Journal of Posthumanism
2025
Volume: 5, No: 3, pp. 181–205
ISSN: 2634-3576 (Print) | ISSN 2634-3584 (Online)
posthumanism.co.uk

DOI: https://doi.org/10.63332/joph.v5i3.726

Analyzing the Impact of Corporate Governance in Enhancing Firms' Financial Performance and Sustainability

Mohamed Nasr Saeed[1], Mohieddine Rahmouni[2], Mohammed Adam Haroun[3], Eid Awad Hassan[4], Ibrahim Omer Elfaki[5], Abdelsamie Eltayeb Tayfor[6], Amani Mohammed Abbas[7]

Abstract

This study aims to critically examine existing governance frameworks, assess their impact on financial performance, and explore executive perspectives on governance practices within the agricultural, food, and petrochemical sectors. Employing a mixed-methods approach, the research combines quantitative surveys and qualitative interviews, focusing on (45) companies listed on the Saudi Stock Exchange. Statistical methods include descriptive statistics, correlation analysis, and multiple regression to analyze the data. Key findings reveal a statistically significant positive relationship between governance compliance and financial performance indicators like Return on Assets (ROA) and Dividends per Share (DPS), indicating that higher governance compliance leads to improved asset efficiency and dividend payouts. However, no significant links were found between governance compliance and liquidity or debt structure. The research highlights the importance of corporate governance in enhancing accountability, resource allocation, and strategic decision-making, contributing to financial outcomes. Recommendations for policymakers suggest a reassessment of existing governance mechanisms and further reforms to enhance practices, while stakeholders are encouraged to promote compliance to drive performance and sustainability. This study contributes to the literature by providing empirical evidence of the governance-performance relationship in an emerging market context, emphasizing the significance of governance practices in driving sustainability and financial performance in sectors vital for diversification of the dynamic Saudi economy.

Keywords: *Corporate Governance, Financial Performance, Governance Framework, Sustainability.*

Introduction

In recent times, the concept of good governance has garnered considerable attention within the Kingdom of Saudi Arabia. The implementation of sound governance practices within enterprises is increasingly perceived as a crucial catalyst for improving financial performance and ensuring long-term sustainability. Moreover, it is widely posited that effective governance plays a vital role in contributing to the optimal allocation of resources, as well as enhancing the formulation of strategic decisions that are necessary for success. Given the substantial role of the agricultural, food, and petrochemical sectors in the Saudi economy, it is critically important to thoroughly explore the influence of governance on the financial performance and sustainability of firms operating within these key industries. Consequently, this study seeks to comprehensively examine the intricate relationship between governance and the financial performance and

1 Applied College, King Faisal University, Saudi Arabia, Email: mnmsaid@kfu.edu.sa, (Corresponding Author)
2 Applied College, King Faisal University, Saudi Arabia.
3 Applied College, King Faisal University, Saudi Arabia.
4 Applied College, King Faisal University, Saudi Arabia.
5 Applied College, King Faisal University, Saudi Arabia.
6 Applied College, King Faisal University, Saudi Arabia.
7 Applied College, King Faisal University, Saudi Arabia.

sustainability of companies engaged in Saudi Arabia's agriculture, food, and petrochemical sectors. The analysis specifically evaluates governance through the comprehensive lens of board composition and ownership structure, while financial performance and sustainability are meticulously assessed through a combination of relevant accounting metrics and emerging environmental, social, and governance (ESG) scores. This multifaceted approach aims to provide valuable insights into how governance mechanisms can drive performance and sustainability in these vital sectors of the economy. (Ahmed, 2016; Nasrallah and El2022; Jan et al., 2021; Nguyen et al.2021; Jan et al.2021).

According to the World Bank, Saudi Arabia’s economy is the largest in the Middle East and North Africa and the 19th largest in the world. Saudi Arabia’s Vision 2030 emphasizes the need to enhance the role of capital markets in achieving economic diversification and mitigating the reliance on oil-based revenues. This vision states that financial and insurance services are essential to supporting various sectors in the economy, including agriculture and food. In line with Vision 2030, the National Agricultural Development Strategy highlights the need to enhance water-use efficiency in the agricultural sector, which accounts for 83% of water use in Saudi Arabia. The agricultural and food industry comprises (25) listed firms and accounts for 3.1% of the total market capitalization of the Saudi Stock Exchange as of 2022. The petrochemical industry consists of two sectors: chemicals and petrochemicals. The chemicals sector comprises (12) firms, while the petrochemical sector comprises (8) firms. The petrochemical industry accounts for 12.9% of Tadawul’s market capitalization and is a key contributor to economic growth and development in Saudi Arabia. This research is expected to enhance the existing literature by providing insights into the agricultural, food, and petrochemical industries in Saudi Arabia. Furthermore, the research findings may aid stakeholders, including regulators and investors, in understanding the significance of governance practices in enhancing firms’ financial performance and sustainability. (Shahwan et al.2023; Alsuwailem et al.2021; Gharbi et al., 2022; Alnaim & Kouaib, 2023).

Background and Rationale

Corporate governance has been widely studied with respect to its definitions, impacts, mechanisms, and other dimensions. This can be used as a synopsis of the most important aspects of corporate governance as academic and non-academic researchers, regulatory authorities, and firm managers consider it. The term corporate governance gained wide popularity in the 1990s after the East Asian financial crisis. Prior to that, it was generally discussed in terms of board structure, ownership concentration, and the relationship among the agents. Until now, corporate governance has been regarded as a dynamic and complex subject. Broadly speaking, corporate governance consists of policies, processes, laws, and institutions related to the direction, management, and control of firms. Good corporate governance ensures the firm’s sustainability, transparency, accountability, equity, and responsibility (Mohammad Jaser & Qasim, 2014; Jan et al., 2021; Naciti et al., 2022; Gerged, 2021).

Corporate governance is particularly important with respect to the firm’s ownership structure and financial performance. Recently, it has gained importance in the context of a developing economy. Saudi Arabia is an emerging economy with a rapidly growing market. From 2005 to 2014, the market capitalization of the listed firms almost doubled. Several factors such as compliance with the regulatory frameworks, industry nature, and ownership concentration affect the corporate governance practices. Saudi Arabia is an oil rich country, and most of the governmental investments are done in oil and petrochemical industries. Although the petrochemical sector has flourished, the agriculture and water sector has always remained a loss incurring sector for the government. In Saudi Arabia, there are several challenges that need to be addressed by enhanced governance such as determination of water prices, transparency in agricultural subsidies, social considerations in the land grants, and credit to the agriculture sector. (Naciti et al., 2022; Luo & Tang, 2021).

Despite being discussed widely, there is a mismatch between the global trends and the local governance standards and practices. Although the leading stock exchanges required the listed firms to comply with certain governance stipulations, the context still needs to be adjusted to the Saudi Arabian economic environment. Broadly speaking, corporate governance mechanisms can be categorized into control mechanisms, internal mechanisms, and regulatory mechanisms. As corporate governance mechanisms affect the financial performance of the firms, an effort is made to analyze the existing governance structures in view of the regulatory frameworks and to explore the improvement avenues which can enhance the financial performance. (Son et al.2023; Du & Li, 2021).

Research Aim and Objectives

Globalization and financial crises prompt firms to adopt robust corporate governance frameworks. Well-defined governance mechanisms enhance accountability and transparency, aligning interests of management and external stakeholders. Saudi Arabia emphasizes corporate governance for firm transparency and legitimacy, improving competitive positions in global markets. Consequently, the Saudi Capital Market Authority mandated corporate governance frameworks for publicly-traded firms in 2006, promoting compliance and disclosure to enhance transparency. Despite good compliance scores, the impact of governance on financial performance is unexplored, especially in sectors crucial to the Saudi economy's diversification beyond oil dependence. (Alsadhan, 2023; Al-Sahali & Al-Adeem, 2024; Al-Adeem & Alsahaly, 2024; Al-Faryan & Alokla, 2023; Al-Faryan & Dockery, 2021).

Saudi Arabia's economy relies on the oil industry, driving government efforts to diversify through the National Vision 2030 Initiative. Food security is vital due to population growth and arid climate, emphasizing the importance of the agricultural and food industries in the economic diversification agenda. Additionally, the petrochemicals sector is crucial for the economy, as most industrial activities revolve around oil refinement. Acknowledging governance's role in enhancing firms' performance and sustainability in these industries addresses knowledge gaps in Saudi Arabia and emerging economies. This research evaluates how corporate governance affects financial performance and sustainability in Saudi Arabia's agriculture, food, and petrochemical sectors. Specifically, it aims to: (1) Critically examine the existing corporate governance frameworks in Saudi Arabia and their implementation in agriculture, food, and petrochemical industries. (2) Quantitatively assess the impact of corporate governance frameworks on firms’ financial performance in agriculture, food, and petrochemical industries. (3) Qualitatively explore executives' views on corporate governance practices and their impact on firms’ financial performance and sustainability in agriculture, food, and petrochemical industries. (4) Examine the impact of corporate governance frameworks on firms’ sustainability outcomes in agriculture, food, and petrochemical industries. (5) Evaluate the global best practice corporate governance frameworks and propose future governance frameworks for agriculture, food, and petrochemical industries in Saudi Arabia. Addressing these objectives is significant for policymakers, shareholders, and managers in Saudi Arabia. (Aladwey & Alsudays, 2024; Aladwey & Alsudays, 2024).

