THE INFLUENCE OF OWNERSHIP STRUCTURE ON CORPORATION PERFORMANCE: EVIDENCE FROM SAUDI LISTED CORPORATIONS

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OPEN ACCESS

How to cite this paper: Alruwaili, T. F., Al-Matari, E. M., Mgammal, M. H., & Alnor, N. H. A. (2024). The influence of ownership structure on corporation performance: Evidence from Saudi listed corporations [Special issue]. *Corporate & Business Strategy Review, 5*(1), 450–462. https://doi.org/10.22495/cbsrv5i1siart18

ISSN Online: 2708-4965
ISSN Print: 2708-9924

Received: 15.10.2023
Accepted: 18.03.2024

JEL Classification: G3, G32, L25
DOI: 10.22495/cbsrv5i1siart18

Abstract

The significance of a company's ownership structure (OST) is reflected in how it impacts the process of making decisions and the allocation of profits within the organization. Based on that, this article aims to inspect the connection between OST and corporation performance (CP). The current study employed an empirical strategy that entailed the development of comprehensive ordinary least squares (OLS) measures, which were then applied to a sample of 199 financial and non-financial firms listed on the Saudi market between the years 2015 and 2021, amounting to a total of 1393 observations. The statistical findings supported the impact of managerial ownership (MGOW), institutional ownership (INOW) and government ownership (GOOW) on CP. On the contrary, foreign ownership (FOOW) and ownership concentration (OWCO) have a negatively significant relationship with CP. This article is one of the few empirical studies that look at how OST affects CP. In addition, it is the first study in the Kingdom of Saudi Arabia (KSA) that examines the impact of the OST components (administrative, institutional, foreign, governmental ownership, and ownership concentration) on the performance of companies in all sectors of financial and non-financial companies.

Keywords: Managerial Ownership, Institutional Ownership, Foreign Ownership, Government Ownership, Ownership Concentration, Corporation Performance

Authors' individual contribution: Conceptualization — T.F.A. and N.H.A.A.; Methodology — E.M.A.-M. and M.H.M.; Software — E.M.A.-M.; Validation — T.F.A. and M.H.M.; Formal Analysis — T.F.A. and E.M.A.-M.; Investigation — M.H.M.; Resources — T.F.A.; Data Curation — T.F.A. and N.H.A.A.; Writing — Original Draft — T.F.A., E.M.A.-M., M.H.M., and N.H.A.A.; Writing — Review & Editing — T.F.A., E.M.A.-M., M.H.M., and N.H.A.A.; Visualization — T.F.A., E.M.A.-M., M.H.M., and N.H.A.A.; Supervision — T.F.A. and E.M.A.-M.; Project Administration — E.M.A.-M.; Funding Acquisition — T.F.A.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

Acknowledgements: This work was funded by the Deanship of Scientific Research at Jouf University under Grant No. DSR2023-NF-12.

1. INTRODUCTION

The universal financial crisis of 2008 demonstrated the significance of corporate governance (CG) as one of the primary reasons for crisis risk reduction for some businesses. Before the crisis and the rise of several corporate issues, many nations around the globe did not consider CG a vital issue. As authorities proposed and enacted some reforms in CG and ownership structure (OST) in the early twenty-first century (Alabdullah, 2018), CG became a critical problem. Various modifications have been made to the Companies Law, the Securities and Exchange Law, and other pertinent laws, such as the establishment of a compliance management system, an audit committee, risk management, and internal control, as well as the advancement of stockholder rights (Kao et al., 2019). These changes are intended to improve the country's business governance. Adhering to good CG practices helps build trust and confidence among stakeholders and enhances a company's reputation. In today's business world, where transparency and accountability are highly valued, companies must ensure that their CG practices are effective and efficient. By doing so, they can prevent legal and reputational risks and ensure their long-term success. Moreover, a robust CG structure promotes a culture of ethical conduct and helps businesses to attract and retain talented employees who value ethical practices. Therefore, companies must continue to prioritize the adoption of comprehensive governance frameworks to promote ethical practices within their organizations.

Corporate governance holds great significance, but corporate controversies and mistakes are prevalent. Incidents like Enron, WorldCom, and Arthur Andersen have led to debates about whether businesses should adopt new governance perspectives or stick to their existing ones. Such incidents have sparked debates about whether or not companies should adopt new governance structures or stick to their present perspectives. It's a delicate balancing act between responsibility and autonomy that businesses must manage effectively to avoid a similar fate. In such scenarios, bankruptcy or sale can be considered viable options. To achieve strategic objectives and augment shareholder wealth, adopting new approaches to evaluate and manage company performance is essential (Alabdullah, 2018). This article assesses the influence of shareholding structure on the performance of listed corporations in the Saudi Arabian market. Kao et al. (2019) used a sample of such companies and measured their performance using return on assets, market-to-book value (MTBV), total assets, and financial leverage. In recent years, there has been a renewed focus on corporate social responsibility (CSR) as a way for companies to ensure that they are operating ethically and transparently. Many businesses are now seeing the benefits of adopting CSR practices and are using them to enhance their brand image and reputation. However, some still believe such initiatives are a way to keep up appearances and do not necessarily lead to tangible results. Ultimately, the question of whether or not corporations should embrace CSR is still being debated, and companies will need to carefully consider their own goals and values before making a decision.

