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Examining the Impact of Working Capital Management Approaches on Financial Performance in the Textile Sector of Pakistan



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Abstract: *Efficient management of operational funds holds immense importance for enterprises. The calculation of net working capital, achieved by subtracting current liabilities from assets, carries significant weight. Aspects such as durations for collecting and disbursing funds, the rate of inventory rotation, the transformation of cash, and the cycle of trade play a pivotal role in determining the level of profitability. This research undertook an evaluation of their influence on the profitability of Pakistan's textile industry, utilizing data from 10 publicly listed companies and subjecting them to thorough panel regression analysis. The findings brought to light that the Average Collection Period (ACP) exhibited an inconsequential and adverse impact on Net Operating Profit (NOP). Conversely, the Average Payment Period (APP) demonstrated a substantial reduction in NOP. While Inventory Turnover (ITID) displayed an insignificant amplification in NOP, Cash Conversion Cycle (CCC) exhibited a positive correlation with the firm's financial performance in distinction to Net Trading Cycle (NTC) yielded a detrimental effect.*

Key Words: Net Trading Cycle, Cash Conversion Cycle, Average Collection Duration, Net Operating Profit Margin, Days Sales of Inventory, Net Current Capital

Introduction

Scholars in the realm of corporate finance (CF) have predominantly centred their focus on long-term financial decision-making, delving into topics such as capital structure (CS), dividend policies, investment selections, and firm valuation. Nevertheless, the astute management of short-term assets and obligations warrants

meticulous exploration due to its pivotal role in determining a firm's profitability and exposure to risk (Smith, 1980). Proficient working capital management (WCM) takes a central and fundamental role within corporate strategy, aiming to enhance shareholder value, with organizations striving to maintain an optimal equilibrium of working capital that maximizes the value attributed to their shares.

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The purpose of this study is to delve into the ramifications of WCM on the performance, particularly

the profitability, of Pakistan's textile sector. The textile industry holds paramount significance in Pakistan, serving as a crucial contributor to revenue generation. In the domain of textile exports, Pakistan stands as the eighth-largest in Asia, with total textile product exports amounting to 10.2 billion US dollars. Given the pivotal role of this industry in revenue generation, it becomes imperative for textile enterprises to meticulously uphold their working capital management practices, with the aim of optimizing their net worth.

In the realm of finance, the concept of "working capital" carries substantial weight and is recognized as a pivotal component within corporate tactics. It embodies the capital accessible for the routine undertakings of an organization, commonly depicted as the surplus stemming from current assets surpassing current liabilities. The working capital strategies of an organization are moulded by two choices: the identification of the suitable magnitude of investment in current assets and their composition for a given activity level (investment decision), and the opting for the means to fund this investment (financing decision).

Current assets encompass assets with high liquidity and benefits realized within one year, such as cash and cash equivalents, inventory, and receivables. Any asset easily convertible into cash is also considered a current asset. Conversely, current liabilities encompass obligations to be settled within one year, including accounts payable, short-term loans, and interest payments. This relationship can be expressed in equation form as:

Net working capital= Current assets-Current Liabilities

The primary objective of working capital management is to effectively handle a firm's current liabilities and assets, striking a balance between making profits and managing risk exposure, ultimately enhancing the firm's overall value. Skilful management of working capital contributes to a heightened firm's value. The firm's inventory can be utilized to generate accounts receivable, which in turn can be used to settle current liabilities. Effectively overseeing

cash, accounts receivable, and inventory stands as a noteworthy apprehension for manufacturing enterprises. Even prosperous companies aren't impervious to risk, underscoring the pivotal importance of adept working capital management in bolstering profitability while mitigating various risks, notably credit and liquidity concerns.

Efficient WCM yields positive impacts on a firm's profitability and performance. Manufacturing firms typically place a higher emphasis on efficient working capital management compared to service-oriented firms. Neglecting proper working capital management can lead to financial turmoil and even bankruptcy. Effective management not only safeguards against bankruptcy but also strengthens the firm's financial standing and enhances profitability. Therefore, the challenges of efficient working capital management are pertinent to all types of organizations, regardless of their sector (manufacturing or services).

