



The Effect of Working Capital Management on Profitability

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Abstract: Examining the connection between a company's working capital management tactics and profitability was the aim of this article. Additionally, try to comprehend how this relationship is affected by global macroeconomic conditions. We use fixed effects estimates and correlation analysis on our sample of industrial firms in the Middle East. While gross operating profit is used as a stand-in for a company's profitability, can the conversion cycle be used as a gauge of working capital management? Additionally, interactive models are used to examine how the global macroeconomic environment affects the relationship in question. The findings show a negative relationship between a company's cash conversion cycle and profitability. Our findings also indicate that managers can increase performance by increasing days payable and decreasing days receivable. Furthermore, our findings show that global macroeconomic factors should be taken into account when developing working capital plans. The results emphasize how crucial effective working capital management techniques are to raising business profitability.

IndexTerms –Working capital Management, Profitability, Cash conversion cycle, Current assets, and current liabilities.

I. INTRODUCTION

Current and non-current assets, as well as current and non-current liabilities, are additional classifications for assets and liabilities. Inventory, trade and other receivables, cash, and bank balances make up the majority of current assets. Bank borrowings and trade and other payables make up the majority of current liabilities. Consider a corporation as a human body, with its existing assets acting as its blood. Over time, if this blood flow is disrupted or begins to clot, the business will begin to wind down. The balance between current assets and current liabilities determines the stability and profitability of the company.

Decisions about working capital management are based on the company's present assets and liabilities, which directly affect the kind of product, how it is made, how it is stored, and how long the customer is granted credit. When a business manages its working capital well and generates enough cash for day-to-day operations, it fulfills its short-term obligations. This can be computed by deducting the current obligations of the business from its current assets. A business unit has a working capital deficit when its current liabilities are greater than its current assets; it has adequate working capital when its current assets are greater than its current liabilities.

The management of working capital will influence the company's profitability and liquidity. Since the organization's owners' equity is fixed, bank borrowing will address the current asset and liabilities shortage. Leverage ratios are always the basis for bank funding and borrowing; therefore, an unusually big discrepancy could put a business in trouble. It is essential to keep a close eye on the company's cash flow, take the required steps, and notify the management team as soon as possible so that they can sound the alarm at the right moment and deal with the funding shortfall.

II. LITERATURE REVIEW

The connection between working capital management and a company's profitability has been examined in a number of studies. These comprise businesses of all sizes worldwide and have employed a number of metrics, including capital intensity, sales growth, net income growth, and return on investment. This analysis has been conducted using a variety of approaches, including ratio analysis, panel data regression, linear regression, etc. Despite varying findings, most of these studies conclude that working capital management and business profitability are strongly correlated and that working capital management is a key indicator of an organization's financial health.

Business is seen as the lifeblood of a developing economy and is essential to a nation's capital formation. Effective and efficient corporate management is so crucial. Purchasing funds and deploying them effectively to maximize returns are two of the biggest challenges facing fund managers today. Since working capital management (WCM) has a direct impact on the company's profitability, it is a crucial corporate financial decision. Effective working capital management is essential, particularly for manufacturing companies whose assets are primarily made up of current assets, particularly inventory and trade receivables.

The aim of this paper is to examine the impact of working capital management on the profitability of Argentine manufacturing companies using the main theoretical framework suggested by the literature. Many research have been conducted on this topic in industrialized economies, but they are rather rare in emerging and developing economies. Based on an economic criterion, we selected the companies for investigation using a stratified sample technique. Over the course of three years, a questionnaire was used to collect the data. To achieve the objectives of the study, we used a fixed effects regression model, which was successful in elucidating the

relationship between working capital management and profitability. The results demonstrated a positive and statistically significant relationship between all elements of working capital profitability, suggesting that raising each variable taken into consideration will raise ROA and ROE. Conversely, a statistically significant negative correlation has been found between leverage and profitability, suggesting that an increase in debt has a negative impact on the performance of businesses *Vazquez, Alvarez, and Sensini (2020)*.

