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**ROLE OF AGILITY IN AUDIT, CORPORATE GOVERNANCE,
RISK AND COMPLIANCE (AGRC) FOR FINANCIAL
PERFORMANCE IN LISTED GOVERNMENT-OWNED
COMPANIES**



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**DOCTOR OF PHILOSOPHY
UNIVERSITI UTARA MALAYSIA
2024**

**ROLE OF AGILITY IN AUDIT, CORPORATE GOVERNANCE,
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PERFORMANCE IN LISTED GOVERNMENT-OWNED
COMPANIES**



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**A thesis submitted to the Ghazalie Shafie Graduate School of Government in
fulfilment of the requirement for the Doctor of Philosophy
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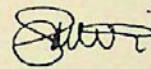
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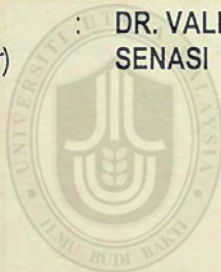
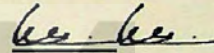
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With my heartfelt gratitude,

ABSTRACT

This study investigates the relationship between corporate governance mechanisms, risk, compliance, and the financial performance of listed government-owned companies in the UAE. The motive of the study in applying it to listed government-owned companies in the UAE is the leading role played by these companies in the redistribution of national income, as this is considered one of the main objectives of establishing such companies. Hence, this study covering the research gap in the field examines the relationship between agility in audit, corporate governance, risk, compliance, and financial performance. Hence, the research is structured into five chapters to fulfill the research questions and objectives, encompassing a comprehensive review of existing related studies, an in-depth analysis and discussion of relevant literature pertinent to this research, and the exploration of a theoretical framework. Consequently, the hypotheses are rested on the basis of the conceptual framework. Also, the research methodology is discussed in this study to outline how this answers the research questions and verifies its hypotheses and the data, which are collected and analyzed statistically. The study reached several results, the most important of which are: that enhancing the company's use of good corporate governance strives to increase shareholder welfare; one of the aspects that investors take into account when deciding whether to purchase shares of a firm is its financial performance, so Investors' money is safe and secure thanks to the application of good corporate governance. can use financial performance to gauge a manager's success in controlling resources for the organization. In the meanwhile, good corporate governance will help it perform better financially because economic performance demonstrates sound financial management also the specific results of this research revealed that regarding the independent variables of internal auditing, there are significant effects of internal auditing effectiveness, audit committee, audit agility and board director on the ROA indicator as one of the financial performance indicators. Also, there are significant effects of the internal auditing variables on the Tobins'Q as one of the financial performance indicators. Therefore, it is necessary to conduct more studies on the relationship between governance mechanisms and financial performance in other business sectors.

Keywords: Governance Mechanisms, Risk, Compliance, Internal Audit, Agility In Audit, Financial Performance.

ABSTRAK

Kajian ini menyiasat hubungan antara mekanisme tadbir urus korporat, risiko, pematuhan dan prestasi kewangan syarikat milik kerajaan tersenarai di UAE. Motif kajian mengaplikasikannya kepada syarikat milik kerajaan tersenarai di UAE adalah peranan utama yang dimainkan oleh syarikat-syarikat ini dalam pengagihan semula pendapatan negara, kerana ini dianggap sebagai salah satu objektif utama penubuhan syarikat tersebut. Oleh itu, kajian yang meliputi jurang penyelidikan di lapangan ini mengkaji hubungan antara ketangkasan dalam audit, tadbir urus korporat, risiko, pematuhan, dan prestasi kewangan. Oleh itu, penyelidikan ini distrukturkan kepada lima bab untuk memenuhi persoalan dan objektif kajian, merangkumi aspek komprehensif. kajian semula kajian berkaitan sedia ada, analisis mendalam dan perbincangan literatur berkaitan yang berkaitan dengan penyelidikan ini, dan penerokaan rangka kerja teori. Akibatnya, hipotesis diletakkan berdasarkan kerangka konsep. Selain itu, metodologi kajian dibincangkan dalam kajian ini untuk menggariskan bagaimana ini menjawab persoalan kajian dan mengesahkan hipotesis dan datanya, yang dikumpul dan dianalisis secara statistik. Kajian itu mencapai beberapa keputusan, yang paling penting ialah: mempertingkatkan penggunaan tadbir urus korporat yang baik oleh syarikat berusaha untuk meningkatkan kebajikan pemegang saham; salah satu aspek yang pelabur ambil kira semasa membuat keputusan sama ada untuk membeli saham firma ialah prestasi kewangannya supaya wang Pelabur selamat dan terjamin berkat penerapan tadbir urus korporat yang baik. boleh menggunakan prestasi kewangan untuk mengukur kejayaan pengurus dalam mengawal sumber untuk organisasi. Sementara itu, tadbir urus korporat yang baik akan membantunya mencapai prestasi kewangan yang lebih baik kerana prestasi ekonomi menunjukkan pengurusan kewangan yang kukuh. juga keputusan khusus penyelidikan ini mendedahkan bahawa mengenai pembolehubah bebas pengauditan dalaman, terdapat kesan ketara keberkesanan pengauditan dalaman, jawatankuasa audit, ketangkasan audit dan pengarah lembaga terhadap penunjuk ROA sebagai salah satu petunjuk prestasi kewangan. Selain itu, terdapat kesan ketara pembolehubah pengauditan dalaman pada Tobins'Q sebagai salah satu penunjuk prestasi kewangan. Oleh itu, adalah perlu untuk menjalankan lebih banyak kajian tentang hubungan antara mekanisme tadbir urus dan prestasi kewangan dalam sektor perniagaan lain.

Kata kunci: Mekanisme Tadbir Urus, Risiko, Pematuhan, Audit Dalaman, Ketangkasan Dalam Audit, Prestasi Kewangan.

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CHAPTER ONE

INTRODUCTION

All of these concepts fall within the good governance framework practices, namely, audit, governance, risk, and compliance (AGRC). Since feedback is given from top to bottom and vice versa in every organization, the AGRC serves as the central nerve for governance. As a result, it safeguards each organization's reputation while giving each entity its core identity.

On the one hand, corporations found it difficult to uphold good governance and embrace modern initiatives to endure over the long run due to the extensive regulatory criteria and conditions that must be adhered to. Nowadays, every nation and company are eager to implement the Artificial Intelligence (AI) phenomenon, the most notable development in the fourth industrial revolution IR.4.0. Listed government-owned businesses are setting aside funds to make the transition to AI. With the rise of good governance practices in the modern world, the term "agile" has come to the fore, and businesses are being urged to adopt it in order to continue operating listed government-owned corporations without encountering any complication or trouble. Working quickly and adapting to changes is a pretty thorough description of agility. As a result, it is a difficult method for AGRC, which necessitates prudence and observation before

addressing any findings in their report and requesting that upper management take any action or decision.

However, how do the members of the AGRC work with other departments to avoid getting in the way of this advancement? Can they still insist that their routine be followed and require the submission of their countless paperwork and documents? This paper examines the issue of agility, which is growing more significant for the corporate sector while complicating the implementation of AGRC.

Companies have to adapt its technique to adapt well with changing business environment. Hence, management changes are essential for companies' survival. The practice of continuously updating an organization's capabilities, direction and structure to meet the dynamic needs of external and internal consumers is referred to as "change management."

The international standard on auditing (ISA) 260 states that "communication with those charged with governance" is necessary to ensure effective communication between auditors and those responsible for the management of the firm. Therefore, board of directors and audit committee need to know about IFRS applications to contribute to higher audit quality (Shbeilat, 2019).

1.1 Background of the study

According to the Open Compliance and Ethics Group (OCEG), Governance, risk, and compliance (GRC) is an integrated set of skills that enables a company to operate ethically, especially in uncertainty, and to reach its goals. GRC encompass more than

just the essential duties of governance, risk, and compliance. Executive offices, market segments, audits, accountability, risks, laws, finance, and the boards themselves are all included in the GRC. A company needs GRC's people, processes, technologies, and data in order to achieve Principled Performance.

A firm is governed and regulated by a group of standards, procedures, and rules known as the AGRC, which is a component of corporate governance. Striking a balance between the interests of a company's stakeholders, such as shareholders, senior managers, consumers, suppliers, funders, the government, and communities, is an essential component of corporate governance (Kafidipe, Uwalomwa, Dahunsi, Okeme, & Ntim, 2021). As it also provides a framework for attaining its goals, corporate governance encompasses all aspects of management, from action plans and internal controls to the evaluation and corporate transparency (Almansour, Asad, & Shahzad, 2016).

Most companies strive for excellent corporate governance (Almansour, Asad, & Shahzad, 2016). A corporation must show strong corporate citizenship in addition to being successful through environmental awareness, moral behavior, and ethical corporate governance processes (Christensen, Kent, Routledge, & Stewart, 2015; Asad, Haider, & Fatima, 2018). Good corporate governance leads to an open system of rules and regulations with coordinated incentives for shareholders, directors, and executives. An audit is considered the most important element of corporate governance (Bansal & Sharma, 2016). Both owners and shareholders can use the extensive information provided by audits to make informed financial and operational decisions (Alkhuzai & Asad, 2018). The objectives of an audit and the information

the auditor needs to complete determine the audit's nature. By evaluating and improving risk management, control, and governance systems using a rigorous, disciplined approach, an internal audit helps an organization achieves its objectives (Boateng, 2018; Abdullah, Ismail, & Smith, 2018). By utilizing the information obtained and retained by the auditor, they must plan a way to keep frequency with the various duties they are supposed to check. On the contrary, all professions are quickly adopting new laws, rules, and procedures. The risk of fraud and errors are decreased through audits (Damer, Al-Znaimat, Asad, & Almansour, 2021). Risk management cannot be disregarded in governance research because the main objective of all corporate governance is to limit risk (Agarwal & Chadha, 2005; Boateng, 2018). Boards of directors are more prepared than ever to implement strict managerial measures to reduce the risks related to transformation.

In the Internet era, stakeholder involvement appears to be more pervasive and powerful. Social activists and non-governmental organizations (NGOs) have significantly increased over the past two decades (Agrawal & Cooper, 2015). Therefore, negligence and poor risk management may affect performance and cause a company to lose its competitive advantage quickly. 2018's Chaudhuri, Boer, and Taran; 2020's Shrouf, Al-Qudah, Khawaldeh, Obeidat, and Rawashdeh. The surge in strategic blunders in influential organizations demonstrates the need for improved decision-making processes. According to Calabrese et al.(2019), The complexity of the decision-making environment demonstrates how organizations mismanage risks by limiting their search for alternatives, making rash judgments, and ineffectively resource allocation.

Compliance with legal, administrative, statutory, and accounting processes is a crucial component that can be used to reduce risk. Completing a responsibility result in compliance (Chang, Chen, Cheng, & Chi, 2019). Corporations must demonstrate their commitment to both statutory legislation and voluntary standards of conduct. Businesses must therefore demonstrate compliance, which is challenging to do for a number of reasons. One of them is that employee involvement is necessary for compliance.

Let us imagine a company does not encourage a compliance-oriented culture. According to their personal standards or ideas about the outcomes and implications of their behavior, employees may choose not to respect the law. Therefore, being aware of the motivations behind employees' adherence to compliance norms is essential to achieving compliance. Regulation compliance may also not be accomplished due to the significant expenditures involved. Businesses are growing less motivated to comply with laws and regulations as a result, which affects performance. (Almansour, Asad, & Shahzad, 2016; Tanjung, 2020).

It is clear from the discussion above that organizations have been addressing audit, governance, risk, and compliance for several years, but research is still struggling to find solutions (Bansal & Sharma, 2016; Chang, Chen, Cheng, & Chi, 2019). There is a need to determine how to make fast adjustments in audit, governance, risk, and compliance since once a fraud occurs, a regulation or protection is put in place that becomes beneficial after a few years (Ado, Rashid, Mustapha, & Ademola, 2020). Thus, understanding the concept of agility and implementing it in audit, governance,

risk, and compliance can address the problem that laid the basis for corporate governance creation (Bashir & Asad, 2018).

For every company in the present day, enhancing speed and agility in the face of technological innovation is crucial. Al-Znaimat, Asad, Damer, and Almansour in 2021. The majority of earlier research has been on agility as a type of organizational structure for startups based on the growth of information systems. As a result, little is known about applying agile structures and principles to already-existing firms, especially in relation to governance procedures. In order to survive and grow in a random and chaotic world, one must have the flexibility to generate and respond to change. The ability to adapt to change is agility. Doz & Kosonen (2010). The current study's application of the concept of agility is concentrated on how auditing, security, accountability, and compliance affect performance from the financial aspect. (Almansour, Asad, & Shahzad, 2016; Busch & Friede, 2018).

Strategic agility is crucial for improving a company's performance in the modern business environment, particularly its financial performance. This is because audit agility refers to the ability to adapt quickly and modify in order to keep up with business environment changes. Hence, audit agility shapes the abilities of a company in a way that it can obtain a competitive advantage. However, the relation between corporate performance and enterprise risk management is mediated by strategic agility, according to Teoh et al. (2017). Additionally, findings by Ahmed et al. (2022) demonstrated that financial reporting standards have a significant impact on the capacities of auditors and agile internal auditing.

Discussions have been conducted over the relationship between sound company governance and financial performance. Since corporate governance practices and financial performance are unrelated, Shahwan (2015) reaches this judgment. In contrast, a study by Abang'a et al. (2022) suggested that corporate governance may affect the financial performance of state-owned enterprises (SOEs) in Kenya.

The company's operational risks take many forms, such as the failure of information processing, its transmission, retrieval of data, and inaccurate output (Santika, E., Fakhrughozy, M. H., Nur, W. M., & Lestari, H. S. (2022)). As a result, the operational risk has an impact on the operations' flow, which consequently affects the financial performance of the company.

Moreover, according to Lumbi, H. K. (2021), the entire firm value and the company's financial performance are both positively impacted by compliance with corporate governance principles.

1.2 Research problem

The financial performance of publicly traded government firms in the UAE has changed throughout time. While some businesses have had successful years, others have had disappointing years. The causes of poor financial performance are said to be several. Corporate strategy and its execution are among the elements that affect financial performance, claim Almansour, Asad, and Shahzad (2016). Corporate governance is often mentioned as one of the other important elements that can greatly impact financial performance.

The agency and institutional theories served as the theoretical underpinning for this study's analysis of the connection between corporate governance and financial success. The agency theory's main goal is to settle disputes brought on by the separation of corporate resource ownership and management (Alkhuzaie & Asad, 2018). Owners and managers may have such conflicts of interest, which can affect the profits' quality and, thus, financial performance. As a result, numerous internal and external methods, collectively referred to as corporate governance, have been recommended to manage conflicts of interest and reduce agency costs.

The main concern with corporate governance in rising economies like the Gulf Council Countries is audits, corporate governance, risk, and compliance, where businesses are having problems with these four areas (Agyemang-Mintah & Schadewitz, 2018). Scandals and corporate failures, such as SK Networks in South Korea, highlighted downfall of corporate governance mechanisms to make corporate audit better, corporate governance, risk, and compliance (Filatotchev, Liu, Lu, & Wright, 2011). In UAE, the inadequacy of high-quality audits, corporate governance practices, risk, and compliance causes the inability of stakeholders to safeguard themselves from corporate fraud.

However, In September 2019, regulatory authorities accused some firms of various breaches, including unauthorized financial activities and deceptive statements about client fees s (Source: Gulf News, July 14, 2020). Also, UAE convicted 40 people and eight companies for fraud (Gulf Insider) In addition, Dubai's regulator prohibited some firms from performing any financial services work in or from the emirate and imposed combined penalties. In UAE, there are now much talks on the compliance of the

companies with the application of governance rules, especially that the law sets diverse sanctions for non-compliance, including: fines, referring to disciplinary board and removing the company completely from stock market. Therefore, the issues related to audit, corporate governance, risk, and compliance of the corporate sector have come into question, as it is linked with the financial performance of businesses.

Although the UAE has enjoyed rapid economic growth over the several previous decades, the local corporate sector has been flourishing since 2000 when the DFM and ADX began operations. A total of 130 firms have been listed on these two stock markets over the last decade. The diversification of the economy raises the non-oil share of GDP to 71% due to massive government investments in the corporate sectors, which result in the highest record of government ownership in the firms listed on the two local stock markets. The government ownership in corporate firms is common in most markets, but the intensity is very high in the UAE because the government has a share ownership in 48% of all firms listed in the Dubai Financial Market (DFM) and Abu Dhabi Exchange (ADX). In their study, Uddin et. al (2014) identify that government became the main player in the local corporate sector by holding share ownership in the major firms listed on the two stock exchanges.

Given that it is accountable for the completeness, accuracy, and transparency of the financial reporting, audit activity plays a significant role in developing sound corporate governance (Agarwal & Chadha, 2005; Gebrayel, Jarrar, Salloum, & Lefebvre, 2018; Alzeban, 2020). However, just because something exists does not guarantee that it will always perform its function as planned. Additionally, some detractors claim that audit activity was created for "cosmetic purposes" (Bala, Amran, & Shaari, 2020; Jairoun,

et al., 2022), as well as to satisfy the standards. These frauds significantly influence the financial performance of the corporate sector. However, listed companies in the UAE facing reduced profits or significant losses from their human, financial, and managerial resources have sought assistance from various consulting entities. These companies are attempting to comply with new governance regulations, despite the complex procedures and high associated costs. (Nassar, M., & Jreisat, A. 2020).

Due to corporate scams, the effectiveness of audits has been questioned in the UAE (Alkhuzaie & Asad, 2018). Despite statutory support for its establishment, The fact that some publicly traded companies oppose an audit committee that is independent in both structure and content worries the institute. In general, the empirical results of Temesgen & Estifanos (2018), Gurzhii, Deshko, Gurzhii, Berlach, & Radyshevskaya (2019), Axmedjanov (2020), Dobrowolski (2020), Lenz (2018, Sarens & Jeppesen), Gebrayel (2018, Jarrar, Salloum, & Lefebvre), and Ghaleb (2021), have shown that the audit activities lack the ability to complete their tasks effectively. Evidently, the aforementioned criticisms, objections, and actual results have greatly heightened worries about the effectiveness of the audit and necessitate immediate adjustments to it.

Asiriwa, Aronmwan, Uwuigbe, & Uwuigbe (2018); Abdullah, Ismail, & Smith (2018); Appuhami (2018); Mertzanis, Balntas, & Pantazopoulos 2019; Eulerich, Kremin, & Wood 2019; Nowak 2019) examined the effectiveness of audit committees based on the perception approach. It has been proposed that the audit features should be taken into account when determining the audit's efficacy (Buallay, 2018; Adegboye, Ojeka, Alabi, Alo, & Aina, 2020). To put it succinctly, identifying the attributes is

essential to figuring out how effective the audit was (Abdillah, Mardijuwono, & Habiburrochman, 2019). Furthermore, very little research on audit agility has been done in the UAE. Therefore, it is crucial to conduct an empirical analysis to determine whether auditing UAE publicly listed firms with agility is likely to improve the effectiveness of the audit and its results.

In contemporary, publicly traded corporations, ownership and control are segregated, which reduces shareholder input into management decisions. The decision-making process constantly gives managers the opportunity to impose their preferences (Lima, Barilari, Massone, & Pascual, 2022). Therefore, shareholders must depend upon the board of directors to question management choices and behaviors (Velte & Issa, 2019; Pererva, Kobielieva, Tkachova, Tkachov, & Diachenko, 2021). Furthermore, shareholders suffer if the choices prove to be unwise and dangerous as a result of the directors' inadequate oversight, which emphasizes the significance of evaluating governance traits, specifically regarding financial performance. Second, there are not many studies on corporate governance's adaptability in the UAE setting, making it challenging to justify performing empirical research on governance there.

It is necessary for the responsible authorities to compel adherence to established standards. As crucial as the accounting standard itself is the degree of compliance with it (Al-Sulaiti, Ousama, & Hamammi, 2018). This is due to the ease with which corporate executives are capable of enriching even if stricter standards of quality and compliance are absent.

According to previous surveys, some companies falsely state that they follow accounting regulations. Therefore, each applicable accounting standard's actual degree

of compliance must be recorded. This makes it possible for authorities to find low compliance areas quickly and take the necessary action (Suarez, V., Schellart, & Shucksmith, 2019). Due to the material-substance issue, compliance flexibility is also necessary. The goal of the current study is to close this gap by presenting the concept of agility while maintaining the accounting standards' disclosure obligations.

To fulfil their regular responsibilities of ensuring that financial reports contain all important information valuable to all stakeholders, standard setters must be able to recognize the characteristics indicating compliance with obligatory disclosure. According to the majority of people (Rosa, Fabio, Caserio, & Bernini, 2019), a company's financial stability and corporate governance practices affect how transparent it is and how well it complies with the law. In light of this, this study examined the relationship between corporate governance and a firm's financial performance and flexibility.

Last but not least, risk is a crucial factor in all corporate governance literature. Previous research on risk management and productivity has apparent consequences. Kalu, Shieler, and Amu (2018); Annamalah, Raman, Marthandan, and Logeswaran (2018); Munir, Jajja, Chatha, and Farooq (2020) are a few examples. Due to the unique characteristics of the GCC, which prevent the application of the final conclusions of developed countries to developing countries, there is a research gap in financial performance. While developing economies received less attention, there have been numerous studies on industrialized countries that focus mostly on alliances among various types of risk.

Despite the plethora of research on risk management and performance, the findings are mixed (Chaudhuri, Boer, & Taran, 2018; Munir, Jajja, Chatha, & Farooq, 2020). As a result, there is a void in the literature review of performance due to the contradictory results of earlier studies, and additional research is required to understand and mitigate the reason behind these inconsistencies. In addition, very few studies have been conducted on risk and performance in the context of the UAE. Therefore, UAE context should be focused on in terms of risk research. Further, the financial performance of a company is indicated by terms expressed in monetary units, such as turnover, growth of sales, and earnings. More particularly, financial performance measures what organizations achieved for a given time, measured by financial structure, operating ability, profitability capability, solvency, and cash flow (Bag and Omrane, 2022).

As a result of the debate above, it is still clear that there are some issues and that the literature on audit, corporate governance, risk, and compliance is inconclusive. The main cause of business failure and performance-related problems is also that audit, corporate governance, risk, and compliance strategies are developed with the problems that have already been encountered in mind. However, things often change, necessitating regular and timely changes to audit, corporate governance, risk, and compliance. Audit, corporate governance, risk, and compliance all need to incorporate the idea of agility. The primary objective of the study is to ascertain the effects of risk and compliance on financial performance in publicly traded government-owned enterprises in the United Arab Emirates, as well as how corporate governance structures (such as the board of directors, audit committee, internal audit, and audit agility) may also have an impact.

The goal of the study is to determine how risk, compliance, listed government-owned companies' financial performance, and corporate governance systems (board of directors, audit committee, internal audit, audit agility) interact.

1.3 Research Objectives

The study has three objectives which are as follows:

1. To measure the impact of corporate governance mechanisms on financial performance of listed government-owned companies in UAE.
2. To estimate the impact of risk on financial performance of listed government-owned companies in UAE.
3. To determine the impact of standards' compliance on performance of listed government-owned companies in UAE.

1.4 Research Questions

The study's research questions are as follows in order to fulfill the study's objectives:

1. What is the impact of corporate governance mechanisms on the financial performance of listed government-owned companies in UAE?
2. Does the risk companies encounter have an impact on financial performance of listed government-owned companies in UAE?
3. Does standards' compliance have an impact on financial performance of listed government-owned companies in UAE?

1.5 Significance of the Study

This study, which is about investigates the relationship between the independent variables named corporate governance mechanisms, risk companies, standards' compliance and dependent variables named financial performance.

Theoretical significance: This study seeks to expand the understanding on financial performance subject in the UAE context by addressing the gaps in literature through direct effect of corporate governance mechanisms, risk companies, standards' compliance on financial performance. The present study added further knowledge to the existing body of knowledge of each variable of the study as well as to the research framework as a whole. Therefore, the present study is expected to fill the gap by exploring the financial performance of government-listed companies in the context of the Middle East, particularly in the UAE. Therefore, this study may contribute to the existing body of literature on financial performance in the context of Asia in general.

Practical significance

This study holds significance on multiple levels, not only in terms of theoretical contributions and literature development but also in practical terms. It plays a vital role in the context of the government sector and state-owned companies in the United Arab Emirates (UAE) by offering valuable insights into enhancing the financial performance of government-controlled companies. The findings of this research serve as a valuable resource, offering directions and guidelines for the formulation of financial and governance capital policies. Additionally, it provides valuable insights into the development of management practices and management development

programs, all of which are essential in effectively controlling and improving the performance of government-owned companies.

In essence, this study is pivotal for the UAE government and its state-controlled enterprises. It serves as a source of practical knowledge that can inform strategic decisions, policies, and practices, enabling these companies to achieve better financial performance, improved governance, and enhanced overall operational efficiency. By aligning their strategies with the insights gained from this research, government entities in the UAE can work towards their goals of achieving financial stability, accountability, and sustainable growth.

1.5.1 Theoretical Significance

The foremost issue is that a large number of research studies related to corporate governance compliance with accounting standards, risk audit, and financial performance have been conducted using data from the U.S. and UK and even Asian countries; studies using information from Middle Eastern nations, however, are scarce. Previous research has shown that corporate governance affects government-listed companies' financial performance (Alkhuzai & Asad, 2018) and has ignored the concept of linking risk and compliance with accounting standards. Thus, there is still a gap in exploring the relation between risk management and compliance for gaining performance, especially financial performance. As per the reviewed literature, hardly any study has been seen collectively using these four aspects in a single framework, which is the main contribution of the current research. In addition, in UAE, having several government-listed companies, the study of corporate governance and risk management has hardly been conducted, and the importance of such studies increased,

especially with the increase of fraudulent activities and the increase of the government in converting their entities into listed companies.

1.5.2 Practical Significance

Additionally to their theoretical importance, studies have largely (Busch & Friede, 2018; Kaplan, 2001) used returns to identify how current practices affect financial performance while ignoring aspects of market performance. Alternatively, studies that have focused on market performance aspects have ignored returns. The goal of the current study is to comprehend how corporate governance, risk, compliance, and audit agility synergistically affect financial performance utilizing accounting financial performance and Tobin's Q. In order to improve the overall financial performance of the government-listed firms in the UAE, this study analyzes the impact of corporate governance on three different factors.

1.6 Scope of the Study

Due to previous corporate scams, imprisonment, and punishment by UAE courts, the current study's focuses solely on listed government-owned corporations in the UAE. The UAE's publicly traded government-owned businesses face unexpected difficulties as a result of technological advancements. Therefore, the focus of this research is on such difficulties and how an improvement in AGRC may affect the financial success of UAE-based businesses. Therefore, the primary objective is to assess the financial performance of UAE government-owned listed enterprises. As a result, the study will focus on corporate governance mechanisms (board director, audit committee, internal audit, audit agility), risk, and compliance. From 2018 through 2022, 60 publicly traded government-owned enterprises make up the study's sample.

1.7 Operational Definition

- Agility: is considered a vital tool for companies during unpredictable conditions (Dobrowolski, 2021).
- Corporate governance: is the set of regulations, practices, and rules that govern and control business operations.
- Operational risk: summarizes the risks and uncertainties a firm must deal with in order to conduct its regular business operations within a certain field or industry.
- The compliance with accounting standards: leads to reliable information that the management depends upon to make decisions; consequently, it has a favorable effect on the performance of the company.
- AGRC: a third line of defense for any organization. Every element of the framework has its own definition and a wide range of practices and techniques that may be used in any kind of business, whether it operates in the public or private sectors, for profit or not for profit.
- Financial performance: is a determination of how successfully a corporation can leverage assets from its primary line of business to generate revenue.
- IFRS:

1.8 Structure of the Study

The thesis is organized into five chapters. They are as follows:

- **Chapter One:** the chapter provides an introduction to the thesis. It also provides the study outline, the research idea, and states the research objectives and questions.

- **Chapter Two:** in order to support research questions and research objectives, this chapter represents all available related prior studies, reviews and discusses relevant literature related to this research. Therefore, this study explores the effect of the independent variables (internal audit, agility auditing, corporate governance, risk, and IFRS compliance) on financial performance in listed government-owned companies in UAE. Moreover, a theoretical framework is discussed in the chapter, besides the theories that contributed to this research. As a consequence, the hypotheses are rested on the basis of the conceptual framework. Also, the research methodology is discussed in this chapter to outline how this study answers the research questions and verifies its hypotheses.
- **Chapter Three:** data, are collected, and analyzed statistically in this chapter, with a description of data collection, the unit of analysis, and its methods.
- **Chapter Four:** this chapter represents the findings of the research
- **Chapter Five:** Discussion, Recommendation and Conclusions

1.9 Chapter Summary

The company's financial performance is a vital indicator of its success. This role can be affected by many factors. Therefore, this research examines the impact of AGRC on the financial performance of the government-owned companies. The study focused on listed government-owned companies in the UAE, in particular, the study aims to examine the role of corporate governance mechanisms (board of directors, audit committee, internal audit, audit agility), operational risk, and IFRS compliance in the listed government-owned companies in UAE. The study aims to accomplish the

following three research goals: determining how corporate governance structures affect the financial performance of publicly traded government-owned enterprises in the United Arab Emirates. Secondly, to examine how risk affects the financial performance of publicly traded government-owned firms in the UAE. Thirdly, to ascertain how standards compliance affects the financial performance of publicly traded government-owned firms in the UAE using information from databases on the legitimate websites of the UAE in 2021.



CHAPTER TWO

LITERATURE REVIEW AND THEORETICAL BACKGROUND

2.1 Introduction

The past literature has been thoroughly evaluated in this chapter. To identify the study gap, it was first necessary to examine how much the relevant variables—corporate governance, audit, risk, and compliance—affect the financial performance of the organizations.

2.2 Literature Review

2.2.1 Mechanisms of Corporate Governance and Financial Performance

This section examines the prior literature on in to develop the research hypotheses and the relation between corporate governance components (audit committee, board of directors, internal auditing) and financial performance.

Pamungkas, I. D., & Puwantoro, M. P. S. (2023) initially looked at that relationship without considering financial performance as a mediating variable in order to better understand the relation between corporate governance and business value. The research's subjects are manufacturing companies in the consumer products industry that were listed on the Indonesia Stock Exchange between 2018 and 2020, totaling 105 samples. The findings indicated a connection between corporate governance, business value, and financial success, according to the tests in this study's

conclusions. The financial success of a corporation affects its value. Moreover, the relation between corporate governance and an organization's value is mediated through financial performance.

While Abdullah, H., and Tursoy, T. (2023) investigated if CG characteristics in a shareholder- and insider-controlled system affected the financial performance of the firm. The audit committee, board of directors, and CEO dualities were the specific governance traits of interest. In order to evaluate the impact of CG on the financial performance of non-financial enterprises listed in Germany that are characterized by having a continental system of CG and are primarily controlled by a major number of shareholders. The sample used in this study included 4169 firm-years' worth of observations, which were spread out over a lengthy period of 17 years (2002 – 2018). Publicly accessible annual company data are gathered. The results of the F.E. regression estimator demonstrated that during the chosen period, CG had a considerable impact on the company performance of non-financial enterprises listed in Germany.

A thorough analysis of the current literature regarding the corporate governance (CG) components of the Malaysian market was the goal of a study by Khatib, et al. (2022). They employed a systematic literature review process and used a final cut-off of 125 studies from the Scopus and Web of Science databases. The result indicates that, as Malaysia's CG codes continuously are modified, there have been a great deal of curiosity across scholars to conduct an indepth study about CG issues in Malaysia.

Widagdo et al. (2022) tried understand how the audit committee's composition, financial results, and listing age affected the reporting of carbon emissions by highly emitting corporations in Indonesia. The size of the audit committee and the frequency of its meetings were used to gauge its characteristics, while the financial performance was assessed using the Altman financial distress model. The greenhouse gas emissions disclosures were assessed using a checklist based on the CDP. The analysis used 99 highly polluting companies that are listed on the Indonesia Stock Exchange. It was revealed that the number of audit committee meetings has a beneficial impact on the report on greenhouse gas emissions, according to the multiple regression analysis. The findings imply that the corporation will have greater incentives to disclose carbon emissions in its annual report or sustainability reporting the more frequently the audit committee meets. The study sheds light on the capital market authority agency's legislation regarding the bolstering elements that might persuade listed firms to disclose their carbon emission.

Shatnawi et al. (2022) aimed (ASE) to investigate the impact of the audit committee (AC) on the financial performance (FP) of businesses listed on the Amman Stock Exchange. Another objective of this research is to determine how enterprise's risk management (ERM) affected the relationship between AC and FP in Jordan. Their study analyzed information from 92 chosen companies that have been listed in ASE for a total of nine years, from 2009 to 2017, including both the industrial and service sectors. STATA was used to examine the data. The findings demonstrated a strong relationship between AC and ROA, ROE, and Tobin's Q. Company size has a positive relation with ROA, ROE, and Tobin's Q, whereas leverage and company age have negative relations with all three. The tested model was statistically significant and can

predict 46.7% of the variation in all performance metrics. According to the findings, ERM had a beneficial moderating effect on how AC affected Jordan's ROA and ROE. However, it did not enable Tobin's Q and AC to moderate one another. Decision-makers must require the adoption of ERM in Jordanian enterprises in order to improve the FP.

Another study by ElHawary, E. (2021) looked at how the audit committee's composition, independence, expertise, gender diversity, and frequency of meetings affect the company's financial performance (ROA and ROE) in Egypt. In order to boost the audit committee's efficiency, the Egyptian Stock Exchange updated the listing requirements for its members' credentials in 2016. The annual reports of the non-financial EGX 30 index listed firms in Egypt for the years 2016–2018 and the board of directors (BOD) are the data sources. Cross-sectional data, panel data, and correlation analysis are all types of data analysis approaches. According to the results, the size of the audit committee and the level of knowledge of its members have a substantial positive correlation with ROA and ROE, respectively. The other variables, such as independence, meetings, and gender diversity, have negligible effects on ROA and ROE.

Using the literature on dynamic institutional theory, Brower, J., and Dacin, P. A. (2020) generated a set of theory-driven hypotheses concerning how the link between corporate social performance (CSP) and corporate financial performance (CFP) for enterprises in the marketplace is affected by the institutionalization of CSP in the organizational field between 1991 and 2008. Our panel time series and dynamic linear estimate models show that early CSP adopters are more likely to experience higher

corporate profitability and higher stock market valuation as a result of their higher CSP levels. However, because they exceed market CSP expectations, they also frequently carry higher firm-idiosyncratic risk. The results also demonstrate that, as CSP has institutionalized through time, it has become less of a factor in determining business success as well as stock market performance.

On a sample of 452 businesses that were listed on the Thai Stock market between 2000 and 2016, System GMM was utilized as the baseline estimator approach, where conventional least squares and fixed effects were used for robustness testing. The results showed that managerial ownership improves performance, but other ownership patterns, such as shares and family ownership, do not appear to have much of an impact on market-based firm performance (Sun & Buachoom, 2020).

Deslandes et al.(2020) used data from 289 Canadian listed companies for the years 2011 to 2015 to investigate the relationship between the use of tax planning by businesses and a number of attributes of audit committee members, such as liberation, expert knowledge, dedication, and gender balance. The researchers found a significant relationship between tax evasion and indicators of effort and expertise. The size, financial expertise, and experience of the audit committee all considerably reduced tax-aggressive behavior.

Additionally, Ado et al. (2020) investigated the relationship between audit quality and the financial performance of Nigerian-listed cement companies. They discovered that the percentage of businesses audited by the Big 4 is positively and statistically

significantly correlated with financial performance (ROA), and that this correlation is also thought to be favorable for auditor independence.

Furthermore, it is still unclear whether factors on the audit committee correlate with company performance (Cassell et al., 2020). The relationship between new audit committee characteristics, meeting attendance by audit committee members, and member changes were examined by Qamhan et al. in 2018. The annual reports of 74 companies listed on the Muscat Securities Market offered 370 observations for the study sample. A weak correlation between the existence of audit committee members and earnings management is also revealed by the study. Additionally, there is a strong connection between effective profit management and member appointments.

Using a two-stage methodology, i.e., data collection and analysis, Khalid (2020) highlighted the audit and governance committee (AGC) function for the efficacy of internal auditing in Bahrain's Islamic banks. Due to the importance of these respondents to Islamic banks, surveys and a literature review on AGC and internal auditors were done. It was also proposed that the governance committees and auditors of the Islamic bank might improve the efficiency of the internal auditors.

Alzeban (2020) conducted a study on the role of audit committees (AC) in order to shed light on the efficiency of internal audit (IA) as a facilitator of the accomplishment of organizational goals. He specifically looked into whether AC mediates the relationship between IA and FP. The study's underlying premises were assessed using mediation and ordinary least squares (OLS) regression tests. The annual reports included 119 publicly traded firms in Saudi Arabia (SA) and the United Arab Emirates

(UAE). The data's sources include survey questions distributed to chief internal auditors (CIAs). The findings also suggested that the AC's independence and the presence of members with accounting and auditing expertise operate as a buffer against the negative impact of IA size and independence on FP. There was no evidence of this particular type of mediation involving FP and IA skills. Additionally, AC meetings have no barrier between FP and IA qualities.

According to Jwaifel (2019), the audit committee mainly helped Jordanian industrial public shareholding companies listed on ASE escape bankruptcy. According to the directory of firms from the ASE's official website, the sample used in the research consists of industrial joint stock companies registered on ASE, which, as of the end of 2017, consisted of up to (67) industrial enterprises dispersed throughout (10) industrial sectors. The descriptive analytical technique determined that the research sample consisted of (49) businesses for whom the sample selection criteria were relevant. The findings of the study also demonstrate that large industrial businesses are capable of avoiding bankruptcy.

Puni and Anlesinya (2019) examined the effect of corporate governance practices suggested by Ghana's SEC on firm performance among listed Ghanaian enterprises. Panel regression analysis was utilized for the examination of the way every corporate governance measure introduced by the SEC of Ghana affected firm performance using datasets of 38 listed firms in Ghana between 2006 to 2018. Information was derived from annual accounts of publicly traded corporations. The results showed that the inclusion of both insiders and outsiders enhanced the corporate board's financial performance. The size of the board, the frequency of board meetings, and the

distribution of ownership among shareholders all typically had a beneficial outcome on financial success. However, CEO duality had no effect on financial performance, although the inclusion of board committees often had a detrimental effect.

An evolving broad moments approach was used by Merendino and Melville (2019) to evaluate the effectiveness and viability of agency theory in the context of Italian corporate governance practices as well as the relationship between the board structure and business performance. They focused on Italian-listed firms from 2003 to 2015. Furthermore, directors chosen by minority shareholders have no influence on performance, whereas independent directors have a non-linear impact. Low board structure ranks have a positive impact on business performance. The ownership structure and shareholder agreements alone have no bearing on a company's performance.

Performance indicators are preferred over financial performance metrics because they are less susceptible to changing accounting systems, practices, and assessments of a company's potential to produce economic returns in the future. Investor expectations have a big impact on performance evaluations (Lee et al., 2019). Even if there is a substantial correlation between performance and governance, authors asserted that there would not be one between long-term stock returns and governance if investors had anticipated that corporate governance would impact performance. As a result, introducing new financial performance measurements may offer a more detailed knowledge of the relationship between particular variables and performance. This makes a company's financial success important and calls for accurate measurement.

The financial performance metrics that were used to assess performance are listed below.

To identify the influence of corporate governance on the performance of selected financial institutions in Sri Lanka as their primary goal, Danoshana and Ravivathani (2019) offered suitable corporate governance actions to boost the effectiveness of a few financial institutions. On the other side, measures used to evaluate corporate governance include the size of the board, the frequency of meetings, and the company's audit committee. For the 2008–2012 study period, a sample size of 25 listed financial institutions was selected. Secondary sources were used to gather the data. According to the investigation, board size and audit committee size benefited a company's performance and significantly influenced corporate governance factors such as performance. The performance of the firm was, nevertheless, severely impacted by meeting frequency.

Oussii and Taktak (2018) provided an empirical study on 162 firm-year observations gathered from Tunisian listed companies between 2011 and 2013 to determine the effectiveness of an audit committee and the timely submission of financial reports by Tunisian listed companies as measured by external audit delay (AD). Findings indicated a strong relation between shorter AD and audit committees with individuals skilled in multivariate financial analysis.

Zrai and Fadzil (2018) looked into the connection between the effectiveness of audit committees at Jordanian companies and financial results. Data from 228 industrial and service organizations were used in this study to use OLS regression to examine the

relationship between independent and dependent variables. Similarly, the findings indicated a weak but positive relationship between audit committee size and ROA. Additionally, the study showed that audit committee meetings with ROA are major and progressing, but meetings with EPS are moving in the right direction but not significantly.

Erasmus and Coetzee (2018) examined the ways in which senior management and the audit committee viewed the specified measures differently in relation to the criteria that impact the effectiveness of the internal audit. In their study, they conducted multivariate multiple regression analysis and collected feedback from senior management, audit committee chairs, and heads of internal audit units from the South African public sector. No statistical correlations based on the number of views could be found in this investigation.

Alqatamin (2018) with a sample size of 165 non-financial firms listed on the Amman Stock Exchange (ASE) between 2014 and 2016, researchers evaluated the influence of audit committee characteristics on the performance of the company. According to their data, there was less of a correlation between meeting frequency and experience than there was between audit committee size, independence, and gender diversity and financial results.

Also, Mahrani and Soewarno (2018) determined how strong corporate governance (GCG) and corporate social responsibility (CSR) directly impact financial performance. The study utilized WarpPLS 5.0 and secondary data from 102 businesses that were listed on the Indonesian Stock Exchange in 2014. The data were analyzed

using partial least squares, and the results showed that both the CSR and the GCG techniques have a favorable impact on financial performance.

According to Tobin's Q, other studies showed no connection between board size and firm valuation. Likewise, when examining a sample of the biggest U.S. corporations, Merendino and Melville (2019) found no correlation between board size and firm performance. Additionally, Handriani and Robiyanto (2019) investigated how board size affected Tobin-Q-measured company performance. According to the findings, board size had no statistically significant impact on explaining performance (Tobin's Q). The association involving board size and business success as assessed by ROA and ROE was also explored by Shahid et al. in 2020. A sample of 30 organizations was chosen randomly, and the results showed no connection between board size and company performance.

However, the literature in this part delves into various aspects of corporate governance and its impact on financial performance. Several studies are discussed, each focusing on different corporate governance components, including the audit committee, board of directors, and internal auditing. These studies explore their relationships with financial performance in diverse contexts. To sum up, these studies collectively contribute to our understanding of the complex relationship between corporate governance and financial performance in various settings, providing insights into the mechanisms and factors that influence these dynamics.

2.2.2 Agility Audit and Financial Performance

An internal audit unit should embrace an agile approach to focus on stakeholder needs, accelerate audit cycles, produce less documentation, foster timely insights, and reduce labor waste. Agile encourages internal auditors and stakeholders to decide upfront what value will be offered by an audit or project. Along with importance, urgency, and readiness for completion, Agile prioritizes audits and projects.

Joshi, P. L. (2021), with the aid of a literature analysis, analyzed agile internal auditing from a retrospective and prospective perspective and offered some insights into the idea, history, need, methodology, characteristics, implementation process, benefits, and obstacles. The article focuses primarily on internal auditors' usage of Agile methodology to deliver quick information. The agile methodology is especially well suited for complicated audits that call for a concentrated team and seasoned auditors to adhere to shorter audit cycles and speedier service delivery to its clients. The agility of the internal audit department will be significantly impacted by the size and organizational culture of a given company. The article concluded that academics, researchers, and practitioners need to conduct empirical, theoretical, and practical investigations on this developing approach's applications, difficulties, successes, and failures in order to provide deeper insights into it. Additionally, it is necessary to undertake agile internal audit case studies in order to develop hypotheses based on cross-case analysis. Additionally, it makes some recommendations for potential future lines of inquiry for this new field.

While Newmark et al. (2018) found that technology breakthroughs like data analytics and artificial intelligence are undergoing a fundamental change in the audit

environment. While disruptive factors like mergers, new IT systems, or last-minute changes in control dependence have always been a possibility for an audit, technological advancements are automating many labor-intensive activities that have historically given traditional audits a sense of certainty. Because of this perceived dependability, big design up-front (BDUF) planning has traditionally been the main project management method used in audits. When unforeseen changes arise, especially in the later stages of the audit, the level of clarity in BDUF audit plans gives only a small room for flexibility. Furthermore, the structure of an audit engagement will probably need to change as the audit process changes due to technological advances. The audit process may use more agility in the present and the future, and Scrum was especially discussed in this paper as a potential method of doing so.

The study by Teoh et al. (2017) looked at the relationship between enterprise risk management (ERM) adoption and firm performance in Malaysian publicly traded businesses (PLCs) and the moderating effects of internal audit function quality, and the mediating effects of strategic agility. The COSO (2004) ERM Integrated Framework was used as the conceptual framework for ERM implementation, and financial and non-financial metrics were used to assess business performance. PLCs in Bursa Malaysia's primary market responded to a questionnaire, yielding a total of 137 responses. According to the study's empirical results, strategic agility strongly mediates the association between ERM implementation and business performance. The effectiveness of internal auditing does not, however, significantly reduce the association between business performance and the use of ERM. Low reaction rates are a problem.

2.2.3 Risk Management and Financial Performance

Syrová, L., and Špička, J. (2023) addressed the scarcity of empirical data on the relationship between enterprise risk management (ERM) of small- and medium-sized businesses (SMEs) and financial performance. In order to investigate potential new mediators in the relationship between ERM and SMEs' financial performance, structural equation modeling was applied. The findings indicated that enterprise risk management and financial performance could be effectively mediated by organizational culture (the mission dimension) and strategic risk management effectiveness. These research findings showed that in the absence of a well-established organizational culture and performance monitoring of strategic risk management, the deployment of ERM in a firm does not, by itself, generate the anticipated effects. These results are especially important for SMEs that utilize "pretend ERM" instead of "real ERM" since they lack the operational and strategic components of "real ERM." ERM also aids in reversing the detrimental effects that foreign investment has had on the monetary performance of SMEs.

Based on a survey of 796 systematically retrieved papers, Ullah et al. (2021) designed a multilayered technology-organization-environment (TOE)-based risk management strategy for the administration of a smart and sustainable city. Fifty-six risks—17 technological, 11 organizational, and 28 external—were identified and categorized into TOE categories. The TOE layers conducted the continuous risk-management process of recognition, assessment, analysis, monitoring, and reaction planning at both the internal management levels and the external layer levels. The local government can use these dangers as an opportunity to invest in developing critical and effective answers that will increase public safety, protection, and confidentiality.

In a setting where the existence and makeup of risk management committees are entirely voluntary, Jia and E. Bradbury (2020) investigated the association between best practice risk management committee and business performance. The sample included 368 listed Australian companies from 2007 to 2014. Additionally, research demonstrated that the human capital risk management committee plays a significant role in boosting business performance as one of the best practices of risk management committee characteristics.

Munir et al. (2020) explored the relationship between supply chain integration (SCI) and supply chain risk management (SCRM) to improve operational performance (IMSS VI). Supply chains have long recognized the importance of risk management and interdisciplinary practices to address the complexity and unpredictability faced. The study's findings suggested that SCRM benefits from source, consumer, and integration, with client and supplier integration as a partial mediating factor for the influence of internal integration. The results also demonstrated that whereas internal integration and operational success are only slightly mediated by SCRM, supplier and customer integration and operational performance are totally mediated by SCRM.

