

From Influence to Impact: The CEO Power-Performance Nexus

Aisha Khursheed¹, Nadia Nazeer², Noor-ul-Ain Waheed³

¹Assistant Professor, UEBS, University of Education, Lahore (Multan Campus), Pakistan.

²Lecturer, Institute of Management Sciences, The Women University Multan, Pakistan.

³Lecturer, UEBS, University of Education, Lahore (Multan Campus), Pakistan.

Correspondence: aisha.khursheed@ue.edu.pk¹

ABSTRACT

Aim of the Study: This study aims to assess the effect of CEO power on performance of the firm in an emerging economy like Pakistan. Additionally, the study also finds the impact of each source of CEO power, i.e., structural power, expert power, ownership power, and prestige power on firm performance.

Methodology: For empirical purpose data is collected from all non-financial firms listed on the PSX during the time 2010 till 2018. Generalized method of moments (GMM) models is used to examine the impact of various sources of CEO power on firm performance.

Findings: Findings of the study reveal that CEO power cumulatively increases firm performance. Concerning the impact of various sources of CEO power, CEOs structural power, expert power and ownership power, positively impact firm performance. However, CEO prestige power impacts firm performance negatively.

Conclusion: Empirical results provide support to practitioners and policy makers to understand how CEO power and various sources of CEO power impacts the performance of the firm. In addition, the findings offer justification for government bodies to improve code of corporate governance in response to variable impact of different forms of CEO power. A valuable contribution has been made by this study in the body of existing literature as the researchers of the study developed a composite index to measure CEO power. With the help of the CEO power index, it is demonstrated that CEO power impacts performance of the firm positively in congruent to the notions of stewardship theory. However, relating to the impact of various sources of CEO power, the impact of each source of CEO power on firm performance is different. Thus, making CEO power a double edge sword.

Keywords: CEO Power, Structural Power, Expert Power, Ownership Power, Prestige Power.

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1. INTRODUCTION

Many academic, regulatory and policy debates revolve around CEOs. The CEO's identity is widely believed to have an impact on firm performance, supported by an increasing amount of real-world data (Ali, Rehman, Suleman, & Ntim, 2022; Pham, 2023). The overall performance of a company is greatly impacted by the leadership and vision of its CEO, who holds responsibility for the organization's operations, mainly because majority of the decisions are made by CEOs (Ali et al., 2022; Ozgen, Mooney, & Zhou, 2024; Winschel & Stawinoga, 2019).

An influential role is expected to be performed by the individuals in leadership positions with the power while evaluating alternative decision choices. When considering different decisions, the personal characteristics and beliefs of these executive's matter (Amedu & Dulewicz, 2018). A CEO who shapes the overall strategy of the company (Abdalkrim, 2019) when coupled with power can wield a considerable level of impact over the decision making process of the organization, ultimately impacting the performance of the organization (Pena & Dalimunthe, 2021; Pham, 2023; Tremblay, 2024). The existence of a strong, powerful CEO and its impact on firm performance has sparked extensive discussion in the body of empirical literature. It has been observed that powerful CEOs may impact performance of the firm positively or negatively (Brahma & Economou, 2024; Tanikawa & Jung, 2019).

The existing body of literature indicates that there could be trade-offs associated with the expenses and advantages of an influential CEO. In terms of advantages, having a powerful CEO could lead to increased efficiency. Such CEOs may facilitate a swift decision-making process, leading to prompt problem-solving or adaptation to expected market shifts (Gunasekarage, Luong, & Truong, 2020). On the other side having a strong CEO can lead to CEOs making decisions independently, with minimal input from the board or other managers (Han, Nanda, & Silveri, 2016; Koo & Kim, 2019). The impact of CEO power on the performance of the organization has been extensively studied in empirical research. However, most of the empirical literature is based on developed economies and a little bit is available in the context of emerging economies like China, Taiwan, Thailand, Vietnam, and Nigeria. Thus, there is a shortage of empirical proof regarding the impact of powerful CEOs on firm performance from emerging and developing nations (Arif, Mustapha, & Abdul Jalil, 2023). Moreover the findings of these studies are also equivocal as there are studies that show a positive impact, studies that show a negative impact, and even studies that find no impact at all (Tanikawa & Jung, 2019). This difference of result may be due to the use of different measures used as CEO power or contextual differences. Moreover, most of the studies are based on single measure of CEO power. Bugeja, Matolcsy, and Spiropoulos (2017) proposed that employing a sole CEO power measure alongside firm financial traits and governance factors as controls might lead to potential issues of multicollinearity and endogeneity, as certain controls could also encompass CEO power.

