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Impact of Liquidity and Financial Leverage on Firm's Profitability- An Empirical Analysis of the Textile Industry of Pakistan

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Abstract

Purpose-This study empirically investigates the impact of liquidity and financial leverage on the profitability of textile firms listed on the Pakistan Stock Exchange (PSX). Utilizing panel data, liquidity is proxied by the current ratio and quick ratio, while financial leverage is measured through the debt-to-equity ratio. Profitability is represented by return on equity (ROE), with firm size (log of total assets) incorporated as a control variable. Design/methodology/approach– Through quantitative approach, panel regression and descriptive statistics models are used by taking annual data of Pakistan's textile sectors from 2016 to 2025. Secondary data has been gathered from financial statements of the firms. The analysis employs Ordinary Least Squares (OLS) estimation, complemented by a Random Effects Model selected based on the Hausman specification test. Findings-The empirical results indicate that the current ratio exerts a positive and statistically significant effect on profitability, suggesting that efficient working capital management enhances firm performance. Conversely, the quick ratio is found to be statistically insignificant, implying limited explanatory power in the context of the textile sector. The debt-to-equity ratio exhibits a positive and significant relationship with profitability, supporting the trade-off theory of capital structure, where moderate leverage contributes to improved returns. However, firm size does not demonstrate a significant association with profitability. Practical implications–The findings underscore the critical role of optimal liquidity management and prudent leverage decisions in enhancing firm profitability. This study provides important implications for financial managers, investors, and policymakers in developing effective financial strategies within Pakistan's textile industry.

Keywords: Leverage, Liquidity, Debt to Equity Ratio, Firm size, Textile Industry, Pakistan Stock exchange

1. Introduction

The economy of Pakistan encompasses around 12 sectors, which include the extraction of raw materials, food production, chemicals, a range of manufactured goods, and pharmaceuticals. In the private sector, the manufacturing of raw materials contributes approximately 38.8 percent of the operations of textile companies(Samo & Murad, 2019). The textile sector is one of the most significant contributors to the economic growth and industrial development of Pakistan. It serves as the backbone of the country's manufacturing base, accounting for a major share of industrial output, employment, and exports(*Pakistan Ecnomic Survey 2024*, n.d.). As a labor-intensive and export-oriented industry the textile sector is crucial for generating foreign exchange income and sustaining the livelihoods for number of workers. This industry has the potential to support the numerous sectors of the society including merchants and labors (Abor, 2005).

The financial health of the firm is one of the crucial indicator of its capability to maintain operations and compete successfully in the market place. Liquidity and leverage are the two most important factors that affect the company's ability to generate income and manage risk (Velnampy & Niresh, 2012a). Liquidity refers to the company's ability to fulfill its short-term liabilities and ensure ongoing operations, while leverage shows the degree to which debt is utilized to fund assets and investments(Javed et al., 2015; Khidmat, 2014). Effective management of these two factors is crucial for firms operating in dynamic and competitive environments such as the textile sector. High liquidity reduce profitability by locking up the capital in unproductive assets, while high level of leverage elevates the risk of financial distress.

In developing economies like Pakistan, where financial markets are often characterized by volatility, inflationary pressures, and limited access to credit, liquidity and leverage decisions become particularly challenging (Shah & Khan, n.d.). Textile companies, which require significant capital and rely on both local and global demand, must maintain an ideal equilibrium between liquidity and leverage to secure long-term profitability and sustainability. This equilibrium allows companies to stay robust during market variations, fulfill short-term responsibilities, and seize investment prospects that can improve profitability.