In their 2019 study, Durst, Hinteregger and Zieba examined how knowledge risk management (KRM) impacts organizational performance. Data were gathered through a global online survey distributed to both public and commercial organizations. Testing analyses and hypotheses were then conducted using structural equation modeling. The findings indicated that KRM has a favorable impact on organizational success, sustainability, growth, inventiveness, and agility, but KRM had no discernible positive impact on an organization's responsiveness.

Boateng (2018) used the CAMELS rating model to evaluate the performance of Ghanaian banks. The terms: capital sufficiency, assets quality, management effectiveness, income, flexibility, and susceptibility were all abbreviated as "the model." To examine the impact the various elements of the CAMELS ' model have on the bank's performance in Ghana, a sample of ten banks was chosen over a seven-year period using the conventional multiple regression method. Additionally, the results of the study of the calculated ratios from the financial statements of the chosen banks showed that revenues emerged as the highly relevant component that influences the performance of Ghanaian banks.

Amarjit Gill and Obradovich (2018) investigated the relationship between financial risk management and small business owners' perceptions of the financial success of their brand-new operations in India's service and industrial sectors. According to the survey, small business owners in India's service and manufacturing industries have more favorable thoughts regarding the financial performance of their new operations when financial risk management is seen to be valued highly. The findings demonstrated that new small business ventures with adequate internal funding sources outperform new small business initiatives without enough internal financing sources in terms of financial performance. Owners of production and service companies, financiers, consultants, as well as other stakeholders could find the insights beneficial.

In general, The studies discussed collectively offer valuable insights into the significance of risk management practices and their wide-reaching impact on the financial performance of businesses operating in diverse sectors and regions. These insights underscore the universal importance of effective risk management as a

strategic tool for enhancing financial outcomes and ensuring the long-term sustainability of organizations, regardless of their industry or geographic location. By exploring the nuanced relationships between risk management strategies and financial performance, these studies contribute to a more comprehensive understanding of how businesses can proactively manage risk to achieve financial stability, resilience, and competitive advantage in an ever-evolving global landscape.

2.2.4 Compliance with Accounting Standards and Financial Performance

Sutaryo et al. (2023) examined the effect of the political and internal audit activities of local governments in Indonesia on the adherence to government accrual-based accounting standards while controlling the financial and local government variables. The research was done for the years 2015–2018 utilizing panel data regression and a robustness test with logistic regression. The results showed the values of legislative coalition, gender, and size, as well as the importance of internal audit function capacity, maturity, experience, and size in promoting accrual-based accounting compliance. The robustness test results showed that the effects hold for the vast majority of factors. With the help of various supportive policies, local governments in Indonesia and the Financial and Development Supervisory Agency can improve the competence, maturity, and human resource availability of their internal audit functions.

Family company compliance methods for sustainability responsibility require significant response and impression control, according to research by Wu et al. (2022). In their study, the compliance practices of family businesses were evaluated using a sample of 2977 Chinese organizations. The results showed that family businesses

combined impression management with important reactions. Additionally, public pressure serves to restrain the use of impression management favorably. Even more noteworthy is that interactions between business and government positively correlate with the use of impression management and negatively correlate with the use of substantial response.

Hu et al. () examined how organizations should encourage staff members' strict adherence to these rules. This study employed an experimental research methodology and combined data from many levels of interviews with archival information from a small- to medium-sized Chinese restaurants. Furthermore, findings indicated that an important psychological process (four steps) that is supported by management safety practices and organizational crisis management strategies is crucial for ensuring that personnel sincerely adhere to security procedures.

Ismail (2021) examined the effects of audited satisfaction on compliance audit and corporate image in Malaysia utilizing unprocessed data that was collected using structured questionnaires delivered via email. To analyze the provided data, descriptive statistics and correlation analyses were both employed. The findings of the analysis showed a considerable correlation between auditee satisfaction and compliance and company image.

Chairani and Siregar (2021) examined the effects of enterprise risk management (ERM) on financial performance and firm value for listed companies in the ASEAN 5 (Indonesia, Malaysia, the Philippines, Singapore, and Thailand) between 2014 and

2018. The findings indicated that ERM positively and significantly affects both corporate value and financial performance.

In another research, Azzahra (2020) examined the impact of Shari'a compliance and intellectual capital on financial performance using multiple linear regression test models. Purposive sampling was used to conduct the sampling, resulting in the collection of 42 responses from 7 Islamic banks in Indonesia. The non-executive directors, led by senior independent director, should be accountable for the chair's performance while taking executive directors' opinions into consideration.

The features of the board of directors and audit committee (hereinafter AC)—two corporate governance mechanisms—were examined by Mnif and Znazen (2020) to see how they affected the degree of compliance with the "Financial instruments: Disclosures" International Financial Reporting Standard (hereinafter FID). Using a 128-item, self-made checklist, this study investigated the IFRS 7 compliance of 63 Canadian financial firms listed on the Toronto Stock Exchange over a three-year period (2014–2016). Additionally, a favorable correlation exists between compliance and the board's size and independence. The AC's independence and financial accounting expertise are likewise found to have a positive impact on the authors' dependent variable. However, neither the CEO/chairman duality, the size of the AC, nor the frequency of meetings significantly affects IFRS compliance.

A country's decision to use IFRS as reporting standard is influenced by a number of variables. According to Chang et al. (2019), the internal audit function (IAF) aids management in enhancing internal control systems for production, reporting, and

compliance. Their study examined the relation between the quality of IAF and the weaknesses of internal control in operations and compliance using a special database from Taiwan. However, internal auditor competency showed a positive link with the efficiency of internal control over compliance but not operations, suggesting that larger internal audit teams can improve internal audit performance for both compliance and operations.

The reviewed literature in this section encompasses a range of studies investigating various aspects of compliance, governance, and their effects on financial performance. It enriches our comprehension of the intricate and multifaceted relationships between compliance, governance, and their profound impact on financial outcomes within a diverse array of sectors and geographic regions. By exploring various dimensions of compliance and governance, ranging from internal audit function effectiveness, enterprise risk management, board and audit committee characteristics, to psychological processes and the interplay between impression management and substantial responses in family businesses

2.2.5 Prior studies evaluation

Pamungkas and Puwantoro (2023) concluded a relationship between corporate governance, firm value, and financial success. Meanwhile, Abdullah and Tursoy (2023) investigated whether CG characteristics in a shareholder- and insider-controlled system influenced firm financial performance. Buachoom and Sun (2020) showed that managerial ownership improves performance, but other ownership patterns, such as shares and family ownership, do not appear to have much of an impact on market-based firm performance.

Puni and Anlesinya (2019) examined the effect of corporate governance practices suggested by Ghana's SEC on firm performance among listed Ghanaian enterprises. Panel regression analysis was used to investigate how each corporate governance measure adopted by the SEC of Ghana affected firm performance using datasets from 38 Ghanaian listed companies between 2006 and 2018.

According to Danoshana and Ravivathani (2019), The size of the board and the audit committee has a positive effect on a company's performance and has a significant impact on corporate governance elements like performance. While some studies discuss the relationship between audit and financial performance, the researcher divided it into two parts:

- i. Part one is the audit committee, where Widagdo et al. (2022) sought to determine how audit committee characteristics impact financial performance and Shatnawi et al. (2022) aimed to investigate the impact of the AC on the financial performance (FP) of businesses listed on the Amman Stock Exchange. Another objective of this study was to ascertain how enterprise risk management (ERM) affects the relationship between AC and FP in Jordan.
- ii. Part two discussed agility in audit, where Joshi (2021) discovered that the agile methodology is especially well suited for complicated audits that necessitate a concentrated team and seasoned auditors, adheres to shorter audit cycles, and provides clients with faster service delivery. According to Teoh et al. (2017), the empirical results showed that strategic agility strongly mediates the association between ERM implementation and business performance. The effectiveness of internal auditing does not, however,

significantly reduce the association between business performance and the use of ERM.

Syrová, L., & Špička, J. (2023) examined the dearth of empirical data on the connection between enterprise risk management (ERM) and the financial performance of small- and medium-sized firms (SMEs). Jia and E. Bradbury's (2020) research demonstrated that human capital, one of the best practice characteristics of risk management committees, significantly boosts business performance.

An investigation also studied the link between financial performance and adherence to accounting standards, highlighting the value of internal audit function capacity, maturity, experience, and size in enhancing accrual-based accounting compliance, as well as the positive effects of the legislative coalition, gender, and size. Significant correlations exist between compliance, corporate image, and audited satisfaction (Sutaryo et al., 2023; Wu et al., 2012; Hu et al., 2021).

The effects of enterprise risk management (ERM) on financial performance and corporate value were examined by Chairani and Siregar in 2021. The results showed that ERM has a favorable and considerable impact on both business value and financial performance.

2.2.6 Research gap

The researcher realized after analyzing other studies that none of them addressed the relation between agile auditing, governance, risk, and compliance and their effect on financial performance in public companies listed in the UAE.

In reality, strategic agility is crucial to the success of a company in today's dynamic and fast-paced commercial climate. To survive in the commercial world, organizations must be able to quickly pivot and restructure without losing any momentum. Businesses must benefit from the adjustments and distributions in the business environment.

Furthermore, this will also increase awareness of how agility auditing can enhance and contribute to the success of ERM implementation and drive firm performance. This study's overall findings will benefit publicly traded companies in the UAE. It is also important because it enables businesses to comprehend the significance of ERM implementation and demonstrates its impact on firm performance. So this study will increase the awareness of implementing ERM among companies.

It should be noted that the regulators and financial markets in the UAE were the first among their global counterparts to adopt governance controls and were even at the forefront of initiating the application of their standards over the past fifteen years. Bearing in mind its extreme importance not only as a first line of defense for public companies against any crises they may face (by creating an internal control system in companies listed on stock exchanges, risk management, and compliance) but also for financial markets in general, given that governance contributes to creating a good business climate, which works to support the financial performance of companies.

The motive of the researcher in applying it to public companies in the UAE is the main role played by these companies in the redistribution of national income, as this is considered one of the main objectives of establishing such companies. Therefore, the

relationship between audit agility, corporate governance, risk compliance, and financial performance in public organizations in the UAE is examined in this study, which fills a research gap in the area.

2.3 Theoretical Framework and Hypotheses Development

Public sector organizations frequently worry about providing services to the public only with a social motive rather than profit maximization. Therefore, how they feel depends on how well-equipped the government agencies are to manage hazards. Internal audit is primarily utilized as an efficient technique to manage operational, financial, legal, and regulatory risks in addition to the other control instruments of risk management. Internal audit functions are part of agencies in the public sector, which put them in a good position to understand the organization and the risks involved (Dzomira, 2020).

The only way to ensure the internal audit unit's independence and objectivity in the way it performs its obligations is to keep it independent from ordinary functional activities. A company's effective internal audit function is a sign of solid corporate governance and emphasizes the importance of an audit risk-based approach. The internal audit function has been a crucial and important component of the control mechanism in the public and private sectors. For it to be effective, it needs to have a few characteristics and be assigned the right tasks (Dzomira, 2020).

2.3.1 Underpinning Theories

Interest conflicts could arise because of the segregation of ownership and management functions and the existence of asymmetric information (Purkayastha, Veliyath, &

George, 2019). Agency theory covers these areas of corporate governance, Audit, as well as Risk Management. Self-interest on the part of the manager might result in the waste of corporate funds, such as investment in dangerous and reckless operations depending solely on cost of the stakeholders' providing funds. Likewise, Institutional theory covers the aspects of compliance and risk management both. Because institutional theory talks about development of the mechanisms to have proper systems and compliance requires the same. In the next section, both the theories have been discussed with the link with the framework.

Professional expectations that follow accounting standards serve as a type of normative isomorphism for the organizations that are governed by these standards. According to institutional theory, corporate governance refers to shifts in organizational processes throughout time as well as the ceremonial functions that state institutions do to justify interactions between the participants in a corporate governance setting (Bose et al., 2018). It entails the use of pressure to adhere to the corporate governance rules established by authorities or stock markets. As a result, some businesses implement proposals for corporate governance, such as an independent panel along with an audit committee (Abdullah et al., 2018).

By clarifying and defining goals that meet environmental standards, corporate governance aims to guarantee the a company's connection with its environment (Giannarakis, Andronikidis, & Sariannidis, 2020). According to the institutional theory, corporate governance ought to include determining the organisational goals of the company while considering its current system of values (Murray, Kuban, Josefy, & Anderson, 2021; Pouliopoulos & Georgiadis, 2021). According to the idea, it is

important to address historical, sociological, and political problems that are pertinent to identifying organizational changes while deciding whether to accept or decline a new scheme or regulation. Consequently, corporate governance would be successful as a new approach to the extent that there is a broad concordance between both the rule changes and the current firm practices (Agarwal & Chadha, 2005).

According to the institutional framework, the board of directors' primary responsibilities include linking and administration (David, Tolbert, & Boghossian, 2019). As previously stated, the board of directors creates a connection between the company and the outside world, whereas, in the latter, the board of directors monitors the conduct of senior management with a special emphasis on the CEO. Additionally, institutional pressure forces firms to use comparable methods to manage similarly to other organizations in the same context. Regardless of actual efficacy, this trait of companies might be viewed by other firms as genuine and socially beneficial structures and managerial techniques (Sales & Barbalho, 2018).

Likewise, investigations comparing best practices by audit committees against actual performance benefit from the institutional theory since it is highly effective at emphasizing the discrepancies between what organizations do and suggestions by structures to the outside world (Vadasi, Bekiaris, & Andrikopoulos, 2019; Adegboye, Ojeka, Alabi, Alo, & Aina, 2020).

In conclusion, mimetic isomorphism is defined as an organization's endeavor to implement a new valid, effective system benchmarked from other organizations. Therefore, when firms tend to implement new laws or best practices or compare

themselves to other organizations to establish their legality, corporate governance processes may become more uniform over time (Haxhi & Aguilera, 2015). Mimetic change happens when organizations believe that certain corporate governance characteristics contribute to the governance structure of successful firms, and as a result, they compare their accounting practices and decisions to those of leading organizations. Over time, this will optimize conformity to corporate governance and accounting rules.

Utilizing both structures as a framework could help with a thorough knowledge of corporate governance and board operations because institutional theory and agency theory supplement each other and corporate governance competence (Calvo & Calvo, 2018; Vadasi, Bekiaris, & Andrikopoulos, 2019).

In conclusion, organizations are guided by various laws and norms to ensure their validity, survival, and access to resources. These guidelines, however, do not ensure that they will continue to run effectively. Additionally, many organizational structures are merely symbolic but might be established to appease societal pressures without bearing on the accuracy of the financial reporting or the company's profitability (Alabdullah, Nor, Ahmed, & Yahya, 2018; Akther & Xu, 2020).

Formulated upon findings of prior authors in the field of performance, the underpinning theory, and the supporting theory, the research framework has been developed. Agency theory, along with institutional theory, form the underpinning and supporting theories for the development of the framework that will be empirically tested. The framework builds the argument that audit, corporate governance, risk management, and compliance significantly affect financial performance.

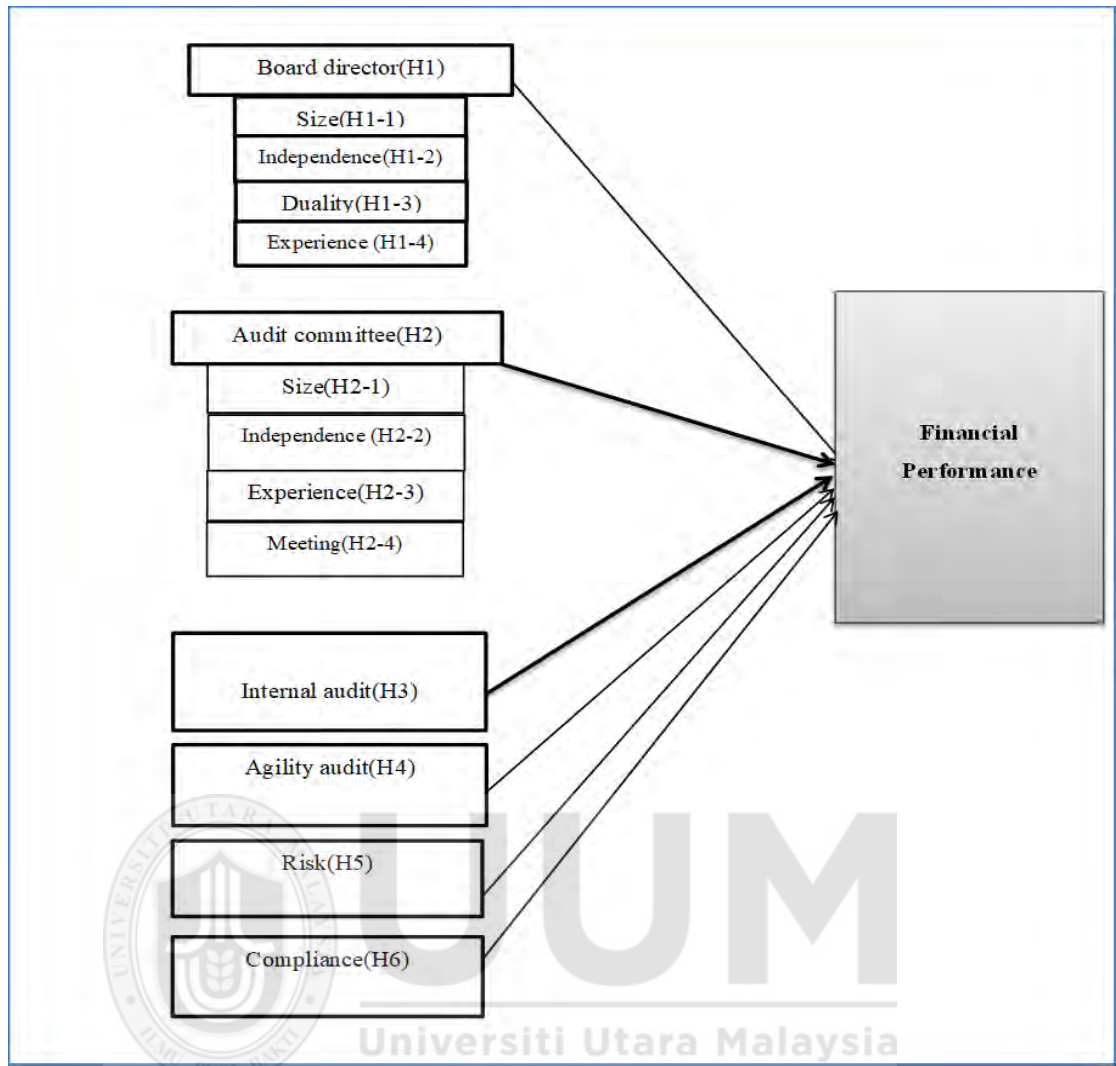


Figure 2. 1 Financial Performance

According to Baah and Jin (2019), financial performance is the ability of an organisation to obtain and manage resources in a number of ways in order to create a competitive advantage. Organisational effectiveness and financial success are two examples of pressure primary categories of performance (Busch & Friede, 2018; Kareem, 2019).

Given that the firm's performance results from the directors' prior actions and other factors that influence the selection of new management, if the board effectively

discharges its tasks, the firm's worth should rise and the shareholders' assets should get better.

Performance can be measured using two primary performance indicators of public organizations, i.e., performance based on the market, commonly termed as strategic performance, and financial performance (Shrouf, Al-Qudah, Khawaldeh, Obeidat, & Rawashdeh, 2020; Kasasbeh, 2021). The two assessments differ significantly because market-based performance measurement is prospective, whereas financial performance measurement is retroactive. Another distinction is that financial performance measurement estimates management's accomplishments, whereas market-based performance measurement estimates the possible achievement of management (Aksoy, 2017; Kasasbeh, 2021). Additionally, using certain appropriate procedures, researchers, investment managers, and shareholders could compute performance (Shrouf, Al-Qudah, Khawaldeh, Obeidat, & Rawashdeh, 2020). Contrarily, accountants evaluate financial performance in accordance with the criteria established by their professions (Ud Din et al., 2021).

Performance metrics are perceived as future-looking evaluations and are usually used to determine the value of a company at a particular point in time, which makes them seem more relevant to other people (Guo, Wang, and Wei, 2018; Eker & Eker, 2019). Financial performance metrics are essential in helping organizations assess their performance in relation to their surroundings, enabling managers to efficiently plan, control, and achieve the objectives of the organizations (Grossi, Kallio, Sargiacomo, & Skoog, 2019; D.T. OTLEY, 2019).

In their research, several authors used financial performance measurement randomly (Pantelidis & Zezou, 2018; Adams & Larrinaga, 2019; Grossi, Vakkuri, & Sargiacomo, 2022). Furthermore, several researchers have used several performance measuring systems for research. After that, several researchers used various performance measurements for research (Wang, Lu, & Feng, 2020). Performance measurements have an advantage over financial performance measurements because they are more resistant to varying accounting systems, processes, and predictions about a company's future ability to generate economic earnings. Investor expectations significantly impact performance evaluations (Safta, Achim, & Borlea, 2020).

Corporate governance is a collection of controls or procedures that guide an organization in attaining its objectives to maximize stakeholders' long-term gains (Murray, Kuban, Josefy, & Anderson, Contracting in the smart era: The implications of blockchain and decentralized autonomous organizations for contracting and corporate governance, (2021). To ensure accountability for their activities, good corporate governance is essential to safeguard not just the interests of stakeholders but also those of other parties, including consumers, suppliers, employment, and the government (Solomon, 2020).

Corporate governance refers to the systems in place to coordinate and direct management to behave in the stakeholders' economic interests (Almagtome, Khaghaany, & Önce, 2020). It is the process in which stakeholders of organizations are guaranteed to serve them the best. In conclusion, corporate governance is defined as the relationship between the company's management and its stakeholders, with the

board of directors acting as a mediator in this connection (Mahrani & Soewarno, 2018; Almagtome, Khaghaany, & Önce, 2020).

The fiduciary relationship between the principals and the agent (management) under the agency contract is strengthened by corporate governance practices (Hacker, 2019). Internal or external corporate governance procedures are also possible. External methods include independent auditors, stock exchange listing requirements, the regulatory environment of the nation, enlisting, and similar approaches. Internal mechanisms include the company board, board committees, CEO characteristics, and other relevant mechanisms.

Better-governed organizations do not seem to need to use the legal system as much to settle governance disputes (Mauerhofer, 2019). Furthermore, they contended that by implementing solid corporate governance, businesses might somewhat make up for inadequate legislation and implementation and possibly boost their potential and evaluation (Bansal & Sharma, 2016). There have been various attempts at defining corporate governance, but there is no universal agreement because there are many variables that might differ from country to another, such as goals and execution techniques (Almansour, Asad, & Shahzad, 2016).

According to Adrian Cadbury's study, "Corporate governance is the system by which companies are directed and controlled." Cadbury pioneered increasing consciousness and presenting the argument on reforms to corporate governance (Code, 1992). Additionally, corporate governance procedures are a collection of frameworks that

define the rights and obligations of an organization's management (Mahrani & Soewarno, 2018). The process of oversight and control used to ensure that a company's managers work in the interests of its shareholders is known as corporate governance.

When Berle and Means discussed the division of corporate power and ownership in 1932, the idea of internal corporate governance emerged. The stakeholders (the principal), being true beneficiaries of public organizations, are represented by managers (the agent) in their actions.

The function of various corporate governance traits as monitoring methods that offer additional certainty, particularly for regulators, has received more attention during the past 20 years. These include precautions that are expected to safeguard the stakeholders, such as independent boards and subcommittees. The corporate governance practice reforms have increased the recruitment of independent or non-executive directors to company boards and subcommittees (Saleem, Khan, Hasan, & Ashfaq, 2020). These changes comprise a number of rules created to strengthen the function of corporate governance, primarily those relating to disclosure. The Sarbanes-Oxley Act, for instance, had been a regulation of the dissemination of corporate governance information that was introduced in response to accounting scandals involving numerous corporations. The way that corporations are governed has been significantly impacted by SOX. They emphasize that, in contrast to the pre-SOX era, there is now a negative correlation between performance and board and audit committee independence. Additionally, the UAE government recently announced several improvements in corporate governance, including the requirement to form subcommittees, the majority of non-executives on boards, and the declaration of

corporate governance implementation. Academic researchers have not yet investigated these revisions.

The correlation between performance and corporate governance has generally drawn some noteworthy findings from the prior published literature (Mardnly, Mouselli, & Abdulraouf, 2018; Ciftci, Tatoglu, Wood, Demirbag, & Zaim, 2019). As a result, this section aims to evaluate the relation between corporate governance practices and performance. Numerous scholars went to great lengths about how corporate governance and performance are related. Enache and Hussainey (2020) listed some factors that impact performance. Independent directors, independent committees, board size, split chair/CEO responsibilities, board meetings, competence of audit committee members, reputation of auditors, and audit committee meetings were all taken into consideration in their examination of CG concerns from the perspective of its measurement.

In recent years, both theory and practice have developed a strong interest in corporate governance. Corporate governance has attracted the most discussion and concern from lawmakers, legislators, professionals, corporate entities, the press, and the general population (Sikka, et al., 2018). Although numerous definitions and approaches to corporate governance exist, it could broadly be characterized as the framework for managing and directing businesses (Code, 1992).

A strong business management system aids the company in raising capital and luring investors (Khrapkina, Matukova, & Korovina, 2019; Bessière, Stéphaney, & Wirtz, 2020) and strengthens key business performance factors (Shad, Lai, Fatt, Klemeš, & Bokhari, 2019). Additionally, strong CG increases the company's financial resilience

to upcoming financial issues (Busch & Friede, 2018), limits shareholder control over corporate management, promotes decision-making processes, and eliminates stakeholder interest conflicts.

As the International Financial Organization (IFC) puts it, it "involves the connections amongst management, board of directors, controlling shareholders, minority shareholders, and other stakeholders." More precisely, it is the platform that governs how the interests of various stakeholders are aligned (Bravo, Sibayan, & Arcilla, 2019). Corporate governance is also described in the principles of corporate governance published by the Organisation for Economic Co-operation and Development (OECD). A collection of interactions between a company's management, board, and shareholders is referred to as corporate governance. Corporate governance also provides the framework for establishing the company's goals, as well as the methods for achieving them and measuring performance (Bansal & Sharma, 2016).

The signal theory places a strong emphasis on the value of the company's information for outside parties making investment decisions. Annual financial statement data is crucial since it typically influences how stock values are determined. Financial statements must contain accurate information and gather data that both internal and external consumers must know (Buallay, A., & Al-Ajmi, J., 2020). Investors can use signals provided by signal theory to guide their judgments. Investors also use this idea to demonstrate how profitable organizations with high and low scores have the ability to enhance performance, which influences the company's worth and raises stock prices (R. Nurazi, I. Zoraya, and A. H. Wiardi, 2020).

According to this view, management is more knowledgeable of the firm's value. However, this information asymmetry leads managers to withhold broad corporate information that could impact the organization's value as a whole. There could be a knowledge gap between managers and business owners. It is up to the managers who are actively involved in the operations of the organization to be knowledgeable about it. The owner, on the other hand, relies solely on the manager's reports and is not actively involved in the operations of the business. Owners of businesses, therefore, possess less knowledge than managers. Managers have better knowledge and are more involved with the business (Situngkir, N. C., & Triyanto, D. N., 2020).

Based on the above, the researcher can illustrate the relation between CG and FP as follows:

1. A conflict of interest between management and ownership may result from their separation. The agency theory suggests CG strategy as a way to resolve the conflict between the principal and the agent in order to prevent or minimize this. The main goal of the CG system is to resolve or lessen the conflict of interest among the potential stakeholders in the company, which lowers the cost associated with the agency problem. Having adequate monitoring or control methods could benefit businesses. The agency theory defines the custodian position as the day-to-day management of the company on behalf of the owners. Additionally, according to the theory, the audit committee's job is to supervise management and auditor activity to safeguard shareholders' interests. Consequently, CG has a significant impact on PF. (Abdullah, H., & Tursoy, T, 2023)

2. According to research by Mahrani, M., and Soewarno, N. (2018), independent agents with high levels of knowledge are more likely to make objective decisions and perceive managerial monitoring as being effective. This study discovered empirical proof that corporate governance practices do not significantly affect financial performance.
3. Enhancing the company's use of good corporate governance strives to increase shareholder welfare. One of the aspects that investors consider when deciding whether to purchase a firm's shares is its financial performance. Investors' money is safe and secure thanks to the application of good corporate governance, which can utilize financial performance to gauge a manager's success in controlling resources for the organization. The most insignificant effect on financial performance is thought to be caused by Indonesia's adoption of good corporate governance.
4. Meanwhile, good corporate governance will help it perform better financially because economic performance demonstrates sound financial management. A healthy and sustainable financial performance as well as investor protection are anticipated as a result of the implementation and further development of corporate governance. According to Mahrani, M., & Soewarno, N. (2018), institutional ownership is one of the variables that can affect financial performance. It is anticipated that large levels of investment will be able to monitor management performance more effectively, affecting financial performance. Monitoring is done with the intention of helping management improve financial performance.
5. Corporate governance impacts financial performance according to a study by Pamungkas, I. D., and Purwantoro, M. P. S. (2023). According to a study

by Kyere, Ausloos, & M. (2021), corporate governance also affects financial success. Al-Ahdal, W. M. et al. (2020) claimed that company governance has a significant impact on economic performance.

6. The corporate governance structure establishes the rules and processes for making strategic choices and allocating rights and obligations among the many stakeholders, including boards, management, shareholders, and other stakeholders. Enhancing a company's overall effectiveness and efficiency, along with the financial performance of the industry in which it operates, largely depends on excellent corporate governance (Nuryana & Surjandari, 2019). A company's potential is diminished by poor corporate governance, which in the worst-case scenario, can pave the path for fraud and financial problems.

More effective corporate governance will result in more thorough management performance evaluation, stop managers from behaving dishonestly, and boost investor trust. Improved corporate governance will further enhance financial performance, and the better the financial performance, the more investors will impact stock investment. Through institutional ownership, a high standard of corporate governance is ingrained, allowing the company to grow and draw in more investors (Pamungkas, I. D., and M. P. S. Purwantoro, 2023).

Generally, businesses that follow the best corporate governance guidelines are able to obtain funds readily and for less expense, and over time, they are more competitive and profitable than those that do not (Ciftci, Tatoglu, Wood, Demirbag, & Zaim, 2019; Mwape, 2022). Improved results and returns enable these businesses to draw in shareholders whose money may be used to fund future expansion and development.

As a result, managers are more likely to choose projects with a favorable net present value, claim Garca Sánchez and GarcaMeca (2018). As a result, good corporate governance must be implemented in order for a firm to be successful in enhancing its financial performance. ROA serves as a proxy for financial performance, and corporate governance exhibits a favorable trend with rising economic efficiency.

The relationship between company financial performance and CG is examined by Saidat, Silva, and Seaman (2018) with regards to board size and independence, audit committee independence, as the following:

2.3.2 Board of Directors

Among the key components of internal corporate governance processes is the board of directors (Baysinger & Butler, 2019). The board provides a vital monitoring function, a crucial entity in internal governance, in order to deal with the agency issues that come with running a company. Due to the belief that managers have personal views and could least occasionally behave in the interests of the stakeholders, the board shall supervise and use its ability to track and oversee management to minimize conflict (Serna, Bowyer, & Gregory, 2022). The board of directors' primary responsibility is to advise management on how to proceed and to disapprove of any unfavorable decisions.

The efficiency of the board of directors determines how it affects performance (Birindelli, Dell'Atti, Iannuzzi, & Savioli, 2018). It also depends on three primary factors: board size, content, and interior construction (Alabdullah, Nor, Ahmed, & Yahya, 2018). The independence of the board and its organizational structure are crucial elements that affect how effective it is. In the following parts, we will go

through the board characteristics of size, independence, director duality, and experience.

On the basis of the debate above, the following theory has been developed:

H1: Characteristics of the board of directors as one of the mechanisms of governance have a significant impact on financial performance

2.3.2.1 Board Size

The size of the board, or the number of directors, has a significant impact on how effective the board is (Alabdullah, Nor, Ahmed, & Yahya, 2018). A larger board would be more effective in supporting management in lowering agency costs brought on by ineffective management, which would produce better outcomes. Board diversity is preferable for corporate governance as it might help management make more decisions, and it is more difficult for a strong CEO to govern (Karim, Manab, & Ismail, 2020). This has the effect of strengthening organizational management and performance while also improving governance. Larger boards offered access to additional connecting opportunities and the added benefit of giving CEOs and other administrators access to a greater number of people who may serve as sources of guidance and advice. The board's (larger) space has also allowed for a general improvement in the board's diversity in terms of expertise, technical skills, ethnicity, and race.

Early research findings on the relationship between board property and performance have been inconclusive. Several studies have discussed the importance of board size, and there is no conclusive finding on appropriate board size (Alabdullah, Nor, Ahmed,

& Yahya, 2018; Ali & Ayoko, 2020; Augusto, Pascoal, & Reis, 2020; Tulung & Ramdani, 2018; Guest, 2009). The majority of the studies have favored a large board size, and also claimed a major constructive influence of board size over market performance (Larmou & Vafeas, 2010; Malik, Wan, Ahmad, Naseem, & Rehman, 2014; Kalsie & Shrivastav, 2016); meanwhile, some contradicted, especially those who measured financial performance and identified an adverse effect of board size over finance, and in some cases even market performance (Hakir, 2008; Guest, 2009; Badu & Appiah, 2017; Palaniappan,). An empirical study conducted by Amedi 2017 & Mustafa, 2020) examined the factors influencing business financial performance in relation to the board's corporate governance practices in the Indian manufacturing sector.

The increased board size helps in social loafing but results in declined performance due to delays in decision-making (Singh, Singhania, & Sardana, 2019; Bokhari & Aftab, 2022). Moreover, the measurement of board size over performance has been analyzed with Tobin's Q as well as financial performance in separate studies. Hardly any study has been conducted that has observed the impact of board size on financial performance measures, including Tobin's Q. The most important function related to the board of directors is to reduce firm costs arising because of separated possession from management (Augusto, Pascoal, & Reis, 2020).

According to Tobin's Q, other studies showed no connection between board size and firm valuation. Likewise, when examining a sample of the biggest U.S. corporations, Merendino and Melville (2019) found no correlation between board size and firm performance. Additionally, Handriani and Robiyanto (2019) investigated how board

size affected Tobin-Q-measured company performance. According to the findings, board size had no statistically significant impact on explaining performance (Tobin's Q). Shahid et al. also explored the association involving board size and business success as assessed by ROA and ROE in 2020. A sample of 30 organizations was chosen randomly, and the findings indicated no association between board size and business performance. With reference to the debate above, the following sub-hypothesis has been developed:

H1-1 : Board size has a significant impact on financial performance

2.3.2.2 Board independence

Two angles have been taken into consideration when examining the board composition difficulties. According to the first viewpoint, there ought to be more non-executive directors on boards, whilst another viewpoint claims a larger number of executive directors on boards would be preferable. The percentage of external directors to total directors is known as the board makeup (Naciti, 2019). Therefore, the crucial roles played by inside and outside directors are necessary for the board to oversee its managers effectively. Therefore, it was stressed that a board's ideal composition should include both internal and outside directors. While outside directors are better independent and skilled at monitoring, inside directors better understand the firm's unique activities and competitive environment. Additionally, due to their prestige, contacts, and knowledge, outside directors may be able to improve monitoring management and assist with personnel issues by establishing more connections to the outside world. Board composition got massive distin recognition over the years since it is believed that having outside directors is essential to the board's ability to function impartially.

Independent directors offer objective opinions, particularly on matters of strategy, productivity, conflict resolution, as well as codes of conduct. Global reports from corporate governance committees have emphasized the importance of independent directors' roles (Zaman, Bahadar, Kayani, & Arslan, 2018). However, the "Companies Act" of the majority of the nations around the globe does not differentiate between the various kinds of boards regarding their obligations. As a result, all directors bear equal legal and collective liability for the decisions and recommendations made by the board.

As it was expected, independence on the board would lower agency costs and lead to better oversight of board operations, which boosts business performance. According to another study, the effectiveness of the company can be increased by having more independent directors on the board to improve company stock values. The primary rationale behind this is that independent directors exert considerable effort to ensure the profitability of a project, as their reputation is at stake. In the event of project failure, they not only experience financial losses but also suffer reputational consequences (Bansal, N., & Sharma, A. K., 2016). With reference to the debate above, the following sub-hypothesis has been developed:

H1-2: Board independence has a significant impact on financial performance

2.3.2.3 CEO Duality

Younas et al. (2021) analyzed 152 non-financial companies registered at the Pakistan Stock Exchange (PSX) between 2003 and 2017 to see how the corporate governance index (PAKCGI) affected company financial distress. To assess the data, they employed the random effect model. The five primary elements of corporate governance procedures—the board of directors, audit committees, shareholders' rights,

disclosures, and risk management—are the foundation of a self-developed index known as the PAKCGI. The construction of PAKCGI uses a binary coding strategy. The results of the study showed that PAKCGI has a beneficial effect on the probability of financial difficulty in enterprises. The PAKCGI's positive coefficient suggests that good business practices lessen the likelihood of financial difficulties in Pakistan by acting as a trigger. Additionally, it has been noted that corporate governance has a sizable favorable effect on financial hardship in Pakistani listed companies. Additionally, this analysis demonstrates a significant inverse relationship between CEO duality, board size, and financial difficulty indicators.

Additionally, the board's role as an internal corporate governance mechanism would directly influence ensuring acceptable performance (Mahrani & Soewarno, 2018). It is imperative for the board to exercise supervision over management, ensuring that they are monitored and managed in a manner that guarantees compliance with all applicable laws and regulations (Shahid, Abbas, Latif, Attique, & Khalid, 2020). There is speculation that board characteristics, including CEO duality, may have an impact on performance (Naciti, 2019; Alabdullah, Nor, Ahmed, & Yahya, 2018). Based on the above discussion, the following sub-hypothesis has been formulated:

H1-3: CEO duality has a significant impact on financial performance

2.3.2.4 Board experience

A dynamic board of directors might be established to provide a strong corporate governance framework. The board is the highest-ranking decision-making body for a successful commercial organization. However, any form of moral hazard or deviation by the board or board members would be detrimental to the business and, in certain

situations, may even lead the corporation to bankruptcy. According to Bangladesh's corporate governance rules, the size of the boards of all publicly traded businesses may range from 5 to 20 (BSEC, 2018).

The larger boards, in accordance with the resource dependency hypothesis, give the business a variety of skills and knowledge that improve its operational excellence. Additionally, the selection of independent directors is crucial in this regard. In addition to helping the business make more money by offering insightful information, they can promote greater transparency for minority owners. With reference to the debate above, the following sub-hypothesis has been developed:

H1-4: Board experience has a significant impact on financial performance

2.3.3 Audit Committee

The researcher can explain the formation and tasks of the audit committees in light of what is mentioned in the Corporate Governance Guidelines 2020:

1. The board of directors forms a permanent committee called the audit committee, and all members of the committee must have knowledge and know-how in financial and accounting matters, and at least one of them must have previous work experience in the field of accounting or financial matters, or hold an educational qualification or professional certificate in accounting or finance, or other related fields. In situations with insufficient non-executive board members, it is possible to appoint one or more members from outside the company.
2. Any former partner in the audit office charged with auditing the company's accounts is prohibited from being a member of the audit committee for a period

of one year starting from the date of the end of his capacity as a partner or any financial interest he has in the audit office, whichever comes later.

3. The company shall provide the audit committee with sufficient resources to perform its duties, including authorizing it to seek the assistance of experts whenever necessary.

Duties of the audit committee

The audit committee has the following tasks and duties:

1. Reviewing the company's financial and accounting policies and procedures.
2. Monitoring the integrity of the company's financial statements and reports (annual, semi-annual, and quarterly) and its control systems, and reviewing them as part of its normal work during the year, and it shall focus in particular on the following:
 - Any changes in accounting policies and practices.
 - Highlighting aspects subject to management discretion.
 - Ensure that the company updates its policies, procedures and control systems annually.
 - Substantial changes resulting from the audit.
 - Assuming continuity of business.
 - Compliance with the accounting standards decided by the Authority.
 - Compliance with the listing and disclosure rules and other legal requirements related to the preparation of financial reports.
3. Coordinating with the company's board of directors, the senior executive management, the financial manager, or the manager carrying out the same duties in the company in order to perform its duties.

4. Considering any important and unusual items that are or should be included in those reports and accounts, and they must give the necessary attention to any issues raised by the financial manager of the company, the manager performing the same duties, the compliance officer, or the auditor.
5. Raising a recommendation to the Board of Directors regarding the auditor's selection, resignation, or dismissal. In the event that the Board of Directors does not agree to the recommendations of the Audit Committee in this regard, the Board of Directors must include in the governance report a statement explaining the recommendations of the Audit Committee and the reasons that prompted the Board of Directors not to take them into consideration.
6. Developing and implementing the policy of contracting with the auditor and submitting a report to the Board of Directors specifying the issues that it deems important to take action on, along with providing its recommendations for the necessary steps to be taken.
7. Ensuring that the auditor meets the conditions stipulated in the applicable laws and decisions and the company's applicable system, and following up and monitoring his independence.
8. Meeting with the company's auditor without the presence of any of the senior executive management or its representatives and discussing the nature and scope of the audit process and its effectiveness in accordance with the approved auditing standards.
9. Approval of any additional work carried out by the external auditor for the benefit of the company and the fees he charges for such work.
10. Examining everything related to the auditor's work, the work plan, correspondence with the company, observations, suggestions, reservations, and

any substantial inquiries raised by the auditor to the senior executive management regarding accounting records, financial accounts, or control systems, and following up on the company's management's response to them and providing the necessary facilities to carry out his work.

11. Ensure that the Board of Directors responds in a timely manner to the clarifications and fundamental issues raised in the auditor's letter.
12. Review and evaluate the company's internal audit and risk management systems.
13. Discuss the internal audit system with the Board of Directors, and ensure it performs its duty to establish an effective internal control system.
14. Considering the results of the main investigations in matters of internal audit assigned to the auditor by the Board of Directors or carried out at the initiative of the Committee and the approval of the Board of Directors.
15. View the auditor's evaluation of the internal audit procedures and ensure the existence of coordination between the internal auditor and the external auditor.
16. Ensuring the availability of the necessary resources for the internal audit function and reviewing and monitoring the effectiveness of that department.
17. Studying internal audit reports and following up on the implementation of corrective actions for the observations contained therein.
18. Establishing controls that enable the company's employees to report any potential violations in the financial reports confidentially, internal audit, or other issues, and the steps to conduct independent and fair investigations of such violations.
19. Monitoring the extent to which the company adheres to the rules of professional conduct.

20. Reviewing the dealings of the related parties with the company, ensuring that there are no conflicts of interest, and making recommendations regarding them to the Board of Directors.
21. Ensuring the implementation of work rules related to its tasks and powers assigned to it by the Board of Directors.
22. Submitting reports and recommendations to the Board of Directors on the issues mentioned in the guide.
23. Consider any other issues determined by the Board of Directors.

The relationship between audit committee characteristics and firm performance is particularly important to the accounting profession because it is the auditors' responsibility to determine a company's actual position and value in terms of income shown, assets, and equity value as represented by the financial statements. The audit committee of a company is regarded as crucial to maintaining transparency (Sharma, A. K., and Bansal, N., 2016).

The board of directors, which is responsible for developing plans to increase the company's financial stability, includes the audit committee members. Therefore, the board of directors and CEO would be better able to develop efficient plans for enhancing the company's performance if the audit committee accurately depicted the financial accounts. The audit committee is a crucial governance instrument since it helps to guarantee that a firm produces precise, sufficient, and reliable data that investors and other outside observers may use to evaluate the performance of the organization (Sharma, A. K., and Bansal, N., 2016).

On the basis of the debate above, the following theory has been developed:

H2: Characteristics of the audit committee as one of the mechanisms of governance have a significant impact on financial performance

2.3.3.1 Audit Committee Size

All listed businesses are required to have an audit committee per the Corporate Governance Code of Bangladesh. Due to family domination on the board, over 50% of publicly traded corporations do not have an audit committee (Muttakin et al., 2015). However, the updated corporate governance rule from the Bangladesh Securities and Exchange Commission (BSEC) emphasizes the creation of an audit committee with at least three members (BSEC, 2018). The size of the audit committee has been demonstrated to improve company performance significantly (Alqatamin, 2018; Fariha R. et al., 2022). According to Zhou, et al. (2018), increased equity ownership by audit committee members has the potential to lessen concerns about directors working together with management to manipulate earnings to their interests or inflated executive pay, which ultimately hurts their interests as well. Companies commonly grant shares to outside directors in order to align their interests with stakeholders' interests and to serve as outside directors' representatives for shareholders (Erasmus & Coetzee, 2018). According to estimates made by agency theory, director equity rewards are given out (Poletti-Hughes & Briano-Turrent, 2019). Furthermore, independent directors with greater ownership typically defend the rights of shareholders by more successfully lowering fraud-related legal actions. With reference to the debate above, the following sub-hypothesis has been developed:

H2-1: Audit committee size has a significant impact on financial performance

2.3.3.2 Audit Committee Independence

Numerous instances of fraud and investor deceit have occurred both domestically (Satyam, Sahara, Saradha, etc.) and internationally (Enron Corporation, Global Crossing, WorldCom, Adelphia, Tyco, etc.). Due to the nature of these frauds, financial statements at the time did not reveal them (Bansal, N., & Sharma, A. K., 2016).

Emphasizing the importance of an independent audit committee and pointing out that the Satyam fraud resulted from inadequate independent directors and an ineffective audit committee. The financial accounts may not have been distorted for as long if the audit committee had more independent directors. Therefore, The audit committee must meet frequently to be more efficient (Bansal, N., & Sharma, A. K., 2016). The efficacy of the audit committee is significantly influenced by the chairman's independence and skill. The audit committee chairperson must be an independent director with experience in professional accounting in accordance with corporate governance regulations (BSEC, 2018). It has been established that the independence and knowledge of the overall audit committee have an impact on the performance of listed companies in Saudi Arabia and the United Arab Emirates (Alzeban, 2020; R. Fariha et al., 2022).

H2-2: Audit committee independence has a significant impact on financial performance

2.3.3.3 Experience of Audit Committee

The audit committee, which is the first line of defense for the board, must be composed of experts with knowledge of professional accounting and finance in order to give

organizational transparency through financial statements (BSEC, 2018). The way the audit committee is set up greatly enhances how the business runs. Thus, including non-executive directors on the audit committee is thought to increase corporate accountability and profit margins (Fariha et al., 2022).

In light of the debate above, the following sub-hypothesis has been developed:

H2-3: Experience of the audit committee has a significant impact on financial performance

2.3.3.4 Audit Committee Meetings

The attendance of the audit committee members at meetings is referred to as diligence. According to Alqatamin (2018), in the context of Jordan and Oman, the frequency of audit committee meetings has not been linked to company performance. The effectiveness of audit committees, which significantly affect the performance of the firm, has been demonstrated to be positively impacted by the frequency of meetings.

With reference to the debate above, the following sub-hypothesis has been developed:

H2-4: Audit committee meetings have a significant impact on financial performance

2.3.4 Internal Audit

An audit is a comprehensive examination of a current system, report, or institution, such as financial records (Roszkowska, 2020). There are several different audits that can be carried out either internally by a company or externally by a third party. Auditor reviews provide reports on each department, procedure, policy, and function of a corporation (Alzabari, Talab, & Flayyih, 2019). While some audits try to identify

inefficiencies and provide recommendations for improvement, others could act as a checklist for wrongdoing or noncompliance.