Finkelstein (1992) described the concept of "power" categorized into four types i.e., structural power, expert power, prestige power and ownership power. Hence, following the model of Finkelstein (1992), a multifactorial measure for CEO power is developed focusing on CEO characteristics and governance variables which incorporate each of the above-mentioned dimensions.

A significant contribution of the current study is the establishment of an extensive model for measuring CEO power based on all four dimensions of CEO power. A comprehensive model may help to better elaborate the connection between the performance of the organization and CEO power. Moreover, the impact of each dimension of CEO power is also evaluated individually to analyze which dimension of power accounts more and in which direction. Additionally existing empirical studies mainly are based on the data of developed markets (Amedu & Dulewicz, 2018) whereas, contextualizing is important while studying the real impact (Kazemi & Alavi, 2023). Hence, current study made a distinctive contribution to the body of general management literature using data focusing on an emerging market. Therefore, the main goal of this study is to find the answers of the following research questions.

RQ1: Do powerful CEOs impact firm performance?

RQ2: How different dimensions of CEOs power impact firm performance?

Based on the findings researchers are confident that verdicts of this study will not only fill a gap in the body of existing literature, but they will also enrich the knowledge base of regulatory bodies along with the functioning board of directors of the organization in formulating policies for appointing a CEO considering the performance of the firm is connected to the background of the CEO. The paper follows the following arrangement. Literature review is presented in section 2. Data collection and methodology are elaborated in Section 3. Results for empirical analysis are presented in section. The discussion on the empirical results is presented in section 5. Lastly, conclusions and future recommendations are presented in section 6.

2. REVIEW OF LITERATURE

CEOs are widely thought to have substantial influence over the fate of their organizations, whether it's positive or negative. This is partly due to their distinctive position at the helm of the company. (Pour, Uddin, Murinde, & Amini, 2023). The concept of CEO power, found in upper echelon literature, encompasses various aspects, with a central focus on the notion of overcoming opposition when decisions are made and when strategic actions are taken place (Pfeffer, 1997). As Adams, Almeida, and Ferreira (2005) refers power of the CEOs as an ability of the top manager to over and over impact the decision-making process within the company, even when faced with opposition from internal or external sources. Finkelstein (1992) outlined four distinct categories of power: structural power, ownership power, expert power, and prestige power. These categories encompass the various dimensions of the definition of "power."

Hierarchical authority and formal organizational structure form the basis of structural power also referred as hierarchical or legitimate power. (Adams et al., 2005; Brass, 1984; Hambrick, 1981).

Hence the structural power of the CEO stems from the nature of their position within the organization and it relates to the official status of a manager within an organization, including their titles and level of compensation (Chintrakarn, Chatjuthamard, Tong, & Jiraporn, 2017; Lewellyn & Muller-Kahle, 2012; Pour et al., 2023). Agency theory suggests that an increase in the structural power of the CEO leads to managerial entrenchment (Sheikh, 2019). CEOs achieve ownership power by acquiring stock in their firm (Ali et al., 2022). Managerial entrenchment is increased as CEO stock ownership rises (Arif et al., 2023). Expert power is based on a deep understanding of business operations and their surroundings, the relationships built with stakeholders and the specialized knowledge gained through experience within the company (Fang, Lee, Chung, Lee, & Wang, 2020; Firstenberg & Malkiel, 1994). The board's ability to monitor the CEO's activities is compromised due to the CEO's close relationships with board members, which has developed over time (Asimakopoulos & Yan, 2019; Graham, Kim, & Leary, 2020). Prestige, as defined by Webster (1993), is described as "holding a significant position in the minds of people." Typically, individuals pay heed to the viewpoints and recommendations of those they deem prestigious, not due to an obligation to obey them, but because these individuals hold influence within the wider public opinion (Fralich & Papadopoulos, 2018). A CEO's prestige is often shown by their connections with other firms, such as holding directorship positions in other companies (Daily & Johnson, 1997; Finkelstein, 1992). Additionally, the level and type of formal qualifications held by a CEO indicate their cognitive ability and readiness to adopt new cognitive skills (Gottesman & Morey, 2010; Wang, Holmes Jr, Oh, & Zhu, 2016). CEOs who serve as directors for other companies or possess advanced formal qualifications may be deemed to be in high demand or to have a respected reputation among their own firm's board members, since other companies value the perspectives and contributions of their CEO. As a result, this will lead to an increased level of influential power, allowing the CEO to encounter fewer limitations in making strategic decisions and are anticipated to deliver superior performance (Alves, Couto, & Francisco, 2016; Lewellyn & Muller-Kahle, 2012).

