

The Impact of Shariah Supervisory Boards on Islamic Banks' Performance in Gulf Cooperation Council (GCC) Countries

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By

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Abstract

While most conventional banks were threatened with failure or collapse because of the Global Financial Crisis (GFC) which beset the world economy during 2008-9, Islamic banks (IBs) remained resilient, and even witnessed notable growth. It is generally accepted that the reason for this is that IBs are guided by Shariah regulations (Islamic law) about how banking/financial transactions should be carried out properly and ethically, in contrast to the ‘fraudulent and speculative managerial conduct’ (Franzoni & Allali 2018, p. 1) that has marked the practices of conventional banks.

Early research investigated the structure of IBs with a focus on the differences between corporate governance in conventional banks compared with Shariah governance in IBs. The purpose of the Shariah Supervisory Boards (SSBs) is to ensure that IBs’ activities and financial transactions strictly adhere to Shariah regulations, which contributes to their success through improving performance. Consequently, to gain a better understanding of Islamic banking, researchers have focused on identifying the Shariah regulations that lead to their success. The focus on classifying types of regulations and the inherent implications of these fails to take account of the diversity between these boards. By extending the scope to include such inherent diversity, this study adds to the current understanding of the function of SSBs.

While some research explores the relationship between SSBs and IB financial performance, there is limited empirical research that closely examines the composition of SSBs and the impact this has. The current research aims to fill this gap. This study focuses not only on profitability but on efficiency and Shariah measurement. It also investigates the moderating effect of the structure of the Board of Directors (BD) on the relationship between SSBs and IBs’ financial performance.

Considering the purpose of this study, it was imperative to broaden the research design to include the whole region of the Gulf Cooperation Council (GCC). A longitudinal study was selected to reinforce such broadness, as were the measurement tools. The study sample included 19 fully fledged IBs listed on the GCC stock exchange over 2010–2019. Annual reports, along with Bank Focus databases, and each bank’s official website were used to collect the data. A multivariate pooled-ordinary least squares regression was used

to investigate the impact of SSB composition (SSB size, SSB expertise, educational level, cross-membership and reputation) on return on assets (ROA), return on equity (ROE), Tobin's Q and *Zakat* on equity (ZOE). Further, data envelopment analysis (DEA) was used to estimate benchmark indices. This study used the truncated Tobit regression, since the DEA estimated efficiency index is limited to 1 and 0. To address issues of endogeneity and to maintain confidence in these estimates, the study used the two-stage least squares (2SLS) method.

The findings indicate that SSBs are indeed diverse, and that this is a reason for their diverse effects on financial performance. This study determined that SSB size and SSB expertise have a significant and positive relationship with bank performance. SSB size, SSB expertise, educational level and cross-membership have a significant positive association, whereas SSB reputation has a significant negative association with Tobin's Q. Regarding the moderating role of the BD, the results show that the interaction between the SSB and the BD is significant and negative on ROA, ROE and Tobin's Q. The findings of the efficiency DEA suggest that the efficiency of IBs in the GCC countries is also affected by SSB composition (size, expertise, cross-membership and reputation).

This study adds to the literature on governance in general and Shariah governance of IBs particularly in emerging countries particularly. In practice, the results of the research allow stakeholders such as regulators (Central Banks) in GCC countries to improve the existing regulatory framework regarding SSBs mechanisms for better IBs' performance. The results will help shareholders to identify the mechanisms that can improve IBs' financial performance and to enhance the role of SSBs in: firstly, achieving business goals; and secondly, devising strategies to deal with future financial crises.

Introducing the current COVID-19 pandemic as a variable may have different implications for IBs' performance. Further research could compare the impact of SSBs on IB financial performance during the GFC and the COVID-19 pandemic of 2020.

Declaration

I, [Mona Ahmed Qari Basali], declare that the PhD thesis entitled [The Impact of Shariah Supervisory Boards on Islamic Banks' Performance in the Gulf Cooperation Council (GCC) Countries] is no more than 100,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work.

Signature

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Date

20/10/2022

Dedication

This thesis and endeavour are dedicated with deep love to the soul of my father who passed away seven years ago, to my mother, my sisters, and my brothers. It is to them that I owe all of the moments of my life and I appreciate all of their love, care and support.

Acknowledgment

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List of Abbreviations

AAOIFI:	Accounting and Auditing Organization for Islamic Financial Institutions.
BD:	Board of Directors.
BD index:	Board size, board independence, and CEO duality.
BCC:	Banker, Charners and Cooper.
CBs:	Conventional Banks.
CBB:	Central Bank of Bahrain.
CBK:	Central Bank of Kuwait.
CCR:	Charnes, Cooper and Rhodes.
CRS:	Constant returns to scale.
CEO:	Chief Executive Officer.
DEA:	Data envelopment analysis.
DMU:	Decision making units.
GCC :	Gulf Cooperation Council.
GFC:	Global Financial Crisis.
IBs:	Islamic banks.
IFC:	International Finance Corporation.
IFSB:	Islamic Financial Services Board.
OECD:	Organisation for Economic Co-operation and Development.
OLS:	Ordinary least squares.
QCB:	Qatar Central Bank.
ROA:	Return on assets (an accounting-based measure).
ROE:	Return on equity (an accounting-based measure).
SACMA:	Saudi Arabian Capital Market Authority.
SAMA:	Saudi Arabian Monetary Agency.
SSB:	Shariah Supervisory Board.
SSBS:	SSB size.
SSBEP:	SSB experience.
SSBED:	SSB educational level.
SSBC:	SSB cross-membership.
SSBR:	SSB reputation.
SSB index:	SSBS + SSBEP + SSBED + SSBC + SSBR.

Tobin's Q: A market-based measure.
VRS: Variable returns to scale.
ZOE: *Zakat* on equity (Shariah approach measure).

Glossary of Arabic Terms

Fatwa: A qualified Shariah scholar's opinion on matters of religious belief and practice.

Fiqh: Islamic jurisprudence.

Fiqh al-Muamalat: Knowledge of Islamic commercial jurisprudence, economic transactions and activities.

Gharar: Uncertainty.

Mudaraba: A partnership contract in Islamic finance in which one partner finances the project and the other provides management and expertise, in accordance with a pre-agreed profit-sharing ratio.

Mudarib: The manager who provides entrepreneurship and management expertise in the Mudaraba contract.

Murabaha: A contract of sale and purchase transaction for the financing of an asset with a specified profit margin.

Musharaka: A partnership contract that shares profits and losses between two parties. Both parties contribute capital and may form a joint management team.

Riba: Interest.

Shariah: Islamic law.

Zakat: Islamic obligation on Muslims' income and wealth to be distributed to defined beneficiaries, such as the poor and indigent.

Chapter 1: Introduction

1.1 Background

This study explores the challenges and opportunities presented by the emergence of Shariah Supervisory Boards (hereafter SSBs) in the Gulf Cooperation Council (GCC) countries. These nations are Bahrain, Kuwait, Qatar, Saudi Arabia, the United Arab Emirates, and Oman. The current study focuses specifically on the GCC region because of the role it plays as an increasingly important hub for the world's Islamic banking and finance industry (Wilson 2009). According to the Islamic Financial Services Industry Stability Report (2020), 45.5% of the world's Shariah-compliant assets are managed by the GCC Islamic banking industry. Another important aspect of this study is to develop a comprehensive picture of the Shariah governance system as it operates through SSBs, which are now integral parts of major Islamic banks (IBs) operating in the region. The study quantifies bank performance and seeks to provide an understanding of how SSBs contribute to transforming corporate governance structures and practices for the better, especially in connection with the “traditional” bank Board of Directors (BD).

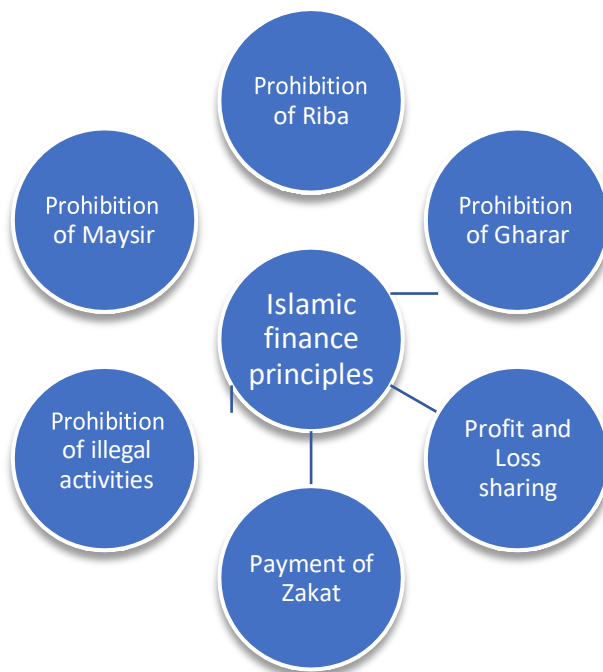
The 2008-9 Global Financial Crisis (GFC) that originated in the United States and spread around the world brought to light the question of ethics in banking. Initially, this crisis began with a downturn in the US subprime housing market and became an international banking crisis due to excessive risk-taking by banks which spread globally throughout the finance system. In order to prevent the collapse of the system, governments around the world bailed out banks and implemented accommodative monetary and fiscal policies. This has led to understanding that the appropriate corporate governance and risk management techniques and structures had to be put in place, especially in the banking sector which was the key to the proper functioning of the global financial system (Alqahtani, Mayes & Brown 2017).

The crisis was widely accepted to have occurred because of ‘fraudulent and speculative managerial conduct’ (Franzoni & Allali 2018, p. 1). When the overly high interest rates of subprime mortgages had to be paid by home-purchasing customers, this was only one example of what went wrong. Subprime mortgages are generally offered to those with a low or no credit rating and consequently at the highest risk of defaulting on their loans (Kopp, Cheung & Jackson 2021), and debate continues regarding the ethics of such loans.

In particular, they are perceived as exploitative as they exploit borrowers who do not have the financial ability to repay large amounts of debt (Villa 2015). Given the push for greater oversight of corporate governance and a call for a greater balance between ethics, morals and profit following the GFC, attention naturally turned to Islamic banks (IBs), which withstood the crisis more soundly than conventional, Western banks which historically functioned on the principles of interest payment and profit. Initial research centred around attempts to identify the factors that created the resilience of IBs (Alqahtani, Mayes & Brown 2017; Perry & Rehman 2011). By 2016, it was estimated that the growth in assets held by IBs would continue at 10%–20% per year (IFSB 2016). By 2017, more than 500 IBs were in existence, holding total global financial assets in excess of US\$3 trillion. The fact that financial assets were in both Muslim and non-Muslim countries suggests IB's broader attractiveness (Al Mannai & Ahmed 2018). While IB assets are marginally lower than those of conventional banks—estimated at US\$148 trillion globally (Norrested 2021)—their resilience and growth has meant they continue to attract much attention.

Although Islamic banking has seen a tremendous growth in terms of the number of banks, assets, and products, only a few academic papers have considered the role of Shariah governance. The GCC countries have recently experienced rapid growth in the number of Islamic banks and total assets under their control. Given that the lack of adequate corporate governance was a major factor in contributing to the GFC (Franzoni & Allali 2018), the strict controls imposed on IBs emerged as a topic of interest, and an approach based on religious principles and the values of Islam were no longer seen as unacceptable in Western contexts. In fact, it was argued that the characteristics of IBs wielded a positive impact on both economic growth and stability (Alexakis et al. 2019). According to Abedifar et al. (2013), IB corporate governance structures have proved instrumental in their ability to withstand major external and internal changes in the finance environment. This strength is founded on Shariah regulations (Islamic law), which emphasise an Islamic approach to financial transactions and are commonly believed to have protected IBs from the worst effects of the crisis compared with conventional banking counterparts (i.e. Western banks). In particular, the Shariah regulations that guide IBs differ in terms of the principles of interest payment that conventional banks adhere to (Mollah & Zaman 2015).

It is important to understand what Shariah regulations are before discussing corporate governance and Shariah governance framework in the GCC countries. Shariah regulations rest on six important principles of profit–loss sharing – principles that are not seen to be part of conventional banking practices: the principle of *Riba* is a ban on charging interest; *Gharar* implies no uncertainty in contracts can exist; *Maysir* prohibits speculation or gambling; illegal activities such as alcohol are prohibited; there is profit and loss sharing and an obligation to have real assets underlying all financial transactions; and finally, *Zakat* is a key pillar of Islam that must be paid by Muslims to the poorer in society, so that justice and redistribution of wealth are being carried out. These principles which are depicted in Figure 1.1, are discussed in more detail in Chapter 2.



Source: Researcher's construction.

Figure 1.1: Principles of Islamic finance.

Unlike the large conventional banks in the West, where managerial conduct demonstrates no concerns to unethical practices, but Shariah regulations are attractive precisely since they do. *Riba* spearheads the essential difference between conventional banking models and IBs. This involves controlling any excess in both the period and amount of interest charged, as this is seen to exploit the debtor and, as such, is immoral. *Gharar*, profit based on uncertainty, is explicitly noted as immoral in the Quran.¹ In fact, Islamic finance

¹ The Holy Book that Muslims believe is the Word of Allah as revealed to the Prophet Mohammad (PBUH).

prefers performance exchange contracts as this disallows one party from dominating and exploiting the other. *Maysir* also disallows speculation, prohibiting making money based on chance. The prohibition of illegal activities emphasises that whatever an individual does has implications for society, politics and the economy. This was clearly an element that the large American banks paid no heed to; nor did they pay heed to sharing of risk and earnings, or real economic activity. Without the rigid regulations imposed by Shariah, conventional Western banking practices proved to be incredibly dangerous (Villa 2015). In contrast, strong regulations are firmly controlled by the SSBs in IB's. In line with the arguments above, the hypothesis of this study is that strong corporate governance positively affects bank performance and is at the heart of IB resilience. While research has identified the importance of following Shariah regulations, the current study investigates the processes by which this occurs.

To ensure IB's continuous compliance with Shariah regulations, governance in respect of SSBs have emerged over the last decade. The Islamic Financial Services Board (IFSB) defined Shariah governance as:

A set of institutional and organizational arrangements through which Islamic financial institutions ensure that there is an effective independent oversight of Shariah compliance over the issuance of relevant Shariah pronouncements, dissemination of information and an internal Shariah compliance review (IFSB, 2009, p. 2).

Shariah governance is expected to protect both depositors and shareholders, but the interests of the former take precedence as they represent the weaker party (Toufik 2015). This is the antithesis of corporate governance in conventional banks, which focuses on the protection of shareholders, often at the expense of depositors, as the GFC demonstrated.

It is argued that the integrity of IBs would be undermined, and customers would lose confidence, if the activities of an IB were found to not comply with Shariah regulations (Alman 2012). For this reason, good Shariah governance is not only important for the success of IBs, but also for promoting customer confidence, which, in turn, increases bank profitability and leads to higher market share (Kashif et al. 2015). Thus, the SSB has become one of the most important internal components of the Shariah corporate governance system in Islamic financial institutions (Hassan 2009). Good Shariah governance, particularly from SSBs, is meant not only to ensure that all financial

transactions comply with Shariah regulations, but also to enhance customers' confidence, leading to increased bank profitability (Amin et al. 2013).

1.1.1 Corporate Governance framework in the GCC countries

Regulators of financial markets in the region and other international and independent bodies, such as the International Finance Corporation (IFC) and the Organisation for Economic Co-operation and Development (OECD), have been active in promoting a culture of good governance practices and investor protection in the region for the last two decades. It culminated in drafting governance codes by the GCC member states since 2002 starting with Oman, 2006 with Saudi Arabia, 2009 with Qatar and UAE and ending with Bahrain and Kuwait in 2010. These codes mainly differ in terms of their enforcement requirement. Since 2014, corporate governance (also known as CG) codes have been updated dramatically across the GCC region, and many countries have switched from voluntary to either comply-or-explain or mandatory compliance, which reflects the maturity of the business environment in adhering to international standards (Salman and Nobanee 2019). On the other hand, these codes share similar provisions such as board composition, but they use varying definitions of director independence. Three of the codes recommend ongoing professional board development programs for directors (Qatar, Saudi Arabia and UAE). As for board committees, all codes require setting up an audit committee which is composed mostly of independent non-executive directors. The duties of such committees are well stated in all these codes.

According to the OECD (2005), CG in the the Middle East and North Africa (MENA) and GCC regions is characterised by a strong concentration of family ownership, and the GCC countries follow a common-law legal system which adheres to religious principles and rules in their legal system. Family ownership of businesses is the foundation of the GCC economy since these businesses in the region generate around 80% of gross domestic product (GDP) outside the oil sector (Abdallah & Ismail 2017). As a result of family companies wishing to maintain ownership and control of the industry and contractual relationships, debt financing is often derived from bank loans rather than equity finance; banks hold significant stakes in companies as a result of their equity investments. Nonetheless, the increase in corporate governance awareness across all GCC economies makes the establishment of good governance mechanisms vital for the long-term survival of businesses. A survey by Pearl Initiative and PWC (2012), which

interviewed more than one hundred family firms in the GCC region, shows that although the majority of those firms believe in the importance of good corporate governance for securing the long-term health of their businesses, they consider it to be less important than other challenges they currently face such as operational and commercial concerns and overall profitability. It is also worth noting that the governance of family businesses in the GCC region encounters issues such as succession and management of conflict, which are both often directly related. Other governance issues include transparency/full disclosure and accountability, formalising management structures, improving rules and processes and the need for better practices at the board level. Corporate governance in the GCC countries has already been taking steps to improve corporate governance in the region. Enhancing corporate governance in the region is expected to enhance international competitiveness, increase local and foreign investment, and build domestic financial markets (OECD 2015).

1.1.1.1 Board of Directors

An effective BD is the most important aspect of good corporate governance (Hsu, Lai & Yen 2019). A BD consists of a number of competent and experienced people who align the interests of managers and stakeholders with the goals, aims, vision and strategy of the company (Przybyłowski, Aluchna & Zamojska 2011). Their main responsibilities are to establish the strategic goals of the firm, supervise their management, report on the company's financial status and inform all relevant stakeholders about its business plans (Ahmed & Gábor 2011; Cadbury 1992). An effective BD is able to monitor the major processes of a firm on a regular basis, to be accountable to its stakeholders and to control the activities of the executive management (Fama 1980; Fama & Jensen 1983). Moreover, an effective BD not only minimises agency conflicts and agency costs (Haniffa & Hudaib 2006), adding value to the firm, but also refers to how a firm utilises resources effectively to support its performance (Gregory & Simms 1999). It has been suggested in the literature that a corporation's alignment with its vision and mission needs to be reflected in its make-up; in other words, an appropriately composed BD is vital for medium- and long- term prospects of success (Al-Matari et al. 2012).