Scope and Significance

The discussion of corporate governance and its impact on financial performance is intensified since the Asian financial crisis. Corporate governance is expected to reduce agency problems arising out of the separation of ownership and control. Agency problems are expected to lead lower performance in firms with poor governance. Thus, it is expected that firms with effective corporate governance would have superior financial performance compared to firms with poor corporate governance (Ahmed, 2016). The corporate governance reform causes a far-reaching consequence in emerging economies that are greatly affected by the Asian financial crisis. The corporate governance reform is deemed necessary even though those countries have a different governance system from the European or Anglo-American model, which is the corporate governance reform's foundation. (Guluma, 2021; Kaal2021; Gerged, 2021; Ananzeh, 2022; Din et al.2022).

The agricultural, food, and petrochemical sectors are selected as the focus of the research. The selected sectors are among the crucial sectors of achieving economic sustainability because they fundamentally develop the country's natural resources, while food security remains the global problem. All publicly listed companies from the selected sectors will be examined. In addition to focusing on the specific sectors of the economy, the research is limited to firms operating in Saudi Arabia. There is an added value of Saudi Arabia as the research location since it is currently undergoing a transformation that stimulates the economic sustainability or a knowledge-based economy development. The Vision 2030 plan serves as the golden target for transforming the nation's economy. The corporate governance reform is a fundamental element in ensuring the success of achieving the Vision 2030 goals. (Rahman, 2021; Chebbi & Ammer, 2022).

This research seeks to analyze the impact of corporate governance in enhancing firms' financial performance and sustainability, particularly in the agriculture, food, and petrochemical sectors Saudi Arabia. The research questions the appropriateness of the existing corporate governance mechanisms in the context of emerging economies, by examining the role of governance in determining financial performance and assessing how governance affects financial performance and sustainability trade-offs. The significance of this research is twofold; first, from an academic perspective, it contributes to the development of corporate governance research, particularly in emerging economies, by providing further evidence on the generalizability of the widely accepted theory of good governance. Good governance is predicted to benefit not only equity holders but also all stakeholders, including employees, creditors, the community, and ultimately society at large, ensuring the firms' sustainable practices. This research provides empirical evidence on the impact of governance arrangements on the trade-off between financial performance and global reporting and assurance practices, particularly in the agricultural, food, and petrochemical sectors. Second, from a practical perspective, this research is important for regulators and policy makers to assess the appropriateness of the existing governance mechanisms in firms listed in the Saudi Capital Market and to consider the need for further governance reforms. Studies attempting to examine such issues in other emerging economies with similar characteristics are still rare. Addressing the ongoing economic sustainability challenges faced by Saudi Arabia, this research is also deemed timely and relevant. There would be potential for similar research undertaking and further development to corporate governance regulation and subsequent audit reform in other emerging economies. (Al-Matari et al.2022; Chebbi & Ammer, 2022; Aryan et al.2022; Vinodkumar & Alarifi, 2022).

Literature Review

Research findings show that corporate governance mechanisms and initiatives have a fundamental role in improving audit practices, mitigating risks, and minimizing corporate illegal activities. It has been observed that a good governance mechanism will have a positive effect on economic performance. We focused on the role of governance and how it would influence economic performance universally. We emphasize the importance of robust and reliable governance measures in an in-depth analysis of the region closest to Europe. Studies showed that firms with good governance practices can attract investors at fairly good prices. In general, there were combinations of extra costs for the investors. (Fera et al.2022; Ikhsan et al.2024; Kaawaase et al., 2021).

Governance performance in the aggregate has reasonable capacity in predicting major corporate scandals and at the discrete level in identifying riskier firms. However, investor belief in the supposed congruence of governance mechanisms with organizational incentives may contribute to the potential for corporate scandals. There is compelling evidence of growing investor recognition of the potential importance of governance. Potential investors also seem likely to be desirous of desired earnings per share performance or are not risk averse. More recently, the study investigates the link between proximity to hostile external events and governance. It has been observed that the relationship between both mechanisms and firm values, reversing prior negative assessments of governance effects, is negative. (McLaughlin et al.2021; Xu et al., 2023; Liu et al., 2021).

There is a striking decline in the disharmony of ratings for some large firms after their implosion. The possibility that it is not feasible to collectively agree on the merit of each internal governance mechanism seems worth exploring. The growing interest in corporate governance triggers a natural question about what corporate governance and managerial force entail. The performance model, which provides the classical economic view of corporate governance, states that the paramount task of the corporation and its directors is to maximize value for shareholders. In recent years, corporate governance has grown in salience, especially in aspects related to increasing shareholder value. (Pacces, 2021; Battilana et al.2022; Aluchna et al., 2022).

Corporate Governance Theories

Corporate governance is a very crucial concept that affects the decision-making of various institutions such as business corporations, banks, and regulatory agencies. Specifically in corporate entities, the importance of corporate governance is emphasized in an extensive range of decisions such as the structure of the corporate board, management’s compensation, accounting choices, employment contracts with independent auditors, legal liabilities, mergers and acquisitions, and the appointment and oversight of key employees, senior managers, and the external auditor. Corporate governance deals with the investment-discretion separation problem. Students of corporate structure generally focus their attention on the different relationships engendered by the separation of ownership from public corporations. (Rane et al.2024; Sunarto et al.2021; Jan et al., 2021; Sunarto et al., 2021; Rane et al.2024; Tibiletti et al., 2021; Abdullah & Tursoy2023).

The corporate governance literature has developed two new perspectives to understand how corporate governance influences ownership and control within the modern public corporation. These two perspectives are the agency cost problem in corporate structure and the control power origins of corporate policies. The agency cost model represents corporate governance as the power process through which the agent initiates control over corporate resources and decisions primarily to serve personal interests. The control power model magnifies that corporate governance is the power process by which multiple corporate agents and claimants, representing businesses, states, and institutions, initiate control over corporate resources and decisions, primarily for the collective interest in the survival of the corporation, through overcoming the principal-agent problem. While it is generally valid that in large, modern, widely scattered companies, nobody cares about the firm as much as its managers, debt holders' entitlements of assurance at the firm's expense under risk could be restored by the introduction of a series of systems of control and auditing, a second-best guarantee device that could be liability suits or damage suits, which are able to prevent or assure the respect of bondholders' interests. (Sunarto et al., 2021; Guluma, 2021; Tang, 2022; Jan et al., 2021).

Financial Performance Indicators

The most common and widely accepted tool utilized to effectively measure the success of a firm in creating value for its shareholders is undoubtedly financial performance indicators. These crucial indicators serve as both a guide and foundational bedrock for assessing value creation in a business. Value is created through a complex feature of corporate management and governance that is designed to generate capital rather than consuming or depleting it. To thoroughly analyze and clearly explain the intricate linkage between a firm's value creation endeavors and the existing corporate governance mechanisms, researchers employ such valuable tools of value creation as the financial performance of the entity. This financial performance is used to represent a continuing investment opportunity, one that develops the firm's potential future earning power and enhances its overall financial viability in the long run. (Barauskaite & Streimikiene2021; Nudurupati et al., 2021; Neri et al., 2021).

There are three main financial performance indicators in the accounting literature that financial experts diligently apply to effectively measure the overall performance of a firm. One of the most used indicators within this framework is the return on investment, which is also frequently referred to as the return on equity. This metric signifies how well the firm manages its assets to determine whether the investments made in these assets ultimately lead to profitability, as well as the payment of higher returns necessary to adequately cover interest charges associated with borrowed funds. Another important financial performance indicator focused on by analysts is the earnings per share ratio. This ratio is calculated as the proportional relationship between net income and the total number of shares currently available in the market. Higher earnings per share ratio is generally expected to correlate with an increase in stock value, creating more wealth for shareholders. The third of these key financial indicators encompasses both the price-to-earnings ratio and the dividend payout ratio, both of which offer crucial insights into how a firm distributes its profits and the overall market sentiment towards its stock. (Sompolgrunk et al., 2021; Saputra2022; Li et al., 2021).

Corporate Governance and Financial Performance Sustainability

Corporate governance is a coherent system by which organizations are directed and controlled. The governance framework specifies the roles and responsibilities of different groups in the organization and includes governance principles that shape the internal control and accountability systems of the organization. Different governance frameworks and principles have been developed and adopted across countries and sectors. These frameworks are intended to make organizations more efficient in the promotion of transparency and accountability. However, there has been limited scrutiny of the efficacy of governance frameworks and principles across different organizations and cultural settings (Firoz Shamsi, 2014). Low or weak governance performance has been found in several global organizations, highlighting an inability or unwillingness to meet the minimum governance benchmarks set by different regulatory bodies. Several studies have substantiated the argument that strong governance practices enhance financial performance (Bafarasat & Oliveira, 2021). However, there are also studies supporting the contrary view that governance has little impact on financial performance. Poor governance can adversely affect organizational performance and damage stakeholder trust. Rapid changes in the business environment demand governance structures that can adapt or evolve to changing organizational needs and external pressures. The governance structures and practices of the Saudi corporations might be particularly interesting to investigate as these organizations operate in a rapidly changing business environment. The Corporate Governance Regulations issued by the Capital Market Authority in Saudi Arabia, which took effect in 2006, had several fundamental implications for corporate governance practices in Saudi Arabia, including the requirement for listed companies to have audit committees and the need to comply with certain governance criteria and principles (Al-Faryan & Alokla, 2023; Boshnak, 2021; Bajaher et al., 2022; Farah et al., 2021; Chebbi & Ammer, 2022).