The Organization for Economic Co-operation and Development (OECD) defines CG as a factor that influences how businesses are managed and controlled, ultimately impacting their performance (Citaristi, 2022). In accordance with Dakhlallh et al.'s (2021) research, CG helps to align the interests of stakeholders and an organization's objectives. The Kingdom of Saudi Arabia (KSA) has previously tested a few of these components (Babatunde & Olaniran, 2009; Ogabo et al., 2021). The Capital Market Authority (CMA) regulates the Saudi Stock Exchange (Tadawul), which has 227 listed companies as of December 31, 2021, many family-owned, including the Saudi royal family (Albassam, 2015; Boshnak, 2023). Despite earlier restrictions on international investors in Tadawul's equity markets, overseas investors have been allowed to invest since June 2015 (Alzyadat & Asfoura, 2021; Boshnak, 2023).

Corporate governance involves directing, organizing, controlling, and decision-making policies that improve the company's value (Hong & Linh, 2023). The main goal of a company's management is to maximize shareholders' wealth. However, other interested parties like management, employees, and creditors aim to maintain and increase their interests (Alabdullah, 2018). To achieve sustainability and growth, all internal and external stakeholders' interests must be considered (Abdullah & Tursoy, 2023). Several previous studies utilized different statistical programs to test their hypotheses, such as regression using SPSS (Alabdullah, 2021), Stata (Altawalbeh, 2020), Eview (Hermawan, 2023), partial least squares (PLS) (Mandiri et al., 2023), two-stage least squares (2SLS) (Kao et al., 2019), panel auto-vector regression (PVAR) (Mandiri et al., 2023), and panel regression (Laporšek et al., 2021). Some studies used AMOS 23 to examine the direct and indirect effects of the OST on company performance, where the board of directors' characteristics played a mediating role (Rashid, 2020) using Baron and Kenny's (1986) four-step procedure. Furthermore, other studies used panel regression (Laporšek et al., 2021).

For some countries, studies examined the role of OST on financial performance in emerging nations, such as Alabdullah (2018), Dodoo et al. (2023), Hanafi et al. (2018), Hermawan (2023), Hong and Linh (2023), Kao et al. (2019), Rashid (2020), Ronoowah and Seetanah (2023). Furthermore, some previous studies took the same variables in developed countries, such as Abdullah and Tursoy (2023), Adelopo et al. (2023), Laporšek et al. (2021). Few previous studies examined CG and OST and their impact on company performance in the KSA (Boshnak, 2023). Some earlier studies examined the role of OST on company performance in a specific sector, such as the banking sector, as in a study by Ogiriki and Kelvin (2023) and Habtoor (2021). Others examined this topic on small entrepreneurial firms founded by an immigrant in developed economies such as the United States of America (USA) (Moghaddam et al., 2023). Despite the widely held belief that a firm's success is largely influenced by its relationship with its owner(s), study on OST remains valuable. Previous research has primarily focused on the connection between OST, business practices, and corporate performance, particularly within developed nations. However, concentrated ownership in emerging economy firms can lead to conflicts between minority and majority shareholders, adversely affecting business performance. Investigating managerial, government, institutional, foreign ownership (FOOW), and ownership concentration (OWCO) as categories can help comprehend these disputes and their relation to business performance (Boshnak, 2023).

This paper presents a fresh perspective on the relationship between OST and company performance in the KSA by employing managerial, institutional, government, and FOOW and OWCO as indicators to assess the performance of Saudi Arabian firms. There is a substantial knowledge deficit regarding the connection between different types of ownership and OWCO in developing markets such as the KSA. The research conducted by Amin and Hamdan (2018) and Boshnak (2023) aims to fill this gap by examining the impact of OST characteristics on company performance in this particular context. The findings of this study could illuminate the significance of OWCO in a developing market like the KSA and offer insightful information to regional stakeholders and policymakers. Additionally, this research contributes uniquely to the literature on CG and performance in both developed and developing countries (Amin & Hamdan, 2018).

The research findings support the conclusion that the OST of a company significantly affects its performance. Institutional and government OST have a positive relationship with the company's performance, as identified in previous studies (Iwasaki et al., 2022). Earlier studies in Ghana found no significant relationship between capital structure and CP (Dodoo et al., 2023). However, other studies have discovered that the OST significantly affects financial performance (Alabdullah, 2021; Dakhlallh et al., 2021; Ogiriki & Kelvin, 2023). Finally, the study uses the framework of the emerging and developed economy as observed in the KSA, which differs from the framework of the economy in the rest of the world regarding institutional and legal frameworks. Thus, facilitating comparison with other economic frameworks is expected.

This article sheds light on an important yet under-examined issue in the finance and accounting field: the relationship between OST characteristics and company performance. While the topic has been a subject of heated debate, the focus has primarily been on developed markets. This paper aims to investigate the impact of different OST on CP by examining evidence from Saudi-listed companies. OST discussed in this paper include managerial ownership (MGOW), institutional ownership (INOW), FOOW, government ownership (GOOW), and OWCO. This study aims to fill a gap by offering actual data to facilitate well-informed decision-making in the KSA's emerging market. By analyzing accounting- and market-based performance indicators, the study aims to comprehensively understand the impact of various OST on company performance. The research findings, based on conventional regression and ordinary least squares (OLS) data analysis for robustness, will contribute to the existing body of literature and offer valuable insights into the factors that determine the success of companies in the Saudi Arabian market. The paper explores the relationship between these OST and CP in the KSA. The findings of this paper will be significant in improving the understanding of how OST can influence CP. An empirical approach was employed to achieve this, which involved creating detailed measures of ownership structure. These measures were then applied to 199 financial and non-financial firms listed on the Saudi market between 2015 and 2021. The statistical findings indicate that MGOW, INOW, and GOOW positively impact CP, whereas FOOW and OWCO have a negative impact. This study is significant as it is one of the few empirical studies to examine the relationship between OST and CP. It is the first to do so in the KSA across all sectors of financial and non-financial companies.

