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## ROLE OF WORKING CAPITAL MANAGEMENT IN ENHANCING FIRM PROFITABILITY: AN EMPIRICAL STUDY ON THE MANUFACTURING COMPANIES OF PAKISTAN

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### ABSTRACT

Working capital management is a crucial instrument and one of the key aspects of any business management. It is considered as an accounting technique to maintain the organization's liquidity and financial balance and is regarded as a critical part of financial management in the company. This study emphasizes on investigating the role played by working capital management in enhancing the profitability of companies from the manufacturing sector listed in Pakistan stock exchange during the period 2018-2022. Return on equity and return on assets are used as the profitability measures; however, account receivable turnover, inventory turnover and cash conversion cycle are used as the measures of working capital management. To evaluate the results, the least square regression model is used. The results show that inventory turnover has a significant positive association with both ROA and ROE, which implies that inventory management and sales acceleration have a positive effect on the company's return on assets and return on equity. Similarly, the association of accounts receivable turnover with ROA and ROE is also significant and positive, demonstrating that good credit management and prompt receivables collection improve the return on equity and assets. The research also reveals a significant positive association of both ROA and ROE with the cash conversion cycle. Higher returns on assets and equity are connected with a higher cash conversion cycle. The results suggested that the managers should speed up the collection of receivables as quickly as possible and quickly sell the inventory so that the cash thus generated can be reinvested in productive assets, which can increase the company's profitability. The study's findings provide an important guideline to financial managers in managing the appropriate level of working capital to enhance firms' profitability.

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### INTRODUCTION

Organizations make a variety of financial decisions that result in their profit or market value (Aras and Yildirim, 2018). As financial decisions are important, it is crucial to estimate the short and long-term financial needs of a firm. This estimation should be supported by thorough business planning to prevent the businesses from investing more or less than enough in their resources. Working capital management (WCM) refers to those crucial investment choices that a financial manager makes to cover a company's operational costs and pay off current debts when they become payable (Ukaegbu, 2014). It entails managing cash, accounts receivables, inventories, and account payables effectively (Gitman and Zutter, 2012). Working capital management is critical for manufacturing organizations since trade receivables and inventory account for most assets (Biswas, 2018). Working capital management is regarded as an accounting technique to maintain the organization's liquidity and financial balance and is viewed as a critical part of financial management in the company. Furthermore, the management of working capital has an impression on the liquidity and profitability of firms', along with solvency (Anton and Afloarei Nucu, 2021). Profitability is the maximization of shareholder wealth, and liquidity is the company's potential to pay its current debts. The aim of any company is to increase profits, but retaining adequate liquidity is also critical. When profit is enhanced at the expense of business liquidity, complexity occurs.

There should be a balance between the two aims of the firms because if profits are foregone, the firm's long-term viability will suffer, and if liquidity is not managed, normal operations will suffer. According to Sani et al. (2023), changes in firm liquidity and operational efficiency are subject to the management of working capital and are, therefore, considered crucial prospects for firms' financial management.

Several types of analysis on the affiliation between the management of working capital and profitability have been performed in several eras and in various industries in Pakistan, where most of these are focused on textiles (Tufail et al., 2013; Sheikh et al., 2016), pharmaceuticals and chemicals (Shah, 2018; Ahmed et al., 2018), and in cement industries (Sarwat et al., 2017). However, little similar research has been conducted on the sub-sectors of the manufacturing industry, such as power generation and distribution, automobile assembly, food and personal care products, engineering, sugar, and allied industries in the context of Pakistan. Thereby, there is little empirical evidence regarding the effect of the management of working capital on these sectors. Furthermore, the effect of working capital management on an organization's operations has not been feasible; some researchers have discovered a strong inverse association between the corporation's working capital component and profitability (Napompech, 2012; Konak and Güner, 2016). In

contrast, others present disparate findings. Alvarez et al. (2021) infer that the profitability ratio of a firm is positive with the working capital component. Therefore, further research is required on this topic because of the current economic issues and dynamic business.

