



The Recent Corporate Governance Code and Company Performance: CEO Tenure as a Moderator

Ahmad A. Toumeh¹

Abstract

This study aims to investigate the impact of the presence of governance committee (GC) and risk management committee (RMC) on company performance, as measured by return on assets (ROA), return on equity (ROE), and Tobin's Q. Also, it evaluates how CEO tenure moderates the influence of these board committees. The sample consists of all non-financial companies listed on the Amman Stock Exchange (ASE) during 2018-2022, totalling 320 firm-year observations. The current research implements multivariate panel data regression techniques for hypotheses testing, and the least absolute value (LAV) regression is used as a robustness test. The findings reveal that both GC and RMC have positive and significant associations with company performance indicators, which means that the new Corporate Governance Code (CGC) issued in 2017 contributes to increase the performance of the listed firms on the ASE. In addition, the present study furnishes conclusive evidence that CEO tenure weakens the positive nexus between CG, RMC, and firm performance. The practical insights derived from the findings have substantial policy implications for government agencies, policymakers, board members, public corporation executives, and shareholders. To the best of the current author's knowledge, this study is among the first empirical research in Jordan that investigates the effect of GC and RMC on firm performance, alongside the moderating influence of CEO tenure.

Keywords: CEO tenure, company performance, corporate governance code, Jordan, governance committee, risk management committee.

¹ Faculty of Business, Al-Zaytoonah University of Jordan, Amman, 11733 Jordan.
a.toumeh@zuj.edu.jo

1. Introduction

Corporate failures caused by a poor corporate governance system emphasized the need to strengthen and reform the governance structure. Companies' governance is crucial in assessing the likelihood of accounting fraud (Berkman et al., 2009; Paminto et al., 2022). The inability to prevent such scams has increased concerns about the effectiveness of current corporate governance practices (Buallay et al., 2017; Naz et al., 2022). These concerns have emerged as a consequence of the widespread corporate financial scandals of various high-profile companies, including Equifax, Enron, HealthSouth, Rite Aid, Sunbeam, Tyco, Qwest, and WorldCom (Bhagat & Bolton, 2019; Toumeh et al., 2021). After these failures, the trust in the credibility of the financial reports have been shaken, raising serious questions about the corporate governance characteristics in place (Abu Afifa et al., 2022; Bhatt & Bhatt, 2017). This inevitably led to a call for more regulation and legislation to control corporate behavior (Neves et al., 2022). As a result, different reforms have been implemented around the world, including the European Union, the United States, and number of Asian countries (Puni, & Anlesinya, 2020).

The recent corporate governance code introduced by the JSC has unique significance due to several distinguishing factors. The code introduces rules that mark a first-time application in Jordan's corporate governance landscape such as establishing the GC and RMC. These regulations include previously unaddressed areas or new requirements that reflect latest industry practices and international standards (CGC, 2017). This highlights the commitment of JSC to develop and enhance corporate governance practices in Jordan. Furthermore, the code is revised to be compatible with specific features of Jordanian economic and regulatory environment, considering the corporate governance challenges and business landscape. The code addresses local needs while aligning with global best practices through incorporating provisions that sound with Jordan's distinct characteristics (SDC, 2022).

In addition, these elements make the recent corporate governance code issued by the JSC relevant within Jordan and also on the international stage. Its inventive regulations and approach contribute to effective governance practices, making it an interesting subject for local and international observers. This code's ability to bridge the gap between global standards and local realities proves its special significance in the realm of corporate governance. However, the present research is motivated by the economic reforms and the recent CGC implemented by the country of Jordan in order to promote foreign capital and attract local investment, as these legislative changes have directly or indirectly aimed to enhance corporate governance practices that can positively influence the firm performance. Corporate governance characteristics are anticipated to have an impact on the company's performance, which is one of the primary concerns for stakeholders because it enables them recognize the factors affecting financial performance and consider those factors as measures of the company's success or failure.

Although the concept of corporate governance has been addressed in the context of developing countries, Jordan possesses its own distinct business environment and regulatory framework that may differentiate it from other developing countries. Jordan's strategic geographical location, accompanied with its role as an emerging market economy, shapes a business landscape characterized by its openness to foreign investments and trade. Factors such as legal structures, investor behavior, and local business practices can influence the way corporate governance operates in Jordan. Therefore, even though insights from research in other developing countries might be informative, the specific context of Jordan requires a thorough examination to realize how governance practices interact with the country's specific features.

Additionally, the CGC issued by the JSC further emphasizes the need for specific research within Jordan. This code could introduce new principles, requirements, or practices that set it apart from other developing countries (CGC, 2017). Nevertheless, considering Jordan's distinctive business environment, looking into the implications of the unique governance code and its committee mandates within the Jordanian context, and uncovering how they contribute to shaping performance outcomes, emerges as a substantial and vital knowledge gap that requires thorough investigation.

In light of this context, the present study aims to contribute fresh perspectives on corporate governance within a developing market, such as Jordan. It achieves this by scrutinizing the impact of GC and RMC on the performance of non-financial companies listed on the ASE with a specific focus on both agency and behavioral theories. Further, this study stands as the pioneering effort to explore the influence of GC and RMC on firm performance in the Jordanian context. Further, there is limited evidence as previous research has focused on either the direct influence of GC and RMC on firm performance or the impact of chief executive officer (CEO) tenure on firm performance. To the best of the current author's knowledge, there has been no exploration of the interaction impact of CEO tenure on the nexus between GC and RMC and business performance. This research seeks to address this gap in the literature by examining how specific CEO characteristics (e.g., CEO tenure) might shape the relationship between GC and RMC and company performance. Specifically, the study aims to determine whether CEO tenure serve as moderating variable in the aforementioned relationships. Notably, each of the variables mentioned introduces an innovative framework, setting this research apart from prior investigations. As a result, this study serves to bridge a significant knowledge gap in the domain of corporate governance literature. The findings of this research may be beneficial to stakeholders, regulators and policy makers who interested in the impact of the most recent edition of CGC in Jordan.