Research on corporate governance and financial performance is extensive in the Western context. However, the impact of regulatory frameworks on corporate governance and financial performance is less understood in developing countries, such as Saudi Arabia. Although Saudi Arabia has enjoyed some of the highest rates of growth in the world, the poor governance of some of its leading companies has negatively impacted stakeholder trust and tarnished the reputation of the country. Considering these developments, the purpose of this study is to investigate the impact of governance on the financial performance of companies listed in the agricultural, food, and petrochemical industries sector of the Saudi stock exchange. Governance is typically viewed as a system of control mechanisms that shapes the behavior of management to safeguard the interests of stakeholders or enhance financial performance. Although governance and leadership are separate concepts, the two can be viewed as complementary in attaining organizational success. According to the above arguments, effective governance should be integral to achieving sustainable financial performance (Ararat et al., 2021; de Villiers & Dimes, 2021; Gerged et al., 2023; Jan et al., 2021; Lu and Batten, 2023).

Sustainability Measures

The formulation of metrics for the evaluation of environmental sustainability presents considerable challenges, largely owing to the complex and multifaceted nature of environmental concerns and the potential global and intergenerational ramifications associated with varying degrees of environmental performance. Moreover, existing literature indicates that environmental reporting is predominantly utilized to validate a company's performance instead of holding it accountable for any ecological detriment that its operations might cause. In economies characterized by market dynamics and competitive pressures, organizations may enhance their competitive edge through strategies aimed at optimizing product life cycles, effectively reducing waste and emissions, and actively fostering resource recycling initiatives. However, it is crucial to note that research indicates that such practices, while seemingly beneficial in the short term, may, in the long run, adversely affect the overall competitiveness of the economy. To clarify the importance of sustainability both for corporate entities and for the broader sustainability of society, scholars have diligently developed five pivotal sustainability metrics that are specifically aimed at influencing corporate behavior and institutional policies. These crucial metrics include: Customer Performance Indicators, which measure how well companies meet customer expectations regarding sustainability; Carbon Liability, assessing potential financial exposure related to carbon emissions; Sustainable Competitive Advantage Strength, evaluating the degree to which sustainability practices contribute to long-term competitive positioning; Sustainability Bulwarks, which focus on the protective measures taken against sustainability risks; and finally, Capital Burn Scenarios, which analyze the economic implications of resource consumption and waste generation. (Ortiz-Martínez et al., 2023; Pham et al., 2021; Arvidsson & Dumay, 2022; Suttipun, 2021).

A considerable number of scholars have meticulously analyzed Key Performance Indicators (KPIs) across various dimensions; however, it is of paramount importance to highlight the existing gaps and insufficient investigation into the sustainability KPIs that corporations utilize. This analysis should be conducted from the standpoint of internal organizational structure management and ethical corporate governance practices, especially focusing on the influential and critical role of internal auditing within these frameworks. It is crucial for top management to synchronize and harmonize the incentives of various departments effectively to promote the ongoing advancement of corporate sustainability initiatives and objectives. The main qualitative aim of this study is to thoroughly investigate the KPIs that are directly related to sustainability performance within organizations. This research endeavors to assist entities and organizations in acknowledging the importance of continuous monitoring, appraisal, and assessment of their overall organizational performance metrics. Additionally, this paper aspires to provide organizations and corporate entities with innovative strategies for identifying, recognizing, and leveraging value-creation opportunities that are relevant to effective strategic planning, operational value generation, value-added outcomes, executive management objectives, and informed departmental decision-making processes. By doing so, it serves to enhance organizational awareness and foster a deeper understanding of sustainability as a critical performance domain. (Hristov & Searcy, 2024; Prencipe, 2024; Krasodomska & Zarzycka, 2021; Zattoni & Cuomo, 2023; Ratajczak & Mikołajewicz, 2021).

Methodology

This section outlines the methodology used in the study, including the research framework, strategies, design, data collection, sampling procedures, and data analysis approach. The study aims to analyze how corporate governance enhances the sustainability of financial performance in Saudi Arabia's agriculture, food, and petrochemical industries. The employed methodology is designed to gather relevant data to fulfil the research objectives. Key objectives include examining the effects of governance on financial performance sustainability within these sectors (R. Y. Abu Arrah et al., 2018). The methodology incorporates both quantitative and qualitative approaches to effectively address research questions and gather comprehensive data. The quantitative method facilitates statistical data collection through closed-ended questions, while the qualitative method collects textual data via open-ended questions, enriching the quantitative outcomes. This mixed-methods approach bolsters the findings by corroborating results from different perspectives (Nguyen et al., 2021).

Research Design

This subsection outlines the research design used in the study, highlighting the reasons for employing a mixed-methods approach to enrich the data collected According to (R. Y. Abu Arrah et al. (2018), this method enhances research reliability and validity, allowing for a deeper understanding of complex issues. The design strategically combines qualitative and quantitative elements, who explain that qualitative data primarily explore issues, while quantitative data are collected later to measure the same issues. The research comprises five main phases and establishes a framework that can effectively support other research components. Key aspects of the design, including its mixed-methods intent, details of qualitative and quantitative methods, participant recruitment, data sources, and analysis procedures, are clearly specified. The research underscores the significance of context, particularly within Saudi Arabia's agriculture, food, and petrochemical industries, asserting that context is crucial for shaping and framing the investigated issues. By concentrating on specific sectors, such as agriculture or petrochemicals, the design aims to develop a comprehensive understanding of the key issues being studied. Ultimately, it seeks to examine the relationship between governance and its sustainable impact on financial performance while considering influences from various contexts, including global, national, and sectoral factors (Bafarasat & Oliveira, 2021; Alsolami, 2022; Alsharari & Aljohani, 2024; Mani & Goniewicz, 2023; Yusuf & Lytras, 2023; Singh et al., 2022).

Data Analysis of the Study

The researchers used data published in board reports and relied on the correlation between several financial indicators to measure the financial performance of companies and the extent to which they adhere to the principles of the corporate governance regulations by calculating the correlation between the study variables as follows: (1) *Corporate Governance (independent variable): The percentage of compliance with the principles of the Saudi corporate governance regulations was calculated, noting that the regulations require listed companies on the Saudi financial market to disclose in the board report the extent of adherence to governance principles.* (2) *Financial Performance Sustainability of Companies (dependent variable):* The study used several financial indicators (return on assets, return on shareholders, current ratio, debt ratio, and dividends per share) as indicators to measure the financial performance of companies. Data was collected from the board reports of industrial companies listed on the Saudi financial market (2012-2015). The study population consists of companies listed on the Saudi financial market, while the sample includes industrial companies listed on the Saudi financial market during the study period (2012-2015). The sample comprises (45) companies listed in two sectors: *Companies Listed in the Agriculture and Food Industries Sector and Petrochemical Industries Sector.*

Empirical Analysis

This section case study aims to analyze the empirical context of corporate governance within Saudi Arabia's agriculture, food, and petrochemical industries. It includes a detailed overview of these sectors, discussing their characteristics, current situations, financial performance, significance, contributions, challenges, and opportunities for governance enhancement. Given Saudi Arabia's arid environment, the agriculture and food industries are crucial, with a unique production control system in place due to natural water scarcity. The rapidly growing population has increased food demand, prompting a focus on local food production as part of the broader economic diversification strategy from an oil-dependent economy.

Over the last few decades, the transformation of Saudi Arabia's agriculture and food sectors has been notable, marked by significant local food production growth. However, this expansion has led to challenges regarding stakeholder relationships. While many organizations have implemented strategic planning to address these issues, practical execution has proven difficult. Therefore, the study seeks to explore how governance can improve stakeholder relationships to support sustainable agricultural and food practices. Additionally, the petrochemical industry is a significant component of Saudi Arabia's economy, being the largest in production capacity globally. The rapid growth of this sector has resulted in a complex structure with numerous large organizations and diverse product portfolios. Various governance frameworks have been developed to ensure sustained financial performance amidst this growth. Nevertheless, recent financial crises have highlighted the need to review the effectiveness of these governance frameworks. Thus, the second research question focuses on evaluating existing governance frameworks and their effectiveness in maintaining financial performance sustainability, supported by examples from leading organizations.

