

**THE IMPACT OF BOARD CHARACTERISTICS
AND INTERNAL AUDIT EFFECTIVENESS ON
BANK PERFORMANCE IN THE KINGDOM OF
SAUDI ARABIA: ENVIRONMENTAL
DISCLOSURE AS A MODERATOR**

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UNIVERSITI SAINS MALAYSIA

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by

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**Thesis submitted in fulfilment of the requirements
for the degree of
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LIST OF ABBREVIATIONS

AUDC	Audit Committee
BCBS	Basel Committee on Banking Supervision
CAE	Chief Audit Executive
CEO	Chief Executive Officer
CFOs	Chief Financial Officers
CG	Corporate governance
CGR	Corporate Governance Regulations
CMA	Capital Market Authority
CSR	Corporate Social Responsibility
DER	Debt to Equity Ratio
DPR	Dividend Payout Ratio
EMS	Environmental management systems
ESG	Environmental, Social, and Governance
GMM	Generalised Method for Moments.
IADs	Internal Audit Departments
IAE	Internal audit effectiveness
IAF	Internal Audit Function
IMF	International Monetary Fund
ISPPIA	Professional Practice of Internal Auditing
KSA	Kingdom of Saudi Arabia
MEA	Middle East and Africa
NSE	Nigeria Stock Exchange
OECD	Organisation for Economic Co-activity and Development
OED	Overall Environmental Disclosure

ROA	Return on Asset
ROE	Return On Equity
SAMA	Central Bank of Saudi Arabia
SSE	Saudi Stock Exchange
UK	United Kingdom
USA	United States
VIF	Variance Inflation Factor

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APPENDIX A STUDY SAMPLE

**KESAN CIRI-CIRI LEMBAGA PENGARAH DAN KEBERKESANAN
AUDIT DALAMAN TERHADAP PRESTASI BANK DI ARAB SAUDI:
PENSAHIRAN ALAM SEKITAR SEBAGAI MODERATOR**

ABSTRAK

Kajian semasa berusaha untuk menilai pengaruh ciri lembaga pengarah dan keberkesanan audit dalaman terhadap prestasi bank di Arab Saudi, dengan tumpuan khusus pada peranan penyederhanaan pensahiran alam sekitar. Sampel kajian terdiri daripada 21 bank, 12 daripadanya adalah bank perdagangan domestik dan 9 daripadanya adalah bank perdagangan asing. Di samping itu, data yang dikumpul daripada laporan tahunan yang diterbitkan meliputi lima tahun kewangan 2016 hingga 2020. Dengan menggunakan metodologi kuantitatif, kajian ini menganalisis data yang diekstrak daripada laporan tahunan bank Arab Saudi terpilih. Melalui aplikasi kaedah statistik seperti statistik deskriptif dan model regresi linear, penyelidikan ini menemui pandangan yang ketara. Terutamanya, penemuan tersebut menekankan kesan besar saiz lembaga pengarah dan kekerapan mesyuarat lembaga pengarah ke atas pulangan aset. Tambahan pula, keberkesanan audit dalaman muncul sebagai penentu penting prestasi bank. Yang penting, kajian itu mendedahkan bahawa pendedahan alam sekitar memainkan peranan penting dalam menyederhanakan hubungan antara dinamik lembaga, keberkesanan audit dalaman dan prestasi bank. Dengan menyepadukan teori agensi dan teori pihak berkepentingan, penyelidikan ini menyumbang kepada wacana ilmiah mengenai tadbir urus korporat dan prestasi organisasi dalam sektor perbankan. Penyelidikan masa depan harus mempertimbangkan faktor kontekstual yang lebih luas dan menggunakan sumber data primer untuk meningkatkan kebolehgeneralisasian penemuan. Wawasan ini mempunyai implikasi praktikal untuk penggubal dasar dan

pengamal industri, menekankan kepentingan tadbir urus lembaga, keberkesanan audit dalaman, dan pendedahan alam sekitar dalam memacu prestasi bank yang mampan dan memaklumkan proses membuat keputusan yang strategik.

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ABSTRACT

The current study endeavors to assess the influence of board characteristics and internal audit effectiveness on the performance of banks in Saudi Arabia, with a specific focus on the moderating role of environmental disclosure. The sample of the study consists of 21 banks, 12 of which are domestic commercial banks and 9 of which are foreign commercial banks. In addition, the collected data from published annual reports covered the five financial years 2016 to 2020. Employing a quantitative methodology, the study analyzes data extracted from the annual reports of select Saudi Arabian banks. Through the application of statistical methods such as descriptive statistics and linear regression models, the research uncovers significant insights. Notably, the findings underscore the substantial impact of board size and the frequency of board meetings on return on assets. Furthermore, internal audit effectiveness emerges as a crucial determinant of bank performance. Importantly, the study reveals that environmental disclosure plays a pivotal role in moderating the relationships between board dynamics, internal audit efficacy, and bank performance. By integrating agency theory and stakeholder theory, this research contributes to the scholarly discourse on corporate governance and organizational performance in the banking sector. Future research should consider broader contextual factors and employ primary data sources to enhance the generalizability of findings. These insights hold practical implications for policymakers and industry practitioners, emphasizing the

significance of board governance, internal audit effectiveness, and environmental disclosure in driving sustainable bank performance and informing strategic decision-making processes.

