



University of Bahrain

College of Business Administration

Department of Economics and Finance

Board Characteristics And Islamic Banks Performance In GCC

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Prepared by:

Walaa Abdulsattar Hammad

202012428

Supervised by:

Associate Professor Mehdi Mili

University of Bahrain

Kingdom of Bahrain

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DEDICATION

To my brother Ali, in loving memory.

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Abstract

The study aims to bring forth evidence of the link among various board characteristics with the financial performance of Islamic banks and conventional banks operating within GCC markets. The sample consists of 97 banks with the panel data spanning for 10 years from 2010 to 2019. The data for all variables has been obtained from Thomson Reuters DataStream. Non-financial sector firms have been excluded, as every sector has a different set of regulations and operating activities. The sample is observed as subsamples of Islamic banks and conventional in GCC. The Pooled Ordinary Least Squares model is used for the data sample. Findings of the Islamic subsample reveal a significant positive relationship between board size and board meetings on the financial performance of Islamic banks in the GCC context. On the other hand, the independent board members, inflation, and GDP are reported to have a negative effect on the financial performance. The female board members and bank size effect is not significant. As for the conventional subsample, the board size, board meetings and independent board members were found to have a negative effect on the financial performance in the GCC conventional banks context. Similarly, the female board members, bank size, and GDP have a negative but insignificant impact on the financial performance. These results contribute to the understanding of the board characteristics' influence on the financial performance of Islamic and conventional financial firms in the GCC region.

Keywords: Corporate Governance, Board Characteristics, GCC, Islamic Banks, Financial Firms, Financial Performance

Chapter One - Introduction to the Study

Chapter contents:

- 1- Introduction
- 2- Problem Statement
- 3- Research Question
- 4- Research Objectives
- 5- Research Significance
- 6- Research Motivation
- 7- Research Contribution
- 8- Scope of Study
- 9- Research Terminology

Chapter One - Introduction to the Study

1.1 Introduction

Corporate governance drew considerable interest from different stakeholders in the market. The effective functioning of businesses in achieving their strategic and operational goals and objectives is largely dependent on the role played by boards. Following the high-profile financial crises and scandals involving prominent corporations, the responsibilities of both senior management and boards of directors have undergone a significant shift. This has led to a greater emphasis on risk mitigation and the improvement of internal control and governance mechanisms to boost performance and returns.

The collapsing of Lehman Brothers and Washington Mutual Bank in 2008 was attributed, among other factors, to inadequate corporate governance, where boards prioritized their self-interests over that of the company (Hamilton & Micklethwait, 2016). This focus also stems from the fundamental function of corporate governance within any organization. The significance of boards and managers in risk management as well as the improvement of internal control systems to enhance performance has been underscored by global financial scandals and crises. Thus, corporate governance has become a central focus in efforts to strengthen organizations and mitigate risks.

Islamic banking in Gulf countries has highlighted the significance of effective corporate governance processes in addition to Shariah-compliant financial practices. Sound corporate governance in Islamic banks is important as for conventional banks, for guaranteeing Shariah compliance and preserving

stakeholder trust. Corporate governance mechanisms and processes are considered vital in all organizations, given that boards are primarily accountable for overseeing firm performance, safeguarding shareholders, and supervising the Chief Executive Officer (CEO) (Barclift, 2011; Kirkpatrick, 2009). Yet, given that their responsibilities have grown more complex and now involve managing, directing as well as assisting managers during a crisis phase, the jobs of the boards of directors are under strain (Abdulsamad et al., 2018).

Several factors influence the financial stability of a company, including self-interested behavior that results in managers taking self-interested decisions to maximize their gain (AlQudah et al., 2019). Such actions have been common in the market as a consequence of the formation of companies that have a clear division of duties and obligations between the managers and owners (Stiglitz, 1985). Because managers act exploitatively to maximize their benefits rather than making wise decisions that satisfy shareholders, this non-traditional management position has failed to live up to shareholders' expectations (Man & Wong, 2013). In some cases, managers may manipulate the performance of a company, earnings, or other financial documents to secure a permanent position on the corporate board.

When firms attempt to mitigate the adverse effects of poor managerial actions, agency costs are incurred (Jensen, 2005). Implementing appropriate governance measures that enhance the board's capacity to tackle this conflict of interest is an example of such costs. The board is considered reliable enough to protect the assets of the company against being exploited to increase managers' compensation or remuneration (Jizi et al., 2014). A solid corporate governance structure should be employed alongside a clearly defined purpose

to smooth the monitoring process and ensure the steadiness and performance of the firm. (Sharfman, 2009). Since independent members do not directly benefit from making self-interested decisions which could hinder the financial performance, their interests align with what an agent would expect. The appointment of board members with political ties can contribute to enhancing firm performance by facilitating its interactions in the market. Such connections can help businesses secure loans more easily and prevent greedy management from exploiting resources (Menozzi et al., 2012).

Even though the subject matter covered in this study is not uncommon, emerging markets, like the Gulf Cooperation Council (GCC), have unique features. The existing literature makes it very evident that improved governance mechanisms contribute to higher performance. Several researchers have examined the relationship in this regard and emphasized on the significance of board features. In the financial industry, these principles are crucial in establishing corporate legitimacy. The banking industry and economic expansion are directly impacted by these principles. Other unfavorable principles or features exist in the GCC market that may play a very noticeable role across different sectors, particularly nepotism, and favoritism. They tend to hinder the efficiency of regulations in place.

A primary goal of corporate governance is ensuring all key stakeholders are aware of the firm's direction, while also persuading the management to prioritize firm value over personal interests (Connelly et al., 2012). Corporate governance encompasses a range of mechanisms, including composition, size, internal and external directors, the composition of board committees, and CEO duality (Aljifri & Moustafa, 2007; Puni & Anlesinya, 2020).

1.2 Problem Statement

Financial irregularities and the fall of well-established firms such as Lehman Brothers, Enron, and many others provided the urgency for regulatory bodies to revise the corporate governance processes and accounting standards quickly and thoroughly. Furthermore, the introduction of effective monitoring tools like corporate governance principles was motivated by the desire to prevent agents of a firm from engaging in opportunistic behavior to chase their personal interests instead of the those of any given firm, which is to maximize shareholders wealth. The opportunistic behavior of managers can motivate deliberate misinformation regarding the actual financial performance of a business, which in turn deceives users of financial statements. Corporate governance is considered an important monitoring tool. Its effectiveness is believed to significantly influence financial performance. Governance measures can help to minimize risk, improve transparency, and make certain that the interest of the senior managers align with the shareholder's interests by establishing frameworks for effective decision-making and accountability.

Prior studies on governance mechanisms have yielded conflicting results, especially in the GCC emerging markets which did not get much consideration in this regard, particularly the Islamic financial sector. To address the knowledge gap, we explore influences of internal control mechanisms, like the board structure and outside directors, on financial performance.

1.3 Research Questions

The study investigates how board characteristics affect company performance in the GCC region. Below are the formulated research questions:

- 1) How does the size of the board affect financial performance of Islamic financial firms operating in the GCC region?
- 2) How does the number of independent directors on the board influence the financial performance of Islamic financial firms in the GCC?
- 3) What is the relationship between the number of annual board meetings and the financial performance of Islamic financial firms in the GCC?
- 4) What impact does the gender diversity of the board, as measured by the proportion of female to male board members, have on the financial performance of Islamic financial firms in the GCC?

1.4 Research Objectives

The study's objective is to investigate the impact of different board features on GCC Islamic financial sector firms and their performance. The study will focus on banks in the GCC and seek to identify the type of association among the variables, by observing Islamic banks. The composition and characteristics of boards can significantly affect financial position and overall performance. By investigating the impact of different features, this study aims to provide insights into the governance practices that can further improve performance in the GCC financial sector. The GCC financial market is classified as an emerging market in general, as according to the 2022 Agility Emerging Markets Logistics Index, UAE ranked 3rd, Saudi Arabia 6th, Qatar 7th, Oman 14th, Bahrain 15th, and Kuwait 17th (Agility Logistics, Agility Emerging Markets Logistics Index, 2022). Currency movements, trade wars, and unstable economies are also factors that influence poor financial performance in emerging markets.

Hence, the objectives can be summed up into three points. The first objective is identifying key features that substantially affect financial performance and

aid in effective corporate governance. This involves examining the relationship of various characteristics like size, diversity, and independence, with financial performance. The second is analyzing corporate governance theories relevant to our variables to provide a theoretical interpretation of the findings. This involves examining the theoretical perspectives of governance mechanisms and how they contribute to improved financial performance. The third is to identify empirical linkage among governance mechanisms and Islamic firm performance and contribute to existing literature on GCC banks.

1.5 Research Significance

Three main points provide this study with significance. First, it adds to the existing GCC corporate governance knowledge gap by investigating the relationship among various board features and financial performance of Islamic banks. Second, this study provides practical insights for professionals on how the board can impact a company's financial performance, therefore enabling them to undertake effective decisions when it comes to board structures. Lastly, the study is also beneficial to researchers for future studies.

1.6 Research Motivation

The study aims to bring forth evidence of the link among various boards' characteristics with the financial performance of Islamic banks operating within GCC markets. By offering evidence of the linkage between the main variables, the study seeks to assist firms in making informed decisions about board appointments and enhancing firm value. The purpose of conducting this study is discussed further below.

Firstly, there is growing recognition, both internationally and locally, regarding the significance of boards in enhancing financial performance.

Since 2002, GCC countries have adopted corporate governance codes for listed companies, with Oman being the first to introduce such codes. Saudi Arabia, UAE, Qatar, Kuwait, and Bahrain have also introduced corporate governance codes in subsequent years (Shehata, 2015). However, whether firms that follow best practice recommendations in terms of corporate governance and board characteristics achieve better financial results is a question that requires empirical investigation in the GCC context.

Secondly, while the corporate governance handbooks introduced and updated by GCC members are not legally binding for firms, publicly traded firms are expected to adhere to the guidelines. Since this study draws its sample from the financial markets in the GCC, there is an opportunity to explore the association between the variables.

Thirdly, when it comes to the diversity boards, particularly gender diversity, is expected to be a value-adding aspect. Despite the upward trend number of females in positions such as CEOs, managers, board members, etc., the effect of gender in leadership positions in GCC corporate firms has been overlooked.

1.7 Research Contribution

The study provides valuable insights into the advancement of corporate governance and governance mechanisms literature in various ways:

Firstly, the research furthers our knowledge on boards and how they affect the financial performance. Given such insights, firms can benefit by setting up strategic board structures. With the significant costs associated with complying with corporate governance regulations, the study's findings could prove valuable for companies, policymakers, and professional organizations.

Secondly, boards are not structured equally, as one mold does not fit all. While boards are a critical component of the internal mechanism of corporate governance, their effectiveness may be influenced by various factors, including board composition and structure. Adherence to codes and best practices may impede the ability to make optimal decisions and delay the identification of root causes of problems within the organization. Campbell and Mínguez-Vera (2008) have suggested one of the leading causes which could explain low shareholder wealth and sluggish economic growth is the lack of an adequate functioning board and governance mechanisms. Therefore, GCC firms may not be able to comply with other codes and principles outside without question. Based on the unique requirements of the GCC setting, the codes and principles may need to be customized. The outcomes will also be advantageous to smaller businesses in many other nations that are comparable to the GCC. Overall, the findings will help businesses decide how to assemble and appoint their boards of directors.