The rest of this study is organized as follows. Section 2 presents the previous research and hypotheses development. Section 3 describes the study method, which includes data and sample considerations, variables operationalization, and the empirical models. Section 4 discusses the main findings, which comprises descriptive analysis, correlation analysis, multivariate analysis, and robustness tests. Finally, conclusion, implications, limitations, and future research directions are provided in section 5.

2. Literature review and hypotheses development

Stone et al. (1998) described corporate governance as “a set of rules and incentives by which the management of the company is directed and controlled to maximize the profitability and long-term value of the firm for shareholders while taking into account the interests of other legitimate stakeholders” (as cited in Tomar & Bino, 2012, p. 354). Further, the Securities Depository Centre (SDC) of Jordan defined corporate governance as “the system by which organizations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among the different participants in the organization – such as the board of directors, managers, shareholders and other stakeholders – and lays down the rules and procedures for decision-making” (SDC, 2022).

These corporate governance definitions offer thoughtful perspectives on the complicated nature of corporate governance. The first definition highlights the importance of rules and incentives that shape how a firm's management is maximizing profitability and considering the interests of various stakeholders. This definition highlights the precise balance between shareholders' interests and other stakeholders' interests that effective governance must maintain. On the other

hand, the second definition of SDC expands on the structural aspect of corporate governance, illustrating it as a comprehensive system that directs and controls an organization. The stress on the distribution of rights and responsibilities among participants, emphasizes the communal nature of governance in decision-making processes. The establishment of rules and procedures for decision-making further emphasizes the regulatory role of governance structures in organizations such as transparency, accountability, and effective leadership within organizations. Nevertheless, these definitions strengthen the complex nature of corporate governance. They illustrate how governance frameworks must reconcile diverse interests while steering organizations towards strategic goals. This alignment between management, stakeholders, and the governance structure is essential in maintaining ethical standards, promoting sustainable growth, and ensuring that organizations remain accountable to financial performance.

The preceding Jordanian CGC states that the board of directors must form a number of permanent committees, including the audit committee, the nomination and remuneration committee. For the initial time, the most recent edition of the code, which went into effect in 2017, required Jordanian public shareholding companies to establish GC and RMC comprised of members of the board of directors. The code stated that GC is responsible for multiple duties. These duties include “prepare the governance report and submit it to the board of directors, develop written procedures for the application of the provisions of these instructions and review them and evaluate their applicability annually, ensure that the company complies with the provisions of these instructions, and study the commission’s observations regarding the application of corporate governance in the company and follow up on what has been done” (CGC, 2017, p. 18).

Based on these key responsibilities, the role of GC in impacting performance can be observed by examining how its tasks contribute to improving or potentially declining the company’s performance. The GC fosters transparency, accountability, and ethical conduct by preparing the governance report and ensuring compliance with the CGC provisions. This may improve stakeholder trust, enhancing the company’s reputation and market standing. An effective governance framework can attract investors and improve access to capital. Moreover, the committee’s responsibility for reviewing and evaluating the procedures annually verifies the compliance with governance best practices. This change of regulatory environments can contribute to operational effectiveness and reduce costs through effective processes.

Concurrently, the code attributed dual primary duties to a RMC. First, “develop the company’s risk management policy and review it annually.” Second, monitor and evaluate the various types of risks that the company may expose” (CGC, 2017, p. 18). These duties hold the potential to positively impact company performance. The committee helps the company identify potential threats early, allowing for timely and effective risk reduction strategies by developing a robust risk management policy and regularly reviewing it. Consequently, these efforts may reduce costs associated with risks. Furthermore, the committee’s continuous monitoring of various risk types ensures that risks are effectively managed and controlled. Thus, it contributes to maintaining operational stability and maintaining the company’s reputation. This can lead to increased stakeholder trust, which, in turn, could positively affect market standing. The committee’s actions can contribute to maintaining or enhancing sales.

These recent CGC requirements issued by the JSC represent a significant step towards promoting a business environment in which sound corporate governance practices raise operational efficiency and support the foundation of success and sustainability for companies in Jordan. Nevertheless, it’s essential to acknowledge that the introduction of such structures

is associated with costs. To justify why the potential benefits should outweigh these costs, several factors must be considered. First, board committees are established for enhancing several aspects of corporate governance, including oversight, risk management, ethical conduct, and strategic decision-making. While the establishment of these committees does involve costs, such as financial resources, time commitment, and administrative efforts, the long-run advantages exceed these expenses. Second, stakeholder trust can be enhanced through an improved transparency and accountability that leads into increased investor confidence and favorable market perceptions. This, in turn, may result in better access to capital, improved stock performance, and enhanced firm reputation. Finally, the advantages of setting up board committees encompass a wide range of benefits that profoundly affect an organization's operations through concentrated supervision of crucial areas. The thorough and specialized attention offered by these committees has the potential to counteract potential setbacks arising from poor management, scandals, and reputational damage.

In line with the reduction of ownership, the redistribution of organization equity caused by the transfer of direct oversight of a company's endeavors from owners to management (Naz et al., 2022). Owners never again directed these organizations, but competent managers who are not the actual owners took over (Fama & Jensen, 1983). This shift in oversight became the foundation for what is currently known as an agency theory (Dalton et al., 2007). An agency relationship is a contract in which one or more parties (the owner) recruit another party (the agent) to make decisions and create value on their behalf; this process involves the authorization of decision-making power and control to the managers. If both parties are self-interested utility maximizers, there is a possibility that managers will not always operate to serve the shareholders' best interests (Jensen & Meckling, 1976; Eisenhardt, 1989).

This gives the core element of an agency theory that a management, while performing as an agency, pursues their own objectives that diverge from those of shareholders if they are not effectively monitored (Farooq et al., 2021). In this sense, agency theory justified the need for governance monitoring mechanisms. Many scholars who have used agency theory in their research have inferred that corporate governance mechanisms (e. g., sub committees formed by the board of directors) were effective tools for minimizing agency problems by aligning managers' interests with those of shareholders (Langan et al., 2022; Paminto et al., 2022; Toumeh, 2023). According to Jensen and Meckling (1976), when incentives are aligned and monitoring managers' behaviour is enhanced, firm performance improves. The assumption should be made that once a firm successfully resolves the agency problem and the interests of both parties are aligned, the company will function more efficiently and effectively, increasing its value and performance (Fama & Jensen, 1983).