This study has broad implications for practitioners as well as academics. By introducing a body of knowledge about WCM practices and their effects on firm productivity and liquidity of a particular manufacturing industry's sub-sectors, this research is intended to widen the breadth of the literature. The study's conclusions will aid managers in developing working capital management strategies that can increase profitability by cutting costs. This will help businesses decide whether to maintain higher inventory levels or lower them by accelerating accounts receivable turnover to cover short-term current liabilities. This research will help businesses manage current assets profitably, raising the price of common stock and maximizing shareholders' wealth. The regulators and policymakers of the manufacturing industry would benefit from this study as it will provide them with useful information about the sub-sectors of the manufacturing industry and assist them in better preparing a base for their decisions.

The study aims to analyze how well the manufacturing sectors deal with working capital, examine the association of the enterprises' profitability with their working capital components, and investigate the extent to which working capital components impact these firms' profitability. This paper is structured in the manner that after the introduction, the literature review is bestowed in 2<sup>nd</sup> segment, 3<sup>rd</sup> segment covers the methodology portion, and 4<sup>th</sup> section includes the discussion and result. Subsequently, in the fifth section, conclusions are presented.

### Concept of Profitability

One of the many reasons for establishing a company is to make a profit and to meet other targets. A company's survival depends on several elements that influence financial performance, which can be measured using the profitability ratio (Heliania et al., 2021). The profitability ratios show a firm's ability to earn a certain amount of gains by making maximum use of its assets and holdings. According to Manoppo and Arie (2016), profitability is a measure of how efficiently a business runs its operational activities that have been put into practice to guarantee the firm's survival and turn these activities into profit. Rahayu et al. (2023) describes profitability as the utilization of all the resources and capabilities of the company, namely as cash, number of employees, capital, sales activities, and so on in earning profits. To assess financial condition, several profitability ratios can be put into exercise. In this research, return on equity (ROE) and return on assets (ROA) are used to measure firms' profitability. Return on asset analyzes the ability of management to generate profit on the company's assets and argues that businesses having enormous quantities of assets can generate substantial amounts of income (Akindele and Odusina, 2015). ROA can be computed as income available for common shareholders divided by total assets (Gitman and Zutter, 2012) whereas ROE shows how effectively a company is managing its capital and measures their turn on investments made by equity owners or company shareholders (Heikal et al., 2014). According to Gitman and Zutter (2012), ROE measures how efficiently a company can earn a return on the investment of the company's common shareholder. In general, the larger the returns, the better off the owners are. ROE is computed by dividing common stock equity by income available for the shareholders.

### Concept of Working Capital Management

Managing the short-term capital of companies, or the funds needed to finance its everyday activities, is the center of attention of working capital management. The gap between current liabilities and current assets results in short-term or working capital (Singhania and Mehta, 2017). Investment by a company in current assets, namely cash, inventories, account receivables, and easily convertible short-term securities, is considered as working capital (Amanda, 2019). The decisions involved in working capital management include how investments will be made and from what resources they will be financed (Konak and Güner, 2016). The aim of managing the working capital is to guarantee that business operations proceed successfully with enough access to cash flow to accommodate increases in expenses and other short-term debts (Muhammad et al., 2015). Management of the cash conversion cycle, accounts payable, accounts receivable, and inventory is part of working capital management. Working capital management is considered an essential business tool that assists companies in effectively optimizing the short-term assets, while generating enough money to fulfill the firms' short-term obligations and objectives (Aldubhani et al., 2022). For the purpose of measuring WCM in this study, proxy measures are used including Inventory turnover ratio (INTRO), Receivable turnover ratio (ARTRO), and the cash conversion cycle (CCC). According to Gitman and Zutter (2012), the liquidity or activity of a firm's inventory is measured by the inventory turnover ratio, which reveals inventory sales a year (Farooq, 2019). Furthermore, the Inventory turnover ratio not only indicates the time interval of converting inventory into the cost of goods sold but also shows how effectively this process is managed. According to Gitman and Zutter (2012), the account receivable turnover ratio ARTO is used to assess the ability of a company to handle sales on credit and evaluate the collection policies. Moreover, this ratio indicates the collection speed of accounts receivable in a particular time period (Khan and Khokhar, 2015). ARTO is obtained by division of average receivable with net sales. The number of days that pass when a firm spends its cash on the procurement of raw materials for manufacturing the final product for sale and receives cash from the sale of these products is what the cash conversion cycle is (Qian, 2016). The larger the time lag in CCC, the greater the working capital investment will be, and vice versa. A longer CCC may improve financial success by increasing sales. At the same time, a longer CCC may result in lower performance because working capital is unnecessarily tied up in an organization; generating little or no profit (Akindele and Odusina, 2015).