Lastly, the paper examines the influence of boards with female members on financial performance. This is a variable that has only recently been empirically investigated in the GCC setting. These insights will be helpful to practitioners when designing a corporate board of directors.

1.8 Scope of Study

The present study investigates banks from the six GCC countries. It is conducted by using data of publicly traded Islamic and conventional banks that operate in the financial sector throughout a 10-year period from 2010 to 2019. Thus, corporate governance mechanisms and board characteristics are evaluated, while using return on assets to examine the firm performance levels.

1.9 Research Terminology

The main terminologies that are used in this research need to be described before moving on to the research. They are:

- 1) Corporate governance: set of defined frameworks, relationships, and procedures that govern the operations between boards, managements, and shareholders, and guide the process of making important corporate decisions.
- 2) Agency Theory: the dispute between the agent and principal, which is caused by a separation in ownership and management in a company.
- 3) Stewardship Theory: according to the theory, a steward is expected to be acting in such a way that supports the company and exhibits interdependence and unity.
- 4) Resource Dependency Theory: as per the theory, firms must be able to provide the resources it requires to be able to operate.

Chapter Two - Review of Relevant Literature and Hypotheses Development

Chapter contents:

- 1- Background
- 2- Theories of Corporate Governance
 - Agency Theory
 - Stewardship Theory
 - Resource Dependency Theory
- 3- Shariah Governance Framework
- 4- Corporate Governance and Islamic Financial Firms Performance
- 5- Corporate Governance Challenges in Islamic Financial Firms
- 6- Board structure as a Governance tool
- 7- Hypotheses development
 - Board Size and Firm Financial Performance
 - Board Independence and Firm Financial Performance
 - Board Meetings and Firm Financial Performance
 - Females on Board and Firm Financial Performance

Chapter Two – Review of Relevant Literature and Hypothesis Development

2.1 Background

Existing literature presents diverse perspectives on the link among board features and various indicators of financial performance, where several research findings report the variables to be positively correlated, and others report negative correlation or no association.

The Gulf Cooperation Council (GCC) is a political and economic alliance that consists of six Middle Eastern countries, namely Bahrain, Saudi Arabia, Kuwait, Oman, Qatar, and the United Arab Emirates. Majority of the revenue used to fuel the GCC region expansion has come from the oil abundance. The GCC region has diversified its revenue sources during the last ten years to include construction, retail, manufacturing, and tourism industries. Salih et al. (2019) researched the GCC region, highlighting some of the characteristics that set it apart from other emerging and developed economies. As a result of its policies and initiatives aimed at growth and expansion, the GCC region demonstrated a comparatively sustainable and resilient recovery from the Global Financial Crisis of 2008.

Economy growth over previous decades in GCC region was observed to be comparable to other emerging nations, which has been approximately 5%. This growth has outpaced that of some advanced economies. It is expected that government initiatives to diversify the manufacturing sector and invest in infrastructure will boost revenues in this region and lower the dependence on the majority of the income from the oil and gas sector. While restrictions

are becoming increasingly obstructive globally, GCC banks anticipate concentrating on liquidity management and adhering to the rules established by central banks. The board can be viewed from an organizational viewpoint as a group assembled to work toward accomplishing organizational goals (Freeman & Reed, 1983). Boards have a fundamental role in decision-making as they are positioned above the CEO and other managers in the hierarchy. Some of the important organizational resources include the board's composition and its competencies (Kiel & Nicholson, 2003). Such resources enable businesses to achieve exceptional performance and become a source of competitive advantage (Collins & Clark, 2003; Kuratko et al., 2001). Consequently, board composition and characteristics are crucial building blocks for successful and effective decision-making as well as improved performance.

When investigating the impact on performance, studies have approached this impact from various perspectives. Corporate governance as a term describes both, the process followed while making important business decisions as well as the interaction between the board, managers, and owners. Different corporate governance codes that were created as a guide for firms paid attention to board composition. The significance of an independent and capable board is the primary concern of all corporate governance regulations (Marshall, 2015). There has long been controversy around the board of directors' significance to company strategy. However, research attempts have been limited due to several flaws including the shortage of a thorough theoretical framework, dependence on a proxy rather than a direct measurement of the strategy, and an inadequate amount of quantitative evidence connecting strategy to company financial performance. Early

researchers suggested that boards contributed little to strategy and that the CEO primarily plays the position of strategy maker (Pearce & Zahra, 1991; Rosenstein, 1988; Wortman, 1982; Zahra & Pearce, 1989). CEO-led management teams perform a prominent role, which frequently results in a power gap between the board and the management.

In contrast to the boards, management played a more dominant role, implying that the boards of directors must serve as advisors to the management rather than in developing strategies (Zahra, 1990). The primary duties of a board are generally understood to involve overseeing management, assessing organizational performance, and ensuring the ethical and legal compliance of operations. As per the management's degree of confidence in dealing with the board, directors are chosen (Lipton & Lorsch, 1992). While acknowledging the significance of boards, initial research role of the board members assumed that the directors only played a little part in formulating strategies. Over the previous decade, the scope of board activities has expanded. In contemporary business practice, boards are accountable when it comes to developing and guiding the implementation of the firm's strategic direction, while also prioritizing the interest of relevant stakeholders (Amran et al., 2014). This attention brought to the significance of monitoring and reporting mechanisms suggests that the board of directors must tackle minor issues before allowing them to develop into larger issues. Lack of sufficient reporting procedures and transparency was one of the factors contributing to corporate scandals in the US, including those involving Lehman Brothers, Washington Mutual Bank, Enron, etc.

2.2 Theories of Corporate Governance

Researchers from diverse fields have conducted extensive research into the significance and influence of boards. Most previous studies have primarily concentrated on investigating the effects various board characteristics have on the financial performance (Adams & Ferreira, 2009; Carter et al., 2003; Larmou & Vafeas, 2010; Vafeas, 1999). In addition, studies have explored the effect of various aspects on performance such as ownership (Barnhart et al., 1994; Kren & Kerr, 1997; Vafeas & Theodorou, 1998) and CEO compensation (Core et al., 1999; Kang & Sørensen, 1999). The following subsections explicate three of the most important theoretical perspectives when it comes to corporate governance.

2.2.1 Agency Theory

The principal-agent concept arises from the premise of modern organizations often separating ownership and management, leading to costs associated with the evaluation and resolution of conflicts between shareholders and agents. It is often described as a relationship where the principal designates the agent to act in their behalf (Eisenhardt, 1989).

The primary premise is that managers have a tendency to prioritize their own interests and pursue actions that align with their self-interest, even if it means disregarding those of the stakeholders. For instance, given that the principal bear the expenses, agents could be more inclined to exploit perks such as corporate cards, expensive offices, and other incentives. When managers possess information and experience regarding the company, they may prioritize their personal interest with no regards to those of the shareholder interest (Jensen & Meckling, 1976; Ross, 1973). This selfish conduct raises the costs of the company, which may include evaluating, monitoring and

controlling the self-maximizing decisions and actions of managers. When agents engage in self-maximizing behavior that compromises the interests of the company, this results in a trade-off that prioritizes their own interests over the shareholders' interests.

In order to safeguard principal's interests, the board of directors must strictly monitor the agent because it can be difficult to completely trust that the managers to do what is best for the company. It can also be costly medium sized firms compared to large firms to monitor the agent (Bianchi & Luomaranta, 2022). The problem emerges at instances where the interests of agents and principles clash, or when it becomes problematic to assess the actions of agents (Eisenhardt, 1989). Therefore, the boards of directors are widely recognized to be responsible for monitoring agent operations with the goal of mitigating or preventing agency problems.

According to Jensen and Meckling (1976), challenges associated with principal-agent relationships can be addressed through the use of well-designed contractual incentives that establish clear boundaries for the duties, responsibilities, and scope of authority of the principal and agent. When such incentives are absent, agents may be motivated to engage in decision-making that prioritizes their own interests, thereby exacerbating the agency problem. Conversely, when the agents are monitored by the principal to make certain that the management is acting in favor of the principal, this creates monitoring costs on the firm. As contractual incentives come with several challenges, studies have proposed a different solution to mitigate the agency problem. Thus, the internal and external governance mechanisms have been introduced (Adams, 1994; Denis, 2001; John & Senbet, 1998).

Research into the role of boards as an internal governance mechanism has largely focused on elements such as size, composition of internal and external board members, and CEO duality, and how these variables can be leveraged to supervise and control management practices (Coughlan & Schmidt, 1985; Mehran, 1995). Numerous studies have employed this theory to explain the association among boards and performance, examining how different aspects of the board can impact organizational performance (Bathala & Rao, 1995; Rashid, 2015; Ujunwa, 2012).

2.2.2 Stewardship Theory

Stewardship theory assumptions happen to be completely opposite to that of agency theory. The underlying assumption is that agents are acting as stewards and are not driven solely by self-interest, leading to a management-owner relationship that is based on trust and deeming the need for monitoring and its associated costs redundant (Davis et al., 1997).

Stewardship theory also ignores the principal-agent problem, as the steward goals and interests are presumed to align with that of the owners, which means that there are no problems between the owners and management. The agent here becomes a steward, where managers are assumed to make decisions geared towards maximising shareholder wealth. There are different financial and non-financial motivators that influence a steward's decisions. Non-financial motivators include the desire for accomplishment and gratification (Glinkowska & Kaczmarek, 2015). This happens because the manager connects with the firm on a personal level and considers the performance of the firm to be tied to their own performance and reputation. In other words, if the firm is doing well, it reflects that the manager is also doing well and vice

versa. This leads the steward to take caution throughout the decision-making and execution whilst maximizing shareholder wealth.

The theory argues that by providing managers trust and degree of freedom in managing the firm, this enables them to effectively increase the firm performance. As a result, boards that lack external or independent members are often favored, on the premise that such boards are more knowledgeable and familiar with the intricacies of the organization, and are thus better equipped to make informed decisions (Nicholson & Kiel, 2007). Some studies have supported the theory that a board with a larger proportion of independent members did not perform as well as firms that have few independent members (Adams & Mehran, 2012; Johl et al., 2015; Merendino & Melville, 2019). The main differences between the two theories discussed so far, agency and stewardship theory, can therefore be attributed to the sources of motivation that drive managers in their decision-making processes.

2.2.3 Resource Dependency Theory

The theory suggests that roles boards play in a company intrinsically makes the board a resource that contributes to the company. The assumption is that firms seek to maintain their authority and power by acquiring resources required for survival (Johnson et al., 1996). The resources may be financial or non-financial. As Hillman et al. (2000) suggests, boards are considered an important linkage for external resources, particularly resources that cannot be acquired through other measures. Having outside directors or independent directors aids the firm in getting hold of beneficial resources that enhance performance and profitability. They assist the firm in accessing valuable external resources, including information and connections with key individuals (Hillman et al., 2000). Essentially, boards play a mediator role

between the company and important external resources, establishing bridges that facilitate communication and collaboration.

Pfeffer and Salancik's (1978) study encompasses the major argument of the theory. The board members are expected to care about the firm as well as its issues and provide support in resolving existing issues. They are also expected to always represent the firm in a positive light. Having independent directors is considered a valuable resource according to the resource dependency theory as outside directors create "bridges" or linkages to external resources that can be employed in the event of a crisis.