The subsequent sections of this study are organized as follows. Section 2 of the paper presents an overview of the literature and theories' evolution, followed by Section 3, which explains the approach taken to study and analyze the articles collected for the research. The study results and interpretation are covered in Sections 4 and 5 of the paper. Finally, Section 6 includes the conclusion, restrictions, and recommendations for further research.

2. LITERATURE REVIEW AND RESEARCH HYPOTHESES

Corporate governance includes mechanisms, transparency, accountability principles, fairness and responsibility in managing the company to preserve the interests of all relevant parties (Alabdullah, 2018). The owners of the investment idea or entrepreneurs collect capital from different categories of investors (who become owners once the shares are purchased) to drive production while obtaining a return. There is a question, how can the owners be sure that the company's management works in their interest. Agency theory indicates that management applies governance and works in the interest of all stakeholders (Rashid, 2020). Conflicts (conflict of interests) are expected to occur between the parties participating in the ownership of companies (Hanafi et al., 2018). The importance of CG cannot be overstated when it comes to ensuring that all parties involved in the management of a company are acting in the best interests of the owners and investors. Agency theory provides a framework that outlines how a company's management can be held accountable and responsible to all stakeholders to ensure transparency and fairness. However, conflicts of interest between the parties involved in the ownership of companies are often inevitable. Corporate governance measures and principles must be adhered to protect all relevant parties' interests. By doing so, entrepreneurs and investors can have confidence that the company's management is working in their best interest.

The OST of a company is essential to preserve the interests of both management and shareholders and to minimize the problems of agency theory and conflicts between the majority and minority shareholders. The company's OST is an essential element and is responsible for reducing the problems of agency theory between management and shareholders as well as conflicts between the majority and minority company's shareholders in order to preserve their interests (Othman et al., 2023). It is known that good governance improves company performance (Beiner et al., 2006; Black et al., 2006; Padachi et al., 2017; Ronoowah & Seetanah, 2023; Saif Ul Islam et al., 2022; Sheaba Rani & Adhena, 2017). The application of CG differs from one nation to another. The application of CG indicators reflects the local rules and practices within the country (Rashid, 2020; Black et al., 2015). Good governance has been proven to improve company performance, and the application of CG indicators can vary from nation to nation due to local rules and practices. Hence, comprehending the intricacies of a company's OST is crucial for ensuring its success and prosperity.

Corporate governance is the mechanism for controlling and directing companies to ensure that the interests of all stakeholders are promoted and protected. These are classified into external and internal CG mechanisms (Munisi, 2023). Internal CG mechanisms refer to the governance practices within the company, such as ownership structure, boards of directors, and internal controls. In contrast, external CG mechanisms refer to those in the external environment, including laws and rules that regulate the product or service market, labour market, financial market, and capital (Connelly et al., 2010; Munisi, 2023). Good CG is essential for the success of any organization, as it helps promote and protect the interests of all stakeholders. Ensuring that all CG mechanisms are in place and functioning properly is important to safeguard stakeholders' interests and the company's objectives.

Users of accounting information in companies are divided into internal, such as management, and external, such as owners, customers, government authorities, tax authorities, and others. The government, as a regulator, plays a policy-making role and acts as a supervisory body by issuing regulations and laws regulating the operations of companies operating within the country, regulating risk management standards in companies, as well as supervising the sustainability of companies and thus the economy (Mandiri et al., 2023). Accounting information plays a critical role in companies' internal and external success. Internal users of accounting information, such as management, rely on this data to make sound decisions concerning the company's operations and performance. On the other hand, external users of accounting information, such as owners, customers, government authorities, tax authorities, and others, use this data to evaluate the company's sustainability. The government also plays a key role in regulating companies' operations and ensuring sustainability by issuing regulations and laws that meet risk management standards. Mandiri et al. (2023) suggest that this regulatory role is essential for the stability of companies and the overall economy. Thus, it is evident that accounting information is essential for a multitude of stakeholders, making it essential for companies to ensure it is accurate and up-to-date.

Alabdullah (2018) study showed that management ownership of company shares positively affects financial performance in Jordan as an emerging economy. The research used multiple regression to analyze the samples of nonfinancial companies registered on the Amman Stock Exchange (ASE) in Jordan for 2012. Interestingly, the size of the company did not affect the company's performance, and the results indicated no influence of FOOW on company performance. These results provide valuable insight into the OST of companies in Jordan and the importance of effective management in achieving optimal financial results.

A corporation's FOOW performance may be impacted both favourably and unfavourably. Furthermore, the type of industry does not affect the company's performance. Moreover, strong CG is essential for all corporations. It should be inspired and supported for the benefit of whole stakeholders. Further, because FOOW does not affect the company's performance, the Jordanian government and other relevant mature parties would reform the rules for distant investors. Between 2015 and 2017, this study analyzed 527 annual reports of public limited companies listed in Bangladesh. Employing AMOS 23, it investigated the direct and indirect impact of OST on firm performance.