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

The banking sector in Kingdom of Saudi Arabia (KSA) plays a crucial role in the country's economic framework, acting as a vital link in financial transactions and economic growth. However, similar to banking systems globally, KSA banks encounter a range of complexities and opportunities that influence their performance within the broader economic context of the nation (Orlando & Bace, 2021).

The regulatory landscape governing KSA banks is robust and meticulously managed by the KSA Monetary Authority (SAMA) (Wilson, 2021). SAMA implements a comprehensive set of regulations aimed at ensuring financial stability and consumer protection (Wilson, 2021). Compliance with these regulations, covering capital adequacy, liquidity ratios, and anti-money laundering measures, not only safeguards the financial system but also presents operational challenges that impact the profitability and operational efficiency of banks.

Interest rates form a critical component of KSA banking dynamics, closely intertwined with global economic trends, particularly the fluctuations in U.S. interest rates due to the riyal's peg to the U.S. dollar. Variations in global interest rates have direct repercussions on domestic borrowing costs and deposit rates, thereby influencing the net interest margins of banks and their overall profitability. Consequently, KSA banks must adeptly manage interest rate risks to maintain sustainable profitability and liquidity (Mukhtar & Foston, 2021).

Credit risk remains a significant concern for KSA banks, accentuated by the economic disruptions stemming from the COVID-19 pandemic (Raj & Bozonelos, 2020). The pandemic-induced economic downturn has led to heightened levels of defaults and loan delinquencies, exerting pressure on banks' asset quality and financial performance. Addressing non-performing loans (NPLs) becomes imperative for banks to uphold their financial stability and mitigate potential losses, necessitating the implementation of robust credit risk management frameworks.

In response to evolving consumer preferences and technological advancements, KSA banks are actively embracing digital transformation initiatives to enhance customer experience and operational efficiency (Arthur & Omari, 2023). The proliferation of mobile banking applications, online payment platforms, and digital onboarding processes reflects the banking sector's commitment to cater to the digital-savvy populace of KSA. However, digital innovation also introduces new challenges, including cybersecurity risks and regulatory compliance requirements, necessitating investments in robust cybersecurity measures and regulatory frameworks (Albarrak & Alokley, 2021).

Alameddin (2022) indicated that the growing emphasis on environmental, social, and governance (ESG) considerations globally underscores the need for KSA banks to integrate sustainability principles into their operational frameworks. Environmental sustainability, social responsibility, and corporate governance have become focal points for sustainable banking practices. KSA banks are exploring opportunities to finance renewable energy projects, support social initiatives, and enhance governance standards to align with evolving ESG expectations (Al Yousif, 2020).

Amidst the challenges, KSA banks also encounter significant growth opportunities. The government's Vision 2030 initiative, aimed at diversifying the economy and promoting private sector development, presents avenues for banks to expand their market presence and diversify revenue streams. Privatization endeavors, capital market reforms, and increased foreign investment provide fertile ground for KSA banks to capitalize on emerging opportunities and contribute to the country's economic advancement (Al Naimi, 2022).

Ultimately, KSA banks navigate a multifaceted landscape characterized by regulatory complexities, economic uncertainties, and technological advancements. While challenges persist, avenues for growth and innovation abound, provided banks adeptly embrace digital transformation, integrate sustainable practices, and capitalize on emerging opportunities (Kaggwa et al., 2023). Through strategic adaptation and alignment with evolving market dynamics, KSA banks can foster financial resilience and contribute to the Kingdom's economic prosperity (Aassouli & Ahmed, 2023).

Alternatively, the banking sector in the Kingdom of Saudi Arabia (KSA) is experiencing significant shifts in corporate governance norms, especially regarding board attributes (Habtoor, 2022). These adjustments signify a broader dedication to transparency, accountability, and bolstering investor confidence within the financial domain.

Parveen (2021) stated that recent years have seen significant regulatory advancements in corporate governance practices overseen by the KSA Capital Market Authority (CMA). The introduction of stringent regulations aims to bolster governance frameworks across listed companies, including banks. These regulations span diverse

areas such as board structure, director independence, and executive remuneration, all aimed at fostering greater organizational transparency and accountability.