Additionally, the behavioral theory of corporate governance (VanEes et al., 2009) offers a distinctive perspective on the structure of governance mechanisms. Rooted in the understanding that human behavior is complex and influenced by cognitive biases, emotions, and social interactions, this theory expands the traditional economic and rational framework. Agency theory posits that managerial decisions and governance practices are not solely driven by purely rational and self-interested motives. Instead, the behavioral theory acknowledges that psychological factors and individual preferences play a significant role in shaping corporate decisions (Gabrielsson & Huse, 2004). This theory stresses the importance of considering how cognitive biases, information processing limitations, and social influences can impact the functioning of governance structures including the roles of GC and RMC (Huse et al., 2011).

The application of the behavioral theory of corporate governance offers potential comparison through which to examine the association between the recent Jordanian CGC and firm

performance. While the agency theory mainly focuses on aligning managerial interests with shareholder interests (Langan et al., 2022), the behavioral theory expands the perspective to consider how cognitive biases and psychological factors can influence decision-making processes. In the context of the CGC, the presence of GC and RMC can be seen as mechanisms formed to mitigate agency conflicts and enhance transparency. However, the behavioral theory emphasizes that the effectiveness of these mechanisms may be contingent upon the psychological qualities and behavioral tendencies of decision-makers. For instance, board members influenced by overconfidence or groupthink may interpret and implement governance guidelines differently, impacting their impact on firm performance. Moreover, the theory suggests that the behavioral dynamics within committees could also affect their interactions, communication, and ultimately their ability to positively influence company outcomes (VanEes et al., 2009).

Much of pertinent literature investigates the nexus between firm performance and a subset of multiple corporate governance mechanisms. For example, based on the sample of 100 largest U.S. financial companies from 2002 to 2016, Bhagat and Bolton (2019) explored that corporate governance measured by director stock ownership was positively related to firm performance. A study on 225 firms listed on the stock exchanges of 11 countries in MENA region from 2007 to 2017, Mertzanis et al. (2019) found that among the corporate governance attributes, board size, board stock ownership, and institutional shareholding were positively and significantly linked to firm performance when measured by ROA and ROE.

Moreover, using a sample of 428 companies listed on Borsa Istanbul for the period between 2010 and 2013, Ciftci et al. (2019) indicated that corporate governance characteristic like board size, foreign ownership, and independent board membership were positively and significantly associated with ROA and Tobin's Q indicators. Kyere and Ausloos (2021) documented similar findings in United Kingdom. Regarding the Malaysian firms (113) for the period of 2007-2012, Bhatt and Bhatt (2017) ascertained that the Japanese corporate governance instructions had a positive impact on company performance measured by ROA, ROE, and return on invested capital (RIC). Similarly, based on a sample of 1412 manufacturing firms in Japan for the period of 2014-2018, Koji et al. (2020) demonstrated that institutional shareholding had a positive impact on company performance when Tobin's Q was taken into account. Also, the findings revealed that foreign ownership was a positive factor for promoting the performance of Japanese companies as far as ROA was concerned.

Conversely, based on a sample of 188 non-financial firms on the Malaysian stock market for the period of 2019-2020, Khatib and Nour (2021) discovered that board size had a negative impact on ROA and ROE. Benson and Ganda (2022) found similar results in South Africa. Another different finding was inferred by Danoshana and Ravivathani (2019) who reported that board size and audit committee were negatively associated with firm performance measured by ROE and ROA in Sri Lanka. Furthermore, based on a sample of 171 listed companies on the Saudi stock exchange from 2012 to 2014, Buallay et al. (2017) explored that the corporate governance had no significant effect on the ROE and ROA. Also, Arora and Sharma (2016) determined that the firm performance proxies ROE and profitability were not related to the corporate governance adoption among Indian companies.

Based on the preceding argument, the study assumes that GC and RMC formed by the board of directors are anticipated to increase firm performance, which leads to the development of the following hypotheses:

H1: Governance committee is positively associated with firm performance.

H2: Risk management committee is positively associated with firm performance.

CEO tenure, reflecting the duration a chief executive has been in office may have negative consequences on firm performance (Henderson et al., 2006). The prolonged leadership may result in complacency, a resistance to change, or a lack of adaptability (Miller, 1991). CEOs with lengthier tenures might become rooted in established practices, potentially preventing innovation and responsiveness to evolving market dynamics (Antia et al., 2010). Bernstein et al. (2016) highlighted that this could be attributed to a potential decline in the agility and adaptability required for sustained competitiveness.

Previous research has extensively investigated the effect of governance structures on company performance (e.g., Farooq et al., 2021; Munisi & Randøy, 2013; Naz et al., 2022; Puni & Anlesinya, 2020; Tomar & Bino, 2012). The existence of board committees such as GC and RMC is assumed to be linked to improved transparency, accountability, and risk management (Kyere & Ausloos, 2021; Paminto et al., 2022). Nevertheless, the effectiveness of these committees in enhancing firm performance may vary based on contextual factors, such as the tenure of the CEO (Huang & Hilary, 2018). CEO tenure is a critical factor that can influence the dynamics of corporate governance (Choi et al., 2019). This hypothesis aims to contribute to a understanding of how agency dynamics evolve over the course of CEO tenures, shedding light on the intricate interplay between governance mechanisms and the leadership characteristics of CEOs in influencing overall company performance (Ghardallou, 2022).