On the one hand, FOOW may open up new markets, increase the company's reputation, and give it access to more financing. However, it can also result in cultural unrest, monetary misunderstandings, or political instability, which might negatively affect the company's operation. Therefore, businesses must consider all available options before choosing whether or not acquiring FOOW is the best course of action to improve performance. The management of a firm has the most impact on its performance. Success demands effective leadership and strategic planning since it calls for teamwork, sufficient funding and motivation, the execution of plans with clarity and efficiency, and knowledge of internal and external factors affecting the sector. Additionally, a solid CG framework may aid in ensuring decision-making is transparent and accountable. Additionally, vital elements for evaluating performance include good communication and outcomes monitoring.

A study conducted by Rashid (2020) utilized Baron and Kenny's (1986) four-step procedure to analyze the role of board characteristics as an intermediate variable. By examining the features of the company's board directors as a mediating variable, the study was able to conclude the correlation between OST and corporation performance (CP) in listed companies in Bangladesh. The examination results indicated that foreign and management ownership significantly affected corporate performance, while liability accounting and INOW had an insignificant but positive influence on return on assets (ROA) performance. The findings of this study are valuable in understanding the dynamics between OST and CP.

Mandiri et al. (2023) conducted research exploring the influence of CG board size and board member count on a company's capital structure and performance. Their study revealed that the magnitude and independence of board directors partially mediate the relationship between CG and corporate performance. Specifically, they analysed the impact of CG on various financial metrics, including the debt-to-equity ratio, capital adequacy ratio, return on investment, return on equity, and nonperforming loans of companies listed on the Indonesia Stock Exchange (IDX) from 2015 to 2019. This study underscores CG's significance of CG as a mediating factor, demonstrating its effectiveness in optimizing corporate performance. Abdullah and Tursoy (2023) investigated the association between CG and corporate performance in non-financial firms listed on the Frankfurt Stock Exchange (FWB) in Germany from 2002 to 2018. Their study utilizes accounting data to measure performance, focusing on ROA and return on equity (ROE). The findings indicated that the features of the audit committee and board directors negatively influenced financial performance, while the chief executive officer's (CEO) duplicity did not show statistical significance. Moreover, a higher number of directors results in decision-making delays within the German CG framework. The adoption of International Financial Reporting Standards in 2005 positively impacted company performance.

In addition, Hermawan (2023) conducted a study to explore the role of ownership structure, whistleblowing systems, and company size in detecting fraud, utilizing data from the annual reports of corporations listed on the IDX or affiliated companies. The sample consisted of 22 commercial banks from 2016 to 2020, with a total of 110 purposively selected samples. Hypothesis analysis was conducted using Eviews 11.0 with a random-effect (RE) analysis model. The findings revealed that INOW influenced disclosure and fraud detection, whereas management ownership and whistleblowing systems did not significantly affect fraud detection. Additionally, company size was found to strengthen the relationship between corporate and management ownership and weaken the relationship between whistleblowing systems and fraud detection. Moreover, numerous studies have addressed the influence of capital structure on company performance, yielding insights into the effect of corporate-taxes on capital-structure (Attia et al., 2023). Corporate fraud has become a major concern in today's business environment. This has led to increased research into the factors that may influence or contribute to corporate fraud. The studies discussed in this paper have shown that ownership structure, whistleblowing systems, and company size are important factors in detecting and preventing fraud. Further research is needed to understand better how these factors interact with each other and how they can be used to effectively prevent and detect fraud.

2.1. Managerial ownership and corporation performance

Management ownership is the current shareholders or owners who simultaneously manage the same company (Mgammal, 2011; Ogiriki & Kelvin, 2023). The board-directors are the fundamental CG mechanism that bears the trustworthiness of supervising the decisions of the executive management (Khatib & Nour, 2021). Some previous studies mentioned that the direction of a company with extensive ownership holdings often influences the board of directors to obtain higher incentives and the company's performance (Adelopo et al., 2023; Weisbach, 2007). The positive result of MGOW on the firm value may make managers act following shareholders' desires. Directors will be inspired to advance performance to produce high value for the company and thus achieve profits for themselves. The presence of management ownership leads to management's participation in decision-making for their company's benefit. The administrative ownership will harmonize the interests of management and other owners to benefit directly from the decisions taken in the general assembly meetings and bear part of the losses due to taking wrong decisions (Alsamhi & Barakat, 2020).

Based on previous studies, the results of them revealed that the management's ownership of the company's shares positively affects the company's performance such as Alabdullah (2018), Ogabo et al. (2021), and Rashid (2020). In this context, Habtoor's (2021) study in the KSA revealed that the bank's performance is meaningfully and certainly influenced by the ownership of the CEO and the ownership of the board-directors chairman, as well as the ownership of independent directors has a negative influence on the bank's performance. Furthermore, Habtoor's (2021) empirical studies concluded that MGOW negatively affects performance (Hossain et al., 2021; Mgammal, 2017).