1.1.2 Shariah Governance framework in the GCC countries

In the GCC countries, the Shariah governance framework is generally categorised into two types, either regulated through legal and supervisory requirements, as in Bahrain, Kuwait, UAE and Qatar, or self-regulated, as is the practice in Saudi Arabia. The majority of Islamic financial institutions in the GCC nations have developed their own Shariah guidelines and standard processes. Based on examinations of financial and non-financial statements of leading Islamic banks in each GCC member country, it was emerged that most of the bloc's banks conducted Shariah reviews rather than Shariah audits. Shariah reviews of the Islamic banks in the GCC are carried out by the SSB. However, in terms of auditing, only a small percentage of Islamic financial institutions' SSBs in the GCC indicated that this work was being delegated to internal Shariah compliance units. The Shariah governance frameworks of each GCC country in the sample will be discussed in more detail in Chapter 2.

In practice, there is a centralised Shariah governance model in Malaysia, Sudan and Pakistan, while a decentralised model is the practice in GCC countries (Graiss & Pellegrini 2006; Hamza 2013). In the latter model, the IB have their own SBs which are independent of the Central Bank. In the GCC countries, each IB has its own SSB, which decides on the Shariah conformity of products offered. It is the case for Kuwait, Saudi Arabia, Bahrain, Qatar, the UAE, Jordan, and Yemen, but also non-GCC countries like Gambia and Indonesia. In the GCC, there are no effective national SBs at the level of central banks. There are individual SSBs at the level of the IB. The permissibility of contracts and Sharia-compliant financial products is decided at the level of these institutions by their own Shariah committee. We note the influence of standards and opinions of the AAOIFI board (see below) on most IBs' SBs in the GCC states.

Due to the fact that International Financial Reporting Standards (IFRS) are not primarily meant to satisfy the accounting requirements of Islamic banks, the Accounting and Auditing Organization for Islamic Financial Institutions (hereafter AAOIFI) was formed to establish Shariah-compliant accounting standards. AAOIFI is an Islamic international, non-profit organisation that sets up accounting, auditing, governance, ethics, and Shariah standards for Islamic financial institutions to follow. To harmonise practices in all such institutions, AAOIFI regularly publishes Shariah standards, and the Islamic Development Bank's Shariah Board provides Shariah-based opinions by working closely with other

international agencies. AAOIFI functions as an independent organisation consisting of 200 members from Islamic financial institutions worldwide. It provides Islamic financial institutions with standards on Shariah regulations for specific Islamic finance products and procedures or mechanisms, accounting and auditing, corporate governance and ethics. These standards are used voluntarily by leading Islamic financial institutions throughout the major Islamic finance jurisdictions (AAOIFI 2015); however, some countries have adopted them as mandatory because the AAOIFI does not have the capacity to impose such standards (Barakat, Samhan & Alsouri 2022; Grassa 2015). Examples of countries that have made them compulsory are Bahrain, Jordan, Mauritius, Nigeria, Qatar, Oman, Pakistan, Sudan, Syria, United Arab Emirates and Yemen. Besides using AAOIFI accounting standards as the basis for developing national accounting standards in jurisdictions like Indonesia and Pakistan, these standards have been recommended as guidelines in jurisdictions like Kuwait. As stated previously, the Shariah governance models will be covered in more detail in Chapter 2.

1.1.2.1 Shariah Supervisory Board

An SSB is defined as an independent body comprising jurists specialising in Islamic commercial jurisprudence and Islamic finance (AAOIFI 2015). When comparing an SSB to the BD in a conventional bank, it is important to note that an SSB represents an additional layer of governance together with the regular BD and other committees in Islamic financial institutions (Nomran, Haron & Hassan 2018). An SSB's major responsibility is to ensure the institution's activities and transactions comply with Shariah regulations (Lahsasna & Saba 2014). An SSB has the authority to attend BD meetings to deliberate on decisions related to Shariah compliance matters for financial services and products (AAOIFI 2015). According to AAOIFI (2015), an SSB requires at least three members who thoroughly understand Islamic jurisprudence (*Fiqh al-Muamalat*) and who are appointed by shareholders at the SSB's annual general meeting. The SSB may include one member who does not specialise in *Fiqh al-Muamalat* but who is still an expert in the field of Islamic financial institutions. Each Islamic financial institution is required to establish an SSB; in some places, such as Bahrain, it is mandatory, while in others, like Saudi Arabia, it is voluntary (Grassa 2013). The presence of an SSB thus represents an important element of IB corporate governance.

In the GCC region, each IB has its own SSB. As a general rule, the SSB certifies permissible financial instruments through *fatwa*, verifies transactions adhere to issued *fatwa*, calculates and pays Zakat, disposes of earnings that are not Shariah-compliant, and advises shareholders and holders of investment accounts about income and expenses. A report is issued by the SSB to certify that all financial transactions comply with the key principles. In most Islamic financial institutions, this report is part of the annual report. In practice, SSBs are responsible for tasks specified in the articles of association of financial institutions or by national regulators. Guidelines for SSBs are implemented by regulators such as central banks and international standard setters such as AAOIFI, in addition to internal corporate arrangements. It is common for these terms to: firstly, refer to the SSB's duties related to Shariah compliance; and secondly, to indicate areas of competence, composition, and decision-making.

It is important to note that the functioning of SSBs brings to light five main issues of corporate governance: independence, confidentiality, competence, consistency, and disclosure. The first concern is the SSB's independence from management. SSB members are generally appointed by the shareholders of the bank, represented by the BD. Therefore, SSBs are employees of the financial institution and report to the BD. Remuneration for SSBs is proposed by the management and approved by the Board. There could be a conflict of interest between members of the SSB who provide remunerated services to the institution and assess the nature of operations. All SSB scholars are generally expected to submit unbiased opinions. They are, however, economically vested in the financial institution because it employs them, which may to some extent compromise their independence. For instance, the SSB's opinion may prohibit a bank from engaging in certain profitable transactions or cause illicit income to be reallocated to charity, resulting in unethical financial performance. In these circumstances, bank managers may be tempted to use their leverage to influence SSB scholars.

A conflict of interest is mitigated in practice by the ethical standards of the members of the SSB, and the financial institution's reputation would suffer from a stained reputation. The majority of SSB members are highly respected Shariah scholars and defenders of its principles. As such, it seems highly unlikely that an SSB would assess and disclose Shariah compliance in an untruthful manner. It would seriously damage the scholars' reputations and prospects for further work if such an incident occurs and comes to light.

Management interference with compliance assessments can also lead to a loss of confidence among shareholders and stakeholders. It is possible for management to be penalised and dismissed. In spite of all of this, and despite the extreme costs of untruthful assessments, existing corporate arrangements regarding SSBs may present a conflict of interest.

1.1.3 Bank Performance

There has been a great deal of attention recently paid to the performance of banks in the finance system. In the wake of the GFC of 2008-9, banks' management and legal terms took action to improve and enhance the ability to measure and monitor bank performance. To do this, several methods became available, such as accounting-based measures (return on assets (ROA) and return on equity (ROE)), a market-based measure (Tobin's Q), the Shariah approach measure (Zakat on equity (ZOE)) and the Data Envelopment Analysis (DEA) estimated efficiency index. In this study, ROA, ROE, Tobin's Q, ZOE and DEA are used as proxy measures for bank performance. These measurements will be discussed in more detail in Chapter 5.

1.2 Research Aims, Objectives and Questions

This research aims to investigate the impact of SSBs as an internal Shariah governance mechanism on bank performance through increasing monitoring, supervising and constraints on operations that are carried out in the GCC region. The study investigates variables that may affect the role and practices of SSBs, and that may in turn affect bank performance. The aims of the study are delineated into six objectives:

1. to examine the impact of SSB size on bank performance
2. to examine the impact of expertise of SSB scholars on bank performance
3. to examine the impact of educational level of SSB scholars on bank performance.
4. to examine the impact of cross-membership of SSB scholars on bank
5. to examine the impact of reputation of SSB scholars on bank performance
6. to investigate whether BD structure has any effect on the relationship between SSB composition and bank performance.

To achieve the aim and objectives, the following two research questions are posed:

RQ1: To what extent does SSB composition affect bank performance?

RQ2: Does the BD influence the role of SSBs?

1.3 Contribution to Knowledge and Statement of Significance

1.3.1 Academic contribution

This research makes several contributions to the literature on governance in general and on Shariah governance of IBs in particular. First, this research adds empirical evidence to the literature on the impact of SSBs on the performance of IBs in the GCC region. The GCC region is increasingly important in the MENA region, and it greatly differs from Western and other developing countries. Most of the literature relating to IBs provides theoretical contributions regarding the uniqueness of Shariah governance in the Islamic finance world (Grais & Pellegrini 2006; Hassan 2011; Safieddine 2009). Only a few empirical studies on the impact of SSBs on bank performance in different contexts have been published, and the results are mixed (Ajili & Bouri 2018a; Mollah et al. 2017; Nomran, Haron & Hassan 2018). These studies also suggest a need for more empirical investigation into the ideal SSB composition for IBs to identify best/effective practices. For this reason, it is important to fill this gap in the literature by conducting more empirical research to investigate the role and functions of SSBs and to confirm whether they have a positive influence on bank performance, especially in the GCC which differs from the developed and developing/emerging countries. In addition, the empirical results of this study could be used as benchmarks by researchers in future studies.

Second, this research examines the moderating effect of a BD's structure on the relationship between SSBs and bank performance. Though several studies have examined the direct effect of SSBs and/or BDs on bank performance as an independent variable (Ajili & Bouri 2018a; Nomran, Haron & Hassan 2018), the indirect impact of a BD on the relationship between SSBs and bank performance remains underexplored, with Mollah and Zaman (2015) and Nomran and Haron (2019) the exceptions. Mollah and Zaman (2015) examined the indirect effects of SSB size and BD on IBs' performance while Safiullah and Shamsuddin (2018) examined the same effect but on IBs' risk-taking. Many researchers assert that using only individual CG items may not reflect the total impact of governance (Brown et al. 2011). To overcome this limitation, this study uses an SSB-index following Farook et al. (2011) and Rahman and Bukair (2013), as it

considers the impact of other important SSB characteristics. Thus, the current study examines whether the impact of SSBs on bank performance varies given the varying structures of the BD. Recently, it has been claimed that the primary role of the SSB has faced disturbing challenges and pressures from BDs (Al Mannai & Ahmed 2018); for example, some SSBs would have been instructed to make specific decisions related to Shariah issues in contravention of their own regulations, a misstep likely to have a damaging impact on bank performance. In this regard, we consider that our current study of the potential moderating effect of a BD on the relationship between SSBs and bank performance constitutes an important and timely contribution to this field.

Third, in contrast to previous studies such as Ajili and Bouri (2018a), this research provides a longitudinal study. The current study contains a sample size of 25 fully fledged Islamic banks across the GCC countries, covering a ten-year period between 2010 and 2019 and assessing 250 observations initially. After finalising data, the final observations were 190 observations. The 10-year period covered is crucial in terms of providing adequate time for reliable results and covering comprehensive financial changes; it allows for a far more comprehensive and focused analysis of SSBs in GCC countries and their relationship to bank performance than hitherto available.

Fourth, unlike previous studies that have only used profitability to measure bank performance (Akbar et al. 2016; Buallay, Hamdan & Zureigat 2017; Low, Roberts & Whiting 2015), this research looks not only at profitability, but also at efficiency and Shariah approach performance measures. Bank performance is not only based on profitability but also the efficiency of how resources are utilised, across, for example, loans, procedures and personnel (Alexakis et al. 2019; Koltai & Uzonyi-Kecskés 2017; Zeineb & Mensi 2018). An inefficient banking system would lead to economic depression, lower financial growth and loss of customer confidence. To attain efficiency and financial growth, banks are required to govern effectively. In this regard, and for IBs to be Shariah-compliant, the existence of an SSB is considered necessary. The importance of the SSB refers to how a bank allocates its resources effectively to enhance its performance. The current research differs from previous studies because it investigates more than one SSB mechanism – which are all important as shown in literature – on different bank performance measurements. Other studies used efficiency as one measurement for bank performance; however, using other measurements provides a broad insight and captures different bank performance characteristics from different

perspectives. The current study benchmarks banks' performance using the estimated performance indicators of the Data Envelopment Analysis (DEA). The DEA indicates efficient versus inefficient units and reports potential overhauls of inefficiency by documenting the interactions between inputs and outputs (Avkiran 2006).

The current study incorporates Shariah approaches to measuring bank performance in addition to profitability and efficiency measurements. Conventional measurements (e.g. ROA, ROE) are commonly used in measuring IBs' performance. However, Ghayad (2008) argues that it is inaccurate to measure their performance using the same methods that apply to conventional banks (CBs) since there are many differences between IBs and CBs in their operational features, objectives and functions. This suggests that the performance of IBs should consider Shariah approaches, and for that, *Zakat* is a more appropriate alternative measurement (Mohammed & Muhammed 2017). Shariah measures show how banks' dynamism can serve to estimate how profitable a bank is (Mohammed & Muhammed 2017). An Islamic bank pays more *Zakat* if it makes more profit; as a result, this can be used as a good indicator of the health and moral integrity of an Islamic bank. Therefore, and for IBs to be Shariah-compliant, the existence of an SSB is deemed necessary. The importance of the SSB refers to how a bank calculates, collects and pays *Zakat* that it has approved of in an effective way. To reflect this more complex reality, the current study offers a wider-ranging view of the impact of SSBs on bank performance that combines profitability, efficiency and Shariah measures.

1.3.2 Practical contribution

This study is of significance to stakeholders such as regulators, clients, investors, and shareholders in Islamic countries, particularly in the GCC region, as little is yet known about the short- or long-term impact of SSBs on bank performance. In most countries, Shariah governance practices need to be enhanced, especially the regulatory framework through which SSBs mechanisms operate (Grassa 2015a). In the GCC region, regulators play an integral role in protecting investors and maintaining high levels of confidence in the economy. Regulators have the power to mandate corporate governance codes. The central banks of each country in the GCC regulate and supervise banking institutions. They promote financial and monetary stability, efficiency and resilience in the financial system, and the protection of consumers through effective supervision that supports economic growth for the benefit of the country and its people.

Regarding laws and regulations, banks are required to follow certain rules, restrictions, and guidelines, among other things, in order to create market honesty between them and their customers. The results of this research may help regulators such as central banks to improve the existing regulatory framework regarding SSB mechanisms for better Islamic bank performance. The results may also assist global institutions such as AAOIFI and Islamic Financial Services Board (IFSB), which issue Shariah governance standards and guidelines, in setting or reforming standards related to SSBs' composition that enhance bank performance and decide whether to advise banks to keep SSBs as a voluntary layer of monitoring and supervising, or to make them mandatory in all banks in the region. Also, other stakeholders such as clients and investors may find the results helpful when deciding whether to invest in a bank. The goal of investors in Islamic banks is to make a profit on their investments. Thus, this study's findings will offer investors an understanding of how well banks perform, so it will lead to greater investor confidence in the market.

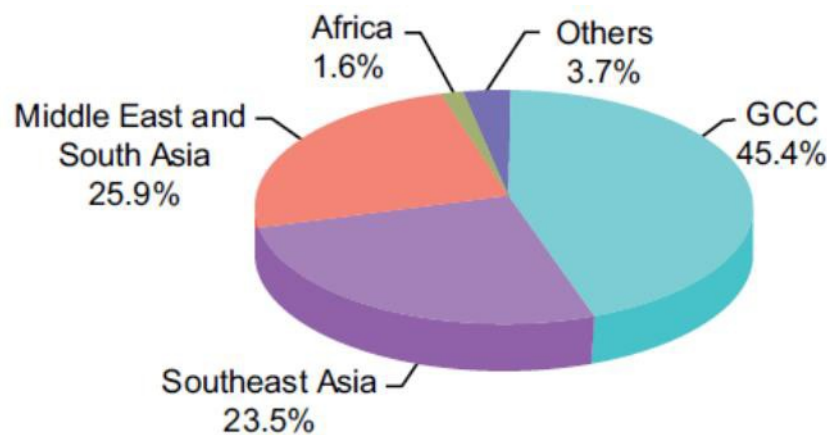
This research offers practical recommendations for decision-makers such as shareholders of a bank. As mentioned before, SSB scholars are appointed by shareholders at the SSB's annual general meeting, so the results may assist shareholders to identify the ideal SSB composition to help improve bank performance. It is also hoped that this identification will provide evidence for the efficacy of the Shariah governance framework in ensuring compliance and shed light on possible avenues for strengthening Shariah governance in the GCC region.

1.4 Statement of Significance

The current study is significant since it empirically identifies mechanisms to help improve bank performance in an economically important part of the world. It is, therefore, anticipated that this study will not only have policy implications for the GCC region's Islamic banking industry but will also be very important to other countries intending to develop the necessary regulatory infrastructure for their Islamic banking industry. This study seeks to not only show how to better utilise SSBs to achieve future business goals, but also to devise strategies to deal with future financial crises.

The banking system plays a major role as a net contributor to GDP in the GCC region (Abu Loghod 2010), with the banking sector representing over 60% of the financial structure of the region (Saidi 2011). In fact, the rapid growth registered by IBs is placing

these institutions in a prominent position as sources of finance (Platonova et al. 2018). According to the Islamic Financial Services Industry Stability Report (2020), IBs account for a significant portion of total Shariah-compliant assets in the GCC area. Figure 1.2 depicts shares of global Shariah-compliant assets by region, showing that the GCC region has the highest percentage of all regions at 45.4%, which suggests that Islamic banks have become systemically important in these countries. This is followed by the Middle East and South Asia and South-East Asian regions, with 25.9% and 23.5%, respectively. Although North African and Sub-Saharan African countries have been merged, the African region's share of Islamic banking remains marginal at 1.6%. Nonetheless, the prospects for entrenching Islamic banking in the region seem encouraging given the various efforts and initiatives being made to that end. Significantly, the Islamic banking market share has already crossed the 25% threshold – a trend that is likely to increase for the foreseeable future. Further, the literature shows that the banking sector wields a positive effect on the stability of the national economy by reducing the impact of financial shocks.



Source: Islamic financial Services Industry Stability Report (2020, p. 14).

Figure 1.2: The shares of global Shariah-compliant assets by region.

