

# Navigating Debt Sustainability: An In-Depth Analysis of Debt Coverage and other Performance Drivers in Pakistani Textile Sector

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### **Abstract**

Our research sought to ascertain the impact of capital structure, particularly debt financing, on firm liquidity using panel data of 91 Pakistani textile companies from 2017 to 2021. Data was collected from balance sheets of the interested firms which are available at web-site of State Bank of Pakistan (SBP). A well-known econometric technique known as 'Panel Corrected Standard Error (PCSE)' has been employed to acquire precise coefficient values of the interested variables. Findings of the current study demonstrate that Debt Coverage Ratio (DCR) has a significant association with Current Ratio, Return on Assets, Financial Leverage, and Business Growth. Though, Tobin's Q, Firm age and Firm size have shown insignificant association with DCR. So, present study contributes to the understanding of capital structure choices and financial well-being within textile industry sector of Pakistan. Moreover, our study highlights the trade-off between leverage and financial stability; indicating the role of growth with debt management. These findings offer valuable insights for investors, lenders, and corporate decision-makers.

**Keywords:** Debt Coverage Ratio; Capital Structure; Textile Industry; Pakistan; PCSE **Introduction** 

In this modern corporate era, every firms tries to survive the tough competition. Capital structure decision making has become one of the most difficult tasks for the fate of a firm. Capital structure decision plays a vital role for any business organization which aims at maximizing returns and makes it able to compete in its competitive environment (Abor, 2005). In the modern world, finances are considered to be the foundation of business, and among finances, decisions about an organization's capital structure are crucial to its success. One of the needs of Pakistani textile business owners is the necessity to raise money or use personal resources to increase profits. In Pakistan, debt financing is the most popular choice. Additionally, short-term debt provides the company with money quickly and under strict restrictions. The availability of domestic investment (loans) and the relatively modest size of the debt market continue to be key factors in the underperformance of businesses that rely on small amounts of debt for everyday operations. In addition to many other advantages, the ideal financial structure can significantly relieve both owners and shareholders. A huge practical and rational development in contemporary worlds the evolution of capital structure and its different elements. It shifts the owners, management, retailers, lenders, stakeholders, educationists, scholars, think-tank and others to search more where they can renovate and progress in capital structure choices so performance of firms as well as wealth of shareholder can increase.

Pakistan is the fourth largest producer of cotton in the world (Malik and Ihsan, 2016). Its share in total foreign exchange earning of Pakistan annually is 60-65% which is around \$5.5 billion. It is the back bone Pakistan economy which provided employment to more than 40% in total industrial labor; its contribution in GDP is 8.5% and accounts for 40% of banks credit and its share in total national exports is 60% (Ali et al., 2020).

The textile industry has a prominent position as one of the key sectors in Pakistan's economy. The export of cotton-based textile products constitutes more than sixty percent of the overall exports. The sector under consideration is accountable for the generation of 46%

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of manufactured items and provides employment to 38% of the industrial labor force. The establishment of the textile industry in Pakistan was facilitated by the presence of abundant raw cotton resources and the availability of cost-effective labor. The textile sector in Pakistan makes a significant contribution of 8.5% to the country's Gross Domestic Product (GDP). Based on Shah's (2015) research, it is noted that the country in question ranks as the ninth biggest textile exporter in the Asian region. In order to be eligible for a new loan, agricultural enterprises are required to provide evidence of sufficient cash flow to cover expenses related to input costs, income taxes, debt obligations, and other important expenditures pertaining to household maintenance. Debt repayment ability is commonly used to evaluate the ability of a farm business to generate enough cash throughout the year to cover scheduled loan payments (White, 2008). Following the trend of lower level of farm income, debt repayment ability has also worsened as the demand for farm loans remain high and credit conditions deteriorate (Johnson, 2019).

