

# Impact of Corporate Governance and Firm Specific Characteristics on Cost of Equity in the Pakistani Textile Sector: An Empirical Analysis

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<https://doi.org/10.62345/jads.2023.12.4.57>

## Abstract

*This research delves into the determinants of the Cost of Equity (CAPM) within the Pakistani textile sector from 2011 to 2020. Given the economic significance of the textile industry in Pakistan, understanding the factors influencing its financial dynamics is crucial. Through OLS regression analyses, we explore the impact of various variables, including firm age, market beta, board characteristics, financial performance, governance metrics, ownership structures, market indices, financial composition, and debt-related ratios on the cost of equity. The results provide nuanced insights, highlighting the influence of firm age, market beta, board characteristics, and several other factors on the cost of equity in the textile sector. These findings offer valuable insights for industry practitioners, policymakers, and researchers interested in comprehending the intricate financial dynamics of the Pakistani textile industry. The economic relevance of Pakistan's textile sector (2011-2020) supports this study's examination of Cost of Equity (CAPM) factors. Regression analysis investigates business age, market beta, governance, and financial performance, yielding critical insights for industry and policy. Fresh data, a larger sample size, and a thorough examination of corporate governance variables improve the study's relevance and add to the current research, with practical implications for controlling the financial dynamics of Pakistan's textile industry.*

**Keywords:** Cost of Equity, CAPM, Corporate Governance, Textile Industry.

## Introduction

The study underscores the global impact of corporate failures on the importance of corporate governance in fostering transparency and accountability. It explores the link between corporate governance and shareholders' wealth, emphasizing the role of the cost of capital in wealth creation. Significantly, the research addresses the insufficiently explored relationship between corporate governance practices and the cost of equity, specifically within Pakistan.

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Compliance with ethical standards: There are no conflicts of interest (financial or non-financial). This study did not receive any funding.

It is vital to look at governance procedures to lower the equity cost. Various corporate governance characteristics are explored in different research (Teti et al., 2016; Bradley and Chen, 2014; Hajiha et al., 2013). Furthermore, there exist numerous ideas that aid scholars and professionals in comprehending corporate governance practices and their connection to an organization's capital costs. The similarities and variations in these theories make the analyses more attractive. All of these theories underline the significance of firm's cost of capital, firm's cost of capital and stockholders' wealth, and stockholders' wealth. Stakeholder, agency, managerial hegemony, resource reliance, and stewardship theories have all highlighted the importance of stockholders' wealth and the cost of capital.

Previous research indicates that improved corporate governance systems benefit companies' cost of capital and financial performance (MacAvoy & Millstein, 2003; Chahine, 2004; Brown, 2006). Studies, such as Johnson et al. (2000), suggest that assessing corporate governance factors is more relevant than macroeconomic factors for understanding and predicting the behaviour of businesses in emerging economies during financial crises, emphasizing the crucial role of effective governance practices. Concerns over weak governance systems and poor business performance have arisen in response to recent financial crises, leading domestic and foreign investors to attribute the crises to inadequate corporate governance practices.

The following studies provide nuanced insights into the relationship between corporate governance (CG) and the cost of equity (COE) within Pakistani-listed firms. Ali et al. (2019) focused on the cement sector, revealing significant associations such as CEO tenure's negative impact and diversity's positive influence on COE. Khan et al. (2023) extended the analysis to non-financial firms on the Pakistan Stock Exchange, uncovering significant relationships between CG variables and the Capital Asset Pricing Model (CAPM). Anwar et al. (2019) broadened the perspective to Asian countries, emphasizing the role of the Quality of Corporate Governance index and explicit governance variables in reducing the cost of equity. Hashmi et al. (2023) delved into the combined impact of CG and ownership concentration levels, highlighting the moderating effect of high ownership concentration on the relationship between corporate governance and COE. These studies collectively contribute valuable insights for policymakers and financial decision-makers navigating the unique dynamics of CG and COE in the Pakistani corporate landscape.

Shah and Butt (2009) observed sectoral heterogeneity in Pakistan and determined that higher corporate governance (CG) quality corresponds to an increased cost of equity (COE). Their findings indicated a positive impact of CG on COE, with both independence and audit committee independence exhibiting positive associations that warrant further exploration. Notably, the study's sample of 114 non-financial companies from the Pakistan Stock Exchange revealed a bias toward the textile sector, comprising 58 of 114 companies, emphasizing the need for diversified sector representation in future investigations.

This study contributes to the literature in the following ways: Firstly, this study used fresh data available for analysis of the textile sector (2011-2020).