The behavioral theory of corporate governance emphasizes the importance of understanding the human and social aspects of corporate decision-making (VanEes et al., 2009). CEO tenure is considered an important element that can influence managerial behavior and decision-making. Examining CEO tenure as a moderating factor within the framework of the behavioral theory allows an understanding of how the interactions between CEOs and board committees change over time (Huse et al., 2011). The behavioral theory of corporate governance suggests that the increasing of CEO tenure weakens the positive relationship between the presence of board committees and company performance weakens (Gabrielsson & Huse, 2004). Longer CEO tenures may introduce complexities between CEOs and board committees which may minimize the effectiveness of these committees in influencing and enhancing overall company performance (Huang & Hilary, 2018).

Drawing from the agency theory perspective, the positive impact of GC and RMC on firm performance is contingent on CEO tenure. The length of CEO tenure may reduce the alignment of managerial actions with shareholder interests (Choi et al., 2019). However, the interaction effect of CEO tenure on the relationship between GC, RMC, and company performance implies that the positive influence of these committees diminishes as CEOs accumulate more experience and knowledge about the company. In this regard, McClelland et al. (2012) provided evidence indicating that when CEOs have an extended tenure and are older, it gives rise to a horizon problem. In essence, the prolonged leadership of CEOs contribute to challenges that manifest as higher agency costs, lower quality in accrual reporting, and a deterioration in the anticipated future performance of the organization. Antia et al. (2010) and Bernstein et al. (2016) stated that the adverse effects derived from the longer CEO tenure might arise from factors like organizational inertia, resistance to change, or a potential decrease in the adaptability when led by a CEO for an extended period.

Based on this line of reasoning, the current research posits that over extended CEO tenures, the effectiveness of GC and RMC in enhancing firm performance decline. Consequently, the study establishes the following hypotheses:

H3: CEO tenure is negatively associated with firm performance.

H4: CEO tenure weakens the association between governance committee and firm performance.

H5: CEO tenure weakens the association between risk management committee and firm performance.

3. Research Method

3.1. Sample and Data Collection

For the study, the sample includes all non-financial firms listed on ASE from both service and manufacturing sectors for the period spanning from 2018 to 2022. Following previous research (e.g., Farooq et al., 2021; Naz et al., 2022; Neves et al., 2022), financial institutions are excluded from the analysis due to of their different regulatory requirements and operating norms from those of non-financial institutions. Further, the selected companies must meet a set of criteria to be included in the study's sample, such as, the company's financial reports must cover the period of the study and be obtainable through the ASE website, companies remain listed and in operation throughout the duration of the study, and companies with acquisitions or mergers during the period of study were removed from the dataset. After these procedures, the study confines the sample to 64 listed companies over a period of 5 years, resulting in a total of 320 firm-year observations for the analysis.

This data in this research was entirely derived from secondary sources. Data on GC, RMC, CEO tenure, firm performance proxies, and control variables were hand-collected from the annual report of these firms published on the ASE website (www.ase.com.jo). The period of the research spans from 2018 to 2022. This period is after issuing the "instructions of corporate governance for shareholding listed companies for the year 2017" which were effective as of 22/5/2017. The new code stated that all Jordanian publicly traded companies on ASE must establish GC and RMC formed by the board of directors. Thus, the time frame should not initiate before 2018.

3.2. Variables and measures

In line with previous literature (e. g., Ciftci et al., 2019; Farooq et al., 2021), the selection of a single performance indicator may be deceptive. For example, Dalton et al. (1999) emphasizes the limitations of using accounting performance measures because they can be manipulated. However, using three several parameters of firm performance should provide more solid ground for investigating the association between corporate governance mechanisms and firm performance (Harymawan et al., 2020; Mertzanis et al., 2019). Further, this research seeks to provide a comprehensive understanding of how effective governance practices influence diverse aspects of performance evaluation. This approach enriches the insights into the complex relationship between corporate governance and organizational performance.

Concerning the control variables, Bhagat and Bolton (2019) highlights that firm characteristics, namely, firm size (FSIZE), debt ratio (DEBT), company age (CAGE), and Industry (INDUS) are significant determinants of company performance. Accordingly, these characteristics were composed in this study as control variables in order to minimize their confounding effects. Furthermore, four corporate governance mechanisms related to the board of directors and the

chief executive officer (CEO) were included as control variables to mitigate their impact. These attributes encompass board size (BSIZE), Independent board membership (BIND), frequency of board meetings (BMEET), and CEO duality (CDUL). Table 1 offers a summary of all the variables' measurements examined in this research.

Table 1: Definition of Variables

<i>Variable title</i>	<i>Variable description</i>
Dependent Variables	
ROA	The company's annual net income divided by its total book value of assets (Shaban & Barakat, 2023; Dodoo et al., 2023).
ROE	The company's annual net income divided by its shareholder's equity (Ayoush et al., 2021; Farooq et al., 2021).
Tobin's Q	The market value of the company's assets to its total book value of assets (Munisi & Randøy, 2013; Toumeh et al., 2023).
Independent Variables	
GC	The value of 1 if the company had a governance committee operating during the year and 0 if otherwise (CGC, 2017).
RMC	The value of 1 if the company had a risk management committee operating during the year and 0 if otherwise (CGC, 2017).
Moderator Variable	
CTNR	The number of years of service as CEO (Ofori-Sasu et al., 2023)
Board specific controls	
BSIZE	The number of directors appointed on board (Mertzanis et al., 2019).
BIND	The value is assigned as 1 when the board of directors adheres to independence according to the Jordanian CGC, and as 0 if this is not the case (CGC, 2017).
BMEET	The Number of the board of director's meetings in one year (Abu Afifa et al., 2022)
CDUL	The value of 1 if the CEO also serves as a chairperson and 0 if otherwise (Puni & Anlesinya, 2020).
Firms specific controls	
FSIZE	The natural logarithm of the firm's total assets (Toumeh et al., 2021).
DEBT	The ratio of a company's total debt (long and short term) to its total assets (Neves et al., 2022).
CAGE	The natural logarithm of the number of years since the establishment of a company (Koji et al., 2020).
INDUS	The value is set to 1 when the company is classified within the manufacturing industry, and to 0 if otherwise (Ciftci et al., 2019).