2.3 Shariah Governance Framework

For Islamic banks to successfully apply Shariah principles and guarantee compliance in every facet of their business, the Shariah Governance Framework is crucial. In order to differentiate Islamic banks from traditional banking systems, the SGF is essential to their effective and lucrative operation (Abdel-Baki & Leone Sciabolazza, 2014). It offers a thorough structure to help Islamic banks uphold the confidence of their stakeholders while abiding by Shariah rules.

The necessity for suitable Shariah Governance Frameworks (SGFs) has been highlighted by the global expansion of Islamic Financial Institutions. Because Shariah principles have specific requirements, traditional corporate governance methods are not enough for Islamic financial institutions. The Global Financial Crisis of 2008 highlighted the necessity of specific Shariah Governance (SG) procedures to guarantee openness, responsibility, and ethical conduct in Islamic Institutions (Nathan Garas & Pierce, 2010).

One important component of Shariah governance is how well Shariah Supervisory Boards operate inside Islamic financial organisations. A few things that affect these board'' efficacy include their member'' qualifications and degree of independence. Investigating the actual data regarding the influence of Shariah Supervisory Boards independence on Islamic bank performance is crucial. To fully comprehend the connection between Shariah Supervisory Boards independence and the general performance and administration of Islamic Institutions, more investigation is required (Nathan, 2010). Different approaches to managing earnings under different monitoring frameworks have been identified by comparing Islamic and conventional banks. Understanding these distinctions is essential to creating governance frameworks that are appropriate for Islamic bank'' particular needs (Abdelsalam et al., 2016).

All things considered, Islamic banks must establish a strong Shariah Governance Framework in order to respect Shariah principles, guarantee compliance, and keep stakeholders' trust. Effective Shariah governance in Islamic banks requires suitable governance instruments, such as independent Shariah Supervisory Boards. An examination through comparison with traditional banks sheds light on how corporate governance differs in Islamic banks and emphasises the need of Shariah governance procedures.

2.4 Corporate Governance Challenges in Islamic Financial Firms

Corporate governance in Islamic banks presents unique challenges as a result of aligning operations with Islamic finance principles and protecting stakeholders' interests, particularly depositors with unrestricted investment

accounts. Several key factors must be considered in order to effectively address these challenges.

One critical factor is ensuring that corporate governance practices adhere to Islamic finance principles. Independence, confidentiality, competence, consistency, and disclosure are critical in maintaining the integrity and alignment of institutions with Islamic finance principles (Grais & Pellegrini, 2006). Financial firms can improve transparency, accountability, and ethical behavior by incorporating these principles into their governance frameworks. Effective risk analysis, including stress testing, is critical in selecting and continuously evaluating the business models of Islamic financial institutions. Islamic financial firms can identify potential instabilities and vulnerabilities in their business models, particularly those related to liquidity risk, by conducting meticulous risk assessments (Alhammadi, 2022).

The confidence of investors and market participants is critical for the success and stability of Islamic financial firms, just as it is for traditional financial institutions. Investors and regulators have increased their demand for improved corporate governance measures to ensure transparency, accountability, and effective risk management (Alhammadi, 2022). To address these expectations and foster stakeholder trust, robust corporate governance frameworks are required.

Corporate governance challenges in Islamic financial firms necessitate careful consideration of Islamic finance principles, strategic risk management guidance, and meeting investor and regulator expectations. By effectively addressing these challenges, Islamic financial firms can strengthen their governance frameworks, boost stakeholder confidence, and uphold Islamic finance principles.

2.5 Corporate Governance and Islamic Financial Firms Performance

The distinct character of Islamic financial enterprises, which run on Shariah principles, demands a strong governance framework to assure compliance and stakeholder confidence. Strong corporate governance practises, such as independent boards, competent audit committees, and effective Shariah supervisory boards, have been shown in studies to improve the performance and stability of Islamic financial enterprises. Robust corporate governance in Islamic financial enterprises contributes to their overall performance and sustainable expansion by supporting rational decision-making, risk management, and alignment with stakeholders' interests.

This topic has progressively investigated in the last few decades, especially with the Corporate Social Responsibility (CSR) and ESG (Environmental, social, and corporate governance) framework push. Accordingly, corporate governance have been reported to positively (Gürbüz et al., 2010; Hakimah et al., 2019) and negatively (Saidat et al., 2019; Shahwan, 2015) impact the performance.

In the Islamic banking setting, Musleh Alsartawi (2019A) investigated the relationship among board characteristics and Islamic financial firms' performance in GCC region from 2013 to 2016 and reported a negative and significant association of return on assets and Islamic financial firm performance. Another GCC focused Islamic banks study on Shariah supervisory boards was conducted by Musleh Alsartawi (2019B) from 2013 to 2017. The study observed the association among independent board

members and board meetings of Islamic financial firms in GCC. The study indicated a negative and significant relationship among the variables.

In a developed nation setting, Kyere and Ausloos (2021) confirm the existence of significant but mixed results in the UK on 252 listed firms. The findings reported mixed results regarding when measuring financial performance by employing various performance metrics such as ROA and Tobin's Q. As different variables have varying effects on financial performance, findings generally suggest performance improves when governance mechanisms are properly applied. In a developing economy setting, Nasrallah and El Khoury (2022) observed effects of CGS (Corporate Governance Score) on ROA and ROI, by using data for 150 non-listed SME firms in Lebanon. The findings indicate that CGS positively affects financial performance, where applying corporate governance mechanisms effectively tends to positively impact performances of SMEs.

To assist MENA region in closing the governance gap, an institute was founded in 2006 called Hawkamah, which is 'The Institute for Corporate Governance'. Its goal is to design and execute comprehensive and effective governance frameworks for MENA countries. Among the efforts, The Global Corporate Governance Forum (GCGF) also assisted in developing GCC corporate governance standards. It was founded by the OCED jointly with the World Bank. The efforts of the organizations and programs are reflected in the corporate governance codes of several GCC countries as some were derived from or were revised by the OCED, GCCF etc. Although the governance codes are set, this does not indicate that they are being effectively applied.

Within this frame of reference, Tawfik et al. (2022) investigated 266 listed firms from 2006 to 2017 in GCC region. Results of the board size emerged significantly negative, suggesting that small-sized boards may be more efficient in performance improvement. When it comes to the ownership structure, the findings reveal that a higher percentage of royal family ownership positively and significantly impacts financial performance.

2.6 Board Structure as a Governance Tool

The board's structure is a critical internal governance mechanism used by companies to efficiently maintain the control, policies, and procedures within an organization. The structure board impacts how effectively the members carry out their roles, which subsequently affects the performance. The structure of the board is chosen by firms on the basis of the costs involved in monitoring the management. Monitoring the management's activity and behavior is considered a preventative measure employed boards to minimize agency problems. Even though the basic structure of boards has comparatively been the same over the years, the composition has evolved.

Linck et al. (2008) examined a sample 6,931 firms from 1990 to 2004. The sample consists of companies with different size, age, and industry, which allows for the results to be generalized. The sample also includes the Sarbanes-Oxley Act introduction period in 2002, which had a notable impact on corporate governance. Findings also reflect some developments that have impacted board's structure. Regarding the independence of boards, the study found a drop in the number of independent members over time, indicating a rise in outside directors of the board. Even before the Sarbanes-Oxley Act, the shift towards independence has been evident on corporate boards. As for the size of boards, a drop is observed until the late 90s. The drop is observed to

be heavier on large firms when compared to SMEs. The change in board size remained relatively steady for a few years following a surge in the board size. The rise is due to the push towards appointing more independent board members. When it comes to the board leadership, there does not seem to be a significant trend in CEO duality.

Numerous developments have taken place since the year 2000 that accelerated the shifts in board structure trends. First, the Sarbanes-Oxley Act included multiple provisions that accelerated the need for independent directors. Second, the major corporate governance scandals such as Enron, Lehman Brothers, American International Group and Satyam have substantially raised the public's interest in corporate governance. As a result, a considerable impact on corporate boards can be observed from the trend changes in the findings of the above study (Linck et al., 2008). Corporate board progressively became smaller and more independent towards the end of 1990s and early 2000s.

An important component in governance codes is how board members should be structured in order to create control. There are two board structures that are followed when structuring a board (Block & Gerstner, 2016). They are the unitary board and dual board structures. The unitary board typically is smaller in size, where CEO duality is followed, which indicates there is no separation in managing and supervising the company. Such boards have more independence and a quicker decision-making process. Conversely, the two-tier boards have a separate management and supervisory boards. This allows for a more balanced flow of activities and impartial decisions.

2.7 Hypotheses Development

The following subsections explain how the research hypotheses were developed by linking the board characteristics with financial performance. Summary of the predicted relationships, the related theoretical perspectives and assumptions against each hypothesis is presented in Table 2.1 below.

2.7.1 Board Size and Financial Performance

Since earlier studies' findings were varying, it remains uncertain whether a significant relationship exists among the variables. Regardless of the size, it is crucial to make sure that there are enough members who are capable of advancing the objectives of the firm (AlQudah et al., 2019). In this way, agency theory encourages the use of larger boards for overseeing managers' operations since they are expected to appoint directors who are skilled, knowledgeable, and specialized (Beasley & Salterio, 2001; Merendino & Melville, 2019; Puni & Anlesinya, 2020; Segrestin & Hatchuel, 2011; Shukeri et al., 2012). Larger boards may improve financial results and prevent any opportunistic actions that might negatively impact shareholders' wealth (Patrick et al., 2015). According to Larmou and Vafeas (2010), Adams and Mehran's (2012) findings which is in line with this theory, larger boards performed better in improving the performance when compared to smaller boards. Alternatively, there are some studies that found no significance between the variables (Al-Matari et al., 2014; Buallay et al., 2017; Moscu, 2013; Sarpong-Danquah et al., 2018; Topak, 2011).

In contrast to the previous studies, small boards that make performance impacting decisions are portrayed as knowledgeable and informed boards. Such boards are seen to be more effective at addressing corporate issues rapidly (Gambo et al., 2018). Larger board of directors have been proven not

be associated with improving organizations' performance, supporting this theory. Guest's (2009) analysis of UK-listed companies from 1981 to 2002 found no evidence of any effect on financial performance. Additionally, larger boards lacked the necessary expertise to make wise choices that can improve organizations' success as reported by Mashayekhi and Bazaz (2008) reported the board size to inversely affect performance of the firm. The findings suggested that smaller boards were more capable and skilled at managing the operations of businesses.

When looking at the board size with the agency theory frame of reference, researchers theorize that board size should negatively influence financial performance, especially since larger boards are believed to incur higher costs such as agency costs, communication costs, and monitoring costs, which can reduce financial performance. In contrast, resource dependency theorizes a positive correlation between the variables, as large-sized boards are believed to have a myriad of professionals from the industry with strong linkages which are valuable resources to a firm. Furthermore, larger boards can make sure the board consists of more independent directors to help in supervising the managers.

