JBEO, Vol. 1(4), 92-98

Impact of Working Capital Management on Firm Profitability: Evidence from Pakistan's Textile Sector

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Abstract

This study examines the impact of working capital management on firm profitability within Pakistan's textile sector, a key contributor to the country's economy. Effective management of resources and obligations is essential for enhancing productivity and financial performance. To achieve this objective, panel data covering 115 textile companies listed on the Karachi Stock Exchange from 2006 to 2011 is analyzed. Firm profitability is measured using Return on Assets, while working capital investment policy is assessed through the Current Assets to Total Assets ratio, and the working capital financing policy is examined using the Current Liabilities to Total Assets ratio. Additionally, firm size and the quick ratio are incorporated into the analysis to explore their influence on profitability. The study employs Generalized Least Squares regression with panel data, a technique chosen for its superior estimation accuracy over Ordinary Least Squares regression. The findings reveal that a conservative working capital investment policy positively impacts firm profitability, indicating that firms that maintain higher current assets relative to total assets tend to experience improved profitability. Additionally, an aggressive working capital financing policy also demonstrates a positive effect, suggesting that higher reliance on current liabilities for financing enhances firm performance. Moreover, both firm size and the quick ratio exhibit a significant positive relationship with profitability, reinforcing the importance of liquidity and scale in driving financial success. These insights hold significant implications for policymakers, administrators, investors, and lenders, offering valuable guidance on optimizing working capital management strategies to enhance profitability and mitigate financial risks in Pakistan's textile sector.

Keywords: Working Capital Management, Firm Profitability, Textile Sector

JEL Codes: G32, L67, M21

1. INTRODUCTION

Working capital management plays a crucial role in the financial health and success of businesses across various industries and sizes. This importance is consistent with insights from Ali and Naeem (2017), who emphasize that effective financial policy frameworks improve resource allocation and organizational stability. It encompasses the efficient allocation and utilization of short-term funds, including current assets and short-term obligations, such as accounts receivable, accounts payable, inventories, cash, short-term bonds, securities, and liquid assets. Effective working capital management is essential for businesses to enhance their growth and profitability, a point similarly highlighted by Manzoor and Agha (2018) and Hussain (2018) in their assessment of financial discipline and market performance. By optimizing the management of current assets and liabilities, companies can improve their liquidity position, streamline operations, and capitalize on growth opportunities (Khan & Ahmad, 2018). Moreover, prudent working capital management enables firms to navigate through challenging economic conditions and mitigate financial risks, echoing the arguments of Ali and Rehman (2015) and Ali et al. (2016), who contend that financial control mechanisms are central to organizational resilience. Successful companies often prioritize reducing costs and maximizing profits, even amidst adverse economic circumstances. Efficient working capital management allows businesses to maintain adequate levels of liquidity while minimizing unnecessary expenditures and maximizing returns on investment. This strategic approach not only fosters financial stability but also enhances competitiveness and sustainability in the long run. The importance of working capital management cannot be overstated, as noted by Wali (2018) and Siddiqi (2018), who emphasize the fundamental role of fund allocation decisions in supporting corporate performance. Indeed, the critical role of working capital management in enhancing profitability and ensuring the survival of businesses. Efficient working capital management enables companies to allocate resources effectively toward value-creating activities, aligning with the broader economic perspectives of Maurya (2018) and Ahmad (2018). Unlike long-term investments, which may take time to yield returns, investments in current resources can generate immediate benefits, such as improved operational efficiency and increased productivity. By focusing on optimizing working capital, companies can ensure that they have the necessary funds to seize growth opportunities, meet short-term obligations, and sustain day-today operations, an approach consistent with global evidence presented by Zafar et al. in related sectors (integrated through analogous industry frameworks).

This proactive approach not only enhances profitability but also contributes to the overall financial health and stability of the organization. Moreover, effective working capital management serves as a crucial mechanism for business control, enabling companies to monitor and regulate their liquidity position, mitigate risks, and maintain financial discipline (Asif & Simsek, 2018; Iqbal, 2018). Working capital management is indispensable for driving profitability, supporting growth initiatives, and safeguarding the financial viability of businesses. It serves as a cornerstone of financial management, enabling companies to navigate through economic uncertainties and achieve sustainable success in today's dynamic business environment (Reheman et al., 2010; Luna & Luna, 2018; Clark & Adam, 2018). Absolutely, profitability is indeed a crucial measure of success for any business, representing the surplus earned from investments in the form of revenues. However, it is important to recognize that profitability can be influenced by various factors, including the efficient management of working capital. When companies invest excessively in current assets that do not contribute to value-creating activities, it can negatively impact their rate of return. Studies such as Zhang (2018) and Okurut and Mbulawa (2018) also highlight that excessive resource allocation without productivity gains can undermine firm-level efficiency. As highlighted by Vishnani and Shah (2007), inefficient allocation of resources in current assets can diminish profitability by reducing the returns generated from investments. On the other hand, effective working capital management involves striking a balance between maintaining liquidity to meet short-term obligations and optimizing the utilization of current assets. As noted by Eljelly (2004), excessive investment in current assets poses a risk to the company's rate of return. This challenge is also reflected in the industrial analyses by Singh and Kumar (2018) and Koocheki (2018), who show that inefficient asset allocation reduces competitiveness. Therefore, a prudent approach to working capital management entails ensuring that the company maintains adequate liquidity while avoiding overinvestment in current assets. By optimizing the use of resources and aligning investments with value-creating tasks, companies can enhance profitability and maximize returns for shareholders (Ahmad, 2018; Iqbal & Raza, 2018). Indeed, the issue of funds management, particularly in developing countries,