The effect of WCM extends beyond controlling short-term liabilities and resources; it also prevents unnecessary investments in these assets. While profit maximization is undoubtedly a crucial goal for firms, maintaining liquidity is equally important. Sacrificing liquidity for increased profits could lead to severe issues and potential collapse. Thus, maintaining an equilibrium between profitability and liquidity becomes imperative. Skilful working capital management not only alleviates liquidity risks but also optimizes inventory control, minimizing disruptions and bottlenecks in production workflows.

The distinct mechanisms of WCM comprise accounts receivable, Cash, Marketable Securities then Inventory Management. Effective management involves promptly collecting outstanding amounts, and strategically delaying payments to preserve cash and maintain liquidity. Delaying accounts payable is a vital tactic in efficient working capital management. However, the decision to pay earlier to take advantage of supplier discounts involves a careful evaluation of the trade-off between obtaining discounts and maintaining liquidity.

The competence of managers in handling working capital issues directly affects firm performance. Inefficient management of working capital can render a firm unable to meet its obligations. To minimize financing costs and

expand initiatives, reducing investment in current assets is crucial. Striking an optimal balance between current and fixed assets is essential, with current assets playing a unique role that cannot be acquired through leasing or renting. Maximizing the owner's wealth is another benefit of effective WCM.

The aim of current research is to explore the impact of WCM on the performance of Pakistan's fabric area. This sector holds immense economic significance and plays a pivotal role in revenue generation. By examining working capital practices (WCP) and their effects on performance, the research aims to contribute valuable insights to the existing literature. The study's focus on the textile sector addresses a gap in research, offering a comprehensive analysis of WCM's impact on cost-effectiveness and performance within this specific industry.

Literature Review

Several scholars have investigated the impact of diverse elements of working capital on profit margins across various nations. Uyar (2009) delved into the correlation between the cash conversion cycle and the profitability of enterprises in Turkey, uncovering a notable and favourable influence. In a separate study, Samiloglu and Demirgunes (2008) scrutinized Turkish companies, revealing that a majority of working capital components wield a positive influence on profitability.

Vishnani and Shah (2007) explored the influence of working capital strategies on performance through an examination of a sample of Indian enterprises, detecting a favourable relationship between working capital constituents and company performance. In a similar vein, Lazaridis and Tryfonidis (2006) investigated firms listed on the Athens stock exchange, underscoring the advantageous impact of various working capital elements on profitability. Padachi (2006) assessed the ramifications of working capital constituents on small-scale manufacturing businesses in Mauritius, uncovering a positive effect of cash conversion cycle (CCC), inventory turnover, and net trade cycle on profitability. Conversely, the average payment period (APP) and average collection period (ACP) exhibited an adverse linkage with profitability.

Shin and Soenen (1998) empirically supported the idea that proper management of all working capital components positively affects organizational performance. Smith et al. (1998) explored the relationship between working capital management and return on investment, demonstrating consistency with previous findings. Jose et al. (1996) examined the empirical relationship between CCC and organizational performance, observing a positive impact on profitability. Afza and Nazir (2008) investigated working capital components' impact on the performance of Pakistani manufacturing firms, while Shah and Sana (2005) analyzed the profitability of the oil and gas sector in Pakistan, highlighting the influence of working capital management components.

Specifically Focusing on Working Capital Components

Average Collection Period (ACP): Raheman et al. (2010) conducted an analysis on manufacturing companies in Pakistan spanning the period from 1998 to 2007, identifying an inverse correlation between average collection period (ACP) and profitability. Similarly, Vahid et al. (2012) investigated Iranian enterprises and reported an adverse impact of the average collection period (ACP) on net operating profit.

Average Payment Period (APP): Raheman et al. (2010) showed a negative impact of APP on profitability for manufacturing firms in Pakistan. Deloof (2003) and Mathuva (2009) found a negative relationship between APP and profitability in Belgian and Kenyan firms, respectively. Padachi (2006) and Garcia and Martinez (2007) demonstrated varying results, with Padachi indicating a positive impact on Mauritian firms and Garcia and Martinez showing a negative correlation for SMEs.

Inventory Turnover in Days (ITID): Padachi (2006), Vahid et al. (2012), and Garcia and Martinez (2007) collectively found that The implementation of ITID results in a detrimental effect on profitability.

Cash Conversion Cycle (CCC) & Net Trading Cycle (NTC): Studies by Padachi (2006), Raheman and Nasr (2010), Deloof (2003), and

Shah and Sana (2005) consistently indicate that CCC and NTC negatively affect profitability.

