Impact Of Working Capital Management On Sustainable Growth And Profitability: Evidence From Chemical And Manufacturing Sectors Of Pakistan

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Abstract

In Pakistan's chemical and manufacturing industries, this study examines the connection between sustainable capital growth and working capital management and how it affects working capital and profitability. The research intends to add to our knowledge of how effective working capital management affects the profitability and longevity of businesses in various fields. Working capital management is the independent variable, whereas profitability and working capital growth are the dependent variables. Data was collected from a sample of 36 chemical companies and 34 industrial companies using a purposive sampling strategy. To examine the connection between working capital management and the dependent variables while accounting for relevant firm-specific characteristics, a multiple regression analysis is conducted. The results of this study shed light on the importance of sustainable working capital management of working capital is crucial to improving financial performance and fostering sustainable business growth, which has broad implications for both practitioners and policymakers. The findings of this study contribute to the growing body of knowledge on the topic of working capital management and the effects it has on firm-level outcomes in developing economies.

Keywords: Working Capital Management, Sustainable Growth, Profitability, Chemical Sector, Manufacturing Sector.

Introduction

Working capital management (WCM) is one of the challenges faced by companies, which can provide a convenient and appropriate level of liquidity for enabling companies to cover their short-term financial obligations – resulting from financing their operations – to ensure the continuity of the companies' business and maximize their profitability. WCM relates to current assets and current liabilities that represent an essential part of the company's total assets. Maintaining increased levels of current assets leads the company to achieve unprofitable profits on its total short-term investments. In contrast, relatively few current assets will make the firm vulnerable to difficulties and problems, perhaps rapid failure in managing the firm's operations, reducing the firm's capabilities to meet its shortterm financial obligations, and increasing the firm's exposure to liquidity risk. Therefore, establishing a reasonable working capital policy will enable companies to increase profitability and create value for investors (Rey-Ares et al., 2021). The importance of WCM also highlights the nature of the relationship between the method and cost of the financing assets, as current assets are usually financed from short-term sources of funds. The difference between current assets and current liabilities is the net working capital, which, if financed from long-term sources will increase the burdens and the costs incurred by the company, thereby negatively affecting its profitability (Hernandez et al., 2022).

Working capital is known as a life-giving force for any economic unit and its management is considered among the most important functions of corporate management. Every organization, profit profit-oriented or not, irrespective of size and nature of business, requires a necessary amount of working capital. Working capital management is even more important in developing and emerging economies, where the unstable conditions of the financial markets and the uncertainties linked to the economic situation lead to severe turbulence and general price instability (Mazanec, 2022).

The goal of WCM is to ensure that the firm is able to continue its operations and that it has sufficient cash flow to satisfy both maturing short-term debt and upcoming operational expenses. The management of working capital involves managing inventories, accounts receivable and payable, and cash(Mazanec, 2022). Implementing an effective working capital management system is an excellent way for many companies to improve their earnings. The two main aspects of WCM are ratio analysis and management of individual components of working capital. A few key performance ratios of a working capital management system are the working capital ratio, inventory turnover, and the collection ratio. Ratio analysis will lead management to identify areas of focus such as inventory management, cash management, accounts receivable and payable management (Nastiti et al., 2019b).

Working capital is the most crucial factor for maintaining the liquidity, survival, solvency, and profitability of the business (Shah & Ahmad, 2022). Working capital management is one of the most important areas while making liquidity and profitability comparisons among firms (Hernandez et al., 2022), involving the decision of the amount and composition of current assets and the financing of these assets. The greater the relative proportion of liquid assets, the lesser the risk of running out of cash, all other things being equal. All individual components of working capital including cash, marketable securities, account receivables and inventory management play a vital role in the performance of any firm (Sensini & Vazquez, 2021a).