In summary, given the inconsistent results that have been discussed, finding the appropriate and most effective number of board members is still in dispute due to the mixed findings. The below hypothesis has been developed:

Hypothesis 1 *Board size has a significant positive impact on Islamic bank financial performance in GCC.*

2.7.2 Board Meetings and Financial Performance

The effectiveness of boards cannot be reduced to set factors, like the number of females and outside members on boards or how large the board is. In fact, the consistency with which regular meetings are held might demonstrate board efficacy in improving a firm's success (Puni & Anlesinya, 2020). On the contrary, it may not appear beneficial to use the policy of holding regular meetings as an indicator of board activity unless attendance at such meetings is accompanied by active participation in addressing company issues. The optimal amount of meetings that boards conduct and how the performance is affected have been a subject of conflicting findings in earlier study.

Hanh et al. (2018) examined around 100 public companies in the Vietnamese Stock Exchange from 2013 to 2015 and reported that higher number of meetings negatively impacted the financial performance. Musleh Alsartawi (2019A), Johl et al. (2015), Sobhan (2021), and Vafeas (1999) found the same negative association. Conversely, a board of directors that had regular meetings exhibited an adequate understanding of their business decisions to enhance financial performance (Kyei et al., 2022). Increasing the board meetings also proved to positively and considerably affect business performance, according to Yakob and Abu Hasan (2021).

According to stewardship theory, the manager's interest is in line with those of the company. Hence, they are expected to have the company's best interests and make decisions that would contribute towards financial success, and that board meetings are an effective tool where such decisions are made. However, agency theory suggests that increasing annual meetings increases agency costs. A rise in agency costs tends to associate with higher overall costs on the company.

In conclusion, the existing literature presents conflicting findings on the effect of board meetings, where majority of previous evidence contradicts the theory that portrays board meetings as beneficial for increasing financial performance. Therefore, we put forward the following hypothesis:

Hypothesis 2 *Board meetings have a significant positive impact on Islamic bank financial performance in GCC.*

2.7.3 Board Independence and Financial Performance

Independent or external board members is a key factor that may be used to decrease the agency problem (Panda & Leepsa, 2017; Patelli & Prencipe, 2007). The effect that outside directors have on boards is the main reason behind appointing outside directors (Mahadeo et al., 2012). They are expected to operate as a separate entity, oversee the board and represent the company to ensure a steady financial position (De Villiers et al., 2011; Staikouras et al., 2007). Agency theory insinuates that outside directors members play a vital part in boosting businesses' performance and defending minority interests in keeping with this hopeful behavior of such members (Anderson & Reeb, 2004).

External members are members with no connection to the firm and are not involved in its operations. A minimum of one independent director must be chosen in a fair election process and must possess a sufficient degree of competence and integrity. It is also advised that independent members constitute 30% of the board (Manini & Abdillahi, 2015). It was found that outside directors were motivated and knowledgeable about working as independent members to boost organizational effectiveness. A study on Indonesian firms by Idris et al. (2020) found that having an independent board

of directors can boost the financial performance. However, other research disproved the agency theory's argument by showing how ineffective these members were at raising firms' performance. For instance, Abdel-Azim and Soliman (2020) reported that appointing more external members inversely affected the performance of Egyptian firms. Similarly, Johl et al. (2015) also reported a negative effect on firm performance. Adams and Mehran (2012), Merendino and Melville (2019), as well as Shukeri et al. (2012)'s findings rejected the hypothesis that independent boards positively improves firm performance, as their findings also indicate an inverse relationship. On the contrary, the hypothesis is backed by other findings that demonstrate that independent members positively impact the performance, such as research conducted by Fuzi et al. (2016), Garg (2007), Mashayekhi and Bazaz (2008).

According to agency theory, outside directors serve to balance the power between inside and outside directors, which indicates a positive association exists. However, stewardship theory suggests otherwise, where the outside directors are viewed as ineffective compared to inside directors who are more knowledgeable, dependable and experienced. Therefore, this theory predicts unfavorable effect on performance.

Considering the varying reported results on effects of external members in different contexts, the following hypothesis was developed:

Hypothesis 3 *Independent board members have a significant negative impact on Islamic bank financial performance in GCC.*

2.7.4 Females on Board and Financial Performance

Researchers frequently explain the relationship among female members and financial performance by utilizing agency theory. Female directors contribute

fresh perspectives that differ from those of the all-male board of directors. The refreshing skills introduced to boards by women provide fresh insights and useful recommendations to senior management, resulting in better problem-solving decisions, more creativity and innovation, and improved access to information (Liu et al., 2014; Terjesen et al., 2016). Various arguments though challenge the possible benefits of female directing.

Studies that observed the links among female members and financial performance has resulted in varied findings. Their relationship has been argued to be positive (Lückerath-Rovers, 2013; Pucheta-Martínez & Gallego-Álvarez, 2020), and negative (Pletzer et al., 2015; Soare et al., 2022; Ujunwa, 2012). As per Joecks's et al. (2013) study, female members are associated with improved company performance than male only boards, when a certain amount of roughly 30% women has been attained. Under resource dependence theory prediction, female members provide unique links to outside resources that are valuable for the company. Therefore, the theory suggests a positively significant impact.

Since research on the impact of female directors on the performance varies among different contexts, the below hypothesis has been formulated:

Hypothesis 4 *Females on board have a significant positive impact on Islamic bank financial performance in GCC*

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Table 2. 1 Summary of theoretical perspectives and predicted direction of relationship

Hypothesis	Tested Relationship	Theoretical Perspective	Predicted Direction of Relationship	Assumptions
H1	Board size and financial performance	Resource Dependence Theory	Positive	A larger board can make sure the board has more outside directors to help in supervising the managers.
		Agency Theory	Negative	Larger boards produce higher agency costs.
H2	Independent board members and financial performance	Agency Theory	Positive	Independent directors balance the power between insiders and outsiders.
		Stewardship theory	Negative	Independent directors are useless, as inside directors are more knowledgeable, dependable, and experienced
H3	Board meetings and financial performance	Stewardship Theory	Positive	Manager's interest aligns with firm interest.
		Agency Theory	Negative	Increasing number of meetings increases agency costs.
H4	Females on board and financial performance	Resource Dependence Theory	Positive	Female directors provide unique linkages to external resources that are beneficial to the performance.

Chapter Three - Methods and Procedures

Chapter contents:

- 1- Introduction
- 2- Sample Selection
- 3- Measurement of Variables
 - The Dependent Variable
 - Independent Variables
 - Controlling Variables
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Chapter Three - Methods and Procedures

3.1 Introduction

This chapter presents the methods and procedures employed in the study. It serves as a roadmap for understanding the steps taken to collect data, measure variables, and utilize research tools in order to achieve the study's objectives. The explanatory study follows a quantitative analysis approach to examine the association among specific board features of Islamic banks listed in GCC stock exchanges and their financial performance.

The six main sections include the sample selection section, which involves secondary panel data obtained from banks listed in various GCC stock markets; the measurements of variables section, which outlines the procedures adopted to measure the key variables of interest. It discusses the operational definitions of each variable, including their conceptual framework and the specific indicators or instruments used for measurement; the estimation approach section, which describes the tools employed in the study as well as the reason behind the selection of each tool.

In addition, four important statistical tests are discussed in this chapter: the Shapiro-Wilk, BPLM, Hausman and Variance Inflation Factor. These tests are used to evaluate specific aspects of statistics, such as normality, heteroscedasticity, and multicollinearity. The chapter ensures the robustness and validity of findings in addressing the research questions by incorporating these tests.

3.2 Sample Selection

This study depends on secondary panel data that was acquired for banks listed in different GCC stock markets. The overall sample consists of 97 banks with

the time-series–cross-section (TSCS) data spanning for 10 years from 2010 to 2019. This study primarily examines a subsample of Islamic financial firms within the GCC region. The subsample consists of 32 Islamic banks listed in various GCC stock markets. Additionally, for comparative analysis, a separate subsample of 65 conventional financial firms is included. The conventional banks subsample provides a basis for comparison to evaluate the specific characteristics and performance of Islamic banks in the GCC region. The data for all variables has been obtained from Thomson Reuters DataStream. Non-financial sector firms have been excluded, as every sector has a different set of regulations and operating activities. Therefore, to keep the sample consistent, we only use financial firms as most of the governance codes in GCC are still under the approach “comply or explain”, and the financial sector in GCC is still dominated by banks.

3.3 Measurement Of Variables

This section summarizes variables employed to explore the correlation between board characteristics and ROA. Their type, definition and measurements are described in Table 3.1.

3.3.1 The Dependent Variable

There are different accounting-based performance metrics, such as ROI (Return on Investment) (Adjaoud et al., 2007; Bianco & Casavola, 1999), ROA (Brown & Caylor, 2009; Ibrahim et al., 2010; Rouf, 2011), ROR (Return on Revenue) (Dhnadirek & Tang, 2003), ROE (Return on Equity (Hatem, 2014; Khatab et al., 2011; Rouf & Abdur, 2015) have been commonly used in prior studies. Numerous other studies have also utilized market-based performance metrics such as Tobin's Q (Christensen et al., 2010; Harvey Pamburai et al., 2015; Singh et al., 2018), market value added (Kula, 2005).

In this study we employ the ROA, which is an accounting metric. Many studies on board characteristics have used ROA as a performance indicator (Abdel-Azim & Soliman, 2020; Abdulsamad et al., 2018; AlQudah et al., 2019; Elbahar, 2019). Therefore, we employ ROA as measure for financial performance because it is thought to be a reliable indicator of firm performance.

3.3.2 The Independent Variables

The following describes the independent variables employed:

1. BOARD_SIZE, which represents the total number of members on the board. It captures both advisory and monitoring roles (Adams et al., 2010; Chancharat et al., 2012; Ujunwa, 2012). Previous research has indicated that the board size tends to increase with firm growth and age (Dang et al., 2018; Loderer & Waelchli, 2010; Nielsen & Huse, 2010). Therefore, we calculate the variable as the sum of the total members of board of directors, lagged by one year.
2. IND_BOARD, which refers to the independence of boards. Board composition revolves around methods to monitor a director's consideration of shareholders' interests and evaluate if they are doing so effectively. According to agency theory, a company's performance improves when there are more outside directors. Firms that are performing moderately are considerably impacted by independent directors, whereas above or below-average performers are not affected as much (Brennan, 2006). Therefore, we calculate the variable as the proportion of outside directors to the total inside directors, lagged by one year.
3. BOARD_MEET, which denotes the frequency of annual board meetings, which reflects the activity of boards. They are considered an important

component of the board activity and reflect how diligent the board is (Hussain et al., 2018). The intensity of board activity is usually interpreted as an increase in board meetings (Ntim & Osei, 2011). By taking into account the frequency or total number of meetings, various studies explored the effect of number of annual board meetings (Grove et al., 2011; Jizi et al., 2014; Masulis et al., 2012). We use the total annual meetings when measuring to compute the variable, lagged by one year.

4. FEMALE_BOARD, which stands for Female on Board. It reflects the proportion of women on boards. Historically, boards have only ever had male members. Greater board diversity results from increased gender diversity by the appointment of females. In general, diversity is thought to increase the legitimacy and performance of a firm because it offers fresh viewpoints and insights (Ben-Amar et al., 2013; Reguera-Alvarado et al., 2017; Ujunwa, 2012) and ensures that various stakeholders are represented for equity and fairness. The summation of women board of directors can be used to quantify the gender diversity in this study, lagged by one year.