These studies collectively provide insights into the relationship between working capital components and firm profitability, shedding light on the complex dynamics influencing financial performance in various industries and countries.

Hypotheses of the Study

Based on the aforementioned literature, the study formulates the following hypotheses for each independent variable:

Average Collection Period (ACP) Hypothesis

The variable ACP is believed to impact the firm's profitability. Past studies have mostly reported a negative impact of ACP on profitability, indicating that longer collection periods lead to reduced profitability. This is due to delayed receipt of payments, which hinders the firm's ability to invest or generate interest revenue. As a result, this study postulates an inverse correlation between the Average Collection Period (ACP) and the profitability of textile companies operating in Pakistan.

H1: An increase in ACP is associated with a decrease in profitability, indicating a negative impact on the profitability of textile firms in Pakistan.

Average Payment Period (APP) Hypothesis

The average payment period is another significant element of working capital management. Prior research commonly reports a negative impact of APP on profitability, suggesting that delaying payments affects a company's image and overall profitability. However, Padachi (2006) argues that delayed payments can be utilized to generate revenue or interest income. Despite this, the overall argument implies a negative effect of APP on profitability.

H2: The profitability of textile firms in Pakistan is negatively affected by the Average Payment Period (APP).

Inventory Turnover (IT) Hypothesis

Inventory turnover signifies the duration required to vend inventory. Prior research, exemplified by

Raheman et al. (2010), Deloof (2003), and Vahid et al. (2012), consistently indicate an adverse influence of inventory turnover on profitability. This implies that a briefer turnover interval signifies swifter sales, thereby contributing to enhanced profitability.

H3: The number of days taken for Inventory Turnover (ITID) has an adverse impact on the profitability of textile enterprises in Pakistan.

Hypothesis on Cash Conversion Cycle (CCC)

The cash conversion cycle denotes the time needed to convert inputs (such as inventory) into cash inflows. Extended conversion periods result in investments being tied up in inventory, leading to delayed cash conversion and consequently harming profitability. This trend is consistent with numerous previous studies, including those by Afza and Nazir (2008), Padachi (2006), and Deloof (2003), all of which propose an inverse relationship between the cash conversion cycle and profitability.

Hypothesis 4 (H4): The Cash Conversion Cycle (CCC) wields a detrimental impact on the profitability of textile enterprises in Pakistan

Hypothesis on Net Trading Cycle (NTC)

The net trading cycle gauges the duration a company requires to generate cash flow through its trading activities. Similar to the cash conversion cycle, the net trading cycle plays a crucial role in working capital management. Earlier research indicates that the net trading cycle has an adverse impact on profitability, owing to reasons analogous to those affecting the cash conversion cycle. This research asserts that the net trading cycle exerts a negative influence on the profitability of textile enterprises in Pakistan.

Hypothesis 5 (H5): The Net Trading Cycle (NTC) has a detrimental effect on the profitability of textile companies in Pakistan.

Theoretical Framework

The theoretical framework constitutes a pivotal aspect of this research, outlining the variables employed within the study, elucidating their interconnections, and formulating the resulting

hypotheses. This framework visually portrays the interplays between the independent variables (working capital constituents) and the dependent variable (net operating profitability). Additionally, it furnishes operational definitions for these variables, encompassing the measurement proxies employed.

For instance, the operational definition of the dependent variable, net operating profitability, entails the computation of net operating income achieved by adding depreciation to earnings before interest and tax, which is then divided by total assets. Analogously, the operational

definitions pertaining to the independent variables—namely, ACP, APP, ITID, CCC, and NTC—are presented, rooted in their respective measurement proxies.

The theoretical framework assumes the role of a compass, facilitating comprehension of the interrelationships among variables and the subsequent hypotheses derived from these connections. It furnishes a coherent structure, guiding the exploration of the effects of working capital management components on the profitability of textile firms in Pakistan.

Table 1

Operation definition of variables

Variable name	Operational definition
Dependent variable	
Net operation profitability (NOP)	(EBIT + depreciation) / Total assets
Independent variables	
Average collection period (ACP)	Account receivable / Net sales *365
Average payment period (APP)	Account payable / purchases *365
Inventory turnover in days (ITID)	Inventory / cost of goods sold*365
Cash conversion cycle (CCC)	ACP + ITID – APP
Net trading cycle (NTC)	ACP + (inventory / Net sales *365) – (Account payables / Purchases *365)

Research Design and Methodology

Within this chapter, the presentation encompasses the research design, methodology, population, sampling methodology, a technique for data collection, a unit of analysis, and the statistical tools applied in the study.