### Relation between firm Profitability and Working Capital Management

Managing working capital is seen as a crucial component in regulating firm profitability. The outcome of working capital management on firm profitability has been examined by several researchers using different variables. According to Kabuye et al. (2019), the profitability of a business is strongly associated with lower inventories held by companies as well as a shorter time for companies to pay off their debts compared to how long it takes customers to pay them. Aldubhani et al. (2022) examined the manufacturing companies during the period of 2015-2019 listed on the Qatar Stock Exchange and found that companies with shorter cash conversion cycles and collection periods are much more profitable, while larger inventory turnover period is related to company's profitability. Furthermore, Lazarus et al. (2023) analyzed the association between profitability and management

of working capital and constituent during the period of 2011 to 2020 on Ghanaian listed manufacturing firms and stated a negative association of working capital management (account receivable collection and inventory conversion period) with profitability (return on asset). Moreover, Akindele and Odusina (2015) analyzed the association between profitability (ROA) and management of working capital, that is CCC in Nigerian companies from the period 2005-2011, and proved an inverse relationship. However, several research studies have found a direct association between components of WCM and firms' profitability. Alvarez et al. (2021) analyzed the influence working capital management constituents have on the profitability of 177 Argentine SMEs using primary data from 2016 to 2018. The findings of this study revealed that days' sales in inventory, current ratio, days 'sales in receivables, current ratio, size and CCC have a significantly positive relationship with profitability (ROE and ROA). Moreover, other Researchers such as Gill et al. (2010) also found a positive relationship between profitability measured by gross operating profit and WCM, measured by cash conversion cycle in the sample of 88 manufacturing companies of America listed on NYSE during 2005-2007. They suggest that managers can make their organizations profitable by managing the cash conversion cycle properly and maintaining an ideal amount of accounts receivable.

Furthermore, several research studies have also been carried out in the context of the Pakistani economy. Iqbal et al. (2023) examined the companies listed on KMI-30 index at Pakistan stock exchange during 2012-2022 and found a significant positive association between profitability and CCC. They suggest that companies should optimize their inventory level as well as accounts payables and receivables while maintaining adequate liquidity to fulfill the firms' operating needs. Iqbal and Zhuquan (2015) performed an analysis on 85 firms registered on the Pakistan Stock Exchange during 2008-2013 and documented a counterassociation between profitability and cash conversion cycle, average payment period, inventory turnover in days, and average collection period. Studies suggest that by efficiently managing working capital, the profitability of companies can be increased. Moreover, Rahman et al. (2019) also endeavored to analyze the relationship between the components of WC and companies' profitability and proved a direct effect of inventory turnover and CCC on firm profitability and an inverse effect of

receivable turnover on firm profitability. An alternate study by Ahmed et al. (2018) carried out in the pharmaceutical sector to investigate the WCM impact on firm profitability for six years period, i.e., 2011-2016, employed the panel regression analysis and stated that a negative association of working capital management and profitability exists and suggested that an optimum volume of working capital the managers should maintain, which will result in profit maximization. For instance, Sohail and Quddos (2021) conducted a study on 21 firms listed in KSE from the non-financial sector from 2014-2019 and documented a significantly positive association of WCM with profitability, implying that high profitability is led by the high liquidity of companies. Similarly, Tufail et al. (2013) also attempted to analyze the association between profitability and WCM policies of 117 Pakistani textile firms. The key findings of the research showed that profitability has a supportive association with liquidity and counter association with the aggressive policy, which implies that instead of investing in fixed assets, companies should put more of their money into current assets, and instead of using current liabilities more often, they should employ long-term debt.