3.3. Empirical Models

To assess which model of panel data is suitable for an analysis, various statistical methods were conducted. To begin, the *F*-test was used to select between a pooled ordinary least squares (OLS) model and a fixed-effect model. Second, the Breusch–Pagan Lagrangian Multiplier (LM) test was undertaken to determine whether the pooled OLS model or random

effects model should be employed. Third, the Hausman test was utilized to decide whether panel data was appropriate and whether the fixed effect regression model or random effects model should be applied for the panel data analysis (Baltagi, 2008; Gujarati & Porter, 2010). The results of both *F*-test and Hausman test were insignificant indicating that the fixed-effect model was not appropriate. The test finding of Breusch–Pagan (LM) test yielded a chibar2 value of 66.84 with a 1% significance level suggesting that the random-effects model is proper estimation technique for the dataset.

To examine the relationships among the response, independent, moderator, and control variables, company performance was proxied by three indicators, ROA, ROE and Tobin's Q; thus, the current research developed three random-effects regression models as follows:

$$\begin{aligned} \text{ROA}_{it} = & \beta_0 + \beta_1 \text{GC}_{it} + \beta_2 \text{RMC}_{it} + \beta_3 \text{CTNR}_{it} + \beta_4 \text{GC}_{it} * \text{CTNR}_{it} + \beta_5 \text{RMC}_{it} * \\ & \text{CTNR}_{it} + \beta_6 \text{BSIZE}_{it} + \beta_7 \text{BIND}_{it} + \beta_8 \text{BMEET}_{it} + \beta_9 \text{CDUL}_{it} + \beta_{10} \text{FSIZE}_{it} + \\ & \beta_{11} \text{DEBT}_{it} + \beta_{12} \text{CAGE}_{it} + \beta_{13} \text{INDUS}_{it} + \varepsilon_i + u_{it} \end{aligned} \quad (1)$$

$$\begin{aligned} \text{ROE}_{it} = & \beta_0 + \beta_1 \text{GC}_{it} + \beta_2 \text{RMC}_{it} + \beta_3 \text{CTNR}_{it} + \beta_4 \text{GC}_{it} * \text{CTNR}_{it} + \beta_5 \text{RMC}_{it} * \text{CTNR}_{it} + \\ & \beta_6 \text{BSIZE}_{it} + \beta_7 \text{BIND}_{it} + \beta_8 \text{BMEET}_{it} + \beta_9 \text{CDUL}_{it} + \beta_{10} \text{FSIZE}_{it} + \beta_{11} \text{DEBT}_{it} + \\ & \beta_{12} \text{CAGE}_{it} + \beta_{13} \text{INDUS}_{it} + \varepsilon_i + u_{it} \end{aligned} \quad (2)$$

$$\begin{aligned} \text{Tobin's Q}_{it} = & \beta_0 + \beta_1 \text{GC}_{it} + \beta_2 \text{RMC}_{it} + \beta_3 \text{CTNR}_{it} + \beta_4 \text{GC}_{it} * \text{CTNR}_{it} + \beta_5 \text{RMC}_{it} * \\ & \text{CTNR}_{it} + \beta_6 \text{BSIZE}_{it} + \beta_7 \text{BIND}_{it} + \beta_8 \text{BMEET}_{it} + \beta_9 \text{CDUL}_{it} + \beta_{10} \text{FSIZE}_{it} + \\ & \beta_{11} \text{DEBT}_{it} + \beta_{12} \text{CAGE}_{it} + \beta_{13} \text{INDUS}_{it} + \varepsilon_i + u_{it} \end{aligned} \quad (3)$$

where β_0 is the constant term, β_1 – β_{13} are the parameters for the independent, moderator, and control variables, ROA and ROE denote accounting-based performance, Tobin's Q denotes The market-based performance, GC denotes governance committee, RMC donates risk management committee, CTNR denotes the CEO tenure, BSIZE donates the board size, BIND donates the board independence, BMEET donates to board meeting frequency, CDUL donates CEO duality, FSIZE donates the firm size, DEBT donates the company leverage, CAGE donates the company age, INUDS donates to industry, ε_i donates to the firm-specific random effect and u_{it} donates to the idiosyncratic (time-varying) error.

4. Empirical analyses and discussion

4.1 Descriptive analysis

Table 2 summarizes descriptive statistics for the full sampled firms including the mean, standard deviations, minimum and maximum for all variables considered in the analysis. As previously stated, this research utilized three different performance metrics to evaluate company performance, namely, ROA ROE and Tobin's Q. The mean value of ROA was 4.1% with a minimum and maximum value of -23.8% and 37.7%, respectively. ROE ranged from -29.2% to 51%, with an average of 6.7%. Table 2 shows that the Tobin's Q varied from 0.01% to 12.9%, with an average of 1.5%. Moreover, the average tenure for a CEO in this position is 4 years, with a range spanning from a minimum of two years to a maximum of 15 years. Also, Table 2 demonstrated that approximately 68% and 67% of the sampled companies established GC and RMC, respectively.

Table 2: Descriptive Statistics

Variable	Observations	Mean	Std. Dev	Minimum	Maximum
ROA	320	0.041	0.081	-0.238	0.377
ROE	320	0.067	0.120	-0.292	0.510
Tobin's Q	320	0.015	0.016	0.001	0.129
GC	320	0.668	0.467	0	1
RMC	320	0.653	0.470	0	1
CTNR	320	4.266	1.928	2	15
BSIZE	320	7.603	2.429	4	13
BIND	320	0.660	0.475	0	1
BMEET	320	7.422	1.928	3	15
CDUL	320	0.409	0.492	0	1
FSIZE	320	17.503	1.445	13.791	21.037
DEBT	320	0.347	0.240	0.001	0.966
CAGE	320	2.269	0.468	1.098	3.401
INDUS	320	0.469	0.499	0	1

4.2 Diagnostic tests

This subsection reports the diagnostic tests that were conducted to inspect the panel data assumptions of multicollinearity, autocorrelation, heteroscedasticity, and panel unit root (Hair et al., 2010). Table 3 shows the Pearson correlation that was utilized to determine the magnitude and direction of the correlation coefficients among the variables. The correlations between the independent variables and the various firm performance proxies were consistent. To avoid repetition, only the ROA proxy was included in the Pearson correlation test.