One focal area of attention within corporate governance is the makeup and attributes of the board of directors (Al-Matari, 2020). In the KSA banking realm, there's a growing emphasis on enriching board diversity, expertise, and independence. Boards are increasingly encouraged to comprise individuals from varied backgrounds, possessing diverse skills and experiences, to better address the multifaceted needs of the banking sector (Alawadi, 2023).

The concept of director independence is pivotal in board composition, with regulatory bodies advocating for an adequate presence of independent directors to ensure rigorous oversight and decision-making processes. Independent directors contribute objectivity, impartiality, and fresh insights to board discussions, thereby mitigating potential conflicts of interest and enhancing governance efficacy (Ben Rejeb, Berraies & Talbi, 2020).

Moreover, boards play a critical role in overseeing risk management practices, particularly amidst evolving regulatory frameworks and emerging risks confronting the banking sector (Musallam, 2020). Boards are tasked with providing strategic direction and oversight on risk management strategies, ensuring banks effectively identify, evaluate, and mitigate risks to protect stakeholders' interests and uphold financial stability (Tamimi, 2021).

In addition to regulatory mandates, KSA banks are increasingly acknowledging the significance of integrating environmental, social, and governance (ESG) considerations into their governance frameworks. Sustainability initiatives, ethical business practices, and social accountability are integral facets of contemporary

governance models, aligning with global trends and investor expectations (Albarrak & Alokley, 2021).

Furthermore, technological advancements and digital transformations are reshaping board dynamics and governance practices within KSA banks. Boards are leveraging data analytics, artificial intelligence, and digital platforms to enhance decision-making processes, bolster board efficiency, and streamline communication channels. Digital tools enable real-time access to critical information, empowering boards to respond promptly to emerging risks and opportunities in a swiftly evolving business environment (Khan et al ., 2022).

To sum up, ongoing developments in corporate governance, particularly pertaining to board characteristics, underscore the evolving regulatory landscape and emerging trends within the KSA banking sector. The emphasis on transparency, accountability, and sustainability reflects concerted efforts to enhance governance frameworks and cultivate investor confidence in the financial industry. By promoting board diversity, independence, and expertise, KSA banks can fortify their governance structures, adapt to shifting market dynamics, and uphold the highest standards of corporate governance.

In the other way, in KSA, the functions of audit committees and the effectiveness of internal audits hold substantial significance for the performance and reliability of the banking sector (Boshnak, 2021). These components are instrumental in upholding transparency, accountability, and robust risk management practices within financial institutions, thereby influencing overall bank performance and stability significantly.

Regulatory oversight and governance frameworks in the KSA banking sector are rigorously enforced by entities such as the KSA Monetary Authority (SAMA) and the Capital Market Authority (CMA) (Ahmed, 2022). These regulatory bodies underscore the importance of robust audit committees within banks to oversee internal control mechanisms, financial reporting processes, and compliance with regulatory standards.

The audit committee serves as an independent entity within the bank's governance structure, responsible for overseeing the efficacy of internal audit functions and providing impartial evaluations of the bank's financial reporting processes. Comprising independent directors with diverse expertise in finance, accounting, and risk management, the committee ensures objectivity and impartiality, t by enhancing the credibility and trustworthiness of financial disclosures, fostering investor confidence and trust in the banking sector (Khalid, 2020).

Furthermore, the effectiveness of internal audits is paramount in evaluating the adequacy and efficiency of internal controls, risk management practices, and compliance frameworks within banks (Sudirman et al ., 2021). Internal audit functions play a critical role in the bank's risk management framework, offering independent assessments of key risks and controls to safeguard assets, maintain operational efficiency, and ensure regulatory compliance (Hazaea et al., 2021).

In KSA, internal audit departments conduct risk-based audits across various business units and operational functions of the bank. These audits cover a broad spectrum of areas, including credit risk, market risk, operational risk, and compliance risk (Alazzabi et al., 2023). Through thorough risk assessments and audit testing procedures, internal auditors identify control deficiencies, operational inefficiencies,

and areas of non-compliance, enabling management to implement corrective actions and mitigate potential risks effectively.

Moreover, the effectiveness of internal audits relies on the independence, objectivity, and professional competence of internal auditors. Internal audit departments in KSA banks are staffed with qualified professionals holding relevant certifications such as Certified Internal Auditors (CIA) or Certified Public Accountants (CPA). These professionals adhere to globally recognized audit standards and ethical principles, ensuring the integrity and reliability of audit findings and recommendations (Islam, & Bhuiyan, 2021).