No.	Companies	Governance Compliance Rate	Return on Assets	Dividends per Share	Current Ratio	Debt Ratio	Return on Shareholders
1	Saudi Fisheries	85.8%	9.8%	0.0	2.4	4.2	-16.2
2	Saudi Dairy and Food	90.2%	13.7%	3.0	3.4	9.7	21.8
3	Eastern Development	76.8%	6.0%	0.0	0.7	1.7	-7.6
4	National Agricultural Development	83.8%	4.2%	0.4	0.7	39.3	3.6
5	Al-Jouf Agricultural	83.4%	9.5%	2.0	5.3	2.9	13.4
6	Al-Qassim Holding for Investment in Agricultural, Plant and Animal Field	81.2%	3.2%	0.0	0.8	5.3	-3.2
7	Almarai	93.9%	7.8%	2.3	1.1	85.6	19.5
8	Wafra for Industry and Development	74.2%	4.6%	0.0	9.8	2.2	4.9
9	Bisha for Agricultural Development	78.1%	15.0%	0.0	0.4	1.3	135.2
10	Tabuk for Agricultural Development	75.3%	4.2%	0.4	2.2	4.3	4.6
11	Jazan for Energy and Development	82.4%	7.8%	0.0	1.3	7.0	-5.1
12	Halwani Brothers	96.7%	11.7%	1.9	4.1	7.4	13.9
13	Anaam International Holding Group	82.1%	8.0%	0.0	1.7	22.5	3.8

14	Herfy Food Services	96.7%	24.9%	2.9	2.2	12.3	34.2
15	Savola Group	93.3%	6.4%	1.2	0.9	42.0	14.7

Table (1) - Agriculture and Food Industries Sector - Governance and Indicators

Source: Prepared by the researchers based on data published on the Saudi financial market (Tadawul).

Table (1) shows the application of corporate governance principles and financial performance indicators in the agriculture and food industries sector. The data reveals a contrasted picture. Companies with higher governance compliance rates, such as Halwani Bros and Herfy Food Services (96.7%), generally demonstrate good financial performance with high return on assets (ROA) and return on shareholders (ROE). Herfy Food Services, for example, has an outstanding 24.9% ROA and 34.2% ROE, indicating effective asset use, significant shareholder value generation, and steady profitability. According to these results, a firm's financial results can be positively impacted by efficient governance processes that guarantee accountability, transparency, and ethical conduct.

However, a direct correlation between governance compliance and all financial metrics is not always evident. Companies like Almarai, with a high governance compliance rate (93.9%), exhibit strong ROA (7.8%) but a relatively high debt ratio (85.6%), potentially indicating a higher level of financial risk. Conversely, Eastern Development, despite a lower governance compliance rate (76.8%), demonstrates a decent ROA (6.0%). This suggests that while good governance is crucial, other factors such as industry dynamics, competitive pressures, and economic conditions also significantly influence a firm's financial performance.

Furthermore, the data does not explicitly provide information on environmental, social, and governance (ESG) factors, which are critical for assessing sustainability. To fully understand the impact of governance on sustainability, it would be necessary to analyze factors such as environmental impact, social responsibility initiatives, and stakeholder engagement. Also, the data provides some evidence to suggest a positive relationship between corporate governance and financial performance, particularly in terms of profitability. However, a more comprehensive analysis, including ESG factors and a deeper dive into industry-specific nuances, is required to draw definitive conclusions about the impact of governance on both financial performance and sustainability.

Variables	**Correlation with Governance Compliance Rate**
Return on Assets (%)	0.54 (Moderate Positive)
Dividends per Share	0.77 (Strong Positive)
Current Ratio	-0.16 (Weak Negative)
Debt Ratio	0.47 (Moderate Positive)
Return on Shareholders (%)	0.001 (Very Weak Positive)

Table 2: Correlation with Governance Compliance Rate Agriculture and Food Industries Sector

The correlation matrix reveals the strength and direction of relationships between the variables (Table 2). In order to identify the economic impacts of Governance Compliance Rate, the current study used the regression model using the ordinary least squares method to estimate the impact of Governance Compliance Rate on the five dependent variables, which Return on Assets, Dividends per Share, Current Ratio, Debt Ratio, and Return on Shareholders. Accordingly, the following standard models were estimated:

Model 1: Dependent variable: Return on assets in the agricultural sector

$$RA_i = \alpha_1 + \beta_1 GCR_i + \varepsilon_i$$

where RA_i stands for the return on assets for the company i, while GCR_i refers to the governance compliance rate.

Model 2: Dependent variable: Dividends per share

$$DS_i = \alpha_1 + \beta_1 GCR_i + \varepsilon_i$$

where DS_i stands for the dividends per share for the company i.

Model 3: Dependent variable: Current ratio

$$CR_i = \alpha_1 + \beta_1 GCR_i + \varepsilon_i$$

where DS_i stands for the current ratio for the company i.

Model 4: Dependent variable: Debt ratio

$$DR_i = \alpha_1 + \beta_1 GCR_i + \varepsilon_i$$

where DS_i stands for the debt ratio for the company i.

Model 5: Dependent variable: Return on shareholders

$$RS_i = \alpha_1 + \beta_1 GCR_i + \varepsilon_i$$

where DS_i stands for the return on shareholders for the company i.

Dependent Variables	**Return on Assets**	**Dividends per Share**	**Current Ratio**	**Debt Ratio**	**Return on Shareholders**
Coefficient	0.397**	0.118***	-0.053	1.446*	-0.004
t-value	2.310	4.429	-0.600	1.948	-0.003
p-value	0.038**	0.001***	0.559	0.073*	0.998
F-statistic	5.335**	19.618***	0.360	3.793**	0.000
R-squared	0.291	0.601	0.027	0.226	0.000

Table 3: Regression coefficient for the Agriculture and Food Industries Sector

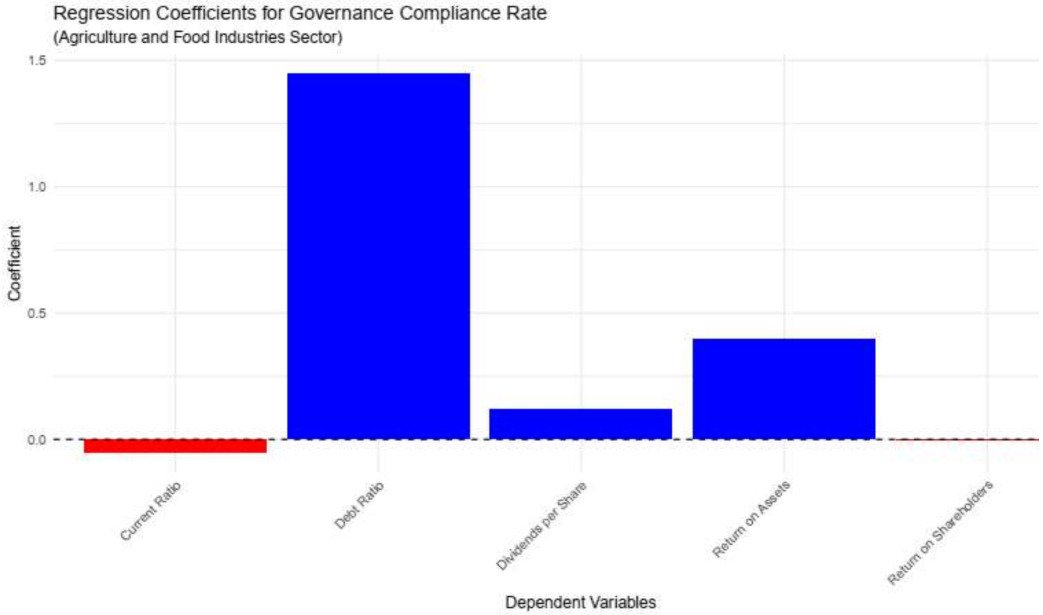


Figure 1: Regression Coefficients for Governance Compliance Rate

The regression analysis reveals that the governance compliance Rate has a statistically significant positive relationship with both Return on Assets (ROA) and Dividends per Share (DPS). Specifically, for every 1% increase in governance compliance Rate, ROA increases by 0.397% ($p=0.038$, $R2=29.1\%$), and DPS increases by 0.118 ($p<0.001$, $R2=60.1\%$). These results indicate that higher governance compliance is associated with improved asset efficiency and greater dividend payouts. However, no significant relationships were observed between Governance Compliance Rate and Current Ratio, Debt Ratio, or Return on shareholders ($p > 0.1$). This suggests that governance compliance may not directly influence liquidity, leverage, or shareholder returns. The findings emphasize the importance of governance practices in driving financial performance metrics, particularly profitability and dividend distribution.