The Institute of Internal Auditors emphasized that for the benefit of taxpayers, people using government services, and the general public, government officials, boards, CEOs, and management should be involved in national, regional, and local public sector internal audit operations. Since gaining a foothold in the management process in the 1970s, internal audit in organizations' public and private sectors has experienced a consistent organic expansion in various countries, such as Malaysia (Dzomira, 2020). However, the audit committee, which is a crucial component of an organization's public accountability and governance, determines the success of the internal audit. The internal audit function is supported and promoted within the organization through audit committees, which are also responsible for appointing the internal audit function's leaders. The monitoring of governance, risk management, and internal control procedures is provided by the audit committee to the boards of public sector organizations (Dzomira, 2020).

As part of their oversight duties, internal auditors assess numerous organizational operations and provide the necessary recommendations to strengthen internal controls and effectiveness (Yusuf & Kanji, 2020; Chen et al., 2020). The preparation of the internal auditor's plan is a regular annual event. The chief internal auditor presents the findings, makes recommendations, and coordinates post-audit follow-ups. In order to supervise an entity's budgetary management and report-setting, internal auditors are essential (Gamayuni, 2018).

The audit committee supports the internal audit in many ways, including evaluating the internal auditor's competence, scope, and function, providing adequate resources, and facilitating interaction with management. This distinguishes the internal auditor's role from that of the audit committee. Audit committees could thereby improve the overall reputation of internal audits and boost their effectiveness and independence (Mardjono & Chen, 2020). In other words, the effectiveness of the internal audit is directly impacted by the audit committee's help.

Along with independence and audit committee meetings, the degree of linkages between audit committees and IA is a critical factor that is anticipated to boost performance (Alzeban, 2020). Corporate governance standards state that preventing difficulties with financial reporting requires the audit committee and IA function to have strong working connections (Akther & Xu, 2020). To the fullest extent possible, the organization needs continual communication between the IA and the audit committee.

Publicly listed companies must perform well financially, and the capital market is viewed as a means of luring capital and bringing down a firm's cost of capital. A company with very strong financial results will develop a favorable reputation among investors. The capital market, managers, and investors all rely on audited financial reports to evaluate a company's operational effectiveness (Alzeban, 2019; Akther & Xu, 2020). Better financial reporting will thereby improve the organization's financial performance.

Busch & Friede (2018) reported that financial performance is characterized as a difficult concept. Researchers have compared financial performance in a variety of ways. In this study, financial performance would be assessed in accordance with the company's profitability. Profitability is always calculated as the ratio of pre-tax income to shareholder equity (Brulhart, Gherra, & Quelin, 2019). Profitability is measured using a variety of indicators, including the Price Earnings Ratio (PER), Return on Equity (ROE), and Return on Assets (ROA). In this study, ROA served as the main metric for measuring financial performance.

A substantial body of literature exists that examines the issue of audit pricing. In the year 1980, Simunic produced a demonstration model of the process for defining the fees paid for audit services. Since that time, a large number of academics have diligently followed up on observations that demonstrate that the outcomes are correlated with the proper assignment of audit fees (Moutinho, 2012). The scope of audit services that the audit company must do inside the auditing circle is mirrored in the quantity of audit services the customer charges the audit firm for.

Hoang et al. (2019) used data from engagements with publicly listed US businesses to investigate the relationship between profitability and observed auditor compensation. The result revealed a mismatched cost-to-product ratio for audits, and the overall audit quality suffered. A larger audit fee payment indicates that the auditors offer their clients more specialized auditing services than a lesser audit fee payment.

However, because audit quality cannot be seen, several studies substitute audit fees for this purpose (MohammadRezaei, Mohd-Saleh, & Ahmed, 2018). The research

undertaken by (MohammadRezaei, Mohd-Saleh, & Ahmed 2018; Beardsley, Lassila, & Omer, 2019; Xiao, Geng, & Yuan, 2020; Rajgopal, Srinivasan, & Zheng, 2021) is also compatible with this study's use of staff audit fees as a final indicator of audit quality.

Auditor independence is assumed at all times when performing their audit function. This is essential to ensure that the interests of the stakeholders will be protected appropriately (Akther & Xu, 2020). The objectivity of a certified auditor promotes fairness and inspires confidence and trust in the financial reports' ultimate users. Habib et al. (2018) defined an auditor's independence as the provisional likelihood that the auditor would find any significant inaccuracy in financial reporting, given that the inaccuracy has already been identified. According to Antoniuk et al. (2021), objectivity fears are frequently of particular significance, which makes it difficult for auditors to provide unbiased auditing services.

Internal auditing benefits the organization by ensuring efficient risks, control, and governance are in place. Audit quality is a significant contributor to timely disclosures that significantly reduces the time it takes to produce an audit report and improves performance (Ado, Rashid, Mustapha, & Ademola, 2020; Shrouf, Al-Qudah, Khawaldeh, Obeidat, & Rawashdeh, 2020). Anomaly accruals in the reporting have a negative relationship with audit quality. Since it depicts the company's success and encourages investor confidence in the company, accurate reporting is crucial to a company's value (Bansal & Sharma, 2016; Shrouf, Al-Qudah, Khawaldeh, Obeidat, & Rawashdeh, 2020).

Alzoubi (2018) examined the relationships between loan financing, audit quality, and earnings management in Jordan. Using a total sample of 72 industrial firms from 2006 to 2012, generalized least squares regression was employed. The results showed that audit quality and debt financing decreased the potential for earnings management and raised the quality of financial reporting.

Based on the above discussion, the following hypothesis has been formulated:

H3: Internal auditing, as one of the mechanisms of governance, has a significant impact on financial performance

2.3.5 Agility audit

Agile internal audit is the mentality that an internal audit unit would adopt to concentrate on stakeholder needs, speed up audit cycles, generate less documentation, drive timely insights, and decrease wasted labor. Agility prompts internal auditors and stakeholders to proactively determine the anticipated value that will be delivered by an audit or project. Agile internal audit also prioritizes audits and projects based on their significance, urgency, and readiness for completion. Finally, reporting focuses on sharing ideas rather than on recording the activity.

The term "agile" is used to refer to a set of guidelines and practices that were developed initially for use in software development and made well-known by the Agile Manifesto for Software Development in 2001. This featured the following four values and twelve value-oriented principles. While all of the parts are necessary, the values presented here acknowledge that the ones in bold should take precedence over those in italics.

1. **People and interactions** over procedures and equipment.
2. Utilizing functional software over thorough documentation.

3. Customer involvement during contract negotiations.
4. Adjusting to change instead of sticking to a plan.

Due to increasing digital disruptions and an increase in financial scandals and fraud, the internal and external audit environment has undergone significant changes. Internal auditing is being automated in place of conventional waterfall and labor-intensive methods. The board and management have higher expectations for the Chief Internal Auditors (CIAs). Only 44% of internal stakeholders, according to a survey by PWC, think the internal audit role adds meaningful value. The performance of internal audits falls short of stakeholder expectations as a result (Joshi, 2021). Additionally, internal auditors need to be more thought of as reliable business advisors, according to stakeholders. Traditional internal auditors have fallen short in the face of economic uncertainty in addressing disruption-related risks. According to audit academics, the auditing field has to switch from reactive to agile in audit planning. Agile is a method for re-evaluating how teams approach projects or smaller tasks. Rapid adaptation to internal and external contexts is a key component of agility, which can enhance operational performance, product quality, and customer happiness (Joshi, 2021).

Table 2. 1
The key distinctions between traditional waterfall internal auditing and agile internal auditing

Traditional Auditing	Agile Auditing
It entails a strict, one-phase planning process for audit work.	It involves a procedure based on continual, flexible, iterative planning in "sprints" (short bursts of planning, work, and increased collaboration)
Communication breakdowns between team members and stakeholders happen frequently.	It emphasizes constant interaction and cooperation between audit team members and stakeholders.

It could take up to eight weeks or longer for the planning, fieldwork, review, and reporting phases. These three stages are finished in a lot less time.

Audit preparation	Backlogs
Observation and Review	Sprints and reflection
Reporting at Project's End	Continual reporting
Emphasizes thorough documentation	Computerized auditing
Following the plan	Adapting to change

An agile internal auditing strategy has ten qualities (Joshi, 2021), which are succinctly listed below:

1. This strategy emphasizes teamwork and cooperation. The project stays on schedule thanks to prompt feedback from clients and developers.
2. The audit process involves clients directly, and they can see how the project is evolving over time thanks to the agile methodology.
3. An agile strategy improves communication since it may use the most recent communication technologies and face-to-face conversation. The agile environment "encourages developers to partially complete work to the product owner and other stakeholders as a sprint advances," according to Deloitte.
4. The potential of an agile strategy to reduce the amount of time between planning and product delivery is one of its traits.
5. The emphasis is on creating the best product, and there is more flexibility to adjust as necessary.
6. The team's ability to provide high-value product features quickly is another attribute of the agile method (Rajkumar, J. B.)

7. One characteristic of the agile method is that meetings are held within the audit teams to determine whether the execution and performance are going as planned and whether the team is encountering any bottlenecks.
8. A cross-functional team with members with diverse functional expertise is used in the agile approach to work towards a common objective. Each team member performs various tasks and continues to support and maintain the team.
9. According to KPMG's 2019 report, integrating agile approaches may help firms' internal audit and control functions be more valuable. It is possible to combine the system with other risk and compliance software.

In general, a change in perspective is necessary to adopt agile internal auditing successfully. It is anticipated that the entire company would adhere to agility (Beerbaum, 2021). It suggests that the IAF is required to concentrate on stakeholder needs, cut waste, and enhance audit processes. Based on the above discussion, the following hypothesis has been formulated:

H4: Agility audit imposes considerable influence over financial performance

2.3.6 Risk Management

Risk management can be described in a variety of ways. Risk management is a process that aims to reduce, eliminate, and manage risks while maximizing benefits and preventing loss from speculating risks (Annamalah, Raman, Marthandan, & Logeswaran, 2018). The objectives of risk management are to maximize the likelihood of success and minimize the likelihood of potential future losses. A risk that is troublesome might affect a company's costs, timeline, systems, and productivity.

Management, directors, and staff members are involved in the risk management process used to set possibilities and solutions. Its goals are to identify potential events that could impact the organization and to manage risk according to the firm's risk appetite to give reasonable assurance about achieving goals (Force, 2018). Risk management is a process of controlling potential risks by identifying, evaluating, and resolving them. This process can help to lessen the detrimental impact and new possibilities that the discovery may facilitate in minimizing the likelihood of risk occurrence and negative effects after it does.

The topic of risk management must be taken extremely seriously for the firm's success and growth, as well as for economic progress (Songling, Ishtiaq, & Anwar, 2018; Mosteanu, 2019). Additionally, poor performance might be related to poor risk management procedures, resulting in an economic meltdown and an unanticipated failure (Ahmed, 2019). The fundamental reason for the collapse is a failure to implement an effective risk management procedure based on responsibility division. Risk management procedures are crucial for enterprises. The practice of risk management in the business sector has been the subject of numerous research, and it has been discovered risk management to be a common practice in contemporary enterprises now (Giambona, Graham, Harvey, & Bodnar, 2018; Greuning & Brajovic-Bratanovic, 2022). Risk management practices were discovered as one of the variables affecting performance (Boateng, 2018). However, the recent worldwide trend toward bank failures and financial crisis raises concerns about how well firms are using risk management practices (Ahmed, 2019; Yilmaz, 2019). It was discovered that poor risk management was one of the causes of the worldwide financial crisis.

Establishing a robust risk management culture in firms will take lots of work (Parashkevova, 2020). Risk management is an ongoing process immediately impacted by internal and external environmental changes (Kraev & Tikhonov, 2019). To identify risk and control it, these alterations require stable concentration. Performance requires successful and efficient risk management (Boateng, 2018). Adopting a consistent risk-return profile is essential in delivering continual stakeholder value given the challenging business and financial environment of today (Jabbour et al., 2020; Danso, Adomako, Lartey, Amankwah-Amoah, & Owusu-Yirenkyi, 2020).

Furthermore, innovation is undoubtedly a crucial occurrence for every sector of the modern economy (Suchek, Fernandes, Kraus, Filser, & Sjögrén, 2021). Effective financial innovation should lower risks and costs while improving facilities that are always offered to multiple clients (Arnold, Schuette, & Wagner, 2021). Nevertheless, some aspects of innovation pose serious dangers that need to be considered and addressed. Additionally, public entities introduce new dangers associated with tasks and services by removing barriers to other activities and products (Chowdhury & Shil, 2019). The industry's rapid innovation rates necessitate assessing the efficiency of risk management in public organizations (Abdullah, Syah, Janor, & Hamid, 2018; Khan & Khan, 2019).

According to Dowd (2007), the following elements led to the discipline of risk management's development: (i) tremendous growth in trading activity, (ii) significant increases in the types of instruments traded and trading volumes during the previous few decades, (iii) enormous growth in the use of financial derivatives, and (iv) rapid advancements in computer technology.

Based on a 796 systematically retrieved papers survey, Ullah et al. (2021) developed a multilayered technology-organization-environment (TOE-based) risk management strategy for smart and sustainable city administration. Fifty-six risks—17 technological, 11 organizational, and 28 external—were identified and categorized into TOE categories. The TOE layers conduct the continuous risk-management process of recognition, assessment, analysis, monitoring, and reaction planning at both the internal management levels and the external layer levels. The local government can use these dangers as an opportunity to invest in developing critical and effective answers that will increase public safety, protection, and confidentiality.

There are three essential steps in effective risk management, which include: (i) awareness of the risks the firm is exposed to; (ii) measurement of the risks to assess their impact and significance; and (iii) risk mitigation through the implementation of appropriate policies or action plans to manage or reduce the risks. The methodology behind risk measurement is a major concern for all risk management frameworks. Risk measurement grows more complicated as financial institutions and products evolve. Accurate risk measurement is the crucial first step in approaching qualified and effective risk management systems (Chowdhury & Shil, 2019). It is important to recognize the benefits of financing risk management. This objective has always been at a higher risk. The issues with risk management in businesses have a significant impact on both economic growth and general business development. The following benefits accrue to banks that have enhanced their risk management implementation:

- i. It is compatible with the rule's compliance function.
- ii. It enhances their credibility and potential to draw in a wider range of clients to expand their fund resource profile.

- iii. It raises their productivity and profitability.

Financial resources are more readily available for organizations with superior risk management than those with poor risk management (Chowdhury & Shil, 2019). The possibility of expanding an organization's profitability and asset output arises from improved financing availability.

Boateng (2018) used the CAMELS rating model to evaluate the performance of Ghanaian banks. The terms capital sufficiency, assets quality, management effectiveness, income, flexibility, and susceptibility are all abbreviated as "the model." To examine the impact the various elements of the camels' model have on the bank's performance in Ghana, a sample of ten banks was chosen over a seven-year period using the conventional multiple regression method. Additionally, the results of the study of the calculated ratios from the financial statements of the chosen banks showed that revenues emerged as the extremely relevant component that influences the performance of Ghanaian banks.

Theoretical analysis has revealed a connection between risk management and a company's financial performance. First, firms can benefit from variety, endure greater levels of risk, and reduce redundancies caused by spreading risks among different departments or regions when they use holistic management. Decreased asymmetric information and increased internal communication can help with decision-making. Risk management reduces the cost of hedging risks by avoiding redundant hedges and focusing solely on risk level (Durst, Hinteregger, & Zieba, 2019).

A company employing risk management should increase its overall understanding of risks to be able to maximize profitability and return on invested capital. Companies can reduce losses by improving their responsiveness to the risk and aligning their investment strategies with their plan with the aid of risk management (Amarjit Gill & Obradovich, 2018). As a consequence of this, businesses can effectively balance risk and have consistent periods of profitability. ERM has features such as "expanding the range of options, recognizing as well as managing risk entity-wide, promoting favorable outcomes and benefits while limiting negative shocks, minimizing variability, optimizing resource allocation, and building enterprise resilience."

Huy et al. (2021) asserted that the employment of risk managers typically has no appreciable effect on the values of stock market indexes (CROs), because it is impossible to forecast the outcomes of actions that will be taken in the future. Their research focuses on immediate responses to risk management employment announcements (Nasrallah & Khoury, 2022). Various studies have looked at the impact that a risk management system has on a company's performance from an empirical point of view, with various results; nonetheless, the majority of academics place emphasis on creating a positive impact.

After examining the relationship between risk management maturity and firm value, Septyanto et al. (2020) found that mature risk management is associated with higher Tobin's Q values in organizations. According to Zeni et al. (2016), boards are strategic decision-making groups, so understanding teamwork and cohesiveness is essential when evaluating performance.

According to Shad et al. (2019), risk management provides organic cost-savings related to applying particular risk treatments, encompassing 680 firm-years' worth of observations. Given those issues, there is sufficient justification to investigate the subject further, which has resulted in the following hypothesis development:

H5: Risk management has a prominent impact on financial performance.

2.3.7 Compliance with Accounting Standards

IAS/IFRS compliance evaluates a reporting unit's level of adherence to the numerous requirements listed in the IAS/IFRS issued by IASC/IASB. A guideline on the lowest amount of relevant and accurate information that a firm must present in its financial reports was also outlined by IFRS, along with various additional accounting standards. Some of the primary forces influencing national IFRS adoption include institutional isomorphism that are coercive, normative, and imitation. This is because businesses that fail to comply with disclosure laws miss critical information that could affect how the financial markets operate. If criteria are willfully violated, the financial report may be biased and misleading. On the other hand, some companies that willingly or involuntarily adopt this approach as a reporting norm falsely claim to be in compliance.

The research findings on the level of compliance with International Financial Reporting Standards (IFRS) generally lack consensus. While several studies indicate an increase in IAS/IFRS compliance, some academics advocate for a reduction in compliance with accounting standards. Despite substantial improvements in overall compliance, a significant portion of the IFRS-mandated disclosures remains undisclosed to the public.

It is possible to distinguish between disclosure-related direct and indirect costs. Direct costs include those associated with information creation, processing, publication, and distribution (Blankespoor, deHaan, & Marinovic, 2020; Armougum, Gaston-Bellegarde, Marle, & Piolino, 2020; Zhang, Liang, Gao, & Zhang, 2018). Indirect costs, on the other hand, include items like proprietary costs. In addition to the associated costs, previous research has supported the benefits of information sharing (Ren, Deng, Hong, & Zhang, 2019; Chin, Chai, Chong, & Yusof, 2018). The enormous expense of absolutely plausible disclosures makes them undesirable in any case. Ismail (2021) examined the effects of audit satisfaction on compliance audit and corporate image in Malaysia utilizing unprocessed data that was collected using structured questionnaires distributed via email. Descriptive statistics and correlation analysis were employed to analyze the provided data. The analysis findings showed a considerable correlation between auditee satisfaction, compliance, and company image.

Although it is not always required by law, companies may choose to publish more information (Ousama et al., 2019). This decision is related to the benefits the business would receive from information disclosure, such as reduced contracting costs, litigation risk, low capital expenses, and agency costs. Based on the aforementioned, it should be assumed that assessing the benefits and costs of information disclosure accounts for the variation in the level of disclosure made by firms under the required and voluntary scheme. According to numerous research (Wang, Wang, Wang, & Yang, 2020; Enache & Hussainey, 2020; Radhouane, Nekhili, Nagati, & Paché, 2019), there are a variety of factors that influence how organizations react when it comes to

voluntary information disclosure. On the other hand, researchers paid less or no attention to articles on the variables influencing mandatory disclosure.

The disclosure requirements of the RPT accounting standard, as well as the voluntary regime, are affected by the following factors. The factors differentiate corporate governance structures from business financial characteristics (Kafidipe, Uwalomwa, Dahunsi, Okeme, & Ntim, 2021). According to Al Farooque, Buachoom, and Sun in 2020, Baysinger & Butler in 2019, and Mohammad & Wasiuzzaman in 2020, corporate governance practices include board diversity, board size, audit committee diversity, audit committee financial expertise, CEO diversity, CEO ownerships, family ownerships, managerial ownerships, and foreign ownerships. A company's financial attributes include tunneling, support, profit, firm progress, and a strong dividend policy.

Very little information is available on board performance evaluations of financial performance and adherence to corporate governance standards as set by limited public businesses. According to Braendle (2019), achieving board performance that generates financial performance depends on compliance. It is recommended that the board conducts a systematic and thorough assessment of its own performance as well as that of its committee and directors. In its annual report, the board should describe the process used to evaluate the performance of the board, its committees, and individual directors.

According to Zhou et al. (2022), the linkages among compliance firm performance were studied using concepts of accounting and marketing. In a top manager's financial decisions at Shari'a-compliant firms, Naz et al. (2017) looked at the differences in

management styles among managers moving between Shari'a-compliant firms and firms not compliant with the Shari'a. They observed a significant difference in decisions between managers of non-shari'a-compliant firms and their counterparts.

Using a mixed-methods research design and partial least squares testing, Nalukenge (2019) examined the link between board role performance and compliance with IFRS among microfinance institutions (MFIs) in Uganda. Interviews were held to determine the executed board role and responsibilities. Using a large-scale survey of 266 respondents from textile manufacturing enterprises in Bangladesh, the impact of strategic orientation on the application of green supply chain management (GSCM) approaches and, subsequently, sustained business performance were examined by Habib et al. in 2021. Additionally, research showed that Shari'a compliance and intellectual capital have a significant positive impact on financial performance (Al-Matari, 2019). Therefore, the current research suggests that:

H6: Compliance with accounting standards has a significant impact on financial performance.

2.4 Chapter Summary

The past literature has been thoroughly evaluated in this chapter. To identify the research gap, it was first necessary to examine how much the concerned variables (corporate governance, audit, risk, and compliance) affect the financial performance of the companies. In addition, a theoretical framework is discussed in the chapter, besides the theories that contributed to this research. Therefore, the hypotheses were developed based on the foundation of the conceptual framework. Also, this study explores the effects of the independent variables (board of directors, audit committee,

internal audit, audit agility, risk, and IFRS compliance) on financial performance in listed government-owned companies in the UAE.



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the study approach utilized to investigate the relationships between the components of corporate governance (the effectiveness of the audit committee, internal audit, and audit agility), risk management, compliance, and performance. A discussion of research philosophy introduces this chapter. Then a thorough discussion of the research technique follows. In the final section, a chapter summary is given. The researcher can clarify the **Governance Guide for Public Shareholding Companies in UAE** as follows:

Decision of the Chairman of the Authority's Board of Directors No. (03 / R.M) for the year 2020 AD regarding the adoption of the Governance Guide for Public Companies

This corporate governance guide provides the necessary framework for regulating the company's affairs, and its provisions are based on the provisions of Federal Law No. (2) of 2015 regarding commercial companies.

This guide focuses on the application of the materials contained in it. Its provisions have been drafted in a simple and clear manner, and all public shareholding

companies are expected to comply with the system. The authority supervises the application of this guide as a regulator for the listed companies. The main pillars of corporate governance consist of accountability, fairness, disclosure, transparency and responsibility.

Corporate governance revolves around directing and controlling companies; it consists of a set of controls and rules that guarantee institutional discipline in the company's relations and management. The framework follows international standards by examining the responsibilities and duties of the members of the board of directors and the executive management of the company. It also takes into account the protection of the rights of shareholders and stakeholders and their supervision and agency toward achieving the company's sustainability.

(2) Principles and objectives of the guide

This guide is based on the following corporate governance principles:

1. Accountability: this guide establishes the accountability of the company's management by all shareholders and stakeholders and directs the board of directors to set the strategy, supervise, direct and monitor management.
2. Justice: the company commits itself to protect the rights of shareholders and ensuring fair treatment for all shareholders, including minority shareholders, and all shareholders are given adequate compensation for the board of directors' damage to shareholders' rights.
3. Transparency and disclosure: the company is committed to making accurate and timely disclosures about all material events related to the company,

including its financial affairs, performance, share ownership and governance, in a manner that is easily accessible to all concerned parties.

4. Responsibility: the company recognizes the rights of other stakeholders in accordance with laws and regulations and encourages cooperation between the company and stakeholders in creating sustainable and financially sound companies.
5. This guide aims to establish an effective legal and regulatory framework to regulate the company's affairs and aims in particular to:
 - Developing a framework to deal with and protect the rights of all stakeholders.
 - Determine the responsibilities of the board of directors and the executive management.
 - Enhancing the role of the board of directors and committees and working on developing their capabilities in order to enhance the company's decision-making mechanisms.
 - Achieving transparency, impartiality and fairness in the capital market, its transactions and the work environment and enhancing its disclosure process.
 - Work to provide effective and balanced tools to deal with cases of conflict of interest.
 - Enhancing accountability and oversight mechanisms for the company's management and employees.
 - Work to ensure the company applies effective risk management mechanisms and internal controls and procedures.

- Supporting the efficiency of the company's auditing system and its tools.
- Work to raise companies' awareness regarding the concept of professional behavior and encourage ethical behavior.
- Ensuring that the company implements an investor relations policy supporting regular, effective, fair communication with shareholders.

(3) The scope and validity of the guide

Taking into account the provisions of the Companies Law and Federal Law No. (10/1992) (concerning evidence in civil and commercial transactions and Federal Law No. (11/1992).

Regarding civil procedures, this guide is applied to local public shareholding companies listed on the market. The provisions of this guide do not apply to foreign companies listed in the market.

(4) Responsibility for implementing the Corporate Governance Manual

First: the responsibility of the board of directors

The company's board of directors shall be responsible for the commitment to implement the company's principles and rules of governance - in accordance with the provisions of this guide and the relevant legislations - and it shall monitor the implementation of the governance system in the company.

Second: safe documents:

The company is required to retain all necessary minutes, documents, reports, and other papers at its main office for a minimum duration of ten years. This includes maintaining records of general assembly meetings, board meetings, and committee meetings. In the event of an investigation related to these records, the company must retain them until the conclusion of any pending lawsuit, claim, or ongoing investigation.

(5) Publication of the company's incorporation certificate and articles of association

The certificate of incorporation of the company accompanied by its Memorandum of Association and Articles of Association and any amendments thereto shall be published in the electronic bulletin on the authority's website, unless the authority decides otherwise.

(6) Board of Directors

- The board of directors shall elect by secret vote from among its members a chairman and a vice-chairman, and the vice-chairman shall take the place of the chairman in the event of his absence or an impediment.
- It is prohibited to combine the position of chairman of the board of directors with the position of the company's manager and/or managing director, or any other executive position in the company.
- The board of directors has the right to elect from among its members a managing director for management and to determine the council's terms of reference and remuneration.

(7) regulations for nomination to the membership of the board of directors

The controls that the company must comply with are as follows:

- The number of board members must be appropriate to the size and nature of the company's activity.
- All board of directors members must have an appropriate balance of skills, knowledge, competencies, experience, diversity and independence.
- The company's articles of association determine the method of forming the board of directors, the number of its members, and the membership duration, provided that the percentage of women's representation is not less than (20%) of the formation of the board of directors—management in its annual report on corporate governance.
- The board is committed to establishing gender diversity policies, goals and procedures to meet those goals.
- The system of association determines the executive, non-executive and independent members, provided that the majority of the board of directors members are independent non-executives who must have the practical experience and technical skills for the benefit of the company. To allocate sufficient time and attention to his membership and that this membership does not represent a conflict with his other interests.
- The door for candidacy for membership of the board of directors must be opened and announced, taking into account the invitation of the general assembly and taking into account the following:
- The door for candidacy for the board of directors' membership should remain open for at least ten days from the announcement date.

- Publish the names of the candidates and their candidacy data on the company's bulletin board and the company's website on the international information network at least two days before the date set for the company's general assembly meeting.
- After closing the door for candidacy, the candidate may not assign his candidacy to another person.
- Provide the authority and the market with a list that includes the names of the candidates on the day following the closing of the candidacy door.

3.2 Research Philosophy

The research approach and research design used to perform the study are discussed in this section.

3.2.1 Research Paradigm

The researcher's core philosophical and theoretical convictions regarding the social world, along with his own beliefs, values, and knowledge, could be viewed as the research paradigm. These factors determine the choice of a methodological technique for a certain study. According to early researchers (positivism and interpretivism), contrasting research paradigms have been used. To make up for the shortcomings of the preceding paradigms, numerous new paradigms have developed from the blending of principles of the two extreme paradigms.

Positivism is a philosophical school of thought that encourages using the scientific method to explore the social world and other subjects. Positivists held the views that the researcher is independent of the subject under study, that social reality

study cannot change the actual reality, and that the purpose of research is to develop theories from empirical facts. Contrarily, the idealistic school of thought served as the foundation for interpretivism. Contrary to the earlier school, interpretivism held that social reality could not be researched using the same methods as natural science phenomena. They maintained social reality as extremely subjective, significant for people, and significantly influenced by the researcher's deliberate acts. Interpretive research refers to a study that comes to its conclusions without using the statistical method of quantitative data analysis, according to Walsham (2006).

This study adheres to the positivist paradigm. This study's primary goal is to evaluate corporate governance, audit, risk, compliance, and performance in relation to financial performance. The study makes the assumption that the influences, contributing variables, and links have actually occurred legitimately. Secondly, by using statistical methods for data analysis, theoretical conjunctures are created and put to the test through empirical evidence. Six research hypotheses, in particular, are developed and concentrate on theory validation and testing using the deductive method. These results led the study to accept the positivist paradigm's ontological, epistemological, axiological, rhetorical, and methodological assumptions.

3.2.2 Research Design

A research design is a plan that is formulated upon the study's research questions for the data collection, evaluation, and analysis. A quantitative research methodology aims to gather secondary data from a sample, evaluate it using statistical methods to see whether a relationship between two or more variables exists, and then extrapolate the findings to the entire population. This methodology is used in the study to assess the

impact of corporate governance, audit, risk, and compliance on financial performance. This methodology was widely used in the majority of financial statements and corporate governance studies, making it more suitable for this kind of study. Secondary data comes from company annual reports and financial statements, company announcements on the official UAE website, and DataStream.

The link between study variables is examined using quantitative approaches for data analysis, and conclusions are formed from this data. In order to consolidate, synthesize, and present data in a rational way that allows for a rational vision of the potential findings of the study, descriptive statistics are used. It includes the numbers for the research variables' means, medians, minimums, maximums, standard deviations, skewness, and kurtosis.

Pearson's correlation determined the direction and amount of the link between the research variables. It was employed to evaluate the multicollinearity amongst the variables included in the study. The study used statistically significant levels of (p 0.01, 0.05, and 0.1). Using ordinary least squares, the relationship between dependent and independent variables in research models were investigated.

The study will estimate the disclosure index and use the aforementioned approaches, including descriptive statistics, Pearson's correlations, and regressions, using Microsoft Excel and SPSS 25. Using the software has made it easier for the researcher to establish significance levels and compute model coefficients, residuals, and R square, all of which are used to judge whether or not research hypotheses are valid.

3.3 Measurement of Variables

The method by which the variables used in research are measured is referred to as variable measurement. The methods employed in earlier investigations are used to measure the research variables in our study.

3.3.1 Dependent Variable

An entity's financial performance is important and calls for accurate measurement. The financial performance metrics used to assess performance are as follows:

3.3.1.1 Return on Assets

Return on Assets (ROA) measures the profitability of assets of the company in terms of the generation of revenues (Purba et al., 2020). Companies with high initial investment requirements typically acquire low ROA. Net income is divided by total assets to determine ROA. A greater ROA demonstrates that assets are utilized wisely to serve stakeholders' financial interests. ROA measures how well assets are used and has a wide range (Purba et al., 2020). Additionally, it evaluates operational and financial performance (Kamaruddin et al., 2021). The return on assets (ROA) can be used to assess how effectively assets are used to generate net income from operations. Researchers further stated that ROA might potentially be used as a measure of management's efficiency in allocating public resources because it is conceivable to be efficient while being badly positioned in the usage of capital.

Pointer and Khoi (2019) applied a quantitative technique to evaluate determinants of both ROA and ROE across insurance companies and banks registered on the Vietnamese stock market. The study's internal variables, encompassing company size,

valuation, equity return, time in operation, and per-share earnings, are significant predictors of both ROA and ROE. ROE was significantly and negatively impacted by capital structure. Compared to insurance firms, banks had a lower return on assets and a higher equity return.

3.3.1.2 Return on Equity

Return on Equity (ROE) indicates the rate of equity return that gives useful data on the production of indebtedness in the capital system and aids managers in understanding how much financial leverage is beneficial or detrimental (Rialdy, 2019). One of the most used metrics for evaluating a company and its leadership is ROE (Ependi & Dalesna, 2021). Net income is divided by the public entity's equity to calculate ROE.

3.3.1.3 Earnings Per Share

One of the most popular approaches employed in stock exchange ratios or market performance indicators is earnings per share (EPS) (Arsal, 2021). EPS is a required ratio that is used on stock exchanges all around the world as a measure of the importance of the ratio. Asset return will serve as the performance indicator for this study (ROA) (Mutai, 2020). This is in line with what several investigations have suggested. They claim that as each performance measurement has its own specific and special capabilities, combining several performance metrics could increase the study's robustness (Busch & Friede, 2018; Nestor et al., 2019).

3.3.1.4 Value Ratio

Black (2000) claimed that the value ratio may be used to calculate a company's value. This could be calculated by dividing the market capitalization's actual value by its

potential value. The cost of the shares determines the real market valuation, whereas the resources' actual value determines the potential market valuation (Kuvshinov & Zimmermann, 2022; Barney, 2018).

3.3.1.5 Tobin's Q

James Tobin, a Distinguished Professor of Economics at Yale University, created Tobin's Q in 1968. Tobin's Q, which reveals a company's strategic position, is a proportion of the market price of its equity and debt to the recoverable amount of its assets. Due to the limited amount of data available, Aljifri and Moustafa (2007), Baek, Kang, and Park (2004), Bauer et al. (2004), and Weir et al. (2002) calculated Tobin's Q as the product of the market value of equity as well as the book value of the debt divided by the book value of the net capital in this study (2002). Its use eliminates the challenge of estimating return rates or variable costs, making "Q" a better indicator of both market worth and price.

Based on the above, the dependent variable in this study is financial performance, and the researcher used two metrics—ROA and Tobin's Q ratio—as measurements for financial performance. The classic accounting metric of return on assets (ROA) has been extensively employed in earlier research. In accordance with the research of Purba et al. (2020), ROA is utilized to indicate how effectively the board of directors uses its assets to increase shareholders' value. Net income is multiplied by the organization's net capital to compute ROA. The values are be calculated from the annual reports published by the company.

However, Tobin's Q ratio measures the relationship between a firm's market value (the current market price of its outstanding shares) and the replacement cost of its assets. Tobin's Q ratio evaluates whether a company's assets are overvalued or undervalued in the stock market, and it serves as an indicator of financial performance and investment efficiency. In essence, was chosen as the market performance metric as it offers a rough approximation of the worth of intellectual capital, such as market dominance, reputation, management excellence, and expansion potential. As a result, it is frequently employed in numerous variations as a metric of financial performance in empirical studies of corporate governance Empirically, many scholars such as Al-Ghamdi and Rhodes (2015); Alzharani and Che-Ahmad (2015); Haji and Mubaraq (2015); Ibrahim and Samad (2011); Rodriguez-Fernandez, Fernandez-Alonso, and Rodriguez-Rodriguez (2014) utilized Tobin's q to determine performance..

3.3.2 Independent Variable

3.3.2.1 Characteristics of the board of directors

- **Board Size:** Total number of directors on boards of the companies in the sample makes up the board size (BSIZE). Outside directors, executive directors, and non-executive directors are all included in this. Citing Malik et al. (2014), this study estimated the board size by counting all available directors (Almansour et al., 2016).
- **Board independence:** board independence is quantified under corporate governance factors by the percentage of independent directors on the board of directors, as in earlier studies. A mount of directors on the company board serves as a proxy for board size. CEO was classified as a financial expert and categorized as "1" if he belongs to a professional accounting organization, has a finance-related education degree or professional history, or both, and "0" otherwise. The

family CEO's influence was assessed using a control variable that was set to "1" if he belonged to the ruling family and "0" otherwise. The proportion of shareholdings by the CEO out of all outstanding shares was used to calculate CEO ownership. All the information were retrieved from the annual reports of the company.

- **CEO Duality:** in a CEO dual role (DUAL), the CEO also serves as the board chair. Alkhuzai and Asad (2018) measured this variable using the numeric values "0" for no duality and "1" for duality. This was done to assess the relationship between CEO duality, a dependent variable, and ROA and TQ, which were independent variables used to quantify firm performance.
- **Board experience:** if the boards provide the company with a variety of expertise and abilities that enhance the operational excellence of the company, measuring this variable by "0," representing no experience, and "1," meaning experience exists.

3.3.2.2 Characteristics of audit committees

- **Audit Committee Size:** The number of audit committee members in company i during time period t .
- **Audit Committee Independence:** the evaluation of the variable audit committee independence (ACIND) was based on methodologies applied in earlier research by Mardjono and Chen, among others (2020). The audit committee's independent director (ACIND) to total director (Audit Committee) ratio was used to compute ACIND.
- **Experience of Audit Committee:** percentage of audit committee members with financial and accounting expertise for a company i during the time period t .

- **Audit Committee Meetings** :the frequency of audit committee meetings conducted each year was used to calculate audit committee meeting attendance (ACMEET). The quantity of audit committee sessions was also employed as a measure by Fauzyyah and Rachmawati (2018).

3.3.2.3 Internal Audit

This variable is measured by the effectiveness of the internal audit department, which includes planning, supervising fieldwork, documenting findings and recommendations, reporting findings and recommendations, and following up on internal audit recommendations, as well as by the support of the organization's members, which includes both senior management support and the presence of effective audit committees (Endaya & Hanefah, 2013).

3.3.2.4 Agility Audit

According to Joshi (2021), this variable is measured as it provides ways of enhancing flexibility in audit planning, execution, and reporting.

3.3.2.5 Risk Management

Risk management is the term used in the industry to describe a practice where certain lenders shift the terms of credit from the default terms—that is, the conditions and rates provided to individuals that missed payments—to the normal terms. The formula for calculating the DR ratio is $DR\ Ratio = \frac{Bad\ Debts}{Total\ Debts}$. It is comparable to research done by Musyoki and Kadubo (2012).

3.3.2.6 Level of Compliance with Accounting Standards

Utilizing a weighted disclosure index, the compliance degree with accounting standard disclosure requirements for RPTs was determined. To get around the problems with the unweighted disclosure index, choosing the weighted disclosure index makes sense. Using the disclosure index (Al-Sartawi et al., 2016) was used and altered for this research. This method awarded absent, partial, full, and outstanding levels of compliance with 0, 1, 2, and 3 points, respectively. RPTs standard shows insufficient compliance, whereas absent compliance indicates no compliance. Full compliance denotes complete adherence to the standard's disclosure criteria. Finally, good compliance is when the reporting companies go above and above the minimum necessary to comply with international standards, disclosing additional information. The final accounts published in the annual reports will confirm the level of compliance with accounting standards. The researcher can illustrate the measurements of variables in Table XX:

Table 3. 1
Measurements of Variables

Type	Variables	Measurements
Dependent Variable	Financial Performance	1. ROA
		2. Tobin's Q ratio
	Characteristics of board directors	1. Board Size
		2. Board Independence
		3. CEO Duality
		4. Board Experience
	Characteristics of Audit Committees	1. Audit Committee Size
		2. Audit Committee Independence

Independent Variable	corporate governance mechanisms	3. Experience of Audit Committee
		4. Audit Committee Meetings
	Internal Audit	1. Internal audit department, 2. Support of the organization's members
	Agility Audit	1. Flexibility in audit planning 2. Flexibility in audit execution 3. Flexibility in audit reporting
	Risk Management	1. DR Ratio=Bad Debts/Total Debts
	Compliance	1. Compliance with Accounting Standards (SC)

3.4 Sample Selection Procedure

In order to enhance the country's business environment and capabilities and strengthen its global economic competitiveness, the UAE Presidency introduced the UAE Commercial Companies Law 2021. This legislation, which officially came into effect in January 2022, focuses on regulating companies in line with global changes, particularly in areas related to governance regulations, protection of partner and shareholder rights, facilitation of foreign investment, and promotion of corporate social responsibility. Its implementation aims to foster a favorable business climate,

empower stakeholders, attract foreign investments, and encourage responsible corporate practices.

The amendments of the law aimed at developing mechanisms and procedures with the aim of increasing the number of companies listed on the financial markets in the country and attracting international investors. They also included solutions for financing and restructuring company operations and finding solutions to the challenges facing business activities in the country.

The law also included many amended provisions with regard to the percentage of founders' contribution to the capital for public joint-stock companies, the mechanisms of public offering in the capital markets, share categories, the formation of boards of directors, the nationality of members, and the transfer between legal forms of companies.

Based on the above, the general population's members who fit the criteria for forming a data source are referred to as the 'target population.' Firms that are listed government-owned companies in the United Arab Emirates make up the study's 'target audience.' Because the community is not particularly vast, there are now 60 companies registered listed government-owned companies in the UAE stock market. This gives the researcher access to reliable and pertinent annual reports on the time being considered.

3.4.1 Sample

For sampling size Banks were not included in the sample because of different legal standards, and the research was limited to listed government-owned companies in the UAE by the end of 2022 over five years, from 2018 to 2022. (CEIC Data, 2022). After removing banks, 60 companies comprised the most recent sample of companies from the UAE Stock Market that offers information on corporate governance features. These 60 businesses were divided up among several industries.

This secondary information was gathered from the 2022 annual report and accounts of the listed companies on the official UAE website: argaam.com/ar/company/financial. The study utilized the most up-to-date source of information available during its execution, specifically the annual reports from the years 2018 to 2022. The names of the companies can be clarified in Table 3.2.

Table 3. 2
Government-owned companies of the United Arab Emirates (UAE)

Government-owned companies of the United Arab Emirates (UAE)	
	Name
1.	Aabar Investments
2.	Abu Dhabi Investment Council
3.	Abu Dhabi Ports Company
4.	Abu Dhabi Terminals
5.	Abu Dhabi National Oil Company
6.	Arab Media Group
7.	Arabian Television Network
8.	Aramex
9.	Atlantis the palm
10.	Creative City
11.	Daman, National Health Insurance Company
12.	DP World
13.	DEWA
14.	DU

15.	Dubai Holding
16.	Dubai Inc.
17.	Dubai Internet City
18.	Dubai Knowledge Village
19.	Dubai Lifestyle City
20.	Dubai Media City
21.	Dubai Royal Air Wing
22.	Dubai Silicon Oasis
23.	Dubai World
24.	Dubai World Central - Al Maktoum International Airport
25.	Dubai World Trade Centre
26.	Dubailand
27.	EDGE Group
28.	Electronic Documents Centre
29.	Emirates Credit Information Company(Emcredit)
30.	Emirates (airline)
31.	Emirates National Oil Company
32.	Emirates Global Aluminium
33.	Emirates Post
34.	Empower Energy Solutions
35.	Etihad Airways
36.	Etihad Credit Insurance
37.	Etisalat (E&end)
38.	Fly Dubai
39.	Green Crescent Insurance Company (GCC)
40.	International Petroleum Investment Company
41.	Kizad
42.	Leisurecorp
43.	Majan
44.	Mubadala Investment Company
45.	Nakheel
46.	Presidential Flight (UAE)
47.	Ras Al Khaimah IT Park
48.	Ras Al Khaimah Media Free Zone
49.	SHOOFtv
50.	Tatweer

51.	Emaar
52.	Americana
53.	Bayanat
54.	Borouge
55.	Burjeel Holdings
56.	Empower
57.	Salik
58.	Taleem
59.	Tecom
60.	Union Coop

3.4.2 Data Collections

The secondary data was meticulously collected from the 2022 annual reports and accounts of publicly listed companies, accessible via the official UAE website, argaam.com/ar/company/financial. This study rigorously relied on the most current and authoritative sources of information available during its execution. Notably, the analysis focused on the annual reports spanning from 2018 to 2022, providing a comprehensive overview of the companies' financial performance and strategic evolution over this critical five-year period. This timeframe was chosen to gain valuable insights into the long-term trends and developments within the companies.

3.5 Unit of Analysis

An individual, an organization, or a collection of people might be the unit of analysis (Zikmund et al., 2013; Quinlan et al., 2018). The current study covers the companies; thus, the ones listed in the UAE stock market are the unit of analysis. Therefore, the unit of analysis for the research is listed government-owned companies in the UAE.

3.6 Methods of Data Analysis

The study's goal is to determine how corporate governance mechanisms influence risk management and compliance over the financial performance of companies listed on the UAE stock market. Therefore, the following three objectives were developed, and to meet the objectives, three hypotheses were developed; the objectives and the hypothesis are as follows:

- Determining the effect of corporate governance mechanisms on the financial performance of listed government-owned companies in UAE.
- Determining the effects of risks on the financial performance of listed government-owned companies in the UAE.
- Determining the effects of compliance with accounting standards on the financial performance of listed government-owned companies in the UAE.
- The Statistical Package for Social Sciences (SPSS) version 25 was used for data analysis. Two basic analysis techniques—descriptive and inferential—were employed to meet the study's goals.

3.6.1 Descriptive Analysis

This approach provides descriptive statistics such as each variable's mean and standard deviations. The purpose of employing this method was to enhance the significance and comprehensibility of the facts. The resulting output data offers insights into the data distribution for the selected organizations.

3.6.2 Inferential Statistics

To ascertain the strength and orientations of the variables, Pearson's correlation approach was used. Corporate governance characteristics and business performance are the variables that are analyzed using correlation. A direct impact of the independent

variable on the dependent variables is referred to as a 'positive connection'. In other words, both variables are moving in a similar direction. On the contrary, a 'negative connection' suggests that the two variables go in the opposing direction.

This advanced method can show how groupings of independent variables and dependent variables relate to one another. The significance of the variable is tested between a 1 percent and a 5 percent degree of confidence. Once the value gets closer to 1, there is a considerable correlation between the two. It also makes testing the hypotheses made in section 3.3 easier. It can also look at the variation in an organization's performance that is described by independent factors.

The following assumption served as the foundation for the acceptance and application of multiple regressions:

- Both the independent and dependent variables follow a straight line. It was presumed that the regression coefficient for the independent variables would remain constant.
- Homoscedasticity refers to the constant variance of the error terms across the range of independent variable values.
- Free from errors term. The error terms had a relationship to other projected values and were independent.
- The error terms' normality. The incorrect terms were randomly scattered.

The level of multicollinearity is another factor to consider. A total of two (2) techniques were employed to find multicollinearity. Correlation matrix was the initial technique. The relationship is multicollinear if the tolerance value is smaller than 0.2.

The following approach used a variance inflation factor (VIF). According to Joseph et al. (2010), a VIF value of less than 10 is generally regarded as appropriate.

3.7 Models of the Study

1. Model (1)

2. : The first hypothesis of the study predicts an analysis of the impact of different characteristics of the board of directors as one of the mechanisms of governance on the financial performance of listed government-owned companies in the UAE. The researcher can formulate the statistical model to test the first hypothesis as follows:

$$FP = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 BIND_{it} + \beta_3 DUAL_{it} + \beta_4 BEXP_{it} + \beta_5 LnTA_{it} + \beta_6 LEV_{it} + \beta_7 ROE_{it} + \beta_8 Loss_{it} + \beta_9 Growth_{it} + \epsilon_{it} \quad (1)$$

Where *FP* represent financial performance index of the selected firms, *Bsize* proxies the board size of the firms, *BIND* shows board independence, *DUAL* is CEO Duality, *BEXP* is Board experience, *LnTA* refer to natural logarithm of total assets to measure the firms size, *LEV* refer to leverage, equal the total liabilities scaled by total equity and *ROE* is Return on Equity.