Finally, the roles of audit committees and the effectiveness of internal audits are integral aspects of corporate governance and risk management practices within the KSA banking sector. By promoting transparency, accountability, and effective risk oversight, audit committees contribute to enhancing investor confidence, strengthening regulatory compliance, and safeguarding the financial integrity of banks. Similarly, internal audits play a crucial role in evaluating and mitigating risks, enhancing operational efficiency, and ensuring compliance with regulatory requirements. Through collaborative efforts between audit committees and internal audit functions, KSA banks can fortify their governance frameworks, uphold the highest standards of integrity, and drive sustainable performance and growth in the dynamic landscape of the banking industry (Al-Yazidi et al., 2022).

On the other hand, banks serve as linchpins of economic stability, fostering growth and resilience in the context of KSA (Mugarura, 2023). Marwa et al. (2020) stated that the environmental disclosure and the efficacy of audit committees stand as

pivotal elements of corporate governance frameworks within the banking sector, both pivotal in ensuring transparency, accountability, and sustainable value creation.

Regarding to the environmental disclosure; mandated by regulatory bodies such as the KSA Monetary Authority (SAMA) and the Capital Market Authority (CMA), environmental disclosure requisites entail transparent communication of environmental policies, initiatives, and performance metrics within banks' annual reports. Compliance with these mandates underscores banks' dedication to environmental stewardship and sustainability, building stakeholder trust and confidence (Boshnak, 2022).

Environmental disclosure furnishes substantial competitive advantages for KSA banks. Transparent reporting of environmental endeavors enhances their reputation, distinguishing them as socially responsible entities in a competitive milieu (Alnasif, 2023). This prioritization of sustainability appeals to socially conscious investors and clientele, augmenting the bank's competitive edge and long-term viability.

Angelini & Nieri (2022) indicated that effective environmental disclosure engenders favorable brand reputation and market positioning for banks. By forthrightly communicating their environmental commitments, banks cultivate trust and credibility among stakeholders, fortifying customer loyalty, averting reputational perils, and bolstering their overall market standing.

Environmental disclosure dovetails with broader sustainability pursuits within KSA Arabia's banking sector. Banks embracing environmental transparency and accountability are better poised to identify and mitigate environmental risks, harness emerging opportunities, and propel the shift toward a low-carbon economy.

Integrating environmental considerations into strategic agendas fosters positive environmental outcomes and fortifies long-term sustainability (Sarea, 2020).

Audit committees, as autonomous entities within banks, oversee financial reporting processes, internal controls, and regulatory compliance. In KSA, regulatory mandates from bodies like SAMA and CMA necessitate robust audit committees to ensure transparency, accountability, and effective risk management (Mahsoon, 2023). A diverse and independent audit committee enhances financial reporting credibility, elevating investor confidence and mitigating financial risks.

Board composition, including the audit committee, shapes environmental disclosure practices and bank performance (Arayssi et al., 2020). Diverse boards furnish varied perspectives and competencies to environmental decision-making, nurturing innovation, strategic acumen, and creativity. Evident research underscores the positive nexus between board diversity, environmental disclosure, and firm performance in KSA banking sector, underscoring the imperative of inclusive governance structures in fostering sustainable growth and value generation (Almaqtari et al., 2023).

In summation, environmental disclosure and robust audit committees constitute cardinal tenets of corporate governance in KSA banking sector. By championing environmental transparency, accountability, and effective risk management, banks can fortify competitiveness, burnish reputation, and drive sustainable growth. As regulatory frameworks evolve and stakeholder expectations burgeon, banks must adhere unwaveringly to pinnacle standards of corporate governance, transparency, and environmental stewardship to navigate the intricacies of contemporary banking landscapes and foster enduring prosperity.

1.2 Problem Statement

In the realm of KSA banking, the evaluation of bank performance extends beyond numerical analysis, encompassing intricate practical challenges and theoretical intricacies intrinsic to the sector (Mastilo, 2024). The regulatory framework overseen by the KSA Monetary Authority (SAMA) prioritizes stability and integrity, necessitating meticulous compliance efforts by financial institutions (AlQassar & Ahmed, 2022). However, the rigorous regulatory environment presents practical obstacles, impeding banks' operational flexibility and capital management capabilities as they strive to meet stringent Basel III standards while optimizing performance metrics.

The economic landscape of KSA, heavily reliant on oil exports, exposes financial institutions to volatility stemming from global oil price fluctuations and geopolitical tensions (Akgün, 2022). This volatility permeates through the banking sector, influencing credit risk management, asset quality, and liquidity management. Banks must navigate the ramifications of economic uncertainties on profitability margins and asset valuations while maintaining credit growth amid fluctuating market conditions.