Population and Sampling

The central objective of this study is to assess how working capital management components influence the profitability of Pakistan's textile industry. Given the presence of over 30 textile firms within the nation, a subset of 10 textile firms was carefully chosen as the study's sample. The selection of these sample firms was conducted using a simple random sampling approach, a method specifically employed to ensure broader applicability and to mitigate any potential bias during the selection process. A detailed list of the chosen textile firms can be found in Appendix 1.

Unit of Analysis

The individual textile firms constitute the unit of analysis for this study.

Data Collection

Accurate data collection stands as a cornerstone in the realm of research. In the context of this study, relevant data concerning the variables subject to investigation were acquired with meticulous care from the annual reports of specific textile firms in Pakistan. These crucial data points were extracted from the income statement and balance sheet segments within these financial records. The study encompasses a temporal span of six years, ranging from 2009 to 2014.

Statistical Tools and Model

The analysis of the gathered data was carried out using E-views 9.0 software. Descriptive statistics were employed to offer a comprehensive overview and elucidation of the findings. To delve into the

influence of different working capital management facets on profitability, a panel regression equation was adopted. To comprehensively assess the effects, both Fixed Effect and Random Effect models were employed. Since the study focuses on a sole dependent variable, the subsequent single regression equation was utilized for the analytical procedure:

$$NOP = \alpha_0 + \beta_1ACP + \beta_2APP + \beta_3ITID + \beta_4CCC + \beta_5NTC + \varepsilon$$

By employing this regression equation, the study endeavoured to reveal the intricate connections between various facets of working capital management and the profitability of Pakistan's textile industry.

Where:

NOP stands for net operating profit

α_0 represents the constant or the intercept of the linear equation

β_1ACP = Average collection period coefficient

β_2APP = Average payment period coefficient

β_3ITID = Inventory turnover in days coefficient

β_4CCC = Cash conversion cycle coefficient

β_5NTC = Net trading cycle coefficient

ε = Error term

Analysis and Results

the empirical discoveries of the study are presented, encompassing descriptive statistics, correlation analysis, and regression analysis.

Descriptive Statistics

Descriptive statistics unveil essential characteristics of the data, offering insights into central tendencies and variability. Table 2 provides a comprehensive overview of the distribution of each variable, encompassing both dependent and independent variables. The table includes measures such as the mean, standard deviation, minimum, and maximum values for each variable. This presentation offers valuable insights into the characteristics and spread of the data, aiding in a better understanding of the variables' behaviour and variability.

Table 2

Descriptive statistics

	NOP	ACP	APP	ITID	CCC	NTC
Mean	6.48	43.31	100.45	96.86	60.11	42.27
Maximum	29.06	182.68	489.37	562.18	173.27	111.55
Minimum	-15.26	0.70	5.95	19.26	5.26	3.37
Std. Dev.	8.24	35.33	99.34	85.39	36.58	25.92
Skewness	-0.12	1.83	2.19	3.47	0.83	0.40
Kurtosis	3.74	7.36	8.64	17.40	3.41	2.43
Observations	60	60	60	60	60	60

Table 2 describes the descriptive statistics of dependent and independent variables. The dependent variable is NOP (net operating profitability) and its mean value is 6.48 which shows that on average the profitability ratio of the selected textile firms of Pakistan is 6.48%. The maximum value of the dependent variable is 29.06. This value indicates the maximum ratio of the profitability of the sampled textile firms is 29.06%. The minimum value is -15.26 which indicates that the minimum profitability ratio of the selected textile firms is 15.26%. The value of the standard deviation of this variable is 8.24 which shows variation from the original mean value of the same variable.

The first independent variable of Table 4 is ACP (average collection period). The mean value of ACP is 43.31 which indicates that on average the selected textile firms receive their due payments after 41.31 days. Its minimum value is 0.71 which indicates that the minimum average collection period of the selected textile firm is 0.71 days while the maximum period is 182.68 days. The standard deviation of the ACP variable is 35.33 which shows high variation.

The second independent variable is the average payment period (APP) and its mean value of this variable is 100.45 which shows that on average the selected textile firms pay their account payables after 100.45 days. The maximum value of the same variable is 489.37

which indicates the maximum payment period of some of the selected firms. The minimum value is 5.95 which indicates that some of the selected textile firms pay their dues at least after 5.95 days. This variable has a standard variation equal to 99.34 which shows high variation.