From a theoretical point of view liquidity refers to the company's ability to cover the assets into the cash without incurring considerable loss in value. Liquidity ratios are used for liquidity management in every organization in the form of current ratio, quick ratio and Acid test ratio that greatly affect the profitability of organization. Ensuring sufficient liquidity reduces the chances of insolvency, whereas having high liquidity may suggest a failure to effectively use resources(Eljelly, 2004). Leverage, on the other hand, measures the proportion of debt in a firm's capital structure. Moderate debt can enhance the profitability and increase the return on equity, while high leverage can cause grater financial risk particularly when interest raise and sales decline (Juan García-Teruel & Martínez-Solano, 2007). The concept of the profitability is to evaluate a business's capability to produce surplus value from investments in relation to the expenses incurred over a designated timeframe. Profitability can be assessed and analyzed in relation to costs, while assets demonstrate how effectively a business utilizes them to generate sales cited by (Samo & Murad, 2019). Empirical evidence on the relationship between liquidity, leverage, and profitability remains mixed. Some studies report a positive relationship between liquidity and profitability, suggesting that maintaining sufficient liquidity enhances firm performance(Akinlo & Asaolu, 2012) while others find a negative relationship, indicating that excess liquidity reduces profitability by keeping funds idle (Eljelly, 2004; Velnampy & Niresh, 2012b). Similarly, the linkage between leverage and profitability differs, some researches shows leverage improve profitability up to the certain level while other shows negative relationship.

Given these considerations, the present study aims to examine the impact of liquidity and leverage on the profitability of the textile sector in Pakistan, focusing on firms listed on the Pakistan Stock Exchange (PSX). The research employs key financial ratios such as the current ratio and quick ratio for liquidity, and the debt-to-equity ratio and debt ratio for leverage while profitability is measured through indicator such as return on assets (ROA). These financial ratios help to find out the key areas to improve the profitability of the companies. Liquidity pertains to the management of assets, while financial leverage pertains to the organization of capital structure. Therefore, both elements are vital for boosting a company's profitability. By analyzing firm-level data, this study seeks to determine the nature and magnitude of the relationship between liquidity, leverage, and profitability in the textile industry.

2. Research Objectives:

Despite its strong contribution, the industry often struggles with issues such as fluctuating input costs, energy shortages, global competition, and financial mismanagement making effective financial decision making critical for its sustained profitability and competitiveness. In this context, this research focuses on understanding how liquidity and financial leverage influence the profitability of textile firms operating in Pakistan.

The primary goal of this study is to analyze how liquidity and financial leverage affect the profitability of Pakistan's textile industry. Effective management of liquidity and capital structure is crucial in a sector characterized by narrow profit margins and intense competition. The research intends to investigate the connection between liquidity ratios

such as the current ratio, quick ratio, and cash ratio and profitability measures, including return on assets (ROA), return on equity (ROE), and net profit margin. Liquidity indicates a company's capacity to meet short-term obligations. While sufficient liquidity is vital for smooth operations, having an excess may imply inefficient allocation of capital. This study aims to determine whether increased liquidity leads to greater profitability or if there are diminishing returns after a certain threshold.

Another objective of this study is to determine the optimal balance between liquidity and financial leverage that maximizes profitability. An imbalance whether in the form of excessive cash holdings or unsustainable debt can negatively impact firm performance. By analyzing the financial data of various textile firms, this research aims to identify patterns and financial strategies that lead to stronger profitability outcomes.

Ultimately, this research aims to offer meaningful insights and practical recommendations for financial managers, investors, and policymakers in Pakistan's textile industry. By identifying the most effective approaches to managing liquidity and leverage, the study will support improved financial decision making, enhanced profitability, and stronger long term sustainability for textile firms across the country.

Research Questions:

1. What is the relationship between liquidity (current ratio, Quick ratio) and profitability in the textile sector of Pakistan?
2. How does financial leverage (Debt to Equity ratio) affect the profitability of textile firms in Pakistan?
3. What is the optimal balance between liquidity and financial leverage that maximizes profitability in Pakistan's textile industry?

4. Literature Review:

Profitability is one of the primary indicators of a firm's financial performance, and it is significantly influenced by internal financial decisions such as liquidity management and capital structure. In developing economies like Pakistan, the textile sector is a backbone of industrial activity, contributing substantially to exports, employment, and GDP. Therefore, understanding the financial determinants of profitability in this sector has gained considerable attention among researchers.