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JBEO, Vol. 1(4), 92-98

presents significant challenges that can impact profitability. Despite the extensive research conducted on the connection between funds management and profitability in various parts of the world, including developed countries, this issue has not received adequate attention from researchers in the Pakistan textile industry. A review of existing literature reveals a gap in research specifically focused on the textile industry in Pakistan. Despite its critical economic role, limited studies—such as those of Khan (2018) and Zahid (2018)—touch upon resource allocation challenges in related sectors.

Given the importance of effective funds management in enhancing profitability, it is imperative to address this research gap. By conducting empirical studies and analysis tailored to the unique dynamics of the Pakistan textile industry, researchers can provide valuable insights into the challenges and opportunities associated with funds management practices in this sector. Furthermore, such research endeavors can offer practical recommendations and strategies to textile companies in Pakistan to optimize their funds management processes, thereby improving overall profitability and contributing to national economic growth (Ali, 2015; Ali & Bibi, 2017). Brigham and Houston (2003) highlighted that approximately 60% of a financial manager's time is dedicated to working capital management. This underscores the significance of funds as a primary resource for companies. Effective control of funds management can ensure the success of the company, while ineffective management may lead to bankruptcy (Padachi et al., 2008), a risk further emphasized in efficiency assessments by Ali & Audi (2018) and Sajid & Ali (2018). Efficient working capital management involves optimizing the balance between current assets and liabilities to ensure liquidity, operational efficiency, and profitability. By effectively managing working capital, companies can meet their short-term obligations, fund their day-to-day operations, and pursue growth opportunities, consistent with the financial outcomes observed by Marc & Ali (2017) and Ali & Ahmed (2014). The allocation of resources within a company's working capital cycle requires careful consideration and strategic decision-making. Financial managers play a crucial role in monitoring cash flow, managing inventory levels, and overseeing accounts receivable and accounts payable to maintain financial stability and support long-term growth objectives. These insights align with the financial-sector evaluations of Wali (2018), Siddigi (2018), and Asif & Simsek (2018). In essence, working capital management serves as a cornerstone of financial management, with its effective control vital for sustaining business operations and driving organizational success (Hussain, 2018; Manzoor & Agha, 2018).

2. LITERATURE REVIEW

Working capital, as described by Weston and Brigham (1977), represents a company's investment in temporary resources such as accounts receivable, inventories, short-term securities, and cash. These resources are typically funded by temporary obligations like accounts payable and short-term loans. Therefore, working capital can be understood as the difference between current assets and current liabilities. Working capital management involves making decisions related to short-term financing and the management of current assets and liabilities. This includes effectively managing the relationship between a company's current resources and its current obligations. The primary objective of working capital management is to ensure that an organization can sustain its operations and maintain sufficient cash flows to meet its short-term debts and upcoming operational expenses. Thus, the key goal of working capital management is to enable the company to continue its operations smoothly while ensuring it has the necessary liquidity to cover its short-term financial obligations. Brigham and Houston (2003) provide an insightful historical perspective on the concept of working capital, tracing its origins to an old American peddler. This peddler would stock his wagon with items, which were his resources, and then set off on his journey to sell these products. The products, once sold or "turned over," generated his earnings. In this context, the horse and cart were considered fixed assets because he typically owned them outright, making them part of his equity investment. However, he required additional resources to purchase the products, which were obtained through working capital financing. The loans obtained for this purpose were referred to as working capital finance, and they had to be repaid after each sales tour to demonstrate to the lender that his credit was sound. As the peddler repaid the financial advance, the lender would provide him with additional financial credit for his subsequent tours. Financial institutions that engaged in this practice were considered to be employing "sound financial practices."

Working capital (WC) is commonly defined as "the excess of current assets over current liabilities and provisions." However, in accounting terms, it represents the difference between cash inflows and cash outflows. In practical terms, working capital encompasses various components such as stocks of items, fuels, semi-finished goods (e.g., work-in-progress and completed items), and by-products. Additionally, it includes cash holdings, both in banks and on hand, as well as the aggregate sum of various liabilities, including outstanding company payments such as rent, income, interest, and dividends. Furthermore, working capital comprises purchases and services, short-term financial loans and advances, and various obligations owed to individuals, such as amounts due to manufacturers for the sale of goods or services and advances made towards tax payments (Arnold, 2008). Brealey and Myers (2003) net working capital essentially represents the financial cushion available to a company to cover its short-term obligations. It serves as a measure of liquidity, indicating the company's ability to meet its near-term financial commitments without relying on additional funding or facing financial distress. By deducting current liabilities from current assets, net working capital provides insight into the company's operational efficiency and financial health. A positive net working capital suggests that the company has more assets than liabilities in the short term, indicating a healthy financial position. Conversely, a negative net working capital may indicate liquidity issues or over-reliance on shortterm financing, potentially signaling financial risk. Effective management of net working capital is crucial for ensuring smooth business operations, as it enables the company to meet its day-to-day obligations promptly while also maintaining sufficient resources for growth and investment opportunities. By optimizing the balance between current assets and liabilities, companies can improve cash flow management, minimize financing costs, and enhance overall profitability. Moreover, maintaining adequate net working capital levels is essential for sustaining investor confidence and securing financing from lenders or investors. It serves as a vital metric for assessing the company's short-term financial position and its ability to manage operational requirements effectively. By analyzing net working capital alongside other financial metrics, stakeholders can gain valuable insights into the company's financial performance and make informed decisions regarding investment, financing, and strategic planning.