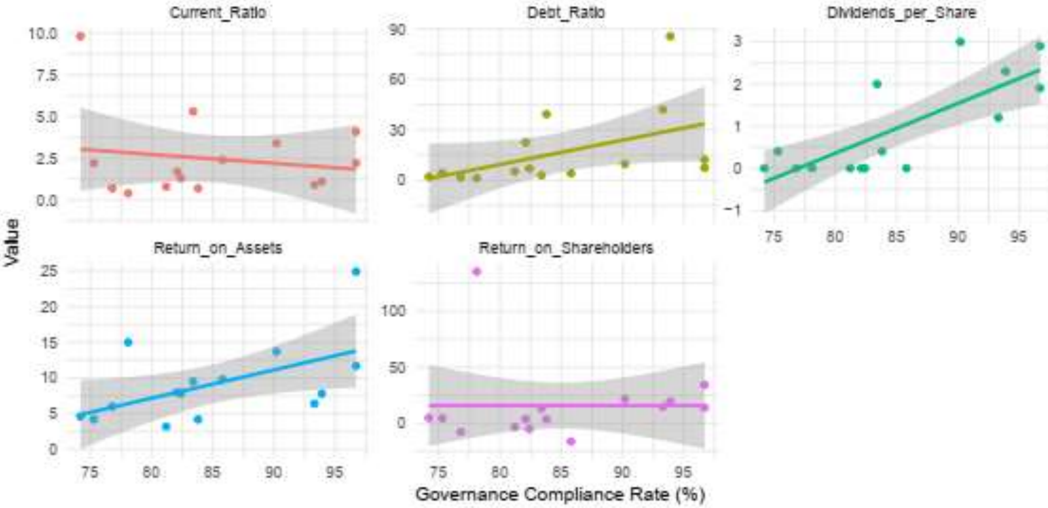


Figure 2: Governance Compliance Rate vs Financial Metrics

The scatter plots with regression lines and confidence intervals provide insight into the relationship between the Governance Compliance Rate and various financial metrics. A positive slope in the regression line indicates a positive correlation, meaning that as the Governance Compliance Rate increases, the financial metric tends to improve. Conversely, a negative slope suggests a negative correlation, where an increase in governance compliance is associated with a decrease in the financial metric. The confidence interval, represented as a shaded area around the regression line, indicates the uncertainty of the estimated relationship; narrower intervals show greater confidence in the regression results, while wider intervals suggest more variability. For example, a positive slope in the Return on Assets graph with a narrow confidence interval implies that companies with higher governance compliance experience better returns on assets, while a negative slope in current ratio suggests that stronger governance correlates with lower current levels. Overall, these visualizations reveal how governance influences financial performance, with a strong or weak correlation evident depending on the financial metric being examined. The confidence intervals help assess the reliability of these correlations, offering a deeper understanding of the potential impact of governance on financial outcomes.

Second: Companies Listed in the Petrochemical Industries Sector:

Table (4) shows the application of corporate governance principles and financial performance indicators in the petrochemical industries sector during the study period (2012-2015). This table provides information on the governance compliance and various financial metrics for companies in the petrochemical sector.

No.	**Company Name**	**Governance Compliance Rate (%)**	**Return on Assets (%)**	**Dividends per Share**	**Current Ratio**	**Debt Ratio (%)**	**Return on Shareholders (%)**
1	Saudi Fertilizers	98.8	38.6	10.1	6.3	1.9	41.2

2	Saudi Basic Industries	85.8	3.3	3.7	2.9	81.4	16.0
3	Saudi Industrial Investment	87.9	2.2	0.6	5.0	229.5	7.6
4	Sahara International Petrochemical	87.9	4.7	0.1	2.5	51.0	5.4
5	Al-Lujain	86.8	1.7	0.0	1.0	341.0	2.2
6	Advanced Petrochemical	95.3	13.2	1.4	1.6	48.5	16.8
7	National Industrial	81.4	0.8	0.0	36.6	268.8	-3.7
8	Rabigh Refining and Petrochemical	87.9	1.3	0.0	0.9	324.8	-2.3
9	Saudi Basic Industries - SABIC	83.4	7.6	0.6	3.0	89.1	6.2
10	National Manufacturing	87.9	4.2	1.3	1.9	127.4	14.8
11	Saudi Kayan Petrochemical	87.9	0.7	0.0	1.8	151.2	-0.6
12	Methanol Chemicals	86.7	3.3	0.1	1.7	81.5	3.1
13	Nama Chemicals	89.6	3.5	0.0	1.8	45.4	-5.2
14	Yanbu National Petrochemicals	96.7	11.7	0.0	1.72	140.2	17.8

Table (4) - Petrochemical Industries Sector - Governance and Indicators

Source: Prepared by the researchers based on data published on the Saudi financial market (Tadawul).

The correlation matrix reveals the strength and direction of relationships between the variables. While a strong correlation between high Governance Compliance Rates and superior financial performance is not immediately evident, some trends emerge. Companies with higher Governance Compliance Rates (e.g., Saudi Fertilizers, Advanced) tend to exhibit better Return on Assets (ROA) and Return on Shareholders (ROE), suggesting a potential positive influence. However, factors like high Debt Ratios significantly impact financial performance. Companies with extremely high debt ratios (e.g., Saudi Industrial Investment, Alujain) demonstrate poor financial performance despite relatively high Governance Compliance Rates. This highlights that while good governance is crucial, it cannot mitigate the risks associated with excessive debt. Furthermore, the data does not explicitly include sustainability indicators, making it difficult to directly assess the relationship between governance and sustainability. However, it can be inferred that companies with strong financial performance and a focus on long-term value creation are more likely to prioritize sustainability considerations. The data suggests that while good corporate governance practices are essential, they are not a guarantee of superior financial performance. Other factors, such as debt levels, market conditions, and industry dynamics, play a significant role. Further analysis with a broader range of financial and sustainability indicators is necessary to establish a more conclusive link between corporate governance and firm performance in the Saudi Arabian context.

Variables	**Correlation with Governance Compliance Rate**
Return on Assets (%)	0.77 (Strong Positive)
Dividends per Share	0.54 (Moderate Positive)
Current Ratio	-0.38 (Moderate Negative)
Debt Ratio	-0.43 (Moderate Negative)
Return on Shareholders (%)	0.72 (Strong Positive)

Table 5: Correlation with Governance Compliance Rate

Petrochemical Industries Sector

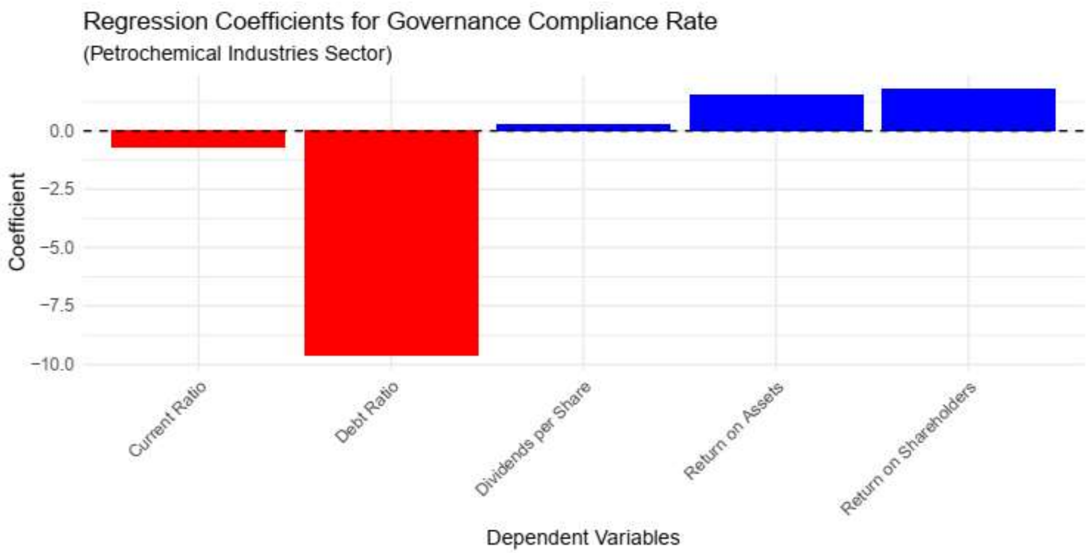
We run a regression model where the Governance Compliance Rate is the predictor, and the financial metrics (Return on Assets, Dividends per Share, Current Ratio, Debt Ratio, return on Shareholders) are the dependent variables. This will give you the coefficients and p-values to assess the strength and statistical significance of the relationships.

Dependent Variables	**Return on Assets**	**Dividends per Share**	**Current Ratio**	**Debt Ratio**	**Return on Shareholders**
Coefficient	1.553***	0.299**	-0.733	-9.652	1.814***
t-value	4.142	2.186	-1.457	-1.672	3.653
p-value	0.001***	0.049**	0.171	0.120	0.003***
F-statistic	17.153***	4.778	2.122	2.795	13.341***
R-squared	0.588	0.285	0.150	0.189	0.526

Table 6: Regression coefficient for the Agriculture and Food Industries Sector

We conducted a regression analysis with Governance Compliance Rate as the predictor and five financial metrics (Return on Assets, Dividends per Share, Current Ratio, Debt Ratio, and Return on Shareholders) as dependent variables. The results indicate that Governance Compliance Rate has a significant positive relationship with Return on Assets (coefficient = 1.553, p-value = 0.001, $R^2 = 0.588$) and Return on Shareholders (coefficient = 1.814, p-value = 0.003, $R^2 = 0.526$), showing strong explanatory power. It also has a weaker, but still statistically significant, positive relationship with Dividends per Share (coefficient = 0.299, p-value = 0.049, $R^2 = 0.285$).