2.1 Theoretical Framework

Agency theory holds significant importance in the realms of firm performance and corporate governance. It explains the behavior of CEOs in making corporate decisions, highlighting the potential conflict between their personal interests and the objectives of the company. Agency theory postulates that granting excessive authority to the CEO can lead to chasing personal agendas that may not line up with the best interests of the stockholders (Finkelstein, 1992). The CEO may exploit their power to prioritize their own interests over the shareholders by imposing their strategic decisions, even if it negatively impacts the company's performance (Chiu, Li, & Kao, 2022). Based on this presumed self-interested conduct, advocates of agency theory argue that the CEO's strategic decisions will have a detrimental effect on the company's performance (Menla Ali, Wu, & Zhang, 2024).

Alternatively, the Stewardship theory contends that the CEO requires increased authority to effectively carry out their responsibilities. As a result, having a powerful CEO will enable the board to access timely information and facilitate a conducive environment for the CEO to promptly and autonomously make decisions, ultimately enhancing the business's performance (Brahma & Economou, 2024). Managers are expected by Stewardship theory to act as trustworthy representatives and to take responsibility for the organization's assets to earn respect from colleagues and higher-ups (Ozgen et al., 2024). However, Resource dependence theory postulates that managers are selected for their exceptional professional skills and experience, leading to better capability in managing complex situations (Choe, Tian, & Yin, 2014). Companies in various settings recruit CEOs with characteristics that align with the company's specific background (Al-Dhamari, Alquhaif, & Al-Gamrh, 2022).

2.2 Firm performance and CEO Power

Powerful CEOs can make quick decisions without needing approval from other members of the management team (Saiyed, Tatoglu, Ali, & Dutta, 2023). Nevertheless, when CEOs have greater power, they may find internal inspiration to lead their companies in genuinely transformative ways. Thus, if the CEO possesses clear and uncontested decision-making responsibility, the company is likely to create superior value (Pham, 2023). Some studies have raised concerns about the potential benefits of CEO power despite evidence showing its positive influence on overall firm productivity. Researchers have argued that CEO power can lead to overconfidence, which in turn can lead to self-centered behavior (Haynes, Zattoni, Boyd, & Minichilli, 2019; Park, Kim, Chang, Lee, & Sung, 2018). Saiyed et al. (2023) studied the sample of 72 Indian software firms for the three-year period from 2009 to 2011. Results revealed that the impact of CEO power on the profitability of the firm is in positive direction when there exists a low level of entrepreneurial orientation. The researchers found that CEO power has both positive and negative impacts on a company, works in benefit till a particular level and starts effecting badly afterwards. It is not inherently advantageous or detrimental. They also discovered a difference between the actual and perceived power of CEOs exemplifying that true impact of Elon Musk's CEO power on Twitter will only be known in the future. Addressing that managing this difference is difficult but important. Chiu et al. (2022) assessed the effect of CEO power on firm value using the sample of US based firms listed on the multiple stock exchanges i.e., NASDAQ, NYSE and AMEX stock exchanges during the time period from 1992 to 2014. To measure CEO power, CEO expert power and CEO structural power were used. Results indicate that CEOs expert power has the capacity to manage organizational capital in a way that it leads to increased firm value. However increased structural power may result in entrenchment behavior of the CEO.

Brahmana, You, and Yong (2021) worked on Malaysian organizations. The sample comprised of 319 non-financial Malaysian public-listed companies. The time period covered for data collection was from 2012 to 2016. Surprisingly results revealed that there is no significant impact of CEO power on firm performance in Malaysian context. Irrespective of the level of CEO power, researchers could not find any impact. It was argued that the indifference of CEO power for firm's performance may be due to the context of developing economy. It was suggested that as family firms dominate the developing market

where mostly a family member is the CEO or CEO is mostly affiliated with the family. This may be the reason for no effect of CEO power on performance of the firm.

A significant role might be played by CEO power for improving the effectiveness of diversified performance of the firm in case the previous performance is poor was revealed by Tanikawa and Jung (2019) while working on 117 companies in Japan. Researchers argued that considerable resources are vested with powerful CEOs hence they have the capacity to make better-quality focused decisions as compared to CEOs having less power. Better quality decisions will ultimately increase firm value. Researchers used CEO expert power and CEO structural power as a measure of CEO power. It was further revealed that CEO expert power and structural power negatively impacts firm performance when firm's previous performance is good. The negative relation may be due to the fact that tenure diversity causes social categorization which will be increased due to agency behavior of the CEO. Amedu and Dulewicz (2018) evaluated the impact of various dimensions of CEO power on firm performance. The study was conducted on 198 firms listed on Nigerian Stock Exchange for the period from 2002 to 2012. Results revealed that CEO expert power and prestige power positively impacts accounting performance of the firm supporting the idea based on contingency theory. However, CEO ownership power and structural power negatively impacts firm performance. Indicating the entrenchment behavior of the CEO with increased vested power.