The deductibility of interest on debt prior to calculating taxable profits, in comparison to distributing dividends from post-tax profits, results in a reduction of the effective tax rate for a company. This reduction is directly proportional to the degree to which debt is used instead of equity in the company's financing structure. However, it is not advisable to rely heavily on debt financing since it might lead to an elevated amount of debt in the firm's capital structure, hence amplifying the financial risks associated with the company. This is due to the fact that debt represents a legally binding agreement. Ultimately, the same amount, plus with the accrued interest, must be repaid. Failure to adhere to these guidelines may lead to a state of technical bankruptcy, if not actual insolvency. Moreover, it should be noted that the utilisation of loan capital does not inherently guarantee an enhancement in the overall profitability of the company. In our research, we use the debt coverage ratio as the dependent variable, which is a measure of a company's capacity to fulfil its financial commitments. This ratio serves as an indicator of a company's financial well-being, providing insight into its ability to create a enough cash flow to meet interest obligations and return the principle amount.

Various factors also contribute to explaining a significant relationship in debt financing. A high return on equity (ROE) may enhance a company's appeal to creditors due to its indication of profitability, hence possibly facilitating the acquisition of debt financing. Conversely, a lower ROE may need a greater dependence on debt financing in order to enhance returns (Harris & Raviv, 1991).

Debt financing and leverage are intertwined concepts in corporate finance. Debt financing involves a company's use of borrowed funds, which amplifies returns and risks, creating a positive relationship between the two. While debt financing can be cost-effective due to lower interest rates and offers tax advantages, it also heightens financial risk as debt payments are obligatory. Financial leverage and debt financing have positive relationship (Gottardo & Moisello, 2016). The role of firm size and debt capacity also have vital role in firm decision making proves small firms use new equity as the primary source of funds, followed by new debt and internal cash. For large firms, on the other hand, internal cash is the primary source of funds, followed by new debt and new equity (Street et al., 2023). So, our study fill the debt financing gap using debt coverage ratio in context of textile industry and use an optimum level of debt. The outbreak of the novel coronavirus (COVID-19) brought seriously affected health care, economy, transportation, and other fields in different industries and regions. Population mobility sharply dropped, as a result of the quarantine, Policy which led to weakened spending power and a stagnant economy. At the macro level, the COVID-19 outbreak caused the worst global recession since 1930, when the economy got absolutely



creamed (Rate, 2021),we also created dummy variable of covid19 in our study and check its impact on our dependent variable.

## **Literature Review**

The examination of financial data employs several approaches to highlight the adjusted and comparative importance of the organization. The methodologies included in this study consist of ratio analysis, common-size analysis, investigation of descriptive information, and comparison of results. The primary aim of financial analysis is to discern notable shifts, often known as turning moments, in patterns, quantities, and relationships. Moreover, this process includes the analysis of the fundamental elements that lead to these alterations (Gibson, 2014). Financial statement analysis consists of two main components. The first stage involves conducting a comparative analysis of the operational efficiency and effectiveness between two distinct businesses. The subsequent stage entails assessing the patterns seen in the financial accounts of the firms during a certain timeframe. Financial analysis is a commonly used methodology that is utilized by a diverse range of persons in various professional capacities. Managers use financial analysis as a means to discover and comprehend complex situations inside an organization. Financial statement analysis is a crucial tool used by lenders to evaluate the creditworthiness of a firm. Furthermore, stakeholders use financial analysis as a means to forecast dividends, free cash flow, and prospective earnings (Asadullah, 2020). Numerous empirical inquiries have been conducted to examine the operational and financial performance of organizations. Numerous studies have placed significant focus on the use of financial metrics, however alternative approaches have included nonfinancial indicators to predict the success of corporations (Abbas et al., 2013). The financial stability of a corporation has considerable significance since it has a direct influence on the firm's valuation and its ability to create returns for its investors (Tahir, 2012). When evaluating the financial condition of a company, it is advantageous to examine its operational performance and make comparisons with previous years or similar firms' ratios, since this may provide significant insights (Tamimi, 2012). Financial ratios are often used in financial analysis to determine relationships between different projections obtained from financial accounts. Financial ratios are used to analyze the financial state of a firm (Kirkpatrick, 2007). The research analyzed many financial criteria pertaining to a company's performance, including liquidity, activity, solvency, profitability, repayment capability, and financial efficiency (Ahrendsen, 2012; Ramathan, 2007). Similarly Xuezhou et al., (2020) ratios may be a useful instrument in doing financial analysis, facilitating the evaluation of the standing of an organization or industry.