Secondly, this study enhanced the sample compared with Shah and Butt (2009) from 58 to 80 firms. The third contribution is that a large number of CG variables are considered in this study to determine how they affect the COE. The corporate governance index is based on 70 provisions based on the 2002 and 2012 codes.

This study's remaining content is divided into five sections. The literature review is covered in Section 2, methodologies in Section 3, and data analysis in Section 4. On the other hand, Section 5 concludes.

## Literature Review

Wahyudi (2019) found a significant inverse relationship between corporate governance and the cost of equity. Companies with many board members had to pay a higher capital cost, as Doğan and Acar (2020) found. Upon analyzing the data for the control variable, they discovered a statistically significant and negative correlation between the cost of equity and the leverage ratio. To examine how corporate governance and cost of capital are related, Odat et al. (2021) examine how corporate governance procedures affect an organization's equity cost. They examined the CEO's size, independence, and dual position on the board, the number of directorships and the political influence on equity costs. To achieve the study's objective, 210 firm-year observations for manufacturing businesses listed on the Amman Stock Exchange (ASE) between 2014 and 2018 were examined using panel data analysis methodologies. The fixed effects regression model's findings show that the cost of equity is significantly impacted by CEO duality and the political sway of the board but not by board independence, size, or multiple directorships. Broad control measures that lower equity costs are essentially a means of strengthening corporate governance standards (Huang et al., 2021). Bertocelli et al. (2021) study looks at the connection between corporate governance norms and equity capital prices. They were utilizing data from Italian-listed companies in 2018. They found that the corporate governance score and the company's equity capital cost did not correlate statistically. In order to explain the results, they pointed out that poorer-performing companies have been catching up to higher-performing ones, that the Italian framework has grown more uniform, and that standards of corporate governance quality have generally increased in recent years. Consequently, the capacity of a composite index to lower the cost of equity capital is not greatly impacted by lesser variability in the corporate governance index.

Ali et al. (2019) investigate the impact of corporate governance (CG) on the cost of equity (COE) in Pakistan's cement sector, focusing on organizational challenges linked to major events like the China–Pakistan Economic Corridor. Utilizing a dataset covering 18 cement companies over six years (2012–2017), the study employs eight CG proxies and two control variables. Results reveal a significant negative association between CEO tenure and COE and a positive link between diversity in CG and COE. The findings contribute specific insights into the cement sector's capital budgeting decisions and call for enhanced implementation of CG codes (Ali et al., 2019).

Khan et al. (2023) examine the intricate relationship between corporate governance variables and the Capital Asset Pricing Model (CAPM) as a cost of equity proxy for non-financial firms on the Pakistan Stock Exchange (PSX) from 2011 to 2020. Using a convenience sampling approach and fixed effects regression, the study reveals significant links, notably between BETA and CAPM, highlighting CEO duality's influence. Factors like CV, EBIT, and governance indicators exhibit associations with CAPM, while others show no significant impact. These nuanced results offer insights for financial decision-makers and policymakers within the PSX context.

Anwar et al. (2019) explore the impact of corporate governance on the cost of equity in Asian countries, employing a regression model on panel data from 24 Asian countries spanning 2006 to 2015. The findings reveal a significant relationship between the Quality of Corporate Governance (QCG) index and the reduction of firms' cost of equity. Additionally, explicit corporate governance variables such as board independence, audit committee independence, ownership concentration, and CEO duality show significant associations with the cost of equity, aligning with the tenets of agency theory.

Hashmi et al. (2023) investigate the impact of corporate governance and ownership concentration levels on the cost of equity in the context of 114 active non-financial companies listed on the

Pakistan Stock Exchange from 2011 to 2016. Utilizing a panel regression analysis and a unique governance index, the study reveals that enhanced corporate governance reduces the cost of equity. Interestingly, ownership concentration at higher thresholds increases the cost of equity, with a noteworthy moderation effect observed at the 20% ownership concentration level. This novel evidence suggests that high ownership concentration complements corporate governance in mitigating the cost of equity.

Khan et al. (2020) utilized a self-constructed Corporate Governance Index to assess firm-level compliance and disclosure with the 2002 Pakistani Code of Corporate Governance. The study explores the relationship between corporate governance and the cost of capital. Results indicate a negative and significant association between the Pakistani Corporate Governance Index (PCGI) and block ownership with the firm-level cost of capital. Better-governed Pakistani listed firms have a lower cost of capital than their poorly governed counterparts, emphasizing the crucial role of good corporate governance practices in minimizing corporate failure and attracting capital at a lower cost.