Considering above reviewed literature we hypothesize that

H1: CEO power effects performance of the firm.

H1a: CEO structural power effects performance of the firm.

H1b: CEO ownership power effects performance of the firm.

H1c: CEO expert power effects performance of the firm.

H1d: CEO prestige power effects performance of the firm.

3. RESEARCH METHODOLOGY

3.1 Data Collection and sample

We obtained sample of the study from non-financial firms listed on PSX during 2010–2018. Based on data availability constraint for all the variables considered in study. Our final sample consists of 1764 observations from 196 companies for the period from 2010 to 2018. Data published in annual reports of the firm is used for the calculation of financial variables. However, the information related to various dimensions of CEO power is collected from multiple sources, i.e., the annual reports of the firms included in the sample, publicly available open access information available on the LinkedIn profiles of CEOs or on the official websites of the sample firms.

3.2 Study Variables

In the current study, researchers have examined the impact of CEO power (in the form of a comprehensive index) on firm performance. Additionally, this study also finds the impact of individual dimensions of CEO power on performance of the firm.

3.2.1 Firm performance

Firms primarily use economic value creation as a metric to evaluate performance. Profitability is commonly used as a measure of economic value created based on cost-based measures. Accordingly, firm performance was measured using market to book ratio (MBR, market value of equity divided by book value of equity) following (Ahmed Sheikh, Wang, & Khan, 2013; Rashid, 2020). MBR is a general measure of firm performance, because it is more likely to reflect increase in firm value (Han et al., 2016). In our model we have included previous year performance i.e., t-1. Previous year's performance is included mainly because of two reasons. Firstly, the performance of the current year of the firm is directly

influenced by the previous year performance (Tanikawa & Jung, 2019). Secondly, inclusion of lag of dependent variable helps to avoid the reverse causality problem between the performance and CEO power. Additionally the endogeneity problem which is inherent in the study of variables based on corporate governance may also be reduced with the inclusion of lag of dependent variable (Brahmana et al., 2021).

3.2.2 CEO power

CEO power is measured using an index following (Cho, Ibrahim, & Yan, 2019). CEO power is based in four sources i.e., Structural power, expert power, prestige power and ownership power, (Bouteska & Mefteh-Wali, 2021a; Cho et al., 2019).

Board independence, CEO pay slice, CEO membership in various committees of corporate board, CEO duality and CEO pay gap is used to measure the Structural power of the CEO (Bachmann, Loyeung, Matolcsy, & Spiropoulos, 2020; Sheikh, 2018; Zagonov & Salganik-Shoshan, 2018). To measure CEO pay slice (CPS) this research has followed (Bebchuk, Cremers, & Peyer, 2011). It is pertinent to mention here that in the current context remuneration paid to top executives is mentioned in annual reports instead of the remuneration given to top five executives. Hence, CPS is measured by the ratio of CEO compensation to the total compensation given to the top management. Following (Sheikh, 2018) A binary variable has been defined that is equal to "1" if CPS exceeds the sample average. The CEO pay gap (CPG) is determined by calculating the ratio of the difference between CEO compensation and the average compensation of the next highest paid executive to the total compensation of the top executives. Based on CPG an indicator variable is defined is set to 1 when the CPG is higher than the sample average, and 0 when it is not. The indicator variable for CEO duality is set to "1" when the CEO holds both positions i.e., chairman of the board and CEO, and "0" when they do not. How much a CEO affects different corporate decisions is evaluated by examining how many board subcommittees they participate in. If the CEO is involved in multiple board subcommittees, it suggests a focused decision-making authority, which enhances their ability to sway these committees during the decision-making process (Bachmann et al., 2020). For the purpose of this study special attention has been given to the number of subcommittees on which the CEO serves. A variable is established as an indicator, set to "1" if the CEO is a member of any committee operating under the corporate board, and "0" if not. In evaluating the influence of CEO structural power, board independence has been utilized as a metric. Independent directors are viewed as effective overseers of CEO activities due to their impact on the CEO's ability to unilaterally make decisions (Fama & Jensen, 1983). A binary variable has been established, taking the value of "1" when 50% or more of the board members are independent in a given year, and "0" otherwise. Consequently, the measure of CEO structural power extends from "0" to "5".