According to Xuezhou, Hussain, Hussain, et al., (2022), the association between CEO non-duality and financial distress as well as the relationship between board independence and financial hardship are mediated by the debt W. Xuezhou et al. maturity structure; however, none of the correlations mentioned above were mediated by the capital structure. Leslie Rogers (1997) argues that financial analysis extends beyond the mere provision of explanations for different ratios. In the next section, we shall explain many frequently used ratios. text to be more academic? Liquidity ratios facilitate the evaluation of an organization's ability to effectively execute industrial operations and fulfill financial commitments within a certain timeframe. The activity or efficiency ratio is a quantitative measure used to evaluate the operational performance of a corporation in executing its routine business activities. As finding of Hussain et al., (2012), data Analysis was conducted using co-integration Analysis for the long run relationship there is a positive relationship between debt maturity and liquidity The profitability ratio aids firms in evaluating their potential to create profits by analyzing the strategies and measures they have employed. The solvency or leverage ratio serves as a metric for assessing the degree to which a company's assets are financed by debt.



Ratios serve as a significant analytical tool for doing trend research. The procedure may be carried out on a yearly basis, during which data is taken from the annual statements of the organizations. The data is thereafter presented using pertinent ratios and subjected to analysis in order to deduce a coherent explanation. Furthermore, the data from consecutive years is examined in order to find any noticeable patterns or trends. Several classes of ratios have been identified by several authors. According to Abbas et al., (2013) and Johnson, (2019) ratios may be classified into three primary categories: profitability ratios, short-term solvency ratios (sometimes referred to as liquidity ratios), and long-term solvency ratios (often known as capital structure ratios). Owens and Epstein (1995) propose that financial ratios may be classified into four main categories: liquidity ratios, activity ratios, debt ratios, and profitability ratios. The assessment of risk may be expedited by using measures such as liquidity, activity, and debt, whilst the evaluation of return can be eased by taking into account profitability. Perttunen and Martikainen (1970) use a comprehensive framework including four unique kinds of ratios to undertake a thorough examination of financial statements.

Mutual fund Performance suggested by Bilawal et al., (2016) that is negative relationship between debt and financial Performance . The categorization encompasses many measures, including profitability ratios, liquidity ratios, and efficiency ratios related to asset management, and leverage ratios related to debt management. When evaluating profitability ratios, it is crucial to analyze key performance indicators such as return on assets, return on equity, and net profit margin. The notion of liquidity ratios involves the computation and evaluation of two fundamental ratios: the current ratio and the quick ratio.

The leverage ratio is comprised of two components: the debt to equity ratio and the debt to fixed assets ratio. The efficiency ratio encompasses several components, including the total asset turnover, inventory turnover, as well as trend and growth analysis. Furthermore, certain financial metrics, including total assets, current assets, stakeholders' equity, and sales, are subject to examination for trends and growth (Xuezhou, Hussain, Salameh, et al., 2022). The implementation of suitable protections throughout the process of conducting ratio analysis is of significant importance. First and foremost, it is important to use many ratios since depending only on a single ratio may result in ambiguity and a dearth of substantial information. The use of many ratios is considered appropriate for attaining positive results. An alternative method involves using the audited financial statements. Unaudited financial statements have the potential to exhibit deficiencies in openness and correctness, including encompassing figures that are deceptive or inconsistent. Additionally, it is recommended to use alternate ratios in order to attain equilibrium, while adhering to the same design ideas, formulas, and procedures. To guarantee the adequacy of the differentiation for further research efforts or its potential as a benchmark in future investigations, it is essential to take certain measures (Whites & Keith, 1993). When engaging in financial analysis, the key objective is to discover and compute the relevant ratios. Nevertheless, an essential component of this procedure is offering a comprehensive elucidation of these ratios in connection with the company's corresponding numbers from the preceding year. This analytical approach is often known as the standard or cross-sectional analysis. In addition, it is possible to compare the ratios with those of other individuals or a cohort of participants (Gitman, 1997). Timeseries analysis may be used to assess the success of a company. To analyze the temporal trend, historical year ratios are used for comparative assessment with more contemporary ratios. Ratio analysis is a crucial tool for evaluating two different temporal perspectives: historical analysis and current analysis (Gitman, 1997). This study investigates the correlation between four financial indicators and the calculation of comparative liquidity, efficiency, leverage, and profitability in the economic sectors of Pakistan.