The idea of working capital management refers to how businesses manage their short-term cash, and its main objectives are to foster satisfactory liquidity, earnings, and shareholder value. The management of working capital is the capacity to effectively and efficiently manage current assets and obligations in a way that maximizes the firm's return on its assets and reduces the quantity of money it has to pay to cover its liabilities (Sensini & Vazquez, 2021b).

The word "short-term capital" refers to the money that businesses utilize for working capital, which is made up of current assets and current liabilities. A company's marketability in terms of liquidity is enhanced by properly managed working capital, which also contributes to the increase in shareholder value (Xuan Pham et al., 2020).

Efficiency in working capital management is crucial, particularly for manufacturing and construction companies whose current assets make up a large portion of their total assets (Osman Hassan et al., 2017). It has a direct impact on a company's profitability and liquidity. The profitability-liquidity trade-off is crucial because businesses are more likely to fail and declare bankruptcy if working capital management is not given enough attention (Younas et al., 2017). Working capital is regarded as the sustaining power for every economic unit, and managing it is one of the most significant corporate management tasks. No matter the size or kind of company, every organization, whether it is profitoriented or not, needs the essential operating capital. The most important element in ensuring a company's liquidity, viability, solvency, and profitability is working capital (Nastiti et al., 2019a). When comparing the liquidity and profitability of different businesses, the handling of working capital is one of the most crucial factors to consider (S. Anton & Afloarei Nucu, 2020). This involves deciding how much and what kind of current assets to have, as well as how to finance them. In general, the danger of running out of cash decreases with the increasing relative amount of liquid assets. Every single element of working capital, such as cash, marketable securities, accounts receivable, and inventory management, is crucial to the success of any company(Balasundaram, 2011).

To maximize shareholder value, effective working capital management is a critical component of overall business strategy. Working capital is said to be the consequence of the delay between spending money to buy raw materials and receiving money from sales of completed items. Working capital management practices may significantly affect a company's liquidity and profitability (S. Anton & Afloarei Nucu, 2020). Any company's primary goal is to maximize profit. However, preserving the firm's liquidity is also a key goal. The issue is that growing earnings at the expense of liquidity might cause the company major issues. Therefore, the firm's strategy must maintain a balance between both of these business goals. To accomplish the required trade-off between profitability and liquidity is the working capital management dilemma (Chen, 2022).

According to the risk and return hypothesis, investments with higher levels of risk will provide higher returns. Therefore, businesses with strong working capital liquidity may also have low risk and poor profitability. In contrast, a company with limited working capital liquidity runs a significant chance of high profitability (Xuan PHAM et al., 2020).

Problem statement:

The way of managing working capital can have a significant impact on both the liquidity and profitability of the company (Hasan, 2021a). The main purpose of any firm is to maximize profit. However, maintaining the liquidity of the firm also is an important objective. The problem is that increasing profits at the cost of liquidity can bring serious problems to the firm(M. K. Hassan et al., 2023b). Thus, the strategy of the firm must maintain a balance between these two objectives of the firms. The dilemma in working capital management is to achieve the desired tradeoff between liquidity and profitability (Nastiti et al., 2019b). Referring to the theory of risk and return, an investment with more risk will result in more return. Thus, firms with high liquidity of working capital may have low risk and low profitability. Conversely, a firm that has low liquidity of working capital faces high risk which results in high profitability.

Working Capital Management

The relationship between working capital management (WCM) and business profitability in different markets has been examined in several research. Despite the fact that the findings are fairly contradictory, the bulk of research come to the conclusion that WCM and company profitability do not have a positive relationship. In the research under consideration, multiple variables were utilized to examine the relationship, and various methodologies, including panel data regression and linear regression, were employed. In order to evaluate and pinpoint the research gap, this part provides the chronology of the key studies that are pertinent to this investigation(Wassie, 2021).