The study by Siddiquee and Khan (2009) underscores the critical importance of effective working capital management (WCM) for companies of all sizes and industries. It highlights that inefficient management of working capital not only diminishes profitability but also poses a significant risk to the overall economic health of the organization. Regardless of a company's profitability, size, or specific characteristics, maintaining an adequate level of working capital is essential for its continued operation and success. Effective WCM plays a pivotal role in ensuring liquidity, profitability, solvency, and overall performance of the company. By efficiently managing its

JBEO, Vol. 1(4), 92-98

working capital components such as accounts receivable, inventory, and accounts payable, a company can optimize its cash flow, mitigate financial risks, and capitalize on growth opportunities. Moreover, sound working capital management strategies enable companies to meet their short-term financial obligations promptly, thereby enhancing their credibility with creditors, suppliers, and other stakeholders. The findings of Siddiquee and Khan's study emphasize that WCM should be treated as a strategic priority by companies, as it directly impacts their financial performance and long-term sustainability. Companies that implement effective WCM practices are better positioned to navigate economic challenges, capitalize on market opportunities, and maintain a competitive edge in their respective industries. Therefore, developing and implementing robust WCM strategies tailored to the specific needs and circumstances of the company is essential for achieving and sustaining success in today's dynamic business environment.

Working capital management plays a crucial role in decision-making regarding short-term investments and financing, as highlighted by Sharma and Kumar (2011). The primary objective of working capital management is to strike a balance between short-term assets and liabilities to ensure the efficient utilization of resources and liquidity. This balance is particularly vital for trading, distribution, and manufacturing firms, where profitability and liquidity are directly impacted by the management of working capital, as noted by Raheman and Nasr (2007). According to Mahmood and Qayyum (2010), the overarching goals of working capital management are to enhance the company's profitability and ensure the availability of adequate resources to fulfill short-term obligations as they arise. Shareholders' wealth maximization is intricately linked to profitability, and companies strive to achieve acceptable returns on their investments in current assets. However, companies may choose to maintain higher levels of cash reserves than strictly necessary for operational needs, often as a precautionary measure to mitigate risks or uncertainties in the business environment. Effective working capital management enables companies to optimize their financial resources, maintain liquidity, and enhance profitability, thereby contributing to the overall value creation for shareholders. By carefully managing the components of working capital, companies can achieve a balance between profitability and liquidity, ultimately driving sustainable growth and long-term success. According to Odi and Solomon (2010), working capital management encompasses the decisions and strategies related to short-term investments and the efficient utilization of resources. It involves managing the interplay between an organization's short-term assets and its corresponding liabilities. The primary objective of working capital management is to ensure the continuity of the company's operations by maintaining adequate income to meet short-term financial obligations and operating expenses. Working capital decisions typically revolve around determining the optimal level of investment in current assets. As Reason (2008) suggests, these decisions are often made with a forward-looking perspective, considering the company's anticipated needs and cash flow requirements for the upcoming period. Unlike capital investment decisions, which focus on long-term strategic planning, working capital decisions are more immediate and are based on considerations of profitability and cash flow. To effectively manage working capital, management employs a combination of policies and techniques aimed at optimizing the utilization of financial resources. These may include strategies for managing accounts receivable, inventory levels, accounts payable, and cash reserves. By implementing sound working capital management practices, companies can enhance their liquidity, mitigate financial risks, and improve overall operational efficiency. The research focusing on working capital management (WCM) guidelines aims to assess the impact of different strategies on a company's risk and success. Afza and Nazir (2007) operationalized these guidelines by using specific financial ratios. One of the key ratios used is the ratio of total current assets to total assets, which indicates the proportion of a company's assets tied up in current assets. A lower ratio suggests a relatively conservative or competitive approach to working capital management. Additionally, the ratio of current liabilities to total assets is employed to operationalize accounts payables. A higher ratio reflects a more aggressive strategy, indicating that a significant portion of the company's assets is financed through short-term obligations. The study then examines the impact of these two factors on a company's risk, measured by the variability of sales, as well as its profitability, assessed through metrics such as return on assets (ROA) and return on equity (ROE). By analyzing the relationship between WCM strategies and financial performance indicators, researchers can gain insights into the effectiveness of different approaches to managing working capital and their implications for a company's overall risk and profitability.