The literature provides valuable insights into the relationship between corporate governance and the cost of equality in various circumstances. According to Wahyudi (2019) and Doğan and Acar (2020), corporate governance negatively correlates with the cost of equity, with board size and leverage ratios playing a significant role. Odat et al. (2021) investigate deeper into the link, discovering that CEO dualism and political influence considerably impact equity costs. Bertonecelli et al. (2021) found no significant correlation in Italian public businesses, citing improving governance rules. Ali et al. (2019) examine the cement sector in Pakistan and show how CEO tenure and governance diversity affect equity costs. Similarly, Khan et al. (2023) and Hashmi et al. (2023) provide detailed insights from Pakistan's stock exchange, focusing on characteristics such as CEO duality and ownership concentration. Finally, Khan et al. (2020) highlight the relevance of strong governance in lowering the cost of capital for Pakistani enterprises and its role in ensuring financial stability and encouraging investment.

## Data and Methodology

This study focuses on the Pakistani textile sector, aiming to understand the Cost of Equity (CAPM) determinants within this specific industry. The research utilizes panel data regression analysis, employing Fixed Effects (FE) and Random Effects (RE) models. The panel data spans from 2011 to 2020, encompassing 800 observations across 80 cross-sectional units, each representing different entities within the Pakistani textile sector.

## Variables Measurement

Following table 1 presents the variables and its measurement.

<b>Table 1: Variables and its measurement</b>	
<b>Variables</b>	<b>Measurement</b>
<b>Dependent variable</b>	=CAPM=Risk-Free Rate+ $\beta$ ×(Market Return–Risk-Free Rate)
Cost of equity(CAPM)	Here, $\beta$ represents the annual beta between stocks and the market index, and the market return is calculated using the daily stock return data.
<b>Independent variables</b>	
Firm age (AGE)	=Natural log of numbers of years since firm established

Beta (BETA)	$\beta = \text{Covariance}(\text{Market Return, Individual Stock Return}) / \text{Variance}(\text{Market Return})$
Board size (BOARDSIZE)	=Natural log of number of directors
CEO duality (CEO_D)	=1 if Chairman and CEO positions held by the same person otherwise
CV	=Coefficient of Variation=Standard Deviation of Annual Stock Price/Average Annual Stock Price
Directors ownership (DIROWN)	=No of shares held by firm's directors
Earnings before interest and taxes (EBIT)	=Total Assets/EBIT
Independent directors (IND)	=No of independent directors on the board
Corporate governance index (INDEX)	=Ratio of the scores obtained during 2002 and 2012 from 70 corporate governance regulations from Pakistan.
Insider ownership (INSIDEROWN)	=Percentage of shares held by executives, directors, and their spouses
Market to book ratio (MBR)	=(Amount of outstanding shares at the end of the fiscal year plus total debt) / (Amount of outstanding shares plus book equity)
Leverage TMDR	= (Total debt) / (Total debt plus price at fiscal year's end × outstanding shares)

### Estimation Equation

The dependent variable, CAPM, is examined as a function of various explanatory and control variables tailored to the textile industry context. These variables include AGE, BETA, BOARDSIZE, CEO\_D, CV, DIROWN, EBIT, IND, INDEX, INSIDEROWN, MBR, and TMDR. Descriptive statistics correlation analyses and Jarque-Bera tests are conducted to ensure the suitability of the variables for regression analysis and to provide an initial understanding of their distribution and relationships.

Panel estimation provides a strong framework for studying longitudinal data since it incorporates time-series and cross-sectional variables. Ordinary Least Squares (OLS) regression expands on the basic model to account for differences across firms and periods. Fixed effects regression improves the analysis by integrating firm-specific fixed effects to account for unobserved heterogeneity and identify within-firm differences over time. Random effects regression, on the other hand, considers unobserved heterogeneity across businesses by assuming that firm-specific effects are uncorrelated with the independent variable. These methods give a complete approach to panel data analysis, providing insights into the interactions between independent and dependent variables while accounting for both within-firm and between-firm fluctuations over time.

The regression results report coefficients, standard errors, t-statistics, and probabilities for each variable in the CAPM equation. The significance of coefficients is denoted by asterisks, following conventional significance levels. Including industry-specific variables allows for a tailored analysis of the factors influencing the cost of equity in the Pakistani textile sector. Model fit statistics, such as R-squared, adjusted R-squared, F-statistic, and Durbin-Watson statistics, provide insights into the overall goodness of fit and the robustness of the regression models in capturing the intricacies of the textile industry's financial dynamics over the specified period.

$$CAPM = \alpha + \beta_1 AGE + \beta_2 BETA + \beta_3 BOARDSIZE + \beta_4 CEO\_D + \beta_5 CV + \beta_6 DIROWN + \beta_7 EBIT + \beta_8 IND + \beta_9 INDEX + \beta_{10} INSIDEROWN + \beta_{11} MBR + \beta_{12} TMDR + \mu \dots \dots \dots 1$$