Agency theory means separating company management from ownership (Hermawan, 2023). The theory is considered one of the prevailing and accepted theories that define the association between OST and CP from the perspective of different stakeholders (Khan et al., 2021). Researchers have focused on the connection between management ownership and business performance. Although there is no clear-cut evidence that management ownership of a corporation improves the success of that firm, study results have generally been good. According to studies, businesses that are majority owned by managers typically do financially better than those that are not. Additionally, it has been discovered that businesses with higher MGOW levels have better liquidity and higher asset returns, pointing to a general improvement in business performance due to MGOW. Based on agency theory and previous literature, we predict that management ownership leads to improved performance. The following is the research hypothesis (*H1*) which was articulated based on the purposes of the study and the discussion of the literature and previous studies:

H1: There is an optimistic association between MGOW and CP.

2.2. Institutional ownership and corporation performance

Several previous studies have investigated the function of corporate ownership as an internal CG mechanism. These studies have shown that when corporate ownership is actively engaged, they play a significant role in the governance of the companies in which they invest. Corporate ownership achieves this by actively engaging with the investee companies through dialogue, rather than just casting votes (Kansil & Singh, 2018; Turshan & Karim, 2022). Previous studies have argued that INOW motivates management to mitigate opportunism and control the exploitation of management who own shares in the company

(Admati et al., 1994; Shleifer & Vishny, 1997). Singh and Kansil (2016) suggested that such INOW can act as a check against opportunistic behaviour and profit manipulation (dividend management) on the part of managers and help increase the company's valuation (owner wealth maximization).

Some previous studies have found that the institutional owners may assist the independent managers in their monitoring of the company, and this contributes to improving the efficiency of the CP, for example (Choi et al., 2007; Coffee, 1991; Hong & Linh, 2023; Kao et al., 2019). Previous studies revealed a positive relationship between INOW and CP (Hossain et al., 2021; Kao et al., 2019; Rashid, 2020). In Vietnam, Hong and Linh (2023) found that INOW can monitor the company and its investments more effectively, which improves performance. The empirical results show a substantial positive link between INOW and company performance (Kansil & Singh, 2018). This frequently results in better company strategies and more effective decision-making, which may raise shareholder profits. It has been demonstrated that a company's stock, financial, and overall operational performance all tend to increase when it has a high level of INOW. This is because institutional investors, like pension, mutual, and hedge funds, have the resources and knowledge to exercise greater oversight and actively manage financial decisions. They also gain from economies of scale and resources because they can afford to hire the best employees. The following is the research hypotheses (*H2*) which was articulated based on the objectives of the study and the discussion of the literature and previous studies:

H2: There is an optimistic association between INOW and CP.

2.3. Foreign ownership and corporation performance

The authorities of each country regulate the management and OST of local and foreign companies, adapting and many previous studies indicate that CG and CG systems at the national and company levels were converging into one form of governance. Often the corporate system is illustrated by a split between ownership, control and securing legal protection for minority owners (Carney et al., 2019). The KSA opened the stock market to direct and indirect foreign investment in stages.

In the past few years, foreign investment has been allowed in the stock market, indirectly or directly, over investment funds. Then institutional foreign investors could invest straight in the stock market, and the Saudi stock market was unlocked to all foreign individuals and institutional investors. Some laws related to the settlement have been amended. In the Saudi market, foreign investors' ownership is less than that of Saudi investors. However, their business procedures greatly influence the investment decisions of Saudi investors over their capability to display the company's plan and the use of capital and employees (Kao et al., 2019). Previous studies find no effect of FOOW on the company's performance in some countries (Alabdullah, 2018). Furthermore, other studies find positive relationships, such as Hossain et al. (2021), Rashid (2020) and Kao et al. (2019). Research studies have found that firms with higher FOOW tend to perform better than those without. This is likely due to increased access to resources and capital and the potential for overseas expansion. The influx of capital triggered by foreign investors can help provide the necessary funds for development, innovation and other strategic initiatives that ultimately lead to long-term growth and improved performance. On top of this, a foreign presence can provide an invaluable source of knowledge transfer, which can greatly impact productivity, improvement of processes and overall improved corporation performance. The following is the research hypotheses (*H3*) which was framed based on the purposes of the study and the discussion of the literature and previous studies:

H3: There is an optimistic relationship between FOOW and CP.

2.4. Government ownership and corporation performance

A low level of governance and audit accuracy often characterizes public sector organizations. The accountability process for government-owned enterprises typically takes longer than that for private companies, as the directors of these enterprises are directly responsible for numerous stakeholders, such as the country's general citizens, in addition to the owners (Le & Nguyen, 2023). The poor performance of state-owned companies compared to private sector companies can be explained by the company's poor management, weak oversight, and lack of CG implementation (Laporšek et al., 2021).

Phung and Mishra (2016) suggest that policies in emerging markets such as Vietnam, where a weak shareholder protection system, should focus on CG mechanisms to protect minority shareholders from expropriation by a highly concentrated state or FOOW. Policymakers should review laws and policies to prevent harmful behaviour on the part of the state or foreign owners in companies, which could lead to a devaluation of the company. The influence of state ownership on corporate performance means that the state-owned enterprise (SOE) reform through privatization in Vietnam must continue to reduce the risks of state ownership to CP. State-owned enterprises differ in their strategic objectives. They provide public services to the country's citizens with less risk of failure and better infrastructure and aim to reduce unemployment, provide social services, and rely on market failures. They pursue goals other than efficiency, and profitability results in lower overall performance (Lazzarini & Musacchio, 2018). Some previous studies concluded that there is a negative association between GOOW and CP (Aboud & Diab, 2022). The idea that GOOW of a firm is associated with improved performance has been widely explored in the academic setting. Studies have revealed a positive correlation between GOOW and CP, signifying that GOOW can be a key factor in the success of a business. This correlation is particularly significant in industries where governments have a greater stake in the business, such as banking and energy. It is important to note, however, that the degree of GOOW does not always correspond directly to the performance of the business — other factors such as the management of the firm and the overall economic climate must be taken into account. Nevertheless, the evidence suggests that GOOW is an optimistic factor in firms' performance. The following is the research hypotheses (*H4*) which was articulated based on the purposes of the study and the discussion of the literature and previous studies:

H4: There is an optimistic association between GOOW and CP.