The term "working capital" refers to the vitality of an organization. The purpose of this study is to understand how working capital is used and how effective it is at Kdmpmacu Ltd, Vijayawada, India. The company's secondary data was used to analyse six years' worth of data. This study concludes that working capital has a major impact on the firm's growth, which is consistent with the literature's assertion that working capital directly affects the firm's profitability and liquidity *Poojitha (2019)*.

The detailed analysis shows that most case study research is observed and mainly concentrates on two areas: working capital management and the effect of working capital on business profitability. The primary issues with previous research include the lack of survey-based methodologies and systematic theory-advancing studies, which offer direction and motivation for further investigation. This paper's recommendations for further research could advance knowledge of the variables influencing working capital management practices *Solanki (2017)*.

The primary subjects of this study were cash conversion efficiency and operating cycle days. It also looks at the role that working capital plays in improvement. The study focused on 200 publicly traded companies on the Bombay Stock Exchange (BSE) across several industries. The profitability and efficiency of the organization's working capital have been heavily emphasized in the study *Kaur and Singh (2013)*.

Several Jordanian companies listed on the Amman Stock Exchange were examined by the author. Using data from a five-year period, the study focused on working capital management and the stability and profitability of this approach in different organizations. Determining the profitability and working capital management performance of our company, as well as the direct and indirect connections between them, was the aim *Kaddumi and Ramadan (2012)*.

Sunday James studied how small and medium-sized enterprises (SMEs) handle their working capital. Due to the absence of an appropriate lending policy, SMEs' working capital management situation is continuously precarious. They usually rely on supplier credit and are in a very vulnerable financial situation. The author ends by telling SMEs that they need to establish a credit policy, strictly follow it, and put in place a credit control system if they want to survive. Working capital management required careful planning to ensure the organization's proper function would continue, grow, and remain solvent *Kehinde (2011)*.

According to Deloof (2003), working capital primarily refers to a company's current assets, which are the parts of its financial resources that fluctuate in kind as operations are carried out on a daily basis. Cash, prepaid expenses, short-term investments, accounts receivable, and inventories make up the majority of assets at the moment. By subtracting a company's current obligations from its current assets, net working capital may be calculated. A working capital deficit would be indicated by a negative net working value if the value of current assets is less than the value of current liabilities. Working in capital management is the process by which a company entity makes decisions about its current assets and current obligations. An accounting strategy that prioritizes keeping current assets and current liabilities at appropriate levels is known as working capital management. Working capital management gives a company enough money to cover its immediate liabilities.

As per the study of Nasr and Raheman (2007), the rate of return on investment is another name for profitability. If there is an unwarranted overinvestment in current assets, it will have a negative impact on the rate of return on investment. The main goal of working capital management is to control a company's current financial resources so that the firm's profitability and the risk that goes along with it are balanced.

Managers can boost corporate profitability by shortening the average collection period, according to a 2003 study by Deloof. The likelihood that the business will become less profitable increases with the length of time that accounts receivable are outstanding. Businesses that don't manage their debts risk experiencing a rise in bad debts and gradually losing control as a result of decreased cash flow. Therefore, the longer someone owes a company money, the more likely it is that the company will never be reimbursed. Profit may therefore only be referred to be actual profit once the receivables have been converted into cash. Thus, the credit policy and collection process have a significant impact on the management of accounts receivable, which is unavoidable. A collection procedure offers recommendations for collecting unpaid invoices that would minimize delays in outstanding receivables, while a credit policy lays down rules to evaluate the worthiness of consumers. Therefore, the receivables collection period—the amount of time it takes for businesses to collect money from their clients—and profitability are significantly negatively correlated.

Dong (2010) focuses on the variables that include the profitability conversion cycle, its related parts, and the link between them. The study concludes that there is a substantial negative correlation between these variables. This indicates that a rise in the cash conversion cycle is the cause of the decline in profitability. Additionally, it is discovered that profitability rises as the number of days of inventory and accounts receivable is reduced.