## Results and Discussions

### Descriptive Statistics

The mean values of the variables in the dataset offer a central point of reference for understanding the average characteristics within each metric. Notably, the average age (AGE) stands at 3.20, indicating a typical value within the dataset. The mean Beta (BETA) of 0.47 suggests a moderate level of systematic risk associated with the stocks. Board size (BOARDSIZE) has an average of 0.89, reflecting the natural logarithm of the total number of directors on the board. The mean value of 0.09 for CAPM (Cost of Equity) implies a relatively low average cost of equity according to the Capital Asset Pricing Model. CEO Duality (CEO\_D) has an average of 0.17, indicating the presence of instances where the Chairman and CEO positions are held by the same person. The mean Governance Index (INDEX) of 0.82 suggests a substantial adherence to corporate governance codes. Insider Ownership (INSIDEROWN) and Market to Book Ratio (MBR) have average values of 0.61 and 1.08, respectively, providing insights into the average proportion of shares held by insiders and the market's valuation relative to the book value. These mean values serve as useful indicators for the central tendencies within the dataset, though a comprehensive interpretation requires consideration of other descriptive statistics such as variability, skewness, and kurtosis.

**Table 2: Descriptive statistics**

	AGE	BETA	BOARD SIZE	CAPM	CEO_D	CV	DIROWN	EBIT	IND	INDEX	INSIDER OWN	MBR	TMDR
Mean	3.20	0.47	0.89	0.09	0.17	0.20	0.38	0.09	0.14	0.82	0.61	1.08	0.65
Median	3.22	0.36	0.85	0.05	0.00	0.17	0.41	0.08	0.11	0.81	0.61	0.82	0.73
Maximum	4.16	2.71	1.18	0.90	1.00	0.90	1.00	0.52	1.29	0.96	1.00	8.97	0.99
Minimum	0.00	-1.09	0.78	-1.13	0.00	0.00	0.00	-0.60	0.00	0.69	0.00	0.27	0.02
Std. Dev.	0.55	0.52	0.07	0.19	0.38	0.12	0.29	0.11	0.20	0.05	0.22	0.95	0.27
Skewness	-1.33	0.66	1.73	-0.09	1.76	1.33	0.16	-0.07	1.99	0.32	-0.51	4.43	-0.78
Kurtosis	6.42	3.18	5.70	7.63	4.09	6.21	1.83	6.93	7.19	2.74	2.79	27.29	2.53
Jarque-Bera	624.858	576.41	73	715.98	451.02	577.90	49.31	515.11	1111.72	15.83	36.11	22280.01	189.44
Probability	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sum	2560.75	379.9	0708.76	68.68	136.00	158.49	304.21	73.24	115.34	658.36	490.72	865.84	523.34
Sum Sq. Dev.	243.8	5217.8	73.42	29.94	112.88	12.00	68.31	9.19	31.18	1.81	37.16	725.83	56.36
Observations	800.0	800.0	800.00	800.00	800.00	800.00	800.00	800.00	800.00	800.00	800.00	800.00	800.00

### Correlation

The Cost of Equity (CAPM) exhibits various correlations with other variables in the dataset. Notably, CAPM demonstrates a moderate positive correlation with Beta (BETA), indicating that the calculated cost of equity is positively associated with the systematic risk of individual stocks. There is a slight positive relationship with Board Size (BOARDSIZE), implying a potential connection between the cost of equity and the natural logarithm of the total number of directors on

the board. CAPM also shows a moderate positive correlation with Stock Variation (CV), suggesting a positive association with the annual stock price's coefficient of variation, indicating possible volatility. The correlation with Governance Index (INDEX) is notable, signifying that firms with higher governance scores may incur higher costs of equity. Conversely, CAPM has a weak negative correlation with Director Ownership (DIROWN), indicating a slight negative relationship with the ratio of shares held by directors. These correlations offer insights into the interplay between the CAPM-derived cost of equity and various financial and governance metrics, providing a foundation for further exploration and analysis in the context of the study.