1.5 Methodology of the Study

The research methodology and methods are presented in detail in Chapter 5. A quantitative method is used to achieve the research aims, test hypotheses and answer the research questions; this determined how the data for the study were collected. The sample consists of 25 randomly selected, fully fledged IBs. The choice of 25 listed IBs gives a total of 250 observations over 2010–2019, serving to facilitate the regression analysis and

enhance the study reliability. The required data for the study were collected from three main sources: the BankFocus database, each sample bank's official website, and the annual reports of the sample banks. This study is limited to firms in the banking industry since they are subject to heavier regulatory scrutiny than any other industry. Further, a bank's financial structure differs markedly to that of firms in other industries (Ntim 2015).

This study divides the explanatory variables into two main groups: testing variables SSB composition (SSB size, SSB expertise, educational level, cross-membership and reputation) and control variables (bank size, bank age, and leverage) (variables that have an important effect on the dependent variables).

Bank performance is measured using accounting-based measures (return on assets (ROA) and return on equity (ROE)), a market-based measure (Tobin's Q), the Shariah approach measure (*Zakat* on equity (ZOE)) and the Data Envelopment Analysis (DEA) estimated efficiency index. To evaluate the efficiency of IBs in GCC countries, this study uses the DEA estimated efficiency index as an alternative measure of performance. Utilising different measures provides more reliable results than relying on one measure, which could be deceptive, and allows us to confirm the results more confidently.

To investigate whether there is a significant association between SSB composition and bank performance, six hypotheses are developed in Chapter 4 based on previous Shariah governance studies and the proposed theoretical framework. Five hypotheses address SSB composition, while the sixth considers whether the BD influences the role of SSBs. These hypotheses are tested using a number of statistical tools, including descriptive statistics, Pearson correlations, multivariate pooled ordinary least square (OLS) regression analyses (OLS regression model) and truncated Tobit regression analysis.

1.6 Ethical and Integrity Risks Associated with this Research

The issues related to ethics are clearly outlined in Victoria University's online guide to research and many other similar guides including that of the American Psychological Association (APA). The researcher completed the Victoria University Ethics Application, a pre-requisite to higher-level research. The other principles outlined in APA (2003) note a need to consider the following as important: ensuring that care is taken with any relationship the researcher enters in undertaking research so that no exploitation of participants exists, following the rules of informed consent, and respecting confidentiality

and privacy. The current research collected all data from bank records, which are open to the public and available online; thus, issues related to privacy, exploitation or informed consent are not relevant.

1.7 Structure of the Thesis

This thesis is structured in seven chapters. Chapter 1 provides a background to the current study and presents the research aims, objectives and questions. This chapter also articulates the research contribution and its significance and scope.

Chapter 2 provides a background on IBs in GCC countries and Shariah governance. It aims to provide an overview of and justification for the necessity for extending research on the impact of SSBs on IBs' performance within GCC countries.

Chapter 3 provides the theoretical background, outlining the different theories that may explain the impact of SSB composition on bank performance.

Chapter 4 reviews the empirical literature related to the current study. This includes conventional corporate governance, Shariah governance and previous studies on SSB and bank performance. The chapter also develops the hypotheses for the study.

Chapter 5 presents the methodology and methods used in this study. This chapter explains how the sample was selected, the data were collected and the various types of data. It also describes how SSB variables and bank performance indicators are measured in the study.

Chapter 6 presents the empirical results and discussion related to the first and second research questions. More specifically, the chapter is divided into three sections. The first section presents the descriptive analysis for all variables that help to answer the first research question, regarding the extent to which SSB composition affects bank performance. The second section presents and discusses the correlation that helps to answer RQ1. The regression results are presented and discussed in the last section to help answer research questions RQ1 and RQ2, regarding whether the BD influences the role of SSBs. The results are analysed and discussed under four sections, with each section related to one of the dependent variables (ROA, ROE, Tobin's Q, ZOE and DEA).

Chapter 7 concludes with a summary of the study results and main findings, followed by its implications and contributions. In addition, it describes the study limitations and provides recommendations for future research.

Chapter 2: Background on IBs in the GCC Countries and Shariah Governance

2.1 Overview

Chapter 1 provided a brief overview of the study's background, aims, objectives, questions, contributions and significance. The aim of the current chapter is to provide an overview of and justification for the necessity of research on the impact of SSBs on IBs' performance within GCC countries. The GCC area was chosen as the focus for this study because it has become an Islamic banking hub, in line with the positive growth that has taken place in this sector in this region. In part, this growth emerged as investors and depositors are now better informed, helping them understand how they can utilise their resources effectively. Countries such as Saudi Arabia, Kuwait, the United Arab Emirates, Qatar and Bahrain have played significant roles in developing the Islamic banking system in the Middle East, making the GCC region active in the global promotion and improvement of services and products associated with Islamic banking (Wilson 2002).² This chapter begins with an analysis of the background to the development of IB within the GCC, followed by a discussion of Islamic banking principles and an outline of the legislative provision and government policy regarding IBs in the GCC region. Following this, there is a discussion of Shariah governance, and finally, a summary is provided. Given the differences between Islamic and conventional banking systems, this background provides essential knowledge for understanding IBs, which requires knowledge of the principles on which IBs operate and the legislative context in which they exist.

2.2 History and Development of Islamic Banking in the GCC Countries

The GCC was established in May 1981 and its constituent countries are Saudi Arabia, Kuwait, the United Arab Emirates (UAE), Qatar, Bahrain and Oman. These nations are situated around the Persian Gulf, and they share other attributes, such as historical development, religion, culture and social norms. The banking sector dominates the GCC finance system, and there has been rapid growth among the IBs, making them an outstanding financial intermediation source in the GCC countries (Mollah et al. 2017).

² Oman was a late arrival to this group, as a result of its fluctuating political system (Alam 2006).

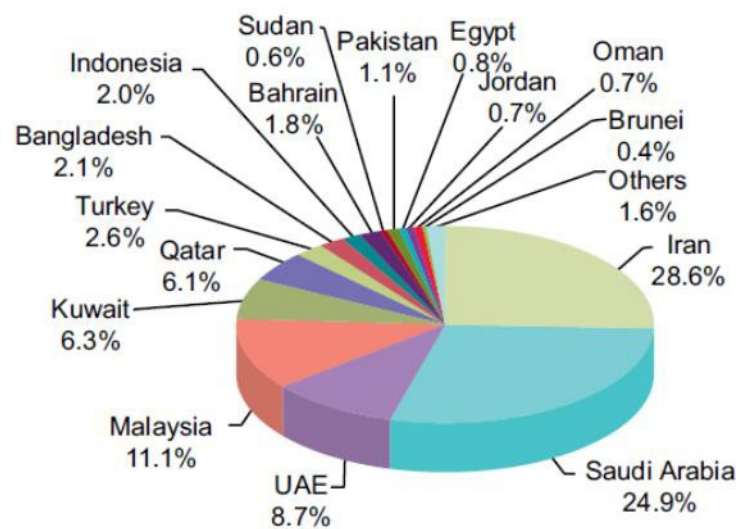
Islamic banking in the GCC actually took a number of years to spread throughout this area; the following section divides the region to demonstrate the diversity in development.

Islamic banking was first introduced to the GCC countries in 1975, when the Dubai Islamic Bank was established (Zaher & Kabir Hassan 2001). Subsequently, the other GCC member countries introduced their own IBs, including Bahrain in 1979, Saudi Arabia in 1987 and Qatar in 1982. The Islamic Development Bank was established by Saudi Arabia in support of global Islamic finance initiatives in 1975 (Islam & Kamruzzaman 2015), with the expectation of positively influencing Saudi authorities towards Islamic banking; however, authorities remained cautious (Wilson 2009). In the same vein, the Kuwait Finance House, established in 1977, was the first IB in Kuwait; today, it is one of the foremost Islamic financial institutions in the world. Several studies (Parashar 2010; Wilson 2013) have indicated that these GCC IBs received much attention as they opened branches in other international Muslim/non-Muslim countries around the globe. For example, the Kuwait Finance House and the Saudi Arabian bank Al-Rajhi have expanded to Melbourne, Turkey, Singapore and Malaysia, while the Dubai Islamic Banks have stepped up investment in the United Kingdom, Turkey and Pakistan. According to Jbili et al. (1997), the IBs in GCC countries are well developed and profitable as they hold high levels of capital – which is what enabled them to endure the GFC. Indeed, interest in IBs heightened following their robust performance during this crisis; between 2009 and 2013, IBs' annual growth rate averaged 17% (IFSB 2020). So, while conventional banks such as JPMorgan Chase, Goldman Sachs, Bank of America and Morgan Stanley were crashing, IBs were growing. This presents a strong picture of the IBs' increasing globally competitive strength. According to the Islamic Financial Services Board (2015), more investors have been attracted to the Islamic banking industry globally, leading to improvements in the business and economic activities of Islamic banking at both regional and global levels.

Globally, the GCC regions accounts for the largest share of Islamic banking assets. It is considered to be one of the main drivers of Islamic banking's global growth. Over a five-year period (2013-2018), Islamic banking assets in the region grew at a compound annual growth rate of 7.9% (Islamic Development Bank 2020). By the end of 2018, Islamic banks had assets worth US\$835 billion compared to US\$799 billion in 2017. According to Islamic Development Bank (2020), Saudi Arabia led the region in terms of Islamic banking assets with almost 50% for six consecutive years from 2013-2018, the highest

figure in the world. In Saudi Arabia, Islamic banking assets grew at a compound annual rate of 7.7%, almost the same rate as the whole region's Islamic banking industry.

The steady growth of banking assets in Saudi Arabia can be attributed to the following factors. Firstly, Shariah-compliant products are in high demand, and the use of advanced digital services by banks is very popular. As well, the Saudi Arabian Monetary Agency's (SAMA) role in regulating and supervising the banking system has enhanced its resilience and stability. In addition, Saudi Arabia is comparatively economically stable at the macro-policy level. Further, the robustness of IBs cannot be ignored given statistics showing that presented in the Islamic Financial Services Industry Stability Report (2020). It is noted that global Shariah-compliant assets account for a substantial part of the GCC area's total banking assets. Towards the end of 2019, such assets were as follows: Saudi Arabia had the highest share (24.9%), followed by the UAE (8.7%), Kuwait (6.3%), Qatar (6.1%) and Bahrain (1.8%), with the segment on the verge of emerging in Oman. The GCC region experienced a modest increase in its share of global Islamic banking assets. Figure 2.1 illustrates shows the share of Islamic banking assets in GCC and other countries.



**The share is apportioned in US dollar terms.*

Source: Islamic Financial Services Industry Stability Report 2020, p. 15.

Figure 2.1: The share of Islamic banking assets in GCC and other countries.

Moreover, by 2019, the GCC Islamic financial assets reached a value of US\$ 1253 billion, representing 44% of global assets, followed by MENA at US\$ 755 billion, with 26.3% share, Southeast Asia at USD 24%, and Europe, Asia, America and Africa, each with

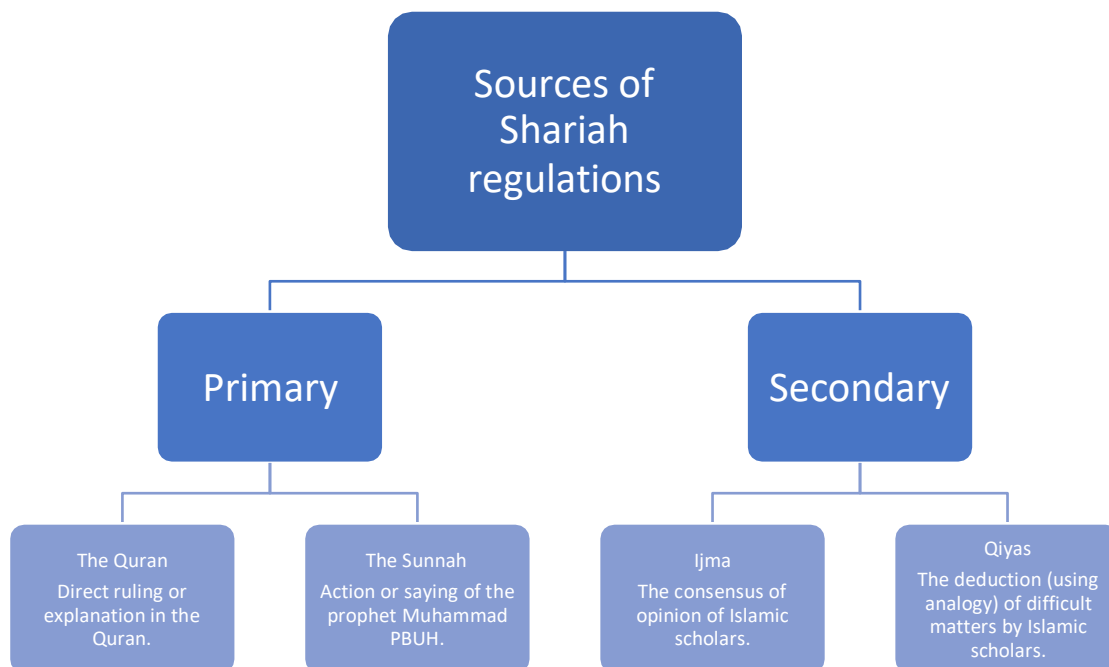
24% (IFSB 2020). According to IFSB's definition of systemic banking, Islamic banking accounts for at least 15% of banking assets in Kuwait, Saudi Arabia, and the United Arab Emirates. Bahrain's retail banking has reached systemic proportions, with a 27% share of retail assets, and a 13% share of retail and wholesale assets. Late in 2012, Oman entered the Islamic banking industry. The significant growth in the assets of the Islamic financial system and the contribution of countries from the GCC region have had a highly positive influence on IBs' economic activities. Khan and Bhatti (2008) suggest that all of this has been made possible by adherence to Shariah regulations which is demanded by a substantial proportion of people in the region.

Corresponding to the Islamic banking sector's rapid growth, there has been an increase in the development of standards bodies, which function to ensure Shariah-compliance, develop regulations regarding the already established principles of the Islamic finance industrys, and direct its operations globally (El-Halaby, Aboul-Dahab & Qoud 2020). An important example of one of these standards bodies is the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) in Bahrain, which was established in 1991 to provide accounting, auditing and Shariah standards for financial reporting purposes at various Islamic financial institutions. Another example is the Islamic Financial Services Board (IFSB), which was established in 2002 and responsible for Islamic financial services. The IFSB is internationally known as the global standard-setting agency that issues guiding principles and international standards for the Islamic finance industry (Ahmed 2010). Most Islamic finance institutions worldwide are members of AAOIFI, and adhere to its standards, which build on, rather than replace, the International Financial Reporting Standards (IFRS) used by most conventional banks in Europe and Asia.

2.3 Islamic Banking

Islamic banking, also referred to as Islamic finance or Shariah-compliant finance, is typically considered to be a finance system which complies with Shariah regulations (Islamic law) (Ahmad 2007). As such, they are inherently different from the principles of the conventional banking system (Kettell 2011). Shariah was defined by Sardar (2003, p. 17) as 'a system of ethics and values covering all aspects of life (e.g. personal, social, political, economic and intellectual) with its unchanging bearings as well as its major means of adjusting to change'. Shariah regulations are the basis of IBs and their primary

source is the Holy Book of Islam (the *Quran*) and the teachings and sayings of the prophet Muhammad PBUH (*Sunnah*) as presented in Figure 2.2. The secondary sources are agreements among the analogy called (*Qiyas*) and Muslim scholars (*Ijma*). The secondary sources are only applicable when no solution to a finance-related matter can be found in either the *Quran* or *Sunnah*. From an Islamic perspective, Shariah regulations sources serve as the cornerstone for proving and supporting corporate governance (Hij Abd Jabbar 2008). It is also understood that Islamic law sources provide the necessary material by which to study corporate governance from the Islamic perspective. For this reason, the GCC region's industry regulators refer to Islamic law sources when devising such laws or regulations.



Source: Researcher's construction.

Figure 2.2: Sources of Shariah regulations.

The six key financial principles within the Shariah regulations for IBs include prohibitions on interest (*Riba*), uncertainty (*Gharar*), speculation or gambling (*Maysir*) and illegal activities such as alcohol, profit and loss sharing, and an obligation to have real assets underlying all financial transactions and the obligation of *Zakat*, as discussed in the next section (see Figure 1.1 in Chapter One). Additionally, while there may be different financial services and products provided by IBs, all must remain compliant with Shariah, such as *Mudaraba*, *Musharaka*, *Murabaha* and *Ijara*, which will also be discussed in the next section. Thus, IBs not only aim to make a profit, but also have to

comply with Shariah regulations to meet the needs of customers who want Shariah-compliant services (Ismail 2015). Consequently, unlike many CBs, they operate within a very rigid, very strictly monitored moral framework.

2.3.1 Principles of IBs

The primary differences between Islamic and conventional banks can be seen in the principles that drive them. As noted in the previous section, there is an argument that the Islamic approach, with its moral basis and monitoring procedures, may have protected IBs from the worst of the GFC (Abedifar et al. 2013). It is argued that these characteristics wield a positive impact on both economic growth and stability (Alexakis et al. 2019), allowing IBs to meet the needs of individuals while also fulfilling their aim of making a profit (Ismail 2015). Franzoni and Allali (2018) explain that the IB concept of profit differs from that of CBs, in that the profit should result from actual trade/investment transactions, and so measures actual growth produced from the use of capital. Consequently, in IBs, profits are obtained when there is no actual uncertainty regarding the outcomes of trade and profits and losses are equally shared. It is only under these conditions that profit is seen as acceptable. So, trading on futures, investments based on gambling or speculation are banned, as are dealings where one party takes on greater risk the other party obtains a greater share of the profits. It is the SSB's responsibility to ensure that the bank complies with Shariah regulations. In order to accomplish this, the link between the role of SSB and principles of IBs is that the SSB inspects all contracts, agreements, policies, and transactions of the bank with third parties. To ensure that all bank records and transactions are comply with Shariah regulations, the SSB has the right to unconditionally review them. In order for the SSB to perform its functions, all data and information must be provided by the bank management. The principles underlying IBs are documented below in more detail.

2.3.1.1 Prohibition of interest (Riba)

As previously stated, *interest* is called *Riba* in the Arabic language. The word *Riba* basically means an increase or addition to an already existing amount owed. This happens when a premium is added by the lender to the basic amount that the borrower is supposed to pay, as a condition of a loan that is to be repaid within a given period of time (Algaoud & Lewis 2007). According to a definition offered by El-Ashker (1987), *Riba* is the

difference between the actual amount borrowed and how much must be repaid. The *Quran* highlights various conditions under which *Riba* is banned; for instance, ‘Allah destroys interest and gives increase for charities’ (Quran, Al-Baqarah 2:276) and ‘O you who have believed, do not consume usury, doubled and multiplied, but fear Allah that you may be successful’ (Quran, Al Imran 3:130). Consequently, when it comes to running IBs or financial institutions, it is very important to understand what *Riba* is in the eyes of Islam, why it is prohibited for Muslims, and why IBs must operate in the global market with the condition of avoiding *Riba*/interest.