Furthermore, the imperative of technological integration underscores the evolving nature of banking operations in KSA (Mani & Goniewicz, 2023). While digital transformation initiatives promise enhanced operational efficiency and customer experience, the integration of innovative technologies like artificial intelligence and blockchain poses challenges. Legacy infrastructure, cybersecurity concerns, and skill gaps among banking personnel hinder seamless technology

adoption, underscoring the practical complexities in intent in leveraging technological innovation to enhance bank performance (Refaei, 2023).

Theoretical considerations enrich the discourse on bank performance evaluation, with various performance measurement models serving as theoretical frameworks guiding assessment methodologies (Klette, 2022). However, the selection and application of these models entail theoretical nuances, as different methodologies yield diverse insights into bank performance. Tandberg & Ulfseth (2023) stated that the traditional metrics such as return on assets (ROA) and return on equity (ROE) may inadequately capture the complexities of contemporary banking operations, necessitating a nuanced understanding of underlying assumptions and methodologies.

Agency theory provides theoretical insights into the principal-agent relationship within banks, emphasizing the alignment of stakeholder interests to mitigate agency conflicts and enhance performance (Gwala & Mashau, 2023). However, theoretical constructs must contend with practical realities, as divergent objectives and asymmetric information may precipitate agency problems. Governance mechanisms, executive compensation structures, and transparency initiatives emerge as theoretical solutions to address agency conflicts and promote stakeholder alignment, highlighting the intricate interplay between theory and practice in shaping bank performance in KSA (Mondello & Smaoui, 2021).

In summation, the assessment of bank performance in KSA transcends mere numerical metrics, encompassing a dynamic interplay of practical challenges and theoretical considerations (Bobur & Sirojiddin, 2023). By navigating regulatory landscapes, economic uncertainties, technological disruptions, and theoretical constructs, stakeholders can cultivate an environment conducive to promoting

transparency, resilience, and sustainability within the KSA banking sector. Recognizing the interconnected nature of practical challenges and theoretical considerations is paramount for advancing financial stability and driving meaningful progress in KSA banking landscape (Ionaşcu et al., 2023).

On the other hand, The KSA banking sector, a vital component of the nation's economy, confronts a multitude of challenges impacting its performance (Dulaijan, 2020). This discourse delves into the interconnected dynamics of poor performance within the KSA banking sector, with particular attention to the roles of board characteristics and internal audit effectiveness as explanatory variables. Against a backdrop of regulatory, economic, and technological complexities, comprehending the contributions of these factors to poor performance is imperative for fortifying the sector's resilience and sustainability (Abdelfattah & El-Shamy, 2024).

As previously elucidated, the KSA banking sector grapples with practical challenges such as stringent regulatory environments, economic volatility, and technological integration. Regulatory advance, while pivotal for upholding stability, may impose constraints on operational adaptability and capital management. Economic fluctuations, driven by oil price shifts and geopolitical tensions, impact credit risk management and asset quality (Abdelfattah & El-Shamy, 2024).

Moreover, technological integration mandates seamless adoption of innovative solutions while addressing legacy infrastructure and cybersecurity concerns (Tariq, 2024). Concomitant with these practical challenges, theoretical considerations regarding performance measurement models and agency theory enrich our comprehension of the sector's complexities. Performance measurement models furnish insights into evaluating bank performance, yet their selection and application

necessitate nuanced considerations to capture contemporary banking intricacies. Similarly, agency theory expounds on the principal-agent relationship within banks, accentuating stakeholder alignment and governance mechanisms to mitigate agency conflicts.

Within the realm of corporate governance, board characteristics assume pivotal roles in shaping organizational strategies, risk management practices, and performance outcomes. The composition of the board, inclusive of independence, expertise, diversity, and leadership structure, influences decision-making processes and nurtures accountability. In the KSA banking context, fortifying board effectiveness via robust governance structures and strategic oversight mechanisms is indispensable for tackling poor performance issues (Federo et al., 2020).

Furthermore, the efficacy of internal audit functions serves as a cornerstone of sound corporate governance practices within banks (Vadasi, Bekiaris & Andrikopoulos, 2021). Internal auditors play pivotal roles in evaluating risk exposures, assessing internal controls, and furnishing assurance regarding the integrity of financial reporting processes. In the KSA banking milieu, optimizing internal audit effectiveness entails aligning audit objectives with organizational goals, harnessing technology-driven audit methodologies, and fostering cultures of compliance and ethical conduct (Lewis, 2024).

The nexus between board characteristics, internal audit effectiveness, and poor performance issues within the KSA banking sector is conspicuous (Kateb & Belgacem, 2023). Boards characterized by diverse expertise, independent oversight, and effective leadership structures are better positioned to navigate regulatory complexities, mitigate risk exposures, and propel strategic initiatives enhancing bank performance.