Within the framework of the division of the first statistical hypothesis of the study, the researcher can re-divide the test model of the first statistical hypothesis of the study, and in addition to that, this division will avoid the problem of double linearity (if any) as follows:

- (H1-1) Model:

$$FP = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 LnTA_{it} + \beta_3 LEV_{it} + \beta_4 ROE_{it} + \beta_5 Loss_{it} + \beta_6 Growth_{it} + \epsilon_{it} \quad (1-1)$$

- (H1-2) Model:

$$FP = \beta_0 + \beta_1 BIND_{it} + \beta_2 LnTA_{it} + \beta_3 LEV_{it} + \beta_4 ROE_{it} + \beta_5 Loss_{it} + \beta_6 Growth_{it} + \varepsilon_{it} \quad (1-2)$$

• **(H1-3) Model:**

$$FP = \beta_0 + \beta_1 DUAL_{it} + \beta_2 LnTA_{it} + \beta_3 LEV_{it} + \beta_4 ROE_{it} + \beta_5 Loss_{it} + \beta_6 Growth_{it} + \varepsilon_{it} \quad (1-3)$$

• **(H1-4) Model:**

$$FP = \beta_0 + \beta_1 BEXP_{it} + \beta_2 LnTA_{it} + \beta_3 LEV_{it} + \beta_4 ROE_{it} + \beta_5 Loss_{it} + \beta_6 Growth_{it} + \varepsilon_{it} \quad (1-4)$$

Where:

FP = financial performance

Bsize = board size

BIND = board independence

DUAL = CEO Duality

BEXP = Board experience

LnTA = natural logarithm of total assets

LEV = leverage

ROE = Return on Equity.

3. Model (2): the second hypothesis of the study predicts an analysis of the impact different audit committee characteristics as one of the governance requirements have on the company's financial performance. The researcher can formulate the statistical model to test the second hypothesis as follows:

$$FP = \beta_0 + \beta_1 ACSIZE_{it} + \beta_2 ACIND_{it} + \beta_3 ACEXP_{it} + \beta_4 ACMEET_{it} + \beta_5 LnTA_{it} + \beta_6 LEV_{it} + \beta_7 ROE_{it} + \beta_8 Loss_{it} + \beta_9 Growth_{it} + \varepsilon_{it} \quad (2)$$

Where ACSIZE represent the number of audit committee members in firm i during time period t, ACIND The audit committee's independent director (ACIND) to total director (Audit

Committee) ratio was used to compute ACIND , ACEXP is percentage of audit committee members with financial and accounting expertise for a company i during the time period t and ACMEET is The frequency of audit committee meetings conducted each year was used to calculate audit committee meeting attendance.

The researcher can re-divide the second statistical hypothesis test model of the study within the framework of the study's second statistical hypothesis; allowing to avoid the problem of double linearity (if any) as follows:

- **(H2-1) Model:**

$$FP = \beta_0 + \beta_1 ACSIZE_{it} + \beta_2 LnTA_{it} + \beta_3 LEV_{it} + \beta_4 ROE_{it} + \beta_5 Loss_{it} + \beta_6 Growth_{it} + \varepsilon_{it} \quad (2-1)$$

- **(H2-2) Model:**

$$FP = \beta_0 + \beta_1 ACIND_{it} + \beta_2 LnTA_{it} + \beta_3 LEV_{it} + \beta_4 ROE_{it} + \beta_5 Loss_{it} + \beta_6 Growth_{it} + \varepsilon_{it} \quad (2-2)$$

- **(H2-3) Model:**

$$FP = \beta_0 + \beta_1 ACEXP_{it} + \beta_2 LnTA_{it} + \beta_3 LEV_{it} + \beta_4 ROE_{it} + \beta_5 Loss_{it} + \beta_6 Growth_{it} + \varepsilon_{it} \quad (2-3)$$

- **(H2-4) Model:**

$$FP = \beta_0 + \beta_1 ACMEET_{it} + \beta_2 LnTA_{it} + \beta_3 LEV_{it} + \beta_4 ROE_{it} + \beta_5 Loss_{it} + \beta_6 Growth_{it} + \varepsilon_{it} \quad (2-4)$$

Where:

ACSIZE = audit committee size

ACIND = audit committee's independent

ACEXP = audit committee expertise

ACMEET = audit committee meetings

4. Model (3): the third hypothesis of the study predicts an analysis of the impact of internal audit on the company's financial performance. The researcher can formulate the statistical model to test the third hypothesis as follows:

$$FP = \beta_0 + \beta_1 \text{ INTERNAL AUDIT DEPT}_{it} + \beta_2 \text{ ORGN MEMBERS}_{it} + \beta_3 \text{ LEV}_{it} + \beta_4 \text{ ROE}_{it} + \beta_5 \text{ Loss}_{it} + \beta_6 \text{ Growth}_{it} + \varepsilon_{it} \quad (3)$$

Where INTERNAL AUDIT DEPT represent planning, supervising fieldwork, documenting findings and recommendations, reporting findings and recommendations, and following up on internal audit recommendations, and ORGN MEMBERS refer to organization members which measured by senior management support and the presence of effective audit committees.

5. Model (4): the fourth hypothesis of the study predicts an analysis of the impact of agility audit on the company's financial performance. The researcher can formulate the statistical model to test the third hypothesis as follows:

$$FP = \beta_0 + \beta_1 \text{ flex audit plan}_{it} + \beta_2 \text{ flex audit execution}_{it} + \beta_3 \text{ flex audit reporting}_{it} + \beta_4 \text{ LEV}_{it} + \beta_5 \text{ ROE}_{it} + \beta_6 \text{ Loss}_{it} + \beta_7 \text{ Growth}_{it} + \varepsilon_{it} \quad (4)$$

flex audit plan refer to review and adjust the plan , in response to changes in the organization's business, risks, operations, programs, systems, and controls, **flex audit execution** represent adjust the execution to response to changes in the organization's business, risks, operations, programs, systems, and controls, and **flex audit reporting** represent adjust the reports to response to changes in the organization's business, risks, operations, programs, systems, and controls.

Where:

Flex audit plan = flexible audit plan

Flex audit execution = flexible audit execution

Flex audit reporting = flexible audit reporting

Model (5): the fifth hypothesis of the study predicts an analysis of the impact of risks on the company's financial performance. The researcher can formulate the statistical model to test the third hypothesis as follows:

$$FP = \beta_0 + \beta_1 Dr_{it} + \beta_2 LEV_{it} + \beta_3 ROE_{it} + \beta_4 Loss_{it} + \beta_5 Growth_{it} + \varepsilon_{it} \quad (5)$$

Where the formula for calculating the **DR** ratio is DR Ratio=Bad Debts/Total Debts
DR Ratio to measure the Risk management

6. Model (6): the sixth hypothesis of the study predicts an analysis of the impact of compliance with accounting standards on the company's financial performance. The researcher can formulate the statistical model to test the hypothesis as follows:

$$FP = \beta_0 + \beta_1 SC_{it} + \beta_2 LEV_{it} + \beta_3 ROE_{it} + \beta_4 Loss_{it} + \beta_5 Growth_{it} + \varepsilon_{it} \quad (6)$$

Where **SC**, represent Compliance with Accounting Standards, its measure by reporting companies go above and above the minimum necessary to comply with international standards, disclosing additional information.

Table 3.3
Summary of the Variables Used

Notation	Variable	Description	Data Source
FB	Financial performance	An entity's financial performance is important and calls for accurate measurement. The financial performance metrics used to assess performance are as follows: (ROA, ROE, EPS, Tobin's Q).	
ROA	Return on Assets	Measures the profitability of assets of the company in terms of the generation of revenues.	
ROE	Return on Equity	The rate of equity return that gives useful data on the production of	

		indebtedness in the capital system and aids managers in understanding how much financial leverage is beneficial or detrimental.	Annual reports and accounts of publicly listed companies, accessible via the official UAE website, argaam.com/ar/
EPS	Earnings Per Share	Is a required ratio that is used on stock exchanges all around the world as a measure of the importance of the ratio.	
Tobin's Q	Tobin's Q	The product of the market value of equity as well as the book value of the debt divided by the book value of the net capital.	
B.Size	Boards Size	Total number of directors on boards of the companies in the sample makes up the board size.	company/ financial.
B.Ind	Board Independence	Is quantified under corporate governance factors by the percentage of independent directors on the board of directors	
Dual	CEO Duality	In a CEO dual role (DUAL), the CEO also serves as the board chair. this variable using the numeric values "0" for no duality and "1" for duality	
B.Exp	Board experience	If the boards provide the company with a variety of expertise and abilities that enhance the operational excellence of the company, measuring this variable by "0," representing no experience, and "1," meaning experience exists.	
AC.Size	Audit Committee Size	The number of audit committee members in firm i during time period t.	
AC.Ind	Audit Committee Independence	The audit committee's independent director (ACIND) to total director (Audit Committee) ratio was used to compute ACIND.	

AC.Exp	Experience of Audit Committee	percentage of audit committee members with financial and accounting expertise for a company i during the time period t .
AC.Meet	Audit Committee Meetings	The frequency of audit committee meetings conducted each year was used to calculate audit committee meeting attendance (ACMEET).
INTERNAL AUDIT DEPT	Internal Audit Department	Includes planning, supervising fieldwork, documenting findings and recommendations, reporting findings and recommendations, and following up on internal audit recommendations.
ORGN MEMBERS	organization's members	Includes both senior management support and the presence of effective audit committees.
Flex audit plan	Flexible audit plan	Review and adjust the plan, as necessary, in response to changes in the organization's business, risks, operations, programs, systems, and controls.
Flex audit execution	Flexible audit execution	Adjust the execution to response to changes in the organization's business, risks, operations, programs, systems, and controls.
Flex audit reporting	Flexible audit execution	Adjust the reports to response to changes in the organization's business, risks, operations, programs, systems, and controls.
SC	Compliance with Accounting Standards	By reporting companies go above and above the minimum necessary to comply with international standards, disclosing additional information.
LnTA	Natural Logarithm of Total Assets	Refer to natural logarithm of total assets to measure the firm's size.

LEV	leverage	Equal the total liabilities scaled by total equity.
GROWTH	Firm Growth	Measure by ability the firms to generate significant positive cash flows or earnings, which increase at faster rates than the overall economy.
Dr	DR Ratio	The formula for calculating the DR ratio is $DR\ Ratio = \frac{Bad\ Debts}{Total\ Debts}$.

3.8 Chapter Summary

This chapter discusses the research philosophy. Then a thorough discussion of research techniques follows. The research methodology used in this chapter examines the connections between the board of directors attributes, the audit committee's efficiency, internal audit, audit agility and risk management, compliance, and performance. The sample selection of the research was limited to listed government-owned companies in the UAE by the end of 2022 over five years, from 2018 to 2022. Firms that are listed government-owned companies in the United Arab Emirates make up the study's target audience. Because the community is not particularly vast, there are now 60 companies registered as listed government-owned companies in the UAE stock market.

According to the study's goals and hypotheses, the researcher is developing six basic models to determine how corporate governance mechanisms (the board of directors, the audit committee, internal audit, and audit agility) have an influence, along with risk management and compliance, over financial performance of listed government-owned companies.

CHAPTER FOUR

DATA ANALYSIS & RESULTS

4.1 Introduction

This chapter outlines the data analysis to investigate the impact of corporate governance mechanisms (board of directors, audit committee, internal audit and agility in audit), risk management, and compliance with accounting standards on financial performance. This chapter first shows the descriptive statistics for all variables. Secondly, this chapter shows the correlation among variables and the direct effect of the independent variables (corporate governance mechanism, risk management and compliance with accounting standards) on the dependent variable (financial performance).

4.2 Descriptive Statistics

The researcher undertook a few steps to confirm the prerequisites for the availability of the statistical techniques that would be employed before the statistical analysis. When using structural equation modeling, Byrne (2010) noted that data analysis is a crucial step before testing the measurement model. According to Blanca et al. (2013), the skewness and kurtosis values indicate how regularly distributed the data are. Table (4.1) displays the descriptive statistics for the study variables. For the items used to measure each variable in the following manner, this table includes the mean, standard deviation, skewness, and kurtosis.

Table 4. 1
Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
ROA	300	5.00%	35.00%	20.53%	8.51%	-0.071	-1.137
Tobins'Q	300	0.88	1.24	1.06	0.10	-0.060	-1.128
B.Size	300	3.00	9.00	6.06	2.05	-0.025	-1.324
B.Ind.	300	0.00	1.00	0.54	0.50	-0.152	-1.990
Dual.	300	0.00	1.00	0.54	0.50	-0.165	-1.986
B.Exp	300	0.00	1.00	0.53	0.50	-0.139	-1.994
AC.Size	300	3.00	9.00	5.81	1.95	0.110	-1.256
AC.Ind	300	0.00	1.00	0.50	0.50	-0.007	-2.013
AC.Exp	300	7.50%	49.90%	28.46%	12.13%	0.026	-1.169
AC.Meet	300	4.00	12.00	8.05	2.67	-0.002	-1.377
INTERNAL AUDIT DEPT	300	0.00	1.00	0.47	0.50	0.112	-2.001
ORGN MEMBERS	300	2.00	6.00	3.99	1.37	0.010	-1.221
flex audit plan	300	0.00	1.00	0.46	0.50	0.152	-1.990
flex audit execution	300	0.00	1.00	0.50	0.50	0.007	-2.013
flex audit reporting	300	0.00	1.00	0.42	0.49	0.327	-1.906
Dr	300	4.00%	26.00%	15.36%	6.77%	-0.022	-1.204
SC	300	0.00	5.00	2.53	1.69	-0.072	-1.291
LnTA	300	2.39	15.42	9.12	3.71	-0.067	-1.150
LEV	300	35.00%	85.00%	58.88%	14.92%	0.073	-1.190
ROE	300	5.00%	35.00%	20.33%	9.37%	0.043	-1.309
LOSS	300	0.00	1.00	0.50	0.50	0.007	-2.013
GROWTH	300	2.37%	21.39%	11.65%	5.55%	0.039	-1.198
Valid N (listwise)	300						

According to Blanca et al. (2013), achieving a normal distribution of data is essential for statistical analysis. This can be determined by assessing the skewness and kurtosis of the data, with suggested ranges of -3 to 3 for skewness and -10 to 10 for kurtosis. In our study, as presented in Table 4.1, these two fundamental conditions are satisfactorily met for all the variables under examination. This signifies that the data in our sample approximates a normal distribution, which is crucial for various statistical analyses.

Taking a closer look at the key characteristics of board directors, we find that their means for size, independence, duality, and financial experience are 6.06, 0.54, 0.54, and 0.53, respectively. These values indicate that these characteristics are well-represented in our sample observations, and they fall comfortably within the mid-range between the minimum and maximum values. This suggests a balanced and consistent representation of these board director attributes across the companies in our dataset.

On the other hand, when we consider the characteristics of the audit committee, including size, independence, financial experience, and meetings, the means are 5.81, 0.50, 28.46%, and 8.05, respectively. These values display a broader range within our sample, indicating diversity in the representation of audit committee variables. This diversity can be attributed to the variations in committee structures and practices among the companies studied.

However, a noticeable contrast emerges when we examine the attributes related to internal audit and audit agility. In this context, the internal audit effectiveness and members exhibit values of 47% and 3.99, respectively. Furthermore, the mean values

for the flexibility of audit planning, execution, and reporting are 46%, 50%, and 42%, respectively. These findings collectively point to a relative deficiency in the level of agility within the companies included in our study, particularly concerning internal audit practices.

Moving on to risk management and compliance with accounting standards, the low values in the descriptive statistics indicate effective risk management and minimal errors in accounting transactions. This is reflective of a high level of compliance with accounting standards, which is a positive attribute for the companies analyzed. It underscores their commitment to accurate financial reporting and adherence to regulatory standards.

Regarding the control variables, these factors are not widely dispersed, as their means fall within the range between the minimum and maximum values for these variables. Additionally, the standard deviations for all variables are low, indicating that the data is tightly clustered around the mean. This lends confidence to the accuracy and reliability of our dataset and allows for meaningful comparisons between our study and related research endeavors.

In conclusion, our comprehensive analysis of these key variables provides valuable insights into the characteristics of the companies within our study sample, facilitating a deeper understanding of their corporate governance, audit practices, and compliance with accounting standards.

4.3 Correlation Statistics

A measure of linear correlation between two data sets is Pearson's correlation coefficient (PCC), also known as Pearson's r , the Pearson product-moment correlation coefficient (PPMCC), the bivariate correlation, or simply the correlation coefficient in statistics. It is effectively a normalized measurement of the covariance, with the result always falling between -1 and 1. It is the ratio between the covariance of two variables and the product of their standard deviations. The measure can only capture a linear correlation between variables, just as covariance itself, and ignores many other kinds of relationships or correlations. Table 4.2 in this study's results can be used to display Pearson's r correlation among variables.



Table 4. 2

Pearson correlation Matrix

	RO A	Tobin s'Q	B.Si ze	B.I nd.	Du al.	B.E xp	AC.S ize	AC.I nd	AC. Exp	AC.M eet	IA D	O M	FP	FE	FR	Dr	SC	Ln TA	LE V	RO E	LO SS	GRO WTH
ROA	1																					
Tobins' Q	.34 0**	1																				
B.Size 6	.04 6	.100	1																			
B.Ind. 2**	.37 2**	-.062	.144 *	1																		
Dual. 5**	.18 5**	.344**	.133 *	.030	1																	
B.Exp 5**	.27 5**	.127*	.130 *	.031	.30 1**	1																
AC.Siz e 3**	.25 3**	-.123*	.414 **	.131 *	.17 2**	.090	1															
AC.Ind 4**	.66 4**	.165**	.054	.312 **	.17 4**	.240 **	.120*	1														
AC.Ex p 1**	.18 1**	.192**	- .009	- .107	- .04 5	.156 **	- .220* *	.114*	1													

AC.Me	.01				.06												
et	2	.098	.016	.033	3	.009	-.071	.012	.049	1							
IAD	.06				.05		.243*		-								
1	1	.055	.047	.087	4	.027	*	-.056	.145*	.058	1						
OM	.00				-												
3	3	.074	.039	.070	.12	.017	.041	.075	.070	.000	.51	1					
					7*						3**						
FP	.05				.04		-		.219*		.33	.50					
9	9	.230**	-	-	9	.022	.175*	.017	*	.063	5**	3**	1				
			.027	.064			*										
FE	-				.05		-		.187*		.31	.46	.57				
9	9	.081	.035	-	0	.063	-	.023	*	-.066	8**	4**	5**	1			
			.075				.130*										
FR	-				.03		.214*				.52	.54	.15	.28			
0	0	-.205**	-	.122	7	.021	*	-.056	-.091	-.067	7**	7**	8**	2**	1		
			.012	*													
Dr	-				.22	.311	.292*		-		.45	.09	-	-	.17		
6	6	-.157**	.196	.088	6**	**	*	.009	.192*	-.018	2**	9	.04	.17	5**	1	
			**						*				3	5**			
SC	-				.07						.78	.48	.42	.48	.50	.41	
7	7	-.105	.100	.027	9	.068	.118*	-.036	-.032	.024	0**	8**	9**	2**	8**	0**	1

The results included in the above table ensure a positive significant relationship between the directors' board characteristics and the financial performance indicators (where $r=0.046, 0.372, 0.185$ and 0.275 , consequently for the ROA and $r= 0.100, -0.062, 0.344$ and 0.127 , consequently for the Tobins'Q, which means that increasing size, independence, duality and financial experience for the directors' board characteristic increase the financial performance measured by ROA and Tobins'Q.

In addition, there is a significant positive relationship between audit committee characteristics and the financial performance indicators (where $r=0.253, 0.664, 0.181$ and 0.012 consequently for the ROA, and $r = -0.123, 0.165, 0.192$ and 0.098 consequently for the Tobins'Q), which means that increasing size, independence, financial experience and meetings for the audit committee characteristics increase the financial performance measured by ROA and Tobins'Q.

Additionally, there exists a positive correlation between the attributes of internal audit and audit agility concerning their relationship with the financial performance indicators. Finally, it is obvious that the negative relationship between the variables risk management measured by default risk, the compliance of accounting standards measured by accounting errors, and the financial performance indicators mean a positive effect on the financial performance indicators. Additionally, the results ensure no multicollinearity among all variables because all correlation coefficients are less than 0.8.

4.4 Diagnostic Tests:

4.4.1 Normality tests:

Normality tests are used to determine if a data set is well-modeled by a normal distribution and to compute how likely it is for a random variable underlying the data set to be normally distributed. In this regard, I will conduct the kurtosis and skewness for testing normality from the shape of data as follow:

Table 4. 3

Normality tests

	N	Skewness	Kurtosis
ROA	300	-0.071	-1.137
Tobins'Q	300	-0.060	-1.128
B.Size	300	-0.025	-1.324
B.Ind.	300	-0.152	-1.990
Dual.	300	-0.165	-1.986
B.Exp	300	-0.139	-1.994
AC.Size	300	0.110	-1.256
AC.Ind	300	-0.007	-2.013
AC.Exp	300	0.026	-1.169
AC.Meet	300	-0.002	-1.377
INTERNAL AUDIT DEPT	300	0.112	-2.001
ORGN MEMBERS	300	0.010	-1.221
flex audit plan	300	0.152	-1.990
flex audit execution	300	0.007	-2.013
flex audit reporting	300	0.327	-1.906
Dr	300	-0.022	-1.204
SC	300	-0.072	-1.291
LnTA	300	-0.067	-1.150
LEV	300	0.073	-1.190
ROE	300	0.043	-1.309
LOSS	300	0.007	-2.013

GROWTH	300	0.039	-1.198
Valid N (listwise)	300		

According to Blanca et al. (2013) the normal distribution of data can be achieved when the absolute values of skewness range between -3 and 3 , and the values of kurtosis range between -10 and 10 . Therefore, according to table (4.3), these two conditions are satisfied for all the variables.

4.4.2 Heteroscedasticity

One of the assumptions made about residuals/errors in OLS regression is that the errors have the same but unknown variance. This is known as constant variance or homoscedasticity. When this assumption is violated, the problem is known as heteroscedasticity. Heteroscedasticity can be tested using two tests, the first one is Bartlett's test and the other is Breusch Pagan Test.

In statistics, Bartlett's test, named after Maurice Stevenson Bartlett, is used to test homoscedasticity, that is, if multiple samples are from populations with equal variances. Some statistical tests, such as the analysis of variance, assume that variances are equal across groups or samples, which can be verified with Bartlett's test.

In a Bartlett test, we construct the null and alternative hypothesis. For this purpose several test procedures have been devised. The test procedure due to M.S.E (Mean Square Error/Estimator) Bartlett test is represented here. This test procedure is based on the statistic whose sampling distribution is approximately a Chi-Square distribution with $(k - 1)$ degrees of freedom, where k is the number of random samples, which may vary in size and are each drawn from independent normal distributions. Bartlett's test

is sensitive to departures from normality. That is, if the samples come from non-normal distributions, then Bartlett's test may simply be testing for non-normality. Levene's test and the Brown–Forsythe test are alternatives to the Bartlett test that are less sensitive to departures from normality.

On the other side, the Breusch–Pagan test, developed in 1979 by Trevor Breusch and Adrian Pagan, is used to test for heteroskedasticity in a linear regression model. This is the basis of the Breusch–Pagan test. It is a chi-squared test: the test statistic is distributed χ^2 with k degrees of freedom. If the test statistic has a p-value below an appropriate threshold (e.g. $p < 0.05$) then the null hypothesis of homoskedasticity is rejected and heteroskedasticity assumed. As a result, I conduct the Bartlett test and the Breusch–Pagan test as follow:

Table 4. 4
Bartlett test and the Breusch–Pagan test

	Breusch Pagan Test					
	Bartlett Test		Dependent variable (ROA)		Dependent variable (Tobin's Q)	
	Chi-Square	Sig.	F	Prob > F	F	Prob > F
Model (1)	229.703	0.000	1.24	0.122	2.08	0.213
Model (2)	324.513	0.000	1.43	0.133	1.94	0.209
Model (3)	153.412	0.000	1.38	0.116	1.79	0.177
Model (4)	247.822	0.000	1.65	0.115	2.19	0.142
Model (5)	65.451	0.000	2.16	0.137	1.43	0.174
Model (6)	61.846	0.000	1.63	0.206	1.22	0.163

The above results indicate significance of Bartlett's Test s for all models, therefore the data are high quality and dependable for models. In addition, Breusch–Pagan test is

not significant which means that I can accept the null hypothesis of this test which ensure there is no heteroscedasticity.

4.4.3 Variance Inflation Factor (VIF)

A variance inflation factor (VIF) is a measure of the amount of multicollinearity in regression analysis. Multicollinearity exists when there is a correlation between multiple independent variables in a multiple regression model. This can adversely affect the regression results. Thus, the variance inflation factor can estimate how much the variance of a regression coefficient is inflated due to multicollinearity. By conducting the VIF test the results revealed this table:

Table 4. 5

VIF test

<u>Model (1)</u>	<u>Tolerance</u>	<u>VIF</u>	<u>Model (2)</u>	<u>Tolerance</u>	<u>VIF</u>
(Constant)			(Constant)		
B.Size	0.939	1.065	AC.Size	0.916	1.092
B.Ind.	0.968	1.033	AC.Ind	0.932	1.073
Dual.	0.883	1.133	AC.Exp	0.924	1.082
B.Exp	0.878	1.138	AC.Meet	0.991	1.009
LnTA	0.968	1.033	LnTA	0.978	1.022
LEV	0.962	1.039	LEV	0.97	1.031
ROE	0.971	1.03	ROE	0.972	1.028
LOSS	0.973	1.028	LOSS	0.961	1.04
GROWTH	0.979	1.022	GROWTH	0.98	1.02
<u>Model (3)</u>	<u>Tolerance</u>	<u>VIF</u>	<u>Model (4)</u>	<u>Tolerance</u>	<u>VIF</u>
(Constant)			(Constant)		
INTERNAL			flex audit		
AUDIT	0.729	1.412	plan	0.649	1.542
DEPT					

ORGN	0.72	1.521	flex audit	0.628	1.593
MEMBERS			execution		
LnTA	0.978	1.216	flex audit	0.913	1.095
			reporting		
LEV	0.97	1.022	LnTA	0.981	1.019
ROE	0.982	1.015	LEV	0.97	1.031
LOSS	0.978	1.069	ROE	0.982	1.019
GROWTH	0.98	1.027	LOSS	0.977	1.024

Based on the above results, it is obvious that all values of VIF is smaller than 10 which means there is no multicollinearity problems.

4.4.4 Test for Autocorrelation

Autocorrelation is a mathematical representation of the degree of similarity between a given time series and a lagged version of itself over successive time intervals. It's conceptually similar to the correlation between two different time series, but autocorrelation uses the same time series twice: once in its original form and once lagged one or more time periods.

The most common method of test autocorrelation is the Durbin-Watson test. Without getting too technical, the Durbin-Watson is a statistic that detects autocorrelation from a regression analysis.

The Durbin-Watson always produces a test number range from 0 to 4. Values closer to 0 indicate a greater degree of positive correlation, values closer to 4 indicate a greater degree of negative autocorrelation, while values closer to the middle suggest less autocorrelation.

Table 4. 6
Durbin-Watson (DW) results

	Durbin-Watson (DW)	
	ROA	Tobins'Q
Model (1)	1.681	1.425
Model (2)	1.708	1.409
Model (3)	1.564	1.383
Model (4)	1.557	1.413
Model (5)	1.566	1.391
Model (6)	1.564	1.387

The Durbin-Watson (DW) for all models is closer to 2 which and so far 0 and 4, consequently, I conclude that there is no autocorrelation.

4.5 Testing Hypotheses (Multiple Regressions)

A statistical technique known as multiple linear regression (MLR), often known as multiple regression, combines a number of explanatory factors. Multiple linear regressions aim to model the linear relationship between the explanatory (independent) factors and response (dependent) variables. Multiple regressions are simply an extension of ordinary least-squares (OLS) regression because they take numerous explanatory factors into account.

Regression analysis is a set of statistical techniques used in statistical modeling to identify the relationships between one or more independent variables (also known as "predictors," "covariates," "explanatory variables," or "features") and a dependent variable (also known as the "outcome" or "response" variable). The line (or more complex linear combination) that most closely matches the data in terms of a specified

mathematical criterion is found in linear regression, the most common type of regression analysis. For instance, when using ordinary least squares, it is possible to identify the precise line (or hyperplane) that minimizes the sum of squared differences between the actual data and that line. This makes it possible for the researcher to determine the dependent variable's conditional expectation—or population average value—when the independent variables assume a specific set of values due to exact mathematical justifications. For instance, nonparametric regression employs slightly different ways to estimate the conditional expectation across a wider range of non-linear models, whereas quantile regression and necessary condition analysis use slightly different approaches to estimate alternative location parameters.

There are primarily two conceptually distinct purposes for regression analysis. First, when it comes to prediction and forecasting, there is a large overlap between regression analysis and machine learning applications. Second, under appropriate conditions, regression analysis can be used to establish causal relationships between the independent and dependent variables. It should be highlighted that regressions alone can only show relationships between a dependent variable and a set of independent variables in a particular dataset. Before utilizing regressions for prediction or to infer causal linkages, researchers must carefully explain why previous correlations have predictive significance in a new context or why a link between two variables has a causal meaning. When researchers aim to infer causal relationships from observational data, the latter is very important. The researcher can so show the outcomes of multiple regression as follows:

4.5.1 Testing the relationship between the directors' board characteristics and the financial performance indicators (H1):

The first hypothesis predicts the relationship between the directors' board characteristics and the financial performance indicators using regression model No.1, and the results are revealed in Table 4.7.

(H1):Model (1)

$$FP = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 BIND_{it} + \beta_3 DUAL_{it} + \beta_4 BEXP_{it} + \beta_5 LnTA_{it} + \beta_6 LEV_{it} + \beta_7 ROE_{it} + \beta_8 Loss_{it} + \beta_9 Growth_{it} + \varepsilon_{it} (1)$$

Table 4. 7
Results of the relationship between the directors' board characteristics and the financial performance indicators

	Panel A: ROA				Panel B: Tobins' Q			
	Coef.	T-Stat.	Sig.	VIF	Coef.	T-Stat.	Sig.	VIF
Cons.	2.725	3.512	0.001		0.971	26.377	0.000	
B.Size	2.429	2.325	0.000	1.065	0.005	2.725	0.000	1.065
B.Ind.	5.236	6.170	0.000	1.033	0.118	2.811	0.000	1.033
Dual.	1.827	2.769	0.000	1.133	0.189	4.942	0.000	1.133
B.Exp	2.598	2.958	0.000	1.138	0.007	2.222	0.000	1.138
LnTA	0.257	1.136	0.247	1.033	0.001	0.485	0.630	1.033
LEV	0.069	0.781	0.415	1.039	0.000	1.035	0.304	1.039
ROE	-0.048	-0.925	0.385	1.030	0.000	0.236	0.825	1.030
LOSS	1.325	1.423	0.156	1.028	-0.008	-0.711	0.470	1.028
GROWTH	0.009	0.125	0.981	1.022	0.002	1.489	0.119	1.022
Firm Fixed Effects	Included				Included			
<i>R</i> ²	52.80%				47.90%			
<i>F-Value</i>	47.581				52.367			
<i>Model Sig.</i>	0.000				0.000			
<i>N</i>	300				300			

The above results indicate the significance of the model in interpreting the changes in the dependent variable financial performance indicators (ROA and Tobins'Q) where ($F = 47.581$ and 52.367) with significance ($p\text{-value} = 0.000$ and 0.000), which were less than 0.05 . Furthermore, the VIF for all variables was less than 10 , meaning there is no multicollinearity.

Furthermore, the Adjusted R-Square values for the ROA and Tobin's Q indicators are calculated as 52.8% and 47.9% , respectively. This signifies that the board characteristics of the directors along with the other control variables, account for 52.8% and 47.9% of the variation observed in the financial performance indicators (ROA and Tobin's Q). These outcomes provide impetus for future research endeavors to explore additional variables that might influence the dependent variables of financial performance indicators (ROA and Tobin's Q).

Regarding the independent variables of directors' board characteristics, there are significant positive effects of board size, board independence, role duality, and the board financial experience on the ROA indicator as one of the financial performance indicators (where $T\text{-Stat.} = 2.325, 6.170, 2.769, 2.958 > 2$; $\text{Sig.} = 0.000, 0.000, 0.000, 0.000 < 0.05$, consequently). Additionally, there are significant positive effects of board size, board independence, role duality, and the board financial experience on the Tobins'Q as one of the financial performance indicators (where $T\text{-Stat.} = 2.725, 2.811, 4.942, 2.222 > 2$; $\text{Sig.} = 0.000, 0.000, 0.000, 0.000 < 0.05$).

Moreover, it is obvious that there are no significant effects of the control variables on the financial performance indicators. Consequently, the researcher can accept the first

hypothesis in the alternative form as follows: **H1: Characteristics of the board of directors as one of the governance mechanisms have a significant positive impact on financial performance.**

Additionally, regarding the sub-hypotheses, the researcher can analyze the relationship individually for each mechanism and its impact on the dependent variables, then build the final model by AMOS. Consequently, the results are revealed in Tables 4.8 and 4.9 as follow:



Table 4. 8

Results of the relationship between the directors' board characteristics and the financial performance indicators (Sub-hypotheses-ROA)

	Panel A: ROA				Panel B: ROA				Panel C: ROA				Panel D: ROA			
	Coef.	T-Stat.	Sig.	VIF	Coef.	T-Stat.	Sig.	VIF	Coef.	T-Stat.	Sig.	VIF	Coef.	T-Stat.	Sig.	VIF
Cons.	2.728	4.238	0.000		14.237	5.335	0.000		15.776	5.513	0.000		16.018	5.814	0.000	
<i>B.Size</i>	0.268	2.451	0.000	1.014	---	---	---	---	---	---	---	---	---	---	---	---
<i>B.Ind.</i>	---	---	---	---	6.380	7.030	0.000	1.007	---	---	---	---	---	---	---	---
<i>Dual.</i>	---	---	---	---	---	---	---	---	3.022	3.108	0.002	1.023	---	---	---	---
<i>B.Exp</i>	---	---	---	---	---	---	---	---	---	---	---	---	4.503	4.712	0.000	1.030
LnTA	0.287	1.518	0.115	1.019	0.220	1.793	0.074	1.014	0.188	1.436	0.152	1.021	0.153	1.187	0.236	1.028
LEV	0.025	0.781	0.512	1.026	0.021	0.700	0.485	1.026	0.031	0.945	0.345	1.036	0.018	0.577	0.564	1.026
ROE	-0.065	-1.055	0.322	1.016	-0.069	-1.410	0.159	1.017	-0.047	-0.913	0.362	1.020	-0.033	-0.641	0.522	1.027
LOSS	1.512	1.511	0.187	1.025	1.213	1.333	0.183	1.018	1.321	1.366	0.173	1.018	1.425	1.505	0.133	1.017
GROWTH	-0.010	-0.187	0.911	1.011	0.033	0.401	0.689	1.016	-0.010	-0.113	0.910	1.011	-0.036	-0.423	0.672	1.016
<i>Firm Fixed Effects</i>	<i>Included</i>				<i>Included</i>				<i>Included</i>				<i>Included</i>			
<i>R</i> ²	16.08%				40.20%				23.10%				30.10%			
<i>F-Value</i>	4.287				9.581				2.801				4.939			
<i>Model Sig.</i>	0.000				0.000				0.011				0.000			
<i>N</i>	300				300				300				300			

Table 4. 9

Results of the relationship between the directors' board characteristics and the financial performance indicators (Sub-hypotheses –Tobins' Q)

	Panel A: Tobins' Q				Panel B: Tobins' Q				Panel C: Tobins' Q				Panel D: Tobins' Q			
	Coef.	T-Stat.	Sig.	VIF	Coef.	T-Stat.	Sig.	VIF	Coef.	T-Stat.	Sig.	VIF	Coef.	T-Stat.	Sig.	VIF
Cons.	1.287	6.451	0.000		1.029	29.895	0.000		0.974	29.850	0.000		1.013	29.847	0.000	
B.Size	0.008	2.725	0.000	1.014	---	---	---	---	---	---	---	---	---	---	---	---
B.Ind.	---	---	---	---	0.111	2.418	0.000	1.007	---	---	---	---	---	---	---	---
Dual.	---	---	---	---	---	---	---	---	0.071	6.387	0.000	1.023	---	---	---	---
B.Exp	---	---	---	---	---	---	---	---	---	---	---	---	0.023	2.009	0.048	1.030
LnTA	0.008	1.412	0.455	1.019	0.003	1.251	0.408	1.014	0.001	0.548	0.584	1.021	0.001	0.791	0.430	1.028
LEV	0.003	0.247	0.762	1.026	0.001	0.418	0.712	1.026	0.000	1.064	0.288	1.036	0.000	0.365	0.716	1.026
ROE	0.004	0.237	0.857	1.016	0.004	0.347	0.825	1.017	0.000	0.155	0.877	1.020	0.000	-0.043	0.966	1.027
LOSS	-0.007	-0.421	0.669	1.025	-0.005	-0.588	0.621	1.018	-0.009	-0.830	0.407	1.018	-0.007	-0.578	0.564	1.017
GROWTH	0.003	1.421	0.121	1.011	0.003	1.421	0.387	1.016	0.002	1.681	0.094	1.011	0.002	1.482	0.140	1.016
Firm Fixed Effects	Included				Included				Included				Included			
<i>R</i> ²	17.30%				13.10%				36.50%				16.50%			
<i>F-Value</i>	4.236				3.866				7.611				3.383			
<i>Model Sig.</i>	0.005				0.020				0.000				0.021			
<i>N</i>	300				300				300				300			

The above results indicate the significance of the model in interpreting the changes in the dependent variable financial performance indicators (ROA and Tobins'Q) where (F = 4.287, 9.581, 2.801, 4.939 and 4.236, 3.866, 7.611, 3.383) with significance (p-values = 0.000, 0.000, 0.011, 0.000 and 0.005, 0.020, 0.000, 0.021), less than 0.05. Furthermore, the VIF for all variables was less than 10, meaning there is no multicollinearity.

Furthermore, the Adjusted R-Square values for the ROA and Tobin's Q indicators are calculated as 16.08%, 40.20%, 23.10%, 30.10%, and 17.30%, 13.10%, 36.50%, 16.50%, respectively. This implies that the directors' board characteristics and other control variables account for 16.08%, 40.20%, 23.10%, 30.10%, and 17.30%, 13.10%, 36.50%, 16.50% of the variation observed in the financial performance indicators, ROA and Tobin's Q. These findings highlight the need for further research to explore additional variables that may impact the dependent variables of financial performance indicators, ROA and Tobin's Q. Tables (4-4 and 4-5) show the results of the independent variables of directors' board characteristics. Panel A revealed that board size is significant, so it has a positive effect on the financial performance indicators (ROA and Tobin's Q). Consequently, the researcher can accept the first sub-hypothesis in the alternative form as follows: **H1-1: Board size has a positive significant impact on financial performance.**

(H1-1) Model (1-1)

$$FP = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 LnTA_{it} + \beta_3 LEV_{it} + \beta_4 ROE_{it} + \beta_5 Loss_{it} + \beta_6 Growth_{it} + \varepsilon_{it} \quad (1-1)$$

The results from Table (4-4 Panel B) and Table (4-5 Panel B) provide evidence that the board independence mechanism is crucial and positively affects the ROA indicator. This is evident from the significant T-Stat. values of 7.030 and 2.418, which are both greater than 2, and the corresponding p-values (Sig.) of 0.000, which are less than 0.05. Consequently, the researcher can accept the second sub-hypothesis in the alternative form as follows: **H1-2: Board independence has a positive significant impact on financial performance.**

(H1-2) Model: (1-2)

$$FP = \beta_0 + \beta_1 BIND_{it} + \beta_2 LnTA_{it} + \beta_3 LEV_{it} + \beta_4 ROE_{it} + \beta_5 Loss_{it} + \beta_6 Growth_{it} + \varepsilon_{it} \quad (1-2)$$

Additionally, the role duality mechanism is significant and has a positive impact on the ROA indicator (where T-Stat. = 3.108 > 2; Sig. = 0.002 < 0.05) according to results in Table (4-4 Panel C); also it is significant and has a positive impact on the Tobin's Q indicator (where T-Stat. = 6.387 > 2; Sig. = 0.000 < 0.05) according to results on Table (4-5 Panel C). Consequently, the researcher can accept the third sub-hypothesis in the alternative form as follows: **H1-3: CEO duality has a positive significant impact on financial performance.**

(H1-3) Model: (1-3)

$$FP = \beta_0 + \beta_1 DUAL_{it} + \beta_2 LnTA_{it} + \beta_3 LEV_{it} + \beta_4 ROE_{it} + \beta_5 Loss_{it} + \beta_6 Growth_{it} + \varepsilon_{it} \quad (1-3)$$

Moreover, the financial experience mechanism is significant and has a positive impact on the ROA indicator (where T-Stat. = 4.712 > 2; Sig. = 0.000 < 0.05) according to

results in Table (4-4 Panel D); also, it is significant and has a positive impact on the Tobin's Q indicator (where T-Stat. = 2.009 > 2; Sig. = 0.048 < 0.05) according to results in Table (4-5 Panel D). Consequently, the researcher can totally accept the fourth sub-hypothesis in the alternative form as follow: **H1-4: Board experience has a positive significant impact on financial performance.**

(H1-4) Model: (1-4)

$$FP = \beta_0 + \beta_1 BEXP_{it} + \beta_2 LnTA_{it} + \beta_3 LEV_{it} + \beta_4 ROE_{it} + \beta_5 Loss_{it} + \beta_6 Growth_{it} + \varepsilon_{it} \quad (1-4)$$

Based on the above results, the researcher can depict the model of the relationship between the directors' board and the financial performance indicators using (AMOS V.25), and the results are shown in Table 4.10.

Table 4. 10
The indices of model fit for the measurement model

Measure	Estimate	Threshold	Interpretation
GFI	0.972	Closer to 1	Accepted
RMR	0.036	Closer to 0	Accepted
CFI	0.965	Closer to 1	Accepted
TLI	0.981	Closer to 1	Accepted
RMSEA	0.632	Less Than 0.8	Accepted

The value of CFI is 0.965, which is accepted as it is greater than 0.95. Furthermore, the value of the RMR index is also accepted because it is lower than 0.05. Similarly, RMSEA equals 0.632, which lies below 0.8, as proposed by Byrne (2010). The value

of GFI, which equals 0.972, is accepted as it is higher than 0.8 (Byrne, 2010). Therefore, the measurement model fits the data collected from the capital market.

Therefore, based on the above indices, the structural model utilized in the current study shows an acceptable degree of fitness. The structural model is presented in Figure 4.1, and the model estimates can be presented in Table 4.11

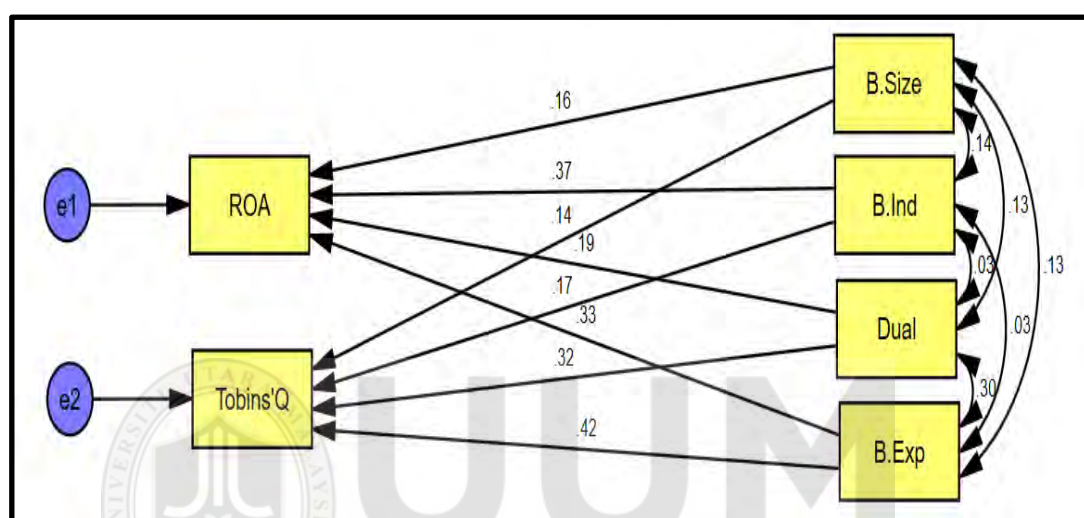


Figure 4. 1 The structural model for the relation between the directors' board characteristics and the financial performance indicators

Table 4. 11
Model estimates for direct relationships

	Panel A: ROA		Panel B: Tobins' Q	
	Estimate	P-Value	Estimate	P-Value
<i>B.Size</i>	0.158	***	0.144	***
<i>B.Ind.</i>	0.370	***	0.165	***
<i>Dual.</i>	0.191	***	0.321	***
<i>B.Exp</i>	0.325	***	0.424	***

In panel A, the findings indicate that all the characteristics of the board of directors have a positive impact on both the ROA and Tobin's Q indicators. These results confirm the previously mentioned outcomes associated with the sub-hypotheses.

4.5.2 Testing the relationship between the audit committee characteristics and the financial performance indicators (H2):

The second hypothesis predicts the relationship between the audit committee characteristics and the financial performance indicators using regression model No.2, and the results are shown in Table .

$$\text{(H2):Model(2)}$$

$$FP = \beta_0 + \beta_1 \text{ACSIZE}_{it} + \beta_2 \text{ACIND}_{it} + \beta_3 \text{ACEXP}_{it} + \beta_4 \text{ACMEET}_{it} + \beta_5 \text{LnTA}_{it} + \beta_6 \text{LEV}_{it} + \beta_7 \text{ROE}_{it} + \beta_8 \text{Loss}_{it} + \beta_9 \text{Growth}_{it} + \varepsilon_{it} \quad (2)$$

Table 4. 12
Results of the relationship between the audit committee characteristics and the financial performance indicators

	Panel A: ROA				Panel B: Tobins' Q			
	Coef.	T-Stat.	Sig.	VIF	Coef.	T-Stat.	Sig.	VIF
Cons.	5.247	2.481	0.000		1.045	12.812	0.000	
AC.Size	0.987	4.236	0.000	1.092	0.010	2.425	0.000	1.092
AC.Ind	10.127	8.789	0.000	1.073	0.035	3.211	0.003	1.073
AC.Exp	0.265	3.711	0.000	1.082	0.001	2.111	0.013	1.082
AC.Meet	0.435	3.781	0.000	1.009	0.003	2.425	0.015	1.009
LnTA	0.475	1.711	0.125	1.022	0.002	0.651	0.618	1.022
LEV	-0.008	-0.215	0.745	1.031	0.003	0.433	0.742	1.031
ROE	0.018	0.266	0.723	1.028	0.004	0.055	0.956	1.028
LOSS	0.425	0.187	0.842	1.040	-0.015	-1.315	0.318	1.040
GROWTH	0.055	0.821	0.524	1.020	0.005	1.425	0.087	1.020
Firm Fixed Effects	Included				Included			
R^2	70.80%				45.60%			
<i>F-Value</i>	32.882				4.236			
<i>Model Sig.</i>	0.000				0.000			
<i>N</i>	300				300			

The above results indicate the significance of the model in interpreting the changes in the dependent variable, namely financial performance indicators (ROA and Tobins'Q) where ($F = 32.882$ and 4.236) with significance ($p\text{-value} = 0.000$ and 0.000), less than 0.05 . Furthermore, the VIF for all variables was less than 10 , indicating no multicollinearity.

Moreover, the Adjusted R Square values are equal to 70.8% and 45.60% consequently for ROA and Tobins'Q indicators which means that audit committee characteristics and the other control variables explain 70.8% and 45.6% from the change of the financial performance indicators (ROA and Tobins'Q). This result motivates further research to explore more variables that may affect the dependent financial performance indicators (ROA and Tobins'Q).