Ownership power is measured using CEO stock ownership. It can help reduce agency problems by increasing CEO control and reducing influence from both internal and external stakeholders (Sheikh, 2018). A binary variable is used to indicate CEO ownership power, with a value of "1" when the CEO owns shares in the company and "0" when they do not. CEO tenure is an indicator of expert power and is used to gauge the CEO's expertise in sustaining performance and maintaining strong relationships with board members (Silvestre, 2019), as indicated by Silvestre (2019). A specific indicator variable has been created to measure CEO tenure, with a value of "1" when the tenure exceeds the sample average and "0" when it does not (Sheikh, 2018). CEO boardlocking, CEO business education, and CEO technical education are used to measure Prestige power. the most elusive aspect of CEO power is Prestige power and it is challenging to measure it due to its intangibility (Asimakopoulos & Yan, 2019). The presence of CEO boardlocking is indicated by a binary variable. If boardlocking exists, its value is "1" otherwise "0" if it doesn't. To measure CEO business education again a binary variable is used, taking a value of "1" when the CEO holds a formal qualification related to business and "0" if not (Saleh, Eleyan, & Maigoshi, 2022). The presence of any engineering, media sciences, or medical qualification determines the value of a binary variable measuring CEO technical education, which is assigned a value of "1" if the CEO possesses such qualifications. The CEO power index is the total of ten indicator/binary variables outlined

earlier, encompassing different aspects of CEO power. This index varies from 0 to 10 and indicates the extent of CEO power.

3.2.3 Control variables

Prior research has indicated that the performance of a company may be affected by specific attributes unique to the company, including its size, financial flexibility, and the caliber of its management (Han et al., 2016; Khursheed & Sheikh, 2022). Therefore, firm-level characteristics (i.e., firm size, liquidity, and management quality) are controlled in this study. The definitions and operationalization of the variables used in the study are summarized in Table 1(a). Operationalization of CEO power index is summarized in Table 1(b) summarized.

Table 1(a): *Definition of variables*

Variable	Symbol	Definition
Firm Performance	PROF _{it}	Measured as Market-to-book ratio and it is calculated by dividing the market value per share by the book value per share.
CEO Power	CEOP _{it}	The CEO power index has a range of values from 1 to 10.
Structural Power	STP _{it}	CEO duality, CEO pay slice, number of CEO membership in various committees of board, CEO pay gap, and independence of the board are used to create a binary variable to measure CEO structural power. CEO structural power ranges from 0 to 5.
Ownership Power	OP _{it}	A binary variable is established that is set to "1" in case CEO owns stocks in the company, and "0" if not.
Expert Power	EP _{it}	A variable has been set up to assess CEO expert power using CEO tenure. It takes on a value of "1" when the tenure is higher than the sample average, and "0" when it is not.
Prestige Power	PP _{it}	A binary variable is established by utilizing CEO boardlocking, CEO business education, and CEO technical education, with its value spanning from 0 to 3.
Firm size	SIZE _{it}	Natural log of total asset
Liquidity	LIQ _{it}	Current assets to current liabilities
Management quality	MQ _{it}	Administrative expenses to total assets

Table 1(b): *Measurement of Dimensions of CEO power*

Dimension	Variables	Operationalization
Structural power	CEO pay slice	The CPS ratio is the value of CEO compensation to the total compensation paid to all top executives, A binary variable has been established where "1" indicates that CPS is higher than the average in the sample (Sheikh, 2018).
	CEO pay gap	The CEO pay gap (CPG) is calculated by subtracting the average compensation of the next highest paid executive from the CEO compensation, and then dividing the result by the total compensation of the top executives. An indicator variable has been established to be "1" if the CPG exceeds the sample average, and

		"0" if it does not (Sheikh, 2018).
	CEO duality	The indicator variable measuring CEO duality is set to "1" when the CEO holds both positions (i.e., chairman of the board and CEO) and "0" when they do not (Bugeja et al., 2017).
	Board independence	A binary variable has been established, with a value of "1" if over 50% of board members are independent in a specific year, and "0" if not (Sikawa et al., 2020).
	CEO membership in various committees of corporate board	An indicator variable is created which equals "1" if CEO is member in any of the committee of the board and "0" otherwise (Bachmann et al., 2020).
Ownership power	CEO stock ownership	An indicator variable is used valuing "1" if CEO possesses shares in the company and "0" if not (Sheikh, 2018).
Expert power	CEO Tenure	A binary variable is used to measure CEO expert power which is equal to "1" when CEO tenure is greater than average value of the sample and "0" else (Silvestre, 2019).
Prestige power	CEO boardlocking	CEO boardlocking is determined by an indicator variable which takes value "1" if boardlocking occurs and "0" if not (Francis et al., 2019).
	CEO business education	CEO business education is an indicator variable holding value "1" when CEO has a qualification related to business education and "0" otherwise (Frydman, 2019).
	CEO technical education	A binary variable which equals to "1" if CEO has any engineering or relevant qualification (Frydman, 2019).