Liquidity and Profitability

Liquidity refers to a firm's ability to meet its short-term obligations using its current assets. It is commonly measured through ratios such as the current ratio and quick ratio. According to financial theory, maintaining an optimal level of liquidity is essential for smooth business operations, as insufficient liquidity may lead to financial distress, while excessive liquidity may result in inefficient use of resources.

Empirical evidence from Pakistan's textile sector suggests a generally positive relationship between liquidity and profitability. The current ratio, in particular, has been shown to positively affect ROE, indicating that firms with higher levels of current assets relative to liabilities are better positioned to generate profits (Akhtar, 2011). The quick ratio, as a more conservative measure of liquidity, also contributes to profitability by reflecting the firm's ability to meet obligations without relying on inventory. Gill, Biger, and Mathur (2010) argued that firms maintaining sufficient liquid resources tend to perform better financially. For instance, research conducted on listed textile firms shows that the current ratio has a significant positive effect on return on Equity (ROE) implying that efficient liquidity management enhances firm performance.

However, the relationship is not always straightforward. Some studies highlight that excessive liquidity can negatively impact profitability due to idle resources. For example, findings reveal that while the current ratio may positively influence profitability, the quick ratio sometimes shows insignificant or even negative results. This suggests that holding too many liquid assets without proper utilization can reduce efficiency. Moreover, components of working capital such as inventory turnover, accounts receivable, and accounts payable periods also play a critical role. Efficient working capital management such as reducing receivable collection time and optimizing inventory has been found to significantly improve profitability in textile firms.

Leverage and Profitability

Leverage refers to the use of debt financing in a firm's capital structure and is typically measured by the debt-to-equity ratio or total debt ratio. Theoretically, leverage can have both positive and negative effects on profitability. According to the trade-off theory, firms balance the benefits of debt (such as tax shields) against the costs (such as financial distress). Shah and Khan (2007) found that higher leverage significantly reduces profitability, as increased debt leads to higher interest expenses and financial risk. Similarly, Zeitun and Tian (2007) concluded that firms with higher debt-to-equity ratios tend to have lower ROA due to the burden of financial obligations.

Leverage is also considered an important determinant of profitability in the textile sector of Pakistan. According to the Trade-Off Theory, firms can enhance profitability through the optimal use of debt financing because debt provides tax benefits and increases the availability of funds for investment and expansion. Several empirical studies support a positive relationship between leverage and profitability. Abor (2005) found that firms using higher levels of debt financing achieved better profitability due to efficient

utilization of borrowed funds. Similarly, Gill, Biger, and Mathur (2011) concluded that leverage positively influences profitability by improving capital structure decisions and increasing shareholder returns. In the textile sector, leverage enables firms to finance machinery, production activities, and operational expansion without relying solely on internal funds. Firms with effective debt management are therefore more capable of increasing pr Return on equity(ROE). Consequently, appropriate use of leverage positively contributes to the profitability and growth of textile firms in Pakistan.

Combined Effect of Liquidity and Leverage

The joint impact of liquidity and leverage on profitability has also been explored in the literature. Findings indicate that firms must strike a balance between maintaining sufficient liquidity and minimizing excessive debt. Some studies using panel data analysis on textile firms in Pakistan reveal that liquidity has a stronger and more consistent impact on profitability compared to leverage. However, when both variables are considered simultaneously, the interaction between them becomes important. For example, firms with high liquidity and leverage tend to perform better, as they face lower financial risk while maintaining operational flexibility.

Role of Firm Size-Specific Factors:

Apart from liquidity and leverage, other firm-specific variables such as firm size, asset structure, and sales growth also influence profitability. Firm size, often measured as the natural logarithm of total assets, is generally found to have a positive relationship with profitability, Larger firms often benefit from economies of scale, better access to financial markets, and improved operational efficiency, all of which contribute to higher profitability. Saleem and Rehman (2011) found that firm size has a positive and significant impact on ROA, indicating that larger firms are more efficient in utilizing their assets to generate earnings.