The independent variables of audit committee characteristics showed no significant positive effects of audit committee size, independence, financial experience and meetings on the ROA indicator as one of the financial performance indicators (where $T\text{-Stat.} = 4.236, 8.789, 3.711, 3.781 > 2$; $\text{Sig.} = 0.000, 0.000, 0.000, 0.000 < 0.05$ consequently). Additionally, there are significant positive effects of audit committee size, independence, financial experience and meetings on the Tobins'Q as one of the financial performance indicators (where $T\text{-Stat.} = 2.425, 3.211, 2.111, 2.425 > 2$; $\text{Sig.} = 0.000, 0.003, 0.013, 0.015 < 0.05$).

Moreover, there are no significant effects of the control variables on the financial performance indicators. Consequently, the researcher can accept the second hypothesis in the alternative form as follows: **H2**: Characteristics of the audit committee as one

of the governance mechanisms have a **significant positive impact on financial performance**.

Additionally, regarding the sub-hypotheses, the researcher could analyze the relationship individually for each mechanism and its impact on the dependent variables, then build the final model by AMOS. The results are shown in Tables 4.13 and 4.14.



Table 4. 13

Results of the relationship between the audit committee characteristics and the financial performance indicators (Sub-hypotheses-ROA)

	Panel A: ROA				Panel B: ROA				Panel C: ROA				Panel D: ROA			
	Coef.	T-Stat.	Sig.	VIF	Coef.	T-Stat.	Sig.	VIF	Coef.	T-Stat.	Sig.	VIF	Coef.	T-Stat.	Sig.	VIF
Cons.	11.025	3.565	0.000		12.757	5.926	0.000		14.704	4.936	0.000		15.236	5.505	0.000	
AC.Size	1.140	4.693	0.000	1.011	---	---	---	---	---	---	---	---	---	---	---	---
AC.Ind	---	---	---	---	11.276	15.127	0.000	1.036	---	---	---	---	---	---	---	---
AC.Exp	---	---	---	---	---	---	---	---	0.119	2.986	0.003	1.011	---	---	---	---
AC.Meet	---	---	---	---	---	---	---	---	---	---	---	---	0.048	2.111	0.000	1.002
LnTA	0.260	2.032	0.043	1.018	0.158	1.587	0.113	1.016	0.200	1.533	0.126	1.017	0.325	1.522	0.195	1.014
LEV	0.014	0.423	0.672	1.028	-0.001	-0.048	0.962	1.029	0.022	0.662	0.508	1.026	0.121	0.781	0.436	1.026
ROE	-0.046	-0.901	0.368	1.019	-0.003	-0.073	0.942	1.025	-0.053	-1.027	0.305	1.017	-0.069	-1.411	0.251	1.017
LOSS	1.644	1.734	0.084	1.019	0.026	0.035	0.972	1.033	1.217	1.254	0.211	1.022	1.418	1.215	0.125	1.017
GROWTH	-0.015	-0.176	0.860	1.012	0.068	1.018	0.310	1.017	-0.016	-0.180	0.857	1.012	-0.010	-0.067	0.911	1.012
Firm Fixed Effects	Included				Included				Included				Included			
<i>R</i> ²	30.00%				66.90%				22.60%				16.80%			
<i>F-Value</i>	4.909				40.177				2.674				3.151			
<i>Model Sig.</i>	0.000				0.000				0.015				0.018			
<i>N</i>	300				300				300				300			

Table 4. 14

Results of the relationship between the audit committee characteristics and the financial performance indicators (Sub-hypotheses –Tobins'Q)

	Panel A: Tobins' Q				Panel B: Tobins' Q				Panel C: Tobins' Q				Panel D: Tobins' Q			
	Coef.	T-Stat.	Sig.	VIF	Coef.	T-Stat.	Sig.	VIF	Coef.	T-Stat.	Sig.	VIF	Coef.	T-Stat.	Sig.	VIF
Cons.	1.062	27.916	0.000		1.007	29.850	0.000		0.981	27.612	0.000		0.994	26.166	0.000	
AC.Size	0.007	2.184	0.030	1.011	---	---	---	---	---	---	---	---	---	---	---	---
AC.Ind	---	---	---	---	0.036	3.063	0.002	1.036	---	---	---	---	---	---	---	---
AC.Exp	---	---	---	---	---	---	---	---	0.002	3.356	0.001	1.011	---	---	---	---
AC.Meet	---	---	---	---	---	---	---	---	---	---	---	---	0.008	2.458	0.010	1.002
LnTA	0.001	0.884	0.377	1.018	0.001	0.903	0.367	1.016	0.001	0.850	0.396	1.017	0.003	1.025	0.311	1.014
LEV	0.000	0.497	0.620	1.028	0.000	0.219	0.826	1.029	0.000	0.432	0.666	1.026	0.001	0.478	0.718	1.026
ROE	0.000	0.367	0.714	1.019	0.000	0.025	0.980	1.025	0.000	0.153	0.878	1.017	0.005	0.311	0.855	1.017
LOSS	-0.008	-0.687	0.493	1.019	-0.011	-0.959	0.338	1.033	-0.010	-0.823	0.411	1.022	-0.017	-0.527	0.691	1.017
GROWTH	0.002	1.663	0.097	1.012	0.002	1.865	0.063	1.017	0.002	1.546	0.123	1.012	0.003	1.439	0.236	1.012
Firm Fixed Effects	Included				Included				Included				Included			
<i>R²</i>	<i>17.20%</i>				<i>21.00%</i>				<i>22.40%</i>				<i>15.20%</i>			
<i>F-Value</i>	<i>2.521</i>				<i>2.300</i>				<i>2.619</i>				<i>2.174</i>			
<i>Model Sig.</i>	<i>0.017</i>				<i>0.035</i>				<i>0.017</i>				<i>0.020</i>			
<i>N</i>	<i>300</i>				<i>300</i>				<i>300</i>				<i>300</i>			

The above results indicate the significance of the model in interpreting the changes in the dependent variable financial performance indicators (ROA and Tobins'Q), where (F = 4.909, 40.177, 2.674, 2.674, 3.151 and 2.521, 2.300, 2.619, 2.174) with significance (p-value = 0.000, 0.000, 0.015, 0.018 and 0.017, 0.035, 0.017, 0.020), less than 0.05. Furthermore, the VIF for all variables was less than 10, meaning there is no multicollinearity.

Moreover, the Adjusted R Square values are equal to (30%, 66.9%, 22.60%, 16.80%) and (17.20%, 21%, 22.40%, 15.20%), consequently for ROA and Tobins'Q indicators which means that audit committee characteristics and the other control variables explain (30%, 66.9%, 22.60%, 16.80%) and (17.20%, 21%, 22.40%, 15.20%) from the change of the financial performance indicators (ROA and Tobins'Q). This result motivates further research to explore more variables that may affect the dependent financial performance indicators (ROA and Tobins'Q).

For the independent variables of audit committee characteristics, the results of Tables (4-9 and 4-10) Panel A revealed that audit committee size is significant, so it has a positive impact on the ROA and Tobins'Q indicators (where T-Stat. = 4.693, 2.184 > 2; Sig. = 0.000, 0.030 < 0.05) according to the results in Table (4-9 and 4-10 Panel A). Therefore, the researcher can accept the first sub-hypothesis in the alternative form as follows: **H2-1: Audit committee size has a positive significant impact on financial performance.**

(H2-1) Model: (2-1)

$$FP = \beta_0 + \beta_1 ACSIZE_{it} + \beta_2 LnTA_{it} + \beta_3 LEV_{it} + \beta_4 ROE_{it} + \beta_5 Loss_{it} + \beta_6 Growth_{it} + \varepsilon_{it} \quad (2-1)$$

The results from Table (4-9 Panel B) indicate that the audit committee independence mechanism has a significant and positive impact on the ROA indicator, as evident by the T-Stat. value of 15.127, which is greater than 2, and the p-value (Sig.) of 0.000, which is less than 0.05. Similarly, the results from Table (4-10 Panel B) demonstrate that the audit committee independence mechanism has a significant and positive effect on Tobin's Q indicator with a T-Stat. value of 3.063, which is greater than 2, and a p-value (Sig.) of 0.002, which is less than 0.05. Therefore, the researcher can totally accept the second sub-hypothesis in the alternative form as follows: **H2-2: Audit committee independence has a significant positive impact on financial performance.**

(H2-2) Model: (2-2)

$$FP = \beta_0 + \beta_1 ACIND_{it} + \beta_2 LnTA_{it} + \beta_3 LEV_{it} + \beta_4 ROE_{it} + \beta_5 Loss_{it} + \beta_6 Growth_{it} + \varepsilon_{it} \quad (2-2)$$

Additionally, the audit committee financial experience mechanism is significant and has a positive impact on the ROA indicator (where T-Stat. = 2.986 > 2; Sig. = 0.003 < 0.05) according to results in Table (4-9 Panel C); also it is significant and has a positive impact on the Tobin's Q indicator (where T-Stat. = 3.356 > 2; Sig. = 0.001 < 0.05) according to results in Table (4-10 Panel C). Therefore, the researcher can totally

accept the third sub-hypothesis in the alternative form as follows: **H2-3: Experience of audit committee has a significant positive impact on financial performance.**

(H2-3) Model: (2-3)

$$FP = \beta_0 + \beta_1 ACEXP_{it} + \beta_2 LnTA_{it} + \beta_3 LEV_{it} + \beta_4 ROE_{it} + \beta_5 Loss_{it} + \beta_6 Growth_{it} + \varepsilon_{it} \quad (2-3)$$

Moreover, the audit committee meetings mechanism is significant and has a positive impact on the ROA indicator (where T-Stat. = 2.111 > 2; Sig. = 0.000 < 0.05) according to results in Table (4-9 Panel D); also, it is significant and has a positive impact on the Tobin's Q indicator (where T-Stat. = 2.458 > 2; Sig. = 0.010 < 0.05) according to results in Table (4-10 Panel D). Therefore, the researcher can totally accept the fourth sub-hypothesis in the alternative form as follows: **H2-4: Audit Committee Meetings have a significant positive impact on financial performance.**

(H2-4) Model: (2-4)

$$FP = \beta_0 + \beta_1 ACMEET_{it} + \beta_2 LnTA_{it} + \beta_3 LEV_{it} + \beta_4 ROE_{it} + \beta_5 Loss_{it} + \beta_6 Growth_{it} + \varepsilon_{it} \quad (2-4)$$

Based on the above results, the researcher can depict the model of the relationship between the audit committee characteristics and the financial performance indicators using (AMOS V.25), and the results are shown in Table 4-14.

Table 4. 15

The indices of model fit for the measurement model

Measure	Estimate	Threshold	Interpretation
GFI	0.968	Closer to 1	Accepted
RMR	0.054	Closer to 0	Accepted
CFI	0.975	Closer to 1	Accepted
TLI	0.984	Closer to 1	Accepted
RMSEA	0.542	Less Than 0.8	Accepted

The value of CFI is 0.968, which is accepted as it is greater than 0.95. Furthermore, the value of the RMR index is also satisfied because it is lower than 0.05. Similarly, RMSEA equals 0.542, which lies under 0.8 as proposed by Byrne (2010). The value of GFI, which equals 0.975, is accepted as it is higher than 0.8 (Byrne, 2010). Therefore, the measurement model fits the data collected from the capital market.

Therefore, based on the above indices, the structural model utilized in the current study shows an acceptable degree of fitness. The structural model is presented in Figure 4.2.

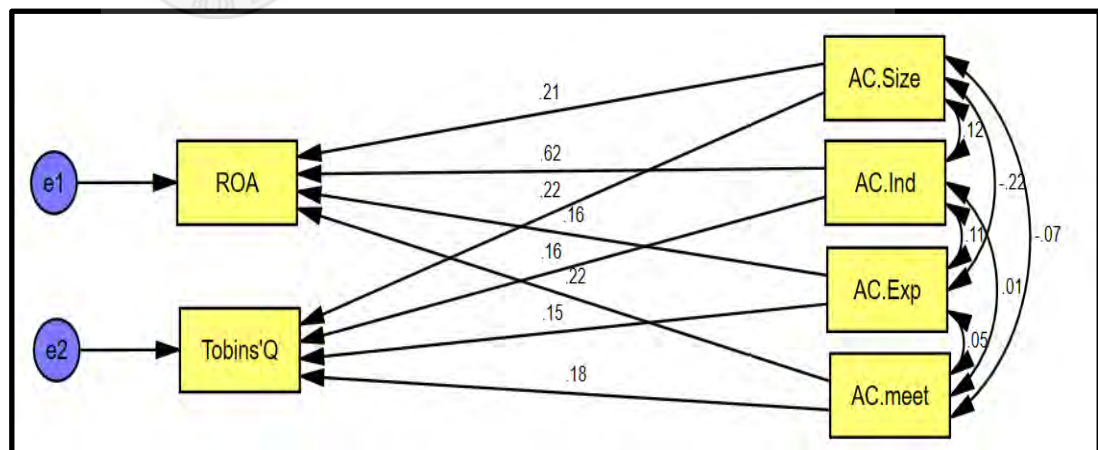


Figure 4. 2 The structural model for the relation between the audit committee characteristics and the financial performance indicators

Moreover, the model estimates can be presented in Table (4-12).

Table 4. 16
Model estimates for direct relationships

	Panel A: ROA		Panel B: Tobins' Q	
	Estimate	P-Value	Estimate	P-Value
<i>AC.Size</i>	0.213	***	0.215	***
<i>AC.Ind</i>	0.620	***	0.159	0.005
<i>AC.Exp</i>	0.156	***	0.147	0.010
<i>AC.Meet</i>	0.218	***	0.182	***

In panel A, the results indicate that audit committee size, audit committee independence, and audit committee financial experience positively impact the ROA indicator, while there is no effect of the other mechanism on the ROA indicator. However, the audit committee's independence and audit committee financial experience also have a positive impact on the Tobins'Q indicator, and these results ensure the above results are related to the sub-hypothesis.

4.5.3 Testing the relationship between internal auditing and the financial performance indicators (H3):

The third hypothesis predicts the relationship between internal audit and the financial performance indicators using regression model No.3, and the results are presented in Table (4-13).

(H3):Model(3)

$$FP = \beta_0 + \beta_1 \text{INTERNAL AUDIT DEPT}_{it} + \beta_2 \text{ORGN MEMBERS}_{it} + \beta_3 \text{LEV}_{it} + \beta_4 \text{ROE}_{it} + \beta_5 \text{Loss}_{it} + \beta_6 \text{Growth}_{it} + \varepsilon_{it} \quad (3)$$

Table 4. 17

Results of the relationship between internal audit and the financial performance indicators

Panel A: ROA	Panel B: Tobins' Q
--------------	--------------------

	Coef.	T-Stat.	Sig.	VIF	Coef.	T-Stat.	Sig.	VIF
Cons.	2.826	4.702	0.000		1.057	6.751	0.000	
<i>INTERNAL AUDIT DEPT</i>	1.485	2.127	0.000	1.412	0.229	2.706	0.000	1.371
<i>ORGN MEMBERS</i>	1.236	3.158	0.000	1.521	0.254	2.522	0.000	1.325
LnTA	0.221	1.412	0.125	1.216	0.002	1.074	0.284	1.226
LEV	0.037	0.558	0.418	1.022	0.000	0.348	0.728	1.027
ROE	- 0.068	- 1.022	0.369	1.015	0.000	0.292	0.770	1.066
LOSS	1.259	1.111	0.265	1.069	- 0.006	- 0.536	0.592	1.125
GROWTH	- 0.015	- 0.228	0.728	1.027	0.002	1.496	0.136	1.116
Firm Fixed Effects		Included			Included			
R²			25.80%				32.10%	
F-Value			7.821				8.256	
Model Sig.			0.000				0.000	
N			300				300	

The above results indicate the significance of the model in interpreting the changes in the dependent variable financial performance indicators (ROA and Tobins'Q) where (F = 7.821 and 8.256) with significance (p-value = 0.000 and 0.000), which is less than 0.05. Furthermore, the VIF for all variables was less than 10, meaning there is no multicollinearity.

Moreover, the Adjusted R Square values are equal to 25.8% and 32.1%, consequently for ROA and Tobins'Q indicators which means that internal audit and the other control variables explain 25.8% and 32.1% from the change of the financial performance indicators (ROA and Tobins'Q). This result motivates further research to explore more

variables that may affect the dependent financial performance indicators (ROA and Tobins'Q).

Regarding the independent variables of internal auditing, there are significant effects of internal audit effectiveness and internal auditing members on the ROA indicator as one of the financial performance indicators (where T-Stat. = 2.127, 3.158 > 2; Sig. = 0.000, 0.000 < 0.05, consequently). Also, the internal auditing variables have significant effects on the Tobins'Q as one of the financial performance indicators (where T-Stat. = 2.706, 2.522 > 2; Sig. = 0.000, 0.000 < 0.05).

Therefore, the researcher can accept the third hypothesis in the alternative form as follows: **H3: Internal auditing as one of the governance mechanisms has a significant impact on financial performance.**

4.5.4 Testing the relationship between the agility audit and the financial performance indicators (H4):

The fourth hypothesis predicts the relationship between the agility audit and the financial performance indicators using regression model No.4, and the results are presented in Table (4-14).

(H4):Model (4)

$$FP = \beta_0 + \beta_1 \text{ flex audit plan}_{it} + \beta_2 \text{ flex audit execution}_{it} + \beta_3 \text{ flex audit reporting}_{it} + \beta_4 \text{ LEV}_{it} + \beta_5 \text{ ROE}_{it} + \beta_6 \text{ Loss}_{it} + \beta_7 \text{ Growth}_{it} + \varepsilon_{it} \quad (4)$$

Table 4. 18

Results of the relationship between the agility audit and the financial performance indicators

	Panel A: ROA				Panel B: Tobins' Q			
	Coef.	T-Stat.	Sig.	VIF	Coef.	T-Stat.	Sig.	VIF
Cons.	2.140	3.359	0.000		2.914	31.765	0.000	
<i>flex audit plan</i>	3.287	2.435	0.000	1.542	3.294	3.436	0.000	1.542
<i>flex audit execution</i>	3.636	2.621	0.000	1.593	2.884	2.521	0.000	1.593
<i>flex audit reporting</i>	2.549	2.781	0.000	1.095	2.723	4.287	0.000	1.095
LnTA	0.315	1.241	0.125	1.019	0.050	0.715	0.275	1.019
LEV	0.111	0.782	0.287	1.031	0.087	0.703	0.486	1.031
ROE	-0.055	-1.115	0.236	1.019	0.025	0.369	0.781	1.019
LOSS	1.412	1.251	0.175	1.024	-0.037	-0.988	0.524	1.024
GROWTH	-0.038	-0.287	0.681	1.050	0.125	0.860	0.691	1.050
<i>Firm Fixed Effects</i>	<i>Included</i>				<i>Included</i>			
<i>R²</i>	<i>18.69%</i>				<i>42.21%</i>			
<i>F-Value</i>	<i>8.137</i>				<i>10.255</i>			
<i>Model Sig.</i>	<i>0.000</i>				<i>0.000</i>			
<i>N</i>	<i>300</i>				<i>300</i>			

The above results indicate the significance of the model in interpreting the changes in the dependent variable financial performance indicators (ROA and Tobins'Q) where (F = 8.137 and 10.255) with significance (p-value = 0.000 and 0.000), which is less than 0.05. Furthermore, the VIF for all variables was less than 10, meaning there is no multicollinearity.

Moreover, the Adjusted R Square values are equal to 18.69% and 42.21%, consequently for ROA and Tobins'Q indicators which means that agility audit and the other control variables explain 18.69% and 42.21% from the change of the financial performance indicators (ROA and Tobins'Q). This result motivates further research to explore more variables that may affect the dependent financial performance indicators (ROA and Tobins'Q).

Regarding the independent variables of agility audit, there are significant effects of agility audit on the ROA indicator as one of the financial performance indicators (where T-Stat. = 2.435, 2.621, 2.781 > 2; Sig. = 0.000, 0.000, 0.000 < 0.05, consequently). Additionally, agility audit has significant positive effects on the Tobins'Q as one of the financial performance indicators (where T-Stat. = 3.436, 2.521, 4.287 > 2; Sig. = 0.000, 0.000, 0.000 < 0.05).

Therefore, the researcher can fully accept the fourth hypothesis in the alternative form:

H4: Agility audit imposes considerable influence over financial Performance.

4.5.5 Testing the relationship between risk management and the financial performance indicators (H5):

The fifth hypothesis predicts the relationship between risk management and the financial performance indicators, using regression model No.5 and the results revealed in Table 4.19 as follows:

(H5): Model (5)

$$FP = \beta_0 + \beta_1 Dr_{it} + \beta_2 LEV_{it} + \beta_3 ROE_{it} + \beta_4 Loss_{it} + \beta_5 Growth_{it} + \varepsilon_{it} \quad (5)$$

Table 4. 19

Results of the relationship between risk management and the financial performance indicators

	Panel A: ROA				Panel B: Tobins' Q			
	Coef.	T-Stat.	Sig.	VIF	Coef.	T-Stat.	Sig.	VIF
Cons.	2.756	5.688	0.000		0.992	27.944	0.000	
<i>Dr</i>	2.210	2.815	0.000	1.012	0.002	2.601	0.010	1.012
LnTA	0.215	1.611	0.125	1.020	0.001	0.827	0.409	1.020
LEV	0.028	0.698	0.522	1.026	0.000	0.442	0.659	1.026
ROE	- 0.067	- 1.125	0.267	1.017	0.000	-0.337	0.736	1.017

LOSS	1.455	1.486	0.134	1.020	- 0.005	-0.437	0.663	1.020
GROWTH	- 0.018	- 0.166	0.822	1.013	0.002	1.516	0.130	1.013
<i>Firm Fixed Effects</i>	<i>Included</i>				<i>Included</i>			
<i>R²</i>	16.87%				19%			
<i>F-Value</i>	5.298				5.859			
<i>Model Sig.</i>	0.003				0.000			
<i>N</i>	300				300			

The above results indicate the significance of the model in interpreting the changes in the dependent variable financial performance indicators (ROA and Tobins'Q) where (F = 5.298 & 5.859) with significance (p-value = 0.003 and 0.000), which is less than 0.05. Furthermore, the VIF for all variables was less than 10, meaning there is no multicollinearity.

Moreover, the Adjusted R Square values are equal to 16.87% and 19%, consequently for ROA and Tobins'Q indicators which means that risk management and the other control variables explain 16.87% and 19% from the change of the financial performance indicators (ROA and Tobins'Q). This result motivates further research in exploring more variables that may affect the dependent variable financial performance indicators (ROA and Tobins'Q).

Concerning the independent variables of risk management, there is a noteworthy impact on the ROA indicator, which is one of the financial performance indicators. This is supported by the T-Stat. value of 2.815, surpassing the threshold of 2, and the p-value (Sig.) of 0.000, which is less than 0.05. Furthermore, there is a significant and

positive effect of risk management on the Tobin's Q indicator, another financial performance indicator. This is evidenced by the T-Stat. value of 2.601, exceeding 2, and the p-value (Sig.) of 0.010, which is less than 0.05.

Furthermore, the control variables do not demonstrate any significant effects on the financial performance indicators. As a result, the researcher can confidently accept the fifth hypothesis in its alternative form.: **H5: Risk management has a prominent impact over financial performance.**

4.5.6 Testing the relationship between compliance with accounting standards and the financial performance indicators (H6):

The sixth hypothesis predicts the relationship between compliance with accounting standards and the financial performance indicators, using regression model No.6 and the results revealed in Table (4-16) as follows:

Model (6):

$$FP = \beta_0 + \beta_1 SC_{it} + \beta_2 LEV_{it} + \beta_3 ROE_{it} + \beta_4 Loss_{it} + \beta_5 Growth_{it} + \varepsilon_{it} \quad (6)$$

Table 4. 20

Results of the relationship between compliance with accounting standards and the financial performance indicators

	Panel A: ROA				Panel B: Tobins' Q			
	Coef.	T-Stat.	Sig.	VIF	Coef.	T-Stat.	Sig.	VIF
Cons.	17.421	6.045	0.000		1.012	29.438	0.000	
SC	0.357	2.451	0.018	1.012	0.316	2.647	0.016	1.012
LnTA	0.318	1.627	0.125	1.017	0.005	0.856	0.287	1.017
LEV	0.025	0.619	0.671	1.026	0.007	0.391	0.655	1.026

ROE	-0.063	- 1.125	0.282	1.016	- 0.018	-0.236	0.921	1.016
LOSS	1.421	1.433	0.169	1.017	- 0.007	-0.542	0.486	1.017
GROWTH	-0.018	- 0.167	0.911	1.020	0.005	1.415	0.217	1.020
<i>Firm Fixed Effects</i>	<i>Included</i>				<i>Included</i>			
<i>R²</i>	<i>16.87%</i>				<i>19.15%</i>			
<i>F-Value</i>	<i>3.496</i>				<i>4.187</i>			
<i>Model Sig.</i>	<i>0.008</i>				<i>0.005</i>			
<i>N</i>	<i>300</i>				<i>300</i>			

The obtained results highlight the significance of the model in explaining variations in the dependent variables of financial performance indicators (ROA and Tobin's Q). The model exhibits a statistically significant F-value of 3.496 and 4.187, with corresponding p-values of 0.008 and 0.005, both of which are below the threshold of 0.05. Moreover, the Variance Inflation Factor (VIF) for all variables was found to be below 10, indicating the absence of multicollinearity.

Furthermore, the Adjusted R Square values are equal to 16.87% and 19.15%, consequently for ROA and Tobins'Q indicators which means that compliance with accounting standards and the other control variables explain 16.87% and 19.15% from the change of the financial performance indicators (ROA and Tobins'Q). This result motivates further research to explore more variables that may affect the dependent financial performance indicators (ROA and Tobins'Q).

In relation to the independent variables of compliance with accounting standards, a positive and significant effect is observed on the ROA indicator, which is one of the

financial performance indicators. This is supported by the T-Stat. value of 2.451, exceeding the threshold of 2, and the p-value (Sig.) of 0.018, which is less than 0.05. Similarly, a positive and significant effect is found between compliance with accounting standards and Tobin's Q indicator, another financial performance indicator. This is evidenced by the T-Stat. value of 2.647, surpassing 2, and the p-value (Sig.) of 0.016, which is less than 0.05.

Accordingly, the researcher can totally accept the sixth hypothesis in the alternative form as follow: **H6: Compliance with accounting standards has significant impact on financial performance.**

Table 4. 21

Summary of the Research Hypotheses

#	Argument	Status
1	H1: Characteristics of the board of directors as one of the mechanisms of governance have a significant impact on financial performance.	Significant
2	H1-1 : Board size has a significant impact on financial performance	Significant
3	H1-2: Board independence has a significant impact on financial performance	Significant
4	H1-3 : CEO duality has a significant impact on financial performance	Significant
5	H1-4: Board experience has a significant impact on financial performance	Significant
6	H2 : Characteristics of the audit committee as one of the mechanisms of governance have a significant impact on financial performance	Significant
7	H2-1: Audit committee Size has a significant impact on financial performance	Significant

8	H2-2: Audit committee independence has a significant impact on financial performance	Significant
9	H2-3: Experience of audit committee has a significant impact on financial performance	Significant
10	H2-4: Audit committee meetings have a significant impact on financial performance	Significant
11	H3: Internal auditing as one of the mechanisms of governance has a significant impact on financial performance	Significant
12	H4: Agility audit imposes considerable influence over financial Performance	Significant
13	H5: Risk management has a prominent impact over financial performance.	Significant
14	H6: Compliance with accounting standards has a significant impact on financial performance.	Significant

4.6 Chapter Summary

This chapter outlines the data analysis to investigate the impact of corporate governance mechanisms (board of directors, audit committee, internal audit, agility in audit), risk management and compliance with accounting standards on financial performance. This chapter first shows the descriptive statistics for all variables. The researcher performed several procedures to verify the availability of the statistical techniques' conditions. Byrne (2010) stated that data examination is a very important step before testing the measurement model, especially when employing structural equation modeling.

The researcher used the In statistics, the Pearson's correlation coefficient (PCC)—also known as Pearson's r , the Pearson product-moment correlation coefficient (PPMCC), the bivariate correlation—a measure of linear correlation between two sets of data, and multiple linear regression (MLR), also known simply as multiple regression, is a

statistical technique that uses several explanatory variables to predict the outcome of a response variable. Multiple regression multiple an extension of ordinary least-squares (OLS) regression because it involves more than one explanatory variable.

The statistical results have illustrated that the corporate governance mechanisms (board director, audit committee, internal audit, audit agility), risk, and compliance significantly impact financial performance.



CHAPTER FIVE

DISCUSSION, RECOMMENDATIONS AND CONCLUSIONS

5.1 Introduction

This study seeks to find the relationship between corporate governance mechanisms, risk, compliance, and the financial performance of listed government-owned companies in the UAE. The final chapter of this academic research serves as a concluding section, offering a last-minute summary and conclusion upon the completion of the study. This chapter encompasses an overview of the study, discussions and conclusions drawn from the findings, contributions made by the research, limitations encountered during the study, and recommendations for future research or actions.

5.2 Discussions and Conclusions

The study has three objectives, and by the end of this study, it is beneficial to discuss the related findings and compare them with the previous studies as follows:

5.2.1 Discussions and Conclusions for Research Objective 1

The first objective is “Identifying the impact of corporate governance mechanisms on financial performance of listed government-owned companies in UAE. The statistical analysis results are as follows:

The Adjusted R Square values for the ROA and Tobin's Q indicators are found to be (16.08%, 40.20%, 23.10%, 30.10%) and (17.30%, 13.10%, 36.50%, 16.50%) respectively. These values indicate that directors' board characteristics and other control variables account for (16.08%, 40.20%, 23.10%, 30.10%) and (17.30%, 13.10%, 36.50%, 16.50%) of the variation observed in the financial performance indicators (ROA and Tobin's Q). This outcome highlights the need for further research to explore additional variables that may impact the dependent variables of financial performance indicators (ROA and Tobin's Q).

Regarding the independent variables of directors' board characteristics, the results revealed that board size is significant, so it positively affects the financial performance indicators (ROA and Tobin's Q). Therefore, the researcher can totally accept the first sub-hypothesis in the alternative form as follow: *H1-1 : Board size has a positive significant impact on financial performance.*

The results demonstrate that the board independence mechanism is significant and has a positive impact on the ROA indicator with T-Stat. values of 7.030 and 2.418 exceeding 2, and corresponding p-values (Sig.) of 0.000, which are less than 0.05. Therefore, the researcher can fully accept the second sub-hypothesis in its alternative form: *H1-2: Board independence has a positive significant impact on financial performance.*

Additionally, the role of duality mechanism is significant and has a positive impact on the ROA indicator (where T-Stat. = 3.108 > 2; Sig. = 0.002 < 0.05); also, it is significant and has a positive impact on Tobin's Q indicator (where T-Stat. = 6.387 > 2; Sig. =

0.000 < 0.05) according to the results. Therefore, the researcher can accept the third sub-hypothesis in the alternative form as follows: *H1-3: CEO Duality has a positive significant impact on financial performance.*

Furthermore, the financial experience mechanism is found to be significant and has a positive impact on the ROA indicator with a T-Stat. value of 4.712 exceeding 2, and a p-value (Sig.) of 0.000, which is less than 0.05, according to the results. Similarly, it is observed that the financial experience mechanism is significant and has a positive impact on the Tobin's Q indicator, with a T-Stat. value of 2.009 exceeding 2, and a p-value (Sig.) of 0.048, which is less than 0.05, according to the results presented in Table (4-5 Panel D). Consequently, the researcher can fully accept the fourth sub-hypothesis in its alternative form: *H1-4: Board experience has a positive significant impact on financial performance.*

The results indicate that board independence and board financial experience, audit committee and duality have a positive impact on the ROA indicator. This result aligns with some previous studies that were conducted in different contexts, such as Merendino and Melville ,2019; Azzahra ,2020; Mnif and Znazen ,2020.

Regarding the independent variables of audit committee characteristics, there are significant positive effects of audit committee size, independence, the financial experience and meetings on the ROA indicator as one of the financial performance indicators (where T-Stat. = 4.236, 8.789, 3.711, 3.781 > 2; Sig. = 0.000, 0.000, 0.000, 0.000 < 0.05, consequently). Additionally, there are significant positive effects of audit committee size, independence, financial experience and meetings on the Tobins'Q as

one of the financial performance indicators (where T-Stat. = 2.425, 3.211, 2.111, 2.425 > 2; Sig. = 0.000, 0.003, 0.013, 0.015 < 0.05).

Subsequently, the researcher can fully accept the second hypothesis in the alternative form as follows: *H2: Characteristics of the audit committee as one of the mechanisms of governance have significant positive impact on financial performance.*

In relation to the independent variables of audit committee characteristics, the findings indicate that audit committee size is statistically significant, exerting a positive impact on both the ROA and Tobin's Q indicators. This is supported by the T-Stat. values of 4.693 and 2.184, both exceeding 2, and the corresponding p-values (Sig.) of 0.000 and 0.030, which are less than 0.05. Therefore, the researcher can confidently accept the first sub-hypothesis in its alternative form.: *H2-1: Audit Committee Size has a positive significant impact on financial performance.*

For the audit committee independence mechanism, it is significant and has a positive impact on the ROA indicator (where T-Stat. = 15.127 >2; Sig. = 0.000 < 0.05); it is also significant and has a positive effect on the Tobin's Q indicator (where T-Stat. = 3.063 >2; Sig. = 0.002 < 0.05). Therefore, the researcher can accept the second sub hypothesis in the alternative form as follows: *H2-2: Audit Committee Independence has a significant positive impact on financial performance.*

The audit committee financial experience mechanism is significant and has a positive impact on the ROA indicator (where T-Stat. = 2.986 >2; Sig. = 0.003 < 0.05); it is also significant and has a positive impact on Tobin's Q indicator (where T-Stat. = 3.356

>2 ; Sig. = 0.001 < 0.05). Consequently, the researcher can totally accept the third sub-hypothesis in the alternative form as follow: *H2-3: Experience of audit committee has a significant positive impact on financial performance.*

Furthermore, the audit committee meetings mechanism is found to be significant and has a positive impact on the ROA indicator with a T-Stat. value of 2.111 exceeding 2, and a p-value (Sig.) of 0.000, which is less than 0.05, according to the results. Similarly, it is observed that the audit committee meetings mechanism is significant and positively impacts Tobin's Q indicator with a T-Stat. value of 2.458 exceeding 2, and a p-value (Sig.) of 0.010, which is less than 0.05, according to the results. Consequently, the researcher can fully accept the fourth sub-hypothesis in the alternative form as follows: *H2-4: Audit committee meetings have a significant positive impact on financial performance.*

The results indicate that audit committee size, audit committee independence and audit committee financial experience have a positive impact on the ROA indicator, and the audit committee independence and audit committee financial experience also has a positive impact on the Tobins'Q indicator.

This finding aligns with several prior studies conducted in various contexts, including Pamungkas and Puwanto (2023), Abdullah and Tursoy (2023), and ElHawary (2021), which explored the relationship between corporate governance and firm value as well as financial performance. It is evident that financial performance plays a significant role in determining a company's value, acting as an intermediary factor in the relationship between corporate governance and organizational value. Furthermore,

the number of audit committee meetings is shown to have a positive impact on financial reporting, further emphasizing its importance in the overall financial performance of a company.

Regarding the independent variables of internal auditing, there are significant effects of internal auditing effectiveness and internal auditing members on the ROA indicator as one of the financial performance indicators (where T-Stat. = 2.127, 3.158 > 2; Sig. = 0.000, 0.000 < 0.05, consequently). Also, the internal auditing variables have significant effects on the Tobins'Q as one of the financial performance indicators (where T-Stat. = 2.706, 2.522 > 2; Sig. = 0.000, 0.000 < 0.05).

Therefore, the researcher can totally accept the third hypothesis in the alternative form as follows: H3: Internal auditing as one of the mechanisms of governance has a significant impact on financial performance. This result is similar to previous studies conducted in different contexts such as (Yusuf & Kanji, 2020; Chen et al., 2020; Akther & Xu, 2020; Alzeban, 2019).

In relation to the independent variables of agility audit, there are noteworthy and significant effects on the ROA indicator, which is one of the financial performance indicators. This is supported by the T-Stat. values of 2.435, 2.621, and 2.781, all exceeding 2, and the corresponding p-values (Sig.) of 0.000, 0.000, and 0.000, all less than 0.05. Furthermore, there are significant and positive effects of agility audit on Tobin's Q indicator, another financial performance indicator. This is evidenced by the T-Stat. values of 3.436, 2.521, and 4.287, all exceeding 2, and the p-values (Sig.) of 0.000, 0.000, and 0.000, all less than 0.05.

Therefore, the researcher can fully accept the fourth hypothesis in the alternative form: *H4: Agility audit imposes considerable influence over financial Performance*. This finding is consistent with previous studies conducted in various contexts, such as those by Teoh et al. (2017) and Joshi (2021).

5.2.2 Discussions and Conclusions for Research Objective 2

The second objective is "Analyzing the impact of risk on financial performance of listed government-owned companies in UAE. The results are coming from the statistical analysis as follows:

The hypothesis tests the relationship between risk management and financial performance indicators (H5). When considering the independent variables of risk management, risk management has a notable and significant impact on the ROA indicator, which serves as one of the financial performance indicators. This is substantiated by the T-Stat. value of 2.815, surpassing the threshold of 2, and the p-value (Sig.) of 0.000, which is less than 0.05. Furthermore, risk management has a significant and positive effect on Tobin's Q indicator, which is another financial performance indicator. This is evidenced by the T-Stat. value of 2.601, exceeding 2, and the p-value (Sig.) of 0.010, which is less than 0.05.

Moreover, the control variables have no significant effects on the financial performance indicators. Therefore, the researcher can fully accept the fifth hypothesis in the alternative form: *H5: Risk management has a prominent impact over financial performance*. This finding is consistent with previous studies conducted in various

contexts, such as Boateng (2018), Chowdhury and Shil (2019), Huy et al. (2021), and Nugraha and Triandewo (2020).

5.2.3 Discussions and Conclusions for Research Objective 3

The third objective is “determining the impact of standards’ compliance on financial performance of listed government-owned companies in UAE. The results are coming from the statistical analysis.

In relation to the independent variables of compliance with accounting standards, there is a significant and positive effect of compliance with accounting standards on the ROA indicator, which serves as one of the financial performance indicators. This is supported by the T-Stat. value of 2.451, exceeding the threshold of 2, and the p-value (Sig.) of 0.018, which is less than 0.05. Additionally, compliance with accounting standards has a positive and significant effect on Tobin's Q indicator, another financial performance indicator. This is evidenced by the T-Stat. value of 2.647, surpassing 2, and the p-value (Sig.) of 0.016, which is less than 0.05.

Therefore, the researcher can fully accept the sixth hypothesis in the alternative form: *H6: Compliance with accounting standards has a significant impact on financial performance.* This finding is consistent with previous studies conducted in various contexts, including Sutaryo et al. (2023), Wu et al. (2022), and Hu et al. (2021). Moreover, prior research has also established a strong connection between IFRS compliance and financial performance (FP).

However, the integration of agility audit, governance, risk, and compliance (AGRC) practices can significantly enhance an organization's financial performance in multiple ways. Firstly, it promotes efficient risk management by proactively identifying and addressing risks in real-time, thus preventing costly disruptions. AGRC also boosts operational resilience, enabling organizations to adapt to unforeseen challenges and maintain operations in adverse conditions. Moreover, it leads to cost reduction by streamlining governance and compliance processes, resulting in substantial savings.

AGRC provides real-time data for informed decision-making, helping organizations make better financial choices. Additionally, it fosters agility and responsiveness to market changes, potentially offering a competitive advantage. Strong governance and compliance practices enhance customer trust and loyalty, leading to increased sales. AGRC can also facilitate the launch of new products and services, diversifying revenue streams.

The agility aspect allows for faster time-to-market, potentially leading to a first-mover advantage and increased revenue. It instills investor confidence and can reduce the cost of capital. Furthermore, AGRC helps identify and manage long-term risks, ensuring sustainability in the face of economic downturns. Lastly, it ensures legal and regulatory compliance, avoiding fines and legal disputes that can negatively impact financial performance. However, the effectiveness of AGRC practices relies on their implementation, integration, and leadership commitment to maintaining a culture of agility, governance, and compliance throughout the organization.

The implementation of Agility Audit, Governance, Risk, and Compliance (AGRC) can have a significant impact on an organization's financial performance. The strengths of

AGRC, including efficient risk management, operational resilience, cost reduction, informed decision-making, and competitive advantage, can contribute to enhanced financial outcomes. However, the weaknesses, such as implementation costs, complexity, resistance to change, integration challenges, and data security risks, may pose challenges that temporarily affect financial performance. Successful AGRC implementation requires careful planning and a strategic approach to mitigate weaknesses while leveraging its strengths to achieve improved financial results. It is essential to strike a balance between the potential benefits and the challenges associated with AGRC to maximize its positive impact on financial performance.

To enhance agility in financial performance, several strategic suggestions and policy recommendations can be implemented. First, organizations should establish agile governance policies that promote real-time decision-making and adaptive risk management. These policies should be regularly reviewed and adjusted to align with evolving market conditions. Second, there should be a strong emphasis on technology integration, with investments in advanced data analytics and reporting tools to enable real-time monitoring and faster decision-making.

Integrating financial systems with other departments can improve coordination and responsiveness. In addition, training and skill development programs should be provided to enhance employees' financial literacy and data analysis capabilities, fostering a culture of learning and adaptation. Moreover, organizations can adopt dynamic budgeting practices, including rolling budgets and flexible budgeting to accommodate unforeseen financial shifts. Also, a dedicated risk management team should be established to identify, assess, and address potential financial risks,

supported by agile project management methodologies. another suggestion is that cross-functional collaboration and communication should be encouraged to facilitate rapid responses to market changes. in addition, organizations can engage with regulatory bodies to advocate for agile regulatory frameworks that adapt to emerging financial technologies and business models while ensuring consumer protection. furthermore, building strong relationships with suppliers and customers and employing demand forecasting and inventory management practices can enhance flexibility in contractual arrangements. besides, organizations should adopt key performance indicators (KPIs) to measure not only financial outcomes but also the speed and adaptability of financial decision-making.

Finally, a continuous improvement program can identify and address inefficiencies in financial processes, fostering a culture of innovation and adaptability. These comprehensive recommendations aim to create a dynamic and responsive financial environment capable of adapting to changing market conditions and achieving sustainable financial success.

In summary, the comprehensive study has add valuable insights into the complex interplay between various facets of corporate governance, risk management, compliance with accounting standards, and their collective impact on the financial performance of government-owned companies in the United Arab Emirates (UAE). This research has sought to explore and elucidate the multifaceted dynamics that underlie the operations of these organizations, shedding light on key determinants of their financial success.

The findings of this study have far-reaching implications, both in the realm of academia and the practical business landscape. First and foremost, our research underscores the pivotal role played by robust corporate governance mechanisms in influencing financial performance. The positive relationship observed between corporate governance variables, such as board characteristics and audit committee attributes, and financial performance indicators (including ROA and Tobin's Q), attests to the importance of effective governance structures in government-owned companies. These findings provide crucial guidance for organizations and regulatory bodies in the UAE, emphasizing the need to nurture and maintain strong governance practices to achieve sustained financial success.

Additionally, this study highlights the instrumental role of risk management in shaping financial performance. The significant and positive impact of risk management practices on both ROA and Tobin's Q reinforces the notion that companies operating in dynamic and competitive environments, such as those in the UAE, must adopt proactive risk management strategies to safeguard their financial stability and enhance their attractiveness to investors. This finding holds particular relevance in today's global business landscape, characterized by ever-increasing uncertainties and challenges.

Furthermore, this research emphasizes the significance of compliance with accounting standards as a driving force behind improved financial performance. The positive effects observed on both ROA and Tobin's Q due to adherence to accounting standards reinforce the importance of transparency, accuracy, and integrity in financial reporting. Compliance with these standards not only ensures the reliability of financial

information but also instills confidence in investors and other stakeholders, thereby contributing to a company's overall financial well-being.

In the context of the UAE, where government-owned companies play a vital role in the national economy, our findings offer valuable insights to both these entities and their stakeholders. The ability to enhance financial performance through corporate governance, risk management, and adherence to accounting standards can empower these organizations to fulfill their objectives and contribute positively to the country's economic growth.

Furthermore, this research does not mark the end but rather the beginning of a broader exploration. It opens the door for future studies to delve deeper into these intricate relationships, offering fertile ground for further investigation. Examining additional variables and their potential influence on financial performance could reveal more nuanced insights into the operations of government-owned companies. Such studies may consider contextual variations, industry-specific dynamics, and the evolving regulatory landscape, enriching the body of knowledge and guiding both policymakers and practitioners in the pursuit of improved financial performance and governance practices.

In conclusion, this study has not only advanced this comprehension of corporate governance in government-owned companies in the UAE but has also provided actionable insights for organizations and stakeholders. Moreover, it invites and encourages further research to continue exploring these vital issues, contributing to the

continuous improvement of corporate governance and financial performance within the unique context of government-owned companies in the UAE.

5.3 Contributions of the Research

The findings of this study yield numerous benefits for both theoretical and practical aspects. Regarding theoretical contribution, the results support the relationship between financial performance and various corporate governance mechanisms (such as the board of directors, audit committee, internal audit, and audit agility), as well as risk and compliance. This enriches the existing empirical literature on the interplay between these variables and allows for generalizing relationships within the conceptual framework.

In practical terms, evaluating the effects of the board of directors' qualities as a governance instrument on the financial performance of listed government-owned enterprises in the UAE is important. This evaluation can provide valuable insights and help improve the overall efficiency and effectiveness of these enterprises. It is crucial to determine the effects of the audit committee's characteristics, as a governance structure, on the financial performance of publicly traded government-owned enterprises in the UAE. This analysis can also provide valuable insights into the relationship between governance practices and financial outcomes in these enterprises, and highlighting how internal audit impacts the financial performance of publicly traded government-owned enterprises in the UAE. By uncovering the effects of audit agility on the financial performance of listed government-owned enterprises in the United Arab Emirates (UAE), decision-makers within the Federal UAE government can enhance their future implementation practices of corporate governance.

Furthermore, other countries can gain insights from the success story of Dubai by examining the influence of risk on the financial performance of listed government-owned companies in the UAE, as well as assessing the impact of standard compliance on their financial performance.

5.3.1 Theoretical Contribution

The results confirm the applicability of agency theory, which suggests that a conflict of interest can arise between management and ownership due to their separation. The agency theory suggests CG strategy as a way to resolve the conflict between the principal and the agent in order to prevent or minimize the conflict. The main goal of the CG system is to resolve or lessen the conflict of interest among the potential stakeholders in the company, which lowers the cost associated with the agency problem. Having adequate monitoring or control methods could benefit businesses. The agency theory defines the custodian position as the day-to-day management of the company on behalf of the owners. According to theory, the audit committee's job is to supervise management and auditor activity to safeguard shareholders' interests.

This study agrees with other studies of enhancing the company's use of good corporate governance and strives to increase shareholder welfare. One of the aspects that investors consider when deciding whether to purchase a firm's shares is its financial performance. Investors' money is safe and secure thanks to the application of good corporate governance. Financial performance serves as a measure to assess a manager's effectiveness in resource management for the organization. Additionally, the implementation and continuous improvement of good corporate governance practices are expected to enhance financial performance by demonstrating sound

financial management. This, in turn, leads to a healthy and sustainable financial performance and provides investor protection.