### Regression Results

**Table 4: Regression results**

Method	Random		Fixed		OLS	
Variables	Coefficients	S.E	Coefficients	S.E	Coefficients	S.E
AGE	0.05***	(0.01)	0.26***		0.36***	(0.05)
BETA	0.16***	(0.01)	0.16***	(0.01)	0.15***	(0.02)
BOARDSIZE	-0.1	(0.10)	-0.1	(0.10)	-0.21	(0.24)
CEO_D	0.02*	(0.02)	0.02*	(0.02)	0.05*	(0.02)
CV	-0.10*	(0.05)	-0.10*	(0.05)	-0.15**	(0.06)
DIROWN	0.01	(0.03)	0.01	(0.03)	0.08	(0.08)
EBIT	0.26***	(0.07)	0.26***	(0.07)	0.54***	(0.09)
IND	0.03	(0.03)	0.03	(0.03)	0.07	(0.04)
INDEX	0.54***	(0.16)	0.54***	(0.16)	0.06	(0.26)
INSIDEROWN	0.06*	(0.03)	0.06*	(0.03)	0.1	(0.08)
MBR	0	(0.01)	0	(0.01)	0	(0.01)
TMDR	0.09**	(0.03)	0.09**	(0.03)	0.07	(0.06)
C	-0.60***	(0.15)	-0.60***	(0.15)	-1.17***	(0.28)
R-squared	0.22		0.33		0.22	
Adjusted R-squared	0.21		0.25		0.21	
F-statistic	18.99***		3.88***		19.00***	
Durbin-Watson stat	1.84		2.06		1.83	

**Table 3: Correlation analysis**

Correlation /probability	AGE	BETA	BOARDSIZE	CAPM	CEO_D	CV	DIROWN	EBIT	IND	INDEX	INSIDEROWN	MBR	TMDR
AGE	1.00												
BETA	-0.17	1.00											
	0.00	-----											
BOARDSIZE	0.05	0.18	1.00										
	0.20	0.00	-----										
CAPM	0.05	0.42	0.09	1.00									
	0.17	0.00	0.01	-----									
CEO_D	0.01	-0.01	-0.15	0.02	1.00								
	0.86	0.67	0.00	0.66	-----								
CV	0.06	0.03	-0.10	0.05	0.10	1.00							
	0.08	0.48	0.00	0.01	0.01	-----							
DIROWN	-0.10	-0.32	-0.24	-0.12	0.15	-0.03	1.00						
	0.00	0.00	0.00	0.00	0.00	0.37	-----						
EBIT	-0.17	0.08	0.12	0.10	-0.06	-0.04	-0.17	1.00					
	0.00	0.02	0.00	0.00	0.11	0.29	0.00	-----					
IND	-0.04	0.08	0.07	0.05	0.02	-0.06	-0.10	0.06	1.00				
	0.21	0.03	0.06	0.18	0.66	0.11	0.01	0.10	-----				
INDEX	0.15	0.32	0.37	0.23	-0.24	-0.16	-0.25	-0.01	0.07	1.00			
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.06	-----			
INSIDEROWN	-0.02	-0.25	0.00	-0.05	-0.05	-0.06	0.48	0.06	-0.14	-0.04	1.00		
	0.60	0.00	0.90	0.14	0.16	0.08	0.00	0.11	0.00	0.24	-----		
MBR	0.02	0.05	0.10	0.01	-0.09	-0.02	-0.28	0.28	0.08	0.20	0.08	1.00	
	0.54	0.14	0.01	0.87	0.01	0.63	0.00	0.00	0.03	0.00	0.02	-----	
TMDR	-0.01	-0.12	-0.25	-0.04	0.16	0.15	0.24	-0.43	-0.20	-0.36	-0.09	-0.62	1.00

### **OLS Model**

The ordinary least squares (OLS) model is the baseline regression analysis, utilizing a linear approach to understand the relationship between the Cost of Equity (CAPM) and various independent variables. In this model, the positive associations observed between CAPM and age (AGE), systematic risk (BETA), profitability (EBIT), and governance index (INDEX) suggest that firms with higher age, greater systematic risk, increased profitability, and stronger governance practices tend to have higher costs of equity. Conversely, the negative impact of stock variation (CV) indicates that firms with more stable stock prices may experience a lower cost of equity.

### **Fixed Effects Model**

The model introduces individual-specific fixed effects, aiming to control for unobserved heterogeneity across entities. In this model, significant relationships are observed for systematic risk (BETA), profitability (EBIT), and governance index (INDEX). Including fixed effects allows for a more nuanced analysis, revealing the impact of these variables on CAPM while accounting for individual-specific characteristics that might otherwise be overlooked.

### **Random Effects Model**

The random effects model acknowledges random variations across entities, treating them as random effects in the regression analysis. In this model, significant relationships are identified for variables such as age (AGE), systematic risk (BETA), CEO duality (CEO\_D), stock variation (CV), profitability (EBIT), and total debt to market ratio (TMDR). The random effects model captures the broader variability across different entities, providing insights into how these diverse factors influence the variation in CAPM.

### **Overall Insights**

Collectively, the OLS, fixed effects, and random effects models offer a comprehensive understanding of the determinants of CAPM. The consistency of findings across models, especially regarding the influence of age, systematic risk, profitability, and governance practices, strengthens the robustness of the results. These insights contribute to informed decision-making in financial management and corporate governance, allowing stakeholders to navigate the complexities of cost of equity considerations in the studied context.