There are several reasons behind the prohibition of *Riba*. First, Shariah seeks to ensure that money is not distributed unfairly; in the case of interest, the rich would get richer, while the poor would get poorer (Siddiqui 2008). Second, when an individual has to pay an extra amount for money borrowed, this is viewed as inequitable, and even oppressive (Naser & Moutinho 1997). Last, there is a wide discrepancy between those within a society when risk is shifted from lenders directly to borrowers, especially when they do not have the capacity to repay borrowed money (Siddiqui 2008). In Shariah regulations, when no additional money is charged for money borrowed, this implies that justice is being served. The implication of this is that Islamic finance works on the basis of mutual sacrifice to improve human life and satisfy material needs (Chapra 1992). To this end, the SSBs came into being to ensure this justice is maintained and protect customers from unlawful and unjust transactions.

2.3.1.2 Prohibition of uncertainty (Gharar)

Gharar is developed from the belief that doubtful transactions lead to doubtful results (Warde 2010). Gharar may be translated as ‘stake’ or ‘chance’; a clear definition was given by Mustafa Al-Zarqa, with Gharar defined as ‘the sale of probable items whose existence or characteristics are not certain, the risky nature of which makes the transaction akin to gambling’ (as cited in El-Gamal 2006, p 58). Ayub (2007) noted that uncertainty is a type of hazard. Uncertainty in this context is akin to putting a price on an item before purchasing it; for example, selling a fish that is not yet caught (Doi 1984). Therefore, any circumstance that may lead to uncertainty must be avoided for the sake of keeping a Gharar-free Islamic banking system (Jabbar & Faridah 2008).

Gharar is forbidden in many aspects of Islamic financial contracts. This is evident in the *Quran*, in the following verse:

And do not consume one another's wealth unjustly or send it [in bribery] to the rulers in order that [they might aid] you [to] consume a portion of the wealth of the people in sin, while you know [it is unlawful]. (Quran, Al-Baqarah 2:188)

Another relevant verse is 'O you who have believed, do not consume one another's wealth unjustly but only [in lawful] business by mutual consent.' Additionally, *Gharar* sales, or any sales that are conducted through fraudulent means or with fraudulent intentions, have been prohibited by the prophet Muhammad PBUH (Doi 1984). The prophet also left several sayings (*Hadiths*) that have been reported and narrated by Ahmad ibn-e-Majah by the authority of Abu-said Al-Khudriy:

Muhammed (Peace Be Upon Him) has forbidden the purchase of the unborn animal in its mother's womb, the sale of the milk in the udder without measurement, the purchase of spoils of war prior to their distribution, the purchase of charities prior to their receipt, and the purchase of the catch of a diver. (Ibn Maja, 35)

This may be the sole reason behind not appreciating any basis of contract that has any content that is not certain or that has any commitment outside the grounds of Shariah regulations (Ayub 2007). Islamic banking systems aim to avoid excessive uncertainty to avoid *Gharar*, and in contracts, no commodity may be accepted unless the terms are clear and understood by all signatories (Ayub 2007). Consequently, the SSB plays a vital role in ensuring that all *Gharar*/uncertainty is avoided and that Shariah regulations are maintained as part of any financial transaction (Buallay 2019; Nomran, Haron & Hassan 2018).

2.3.1.3 Obligation of Zakat

Islam has five pillars, with *Zakat* the third. Today, many people consider *Zakat* charity, but a more accurate translation would be 'purity'. The order for *Zakat* is given several times in the *Quran* and *Sunnah* of the Prophet Muhammad PBUH. Evidence of this within the *Quran* lies in the verse that says: 'And establish prayer and give *Zakat* and bow with those who bow [in worship and obedience]' [Quran, Al-Baqarah 2:43]. Another verse states:

Your ally is none but Allah and [therefore] His Messenger and those who have believed – those who establish prayer and give *Zakat*, and they bow [in worship]. (Quran, AL-Ma'idah 5:55)

Shahul and Yaya (2005, p. 85) define *Zakat* as ‘a religious obligation and a levy accepted by Islam on a Muslim’s income and wealth to be distributed to the defined beneficiaries, such as the poor and indigent’. IBs are obligated to pay *Zakat* annually based on the Financial Accounting Standard 9, as presented in the AAOIFI. AAOIFI Governance Standard 1 states that IBs must disclose any information about *Zakat* in their annual reports, and SSBs must reveal any information in their annual report about banks’ responsibilities for *Zakat* (AAOIFI 2015). These decisions are supported by the research of Shanmugam and Zahari (2009), who state that the purpose of paying *Zakat* is to support and financially stabilise those who are in need. To achieve this, it is necessary that these principles are applied in Islamic financial activities, where a proportion/variance is taken from those with greater wealth. Similarly, Platonova et al. (2018) note that giving *Zakat* contributes to lowering poverty levels and helps share society’s needs and responsibilities, and this results in bringing an economic balance to society. Therefore, an SSB is important for helping IBs to calculate and report *Zakat* (Nomran and Haron 2021).

2.3.1.4 Profit-sharing agreement (Mudaraba)

Mudaraba refers to a special contract of partnership that is a part of the Islamic financing system. This is usually a contract between an entrepreneur (Mudarib) and an investor (Rab-Almal). In this relationship, the entrepreneur aims to make and then share profits by providing their ideas and expertise, while the investor provides the amount needed, spending money on the ideas that the entrepreneur provides (Ben Jedidia & Hamza 2014). In their study, Iqbal and Llewellyn (2002) explain that the Mudaraba contract must be proper, fair and stable between both parties. For this, the entrepreneur must be able to supervise and control the business, and the shares of profit must be calculated in terms of percentages rather as a lump-sum payment. This was supported by Dhumale and Sapcanin (1998), who note that the profit made from any project must be shared between the entrepreneur and the investor based on mutual agreement and in accordance with the agreed amount/ratio. Correspondingly, if there is a loss, one party must not be overly burdened with this; it is divided equally. In this instance, the investor’s loss is in terms of

money invested, while the entrepreneur's loss is in terms of their effort and time invested in the project. Even so, the entrepreneur (Mudarib) is responsible for any misconduct or negligence made by them (El-Qorchi 2005). Because the entrepreneurs use the money provided by the investors, they are expected to use it with conscientiousness and full attention, avoiding any errors/risk along the way. The principles of Shariah and Islamic law are included in these Mudaraba contracts, and therefore, the contracts made under this law are lawful and legally binding. However, Mudaraba contracts entail a risk of being cancelled in certain circumstances; for instance, in trades of wine, which are illegal under Shariah regulations. To avoid the risk of this occurring, an SSB plays an important role in ensuring that these contracts are legal, acceptable and abide by Shariah regulations (Nomran, Haron & Hassan 2018; Alexakis et al. 2019).

2.3.1.5 Cost-plus-financing (Murabaha)

Another type of contract used in IBs is Murabaha, which refers to short-term financial contracts (El-Qorchi 2005). Murabaha also refers to cost-plus-financing that occurs with the support of corporate assets (Mirakhor & Zaidi 2007). This is different from Mudaraba, as it does not include a contract between an investor and an entrepreneur, but rather, a relationship between a bank and a borrower, under which an agreement is entered into such that the bank imports commodities or purchase goods for the borrower, which the borrower then buys at a price that is agreed before the purchase is made (called cost- plus-profit) (Yousef 2004). An example of this is a bank buying an asset and then selling it to the borrower for the value of the asset plus an additional profit agreed on by both parties. For instance, if the purchase price of the asset was \$500,000 and the profit margin was \$300,000, the Murabaha price would be calculated by adding both these amounts, giving a total price of \$800,000. The borrower has the choice to either pay the total price in one payment or by instalments that take place annually, monthly or even weekly (Ismal 2010). There is a debate over whether this type of transaction is a legal or illegal trade and whether it is acceptable in Shariah regulations. Several scholars have approved it, agreeing that the Murabaha method is a halal activity in banking and finance (Khan & Bhatti 2008). However, there is a potential issue that arises when there is a delay, and the goods may be provided later than the actual time of sale (Thomas, Cox & Kraty 2005). As the bank is not obligated to act on the instructions of the borrower immediately, there may be an element of uncertainty in relation to the timeframe of the agreement. In such cases, Shariah scholars have suggested that, to avoid future conflict, both parties must

come to a mutual agreement on all aspects of the good or service purchased (Hassan & Lewis 2007).

2.3.1.6 Equity participating (Musharaka)

Musharaka is different from both Murabaha and Mudaraba, as it involves a joint or partnership venture contract between a bank and its customers, and its basis is equity. In this case, the funds are not provided solely by the bank, but instead, through a joint partnership-based system (Iqbal & Khan 2005). Mushakara is ideal for those business owners who want to share or combine their financial resources with another interested party. Basically, the IB and the client come to an agreement to combine their financial resources to set up or run a project or business (Ayub 2007). In this situation, the contract can be between more than two parties, with the amounts based on a working capital allocation (Jabbar & Faridah 2008). This means that the share one holds in the business is related to the amount of gain they will receive from the working capital.

Musharaka is mainly used for long-term investments and in situations where a group of two or more parties provide a certain amount of capital. It is important to note here that when there is a gain/loss, all parties must share in it based on the ratio invested by each party (Rosly 2005). Additionally, the profit may be shared between the parties based on a pre-agreed ratio that differs from the original investment. For instance, in the case of Musharaka Mutanakisa (diminishing partnership), one party becomes the sole owner of the capital gain. For example, when an amount is borrowed from the bank for an investment or purchasing of goods, the bank provides funds in the initial stages as per the agreement in the contract; however, after an agreed period, the customer becomes the sole owner of the gains received from the investment (Shanmugam & Zahari 2009) and losses are calculated and shared based on equity (Dusuki 2009).

As mentioned above, Musharaka differs to Mudaraba and Murabaha; however, in some instances, a Musharaka contract may be similar to a Mudarabah contract. This similarity arises in agreements where there are profits or losses from any shared projects or partnerships between parties (Chong & Liu 2009). In Musharaka, both parties share responsibility; thus, both parties are involved in the business and its management, and therefore, both parties share involvement and enjoy equal rights in the outcome. However, in Mudaraba, the investor (Rab-Almal), or the owner of the capital, does not participate

in the responsibilities of the business and is only concerned with the outcome/profit (Usmani 2002). This is set up through mutual consent and agreement, where a managing partner is assigned to work on the projects, while the other partner is silent (Ayub 2007). Musharaka is considered one of the most authentic and reliable models produced by Shariah regulations. However, it has not yet gained popularity in Islamic financing contracts (Ahmad 2010). Consequently, an SSB is responsible for ensuring that these contracts are Shariah compliant (Alexakis et al. 2019; Meslier, Risfandy & Tarazi 2020).

2.3.1.7 Leasing (Ijara)

Ijara differs markedly from the contracts described above, but it is permitted by jurists of Islam as a contract that falls under Shariah regulations. According to Shariff and Rahman (2003), Ijara describes a leasing agreement that is set between a customer and a bank where the bank purchases an asset (e.g., car) for the customer and then sets repayments through several instalments/rent until the purchase amount is repaid. At the point that the purchase amount is repaid, the asset is completely owned by the customer. Ijara is not only used in Islamic banking systems; conventional banks also use such contracts (Ahmed 2010). However, the difference between conventional banks and IBs arises in the length of the lease term. While conventional banks may provide a lease for a short period, IBs prefer long-term lending. Lending from conventional banks often involves a lease that includes interest, while IBs set a different amount that ensures that the Ijara agreement is in accordance with Shariah regulations. The Ijara amount, whether fixed or variable, is not the choice of one party, but once again, involves the mutual agreement of both parties. The amount is also set after the asset is delivered to the customer (Shariff & Rahman 2003). Thus, an SSB's role is to ensure that this contract is made in accordance with Shariah regulations (Meslier, Risfandy & Tarazi 2020).

2.4 Shariah Governance

The principles outlined above identify that Shariah regulations guide corporate governance in the Islamic finance system (Muneeza & Hassan 2014). In fact, the basic aim of Shariah governance is to ensure that Islamic financial institutions obey the regulations and guidelines of Shariah. According to IFSB (2020):

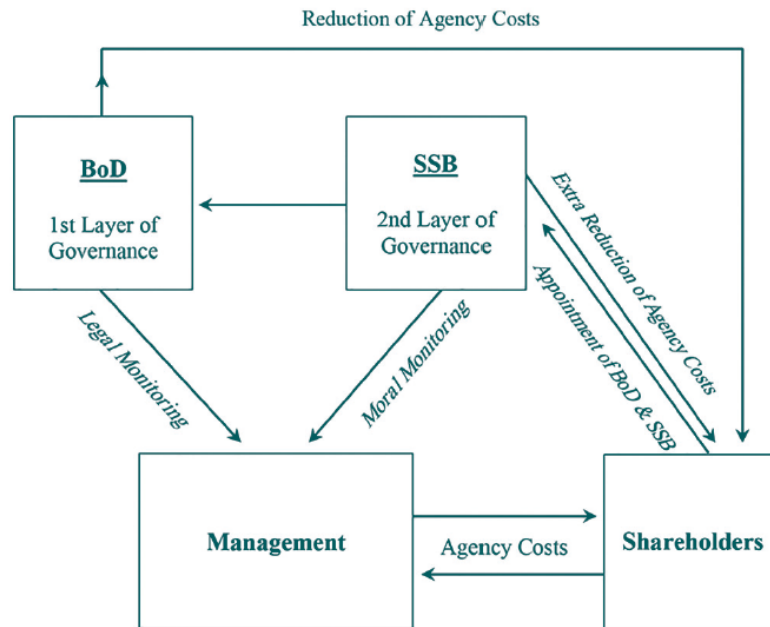
The Shariah governance system refers to the set of institutional and organisational arrangements through which an IIFS ensures that there is effective independent oversight of Shariah-compliance.

Shariah governance has several features that bolster its effectiveness: limiting the risks associated with non-compliance with Shariah regulations; contributing to economic growth and stability of Islamic banking; improving Islamic banking's operational efficiency and decision making; aiming to attract foreign investment to Shariah-compliant assets; enhancing the efficiency of internal capital management; enhancing stakeholder trust; enhancing relationships with depositors, investors, and financiers (Alabbad, Hassan & Saba 2019). Shariah governance is expected to protect both depositors and shareholders, but the interests of the former take precedence, as they represent the weaker party (Toufik 2015). Compared with conventional corporate governance, which concentrates more on protecting shareholders, Shariah governance focuses on protecting depositors.

It is argued that the integrity of IBs would be undermined, and customers would lose confidence, if their activities were found to not comply with Shariah regulations (Alman 2012). For this reason, good Shariah governance is not only important for the success of IBs but also for promoting customer confidence, which, in turn, increases bank profitability and leads to higher market share (Kashif et al. 2015). The SSB has emerged as one of the most important internal components of monitoring Shariah governance in all activities and operations (Hassan 2009). Good Shariah governance, particularly through SSBs, not only ensuring that all financial transactions obey Shariah regulations, but strengthening customers' confidence, leading to better bank profitability (Amin, Isa & Fontaine 2013).

According to Garas (2010), to ensure good governance in Islamic financial institutions, Shariah supervision must be considered a key element. Ignorance of Shariah regulations can lead to serious unexpected consequences, which may undermine not only Islamic financial institutions' activities, but the Islamic banking system as a whole. To achieve good and moral outcomes, Islamic financial institutions' corporate governance has to prepare institutional arrangements for the supervision of Shariah-compliant activities. Consequently, an SSB is seen as a very effective institutional arrangement that performs vital functions in every area of Shariah regarding Islamic financial institutions, including

monitoring, supervision, auditing and providing *fatwa* and rules. Figure 2.3 illustrates the corporate governance framework of Islamic banks and the interactions between the bank's various actors (e.g., managers, Board of Directors, and SSB) and its shareholders. Moreover, it shows the impact of SSB on agency costs and reporting behavior.



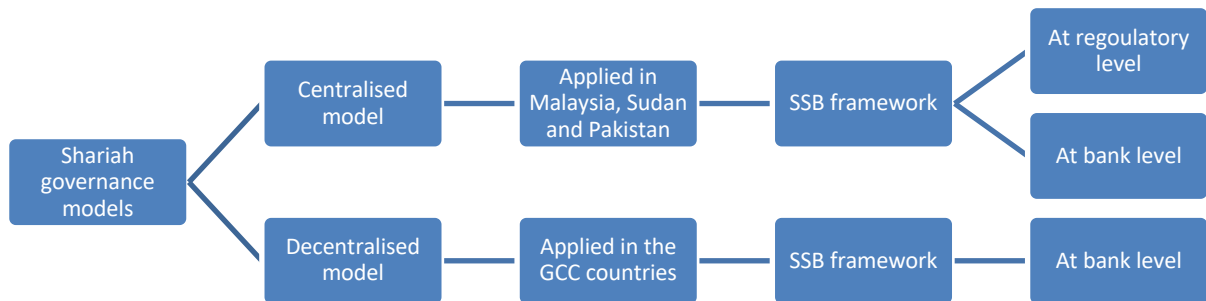
Source: Abdelsalam et al. (2016); Nomran & Haron (2019).

Figure 2.3: Corporate governance structure for Islamic banks.

2.4.1 Shariah governance models

It has been observed that the Shariah governance framework is more centralised in Malaysia, Sudan and Pakistan compared to the GCC countries (Grassa 2015; Hakimi et al. 2018). Decentralisation is defined as Shariah supervision in which each IB creates its own SSB, while centralisation is where SSBs are created at the national and institutional levels such as a Securities Commission, Capital Market Authority or the Central Bank (Grassa 2015; Hakimi et al. 2018). Jurisdictions do not follow a commonly preferred model (Oseni, Ahmad & Hassan 2016). Some researchers believe that the centralised approach is better than the decentralised one when it comes to IBs (Hamza 2013), while others think that the latter is superior (Grais & Pellegrini 2006; Quttainah, Song & Wu 2013). Every model of Shariah governance has its own method of achieving high levels of efficiency based on standardised Islamic finance procedures. In the Islamic finance sector, both centralised and decentralised models play an important role in harmonising

and standardising operations. Shariah governance models are shown in Figure 2.4 below. Each model is discussed below.



Source: Researcher's construction.

Figure 2.4: Shariah governance models.