The study refers to the corporate governance structure, establishing the rules and processes for making strategic choices and allocating rights and obligations among the many stakeholders, including the boards, management, shareholders, and others. So more effective corporate governance will result in a more thorough management performance evaluation, stop managers from behaving dishonestly, and boost investor trust.

Precisely for this study, the researcher realized after analyzing previous findings that they did not address the relationship between agile auditing, governance, risk, and compliance and their effect on financial performance in listed government-owned companies in the UAE.

The researcher's motivation for applying this study to listed government-owned companies in the UAE stems from the significant role these companies play in redistributing national income, which is one of the key objectives behind their establishment. By addressing the research gap in this area, the study explores the relationship between audit agility, corporate governance, risk compliance, and financial performance in listed government-owned companies in the UAE. This research contributes to a better understanding of the dynamics and impact of these factors within the specific context of government-owned entities.

5.3.2 Practical Contribution

The study was conducted on listed government-owned companies in the UAE because of the recent corporate frauds and imprisonment and punishment by the courts of the UAE. The listed government-owned companies in the UAE encounter unforeseen challenges due to technological changes. Therefore, this research focuses on those challenges and how the improvement in AGRC influences the financial performance of companies in the UAE. Hence, to evaluate the financial performance of listed government-owned companies in the UAE, the study focuses on corporate governance mechanisms (board directors, audit committee, internal audit, audit agility), risk, and compliance.

Other countries in the Gulf area, the Arab world, and developing countries can learn from the success story of the UAE. The previous literature has many unsuccessful stories, especially in other countries, which can affect other countries' intentions to comply with corporate governance adoption. However, this study shows the success of Dubai and how to follow its best practices. Policy makers and managers in other countries can learn valuable lessons from this research.

The findings of this study offer decision-makers valuable insights. First, compliance with accounting standards ensures the availability of reliable information that management relies on for decision-making. Second, measuring financial performance indicates how effectively a company utilizes its primary business assets to generate revenue. Lastly, emphasizing top management support is crucial for enhancing the quality of corporate governance reporting in UAE companies. These results provide

guidance on key areas to prioritize when aiming to improve corporate governance practices and reporting in the UAE.

5.4 Limitations of The Research

Every academic study has limitations related to the research design, such as the conceptual framework, location, population, data collection, and other design issues.

- This study is limited to describing how corporate governance mechanisms affect the financial performance of publicly traded government-owned enterprises in the United Arab Emirates, analyzing how risk affects that performance, and assessing how standards adherence affects the financial performance of listed government-owned enterprises in the UAE.
- The statistical analysis results are limited to using data from databases in the official UAE websites in the annual reports from 2018 to 2022.
- The study used quantitative methods and was based on primary data collected from reliable sources. This secondary information was gathered from the 2022 annual report and accounts of the listed companies on the official UAE website—the most recent source of information accessible when the study was conducted.

5.5 Recommendations for Future Research

To ensure the generalizability of the suggested relationships, it is recommended to replicate the study in multiple nations. This is important as businesses need to adapt and navigate changes in order to maintain their position in the corporate world. By conducting the study in various countries, it would allow for a broader understanding of the relationships and their applicability across different contexts. Businesses must

take advantage of these shifts and changes in the business environment, which will raise awareness of the benefits of agility auditing and how it may improve the implementation of ERM and boost business performance. Therefore, this study will raise corporate knowledge of ERM implementation.

The regulators and financial markets in the UAE should bear in mind the extreme importance of corporate governance as a first line of defense for listed government-owned companies against any crises they may face; its focus should be on creating an internal control system in companies listed on stock exchanges, risk management, and compliance for financial markets in general, given that governance contributes to creating a good business climate.

The specific results of this research revealed that regarding the independent variables of internal auditing, there are significant effects of internal auditing effectiveness, audit committee, audit agility, and board director on the ROA indicator as one of the financial performance indicators. Furthermore, the internal auditing variables exhibit significant effects on the Tobins'Q as a financial performance indicator, aligning with previous studies and supporting the logical reasoning behind the variable. Consequently, it is essential to conduct further studies to explore the relationship between governance mechanisms and financial performance in different business sectors. By conducting more research in diverse sectors, we can understand how governance mechanisms impact financial performance and enhance decision-making in various industries.

REFERENCES

- Abang'a, A. O. G., Tauringana, V., Wang'ombe, D., & Achiro, L. O. (2022). Corporate governance and financial performance of state-owned enterprises in Kenya. *Corporate Governance: The International Journal of Business in Society*, 22(4), 798-820.
- Abdillah, M. R., Mardijuwono, A. W., & Habiburrochman, H. (2019). The effect of company characteristics and auditor characteristics to audit report lag. *Asian Journal of Accounting Research*, 4(1), 129-144. doi:<https://doi.org/10.1108/AJAR-05-2019-0042>
- Abdullah, B., Syah, M. H., Janor, H., & Hamid, M. A. (2018). High performance organization and enterprise risk management implementation. *International Journal of Business & Management Science*, 8(2).
- Abdullah, H., & Tursoy, T. (2023). The effect of corporate governance on financial performance: evidence from a shareholder-oriented system. *Iranian Journal of Management Studies*, 16(1), 79-95.
- Abdullah, R., Ismail, Z., & Smith, M. (2018). Audit committees' involvement and the effects of quality in the internal audit function on corporate governance. *International Journal of Auditing*, 22(3), 385-403. doi:<https://doi.org/10.1111/ijau.12124>
- Adams, C. A., & Larrinaga, C. (2019). Progress: engaging with organisations in pursuit of improved sustainability accounting and performance. *Accounting, Auditing & Accountability Journal*, 32(8), 2367-2394. doi:<https://doi.org/10.1108/AAAJ-03-2018-3399>
- Adegboye, A., Ojeka, S., Alabi, O., Alo, U., & Aina, A. (2020). Audit committee characteristics and sustainability performance in Nigerian listed banks. *Business: Theory and Practice*, 21(2), 469-476. doi:<https://doi.org/10.3846/btp.2020.10463>
- Ado, A. B., Rashid, N., Mustapha, U. A., & Ademola, L. S. (2020). The impact of audit quality on the financial performance of listed companies Nigeria. 7(9), 37-42. doi:<http://dx.doi.org/10.31838/jcr.07.09.07>
- Agarwal, A., & Chadha, S. (2005). Corporate governance and accounting scandals. *Journal of Law and Economics*, 48(2), 371-406.
- Agrawal, A., & Cooper, T. (2015). Corporate governance consequences of accounting scandals: Evidence from top management, CFO and auditor turnover. *Quarterly Journal of Finance*.
- Agyemang-Mintah, P., & Schadewitz, H. (2018). Audit committee adoption and firm value: evidence from UK financial institutions. *International Journal of Accounting & Information Management*, 26(1), 205-226. doi:<https://doi.org/10.1108/IJAIM-04-2017-0048>

- Ahmed, H. (2019). Financial crisis: Risks and lessons for Islamic finance. *ISRA International Journal of Islamic Finance*, 1(1), 7-32.
- Ahmed, W., Khan, M. A., Najmi, A., & Khan, S. A. (2023, January). Strategizing risk information sharing framework among supply chain partners for financial performance. In *Supply Chain Forum: An International Journal* (pp. 1-18). Taylor & Francis.
- Aksoy, H. (2017). How do innovation culture, marketing innovation and product innovation affect the market performance of Small and Medium-Sized Enterprises (SMEs)? *Technology in Society*. doi: 10.1016/j.techsoc.2017.08.005
- Akther, T., & Xu, F. (2020). Existence of the audit expectation gap and its impact on stakeholders' confidence: The moderating role of the financial reporting council. *International Journal of Financial Studies*, 8(1). doi:https://doi.org/10.3390/ijfs8010004
- Al Farooque, O., Buachoom, W., & Sun, L. (2020). Board, audit committee, ownership and financial performance—emerging trends from Thailand. *Pacific Accounting Review*, 32(1), 54-81. doi:https://doi.org/10.1108/PAR-10-2018-0079
- Alabdullah, T. T., & Ahmed, E. R. (2020). Audit committee impact on corporate profitability in oman companies: An auditing and management accounting perspective. *Riset Akuntansi dan Keuangan Indonesia*, 5(2), 121-128.
- Alabdullah, T. T., Nor, M. I., Ahmed, E. R., & Yahya, S. (2018). The determination of firm performance in emerging nations: Do board size and firm size matter? *International Academic Journal of Accounting and Financial Management*, 5(2), 57-66. doi:ISSN 2454-2350
- Ali, M., & Ayoko, O. B. (2020). The impact of board size on board demographic faultlines. *Corporate Governance*, 20(7), 1205-1222. doi:https://doi.org/10.1108/CG-03-2020-0100
- Aljifri, K., & Moustafa, M. (2007). The impact of corporate governance mechanisms on the performance of UAE firms: an empirical analysis. *Journal of Economic and Administrative Sciences*, 23(2), 71-93. doi:https://doi.org/10.1108/10264116200700008
- Alkhuzaie, A. S., & Asad, M. (2018). Operating cashflow, corporate governance, and sustainable dividend payout. *International Journal of Entrepreneurship*, 22(4), 1-9.
- Almagtome, A., Khaghaany, M., & Önce, S. (2020). Corporate governance quality, stakeholders' pressure, and sustainable development: An integrated approach. *International Journal of Mathematical, Engineering and Management Sciences*, 5(6), 1077-1090.
- Almansour, A. Z., Asad, M., & Shahzad, I. (2016). Analysis of corporate governance compliance and its impact over return on assets of listed companies in Malaysia. *Science International*, 28(3), 2935-2938.

- Al-Matari, E. M. (2019). Do characteristics of the board of directors and top executives have an effect on corporate performance among the financial sector? Evidence using stock. *Corporate Governance: The International Journal of Business in Society*, 20(1), 16-43. doi:<https://doi.org/10.1108/CG-11-2018-0358>
- Alqahtani, J., Duong, L., Taylor, G., & Eulaiwi, B. (2021). Outside directors, firm life cycle, corporate financial decisions and firm performance. *Emerging Markets Review*, 1-20. doi:10.1016/j.ememar.2021.100820
- Alqatamin, R. M. (2018). Audit committee effectiveness and company performance:Evidence from Jordan. *Accounting and Finance Research*, 7(2). doi:10.5430/afr.v7n2p48
- Alqatamin, R.M. (2018), “Audit committee effectiveness and company performance: evidence from Jordan”, *Accounting and Finance Research*, Vol. 7 No. 2, p. 48
- Al-Sartawi, A. M., Alrawahi, F., & Sanad, Z. (2016). Corporate governance and the level of compliance with international accounting standards (IAS-1): Evidence from Bahrain Bourse. *International Research Journal of Finance and Economics*, 157, 110-122.
- Al-Sulaiti, J., Ousama, A., & Hamammi, H. (2018). The compliance of disclosure with AAOIFI financial accounting standards: A comparison between Bahrain and Qatar Islamic banks. *Journal of Islamic Accounting and Business Research*, 9(4), 549-566. doi:<https://doi.org/10.1108/JIABR-10-2017-0144>
- Alzabari, S. A., Talab, H. R., & Flayyih, H. H. (2019). The effect of internal training and auditing of auditors on supply chain management: An empirical study in listed companies of Iraqi stock exchange for the period 2012-2015. *Int. J Sup. Chain. Mgt*, 8(5).
- Alzeban, A. (2019). The impact of audit committee, CEO, and external auditor quality on the quality of financial reporting. *Corporate Governance: The International Journal of Business in Society*, 20(2), 263-279. doi:<https://doi.org/10.1108/CG-07-2019-0204>
- Alzeban, A. (2020), “The relationship between the audit committee, internal audit and firm performance”, *Journal of Applied Accounting Research*, Vol. 21 No. 3, pp. 437-454.
- Alzeban, A. (2020). The relationship between the audit committee, internal audit and firm performance. *Journal of Applied Accounting Research*, 21(3), 437-454. doi:<https://doi.org/10.1108/JAAR-03-2019-0054>
- Alzoubi, E. S. (2018). Audit quality, debt financing, and earnings management: Evidence from Jordan. *Journal of International Accounting, Auditing and Taxation*, 30, 69-84. doi:<https://doi.org/10.1016/j.intaccaudtax.2017.12.001>
- Alzoubi, E. S. (2019). Audit committee, internal audit function and earnings management: Evidence from Jordan. *Meditari Accountancy Research*, 27(1), 72-90. doi:<https://doi.org/10.1108/MEDAR-06-2017-0160>

- Amar, S. S., Putri, D. L., Fathorrahman, F., Wahyuni, U., Kusuma, A., & Aina, M. (2022). The role of enterprise risk management on intellectual capital and its impact on firm performance based on agency theory, signaling theory and resource-based view (RBV) theory approach. *International Journal of Multicultural and Multireligious Understanding*, 9(7), 247-256.
- Amarjit Gill, L.-P. D., & Obradovich, J. D. (2018). Financial risk management and financial performance of new small business ventures: Evidence from Indian survey data. 11(2), 75-95. doi:<https://doi.org/10.1504/JIBED.2018.091205>
- Amedi, A. M., & Mustafa, A. S. (2020). Board characteristics and firm performance: Evidence from manufacture sector of Jordan. *Accounting Analysis Journal*, 9(3), 146-151. doi:<https://doi.org/10.15294/aaj.v9i3.39577>
- Annamalah, S., Raman, M., Marthandan, G., & Logeswaran, A. K. (2018). Implementation of enterprise risk management (ERM) framework in enhancing business performances in oil and gas sector. *Economies*, 6(1). doi:<https://doi.org/10.3390/economies6010004>
- Antoniuk, O., Kutsyk, P., Brodska, I., Kolesnikova, O., & Struk, N. (2021). Institutionalization of accounting and auditing services in Ukraine: Genesis, evaluation, analysis. *Independent Journal of Management & Production*, 12(3), s123-s137. doi:<https://doi.org/10.14807/ijmp.v12i3.1530>
- Appuhami, R. (2018). The signalling role of audit committee characteristics and the cost of equity capital: Australian evidence. *Pacific Accounting Review*, 30(3), 387-406. doi:<https://doi.org/10.1108/PAR-12-2016-0120>
- Armougum, A., Gaston-Bellegarde, A., Marle, C. J.-L., & Piolino, P. (2020). Expertise reversal effect: Cost of generating new schemas. *Computers in Human Behavior*, 111. doi:<https://doi.org/10.1016/j.chb.2020.106406>
- Arnold, M., Schuette, D., & Wagner, A. (2021). Neglected risk in financial innovation: Evidence from structured product counterparty exposure. *European Financial Management*, 27(2), 287-325. doi:<https://doi.org/10.1111/eufm.12281>
- Arsal, M. (2021). Impact of earnings per share and dividend per share on firm value. *Atestasi: Jurnal Ilmiah Akuntansi*, 4(1), 11-18. doi:<https://doi.org/10.33096/atestasi.v4i1.594>
- Asad, M., Ahmad, I., Haider, S. H., & Salman, R. (2018). A critical review of islamic and conventional banking in digital era: A case of Pakistan. *International Journal of Engineering & Technology*, 7(4.7), 57-59.
- Asad, M., Haider, S. H., & Fatima, M. (2018). Corporate social responsibility, business ethics, and labor laws: A qualitative analysis on SMEs in Sialkot. *Journal of Legal, Ethical and Regulatory Issues*, 21(3), 1-7.
- Asad, M., Iftikhar, K., & Jafary, A. Y. (2019). Relationship between capital structure and financial performance of textile sector companies. *Kashmir Economic Review*, 28(1), 39-52.

- Asiriwa, O., Aronmwan, E. J., Uwuigbe, U., & Uwuigbe, O. R. (2018). Audit committee attributes and audit quality: a benchmark analysis. *Verslas: Teorija IR Praktika/Business: Theory and Practice*, 19, 37-48. doi:10.3846/btp.2018.05
- Augusto, M., Pascoal, R., & Reis, P. (2020). Firms' performance and board size: A simultaneous approach in the European and American contexts. *Applied Economics Letters*, 27(13), 1039-1043. doi:https://doi.org/10.1080/13504851.2019.1659487
- Axmedjanov, K. (2020). KB Akhmedjanov internal audit and its development prospects. *Архив научных исследований*, 1(4).
- Azzahra, K. (2020). The influence of intellectual capital and sharia compliance to the banking financial performance in Indonesia. 5(1). doi:https://doi.org/10.35457/jares.v5i1.900
- Baah, C., & Jin, Z. (2019). Sustainable supply chain management and organizational performance: The intermediary role of competitive advantage. *J. Mgmt. & Sustainability*, 9(1).
- Baah, C., Opoku-Agyeman, D., Acquah, I. S., Issau, K., & Abdoulaye, F. A. (2021). Understanding the influence of environmental production practices on firm performance: A proactive versus reactive approach. *Journal of Manufacturing Technology Management*, 32(2), 266-289. doi:https://doi.org/10.1108/JMTM-05-2020-0195
- Badu, E. A., & Appiah, D. K. (2017). The impact of corporate board size on firm performance: Evidence from Ghana and Nigeria. *Research in Business and Management*, 4(2), 1-12. doi:10.5296/rbm.v4i2.11721
- Baek, J.-S., Kang, J.-K., & Park, K. S. (2004). Corporate governance and firm value: Evidence from the Korean financial crisis. 71(2), 265-313. doi:https://doi.org/10.1016/S0304-405X(03)00167-3
- Bala, H., Amran, N. A., & Shaari, H. (2020). Audit committee attributes and cosmetic accounting in Nigeria: The moderating effect of audit price. *Managerial Auditing Journal*, 35(2), 177-206. doi:https://doi.org/10.1108/MAJ-06-2018-1897
- Balsmeier, B., Buchwald, A., & Stiebale, J. (2014). Outside directors on the board and innovative firm performance. *Research Policy*, 43(10), 1800-1815. doi:https://doi.org/10.1016/j.respol.2014.06.003
- Bananuka, J., Kadaali, A. W., Mukyala, V., Muramuzi, B., & Namusobya, Z. (2019). Audit committee effectiveness, isomorphic forces, managerial attitude and adoption of international financial reporting standards. *Journal of accounting in Emerging Economies*, 9(4), 502-526. doi:https://doi.org/10.1108/JAEE-08-2018-0084
- Bansal, N., & Sharma, A. K. (2016). Audit committee, corporate governance and firm performance: Empirical evidence from India. *International Journal of Economics and Finance*, 8(3). doi:10.5539/ijef.v8n3p103

- Barney, J. B. (2018). Why resource-based theory's model of profit appropriation must incorporate a stakeholder perspective. *Strategic Management Journal*, 39(13), 3305-3325. doi: <https://doi.org/10.1002/smj.2949>
- Bashir, A., & Asad, M. (2018). Moderating effect of leverage on the relationship between board size, board meetings and performance: A study on textile sector of Pakistan. *American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS)*, 39(1), 19-29.
- Bauer, R., Guenster, N., & Otten, R. (2004). Empirical evidence on corporate governance in Europe: The effect on stock returns, firm value and performance. *Journal of Asset Management*, 5(2), 91–104. <https://www.danagas.com/wp-content/uploads/2020/08/SCA-Resolution-No.3-of-2020.pdf>
- Baysinger, B. D., & Butler, H. N. (2019). Corporate governance and the board of directors: Performance effects of changes in board composition. In *Corporate Governance*. Gower.
- Beardsley, E. L., Lassila, D. R., & Omer, T. C. (2019). How do audit offices respond to audit fee pressure? Evidence of increased focus on nonaudit services and their impact on audit quality. *Contemporary Accounting Research*, 36(2), 999-1027. doi:<https://doi.org/10.1111/1911-3846.12440>
- Bessière, V., Stéphany, E., & Wirtz, P. (2020). Crowdfunding, business angels, and venture capital: An exploratory study of the concept of the funding trajectory. *Venture Capital*, 22(2), 135-160. doi:<https://doi.org/10.1080/13691066.2019.1599188>
- Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of Corporate Finance*, 14, 257-273.
- Birindelli, G., Dell'Atti, S., Iannuzzi, A. P., & Savioli, M. (2018). Composition and activity of the board of directors: Impact on ESG performance in the banking system. *Sustainability*, 10(12). doi:<https://doi.org/10.3390/su10124699>
- Black, B. (2000). Does corporate governance matter--A crude test using Russian data. *U. Pa. L. Rev.*
- Blanca, M. J., Arnau, J., López-Montiel, D., Bono, R., & Bendayan, R. (2013). Skewness and kurtosis in real data samples. *Methodology*.
- Blankespoor, E., deHaan, E., & Marinovic, I. (2020). Disclosure processing costs, investors' information choice, and equity market outcomes: A review. *Journal of Accounting and Economics*, 70(2-3). doi:<https://doi.org/10.1016/j.jacceco.2020.101344>
- Boateng, K. (2018). Credit risk management and performance of banks in Ghana: The 'camels' rating model approach. *International Journal of Business and Management Invention*, 8(2), 1-8.

- Bokhari, S. A., & Aftab, M. (2022). Personality traits and social loafing among employees working in teams at small and medium enterprises: A cultural perspective data from emerging economies. *Data in Brief*, 42. doi:<https://doi.org/10.1016/j.dib.2022.108085>
- Bose, S., Khan, H. Z., Rashid, A., & Islam, S. (2018). What drives green banking disclosure? An institutional and corporate governance perspective. *Asia Pacific Journal of Management*, 35(2), 501-527.
- Braendle, U. (2019). Corporate Governance Code compliance and financial performance: The case of Austrian stock listed companies. *Investment Management & Financial Innovations*, 16(3), 131-141. doi:10.21511/imfi.16(3).2019.13
- Bravo, M., Sibayan, A., & Arcilla, M. (2019). An assessment of the E-learning management systems used by Philippine insurance agents of an international financial organization using HELAM.
- Brower, J., & Dacin, P. A. (2020). An institutional theory approach to the evolution of the corporate social performance–corporate financial performance relationship. *Journal of management studies*, 57(4), 805-836.
- Brulhart, F., Gherra, S., & Quelin, B. V. (2019). Do stakeholder orientation and environmental proactivity impact firm profitability? *Journal of Business Ethics*, 158(1), 25-46.
- BSEC (2018), Corporate Governance Code, Bangladesh Securities & Exchange Commission, Dhaka, available at: https://sec.gov.bd/slaws/Corporate_Governance_Code_10.06.2018.pdf (accessed 24 April 2021)
- Buallay, A. (2018). Audit committee characteristics: An empirical investigation of the contribution to intellectual capital efficiency. *Measuring Business Excellence*, 22(2), 183-200. doi:<https://doi.org/10.1108/MBE-09-2017-0064>
- Buallay, A. (2018). Audit committee characteristics: An empirical investigation of the contribution to intellectual capital efficiency. *Measuring Business Excellence*, 22(2), 183-200. doi:<https://doi.org/10.1108/MBE-09-2017-0064>
- Buertey, S., Sun, E.-J., Lee, J. S., & Hwang, J. (2020). Corporate social responsibility and earnings management: The moderating effect of corporate governance mechanisms. *Corporate Social Responsibility and Environmental Management*, 27(1), 256-271. doi:10.1002/csr.1803
- Busch, T., & Friede, G. (2018). The robustness of the corporate social and financial performance relation: A second-order meta-analysis. *Corporate Social Responsibility and Environmental Management*, 25(4), 583-608. doi:<https://doi.org/10.1002/csr.1480>
- Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (2nd ed.). Routledge/Taylor & Francis Group.

- Calabrese, A., Costa, R., Levialdi, N., & Menichini, T. (2019). Integrating sustainability into strategic decision-making: A fuzzy AHP method for the selection of relevant sustainability issues. *Technological Forecasting and Social Change*, 155-168. doi:<https://doi.org/10.1016/j.techfore.2018.11.005>
- Calvo, N., & Calvo, F. (2018). Corporate social responsibility and multiple agency theory: A case study of internal stakeholder engagement. *Corporate Social Responsibility and Environmental Management*, 25(6), 1223-1230. doi:<https://doi.org/10.1002/csr.1633>
- Carungu, J., Pietra, R. D., & Molinari, M. (2020). Mandatory vs voluntary exercise on non-financial reporting: does a normative/coercive isomorphism facilitate an increase in quality? *Meditari Accountancy Research*, 29(3), 449-476. doi:<https://doi.org/10.1108/MEDAR-08-2019-0540>
- Cassell, C. A., Hansen, J. C., Myers, L. A., & Seidel, T. A. (2020). Does the timing of auditor changes affect audit quality? Evidence from the initial year of the audit engagement. *Sage Journal*, 263-289. Retrieved from <https://journals-sagepub-com.eserv.uum.edu.my/doi/full/10.1177/0148558X17726241>
- Cassell, C. A., Hansen, J. C., Myers, L. A., & Seidel, T. A. (2020). Does the Timing of Auditor Changes Affect Audit Quality? Evidence From the Initial Year of the Audit Engagement. *sage journal*, 263-289. Retrieved from <https://journals-sagepub-com.eserv.uum.edu.my/doi/full/10.1177/0148558X17726241>
- Cavaco, S., Crifo, P., Rebérioux, A., & Roudaut, G. (2017). Independent directors: Less informed but better selected than affiliated board members? *Journal of Corporate Finance*, 43, 106-121. doi:<https://doi.org/10.1016/j.jcorpfin.2017.01.004>
- CEIC Data. (2022). *United Arab Emirates Number of Listed Companies: ADX*. Retrieved from ABU DHABI SECURITIES EXCHANGE: <https://www.ceicdata.com/en/united-arab-emirates/abu-dhabi-securities-exchange-number-of-listed-companies/no-of-listed-companies-adx>
- Chairani, C., & Siregar, S. V. (2021). The effect of enterprise risk management on financial performance and firm value: The role of environmental, social and governance performance. *Meditari Accountancy Research*, 29(3), 647-670. doi:<https://doi.org/10.1108/MEDAR-09-2019-0549>
- Chang, Y.-T., Chen, H., Cheng, R. K., & Chi, W. (2019). The impact of internal audit attributes on the effectiveness of internal control over operations and compliance. *Journal of Contemporary Accounting & Economics*, 15(1), 1-19. doi:<https://doi.org/10.1016/j.jcae.2018.11.002>
- Chaudhuri, A., Boer, H., & Taran, Y. (2018). Supply chain integration, risk management and manufacturing flexibility. *International Journal of Operations & Production Management*, 38(3), 690-712. doi:<https://doi.org/10.1108/IJOPM-08-2015-0508>

- Chen, Y., Lin, B., Lu, L., & Zhou, G. (2020). Can internal audit functions improve firm operational efficiency? Evidence from China. *Managerial Auditing Journal*, 35(8), 1167-1188. doi:<https://doi.org/10.1108/MAJ-01-2019-2136>
- Chethiyar, S. D., Asad, M., Kamaluddin, M. R., Ali, A., & Sulaiman, M. A. (2019). Impact of information and communication overload syndrome on the performance of students. *Opción*, 24, 390-405.
- Chin, L., Chai, C., Chong, H., & Yusof, A. M. (2018). The potential cost implications and benefits from building information modeling (BIM) in Malaysian construction industry. In *Proceedings of the 21st International Symposium on Advancement of Construction Management and Real Estate* (pp. 1439-1454). Singapore: Springer.
- Chowdhury, A., & Shil, N. C. (2019). Influence of new public management philosophy on risk management, fraud and corruption control and internal audit: Evidence from an Australian public sector organization. *Accounting and Management Information Systems*, 18(4), 486-508. doi:<http://dx.doi.org/10.24818/jamis.2019.04002>
- Christensen, J., Kent, P., Routledge, J., & Stewart, J. (2015). Do corporate governance recommendations improve the performance and accountability of small listed companies? *Accounting & Finance*, 55(1), 133-164. doi:10.1111/acfi.12055
- Ciftci, I., Tatoglu, E., Wood, G., Demirbag, M., & Zaim, S. (2019). Corporate governance and firm performance in emerging markets: Evidence from Turkey. *International Business Review*, 28(1), 90-103. doi:<https://doi.org/10.1016/j.ibusrev.2018.08.004>
- Code, C. (1992). *The financial aspects of corporate governance.* London: The committee on the financial. Aspects of Corporate Governance and Gee and Co. Ltd.
- D. Beerbaum, "Application of agile audit: A case study research," (2020), Retrieved on 7 March 2021 from:<https://www.researchgate.net/publication/346652158>
- D.T. OTLEY, A. J. (2019). CONTROL, ORGANISATION AND ACCOUNTING. In *Management Control Theory* (pp. 1-14). Routledge.
- Damer, N., Al-Znaimat, A. H., Asad, M., & Almansour, A. Z. (2021). Analysis of motivational factors that influence usage of Computer Assisted Audit Techniques (CAATs) auditors in Jordan. *Academy of Strategic Management Journal*, 20(Special Issue 2), 1-13.
- Danoshana, S., & Ravivathani, T. (2019). The impact of the corporate governance on firm performance: A study on financial institutions in Sri Lanka. *SAARJ Journal on Banking & Insurance Research*, 8(1), 62-67. doi:10.5958/2319-1422.2019.00004.3

- Danso, A., Adomako, S., Lartey, T., Amankwah-Amoah, J., & Owusu-Yirenkyi, D. (2020). Stakeholder integration, environmental sustainability orientation and financial performance. *Journal of Business Research*, 119, 652-662. doi:<https://doi.org/10.1016/j.jbusres.2019.02.038>
- David, R. J., Tolbert, P. S., & Boghossian, J. (2019). Institutional theory in organization studies. In *Oxford Research Encyclopedia of Business and Management*. doi:<https://doi.org/10.1093/acrefore/9780190224851.013.158>
- Deloitte, "Adopting agile," (2020), Retrieved on 7 March 2021 from: <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/finance/us-adopting-agile-pov.pdf>
- Deslandes, M., Fortin, A., & Landry, S. (2020). Audit committee characteristics and tax aggressiveness. *Managerial Auditing Journal*, 35(2), 272-293. doi:<https://doi.org/10.1108/MAJ-12-2018-2109>
- Dobrowolski, Z. (2020). The supreme audit institutions readiness to uncertainty. *Entrepreneurship and Sustainability*, 8(1), 513-525. doi:[10.9770/jesi.2020.8.1\(36\)](https://doi.org/10.9770/jesi.2020.8.1(36))
- Dowd, K. (2007). *Measuring market risk*. John Wiley & Sons.
- Doz, Y. L., & Kosonen, M. (2010). Embedding strategic agility: A leadership agenda for accelerating business model renewal. *Long range planning*, 43(2-3), 370-382. doi:<https://doi.org/10.1016/j.lrp.2009.07.006>
- Dubey, R., Gunasekaran, A., Childe, S. J., Blome, C., & Papadopoulos, T. (2019). Big data and predictive analytics and manufacturing performance: Integrating institutional theory, resource-based view and big data culture. *British Journal of Management*, 30(2), 341-361. doi: <https://doi.org/10.1111/1467-8551.12355>
- Durst, S., Hinteregger, C., & Zieba, M. (2019). The linkage between knowledge risk management and organizational performance. *Journal of Business Research*, 105, 1-10. doi:<https://doi.org/10.1016/j.jbusres.2019.08.002>
- Dzomira, S. (2020). Corporate governance and performance of audit committee and Internal audit functions in an emerging economy's public sector. *Indian Journal of Corporate Governance*, 13(1), 85-98.
- Eker, M., & Eker, S. (2019). Exploring the relationships between environmental uncertainty, business strategy and management control system on firm performance. *Business and Economics Research Journal*, 10(1), 115-130.
- ElHawary, E. (2021). Audit committee effectiveness and company performance: Evidence from Egypt. *Journal of Governance and Regulation*/Volume, 10(2).
- Enache, L., & Hussainey, K. (2020). The substitutive relation between voluntary disclosure and corporate governance in their effects on firm performance. *Review of Quantitative Finance and Accounting*, 54(2), 413-445.

- Endaya, K. A., & Hanefah, M. M. (2013). Internal audit effectiveness: An approach proposition to develop the theoretical framework. *Research Journal of Finance and Accounting*, 4(10), 92-102.
- Endrawes, M., Feng, Z., Lu, M., & Shan, Y. (2020). Audit committee characteristics and financial statement comparability. *Accounting & Finance*, 60(3), 2361-2395. doi: <https://doi.org/10.1111/acfi.12354>
- Ependi, E., & Dalesna, D. (2021). The effect of inventory turn over, fixed asset turn over, return on fixed asset, and return on equity on financial performance regional public services agencies. *Journal of Industrial Engineering & Management Research*, 2(1), 102-113. doi:<https://doi.org/10.7777/jiemar.v2i1.120>
- Erasmus, L., & Coetzee, P. (2018). Drivers of stakeholders' view of internal audit effectiveness: Management versus audit committee. *Managerial Auditing Journal*, 33(1), 90-114. doi:<https://doi.org/10.1108/MAJ-05-2017-1558>
- Eulerich, M., Kremin, J., & Wood, D. A. (2019). Factors that influence the perceived use of the internal audit function's work by executive management and audit committee. *Advances in Accounting*, 45. doi:<https://doi.org/10.1016/j.adiac.2019.01.001>
- Fariha, R., Hossain, M. M., & Ghosh, R. (2022). Board characteristics, audit committee attributes and firm performance: empirical evidence from emerging economy. *Asian Journal of Accounting Research*, 7(1), 84-96.
- Farooque, O. A., Buachoom, W., & Sun, L. (2020). Board, audit committee, ownership and financial performance – Emerging trends from Thailand. *Pacific Accounting Review*, 32(1), 54-81. doi:<https://doi.org/10.1108/PAR-10-2018-0079>
- Farrukh, W., & Asad, M. (2017). The determinants of capital structure: A study on cement sector of Pakistan. *International Journal of Management Sciences and Business Research*, 6(2), 16-26.
- Fauzyyah, R., & Rachmawati, S. (2018). The effect of number of meetings of the board of commissioners, independent commissioners, audit committee and ownership structure Upon the extent of CSR disclosure. *The Accounting Journal of Binaniaga*, 3(02), 41-54.
- Fernández-Temprano, M. A., & Tejerina-Gaite, F. (2020). Types of director, board diversity and firm performance. *Corporate Governance*, 20(2), 324-342. doi:<https://doi.org/10.1108/CG-03-2019-0096>
- Ferraris, A., Mazzoleni, A., Devalle, A., & Couturier, J. (2018). Big data analytics capabilities and knowledge management: Impact on firm performance. *Management Decision*, 57(8), 1923-1936. doi: <https://doi.org/10.1108/MD-07-2018-0825>

- Filatotchev, I., Liu, X., Lu, J., & Wright, M. (2011). Knowledge spillovers through human mobility across national borders: Evidence from Zhongguancun Science Park in China. *Research Policy*, 40(3), 453-462. doi:<https://doi.org/10.1016/j.respol.2011.01.003>
- Force, J. T. (2018). Risk management framework for information systems and organizations. *NIST Special Publication*.
- Freeman, R. E., Harrison, J. S., & Zyglidopoulos, S. (2018). Stakeholder theory : Concepts and strategies. Cambridge University Press.
- Gamayuni, R. R. (2018). The effect of internal auditor competence and objectivity, and management support on effectiveness of internal audit function and financial reporting quality implications at local government. *Int. J. Economic Policy in Emerging Economies*, 11(3), 248-261.
- García-Sánchez, I.-M., & García-Meca, E. (2018). Do talented managers invest more efficiently? The moderating role of corporate governance mechanisms. *Corporate Governance: An International Review*, 26(4), 238-254. doi:<https://doi.org/10.1111/corg.12233>
- García-Sánchez, Isabel-María, Martínez-Ferrero, J., & Garcia-Benau, M.-A. (2019). Integrated reporting: The mediating role of the board of directors and investor protection on managerial discretion in munificent environments. *Corporate Social Responsibility and Environmental Management*, 26(1), 29-45. doi:<https://doi.org/10.1002/csr.1655>
- Gebrayel, E., Jarrar, H., Salloum, C., & Lefebvre, Q. (2018). Effective association between audit committees and the internal audit function and its impact on financial reporting quality: Empirical evidence from Omani listed firms. *International Journal of Auditing*, 22(2), 197-213. doi:<https://doi.org/10.1111/ijau.12113>
- Gebrayel, E., Jarrar, H., Salloum, C., & Lefebvre, Q. (2018). Effective association between audit committees and the internal audit function and its impact on financial reporting quality: Empirical evidence from Omani listed firms. *International Journal of Auditing*, 22(2), 197-213. doi:<https://doi.org/10.1111/ijau.12113>
- Gerster, D., Dremel, C., Brenner, W., & Kelker, P. (2020, February). How Enterprises Adopt Agile Forms of Organizational Design: A Multiple-Case Study. *SIGMIS Database*, 51, 84–103. doi:10.1145/3380799.3380807
- Ghaleb, B. A. (2021). Audit committee chair's legal expertise and real activities manipulation : Empirical evidence from Malaysian energy and utilities sectors. *Digitales Archiv*.
- Giambona, E., Graham, J. R., Harvey, C. R., & Bodnar, G. M. (2018). The theory and practice of corporate risk management: Evidence from the field. *Financial Management*, 47(4), 783-832. doi:<https://doi.org/10.1111/fima.12232>

- Giannarakis, G., Andronikidis, A., & Sariannidis, N. (2020). Determinants of environmental disclosure: investigating new and conventional corporate governance characteristics. *Annals of Operations Research*, 294(1), 87-105.
- Gren, L., & Lenberg, P. (2020). Agility is Responsiveness to Change: An Essential Definition. *Proceedings of the Evaluation and Assessment in Software Engineering*, 348–353. doi:10.1145/3383219.3383265
- Greuning, H. v., & Brajovic-Bratanovic, S. (2022). Analyzing banking risk: A framework for assessing corporate governance and risk management.
- Grossi, G., Kallio, K.-M., Sargiacomo, M., & Skoog, M. (2019). Accounting, performance management systems and accountability changes in knowledge-intensive public organizations: A literature review and research agenda. *Accounting, Auditing & Accountability Journal*, 33(1), 256-280. doi:https://doi.org/10.1108/AAAJ-02-2019-3869
- Grossi, G., Vakkuri, J., & Sargiacomo, M. (2022). Accounting, performance and accountability challenges in hybrid organisations: a value creation perspective. *Accounting, Auditing & Accountability Journal*, 35(3), 577-597. doi:https://doi.org/10.1108/AAAJ-10-2021-5503
- Guest, P. M. (2009). The impact of board size on firm performance: Evidence from the UK. *The European Journal of Finance*, 15(4), 385-404. doi:https://doi.org/10.1080/13518470802466121
- Gulf Insider. (2021, August 17). *UAE convicts 40 people, 8 companies of fraud, money laundering*. Retrieved August 15, 2022, from <https://www.gulf-insider.com/uae-convicts-40-people-8-companies-of-fraud-money-laundering/>
- Guo, B., Wang, J., & Wei, S. X. (2018). R&D spending, strategic position and firm performance. *Frontiers of Business Research in China*, 12(1), 1-19.
- Guping, C., Sial, M. S., Wan, P., Badulescu, A., Badulescu, D., & Brugni, T. V. (2020). Do board gender diversity and non-executive directors affect CSR Reporting? Insight from agency theory perspective. *Sustainability*, 12(20).
- Gurzhii, T., Deshko, L., Gurzhii, A., Berlach, A., & Radyshevska, O. (2019). State audits in modern Ukraine: Issues, challenges, perspectives. *Public Policy and Administration*, 18(2), 281-298.
- Habib, A., Ranasinghe, D., Muhammadi, A. H., & Islam, A. (2018). Political connections, financial reporting and auditing: Survey of the empirical literature. *Journal of International Accounting, Auditing and Taxation*, 31, 37-51. doi:https://doi.org/10.1016/j.intaccaudtax.2018.05.002
- Habib, M. A., Bao, Y., Nabi, N., Dulal, M., Asha, A. A., & Islam, M. (2021). impact of strategic orientations on the implementation of green supply chain management practices and sustainable firm performance. *Sustainability*, 13(1). doi:https://doi.org/10.3390/su13010340

- Habibullah, K., & Wisner, J. D. (2019). Supply chain integration, learning, and agility: Effects on performance. *Journal of Operations and Supply Chain Management*, 12(1), 14-23. doi:<http://dx.doi.org/10.31387/oscm0360218>
- Hacker, P. (2019). Corporate governance for complex cryptocurrencies? A framework for stability and decision making in blockchain-based organizations. 140-166.
- Hammami , S. M., Ahmed , F., Johny, J., & Sulaiman, M. A. (2021). Impact of knowledge capabilities on organisational performance in the private sector in Oman: an SEM approach using path analysis. *International Journal of Knowledge Management (IJKM)*, 17(1), 15-18. doi:10.4018/IJKM.2021010102
- Handriani, E., & Robiyanto, R. (2019). Institutional ownership, independent board, the board size, and firm performance: Evidence from Indonesia. *Contaduría y administración*, 64(3).
- Haxhi, I., & Aguilera, R. V. (2015). Corporate governance through codes. *International Management*, 6. doi:10.1002/9781118785317.weom060097
- Hidayat, A. A., & Utama, S. (2017). Board characteristics and firm performance: Evidence from Indonesia. *International Research Journal of Business Studies*, 8(3), 137-154. doi:<https://doi.org/10.21632/irjbs.8.3.137-154>
- Hoang, K., Jamal, K., & Tan, H.-T. (2019). Determinants of audit engagement profitability. *The Accounting Review*, 94(6), 253-283. doi:<https://doi.org/10.2308/accr-52438>
- Hoang, T. H., Przychodzen, W., Przychodzen, J., & Segbotangni, E. A. (2021). Environmental transparency and performance: Does the corporate governance matter? *Environmental and Sustainability Indicators*, 10, 1-11. doi:<https://doi.org/10.1016/j.indic.2021.100123>
- Hu, X., Yan, H., Casey, T., & Wu, C.-H. (2021). Creating a safe haven during the crisis: How organizations can achieve deep compliance with COVID-19 safety measures in the hospitality industry. *International Journal of Hospitality Management*, 92. doi:<https://doi.org/10.1016/j.ijhm.2020.102662>
- Huu Nguyen, A., Doan, D. T., & Nguyen, L. H. (2020). Corporate governance and agency cost: Empirical evidence from Vietnam. *Journal of Risk and Financial Management*, 13(5).
- Huy, D. T., Thach, N. N., Chuyen, B. M., Nhung, P. T., Tran, D. T., & Tran, T. A. (2021). Enhancing risk management culture for sustainable growth of Asia commercial bank-ACB in Vietnam under mixed effects of macro factors. *Entrepreneurship and Sustainability Issues*, 8(3). doi:[http://doi.org/10.9770/jesi.2021.8.3\(18\)](http://doi.org/10.9770/jesi.2021.8.3(18))
- Iredele, O. O., Tankiso, M., & Adelowotan, M. O. (2020). The influence of institutional isomorphism and organisational factors on environmental management accounting practices of listed Nigerian and South African firms. *South African Journal of Accounting Research*, 34(3), 183-204.

- Ismail, A. (2021). Auditee satisfaction impact on compliance and corporate image concerning Malaysian SMEs. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(10), 3436-3452. doi:<https://doi.org/10.17762/turcomat.v12i10.5020>
- J. B. Rajkumar, "How to deliver high-value software features in a short period using agile scrum process,"(2021), Retrieved on 7 March 2021 from: <https://www.softwaretestinghelp.com/how-to-deliver-high-valuesoftware-features-in-a-short-time-period-using-agile-scrum-process>
- Jabbour, C. J., Seuring, S., Jabbour, A. B., Jugend, D., Fiorini, P. D., Latan, H., & Izeppi, W. C. (2020). Stakeholders, innovative business models for the circular economy and sustainable performance of firms in an emerging economy facing institutional voids. *Journal of Environmental Management*, 264. doi:<https://doi.org/10.1016/j.jenvman.2020.110416>
- Jairoun, A. A., Al-Hemyari, S. S., Shahwan, M., El-Dahiyat, F., Bisgwa, J., Jamshed, S., & Shourrab, H. Y. (2022). Development and Delphi validation of instrument for the preparation of a GMP audit of a cosmetic contract manufacturer in the UAE. *Scientific Reports*, 12(1), 1-11.
- Jia, J., & E.Bradbury, M. (2020). Complying with best practice risk management committee guidance and performance. *Journal of Contemporary Accounting & Economics*, 16(3). doi:<https://doi.org/10.1016/j.jcae.2020.100225>
- Joseph F. Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis A Global Perspective*. New York: Pearson Prentice Hall.
- Joshi, P. L. (2021). A review of Agile internal auditing: Retrospective and prospective. *Int. J. Smart Bus. Technol*, 9, 13-32.
- Jwaifel, D. I. (2019). The impact of the characteristics of the audit committees on avoiding financial failure in Jordanian industrial public shareholding companies listed in ASE (amman stock exchange) – applied study. *Journal of Business & Economic Policy*, 6(3). doi:10.30845/jbep.v6n3p3
- Kafidipe, A., Uwalomwa, U., Dahunsi, O., Okeme, F. O., & Ntim, C. G. (2021). Corporate governance, risk management and financial performance of listed deposit money bank in Nigeria. *Cogent Business & Management*, 8(1). doi:<https://doi.org/10.1080/23311975.2021.1888679>
- Kalsie, A., & Shrivastav, S. M. (2016). Analysis of board size and firm performance: Evidence from NSE companies using panel data approach. *Indian Journal of Corporate Governance*, 9(2), 148-172. doi:<https://doi.org/10.1177/0974686216666456>
- Kalu, E. O., Shieler, B., & Amu, C. U. (2018). Credit risk management and financial performance of microfinance institutions in Kampala, Uganda. *Independent Journal of Management & Production*, 9(1), 153-169.