Finally, the panel estimation approach thoroughly examines the determinants of the Cost of Equity (CAPM) in Pakistan's Textile Sector. The findings from the Ordinary Least Squares (OLS), fixed effects, and random effects models provide useful information on the factors that influence equity costs in this business. The positive connections between CAPM and variables such as age, systematic risk, profitability, and governance index highlight the significance of firm-specific features in influencing equity costs. Furthermore, using fixed effects allows for the control of unobserved heterogeneity, whereas the random effects model captures larger variability among entities, exposing new factors impacting CAPM variance. These findings contribute to academic understanding and have practical consequences for stakeholders, allowing them to make educated decisions about capital budgeting, risk management, and corporate governance procedures in the Pakistani textile sector. Overall, the detailed study offered here improves our understanding of the sector's financial dynamics and identifies areas for future research and improvement in industry standards.

## Conclusion

In conclusion, this analysis sheds light on the complex dynamics of the Cost of Equity (CAPM) in Pakistan's textile business from 2011 to 2020. The textile industry is critical to Pakistan's economy, highlighting the need for a detailed investigation of its financial dynamics. This study provides useful insights by conducting rigorous regression analyses that include firm age, market beta, board characteristics, financial performance, governance measures, ownership structures, market indices, financial composition, and debt-related ratios. Specifically, it reveals that older firms and those with greater market beta values have higher equity costs. Furthermore, board characteristics, financial performance, governance procedures, ownership structures, market indices, financial structure, and debt-related ratios all impact the cost of stock in the industry. These findings provide actionable insights for industry practitioners and policymakers, allowing them to make educated decisions in the dynamic environment of Pakistan's textile industry.

Given the study's results on the factors impacting the Cost of Equity in Pakistan's textile sector, governments should emphasize improving corporate governance standards to lower risk premiums. Regulatory improvements that promote board diversity, openness, and accountability can reduce equity costs. Measures to promote market stability, such as reducing volatility and increasing investor trust, are critical. Supporting initiatives to improve financial performance through strategic investments and operational efficiency is critical, possibly through incentives for innovation. Collaboration among stakeholders can help them share expertise and handle common difficulties. Additionally, monitoring and managing debt levels to avoid undue leverage are critical for reducing equity costs. Stakeholders can create a more resilient and sustainable textile industry in Pakistan by implementing these policies.

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## Appendix 1

### Pakistani Corporate Governance Index: List of Provisions and Measurement

	Corporate Governance Variables	Measurement
<b>Board of Directors</b>		
1	Directors Categorization Disclosed in Reports	Binary number 1 is assigned if it discloses the categorization of directors in annual reports, 0 otherwise
2	Board Composition (Ratio of Independent Directors)	A binary number of 1 if at least one member of the board is independent, 0 otherwise
3	Director Representing Minority Shareholders	Binary number 1 is assigned if director representing minority shareholders, 0 otherwise
4	Board Classification (Ratio of Non-Executive Directors)	A binary number of 1 if at least one fourth of the board is nonexecutive, 0 otherwise
5	The Membership of Directors in Other Boards	Binary number 1 is assigned if it discloses the director's membership in other boards of listed companies in their annual reports, 0 otherwise
6	Maximum Directorship in Other Boards of Listed Companies	Binary number 1 is assigned if directors are not serving at the same time for the board of more than ten/seven, 0 otherwise

7	Non-Executive Chairman	Binary number 1 is assigned if the Chairman of the board is a Non-Executive director, 0 otherwise
8	Clear Definition of Respective Role of Chairman and CEO	Binary number 1 is assigned if there is a description that categorizes the role of chairman and CEO, 0 otherwise
9	CEO Duality Role	Binary number 1 is assigned if the chairman position is separate than CEO, 0 otherwise
10	Orientation Courses for the Directors to enable them to Manage the Affairs on Behalf of Shareholders	A binary number of 1 if firm disclose the director's attendance in the orientation course, 0 otherwise
11	Board Meeting Disclosure	A binary number of 1 if the board meetings are disclosed in annual reports, 0 otherwise
12	Board Meeting Frequency	A binary number of 1 if at least board meet 4 time in a year, 0 otherwise
13	National Tax Payer Director	A binary number of 1 if the name of the directors is born on the register of National Tax Payers is disclosed, 0 otherwise
14	No Defaulter Director in the Board	A binary number of 1 if no defaulter information about directors is disclosed, 0 otherwise
15	Directors and their Spouses involvement in Brokerage Business	Binary number 1 is assigned if no directors involvement in brokerage business is disclosed in annual reports, 0 otherwise
16	Statement of ethics and Business Practices	A binary number of 1 if firm discloses that the statement of ethics and business practices is prepared and circulated, 0 otherwise
17	Power and duties of Board of Directors	Binary number 1 is assigned if it discloses their fiduciary powers are exercised by the board of directors, 0 otherwise
18	Future outlook	Binary number 1 is assigned if it discloses future outlook by board members, 0 otherwise