Conversely, the relationships with Current Ratio (coefficient = -0.733, p-value = 0.171, R^2 = 0.150) and Debt Ratio (coefficient = -9.652, p-value = 0.120, R^2 = 0.189) are not statistically significant, suggesting limited explanatory power for these metrics. These results highlight that governance compliance strongly correlates with key profitability and shareholder return metrics but has minimal impact on liquidity and debt structure. The low R-squared values for these variables (0.150 and 0.189) indicate that other factors likely contribute to explaining their variance. Overall, the results underscore the critical role of corporate governance in driving profitability and shareholder value, contributing to economic sustainability.



Findings and Analysis

This section presents a synthesis of the research results of data collected. It outlines key themes and patterns identified in the data and links them back to the research objectives. The focus of this section is on the implications and corporate governance practices on the financial performance sustainability of selected companies in the agriculture, food, and petrochemical industries sector in Saudi Arabia. To address the research questions, each finding is presented in a thematic narrative style and supported by qualitative and quantitative evidence, thereby reinforcing the reliability of the results (Uwuigbe et al., 2017). In addition, some implications of the findings are discussed in relation to the existing literature, contributing to a deeper understanding of the subject matter. An overview of the challenges and obstacles faced by organizations in implementing and complying with some practices is elaborated upon as well (Bafarasat & Oliveira, 2021). Overall, this section throws light on some actionable recommendations derived from the findings and analysis that can help organizations enhance their performance in relation to ethical practices and corporate governance principles. An overview of the recommendations is provided, intending to inform management and decision-makers about the most effective strategies for achieving sustainability in performance and compliance. Key Findings and Themes Supported by Evidence The qualitative and quantitative data analysis revealed that organizations in the agriculture, petrochemical, and food industries in Saudi Arabia are taking measures to implement corporate governance principles. However, maintaining compliance and sustainability in key ethical areas is still a challenge. The findings of the research were categorized into four themes: financial performance sustainability, corporate governance, and key stakeholders. Each theme is discussed further, supported by evidence from the research (Aladwey & Alsudays, 2024).

Conclusion and Recommendations

The conclusion section brings together the key findings of the research, and corporate governance in enhancing financial performance sustainability. The significant relationships between corporate governance, and financial performance sustainability are confirmed, along with the collective impact of these factors on the agriculture, food, and petrochemical industries sectors listed in Saudi Arabia. These findings contribute to the existing literature, supporting the capital agency theory perspective on the relationship between corporate governance and financial performance sustainability (Bafarasat & Oliveira, 2021).

Additionally, the results of the casual research provide supplemental empirical data, reinforcing the arguments made in the literature review. The conclusion section synthesizes the insights garnered from both the literature review and the empirical data, presenting a final perspective on the study's research questions. Consequently, the research findings help practitioners in the industry and policymakers gain a deeper understanding of the pathways for adopting governance practices to achieve greater financial performance sustainability. In this respect, there is a necessity for organizations to nurture a culture of the strategic agenda of corporate governance and sustainability, as such leadership and governance structures play an essential role in risk management, financial controls management, and the smooth functioning of operations (Banks et al., 2021; Dey et al.2022).

Furthermore, the governance framework must be recognized as a vital element in a sector's prosperity in achieving financial performance sustainability. This research proposes an initial assessment framework to assist industry sectors in evaluating the robustness of their governance practices against good governance principles. Future research could validate this preliminary assessment framework through sector-specific case studies, as each sector faces different challenges and opportunities in its governance arrangements. In addition, future studies could expand the assessment framework to include governance aspects beyond corporate governance, such as supply chain or business relationship governance. Lastly, investigations into other industry sectors, both in developing and developed economies, would enrich understanding of how governance fosters sustainability (Omol, 2024; Mousazadeh et al.2023; Goloshchapova et al.2023).

Acknowledgements

This work was supported by the Deanship of Scientific Research, Vice Presidency for Graduate Studies and Scientific Research, King Faisal University, Saudi Arabia [Grant No. KFU250463].

References

Abdullah, H., & Tursoy, T. (2023). The effect of corporate governance on financial performance: evidence from a shareholder-oriented system. Interdisciplinary Journal of Management Studies (Formerly known as Iranian Journal of Management Studies), 16(1), 79-95.

Aftab, J., Abid, N., Sarwar, H., & Veneziani, M. (2022). Environmental ethics, green innovation, and sustainable performance: Exploring the role of environmental leadership and environmental strategy. Journal of Cleaner Production.

Aguilera, R. V., Aragón-Correa, J. A., Marano, V., & Tashman, P. A. (2021). The corporate governance of environmental sustainability: A review and proposal for more integrated research. Journal of

Management, 47(6), 1468-1497.

Ahmad, S., Islam, T., Sadiq, M., & Kaleem, A. (2021). Promoting green behavior through ethical leadership: a model of green human resource management and environmental knowledge. Leadership & Organization Development Journal, 42(4), 531-547.

Ahmed, M. (2016). How Corporate Governance Influence on Firms Performance: An Evidence of Oil and Gas Sector Listed in KSE-100.

Al Naimi, S. M. (2022). Economic diversification trends in the Gulf: The case of Saudi Arabia. Circular Economy and Sustainability.

Al-Adeem, K. R. & Alsahaly, S. (2024). Reporting Corporate Risk: An Empirical Inquiry into Listed Entities in the Saudi Capital Market. Available at SSRN 4913785.

Aladwey, L. M. A. & Alsudays, R. A. (2024). Does Sustainability and Environmental disclosure matter in Saudi Arabia? Insights from a Stakeholders' Perspective.

Aladwey, L. M. A. & Alsudays, R. A. (2024). Unveiling the Significance: Sustainability and Environmental Disclosure in Saudi Arabia through Stakeholders' Theory. Sustainability.

Aladwey, L. M. A. & Alsudays, R. A. (2024). Unveiling the Significance: Sustainability and Environmental Disclosure in Saudi Arabia through Stakeholders' Theory. Sustainability.

Alamri, Y., Alrwis, K., Ghanem, A., Kamara, S., Alaagib, S., & Aldawdahi, N. (2023). The Economic Nexus between Energy, Water Consumption, and Food Production in the Kingdom of Saudi Arabia. Economies, 11(4), 113.

Albaity, M. & Rahman, M. (2021). Customer loyalty towards Islamic banks: the mediating role of trust and attitude. Sustainability.

Al-Faryan, M. A. S. & Alokla, J. (2023). Do publicly listed insurance firms in Saudi Arabia have strong corporate governance? Economies.

Al-Faryan, M. A. S., & Dockery, E. (2021). Testing for efficiency in the Saudi stock market: does corporate governance change matter?. Review of Quantitative Finance and Accounting, 57(1), 61-90.

Alkhadra, W. A., Khawaldeh, S., & Aldehayyat, J. (2023). Relationship of ethical leadership, organizational culture, corporate social responsibility and organizational performance: a test of two mediation models. International Journal of Ethics and Systems, 39(4), 737-760.

Al-Mahish, M., Alzahrani, F., Elzaki, R., & Slama, M. B. (2024). Economies of scale in Saudi Arabia's refining sector: An application of modern econometric models. Heliyon.

Al-Matari, E. M., Mgammal, M. H., Alosaimi, M. H., Alruwaili, T. F., & Al-Bogami, S. (2022). Fintech, board of directors and corporate performance in Saudi Arabia financial sector: Empirical study. Sustainability, 14(17), 10750.

Almutairi, K. & Alahmadi, R. (2023). Assessing the Impact of the Recent Unprecedented World Events on the Economic and Environmental Conditions of Saudi Arabia. Sustainability.

Alnaim, M. & Kouaib, A. (2023). Inventory turnover and firm profitability: A Saudi Arabian Investigation. Processes.

Alsadhan, K. S. O. (2023). Takeovers of publicly traded companies in KSA: a critique of regulations and minority shareholders protection rules in the takeover context.

Al-Sahali, S. A. & Al-Adeem, K. R. (2024). Reporting Corporate Risk: An Empirical Inquiry into Listed Entities in the Saudi Capital Market. Sustainability.

Alsharari, N. M. & Aljohani, M. S. (2024). The benchmarking implementation and management control process as influenced by interplay of environmental and cultural factors: institutional and contingency …. Benchmarking: An International Journal.

Alsolami, B. M. (2022). Identifying and assessing critical success factors of value management implementation in Saudi Arabia building construction industry. Ain Shams Engineering Journal.

Alsuwailem, A. A., Salem, E., Saudagar, A. K. J., AlTameem, A., AlKhathami, M., Khan, M. B., & Hasanat, M. H. A. (2021). Impacts of COVID-19 on the food supply chain: a case study on Saudi Arabia. Sustainability, 14(1), 254.

Aluchna, M., Roszkowska-Menkes, M., Kamiński, B., & Bosek-Rak, D. (2022). Do institutional investors encourage firm to social disclosure? The stakeholder salience perspective. Journal of Business Research, 142, 674-682.

Ananzeh, H. (2022). Corporate governance and the quality of CSR disclosure: lessons from an emerging economy. Society and Business Review.

Ararat, M., Claessens, S., & Yurtoglu, B. B. (2021). Corporate governance in emerging markets: A selective review and an agenda for future research. Emerging Markets Review.