According to Dong's (2010) research, working capital management has an impact on a company's liquidity and profitability. According to the research, there is a significant negative correlation between profitability and CCC. This indicates that an increase in the cash conversion cycle is the cause of the decline in profitability.

III. RESEARCH METHODOLOGY

3.1 Research Design

42 observations from the 30 manufacturing enterprises listed on the Middle East Counties qualify to provide the seven years of financial data required for this multiple case study research. The quantitative research approach is used to reach the conclusion, wherein regression analysis, specifically Ordinary Least Squares (OLS), is used to find out the relationship and extent of the effect of working capital management variables on profitability, and correlation analysis is used to determine the nature of the relationship between the variables.

3.2 Data Collection

For the seven-year period from 2018 to 2024, the Middle East Stock Exchanges provide the annual financial statements (statement of comprehensive income and statement of financial condition), which are utilized to gather data about the companies included in this study. Five manufacturing enterprises listed on the Middle East Securities Markets website as of May 31, 2025, are the research's target audience. There are thirty manufacturing companies identified that meet the requirements to provide us with the data we need for the study's population during an seven -year timeframe.

3.3 Variables and Measurement

The selection of explanatory variables in this study is predicated on additional variables that were employed in earlier research as well as different ideas pertaining to working capital management and profitability. The variables included in this study are derived from the line that has been applied in other studies about the connection between profitability and working capital management. These factors fall under the following categories:

Gross operating profitability (GOP), a gauge of the company's profitability, is the dependent variable. Sales less cost of goods sold divided by total assets less financial assets is how it is defined.

Independent factors: Average collection period (ACP): The collection policy is represented by ACP. The inventory policy is proxied by inventory conversion period, inventory turnover days (ITD), and (Receivables/Sales)*365. The average payment period (APP), which has been used as a stand-in for the payment policy, is computed as follows: (Inventory/(Cost of goods sold)*365). It is computed using the cash conversion cycle (CCC) and payables divided by the purchase (365). A thorough metric for working capital management is the cash conversion cycle. Average Collection Period + Inventory Turnover in Days - Average Payment Period is the formula used to compute it.

3.4 Cash flow

Because internal sources are less expensive than external ones, Pecking Order Theory demonstrates that businesses give priority to internal sources over external funding. Cash flow from operations would therefore have an impact on working capital management, and companies with higher cash flows should be able to invest more in their working capital needs; in other words, a positive increase in revenues typically results in an increase in cash flow from operations, which in turn increases retained earnings and, ultimately, lessens the need for outside financing (Hussain et al., 2022). Businesses with stronger cash flows have more working capital because they have more internal resources to finance working capital, which enables them to have more current assets, according to Fazzari and Petersen (1993). We use the operating cash flow-to-sales ratio as a proxy for cash flow. Nonetheless, it is anticipated that the cash conversion cycle and cash flows will be negatively correlated.

3.5 Profitability

A number of studies contend that working capital and profitability are negatively correlated (Safia, 2020; Sardo & Serrasqueiro, 2022). Companies can use these competitive advantages to boost their liquidity, and on the one hand, higher profitability improves a company's negotiation position with suppliers and customers. Conversely, higher working capital investments entail the use of more sources, which raises the business's opportunity cost. The objective of this study is to quantify profitability using return on assets. Nonetheless, we anticipate that the cash conversion cycle and profitability will be negatively correlated.

IV. RESULT AND DISCUSSIONS

4.1 The Connection between Profitability and Average Collection Period

Prior to this there are many researchers have found a negative correlation between ACP and business profitability with respect to the average days of accounts receivable. The researcher also discovers a negative correlation between profitability and ACP. This implies that a company's profitability suffers when the number of days it takes to collect money from sales increases. A one-day reduction in the number of days accounts receivable is linked to an improvement in profitability, according to the negative correlation found between average collection period and profitability. That rise in profitability is another way to evaluate the results. The results might alternatively be construed as showing that an increase in accounts receivable has detrimental long-term effects on the firm's profitability due to opportunity costs and bad debt. These results are consistent with the working capital management rule, which states that businesses should make every effort to recover debts from debtors as soon as feasible while being cautious not to jeopardize their business relationship. As a result, bad debts rise and profitability falls with longer collection periods, while bad debts diminish and profitability rises with shorter collection periods.