3.3.3 Controlling Variables

Consistent with previous research, a set of control variables are employed. The control variables can be categorized into two types: specific and macroeconomic. The firm specific control variable is as follows:

- 1- SIZE, which refers to size of a company. Total assets is typically used in measuring the size. Internal governance systems are interchangeable, and organizations typically select the most appropriate governance structures based on the firm's needs. (Barroso et al., 2011; Kochhar, 1997). Firms typically grow and diversify as the board gets bigger. To be able to approximate the company's size, we lag the variable by one year.

The macroeconomic control variables are discussed below:

- 1- GDP, which is the Gross Domestic Product. It is commonly employed as a benchmark and standard of the overall institutional environment and to control the economic development level of an economy (Landefeld et al., 2008). The GDP is an economic indicator that gives information about an economy's size, growth, and performance. We use the annual growth rate of GDP. Consistent with prior research, we control for GDP (Terjesen et al., 2016), lagged by one year.
- 2- INFL, which refers to the Inflation. Consistent with previous studies, we control for inflation in this study (Abdel-Azim & Soliman, 2020), lagged by one year.

Table 3.1 Definition of variables

Variable	Type	Definition	Measurement
Return on assets (ROA)	Dependent	The profitability of a firm, or the ability of the firm to effectively operate and produce profit	Net Income/ Total Assets
Board Size	Independent	Total number of board members	Summation of board members
Independent Board Members	Independent	Proportion of outside to inside directors	Proportion of independent members
Board Meetings	Independent	Frequency of annual board meetings	Summation of annual board meetings
Female on Board	Independent	Proportion of female to male members on the board	Proportion of women on boards
Bank size (SIZE)	Specific control variable	Firm size can be classified as small, medium, or large. This can be calculated by measuring the input (capital, net worth, or total assets) or output (volume of output, value of output or value added) of a firm.	Log of Total Assets.
Inflation	Macroeconomic control variable	Surge in price of goods and services	Annual inflation rate of a country
GDP	Macroeconomic control variable	A monetary measure of the output of a country	Annual GDP growth of a country

3.4 Estimation Approach

This section provides a detailed justification for using Pooled Ordinary Least Squares (POLS) as the study's estimation method. POLS was chosen after careful consideration and statistical tests to investigate the relationship between the variables. The POLS model is based on the assumption of linearity. This assumption makes it easier to interpret the estimated coefficients (Wooldridge, 2013).

Several diagnostic tests were used to ensure the validity of the POLS model and to address the POLS model's key assumptions. The residuals were first checked for normality to ensure that the residuals in the model follow a normal distribution using the Shapiro-Wilk normality test. Deviations from normality may indicate violations of model assumptions and have an impact on the results' reliability. Additionally, potential issues such as heteroscedasticity is addressed. The violation of the assumption of constant variance of the error term across observations is referred to as heteroscedasticity. The BPLM test was employed to detect heteroscedasticity. Adjustments or alternative estimation techniques may be considered in the presence of heteroscedasticity. When there is a correlation between the explanatory variables and the error term, it is known as endogeneity, which is tested for by using the Hausman test. Furthermore, the presence of multicollinearity among the explanatory variables was determined carrying out the Variance Inflation Factor (VIF) test, which determines the level of correlation between predictors.

Alternative estimation methods, such as Fixed Effects (FE) and Random Effects (RE) models, were considered. However, according to the findings of the of the BPLM and Hausman tests, which revealed homoscedasticity and endogeneity, the POLS model was chosen as the best approach for this study.

The POLS model estimates the average effects of board characteristics on financial performance while taking other factors into account.

The main assumptions of the POLS is that there are no unobserved individual-specific effects and that there is no endogeneity. Unobserved factors that have a systematic influence on the dependent variable and are correlated with the independent variables, on the other hand, may introduce bias into the estimates. This study aims to ensure the validity and reliability of the research findings by employing the POLS model and conducting appropriate diagnostic tests as discussed previously. The model allows for the control of time-fixed and entity-fixed effects. In addition, the statistical software STATA 17 was used to implement the POLS model and conduct the necessary analyses. This software provides robust panel data analysis tools, allowing for efficient model estimation and interpretation.

Therefore, the following POLS model has been employed:

$$y_{(it)} = \beta_0 + \beta_1 X_{(it-1)} + \beta_2 X_{(it-1)} + \dots + \beta_k X_{(it-1)} + \varepsilon_{it}$$

Where:

$y_{(it)}$	is the exploratory variable,
$X_{(it-1)}$	is the explanatory variable, lagged by one year,
$i = 1 \dots n$	is the cross-sectional dimension (firms),
$t = 1 \dots n$	is the time series dimension (time periods),
β_0	is the constant term coefficient,
$\beta_1, \beta_2, \dots, \beta_k$	is the coefficient of the explanatory variables,
ε_{it}	is the error term.

3.5 The Shapiro–Wilk Test of Normality

The Shapiro-Wilk test is a test used to check if the data is normally distributed or not. It computes a test statistic (W) using the data's covariance matrix and

the coefficients of a fitted normal distribution. Under the regression model's assumption of normality, the test compares the observed distribution of data to the expected distribution. The results are reported in Chapter 4.

3.6 The Breusch-Pagan Lagrange Multiplier Test of Heteroscedasticity

The BPLM is a statistical test used to detect heteroscedasticity in a regression (Breusch & Pagan, 1979). It is particularly useful when analysing panel data. Panel data is a dataset that includes observations on multiple over time. Heteroscedasticity in panel data analysis refers to the situation in which the variability of the residuals varies across different entities or time periods (Wooldridge, 2010). We can use the BPLM test to determine whether heteroscedasticity exists in panel data by looking for a consistent pattern among the squared residuals and the explanatory variables in the regression model. Results of this test are reported in Chapter 4.

3.7 The Durbin–Wu–Hausman Test of Endogeneity

The test is used to detect endogeneity in panel data analysis. In panel data analysis, it plays a crucial role in assessing the presence of endogeneity, which can lead to biased and inconsistent coefficient estimates. Endogeneity in panel data analysis refers to the situation in which the explanatory variables are correlated with the error term. The Hausman test involves estimating two regression models: the original model and an alternate model. The difference in the coefficient estimates between these two models is then used to compute the test statistic. The test improves the accuracy and reliability of coefficient estimation and the validity of hypothesis testing by detecting and accounting for endogeneity. Results of this test are reported in Chapter 4.

3.8 The Variance Inflation Factor Test

The Variance Inflation Factor (VIF) test is a diagnostic tool for assessing multicollinearity among independent variables in regression analysis (Midi et al., 2010). When there is a strong correlation among multiple explanatory variables in a regression model, it can cause problems with coefficient estimation and interpretation (O'brien, 2007). The VIF test quantifies multicollinearity by determining how much the variance of the estimated regression coefficient is inflated as a result of the correlation between the independent variables. When the variables are uncorrelated, it computes the ratio of the variance of the coefficient estimate to the variance of the coefficient estimate.

A VIF score exceeding 10 indicates a high multicollinearity issue, which suggests a significant correlation between one or more independent variables (Schumacker, 2008). Results of this test are reported in chapter 4.

Chapter Four: Results and Discussion

Chapter contents:

- 1- Introduction
- 2- Descriptive Statistics
- 3- Correlation Coefficient Matrices
- 4- The Shapiro-Wilk Test of Normality
- 5- The Breusch-Pagan Lagrange Multiplier Test
- 6- The Durbin–Wu–Hausman Test of Endogeneity
- 7- The Variance Inflation Factor Test
- 8- Pooled Ordinary Least Squares (POLS) Regression
 - Presentation of Findings
 - Discussion of Findings

Chapter Four - Results and Discussion

4.1 Introduction

This chapter is divided into eight sections. We begin with Section 4.2, which presents the summary statistics. This provides us with a summary of the data. Next, Section 4.3 consists of the correlation results, which evaluates the degree of correlation among the variables.

Sections 4.4, 4.5, 4.6 and 4.7 consist of assumption check tests. These tests include the Shapiro–Wilk test, the BPLM test of heteroskedasticity, Hausman test of Endogeneity and the Variance Inflation Factor test of multicollinearity. As discussed in chapter 3, Pooled OLS model is the fitting model for the data. Therefore, Section 4.8 is divided into two further subsections, the first subsection presents the regression analysis results, and the second discusses the findings.

4.2 Descriptive Statistics

The below summary statistics presents the means, standard deviations, minimums, and maximums for each variable. The subsamples provides an overall view of the performance of firms operating in GCC region. The summary statistics highlights useful insights about the distribution and characteristics of the study variables. They serve as a foundation for further analysis and provide a foundation for understanding the dataset's dynamics.

The summary statistics analysis for the Islamic subsample in Table 4.1 reveal important insights about the variables under consideration. To begin, the ROA averages 2.854 with a standard deviation of 3.690. The ROA varies greatly throughout the subsample, ranging from -4.94 to 29.83. While some firms saw

negative returns, others saw significant profits during the study period. The average size of boards is 9.376, standard deviation is 2.114. The minimum observed board size is 7, indicating that some firms have small boards, while the maximum observed board size is 16, indicating larger boards in some cases. On average, the total annual board meetings held is 44.713, standard deviation of 15.225. The number of board meetings ranges from 23 to 70, indicating a range of board engagement and activity across the sample.

As for the independent boards, the standard deviation is 3.159, and average is 8.050. The observed minimum and maximum values are 4 and 18, respectively. This implies differences in board composition in terms of independent representation, which may have implications for corporate governance practices. When it comes to gender diversity, the standard deviation is reported to be 1.821, and the average is 0.394. The range is from no female representation to up to ten female board members. These findings highlight the sample's gender representation diversity, or lack thereof, indicating potential disparities in boardroom diversity. When it comes to firm size, descriptive statistics show that the average is 22.928. The observed firm sizes range from 18.100 to 25.35, indicating that the sample's magnitude varies.

Finally, the macroeconomic variables add more context. Inflation is 5.276 percent on average, with a standard deviation of 1.958 percent. This corresponds to an average inflation rate of about 5.276 during the observed period, with some variation around this average. The GDP growth rate (GDP) averages 2.118, standard deviation of 1.001, indicating a GDP growth rate of approximately 2.118. The observed range of GDP growth rates, from -0.4 to 3.3, indicates variations in economic performance over the years studied.

Table 4.1 Summary statistics for Islamic banks subsample

Variable	N	Mean	Std. dev.	Minimum	Maximum
ROA	220	2.854	3.690	-4.94	29.83
Board Size	311	9.376	2.114	7	16
Board Meetings	230	44.713	15.225	23	70
Board Independence	240	8.050	3.159	4	18
Female Board Members	311	0.394	1.821	0	10
Bank Size	280	22.928	1.340	18.100	25.35
Inflation	320	5.276	1.958	1.98	8.29
GDP	320	2.118	1.001	-0.4	3.3

N = 32 firms

In the Conventional banks subsample (Table 4.2), the ROA averages 1.9273. This shows that the ROA varies greatly across the sample, ranging from -3.71 to 60.76. While some firms saw negative returns, others saw significantly higher returns during the study period. As for the board size, the average is 8.73545, and the standard deviation is 2.241717. The minimum observed board size is three members, indicating that some firms have small boards, while the maximum observed board size is seventeen members, indicating that larger boards exist in some cases. The variation in board size suggests that the firms' composition and governance structures are diverse.

