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Research Article

Unlocking Stock Market Success: Connecting Chief Financial Officers Influence and Governance Dynamics in Pakistan

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Declaration of interests

The authors declare no financial or personal conflicts of interest.

Abstract

This study examines the influence of Chief Financial Officers (CFOs) and corporate governance factors on stock returns in Pakistan. Employing a quantitative approach, we analyzed the dynamic relationship between CFO presence and governance elements, including insider shareholding, board size, independence, CEO duality, and audit committee meetings. We used data from the top 30 firms listed on the Pakistan Stock Exchange. The findings reveal that board independence, CEO duality, and audit committee meetings emerge as significant drivers of stock returns, and conventional metrics, such as insider shareholding and board size, exhibit less impact. Importantly, our study elucidates the pivotal role of CFOs in moderating these relationships, emphasizing their indispensable contribution to effective corporate governance. This study underscores the transformative potential of CFOs and emphasizes the necessity of reevaluating corporate governance frameworks to ensure long-term sustainability in the market. These insights have profound implications for policymakers and businesses advocating for a collaborative approach that leverages CFO expertise to unlock sustainable growth and prosperity in Pakistan's stock market.

Keywords: Sustainable Practices, Corporate Governance, Stock Returns, Chief Financial Officers.

How to Cite this Work:

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1 INTRODUCTION

In recent decades, there has been a notable evolution in the role of Chief Financial Officers (CFOs) within Pakistani firms. Formerly tasked primarily with financial matters and strategic oversight, CFOs now play a more active role in shaping and implementing firms strategies (Agrawal & Cooper, 2017). This shift reflects a growing recognition of the CFO's importance within public firms, where they are increasingly entrusted with fiduciary director responsibilities and viewed as essential members of the board (Andreou, Antoniou, Horton, & Louca, 2016; Belot & Waxin, 2019).

Existing literature on corporate board governance underscores the significant influence of board composition on firms' outcomes and performance. Various studies have highlighted how board structure and composition can profoundly impact firms' success, contingent upon several factors (Duong & Evans, 2015; Duong, Evans, & Truong, 2020). While insider shareholding, board size, board independence, CEO duality, and audit committee meetings undeniably affect stock returns, they also serve as indicators of corporate governance quality within firms, thereby influencing stock performance (Xudong Fu, Kong, Tang, & Yan, 2020; Xi Fu & Zhang, 2019). Consequently, this study endeavors to evaluate these variables to assess the quality of corporate governance in Pakistani public firms and its impact on stock returns. Corporate governance, defined as the collective influences on institutional processes concerning regulatory and control mechanisms within an firm, plays a crucial role in safeguarding stakeholders' interests (Gupta, Mortal, Chakrabarty, Guo, & Turban, 2020).

The importance of effective corporate governance extends beyond national borders, being essential for the growth of firms in both emerging and developed economies (Hunjra, Mehmood, & Tayachi, 2020). As firms expand and engage with local communities, maintaining good corporate governance becomes imperative, not only for firms' prosperity but also for societal benefit (Hurley & Choudhary, 2020). Nonetheless, significant firms' scandals and frauds often arise from poor corporate governance practices and inadequate board oversight (Jeon, 2019). The consequences of such governance lapses extend beyond firms' boundaries, impacting societal facets such as employment and investor confidence (Kim, Li, & Li, 2014).

Hence, there is a pressing need to scrutinize and monitor board composition, insider shareholding, board size, board independence, CEO duality, and audit committee meetings to ensure robust corporate governance (Li & Zeng, 2019; Zeng, Zhong, & Naz, 2023). Furthermore, stakeholders exert considerable influence over firms' performance and returns. Negative actions by interest groups can provoke public discontent, leading to boycotts of firm products or services (Mishra, Talukdar, & Upadhyay, 2019). Given these dynamics, analyzing and optimizing board composition in public firms in Pakistan is paramount for fostering positive corporate governance practices and enhancing stock returns.

Despite notable advancements, there remains much to uncover about how CFOs, board composition, and corporate governance practices interact and impact firms' success, particularly in the Pakistani context. Existing research often focuses on isolated components, leaving gaps in our comprehension of how these elements interconnect (Belot & Waxin, 2019). Therefore, this study seeks to bridge these gaps by examining how the presence of CFOs on boards, alongside other facets of corporate governance, influences the performance of public firms in Pakistan.

This research holds both theoretical and practical significance. Theoretically, it contributes to understanding the impact of corporate governance on stock returns within Pakistani public firms, considering unique contextual factors and the role of CFOs. Practically, the findings can inform policymaking and corporate governance practices, potentially improving firms' performance and stakeholder value in Pakistan's public sector. Moreover, the study's insights extend beyond Pakistan, as effective corporate governance principles and the role of CFOs are relevant to firms globally.

The first section of this study introduces the research background, followed by a literature review in the second section, a methodology in the third section, an analysis in the fourth section, and a conclusion and implications in the final section.

2 LITERATURE REVIEW

Arora and Sharma (2016) argue that the agency theory provides a useful framework for understanding and managing corporate governance issues globally. This theory delves into the dynamics between firm managers (agents) and owners (principals), highlighting the common agency problem arising from conflicts over control and power. Azeez (2015) emphasizes the importance of independent corporate governance, advocating against CEO duality. Scholars like Azzoz and Khamees (2016) and Halioui, Neifar, and Abdelaziz (2016) suggest that involving stakeholders such as CFOs, holding regular board meetings, and establishing clear committees can enhance regulatory effectiveness.

However, Bhagat and Bolton (2019) caution that neglecting the agency problem can lead to increased costs for firms, impacting shareholder returns and overall value. Buallay, Hamdan, and Zureigat (2017) propose measuring these costs, stressing the need for independent boards and transparent audit committees (Chang & Watson, 2015)challenge the notion that well-developed markets can operate without corporate controls. They assert that adhering to agency theory principles is crucial for firm success, regardless of market maturity. Therefore, applying agency theory principles can help firms navigate governance challenges, fostering transparency and accountability for improved outcomes.