Table 3: Pearson Correlation

Variable	ROA	GC	RMC	CTNR	BSIZE	BIND	BMEET	CDUL	FSIZE	DEBT	CAGE	INDUS
ROA	1											
GC	0.149***	1										
RMC	0.017	-0.163***	1									
CTNR	0.687***	0.322***	0.176**	1								
BSIZE	-0.000	-0.049	0.070	0.029	1							
BIND	0.049	0.026	0.058	0.129**	-0.046	1						
BMEET	0.028	-0.021	0.135**	0.010	-0.065	-0.006	1					
CDUL	-0.001	-0.116**	-0.154***	-0.055	0.066	0.035	0.051	1				
FSIZE	0.062	0.165***	-0.150***	0.077	0.082	-0.037	-0.070	-0.005	1			

DEBT	-0.173***	0.068	-0.175***	-0.086	-0.119**	-0.053	0.064	0.161***	0.015	1		
CAGE	0.095*	0.108*	0.190***	0.104*	0.128**	0.041	0.029	-0.216***	-0.096*	-0.137**	1	
INDUS	-0.035	-0.070	0.066	-0.024	0.045	0.014	0.044	-0.005	-0.160***	-0.156***	0.108*	1
Notes: *, **, and *** denote significance levels of 0.1, 0.05, and 0.01, respectively												

In Table 4, the results revealed the absence of multicollinearity problem, as none of the correlation coefficients between the independent variables were highly correlated (≥ 0.80). Furthermore, Table 4 reports the variance inflation factor (VIF) and tolerance values among the independent variables as an additional diagnostic check for multicollinearity. None of the variance inflation factors were greater than 10, and none of the tolerance values were less than 0.10, confirming that multicollinearity issue did not exist in the dataset (Gujarati & Porter, 2010).

Table 4: Multicollinearity Test

Variable	VIF	tolerance values
GC	1.29	0.774
RMC	1.26	0.796
CTNR	1.23	0.813
BSIZE	1.07	0.935
BIND	1.03	0.970
BMEET	1.04	0.959
CDUL	1.13	0.886
FSIZE	1.10	0.912
DEBT	1.11	0.897
CAGE	1.15	0.870
INDUS	1.06	0.939
Mean VIF	1.13	

Concerning the heteroscedasticity assumption, two distinct tests were employed to determine whether the data was homoscedastic. Table 5 displays the findings of Breusch-Pagan/Cook-Weisberg and White's tests, which asserted that the null hypothesis of homoscedasticity was rejected concluding that the data exhibits heteroscedasticity (Stockemer, 2018). Therefore, the random-effects regression with Huber–White standard errors was employed to solve the issue of heteroscedasticity (Baltagi, 2008).

Table 5: Heteroscedasticity Tests

	Chi-Square(2) value / F-value	p-value
Breusch-Pagan/Cook-Weisberg Test	8.34	0.004
White's Test	165.61	0.000

In panel data analysis, the error terms should be uncorrelated and independently scattered to generate a statistically valid inference (Gujarati & Porter, 2010). To validate this assumption, the Wooldridge test for autocorrelation in panel data was employed. Table 6 illustrates that the null hypothesis of no first-order autocorrelation was accepted, implying that there was no serial correlation problem in this study.

Table 6: Autocorrelation Test

	Chi-Square(2) value / F-value	p-value
Wooldridge Test for Autocorrelation in Panel Data	0.041	0.839

Finally, the Harris-Tzavalis test for data stationarity was used, which is appropriate for determining unit roots in a micro panel (Hlouskova & Wagner, 2006). In Table 7, the p-values for all key variables were below the 0.05 significance level. Thus, the panel data estimations were stationary.

Table 7: Harris–Tzavalis Test

Variables	Statistic	Z	p-value
ROA	-0.467	-15.873	0.000
ROE	-0.149	-10.649	0.000
Tobin's Q	-0.398	-14.743	0.000
GC	-0.272	-12.672	0.000
RMC	-0.195	-11.408	0.000
CTNR	-0.294	-13.033	0.000

4.3 Multivariate regression results

Table 8 presents the findings of random-effects regression with Huber–White standard errors. ROA, ROE and Tobin's Q models were deemed fit and statistically significant at 0.01 level with the Wald χ^2 of 98.14, 56.93, and 47.76, respectively. This indicated that the results of the random-effects models, on the whole, were statistically valid. Moreover, the R-squared within the models were almost 57%, 32% and 14%, respectively, indicating that the percentages of the dependent variables' variations explained by the independent variables were satisfactorily.

As anticipated in H1, the presence of GC had a positive and significant effect on the company performance in the ROA model at the 0.05 significance level and in the ROE model at the 0.10

significance level. This finding means that the existence of GC increased the company performance indexed by ROA and ROE. The validation of H1 was partially confirmed. In the Tobin's Q model, the positive effects were noted, yet they were not statistically significant. The GC's primary responsibilities include ensuring that the company follows the provisions of corporate governance instructions, as well as developing written procedures for the implementation of corporate governance attributes and evaluating their validity on an annual basis. In this sense, previous studies (e. g., Bhatt & Bhatt, 2017; Ciftci et al., 2019; Munisi & Randøy, 2013; Neves et al., 2022; Puni & Anlesinya, 2020) have shown comparable results that a good corporate governance system was a positive aspect of promoting the performance.

On the other hand, Table 8 shows that the presence of RMC was positively and significantly related to the ROA and Tobin's Q at the 0.05 and 0.10 level, respectively. The prediction of H2 was partially supported by the fact that companies with RMC demonstrated higher financial performance, as the results of ROE model reported a positive effect, but the impacts were insignificant. From a theoretical perspective, these outcomes support the agency theory, assuming that an effective corporate governance improves the quality of corporate financial reporting and reduces agency costs, which leads to better company performance (Langan et al., 2022).