The third independent variable is ITID (inventory turnover in days) having a mean value of this variable is 96.86 which shows that the average trend of the selected firms to convert the inventory in the cash flow is 98.86 days. The maximum period for selling inventory is 562.18 days. The minimum value is 19.26 and every selected firm requires at least 19.26 days to generate cash flow from inventory. This value shows that the minimum period required by the selected firms to sell their inventory is 19.26 days. While the standard deviation is 85.39 which shows high variation.

The fourth variable is CCC (cash conversion cycle) and its mean value is 60.11 indicates that the average time period for the selected firms to convert the inputs into the cash flow is 60.11 days.

The maximum period for the said purpose is 173.27 days and the minimum value is 5.26. This value indicates that the minimum period required for any selected firm to convert the inputs into cash flows is 5.26 days. The standard deviation value is 36.58 which shows a moderate level of variation.

The last variable is NTC (net trading cycle) having an average period required for the said purpose is about 42.27 days. The maximum period required for the said purpose is 111.55 days and a minimum value of 3.37. It indicates that the selected firms will take at least 8 days to generate cash flow through. There is little variation in this variable which is only 25.92.

Correlation Analysis

To see the relationship of different variables with each other correlation analysis is used. A correlation matrix indicates the relationship of all the variables with other variables. The correlation matrix is shown in table 5. Each variable has one correlation with itself.

Table 3
Correlation analysis

	ACP	APP	ITID	NTC	CCC
ACP	1.00				
APP	0.61	1.00			
ITID	0.44	0.31	1.00		
NTC	0.28	0.23	0.18	1.00	
CCC	0.20	-0.08	0.26	0.34	1.00

The variable APP has a correlation value equal to 0.61. This value indicates that there is a positive association between APP and ACP. The correlation is strong enough but this value is sufficient for this association. ITID is another variable and it has a correlation value equal to 0.44. It indicates a positive association between ACP and ITID. This value indicates a moderate correlation. The variable NTC having a value of 0.28 Indicates a positive but weaker correlation between NTC and ACP. The variable CCC has a correlation value equal to 0.20. This value indicates a positive relationship between these two CCC and ACP. This relationship is not stronger enough. The correlation between APP and ITID is 0.31 which indicates a weak positive

association between these two variables. The variable is NTC which has a correlation value equal to 0.23. This value shows a positive relationship between APP and NTC variables. The variable is CCC which has a correlation value equal to -0.03. This value shows a negative and weaker relationship between APP and CCC variables. The variable is ITID which has a correlation value equal to 0.18. This value shows a positive relationship between ITID and NTC variables. The variable is ITID which has a correlation value equal to 0.26. This value shows a positive relationship between ITID and CCC variables. The variable is NTC which has a correlation value equal to 0.34. This value shows

a positive relationship between these NTC and CCC variables.

Testing for Unit Root and Stationarity

The unit root test is a crucial step in determining the stationary nature of a time series. In order to ensure the reliability of our analysis, it is essential that the series exhibit stationarity. Table 6, displayed below, presents the assessment of

stationarity for both the dependent and independent variables utilized in this study. It is worth noting that individual unit root tests may have limited ability to detect deviations from stationarity, thus a common unit root test is adopted for analysis, as recommended by (Levin et al., 2002). This approach enhances the robustness of our investigation and aligns with established best practices.

Table 4

Unit Root analysis

Panel Unit Root Test		
Variable	Coefficient	Probability
NOP*	-7.63	0.0000
ACP*	-5.49	0.0000
APP*	-3.77	0.0001
ITID*	-7.21	0.0000
NTC*	-5.24	0.0000
CCC*	-4.07	0.0000

*Level, **1st Difference, ***2nd Difference

The outcomes of the panel unit root test indicate that all the series under consideration exhibit stationarity at their respective levels. This finding implies that there is no requirement to apply lagging or differencing techniques to the variables. The stationary nature of the series at their original levels ensures a solid foundation for our analysis, thereby enhancing the accuracy and reliability of our results.

Regression Analysis: Exploring the Effects of Working Capital Management on Profitability

The regression analysis delves deeply into how

different aspects of working capital management impact the profitability of textile firms in Pakistan. Within this analysis, the panel regression method incorporates three distinct effect types: Common Effects, Fixed Effects, and Random Effects. Thorough examinations are conducted to establish the most optimal model for the analysis.