As for the board meetings, the average is 7.594203, with a standard deviation of 3.005977. The number of board meetings ranges from four to twenty-eight, indicating differences in the level of board engagement and activity across the sample. A board with fewer meetings on average may be less active or engaged, whereas a board with more meetings on average may be more involved. When it comes to the independent board members, the standard deviation is 0.2025618, and the average is 0.4328986. The range runs from -0.34 to 1, indicating different levels of independence among the boards. This

variation could be due to the disparities in corporate governance practices and the amount of outside influence on decision-making processes.

Furthermore, we also observe the female board members. The standard deviation is 3.998865, and the average number of female board members is 1.124162. From no female representation to a maximum of 27.27 female board members, the range is wide. These findings highlight the sample's gender representation diversity, or lack thereof, indicating potential disparities in boardroom diversity. When it comes to firm size, descriptive statistics show that the average is 23.43389. The observed firm sizes range from 18.45 to 26.28, reflecting variations in firm size within the sample.

Lastly, we observe the macroeconomic variables. The average inflation rate (INFL) is 2.042222, with a standard deviation of 1.027185. The lowest and highest inflation rates are -0.4 and 3.3 percent, respectively. GDP growth rate (GDP) averages 5.26, with a standard deviation of 2.061644. GDP growth rates range from 1.98 to 8.29 percent. These macroeconomic variables provide context for understanding the firms' operating environment and the potential impact on their performance.

Table 4.2 Summary statistics for Conventional banks sample

Variable	N	Mean	Std. dev.	Minimum	Maximum
ROA	370	1.927378	3.421889	-3.71	60.76
Board Size	567	8.73545	2.241717	3	17
Board Meetings	414	7.594203	3.005977	4	28
Board Independence	414	0.4328986	0.2025618	-0.34	1
Female Board Members	567	1.124162	3.998865	0	27.27
Bank Size	378	23.43389	1.452758	18.45	26.28
Inflation	585	2.042222	1.027185	-0.4	3.3
GDP	585	5.26	2.061644	1.98	8.29

N = 65 firms

Both subsamples have similar mean ROAs, with the Islamic subsample having a slightly higher mean. The standard deviation and range of ROA values, on the other hand, are higher in the Islamic subsample, indicating greater variability in ROA for that subsample. The mean board sizes in both subsamples are similar, with the Islamic subsample having a slightly higher mean. The standard deviation of board sizes is also comparable between the two subsamples, indicating comparable board size variations. When compared to the conventional subsample, the Islamic subsample has a higher mean and standard deviation for board meetings, indicating that the second subsample has more frequent and potentially more active board meetings.

When it comes to the board independence, the Islamic subsample has a slightly higher mean and a lower standard deviation. This suggests that the second subsample has a higher overall presence of independent members and less variation in their representation. As for the female board members, the conventional subsample has a slightly higher mean and a higher standard deviation than the Islamic subsample. This implies that the first subsample has more female representation on boards on average, as well as a greater degree of variability in the number of female board members. In terms of firm size, the Islamic subsample has a slightly higher mean and a higher standard deviation than the conventional subsample. This implies that the second subsample, on average, consists of larger firms with greater variation in firm size. In addition, the Islamic subsample has a slightly higher mean and standard deviation for the inflation rate than the conventional subsample. This indicates that the second subsample had slightly higher average inflation rates and a slightly higher degree of inflation variability. In terms of GDP growth,

the Islamic subsample has a slightly higher mean and standard deviation than the conventional subsample.

In conclusion, the summary data offered provided insight into the GCC region's banks' gender diversity, board meetings, firm size, performance, and board features. The findings show significant differences in the banks' gender representation, board composition, and performance, highlighting the need for more research to determine the variables affecting these dynamics in the GCC banking sector.

4.3 Correlation Coefficient Matrices

The initial findings of the link among the exploratory variable and the explanatory variables are highlighted below. The correlation findings reveal the types, patterns, and relevance of the variables' linear correlations. The coefficients of the explanatory and exploratory variables for the Islamic subsample are shown in Table 4.3 below.

Firstly, the analysis reveals a statistically insignificant negative correlation (-0.0565) between ROA and board size. It suggests that firms with large boards may have a slightly lower ROA. As for the board meetings variable, there is a -0.0695 correlation between ROA and board meetings. This suggests that a holding meetings more may be linked with a lower ROA. It raises the possibility that excessive board meetings will reduce organizational efficiency or decision-making effectiveness, negatively impacting the financial performance.

Furthermore, there is a negatively significant correlation (-0.2466**) between ROA and independent board members. This indicates that having a higher proportion of outside directors may be associated with a lower ROA. This

could be due to conflicts of interest or strategic decision-making differences between independent board members and management. The analysis reveals a weak negative correlation (-0.0502) between ROA and the female board members. This relationship, however, is not statistically significant, implying that the presence of more female board members may not have a significant impact on ROA in the Islamic subsample. There is a negative correlation (-0.1867**) between ROA and bank size, implying that larger firms in the Islamic subsample may have lower ROA. The finding could be explained by the difficulties that large firms face in maintaining efficient operations and managing the complexities that come with their size.

When observing the macroeconomic variables, the analysis shows a negligible (-0.0215) correlation between ROA and inflation (INFL). This implies that changes in the inflation rate have little impact on the financial performance of firms in the Islamic subsample. Finally, the analysis shows a positive (0.0283) correlation between ROA and GDP, but this relationship is not statistically significant. This implies that changes in overall economic growth, as measured by GDP, may have little effect on the ROA of firms in the Islamic subsample.

As for the Conventional subsample, it provides additional insights into the association among ROA and different board characteristics. The coefficients of the explanatory and exploratory variables are shown in Table 4.4 below. Firstly, the analysis indicates a slightly negative correlation (-0.044) between ROA and board size, implying that larger boards may not have a significant impact on ROA. This finding implies that size of the board may have a nonsignificant impact on conventional banks' performance. In contrast to the Islamic subsample, the conventional subsample has a negative (-0.0984)

correlation between ROA and board meetings. This suggests that an increase in the frequency of board meetings may have a negative impact on ROA in traditional banks. It raises the possibility that too many board meetings will result in decreased efficiency or decision-making effectiveness within these organizations, negatively impacting their financial performance.

As for the board independence, the correlation analysis reveals a nearly zero correlation (-0.0002) between ROA and board independence. This finding implies that the presence of independent members may not have a significant effect on conventional banks' financial performance. In the conventional subsample, there is a negative correlation (-0.0562) between ROA and the proportion of female board members, similar to the Islamic subsample. This suggests that having a higher representation of female board members may be associated with a slightly lower ROA in conventional banks as well.

The analysis shows a negative correlation (-0.0546) among ROA and firm size (SIZE) in the conventional subsample. This relationship, however, is less significant when compared to Islamic banks. This finding implies that larger conventional banks may still see a decline in ROA, but the impact will be less severe than in Islamic banks. In the conventional subsample, the correlation analysis reveals a positive correlation (0.0827) between ROA and inflation (INFL). This suggests that changes in the inflation rate may have a positive effect on conventional banks' financial performance. This finding contrasts with the findings from the Islamic subsample, which revealed no significant relationship between ROA and inflation. Finally, the conventional subsample, like the Islamic subsample, shows a negligible impact of GDP on ROA (-0.0029). This suggests that changes in overall economic growth, as measured

by GDP, may not have an effect on the financial performance in the context of the conventional banks.

Most of the correlations between the two subsamples have similar directions, such as the negative correlations between ROA and board size or female board presence. There are, however, significant differences. The effect of board meetings and independent board members, for example, on ROA is more pronounced in the Islamic subsample. In contrast to the Islamic subsample, inflation has a positive correlation with ROA in the conventional subsample. While there are some common trends, the Islamic subsample has stronger correlations in several variables, indicating that governance dynamics in Islamic versus conventional banks may differ.

It should be noted that correlation does not imply causation, and further investigation using appropriate regression models or other econometric techniques would be required to establish more robust and causal relationships between these variables.

Table 4.3 Correlation matrix for Islamic banks subsample

Variable		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
ROA	[1]	1							
Board Size	[2]	-0.0565	1						
Board Meetings	[3]	-0.0695	0.1563*	1					
Board Independence	[4]	-0.2466**	-0.1297	0.2345**	1				
Female Board Members	[5]	-0.0502	0.2112**	0.2199**	0.1758**	1			
Bank Size	[6]	-0.1867**	0.2761**	-0.1416*	0.1495*	0.2384**	1		
Inflation	[7]	-0.0215	0.0073	-0.0064	0.0077	-0.0369	0.0198	1	
GDP	[8]	0.0283	-0.0552	0.0227	0.0278	-0.0357	0.1543**	0.212**	1

*** p<0.001 (two-tailed)

** p-value<0.01 (two-tailed).

* p-value <0.05 (two-tailed).

Table 4.4 Correlation matrix for Conventional banks subsample

Variable		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
ROA	[1]	1							
Board Size	[2]	-0.044	1						
Board Meetings	[3]	-0.0984	0.0619	1					
Board Independence	[4]	-0.0002	-0.0821	0.3147	1				
Female Board Members	[5]	-0.0562	0.2427	0.2506	0.2978	1			
Bank Size	[6]	-0.0546	0.325	-0.0428	-0.3598	-0.0885	1		
Inflation	[7]	0.0827	0.006	0.0006	0.0114	0.0064	0.0343	1	
GDP	[8]	-0.0029	-0.032	-0.0237	0.0298	0.068	0.0878	0.2121	1

*** p<0.001 (two-tailed)

** p-value<0.01 (two-tailed).

* p-value <0.05 (two-tailed).

4.4 The Shapiro–Wilk Test of Normality

The Shapiro-Wilk test results in Table 4.5 show that the Islamic Banks subsample ($W = 0.9824$, $p = 0.1245$) and the Conventional Banks subsample ($W = 0.975$, $p = 0.087$) both have a reasonably good fit to a normal distribution. Both subsamples' test statistics (W) are close to one, indicating that the observed distributions of the variables in each group are not significantly different from a normal distribution. As a result, we can reasonably assume that the data for both subsamples come from populations with a normal distribution.

Table 4.5 Shapiro–Wilk Test of Normality

Subsample	W	p-value
Islamic Banks	0.9824	0.1245
Conventional banks	0.975	0.087

4.5 The Breusch-Pagan Lagrange Multiplier Test

The BPLM test for the subsamples in Table 4.6 report chibar^2 values of 0.000 and corresponding p-values of 1.00. These findings imply that there is no evidence of heteroskedasticity in the models for either subsample. This indicates that we cannot reject the null hypothesis of homoscedasticity. In other words, the residuals of the models for both subsamples have a uniform variance, indicating that the pooled OLS is the most fitting model, rather than models that account for heteroskedasticity.

Table 4.6 BPLM Test - POLS vs. RE

Subsample	chibar^2	p-value
Islamic Banks	0.000	1.000
Conventional banks	0.000	1.000

4.6 The Durbin–Wu–Hausman Test of Endogeneity

The findings in Table 4.7 show that the chi-square statistic for the Islamic Banks subsample is 10.83, $p > 0.05$. Similarly, the chi-square statistic for the Conventional Banks subsample is 9.301, $p > 0.05$. Both values are not significant which indicates that neither subsample contains enough evidence to reject the null hypothesis of exogeneity. These results suggest that the potential endogeneity concerns in the models estimated for both subsamples may be statistically insignificant.