2.1 Insider Shareholdings and Stocks Returns

Insider shareholdings on stock returns has been a focal point of numerous studies, revealing valuable insights into how insider ownership shapes firm performance and shareholder value. Recent research, like that of (Ciftci, Tatoglu, Wood, Demirbag, & Zaim, 2019) and (Danoshana & Ravivathani, 2019) underscores the positive influence of insider ownership, particularly notable in the UK where insiders bolster corporate governance and mitigate conflicts, while studies in markets like Pakistan, such as (Mehmood, Amin, & Raza, 2020), shed light on the detrimental effects of low insider shareholdings, leading to agency and stewardship challenges.

Xudong Fu et al. (2020) further emphasize the vital role insiders play in addressing the agency problem and aligning management and shareholder interests, contributing to enhanced stock returns. Studies across diverse markets like Korea, Sweden, India, and China, including work by (Bauer, Derwall, & Pankratz, 2021) and (Pan & Qian, 2024), consistently support the positive relationship between insider ownership and firm value, highlighting insider shareholdings as a key driver of stock returns globally. In light of this evidence, it is hypothesized that insider shareholding has a positive and significant impact on stock returns.

H1: The impact of insider shareholdings on stocks returns is positive and significant.

2.2 Board Size and Stock Returns

Gao, Ma, and Ng (2015) suggests that larger board sizes in listed firms have a negative impact on stock returns. This view is supported by arguments concerning corporate governance dysfunctionality stemming from larger boards, which can hinder effective decision-making and communication within the board. This sentiment resonates with findings from studies such as those conducted by (Haider, Khan, & Iqbal, 2015) indicating that while larger board sizes may have a positive role in the functioning of the board and executive members, they can also negatively affect profitability and operational performance.

Hassan, Marimuthu, and Satirenjit (2015) contribute to this discourse by highlighting the potential negative influence of larger board sizes on communication and decision-making processes, which in turn can impact firm profitability. Consequently, there's a call from many scholars to maintain an optimal and moderate board size to prevent delayed decision-making that may impede financial stability and economic contributions. Halioui et al. (2016) provide empirical insights into the operational performance of South African listed firms, suggesting that an appropriate board size is crucial for positive firm growth.

Similarly, (Bauer et al., 2021; Hermuningsih, KUSUMA, & CAHYARIFIDA, 2020) find that smaller board sizes exhibit an increasing trend in financial growth, indicating a linear relationship between board size and firm performance. Moreover, Huang and Wang (2015) shed light on the association between board size and managerial compensation, emphasizing that larger boards may incur higher costs for the firm. This aligns with the broader consensus that maintaining a moderate board size, particularly in emerging economies like Pakistan, is essential for effective decision-making and cost management (Bauer et al., 2021; Hair, 2010; Pan & Qian, 2024). Therefore, the following hypothesis has been proposed.

H2: Impact of board size on stocks returns is positive and significant.

2.3 Independent Board and Stocks Returns

According to agency theory, board members are expected to act independently, free from external pressures or influence from any particular group, in order to effectively align the interests of shareholders (Azzoz & Khamees, 2016; Duong et al., 2020). Board independence is crucial for mitigating conflicts between agents (management) and owners (shareholders), as it ensures that decisions are made in the best interest of the company. Studies such as (Isik & Ince, 2016)have demonstrated the significant impact of board independence on stock returns and firm profitability, particularly in the context of Chinese firms, where increased board independence has been associated with enhanced returns.

Similarly, research by Liu, Ke, Wei, Gu, and Chen (2010) reinforces the importance of board independence in facilitating the smooth operation of firms. (Madanoglu & Karadag, 2016) highlight the necessity of board independence in complementing both external and internal corporate governance mechanisms, as it helps prevent conflicts of interest and minimizes agency issues (Ali & Amir, 2018). Previous studies consistently support the notion that independent boards contribute positively to firm performance by safeguarding the interests of both shareholders and management. Furthermore, Mardnly, Mouselli, and Abdulraouf (2018) have underscored the significant impact of board independence on stock returns. Bauer et al. (2021) findings emphasize that effective corporate governance hinges upon board independence, which, in turn, can lead to increased share prices and enhanced shareholder value. Therefore, based on the aforementioned research, the hypothesis can be proposed as follows.

H3: The impact of board independence on stock returns is positive and significant.

2.4 Impact of CEO duality on stock returns

Agency theory is against the CEO duality in corporate governance and theorists have explained that the CEO duality must not be present in board structure. The CEO and president must be different entities because only this thing can ensure the smooth functioning of corporate governance. Merz and Trabert (2020) have explained that CEO duality is a hindrance to the performance of the firm. Many scholars have explained the agency problem can occur due to the formation of the CEO duality in the firms. Significantly this thing has given the rise to the agency theorists' assumptions that CEO duality may not occur against the performance of the firm. Nguyen, Rahman, Tong, and Zhao (2016) have hypothesized the statement and conceptual framework regarding the efficient working of the corporate governance bodies at different Asian firms.

The findings have suggested that a negative but significant impact was seen on the stock returns of the firm. That is why the international corporate governance bodies and committees have incorporated their views and explained that the CEO and chairperson of any large firm must be independent and that must be separate from the CEO designation. The Ntow-Gyamfi, Bokpin, and Gemegah (2015) have examined that there is a theory named as stewardship theory of corporate governance which have supported the duality and dual functioning of the CEO this has been examined that this thing has caused the decreased cost and remuneration for the two different authorities and significantly it has caused the increased profitability of the owners of the firm.

In the context of Pakistan, the CEO duality is not being borne by the firms, and there are mostly independent presidents and CEOs in every listed firm which has given the rise to the safety of the interests of the owners and management of the firm. Palladino (2020) examined the association between the CEO duality and stocks returns and the conclusion supported the negative association between them, and the researchers have suggested that the duality may not be present there for the safety of the value of the stock of the owners. In this regard, the following hypothesis is being proposed by the researcher.