2.4.1.1 The centralised model

In the centralised model, SSBs are selected by the central banks for harmonisation and standardisation purposes. According to Oseni (2009), in the centralised model, CBS will be notified of any disagreement, which will then be resolved by arbitration, litigation or mediation, which will facilitate the proper management of disputes more effectively and consider Shariah opinions on specific issues. Under this model, SSBs are bound by Shariah pronouncements made by the CSB. In light of the CSB's pronouncement, Shariah scholars may be restricted in the independence of their *ijtihad* and unable to present a different opinion. It is argued that the existence of a Shariah Board in the Central Bank will reduce differences of interpretation, provided that the bank's authorities do not try to impose their own opinions but arrive at decisions through reasoned debate (Chapra and Khan 2000).

2.4.1.2 The decentralised model

In a decentralised model, prominent scholars serving on several may contribute to refining Shariah opinions (Ibrahim, 2012). Every bank has its own SSB that is independent of the Central Bank. For this reason, it is difficult to manage conflicts of interest and achieve consensus on Shariah interpretation (Hasan Z., 2010; Abdul-Rahman, 2010). It is not binding for members of the SSB to comply with any pronouncements issued by the CSB. This provides more room for SSB members to share

their opinions, along with a greater chance for *ijtihad* (Hasan & Sabirzyanov, 2015; Hamza, 2013). Decentralised models allow Shariah approval of new products to be obtained only from the SSB, while centralised models require approval from both the SSB and the CSB. Decentralised models allow for a product launch to be more rapid than centralised ones (Hasan & Sabirzyanov, 2015, 250).

In this model, the IB's SSB determines finance products' compliance with Shariah regulations. This is the case in Bahrain, Kuwait, Qatar, Saudi Arabia, and the UAE. At the Central Bank level, there is no effective national SSB in the GCC. At the IB level, there are individual SSBs, and the SSB of each institution decides whether financial products and contracts are Shariah-compliant. Most SSBs in the GCC adhere to standards and opinions delivered by the AAOIFI board.

In Bahrain, the national SB of the Central Bank of Bahrain (CBB) serves and assesses only its own products for Shariah compliance. The members of the national SB are not limited to serving one financial institution, neither are they restricted from serving multiple institutions. Annually, all SSBs must submit a report to the shareholders regarding the operations and activities of the IB. It is the responsibility of the SSB to notify the CBB if the Bahraini Islamic bank fails to effectively deal with any major Shariah non-compliance issue.

Every IB in Kuwait is required to have an SSB under Central Bank Law 32/1968. As well, the SSB is guided by the Shariah standards of the Islamic *Fiqh* Academy and the AAOIFI. Conflicts of opinion, disagreements, or disputes among SSB scholars should be referred to the IB's board of directors. In this case, the Ministry of *Awqaf* and Islamic Affairs *Fatwa* Board will serve as the final authority as it is considered to be the national SB (Wilson 2009). Since there is no national approval by the central financial authorities on products issued by IB, the internal audit committee of each IB is responsible for assessing the Shariah compliance of their products (Gintzburger 2010). Neither the *Fatwa* Board nor SSB scholars are restricted from serving on any IB. Moreover, there is no restriction on serving on more than one supervisory board. Generally, SBs are required to submit an annual report to the general assembly that outlines how the bank operates according to Shariah principles. This report is to be attached to the annual financial statements.

In Qatar, its Central Bank does not have a SB, but disputes and issues can be referred to the Supreme Shariah Council of the Ministry of Awqaf. There is no guidance offered by this council on the permissibility of Islamic financial products. Like Kuwait, every IB has a SSB and the internal audit committee reviews Shariah compliance. There is no restriction on SSB scholars serving on these boards in more than one IB. Meanwhile for Saudi Arabia there is no national SB and the SSBs created at the IB level are guided only by the Islamic Fiqh Academy's Shariah standards. In terms of jurisprudence, this academy establishes legal norms and deals with subject differences. In cases where Shariah non-compliant activities are not addressed adequately by the bank, the SSB shall inform SAMA.

The UAE implemented the first Islamic banking law in the GCC in 1985. Under this particular law, Article 6 mandates that each IB, financial institution, or investment company must establish a SSB (known locally as a Shariah Supervisory Authority) to ensure that its transactions and practices are consistent with Shariah regulations. In the same law, the "Higher Shariah Authority" is established to supervise IBs, financial institutions, and investment companies (Art. 5, Federal Law No. 6 of 1985). This body of experts is the final authority in terms of Shariah compliance and there are no restrictions imposed on SSB members to serve on more than one SSB. Meanwhile in Oman, the Central Bank is the central financial authority and under its Shariah governance, the CBO has established HSSA (Higher Shariah Supervisory Authority) to assess all Islamic banks in the country. Each IFI in Oman must have its own supervisory board (CBO 2012; CBO 2013, 8). Oman uses a centralised Shariah governance framework. SSB scholars cannot be members of two IFIs of the same category at the same time.

Most Shariah scholars sit on several SBs in the GCC countries, ensuring some uniformity. Wilson (2009) argues that this type of approach allows products to be innovative and dynamism in the industry is greatly enhanced (Wilson 2009). There is, however, a risk of lack of regulation or proper oversight where the regulators do not have their own SBs, and consequently, dispute resolution becomes more problematic. This in turn results in inconsistencies in *fatwas* across SBs and over time. Shariah governance frameworks are different from each other in terms of governing practices and Islamic finance contracts are applied differently in different countries in the GCC region. These are explained in more detail in section 2.5 below.

2.4.2 Shariah supervisory board (SSB)

An SSB is defined as an independent body comprising jurists specialising in Islamic commercial jurisprudence and Islamic finance (AAOIFI 2015). An SSB represents an additional layer of governance, together with the regular BD and other committees in Islamic financial institutions (Nomran, Haron & Hassan 2018). An SSB's major responsibility is to ensure the institution's activities and transactions comply with Shariah regulations (Lahsasna & Saba 2014). It has a wide range of powers including the authority to attend BD meetings to deliberate on decisions related to Shariah regulations (AAOIFI 2015). According to the AAOIFI (2015), given the responsibility they have, selection of members is very carefully controlled.

An SSB requires at least three members who thoroughly understand Islamic jurisprudence (*Fiqh al-Muamalat*) and who are appointed by shareholders at the SSB's annual general meeting. An SSB may include one member who does not specialise in *Fiqh al-Muamalat* but who should still be an expert in the field of Islamic financial institutions. It is necessary for an SSB to understand all aspects of banking, both in relation to Shariah regulations and modern finance (Mollah et al. 2017). SSB members also work on new innovations and develop new procedures and products, which allows members to receive proper salaries for their work and to attend meetings (Grais & Pellegrini 2006). An SSB must be established by each Islamic financial institution; it is an obligation in many places. In Bahrain, for example, it is a mandatory requirement, while in countries such as Saudi Arabia, it is voluntary

The purpose of the SSB is to ensure that Shariah regulations are enforced in every banking transaction and to ensure all stakeholders can guarantee that all transactions are compliant with Shariah regulations (Paino, Bahari & Bakar 2011). Moreover, researchers consider that the application of Shariah regulations reduces injustice, exploitation and any unlawful consuming of wealth (Grassa 2016; Hakimi et al. 2018; Quttainah, Cocco & Al-Zufairi 2017). It seems likely that there will be strong support for the argument that the existence of an SSB is positively linked to the profitability and efficiency of IBs (Nomran & Haron 2019). There is a great diversity in the composition of SSBs between countries. There are a number of IFIs that hire three to six members to serve on the SSB, which is consistent with AAOIFI GS No. 1 and IFSB-10 (ISRA, 2016, 731). According to AAOIFI GS-1, the SSB should consist of at least three Shariah scholars (AAOIFI GS-1, 2015, 886). This

is the case in most of the GCC countries, as they have their own guideline for the number of scholars on an SSB which is a minimum of three scholars.

After reviewing 190 observations of IBs in the GCC countries, it is worth noting that each country has its own term for SSB but essentially, they have the same role and functions. In Bahrain, Kuwait, Qatar and Oman, they refer to the SSB, while it is the Shariah Committee in Saudi Arabia, and Internal Shariah Supervisory in the UAE. In this study, we will use the abbreviation SSB to cover all contexts. It is imperative that the Board of Directors rely on the SSB for the issuance of Shariah decisions related to the Islamic bank's activities. There are several roles that need to be performed by the SSB.

- i. Ensure Islamic banking transactions are conducted in accordance with Shariah principles and rules. A Shariah compliance report and internal Shariah audit observations should help to identify issues that require attention and propose corrective measures as necessary.
- ii. To ensure compliance with Shariah regulations, the SSB shall make Shariah-related decisions and issuing *fatwas*.
- iii. To ensure that the terms and conditions contained in the forms, contracts, agreements, and any other legal documents used in the transaction are valid.
- iv. To ensure the product, marketing materials used to describe the product, illustrative pamphlets and brochures factually describe the product.
- v. The SSB scholars aid related parties of the bank, including its legal consultants, external auditors, etc., when they request advice on Shariah matters.
- vi. If the SSB determines the bank has participated in Islamic banking activities that are not Shariah-compliant, the SSB shall inform the Board of Directors, and recommend corrective actions.
- vii. The SSB must notify regulators when a bank fails to address Shariah-incompatible activities effectively or adequately or does not take corrective measures.
- viii. An annual report is prepared and submitted to the board on the compliance of the bank's Islamic activities with Shariah rules and principles.
- ix. Review and approve *Zakat* calculations for the bank on behalf of shareholders.

2.5 Government Policy and Legislative Provision for IBs in GCC Countries

As mentioned previously, the GCC countries have enduring advantages based on cultural similarities, political ties and strategic position in the region, Shariah judiciary systems, and their governments' eagerness to economically transform these nations. Their legal systems are based on civil law. Considering the ongoing debate over legal origins, Fan and Yu (2012) argue that civil law countries heavily rely on internal controls to administer legislation. The GCC machinery of governance in reality is dictated by insider ownership, concentrated shareholdings and low transparency/disclosure levels (Farooq and Derrabi 2012). According to a McKinsey & Company study in 2015, 60%–70% of GCC businesses are owned by family members. Additionally, GCC's rise to emerging market status was presaged by the inclusion of UAE and Qatar in the MSCI Emerging Markets Index in May 2014. Considering these opportunities, solid CG fundamentals should be embedded in the core of business processes for strategic agility, operational scalability, and improved transparency, all traits leading to increased foreign direct investment.

A number of international and local bodies, including the World Bank, International Finance Corporation (IFC), and OECD as well as the Dubai International Financial Centre (DIFC) and Union of Arab Banks, felt the CG regulations were necessary to ensure that the corporate sector operated smoothly. Following this recognition, these regulators established Hawkamah in 2005, which is the Institute of Corporate Governance (CG) for the Middle East and North Africa (MENA) region. Its main goal is to help boards and companies in the region improve their CG practices. Hawkamah also conducts studies and surveys, collaborating with different industries and governments to create CG benchmarks that act as catalysts for refining governance practices (Hawkamah 2016). The GCC corporate governance codes were developed based on international best practices and corporate governance principles in line the G20/OECD Principles of Corporate Governance 2015 Edition (Salman and Nobanee 2019). Table 2.1 shows the key features of CG of each GCC country.

Table 2.1 Summary of the Key Features of CG in the GCC countries

Item	Bahrain	Kuwait	Qatar	Saudi Arabia	UAE	Oman
Name of CG code	Corporate governance code	Corporate governance code	Corporate governance code for companies and legal entities listed on the main market	Corporate governance code	The standards of institutional discipline and Governance of public shareholding companies	Code of corporate governance for publicly held joint stock companies
Date of issuing CG code	2010	2010	2009	2006	2009	2002
Date of updating CG code	2010	2016	2015	2017	2016	2015
Authority of Regulatory issuing CG code	Ministry of Industry and Commerce, in cooperation with the Central Bank of Bahrain	Capital Markets Authority	Qatar Financial Markets Authority	Capital Markets Authority	Ministry of Economy and the Securities and Commodities Authority	Capital Market Authority
Legal status	Comply/explain basis	Changed to two parts: mandatory and comply/explain	Changed to comply/explain	Mandatory	Mandatory	Comply/explain basis

Source: extracted from official websites of each GCC country - Researcher's construction.

The GCC countries have their own individual framework of Shariah governance. A monetary agency or financial authority is responsible for regulating and supervising IFIs, including Shariah governance. In general, Shariah governance in the GCC can be categorised into two types: legal and supervisory regulation, as in Bahrain, Kuwait, UAE, and Qatar, or self-regulation, as is the case for Saudi Arabia. Table 2.2 presents the key features of Shariah governance in each GCC country. Below is a brief overview of the regulatory and Shariah governance frameworks in each GCC nation.

Table 2.2: Summary of the Key Features of Shariah Governance in GCC countries

	Bahrain	Kuwait	Qatar	Saudi Arabia	UAE	Oman
Authority of Regulatory	Central Bank of Bahrain	Central Bank of Kuwait	Qatar Central Bank	Saudi Arabian Monetary Agency & Capital Market Authority	UAE Central Bank	Central Bank of Oman
Authority of Shariah conflict	The national SB in Central Bank	Fatwa Board in Ministry of Awqaf and Islamic Affairs	The Supreme Shariah Council in the Ministry of Awqaf	Islamic Fiqh Academy	Higher Shariah Authority	
Islamic Banking law	CBB Rulebook - Volume 2- Islamic Banks	Article 93 of Law No. 32/1968	Law of the Qatar Central Bank and the Regulation of Financial Institutions Law No. 13/2012	Banking Control Law was issued by Royal Decree No. M/5 on 11/6/1966	Federal Law No. 6/1985	Banking Law Royal Decree No. 114/2000
Name of Shariah governance/ Islamic Banking framework	Shari'a governance Module	Shariah Supervisory Corporate Governance in Islamic Banks	Corporate governance principles for banks.	Shariah Governance Framework for Local Banks Operating in Saudi Arabia	Standard re. Shariah governance for Islamic financial institutions	Islamic Banking regulatory framework.
Date of issuing Shariah governance framework	2017	2003	2008	2020	2020	2012
Date of updating	2020	2016	2015	-	-	2015
Acct. Standard	AAOIFI	IFRS	IFRS	IFRS	IFRS	IFRS/IAS
SSB standard	AAOIFI	AAOIFI	AAOIFI	-	AAOIFI	AAOIFI
SSB Name	Shariah Supervisory Board	Shariah Supervisory Board	Shariah Supervisory Board	Shariah Committee	Internal Shari'ah	Shariah Supervisory Board

	Bahrain	Kuwait	Qatar	Saudi Arabia	UAE	Oman
SSB appointment	Appointed by shareholders	Appointed by the bank's general assembly upon BD's nomination	Approved by the bank's general assembly upon BD's proposal, after QCB's approval.	Appointed by BD upon nomination and remuneration committee's recommendations, after SAMA's approval	Supervisory Committee Appointed by the bank's general assembly upon BD's nomination and after the Higher Shariah Authority's approval	Appointed by general assembly.
SSB composition	At least three members	At least three members	At least three members	At least three members.	At least five members.	At least three members.

Source: extracted from official websites of central bank of each GCC country - Researcher's construction.

2.5.1 Bahrain

2.5.1.1 Overview of Regulations

Bahrain has functioned as a regional financial centre since 1976, keeping its market open to foreign banks. Its equity market was founded in 1989 and was the smallest in the GCC region (IIF-Hawkamah Bahrain, 2007). Only 26 firms were operating in Bahrain and its market capitalisation was only \$19.94 million at the end of September 2015 (CBB 2016). Unlike Saudi Arabia and Kuwait, Bahrain licensed only majority, locally owned institutions. Bahrain has more Islamic financial institutions than any other centre – 24 IBs and 11 Islamic insurance (*takaful*) companies, most of which serve the regional, rather than the local, market (IFSB 2020). In addition, Bahrain has long been recognised as a global leader in Islamic finance, playing host to the largest concentration of Islamic financial institutions in the Middle East and a number of pre-eminent global Islamic standard-setting organisations such as the AAOIFI and the IFSB (AAOIFI 2012).

Due to Bahrain's culture of open business, international investment is not viable unless the authorities accept and implement CG practices throughout the region. Thus, the Ministry of Industry and Commerce (MOIC) revised the Commercial Companies Law in 2001 to address various CG-related issues, including director election and voting procedures, director obligations, and director disclosure. In 2003, the MOIC and Central Bank of Bahrain (CBB) funded a project to build awareness about the CG framework in Bahrain's corporate sector. An analysis of CG's progress in Bahrain was published by KPMG in 2004 funded by MOIC and CBB. A year later in 2005, AAOIFI published Shariah-related governance standards. The CBB CG guidelines were mandatory for the financial sector of Bahrain, so its CG practices are better managed than those of the non-financial sector.

The CG codes for Bahrain were generated by MOIC and CBB, and they were supposed to be published by 2007 but were instead published in 2010 (Shehata, 2015). Nine rules are outlined in the code, seven of which relate to the board and directors, one to disclosure of CG matters, and one to Islamic principles. There are five appendices, relating to independent directors, audit committees, nomination committees, remuneration committees, and corporate governance disclosures. Overall, the growth of Islamic banking has been remarkable in Bahrain, with total assets increasing from US\$1.9 billion

in 2000 to US\$27.8 billion as of November 2018, a more than 14-fold increase (IFSB 2020). The market share of IBs correspondingly rose from 1.8% of total banking assets in 2000 to 14.5% in November 2018 (IFSB 2020). This growth was made possible by a number of factors; most importantly, the clear vision and approach of the Central Bank of Bahrain (CBB). The CBB regulates and supervises all financial institutions, insurance sector, and capital markets.

In Bahrain, the financial system is governed by five main laws, these being the Bahrain Stock Exchange Law 1987, the Commercial Companies Law 2001, The Anti Money Laundering Law 2001 and the Financial Trust Law 2006, the Central Bank of Bahrain and Financial Institutions Law 2006. The CBB introduced a separate regulatory framework, along with a comprehensive prudential and reporting mechanism for the Islamic segment that was tailor-made for specific concepts and needs of Islamic banking and insurance. A legal framework for Islamic finance is provided in the CBB Rule Book Volume 2, Islamic Banks. The rulebook for IBs covers topics such as licensing requirements, capital adequacy, risk management, business conduct, financial crime and disclosure/reporting requirements. Similarly, the insurance rulebook addresses the specific features of *Takaful* firms. Both rulebooks were the first comprehensive regulatory frameworks that dealt with the Islamic finance industry in the region.