It has not been feasible to determine the predominant association between WCM and enterprise profitability from the aforementioned review of empirical evidence. However, empirical analysis most frequently discovered a negative linear association of profitability with WCM. Therefore, below three research hypotheses are formulated from the above discussion:

- H1: A significant relationship exists between working capital management and firms' profitability in Pakistan's manufacturing industry.
- H2: A significant positive relationship exists between working capital management and the return on asset.
- H3: A significant positive relationship exists between working capital management and the return on equity.

**Conceptual Framework**

On the basis of the above discussion, the conceptual model is presented in Figure 1, it represents the response variables, which are return on asset and return on equity, and the explanatory variables, which are the components of working capital management.

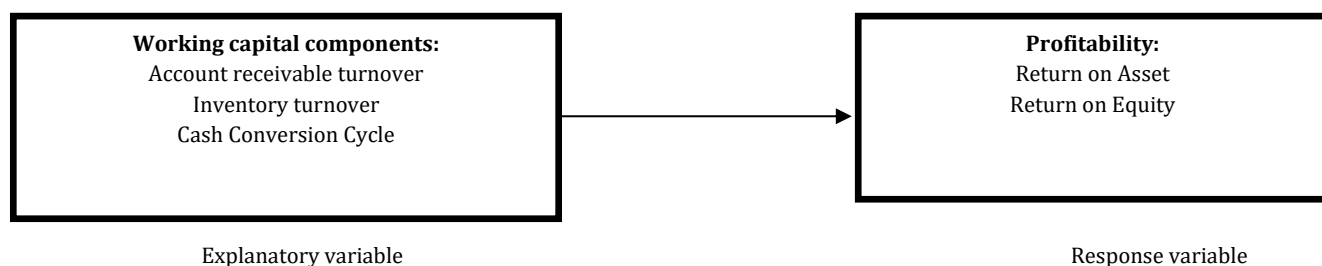


Figure 1. Conceptual framework.

**METHODOLOGY**

This section focuses on the method used to conduct the study. This study is Explanatory and correlational in nature as it investigates and establishes the association firm profitability has with the components of working capital. Additionally, the correlational research analyzes the relational aspects among various variables. In this study, the analysis was based on secondary data, and a quantitative technique was employed for analyzing the numerical

data to explain the phenomena under study. Data for the study is obtained from the Pakistan Stock Exchange website and companies' official websites from their annual reports. A sample of 94 annual reports of selected manufacturing sub-sector firms listed in the Pakistan stock exchange, i.e., Engineering, Automobile assemblers, Sugar and allied industries, food and personal care products, and power generation and distribution, has been obtained to accomplish

the research objectives. However, only 80 companies were considered for analysis after eliminating the companies that liquidated during the study period and the companies with missing data. Table 1 presents the number of companies selected from each sub-sector of the manufacturing industry. Five-year data from each company from 2018-2022 was gathered from the Pakistan Stock Exchange website along with their respective financial reports.

Table 1. Total companies from each sector.

Sector	Number of Companies
Automobile Assemblers	11
Engineering	12
Food and personal care products	23
Power generation and distribution	13
Sugar and Allied Industries	21

For measuring profitability, ROE and ROA are used as response variables, while inventory turnover (INVTO), account receivable turnover (ARTRO), and cash conversion cycle (CCC) are taken as a proxy of working capital management as an explanatory variable (Aqil et al.,2019). The econometric model stated in this work was based on the work of Sohail and Quddos (2021). The econometric model below was developed to study the said relationship of variables:

$$ROA_{it} = \alpha + \beta_1 INVTO_{it} + \beta_2 ARTRO_{it} + \beta_3 CCC_{it} + e_{it} \quad (1)$$

$$ROE_{it} = \alpha + \beta_1 INVTO_{it} + \beta_2 ARTRO_{it} + \beta_3 CCC_{it} + e_{it} \quad (2)$$