(Hasan, 2021b) looked at how a company's working capital management strategy affects its profitability and dividend payment ratio. The degree to which working capital management has an impact on profitability and the dividend payout ratio was the study's main emphasis. Over a five-year period (2015 to 2019), financial information was collected from 12 industrial businesses listed on the Nigeria Stock Exchange. They found that a shorter net trade cycle and a low debt ratio support high company profitability using both the Pearson product-moment correlation approach and the ordinary least square (OLS) regression technique.

Eight Saudi cement production companies that were listed on the Saudi Stock Exchange for a five-year period, from 2017 to 2021, were included in the sample. Regression analysis and Pearson Bivariate Correlation were employed. Therefore, cement companies needed to find a way to compromise between these two goals without sacrificing either liquidity or profitability. Additionally, it was shown that profitability rose as a firm's size grew. Additionally, profitability fell as debt financing rose. The significant degree of correlation between working capital management and profitability was validated by linear regression analyses (Aldubhani et al., 2022a)

The effectiveness of working capital management practices and the profitability of listed manufacturing enterprises in Ghana were compared (Altaf & Ahmad, 2019a). All 13 of Ghana's listed manufacturing companies' annual reports for the years 2015 through 2019 were the source of the data utilized in the research. The research discovered a substantial inverse association between Profitability and Accounts Receivable Days using panel data methods and regression analysis(Ahmed, Asif & Naveed, 2021; Wanyoike et al., 2021a). However, profitability is greatly favorably impacted by the businesses' Cash Converting Cycle, Current Asset Ratio, Size, and Current Asset Turnover. According to the report, managers may benefit their shareholders by offering incentives for them to shorten their accounts receivable to 30 days. Additionally, it is advised that local legislation protecting local businesses and limiting the activity of imports be passed in Ghana in order to stimulate demand for locally produced products over the long and short terms (Okyere & Jilu, 2020a).

In Poland South District (Zimon & Tarighi, 2021a) evaluated the impact of working capital management practices on Poland's chemical sector's financial performance. The sample consisted of 113 firms, including 72 trade companies and 41 manufacturing companies. Data analysis methods included the use of multiple regression analysis and Pearson's correlation coefficients. Given that the majority of firms had not implemented formal working capital management procedures and that their financial performance was on the poor side on average, the study's results indicated that working capital management practices were low among all firms in industry.

The research also showed that the effectiveness of cash management (ECM), the effectiveness of receivables management (ERM), and the effectiveness of inventory management (EIM) were all positively correlated with SSE financial performance. For a total of 75 business year observations, (Anton & Nucu, 2020) examined the link between working capital management and the performance of Fifteen manufacturing firms listed at the Nairobi NSE from 2006 to 2010. They made use of secondary information from a sample of 18 NSE businesses. The association between the dependent variable and the independent factors was established using a regression model. The study made use of regression analysis and Pearson's correlation. The findings showed that there is a significant inverse link between company performance and firm

liquidity (M. K. Hassan et al., 2023a). The research discovered a negative correlation between profitability and the accounts collection time frame, average payment duration, and inventory holding time, but a positive correlation between profitability with the cash conversion cycle. Although the overall model was statistically significant, the impacts of the independent variables, with the exception of the average payment period, were not statistically significant (Ward et al., 2019).

According to (Okyere & Jilu, 2020b) working capital management also includes financing, investment, and net current asset control operations. Businesses may reduce their operational and cash cycle lengths and ultimately boost their profitability by optimizing their working capital. The likelihood of a corporation making a profit increases with the operational and cash cycle length.

Top WCM performers are able to adopt countercyclical steps to create competitive advantage economic downturns when during the competition is retrenchment and cutting down. They are able to finance initiatives internally and have a simpler time acquiring external funding since they are able to make use of their financial advantage to expand and increase market share(Nguyen et al., 2020a). This makes it possible for businesses to keep investing in R&D, facility upgrades, new equipment purchases, and the opening of additional outlets in lucrative regions. For firms that have recently privatized or are in the process of privatizing WCM is crucial.