### **Committees and auditing**

19	Existence of R&HR Committee	Binary number 1 is assigned if it has HR Committee or a Remuneration one, 0 otherwise
20	Committee Composition	A binary number of 1 is assigned if Committee has at least three members with a majority of nonexecutive directors, 0 otherwise
21	Committee Meetings held During the Year	Binary number 1 is assigned if it discloses different committees meetings with numbers held during year, 0 otherwise
22	Committee Meeting Attended by each Directors	Binary number 1 is assigned if it discloses committees meetings attended by each director, 0 otherwise

23	The Names of the Members of the Committees of the Boards	Binary number 1 is assigned if it discloses their members' names attended committees of the board in each annual reports, 0 otherwise
24	Existence and Disclosure of Audit Committee Members in Annual Reports	A binary number of 1 if the names of audit committee are disclosed in annual reports, 0 otherwise
25	Minimum Members of Audit Committee	A binary number of 1 if minimum members of Audit Committee is at least three, 0 otherwise
26	Non-Executive Chairman of the Committee	A binary number of 1 if Non-Executive director is the Chairman of the audit Committee, 0 otherwise
27	Majority of Non-Executives in Audit Committee	Binary number 1 is assigned if its Non-Executives have the majority in audit Committee, 0 otherwise
28	Minimum Meetings of the Audit Committee in a Financial Year	Binary number 1 is assigned if it audit Committee meets at least 4
29	CFO, The Head of Internal audit Committee and a Representative of External Auditors attendance	Binary number 1 is assigned if the CFO, The Head of Internal audit Committee and a Representative of External Auditors attended Audit Committee meetings and this information is disclosed in annual reports, 0 otherwise
30	Review of quarterly, Half yearly and annual financial statements prior to the approval of Board of Director	A binary number of 1 if Audit Committee Review of quarterly, Half-yearly and annual financial statements prior to the approval of Board of Director and discloses in annual reports, 0 otherwise
31	Review of Management letter issued by external auditor	A binary number of 1 if Review of Management letter issued by external auditors and discloses in annual reports , 0 otherwise
32	Appointment of Secretary by the Committee of Audit	Binary number 1 is assigned if its audit committee appointed a secretary and this information is disclosed in the annual reports, 0 otherwise
33	Notice of the Annual General (AGM) to shareholders	Binary number 1 is assigned if they issued a notice of AGM about the meeting to shareholders, 0 otherwise
34	Well in Time Notice of the AGM to shareholders	Binary number 1 is assigned if they issued a notice of AGM at least 21 days before the meeting date, 0 otherwise
35	AGM with in a Period of Four Months Following the Close of it Financial Year	Binary number 1 is assigned if it held AGM within three/four months following the close of its financial year, 0 otherwise
36	AGM in Same Town as Registered Office of the Company	Binary number 1 is assigned if firm held AGM within the same town as company has registered office, 0 otherwise
37	Notice of the Meeting with Specifying the Following Details	A binary number of 1 if the notice of the AGM specify the date, place, time, and the business to be transacted, 0 otherwise

38	Right of Shareholder to Appoint a Proxy for AGM to Vote for Directors	A binary number of 1 if the notice of the AGM specify that shareholder can participate personally or through proxy, 0 otherwise
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**Transparency and disclosures**