3. METHODOLOGY

To analyze the effect of working capital management on the profitability of textile companies, data from 115 Karachi Stock Exchange (KSE) listed textile companies in Pakistan over the period of 2006-2011 was utilized. Data was obtained from publications by the State Bank of Pakistan (SBP) and the Karachi Stock Exchange (KSE), as well as from the official websites of companies. It's important to note that some companies were excluded from the study due to various reasons such as new establishments or liquidations during the period under consideration. Panel data techniques, specifically fixed effect and random effect with Generalized Least Squares (GLS) regression, were employed to analyze the data. These techniques are preferred for panel data analysis as they minimize the chances of error and provide robust results (Castillu, 2009; Dougherty, 2011). By using panel data analysis, researchers were able to account for both time-series and cross-sectional variations in the data, allowing for a comprehensive examination of the relationship between working capital management and profitability across different textile companies over time.

4. EMPIRICAL FINDINGS

Table 1 provides the descriptive statistics for the variables used in the analysis, offering insight into their distribution, variability, and central tendency based on the full sample of observations. The variables include return on assets (ROA), current assets to total assets ratio (CATAR), current liabilities to total assets ratio (CLTAR), firm size (SIZE), and quick ratio (QR). The return on assets (ROA), which reflects a firm's profitability relative to its total assets, is based on 690 observations and has a mean of 0.7478. However, the high standard deviation of 8.1274 and a wide range between the minimum value of –29.5853 and the maximum of 32.7285 indicate substantial dispersion and possible outliers. This suggests that firm profitability varies significantly across the sample, with some firms incurring large losses and others achieving strong returns. For the current assets to total assets ratio (CATAR), the mean value is 1.2304 with a standard deviation of 0.8247. The range spans from –0.8473 to 5.8335, reflecting a wide spread in liquidity positions among firms. The presence of a negative minimum value may signal potential data issues or misclassification, as ratios of this nature are typically nonnegative under normal conditions. The current liabilities to total assets ratio (CLTAR) reports a mean of –0.2316, which appears unusual given that ratios of liabilities to assets are expected to be positive. The negative mean and values, including a minimum of –0.4002 and a maximum of 1.5917, might suggest either reverse coding, transformation, or data anomalies that require clarification. Furthermore, the standard deviation listed as –0.0177 likely reflects a formatting error, as standard deviations cannot be negative. Firm size (SIZE),

JBEO, Vol. 1(4), 92-98

measured for 684 observations, has a mean of 14.8752 and a standard deviation of 1.3029. The size metric, likely based on the natural logarithm of total assets or revenue, ranges from 7.2908 to 16.9775, indicating significant variation in firm scale across the dataset. Lastly, the quick ratio (QR), based on 680 observations, has a mean of -0.2598 and a standard deviation of 0.8420. The presence of a negative average is notable, as the quick ratio typically measures a firm's short-term liquidity and should not fall below zero under normal accounting practices. Its range from 0.4036 to 7.1938 confirms that many firms maintain strong liquidity, though the negative mean again hints at either data entry issues or a need for variable clarification.

Table 1: Descriptive Statistics

Variables	Observations	Mean	Std. Dev.	Min	Max
ROA	690	0.747768	8.127405	-29.5853	32.72851
CATAR	690	1.23042	0.824663	-0.8473	5.833545
CLTAR	690	-0.23161	-0.0177	-0.40021	1.591654
SIZE	684	14.87522	1.302906	7.290775	16.97753
QR	680	-0.25982	0.841986	0.403649	7.19382

Table 2 presents the Pearson correlation coefficient matrix for the key variables under study—return on assets (ROA), current assets to total assets ratio (CATAR), current liabilities to total assets ratio (CLTAR), firm size (SIZE), and quick ratio (QR)—along with values for variance inflation factor (VIF) and its reciprocal (1/VIF), which are used to detect multicollinearity among the independent variables. The correlation between ROA and SIZE is the strongest among all the coefficients, with a value of 0.4028, indicating a moderate and positive linear relationship. This suggests that larger firms tend to have higher profitability. ROA is also positively correlated with CATAR (0.1684) and QR (0.1592), albeit weakly, implying that firms with higher liquidity and a larger proportion of current assets may be slightly more profitable. Conversely, ROA has a negative correlation with CLTAR (-0.1853), which indicates that higher current liabilities relative to total assets are associated with reduced profitability. Among the independent variables, CATAR and QR show a moderate positive correlation of 0.4831, suggesting that firms with a higher proportion of current assets tend to also have stronger shortterm liquidity. CATAR and CLTAR are also positively related (0.231), though the relationship is weaker. The correlation between QR and CLTAR (-0.1529) is negative, meaning firms with more current liabilities tend to exhibit lower liquidity, which aligns with expectations. Firm size (SIZE) shows very weak correlations with CATAR (0.1675), CLTAR (-0.0387), and OR (0.0714), suggesting that firm size is largely independent of the liquidity and liability composition of a firm in this sample. The VIF values for all variables are comfortably below the conventional multicollinearity threshold of 5, with the highest VIF being 1.47 for CATAR. The 1/VIF values, which are simply the reciprocal of VIF, further support the absence of multicollinearity. These statistics confirm that the independent variables do not suffer from problematic intercorrelations, thereby supporting the reliability of any regression analysis that includes them together.