2.5.1.2 Overview of Shariah governance

It is stated in the CBB Rule Book Volume 2, Islamic Banks, Part A, High Level Control, section 1.3.15 that all banks are required to establish an independent Shariah board that complies with the governance standards set forth by AAOIFI for IFIs No.1 and No.2. Failure to adhere with this requirement will constitute non-compliance with the directives of the CBB. Bahrain, unlike most of the other GCC countries, has established a Shariah Advisory Board of the CBB to verify Shariah compliance (Hasan, A., 2007). However, the Shariah board of the CBB differs from those of Malaysia, Sudan, Indonesia, Pakistan, and Brunei because it does not have authority over other IFIs. Shariah governance in Bahrain follows the AAOIFI governance standards, which require all IFIs to establish Shariah Supervisory Boards. In accordance with section 1.3.16 of the CBB Rule Book, IFIs must adopt the standards and have a separate Shariah review function to ensure Shariah compliance. To address this issue, the practice of the IFIs shows that the Shariah review or audit is carried out by the existing internal audit personnel. The legal

requirement for adoption of these standards reflects Bahrain's role as host of AAOIFI since 2001.

It is mandatory for Bahraini Islamic banks to have SSBs, which must consist of at least three scholars specialising in *Fiqh al-Muamalat*, and whose members must be approved by shareholders at the annual general meeting according to the CBB regulations, resolutions, and directives. Bahraini Islamic banks are required to comply with Shariah rules and principles outlined in the AAOIFI Shariah standards and in their respective SSB decisions. It is the responsibility of the SSB to notify the CBB if the Bahraini Islamic bank fails to effectively deal with any major Shariah non-compliance. Notification must be sent in writing to the CBB's Director of Islamic Financial Institutions Directorate. *Zakat* calculations for Bahraini Islamic banks must be reviewed and approved by the SSB on behalf of the shareholders according to SG-2.3.7 (CBB RuleBook).

2.5.2 Kuwait

2.5.2.1 Overview of Regulations

The Kuwaiti stock exchange has been operating since 1944 and is the oldest in the GCC region. It has weak surveillance, investigation, and inspection powers, and there are no well-defined procedures to assist it. Although the regulators are willing to amend the Commercial Companies Law to include CG provisions, there is no clear indication of when this will occur (IIF-Hawkamah Kuwait, 2007). Kuwait has two stock exchanges, and both have collapsed twice in the past three decades (Ayman Badar, 2013). Since 1982, the government has been working to protect the rights of minority shareholders, but subsequent regimes have failed to do so (IIF-Hawkamah Kuwait, 2007). In 2008, the market collapsed a second time, and the government again failed to create regulations to protect small investors (Ayman Badar, 2013). Kuwait is the first country in the world to implement Basel II principles, but Kuwaiti banks adopted the simplified approach for calculating credit risk at the end of 2005 (IIF-Hawkamah Kuwait, 2007).

According to the IIF-Hawkamah Kuwait (2007), Kuwait's CG code was scheduled to be published in 2006, and the code was to be implemented at the end of 2007. However, corporate social responsibility's CG code was published in 2010 and it is valid for listed companies (Shehata, 2015). According to Ayman Bader (2013), Kuwaiti companies are controlled by powerful family shareholders who do not want to lose control because

implementing CG codes might lead to this outcome. The Capital Markets Authority of Kuwait published CG regulations in 2013 and stated that Kuwaiti companies should initiate them by the end of the year. In 2014, Reuters reported that Kuwaiti companies would comply with CG regulations by 2016.

2.5.2.2 Overview of Shariah governance

It is the Central Bank of Kuwait's (CBK) responsibility to regulate and control the activities of Islamic financial institutions in accordance with article 86. In 2004, the Kuwait government, in support of the idea of Islamic banking, passed a law to verify the 1968 Central Bank Law 32, bringing the Kuwait Finance House under the regulatory authority of the Central Bank of Kuwait. This new Islamic financial arrangement had the aim of allowing other banks to attain Islamic banking licenses. Consequently, it upheld the ongoing competition in the Islamic financial sector. Kuwait specifically increased and evolved their banking activities and legislation for the sake of developing healthy relations and a competitive environment among IBs. This was seen as important to ensure that they remained up to date with the rest of the market.

As part of the efforts of the CBK to promote Islamic banking business, including developing Shariah supervisory instructions, and in accordance with best practices in this regard, the CBK approved the instructions on 20/12/2016. This new set of instructions replaced the Central Bank of Kuwait's instructions issued on 15 & 19 June 2003 regarding the SSB. The new instructions complement the Corporate Governance Rules and Regulations for Kuwaiti Banks, which were issued in July 2012. Several articles (specifically, 86, 87, 93 and 96) in the new legislation of 2004 provided a set of rules and guidelines for Islamic finance governance. In addition, it set the important stipulation that each financial entity must have an SSB with at least three members. The duty of the SSB would be to ensure that Shariah regulations were included in all aspects of Islamic finance. Members of the SSB cannot serve on more than three SSBs in Kuwait.

As the highest Shariah authority in Islamic banking and finance, the CBK does not have a Shariah board. It is possible that conflict of opinions among members of the SSB would result in a dispute requiring dispute resolution. This issue is addressed in the CBK Law by recognising the *Fatwa* Board in the Ministry of (*Awqaf*) and Islamic Affairs as the final authority when it comes to Shariah disputes. It is the responsibility of the BD of

Islamic financial institutions to refer the dispute to the *Fatwa* Board. Although the CBK Law does not specify the status of this board's decisions, it is suggested that they are binding on all Islamic financial institutions. In article 100 of the CBK Law, Islamic Law is clearly established as the supreme law, which states that Islamic financial institutions shall be subject to the provisions of the CBK Law, but subject to Shariah principles. As a result of this proviso, Shariah is Kuwait's supreme law regarding Islamic finance and banking. Due to the fact that they are also appointed at the annual general meeting, the SSB has a duty to submit a Shariah report to the bank's General Assembly. According to the CBK Law, Shariah reports must include a Shariah opinion on the bank's operation in terms of compliance, as well as comments and views on Shariah issues. Shariah reports must be included in the annual reports of Islamic financial institutions.

All aspects of corporate governance in the Bank are ultimately accountable to the BD, and the BD is expected to rely on the SSB for Shariah resolutions and opinions related to the Bank's activities. Therefore, the SSB must ensure that its resolutions are based on clear-cut deliberations.

2.5.3 Qatar

2.5.3.1 Overview of Regulations

The Doha Security Market (DSM) was established in 1997 and has witnessed growth since 2005 (IIF-Hawkama Qatar 2007). The Law of the Qatar Central Bank (QCB) and the Regulation of Financial Institutions is Law No. 13/2012. Guidelines on corporate governance for financial institutions were published in 2008 by QCB in its Instructions to Banks book. Since 2009, the CG code of Qatar has been implemented, and all listed companies on DSM must comply with its rules (Sharar 2011). In order to implement CG rules, Qatar Financial Markets Authority and DSM were expected to receive technical and financial assistance. Since most of the listed companies at DSM are state-owned, it is crucial that the government officers demonstrate their concern for CG regulations. In the Qatari CG code, there are no rules regarding the board structure, which is one of its major weaknesses. This weakness is primarily caused by the absence of these rules in Qatar's Commercial Company Law. Qatar's banking sector has adopted the CG codes efficiently (IIF-Hawkama Qatar 2007). The Qatari CG code consists of 31 articles divided

into ten groups and seven guiding rules that provide support to the associated parties (Shehata 2015).

As the Islamic banking market in Qatar expanded since 2008, the Qatar Central Bank (QCB) published guidelines for banks and guidelines for financial institutions on corporate governance. In the wake of the GFC, banks were assigned a greater degree of responsibility and a more encompassing role. Accordingly, the QCB released a revised version of corporate governance principles in 2015. Corporate governance is outlined in 15 principles. In limited cases, some banks may not be subject to certain principles. The principle of "comply or explain" does apply in such cases. It is stated in the revised version of corporate governance principles document is this new version shall replace the previous QCB instructions. Four of the Principles deal with Board' overall responsibilities, Board member selection and qualifications, Board's practices and conflicts of interest, and Board's committees. Principle 5 deals with senior management. Principles 1 specify "Board's overall responsibilities". Board of Directors are responsible for approving and overseeing the implementation of the bank's strategic objectives, policies, risk profile, governance framework and corporate culture. The board is also responsible for overseeing of senior management.

2.5.3.2 Overview of Shariah governance

The CBQ published a Shariah governance framework for Islamic banks (Wilson 2013). This is evident in the revised version of corporate governance principles in 2015 "Principle 15: Additional Requirement for Corporate Governance in Islamic Banks". According to Principle 15, all Islamic banks must comply with the Shariah rules and principles as determined by the SSB of the bank. To ensure compliance with Islamic principles, each bank should form an independent advisory board known as the "Sharia Supervisory Board". There should be at least three scholars on it who have expertise in Islamic jurisprudence and Shariah law and worked on behalf of Islamic financial institutions. As per Annex (2) herein, "Main Referential Terms of Sharia Supervisory Board", SSB appointments should be approved by the General Assembly of the bank on the recommendation of the BD. In order to make the appointment, the Board should obtain the QCB's non-objection. It is very important that Islamic banks discloses all details related to the nature of the product or financial services for which SSBs' opinions

are requested. Having such practices in place will prevent confusion and misunderstandings.

Neither the QCB nor the QFC have a Shariah Board, but Qatar did establish the Supreme Shariah Council which is attached to the Ministry of Awqaf as the highest Shariah authority in the land. When it comes to Shariah disputes pertaining to Islamic finance, this council is the final authority. Whenever the SSB reports a critical Shariah non-compliance issue to the bank's management, but it remains unresolved, the SSB should inform the QCB directly. It is clearly stated in Principle 15, that two-thirds of the Board of directors will ensure that the financial statements clearly disclose the rights of unrestricted and restricted investment accounts holders in accordance with accounting and disclosure standards issued by AAOIFI and QCB disclosure standards. These are required under Pillar III of Basel Committee on Banking Supervision and the Islamic Financial Services Board (IFSB).

2.5.4 Saudi Arabia

2.5.4.1 Overview of Regulations

In Saudi Arabia, the stock exchange market is known as Tadawul. The Saudi Arabian Capital Market Authority (SACMA) regulates the exchange, which is the largest equity market within the GCC. Due to the fact that investors manage their own investments, there is a lack of sophistication. Instead of using the services of portfolio managers and investment consultants, investors in Tadawul rely on rumours and incomplete information. International investors perceive Tadawul negatively due to its lack of transparency. In order to gain the confidence of international investors, SACMA implemented the Saudi CG code in 2006 (IIF-Hawkamah Saudi Arabia 2007), in order to protect Tadawul investors from massive losses in 2006 (Hussainey and Al-Nodel 2008). Later in 2009, another amendment was made to the code (Sheheta 2015). It is essential for SACMA to educate investors and implement regulations regarding broker dealings, IPO pricing, and insider trading. To enhance investors' confidence, SACMA and Tadawul should provide financial information about listed companies (IIF-Hawkamah Saudi Arabia 2007). Tadawul had 169 companies listed on it by the end of 2014 (Saudi Arabian Capital Market Authority 2016). The Saudi CG code has five main sections and nineteen articles. According to article nine of the code, listed companies must satisfy seven

requirements which began in 2008. A set of six principles has been published by SACMA in 2012 for the Saudi banking sector (Sheheta 2015).

The Saudi Arabian Monetary Agency (SAMA) was established by Royal Decree in 1952. It differs from a central bank in terms of monetary agency but shares similar features and laws. Generally, banking and finance in Saudi Arabia are regulated by the Saudi Arab Monetary Agency (SAMA). The Saudi Arabian Banking Control Law was issued by Royal Decree No. M/5 on 11/6/1966. It started to govern many aspects of banking in the country. Under Articles 8 and 9 of the law, lending is restricted and not permitted under Shariah regulations. Article 10 advises banks to prohibit engagement in retail or wholesale trade in order to eliminate the idea of cost-plus (*Murabaha*) transactions. In the 1970s, during the oil boom, there was a greater emphasis on creating a modern banking system that would serve the financial requirements of the country. However, SAMA neglected the sensitive aspects of Shariah compliance. At the same time, international initiatives supporting Islamic banking and finance took hold; hence, in 1975 in Jeddah, the Islamic Development Bank was established, with the sole aim to serve and assist the Islamic world by developing banking services (Wilson 2009).

2.5.4.2 Overview of Shariah governance

In Saudi Arabia, Shariah is the primary source of legislation, and the Shariah court is the highest court in the land. Shariah governance in Saudi Arabia differs from those in other jurisdictions because it is a method of self-regulation rather than legal oversight. Shariah governance is not required or imposed by law on IFIs. It is useful to refer to Al-Rajhi as an illustration of the Shariah governance system in Saudi Arabia, which is premised on self-regulation. The Shariah board and charter of the Al-Rajhi were established at the 11th General Assembly in 2008. Al-Rajhi's internal rules and guidelines included the provision for establishing the Shariah board. Due to the appointment made at the annual general meeting, the Shariah board is independent of all organs of governance, including management and the Board of Directors.

In order to ensure that Shariah rulings are properly monitored and implemented, the Al-Rajhi has passed its own guidelines and procedures known as the Shariah Monitoring Guide and Shariah Control Guidelines since there are no standard guidelines for Shariah governance issued by the regulatory authority. According to Al-Rajhi's Shariah guideline,

the Shariah board's rulings are binding, so the board approves all products or services before they can be released to the market. Early in 2020, the SAMA issued a Shariah governance framework for local banks operating in Saudi Arabia to implement effective Shariah governance requirements. This framework offers the minimum supervisory and monitoring requirements in relation to Shariah governance practices, and are consistent with the regulations and other related supervisory requirements issued by the institution. The purpose of this framework is to ensure that banks comply with Shariah principles and rules, and it defines the duties and responsibilities of the board of directors, executive management, SSB, compliance department, risk management department, and internal audit department.

In order to achieve these outcomes, the bank's board and executive management must have a sound understanding of Shariah principles. In order to understand Shariah issues presented to the SSB, it should have at least a basic understanding of financial and banking aspects in general. In the Shariah governance framework of 2020, it is stated that following SAMA's written non-objection, the BD will form and appoint the SSB based on the nomination and remuneration committee's recommendations. It is possible for the bank to appoint SSB scholars with the approval of the general assembly, so long as the bank's internal policy specifies this process. It is generally recommended that the SSB be formed as follows; the number of scholars is not less than three and not more than five, and chairpersons of the SSB must be independent. It is not allowed for the bank to appoint scholars of its SSB from another Saudi bank's SSB. In this way the SSB can avoid conflicts of interest and maintain the confidentiality of information.

The responsibilities of the BD are stated in the Shariah governance 2020. The bank's BD is responsible for overseeing the Shariah governance framework, approving the Shariah governance framework of the bank, monitoring its effectiveness, and ensuring that it is appropriate to the size, complexity, and nature of the bank's business. The BD shall remunerate the SSB appropriately based on recommendations from the nomination and remuneration committee. In accordance with SAMA's relevant instructions, such remuneration shall be commensurate with these members' duties and responsibilities.

2.5.5 The UAE

2.5.5.1 Overview of Regulations

The UAE established its equity markets in 2000, these being the Dubai Financial Market and Abu Dhabi Securities Market. Due to the federal structure that characterises the UAE, there are many similarities between CG practices in Dubai and Abu Dhabi. In order to improve surveillance, financial reporting, and regulations enforcement, Abu Dhabi Securities Market and the Emirates Securities and Commodities Authority must work together. The UAE CG code has been professionally devised by Abu Dhabi Securities Market and the Emirates Securities and Commodities Authority. In 2007, IIF-Hawkamah UAE released a draft CG code for the UAE for public comments. After such comments were received, the code was finalised by these regulators. It has also been confirmed by Foster (2007) that the first draft of UAE's CG code was released in 2004, subsequently refined in 2005. In 2007, the code was published on a comply-or-penalise basis but only went into operation in 2010. The banking sector is more effectively managed and supervised. As a result of the Central Bank of UAE's CG Guidelines for UAE bank directors published in 2009, the sector is growing rapidly both in terms of profitability and asset size. According to Hassan (2009), all UAE listed companies must comply with all sixteen articles of the code since the revised version's publications in 2009. In addition, CG rules included nine for Small and Medium Enterprises in a 2011 CG code developed with Hawkamah (Shehata 2015).

Banks and finance sectors are regulated by Union Law No. 10 of 1980 Concerning the Central Bank, the Monetary System and Organization of Banking. It gives the UAE Central Bank the authority to supervise and regulate financial institutions. Additionally, the UAE government is actively promoting Islamic finance, with Dubai being a leader in Islamic finance. The government passed a specific law regarding Islamic finance in 1985, known as Federal Law No. 6 of 1985 Regarding Islamic Banks, Financial Institutions, and Investment Companies. According to Article 1 of this law, IFIs must conduct business in accordance with Shariah, as stated in their articles and memorandums of incorporation. Compared to other parts of the UAE, Dubai is in a unique position. As part of the Dubai International Financial Centre Law No. 6 of 1985, the UAE authority passed a separate law. The Dubai Financial Services Authority's Islamic Financial Business Module and Law 13 of 2004 provide legal frameworks for Islamic financial business laws

as well as Shariah board regulations. As a result of DIFC Law No 13, the DIFC enjoys certain privileges and economic incentives from the government. The DIFC Law governs all institutions and corporate entities subject to its jurisdiction, including DIFC Courts and DIFC Arbitration Centres.

2.5.5.2 Overview of Shariah governance

Shariah governance in the UAE is governed by Federal Law No. 6 of 1985. In Article 5 of Federal Law No. 6 of 1985, the Ministry of Justice and Islamic Affairs established the "Higher Shariah Authority" to supervise Islamic banks, financial institutions and investment companies and provide Shariah opinions finance and banking issues. According to article 5, the Higher Shariah Authority's position is binding. Added to this authority, a government-established organisation, it is important to note that Shariah scholars in the UAE have voluntarily established a central committee of the Shariah supervisory board for the purpose of harmonising and standardising Shariah practices (Humayon 2009). In this voluntary arrangement, Shariah rulings would be consistent.