H4: The impact of CEO duality on stock returns is positive and significant.

2.5 Audit Committee Meetings and Stock Returns

Paniagua, Rivelles, and Sapena (2018) have argued by analysing this impact through cross-sectional time horizon using panel data and multiple regressions the conclusion was presented as the significance between the association. Significantly, the scholars have explained that the study of Rodriguez-Fernandez (2016) has also focused on the audit committee meeting influence of the returns of the stock and it was seen that audit committees have caused an influential impact on the functioning of the financial sector of the firm.

In addition to this, Rostami, Rostami, and Kohansal (2016) have explained that the theory of the agency is also in support of the transparent functions of the audit committee meetings as these meetings help the firms to maintain the transparent record of the transactions and financial (Noor, Farooq, & Tahir, 2022). The true picture of the firm's performance can be delivered by the financial reports and such audit meetings cannot put the financial performance of the firm at stake (Ali & Amir, 2018). Moreover, it was discovered that in developing countries the audit committee meetings have a weak relationship with the returns and prices of the stocks.

Moreover, Shahwan (2015) have checked the impact of audit committee meeting on the financial performance of the firm and revealed the positive influence of the committee meetings as such meetings ensure the transparent operations across the whole organizing board members and ensure the due financial decisions to be taken effectively as well (Naz & Sheikh, 2023). In this regards the proposed hypothesis is as follows.

H5: The impact of audit committee meetings on stock return is positive and significant.

2.6 The Moderating Role of CFO Board

In prior decades the role of chief financial officers has been changed substantially, now the CFO plays a vital role that can be influential on the board members as well. A large number of literatures has considered the CFO board as a moderator in checking the impact of corporate governance role on the firm's profitability and overall, its performance on the firm. Similarly, Ueng (2016) has studied that the significance can be seen in the association between board independence, board size due to the impact of CFO on board. Because the financials of the firm-related decisions are being made by the CFO and that is why this is considered by many studies that stock returns performance is also set by the CFO.

Wang and Chou (2018) have suggested that having a CFO on board can turn the tables regarding the financial decision-making of the listed firms in China. Due to this fact, the researchers have also gained knowledge that sometimes in decision making the influence of the CFO in the management of the governing bodies is stronger than the CEO's of the firm (Merz & Trabert, 2020). Although some arguments explained the negativity of the CFO on board in developing countries like Pakistan, the management must give chance to get a CFO on board as this has been proved helpful for the efficient performance of the stocks in the stock exchange index.

H6: CFO board significantly moderate between insider shareholdings and stock return.

H7: CFO board significantly moderate between board size and stock return.

H8: CFO board significantly moderate between board independence and stock return.

H9: CFO board significantly moderate between CEO duality and stock return.

H10: CFO board significantly moderate between audit committee meetings and stock return.

2.7 Theoretical framework

Following diagram presenting the graphical framework of the study.

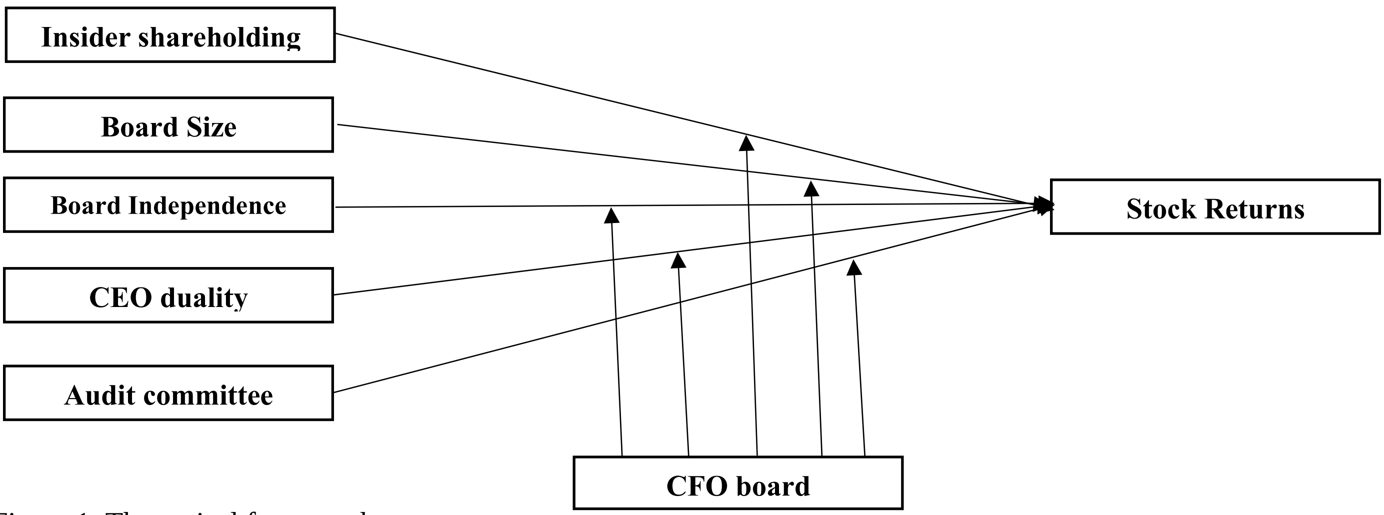

Figure 1. Theoretical framework

3 RESEARCH METHODOLOGY

This study adopts a quantitative research design to explore the influence of corporate governance factors on stock returns in Pakistani firms. Quantitative research is chosen for its ability to collect and analyse data using statistical tools, offering precise insights into the relationships between variables (Hair, 2010). The sample comprises the top 30 firms listed on the Pakistan Stock Exchange from 2016 to 2023. This selection ensures representation across various industries and market conditions.

Data analysis is conducted using EViews version 10 software. Descriptive statistics, including measures such as mean, standard deviation, minimum and maximum values, kurtosis, skewness, and coefficient of variation, are calculated to provide a comprehensive overview of the dataset (Blumberg, Cooper, & Schindler, 2014; Creswell, 2014). Correlation analysis is then performed to assess the relationships between dependent, independent, and control variables.