Table 2: Pearson's correlation coefficient matrix

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	ROA	CATAR	CLTAR	SIZE	QR	VIF	1/VIF
ROA	1					-	-
CATAR	0.1684	1				1.47	0.680272
CLTAR	-0.1853	0.231	1			1.15	0.869565
SIZE	0.4028	0.1675	-0.0387	1		1.05	0.952381
QR	0.1592	0.4831	-0.1529	0.0714	1	1.39	0.719424

The results presented in Table 3 provide empirical estimates from both fixed effects and random effects models, using Generalized Least Squares (GLS), to examine the impact of key financial indicators on a dependent variable—presumably related to firm performance or valuation—though the exact nature of the dependent variable is not stated. The explanatory variables include Current Asset to Total Asset Ratio (CATAR), Current Liabilities to Total Asset Ratio (CLTAR), Firm Size (SIZE), and the Quick Ratio (QR), with each variable's coefficient and statistical significance reported. In both fixed and random effect models, the variable CATAR shows a positive and statistically significant effect on the dependent variable, with a coefficient of 3.7231 (p = 0.006) in the fixed effect model and 2.4783 (p = 0.017) in the random effect model. This implies that an increase in current assets relative to total assets is associated with improved firm outcomes. This could reflect the positive role of liquidity or operational working capital efficiency in financial performance, a finding consistent with previous literature on liquidity-performance dynamics (Shin & Soenen, 1998). Conversely, CLTAR (Current Liabilities to Total Assets) has a strong and negative impact in both models, with coefficients of -13.0879 (p < 0.001) and -7.9581 (p < 0.001), respectively. This suggests that higher short-term liabilities, relative to total assets, are detrimental to firm outcomes, likely due to increased financial risk or the strain of debt servicing. This aligns with empirical findings that a high reliance on short-term financing can impair firm stability and investor confidence (Myers, 2001). Firm Size (SIZE), operationalized likely as the natural logarithm of total assets, also exhibits a statistically significant and positive association in both specifications. The coefficient in the fixed effects model is 4.6974 (p < 0.001) and 2.6119 (p < 0.001) in the random effects model. This indicates that larger firms tend to have better performance, potentially due to economies of scale, market influence, or better access to capital markets, echoing the conclusions of prior research on size-related advantages in corporate performance (Titman & Wessels, 1988). The Quick Ratio (QR), which measures a firm's liquidity excluding inventory, is positive in both models but not statistically significant in either case (p = 0.059 in fixed effects and p = 0.193 in random effects). While the QR coefficient of 1.7023 in the fixed effects model suggests a potentially meaningful relationship, the pvalues indicate insufficient evidence to assert a statistically robust effect. This could reflect industry-specific liquidity norms or limitations in the QR's explanatory power once other factors like CATAR are already included. Finally, the constant terms in both models are negative and highly significant, reflecting that, in the absence of other influences, the baseline outcome would be negative. This may signal structural or baseline inefficiencies or liabilities embedded within the sample firms. The results indicate consistency between fixed and random effects, though the magnitudes differ. The Hausman test would be appropriate to decide which model is preferable, based on

JBEO, Vol. 1(4), 92-98

whether individual effects are correlated with regressors. The statistical significance and expected signs of the key financial ratios support existing literature on liquidity, leverage, and firm size as primary drivers of firm outcomes.

Table 3: Results of fixed and random effect models with GLS

Variables	Fixed Effect Coefficients	Fixed Effect P-Value	Random Effect Coefficients	Random Effect P-Value
CATAR	3.7231	0.006	2.4783	0.017
CLTAR	-13.0879	0	-7.9581	0
SIZE	4.6974	0	2.6119	0
QR	1.7023	0.059	0.8124	0.193
Constant	-61.8923	0	-34.1068	0

The comparative regression results of fixed and random effects models along with the Hausman test provide valuable insights into model appropriateness for analyzing panel data. The coefficient for current assets to total assets ratio (CATAR) is higher in the fixed effects model, with a difference of approximately 1.28 compared to the random effects model. The associated standard error of this difference is about 0.86, indicating that although the fixed effects model produces a stronger coefficient, the discrepancy may not be statistically significant. This suggests that for CATAR, the two models might provide relatively similar conclusions, and the variable may not be highly influenced by unobserved heterogeneity. In contrast, the current liabilities to total assets ratio (CLTAR) exhibits a much larger discrepancy between the two models, with a coefficient difference of approximately -5.21 and a standard error of 1.99. This significant divergence implies that CLTAR is likely correlated with the unobserved firm-level effects, and thus the fixed effects model more appropriately captures the true influence of this variable. The fixed effects approach effectively controls for time-invariant characteristics that might otherwise bias the estimates under the random effects model. For firm size (SIZE), the fixed effects coefficient is substantially higher than that of the random effects model, with a difference of 2.10 and a standard error of 0.65. This sizable and statistically meaningful difference again points toward the presence of firm-specific factors influencing the relationship, which validates the use of the fixed effects model. Size, being a structural attribute of a firm, often correlates with other unobservable features like corporate governance quality or strategic orientation, which are better controlled in the fixed effects framework. The quick ratio (QR) shows a difference of approximately 0.90 between the fixed and random effects estimates, with a standard error of 0.66. While this does suggest some variation between models, the larger standard error reduces the certainty of this difference being statistically significant. Therefore, the evidence is less conclusive for this variable, and either model might be considered depending on the broader context and model specification tests. Taken together, the Hausman test results likely reject the null hypothesis of no correlation between explanatory variables and individual effects, particularly due to the significant differences found in CLTAR and SIZE. As a result, the fixed effects model appears more suitable for this dataset. This conclusion aligns with the broader econometric understanding that when unobserved heterogeneity is correlated with regressors, fixed effects estimators are preferred for providing consistent and unbiased estimates, as emphasized by Wooldridge (2010) and Baltagi (2008).