In order to ensure the effectiveness and efficiency of banking activities, the Central Bank works to promote their development. It promotes financial stability by ensuring their resilience. In 2020, the central bank issued a standard for Shariah governance. The Central Bank issues this standard pursuant to the provisions of Decretal Federal Law No. 14 of 2018 Regarding the Central Bank & Organization of Financial Institutions and Activities (the Central Bank Law). According to article 5, all IFIs are required to appoint a qualified SSB in accordance with the eligibility and competence requirements set out in this standard. They should specify in their articles and memorandum of association the composition of the SSB. Article 7 deals with the appointment, composition, and restrictions pertaining to SSB. In accordance with this section, the SSB is required to have at least five members. The SSB are appointed by the bank's general assembly upon BD's nomination and after the Higher Shariah Authority's approval. It is necessary for the articles and memorandum of association to specify the manner and governance of the SSB, including its duties, responsibilities and functions. In terms of appointment, advisors of the Higher Shariah Authority are appointed by the government, and at the individual IFI level, the SSB is appointed by the BD or at the annual general meeting. In order to appoint Shariah board members, IFIs must submit their SSB proposed names for approval to the Higher Shariah Authority.

Those IFIs registered under the DIFC must adhere to its regulations and laws, in particular DIFC Law No.13 of 2004 on Islamic Financial Business and the DIFC Services Authority (DFSA) Rulebook on Islamic Financial Business Module (ISF). To comply with the Shariah, IFIs must adopt the AAOIFI Governance Standards (Praesidium and DIFC, 2007: 40–44). In regard to Shariah governance, section 13 of the law requires IFIs to establish SSB, and the DFSA has the power to prescribe rules for their appointment, formation, conduct, and operation. The ISF specifies the Shariah governance requirements of DIFC in this case. According to the practice, in order to avoid conflicts of interest, the ISF restricts SSB members from serving as directors or controllers of IFIs. The IFIs are required to provide reasonable assistance to the SSB in terms of access to relevant records and information and must not provide misleading information and interfere with the SSB's function at all times. The SSB must not exceed three memberships inside the UAE and must not exceed a total of fifteen SSB (or equivalent committees) memberships inside and outside the UAE. The ISF Sections 5.2 and 5.3 clearly stipulate that IFIs are required to adopt the AAOIFI Governance Standards and submit Shariah annual reports to the DFSA. IFIs are further required to conduct internal Shariah reviews in accordance with AAOIFI Governance Standards No. 3. In this regard, the IFIs must ensure that the internal Shariah review is completed by the internal audit or compliance departments or by an independent internal audit department.

2.5.6 Oman

2.5.6.1 Overview of Regulations

The Muscat Stock Exchange was established in 1988 and is the second oldest one in the GCC. Omani Capital Market Authority published the CG code in 2002 and revised it again in 2003 (Oyelere & Al-Jifri 2011). Foreign investment was attracted to Oman compared to other GCC countries following the implementation of the CG code. This code focused on implementing governance procedures that can diminish conflict of interest issues in family-run businesses. Despite the CG rules being implemented, the Muscat Stock Exchange did not attract much international investment due to its small size. A brochure distributed by Omani Capital Market Authority emphasised the common drawback investors make when they rely on rumours (IIF-Hawkamah Oman 2007). According to Shehata (2015), there are 11 sections of the Omani CG cod, these being company's philosophy, board of directors, audit committee and other committees, process

of nomination of the directors, remuneration matters, details of non-compliance by the company, means of communication with shareholders and investors, market price data, specific areas of non-compliance with the provisions of corporate governance and reasons for this non-compliance, professional profile of the statutory auditor and any other important aspects.

The relevant law in Oman that Islamic banks must follow is the Corporate Governance Code issued by the Capital Market Authority. There have been several revisions to the code made by this agency. The latest update was in July 2015, and it was supposed to be implemented by 2016. As of 2016, companies had to adopt the regulations of the new code (PWC 2016). In the Islamic banking regulatory framework, in Section 3.3 “Role and Responsibility of the Board of Directors”, it is the responsibility of the Board to formulate policies based on a corporate vision that is continually reviewed and updated in a changing business, political, and economic environment. Management should be given a clear set of principles to guide its strategic objectives and financial plan in order to ensure effective management. In general, major policy areas in Oman include resource mobilisation, credit, treasury, risk management and professional liability (such as trusts, funds management, financial advisory services, etc.).

2.5.6.2 Overview of Shariah governance

The Islamic banking industry in Oman emerged very late compared with other GCC countries because of its fluctuating political system (Alam 2006). However, it is growing and at the end of 2018, the total market share of IBs in Oman reached 14% of total banking assets in the sultanate (Moody’s Investors Service 2018). Prospects for Islamic finance and banking services were expected to improve in the short-term, not only in asset growth but also human capital (IFSB 2020).

Banking Law Royal Decree No. 114/2000 was a revision of Banking Law No. 7/74. This law aimed to develop banking institutions to ensure financial stability, growth, and empower the Central Bank to maintain the value of the domestic currency and supervise banking activities. The Islamic Banking Regulatory Framework was published on 18th December 2012. Oman allows Islamic banking activities through the establishment of full-fledged Islamic banks or Islamic banking windows operated by conventional banks. Almost all regulatory requirements are covered by the regulatory framework. The Shariah

governance framework in Oman ensures Shariah compliance in Islamic banking operations under the supervision of the country's Central Bank.

The Royal Decree 69/2012 included a new section of the Omani Banking Law titled 'Islamic Banking'. The law consists of new articles (Articles 120–126). One of the important points of this law is that IBs and Islamic Shariah-window banks³ are exempt from any kind of fees imposed on transactions in real estate and movable assets because IBs must own the asset before selling it to customers. Despite the fact that the industry is still in its early stages, Oman has developed a regulatory framework for Islamic banking services, and this covers all aspects, including Shariah rulings. The framework plays a pivotal role in allowing the public to deal with finance products and services that agree with the provisions of Shariah regulations and consolidate customer confidence and trust.

In regard to SSB appointment and composition, Oman's Islamic banks should establish their own SSB, and it should consist of a minimum of three scholars. The general assembly of the bank decides to appoint members of SSB and fix their remuneration. The annual report shall disclose the remuneration of each SSB member. Whenever the SSB believes Shariah non-compliant activities are being carried out, the SSB should inform the Board of Directors and suggests appropriate measures to rectify the situation. It is the responsibility of the SSB to inform the Central Bank of such violations and to report them in its annual Shariah compliance report if Shariah non-compliant activities continue despite the above measures. Oman's Islamic banks have to adhere to the Financial Accounting Standards issued by the AAOIFI. For matters where there are no AAOIFI standards, Islamic banks can use International Financial Reporting Standards (IFRS) as stipulated by AAOIFI.

2.6 Chapter Summary

This chapter reviewed the history and development of Islamic banking systems in all GCC country. No Islamic banking model was evident in any of these countries prior to the Islamic Development Bank in 1952. Prior to this, conventional banks of Western economies operated and many individuals from these countries opened savings accounts

³ Islamic Shariah-window banks offer Islamic finance services or Shariah-compliant products besides conventional banking.

that paid interest, while others maintained accounts that had a policy of not paying a return (Wilson 2002).

The GCC countries devised their own frameworks of Shariah governance and how to assess the compliance of financial products and services. In all GCC nations a monetary agency or financial authority is responsible for regulating and supervising IFIs, including Shariah governance issues. Prior to discussing the Shariah governance framework, it was first necessary to have a thorough understanding of IB development, and the legal background that guided their functioning in the GCC countries, and especially how Islamic law is applied in each country's judicial system.

The chapter identified that the major difference between Islamic and conventional banking systems rests in the fact that IBs adhere to Shariah governance, which emphasises an Islamic and ethical approach to financial transactions in which all parties are protected, while conventional banks are driven primarily by profit and the interests of shareholders. This may have been a determining factor in protecting IBs from the worst effects of the GFC. SSBs are the key to managing the internal Shariah governance system. SSBs are now functioning in an Islamic banking sector that is much more global, dynamic but also complex so decisions on the Shariah compliance of Islamic financial transactions are not easy to arrive at. These boards provide assurance to those who deal with IBs that the banks' activities conform to Shariah regulations. This helps to maintain the confidence of clients and investors, leading to increased bank profitability. Consequently, it is assumed that any issues among debtholders, shareholders and managers will be minimised. The theoretical framework devised for this thesis is presented in the next chapter.

Chapter 3: Theoretical Framework

3.1 Overview

The purpose of Chapter 2 was to provide a comprehensive overview and rationale for why it is necessary to investigate the impact of SSBs within GCC countries. The literature in this field is still emerging, and suggestions for the factors that impact a firm's performance. This chapter presents theories of corporate governance and the role of the SSB on IB performance. It provides a theoretical framework with reference to agency theory, resource dependence theory, stakeholder theory and legitimacy theory.

3.2 Theoretical Background

The concept of corporate governance (CG) encompasses the combination of legislation, regulations, rules, and voluntary business practices for organizations in the private sector (Arora & Sharma 2016; Brennan & Solomon 2008). According to the OECD principles of corporate governance of (2015), CG is defined as follows by:

CG involves a set of relationships between a company's management, its board, its shareholders, and other stakeholders. CG also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined. (OECD 2015)

Corporate governance has emerged as a crucial issue, and researchers have explored a variety of theories to explain different corporate governance mechanisms and how they are implemented. Corporate governance is a complex topic, covering a number of fields including management, policy, finance, ethics and economics (Brennan & Solomon 2008). Consequently, it is not practical to rely on just one theory to explain or interpret corporate governance practices (Arora & Sharma 2016), and multiple theoretical frameworks are combined where possible. Further, though each of these theories have their weaknesses (Chen & Roberts 2010), when combined, their predictive ability is more accurate.

Previous studies investigating the relationship between corporate governance and firm performance are based on various theories including agency theory, stakeholder theory, resource dependence theory, stewardship theory and legitimacy theory. It is essential to

note that such theories can have conflicting assumptions, and this means that the results of previous analyses of corporate governance and firm performance are inconsistent (Kiel & Nicholson 2003). However, the existing literature on the relationship between a BD and firm performance is extensive and focuses particularly on agency and resource dependence theories (Sarhan, Ntim & Al-Najjar 2019; Ujunwa 2012). The main functions of a BD are controlling and monitoring managers, providing advice and counsel to managers, monitoring organisational compliance with applicable rules and legislation, and connecting the organisation to the external environment (Jensen 1993; Lipton & Lorsch 1992; Monks & Minow 2004). It has been argued that, since the roles of a BD and an SSB are similar, the factors that may affect the former will also influence the latter (Abdul Rahman & Bukair 2013). According to Bhatti and Bhatti (2010), Shariah governance structure and conventional corporate governance structure are in fact similar. Thus, theories such as agency theory, stakeholder theory, resource dependence theory and legitimacy theory can be expanded to explain the relationship between SSB composition and banks' performance.

A multi-theoretical framework supports the establishment of a broader understanding of governance practices than what can be achieved with only one theory (Buallay 2019; Kılıç & Kuzey 2016; Nomran & Haron 2019). This will also help to create a link between theories to build a framework for this study. The current study follows previous efforts that employ agency theory, stakeholder theory, resource dependence theory and legitimacy theory as a basis for explaining the role and effectiveness of SSBs in IBs (Farook, Hassan & Lanis 2011; Nomran, Haron & Hassan 2018; Quttainah, Song & Wu 2013). The following subsections briefly review these theories.

3.2.1 Agency theory

Agency theory is based on the idea that players in a firm can be categorised into two groups: principals, who are the firm owners, and agents, whose function is to manage the operations of the firm on behalf of owners (Eisenhardt 1989; Jensen & Meckling 1976). The key element of this theory is that agents (managers) are self-centred and act in their own personal interests. As suggested by Jensen and Meckling (1976), it is unclear whether managers will anxiously watch over the company like owners would. Therefore, the separation of ownership from control will automatically lead to agency problems. This conclusion was based on ideas that were widely postulated by economics, finance

and accounting scholars across different areas of research (Jensen & Meckling 1976). Further, according to agency theory, if minority shareholders are unable to carry out their role as monitoring agents, this can give rise to another type of principal–agent issue. Primarily, the aim of this theory is to explain the relationship between the owners of a company and the management, who are given authority by the owners to conduct work on their behalf (Jensen & Meckling 1976).

Jensen and Meckling (1976) posited that there are three issues with agency. The first is the conflict of interest between principals and agents. This is seen primarily when the principal is required to delegate certain decision-making powers to the agent. According to Fama (1980), conflicts of interest are often attributed to an agent's opportunistic and self-interest behaviours. The second issue posed by agency relationships is information asymmetry (Jensen & Meckling 1976). The fact that the agent has decision-making authority and is relatively knowledgeable about the workings of the company may put the manager at an informational advantage, which may become an informational disadvantage for the owners. This could result in information asymmetry between principal and agent (Alsartawi 2019; Elbadry, Gounopoulos & Skinner 2015; Morris 1987). Last, both parties may have contradictory opinions on risk management (Eisenhardt 1989). A firm consists of different units and individuals with different approaches to risk tolerance, so their actions will likely vary. A principal will invest capital and bear the risk to obtain economic benefits, while an agent will be more averse to taking risks while trying to maximise his or her own private benefit. The general basis of agency theory is that most people are opportunistic and seek to maximise their own profits. For this reason, managers aim to pursue their own interests, which might not align with those of owners (Eisenhardt 1989).

To reduce and contain the agency problem, agents and principals can bear a cost known as agency cost (Jensen & Meckling 1976). According to Schroeder, Clark and Cathey (2019), agency cost is the total of (1) monitoring costs by the principal, (2) bonding costs by the agent and (3) the residual loss. The cost of having the agent's performance monitored, the monitoring cost, involves a range of mechanisms. These provide owners with an avenue to reduce opportunistic behaviour of agents, while reducing the incidence of information asymmetry. According to agency theory, the best way to minimise and monitor conflict between parties is through an effective corporate governance mechanism (Brennan & Solomon 2008; Haniffa & Hudaib 2006). Fama (1980) argued that the best

way to contain or resolve conflicts is to put certain measures in place such as executive and BD payment or compensation schemes. Corporate governance mechanisms involve proper capital adequacy and disclosure guidelines, and proper processes applied to the appointment of the BD and any connected committees. Hence, the main objective of corporate governance mechanisms is to reduce the conflict between and to align the interests of principals and agents to ensure shareholders' wealth and happiness regarding the company's conduct (Demsetz & Lehn 1985; Farrar 2008).

Bonding cost is the cost of certifying the legitimacy of a manager's decisions, to ensure that decisions are in the best interests of the principals (Jensen & Meckling 1976). Shareholders are responsible for paying bonding costs to agents, which are perceived as a better alternative to exorbitant monitoring costs, which take the form of bonuses and salaries (e.g. money paid to provide shareholders with complete information about the company). The bonding costs serve as an encouragement to agents, giving them the necessary motivation to protect the interests of shareholders (Jensen & Meckling 1976). Last, residual cost is the cost expended when bonding and monitoring costs fail to control a manager's perceived divergent and contrary behaviour. Agency theory suggests that transparent corporate governance should serve to protect the owner's investments and values by controlling and monitoring management decisions (Jensen & Meckling 1976).

The Islamic banking industry has been studied in the context of the principal-agent relationship (Bashir 1996). Some scholars argue that Islamic banking requires an additional agency cost as all transactions need to be Shariah-compliant (Safieddine 2009). The profit- and loss-sharing concept of transferring some business risk to investors is a major principle of Islamic banking (Siddiqui 2008); however, it can lead to another agency problem since the cash will need to be separated from the control base (Siddiqui 2008). IB also does not allow investors to participate in decisions, which creates an environment where managers can easily pursue their own interests, with investors bearing the cost (Ginena 2014). In other words, managers may not identify the best opportunities on behalf of a customer through deliberate negligence or by not sufficiently managing the funds of investors in a Shariah-compliant manner (Grais & Pellegrini 2006). Therefore, the agency problem is even more intense for Islamic banking, where the profit and loss as well as the risk is shared between a bank and its investors, while investors in conventional banks have a level of certainty in their returns (Siddiqui 2008). Consequently, this issue in IBs is not limited to the separation of ownership and control;

it extends to the separation of cash flow and control, which makes the agency problem in IBs even more complicated than in conventional banks (Safieddine 2009).

In Islamic banking, in addition to being accountable to shareholders and the company, managers are also accountable to Allah, with social order/welfare and ‘the greater good’ the main goals (Abu-Tapanjeh 2009). This is completely different from the assumed self-interest of agency theory. However, that is not to say that Shariah governance encourages neglect of the owner’s interests, as there are regulations on property rights as well as contractual rights in Islam (Bhatti & Bhatti 2010). Thus, the outcome of the unique monitoring system in Shariah governance is to ensure the compliance of Islamic banking with Shariah regulations. It also seeks to provide financial reports that help not just owners, but stakeholders and the wider society (Grais & Pellegrini 2006). With these reports, information asymmetry among managers and other parties such as shareholders and investors are automatically reduced. This is why there must be transparency in every IB, particularly when handling issues that have to do with Shariah law (Haniffa & Hudaib 2006). Ahmed and Chapra (2002), however, mention that the agency problem can affect a bank’s credibility and ability to attract investors. In line with agency theory, Shariah governance is a monitoring mechanism for handling the agency problem for matters involving Shariah matters in banking operations. Therefore, providing transparent and accurate information will increase the trust and confidence held by the public and investors.

Managing agency problems and moral hazard rely heavily on good governance mechanisms to help banks perform well. Since the GFC, this subject has received extensive attention (Aebi et al. 2012; Pathan and Faff 2013; Wintoki et al. 2012). Studies concerning the relationship between governance mechanisms and the performance of conventional banks have primarily examined board size, board independence, and dual roles of CEOs. It was unclear, however, how these aspects impacted performance in previous studies. As mentioned above, IBs are subject to two internal mechanisms of corporate governance, the BD and the SSB, altering the conventional ‘single-layer’ to a ‘multi-layer’ governance system (Abdelsalam et al. 2016; Mollah & Zaman 2015; Quttainah & Almutairi 2017; Safiullah & Shamsuddin 2018; Shibani & De Fuentes 2017). The BD represents the first layer and provides necessary legal oversight, while the SSB represents the second layer and offers the necessary moral oversight (Abdelsalam et al. 2016; Shibani & De Fuentes 2017). The BD focuses more on the conventional legal

aspects of governance than moral liability. Further, research has shown that an SSB has a significant effect on managerial behaviour and can help mitigate agency problems (Quttainah & Almutairi 2017), particularly by providing additional monitoring services (Abdelsalam et al. 2016; Quttainah & Almutairi 2017; Shibani & De Fuentes 2017). A key responsibility of the SSB is to ensure compliance with ethical practices (Choudhury and Nurul Alam 2013; Safieddine 2009), such as avoiding speculation in lending and investment activities, which could adversely affect performance (Al-Suhaibani and Naifar 2014; Mollah and Zaman 2015). A key finding here is the complexity of Islamic banking business models and the importance of SSB in operations and governance. For this reason, the current study examines a range of variables in corporate governance and Shariah governance mechanisms that may have an impact on firm performance. This will help identify whether the tested mechanisms are effective at reducing agency cost, increasing transparency, mitigating against possible opportunistic behaviour and reducing information asymmetry in financial reporting (Buallay 2019; Mollah & Zaman 2015; Tessema & Garas 2017).