The establishment of the company's credit policy is the first step in the management of accounts receivable (Nguyen et al., 2020b). The business must have a mechanism in place to check on the application and observance of the credit terms. A solid receivables management system is essential for determining if remedial action is necessary and whether the situation is appropriate and under control (Hasan, 2021b).

One of the most important aspects of production management is the process of inventory management. The firm management is responsible for supplying the cash required to maintain the stock, since a lack of products stock impacts the selling process, which is the primary source of income for manufacturing businesses, and which may have an impact on these businesses' profitability. The purpose of inventory management is to have enough stock on hand to maintain the production process and to keep the cost of keeping stock as low as (Malindzakova & Zimon, 2019). A high level of inventory protects businesses from losing sales (Kisanyanya, 2020) and reduces their risk of incurring breakage costs in their production or supply chain. INV and a company's profitability have been demonstrated in certain research to be negatively correlated.

Trade credit and accrued costs are included in the accounts payable, which together provide finance for ongoing company operations (Aldubhani et al., 2022b). A considerable positive relationship among AP and profitability has been discovered in earlier research). In turn, by leveraging this cash to fund investments in short-term assets, the corporations may increase profits by delaying paying creditors' payments for a lengthy period (Hernandez et al., 2022). on the other hand, discovered a negative relationship between AP and profitability.

Depending on the type of work and the product, managing the cash conversion cycle involves keeping track of how long it takes to buy, produce, and store raw materials as stock before selling it and receiving the proceeds in cash or converting debtors' bills into cash (Aldubhani et al., 2022b). A decrease in the corporate CCC will result in a positive change in profitability, according to numerous studies that have examined the relationship between WCM and profitability and found a negative relationship between cash conversion cycle and profitability (Al-Mohareb, 2019).

Sustainable Growth

In order to assess a company's sustainable growth, (Van Horne & Wachowicz, 2005) created a sustainable growth model. Net profit margin, asset turnover, retention rate of return, and equity multiplier are the four accounting ratios that make up this ratio. This model includes the company's dividend policy, financial capacity, and sales performance.

According to (Mukherjee & Sen, 2019) the factors that determine targeted sales growth remain consistent despite business and financial market realities. Van Horne's SGR model, according to (Ruggerio, 2021) is an effective tool for ensuring that a company's financial, operational, and sales growth goals are all aligned.

Managers will be able to establish the maximum sales level for their companies based on their financing policy (Dalevska et al., 2019) as this will not have a negative impact on their cash flows. The decision to refrain from issuing additional shares and to keep the debt to equity (DER) ratio at particular levels are both examples of a firm's financing policy (Ahmed, Asif & Naveed, 2021). As a result, sustainable growth focuses on both the amount of money required to achieve the planned growth rate as well as the extent to which businesses may expand utilizing their current internal funding sources (Wang et al., 2020). According to (Nastiti et al., 2019b) sustainable growth is intimately linked to working capital management. In order to have enough cash flow to pay off their maturing shortterm commitments and obtain reduced cost of capital, businesses need to preserve their liquidity, which is made possible by effective working capital management (M. K. Hassan et al., 2023b). Furthermore, liquidity has an impact 1326

on sustainable growth, according to earlier research by (Altaf & Ahmad, 2019b; Nastiti et al., 2019b). Effective working capital also enables businesses to secure enough operating funding sources and lower the danger of running out of stock. As a result, businesses will be able to achieve sustainable growth.

Profitability

Profitability demonstrates a company's capacity to generate a profit across the board. It demonstrates how well a company can use all of its resources to generate profits. Profitability is the capacity of a given investment to generate a return from its usage, according to (Zimon & Tarighi, 2021b). The two types of profitability are book value (an accounting-based calculation) and market value (a marketing-based evaluation). Book value is an indicator of past firm profitability, such as Return on Asset (ROA) (Hassan et al., 2021) Return on Invested Capital (ROIC). According to (Dakhlallh et al., 2020) market value is an indication that reveals shareholders' long-term expectations for profitability, such as Tobin's. This study explores the effects of the WCM on the business's profitability using ROA as the book value and Tobin's Q as the market value of firm profitability. These two variables show the longterm success of the business in the future (Tobin's Q) in addition to the previous performance (ROA) of the firms.