4.2 The Connection between Profitability and Inventory Turnover in Days

ITD and GOP have a negative association, which is in line with research Rehemani and Nasr (2007), and Dong (2010) that identified a significant negative correlation between ITD and profitability. The results, however, conflict with those of studies that demonstrate a favorable correlation between ITD and profitability (Gill, Bigger, and Mathur, 2012; Naimulbari, 2012; Muthuva 2010). This suggests that a decrease in the average amount of time needed to transform raw materials into completed commodities and then sell those goods results in a rise in profitability. Due to their massive stockpiles of both raw materials and completed goods, manufacturing enterprises must sell their products rapidly in order to turn a profit. Generally speaking, this result suggests that greater time spent selling inventory will have a negative impact on profitability.

4.3 The Connection between Profitability and Average Payment Period

The average payment terms and profitability are positively correlated. According to Muthuva (2010), Naimulbari (2012), and Gill, Bigger, and Mathur (2012), there is a correlation between an improvement in profitability and a one-day rise in the number of days of accounts payable. This outcome makes economic sense because a company's working capital reserves and use to boost profitability rise with the amount of time it takes to pay its debtors. To support the working capital management principle that companies should make every effort to postpone payments to creditors as long as feasible, while being cautious not to jeopardize their business partnerships.

4.4 The Connection between Profitability and the Cash Conversion Cycle

The nature of businesses and increased profitability as a result of market domination may account for the positive correlation between earnings and the cash conversion cycle. Due to increasing production, manufacturing companies keep larger inventories to account for the seasonality effect and prevent the expenses associated with price variations and stockouts. The fact that optimizing the investment in current assets can contribute to increased profits also explains the positive correlation between the company's cash conversion cycle and profitability. This indicates that the company does not keep a lot of liquid cash on hand for operations.

4.5 The Connection between Profitability and Liquidity

The relationship's outcome is consistent with research showing a negative correlation between liquidity and profitability. This implies that the two goals of liquidity and profitability have an inverse connection, with the gross operating profitability rising as the firm's current ratio falls.

V. CONCLUSION

One of a company's most crucial financial considerations is how to manage its working capital. Regardless of the type of business, a sufficient amount of working capital is necessary for the efficient operation of the enterprise. By lowering the number of days accounts receivable, a company's management can generate value for its shareholders. This is because manufacturing firms become more profitable when the ACP falls, but it's also true that when the ACP rises, the amount of bad debt rises as well, which eventually lowers profitability. Since the data show that profitability rises as the ITD falls, the management may also generate value for their shareholders by bringing their inventories down to a manageable level. In order to maintain the available inventory, storage costs rise in tandem with the ITD. As demonstrated by the fact that profitability rises with an increase in APP, companies may also take a long time to pay their creditors if they do not maintain a business relationship with them. Additionally, companies can lower their liquidity level to improve overall performance, as evidenced by the inverse link between liquidity and profitability.

By accelerating the cash conversion cycle and making effective and efficient use of the organization's resources, businesses can obtain a sustained competitive edge. By doing this, it is anticipated that the firms' profitability will rise. The term "management of current assets and current liabilities, and financing these current assets" refers to working capital management. These businesses' profitability will eventually rise if they manage their cash, accounts receivable, and inventories well.

Future studies should look into how the results might be applied to companies other than those listed on the Middles East Stock Exchange. Additionally, new working capital variables and profitability metrics, such as cash, marketable securities, and ROA and ROE, respectively, should be included in the scope of future research, and it should be expanded in terms of years.

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