In order to identify the most appropriate model, a choice is made between the Common Effect Model (Panel Least Square) and the Fixed Effect Model, utilizing the Redundant Fixed Effects-Likelihood Ratio Test. The outcomes of this pivotal test are presented in Table 5 below:

Table 5

Redundant fixed effects tests

Redundant Fixed Effects Tests			
Effects Test	Statistics	d.f.	Prob.
Cross-section F	1.932197	(9,45)	0.0713

The test's null hypothesis is formulated as H0: Select Fixed Effect Model, while the alternative hypothesis is articulated as H1: Opt for Common Effects Model. A scrutiny of the outcomes unveils an F-statistic value of 1.93, which, owing to its associated probability value of 0.0713, is considered insubstantial. This result does not furnish adequate justification for rejecting the null

hypothesis. Consequently, the adoption of the Common Effects model is deemed appropriate for our analysis.

With the null hypothesis being accepted, there exists no compelling necessity to proceed with the application of the Hausman test, a method often employed to distinguish between

Fixed Effects and Random Effects models. Given that our findings have not validated the suitability of the Fixed Effects model, the implementation of

the Hausman test becomes superfluous in this context.

Table 5

Panel Least Square regression analysis

Variable	Coefficient	Std. Error	t-statistic	Prob
C	9.745	2.422	4.022741	0.000
ACP	-0.047	0.039	-1.192559	0.238
APP	-0.027	0.013	-2.022869	0.048
ITID	0.017	0.013	1.291627	0.202
CCC	0.002	0.031	0.080894	0.935
NTC	-0.006	0.042	-0.152509	0.879

R-squared	0.202	Mean dependent var	6.482
Adjusted R-squared	0.128	S.D. dependent var	8.244
S.E. of regression	7.694	Akaike info criterion	7.013
Sum squared resid	3197.21	Schwarz criterion	7.223
Log likelihood	-204.40	Hannan-quinn criter.	7.095
F-Statistic	2.747	Durbin-Watson stat	1.845
Prob(F-statistic)	0.027		

Regression Analysis: Impact of Working Capital Management on Profitability

The coefficients corresponding to each independent variable are displayed in Table 8, shedding light on their effects on the profitability of Pakistan's textile sector. Let's delve into the results of each variable:

Average Collection Period (ACP): The coefficient for ACP registers a negative value of -0.047. However, this coefficient lacks statistical significance, evident from its P-value of 0.238, which surpasses the conventional threshold of significance ($P < 0.05$).

This observation implies that the influence of ACP on the profitability of Pakistan's textile sector is not substantial, aligning with the affirmed hypothesis H1. This result is in harmony with earlier research by Deloof (2003), Vahid et al. (2012), and Raheman et al. (2010), thereby reinforcing and corroborating their respective conclusions.

Average Payment Period (APP): The coefficient associated with APP reveals a negative value of -0.027. This coefficient attains statistical significance at the 5% significance level, as indicated by the P-value of 0.048. The negative sign of the coefficient implies that an increase in the Average Payment Period adversely affects the Net Operating Profit (NOP) of Pakistan's textile sector. Consequently, hypothesis H2 is substantiated by our analysis.

Inventory Turnover in Days (ITID): The coefficient linked to ITID demonstrates a positive value of 0.017. However, the corresponding P-value of 0.202 falls short of achieving statistical significance at the 5% level. As a result, hypothesis H3 is validated, suggesting that ITID does not wield a significant influence on the profitability of Pakistan's textile sector. This finding aligns with the conclusions drawn from prior research by Raheman et al. (2010), Deloof (2003), and Vahid et al. (2012), thereby fortifying the consistency of these outcomes.

Cash Conversion Cycle (CCC): The coefficient value of CCC is positive, amounting to 0.002, but its corresponding P-value of 0.935 does not attain statistical significance at the 5% level. Consequently, the basis for rejecting hypothesis H4 is not established. This outcome mirrors the conclusions drawn in analogous research endeavours, exemplified by the studies conducted by Afza and Nazir (2008), Padachi (2006), and Deloof (2003).