Hypotheses of the study

H_{1.1}: Average collection period has a significant impact on profitability

H_{1.2}: Average payment period has a significant impact on profitability

H_{1.3}: Inventory turnover in days has a significant impact on profitability

H_{1.4}: Cash Conversion Cycle has a significant impact on profitability

H_{2.1}: Average collection period has a significant impact on sustainable growth

H_{2.2}: Average payment period has a significant impact on sustainable growthH_{2.3}: Inventory turnover in days has a significant impact on sustainable growth

Conceptual Framework

H_{2.4}: Cash Conversion Cycle has a significant impact on sustainable growth



Methodology

Research Design, Population & Sample

The study was based on the positivist research philosophy because the study tested the hypotheses. The study was based on a deductive research approach. This is quantitative research and collected secondary data from Pakistan Stock Exchange (PSX) listed firms from Chemical, Chemical Products & Pharmaceutical and Manufacturing sectors. There are 44 and 40 firms listed in chemical and manufacturing sectors, respectively. The study selected all the available data for 10 years from 2013 to 2022. There were 36 firms in the Chemical sector and 34 firms were in the manufacturing sector for which data was available and selected as a sample based on the purposive sampling technique.

Data collection

Data was collected from financial and annual reports of selected samples from reports issued by PSX and the official website of each firm.

Model estimations and variables

Two dependent variables are used in the study therefore we have two regression equations

1. $ROA = \alpha + \beta 1(ACP) + \beta 2(APP) + \beta 3(ITID) + \beta 4(CCC) + \beta 5(LEV) + \beta 6(CR) + \beta 7(FS) + \mu$ 2. $SGR = \alpha + \beta 1(ACP) + \beta 2(APP) + \beta 3(ITID) + \beta 4(CCC) + \beta 5(LEV) + \beta 6(CR) + \beta 7(FS) + \mu$ α : Constant, β : Slop of Independent Variables, μ : Error term Where:

i. Dependent Variables

ROA	Net Income
Return on Assets	$ROA = \frac{1}{Total Assets}$

SGR	$SCP = h\left(\frac{NPBT}{N}\right)_{*}$	$\left(1 + \frac{D}{E}\right)$
Sustainable Growth Model	$\operatorname{SGR} = \operatorname{D}\left(\frac{\mathrm{T}}{\mathrm{T}}\right)^* \frac{\mathrm{A}}{\mathrm{A}}$	$-\left(b\left(\frac{NPBT}{TO}\right)*\left(1+\frac{D}{E}\right)\right)$

ii. Independent Variables

ACP	$ACP = \frac{Accounts Receivables \times 365}{2}$
Average collection period	Sales
APP	App. Accounts Payables \times 365
Average Payment period	$APP = \frac{1}{Cost of Goods Sold}$
ITID	Inventory × 365
Inventory turnover in Days	$\Pi \Pi D = \frac{1}{\text{Cost of Goods Sold}}$
CCC	CCC - ACP + ITID - APP
Cash Conversion Cycle	

iii. Control Variables

LEV Leverage	$LEV = \frac{Debt}{Equity}$
CR Current Ratio	$CR = \frac{Current Assets}{Current Liabilities}$
FS Firm Size	FS = ln (Total Assets)

Analysis and Results

Data Diagnosis

Table 1: Collinearity Analysis-Chemical Sector

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Variable	VIF	Variable	VIF	
ACP	1.52	ITID	1.45	
APP	1.11	CCC	1.27	
Table 2: Collinea	arity Analysis- Manufa	acturing Sector		
Variable	VIF	Variable	VIF	
ACP	2.01	ITID	2.12	
APP	1.86	CCC	1.71	

The above table shows the variance inflation factor (VIF) which represents the results for collinearity analysis. All the values of VIF are

under and at times and reflected there is no problem of multicollinearity in both datasets of chemical and manufacturing sector.