Similarly, internal audit functions demonstrating independence, objectivity, and proficiency in risk assessment and mitigation contribute to fortifying the overall governance framework and mitigating poor performance risks (Lucian, Nahrgang & Shropshire, 2020).

In summation, comprehending the interplay between board characteristics, internal audit effectiveness, and poor performance issues is imperative for fostering resilience and sustainability within the KSA banking sector. By bolstering board effectiveness, optimizing internal audit functions, and aligning governance practices with organizational objectives, stakeholders can confront the myriad challenges confronting the sector. Moving forward, concerted endeavors to fortify corporate governance mechanisms, leverage technology-driven solutions, and foster cultures of accountability are paramount for driving substantive progress and augmenting the performance and stability of the KSA banking sector.

In recent times, there has been a burgeoning acknowledgment of the significance of environmental sustainability and corporate accountability across various sectors, including banking (Morgera, 2020). The disclosure of environmental information has emerged as a pivotal element of organizational transparency and responsibility, indicative of a bank's dedication to environmental stewardship and risk management (Wang, 2020). An understanding of how environmental disclosure interacts with board characteristics and influences bank performance is imperative for evaluating the broader ramifications of sustainability initiatives within the banking industry.

The composition and attributes of a bank's board of directors exert a profound influence on its strategic orientation and operational efficacy (Galletta, Mazzù &

Naciti, 2021). Board diversity, encompassing factors such as gender, ethnicity, and professional background, enriches decision-making processes by fostering a spectrum of perspectives and experiences. Independent boards, devoid of conflicts of interest, furnish effective oversight and governance, thereby enhancing accountability and bolstering investor confidence (Al Frijat et al., 2023). Furthermore, boards endowed with expertise in finance, risk management, and regulatory compliance contribute invaluable insights to strategic delineation and performance appraisal, particularly within the intricate and dynamic milieu of banking (Jouber, 2021).

Environmental disclosure encompasses a spectrum of practices designed to disseminate a bank's environmental policies, performance metrics, and impacts to stakeholders. This encompasses the divulgence of carbon emissions, energy consumption, sustainable financing endeavors, and climate-related risks and opportunities. Robust frameworks for environmental disclosure empower banks to showcase their commitment to sustainability, address stakeholder apprehensions, and align with evolving regulatory mandates and industry norms. Through the provision of transparent and reliable information, environmental disclosure augments a bank's reputation, fortifies stakeholder relationships, and mitigates potential risks associated with environmental controversies or non-adherence to regulatory mandates (Yusuf, 2024).

The nexus between environmental disclosure, board characteristics, and bank performance is intricate and dynamic (Khan et al., 2021). Boards characterized by diversity and expertise are predisposed to recognize the strategic import of environmental sustainability and advocate for comprehensive disclosure practices. Independent boards assume a pivotal role in safeguarding the integrity and credibility of environmental disclosures, thereby fostering stakeholder and investor trust.

Moreover, boards possessing environmental acumen or oversight committees may facilitate the integration of sustainability imperatives into the bank's strategic blueprint, thereby propelling innovation, operational efficiency, and long-term value generation (Dobija et al., 2023).

Despite the merits of environmental disclosure, banks grapple with several challenges in its effective implementation. These include complexities associated with data aggregation and management, compliance costs vis-a-vis regulatory mandates, and the absence of standardized reporting protocols. Moreover, the quantification of the impact of environmental disclosure on bank performance is rendered challenging by the heterogeneity of disclosure practices, industry-specific dynamics, and externalities influencing financial outcomes (Qian, Parker & Zhu, 2024). Nonetheless, environmental disclosure presents banks with opportunities to differentiate themselves in the marketplace, attract socially responsible investors, and access novel avenues of capital for sustainable investments and initiatives.

Finally, environmental disclosure serves as a catalyzing agent for reformulating board governance paradigms and propelling sustainable performance within the banking sector (Freytag, 2020). By integrating environmental imperatives into strategic decision-making frameworks, boards can augment transparency, accountability, and stakeholder engagement, thereby fostering resilience and engendering long-term value creation (Ao et al., 2023). While challenges persist, the escalating emphasis on environmental sustainability underscores the imperative for banks to embrace disclosure as a strategic imperative and seize opportunities for innovation and growth within an evolving landscape.

Agency theory offers a pertinent framework for scrutinizing the interrelations between principals and agents within organizational settings, particularly concerning corporate governance and performance evaluation. Within the banking sector, the interaction between shareholders (principals) and the board of directors alongside top management (agents) often gives rise to conflicts of interest attributable to incongruent objectives and incentives. While shareholders aim to optimize wealth accumulation, managers and directors may pursue personal interests potentially conflicting with shareholder welfare. The ensuing misalignment underscores the significance of robust governance mechanisms to alleviate agency predicaments and ensure the harmonization of incentives (Köksal & Strähle, 2021).