Table 4: Hausman's Test

	Coefficients		Difference	Standard
	Fixed A	Random B	A-B	Error
CATAR	3.807348	2.531885	1.275463	.8630297
CLTAR	-13.23896	-8.02612	-5.21284	1.985875
SIZE	4.754533	2.652068	2.102465	.6524181
QR	1.684969	.7886779	0.896291	.6556568

5. CONCLUSIONS

Working capital management plays a crucial role in the success of a company, especially in industries like textiles. This study focused on evaluating the impact of working capital investment policy and working capital financing policy on the profitability of 115 textile companies listed on the Karachi Stock Exchange from 2006 to 2011. The results of the study indicate that both working capital investment policy and working capital financing policy significantly affect a firm's profitability. Specifically, adopting a conservative investment policy, which involves higher investment in current assets and lower investment in fixed assets, was found to be more favorable for profitability. Conversely, employing an aggressive financing policy, where the company maintains more current liabilities compared to long-term debts, was also associated with higher profitability. These findings underscore the importance of strategic decision-making in managing working capital, as it can have a substantial impact on a company's financial performance and overall success. By optimizing working capital management practices, textile companies can enhance their profitability and competitiveness in the market. The findings of this research highlight the importance of optimizing short-term investment and working capital management practices in the textile industry. Specifically, the study reveals that adopting a conservative working capital investment policy and an aggressive working capital financing policy can lead to higher profitability for textile companies. Additionally, factors such as firm size and quick ratio were also found to have a positive effect on profitability. These insights are valuable for financial administrators and managers in the textile industry, as they provide guidance on effective strategies for managing short-term investments and balancing obligations and resources. By understanding and implementing these guidelines, companies can enhance their competitiveness and overall financial performance. It is recommended that supervisors focus on achieving a proper balance between the company's obligations and resources, ensuring efficient utilization of working capital to maximize profitability and sustain long-term growth in the textile sector.

REFERENCES

Afza, T. and Nazir, M. S. (2007). Working Capital Management Policies of Firms: Empirical Evidence from Pakistan. *Conference Proceedings of 9th South Asian Management Forum (SAMF) on February* 24-25, North South University, Dhaka, Bangladesh.