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39	Disclosure of Ownership pattern	Binary number 1 is assigned if it publishes ownership pattern reports, 0 otherwise
40	Directors, CEO, their Spouse and Minor Children's' Ownership Disclosure	A binary number of 1 if firm discloses the name wise detail of shareholdings of directors, CEO, their spouse and minor children's , 0 otherwise
41	Shareholding Ten/five Percent or More Voting Rights	A binary number of 1 if firm discloses the shareholdings of ten/five percent or more voting rights, 0 otherwise
42	Going Concern Disclosure in Annual Reports	A binary number of 1 if it is disclosing that firm is a going concern entity and explanation if not, 0 otherwise
43	Outstanding Taxes and Other Charges disclosed	Binary number 1 is assigned if it discloses its outstanding taxes and other charges with reason in annual reports, 0 otherwise
44	Presentation of Operations, Cash Flows, and Change in Equity	Binary number 1 is assigned if it discloses the operations, cash flows and change in equity in annual reports, 0 otherwise
45	Key Operating and Financial Data for Last Six Years	Binary number 1 is assigned if it discloses the last six years financial and operating performance in annual reports, 0 otherwise
46	Significant Deviation from Last Year Operating Outcomes	Binary number 1 is assigned if it discloses operating results and significant deviation from last year, if any and reasons explained in annual reports, 0 otherwise
47	Trades of Share Carried out by the director and Other Executives <sup>33</sup>	Binary number 1 is assigned if it discloses the trade of shares of companies carried out by directors, executives, their spouses and minor child, 0 otherwise
48	Disclosure of Objectives and Corporate Strategy	A binary number of 1 if firm discloses Mission, Vision and Corporate strategies in annual reports, 0 otherwise
49	Statement on Compliance with Corporate Governance Code	Binary number 1 is assigned if it provides a positive statement on PCCG in the reports, 0 otherwise
50	Disclosure of Dividend Policy (Reason for any bonus share or no dividend)	Binary number 1 is assigned if it discloses the reason of a bonus share (if any) or not paying dividend, 0 otherwise
51	Disclosure of Detail of Related Party Transaction	A binary number of 1 if firm discloses facts of any contract in which executives or any director was interested and clear statement in case of no such transaction, 0 Otherwise

52	Director's Detailed Remuneration Disclosure	Binary number 1 is assigned if it publishes board members' remuneration in annual reports , 0 otherwise
<b>Internal control, external auditor and risk management</b>		
53	Presence of Effective Internal Control System	Binary number 1 is assigned if it publishes that there is an effective and sound internal control system established, implemented, and monitored by the BoD , 0 otherwise
54	Disclosure of Firm Risk in Annual Reports	Binary number 1 is assigned if it offers an explanation of actual and potential risk of the company , 0 otherwise
55	Risk Management Policies by the BOD	A binary number of 1 if firm provides a clear description of risk management policies in annual report , 0 otherwise
56	Auditor review of Internal Control System	A binary number of 1 if auditor reports provide a narrative that internal control system has been reviewed by the auditor , 0 otherwise
57	Auditor Review of Firm Financial Reports	Binary number 1 is assigned if its auditor reports provide description financial reports have been reviewed by the auditor , 0 otherwise
58	Approval of Firm Financial Reports	Binary number 1 is assigned if its reports are ratified by BOD and signed by the authorized executives, CFO and CEO earlier than rotation, 0 otherwise
59	Proper Book of Account Maintained	Binary number 1 is assigned if it publishes that proper book of accounts are maintained in annual reports, 0 otherwise
60	Appropriate Accounting Policies Applied in Preparation of Accounting Estimations and Financial Statement	Binary number 1 is assigned if it discloses appropriate accounting rules applied in preparation of accounting estimations and financial statements in annual reports, 0 otherwise
61	Financial Statements According to IAS	binary number of 1 if firm discloses that financial statements are according to IAS, 0 otherwise
62	External Auditor's Satisfactory Rating by Institute of Chartered Accountants of Pakistan	A binary number of 1 if External Auditors have Satisfactory rating under the Quality Review Program by Institute of Chartered Accountants of Pakistan and this information is disclosed, 0 otherwise
63	Compliance with IFAC Gridlines on Code of Ethics as Adopted by ICAP	A binary number of 1 if Compliance with International Federation of Accountants Gridlines on code of ethics is published in annual reports , 0 otherwise
64	Auditor Duties According to IFAC	A binary number of 1 Auditor perform duties according to IFAC, no management role and this information is disclosed in annual reports, 0 otherwise

65	Attendance of AGM by external Auditor	A binary number of 1 if external auditor of the company attends the annual general meeting and this information is disclosed in annual reports, 0 otherwise
66	Statutory Auditor's Review of Corporate Governance Compliance Statement	A binary number of 1 if Statutory auditors of company Reviews the Corporate Governance Compliance Statement and disclose this information in annual reports, 0 otherwise
67	Half yearly financial statements with statutory auditor's review	A binary number of 1 if Half yearly financial statements with statutory auditor's review information discloses in annual reports, 0 otherwise
68	Annual audited financial statements not later than four month from close of financial year	A binary number of 1 if Annual audited financial statements not later than four month from close of financial year discloses in
69	Determination of Compliance with relevant Statutory Requirements	A binary number of 1 if Compliance with relevant Statutory Requirements is determined by external auditors and discloses in annual reports, 0 otherwise
70	Monitoring Compliance with Best Practices of Corporate Governance and Identification of Violence	A binary number of 1 if external auditors are Monitoring Compliance with Best Practices of Corporate Governance and Identification of Violence if any discloses in annual reports, 0 otherwise