3.3 Model specification and analysis

Data from the non-financial firms listed in 12 different sectors of Pakistan were collected from 2010 to 2018. In the base model, firm performance is the dependent variable, and CEO power is the independent variable. Moreover, this study further tests the impact of various dimensions of CEO power on firm performance as discussed above. To test hypothesis 1a, 1b, 1c, 1d, a dynamic model of performance is adopted by including a lagged firm performance with other regressors. Statistical models are as follows:

$$PROF_{it} = \beta_0 + \beta_1 PROF_{it-1} + \beta_2 CEOP_{it} + \beta_3 SIZE_{it} + \beta_4 LIQ_{it} + \beta_5 MQ_{it} + \epsilon_{it} \text{---(1)}$$

$$PROF_{it} = \beta_0 + \beta_1 PROF_{it-1} + \beta_2 SP_{it} + \beta_3 OP_{it} + \beta_4 EP_{it} + \beta_5 PP_{it} + \beta_6 SIZE_{it} + \beta_7 LIQ_{it} + \beta_8 MQ_{it} + \epsilon_{it} \text{---(1a)}$$

The dynamic panel specification (GMM) is employed in this research for various reasons. The presence of lagged dependent variable in the model is the main reason for using dynamic panels. Other models like the fixed and random effects models produce inconsistent predictions and estimations (Li, 2016) because when utilizing lagged dependent variables in fixed effect and random effect models, it's important to consider the correlation between the lagged dependent variable and the error term. Moreover, empirical literature suggests the presence of endogeneity in the case of governance variables. The occurrence of endogeneity can be ascribed to various other aspects including measurement error, reverse causation, simultaneity causation and omitted variable bias. In the presence of endogeneity, the ordinary least squares (OLS) will be expected to produce misleading, inconsistent, and biased results. Therefore, the potential synchronized relationship between firm performance and CEO power may lead to an

endogeneity issue in our estimation model (Li, 2016). In conclusion, the system GMM estimator has been recently used to successfully address endogeneity problems and remove firm fixed effects (Bouteska & Mefteh-Wali, 2021b; Pour et al., 2023; Shahab, Gull, Ahsan, & Mushtaq, 2022).

3.4 Empirical tests and findings

Equation 1 and 1(a) are estimated using a technique named “two-step GMM” first ascribed by Arellano and Bond (1991). This approach has been recognized as being more efficient as compared to the one-step GMM technique (Olaniyi 2019; Chen et al. 2014; Buck et al. 2008). In addition, both theoretically and empirically, it has been established that the estimation of GMM relies on the accuracy of the instrumental variables (Arellano and Bond 1991). Sargan tests of over-identifying restrictions are used to assess the validity of instruments. The results indicate that the instrumental variables are valid, suggesting that they are not correlated with error terms. In the same way, the outcomes of AR(1) and AR(2) first- and second-order autocorrelation in the first-differenced residuals show that the GMM estimates are not affected by serial autocorrelation issues. Hence, it validates the robustness of GMM estimates demonstrating the reliability of the model and the resulting estimates. The results of diagnostic tests indicate that there exists no major problem with the data set.

4. RESULTS

4.1 Summary statistics

The summary statistics related to the variables used in this study is presented in Table 2. The study sample is based on 1764 firm year observations spanning a time of nine years. The data is collected from nine sectors listed on PSX.

Table 2: Summary Statistics

<i>Variable</i>	<i>Obs.</i>	<i>Mean</i>	<i>Std.Dev.</i>	<i>Min.</i>	<i>Max.</i>
PROF _{it}	1764	2.072	5.639	-4.54	86.342
CEOP _{it}	1764	5.197	1.319	1	9
SP _{it}	1764	2.142	.883	0	5
OP _{it}	1764	.833	.373	0	1
EP _{it}	1764	.384	.487	0	1
PP _{it}	1764	1.504	.821	0	3
SIZE _{it}	1764	22.183	1.449	17.775	26.125
LIQ _{it}	1764	1.46	1.248	.007	10.546
MQ _{it}	1764	0.089	.298	0	4.593

Note: The table presents summary statistics of the study variables. Where prof_{it} = Market to book ratio, CEOP_{it} = CEO power index, SP_{it} = CEO Strategic power, OP_{it} = CEO ownership power, EX_{it} = CEO expert power, PP_{it} = CEO prestige power, Size_{it} = Firm Size, LIQ_{it} = Firm liquidity, MQ_{it} = Management Quality

The statistics presented in table 2 indicate that Market to book ratio an indicator of firm profitability has an average value of 2.072 times. CEO power index has a value ranging between 1 to 9. The mean value of CEO power index in the sample is 5.197 indicating that most of the firms included in the sample are led by medium to high powered CEOs. The strategic power of a CEO has its value ranging between 0 to 5. The mean value of CEO strategic power is 2.142 indicating a medium to low level of strategic power. CEO ownership power has a mean value of 0.833 indicating highest level of CEO ownership in sample firms. CEO expert power has its mean at 0.384 indicating a low level of expert power amongst the CEOs of sample firms. The mean value of CEO prestige power is 1.504 and its value ranges from 0 to 3. Value of variable Firm size calculated as natural logarithm of total asset is 22.183. Firms' liquidity measured as the ratio of current asset to current liabilities has the mean value of 1.460. To measure the variable management quality ratio of administrative expense to total assets is used. Mean value of administrative expenses of all firms are 8% of firm's total assets.