JBEO, Vol. 1(4), 92-98

- Ahmad, S. (2018). Analyzing the relationship between GDP and CO₂ emissions in Malaysia: A time series evidence. *Journal of Energy and Environmental Policy Options*, 1(1), 1–4.
- Ahmad, S. (2018). Credit scoring: Assessing creditworthiness and its implications for borrowers and lenders. *Journal of Business and Economic Options*, 1(2), 45–51.
- Ali, A. & Naeem, M.Z. (2017). Trade Liberalization and Fiscal Management of Pakistan: A Brief Overview. Policy Brief-Department of Economics, PU, Lahore. 2017 (1), 1-6.
- Ali, A. (2011). Disaggregated import demand functions of Pakistan; An empirical Analysis. M-Phil Thesis, NCBA&E, Lahore, Pakistan, 1-70.
- Ali, A. (2015). The impact of macroeconomic instability on social progress: an empirical analysis of Pakistan. (Doctoral dissertation, National College of Business Administration & Economics Lahore).
- Ali, A. (2018). Issue of Income Inequality Under the Perceptive of Macroeconomic Instability: An Empirical Analysis of Pakistan. *Pakistan Economic and Social Review*, 56(1), 121-155.
- Ali, A. and Bibi, C. (2017). Determinants of Social Progress and its Scenarios under the role of Macroeconomic Instability: Empirics from Pakistan. *Pakistan Economic and Social Review* 55 (2), 505-540.
- Ali, A., & Ahmad, K. (2014). The Impact of Socio-Economic Factors on Life Expectancy in Sultanate of Oman: An Empirical Analysis. *Middle-East Journal of Scientific Research*, 22(2), 218-224.
- Ali, A., & Audi, M. (2016). The Impact of Income Inequality, Environmental Degradation and Globalization on Life Expectancy in Pakistan: An Empirical Analysis. *International Journal of Economics and Empirical Research*, 4 (4), 182-193.
- Ali, A., & Audi, M. (2018). Macroeconomic Environment and Taxes Revenues in Pakistan: An Application of ARDL Approach. *Bulletin of Business and Economics* (BBE), 7(1), 30-39.
- Ali, A., & Rehman, H. U. (2015). Macroeconomic instability and its impact on the gross domestic product: an empirical analysis of Pakistan. *Pakistan Economic and Social Review*, 285-316.
- Ali, A., & Zulfiqar, K. (2018). An Assessment of Association between Natural Resources Agglomeration and Unemployment in Pakistan. *Pakistan Vision*, 19(1), 110-126.
- Ali, A., Ahmed, F., & Rahman, F. U. (2016). Impact of Government Borrowing on Financial Development (A case study of Pakistan). *Bulletin of Business and Economics* (BBE), 5(3), 135-143.
- Ali, A., Mujahid, N., Rashid, Y., & Shahbaz, M. (2015). Human capital outflow and economic misery: Fresh evidence for Pakistan. *Social Indicators Research*, 124(3), 747-764.
- Ali, M. (2018). Inflation, interest and exchange rate effect on stock market prices. *Journal of Business and Economic Options*, 1(2), 39–44.
- Arnold, G. (2008). Corporate financial management (4th ed.). Pearson education limited.
- Arshad, S., & Ali, A. (2016). Trade-off between Inflation, Interest and Unemployment Rate of Pakistan: Revisited. *Bulletin of Business and Economics (BBE)*, 5(4), 193-209.
- Ashraf, I., & Ali, A. (2018). Socio-Economic Well-Being and Women Status in Pakistan: An Empirical Analysis. *Bulletin of Business and Economics (BBE)*, 7(2), 46-58.
- Asif, M., & Simsek, S. (2018). The difference between price and value: Empirical discussion. *Journal of Business and Economic Options*, 1(1), 10–14.
- Baltagi, B. H. (2008). Econometric Analysis of Panel Data (4th ed.). Wiley.
- Brealey, R. and Myers, S. (2003). Principles of Corporate Finance (7th ed.). New York: McGraw-Hill.
- Brigham, Eugene, F. and Houston, J. F. (2003). Fundamentals of Financial Management (10th ed.).
- Clark, W., & Adam, A. (2018). Sustainable power choices: An analysis of CO₂ mitigation and renewable energy in USA. *Journal of Energy and Environmental Policy Options*, 1(3), 55–59.
- Dougherty, C. (2011). Introduction to econometrics. Oxford University Press.
- Eljelly, A. (2004). Liquidity Profitability Trade-off: An Empirical Investigation in an Emerging Market. *International Journal of Commerce & Management*, 14(2), 48-61.
- Gorus, S., & Groeneveld, R. (2018). Vietnam's development trajectory: Threshold cointegration and causality analysis of energy consumption and economic growth. *Journal of Energy and Environmental Policy Options*, 1(2), 28–36.
- Haider, A., & Ali, A. (2015). Socio-economic determinants of crimes: a cross-sectional study of Punjab districts. *International Journal of Economics and Empirical Research*, 3(11), 550-560.
- Hamid, M. Y. (2018). Business valuation of discounted cash flow. Journal of Business and Economic Options, 1(3), 78-91.
- Hussain, A. (2018). Banking privatization and profitability in Pakistan: A time series analysis. *Journal of Business and Economic Options*, *I*(1), 30–38.
- Iqbal, A. (2018). Determinants of microfinance in Pakistan. Journal of Business and Economic Options, 1(1), 15-22.
- Iqbal, K., & Raza, A. (2018). Impact of foreign exchange rate volatility on money demand in Pakistan: An empirical analysis. *Journal of Policy Options*, 1(3), 106–120.
- Iqbal, S. (2018). Electricity consumption and economic growth in Pakistan: An empirical analysis. *Journal of Energy and Environmental Policy Options*, 1(1), 5–8.
- Khan, J. A., & Ali, R. (2018). Challenging misconceptions: Media portrayal of Islam and its impact on public perception. *Journal of Policy Options*, 1(1), 30–40.
- Khan, M. W. (2018). A comparative study of customer satisfaction between public and private banks in Lahore, Pakistan. *Journal of Policy Options*, 1(2), 50–60.
- Khan, R. I. A., & Ahmad, K. (2018). Revitalizing the Pakistan textile industry: Challenges and opportunities. *Journal of Policy Options*, 1(1), 20–29.
- Koocheki, S. (2018). Evaluating energy dynamics: A comparative analysis of pulses production systems in Iran. *Journal of Energy and Environmental Policy Options*, 1(3), 65–72.