Where, ROA shows the return on asset, INVTO shows the inventory turnover, ARTRO shows the account receivable turnover, CCC is cash conversion cycle, ROE is return on equity,  $\alpha$  is intercept,  $\beta$  represent the respective coefficient and  $e$  is the error term. The EViews software (version 12) was used for the investigation. To examine the normality of the data, descriptive statistics were employed. In order to check the stationarity of

variables, a unit root test was applied whereas correlation analysis was used to assess the association between the said variables. To check the multicollinearity problem, VIF test was applied. To evaluate regression model, the least square method was employed to check the association between the said variables (Konak and Güner, 2016).

## RESULTS AND DISCUSSION

This segment provides an analysis of the companies belonging to the manufacturing sub-sectors that are registered in the Pakistan stock exchange.

### Descriptive statistics

The period from 2018 to 2022 gives the descriptive statistics of all the employed variables in the study given in Table 2. The average measure of Return on Assets is 4.78%, and its standard deviation is 11.42919. The Average measure of return on equity is 14.21%, with a standard deviation of 40.046. Companies, on average, convert their inventory into the cost of goods sold 8.95 times a year with a standard deviation of 12.83. Companies receive payments against sales on an average of 270.84 times a year, with a standard deviation of 2541.853, showing that many firms deviate from the mean value to a larger extent. Companies, on average, have a CCC of 138.18 days with a standard deviation of 826.9 days. The result of descriptive statistics indicates the presence of outliers. In order to deal with this problem, this study used a logarithm transformation on explanatory variables to address the outliers in the data set.

### Unit Root Test

Phillips Perron PP and Augmented Dickey-Fuller ADF tests, were performed to check for the stationarity of variables. Table 3 reports the results of the Philipps-Perron and Augmented Dickey-Fuller unit root test. The table shows the t-statistics and p-value of every variable. The result shows that all the variables have p-values equal to 0.0000 and are stationary at level.

Table 2. Descriptive statistics.

Variables	No of observations	Mean	Standard deviation	Minimum	Maximum
ROA	399	4.787275	11.42919	-59.17000	51.52000
ROE	399	14.21601	40.04626	-114.1600	295.0800
INVTO	399	8.950927	12.83376	0.340000	103.6200
ARTO	399	270.8478	2541.853	0.020000	45833.89
CCC	399	138.1821	826.9173	-3770.000	11909.00

Table 3: Unit Root Test

Variables	Augmented dickey Fuller ADF		Philipps-Perron PP	
	T-statistics	Probability-value at 1%	T-statistics	Probability-value at 1%
ROA	-8.662906	0.0000	-12.52138	0.0000
ROE	-9.900749	0.0000	-9.723638	0.0000
INVTO	-6.577166	0.0000	-9.79296	0.0000
ARTO	-13.82334	0.0000	-13.92563	0.0000
CCC	-8.589736	0.0000	-14.21610	0.0000

### Correlation Analysis

The correlation analysis of the response variable return on asset with explanatory variables is presented in Table 4.

Table 4 shows that return on asset has a positive but weak association with the log of inventory turnover and log of account receivable turnover, with coefficients of 0.088 and 0.1107. The result of this correlation indicates that the variables are positively correlated, i.e., if there is an increase in the explanatory variable, there will be an increase in the response variable and vice versa. The result suggests that managing company's inventory effectively and collecting receivables on time, may increase company's profitability. Similarly, the results show a fragile and negative association of the log of the cash conversion cycle with the return on asset, having a coefficient of -0.0088, which indicates that by decreasing the cash conversion cycle company's profitability may increase and vice versa.

Correlation analysis of response variable return on equity (ROE) with an explanatory variable is given in Table 5.