2.5. Ownership concentration and corporation performance

OWCO refers to the ratio (shares owned/total shares in the company) of significant shareholders that possess more than 5% of the shares. These major shareholders are crucial to a company's internal control, as their substantial ownership motivates them to closely monitor management actions to safeguard their interests (Le & Nguyen, 2023). The discussion centres on concentrated ownership in terms of competition, control, monitoring, resolving agency problems, and acquiring corporate resources. That leads to high risks represented in appropriating the rights of minority shareholders. Due to weak laws and protection systems, the risk of conflict increases between major and minor shareholders in emerging markets and less developed institutions. The diversity of concentration among the different groups in the company's ownership leads to power distribution between these groups. It is a remedy for the danger of concentration of ownership (Iwasaki et al., 2022). Some of the outcomes of prior studies revealed that the concentration of ownership significantly disturbs performance (Aboud & Diab, 2022; Hossain et al., 2021).

Although some studies indicate that high concentrations of ownership positively affect company performance, that does not mean the government should own a significant percentage of company shares. Its positive impact is not due to efficiency improvements but rather to the political connections that the government brings. Suppose the state continues to support companies through high state ownership. In that case, this will eventually raise problems correlated to CG and the impact on company performance such as (Phung & Mishra, 2016). OWCO is a significant factor of CG and, thus, company performance. The literature verifies that the effect of concentration of ownership on corporate performance spans from negative to positive. There was a concentration of ownership because a controlling owner could receive a large percentage of the company's returns. They have more encouragement to monitor the company's management to mitigate agency theory problems (Kao et al., 2019). The concentration of ownership has been linked to an optimistic outcome in terms of performance. This can be seen as a strong indication that a greater OWCO can increase performance. By taking an academic approach to this important insight, we can better understand the advantages of having a higher concentration of ownership and how to secure the benefits it can bring. It can be argued that the higher the concentration of ownership, the higher the potential performance of an organization. Therefore, it is essential to take an academic approach to the analysis of this vital topic. The following is the research hypotheses (*H5*) which was framed based on the purposes of the study and the discussion of the literature and previous studies:

H5: There is an optimistic association between the OWCO and performance.

3. RESEARCH METHOD

3.1. Data collection

This paper's sample will contain all the companies in financial and non-financial sectors in the Saudi stock exchange (Tadawul), covering seven years from 2015 to 2021. Thus, this study will be generated 1393 observations. The data will be collected from the financial statements of these companies. In order to calculate the short-term and the long-term measurements, this paper uses the ROA and MTBV, respectively. Al-Matari et al. (2014) mentioned that "research should use a combination measure of the firm performance that both accounting and market based measures to accurately measure the firm performance. In fact, the accounting-based measure can reflect the past performance of the company while the market-based indicators help to anticipate the future performance" (p. 38). Although there are several methods for evaluating the connection between independent and dependent variables, such as OLS regression, generalized least squares (GLS) regression, and feasible generalized least squares (FGLS) regression, the results in Table 5 indicate that OLS regression was the most suitable method for this study.

$$\begin{gathered} ROA_{it} = \beta_0 + \beta_1 MGOW_{it} + \beta_2 INOW_{it} \\ + \beta_3 FOOW_{it} + \beta_4 GOOW_{it} + \beta_5 OWCO_{it} \\ + \beta_6 TOASSET_{it} + \beta_7 TOASSET_{it} + \beta_8 LEVG_{it} \\ + \beta_9 LEVG_{it} + \varepsilon i \end{gathered} \tag{1}$$

$$\begin{gathered} MTBV_{it} = \beta_0 + \beta_1 MGOW_{it} + \beta_2 INOW_{it} \\ + \beta_3 FOOW_{it} + \beta_4 GOOW_{it} + \beta_5 OWCO_{it} \\ + \beta_6 TOASSET_{it} + \beta_7 TOASSET_{it} + \beta_8 LEVG_{it} \\ + \beta_9 LEVG_{it} + \varepsilon i \end{gathered} \tag{2}$$

3.2. Measurement of variables

The term "*measurement of variables*" denotes the accuracy with which variables are documented.so, Table 1 provided the measurement of variables.