4.2 Correlation matrix

Correlation matrix for the study variables of model1 and model 1(a) are given in Table 3.

Table 3: Correlation of variables

	$PROF_{it}$	$CEOP_{it}$	SP_{it}	OP_{it}	EP_{it}	PP_{it}	$SIZE_{it}$	LIQ_{it}	MQ_{it}
$PROF_{it}$	1								
$CEOP_{it}$	-0.0174	1							
SP_{it}	-0.009	0.705***	1						
OP_{it}	-0.121***	0.309***	-0.033	1					
EP_{it}	-0.038	0.347***	0.098***	0.161***	1				
PP_{it}	0.118***	0.334***	-0.044*	-0.064***	-0.056**	1			
$SIZE_{it}$	0.123***	-0.033***	-0.109***	-0.055**	0.018	0.176***	1		
LIQ_{it}	0.020***	0.076***	0.056**	-0.047**	0.040*	0.040***	-0.025	1	
MQ_{it}	-0.040***	0.071***	0.051**	0.055**	0.076***	-0.050**	-0.193***	-0.091***	1

Note: Correlation Matrix for the study variables are presented in this table.

Where $prof_{it}$ = Market to book ratio, $CEOP_{it}$ = CEO power index, SP_{it} = CEO Strategic power, OP_{it} = CEO ownership power, EX_{it} = CEO expert power, PP_{it} = CEO prestige power, $Size_{it}$ = Firm Size, LIQ_{it} = Firm liquidity, MQ_{it} = Management Quality

***. P-value < 0.01**. P-value < 0.05

Pair-wise correlation results indicate that CEO power index, strategic power, expert power and ownership power and has a negative correlation with performance of the firm. However, a positive correlation exists between CEO prestige power and firm performance. In addition, fairly small values of cross correlation for all the explanatory variables indicates nonexistence of multicollinearity amongst them. This result is further confirmed by variance inflation factor (VIF). The Mean value of VIF is 1.03 and 1.05 in model 1 and model 1(a) respectively, indicating there is no multicollinearity.

4.3 Results and discussion

The results of estimation for model 1 and model 1(a) are given in table 4.

Table 4: Regression Results

	Model 1	Model 1(a)
C	4.645 (3.415)	4.860* (2.694)
$PROF_{it-1}$	0.406*** (0.005)	0.401*** (0.006)
$CEOP_{it}$	0.187*** (0.042)	-
SP_{it}	-	0.160*** (0.040)
OP_{it}	-	0.351** (0.141)
EP_{it}	-	0.513*** (0.093)
PP_{it}	-	-0.189** (0.105)
$SIZE_{it}$	-0.219 (0.153)	-0.208* (0.121)
LIQ_{it}	-0.041 (0.064)	-0.015 (0.063)

	MQ_{it}	0.657** (0.302)	0.491** (0.232)
No. of groups		196	196
No. of IV		33	42
AR(1) test		0.115	0.114
AR(2) test		0.434	0.438
Sargan test		0.072	0.074

Note: Regression results for model1 and model 1(a) are presented in this table.

Where $prof_{it}$ = Market to book ratio, $CEOP_{it}$ = CEO power index, SP_{it} = CEO Strategic power, OP_{it} = CEO ownership power, EP_{it} = CEO expert power, PP_{it} = CEO prestige power, $Size_{it}$ = Firm Size, LIQ_{it} = Firm liquidity, MQ_{it} = Management Quality

***. P-value < 0.01**. P-value < 0.05

Results for model 1 indicate that firm's previous year performance, CEO power index and management quality are positively and significantly related to firm performance. Statistical estimation for model 1(a) reveals that hat firm's previous year performance, CEO strategic power, Ownership power, expert power, and management quality are statistically significant and positively related to firm performance. However, CEO prestige power and firm size are significant and negatively related to firm performance. Regarding the effect of control variables management quality is the only variable which shows a persistent significant positive relationship in both models impacting the performance of the firm.