Finally, multiple linear regression analysis is employed to evaluate the impact of corporate governance factors on stock returns (Bryman, 2016; Ghauri & Grønhaug, 2010; Smith, 2022).

The research utilizes a cross-sectional approach, drawing data from listed firms on the Pakistan Stock Exchange. This method enables the examination of corporate governance practices and their effects on stock returns at a specific point in time (Bryman, 2016). Non-listed firms and those adhering to alternative regulatory frameworks are excluded to ensure the homogeneity of the sample.

3.1 Variable Description and Measures

The variables of the study, including insider shareholding, board size, board independence, CEO duality, and audit committee meetings, were sourced from the work of (Amba, 2014). Insider shareholding is determined by the proportion of shares held by insiders, while board size is measured by the number of board directors on the board. Board independence is calculated as the proportion of independent board members, and CEO duality is measured as the combination of the board chairperson and CEO functions.

Table 1. Variables' definitions and measurements

Variable type	Name	Measurement and definition
Independent	Insider shareholding	Measured as the proportion of shares owned by insiders.
	Board size	Measured as the number of board of directors on firm's board.
	Board independence	Measured as proportion of independent board on firm's board.
	CEO duality	Measured as a function of board chairperson combined with CEO, CEO = 1 if CEO is also chairperson, otherwise = 0.
	Audit committee meetings	Measured as a function of the number of audit committee meetings held.
Dependent	Stock returns	Retrieved from the website of Pakistan Stock Exchange.
Moderator	CFO Board	According to the structure of board of the firms, if the firm has a CFO on its board, it will be equal to 1, whereas, if there is no CFO on the board, it will be equal to 0.
Control	ROA	Measured as, Return on assets = Earnings before tax/Total assets.
	ROE	Measured as Return on equity = Earnings before tax/Book value of shareholder's equity.
	Firm Size	Measured as the logarithm of the firm's total assets.
	Cash ratio	(Cash + Marketable Securities) / Current Liabilities

Audit committee meetings are measured by the number of meetings held. The moderating variable for this study is the CFO board, which is measured based on the board structure of the firm. If the firm has a CFO on its board, the measure is equal to 1, and if there is no CFO on the board, the measure is equal to 0. This measure was adopted from the study of (Duong et al., 2020). Table 1 below also represents a summary of the types of variables, the names of the variables and the definitions and measurements for the variables.

4 DATA ANALYSIS

This section presents the results of the data analysis, first of all the table below represents the results for the descriptive statistics. Table 2 represents the mean value, the median value, the maximum and minimum values, thus terrier addition and skewness value and the observations and kurtosis values.

Table 2. Descriptive Statistics

Variables	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis	Observations
SR	0.257	0.249	0.740	0.009	0.163	0.456	3.055	240
ISH	0.131	0.049	0.822	0.000	0.193	0.980	2.349	240
BI	0.808	0.866	0.923	0.375	0.111	-1.040	3.287	240
BS	8.581	8.000	13.000	5.000	1.727	0.813	2.717	240
CEOD	0.176	0.000	1.000	0.000	0.382	1.700	3.890	240
AC	3.405	3.000	6.000	1.000	0.887	-0.184	2.837	240
FSIZE	19.320	18.734	130.25	11.225	8.240	0.673	2.999	240
ROE	0.166	0.145	8.099	-2.673	0.640	0.566	1.156	240
ROA	0.015	0.013	0.725	-1.227	0.157	-0.736	2.625	240
CASHR	0.040	0.025	0.383	0.000	0.049	0.958	1.658	240

Table 2 represents that the total observations are equal to 210, the data is normal as the mean values do not cross maximum and minimum values. Moreover, low levels of skewness, and standard deviation represent that the data does not show much of spread and lies around the mean value. So, there are no outliers present in the data and the data is normal and good to go for further testing and analysis.

Correlation test represents the relation that is present among the variables and the components, over here it can be seen that stock returns have perfect relationship with itself, as the correlation is equal to 1, the correlation among other variables can also be observed to be significantly sufficient. It means that the variables are getting impacted by each other, the negative sign among the audit committee meetings and CEO duality is representing that the relationship is negative, whereas the positive relationships are represented with positive sign in the table above. However, significant correlations among the variables represent that the model is good to go for further testing.

Table 2. Correlation Test

Variable	**SR**	**ISH**	**BI**	**BS**	**CEOD**	**AC**	**FSIZE**	**ROE**	**ROA**	**CASHR**
SR	1.000									

ISH	-0.001	1.000								
	-0.015	-----								
	0.988	-----								
BI	0.142	-0.478	1.000							
	2.072	-7.840	-----							
	0.040	0.000	-----							
BS	0.051	-0.222	0.515	1.000						
	0.738	-3.285	8.672	-----						
	0.461	0.001	0.000	-----						
CEOD	0.287	0.163	-0.079	0.200	1.000					
	4.316	2.377	-1.143	2.937	-----					
	0.000	0.018	0.254	0.004	-----					
AC	-0.029	0.080	0.027	0.014	-0.070	1.000				
	-0.424	1.156	0.384	0.208	-1.016	-----				
	0.672	0.249	0.702	0.835	0.311	-----				
FSIZE	-0.073	-0.047	-0.034	0.090	-0.020	0.038	1.000			
	-1.055	-0.674	-0.492	1.310	-0.285	0.543	-----			
	0.293	0.501	0.623	0.192	0.776	0.588	-----			
ROE	0.030	-0.004	-0.211	-0.149	0.106	-0.090	0.037	1.000		
	0.429	-0.063	-3.115	-2.169	1.531	-1.300	0.532	-----		
	0.669	0.950	0.002	0.031	0.127	0.195	0.596	-----		
ROA	0.127	0.130	0.069	-0.066	0.049	0.008	-0.040	0.160	1.000	
	1.841	1.896	1.002	-0.961	0.702	0.114	-0.579	2.331	-----	
	0.067	0.059	0.318	0.338	0.483	0.909	0.563	0.021	-----	
CASHR	-0.038	-0.005	-0.030	0.099	0.177	0.130	-0.029	-0.011	0.033	1.000
	-0.543	-0.065	-0.426	1.431	2.589	1.892	-0.423	-0.158	0.477	-----
	0.588	0.948	0.670	0.154	0.010	0.060	0.673	0.875	0.634	-----