Table 5 shows a positive but weak association of return on equity with the log of inventory turnover and account receivable turnover, with coefficients of 0.08187 and 0.140609. The result of this correlation shows that the variables are positively correlated i.e. if there is an increase in the explanatory variable, there will also be an increase in the response variable and vice versa. The results suggest that managing company's inventory effectively and collecting receivable on time, may increase the company's profitability. Similarly, the table shows a very weak and negative association between the log of cash conversion cycle and return on equity, with a coefficient of -0.03059, which indicates that by decreasing the cash conversion cycle, the company's profitability may increase and vice versa.

Table 4. Correlation analysis of return on asset (ROA).

	ROA	LOGINVTO	LOGARTO	LOGCCC
ROA	1.0000			
LOGINVTO	0.088278	1.0000		
LOGARTO	0.110753	-0.205254	1.00000	
LOGCCC	-0.008817	-0.179973	-0.5999515	1.000000

Table 5. Correlation analysis of ROE.

Correlation	ROE	LOGINVTO	LOGARTO	LOGCCC
ROE	1.000000			
LOGINVTO	0.081879	1.000000		
LOGARTO	0.140609	-0.205254	1.000000	
LOGCCC	-0.030590	-0.179973	-0.599515	1.000000

Table 6. Multicollinearity test.

Variables	VIF
LOGINVTO	1.227708
LOGARTO	1.854473
LOGCCC	1.835809

Table 7. Response variable ROA.

Variables	Coefficient	t- Statistics	Probability value
C	-9.426793*	-2.252204	0.0250
LOGINVTO	1.9359511**	2.845718	0.0047
LOGARTO	1.438724**	3.377916	0.0008
LOGCCC	1.495547*	2.333310	0.0202
R-squared	0.704090		
F-statistics	4.705881	Prob(F-statistics)	0.003123**

Note: LOGINVTO represents the log of inventory turnover, LOGARTO is log of receivable turnover, and LOGCCC is log of cash conversion cycle, and \*,\*\* shows a significance level at 5% and 1%, respectively.

### Test for Multicollinearity

A variance inflation factor (VIF) test was performed to check the multicollinearity between explanatory variables. The problem of multicollinearity arises when two or more explanatory variables are associated with each other and can adversely affect the response variable. The result of the VIF test is bestowd in Table 6, which shows that all the employed variables in the study have a VIF value below 10, thus, the question of multicollinearity is not present in this study.

### Regression Analysis

To evaluate the regression model, the least square regression model is employed to see the influence of explanatory variables on the response variables.

Regression results of return on asset (response variable) are displayed in Table 7. The outcome of the least square regression depicts that the relationship of the log of ARTO with ROA is positive and significant at 1%, as its p-value is 0.0008 with a coefficient of 1.438724. Similarly, the log of INVTO has a positive association with ROA with a coefficient of 1.939511 and is significant at 1% as its probability value is 0.0047. The coefficient of the log of CCC is 1.495547, which demonstrates a positive relationship, and it states that with a 1 unit rise in the log of CCC, the ROA will increase by 1.495547, and the relationship is significant at 5% as its probability value is 0.0202. Furthermore, R-square value of 0.704 shows that the overall model explains 70.4% of the total change in return on assets is caused by explanatory variables. A significant impact of all three explanatory variables on the response variable is shown by the F statistics.

Table 8. Response variable ROE.

Variables	Coefficient	t- Statistics	P-value
C	-23.85544	-2.252204	0.0202
LOGINVTO	4.678328	2.845718	0.0052
LOGARTO	3.879329	3.377916	0.0002
LOGCCC	3.506704	2.333310	0.0257
R-squared	0.740298		
F-statistics	5.445037	Prob(F-statistics)	0.001151

Note: LOGINTO represents log of inventory turnover, LOGARTO is log of receivable turnover, and LOGCCC is log of cash conversion cycle, and \*,\*\* show significance level at 5% and 1%, respectively.