Viewed from the lens of behavioural theory of corporate governance (Huse et al., 2011; VanEes et al., 2009), the positive nexus between GC and RMC, and company performance can be understood within this framework. This theory highlights the influence of cognitive biases, emotions, and social interactions on organizational decision-making. The presence of GC and RMC signifies a proactive approach to governance that promotes transparency and risk management. Within the framework of the behavioural theory, these committees are likely to encourage better decision-making by boosting diverse perspectives and mitigating cognitive biases. Moreover, they can contribute to a culture of responsible behaviour, aligning actions with long-term value creation. Thus, the observed positive relationship can be attributed to the behavioural contingencies introduced by GC and RMC, aligning with the principles of the behavioural theory and emphasizing the significant role of governance structures in influencing behaviour and outcomes within organizations. In addition, the evident positive effect of GC and RMC supports the claim made by agency theory that effective corporate governance reduces information asymmetry between managers and shareholders. This, in turn, enhances the quality of financial reporting, and reduce agency costs, thus fostering improved company performance.

The CEO tenure variable exerted a positive and significant effect on company performance at the 0.01 significance level in all models, contrary to the predictions of H3. Moreover, concerning the moderation effect of CEO tenure on the relationships between CG, RMC, and company performance, the regression finding reveals that the interaction term GC*CTNR had a negative and significant influence in ROA and ROE models at the 0.01 and 0.10 levels, respectively, while being insignificant in the Tobin's Q model. This provides partial support for H4, implying that CEO tenure weakens the nexus between CG and firm performance. Likewise, the interaction term of RMC*CTNR was negative and significant across all models at the 0.01, 0.10, and 0.50 levels, respectively, supporting H5. This suggests that CEO tenure weakens the link between RMC and firm performance. The results are consistent with prior researchers (e.g., Antia et al., 2010; Bernstein et al., 2016; Choi et al., 2019; Huang & Hilary, 2018; McClelland et al., 2012) who indicated that the interaction effect of CEO tenure weakened the positive relationships between GC, RMC, and company performance as CEOs accumulate more experience and knowledge about the firm. This may contribute to challenges

exhibited as higher agency costs, lower quality in accrual reporting, and a decline in the predicted future firm performance.

Finally, BIND demonstrated a significant negative association with ROA at the 0.05 significance level. Also, BMEET displayed positive and significant association with ROE at the 0.05 level. DEBT was found to be negatively and significantly related to company performance in all models. Further, the coefficient of CAGE variable had a positive sign in all models but not significant, except for the ROE model, where the association was significant at the 0.10 level. Finally, all models showed that the influence of BSIZE, CDUL, FSIZE, and INDUS were not statistically significant.

Table 8: Random-effects Regression Models with Huber–White Standard Errors

Variable	ROA Model		ROE Model		Tobin's Q Model	
	Coefficients	z-stat	Coefficients	z-stat	Coefficients	z-stat
GC	0.037	2.49**	0.046	1.75*	0.004	1.43
RMC	0.035	2.07**	0.042	1.39	0.005	1.75*
CTNR	0.036	5.24***	0.033	3.67***	0.003	3.91***
GC*CTNR	-0.011	-3.35***	-0.009	-1.66*	-0.001	-1.55
RMC*CTNR	-0.013	-3.05***	-0.012	-1.70*	-0.002	-2.27**
BSIZE	-0.002	-1.50	-0.002	-1.12	0.000	0.54
BIND	-0.011	-2.14**	-0.005	-0.60	0.001	0.37

BMEET	0.002	1.38	0.005	2.02**	-0.000	-0.14
CDUL	0.001	0.09	0.013	1.02	-0.000	-0.30
FSIZE	0.001	0.32	0.009	1.30	-0.000	-0.17
DEBT	-0.032	-2.39**	-0.054	-1.86*	-0.008	-2.37**
CAGE	0.010	1.04	0.029	1.84*	0.002	0.90
INDUS	-0.008	-0.75	-0.010	-0.50	-0.004	-1.09
Constant	-0.102	-1.54	-0.283	-2.27**	0.006	0.46
R-squared	0.568		0.318		0.141	
Wald χ^2 (p-value)	98.14***		56.93***		47.76***	
Observations	320		320		320	

Note: *, **, and *** denote the significance level at 0.1, .05, and 0.01 respectively.

These empirical results contribute significantly to both theoretical and empirical aspects of the current study, which offer valuable insights on the relationships between contemporary corporate governance structures and company performance. As anticipated, the presence of GC and RMC yielded a notably positive impact on company performance. This outcome stresses the influential role of these committees in enhancing key performance indicators. Also, it was found that the moderating effect of CEO tenure declines the positive impact of GC and RMC on firm performance. Nevertheless, this investigation has the potential to significantly enrich the existing body of literature focused on corporate governance. Through a thorough exploration of the practical implementation of these regulations, this study expands its scope

beyond theoretical constructs, including the transformative influences they exert across diverse dimensions of firm performance. This approach provides a comprehensive understanding of how the recent corporate governance landscape sounds with the broader business environment, contributing to the advancement of both theory and practice.

4.5 Robustness Tests

The empirical results are subjected to a number of robustness analyses to determine their sensitivity to, first, a nonparametric alternative to Pearson correlation, and, second, the use of least absolute value (LAV) regression. Table 9 shows the findings of Spearman correlation among the variables of the study. None of the correlation coefficients among the explanatory variables were highly correlated (≥ 0.80). These results indicated that the outcomes of Spearman correlation test were comparable to the previously reported Pearson correlation findings.

Table 10 provides the regression results from the LAV regression models examining the association between firm performance proxies and independent variables, along with the moderating effects of CEO tenure throughout the entire study period. The application of LAV regression serves as a robustness check for the random effects model. LAV regression minimizes the sum of absolute deviations and gives inherent resistance to the influence of outliers. This feature makes this regression model particularly appropriate for situations where the presence of extreme observations can unduly impact the standard least squares estimates (Dielman, 1986). Additional analysis showed a significant relationship between board committees and company performance. While certain variables exhibited varying degrees of influence, their direction and significance remained largely consistent. Nonetheless, the coherence of outcomes in both models indicates the validity and reliability of the key findings provided in Table 8. Supplementary assessments confirmed the robustness of research results across different statistical analyses.