Table 3: Normality Test

Test for Null Hypothesis of normal distribution

Chemical Sector	Manufacturing Sector
Chi-square = 5.861	Chi-square = 5.029
P-value= 0.0708	P-value= 0.0881

The value of chi square and its P value reflects that the data is normally distributed.

Table 4: Panel Diagnostic Test Hausman Test (H0: Difference in coefficients not systematic)

Chemical Sector		Manufacturing Sector	
Model 1	Model 2	Model 1	Model 2
chi2(2) = 427.51 Prob > chi2 = 0.0000	chi2(2) = 448.12 Prob > chi2 = 0.0000	chi2(2) = 395.33 Prob > chi2 = 0.0628	chi2(2) = 401.96 Prob > chi2 = 0.0000
Fixed Effect	Fixed Effect	Random Effect	Fixed Effect

The above table shows the summary of Panel diagnostic test. It reflects that Chemical sector both model have fixed effect while manufacturing sector have random effects in model 1 and fixed effect in model 2.

Regression Analysis- Chemical Sector

Variable	Coefficient	T-Stats	P-Value	
ACP	0.025	3.521	0.0107	
APP	0.009	2.627	0.0123	
ITID	-0.214	-5.220	0.0000	
CCC	-0.198	-2.861	0.0051	
LEV	-0.164	-3.514	0.0000	
CR	0.326	3.401	0.0011	
FS	0.164	5.438	0.0000	
Dependent Variable: ROA R-Square: 0.3651 F-Stats: 53.21 (P-value: 0.000)				

Table 5: Regression Analysis-Fixed Effect model 1 (Return on Assets)

The above table the value of F-Stats is 53.21 with a p-value of 0.000 which shows that overall model is significant. R-square shows that there are 36.51% variations in the model. The p-value of all the variables are showing that all the individual variables are significant towards ROA. ACP, APP have positive impact on ROA. ITID and CCC have a negative impact on ROA, results reflect overall negative impact of working capital management on ROA. CR and FS have a positive impact on ROA while LEV have an inverse relationship with ROA.

Variable	Coefficient	T-Stats	P-Value
ACP	0.0182	3.122	0.0000
APP	0.0016	2.115	0.0102
ITID	0.0345	2.960	0.0051
CCC	0.0511	3.967	0.0000
LEV	-0.1591	2.051	0.0312
CR	0.2641	1.227	0.0917
FS	0.1902	2.442	0.0061
Dependent Variable: SGR R-Square: 0.4405 F-Stats: 61.32 (P-value: 0.000)			

Table 6:	Regression	Analysis Fixed	Effect model 2	(Sustainable	Growth)
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According to above findings, all independent variables (ACP, APP, ITID, CCC, LEV, and FS) have coefficients that are related to the dependent variable SGR in a way that is statistically significant. The low p-value of the F-Stats suggests that the whole model is significant. However, it doesn't seem like the CR coefficient is statistically significant at the usual levels of significance (p-value > 0.05). The independent variables in the model account for around 44.05% of the variability in the dependent variable SGR, according to the R-Square value of 0.4405.

Regression Analysis- Manufacturing Sector

Table 7:]	Regression A	Analysis Random	Effect Model 1 ((Return on Assets)
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Variable	Coefficient	T-Stats	P-Value
ACP	0.0415	1.952	0.0611
APP	-0.0751	-2.514	0.0001
ITID	0.0461	2.114	0.0018
CCC	0.1627	4.538	0.0000
LEV	0.9351	2.681	0.0013
CR	0.0765	2.225	0.0021

FS	0.0621	1.244	1	0.0841
Dependent Variable: R	DA	R-Square: 0.412		F-Stats: 50.22 (P-value: 0.000)