Table 4 below represents the results for the direct impacts of the independent variables on the dependent variable stock returns. The value of the coefficient represents the extent of the impact whereas, on the other hand the level of probability represents the significance or non-significance of the impacts of the independent variables on the dependent variable. According to this table, the impact of insider shareholding on the stock returns is insignificant whereas, the impact of board independence on the stock returns is significant and positive, because the P value is less than .05 whereas, the value of coefficient is 32% which means that with every 1% increase in board independence the stock returns will increase by 32%. The impact of board size on the stock returns is insignificant, as the P value is more than .05, the impact of CEO duality on stock returns has been found to be significant as the P value is less than .05 and the value of coefficient is 14% which means that with every 1% increase in CEO duality, the stock returns will enhance by 14%.

Table 4. Panel Least Squares

Variable	Coefficient	Std. Error	T-Statistic	Prob.
ISH	0.011909	0.066708	0.178526	0.8585
BI	0.328257	0.133816	2.453055	0.0150
BS	-0.01006	0.007730	-1.30248	0.1942
CEOD	0.141613	0.030375	4.662136	0.0000
AC	0.025290	0.012354	3.023438	0.0013
FSIZE	-0.00091	0.001319	-0.72129	0.4716
ROE	0.003425	0.017810	0.192330	0.8477
ROA	0.088261	0.071935	2.226942	0.0013
CASHR	-0.27816	0.226997	-2.22533	0.0019
C	0.078709	0.110159	0.714503	0.4757
R-squared	0.739040	Mean dependent var		0.25747
Adjusted R-squared	0.700297	S.D. dependent var		0.16306
S.E. of regression	0.154670	Akaike info criterion		-0.84860
Sum squared resid	4.784539	Schwarz criterion		-0.68921
Log likelihood	99.10329	Hannan-Quinn criter.		-0.78416
F-statistic	9.588761	Durbin-Watson stat		1.774066
Prob(F-statistic)	0.000367			

The impact of Audit committee meetings on stock returns has been found to be significant as well, which means that with every 1% increase in the audit committee meetings, the stock returns will enhance by 2.5%. The impact of firm size and return on equity is insignificant on the stock returns. Whereas the impacts of return on assets and cash ratio have been found to be significant on the stock returns. The R-squared value represents how much the data fits the regression model, in this case it is 74%, which is a significant value with the F statistic of 9.588761.

Table 5: Panel Least Squares (Moderation Testing)

Variable	Coefficient	Std. Error	T-Statistic	Prob.
ISH	0.089642	0.071672	1.250723	0.2125
BI	0.472837	0.145487	3.250038	0.0014
BS	-0.015329	0.009941	-1.541904	0.1247
CEOD	0.131505	0.046969	2.799838	0.0056
AC	-0.000327	0.018004	-0.018145	0.9855
CFOB	0.177354	0.242300	2.731962	0.0451
CFOB*AC	-0.007274	0.026219	-0.277450	0.7817
CFOB*BI	-0.303970	0.312873	-0.971545	0.3325
CFOB*BS	0.011429	0.017180	2.665258	0.0067
CFOB*CEOD	0.050577	0.069512	2.727600	0.0477
CFOB*ISH	-0.336563	0.174671	-1.986846	0.0454
C	-0.024818	0.135164	-0.183613	0.8545
R-squared	0.845685	Mean dependent var		0.25747
Adjusted R-squared	0.798223	S.D. dependent var		0.16306
S.E. of regression	0.154848	Akaike info criterion		-0.83733
Sum squared resid	4.747611	Schwarz criterion		-0.64600
Log likelihood	99.91683	Hannan-Quinn criter.		-0.75992
F-statistic	9.069512	Durbin-Watson stat		1.764353
Prob(F-statistic)	0.000800			

Table 5 also represents the impacts of the independent variables on the dependent variable, but the major focus is on the moderation of the CFO board right here. The moderation of CFO board between audit committee meetings and stock returns is insignificant as the P value is more than .05, same is the case with board independence and stock returns. Whereas the moderation of CFO board between board size and stock returns is significant and it enhances the impact of board size on stock returns by one point 1%. The moderation in the case of CEO duality, and insider shareholding is significant as well in relationship with stock returns. The probability value 0.4637 is significant at Df level 30, it represents that there is no heteroskedasticity present in the data, so the data and the model are fit and significant.

Table 4.1: Panel Cross-section Heteroskedasticity LR Test

	Value	Df	Probability
Likelihood ratio	96.84093	30	0.4637

LR test summary:

	Value	Df
Restricted logl	99.10329	200
Unrestricted logl	147.5238	200

5 DISCUSSION AND CONCLUSION

5.1 Discussion on results

The study explores the impact of corporate governance mechanisms on stock returns within Pakistani firms, examining variables such as board size, insider shareholdings, audit committees, independent boards, and CEO duality. The investigation also considers the moderating role of CFO presence on the board and control variables such as ROA and cash ratio. Through a comprehensive analysis, the study provides valuable insights into the relationship between corporate governance practices and stock market performance.

The findings of this study are consistent with prior research indicating the insignificant impact of insider shareholdings on stock returns in South Asian countries, including Pakistan. (Bansal, Ali, & Choudhary, 2021) note that insider shareholdings are often disregarded in these regions, similar to European corporate governance norms. Furthermore, (Qadorah, 2019)highlights the potential conflict of interest between agents and principals arising from insider shareholdings, which diminishes their impact on stock returns. (Carballo-Penela & Castromán-Diz, 2015) also support this notion, underscoring similar findings across multiple studies.