Regression results of the response variable Return on equity are bestowed in Table 8. The outcomes of the least square regression show that the explanatory variables hold a significant and positive association with the response variable ROE. The coefficient of the log of ARTO is 3.879329, and the relationship with ROE is positive and significant, as its p-value is 0.0002. Similarly, the log of INVTO has a co-efficient of 4.678328, which demonstrates that with a 1 unit increment in the log of INVTO, return on equity will increase by 4.678328 units, and the relationship is positive and significant at 1% level as its p-value is 0.0052. The coefficient of the log of CCC is 3.506704, which demonstrates a positive relationship, and it shows that with a 1 unit increment in the log of CCC, the ROE will increase by 3.506704, and the relationship is significant at 1% level as its p-value is 0.0257. The R-square of 0.740298 shows that the overall framework explains that 74% of the total variation in ROE is caused by explanatory variables. The F statistic displays that all three explanatory variables have an important influence on the response variable.

#### Discussion of Findings

The study attempts to analyse the effect of elements of the management of working capital on the profitability of firms in Pakistan's manufacturing sub-sectors. The results of correlation and regression show that the elements of working capital management hold a significant relationship with the firms' profitability; therefore, hypothesis 1 is accepted. The result of regression shows that the response variable ROA has a significant and positive relationship with the inventory turnover ratio. It implies that managing the inventories effectively and selling them quickly can increase companies' return on asset. The stated positive relationship is conformable with the study of Shah (2018) and Sohail and Quddos (2021). Furthermore, receivable turnover is significantly and directly related to the response variable ROA; results indicate that effective credit management and collecting the receivables on time can enhance the return on company's assets. These outcomes are conformable with the study of Aqil et al. (2019) and Sohail and Quddos (2021). Similarly, the WCM component; that is, the cash conversion cycle, holds a significant direct association with the response variable return on asset. Results show that a rise in the cash conversion cycle would enhance the return on the company's assets. These findings are conformable with the study of Aqil et al. (2019) and (Sohail and Quddos, 2021). Thus, based on these findings, hypothesis 2: a significant direct association exists between the working capital management components and return on asset, is accepted.

Moreover, the results depict that the response variable return on equity has a significantly direct association with inventory turnover. It implies that managing the inventories effectively and selling it more quickly can enhance the company's return on equity. These outcomes are conformable with those of Aqil et al. (2019) and Shah (2018). Similarly, ROE has a significant and positive relationship with account receivable turnover, which

implies that effective credit management and collecting receivables on time can increase company's profitability. These results are consistent with Shah (2018) but depart from the results of Aqil et al. (2019). The results of the regression show that an important and direct association of the cash conversion cycle exists. These findings are consistent with the study of Shah (2018) but differ from the result of Aqil et al. (2019). Thus, based on the above findings, it is suggested that hypothesis 3 that a significant positive relationship exists between the components of working capital management and return on equity is accepted.

#### CONCLUSIONS AND RECOMMENDATIONS

Working capital management (WCM) refers to those crucial investment choices that a financial manager makes to cover a company's operational costs and pay off short-term debt obligations when they become due. WCM is considered an accounting technique to maintain the organization's liquidity and financial balance and is considered an important part of the financial management of a firm. The focus of this study was to examine the influence of working capital management on the profitability of five sub-sectors of Pakistan's manufacturing industry from 2018-2022. In order to know the company's profitability ROA and ROE were used as response variables, while inventory turnover, receivable turnover and cash conversion cycle were used as explanatory variables. The study concluded that all the components of working capital management are significantly and positively related to profitability. Supported by the key findings of the study, managers can enhance the profitability of a firm by tightening the firm credit policy, and should collect its receivables as quickly as possible, and quickly sell its inventory so that the cash can be reinvested in a productive asset which can increase the company's profitability. The outcomes of the study furnish essential guidelines for the financial managers in managing the appropriate level of working capital to enhance the company's profitability.

In terms of the empirical model, this study can be extended by using variables other than ROA and ROE. This study can also be extended in terms of the number of years, as this study only used 5 years of data. Future research can extend the time period and use other measures of working capital management, like quick and current ratios. Future research can study the stated impact on different sectors, such as the financial and services sectors, in Pakistan.

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