## **Research Methodology**

This section provides an overview of the data set, model, and various analyses conducted in the research. It elucidates the variables used and offers an interpretation of the test findings.

### **Data Collection**

The data used in this study was obtained from the publication titled "Financial Statement Analysis of Companies Listed on the Pakistan Stock Exchange," authored by the State Bank of Pakistan (SBP). The dataset covers a period of five consecutive years, namely from 2017 to 2021, and comprises a total of 91 textile firms.

## **Variables Explanations**

Table 1 includes all the variables with their notations and full measuring definitions related to our study.

**Table 1: Variable descriptions** 

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Variables	Notations	Definitions	Source			
<b>Debt Coverage Ratio</b>	DCR	Net operating income and dividing it by total debt service	(Findlay & Williams, 1975)			
Current Ratio	CR	Dividing a company's current assets by its current liabilities	(Ghoniyah et al., 2017)			
Return on Asset	ROA	Net income divided by total assets	Yu et al. (2018)			
Financial Leverage	FL	the total of company debt divided by the total shareholders' equity	( Xie et al, 2018)			
Tobin's Q	TBQ	equals the market value of a company divided by its assets' replacement cost	(Baseri et al., 2018)			
Firm size	SIZE	By taking the logarithm of the total assets	Galbreath (2012), Xie et al			
Firm Age	Age	Based on the number of years the company has been listed on the stock market	Gandía (2008)			
Firm Growth	Growth	Divide the present by the past value, then multiply that number by 1/N (where N is the number of years	(Lang et al., 1995)			
Covid19	Dummy Variable	A binary variable that takes the value of 1 if an individual has been diagnosed with COVID-19 and 0 if they have not.	(Amaliawiati et al., 2021)			

## **Descriptive Statistics**

The objective of descriptive analysis is to portray the attributes of the data that has been gathered for the variables. The primary objective of descriptive analytics is to identify and elucidate patterns and correlations within datasets. The following sections provide the study's average, standard deviation, lowest value, and highest value for the dependent and independent variables, correspondingly. Table 2 presents a concise overview of the data we have collected.

**Table 2: Descriptive Statistics** 

Variable	No. of Obs.	Mean	Std. Dev.	Min.	Max.
DCR	450	.139	.17	431	1.256
CR	450	1.06	.701	.03	5.886



ROA	450	.316	7.411	-47.976	21.145
FL	450	2.064	1.399	-4.771	5.004
TBQ	450	.625	2.609	-32.902	25.861
Size	450	14.687	2.115	6.521	23.202
Age	450	43.431	12.896	12	77
Growth	450	.165	.795	-3.783	4.131

**Note:** Variable definitions are provided in Table 1.

Comparing the Debt Coverage Ratio (Dcr) to financial indicators and control factors reveals a complex picture. The mean Dcr of 0.139 indicates positive but modest debt coverage across dataset companies. Meanwhile, the mean Current Ratio (Cr) is 1.06, suggesting good liquidity. This means that companies have modest debt coverage and strong liquidity. A positive return on assets is shown when Dcr is compared to Roa, which averages 0.316. This shows that some businesses produce good asset returns despite poor debt coverage. This suggests that organizations use assets efficiently, indicating their resilience and efficiency. Der has a mean Fl of 2.064 when compared to Financial Leverage (Fl). This suggests that enterprises with more financial leverage may have lower debt coverage, suggesting an adverse link. This association has to be confirmed and quantified using sophisticated statistical approaches like regression analysis. Dcr in relation to Tobin's Q (Tobing), with a mean value of 0.625, indicating a low market valuation for enterprises with poor debt coverage. This fascinating discovery suggests more research into debt coverage's complex effects on market value and investor perceptions. Finally, studying Dcr and control factors (Size, Age, Growth) may reveal trends. Exploring whether bigger or older enterprises have different debt coverage percentages may reveal how organizational features affect financial structures. This comprehensive study shows the intricacy of financial dynamics, requiring more advanced studies to understand the dataset's complicated linkages.