Core to agency theory lies the concept of monitoring and control mechanisms engineered to align the interests of principals and agents (Bjurstrøm, 2020). The board of directors stands as a primary governance mechanism tasked with supervising managerial decisions, ensuring accountability, and safeguarding shareholder interests. Furthermore, internal audit functions assume a pivotal role in evaluating the efficacy of internal controls, risk management protocols, and corporate governance frameworks. These mechanisms collectively enhance transparency, accountability, and the overall integrity of organizational operations (Rorong & Lasdi, 2020).

In the context of the proposed thesis, the inquiry revolves around discerning the nexus between board characteristics, internal audit efficacy, and bank performance, particularly gauged through Return on Assets (Behrend, 2020). Board attributes, encompassing dimensions such as size, independence, diversity, and the presence of financial acumen, constitute pivotal determinants of effective corporate governance. A board characterized by heightened independence and expertise is aptly positioned to scrutinize managerial decisions and uphold shareholder interests. Similarly, internal

audit effectiveness contributes to the dependability of financial reporting, the efficiency of internal controls, and overarching corporate governance frameworks (Wijayanti & Setiawan, 2023).

The current study is posits that select board characteristics and internal audit efficacy exert a positive influence on bank performance, as evidenced by ROA metrics. Through empirical scrutiny and rigorous statistical methodologies, the study endeavors to empirically validate these propositions, t by advancing the comprehension of how corporate governance mechanisms shape bank performance within the confines of agency theory. By unraveling the intricacies of governance structures, internal control mechanisms, and financial performance, the thesis seeks to furnish invaluable insights into the dynamics of corporate governance and its ramifications for bank performance and shareholder wealth maximization.

Stakeholder theory offers a valuable framework for comprehending organizational interactions with diverse stakeholders and their consequential effects on organizational behavior and performance (McGahan, 2021). In the proposed study, stakeholder theory serves as the theoretical lens through which to investigate the associations among board characteristics, internal audit effectiveness, environmental disclosure, and bank performance, specifically in terms of return on assets. According to stakeholder theory, organizations are urged to consider the interests of all stakeholders, encompassing shareholders, employees, customers, suppliers, and the wider community, in their decision-making processes. Consequently, this theory underscores the pivotal role of corporate governance mechanisms, such as board characteristics and internal audit effectiveness, in managing stakeholder relationships and ensuring accountability and transparency (Raimo, 2021).

Reviewing the literature on board characteristics and internal audit effectiveness reveals their substantial impact on organizational performance and the creation of stakeholder value (Musallam, 2020). Elements such as board composition, independence, and expertise, alongside internal control systems and risk management processes, contribute significantly to financial performance metrics like ROA. These dimensions of corporate governance represent critical facets that influence an organization's ability to meet its obligations to stakeholders while pursuing operational efficiency and profitability. Consequently, a nuanced understanding of the intricate relationships among these variables is essential for comprehensively assessing organizational performance and strategic decision-making processes (Mulyani & Basrowi, 2024).

Environmental disclosure emerges as a moderating factor within the dynamic interactions among board characteristics, internal audit effectiveness, and bank performance (Adu, Al-Najjar & Sitthipongpanich, 2022). It serves as a reflection of an organization's commitment to environmental sustainability and transparency in disclosing its environmental impacts and initiatives. By signaling the organization's dedication to environmental responsibility and its accountability to stakeholders, environmental disclosure shapes the effectiveness of corporate governance mechanisms. Acknowledging the role of environmental disclosure as a moderating variable enriches the comprehension of how organizations navigate the complexities in corporate governance, sustainability imperatives, and financial performance within the contemporary business environment (Chen et al., 2024).

1.3 Research Objectives

The fundamental goal of the current research is to look into the underlying relationship between; board characteristics, internal audit, and firm performance as well as the environmental disclosure role in moderating these relationships. As a consequence, the goals of this research are as follows:

- 1) To examine the impact of board characteristics on bank performance in KSA
- 2) To examine the impact of effective internal auditing on bank performance in KSA
- 3) To examine the role of environmental disclosure in moderating the relationship between board characteristics and bank performance in KSA
- 4) To examine the role of environmental disclosure in moderating the relationship between effective internal audit and bank performance in KSA

1.4 Research Questions

Accordingly, research questions of the study are stated below:

- 1) Do board characteristics influence KSA bank performance?
- 2) Does effective internal auditing affect bank performance in KSA?
- 3) Does the environmental disclosure moderate the relationship between board characteristics and bank performance in KSA?
- 4) Does environmental disclosure moderate the relationship between effective internal audit and bank performance in KSA?