Table 1. Measurement of variables

Variable	*Abbreviation*	*Definition*
Return on assets	*ROA*	The net income of the company is split by its total assets (Al-Ahdal et al., 2023; Al-Sayani & Al-Matari, 2023; Al-Matari & Mgammal, 2019).
Market-to-book value	*MTBV*	The market value of equity for the company is split by its book equity value.
Managerial ownership	*MGOW*	The portion of stock owned by the managers of the company (Al-Ahdal et al., 2023; Al-Matari et al., 2017; Alves, 2023; Qasem et al., 2023).
Institutional ownership	*INOW*	The percentage of institutional investors' stock in the company (Al-Matari et al., 2017; Widati et al., 2023).
Foreign ownership	*FOOW*	The ratio of foreign investors' stake in the company (Hogan & Olson, 2021; Widati et al., 2023).
Government ownership	*GOOW*	The proportion of the government stock in the company (Al-Matari & Al-Hebry 2019).
Ownership concentration	*OWCO*	The portion of the stock held by the biggest five investors in the company (Al-Ahdal et al., 2023).
Log of total assets	*TOASSET*	The log of total assets (Al-Matari, 2022).
Leverage	*LEVG*	Total debt of the company to its total assets (Alsayani et al., 2023; Al-Matari, 2023).
Years	*YEARS*	Dummy variable (Al-Matari et al., 2023; Al-Matari et al., 2022).

4. STUDY FINDINGS

4.1. Descriptive analysis

Based on outcomes in Table 2, which displays the descriptive statistics of this study variables, the average value of *ROA* and *MTBV* are 0.03342 and 2.52405, respectively. It also can be seen that the mean of *INOW* and *GOOW* are 0.36153 and 0.35475, with a maximum of 1.000 and 0.98440, respectively, which means that *INOW* and *GOOW* own the most companies in the sample of this paper.

By contrast, the average value of *FOOW* is 0.05176, indicating a few *FOOW* investors in the sample. As shown in Table 2, the *OWCO* and *MGOW* have a mean value of 0.25067 and 0.06295, respectively.

Table 2. Test for variable descriptions

Variable	*Obs.*	*Mean*	*Std. dev.*	*Min*	*Max*
ROA	1400	0.03342	0.23263	-5.81592	5.09522
MTBV	1400	2.52405	5.37493	-61.47631	80.05815
MGOW	1400	0.06295	0.13306	0.00000	0.78690
INOW	1400	0.36153	0.24745	0.00000	1.00000
FOOW	1400	0.05176	0.09151	0.00000	0.67180
GOOW	1400	0.35475	0.23826	0.04953	0.98440
OWCO	1400	0.25067	0.22180	0.00000	1.00000
TOASSET	1400	26500000.00000	123000000.00000	12571.00000	2160000000.00000
LEVG	1400	0.47634	0.24632	0.00000	1.01561

Note: Definition of all variables is mentioned in Table 1.

To investigate if the sample of this paper has a multicollinearity issue, we performed the correlation matrix test. According to the outcomes in Table 3, this paper has not multicollinearity issue because the value of the correlation matrix is less than 0.80 (Gujarati & Porter, 2009). To confirm these outcomes, we used variance inflation factor (VIF) test, and its results ensured no multicollinearity issue in the sample. This is because the value of VIF is less than 10, as shown in Table 4 (Hair et al., 2010).

Table 3. Results of correlation matrix for continues variable

Variable	*ROA*	*MTBV*	*MGOW*	*INOW*	*FOOW*	*GOOW*	*OWCO*	*TOASSET*	*LEVG*
ROA	1.000								
MTBV	0.054	1.000							
MGOW	-0.144	-0.121	1.000						
INOW	0.261	0.024	-0.177	1.000					
FOOW	-0.168	-0.103	0.229	-0.043	1.000				
GOOW	0.162	-0.032	-0.036	0.658	-0.012	1.000			
OWCO	0.199	-0.018	0.319	0.743	0.135	0.605	1.000		
TOASSET	0.191	-0.238	0.080	0.458	-0.051	0.554	0.498	1.000	
LEVG	-0.473	-0.135	0.120	-0.022	0.177	0.152	-0.178	0.113	1.000

Table 4. Variance inflation factor

Variable	*VIF*	*1/VIF*
OWCO	6.71	0.1491
INOW	4.85	0.2063
MGOW	2.44	0.4093
GOOW	2.34	0.4278
TOASSET	1.73	0.5780
LEVG	1.6	0.6252
FOOW	1.2	0.8347
MTBV	1.12	0.8927
Mean VIF	2.75	

Note: Definition of all variables is mentioned in Table 1.

4.2. Regression results

We can analyse the data using two statistical methods: 1) OLS or 2) the RE. To select the suitable method test for this study, we should check the heterogeneity in the study's sample. If this study has no heterogeneity in its sample and thus pooled OLS regression will be used rather than the RE model. Based on the outcomes in Table 5, this study does not have heterogeneity because the p-value is more than 5%, and thus it utilized pooled OLS regression (Wooldridge, 2013).

In addition to testing for homoscedasticity using the Breusch-Pagan test, in accordance with Wooldridge (2013), the chi-square statistic for the current study's model is significant ($p < 0.000$), indicating that the null hypothesis of steady variance in residuals is rejected. Consequently, robust standard errors were employed to address the issue of heteroscedasticity in the data. As demonstrated in Table 6, the results support this decision.