Liquidity, Leverage, and Profitability

The combined effect of liquidity and leverage on profitability has been widely explored in financial research. Empirical evidence suggests that while liquidity (measured through current and quick ratios) generally has a positive impact on profitability, leverage (measured through the debt-to-equity ratio) also contributes positively toward firm performance when managed efficiently. Adequate liquidity enables firms to meet short-term obligations, maintain smooth operational activities, and improve working capital management, which ultimately enhances profitability. Raheman and Nasr (2007) found that effective liquidity management positively influences the profitability of Pakistani firms, while Eljelly (2004) also reported a significant positive relationship between liquidity and firm performance.

Similarly, according to the Trade-Off Theory, optimal use of debt financing allows firms to benefit from tax advantages and investment opportunities, thereby increasing profitability. Abor (2005) concluded that firms with efficient leverage management achieve higher profitability due to better utilization of borrowed funds. Gill, Biger, and Mathur (2011) also identified a positive association between leverage and profitability. In the textile sector of Pakistan, firms require substantial working capital and external financing for operational expansion and production activities; therefore, maintaining adequate liquidity and appropriate leverage significantly contributes toward improving Profitability (including ROE & ROA).

Research Gap

Despite extensive research, there are still inconsistencies in the findings regarding the impact of liquidity and leverage on profitability. Some studies report insignificant relationships for certain liquidity measures, such as the quick ratio, while others find varying effects of leverage depending on economic conditions and firm characteristics. Moreover, many previous studies have used limited sample sizes or outdated data, which may not accurately reflect the current dynamics of Pakistan's textile sector.

Therefore, there is a need for further empirical investigation using updated data and advanced econometric techniques (such as panel data analysis in EViews) to better understand these relationships. This study aims to fill this gap by examining the impact of liquidity and leverage on profitability using recent data from textile firms in Pakistan.

5. Methodology:

Analysis Technique

Ordinary Least Squares Estimation

The main estimation technique used in this study is Ordinary Least Squares (OLS) regression, which is the most popular method for estimating linear relationships in empirical corporate finance (Wooldridge, 2010). OLS minimizes the sum of squared residuals to produce Best Linear Unbiased Estimators (BLUE) under the Gauss-Markov assumptions. These assumptions include linearity, the exogeneity of regressors, homoscedasticity, the absence of autocorrelation, and no perfect multicollinearity. The general regression model estimated in this study is specified as follows:

$$ROE_{it=}\ \alpha + \beta_1 CR_{it} + \beta_2 QR_{it} + \beta_3 DER_{it} + \beta_4 LN\_FS_{it} + \epsilon_{it} \ldots\ldots\ldots\ldots (1)$$

Where:

- *Ln (FS_{it})* is the natural logarithm of total assets (firm size),
- *i= cross-section (Company)*
- *t*= time period
- α is the intercept term;
- ϵ_{it} = error term
- β_1 to β_n are the slope coefficients to be estimated
- CR, QR, DER, and LN_FS represent the independent variables.

The statistical significance of each regression coefficient is determined using the t-statistic at standard levels of significance (1%, 5%, and 10%). The complete explanatory power of the model is evaluated using the coefficient of determination (R^2) and the adjusted R^2, the latter penalizing for the inclusion of additional regressors that do not improve model fit. The F-statistic tests the joint significance of all slope coefficients.

Descriptive Statistics

Table 2 presents the descriptive statistics for all variables considered in the research: Return on Equity (ROE), Current Ratio (CR), Quick Ratio (QR), Debt to Equity Ratio (DER), and the natural log of firm size (LN_FS). Descriptive statistics play a critical role in any empirical study, as they provide a direct assessment of the data characteristics of the variables before making any inference about them (Hair et al., 2019). The dependent variable in the study is ROE, with a standard deviation of 9.423 and a mean of 9.128, both quite high and suggesting considerable variability in firms' profit performance. The heterogeneity in the financial performance of the sampled firms is further confirmed by the ROE of -7.861 to 46.046. This heterogeneity is not unexpected since the corporate finance literature already points out that profitability indicators such as ROE tend to be very different among firms in developing economies based on their management effectiveness and capital structures (Demirguc-Kunt & Huizinga, 2000). The Current Ratio (CR) had a mean of 1.164 and a small standard deviation of 0.212, implying that, on average, the sampled firms had an acceptable level of short-term liquidity. Equally, the mean Quick Ratio (QR) was 0.585, indicating that the companies had moderate immediate liquidity. A lower mean QR below 1 can indicate a possible inability to fulfil short-term commitments without liquidating inventory, which is an essential liquidity risk determinant in the financial management literature (Brigham & Houston, 2021).