- Kamaruddin, N. A., Ishak, N., Hamzah, S. R., Halim, N. A., & Rasedee, A. F. (2021). Assessing the financial performance of takaful operators in Malaysia through return on assets and return on equity. *5TH ASIA INTERNATIONAL MULTIDISCIPLINARY CONFERENCE 2021*, 3, pp. 82-85. doi:<https://doi.org/10.31580/sps.v3i1.1946>
- Kaplan, R. S. (2001). Strategic performance measurement and management in nonprofit organizations. *Nonprofit Management and Leadership*, 11(3), 353-370. doi: <https://doi.org/10.1002/nml.11308>
- Kareem, M. A. (2019). The impact of human resource development on employee performance and organizational effectiveness.
- Karim, S., Manab, N. A., & Ismail, R. (2020). The interaction effect of independent boards on corporate governance-corporate social responsibility (CG-CSR) and performance nexus. *Asian Academy of Management Journal*, 25(1). doi:<https://doi.org/10.21315/aamj2020.25.1.4>
- Kasasbeh, F. I. (2021). Impact of financing decisions ratios on firm accounting-based performance: Evidence from Jordan listed companies. *Future Business Journal*, 7(1), 1-10.
- Khalid, A. A. (2020). Role of audit and governance committee for internal shariah audit effectiveness in islamic banks. *Asian Journal of Accounting Research*, 5(1), 81-89. doi:<https://doi.org/10.1108/AJAR-10-2019-0075>
- Khalid, A. A. (2020). Role of audit and governance committee for internal shariah audit effectiveness in islamic banks. *Asian Journal of Accounting Research*, 5(1), 81-89. doi:<https://doi.org/10.1108/AJAR-10-2019-0075>
- Khalil, R., Asad, M., & Khan, S. N. (2018). Management motives behind the revaluation of fixed assets for sustainability of entrepreneurial companies. *International Journal of Entrepreneurship*, 22(Special), 1-9.
- Khan, N. A., & Khan, A. N. (2019). What followers are saying about transformational leaders fostering employee innovation via organisational learning, knowledge sharing and social media use in public organisations? *Government Information Quarterly*, 36(4). doi:<https://doi.org/10.1016/j.giq.2019.07.003>
- Khatib, S. F., Abdullah, D. F., Elamer, A., & Hazaea, S. A. (2022). The development of corporate governance literature in Malaysia: A systematic literature review and research agenda. *Corporate Governance*, 22 (5), 1026-1053. doi:<https://doi.org/10.1108/CG-12-2020-0565>
- Khrapkina, V., Matukova, H., & Korovina, O. (2019). Formation of mechanism of business management by means of ps and creative management in the context of providing investment attractiveness.
- Khudhair, D. Z., Al-Zubaidi, F. K., & Raji, A. A. (2019). The effect of board characteristics and audit committee characteristics on audit quality. *Management Science Letters*, 9(2), 271-282. doi:10.5267/j.msl.2018.11.012

- Khushi, M., din, S. M., & Sulaiman, M. A. (2020). Effects of profitability measures on free cash flow; evidence from pakistan stock exchange . *International Journal of Scientific & Technology Research*, 9(2), 3882-3889.
- KPMG, "Agile internal audit: White paper on working agile within internal audit functions," (2019), Retrieved on 2 October 2020 from: <https://assets.kpmg/content/dam/kpmg/cn/pdf/en/2020/06/agile-internalaudit-white-paper-on-working-agile-within-internal-audit-functions.pdf>
- Kraev, V. M., & Tikhonov, A. I. (2019). Risk management in human resource management. *TEM Journal*, 8(4), 1185-1190. doi:10.18421/TEM84-11
- Kuvshinov, D., & Zimmermann, K. (2022). The big bang: Stock market capitalization in the long run. *Journal of Financial Economics*, 145(2), 527-552. doi:<https://doi.org/10.1016/j.jfineco.2021.09.008>
- lamelas, A. (2018, 10 11). *www.xpand-it.com*. Retrieved 12 5, 2020, from <https://www.xpand-it.com/2018/10/11/top-5-agile-methodologies/>
- Larmou, S., & Vafeas, N. (2010). The relation between board size and firm performance in firms with a history of poor operating performance. *Journal of Management & Governance*, 61, 1-14. doi:<https://doi.org/10.1007/s10997-009-9091-z>
- Lee, T. K., Cho, J. H., Kwon, D. S., & Sohn, S. Y. (2019). Global stock market investment strategies based on financial network indicators using machine learning techniques. *Expert Systems with Applications*, 117, 228-242. doi:<https://doi.org/10.1016/j.eswa.2018.09.005>
- Lela, H., & Nuryakin, N. (2020). The relationship between organizational capability, organizational learning, and financial performance. *The Journal of Asian Finance, Economics and Business*, 7(8), 625-633. doi:<https://doi.org/10.13106/jafeb.2020.vol7.no8.625>
- Lenz, R., Sarens, G., & Jeppesen, K. K. (2018). In search of a measure of effectiveness for internal audit functions: An institutional perspective. *Edpacs*, 58(2), 1-36. doi:<https://doi.org/10.1080/07366981.2018.1511324>
- Liao, S., Liu, Z., & Ma, C. (2019). Direct and configurational paths of open innovation and organisational agility to business model innovation in SMEs. *Technology Analysis & Strategic Management*, 31(10), 1213-1228. doi:<https://doi.org/10.1080/09537325.2019.1601693>
- Lima, M. L., Barilari, A., Massone, H. E., & Pascual, M. (2022). Incorporating local researchers' and decision makers' preferences for groundwater resources management in a spatial multi-voiced decision model. *Journal of Environmental Management*, 302. doi:<https://doi.org/10.1016/j.jenvman.2021.113954>
- Luan, C.-J., & Tang, M.-J. (2007). Where is independent director efficacy? *Corporate Governance An International Review*, 15(4), 636-643. doi:<https://doi.org/10.1111/j.1467-8683.2007.00593.x>

- Lumbi, H. K. (2021). *Corporate governance compliance and financial performance of listed companies in Kenya* (Doctoral dissertation, Strathmore University).
- Mahmod, A. L., & ALkabbji, R. F. (2020). Impact of external auditing quality and audit committees on accounting conservatism and the performance of industrial firms listed at the amman stock exchange. *International Journal of Financial Research*, 11(4), 556-562. doi:10.5430/ijfr.v11n4p556
- Mahrani, M., & Soewarno, N. (2018). The effect of good corporate governance mechanism and corporate social responsibility on financial performance with earnings management as mediating variable. *Asian Journal of Accounting Research*, 3(1), 41-60. doi:https://doi.org/10.1108/AJAR-06-2018-0008
- Malik, M., Wan, D., Ahmad, M. I., Naseem, M. A., & Rehman, R. U. (2014). Role of board size In corporate governance and firm performance applying pareto approach, is it cultural phenomena? *Journal of Applied Business Research*, 30(5), 1395-1406. doi:https://doi.org/10.19030/jabr.v30i5.8795
- Manning, B., Braam, G., & Reimsbach, D. (2019). Corporate governance and sustainable business conduct—Effects of board monitoring effectiveness and stakeholder engagement on corporate sustainability performance and disclosure choices. *Corporate Social Responsibility and Environmental Management*, 26(2), 351-366. doi:https://doi.org/10.1002/csr.1687
- Mardjono, E. S., & Chen, Y.-S. (2020). Earning management and the effect characteristics of audit committee, independent commissioners: Evidence from Indonesia. *International Journal of Business and Society*, 21(2), 569-587. doi:https://doi.org/10.33736/ijbs.3272.2020
- Mardnly, Z., Mouselli, S., & Abdulraouf, R. (2018). Corporate governance and firm performance: An empirical evidence from Syria. *International Journal of Islamic and Middle Eastern Finance and Management*, 11(4), 591-607. doi:https://doi.org/10.1108/IMEFM-05-2017-0107
- Masulis, R. W. (2019). How valuable are independent directors? Evidence from external distractions. *Journal of Financial Economics*, 132(3), 226-256. doi:https://doi.org/10.1016/j.jfineco.2018.02.014
- Mauerhofer, V. (2019). An introduction and overview on law, politics and governance: Institutions, organizations and procedures for ecological economics. *Ecological Economics*, 165. doi:https://doi.org/10.1016/j.ecolecon.2019.106396
- McCahery, J. A., Sautner, Z., & Starks, L. T. (2015). Behind the scenes: The corporate governance preferences of institutional investors. *Journal of Finance*, Forthcoming , 1-46.
- Meng, Y., Clements, M. P., & Padgett, C. (2018). Independent directors, information costs and foreign ownership in Chinese companies. *Journal of International Financial Markets, Institutions and Money*, 53, 139-157. doi:https://doi.org/10.1016/j.intfin.2017.09.016

- Merendino, A., & Melville, R. (2019). The board of directors and firm performance: Empirical evidence from listed companies. *Corporate Governance*, 19(3), 508-551. doi:<https://doi.org/10.1108/CG-06-2018-0211>
- Mertzanis, C., Balntas, V., & Pantazopoulos, T. (2019). Internal auditor perceptions of corporate governance in Greece after the crisis. *Qualitative Research in Accounting & Management*, 17(2), 201-227. doi:<https://doi.org/10.1108/QRAM-07-2018-0045>
- Mnif, Y., & Znazen, O. (2020). Corporate governance and compliance with IFRS 7: The case of financial institutions listed in Canada. *Managerial Auditing Journal*, 35 (3), 448-474. doi:<https://doi.org/10.1108/MAJ-08-2018-1969>
- Mohammad, W. M., & Wasiuzzaman, S. (2020). Effect of audit committee independence, board ethnicity and family ownership on earnings management in Malaysia. *Journal of Accounting in Emerging Economies*, 10(1), 74-99. doi:<https://doi.org/10.1108/JAEE-01-2019-0001>
- MohammadRezaei, F., Mohd-Saleh, N., & Ahmed, K. (2018). Audit firm ranking, audit quality and audit fees: Examining conflicting price discrimination views. *International Journal of Accounting*, 53(4), 295-313. doi:<https://doi.org/10.1016/j.intacc.2018.11.003>
- Mohammed, A. M. (2018). The impact of audit committee characteristics on firm performance: Evidence from Jordan. *Academy of Accounting and Financial Studies Journal*, 22(5), 1-7.
- Mohammed, I. A., Che0Ahmad, A., & Malek, M. (2018). Shareholder's involvement in the audit committee, audit quality and financial reporting lag in Nigeria. *Business and Economic Horizons (BEH)*, 14, 355 - 374. doi:10.22004/ag.econ.285178
- Morozova, N. I., Tinyakova, V. I., Platko, A. Y., Sozaeva, D. A., & Shirokovskih, S. A. (2020). The development of cooperative organizations and ensuring their viability through the prism of the main guidelines of the new institutional theory. *Revista Turismo Estudos & Práticas*, 54-54.
- Mosteanu, N. R. (2019). Intelligent tool to prevent economic crisis–Fractals. A possible solution to assess the management of financial risk. *Calitatea*, 20(172), 13-17.
- Munir, M., Jajja, M. S., Chatha, K. A., & Farooq, S. (2020). Supply chain risk management and operational performance: The enabling role of supply chain integration. *International Journal of Production Economics*, 227. doi:<https://doi.org/10.1016/j.ijpe.2020.107667>
- Munir, M., Jajja, M. S., Chatha, K. A., & Farooq, S. (2020). Supply chain risk management and operational performance: The enabling role of supply chain integration. *International Journal of Production Economics*, 38(3), 690-712. doi:<https://doi.org/10.1108/IJOPM-08-2015-0508>

- Murray, A., Kuban, S., Josefy, M., & Anderson, J. (2021). Contracting in the smart era: The implications of blockchain and decentralized autonomous organizations for contracting and corporate governance. *Academy of Management Perspectives*, 35(4), 622-641. doi:<https://doi.org/10.5465/amp.2018.0066>
- Murray, A., Kuban, S., Josefy, M., & Anderson, J. (2021). Contracting in the smart era: The implications of blockchain and decentralized autonomous organizations for contracting and corporate governance. *Academy of Management Perspectives*, 35(4), 622-641. doi:<https://doi.org/10.5465/amp.2018.0066>
- Musyoki, D., & Kadubo, A. S. (2012). The impact of credit risk management on the financial performance of Banks in Kenya for the period 2000-2006. *International Journal of Business and Public Management*, 2(2), 72-80.
- Mutai, J. K. (2020). Can a company's Pre-IPO return on Assets (ROA), Return on Equity (ROA) and initial returns predict post-IPO performance. *Journal of Finance and Economics*, 8(3), 93-99. doi:10.12691/jfe-8-3-1
- Muttakin, M.B., Khan, A. and Belal, A.R. (2015), "Intellectual capital disclosures and corporate governance: an empirical examination", *Advances in Accounting*, Vol. 31 No. 2, pp. 219-227.
- Mwape, A. (2022). The impact of poor corporate governance on the effectiveness of internal audit at the road development agency (RDA) in Zambia. *Open Journal of Business and Management*, 10(5), 2325-2365. doi:10.4236/ojbm.2022.105116
- Naciti, V. (2019). Corporate governance and board of directors: The effect of a board composition on firm sustainability performance. *Journal of Cleaner Production*, 237. doi:<https://doi.org/10.1016/j.jclepro.2019.117727>
- Nalukenge, I. (2019). Board role performance and compliance with IFRS disclosure requirements among microfinance institutions in Uganda. *International Journal of Law and Management*, 62(1), 47-66. doi:<https://doi.org/10.1108/IJLMA-08-2017-0195>
- Naseem, T., Shahzad, F., Asim, G. A., Rehman, I. U., & Nawaz, F. (2019). Corporate social responsibility engagement and firm performance in Asia Pacific: The role of enterprise risk management. *Corporate Social Responsibility and Environmental Management*, 27(2), 501-513. doi:<https://doi.org/10.1002/csr.1815>
- Nasrallah, N., & Khoury, R. E. (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. doi:<https://doi.org/10.1080/20430795.2021.1874213>
- Naz, I., Shah, S. M., & M.Kutan, A. (2017). Do managers of sharia-compliant firms have distinctive financial styles? *Journal of International Financial Markets, Institutions and Money*, 46, 174-187. doi:<https://doi.org/10.1016/j.intfin.2016.05.005>

- Nestor, B., McDermott, M. B., Boag, W., Berner, G., Naumann, T., Hughes, M. C., . . . Ghassemi, M. (2019). Feature robustness in non-stationary health records: Caveats to deployable model performance in common clinical machine learning tasks. *In Machine Learning for Healthcare Conference*, 381-405.
- Newmark, R. I., Dickey, G., & Wilcox, W. E. (2018). Agility in audit: Could scrum improve the audit process?. *Current Issues in Auditing*, 12(1), A18-A28.
- Nguyen, L. A., & Kend, M. (2021). The perceived impact of the KAM reforms on audit reports, audit quality and auditor work practices: Stakeholders' perspectives. *Managerial Auditing Journal*, 36(3), 437-462. doi:<https://doi.org/10.1108/MAJ-10-2019-2445>
- Nowak, M. (2019). Statutory auditors' self-perception and their perception of audited companies and accountants. Behavioral research with the use of metaphors. *Zeszyty Teoretyczne Rachunkowości*, 103(159), 227-242.
- Nuryana, Y., & Surjandari, D. A. (2019). The effect of good corporate governance mechanism, and earning management on company financial performance. *Global Journal of Management and Business Research*, 19(1).
- OCEG. (2021, september 25). *oceg.org*. Retrieved from <https://www.oceg.org/about/what-is-grc/>
- Ousama, A. A., Al-Mutairi, M. T., & Fatima, A. H. (2019). The relationship between intellectual capital information and firms' market value: A study from an emerging economy. *Measuring Business Excellence*, 24(1), 39-51. doi:<https://doi.org/10.1108/MBE-01-2019-0002>
- Oussii, A. A., & Taktak, N. B. (2018). Audit committee effectiveness and financial reporting timeliness: The case of Tunisian listed companies. *African Journal of Economic and Management Studies*, 9 (1), 34-55. doi:<https://doi.org/10.1108/AJEMS-11-2016-0163>
- Palaniappan, G. (2017). Determinants of corporate financial performance relating to board characteristics of corporate governance in Indian manufacturing industry: An empirical study. *European Journal of Management and Business Economics*, 26(1), 67-85. doi:<https://doi.org/10.1108/EJMBE-07-2017-005>
- Pamungkas, I. D., & PURWANTORO, M. P. S. (2023). Corporate Governance and Financial Performance on Firm Value: The Case of Indonesia. *WSEAS Transactions on Business and Economics*, 20, 92-103.
- Pantelidis, P., & Zezou, S. (2018). Managerial decisions and accounting performance following mergers in Greece. *Investment Management & Financial Innovations*, 15(1), 263-276.
- Parashkevova, E. (2020). Integrating project risk into risk management strategies in public sector organizations. *IJASOS-International E-journal of Advances in Social Sciences*, 6(16), 283-293. doi:<https://doi.org/10.18769/ijasos.616039>

- Pererva, P. G., Kobieliava, T. O., Tkachova, N. P., Tkachov, M. M., & Diachenko, T. A. (2021). Management of relations with enterprise stakeholders based on value approach. doi:doi.org/10.21511/ppm.19(1).2021.03
- Pointer, L. V., & Khoi, P. D. (2019). Predictors of return on assets and return on equity for banking and insurance companies on Vietnam stock exchange. *Entrepreneurial Business and Economics Review*, 7(4), 185-198. doi:https://doi.org/10.15678/EBER.2019.070411
- Poletti-Hughes, J., & Briano-Turrent, G. C. (2019). Gender diversity on the board of directors and corporate risk: A behavioural agency theory perspective. *International Review of Financial Analysis*, 62, 80-90. doi:https://doi.org/10.1016/j.irfa.2019.02.004
- Pombo, C., & Gutiérrez, L. H. (2011). Outside directors, board interlocks and firm performance: Empirical evidence from Colombian business groups. *Journal of Economics and Business*, 63(4), 251-277. doi:https://doi.org/10.1016/j.jeconbus.2011.01.002
- Pouliopoulos, T., & Georgiadis, K. (2021). FIFA and UEFA, a critical review of the two organizations through the lens of institutional theory and MacIntyre's philosophical schema. *Soccer & Society*, 22(7), 778-790. doi:https://doi.org/10.1080/14660970.2021.1896498
- ProofHub, "What are the 10 key characteristics of agile project management?" (2019), Retrieved on 28 March 2021 from: <https://blog.proofhub.com/what-are-the-main-characteristics-of-an-agile-project-managementmethodology-e28c4bd59b55>
- Puni, A., & Anlesinya, A. (2019). Corporate governance mechanisms and firm performance in a developing country. *International Journal of Law and Management*, 62 (2), 147-169. doi:https://doi.org/10.1108/IJLMA-03-2019-0076
- Purba, M. N., Sinurat, E. K., Djailani, A., & Farera, W. (2020). The effect of current ratio, return on assets, total asset turnover and sales growth on capital structure in manufacturing company. *International Journal of Social Science and Business*, 4(3), 489-500. doi:https://doi.org/10.23887/ijssb.v4i3.27958
- Purkayastha, S., Veliyath, R., & George, R. (2019). The roles of family ownership and family management in the governance of agency conflicts. *Journal of Business Research*, 98, 50-64. doi:https://doi.org/10.1016/j.jbusres.2019.01.024
- PWC, "Staying the course toward true north: Navigating disruption," (2017), Retrieved on 8 December 2020 from: <https://www.pwc.com/us/en/risk-assurance/sotp/2017-state-of-the-internal-audit-professionreport>.
- Qalati, S. A., Ostic, D., Sulaiman, M. A., Gopang, A. A., & Khan, A. (2022). Social media and SMEs' performance in developing countries: effects of technological-organizational-environmental factors on the adoption of social media. *SAGE Open*, 12(2), 1-13. doi:10.1177/21582440221094594

- Qamhan, M. A., Haat, M. H., Hashim, H. A., & Salleh, Z. (2018). Earnings management: Do attendance and changes of audit committee members matter? *Managerial Auditing Journal*, 33(8/9), 760-778. doi: <https://doi.org/10.1108/MAJ-05-2017-1560>
- Quinlan, C., Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2018). *Business Research Methods* (2 ed.). London: Cengage Learning.
- Radhouane, I., Nekhili, M., Nagati, H., & Paché, G. (2019). Is voluntary external assurance relevant for the valuation of environmental reporting by firms in environmentally sensitive industries? *Sustainability Accounting, Management and Policy Journal*, 11(1), 65-98. doi: <https://doi.org/10.1108/SAMPJ-06-2018-0158>
- Rajgopal, S., Srinivasan, S., & Zheng, X. (2021). Measuring audit quality. *Review of Accounting Studies*, 26(2), 559-619.
- Raza, W., Hayat, K., Farooq, N., & Bilal, H. (2020). Corporate governance and return on equity evidence from Pakistan stock exchange. *Journal of Accounting and Finance in Emerging Economies*, 6(1), 63-72. doi: <https://doi.org/10.26710/jafee.v6i1.1061>
- Ren, C., Deng, Z., Hong, Z., & Zhang, W. (2019). Health information in the digital age: an empirical study of the perceived benefits and costs of seeking and using health information from online sources. *Health Information & Libraries Journal*, 36(2), 153-167. doi: <https://doi.org/10.1111/hir.12250>
- Rialdy, N. (2019). Influence of return on equity (ROE), the price earnings ratio (per) and the capital structure of the company's share price against the sub sectors of transport registered in bursaefek Indonesia (BEI). *International Journal of Accounting & Finance in Asia Pasific (IJAFAP)*, 2(3), 46-53.
- Riphah, H. Z., Ali, S., Danish, M., & Sulaiman, M. A. (2022). Factors affecting consumers intentions to purchase dairy products in Pakistan: a cognitive affective-attitude approach. *Journal of International Food & Agribusiness Marketing*. doi:10.1080/08974438.2022.2125919
- Rosa, L., Fabio, Caserio, C., & Bernini, F. (2019). Corporate governance of audit firms: Assessing the usefulness of transparency reports in a Europe-wide analysis. *Corporate Governance: An International Review*, 27(1), 14-32. doi: <https://doi.org/10.1111/corg.12235>
- Roszkowska, P. (2020). Fintech in financial reporting and audit for fraud prevention and safeguarding equity investments. *Journal of Accounting & Organizational Change*, 17(2), 164-196. doi: <https://doi.org/10.1108/JAOC-09-2019-0098>
- Saad, R. A., Farouk, A. U., & Kadir, D. A. (2020). Business zakat compliance behavioral intention in a developing country. *Journal of Islamic Accounting and Business Research*, 11(2), 511-530. doi: <https://doi.org/10.1108/JIABR-03-2018-0036>

- Sadangi, C. K., Mohapatra, S., & Sinha, K. (2020). Automation of Local Fund Audit (ALFA): Aligning the Goal of Audit in Nation.
- Safta, I.-L., Achim, M. V., & Borlea, S. N. (2020). Manipulation of financial statements through the use of creative accounting. Case of Romanian companies. *Studia Universitatis Vasile Goldiș Arad, Seria Științe Economice*, 30(3), 90-107.
- Saidat, Z., Silva, M., & Seaman, C. (2018). The relationship between corporate governance and financial performance: Evidence from Jordanian family and nonfamily firms. *Journal of Family Business Management*, 9(1), 54-78. doi:<https://doi.org/10.1108/JFBM-11-2017-0036>
- Saleem, I., Khan, M. N., Hasan, R., & Ashfaq, M. (2020). Corporate board for innovative managerial control: implications of corporate governance deviance perspective. *Corporate Governance: The International Journal of Business in Society*, 21(3), 450-462. doi:<https://doi.org/10.1108/CG-04-2020-0151>
- Sales, L. d., & Barbalho, S. (2018). Identifying system archetypes in order to comprehend and improve the program management practices in organizations. *IEEE Transactions on Engineering Management*, 67(1), 163-173. doi:10.1109/TEM.2018.2874770
- Santika, E., Fakhruhozy, M. H., Nur, W. M., & Lestari, H. S. (2022). Effect of operational risk on financial performance in banking industry IDX. *Jurnal Ekonomi*, 27(1), 123-137.
- Sarbanes, P., & act, S.-o. (2002). In the public company accounting reform and investor protection act. *Washington DC: US Congress*, 55.
- Septyanto, D., Nugraha, I. M., & Triandewo, M. A. (2020). How corporate risk management and other factors have an impact on the value of property and real estate companies listed on the Indonesia Stock Exchange (IDX) during 2015–2018. *Southeast Asia Journal of Contemporary Business, Economics, and Law*, 23(1), 188-200.
- Serna, L. R., Bowyer, D. M., & Gregory, S. K. (2022). Management control systems. A non-family stakeholder perspective on the critical success factors influencing continuous stakeholder support during businesses succession. *Journal of Small Business and Enterprise Development ahead-of-print*. doi:<https://doi.org/10.1108/JSBED-09-2021-0364>
- Shad, M. K., Lai, F.-W., Fatt, C. L., Klemeš, J. J., & Bokhari, A. (2019). Integrating sustainability reporting into enterprise risk management and its relationship with business performance: A conceptual framework. *Journal of Cleaner Production*, 208, 415-425. doi:<https://doi.org/10.1016/j.jclepro.2018.10.120>
- Shahid, M. N., Abbas, A., Latif, K., Attique, A., & Khalid, S. (2020). The mediating role of board size, philanthropy and working capital management between basic corporate governance factors and firm's performance. *Journal of Asian Business and Economic Studies*, 27(2), 135-151. doi:<https://doi.org/10.1108/JABES-07-2018-0050>

- Shahwan, T. M. (2015). The effects of corporate governance on financial performance and financial distress: evidence from Egypt. *Corporate Governance*, 15(5), 641-662.
- Shaker, R. Z., Asad, M., & Zulfikar, N. (2018). Do predictive power of fibonacci retracements help the investor to predict future? A study of Pakistan Stock Exchange. *International Journal of Economics and Financial Research*, 4(6), 159-164.
- Shakir, R. (2008). Board size, executive directors and property firm performance in Malaysia. *Pacific Rim Property Research Journal*, 14(1), 66-80. doi:<https://doi.org/10.1080/14445921.2008.11104248>
- Shatnawi, S. A., Marei, A., Hanefah, M. M., Eldaia, M., & Alaaraj, S. (2022). The effect of audit committee on financial performance of listed companies in Jordan: the moderating effect of enterprise risk management. *Journal of Management Information & Decision Sciences*,
- Shbeilat, M. K. (2019). International Standard on Auditing No. 260 and Audit Quality: Evidence from Jordan. *International Business Research*, 12(4), 61-75.
- Shin, J. Y., Hyun, J.-H., Oh, S., & Yang, H. (2017). The effects of politically connected outside directors on firm performance: Evidence from Korean chaebol firms. *Corporate Governance An International Review*, 26(1), 23-44. doi:<https://doi.org/10.1111/corg.12203>
- Shrouf, H., Al-Qudah, S., Khawaldeh, K., Obeidat, A., & Rawashdeh, A. (2020). A study on relationship between human resources and strategic performance: The mediating role of productivity. *Management Science Letters*, 10(13), 3189-3196. doi:10.5267/j.msl.2020.5.002
- Sikka, P., Hudson, A., Hadden, T., Willmott, H., Christensen, J., Cooper, C., & al., C. H. (2018). A better future for corporate governance: Democratising corporations for their long-term success.
- Simunic, D. A. (1980). The pricing of audit services: Theory and evidence. *Journal of Accounting Research*, 18(1), 161-190. doi:<https://doi.org/10.2307/2490397>
- Singh, A. K., Singhania, S., & Sardana, V. (2019). Do women on boards affect firm's financial performance? Evidence from Indian IPO firms. *Australasian Accounting, Business and Finance Journal*, 13(2), 53-68. doi:10.14453/aabfj.v13i2.4
- Solomon, J. (2020). *Corporate governance and accountability*. John Wiley & Sons.
- Songling, Y., Ishtiaq, M., & Anwar, M. (2018). Enterprise risk management practices and firm performance, the mediating role of competitive advantage and the moderating role of financial literacy. *Journal of Risk and Financial Management*, 11(3). doi:<https://doi.org/10.3390/jrfm11030035>

- Suarez, C., V., V., Schellart, A. N., & Shucksmith, W. B. (2019). Quantifying the impact of uncertainty within the longitudinal dispersion coefficient on concentration dynamics and regulatory compliance in rivers. *Water Resources Research*, 55(5), 4393-4409. doi: <https://doi.org/10.1029/2018WR023417>
- Suchek, N., Fernandes, C. I., Kraus, S., Filser, M., & Sjögrén, H. (2021). Innovation and the circular economy: A systematic literature review. *Business Strategy and the Environment*, 30(8), 3686-3702. doi:<https://doi.org/10.1002/bse.2834>
- Sulaiman, M. A. (2002). *How to Attract Foreign Direct Investment: The Case of Oman*. Oxford: Oxford Brookes University.
- Sulaiman, M. A., & Ahmed, M. N. (2017). The essential elements of organized retail stores in influencing customers to stores. *International Journal of Applied Business and Economic Research*, 15(6), 1-6.
- Sutaryo, S., Sahari, S., Jakpar, S., & Balia, S. S. (2023). Internal audit function, political characteristics, and compliance with government accrual-based accounting standards in Indonesian local government. *Contaduría y administración*, 68(1), 25-57
- Syrová, L., & Špička, J. (2023). Exploring the indirect links between enterprise risk management and the financial performance of SMEs. *Risk Management*, 25(1), 1.
- Tahir, I. M., & Razali, A. R. (2011). The Relationship between enterprise risk management (ERM) and firm value: Evidence from Malaysian public listed companies. *International Journal of Economics and Management Sciences*, 1(2), 32-41.
- Tanjung, M. (2020). A cross-firm analysis of corporate governance compliance and performance in Indonesia. *Managerial Auditing Journal*, 35(5), 621-643. doi:<https://doi.org/10.1108/MAJ-06-2019-2328>
- Temesgen, A., & Estifanos, L. (2018). Determinants of internal audit effectiveness: Evidence from Gurage Zone. *Research Journal of Finance and Accounting*, 9(19), 15-25.
- Teoh, A. P., Lee, K. Y., & Muthuveloo, R. (2017). The impact of enterprise risk management, strategic agility, and quality of internal audit function on firm performance. *International Review of Management and Marketing*, 7(1), 222-229.
- Tran, Q. T. (2019). Independent directors and corporate investment: Evidence from an emerging market. *Journal of Economics and Development*, 21(1), 30-41. doi:<https://doi.org/10.1108/JED-06-2019-0008>
- Tuán, N. V. (2021). Mainstream theories of corporate governance and the corporate governance–firm performance relationship. *Science & Technology Development Journal-Economics-Law and Management*, 5(3), 1638-1647.

- Tulung, J. E., & Ramdani, D. (2018). Independence, size and performance of the board: An emerging market research. *Corporate Ownership & Control*, 15(2), 8. doi:<https://ssrn.com/abstract=3133857>
- Ud Din, N., Cheng, X., Ahmad, B., Sheikh, M. F., Adedigba, O. G., Zhao, Y., & Nazneen, S. (2021). Gender diversity in the audit committee and the efficiency of internal control and financial reporting quality. *Economic Research-Ekonomska Istraživanja*, 34(1), 1170-1189. doi:<https://doi.org/10.1080/1331677X.2020.1820357>
- Ullah, Z., Otero, S. Á., Sulaiman, M. A., Sial, M. S., Ahmad, N., Scholz, M., & Omhand, K. (2021). Achieving organizational social sustainability through electronic performance appraisal systems: the moderating Influence of transformational leadership. *sustainability*, 13(10), 1-14. doi:0.3390/su13105611
- Ullah, Z., Sulaiman, M. A., Ali, S. B., Ahmad, N., Scholz, M., & Han, H. (2021). The effect of work safety on rrganizational social sustainability Improvement in the healthcare sector: the case of a public sector hospital in Pakistan. *International Journal of Environmental Research and Public Health*, 18(12), 1-18. doi:10.3390/ijerph18126672
- Unerman, J., Bebbington, J., & O'dwyer, B. (2018). Corporate reporting and accounting for externalities. *Accounting And Business Research*, 48(5), 497-522. doi:<https://doi.org/10.1080/00014788.2018.1470155>
- Vadasi, C., Bekiaris, M., & Andrikopoulos, A. (2019). Corporate governance and internal audit: An institutional theory perspective. *Corporate Governance: The International Journal of Business in Society*, 20(1), 175-190. doi:<https://doi.org/10.1108/CG-07-2019-0215>
- Vafeas, N., & Vlittis, A. (2018). Independent directors and defined benefit pension plan freezes. *Journal of Corporate Finance*, 50, 505-518. doi:<https://doi.org/10.1016/j.jcorpfin.2017.10.003>
- Van Wijk, J., Zietsma, C., Dorado, S., Bakker, F. G., & Marti, I. (2019). Social innovation: Integrating micro, meso, and macro level insights from institutional theory. *Business & Society*, 58(5), 887-918. doi:<https://doi.org/10.1177/0007650318789104>
- Velte, P., & Issa, J. (2019). The impact of key audit matter (KAM) disclosure in audit reports on stakeholders' reactions: A literature review. *Problems and Perspectives in Management*, 17(3), 323-341.
- Venturelli, A., Caputo, F., Leopizzi, R., & Pizzi, S. (2018). The state of art of corporate social disclosure before the introduction of non-financial reporting directive: A cross country analysis. *Social Responsibility Journal*, 15(4), 409-423. doi:<https://doi.org/10.1108/SRJ-12-2017-0275>

- Vitolla, F., Raimo, N., & Rubino, M. (2020). Board characteristics and integrated reporting quality: An agency theory perspective. *Corporate Social Responsibility and Environmental Management*, 27(2), 1152-1163. doi: <https://doi.org/10.1002/csr.1879>
- Walsham, G. (2006). Doing interpretive research. *European Journal of Information Systems*, 15(3), 320-330. doi: <https://doi.org/10.1057/palgrave.ejis.3000589>
- Wang, R., Lu, S., & Feng, W. (2020). Impact of adjustment strategies on building design process in different climates oriented by multiple performance. *Applied Energy*, 266. doi: <https://doi.org/10.1016/j.apenergy.2020.114822>
- Wang, S., Wang, H., Wang, J., & Yang, F. (2020). Does environmental information disclosure contribute to improve firm financial performance? An examination of the underlying mechanism. *Science of the Total Environment*, 714. doi: <https://doi.org/10.1016/j.scitotenv.2020.136855>
- Weir, C., Laing, D., & McKnight, P. J. (2002). Internal and external governance mechanisms: Their impact on the performance of large UK public companies. 29(5-6), 579-611. doi: <https://doi.org/10.1111/1468-5957.00444>
- Widagdo, A. K., Rahanyamtel, B. A., & Ika, S. R. (2022, April). The impact of audit committee characteristics, financial performance, and listing age on greenhouse gas emission disclosures of highly emitted industry in Indonesia. In IOP Conference Series: Earth and Environmental Science (Vol. 1016, No. 1, p. 012047). IOP Publishing.
- Wintoki, M. B., Linck, J. S., & Netter, J. M. (2012). Endogeneity and the dynamics of internal corporate governance. *Journal of Financial Economics*, 105(3), 581-606. doi: [10.1016/j.jfineco.2012.03.005](https://doi.org/10.1016/j.jfineco.2012.03.005)
- Wu, B., Monfort, A., Jin, C., & Shen, X. (2022). Substantial response or impression management? Compliance strategies for sustainable development responsibility in family firms. *Technological Forecasting and Social Change*, 174. doi: <https://doi.org/10.1016/j.techfore.2021.121214>
- Xiao, T., Geng, C., & Yuan, C. (2020). How audit effort affects audit quality: An audit process and audit output perspective. *China Journal of Accounting Research*, 13(1), 109-127. doi: <https://doi.org/10.1016/j.cjar.2020.02.002>
- Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics*, 40(2), 185-211. doi: [https://doi.org/10.1016/0304-405X\(95\)00844-5](https://doi.org/10.1016/0304-405X(95)00844-5)
- Yilmaz, A. K. (2019). Transformation process risk management to sustainable corporate performance and quality management: developing flowcharts for approved training organization. *Aircraft Engineering and Aerospace Technology*, 92(2), 201-212. doi: <https://doi.org/10.1108/AEAT-07-2019-0151>
- Younas, N., UdDin, S., Awan, T., & Khan, M. Y. (2021). Corporate governance and financial distress: Asian emerging market perspective. *Corporate Governance*, 21 (4), 702-715. doi: <https://doi.org/10.1108/CG-04-2020-0119>

- Yusuf, M., & Kanji, L. (2020). Effect of internal audit and accounting information system on the effectiveness of internal control. *ATESTASI: Jurnal Ilmiah Akuntansi*, 3(2), 120-125.
- Zalata, A. M., & Abdelfattah, T. (2021). Non-executive female directors and earnings management using classification shifting. *Journal of Business Research*, 134. doi:<https://doi.org/10.1016/j.jbusres.2021.04.063>
- Zaman, R., Bahadar, S., Kayani, U. N., & Arslan, M. (2018). Role of media and independent directors in corporate transparency and disclosure: Evidence from an emerging economy. *Corporate Governance*, 18(5), 858-885. doi: <https://doi.org/10.1108/CG-01-2018-0042>
- Zasada, A. (2019, october 31). Design Principles for Ensuring Compliance. Rostock. Retrieved october 6, 2020, from http://rosdok.uni-rostock.de/file/rosdok_disshab_0000002302/rosdok_derivate_0000088840/Zasada_Dissertation_2020.pdf
- Zeni, T. A., Buckley, M. R., Mumford, M. D., & Griffith, J. A. (2016). Making “sense” of ethical decision making. *The Leadership Quarterly*, 27(6), 838-855. doi:<https://doi.org/10.1016/j.leaqua.2016.09.002>
- Zhang, B., Liang, H., Gao, Y., & Zhang, G. (2018). The optimization-based aggregation and consensus with minimum-cost in group decision making under incomplete linguistic distribution context. *Knowledge-Based Systems*, 162, 92-102. doi:<https://doi.org/10.1016/j.knosys.2018.05.038>
- Zhou, H., Owusu-Ansah, S., & Maggina, A. (2018). Board of directors, audit committee, and firm performance: Evidence from Greece. *Journal of International Accounting, Auditing and Taxation*, 31, 20-36. doi:<https://doi.org/10.1016/j.intaccaudtax.2018.03.002>
- Zhou, J., Fang, Y., & Grover, V. (2022). Managing collective enterprise information systems compliance: A social and performance management context perspective. *MIS Quarterly*, 46(1).
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). *Business research methods*. Cengage Learning. South-Western: Erin Joyner.
- Zraiq, M. A., & Fadzil, F. H. (2018). The impact of audit committee characteristics on firm performance: Evidence from Jordan. *Scholar Journal of Applied Sciences and Research*, 1(5), 39-42.

APPENDICES

Appendix A

Descriptive

Notes		
Output Created		11-MAR-2023 18:56:16
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	300
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=ROA TobinsQ B.Size B.Ind Dual B.Exp AC.Size AC.Ind AC.Exp AC.Meet INTERNALAUDITDEPT ORGNMEMBERS flexauditplan flexauditexecution flexauditreporting Dr SC LnTA LEV ROE LOSS GROWTH /STATISTICS=MEAN STDDEV MIN MAX KURTOSIS SKEWNESS.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

[DataSet1]

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
ROA	300	5.00%	35.00%	20.5279%	8.51392%	-.071
Tobins'Q	300	.875	1.236	1.05985	.101433	-.060
B.Size	300	3.0	9.0	6.059	2.0495	-.025
B.Ind.	300	.0	1.0	.538	.4994	-.152
Dual.	300	.0	1.0	.541	.4991	-.165
B.Exp	300	.0	1.0	.534	.4996	-.139
AC.Size	300	3.0	9.0	5.807	1.9480	.110
AC.Ind	300	.0	1.0	.502	.5008	-.007
AC.Exp	300	7.50%	49.90%	28.4616%	12.13343%	.026
AC.Meet	300	4.0	12.0	8.052	2.6663	-.002
INTERNAL AUDIT DEPT	300	.0	1.0	.472	.5000	.112

ORGN MEMBERS	300	2.0	6.0	3.990	1.3657	.010
flex audit plan	300	.0	1.0	.462	.4994	.152
flex audit execution	300	.0	1.0	.498	.5008	.007
flex audit reporting	300	.0	1.0	.420	.4943	.327
Dr	300	4.00%	26.00%	15.3607%	6.77076%	-.022
SC	300	.0	5.0	2.531	1.6917	-.072
LnTA	300	2.385	15.418	9.11636	3.709805	-.067
LEV	300	35.00%	85.00%	58.8820%	14.92214%	.073
ROE	300	5.00%	35.00%	20.3279%	9.37438%	.043
LOSS	300	.0	1.0	.498	.5008	.007
GROWTH	300	2.37%	21.39%	11.6464%	5.55433%	.039
Valid N (listwise)	300					

Descriptive Statistics

	Skewness	Kurtosis	
	Std. Error	Statistic	Std. Error
ROA	.140	-1.137	.278
Tobins'Q	.140	-1.128	.278
B.Size	.140	-1.324	.278
B.Ind.	.140	-1.990	.278
Dual.	.140	-1.986	.278
B.Exp	.140	-1.994	.278
AC.Size	.140	-1.256	.278
AC.Ind	.140	-2.013	.278
AC.Exp	.140	-1.169	.278
AC.Meet	.140	-1.377	.278
INTERNAL AUDIT DEPT	.140	-2.001	.278
ORGN MEMBERS	.140	-1.221	.278
flex audit plan	.140	-1.990	.278
flex audit execution	.140	-2.013	.278
flex audit reporting	.140	-1.906	.278
Dr	.140	-1.204	.278
SC	.140	-1.291	.278
LnTA	.140	-1.150	.278
LEV	.140	-1.190	.278
ROE	.140	-1.309	.278
LOSS	.140	-2.013	.278
GROWTH	.140	-1.198	.278
Valid N (listwise)			

CORRELATIONS

/VARIABLES=ROA TobinsQ B.Size B.Ind Dual B.Exp AC.Size AC.Ind AC.Exp
AC.Meet INTERNALAUDITDEPT ORGNMEMBERS flexauditplan
flexauditexecution flexauditreporting Dr SC LnTA LEV ROE LOSS GROWTH

/PRINT=TWOTAIL NOSIG
/MISSING=PAIRWISE.

Correlations

Notes		
Output Created		11-MAR-2023 18:56:39
Comments		
Input	Active Dataset	DataSet1
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	N of Rows in Working Data File	300
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.
Syntax		CORRELATIONS /VARIABLES=ROA TobinsQ B.Size B.Ind Dual B.Exp AC.Size AC.Ind AC.Exp AC.Meet INTERNALAUDITDEPT ORGNMEMBERS flexauditplan flexauditexecution flexauditreporting Dr SC LnTA LEV ROE LOSS GROWTH /PRINT=TWOTAIL NOSIG /MISSING=PAIRWISE.
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.05

Correlations												
		ROA	Tobins' Q	B.Size	B.Ind	Dual	B.Exp	AC.Size	AC.Ind	AC.Exp	AC.Meet	INTERNAL AUDIT DEPT
ROA	Pearson Correlation	1	.340**	.046	.372*	.185	.275*	.253**	.664**	.181**	.012	.061
	Sig. (2-tailed)		.000	.419	.000	.001	.000	.000	.000	.002	.829	.288

N		300	300	300	300	300	300	300	300	300	300	300
Tobins'Q	Pearson	.340**	1	.100	-.062	.344**	.127*	-.123*	.165**	.192**	.098	.055
	Correlation											
	Sig. (2-tailed)	.000		.080	.277	.000	.026	.032	.004	.001	.087	.337
N		300	300	300	300	300	300	300	300	300	300	300
B.Size	Pearson	.046	.100	1	-.144*	.133*	.130*	.414**	.054	-.009	.016	.047
	Correlation											
	Sig. (2-tailed)	.419	.080		.012	.020	.023	.000	.344	.872	.785	.418
N		300	300	300	300	300	300	300	300	300	300	300
B.Ind.	Pearson	.372**	-.062	-.144*	1	.030	.031	.131*	.312**	-.107	.033	.087
	Correlation											
	Sig. (2-tailed)	.000	.277	.012		.601	.589	.022	.000	.062	.565	.132
N		300	300	300	300	300	300	300	300	300	300	300
Dual.	Pearson	.185**	.344**	.133*	.030	1	.301*	.172**	.174**	-.045	.063	.054
	Correlation											
	Sig. (2-tailed)	.001	.000	.020	.601		.000	.003	.002	.437	.275	.347
N		300	300	300	300	300	300	300	300	300	300	300
B.Exp	Pearson	.275**	.127*	.130*	.031	.301**	1	.090	.240**	.156**	.009	.027
	Correlation											
	Sig. (2-tailed)	.000	.026	.023	.589	.000		.118	.000	.006	.882	.640
N		300	300	300	300	300	300	300	300	300	300	300
AC.Size	Pearson	.253**	-.123*	.414**	.131*	.172**	.090	1	.120*	-.220**	-.071	.243**
	Correlation											
	Sig. (2-tailed)	.000	.032	.000	.022	.003	.118		.036	.000	.217	.000
N		300	300	300	300	300	300	300	300	300	300	300
AC.Ind	Pearson	.664**	.165**	.054	.312*	.174**	.240*	.120*	1	.114*	.012	-.056
	Correlation											
	Sig. (2-tailed)	.000	.004	.344	.000	.002	.000	.036		.046	.831	.333

N	300	300	300	300	300	300	300	300	300	300	300
AC.Exp Pearson	.181										
Correlati	**	.192**	-.009	-	-	.156*	-.220**	.114*	1	.049	-.145*
on				.107	.045	*					
Sig. (2-	.002	.001	.872	.062	.437	.006	.000	.046		.392	.011
tailed)											
N	300	300	300	300	300	300	300	300	300	300	300
AC.Meet Pearson	.012	.098	.016	.033	.063	.009	-.071	.012	.049	1	.058
Correlati											
on											
Sig. (2-	.829	.087	.785	.565	.275	.882	.217	.831	.392		.314
tailed)											
N	300	300	300	300	300	300	300	300	300	300	300
INTERNA Pearson	.061	.055	.047	.087	.054	.027	.243**	-.056	-.145*	.058	1
L AUDIT Correlati											
DEPT on											
Sig. (2-	.288	.337	.418	.132	.347	.640	.000	.333	.011	.314	
tailed)											
N	300	300	300	300	300	300	300	300	300	300	300
ORGN Pearson	.003	.074	.039	.070	-.127	.017	.041	.075	.070	.000	.513**
MEMBER Correlati					*						
S on											
Sig. (2-	.958	.199	.498	.220	.026	.763	.472	.194	.224	.998	.000
tailed)											
N	300	300	300	300	300	300	300	300	300	300	300
flex audit Pearson	.059	.230**	-.027	-	.049	.022	-.175**	.017	.219**	.063	.335**
plan Correlati				.064							
on											
Sig. (2-	.302	.000	.642	.269	.393	.706	.002	.772	.000	.271	.000
tailed)											
N	300	300	300	300	300	300	300	300	300	300	300
flex audit Pearson	-	.081	.035	-	.050	.063	-.130*	.023	.187**	-.066	.318**
execution Correlati	.009			.075							
on											
Sig. (2-	.870	.159	.539	.189	.388	.275	.023	.690	.001	.247	.000
tailed)											
N	300	300	300	300	300	300	300	300	300	300	300
flex audit Pearson	-	-.205**	-.012	.122*	.037	.021	.214**	-.056	-.091	-.067	.527**
reporting Correlati	.040										
on											
Sig. (2-	.483	.000	.841	.033	.523	.712	.000	.330	.113	.246	.000
tailed)											

	N	300	300	300	300	300	300	300	300	300	300	300
Dr	Pearson											
	Correlati	.046	.157**	.196**	.088	.226**	.311*	.292**	.009	-.192**	-.018	.452**
	on											
	Sig. (2-	.426	.006	.001	.123	.000	.000	.000	.882	.001	.757	.000
	tailed)											
	N	300	300	300	300	300	300	300	300	300	300	300
SC	Pearson											
	Correlati	.047	.105	.100	.027	.079	.068	.118*	-.036	-.032	.024	.780**
	on											
	Sig. (2-	.414	.066	.081	.641	.167	.238	.039	.531	.574	.671	.000
	tailed)											
	N	300	300	300	300	300	300	300	300	300	300	300
LnTA	Pearson											
	Correlati	.099	.062	.071	.002	.070	.113*	-.061	.045	.054	.003	.016
	on											
	Sig. (2-	.084	.284	.213	.967	.221	.050	.289	.430	.348	.958	.785
	tailed)											
	N	300	300	300	300	300	300	300	300	300	300	300
LEV	Pearson											
	Correlati	.040	.025	.031	-	-	.021	.043	.057	-.013	.009	-.026
	on				.001	.097						
	Sig. (2-	.490	.666	.594	.990	.091	.717	.457	.323	.828	.874	.645
	tailed)											
	N	300	300	300	300	300	300	300	300	300	300	300
ROE	Pearson											
	Correlati	-	-.016	-.013	.033	-	-.106	-.050	-.096	-.038	-.031	-.004
	on	.068				.068						
	Sig. (2-	.237	.782	.819	.564	.235	.064	.388	.094	.504	.584	.949
	tailed)											
	N	300	300	300	300	300	300	300	300	300	300	300
LOSS	Pearson											
	Correlati	.088	-.033	-.090	.030	.050	.010	-.049	.128*	.076	-.022	.029
	on											
	Sig. (2-	.126	.571	.118	.604	.388	.861	.392	.026	.184	.701	.609
	tailed)											
	N	300	300	300	300	300	300	300	300	300	300	300
GROWTH	Pearson											
	Correlati	-	.093	.015	-	.020	.076	.016	-.071	.033	.026	.062
	on	.002			.073							
	Sig. (2-	.972	.105	.797	.202	.734	.183	.779	.214	.569	.657	.280
	tailed)											