Additionally, the study rejects the hypothesis regarding the impact of board size on stock returns, similar to (Elmagrhi, Ntim, Wang, Abdou, & Zalata, 2020), who found board size to be insignificant in the Pakistani context due to a lack of awareness or focus on its supporting role. (Hassan et al., 2015) further argues that board size alone does not significantly influence stock returns, emphasizing the importance of effective financial and management policies instead. In contrast, the study confirms a significant and positive impact of board independence on stock returns, in line with (Mehmood et al., 2020). They suggest that board independence, guided by the agency theory, facilitates conflict resolution and enhances firms' performance.

CEO duality was found to have a significant and positive impact on stock returns, despite its prevalence in Pakistani firms. According to (Namazi & Hosseini-Nia, 2017)this can be attributed to traditional corporate cultures and the emerging industrial sector, suggesting that CEO duality may not necessarily impede stock market performance in this context. Furthermore, the study emphasizes the importance of audit committee meetings, which have a direct influence on stock returns through transparent financial decision-making processes, as indicated by (Nazir & Afza, 2018). These meetings play a vital role in shaping investor perceptions and overall financial performance.

The study also highlights the varying impacts of CFO presence on the board, depending on the corporate governance context. While some relationships show significant and positive associations with CFO presence, others are deemed insignificant, reflecting the complex interplay between corporate governance mechanisms and stock market performance. This study deepens our understanding of the intricate relationship between corporate governance practices and stock returns in Pakistani firms, drawing upon prior research to provide comprehensive insights into the factors driving stock market performance. By considering diverse variables and their interactions, the study contributes valuable knowledge to both academic discourse and practical corporate governance implementations.

5.2 Conclusion

This study aimed to investigate the impact of various corporate governance factors on stock returns, including board independence, audit committee meetings, CEO duality, board size, and insider shareholdings. Additionally, the moderating role of the CFO on board was explored, along with control variables such as ROA, ROE, cash ratio, and firm size. Quantitative tools and techniques were employed for data collection and analysis, with a positivist research philosophy chosen for its potential to yield accurate results. The study adopted a cross-sectional time horizon, focusing on the top 30 listed firms from the Pakistan Stock Exchange over the period of 2016 to 2023.

Using E-views as the primary analytical tool, descriptive statistics including mean, median, kurtosis, standard deviation, and skewness were computed. Correlation and multiple linear regression analyses were also conducted to assess the relationships between corporate governance factors and stock returns. The findings revealed significant and positive associations between board independence, CEO duality, audit committee meetings, and stock returns. Conversely, the impact of board size and insider shareholdings on stock returns was deemed insignificant. Furthermore, the moderating role of the CFO on board was found to be significant in influencing the relationships between board size, CEO duality, and insider shareholdings. However, its moderating impact on board independence, audit committee meetings, and stock returns was deemed insignificant.

Overall, this study contributes to our understanding of how different aspects of corporate governance influence stock market performance in Pakistani firms. By identifying significant factors and their interplay, it provides valuable insights for both academic research and practical corporate decision-making.

5.3 Research Implications

The current research yields significant implications for practical application, theoretical advancement, and policymaking considerations. Firstly, the study underscores the critical role of having a Chief Financial Officer (CFO) on the board, a practice that has gained prominence in recent years. From a practical standpoint, it is imperative for Pakistani firms to recognize the importance of including the CFO as a board member, particularly in navigating the challenges posed by the post-pandemic era. Given the CFO's pivotal role in financial decision-making, firms that overlook this aspect may find themselves at a disadvantage compared to those that embrace it. This highlights the necessity for firms to prioritize the inclusion of CFOs on their boards to enhance financial resilience and performance in uncertain times.

Moreover, the study sheds light on the significant relationship between the presence of a CFO on the board and improved financial performance. This underscores the potential for Pakistani firms to leverage the expertise of CFOs in driving sustainable growth and profitability. By acknowledging and capitalizing on this relationship, firms can bolster their financial capabilities and adaptability to dynamic market conditions.

Furthermore, the research contributes to theoretical discourse by delving into the intricate interplay between corporate governance concepts and stock returns. The study's novel approach of considering the CFO on board as a moderator adds depth to existing literature, enriching our understanding of the mechanisms influencing stock market performance. By integrating this unique perspective, the study expands the theoretical framework surrounding corporate governance and underscores the relevance of considering diverse factors in analysing stock market dynamics.

In terms of policymaking implications, the findings advocate for the adoption of policies mandating the inclusion of CFOs on corporate boards. This proactive approach aligns with sustainable development goals by promoting transparency, accountability, and effective financial stewardship within Pakistani firms. Policymakers can leverage the insights gleaned from this study to formulate regulations that incentivize firms to embrace best practices in corporate governance, ultimately fostering a more robust and resilient business environment.

5.4 Research Limitations and Future Indications

The sample size of the current research is rather small, and it is suggested that future researchers increase the sample size in order to more accurately represent the entire population. Additionally, the study has employed outdated data analysis tools and quantitative methods. It is recommended that researchers utilize more recent tools and techniques to better analyse the data. Furthermore, the study suggests that future researchers may modify the corporate governance mix based on the specific nature of the study and incorporate new concepts, such as independent directors, non-executive board members, and other committees like remunerations and compensation, to achieve more accurate findings.

REFERENCES

Agrawal, A., & Cooper, T. (2017), "Corporate governance consequences of accounting scandals: Evidence from top management, CFO and auditor turnover", *Quarterly Journal of Finance, Vol. 7* No 01, pp. 1650014.

Ali, K., & Amir, M. (2018), "Impact of Audit Committee structure on firms' value in Pakistan: Evidence from the Cement Sector", *Journal of Corporate Governance Research, Vol. 2* No 1, pp. 42.

Amba, S. M. (2014), "Corporate governance and firms' financial performance", *Journal of Academic and Business Ethics, Vol. 8* No 1, pp. 1.