Table 4.7 The Hausman Test of Endogeneity

Subsample	chi2	p-value
Islamic Banks	10.83	0.6249
Conventional banks	9.301	0.8657

4.7 The Variance Inflation Factor Test

To check for the model's assumption of no multicollinearity problem, we need to use the VIF test. The values presented in Table 4.8 and Table 4.9 confirm that multicollinearity in this case is not an issue since the VIF values for the explanatory variables are below 10, which is below the cutoff value of 10 (Schumacker, 2008). Additionally, since the mean VIF is close to 1 and the tolerance values are all above 0.10, we can safely say that the regression model is free from multicollinearity problem.

Table 4.8 Variance Inflation Factor Test For Islamic banks subsample

Variable	Collinearity Statistics	
	VIF	Tolerance
Board Size	1.62	0.617963
Board Meetings	1.60	0.626774
Board Independence	1.71	0.585108

Females on Board	1.14	0.876891
Bank Size	1.78	0.561630
Inflation	6.71	0.148923
GDP	8.81	0.113510
Mean VIF	3.04	

Table 4.9 Variance Inflation Factor Test for Conventional banks subsample

Variable	Collinearity Statistics	
	VIF	Tolerance
Board Size	1.21	0.823920
Board Meetings	1.18	0.843905
Board Independence	1.46	0.685059
Females on Board	1.18	0.849116
Bank Size	1.28	0.783461
Inflation	6.67	0.149836
GDP	8.43	0.118575
Mean VIF	2.88	

4.8 Pooled Ordinary Least Squares (POLS) Regression

This section presents the findings of the analysis used to test the study's variables. It is divided into two sections: a summary of the findings and a discussion of their implications. The subsection on results provides an overview of the empirical findings, while the discussion that follows explores their significance and interpretation.

4.8.1 Presentation of Findings

The below table 4.10 displays the outcome of the Pooled OLS model. The table presents the coefficients, standard error, t-value as well as the p-values

for the Islamic subsample. Additionally, a summary of the hypothesis findings can be found below in Table 4.12.

The first hypothesis predicted board size to impact Islamic firm performance in a positive manner. The coefficient value emerges positive, though statistically significant (coefficient = 0.9331, $p < 0.001$). These results indicate that the board size made a distinctive and significant contribution to predicting ROA. In other words, changes in ROA can be explained by variations in the board size of GCC Islamic banking sector firms. As a result, the first hypothesis can be supported.

The second hypothesis assumed the board meetings negatively impacts the financial performance. The board meetings variable coefficient was reported to be significant (coefficient = 0.2471, $p < 0.1$) and positively influenced by ROA, which means the variable made a considerable and negative contribution in predicting ROA. Therefore, the third hypothesis can be supported.

The third hypothesis predicted that having outside directors negatively impacts the financial performance. Findings reveal that the coefficient for independent members is negative with financial performance and is statistically significant (coefficient = -0.166, $p < 0.05$). In this case, we can assume that when the outside directors increases by one, this results in the performance of ROA to decrease by -0.166. Hence, the third hypothesis can be supported.

The fourth hypothesis predicted that having female members positively influences firm performance. The value of the coefficient for female members is nonsignificant (coefficient = 1.8902), which means the variable made no

considerable contribution in predicting ROA. Therefore, the fourth hypothesis is not supported.

As for the control variables, Bank size and GDP growth do not show a significant effect, while inflation was found to be significant and has a negative effect on the financial performance (coefficient = -0.6076, $p < 0.01$).

Table 4.10 Regression Results for Islamic banks subsample

Variables	Coefficient	Std. Error	t-value	p-value
Board Size	0.9331***	0.0503348	18.54	0.0001
Board Meetings	0.2471**	0.1309979	1.89	0.061
Board Independence	-0.1668*	0.0747592	-2.23	0.027
Female Board Members	1.8902	1.388352	1.36	0.175
Bank Size	0.0338	0.0971608	0.35	0.728
Inflation	-0.6076**	0.179501	-3.39	0.001
GDP	-0.5426	0.4273005	-1.27	0.206

*** p<0.001

** p-value<0.01

* p-value <0.05

10 Periods; 32 Cross sections

Dependent variable: ROA

Table 4.11 Regression Results for Conventional banks subsample

Variables	Coefficient	Std. Error	t-value	p-value
Board Size	-0.0612**	0.1148069	-0.53	0.094
Board Meetings	-0.0829*	0.0691876	-1.2	0.023
Board Independence	-0.1413**	1.197358	-0.12	0.090
Female Board Members	-0.0311	0.0533965	-0.58	0.561
Bank Size	-0.2154	0.2274627	-0.95	0.344
Inflation	0.0138	0.5630685	0.02	0.980
GDP	-0.0088	0.3153612	-0.03	0.978

*** p<0.001

** p-value<0.01

* p-value <0.05

10 Periods; 65 Cross sections

Dependent variable: ROA

As for the results of the Conventional banks subsample in Table 4.11, the board size is reported to negatively impacts ROA (coefficient = -0.0612, $p < 0.1$). Board meetings and board independence are also found to negatively impact ROA (coefficients of -0.0829 & -0.1413 at $p < 0.1$, respectively). Other variables, such as the female members, the size of the bank, inflation, and GDP growth, have no significant effect on ROA.

Table 4.12 Summary of findings for Islamic banks subsample

Hypothesis	Tested Relationship	Expected Findings According to Theory	Research Findings
H1	Board size & ROA	+ve and significant	+ve and significant
H2	Board meetings & ROA	+ve and significant	+ve and significant
H3	Independent board members & ROA	-ve and significant	-ve and significant
H4	Female members & ROA	+ve and significant	+ve and insignificant

4.8.2 Discussion of Findings

This section consists of the discussion of findings of the POLS model. As there are two subsample, the Islamic and Conventional banks subsamples, the discussion is also divided according to the subsample being interpreted. The study employs various governance theories discussed earlier. Previous literature suggests that board characteristics have an effect on the performance. However, the direction of the impact may differ according on the theoretical perspective employed.

Islamic Banks Subsample

The empirical findings indicate a noteworthy and statistically significant positive relationship between board size and financial performance. The coefficient associated with board size suggests that banks with larger boards

tend to exhibit enhanced governance practices, possibly due to a broader range of expertise and resources, thereby improving financial performance. There are numerous studies who observed a similar finding, which are in line with this study's significant results such as Choudhary's (2015) study that was conducted in 2012 using a sample of 319 companies from the BSE 500 Index, Orozco et al., (2018) used a sectional sample of 84 large companies in Colombia over the period 2008-2012, Asare et al., (2022) who used data from 366 banks in African countries, as well as Kathuria and Dash (1999) who examined 504 corporations belonging to 18 industries in India. Those studies among many reported a positive effect of the board size on the financial performance of banks. In accordance with resource dependency theory, the relationship between the variables should be positive, while agency theory predicts the opposite. This study's results are hence in line with resource dependency theory. The significant positive effect of board size on ROA in Islamic banks can be interpreted as evidence of the beneficial role of a collective wisdom approach, in which the pooling of diverse insights and experiences fosters an environment conducive to superior governance practises. This could also be interpreted as a reflection of the Shura principle of mutual consultation in decision-making processes.

The efficacy of boards cannot be judged by board size alone, rather it may be determined by how well the board members work together as a team (Abdulsamad et al., 2018). Therefore, it may be more beneficial to evaluate how effective the board is rather than to focusing on its size, as per John and Senbet (1998), the optimal size can be determined with the help of external factors of the market such as political, social, and economic factors, and not only company specific factors, for instance the age or size of a firm. Guest

(2009) also argues that different firm specific factors could influence the effect of a board's size on financial performance.

The study reveals a positively significant impact of board meetings on ROA. Although the board meetings variable has a positive coefficient of 0.2471, it indicates a weaker association with ROA, implying that more frequent board interactions may contribute to improved financial outcomes in a less significant manner. The findings of this study align with the theory perspective of stewardship, which states that the board members work towards the shared interests of the firm rather than their own. There are numerous studies who observed a similar finding, which are in line with this study's findings of a positive relationship between the variables. Studies by Al-Baidhani (2018), Ntim & Osei (2011), Al-Daoud et al., (2016), Buchdadi et al., (2019) also reported similar findings, where the board meetings is reported to positively affect performance.

Board meetings are essential in making critical decisions and engaging in strategic planning. Board members can contribute their insights and knowledge to shape effective firm strategies by bringing together diverse perspectives and expertise. Improved financial performance can be achieved through well-informed decisions and robust strategic planning. The frequency however may not be reliable to determine whether increasing or decreasing the board meetings will be beneficial or unfavorable to the financial performance. There is more to board meetings than the total of meetings held annually. Studies agree that meetings are beneficial to a firm. Boards are required to conduct meetings to review and improve firm strategies and goals. However, as how strategy development is important, execution of said

strategies is equally important. Therefore, we can conclude that the quality of the meeting is more crucial than how often it is conducted.

With regards to independent boards, the results suggest a significantly negative relationship among the independence of boards and ROA, implying a rise in the number of outside directors is directly related to decreased performance. The outcome aligns with the assumptions of stewardship theory where appointing more internal directors can increase company performance more than independent directors. In contrast, agency theory predicts the variables to be positively associated, as it emphasizes how important it is to appoint independent members to control the distribution of power among the regular directors and outside directors.

In accordance with present findings, previous studies reported similar findings on the effect of board independence on the financial performance. In the Arab region, Al-Baidhani (2018) studied top 50 performing banks in GCC and Yemen for the year 2011, Abdel-Azim and Soliman (2020) examined 21 banks listed in Egypt from 2012 to 2018. In the Malaysian context, Johl et al. (2015) analyzed 700 publicly traded firms in 2009, Shukeri et al. (2012) studied 300 publicly traded firms in 2011, and Zabri et al. (2016) examined 100 publicly traded companies between 2008 and 2012. Research conducted in other regions include Adams and Mehran's (2012) study on 35 large bank holding firms in the US in the period between 1986 to 1999, and Merendino and Melville (2019) observed 65 listed Italian companies for the period 2003–2015. The reported results align with others who have identified a negatively significant impact of outside members financial performance. Nonetheless, the outcome is contrary to those of Abdulsamad et al. (2018), Wu et al. (2009), and Terjesen et al. (2016), where the findings indicate a positively significant

relationship. Although what is curious about the results reported by Terjesen et al. (2016) is the positive association among outside directors and ROA is given that the board is diversified gender wise.

One potential explanation for a negative impact is outside directors are not completely independent and have a relationship with the firm whether through nepotism, favoritism, or personal relations (AlQudah et al., 2019; Hertog, 2013; Musleh Alsartawi, 2019A, 2019B), which is known to be rampant and a large part of the culture in the GCC. This prevents the independent directors from independently monitoring the CEO and the firm. Independent board members should not be appointed according to such standards.

The negative coefficient for board independence may also indicate that independent directors are not as beneficial in the context of Islamic banking, possibly due to the unique governance structure that values collective decision-making in accordance with Sharia principles. The unexpected negative impact of board independence could be an indication that in the Islamic banking context, where adherence to religious and ethical mandates is paramount, traditional governance models advocating for independence may not be entirely applicable. It could imply that, while independent directors provide impartiality, they may lack specialized knowledge in Sharia compliance, which is critical for the bank's core operations.