In addition, the Debt-to-Equity Ratio (DER) had a mean of 0.867 and a fairly large standard deviation of 0.883, indicating an indication of the different levels of financial leverage among sample firms. The skewness of DER is 1.243 which shows that it is distributed to the right, that is, there is a small part of the sample firms with disproportionately high leverage. These asymmetric leverage structures are widely reported in the literature of the capital structure and attributed to agency costs and risks of financial distress (Jensen and Meckling, 1976). The size of the firms as proxied by LN_FS had a mean of 22.266, and standard deviation of 1.814. The value of skewness (-0.569) is negative and indicates a slight leftward distribution that indicates that most of the firms in the sample are relatively larger in size. The Jarque Berra statistics and their probability values verify that none of the variables have significant deviation to normality at standard levels of significance and the probability value of 0.366 to 0.524 is the resultant probability value. This fulfills an important assumption underlying parametric panel data estimation techniques (Gujarati & Porter, 2009).

Table 2: ***Descriptive Statistics Results***

Statistic	ROE	CR	QR	DER	LN_FS
Mean	9.128128	1.163950	0.585000	0.867440	22.26617
Median	6.813200	1.160000	0.570000	0.515000	22.33255
Maximum	46.04600	1.710000	1.510000	3.310000	25.29152
Minimum	-7.860800	0.750000	0.190000	0.020000	16.27834
Std. Deviation	9.422646	0.212119	0.209653	0.882546	1.813687

Skewness	1.914847	0.125434	0.892765	1.242728	-0.568595
Kurtosis	7.090122	2.491505	5.530718	3.433056	3.130608
Jarque-Bera	6.267955	1.339590	9.969386	6.520956	5.459418
Probability	0.435443	0.511814	0.429467	0.366267	0.523828

Correlation Matrix

The Pearson correlation matrix results, presented in Table 3, were used to analyze the bivariate linear relationships among the research variables before regression estimation. The correlation matrix is also useful for detecting potential multicollinearity issues that may affect the estimation of coefficients in the regression model (Kennedy, 2008). From the results, it was found that the CR and ROE had a positive correlation (r = 0.149). On the other hand, the QR had a weak positive correlation (r = 0.201), suggesting that firms with high liquidity ratios have a higher chance of making profits. This conclusion is mostly agreeable with the liquidity-profitability trade-off theory, which assumes that companies with sufficient liquidity buffers are better placed in seeking lucrative investments without financial pressures. They found that the DER and ROE had a significant positive relationship (r = 0.347), which confirms the fact that at moderate leverage the benefit of the tax shield and the effect of financial leverage can lead to higher returns on equity. It resembles the theory of trade-off of capital structure, according to which firms make a trade-off between the tax benefits of debt and the risks of financial distress (Modigliani and Miller, 1963). Conversely, LN_FS and ROE had a small positive correlation (r = 0.009) indicating that in this sample, there is no significant linear correlation between the size of a firm and profitability. It is worth noting that inter-predictor correlations were calculated to determine the issues of multicollinearity. The highest inter-variable correlation was between CR and QR (r = 0.616), which can be explained by the fact that these measures intersect in a conceptual sense as a measure of short-term liquidity. Nevertheless, this coefficient was below the critical value of 0.80 that is commonly used in the multicollinearity diagnostics literature (Tabachnick & Fidell, 2013), indicating that multicollinearity may not significantly affect the reliability of the further regression estimates.