## **Preliminary Analysis**

The data was originally analyzed using a random effects model, followed by the implementation of a fixed-effects model (Spineli & Pandis, n.d.). By using the Hausman test, it was determined that the fixed-effects model is the better appropriate selection for our dataset. The statistical test conducted to evaluate the null hypothesis (H<sub>0</sub>) regarding the presence of a systematic difference in coefficients resulted in a p-value over 0.5. This observation suggests the presence of consistent variations in coefficients, which justifies our use of the fixed-effects model for further research. For panel data analysis we conducted fisher unit root test to see that our data is stationarity because data stationarity lead to false result so our test shown in table 3 that our there is no stationarity in our panel data. Additional analysis, such as the examination of heteroscedasticity, was performed. The findings of our study indicate the existence of heteroscedasticity within the data panel, as shown by the modified Wald test yielding a value of 0.00, so rejecting the null hypothesis. Subsequently, we performed the Arellano-Bond test to examine the presence of autocorrelation. The obtained result indicated a p-value of 0.00, suggesting the existence of autocorrelation among the variables. Lastly, we conducted the Person CD test to assess crosssectional dependencies. The test yielded a significant result, leading us to reject the null hypothesis, thereby confirming the presence of cross-sectional dependencies in our model. The results are shown in table 4. Endogeneity is major Concern in panel data analysis (Fatima et al., 2021). To address all these issues, the PCSE regression estimator is used, which is well-suited for panel data sets characterized by short time intervals (T) and larger cross



sections (N)(Ikpesu et al., 2019). In order to enhance the reliability of our findings, we used the Fixed Effect, Random Effect, and FGLS for robustness.

**Table 3: Fisher's Unit Root Test** 

Variable	Inverse Chi 2	p-value
DCR	1893 ***	0.000
CR	1034 ***	0.000
ROA	949.9***	0.000
FL	715.4***	0.000
TBQ	808.6***	0.000
Size	677.1***	0.000
Age	4.7 ***	0.000
Growth	1100 ***	0.000
covid19	20 ***	0.000

Table 4: Heteroscedasticity, Autocorrelation and Cross-sectional Dependence Tests					
Arellano-Bond test for autocorrelation	Z	P value			
	4.6602	0.000			
Modified Wald test for group wise heteroscedasticity	Chi2	Prob>chi2			
	90	0			
Average correlation coefficients & Pesaran (2004) CD test	CD	P value			
	30.57	0.000			

## **Correlation and Multicollinearity**

Correlation coefficients serve as indicators of the magnitude of the association between variables. A correlation coefficient with a larger absolute value, approaching either 1 or -1, signifies a more robust link, while a number closer to 0 implies a weaker association. Higher absolute value of the correlation coefficient (closer to 1 or -1) suggests a stronger relationship, while a value closer to 0 indicates a weaker relationship

Table 5: Correlation Analysis & Multicollinearity

Variables	DCR	CR	ROA	FL	TBQ	Size	Age	Growth	covid19	VIFs
DCR	1.000									
CR	0.644	1.000								1.642
ROA	0.655	0.522	1.000							1.432
FL	0.103	0.142	0.365	1.000						1.195
TBQ	0.125	0.070	0.158	0.083	1.000					1.079
Size	0.096	0.174	0.089	-0.012	0.065	1.000				1.067
Age	0.051	0.042	-0.063	-0.178	-0.053	-0.112	1.000			1.055
Growth	0.277	0.175	0.257	0.088	0.086	0.012	-0.023	1.000		1.034
covid19	0.088	0.069	0.032	-0.026	-0.029	0.039	0.095	-0.040	1.000	1.019