Arvidsson, S. & Dumay, J. (2022). Corporate ESG reporting quantity, quality and performance: Where to now for environmental policy and practice?. Business strategy and the environment.

Aryan, L., Owais, W., Dahiyat, A., Rahamneh, A., Saraireh, S., Haija, A., & Al-Hawary, S. (2022). The effectiveness of corporate governance on corporate social responsibilities performance and financial reporting quality in Saudi Arabia's manufacturing sector. Uncertain Supply Chain Management, 10(4), 1141-1146.

Bafarasat, A. Z. & Oliveira, E. (2021). of a transition to the knowledge economy in Saudi Arabia and Qatar: A critical reflection through the lens of spatial embeddedness and evolutionary governance Futures.

Bajaher, M., Habbash, M., & Alborr, A. (2022). Board governance, ownership structure and foreign investment in the Saudi capital market. Journal of Financial Reporting and Accounting, 20(2), 261-278.

Balaraman, P. (2017). Qualitative Review of Ethics from Religion, Culture and Corporate Scandals.

Banks, G. C., Fischer, T., Gooty, J., & Stock, G. (2021). Ethical leadership: Mapping the terrain for concept cleanup and a future research agenda. The Leadership Quarterly.

Barauskaite, G., & Streimikiene, D. (2021). Corporate social responsibility and financial performance of companies: The puzzle of concepts, definitions and assessment methods. Corporate Social Responsibility and Environmental Management, 28(1), 278-287.

Battilana, J., Obloj, T., Pache, A. C., & Sengul, M. (2022). Beyond shareholder value maximization: Accounting for financial/social trade-offs in dual-purpose companies. Academy of Management Review, 47(2), 237-258.

Benedicto Ng'eni, F. (2015). The Corporate Governance and Firm Performance: A Review of Existing Empirical Evidence.

Bhardwaj, R. L., Parashar, A., Parewa, H. P., & Vyas, L. (2024). An Alarming Decline in the Nutritional Quality of Foods: The Biggest Challenge for Future Generations' Health. Foods.

Boshnak, H. A. (2021). Corporate governance mechanisms and firm performance in Saudi Arabia. International Journal of Financial Research.

Chebbi, K. & Ammer, M. A. (2022). Board composition and ESG disclosure in Saudi Arabia: The moderating role of corporate governance reforms. Sustainability.

Chebbi, K. & Ammer, M. A. (2022). Board composition and ESG disclosure in Saudi Arabia: The moderating role of corporate governance reforms. Sustainability.

de Villiers, C. & Dimes, R. (2021). Determinants, mechanisms and consequences of corporate governance reporting: a research framework. Journal of Management and Governance.

Din, S. U., Arshad Khan, M., Khan, M. J., & Khan, M. Y. (2022). Ownership structure and corporate financial performance in an emerging market: a dynamic panel data analysis. International Journal of Emerging Markets, 17(8), 1973-1997.

Dos Santos, L. M. (2021). The relationship between workforce sustainability, stress, and career decision: A study of kindergarten teachers during the COVID-19 pandemic. Sustainability.

Du, W. & Li, M. (2021). The impact of land resource mismatch and land marketization on pollution emissions of industrial enterprises in China. Journal of Environmental Management.

El-Chaarani, H., Abraham, R., & Skaf, Y. (2022). The impact of corporate governance on the financial performance of the banking sector in the MENA (Middle Eastern and North African) region: An immunity test of banks for COVID-19. Journal of Risk and Financial Management, 15(2), 82.

Farah, B., Elias, R., Aguilera, R., & Abi Saad, E. (2021). Corporate governance in the Middle East and North Africa: A systematic review of current trends and opportunities for future research. Corporate Governance: An International Review, 29(6), 630-660.

Fera, P., Pizzo, M., Vinciguerra, R., & Ricciardi, G. (2022). Sustainable corporate governance and new auditing issues: a preliminary empirical evidence on key audit matters. Corporate Governance: The International Journal of Business in Society, 22(1), 194-211.

Firoz Shamsi, A. (2014). Corporate Governance in Pakistan and Need of Corporate Performance Measurement: An Empirical Study.

Gerged, A. M. (2021). Factors affecting corporate environmental disclosure in emerging markets: The role of corporate governance structures. Business Strategy and the Environment.
Gerged, A. M. (2021). Factors affecting corporate environmental disclosure in emerging markets: The role of corporate governance structures. Business Strategy and the Environment.
Gerged, A. M., Albitar, K., & Al-Haddad, L. (2023). Corporate environmental disclosure and earnings management—The moderating role of corporate governance structures. International Journal of Finance & Economics, 28(3), 2789-2810.

Gharbi, H., Sobaih, A. E. E., Aliane, N., & Almubarak, A. (2022). … role of innovation capacities in the relationship between green human resource management and competitive advantage in the Saudi food industry: does gender of …. Agriculture.

Goloshchapova, T., Yamashev, V., Skornichenko, N., & Strielkowski, W. (2023). E-Government as a key to the economic prosperity and sustainable development in the Post-Covid Era. Economies, 11(4), 112.

Guluma, T. F. (2021). The impact of corporate governance measures on firm performance: the influences of managerial overconfidence. Future Business Journal.
Guluma, T. F. (2021). The impact of corporate governance measures on firm performance: the influences of managerial overconfidence. Future Business Journal.
Heaton, S., Teece, D., & Agronin, E. (2023). Dynamic capabilities and governance: An empirical investigation of financial performance of the higher education sector. Strategic Management Journal.

Hristov, I. & Searcy, C. (2024). Integrating sustainability with corporate governance: a framework to implement the corporate sustainability reporting directive through a balanced scorecard. Management Decision.

Hu, K. H., Hsu, M. F., Chen, F. H., & Liu, M. Z. (2021). Identifying the key factors of subsidiary supervision and management using an innovative hybrid architecture in a big data environment. Financial Innovation.

Id Bouichou, S., Wang, L., & Zulfiqar, S. (2022). How Corporate Social Responsibility Boosts Corporate Financial and Non-financial Performance: The Moderating Role of Ethical Leadership.

Ikhsan, A., Rosari, D., Pambudi, J. E., Lubis, P. K. D., & Fadillah, T. D. (2024). THE EFFECT OF AUDIT COMMITTEE, INTERNAL AUDITOR AND AUDIT QUALITY ON FIRM VALUE ON HOTEL INDUSTRY IN INDONESIA. International Journal of Economics and Finance Studies, 16(1), 337-354.

Jan, A. A., Lai, F. W., & Tahir, M. (2021). Developing an Islamic Corporate Governance framework to examine sustainability performance in Islamic Banks and Financial Institutions. Journal of Cleaner Production.

Jan, A. A., Lai, F. W., & Tahir, M. (2021). Developing an Islamic Corporate Governance framework to examine sustainability performance in Islamic Banks and Financial Institutions. Journal of Cleaner Production.

Jan, A. A., Lai, F. W., Draz, M. U., Tahir, M., Ali, S. E. A., Zahid, M., & Shad, M. K. (2021). Integrating sustainability practices into islamic corporate governance for sustainable firm performance: from the lens of agency and stakeholder theories. Quality & Quantity, 1-24.

Kaal, W. A. (2021). Blockchain solutions for agency problems in corporate governance. In Information for efficient decision making: Big data, blockchain and relevance (pp. 313-329).

Kaawaase, T. K., Nairuba, C., & Akankunda…, B. (2021). Corporate governance, internal audit quality and financial reporting quality of financial institutions. Asian Journal of ….

Khan, Z. A., Chowdhury, S. R., & Mitra…, B. (2023). Analysis of industrial symbiosis case studies and its potential in Saudi Arabia. Journal of Cleaner.

Kim, B. J., Kim, M. J., & Kim, T. H. (2021). "The power of ethical leadership": The influence of corporate social responsibility on creativity, the mediating function of psychological safety, and the moderating role of ethical leadership. International journal of environmental research and public health, 18(6), 2968.

Krasodomska, J. & Zarzycka, E. (2021). Key performance indicators disclosure in the context of the EU directive: when does stakeholder pressure matter?. Meditari Accountancy Research.

Li, M., Li, W., Wang, F., Jia, X., & Rui, G. (2021). Applying BERT to analyze investor sentiment in stock market. Neural Computing and Applications.

Liu, L. X., Liu, S., & Sathye, M. (2021). Predicting bank failures: a synthesis of literature and directions for future research. Journal of Risk and Financial Management.

Lu, J., & Batten, J. (2023). The implementation of OECD corporate governance principles in post-crisis Asia. In Australasian Perspectives on Corporate Citizenship (pp. 47-62). Routledge.

Lu, J., & Wang, J. (2021). Corporate governance, law, culture, environmental performance and CSR disclosure: A global perspective. Journal of International Financial Markets, Institutions and Money, 70, 101264.

Luo, L. & Tang, Q. (2021). Corporate governance and carbon performance: Role of carbon strategy and awareness of climate risk. Accounting & Finance.

Mani, Z. A. & Goniewicz, K. (2023). Adapting disaster preparedness strategies to changing climate patterns in Saudi Arabia: A rapid review. Sustainability.