Table 3: ***Correlation Matrix Results***

Variable	**ROE**	**CR**	**QR**	**DER**	**LN_FS**
ROE	1.000000				
CR	0.148926	1.000000			
QR	0.200570	0.615835	1.000000		
DER	0.347238	-0.289027	-0.129900	1.000000	
LN_FS_	0.008538	-0.163672	-0.317158	0.059450	1.000000

Cross-Sectional Dependency

Table 4 gives the cross-sectional dependency (CSD) tests of the panel data that consist of the Breusch-Pagan LM test, Pesaran scaled LM test, bias-corrected scaled LM test, and Pesaran CD test. The cross-sectional dependence is a critical diagnostic concern in panel data models because it results in imprecise and inefficient estimators otherwise (Pesaran, 2004). The findings showed that all four test statistics were statistically significant at the 1% level, with p-values of 0.0000 in all tests. The Breusch-Pagan LM value of 114.086 and the Pesaran CD value of 5.519 are both, without any doubt, indicative of cross-sectional dependence in the panel data. These results suggest that the error terms across cross-sectional units are correlated, which is probably due to shared macroeconomic shocks or industry-specific spillover effects affecting multiple firms in the sample simultaneously. The establishment of cross-sectional dependence is significant for its methodological implications. According to Pesaran (2007), panel estimation that does not account for CSD leads to severe size distortions in standard hypothesis tests. Subsequent unit root tests and estimation procedures, therefore, need to utilize procedures that are resistant to cross-sectional dependence, which is appropriately accounted for in the analyses below. The current results align with the recent empirical literature, indicating that cross-sectional dependence is a widespread phenomenon in firm- and macro-level panel data in integrated economies (Baltagi, 2008).

Table 4: *Cross-Sectional Dependency Tests Results*

Test	Stat.	p-value
Breusch-Pagan LM	114.0855	0.0000
Pesaran scaled LM	7.282249	0.0000
Bias-corrected scaled LM	6.726694	0.0000
Pesaran CD	5.518969	0.0000

Unit Root Test

Table 5 presents the results of the four panel unit root tests used to assess the stationarity of the variables under study. They were the Levin, Lin, and Chu (LLC) test, the Im, Pesaran, and Shin (IPS) test, the ADF-Fisher Chi-square test, and the ADF-Choi Z-statistic. In panel data econometrics, stationarity testing is a prerequisite because a unit root can yield spurious regression estimates, leading to inaccurate inferences (Granger & Newbold, 1974). It was shown that the null hypothesis of a unit root was rejected at the 1% level of significance by all four test statistics. Specifically, the LLC statistic of -6.483 ($p = 0.0000$), the IPS statistic of -2.408 ($p = 0.0080$), the ADF-Fisher Chi-square statistic of 39.363 ($p = 0.0060$), and the ADF-Choi Z-statistic of -3.317 ($p = 0.0005$) collectively confirm that the panel series are stationary at level, i.e., integrated of order zero, I(0). The agreement of the four tests in rejecting the null hypothesis goes a long way to reinforce the conclusion of stationarity. The methodological significance of verifying stationarity for all variables is significant. This ensure that any spurious relationship does not affect the regression analysis conducted in the subsequent step and that the estimators possess the regular asymptotic properties. This finding confirms the hypothesis formulated earlier about the mean reverting nature of the financial ratios, as documented in empirical studies on corporate finance (Choi, 2006).

Table 5: *Unit Root Test Results*

Test	Statistic	p-value
Levin, Lin & Chu (LLC)	-6.48264	0.0000
Im, Pesaran and Shin (IPS)	-2.40803	0.0080
ADF - Fisher Chi-square	39.3633	0.0060
ADF - Choi Z-stat	-3.31658	0.0005

Hausman Test

The results from the Hausman specification test as presented in Table 6 indicate whether Fixed effect model (FEM) or Random effect model (REM) would be a more appropriate and consistent model for estimating panel data. Hausman test is used to measure the correlation between the individual specific effects and the regressors, which when found to exist implies that the estimators will be inconsistent (Hausman, 1978). In conducting the Hausman test, a Chi-square test statistic value of 0.829 was found at the probability value of 0.9345. Since the p-value is larger than 0.05, then the null hypothesis cannot be rejected. The results from the Chi-square Hausman statistic strongly suggest that REM will be an appropriate estimator of the panel data. The suitability of using the random effect estimator is based on the fact that it assumes that there exists no correlation between the firm specific unobservable factors and explanatory variable. Additionally, the random effects model is especially beneficial in this case because it can be used to estimate time-invariant attributes across firms and is more effective than the fixed effects model when the exogeneity assumption holds. The Hausman test result that led to the adoption of the random effects model is consistent with the methodological recommendations of the panel data econometrics literature (Baltagi, 2008).