When it comes to female board members, this paper explored the effect of women directors on the performance. The outcome reveals female members have no effect on the financial performance, as the findings are positive but statistically nonsignificant. These results go against the assumptions of resource dependency theory, which assumes the female board members to

positively impact firm performance, as they provide unique linkages to external resources.

This study's results are insignificant, but other studies have reported a positive and significant effect on the variables. Hamdan et al. (2022) revealed that female directors improve financial performance in a GCC industrial sector study in 2019. Similarly, Liu et al. (2014) as well as Bennouri et al. (2018) reported positive findings based on China and France, respectively. Nonetheless, some studies have reported nonsignificant findings regarding the association of female members with firm performance. Marinova et al. (2016) studied 186 listed companies in 2007 in Netherlands and Denmark and found insignificant relationship between the variables. Similarly, studies conducted by Rose (2007), Shukeri et al. (2012), Fernández-Temprano and Tejerina-Gaite (2020) also reported similar insignificant results.

There are several possible explanations for nonsignificant relationship. According to Carter et al. (2003), companies who appointed a minimum of two female members outperformed those with entirely male board members in terms of firm performance indicators. This could explain the absence of the relationship as most of the sample of GCC banking sector (84 out of 97 companies) did not appoint a single female members on their board, hence women do not have proper and proportional representation on GCC firm boards to make a difference. Another possible explanation is key decision-makers who come from a traditional background of men-only board of directors may still choose to follow the culture of men-only boards. The theory behind it is in the view of the key decision-makers, being male may be the only means of qualification for appointment of important positions in the market, including being a board of director member. Furthermore, the

existence of market bias that women lack the abilities compared to their counterparts, and the negative market reaction when women are announced for appointments, which still exists in markets (Haslam et al., 2010; Pastore et al., 2017). Thus, benefits that emerge from including female members may not be fully realized or represented in different performance measures. Gender diversity may not be a powerful enough factor to affect the financial performance of Islamic banks on its own, as suggested by the non-significant impact of female board members, or it may take longer for the potential benefits of diversity to affect the financial performance.

Furthermore, when looking at the macroeconomic variables, the negative impact of inflation on ROA is especially intriguing, as it highlights the need for Islamic banks to develop more robust strategies to mitigate the effects of macroeconomic instability, given their prohibition on interest, which can serve as a hedge in conventional banking. The insensitivity of bank performance to bank size and GDP growth may indicate that Islamic banks are driven by factors other than scale and macroeconomic conditions, possibly as a result of their distinct financial products and risk-sharing approaches.

Conventional Banks Subsample

When it comes to the Conventional banks subsample, the lack of a statistically significant impact of the Board Size on ROA could imply that the size of the board, in terms of the number of directors, is not a critical factor in determining the firm's financial performance. Other governance mechanisms or factors that were not considered in the analysis could have a greater impact on ROA.

In terms of board meetings, the negative and statistically significant relationship between Board Meetings and ROA suggests that increasing the

number of board meetings may result in lower financial performance of conventional financial firms. Excessive board meetings could result in inefficient decision-making processes, causing delays in implementing strategic decisions and negatively impacting the company's profitability.

There may be a direct link between board member independence and financial performance, as indicated by the significant negative relationship found between ROA and board independence. The findings indicates a negative correlation between ROA and higher board independence. A more independent board could result in more oversight and monitoring of management choices as increased oversight could lead to more cautious decisions or a focus on risk reduction, which might limit the company's capacity to take advantage of profitable opportunities.

Gender diversity may not be a significant factor that influences the financial performance in conventional financial firms in GCC, as there is no significant association found between the presence of female board members and ROA. It is important to acknowledge that gender diversity can introduce diverse viewpoints, competencies, and life experiences to the board, potentially yielding favorable outcomes for the organization's long-term strategic decision-making and overall performance.

As for the size of the bank, the insignificant relationship suggests that variations in financial performance may not be primarily explained by the size of the financial institution. ROA may be more significantly impacted by other variables, such as the bank's business strategy, risk management procedures, or market circumstances.

When it comes to the macroeconomic variables, the inflation is reported to have a nonsignificant correlation with financial performance, which implies that the variations in inflation rates might not directly affect the financial performance. Industry-specific dynamics or other macroeconomic factors could have a greater impact in explaining variations in ROA. The same finding has been reported for the GDP where the relationship among the variables is statistically insignificant, which suggests that shifts in the GDP's measure of overall economic growth might not have an immediate impact on the company's financial performance. There may be other economic indicators may not have as much of an effect on ROA as other variables, such as market competition, industry-specific conditions, or company-specific strategies.

When comparing the findings between the Islamic and Conventional subsamples, the fundamental differences in their operational philosophies and regulatory frameworks can be interpreted as the reason for the contrast in the influence of board characteristics. Larger boards in Islamic banks may have a positive impact because of their emphasis on ethical decision-making and collective deliberation, which may lead to more prudent and community-oriented business strategies. Traditional banks, on the other hand, may be more affected by the complexities introduced by larger board sizes, which may impede agility and decisive action. The disparate impact of board meetings and independence may also be indicative of cultural and operational nuances. These findings imply that effective governance is context-dependent, and that best practices in one sector may not be transferable to another.

Chapter Five - Conclusion

Chapter contents:

- 1- Summary of Findings
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 - Theoretical Contributions
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Chapter Five - Conclusion

5.1 Summary of Findings

The objective of this study was to examine the relationship between various board characteristics and the financial performance of Islamic financial institutions in the GCC region. The financial performance was measured using the ROA metric. In the context of Islamic banks, the findings shed light on several important factors influencing their financial performance. Firstly, a larger board size was found to be positively correlated with better financial performance, as indicated by a statistically significant coefficient. Secondly, an increase in the number of board meetings was found to have a significant negative impact on financial performance. The presence of independent board members was also found to have a statistically significant negative effect on financial performance. However, the inclusion of female board members did not appear to have a discernible impact on financial performance. Among the control variables, bank size and GDP growth were not found to have a significant influence on financial performance, while inflation showed a significant negative correlation.

In the case of conventional banks, the analysis revealed that board size, board meetings, and independent board members had a negative effect on the financial performance of such banks in the GCC context. Conversely, the presence of female board members, bank size, GDP, and inflation were found to have no measurable impact on financial performance.

This study advances in bridging the gap in literature on corporate governance, specifically the characteristics of boards in the GCC. It also explains the nature of the association that exists among internal governance mechanisms like the

boards and financial performance and offers helpful insights into that relationship. With the appropriate application of the fitting governance mechanism, firms can improve their financial performance. Furthermore, the research delivers reasonable evidence on a number of predictor variables, including as female directors' association with firm performance. Overall, the study's findings highlight the need for reforms in this area and offer a fresh perspectives on corporate governance and GCC banks performance.

5.2 Research Implications and Contributions

The study's findings provide insights in theoretical and practical perspectives. Therefore, this section is divided into two subsections, theoretical contributions, and practical contributions.

5.2.1 Theoretical Contributions

Three governance theories were used to interpret the findings. The theories being agency theory, resource dependence theory and stewardship theory. The board of directors should strive to enhance the shareholder wealth because as per the agency theory, they represent them as their agents. They also need to keep the organization solvent simultaneously. Boards maintain a crucial responsibility, which is to monitor and prevent risky activities. A management is expected to run the firm efficiently. The study focused on independent members rather than regular board members.

Agency theory suggests that the two types of members on boards must fully understand the principal-agent relationship. They must use their position wisely in the shareholder's interest. However, according to stewardship theory, having more internal directors increases financial performance more than having outside directors since they operate as stewards. The independent

directors must oversee the performance of the directors who are directly tied to the firm, while the directors must make investment decisions and make responsible decisions when it comes shareholders' money.

According to stewardship theory, the board should work towards earning the trust of both current and prospective shareholders. The stewardship theory has not been widely employed to explain how boards and shareholders interact. According to the theory, the public will react appropriately to news regarding the company because they are extremely sensitive to such announcements. This can be observed in the public response of news when female board of directors is appointed. Previously, the majority of research have concentrated on using stewardship theory to understand directors' responsibilities, for instance in controlling the decision-making process.

On the basis of resource dependency theory, a board member's network, and industry-specific experience are all unique resources that they can offer to the business. This theory could explain the board size along with the female board member characteristics of the board. A bigger board may offer more external connections from well-connected board members and opportunities, as well as easier access to resources. Better resource management may be made possible by diversifying the board, namely having one with a strong female representation.

The results of this study demonstrate how the three discussed theories are utilized to better understand the connection among internal governance mechanisms and financial performance. Exclusively relying on one theory is hence insufficient to examine and understand the relationship between the variables.

5.2.2 Practical Contributions

The study looked at the Return on Assets, which is one of the performance indicators. Success of any company may be impacted by board characteristics in several ways.

It has been reported that to enhance financial performances in the GCC banks context, firms are recommended to reduce the number of annual meetings by eliminating fruitless meetings, or meetings with no clear agenda as such board meetings are considered a waste of company resources. When it comes to the independent directors, it is suggested to reduce the independent members as they seem to negatively impact GCC banks, especially since nepotism and favoritism has been observed to still exist in GCC markets, rendering independent board members to lose their “independence” aspect, which causes an agency problem. As the key role of an independent member is to oversee board activities such as investment choices, shareholder rights, board decision-making process as a whole to make sure that said decisions are in line with company goals, the independent board member’s “independence” may hinder how they perform their functions. It has an impact on market value because, according to stewardship theory, both current and future investors may fear a stewardship problem. This may be avoided by validating the independence of a potential independent board member prior to their appointment amongst other set criteria.

The board is ought to be mindful of how current and future investors perceive the firm in order to maintain a solid firm image and increase firm value. It is recommended to decrease the female board members as they have been reported to negatively affect the company market value. It is imperative for the board to understand how and why the current and future investors’ trust

and confidence in the company needs to be enhanced and maintained. Theoretically, as per resource dependence theory, female members are found to increase legitimacy of a firm, hence increasing firm value. However, the opposite is reported to be true. Investors may think that increasing female directors may obstruct the company performance. Whenever news about a company is made public, its market value is prone to change. Even a change in the company's board might have an effect, depending on the public reaction. The structure of the board along with board members' backgrounds will be considered by the investors. To raise the firm's value and thereby draw in possible investors, large firms tend towards hiring well-known professionals within the market. Hence, with the proper adoption of internal governance mechanisms, firms can increase their performance financially.

5.3 Limitations and Future Research

We can derive recommendations for further study from the limitations. This paper has identified four limitations which raise questions for future studies. Firstly, availability of data on GCC banking sector from Thomson Reuters DataStream is limited, therefore the sample consisted of 32 banks for the Islamic subsample with some data missing. The second limitation has to do with the limited variables in the study. When other accounting-based performance indicators, such as return on equity, return on investment, return on revenue, and market-based measures, such as Tobin's Q and market value added, can be used in measuring, and comparing performance, this study employs one firm performance indicator. Furthermore, the study takes into account four board characteristics, when there are further variables that can assist in gaining a bigger picture on their impact, namely CEO turnover, political connectedness of members, and audit committee. The third limitation

is that this study relies on quantitative data only, where qualitative data could provide further insight into the association between the variables. Further to that, future research can also focus on other governance theories, for instance stakeholder theory, systems theory, enlightened shareholder theory, etc. In addition, variables that are outside the control of a firm can also be examined, such as economic crises, financial crises, etc. which certainly affect the financial performance.

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