Table 5. Breusch and Pagan Lagrangian test

Breusch-Pagan LM test	
Chibar2(01)	0.74
Prob > chibar2	0.1956

Table 6. Breusch-Pagan test

Test for heteroskedasticity	*ROA*	*MTBV*
Chibar2(01)	13.26	39.90
Prob > chibar2	0.0000	0.0000

Table 7. Results of study's models

Variable	*Model 1*		*Model 2*	
	Coef.	*t*	*Coef.*	*t*
MGOW	0.072*	1.69	-1.272	-1.33
INOW	0.159***	2.73	-0.077	-0.06
FOOW	-0.002	-0.05	-2.122**	-2.11
GOOW	0.057*	1.89	0.571	0.86
OWCO	-0.167***	-2.7	1.249	0.97
TOASSET	0.000***	2.68	0.000***	-4.14
LEVG	-0.215***	-7.97	-0.334	-0.59
_cons	0.116***	9.38	1.968***	7.49
Number of obs.	190		190	
Prob > F	0.000		0.000	
R-squared	0.3476		0.1073	

*Note: Definition of all variables is mentioned in Table 1. *, ** and *** is a significance level at 10%, 5% and 1% respectively.*

5. DISCUSSION

As seen in Table 7, the findings indicate that *MGOW* positively connects with *CP* in the short-term measured by *ROA*. This finding supported our prediction that *MGOW* and *CP* should be positively correlated. Thus, our *H1* is accepted. This result mentions that the *MGOW* could improve the *CP* in the short term. This outcome is consistent with earlier research (Al-Matari & Al-Arussi, 2016; Alabdullah, 2018; Ogabo et al., 2021). However, the results show that *MGOW* is not linked with the long-term measured by *MTBV*. This means that the *MGOW* does not have an impact on *CP* in the long term. These findings demonstrate the importance of understanding the effects of *CG* on *CP*. Companies must ensure that their governance structures are properly aligned with their short and long-term goals.

Based on earlier empirical investigations, this study assumed that *INOW* should improve business performance. Therefore, *H2* is supported, according to the current study's statistical findings. These outcomes revealed that *INOW* is positively linked to *ROA*, indicating that *INOW* plays a fundamental function in improving business performance in the short term. This outcome aligns with those of Rashid (2020) and Hossain et al. (2021). For companies looking to boost *ROA*, this outcome is crucial. Investing in fresh prospects can only be a potent strategy for enhancing corporate success in the near term. Other strategies might be more fruitful in the long run, such as lowering costs, streamlining processes, and improving efficiency. It's also critical to remember that this study's findings are relative. Since every firm is unique, the effects of *INOW* will vary according to its particular needs and objectives. As a result, companies should take the time to think about their unique requirements and create a plan that works for them.

No significant association was found between *FOOW* and *ROA* in the outcomes of this study, but it confirmed that *FOOW* has a negative impact on *MTBV*. Thus, *H3* is unsupported. This outcome means that the *FOOW* does not care and focuses on enhancing the company's performance. This unaccepted result may be because *FOOW* is represented in the study's sample. As shown in Table 2, *FOOW* has a mean value of 5% in the sample. This outcome is consistent with earlier research by Alabdullah (2018). This result implies that increased company performance is not always a result of financial ownership. It's crucial to emphasize that this does not imply that financial ownership is unimportant; rather, further research may be necessary to determine how financial ownership affects business performance.

Based on the agency theory assumption, hypothesis *H4* in our study predict that *GOOW* positively impacts *CP*. This study's results supported our prediction, so *H4* is accepted. These results found that *GOOW* has a positive impact on short-term corporate performance, while the long-term was not affected by the function of *GOOW*. This result indicates that *GOOW* can improve corporate performance in the short-term rather than the long-term. This finding aligns with those of Al-Matari and Al-Arussi (2016).

As previously mentioned, it is essential to guarantee that a firm's performance is appropriately headed. Based on this, our study anticipated a connection between *OWCO* and company performance. As shown in Table 7, the results revealed a strong negative correlation between *OWCO* and business performance in the short-term, while the long-term does not find any correlation. This outcome aligns with previous empirical research by Hu et al. (2010) and Millet-Reyes and Zhao (2010). Thus, *H5* is unaccepted.

6. CONCLUSION

This study was inspired by the lack of literature on the relationship between research variables in the context of the KSA, a developing nation. It is distinct from other studies as it explored the connection between OST and its impact on business performance in a country with various regulations and business environments, unlike developed countries where ownership is often divided among several shareholders. This research examined the connection between OST, such as MGOW, INOW, FOOW, GOOW, and OWCO, and the financial and non-financial performance of Saudi-listed companies. It utilized pooled OLS to analyze these relationships. The sample included all firms from the financial and non-financial sectors listed on Tadawul, and the data covered seven years, from 2015 to 2021.

The outcomes of this research summarized that MGOW, INOW and GOOW positively and significantly influence CP in the short-term measured by ROA. On the opposite, the OWCO has a negative impact on ROA. However, the FOOW does not find evidence of its effect on ROA. Regarding CP in the long-term measured by MTBV, the findings show that all the dimensions of OST have no significant impact, except the FOOW, which has a negative effect on MTBV.

This study is distinctive since it examined the relationship between the OST and its impact on business performance. As previously stated, the lack of literature on the correlations between the research variables in the setting of the KSA, a developing country, served as the impetus for this study. This study adds to our understanding of how OST affects company performance, especially in a nation with a diverse business and market environment.

This study has made several significant contributions to both theory and practice, but it also has some limitations that need to be addressed for future research. The first limitation is related to the analysis of the relationship between OST and business performance, despite the presence of additional CG features, such as the board of directors, executive committee, compensation committee, and risk committee. The author suggests that future studies should consider examining the relationships through culture, and other variables that can enhance performance, as the second limitation relates to the direct relationship between independent variables and corporate performance. Additionally, the study's testing of the variable's link in the KSA is limited, and future researchers may choose to examine two Gulf Cooperation Council (GCC) countries with similar structures.

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