Table 9: Spearman Correlation

Variable	ROA	GC	RMC	CTNR	BSIZE	BIND	BMEET	CDUL	FSIZE	DEBT	CAGE	INDUS
ROA	1											
GC	0.175***	1										
RMC	0.047	-0.206***	1									
CTNR	0.685***	0.373***	0.183***	1								
BSIZE	-0.037	-0.043	0.075	-0.003	1							
BIND	0.053	0.026	0.058	0.118**	-0.041	1						
BMEET	0.021	-0.011	0.131**	0.041	-0.019	0.024	1					
CDUL	0.035	-0.116**	-0.154***	-0.067	0.061	0.035	0.033	1				
FSIZE	0.080	0.144***	-0.148***	0.090	0.104*	-0.050	-0.084	0.079	1			
DEBT	-0.172***	0.066	-0.148***	-0.097*	-0.127**	-0.051	0.036	0.110**	0.015	1		
CAGE	0.080	0.099*	0.191***	0.101*	0.156***	0.049	0.033	-0.203***	-0.074	-0.151***	1	
INDUS	-0.013	-0.071	0.066	-0.048	0.035	0.015	0.039	-0.005	-0.193***	-0.115**	0.115**	1
Notes: *, **, and *** denote significance levels of 0.1, 0.05, and 0.01, respectively												

Table 10: Least Absolute Value Regression Models

Variable	ROA Model		ROE Model		Tobin's Q Model	
	Coefficients	t-stat	Coefficients	t-stat	Coefficients	t-stat
GC	0.030	2.56**	0.031	1.80*	0.001	0.51
RMC	0.039	3.16***	0.046	2.59**	0.002	2.20**
CTNR	0.037	12.39***	0.033	7.54***	0.003	13.95***
GC*CTNR	-0.010	-3.78***	-0.008	-2.06**	-0.001	-3.30***
RMC*CTNR	-0.013	-4.77***	-0.012	-3.08***	-0.001	-4.38***
BSIZE	-0.001	-0.43	-0.002	-1.02	-0.000	-2.05**
BIND	-0.009	-1.58	0.019	2.30**	-0.000	-0.30
BMEET	-0.000	-0.06	0.001	0.83	-0.000	-0.91

CDUL	0.012	2.01**	-0.003	-0.30	0.000	0.67
FSIZE	-0.002	-0.99	0.010	3.64***	-0.000	-0.93
DEBT	-0.023	-1.88*	-0.029	-1.64*	-0.003	-3.01***
CAGE	0.008	1.32	0.003	0.33	0.001	2.67***
INDUS	-0.004	-0.69	-0.007	-0.87	0.000	0.40
Constant	-0.065	-1.55	-0.256	-4.21***	0.004	1.11
Pseudo R^2	0.287		0.163		0.207	
Observations	320		320		320	

Note: *, **, and *** denote the significance level at 0.1, .05, and 0.01 respectively.

Conclusion

According to the most recent issue of Jordan's CGC, published in May 2017, listed firms are required to form GC and RMC. This change in emphasis from "comply or explain" to mandatory establishment of board committees is noteworthy, because no research on the presence of such committees has been carried in Jordan. Accordingly, this study contributes to tackling this issue by investigating the existence of both GC and RMC and their impacts on company performance measured by ROA, ROE, and Tobin's Q. In addition, it examines the moderating influence of CEO tenure on these links.

The objective of this research was to assess how the GC and RMC were capable to effect the firm financial performance, with a particular focus on understanding how CEO tenure functions as a moderator in these associations. To examine these relationships, the sample included 320 firm-year observations of non-financial companies listed on ASE during the period 2018 to 2022. The empirical analysis revealed that the presence of GC and RMC were positively and significantly related to firm performance proxies, which was consistent with the theoretical predictions. This means that the implementation of the new CGC in Jordan assisted listed firms in improving their financial performance. The findings were consistent with an agency theory view that monitoring mechanisms would improve the quality of financial reporting and reduce agency costs, thereby boosting financial performance. Furthermore, the current study provides conclusive evidence that in Jordan, CEO tenure weakens the positive nexus between GC, RMC, and firm performance.

The study documented empirically, for the initial time in literature, that the formation of both GC and RMC were linked to higher company performance. The discoveries obtained from this study have significant policy implications for government agencies, policymakers, board of directors, public corporation executives, and shareholders. For example, it suggests that efforts be made to strengthen the execution of the recent code, while also urging institutional bodies to contribute in introducing these governance shifts. Moreover, the study encourages listed firms to follow the recent edition of CGC to ensure efficient oversight of the companies' operations, and hence lowering agency costs and enhancing performance. Also, the findings are significant for regulators who are looking to develop novel policy initiatives in hopes of creating an improved legislative framework that enhances investor confidence and tends to attract further foreign capital. Finally, the identified weakening impact of CEO tenure on the associations between GC, RMC, and firm performance in Jordan suggests that there may be a need for policy and governance reforms. Policymakers could consider implementing measures to address potential challenges linked to lengthy CEO tenures, ensuring a more robust and effective corporate governance structure.

This research is constrained by some limitations. First, the sample consisted 64 publicly traded firms, which are regarded large businesses in the context of Jordan, and therefore excluded small and medium-sized enterprises due to the lack of unlisted firm's financial reports. Thus, future studies may include those companies in order to offer a comprehensive evidence. Second, the current research concentrated on service and industrial firms in the non-financial sector. As the financial firms were excluded from the sample, some caution would be required before making generalization. Third, the study focused on the influence of the recent CGC on company performance in Jordanian context. Therefore, future research may be directed toward a cross-country investigation to compare the recent edition of Jordan's CGC with those of other contexts. Finally, the study did not cover all aspects of corporate governance. As a result, future research is encouraged to incorporate additional attributes like board diversity, ownership structures, other sub-committees, and country-level governance.

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