1.5 Significance of the Study

The current study assesses the impact of board characteristics and internal auditing in the KSA banking sector. Furthermore, the current study investigates the role of environmental disclosure in the impact of board characteristics and internal audit on KSA bank performance.

Empirical research on the impacts of board characteristics and effective internal audit on performance of banks is ambiguous, indecisive, and contentious (Almutairi & Quttainah, 2020). Moreover, the majority of the studies are from the contexts of the U.S, Europe, Australia, and China while studies on developing countries are limited, as in the case of KSA. In comparison to developed countries, data on environmental performance is not properly disclosed, or firms in developing countries provide limited data. Thus, by utilising data from KSA-listed banks, this study would contribute to the literature in the context of developing countries by providing empirical evidence of a significant affiliation between impacts of board characteristics mechanisms and effective internal audit on performance of banks. Furthermore, this study can provide variation in disclosure practices among different environmental performers by categorising firms as good, bad, or mixed environmental performers in order to examine the impact of performance on environmental disclosure. As a result, the study provides information and the impact of all Saudi Stock Exchange financial sectors on the affiliation of CG, internal audit, and environmental disclosure, which has never been done before.

Despite the increased number of environmental conditions, relatively few studies have been made to determine the board characteristics influence on environmental disclosure (Paloviita et al., 2010). Therefore, this study is meant to

make the contribution needed to the literature by providing empirical evidence of the proposed relationship between board characteristics and environmental disclosure and the resulting bank performance in the context of KSA. Nevertheless, it is evident from the literature that Corporate Social Responsibility (CSR) is well studied in the context of KSA, and that useful CSR practises enhance corporate image and firms' financial performance (Lone et al., 2016), which highlights the moderating role of environmental disclosure in bank performance. Additionally, a significant association between CG and corporate disclosure has been examined. Empirical evidence regarding whether or not CG affects environmental disclosure is insufficient. Thus, this study fills the gap through investigating the impact of CG on environmental disclosure using data from KSA-listed banks.

Moreover, effective CG mechanisms would then demonstrate improved collaboration between influencing shareholders and minority shareholder to disclose high-quality environmental information. Nonetheless, despite a developed and improved corporate business environment, the effectiveness of good CG in terms of environmental disclosure is unanswerable. There has been no recent research in the banking industry that has examined the relationship between board characteristics and internal audit with the moderating role of environmental disclosure as more studies are focused on exploring the direct relationship of environmental disclosure with board characteristics (Giannarakis, Andronikidis, & Sariannidis, 2020; Ienciu, 2012) and internal audit (Maria, 2012). This study significantly advances knowledge in the areas of accounting and auditing for the KSA Arabian banking sector.

1.6 Scope of the Study

The current research stresses on the aspects of board characteristics, internal auditing, and environmental disclosure. The current analysis is based on banks in KSA. Because of accounting for more than 53% of the trading value on the KSA Stock Exchange, the banking industry in KSA is regarded as essential and crucial. Besides, the importance banking sector for the environment is agreed upon because it aids the country's adaptation to changing climatic conditions. Moreover, by allocating financing to adversely affected areas, these banks show a critical role in lessening the effects of climate change and achieving sustainability as well. In fact, banks are critical to achieving the vision of a green economy. Furthermore, this industry employs the most people in KSA (Oladapo et al., 2022).

1.7 Chapter Summary

This chapter contains the chapter's introduction. In this regard, the topic's background is presented. Besides, the problem statement, research question, and research objectives of the research topic are outlined. The importance of this research in both practical and theoretical terms is justified, as is the scope of the study.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

Chapter two examines the board characteristics models found in the literature and presents a widely accepted definition of corporate governance. This chapter also covers fundamental concepts for internal auditing as well as the dependent and independent definitions of variables. Furthermore, the chapter examines literature on bank performance in the context of Kingdom of Saudi Arabia (KSA).

2.2 Firm performance

Companies today constantly monitor their environment for changes in an effort to sustain their rising performance while growing and improving it. Those that make an effort to develop and invent in order to achieve and maintain performance hold the winning card. Therefore, it is crucial to comprehend and keep track of firm performance (FP) in a dynamically competitive economy. As a result, management and scholars have always been interested in evaluating the success of companies. Taouab and Issor (2019) highlighted that the assessment of FP in an economic environment is crucial for academic researchers and managers. Hence, in developing the measurement of business performance, researchers have increased their efforts.

Profit maximization is considered as the main aim of companies. Profit or gain comes from revenues through sales operations and costs. A company can maximize its profit by maximizing revenues or minimizing costs. This present study hence takes cues from previous studies that have examined the measurement of revenues and costs.