Andreou, P. C., Antoniou, C., Horton, J., & Louca, C. (2016), "Corporate governance and firm-specific stock price crashes", *European Financial Management, Vol. 22* No 5, pp. 916-956.

Arora, A., & Sharma, C. (2016), "Corporate governance and firm performance in developing countries: evidence from India", *Corporate governance,* Vol, 16, No 2, pp.420-436

Azeez, A. (2015), "Corporate governance and firm performance: evidence from Sri Lanka", *Journal of Finance, Vol. 3* No 1, pp. 180-189.

Azzoz, A.-R. A., & Khamees, B. A. (2016), "The Impact of Board of Directors and Audit Committees on Stock Return of Jordanian Financial Companies", *Dirasat: Administrative Sciences, Vol. 43* No 2, pp. 923-942.

Bansal, M., Ali, A., & Choudhary, B. (2021), "Real earnings management and stock returns: moderating role of cross-sectional effects", *Asian Journal of Accounting Research, Vol.* 14, No 2, pp 1-13.

Bauer, R., Derwall, J., & Pankratz, N. (2021), "Insider ownership, governance mechanisms, and corporate bond pricing around the world", *Journal of International Money and Finance, Vol. 117* No, pp. 102423.

Belot, F., & Waxin, T. (2019), "CEO-CFO Educational Ties and Mergers and Acquisitions", *Available at SSRN 3422172,* No.

Bhagat, S., & Bolton, B. (2019), "Corporate governance and firm performance: The sequel", *Journal of Corporate Finance, Vol. 58* No, pp. 142-168.

Blumberg, B., Cooper, D., & Schindler, P. (2014). *Business research methods*. London: McGraw Hill.

Bryman, A. (2016). *Social research methods* (5th ed.): Oxford university press.

Buallay, A., Hamdan, A., & Zureigat, Q. (2017), "Corporate governance and firm performance: evidence from Saudi Arabia", *Australasian Accounting, Business and Finance Journal, Vol. 11* No 1, pp. 78-98.

Carballo-Penela, A., & Castromán-Diz, J. L. (2015), "Environmental policies for sustainable development: an analysis of the drivers of proactive environmental strategies in the service sector", *Business Strategy and the Environment, Vol. 24* No 8, pp. 802-818.

Chang, M., & Watson, I. (2015), "Delayed disclosure of insider trades: Incentives for and indicators of future performance?", *Pacific-Basin Finance Journal, Vol. 35* No, pp. 182-197.

Ciftci, I., Tatoglu, E., Wood, G., Demirbag, M., & Zaim, S. (2019), "Corporate governance and firm performance in emerging markets: Evidence from Turkey", *International Business Review, Vol. 28* No 1, pp. 90-103.

Creswell, J. W. (2014). *Research design : qualitative, quantitative, and mixed methods approaches* (4th ed.). USA: SAGE Publications.

Danoshana, S., & Ravivathani, T. (2019), "The impact of the corporate governance on firm performance: A study on financial institutions in Sri Lanka", *SAARJ Journal on Banking & Insurance Research, Vol. 8* No 1, pp. 62-67.

Duong, L., & Evans, J. (2015), "CFO compensation: Evidence from Australia", *Pacific-Basin Finance Journal, Vol. 35* No, pp. 425-443.

Duong, L., Evans, J., & Truong, T. P. (2020), "Getting CFO on board–its impact on firm performance and earnings quality", *Accounting Research Journal,* No.

Elmagrhi, M. H., Ntim, C. G., Wang, Y., Abdou, H. A., & Zalata, A. M. (2020), "Corporate governance disclosure index–executive pay nexus: The moderating effect of governance mechanisms", *European Management Review, Vol. 17* No 1, pp. 121-152.

Fu, X., Kong, L., Tang, T., & Yan, X. (2020), "Insider trading and shareholder investment horizons", *Journal of Corporate Finance, Vol. 62* No, pp. 101508.

Fu, X., & Zhang, Z. (2019), "CFO cultural background and stock price crash risk", *Journal of International Financial Markets, Institutions and Money, Vol. 62* No, pp. 74-93.

Gao, G., Ma, Q., & Ng, D. T. (2015), "The sound of silence: What do we know when insiders do not trade?", *Johnson School Research Paper Series,* No 3-2013.

Ghauri, P., & Grønhaug, K. (2010), "Research methods in business studies (ed.)", *Harlow: Financial Times Prentice Hall,* No.

Gupta, V. K., Mortal, S., Chakrabarty, B., Guo, X., & Turban, D. B. (2020), "CFO gender and financial statement irregularities", *Academy of Management Journal, Vol. 63* No 3, pp. 802-831.

Haider, N., Khan, N., & Iqbal, N. (2015), "Impact of corporate governance on firm financial performance in Islamic financial institution", *International Letters of Social and Humanistic Sciences, Vol. 51* No, pp. 106-110.

Hair, J. F. (2010), "Black, WC, Babin, BJ, & Anderson, RE (2010). Multivariate data analysis: A Global Perspective", *New Jersey. Pearson. Ed, Vol. 7* No, pp. 816.

Halioui, K., Neifar, S., & Abdelaziz, F. B. (2016), "Corporate governance, CEO compensation and tax aggressiveness: Evidence from American firms listed on the NASDAQ 100", *Review of Accounting and Finance,* No.

Hassan, R., Marimuthu, M., & Satirenjit, K. J. (2015), "Diversity, corporate governance and implication on firm financial performance", No.

Hermuningsih, S., Kusuma, H., & Cahyarifida, R. A. (2020), "Corporate governance and firm performance: An empirical study from Indonesian Manufacturing Firms", *The Journal of Asian Finance, Economics, and Business, Vol. 7* No 11, pp. 827-834.

Huang, Y. S., & Wang, C.-J. (2015), "Corporate governance and risk-taking of Chinese firms: The role of board size", *International Review of Economics & Finance, Vol. 37* No, pp. 96-113.