Net Trading Cycle (NTC): NTC displays a negative coefficient value of -0.006, accompanied by an insignificant P-value of 0.879 at the 5% level. This outcome suggests that NTC does not exert a statistically significant influence on the NOP of Pakistan's textile firms. Thus, hypothesis H5 is accepted, aligning with the proposed negative relationship between NTC and NOP.

Post Estimation Tests

Table 8 also encompasses the outcomes of post-estimation tests, elucidated as follows:

Model Summary and Fitness

The coefficient of determination, represented as R-squared, quantifies the proportion of variation that the model elucidates. Demonstrating an R-squared value of 0.202, the model accounts for 20.2% of the observed variation, leaving 79.8% unexplained. The standard error of estimate measures variation from the regression line, and the low value of 7.69 indicates minimal deviations of observations from the regression line.

The Analysis of Variance (ANOVA) assesses differences among more than two means. The F-test examines whether population means differ. In this context, the F-test yields a value of 2.747, signifying significance at the 5% level ($P < 0.05$), indicating that population means are not equal.

Multicollinearity

The basic assumption of multiple regression is that it assumes no correlation between independent variables. In other words, there should not be a multicollinearity issue in the data. To check the multicollinearity two tests named VIF and tolerance are used. The values of the VIF should be less than 10. If this value is less than 10, this indicates no issue of collinearity. There is no

automatic calculation of VIF in Eviews so it should be calculated manually using Kutner et al. (2004) methodology. The following equation is used to calculate VIF:

$$VIF = 1 / (1 - R^2)$$

$$VIF = 1 / (1 - 0.20)$$

$$VIF = 1.25$$

The equation shows that the VIF value is less than 10, which indicates that multicollinearity does not exist in the data.

Auto Correlation

Model Summary and Durbin-Watson Test

Table 8 provides an overview of the model summary, including the Durbin-Watson test value. The Durbin-Watson test serves as a tool to assess autocorrelation, gauging the independence of error terms, a fundamental assumption of multiple regression models. Ideally, the test's value should fall within the range of 1 to 4.

In our case, the Durbin-Watson test yields a value of 1.84. This value implies that there are no indications of autocorrelation issues within the dataset, affirming the independence of all error terms (Field, 2009). This finding enhances the reliability of our regression analysis and upholds the validity of our results.

Summary of Results

Five independent Variables were employed to assess the influence of working capital on profitability, specifically focusing on the variable ACP. was found to be negatively correlated with NOP and its result is insignificant. The APP variable has a negative coefficient and is found significant. The third variable was ITID and a positive impact of this variable on NOP is observed. The result of this variable was insignificant and shows that ITID positively affects the NOP. The fourth variable was CCC and a positive impact of this variable on the NOP is seen. The result of this variable was also insignificant and showed that CCC negatively affects the NOP of the textile firms of Pakistan. The last variable was NTC and a negative association between this variable and NOP is observed. The result of the study was also insignificant and showed that the proposed relationship was true. The summary of the results is provided in table 7 below.

Table 6

Summary of the results

Variables	Hypothesis	Results	Significance
ACP	Negative	Negative	Insignificant
APP	Negative	Negative	Significant
ITID	Negative	Positive	Insignificant
CCC	Negative	Positive	Insignificant
NTC	Negative	Negative	Insignificant

Conclusion

Adept handling of working capital emerges as a pivotal determinant of a company's operational triumph. This research centred its efforts on the evaluation of how distinct working capital components(WCC impact the financial performance of textile businesses operating in Pakistan. The components under examination included the average collection period (ACP), average payment period (APP), inventory turnover in days (ITID), cash conversion cycle (CCC), and net trading cycle (NTC). Meanwhile, the study's focal point for analysis was the net operating profitability (NOP) as the dependent variable. In essence, this research delves into the complex interplay between these crucial elements, unveiling their potential influence on the financial success of textile companies in Pakistan.

The study revealed that a longer average collection period (ACP) has a negative influence on profitability, indicating that delayed payments hinder the financial performance of textile firms. Similarly, the analysis highlighted that postponing payments, as represented by the average payment period (APP), adversely affects profitability. Contrary to expectations, the study found a positive impact of inventory turnover in days (ITID) on profitability, though this effect lacked statistical significance. Additionally, the cash conversion cycle (CCC) and net trading cycle (NTC) exhibited positive and negative relationships with profitability, respectively, though these effects were not statistically significant. Overall, these findings emphasize the significance of prudent working capital management (WCM) components to enhance the financial performance of textile firms in Pakistan.

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