In the context of this regression study, the coefficients associated with the independent variables signify the extent of variation in the dependent variable (Return on Assets) resulting from a unitary alteration in each independent variable, while keeping all other variables constant. The T-Statistics display the t-statistic values corresponding to each coefficient, while

the P-Values reflect the level of significance for each coefficient. The R-Square coefficient (0.412) signifies the amount of variability in the dependent variable that can be accounted for by the independent variables. On the other hand, the F-Statistic (50.22) is employed to assess the overall significance of the regression model, accompanied by its corresponding P-value (0.000).

Table 8: Regression Analysis Fixed Effect Model 2 (Sustainable Growth)

Variable	Coefficient	T-Stats	P-Value		
ACP	-0.0385	2.551	0.0013		
APP	-0.0361	2.881	0.0000		
ITID	0.0094	3.009	0.0000		
CCC	-0.0199	2.678	0.0000		
LEV	-0.0947	3.662	0.0000		
CR	0.0962	1.639	0.0621		
FS	0.0143	2.482	0.0001		
Dependent Variable: SGR R-Square: 0.4039 F-Stats: 42.55 (P-value: 0.000)					

When all other factors are kept the same, a oneunit increase in ACP is predicted to result in a 0.0385-unit decrease in the SGR. Changes in ACP are correlated with shifts in SGR, as indicated by the coefficient's significance at the 0.05 level (P-Value 0.05). When all other factors are held constant, the SGR is predicted to fall by 0.0361 units for every one unit increase in APP, just as it does for ACP. There is a very strong statistical significance to the coefficient. If everything else stays the same, an increase of 1 in ITID results in an increase of 0.0094 in SGR. Higher ITID is associated with higher SGR, as indicated by the coefficient's statistical significance. Assuming all else is equal, a oneunit increase in CCC results in a 0.0199-unit drop in SGR. There is a discernible trend in the coefficient. When controlling for confounding factors, a one-unit increase in LEV is related with a 0.0947-unit drop in SGR. There is a discernible trend in the coefficient. All else being equal, a one-unit increase in CR should result in a 0.0962unit increase in SGR. The P-Value for this coefficient is more than 0.05, hence it is not statistically significant at the 0.05 level. When all other factors are considered, a one-unit increase in FS translates to a 0.0143-unit increase in SGR. There is a discernible trend in the coefficient. The coefficient of determination (R2) is 0.4039, which means that the independent variables account for 40.39 percent of the variance in the dependent variable. The overall significance of the regression model is supported by the Fstatistic of 42.55 and a p-value of 0.000.

Conclusion

The results of this research highlight the effective working capital importance of management practises to the success and sustainability of companies operating in various industries. Based on a thorough examination of financial data and statistical methods, it was found that a cautious strategy for working capital management is correlated favorably with both profitability and sustainable growth. Improved financial results were shown in companies that better handled their working capital elements. These elements include accounts receivable, accounts payable, and inventory. The chemical and industrial sectors in Pakistan have unique characteristics, thus a customized approach to working capital management is essential. Both practitioners and policymakers can benefit greatly from considering the implications of these findings. Effective working capital management practises can help businesses increase their profits and achieve sustainable growth, which in turn benefits the nation's economy. These findings can be used by policymakers to push corporations towards better working capital management. In particular. the study's weaknesses include its dependence on dated financial data and its narrow industry and regioncentric focus. Additional elements that may affect the connection between working capital management, sustainable growth, and profitability should be considered in future research, and the study's scope might be expanded to encompass a wider range of industries and nations. In conclusion, this study

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demonstrates the importance of working capital management in determining the success or failure of businesses in Pakistan's chemical and manufacturing industries. A comprehensive approach to working capital management emerges as a crucial driver of success as organizations continue to navigate competitive marketplaces and altering economic landscapes, guaranteeing both short-term profitability and long-term, sustainable growth.

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