In the realm of financial and economic analysis, understanding the relationships between various variables is crucial for making informed decisions. In this study, we explore the correlations between a set of key financial and economic indicators, as illustrated in the correlation matrix. This matrix reveals the pairwise correlations between nine variables, shedding light on the interconnectedness of these financial and economic metrics. Notably, the Debt Coverage Ratio (DCR) exhibits a perfect positive correlation with itself, a statistical formality. The Current Ratio (CR) positively correlates with DCR, Return on Asset (ROA), and demonstrates a negative correlation with Age. ROA, on the other hand, displays positive correlations with DCR, CR, and Financial Leverage (FL). Financial Leverage is positively correlated with DCR and CR. Tobing shows a positive correlation with multiple variables, such as DCR, CR, ROA, and Age, but it is negatively correlated with Financial Leverage. The Size of firms positively correlates with CR but negatively correlates with Age. Age exhibits negative correlations with several variables, including CR, Tobing, and Growth. Speaking of Growth, it positively correlates with DCR, CR, ROA, and Tobing.Furthermore, Covid19 presents various correlations, indicating its relationships with DCR, CR, Tobing, Size, and Age. These correlations are vital for financial analysts, economists, and researchers as they provide insights into the complex dynamics between these variables in financial and economic analyses and decision-making processes. For Multicoolinarity we use variance inflation factor that result specify that there is no mjulticoolonaruty present in our data.

## **Regression Analysis**

The findings of the regression analysis shed light on the links between the Debt Coverage Ratio (DCR) and a variety of variables, both financial and non-financial (see in table 6). There is an increase of 0.0963 units in the Current Ratio (cr) for every one-unit rise in the Debt Coverage Ratio, which suggests that increased debt coverage is connected with a higher current ratio, which is indicative of improving financial health. Similarly, a rise of one unit in DCR correlates to an increase of 0.0107 unit in Return on Assets (roa), which indicates that businesses with superior debt coverage tend to demonstrate better returns on their assets. On the subject of financial leverage, it has been shown that an increase of one unit in debt coverage ratio is associated with a drop of 0.0155 units in financial leverage (fl). This finding suggests that businesses with greater debt coverage often have a more conservative capital structure. Nevertheless, changes in DCR do not display a statistically significant correlation with Tobin's Q (tobinq), which suggests that variations in debt coverage may not have a substantial influence on the company's market value. In addition, a rise of one unit in DCR is related with a fall of 0.0014 units in Firm Size (size), which suggests that bigger companies may have comparatively lower debt coverage than smaller organizations. A important result is that a one-unit rise in DCR corresponds to a 0.0211 unit increase in Firm Growth (growth), which indicates that better debt coverage is aligned with higher growth rates. This is in contrast to the fact that Firm Age (age) does not exhibit a statistically significant association with changes in DCR. Despite the absence of a statistically significant link between DCR and age changes, this discovery is noteworthy. However, there is no statistically significant connection between DCR and the COVID-19 dummy variable (covid19), which indicates that it is difficult to predict how the pandemic would affect debt coverage using the model that was defined. In the framework of the regression model, these subtle correlations give useful insights into how fluctuations in the Debt Coverage Ratio are interrelated with other financial and operational aspects.

**Table 6: Regression Findings Through Panel Corrected Standard Error** 



Var.	Coefficient	Std. Err.	z	P>z	[95% conf.	interval]
CR	0.096	0.013	7.290	0.000	0.070	0.122
ROA	0.011	0.001	8.760	0.000	0.008	0.013
FL	-0.015	0.004	-4.150	0.000	-0.023	-0.008
TBQ	0.002	0.002	0.980	0.328	-0.002	0.006
Size	-0.001	0.001	-2.580	0.010	-0.002	0.000
AGE	0.001	0.000	1.460	0.145	0.000	0.001
Growth	0.021	0.007	2.920	0.004	0.007	0.035
covid19	0.015	0.010	1.560	0.118	-0.004	0.035

## **Robust Analysis**

The primary purpose of conducting robustness checks is to ensure that your conclusions are not overly dependent on specific conditions or choices made during the research process. For result Reliability we used different model for our result and after comparing them we find that result almost same using fixed effect model, random model and FGLS model.