Hunjra, A. I., Mehmood, R., & Tayachi, T. (2020), "How Do Corporate Social Responsibility and Corporate Governance Affect Stock Price Crash Risk?", *Journal of Risk and Financial Management, Vol. 13* No 2, pp. 30.

Hurley, D., & Choudhary, A. (2020), "Role of gender and corporate risk taking", *Corporate Governance: The International Journal of Business in Society, Vol. 12,* No 2, pp 1-11.

Isik, O., & Ince, A. R. (2016), "Board size, board composition and performance: An investigation on Turkish banks", *International Business Research, Vol. 9* No 2, pp. 74-84.

Jeon, K. (2019), "Corporate governance and stock price crash risk", *Academy of Accounting and Financial Studies Journal, Vol. 23* No 4, pp. 1-13.

Kim, Y., Li, H., & Li, S. (2014), "Corporate social responsibility and stock price crash risk", *Journal of Banking & Finance, Vol. 43* No, pp. 1-13.

Li, Y., & Zeng, Y. (2019), "The impact of top executive gender on asset prices: Evidence from stock price crash risk", *Journal of Corporate Finance, Vol. 58* No, pp. 528-550.

Liu, H., Ke, W., Wei, K. K., Gu, J., & Chen, H. (2010), "The role of institutional pressures and organizational culture in the firm's intention to adopt internet-enabled supply chain management systems", *Journal of operations Management, Vol. 28* No 5, pp. 372-384.

Madanoglu, M., & Karadag, E. (2016), "Corporate governance provisions and firm financial performance: The moderating effect of deviation from optimal franchising", *International Journal of Contemporary Hospitality Management,* No.

Mardnly, Z., Mouselli, S., & Abdulraouf, R. (2018), "Corporate governance and firm performance: an empirical evidence from Syria", *International Journal of Islamic and Middle Eastern Finance and Management, Vol.12,* No 1, pp. 1-12.

Mehmood, S., Amin, M. S., & Raza, K. (2020), "EFFECT OF CORPORATE GOVERNANCE ON FIRM PERFORMANCE: MODERATING ROLE OF FIRM SIZE IN PAKISTAN", *International Journal of Management (IJM), Vol. 11* No 7.

Merz, A., & Trabert, S. (2020), "Board Size, Firm Type, and Stock Return Volatility", *Firm Type, and Stock Return Volatility (March 6, 2020), Vol. 12,* No 2, pp. 1-10.

Mishra, S., Talukdar, B., & Upadhyay, A. (2019), "CFO appointment and debt-equity choice", *Managerial Finance, Vol. 18* No 2, pp. 114-126.

Namazi, M., & Hosseini-Nia, S. (2017), "The moderating role of corporate governance on the relationship between a firm's product lifecycle and risk-taking", *Asian Journal of Accounting and Governance, Vol. 8* No, pp. 87-100.

Naz, A., & Sheikh, N. A. (2023), "Capital structure and earnings management: evidence from Pakistan", *International Journal of Accounting & Information Management, Vol. 31* No 1, pp. 128-147. doi:10.1108/IJAIM-08-2022-0163

Nazir, M. S., & Afza, T. (2018), "Does managerial behavior of managing earnings mitigate the relationship between corporate governance and firm value? Evidence from an emerging market", *Future Business Journal, Vol. 4* No 1, pp. 139-156.

Nguyen, P., Rahman, N., Tong, A., & Zhao, R. (2016), "Board size and firm value: evidence from Australia", *Journal of Management & Governance, Vol. 20* No 4, pp. 851-873.

Noor, A., Farooq, M., & Tahir, Z. (2022), "Nexus between audit committee and corporate risk: evidence from Pakistan", *Corporate Governance: The international journal of business in society, Vol. 22* No 6, pp. 1327-1344.

Ntow-Gyamfi, M., Bokpin, G. A., & Gemegah, A. (2015), "Corporate governance and transparency: evidence from stock return synchronicity", *Journal of Financial Economic Policy,* No.

Palladino, L. (2020), "Do corporate insiders use stock buybacks for personal gain?", *International Review of Applied Economics, Vol. 34* No 2, pp. 152-174.

Pan, X., & Qian, M. (2024), "Firm financing through insider stock pledges", *Review of Finance, Vol. 28* No 2, pp. 621-659.

Paniagua, J., Rivelles, R., & Sapena, J. (2018), "Corporate governance and financial performance: The role of ownership and board structure", *Journal of Business Research, Vol. 89* No, pp. 229-234.
Qadorah, A. A. M. (2019). *The moderating role of board ownership on the relationship between corporate governance and firm performance among the listed companies in Jordan.* Universiti Utara Malaysia,
Rodriguez-Fernandez, M. (2016), "Social responsibility and financial performance: The role of good corporate governance", *BRQ Business Research Quarterly, Vol. 19* No 2, pp. 137-151.
Rostami, S., Rostami, Z., & Kohansal, S. (2016), "The effect of corporate governance components on return on assets and stock return of companies listed in Tehran stock exchange", *Procedia Economics and Finance, Vol. 36* No, pp. 137-146.
Shahwan, T. M. (2015), "The effects of corporate governance on financial performance and financial distress: evidence from Egypt", *Corporate Governance, Vol. 12* No 2, pp. 230-242.
Smith, M. (2022). *Research Methods in Accounting* (6th ed.). London: SAGE Publications Ltd.
Ueng, C. J. (2016), "The analysis of corporate governance policy and corporate financial performance", *Journal of Economics and Finance, Vol. 40* No 3, pp. 514-523.
Wang, Y.-C., & Chou, R. K. (2018), "The impact of share pledging regulations on stock trading and firm valuation", *Journal of Banking & Finance, Vol. 89* No, pp. 1-13.
Zeng, Z., Zhong, W., & Naz, S. (2023), "Can Environmental Knowledge and Risk Perception Make a Difference? The Role of Environmental Concern and Pro-Environmental Behavior in Fostering Sustainable Consumption Behavior", *Sustainability, Vol. 15* No 6, pp. 4791.