McLaughlin, C., Armstrong, S., Moustafa, M. W., & Elamer, A. A. (2021). Audit committee diversity and corporate scandals: evidence from the UK. International Journal of Accounting & Information Management, 29(5), 734-763.

Mohammad Haj Yousef, E. (2016). The Impact of Corporate Governance on the Profitability of the Listed Companies in Jordan over the period from 2010 to 2014.

Mohammad Jaser & Qasim, A. (2014). The Impact of Corporate Governance on Firm Performance: Evidence from the UAE.

Mousazadeh, H., Ghorbani, A., Azadi, H., Almani, F. A., Zangiabadi, A., Zhu, K., & Dávid, L. D. (2023). Developing sustainable behaviors for underground heritage tourism management: The case of Persian Qanats, a UNESCO world heritage property. Land, 12(4), 808.

Naciti, V., Cesaroni, F., & Pulejo, L. (2022). Corporate governance and sustainability: A review of the existing literature. Journal of Management and Governance.
Naciti, V., Cesaroni, F., & Pulejo, L. (2022). Corporate governance and sustainability: A review of the existing literature. Journal of Management and Governance.
Nasrallah, N., & El Khoury, R. (2022). Is corporate governance a good predictor of SMEs financial

performance? Evidence from developing countries (the case of Lebanon). Journal of Sustainable Finance & Investment, 12(1), 13-43.

Neri, A., Cagno, E., Lepri, M., & Trianni, A. (2021). A triple bottom line balanced set of key performance indicators to measure the sustainability performance of industrial supply chains. Sustainable Production and Consumption, 26, 648-691.

Nguyen, N. T. T., Nguyen, N. P., & Hoai, T. T. (2021). Ethical leadership, corporate social responsibility, firm reputation, and firm performance: A serial mediation model. Heliyon.

Nguyen, T. H., Elmagrhi, M. H., Ntim, C. G., & Wu, Y. (2021). Environmental performance, sustainability, governance and financial performance: Evidence from heavily polluting industries in China. Business Strategy and the Environment, 30(5), 2313-2331.

Nudurupati, S. S., Garengo, P., & Bititci, U. S. (2021). Impact of the changing business environment on performance measurement and management practices. International Journal of Production Economics, 232, 107942.

Ohana, M., Murtaza, G., Haq, I., Al-Shatti, E., & Chi, Z. (2024). Why and when can CSR toward employees lead to cyberloafing? The role of workplace boredom and moral disengagement. Journal of Business Ethics.

Omol, E. J. (2024). Organizational digital transformation: from evolution to future trends. Digital Transformation and Society.

Ortiz-Martínez, E., Marín-Hernández, S., & Santos-Jaén, J. M. (2023). Sustainability, corporate social responsibility, non-financial reporting and company performance: Relationships and mediating effects in Spanish small and medium sized enterprises. Sustainable Production and Consumption, 35, 349-364.

Pacces, A. M. (2021). Will the EU taxonomy regulation foster sustainable corporate governance?. Sustainability.

Pham, D. C., Do, T. N. A., Doan, T. N., Nguyen, T. X. H., & Pham, T. K. Y. (2021). The impact of sustainability practices on financial performance: empirical evidence from Sweden. Cogent Business & Management, 8(1), 1912526.

Prencipe, R. (2024). The G in ESG: an analysis of the impact of Corporate Governance indicators on firm performance.

R. Y. Abu Arrah, T., Caglar, D., & Bayram, P. (2018). The role of corporate culture and ethical environment in directing individuals' behavior.

Rahman, M. M. (2021). Achieving Sustainable Development Goals of Agenda 2030 in Bangladesh: the crossroad of the governance and performance. Public administration and policy.

Rahman, M. M., Akter, R., Abdul Bari, J. B., Hasan, M. A., Rahman, M. S., Abu Shoaib, S., ... & Rahman, S. M. (2022). Analysis of climate change impacts on the food system security of Saudi Arabia. Sustainability, 14(21), 14482.

Rahman, M. M., Rahman, M. S., Chowdhury, S. R., Elhaj, A., Razzak, S. A., Abu Shoaib, S., ... & Rahman, S. M. (2022). Greenhouse gas emissions in the industrial processes and product use sector of Saudi Arabia—An emerging challenge. Sustainability, 14(12), 7388.

Rane, N. L., Choudhary, S. P., & Rane, J. (2024). Artificial Intelligence-driven corporate finance: enhancing efficiency and decision-making through machine learning, natural language processing, and robotic process automation in corporate governance and sustainability. Studies in Economics and Business Relations, 5(2), 1-22.

Ratajczak, P. & Mikołajewicz, G. (2021). The impact of environmental, social and corporate governance responsibility on the cost of short-and long-term debt. Economics and Business Review.

Saputra, F. (2022). Analysis Effect Return on Assets (ROA), Return on Equity (ROE) and Price Earning Ratio (PER) on Stock Prices of Coal Companies in the Indonesia Stock Exchange (IDX) Period 2018-

2021. Dinasti International Journal of Economics, Finance & Accounting, 3(1), 82-94.

Shahwan, Y., Alramahi, N., & Alayan, M. A. (2023). Saudi Food Industry Value: Profile Disclosure, Profitability, and Sustainable Supply Chain Effects. Information Sciences Letters, 12(8), 2499-2509.

Sherman, S. L., Calcei, J., Ray, T., Magnussen, R. A., Musahl, V., Kaeding, C. C., ... & Arnold, M. P. (2021). ACL Study Group presents the global trends in ACL reconstruction: biennial survey of the ACL Study Group. Journal of ISAKOS, 6(6), 322-328.

Singh, A., Singh, H. P., Alam, F., & Agrawal, V. (2022). Role of education, training, and E-learning in sustainable employment generation and social empowerment in Saudi Arabia. Sustainability.

Sompolgrunk, A., Banihashemi, S., & Mohandes, S. R. (2021). Building information modelling (BIM) and the return on investment: a systematic analysis. Construction Innovation, 23(1), 129-154.

Son, T. H., Weedon, Z., Yigitcanlar, T., Sanchez, T., Corchado, J. M., & Mehmood, R. (2023). Algorithmic urban planning for smart and sustainable development: Systematic review of the literature. Sustainable Cities and Society, 94, 104562.

Sukumaran, S., Bee, T. S., & Wasiuzzaman, S. (2022). Cryptocurrency as an investment: The Malaysian context. Risks.

Sunarto, S., Widjaja, B., & Oktaviani, R. M. (2021). The effect of corporate governance on tax avoidance: The role of profitability as a mediating variable. The Journal of Asian Finance, Economics and Business, 8(3), 217-227.

Suriyankietkaew, S., Krittayaruangroj, K., & Iamsawan, N. (2022). Sustainable Leadership practices and competencies of SMEs for sustainability and resilience: A community-based social enterprise study. Sustainability.

Suttipun, M. (2021). The influence of board composition on environmental, social and governance (ESG) disclosure of Thai listed companies. International Journal of Disclosure and Governance.

Tang, H. (2022). The effect of ESG performance on corporate innovation in China: The mediating role of financial constraints and agency cost. Sustainability.

Tibiletti, V., Marchini, P. L., Furlotti, K., & Medioli, A. (2021). Does corporate governance matter in corporate social responsibility disclosure? Evidence from Italy in the “era of sustainability”. Corporate Social Responsibility and Environmental Management, 28(2), 896-907.

Tiep Le, T. & Behl, A. (2022). Role of corporate governance in quick response to Covid-19 to improve SMEs’ performance: evidence from an emerging market.

Tjahjadi, B., Soewarno, N., & Mustikaningtiyas, F. (2021). Good corporate governance and corporate sustainability performance in Indonesia: A triple bottom line approach. Heliyon.

Uwuigbe, U., Olugbenga, J., R. Uwuigbe, O., Peters, S., & Adegbola, O. (2017). CORPORATE ETHICAL REPORTING AND FINANCIAL PERFORMANCE: EVIDENCE FROM THE EMERGING MARKET.

Vinodkumar, N., & Alarifi, G. (2022). Environmental social governance: A core value to responsible stakeholders and stock market sustainability in the Kingdom of Saudi Arabia. Journal of Sustainable Finance & Investment, 12(4), 1085-1101.

Walker, A. (2018). Corporate Governance Strategies to Improve Organizational Performance in the Accounting Industry.

Xu, B. & Ma, L. (2022). Religious values motivating CSR: An empirical study from corporate leaders' perspective. Journal of Business Ethics.

Xu, X., Xiong, F., & An, Z. (2023). Using machine learning to predict corporate fraud: evidence based on the gone framework. Journal of Business Ethics.

You, L. (2024). The impact of social norms of responsibility on corporate social responsibility short title: The impact of social norms of responsibility on corporate social responsibility. Journal of Business

Ethics.

Yusuf, N. & Lytras, M. D. (2023). Competitive sustainability of saudi companies through digitalization and the circular carbon economy model: a bold contribution to the vision 2030 agenda in Saudi …. Sustainability.

Zattoni, A. & Cuomo, F. (2023). Should we integrate corporate social responsibility with corporate governance? An empirical investigation of good governance codes' recommendations. … on Corporate Governance and Ethics.