Table 6: ***Results of Hausman Test***

	Chi-Sq. Statistic	Prob.
Hausman Test	0.829216	0.9345

Ordinary Least Squares Estimation

Table 7 presents the panel regression results from the Random Effect Model (based on the Hausman test result in Table 6) that evaluate the impacts of liquidity and leverage measures on Return on Equity (ROE) for the sampled companies. The Current Ratio (CR), Quick Ratio (QR), Debt-to-Equity Ratio (DER), and firm size (LN_FS) were taken as explanatory variables in the estimated model. The overall fit of the model was satisfactory, with the values of R-Squared = 0.462 indicating that about 46.2 per cent of the variance in ROE is accounted for by the predictors used in the model, and an adjusted R-Squared = 0.382 indicating that the model still has sufficient explanatory power even after it has penalized the number of predictors. The first hypothesis (H1) has been accepted at the 5% significance level. The Current Ratio (CR) coefficient was positive and significant with the value of 12.489 (t = 2.122, p = 0.0364). This means that a unit shift in the Current Ratio will cause the Return on Equity (ROE) to increase by an approximation of 12.49 units all other things being equal. The phenomenon can be explained by the notion that the good liquidity at a short-term scale boosts the profitability of the company. These findings are consistent with existing research on the management of working capital, which has continually indicated that companies that have high current ratios are generally better performing financially (Deloof, 2003; Gill et al., 2010). Adequate liquidity helps decrease financial risk, minimize costs, and exploit more business opportunities.

Also, the second hypothesis (H2) is rejected. The Quick Ratio (QR), on the other hand, had a statistically non-significant coefficient of 0.208 (t = 0.037, p = 0.9707). The fact that there is no substantial correlation between QR and Return on Equity (ROE) implies that the current ratio does not imply that this immediate indicator of liquidity that does not include the inventory has a significant independent impact on the profitability. This finding could be associated with the nature of the sampled industries, where inventory levels are not a high liquidity risk, or could be because CR and QR have a similar explanatory content (Muscettola, 2014). Moreover, the third hypothesis (H3) is accepted at the level of 5% significance. The coefficient for the Debt-to-Equity Ratio (DER) was found to be positive and statistically significant (t = 2.091, p = 0.0392). This implies that increased financial leverage is correlated to increased profitability of the sampled firms. This observation is explicable by the leverage hypothesis behind the trade-off theory of capital structure which argues that the middle ground in terms of debt utilization improves firm value and returns to equity owners due to the tax shield effect (Modigliani and Miller, 1963). The positive leverage-profitability nexus is also reported in the literature on the Indonesian corporate sector where debt financing is associated with disciplined resource allocation and increased returns (Murhadi, 2013).

The fourth hypothesis (H4) is found to be rejected. There was no impact of the LN_FS variable on ROE, as the coefficient value for LN_FS was found to be 0.022 (t-value = 0.033, p-value = 0.9738). This means that the size of the firm does not have any influence on profitability. As the connection between profitability and firm size in developing economies can be non-linear or industry-specific (Pervan & Visic, 2012), this result cannot be considered unexpected.

Furthermore, the value of 1.816 for the Durbin-Watson statistics, which is close to 2.000 – the benchmark value – suggests the lack of first-order serial autocorrelation in the estimated model. The presence of no serial correlation implies that the estimates are reliable because the calculated values of t-statistics and p-values can be trusted (Durbin & Watson, 1950). Overall, the regression results provide robust empirical evidence that liquidity, specifically the current ratio, and financial leverage, measured by DER, are statistically significant determinants of firm profitability in the sampled panel, while the quick ratio and firm size do not contribute significantly to explaining ROE variation.