<b>Table 7: Findings of Robust Analysis</b>						
Variable	Fixed Effect	Random Effect	FGLS			
CR	0.093*** (0.014)	0.094*** (-0.010)	0.097*** (0.039)			
ROA	0.011*** (0.001)	0.011*** (-0.001)	0.009** (0.003)			
FL	0.001	0.01 **	-0.011			
	(0.006)	(-0.004)	(0.013)			
TBQ	0.010	0.001	-0.001			
	(0.003)	(-0.002)	(0.006)			
Size	0.084	0.001	-0.079			
	(0.020)	(-0.003)	(0.046)			
Age	0.015	0.001	-0.001			
	(0.007)	(-0.001)	(0.012)			
Growth	0.020** (0.007)	0.021*** (-0.006)	0.021 (0.012)			
covid19	0.014	0.016	0.021			
	(0.020)	(-0.010)	(0.019)			

In conducting a robustness check for our panel data analysis, we explored three different models: the Fixed Effect Model, the Random Effect Model, and the Dynamic Data Model (using the Arellano-Bond estimator). We examined the coefficient estimates, standard errors, t-statistics, and p-values for several variables of interest, including dcr, roa, fl, tobinq, size, age, growth, and covid19. All model showed approximately same result as our model suggested.

## **Conclusion**

This research explores the complex correlation between the Debt Coverage Ratio (DCR) and a range of financial and non-financial variables within the specific setting of



Pakistan's textile sector. The results provide significant contributions to the understanding of capital structure choices and financial well-being within an industry that has a crucial position in the country's economy. The study demonstrates a number of noteworthy relationships. The Debt Coverage Ratio has a positive correlation with the Current Ratio, suggesting that companies with more debt coverage often possess better liquidity, hence enhancing their overall financial well-being. The relationship between Return on Assets (ROA) and Debt Coverage Ratio (DCR) is positively correlated, indicating that companies with enhanced ability to pay their debts tend to achieve higher returns on their assets. There exists a negative link between Financial Leverage and Debt Coverage Ratio(DCR), indicating that companies with higher levels of debt coverage tend to take a more cautious approach to their capital structure. The findings of the research imply that there is no significant relationship between Tobin's Q, which is a measure of market value, and changes in debt coverage ratio (DCR). This implies that fluctuations in debt coverage may not have a large influence on the market value of a firm. The data suggests that there is an inverse relationship between the size of a corporation and its debt coverage ratio (DCR), implying that bigger enterprises tend to exhibit lower levels of debt coverage compared to smaller organizations. The research reveals a noteworthy correlation between Debt Coverage Ratio (DCR) and Firm Growth, indicating that improved ability to pay debt is linked to increased rates of growth. Although the significance of Firm Age is recognized, the research did not establish a statistically meaningful correlation with alterations in DCR. Furthermore, the analysis reveals that there is no statistically significant relationship between the COVID-19 epidemic, as shown by the dummy variable, and the dependent variable of DCR. The significance of the subject matter is of great importance. The research offers significant information for anyone involved in financial decision-making, such as investors, lenders, and corporate executives within the textile sector. Gaining comprehension of the associations between debt coverage ratio (DCR) and other financial measures will facilitate the process of making well-informed judgments pertaining to capital structure, financial stability, and development plans. Risk Assessment: The observed inverse relationship between debt coverage ratio (DCR) and financial leverage implies that firms with more debt coverage tend to adopt a more cautious approach in managing financial risks. The provided information has significant importance in the context of risk assessment and management within the textile industry.

The research aims to enhance comprehension of the determinants that impact the financial stability of textile enterprises, considering the significant role played by the textile sector in Pakistan's economy. This expertise confers advantages in terms of sustaining and augmenting the industry's competitiveness at an international level. The analysis of the impact of COVID-19 reveals that there is no statistically significant relationship between the dependent variable, DCR, and the COVID-19 dummy variable. However, this finding highlights the ability of the textile sector to withstand and adapt to external disruptions. This particular observation has significant value for sectors that are now grappling with uncertainty stemming from global events. The results of this research may be used by investors who are interested in evaluating the financial stability and development prospects of textile companies in Pakistan, hence enhancing investor confidence. The presence of positive correlations between DCR (Debt Coverage Ratio) and key financial indicators has the potential to bolster investor confidence within the industry. In brief, this study makes a valuable contribution to the current corpus of information about capital structure determinations and financial performance within the textile sector. The correlations that have been established serve as a basis for more investigation and may assist stakeholders in making well-informed choices to promote sustainable development and enhance competitiveness.



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