N	300	300	300	300	300	300	300	300	300	300	300
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Correlations

		ORGN MEMBERS	flex audit plan	flex audit execution	flex audit reporting	Dr	SC	LnTA	LEV	ROE	LOSS
ROA	Pearson Correlation	.003	.059	-.009	-.040	.046	.047	.099	.040	-	.068
	Sig. (2- tailed)	.958	.302	.870	.483	.426	.414	.084	.490	.237	.126
	N	300	300	300	300	300	300	300	300	300	300
Tobins'Q	Pearson Correlation	.074	.230**	.081	-.205**	.157**	.105	.062	.025	-	.016
	Sig. (2- tailed)	.199	.000	.159	.000	.006	.066	.284	.666	.782	.571
	N	300	300	300	300	300	300	300	300	300	300
B.Size	Pearson Correlation	.039	-.027	.035	-.012	.196**	.100	.071	.031	-	.013
	Sig. (2- tailed)	.498	.642	.539	.841	.001	.081	.213	.594	.819	.118
	N	300	300	300	300	300	300	300	300	300	300
B.Ind.	Pearson Correlation	.070	-.064	-.075	.122*	.088	.027	.002	-	.001	.033
	Sig. (2- tailed)	.220	.269	.189	.033	.123	.641	.967	.990	.564	.604
	N	300	300	300	300	300	300	300	300	300	300
Dual.	Pearson Correlation	-.127*	.049	.050	.037	.226**	.079	.070	-	-	.050
	Sig. (2- tailed)	.026	.393	.388	.523	.000	.167	.221	.091	.235	.388
	N	300	300	300	300	300	300	300	300	300	300
B.Exp	Pearson Correlation	.017	.022	.063	.021	.311**	.068	.113*	.021	-	.106
	Sig. (2- tailed)	.763	.706	.275	.712	.000	.238	.050	.717	.064	.861
	N	300	300	300	300	300	300	300	300	300	300
AC.Size	Pearson Correlation	.041	-	-.130*	.214**	.292**	.118*	-.061	.043	-	.050
	Sig. (2- tailed)	.472	.175**	.023	.000	.000	.039	.289	.457	.388	.392
	N	300	300	300	300	300	300	300	300	300	300

AC.Ind	Pearson Correlation Sig. (2- tailed) N	.075 .194 300	.017 .772 300	.023 .690 300	-.056 .330 300	.009 .882 300	-.036 .531 300	.045 .430 300	.057 .323 300	- .096 300	.128* .026 300
AC.Exp	Pearson Correlation Sig. (2- tailed) N	.070 .224 300	.219** .000 300	.187** .001 300	-.091 .113 300	-.192** .001 300	-.032 .574 300	.054 .348 300	- .828 300	- .504 300	.076 .184 300
AC.Meet	Pearson Correlation Sig. (2- tailed) N	.000 .998 300	.063 .271 300	-.066 .247 300	-.067 .246 300	-.018 .757 300	.024 .671 300	.003 .958 300	.009 .874 300	- .031 300	-.022 .701 300
INTERNAL AUDIT DEPT	Pearson Correlation Sig. (2- tailed) N	.513** .000 300	.335** .000 300	.318** .000 300	.527** .000 300	.452** .000 300	.780** .000 300	.016 .785 300	- .645 300	- .949 300	.029 .609 300
ORGN MEMBERS	Pearson Correlation Sig. (2- tailed) N	1 .503** 300	.503** .000 300	.464** .000 300	.547** .000 300	.099 .085 300	.488** .000 300	-.059 .303 300	.040 .481 300	.035 .543 300	-.055 .335 300
flex audit plan	Pearson Correlation Sig. (2- tailed) N	.503** .000 300	1 .000 300	.575** .000 300	.158** .006 300	-.043 .458 300	.429** .000 300	.036 .534 300	- .682 300	.001 .992 300	.075 .189 300
flex audit execution	Pearson Correlation Sig. (2- tailed) N	.464** .000 300	.575** .000 300	1 .000 300	.282** .000 300	-.175** .002 300	.482** .000 300	.036 .536 300	- .510 300	- .512 300	.069 .231 300
flex audit reporting	Pearson Correlation Sig. (2- tailed) N	.547** .000 300	.158** .006 300	.282** .000 300	1 .000 300	.175** .002 300	.508** .000 300	-.038 .514 300	.052 .363 300	- .971 300	-.010 .855 300
Dr	Pearson Correlation	.099	-.043	-.175**	.175**	1	.410**	.076	- .008	.036	-.056

	Sig. (2-tailed)	.085	.458	.002	.002		.000	.188	.891	.531	.329
	N	300	300	300	300	300	300	300	300	300	300
SC	Pearson Correlation	.488**	.429**	.482**	.508**	.410**	1	.049	.007	-	-.014
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.394	.899	.916	.801
	N	300	300	300	300	300	300	300	300	300	300
LnTA	Pearson Correlation	-.059	.036	.036	-.038	.076	.049	1	.110	.033	.009
	Sig. (2-tailed)	.303	.534	.536	.514	.188	.394		.055	.563	.877
	N	300	300	300	300	300	300	300	300	300	300
LEV	Pearson Correlation	.040	-.024	-.038	.052	-.008	.007	.110	1	.009	-.082
	Sig. (2-tailed)	.481	.682	.510	.363	.891	.899	.055		.874	.151
	N	300	300	300	300	300	300	300	300	300	300
ROE	Pearson Correlation	.035	.001	-.038	-.002	.036	-.006	.033	.009	1	-.097
	Sig. (2-tailed)	.543	.992	.512	.971	.531	.916	.563	.874		.090
	N	300	300	300	300	300	300	300	300	300	300
LOSS	Pearson Correlation	-.055	.075	.069	-.010	-.056	-.014	.009	-.082	-.097	1
	Sig. (2-tailed)	.335	.189	.231	.855	.329	.801	.877	.151	.090	
	N	300	300	300	300	300	300	300	300	300	300
GROWTH	Pearson Correlation	.084	.193**	.105	.018	.043	.094	.010	-	-	.007
	Sig. (2-tailed)	.146	.001	.068	.758	.454	.100	.868	.188	.216	.903
	N	300	300	300	300	300	300	300	300	300	300

Correlations

		GROWTH
ROA	Pearson Correlation	-.002
	Sig. (2-tailed)	.972
	N	300
Tobins'Q	Pearson Correlation	.093
	Sig. (2-tailed)	.105

	N	300
B.Size	Pearson Correlation	.015
	Sig. (2-tailed)	.797
	N	300
B.Ind.	Pearson Correlation	-.073
	Sig. (2-tailed)	.202
	N	300
Dual.	Pearson Correlation	.020
	Sig. (2-tailed)	.734
	N	300
B.Exp	Pearson Correlation	.076
	Sig. (2-tailed)	.183
	N	300
AC.Size	Pearson Correlation	.016
	Sig. (2-tailed)	.779
	N	300
AC.Ind	Pearson Correlation	-.071
	Sig. (2-tailed)	.214
	N	300
AC.Exp	Pearson Correlation	.033
	Sig. (2-tailed)	.569
	N	300
AC.Meet	Pearson Correlation	.026
	Sig. (2-tailed)	.657
	N	300
INTERNAL AUDIT DEPT	Pearson Correlation	.062
	Sig. (2-tailed)	.280
	N	300
ORGN MEMBERS	Pearson Correlation	.084
	Sig. (2-tailed)	.146
	N	300
flex audit plan	Pearson Correlation	.193**
	Sig. (2-tailed)	.001
	N	300
flex audit execution	Pearson Correlation	.105
	Sig. (2-tailed)	.068
	N	300
flex audit reporting	Pearson Correlation	.018
	Sig. (2-tailed)	.758
	N	300
Dr	Pearson Correlation	.043

	Sig. (2-tailed)	.454
	N	300
SC	Pearson Correlation	.094
	Sig. (2-tailed)	.100
	N	300
LnTA	Pearson Correlation	.010
	Sig. (2-tailed)	.868
	N	300
LEV	Pearson Correlation	-.076
	Sig. (2-tailed)	.188
	N	300
ROE	Pearson Correlation	-.071
	Sig. (2-tailed)	.216
	N	300
LOSS	Pearson Correlation	.007
	Sig. (2-tailed)	.903
	N	300
GROWTH	Pearson Correlation	1
	Sig. (2-tailed)	
	N	300

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Regression

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	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ROA /METHOD=ENTER B.Size B.Ind Dual B.Exp LnTA LEV ROE LOSS GROWTH /RESIDUALS DURBIN.
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Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	GROWTH, LOSS, LnTA, B.Ind., Dual., ROE, LEV, B.Size, B.Exp ^b		Enter

a. Dependent Variable: ROA

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.727 ^a	.528	.521	7.56171%	.681

a. Predictors: (Constant), GROWTH, LOSS, LnTA, B.Ind., Dual., ROE, LEV, B.Size, B.Exp

b. Dependent Variable: ROA

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5168.087	9	574.232	47.581	.000 ^b
	Residual	16867.926	295	57.179		
	Total	22036.013	304			

a. Dependent Variable: ROA

b. Predictors: (Constant), GROWTH, LOSS, LnTA, B.Ind., Dual., ROE, LEV, B.Size, B.Exp

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.725	2.911		3.512	0.001
	B.Size	2.429	.218	.060	2.325	0.000
	B.Ind.	5.236	.882	.371	6.170	0.000
	Dual.	1.827	.925	.095	2.769	0.000
	B.Exp	2.598	.926	.214	2.958	0.000
	LnTA	0.257	.119	.059	1.136	0.247
	LEV	0.069	.030	.043	0.781	0.415
	ROE	-0.048	.047	-.045	-0.925	0.385
	LOSS	1.325	.878	.074	1.423	0.156
	GROWTH	0.009	.079	.005	0.125	0.981

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	B.Size	.939	1.065
	B.Ind.	.968	1.033
	Dual.	.883	1.133
	B.Exp	.878	1.138
	LnTA	.968	1.033
	LEV	.962	1.039
	ROE	.971	1.030
	LOSS	.973	1.028
	GROWTH	.979	1.022

a. Dependent Variable: ROA

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	B.Size	B.Ind.	Dual.
1	1	7.691	1.000	.00	.00	.00	.00
	2	.535	3.791	.00	.00	.08	.24

3	.483	3.990	.00	.00	.13	.04
4	.433	4.215	.00	.01	.69	.06
5	.324	4.873	.00	.00	.00	.62
6	.187	6.414	.00	.00	.02	.00
7	.146	7.267	.00	.03	.00	.01
8	.112	8.298	.00	.39	.00	.01
9	.072	10.355	.01	.40	.03	.02
10	.018	20.794	.98	.17	.04	.02

Collinearity Diagnostics^a

Model	Dimension	Variance Proportions					
		B.Exp	LnTA	LEV	ROE	LOSS	GROWTH
1	1	.00	.00	.00	.00	.00	.00
	2	.28	.00	.00	.01	.16	.00
	3	.01	.00	.00	.02	.73	.00
	4	.03	.01	.00	.02	.02	.02
	5	.61	.00	.00	.01	.01	.00
	6	.03	.01	.00	.24	.01	.67
	7	.04	.36	.01	.50	.01	.11
	8	.00	.49	.03	.07	.00	.05
	9	.00	.09	.48	.03	.01	.01
	10	.00	.03	.47	.11	.06	.13

a. Dependent Variable: ROA

b.

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	11.9251%	29.2501%	20.5279%	4.12314%	300
Residual	-20.92554%	16.93744%	0.00000%	7.44893%	300
Std. Predicted Value	-2.086	2.115	.000	1.000	300
Std. Residual	-2.767	2.240	.000	.985	300

a. Dependent Variable: ROA

REGRESSION

```

/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT TobinsQ
/METHOD=ENTER B.Size B.Ind Dual B.Exp LnTA LEV ROE LOSS GROWTH
/RESIDUALS DURBIN.

```

Regression

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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT TobinsQ /METHOD=ENTER B.Size B.Ind Dual B.Exp LnTA LEV ROE LOSS GROWTH /RESIDUALS DURBIN.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.03
	Memory Required	8752 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	GROWTH, LOSS, LnTA, B.Ind., Dual., ROE, LEV, B.Size, B.Exp ^b		. Enter

a. Dependent Variable: Tobins'Q

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.610 ^a	.372	.312	.095566	.425

a. Predictors: (Constant), GROWTH, LOSS, LnTA, B.Ind., Dual., ROE, LEV, B.Size, B.Exp

b. Dependent Variable: Tobins'Q

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.434	9	.048	5.275	.000 ^b
	Residual	2.694	295	.009		
	Total	3.128	304			

a. Dependent Variable: Tobins'Q

b. Predictors: (Constant), GROWTH, LOSS, LnTA, B.Ind., Dual., ROE, LEV, B.Size, B.Exp

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.971	.037		26.377	0.000
	B.Size	0.005	.003	.036	2.725	0.000
	B.Ind.	0.118	.011	-.061	2.811	0.000
	Dual.	0.189	.012	.342	4.942	0.000
	B.Exp	0.007	.012	.013	2.222	0.000
	LnTA	0.001	.002	.027	0.485	0.630
	LEV	0.000	.000	.057	1.035	0.304
	ROE	0.000	.001	.012	0.236	0.825
	LOSS	-0.008	.011	-.040	-0.711	0.470
	GROWTH	0.002	.001	.085	1.489	0.119

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	B.Size	.939	1.065
	B.Ind.	.968	1.033

Dual.	.883	1.133
B.Exp	.878	1.138
LnTA	.968	1.033
LEV	.962	1.039
ROE	.971	1.030
LOSS	.973	1.028
GROWTH	.979	1.022

a. Dependent Variable: Tobins'Q

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	B.Size	B.Ind.	Dual.
1	1	7.691	1.000	.00	.00	.00	.00
	2	.535	3.791	.00	.00	.08	.24
	3	.483	3.990	.00	.00	.13	.04
	4	.433	4.215	.00	.01	.69	.06
	5	.324	4.873	.00	.00	.00	.62
	6	.187	6.414	.00	.00	.02	.00
	7	.146	7.267	.00	.03	.00	.01
	8	.112	8.298	.00	.39	.00	.01
	9	.072	10.355	.01	.40	.03	.02
	10	.018	20.794	.98	.17	.04	.02

Collinearity Diagnostics^a

Model	Dimension	Variance Proportions					
		B.Exp	LnTA	LEV	ROE	LOSS	GROWTH
1	1	.00	.00	.00	.00	.00	.00
	2	.28	.00	.00	.01	.16	.00
	3	.01	.00	.00	.02	.73	.00
	4	.03	.01	.00	.02	.02	.02
	5	.61	.00	.00	.01	.01	.00
	6	.03	.01	.00	.24	.01	.67
	7	.04	.36	.01	.50	.01	.11
	8	.00	.49	.03	.07	.00	.05
	9	.00	.09	.48	.03	.01	.01
	10	.00	.03	.47	.11	.06	.13

a. Dependent Variable: Tobins'Q

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.99141	1.13170	1.05985	.037765	300
Residual	-.235261	.211267	.000000	.094140	300
Std. Predicted Value	-1.812	1.902	.000	1.000	300
Std. Residual	-2.462	2.211	.000	.985	300

a. Dependent Variable: Tobins'Q

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT ROA

/METHOD=ENTER AC.Size AC.Ind AC.Exp AC.Meet LnTA LEV ROE LOSS GROWTH

/RESIDUALS DURBIN.

Regression

Notes

Output Created	11-MAR-2023 18:58:27	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	300
	File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax	REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ROA /METHOD=ENTER AC.Size AC.Ind AC.Exp AC.Meet LnTA LEV ROE LOSS GROWTH /RESIDUALS DURBIN.	
Resources	Processor Time	00:00:00.02

Elapsed Time	00:00:00.01
Memory Required	8752 bytes
Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	GROWTH, LOSS, LnTA, AC.Meet, AC.Size, ROE, LEV, AC.Ind, AC.Exp ^b		. Enter

a. Dependent Variable: ROA

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.841 ^a	.708	.686	6.10654%	.708

a. Predictors: (Constant), GROWTH, LOSS, LnTA, AC.Meet, AC.Size, ROE, LEV, AC.Ind, AC.Exp

b. Dependent Variable: ROA

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11035.507	9	1226.167	32.882	.000 ^b
	Residual	11000.507	295	37.290		
	Total	22036.013	304			

a. Dependent Variable: ROA

b. Predictors: (Constant), GROWTH, LOSS, LnTA, AC.Meet, AC.Size, ROE, LEV, AC.Ind, AC.Exp

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.247	2.755		2.481	0.000
	AC.Size	0.987	.188	.218	4.236	0.000
	AC.Ind	10.127	.725	.619	8.789	0.000

AC.Exp	0.265	.030	.152	3.711	0.000
AC.Meet	0.435	.132	.012	3.781	0.000
LnTA	0.475	.095	.076	1.711	0.125
LEV	-0.008	.024	-.008	-0.215	0.745
ROE	0.018	.038	.009	0.266	0.723
LOSS	0.425	.713	.007	0.187	0.842
GROWTH	0.055	.064	.033	0.821	0.524

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AC.Size	.916	1.092
	AC.Ind	.932	1.073
	AC.Exp	.924	1.082
	AC.Meet	.991	1.009
	LnTA	.978	1.022
	LEV	.970	1.031
	ROE	.972	1.028
	LOSS	.961	1.040
	GROWTH	.980	1.020

a. Dependent Variable: ROA

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	AC.Size	AC.Ind	AC.Exp
1	1	8.249	1.000	.00	.00	.00	.00
	2	.514	4.004	.00	.00	.32	.00
	3	.440	4.332	.00	.00	.58	.00
	4	.193	6.533	.00	.00	.00	.00
	5	.163	7.115	.00	.11	.01	.55
	6	.142	7.609	.00	.05	.03	.09
	7	.126	8.099	.00	.12	.03	.03
	8	.097	9.213	.00	.25	.02	.16
	9	.062	11.535	.00	.23	.00	.05
	10	.014	24.564	1.00	.24	.00	.12

Collinearity Diagnostics^a

Model	Dimension	Variance Proportions					
		AC.Meet	LnTA	LEV	ROE	LOSS	GROWTH
1	1	.00	.00	.00	.00	.00	.00
	2	.00	.00	.00	.02	.45	.01
	3	.00	.00	.00	.00	.48	.00
	4	.00	.01	.00	.37	.01	.52
	5	.00	.03	.00	.06	.01	.08
	6	.01	.35	.02	.35	.00	.16
	7	.13	.48	.01	.07	.00	.15
	8	.62	.00	.00	.00	.00	.00
	9	.07	.08	.69	.01	.00	.00
	10	.16	.05	.28	.11	.04	.07

a. Dependent Variable: ROA

b.

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	9.9212%	31.7750%	20.5279%	6.02503%	300
Residual	-16.16297%	19.04615%	0.00000%	6.01547%	300
Std. Predicted Value	-1.760	1.867	.000	1.000	300
Std. Residual	-2.647	3.119	.000	.985	300

a. Dependent Variable: ROA

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT TobinsQ

/METHOD=ENTER AC.Size AC.Ind AC.Exp AC.Meet LnTA LEV ROE LOSS GROWTH

/RESIDUALS DURBIN.

Regression

Notes		
Output Created		11-MAR-2023 18:58:45
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	300
	File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT TobinsQ /METHOD=ENTER AC.Size AC.Ind AC.Exp AC.Meet LnTA LEV ROE LOSS GROWTH /RESIDUALS DURBIN.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03
	Memory Required	8752 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	GROWTH, LOSS, LnTA, AC.Meet, AC.Size, ROE, LEV, AC.Ind, AC.Exp ^b		Enter

a. Dependent Variable: Tobins'Q

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.675 ^a	.456	.452	.098118	.409

a. Predictors: (Constant), GROWTH, LOSS, LnTA, AC.Meet, AC.Size, ROE, LEV, AC.Ind, AC.Exp

b. Dependent Variable: Tobins'Q

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.288	9	.032	4.236	.000 ^b
	Residual	2.840	295	.010		
	Total	3.128	304			

a. Dependent Variable: Tobins'Q

b. Predictors: (Constant), GROWTH, LOSS, LnTA, AC.Meet, AC.Size, ROE, LEV, AC.Ind, AC.Exp

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.045	.044		12.812	0.000
	AC.Size	0.010	.003	-.110	2.425	0.000
	AC.Ind	0.035	.012	.174	3.211	0.003
	AC.Exp	0.001	.000	.145	2.111	0.013
	AC.Meet	0.003	.002	.077	2.425	0.015
	LnTA	0.002	.002	.036	0.651	0.618
	LEV	0.003	.000	.019	0.433	0.742
	ROE	0.004	.001	.003	0.055	0.956
	LOSS	-0.015	.011	-.069	-1.315	0.318
	GROWTH	0.005	.001	.102	1.425	0.087

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	AC.Size	.916	1.092

AC.Ind	.932	1.073
AC.Exp	.924	1.082
AC.Meet	.991	1.009
LnTA	.978	1.022
LEV	.970	1.031
ROE	.972	1.028
LOSS	.961	1.040
GROWTH	.980	1.020

a. Dependent Variable: Tobins'Q

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	AC.Size	AC.Ind	AC.Exp
1	1	8.249	1.000	.00	.00	.00	.00
	2	.514	4.004	.00	.00	.32	.00
	3	.440	4.332	.00	.00	.58	.00
	4	.193	6.533	.00	.00	.00	.00
	5	.163	7.115	.00	.11	.01	.55
	6	.142	7.609	.00	.05	.03	.09
	7	.126	8.099	.00	.12	.03	.03
	8	.097	9.213	.00	.25	.02	.16
	9	.062	11.535	.00	.23	.00	.05
	10	.014	24.564	1.00	.24	.00	.12

Collinearity Diagnostics^a

Model	Dimension	Variance Proportions					
		AC.Meet	LnTA	LEV	ROE	LOSS	GROWTH
1	1	.00	.00	.00	.00	.00	.00
	2	.00	.00	.00	.02	.45	.01
	3	.00	.00	.00	.00	.48	.00
	4	.00	.01	.00	.37	.01	.52
	5	.00	.03	.00	.06	.01	.08
	6	.01	.35	.02	.35	.00	.16
	7	.13	.48	.01	.07	.00	.15
	8	.62	.00	.00	.00	.00	.00
	9	.07	.08	.69	.01	.00	.00
	10	.16	.05	.28	.11	.04	.07

a. Dependent Variable: Tobins'Q

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.99261	1.14527	1.05985	.030766	300
Residual	-.226967	.227048	.000000	.096655	300
Std. Predicted Value	-2.186	2.776	.000	1.000	300
Std. Residual	-2.313	2.314	.000	.985	300

a. Dependent Variable: Tobins'Q

Regression

Notes

Output Created		11-MAR-2023 18:59:16
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	300
	File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ROA /METHOD=ENTER INTERNALAUDITDEPT ORGNMEMBERS LnTA LEV ROE LOSS GROWTH /RESIDUALS DURBIN.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02
	Memory Required	6992 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	GROWTH, LOSS, LnTA, INTERNAL AUDIT DEPT, ROE, LEV, ORGN MEMBERS ^b		Enter

a. Dependent Variable: ROA

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.508 ^a	.258	.253	8.49915%	.564

a. Predictors: (Constant), GROWTH, LOSS, LnTA, INTERNAL AUDIT DEPT, ROE, LEV, ORGN MEMBERS

b. Dependent Variable: ROA

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	582.054	7	83.151	7.821	.000 ^b
	Residual	21453.960	297	72.236		
	Total	22036.013	304			

a. Dependent Variable: ROA

b. Predictors: (Constant), GROWTH, LOSS, LnTA, INTERNAL AUDIT DEPT, ROE, LEV, ORGN MEMBERS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t
		B	Std. Error	Beta	
1	(Constant)	2.826	3.130		4.702
	INTERNAL AUDIT DEPT	1.485	1.142	.069	2.127
	ORGN MEMBERS	1.236	.421	-.021	3.158
	LnTA	0.221	.133	.094	1.412
	LEV	0.037	.033	.039	0.558
	ROE	-0.068	.052	-.063	-1.022
	LOSS	1.259	.984	.081	1.111
	GROWTH	-0.015	.089	-.008	-0.228

Coefficients^a

Model		Sig.	Collinearity Statistics	
			Tolerance	VIF
1	(Constant)	0.000		
	INTERNAL AUDIT DEPT	0.000	.729	1.412
	ORGN MEMBERS	0.000	.720	1.521
	LnTA	0.125	.978	1.216
	LEV	0.418	.970	1.022
	ROE	0.369	.982	1.015
	LOSS	0.265	.978	1.069
	GROWTH	0.728	.980	1.027

a. Dependent Variable: ROA

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	INTERNAL AUDIT DEPT	ORGN MEMBERS
1	1	6.502	1.000	.00	.01	.00
	2	.515	3.552	.00	.37	.00
	3	.458	3.767	.00	.29	.00
	4	.192	5.818	.00	.00	.00
	5	.148	6.630	.00	.00	.00
	6	.105	7.864	.01	.10	.21
	7	.060	10.400	.00	.21	.61
	8	.019	18.494	.98	.02	.17

Collinearity Diagnostics^a

Model	Dimension	Variance Proportions				
		LnTA	LEV	ROE	LOSS	GROWTH
1	1	.00	.00	.00	.01	.00
	2	.00	.00	.00	.44	.00
	3	.01	.01	.03	.47	.01
	4	.00	.00	.30	.01	.61
	5	.50	.01	.37	.01	.13
	6	.30	.12	.20	.00	.14
	7	.11	.41	.00	.00	.00
	8	.07	.45	.10	.06	.10

a. Dependent Variable: ROA

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	16.8708%	23.9680%	20.5279%	1.38371%	300
Residual	-17.79671%	15.96508%	0.00000%	8.40073%	300
Std. Predicted Value	-2.643	2.486	.000	1.000	300
Std. Residual	-2.094	1.878	.000	.988	300

a. Dependent Variable: ROA

REGRESSION

```

/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT TobinsQ
/METHOD=ENTER INTERNALAUDITDEPT ORGNMEMBERS LnTA LEV ROE LOSS GROWTH
/RESIDUALS DURBIN.

```

Regression

Notes		
Output Created		11-MAR-2023 18:59:35
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	300
	File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT TobinsQ /METHOD=ENTER INTERNALAUDITDEPT ORGNMEMBERS LnTA LEV ROE LOSS GROWTH /RESIDUALS DURBIN.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.01
	Memory Required	6992 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed ^a			
Model	Variables Entered	Variables Removed	Method
1	GROWTH, LOSS, LnTA, INTERNAL AUDIT DEPT, ROE, LEV, ORGN MEMBERS ^b		. Enter

a. Dependent Variable: Tobins'Q

b. All requested variables entered.

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.567 ^a	.321	.315	.101637	.383

a. Predictors: (Constant), GROWTH, LOSS, LnTA, INTERNAL AUDIT DEPT, ROE, LEV, ORGN MEMBERS

b. Dependent Variable: Tobins'Q

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.060	7	.009	8.256	.000 ^b
	Residual	3.068	297	.010		
	Total	3.128	304			

a. Dependent Variable: Tobins'Q

b. Predictors: (Constant), GROWTH, LOSS, LnTA, INTERNAL AUDIT DEPT, ROE, LEV, ORGN MEMBERS

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t
		B	Std. Error	Beta	
1	(Constant)	1.057	.037		6.751
	INTERNAL AUDIT DEPT	0.229	.014	.021	2.706
	ORGN MEMBERS	0.254	.005	.058	2.522
	LnTA	0.002	.002	.062	1.074
	LEV	0.000	.000	.020	0.348
	ROE	0.000	.001	-.017	0.292
	LOSS	-0.006	.012	-.031	-0.536
	GROWTH	0.002	.001	.087	1.496

Coefficients^a

Model		Sig.	Collinearity Statistics	
			Tolerance	VIF
1	(Constant)	0.000		
	INTERNAL AUDIT DEPT	0.000	.729	1.371
	ORGN MEMBERS	0.000	.720	1.325
	LnTA	0.284	.978	1.226
	LEV	0.728	.970	1.027
	ROE	0.770	.982	1.066
	LOSS	0.592	.978	1.125
	GROWTH	0.136	.980	1.116

a. Dependent Variable: Tobins'Q

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	INTERNAL AUDIT DEPT	ORGN MEMBERS
1	1	6.502	1.000	.00	.01	.00
	2	.515	3.552	.00	.37	.00
	3	.458	3.767	.00	.29	.00
	4	.192	5.818	.00	.00	.00
	5	.148	6.630	.00	.00	.00
	6	.105	7.864	.01	.10	.21
	7	.060	10.400	.00	.21	.61
	8	.019	18.494	.98	.02	.17

Collinearity Diagnostics^a

Model	Dimension	Variance Proportions				
		LnTA	LEV	ROE	LOSS	GROWTH
1	1	.00	.00	.00	.01	.00
	2	.00	.00	.00	.44	.00
	3	.01	.01	.03	.47	.01
	4	.00	.00	.30	.01	.61
	5	.50	.01	.37	.01	.13
	6	.30	.12	.20	.00	.14
	7	.11	.41	.00	.00	.00
	8	.07	.45	.10	.06	.10

a. Dependent Variable: Tobins'Q

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.02731	1.09873	1.05985	.014013	300
Residual	-.194285	.190327	.000000	.100460	300
Std. Predicted Value	-2.322	2.774	.000	1.000	300
Std. Residual	-1.912	1.873	.000	.988	300

a. Dependent Variable: Tobins'Q

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

```

/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT ROA
/METHOD=ENTER flexauditplan flexauditexecution flexauditreporting
LnTA LEV ROE LOSS GROWTH
/RESIDUALS DURBIN.

```

Regression

Notes		
Output Created		11-MAR-2023 19:00:08
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	300
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ROA /METHOD=ENTER flexauditplan flexauditexecution flexauditreporting LnTA LEV ROE LOSS GROWTH /RESIDUALS DURBIN.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02
	Memory Required	7840 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method

1	GROWTH, LOSS, LnTA, flex audit reporting , ROE, LEV, flex audit plan , flex audit execution ^b		. Enter
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a. Dependent Variable: ROA

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.432 ^a	.187	.181	.49723%	.557

a. Predictors: (Constant), GROWTH, LOSS, LnTA, flex audit reporting , ROE, LEV, flex audit plan , flex audit execution

b. Dependent Variable: ROA

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	663.965	8	82.996	8.137	.000 ^b
	Residual	21372.048	296	72.203		
	Total	22036.013	304			

a. Dependent Variable: ROA

b. Predictors: (Constant), GROWTH, LOSS, LnTA, flex audit reporting , ROE, LEV, flex audit plan , flex audit execution

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.140	2.863		3.359	0.000
	flex audit plan	3.287	1.212	.096	2.435	0.000
	flex audit execution	3.636	1.228	-.063	2.621	0.000
	flex audit reporting	2.549	1.032	-.035	2.781	0.000
	LnTA	0.315	.133	.094	1.241	0.125
	LEV	0.111	.033	.037	0.782	0.287
	ROE	-0.055	.052	-.067	-1.115	0.236

LOSS	1.412	.985	.080	1.251	0.175
GROWTH	-0.038	.090	-.017	-0.287	0.681

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	flex audit plan	.649	1.542
	flex audit execution	.628	1.593
	flex audit reporting	.913	1.095
	LnTA	.981	1.019
	LEV	.970	1.031
	ROE	.982	1.019
	LOSS	.977	1.024
	GROWTH	.952	1.050

a. Dependent Variable: ROA

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	flex audit plan	flex audit execution
1	1	6.671	1.000	.00	.00	.00
	2	.696	3.096	.00	.14	.14
	3	.522	3.574	.00	.11	.02
	4	.455	3.830	.00	.03	.00
	5	.217	5.550	.00	.57	.76
	6	.185	5.997	.00	.11	.03
	7	.146	6.769	.00	.04	.03
	8	.087	8.770	.03	.00	.00
	9	.022	17.582	.97	.00	.01

Collinearity Diagnostics^a

		Variance Proportions					
		flex audit reporting	LnTA	LEV	ROE	LOSS	GROWTH
Model	Dimension						
1	1	.01	.00	.00	.00	.01	.00
	2	.10	.01	.00	.01	.05	.00
	3	.55	.00	.00	.01	.22	.00

4	.25	.01	.00	.02	.66	.01
5	.07	.01	.00	.00	.00	.06
6	.00	.00	.00	.34	.01	.52
7	.00	.47	.01	.35	.01	.17
8	.02	.44	.35	.14	.01	.08
9	.00	.06	.62	.12	.05	.14

a. Dependent Variable: ROA

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	16.4063%	24.5265%	20.5279%	1.47787%	300
Residual	-17.23168%	15.28123%	0.00000%	8.38468%	300
Std. Predicted Value	-2.789	2.706	.000	1.000	300
Std. Residual	-2.028	1.798	.000	.987	300

a. Dependent Variable: ROA

REGRESSION
 /MISSING LISTWISE
 /STATISTICS COEFF OUTS R ANOVA COLLIN TOL
 /CRITERIA=PIN(.05) POUT(.10)
 /NOORIGIN
 /DEPENDENT TobinsQ
 /METHOD=ENTER flexauditplan flexauditexecution flexauditreporting
 LnTA LEV ROE LOSS GROWTH
 /RESIDUALS DURBIN.

Regression

tes

Output Created	11-MAR-2023 19:00:32	
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	300
	File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.

Syntax	<pre> REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT TobinsQ /METHOD=ENTER flexauditplan flexauditexecution flexauditreporting LnTA LEV ROE LOSS GROWTH /RESIDUALS DURBIN. </pre>	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03
	Memory Required	7840 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	GROWTH, LOSS, LnTA, flex audit reporting , ROE, LEV, flex audit plan , flex audit execution ^b		Enter

a. Dependent Variable: Tobins'Q

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.649 ^a	.422	.415	.096332	.413

a. Predictors: (Constant), GROWTH, LOSS, LnTA, flex audit reporting , ROE, LEV, flex audit plan , flex audit execution

b. Dependent Variable: Tobins'Q

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.381	8	.048	10.255	.000 ^b
	Residual	2.747	296	.009		

Total	3.128	304			
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a. Dependent Variable: Tobins'Q

b. Predictors: (Constant), GROWTH, LOSS, LnTA, flex audit reporting , ROE, LEV, flex audit plan , flex audit execution

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.914	.032		31.765	0.000
	flex audit plan	3.294	.014	.266	3.436	0.000
	flex audit execution	2.884	.014	-.004	2.521	0.000
	flex audit reporting	2.723	.012	-.248	4.287	0.000
	LnTA	0.050	.002	.039	0.715	0.275
	LEV	0.087	.000	.039	0.703	0.486
	ROE	0.025	.001	-.020	0.369	0.781
	LOSS	-0.037	.011	-.054	-0.988	0.524
	GROWTH	0.125	.001	.048	0.860	0.691

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	flex audit plan	.649	1.542
	flex audit execution	.628	1.593
	flex audit reporting	.913	1.095
	LnTA	.981	1.019
	LEV	.970	1.031
	ROE	.982	1.019
	LOSS	.977	1.024
	GROWTH	.952	1.050

a. Dependent Variable: Tobins'Q

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	flex audit plan	flex audit execution

1	1	6.671	1.000	.00	.00	.00
	2	.696	3.096	.00	.14	.14
	3	.522	3.574	.00	.11	.02
	4	.455	3.830	.00	.03	.00
	5	.217	5.550	.00	.57	.76
	6	.185	5.997	.00	.11	.03
	7	.146	6.769	.00	.04	.03
	8	.087	8.770	.03	.00	.00
	9	.022	17.582	.97	.00	.01

Collinearity Diagnostics^a

Model	Dimension	Variance Proportions					
		flex audit reporting	LnTA	LEV	ROE	LOSS	GROWTH
1	1	.01	.00	.00	.00	.01	.00
	2	.10	.01	.00	.01	.05	.00
	3	.55	.00	.00	.01	.22	.00
	4	.25	.01	.00	.02	.66	.01
	5	.07	.01	.00	.00	.00	.06
	6	.00	.00	.00	.34	.01	.52
	7	.00	.47	.01	.35	.01	.17
	8	.02	.44	.35	.14	.01	.08
	9	.00	.06	.62	.12	.05	.14

a. Dependent Variable: Tobins'Q

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.97956	1.13402	1.05985	.035397	300
Residual	-.185708	.231403	.000000	.095056	300
Std. Predicted Value	-2.268	2.095	.000	1.000	300
Std. Residual	-1.928	2.402	.000	.987	300

a. Dependent Variable: Tobins'Q

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT ROA
 /METHOD=ENTER Dr LnTA LEV ROE LOSS GROWTH
 /RESIDUALS DURBIN.

Regression

Notes		
Output Created		11-MAR-2023 19:01:04
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data	300
	File	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ROA /METHOD=ENTER Dr LnTA LEV ROE LOSS GROWTH /RESIDUALS DURBIN.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00
	Memory Required	6208 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	GROWTH, LOSS, LnTA, Dr, ROE, LEV ^b		. Enter

a. Dependent Variable: ROA

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.411 ^a	.169	.163	8.49177%	.566

a. Predictors: (Constant), GROWTH, LOSS, LnTA, Dr, ROE, LEV

b. Dependent Variable: ROA

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	547.211	6	91.202	5.298	.003 ^b
Residual	21488.802	298	72.110		
Total	22036.013	304			

a. Dependent Variable: ROA

b. Predictors: (Constant), GROWTH, LOSS, LnTA, Dr, ROE, LEV

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.756	2.997		5.688	0.000
	Dr	2.210	.072	.047	2.815	0.000
	LnTA	0.215	.133	.093	1.611	0.125
	LEV	0.028	.033	.037	0.698	0.522
	ROE	-0.067	.052	-.065	-1.125	0.267
	LOSS	1.455	.982	.086	1.486	0.134
	GROWTH	-0.018	.088	-.007	-0.166	0.822

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Dr	.988	1.012
	LnTA	.980	1.020
	LEV	.975	1.026
	ROE	.983	1.017
	LOSS	.980	1.020
	GROWTH	.987	1.013

a. Dependent Variable: ROA

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	Dr	LnTA	LEV
1	1	5.920	1.000	.00	.00	.00	.00
	2	.484	3.497	.00	.01	.00	.00
	3	.193	5.542	.00	.00	.01	.00
	4	.156	6.152	.00	.45	.06	.00
	5	.141	6.484	.00	.39	.53	.01
	6	.086	8.290	.02	.06	.35	.40
	7	.020	17.079	.98	.09	.04	.58

Collinearity Diagnostics^a

Model	Dimension	Variance Proportions		
		ROE	LOSS	GROWTH
1	1	.00	.01	.00
	2	.01	.91	.00
	3	.32	.01	.60
	4	.35	.00	.20
	5	.08	.01	.01
	6	.12	.01	.06
	7	.11	.06	.13

a. Dependent Variable: ROA

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	17.4043%	24.2170%	20.5279%	1.34165%	300
Residual	-17.41946%	16.07007%	0.00000%	8.40755%	300
Std. Predicted Value	-2.328	2.750	.000	1.000	300
Std. Residual	-2.051	1.892	.000	.990	300

a. Dependent Variable: ROA

REGRESSION

```

/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT TobinsQ
/METHOD=ENTER Dr LnTA LEV ROE LOSS GROWTH
/RESIDUALS DURBIN.

```

Regression

Notes		
Output Created		11-MAR-2023 19:01:21
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	300
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT TobinsQ /METHOD=ENTER Dr LnTA LEV ROE LOSS GROWTH /RESIDUALS DURBIN.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03
	Memory Required	6208 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	GROWTH, LOSS, LnTA, Dr, ROE, LEV ^b		Enter

a. Dependent Variable: Tobins'Q

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.436 ^a	.190	.171	.100584	.391

a. Predictors: (Constant), GROWTH, LOSS, LnTA, Dr, ROE, LEV

b. Dependent Variable: Tobins'Q

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.113	6	.019	5.859	.000 ^b
	Residual	3.015	298	.010		
	Total	3.128	304			

a. Dependent Variable: Tobins'Q

b. Predictors: (Constant), GROWTH, LOSS, LnTA, Dr, ROE, LEV

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.992	.035		27.944	.000
	Dr	.002	.001	.149	2.601	.010
	LnTA	.001	.002	.048	.827	.409
	LEV	.000	.000	.025	.442	.659
	ROE	.000	.001	-.019	-.337	.736
	LOSS	-.005	.012	-.025	-.437	.663
	GROWTH	.002	.001	.087	1.516	.130

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Dr	.988	1.012
	LnTA	.980	1.020
	LEV	.975	1.026
	ROE	.983	1.017
	LOSS	.980	1.020
	GROWTH	.987	1.013

a. Dependent Variable: Tobins'Q

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	Dr	LnTA	LEV
1	1	5.920	1.000	.00	.00	.00	.00
	2	.484	3.497	.00	.01	.00	.00
	3	.193	5.542	.00	.00	.01	.00
	4	.156	6.152	.00	.45	.06	.00
	5	.141	6.484	.00	.39	.53	.01
	6	.086	8.290	.02	.06	.35	.40
	7	.020	17.079	.98	.09	.04	.58

Collinearity Diagnostics^a

Model	Dimension	Variance Proportions		
		ROE	LOSS	GROWTH
1	1	.00	.01	.00
	2	.01	.91	.00
	3	.32	.01	.60
	4	.35	.00	.20
	5	.08	.01	.01
	6	.12	.01	.06
	7	.11	.06	.13

a. Dependent Variable: Tobins'Q

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.00875	1.10707	1.05985	.019266	300
Residual	-.207058	.216246	.000000	.099586	300
Std. Predicted Value	-2.652	2.451	.000	1.000	300
Std. Residual	-2.059	2.150	.000	.990	300

a. Dependent Variable: Tobins'Q

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA COLLIN TOL

/CRITERIA=PIN(.05) POUT(.10)

/NOORIGIN

/DEPENDENT ROA

/METHOD=ENTER SC LnTA LEV ROE LOSS GROWTH

/RESIDUALS DURBIN.

Regression

Notes		
Output Created		11-MAR-2023 19:01:50
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	300
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT ROA /METHOD=ENTER SC LnTA LEV ROE LOSS GROWTH /RESIDUALS DURBIN.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03
	Memory Required	6208 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	GROWTH, LOSS, LnTA, SC, ROE, LEV ^b		. Enter

a. Dependent Variable: ROA

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.411 ^a	.169	.161	8.49283%	.564

a. Predictors: (Constant), GROWTH, LOSS, LnTA, SC, ROE, LEV

b. Dependent Variable: ROA

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	541.827	6	90.304	3.496	.008 ^b
	Residual	21494.186	298	72.128		
	Total	22036.013	304			

a. Dependent Variable: ROA

b. Predictors: (Constant), GROWTH, LOSS, LnTA, SC, ROE, LEV

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	17.421	2.882		6.045	0.000
	SC	0.357	.290	.044	2.451	0.018
	LnTA	0.318	.132	.095	1.627	0.125
	LEV	0.025	.033	.036	0.619	0.671
	ROE	-0.063	.052	-.064	-1.125	0.282
	LOSS	1.421	.981	.084	1.433	0.169
	GROWTH	-0.018	.089	-.009	-0.167	0.911

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SC	.988	1.012
	LnTA	.984	1.017
	LEV	.975	1.026
	ROE	.984	1.016
	LOSS	.983	1.017
	GROWTH	.980	1.020

a. Dependent Variable: ROA

Collinearity Diagnostics ^a							
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	SC	LnTA	LEV
1	1	5.796	1.000	.00	.01	.00	.00
	2	.484	3.459	.00	.03	.00	.00
	3	.273	4.608	.00	.88	.02	.01
	4	.190	5.527	.00	.05	.00	.00
	5	.147	6.271	.00	.00	.49	.01
	6	.088	8.121	.03	.01	.43	.36
	7	.021	16.444	.97	.02	.05	.62

Collinearity Diagnostics ^a						
Model	Dimension	Variance Proportions				
		ROE	LOSS	GROWTH		
1	1	.00	.01	.00		
	2	.01	.90	.00		
	3	.08	.01	.00		
	4	.25	.01	.66		
	5	.39	.01	.13		
	6	.15	.01	.07		
	7	.12	.05	.14		

a. Dependent Variable: ROA

Residuals Statistics ^a					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	17.3172%	24.1288%	20.5279%	1.33504%	300
Residual	-17.57343%	15.96705%	0.00000%	8.40860%	300
Std. Predicted Value	-2.405	2.697	.000	1.000	300
Std. Residual	-2.069	1.880	.000	.990	300

a. Dependent Variable: ROA

```

REGRESSION
/MISSING LISTWISE
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT TobinsQ
/METHOD=ENTER SC LnTA LEV ROE LOSS GROWTH
/RESIDUALS DURBIN.

```

Regression

Notes		
Output Created		11-MAR-2023 19:02:07
Comments		
Input	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	300
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT TobinsQ /METHOD=ENTER SC LnTA LEV ROE LOSS GROWTH /RESIDUALS DURBIN.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00
	Memory Required	6208 bytes
	Additional Memory Required for Residual Plots	0 bytes

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	GROWTH, LOSS, LnTA, SC, ROE, LEV ^b		Enter

a. Dependent Variable: Tobins'Q

b. All requested variables entered.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.438 ^a	.192	.189	.101268	.387

a. Predictors: (Constant), GROWTH, LOSS, LnTA, SC, ROE, LEV

b. Dependent Variable: Tobins'Q

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.072	6	.012	4.187	.005 ^b
	Residual	3.056	298	.010		
	Total	3.128	304			

a. Dependent Variable: Tobins'Q

b. Predictors: (Constant), GROWTH, LOSS, LnTA, SC, ROE, LEV

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.012	.034		29.438	0.000
	SC	0.316	.003	.094	2.647	0.016
	LnTA	0.005	.002	.054	0.856	0.287
	LEV	0.007	.000	.022	0.391	0.655
	ROE	-0.018	.001	-.014	-0.236	0.921
	LOSS	-0.007	.012	-.032	-0.542	0.486
	GROWTH	0.005	.001	.084	1.415	0.217

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SC	.988	1.012
	LnTA	.984	1.017
	LEV	.975	1.026
	ROE	.984	1.016
	LOSS	.983	1.017

	GROWTH	.980	1.020
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a. Dependent Variable: Tobins'Q

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	SC	LnTA	LEV
1	1	5.796	1.000	.00	.01	.00	.00
	2	.484	3.459	.00	.03	.00	.00
	3	.273	4.608	.00	.88	.02	.01
	4	.190	5.527	.00	.05	.00	.00
	5	.147	6.271	.00	.00	.49	.01
	6	.088	8.121	.03	.01	.43	.36
	7	.021	16.444	.97	.02	.05	.62

Collinearity Diagnostics^a

Model	Dimension	Variance Proportions		
		ROE	LOSS	GROWTH
1	1	.00	.01	.00
	2	.01	.90	.00
	3	.08	.01	.00
	4	.25	.01	.66
	5	.39	.01	.13
	6	.15	.01	.07
	7	.12	.05	.14

a. Dependent Variable: Tobins'Q

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.01930	1.09790	1.05985	.015355	300
Residual	-.190755	.205698	.000000	.100264	300
Std. Predicted Value	-2.641	2.478	.000	1.000	300
Std. Residual	-1.884	2.031	.000	.990	300

a. Dependent Variable: Tobins'Q