Table 7: ***Results of Pooled OLS (Fixed Effect Model)***

Variable	Coefficient	Std. Error	t-statistic	p-value
Constant (C)	-9.150423	16.13621	-0.567074	0.5720
CR	12.48886	5.885389	2.122011	0.0364**
QR	0.208248	5.652046	0.036845	0.9707

DER	3.596333	1.720241	2.090598	0.0392**
LN_FS_	0.022488	0.683534	0.032899	0.9738

R-squared	0.461913
Adjusted R-squared	0.381808
Durbin-Watson stat	1.816499

6. Conclusion

The aim of this study was to investigate the impact of liquidity and financial leverage on the profitability of Pakistan Stock Exchange listed textile firms, a research issue of long-term practical significance in an industry that is still considered a core in terms of exports and job availability in the nation. Based on panel data and a Random Effects Model chosen through the Hausman specification test, the results provide a more detailed explanation of these financial relations, which validate and complicate traditional expectations. The current ratio became a statistically significant and positive predictor of return on equity, which supported the idea that sufficient liquidity on a short-term basis is not only a defensive financial stance but also an active facilitator of profitability with empirical evidence. Companies with adequate current assets compared to liabilities seem to be in a better position to meet the demands of their operations, escape the expensive financial turmoil, and seek opportunities of expanding as they come. This finding is consistent with the working capital management literature and indicates that much more strategic emphasis is warranted on liquidity management in the textile industry than is commonly done. Simultaneously, a more conservative measure of liquidity, the quick ratio, did not have statistically significant correlation with ROE. This deviation is probably indicative of the reality that inventory, which does not count in quick ratio, is a significant and useful resource in the textile processes as opposed to a dormant one and blurs the line between the two indicators in this specific industrial scenario.

Conceivably the most theoretically interesting outcome is the positive and significant impact of the debt-to-equity ratio on the profitability. Instead of validating the often-observed negative leverage-profitability nexus in the literature of developing economy studies, the fact here is more in line with the prediction made by the trade-off theory that equitable financing in moderation can have a positive impact on equity returns via the tax shield mechanism, as well as by the discipline associated with resource allocation. This result is open to interpretation: it is not proposing that firms in Pakistan in the textile industry should be encouraged to borrow freely but it does indicate that at the leverage levels these firms are operating, the advantages of debt are not yet being swamped by the disadvantages of financial risk. However, the company's size, contrary to claims based on economies of scale, had no significant effect on profitability. It implies that management and finance are more important factors for this enterprise than simply size.

The current study has several limitations. The sample is limited to PSX-traded textile companies, which might not reflect financial dynamics of untraded or smaller companies that form a large share of the market. The available data also limits the time frame of the study, and the correlations that have been discovered here may change significantly with macroeconomic shocks, exchange rate volatility, energy price changes, or with alterations in global demand trends that would not be reflected in the sample period. Future studies would be better served by analyzing the data over a longer time frame, including macroeconomic moderators like inflation and interest rate trends and non-linear threshold effects that could be used to determine the nature of the liquidity-profitability and leverage-profitability relationships. The sector comparisons with other export-oriented industries would also be used to find out whether the findings were specific to textiles only or it was a general trend in the industry-oriented economy of Pakistan.

7. Recommendations

According to the results of this research, various suggestions are made to concerned stakeholders. Textile firms' financial managers are advised to focus on having an ideal level of liquidity and especially the current ratio because it has a positive relationship with profitability, idle cash holdings are to be minimized and enough working capital to run the business on should be maintained. Companies also need to have a moderate leverage policy where it uses moderate debt financing to enjoy tax shield and better returns on equity and does not take too much debt where it risks financial distress. It is recommended that investors and analysts use liquidity and leverage ratios as leading indicators when analyzing the firms in the textile sector listed on the PSX instead of focusing on firm size as found in this study to be unimportant. Lastly, policymakers must strive to ensure that there are no fluctuating interest rate environments and that there is an ease of access to short-term trade finance because these are the conditions that directly underlie the liquidity and capital structure choices that form the basis of firm profitability in the Pakistani textile sector.

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