Results provide evidence that powerful CEOs increase firm performance coherent with the notions of stewardship theory and resource dependence theory. Powerful CEOs have the tendency to overrule decisions by decreasing internal conflicts and interference of senior management. Additionally, they have access to more substantial resources thus, in situations when a firm requires support and assistance from the high-ups for swift choices, powerful CEOs provide this support to the firm resulting in a positive effect on the performance of the firm. Furthermore, a CEO with more power can judge and estimate required market trends early thus responding proactively to new market requirements in an innovative way. Early decisions can rise the firm as a market leader resulting in increased firm's profitability and performance. Powerful CEOs may leverage external resources like political connections, qualifications, and skills to influence the external economic environment, in addition to making quick decisions. The positive relation between firm performance and CEO Power confirms the findings of (Saiyed et al., 2023; Tanikawa & Jung, 2019).

Results indicate that CEO power arising from different dimensions impacts firm performance differently. For instance, CEO structural power impacts firm performance significant positively supporting the postulates posed by stewardship theory and resource dependence theory. The results are intuitive because structural power enables CEOs to exercise careful discretion when it comes to conflicting projects and interests, refrain them from risky investments, balance competing interests, and enables them to endorse only those projects which have the potential for the greatest success. Moreover, structural power is characterized with dominance and the dominant CEOs bring varied strategies that lead to extreme performances. The positive relation between CEO structural power and firm performance confirms the findings of (Fang et al., 2020; Saleh et al., 2022). CEO ownership power also impacts firm performance significantly and positively supporting the evidence of agency theory. As agency theory postulated that when CEOs have larger stakes in the firm, they have more incentives to closely supervise the performance of the organization. Thus resulting in increased performance. Positive results are consistent with the findings of (Ali et al., 2022).

CEO expert power also has a positive and significant relation with firm performance confirming the postulates of resource dependence theory. The results are plausible because CEOs who has worked for longer tenures are able to build a dependable and productive team, which helps them handle their work environment and overcome challenges more effectively, ultimately leading to improved performance. Positive results are consistent with the study of (Ting et al., 2017). CEO prestige power has a significant negative effect on firm performance. Confirming the propositions of managerial power theory, which motivates CEOs to make radical decisions to alleviate their power reputation. The reason for the negative

relationship could be that when CEOs have higher prestige power, they might ignore other viewpoints and perspectives instead of promoting their own dominant thinking. This situation may arise the potential for hindering the support required for the execution of challenging strategies and projects that are competing for attention and resources, leading to decreased company performance. Moreover, high prestige power may lead to cognitive biases influencing the CEO's decision-making process and perceptions of risks associated with decisions. As a result, they focus on the decision's upside potential while ignoring any related negative repercussions. Resultantly, CEOs may end up making suboptimal decisions that have a detrimental impact on the company's performance. The inverse relation between CEO prestige power and firm performance confirms the finding of (Saiyed et al., 2023).

5. CONCLUSION

The Current study used CEO power index to examine the effect of CEO power on the performance of the firm. Additionally, researchers have also examined the effect of each of the four dimensions of CEO power on performance of the firm. We present the following broad conclusions. Results reveal that CEO power is significant and positively related to firm performance. A powerful CEO has the capacity to influence firm performance and increase company value. CEO power can positively influence firm performance in various dimensions. This study finds that CEO structural power, ownership power and expert power impacts firm performance significant positively however, CEO prestige power impacts firm performance significant negatively. CEO structural power helps CEOs to make proactive and optimal decisions, to use firm resources in an innovative way, and to get support from the top management to implement strategic decisions smoothly resulting in increased firm performance. The presence of a powerful CEO who has significant ownership can effectively shape corporate strategy, leading to a boost in entrepreneurial spirit and a decrease in the likelihood of delays and conflicts commonly associated with a democratic decision-making at the board level. An expert CEO positively impacts based on a deep understanding of the system and strong loyal commitments developed during the longer tenure. However, prestige power may prove harmful for the firm as a powerful CEO is less likely to receive independent advice or to have their decisions scrutinized.

The current study's findings hold significance for practitioners, policymakers, and regulatory authorities, particularly for countries and companies investigating the puzzle on the impact of CEOs power and firm performance in emerging markets. The key implication of this study is that in an emerging economy a greater firm performance can be achieved by getting the benefit of CEO structural power, ownership power and expert power. While CEO prestige power may become beneficial for the firms when there are strong internal and external governance structure. Future research may focus on the impact of CEO power on firm performance in the presence of internal and external governance indicators.

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Conflict of Interest

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ORCID iDs

Aisha Khurshed ¹ <https://orcid.org/0000-0002-0227-2638>

Nadia Nazeer ² <https://orcid.org/0000-0002-0848-0470>

Noor-ul-Ain Waheed ³ <https://orcid.org/0000-0003-3986-2874>

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