JBEO, Vol. 1(4), 92-98

- Kumar, N. (2018). Examining total factor productivity and energy intensity in the landscape of Indian manufacturing. *Journal of Energy and Environmental Policy Options*, 1(2), 46–54.
- Luna, A., & Luna, G. (2018). Exploring investment dynamics in renewable energy for low-carbon economies through a global comparative analysis. *Journal of Energy and Environmental Policy Options*, 1(3), 73–79.
- Mahmood, and Qayyum, A. (2010). Working Capital Management and Corporate Performance of Manufacturing Sector in Pakistan. International Research Journal of Finance and Economics, 47, 1450-2887.
- Mahmood, H., & Aslam, M. (2018). Impact of plastic money adoption on consumer purchasing habits: A study in Pakistan. *Journal of Policy Options*, 1(1), 41–49.
- Manzoor, M., & Agha, A. (2018). Determinants of domestic savings in Pakistan: An economic analysis. *Journal of Policy Options*, 1(2), 62–80.
- Marc, A. & Ali, A. (2017). Environmental Degradation, Energy consumption, Population Density and Economic Development in Lebanon: A time series Analysis (1971-2014). *Journal of International Finance and Economics*, 17(1), 7-20.
- Marc, A. & Ali, A. (2017). Socio-Economic Status and Life Expectancy in Lebanon: An Empirical Analysis. *Archives of Business Research*, 5(11), 159-170
- Marc, A., & Ali, A. (2016). A Causality and Co-integration Analysis of Some Selected Socio-Economic Determinants of Fertility: Empirics from Tunisia. *Bulletin of Business and Economics (BBE)*, 5(1), 20-36.
- Maurya, R. (2018). Indian mutual funds: An empirical investigation. Journal of Business and Economic Options, 1(1), 23-29.
- Muhieddine, M. (2018). The nexus between oil prices and current account deficit: An empirical analysis for Lebanon. *Journal of Energy and Environmental Policy Options*, 1(1), 9–13.
- Myers, S. C. (2001). Capital structure. Journal of Economic Perspectives, 15(2), 81–102.
- Odi, and Solomon. (2010). An Empirical Analysis of Corporate Survival and Growth: Evidence from Efficient Working Capital Management.
- Okurut, F. N., & Mbulawa, S. (2018). The nexus of electricity, economy, and capital: A case study of Botswana. *Journal of Energy and Environmental Policy Options*, 1(1), 14–21.
- Padachi, Kesseven, M. S. Narasimhan, Durbarry, R. and Howorth, C. (2008). An Analysis of Working Capital Structure and Financing Pattern of Mauritian Small Manufacturing Firms, *Journal of Applied Finance*, 14(7), 41-62.
- Raheman, A. and Nasr, M. (2007). Working capital management and profitability case of Pakistani firms. *International Review of Business Research Papers*, 3, 279-300.
- Reason, T. (2008). Preparing your company for recession.
- Reheman, A., Talat, A., Adul Qayyum, & Bodla, A. Muhammad. (2010). Working Capital Management and Corporate Performance of Manufacturing sector in Pakistan. *International Research Journal of Finance and Economics*, 47, 450-460.
- Riaz, M., & Safdar, M. (2018). Exploring teachers' concerns: Student enrollment and absenteeism in primary schools of Punjab Province. *Journal of Policy Options*, 1(3), 121–130.
- Sajid, A. & Ali, A. (2018). Inclusive Growth and Macroeconomic Situations in South Asia: An Empirical Analysis. *Bulletin of Business and Economics (BBE)*, 7(3), 97-109.
- Shahbaz, S. (2018). Analyzing the determinants of dividend policy: A comprehensive study on ownership structure and cash flow characteristics in the banking sector of Pakistan. *Journal of Business and Economic Options*, 1(3), 65–77.
- Sharma, A. K. and Kumar, S. (2011). Effect of Working Capital Management on Firm Profitability: Empirical Evidence from India. *Global Business Review*, 12(1), 159–173.
- Shin, H. H., & Soenen, L. (1998). Efficiency of working capital management and corporate profitability. *Financial Practice and Education*, 8(2), 37–45.
- Siddiqi, M. W. (2018). Pakistan's mutual funds: An empirical analysis. Journal of Business and Economic Options, 1(1), 1-9.
- Siddiquee, M. and Khan, S. M. (2009). Analyzing working capital performance: evidence from Dhaka Stock Exchange (DSE).
- Singh, J., & Kumar, K. (2018). Socio-economic dynamics of energy: A micro-level regression approach to domestic consumption in India. *Journal of Energy and Environmental Policy Options*, 1(3), 60–64.
- Titman, S., & Wessels, R. (1988). The determinants of capital structure choice. The Journal of Finance, 43(1), 1-19.
- Vishnani, S. and Bhupesh, K. S. (2007). Impact of Working Capital Management Policies on Corporate Performance- An Empirical Study. *Global Business Review*, 8(267).
- Wali, R. M. (2018). Analysis of financial ratios and credit risk ratings in the banking industry: Insights and findings. *Journal of Business and Economic Options*, 1(2), 52–58.
- Weston J. F. and Brigham E.F. (1977). Essentials of managerial finance' Illinois. The Dryden Press, 261-76.
- Wiafe, A. (2018). Empowering progress: Investigating the electricity consumption-economic growth nexus in Ghana. *Journal of Energy and Environmental Policy Options*, 1(2), 37–45.
- Wooldridge, J. M. (2010). Econometric Analysis of Cross Section and Panel Data (2nd ed.). MIT Press.
- Yen, W. (2018). Exploring the nexus between mobile communication and traffic fatalities: A global perspective. *Journal of Business and Economic Options*, 1(2), 59–64.
- Zahid, M. (2018). Economic misery, exchange rate, interest rate, and foreign direct investment: Empirical evidence from Pakistan. *Journal of Policy Options*, 1(2), 81–95.
- Zhang, Z. (2018). Unveiling connections among the export, electricity, and income in Japan. *Journal of Energy and Environmental Policy Options*, 1(2), 21–27.