Despite being one of the most widely accepted theories in corporate governance, agency theory has been criticized for its myopic view of corporate governance as well as for the potential for misplaced incentives. According to Driver and Thompson (2002), the agency theory may not be suitable for an organisation from a long-term perspective as it only puts the shareholder first. According to the authors, in order for an organization to achieve sustainability, its interests must be served by a wider range of stakeholders. This is a common argument against agency theory. Some researchers have identified some technical problems with agency theory, such as Blair (1995) and Heath and Norman (2004). In their view, shareholders are not completely the company's owners as a primary premise. They argued that owners should be able to enjoy the returns from the business as well as exercise control over its operations. In companies, however, only directors of the major shareholders may have some control over the business. In the event that small or minor shareholders are unhappy with the management's performance, they have either to tolerate the performance or sell off the shares in the secondary market in order to exit the company. Therefore, shareholders should not be considered company owners technically. Major and minority shareholders differ in their ability to exercise control over management according to Young et al. (2008). This is known as the Principal-Principal

problem. Researchers have identified these limitations of agency theory as a major problem.

In summary, it is impossible to write about Shariah governance, corporate governance and firm performance without referring to agency theory, which has been widely applied in several studies on those topics (Arora & Sharma 2016; Buallay 2019; Nomran & Haron 2020b; Quttainah & Almutairi 2017). Agency theory has been used to justify and explain several features of corporate business, and it is crucial to the theoretical framework of this thesis. Agency theory was used to test different aspects of the composition of the SSB and the BD, and how they can mitigate agency cost, increase monitoring, reduce information asymmetry and reduce opportunistic behaviour, thereby enhancing banks' performance.

3.2.2 Stakeholder theory

Stakeholder theory provides a broader perspective on corporate governance. It was introduced in the 1970s as a way to overcome criticisms of the shareholder model (Sternberg 1997). According to Freedman (1984, p. 46), stakeholders are 'any group or individual who can affect or is affected by the achievement of the organization's objectives. Alkhafaji (1989, p. 36) defined stakeholders in terms of 'groups to whom the corporation is responsible'. According to Greenwood (2007), stakeholders are people with vested interests in the community, who can also affect corporate operations or be affected by them. However, there are scholars such as Mitchell, Agle and Wood (1997) whose views about stakeholders are not as encompassing, and for whom risk can be attributed to voluntary stakeholders who have invested some form of capital – human or financial – in the business.

From the above definitions, stakeholder identification includes both internal and external stakeholders. Internal stakeholders include employees, owners and managers, while customers, suppliers, shareholders, government, creditors and society at large make up external stakeholders (de Chernatony & Harris 2000). Every stakeholder has a network in the organisation aimed at serving business goals (Freeman & Evan 1990). According to Post, Preston and Sachs (2002), every organisation seeks to create wealth for stakeholders. For Du, Bhattacharya and Sen (2010) and Maak (2007), there should be a broader set of stakeholders, each with varying needs, and no group of interests should

dominate. The theoretical basis of stakeholder theory was explained by Solomon (2020) as follows: as companies become larger and their impact on society becomes more widespread, they ought to be accountable to a much broader range of stakeholders than only their shareholders. Unlike the views espoused by stewardship and agency theories on management behaviour, under stakeholder theory, managers are said to be accountable to stakeholders (Chen & Roberts 2010).

Stakeholder theory has a number of underlying assumptions. First, it believes that firms should not operate just in the interests of the owners, but those of the wider society (Chen & Roberts 2010). The second assumption is that managers are just as accountable to stakeholders, such as creditors, employees, suppliers, customers and the local community as to shareholders (Clarke 1998). Third, stakeholder theory has a strong sense of morality that includes the ethics of corporate social responsibility (Westphal & Zajac 2013). According to Wheeler, Fabig and Boele (2002), organisational and sociological disciplines play a key role in stakeholder theory. Hence, stakeholder theory can be considered a broad theory whose origins can be traced to philosophy, politics, law, economics and ethics (Abdullah & Valentine 2009).

Criticism of stakeholder theory come from two different perspectives (Sternberg 1997):

i) the assumptions of stakeholder theory contradict key company objectives since a company is premised on increasing the wealth of shareholders, and ii) it goes against the shareholder–manager relationship since it makes agents accountable to more than principals. Considering these perspectives, it can be argued that stakeholder theory is contrary to the basic tenets of corporate governance (Albassam 2014). However, Clarke (1998) and Chen and Roberts (2010) maintain that stakeholder theory is an important theory of corporate governance.

This theory has been reviewed extensively by scholars including Andriof et al. (2017), who believe it can explain how organisations behave towards stakeholders. However, Sundaram and Inkpen (2004) argued that management attention should also be focused on stakeholders. Post, Preston and Sachs (2002) assumed that all stakeholder groups are involved in business activities to obtain benefits. This theory was severely criticised by Stieb (2009), who argued that Freeman (1984) only focused on stakeholder interests, thereby transferring wealth and decision-making powers without undue consideration.

There are three major approaches to stakeholder theory propositions: normative, instrumental and descriptive approaches (Freeman & Evan 1990; Stieb 2009). The role of the descriptive approach is mainly informative. It is concerned with corporate actions that affect the stakeholder and reports about the happenings within the business. According to Post, Preston and Sachs (2002), managers can use the descriptive aspect as a guide to operate the corporation's activities in a manner that benefits stakeholders. Freeman (1990) supports the normative approach, which is considered the foundation of stakeholder theory. This approach helps to determine the perceptions of the different stakeholder groups with reference to corporate activities. It considers the ethics of such activities and the morally right and wrong options. The decisions made in the normative stage inform the development level of the other two aspects (Introna & Pouloudi 1999). The instrumental approach evaluates and integrates the other aspects, which makes it a more predictive and practical option. It works by assessing management decisions and linking reality to outcomes. It also posits that community involvement activities should be introduced to accomplish or avoid specific responses from stakeholders (Pesqueux & Damak-Ayadi 2005). In this thesis, the position of the researcher is that the instrumental and normative dimensions of stakeholder theory can explain the behaviour of agents such as the BD, managers and the SSB.

From the Islamic point of view, stakeholder theory provides a comprehensive validation of what stakeholders are capable of and the responsibilities both the firm and stakeholders have to fulfil if they are to meet the necessary guidelines. According to Mirakhor and Iqbal (2004), these guidelines are recognised in the Islamic principles of property rights and contracts. Therefore, firms are enjoined to respect implied contracts by recognising that stakeholders, such as suppliers, local communities, customers, employees and consumers, also have property rights. The validity of these property rights can be found in the Shariah regulations that preserve and endorse economic development, wealth creation and social order.

The SSB is responsible for supervising the operations of the firm and ensuring they comply with the necessary Shariah regulations. While acting on behalf of shareholders, the BD is responsible for monitoring and overseeing all business activities, while managers are entrusted with the management of the firm on behalf of both shareholders and stakeholders. Stakeholders such as depositors, customers and employees have a duty to fulfil their contractual obligations. In addition to considering stakeholders, the external

institution responsible for providing enforcement and regulatory framework will be considered; the role of the SSB in influencing the performance of IBs cannot be overemphasised, and stakeholder theory provides a basis to determine whether the SSB is affecting how well IBs perform (Mohammed & Muhammed 2017b).

Three key stakeholders have been selected according to the Islamic stakeholder model as exerting an influence on a bank's financial performance. These have been identified as first the management – that is, the duality of the role of Chief Executive Officer (CEO), the board size (BOS) and its independence – while the other four are SSB factors (size, expertise, educational level and cross-membership). Other factors such as ownership (large shareholders) and external auditors are not included in the literature review because they are not relevant to this present study. A discussion of corporate governance in the Islamic-based literature confirms the differences between conventional corporate governance and Shariah governance (Hasan 2008). Researchers of banking systems have been calling for a more comprehensive Islamic framework that accounts for both regulatory and moral aspects of governance (Abdul Rahman & Bukair 2013; Hassan 2009; Khokhar et al. 2019). In an Islamic banking context, the establishment of an SSB is essential, as transactions and activities of IBs must be approved by that authority. This suggests that the SSB is one of the most important stakeholders in Islamic banking. Accordingly, this presents the opportunity to use stakeholder theory to explain the relationship between corporate governance and banking performance.

3.2.3 Resource dependence theory

The premise of resource dependence theory is that a company's actions can be influenced by outside resources (e.g. expertise, capital and raw materials). According to Pfeffer and Salancik (2003), the success of any company is highly dependent on the control and management of vital environmental resources. This therefore means that a company's market or industry power can be boosted by gaining access to essential external resources and developing an active approach to management when dealing with related circumstances (Hillman, Withers & Collins 2009). Chen and Roberts (2010, p. 653) explain that:

Organizations are not self-contained or self-sufficient, they rely on their environment for existence, and the core of the [resource dependence] theory focuses on how organizations gain access to vital resources for survival and growth.

Apart from the previously discussed function of monitoring management, which aims to reduce agency conflicts in a corporation, the second main function of a board is to provide resources (Hillman, Withers & Collins 2009; Pfeffer & Salancik 2003). Resource dependence theory suggests that directors should not only be involved in monitoring, but also work to provide critically needed resources, such as establishing business connections and contracts and providing advice to managers (Chen & Roberts 2010; Kiel & Nicholson 2003). Consequently, the BD is a key link between the corporation and financial and non-financial resources (Hillman, Withers & Collins 2009). Directors offer resources through their channels with external firms or by obtaining information from important authorities outside the firm (Adeabah, Gyeke-Dako & Andoh 2019; Assenga, Aly & Hussainey 2018).

Hillman, Withers and Collins (2009) claim that the agency-based approach is less valuable in understanding the resource dependence role. As firms may encounter external uncertainties, board members serve not only to link the firm with its external environment, but also to bring in resources (e.g. expertise, information, skills) to reduce uncertainty and increase firm survival. Diverse boards will provide more unique resources and information, which may benefit decision-making. Within a diverse board, there exist a range of perspectives and non-traditional alternatives to certain problems; as such, this theory usually underpins studies on board diversity.

The board plays four essential roles. First, it provides management with necessary counsel and advice with respect to directors' expertise and background. For example, the firm can reduce the transactional costs and uncertainties of working with regulatory agencies by ensuring the directors appointed have regulatory expertise. Directors can also help the firm with bids for certain government contracts. Second, they help in communicating things about the firm to the outside world (suppliers, customers, regulatory bodies). According to Hillman, Withers and Collins (2009), the firm can show its commitment to minorities by having a diverse board. Third, the board facilitates access to resources. The firm can increase positive sales by appointing directors with significant industry experience, and board members who are finance experts may help with debt strategies, providing the firm with the necessary credibility and legitimacy such as the advice given by highly reputed Shariah scholars (Farook, Hassan & Lanis 2011; Nomran, Haron &

Hassan 2018). From the above, it is safe to infer that the duties of the board under this theory are not limited to controlling and monitoring, but also include providing advice.

In the context of Islamic banking, resource dependence theory is relevant in that SSBs are important in obtaining diverse resources (Farook, Hassan & Lanis 2011; Nomran, Haron & Hassan 2018). Islamic banking also has a large business segmentation starting from funding activities, financing, and services performed. So, it can be concluded that there is a complexity of responsibility for the task of SSB in directing, supervising, and reviewing sharia compliance. Based on this theory, an SSB is an important link for the bank to the external environment, providing information, perspectives, skills and expertise, and connecting the bank to important suppliers, buyers, social groups and legislations to reduce uncertainty (Pfeffer & Salancik 2003). Consequently, to help banks to acquire important resources that may improve performance, Shariah governance supports the process of diversifying boards and appointing directors to multiple boards (Carter et al. 2010).

3.2.4 Legitimacy theory

Legitimacy theory is based on the premise that there exists a social contract between an organisation and the wider society. This is seen in a company's commitment to ensuring compliance with the norms and values of different host communities through their corporate behaviour (Golant & Sillince 2007; Suchman 1995). The argument at the heart of this theory is that for a company to thrive and survive in a given society, it must ensure that its values match those of the host community (Dowling & Pfeffer 1975; Golant & Sillince 2007). Companies must run their operations in a socially responsible way if they want to make profits and legitimise their business philosophy and procedures (Buallay 2019; Mollah et al. 2017; Nomran & Haron 2019). This theory has gained much attention over the last two decades. Investors and stakeholders can easily punish a company for any practice considered ambiguous or illegitimate, and that could reduce customer confidence. The integrity of the institution will be called into question if it fails to maintain legitimate social behaviour (Dowling & Pfeffer 1975). For instance, the integrity of IBs could be undermined, causing customers to lose confidence where the activities of an IB fail to comply with Shariah regulations (Bukair & Abdul Rahman 2015; Nomran & Haron 2020b).

Interestingly, Deephouse and Carter (2005) are unequivocal about the concept of organisational reputation and organisational legitimacy employed to evaluate an institution's social structure. Organisational theories are not new to the concept of legitimacy, as seen in theories such as institutional theory (Meyer & Rowan 1977), organisational ecology (Carroll & Hannan 1989) and resource dependence theory (Pfeffer & Salancik 2003). Though many theorists have written about this, according to Suchman (1995), legitimacy is the pivotal point of a theoretical apparatus, and has been expanded immensely to deal with normative, cognitive and regulative pressures in the organisation. Hence, the acquired reputation of the organisation is accepted as engendering the trust of stakeholders as a result of efforts to maintain the legitimacy of business operations (Suchman 1995). From an Islamic banking viewpoint, Haridan, Hassan and Karbhari (2018, p.10) claimed that:

legitimacy and reputation can be viewed as a concept that is complex and multi-dimensional and is linked to a variety of stakeholders having significance of being the 'be all and end all' of an Islamic bank's survival.

For the purposes of this study, SSBs are seen to provide a legitimate internal mechanism of Shariah governance, and to promote IBs and protect their reputation. As stated previously, the major responsibility of SSBs is to ensure that activities comply with Shariah regulations to boost customer confidence and meet their demands (Lahsasna & Saba 2014).

The theological legitimacy that the SSB represents is what makes IBs valuable to their stakeholders. According to previous studies, applying agency theory in a mainstream setting makes banks responsible to their investors alone, while the Islamic point of view includes ethical integrity, a suitable political and social environment, and religious compliance (Almutairi & Quttainah 2019; Safieddine 2009). Hence, the validity and relevancy of legitimacy theory is incontestable, especially when considering the position of stakeholders in either the BD, the SSB or their capacities. This is true because members of the board can exercise power over SSBs in certain situations, though maximisation of their own interests is against the rules. However, BD/management must not go against the interests of stakeholders by using SSB members to carry out such activities. Consequently, good Shariah governance enhances the confidence of customers that

businesses are obeying the Islamic rules of business, thereby boosting their profitability (Amin et al. 2013).

For Islamic financial institutions (IFIs), shariah compliance is core element in these institutions and it gives legitimacy for their activities (Hasan & Sabirzyanov, 2015). The trust from society will increase that all practices by IFIs are in accordance with Islamic principles all the time. Therefore, the communication of shariah compliance of IFIs can influence the level of legitimacy received from the society (Colleoni, 2013).

Besides the four theories mentioned above, it is worth noting to acknowledge that there are other theoretical perspectives on corporate governance such as managerial-class hegemony theory (Mace 1971) and stewardship theory (Donaldson & Davis 1991). The position of stewardship theory is in stark contrast to that of agency theory – under stewardship theory, separation of ownership does not breed a conflict of interest and governance is all about finding structures and mechanisms to ensure that both owners and management are in alignment (Donaldson & Davis 1991). Stewardship theory also believes that people in a firm are pro-organisational and collectivist-minded rather than opportunist (Davis, Schoorman & Donaldson 1997; Manawaduge 2012). Transactional costs in stewardship theory are expected to be lower because the organisation does not have to pay as much for incentives and behaviour monitoring (Davis, Schoorman & Donaldson 1997). The managerial-class hegemony theory on the other hand believes that the board is not an effective corporate governance mechanism, and that the board's role in directing and strategising for an organisation is passive since management is typically in charge of such activities (Mace 1971). This theory believes that the board's role in strategic management only comes into play when the firm is facing a crisis (Clendenin 1972; Mace 1971). Hence, corporate management is in charge of the control and management of the business (Bennett 1997).

The literature review identified many theories that could explain corporate governance and its impact on performance. This study applies several theories, namely agency theory, stakeholder theory, resource dependence theory and legitimacy theory. Further, this study follows previous studies that have explained the effectiveness and role of SSBs in Islamic banks using these theories (Ajili & Bouri 2018b; Nomran, Haron & Hassan 2018). Existing research shows that corporate governance involves diverse parties with various motivations and expectations. Thus, identifying the effective mechanisms of corporate

governance and establishing their effect on performance will require more than theory. This study focuses on the mechanisms that impact performance. For greater clarity, this study investigates the mechanisms of SSB composition and BD structure. This categorisation will afford greater insight into the drivers of corporate governance.

From the perspective of the agency and resources dependence theories, the BD and SSB are responsible for supervising and advising banks' executive management team (Fama & Jensen, 1983; Jensen & Meckling 1976), and providing access to external professional networks (Hillman et al 2000; Nicholson & Kiel 2007). These roles in are in addition to playing a key role in the formulation of bank strategy (Haan & Vlahu 2016), which affects the strategic market positioning of Islamic banks.

3.3 Chapter Summary

This chapter presented the theoretical framework for the study, and looked at the core rationale of agency theory, stakeholder theory, resource dependence theory and legitimacy theory. In summary, these four theoretical approaches can complement one another, and can be used in developing hypotheses and interpreting results. The BD can exert a substantial effect on firm performance (Nomran, Haron & Hassan 2018; Ujunwa 2012), and in GCC countries, understanding the board's roles of controlling and monitoring agent and principal activities can be more clearly understood by taking drawing on these theories. Detailed analysis of the literature published on conventional corporate governance, Shariah governance and SSBs is provided in the next chapter, which also highlights and explains the differences between GCC countries's Shariah governance and conventional corporate governance in GCC countries and the mechanisms behind these. Various corporate governance models and mechanisms from around the world are considered and compared in the literature review. The end of Chapter 4 develops the study hypotheses based on the review of the literature.

Chapter 4: Literature Review and Hypothesis Development

4.1 Overview

The theoretical foundation for the study was described in Chapter 3. IBs are more resilient to financial crises than conventional banks, according to a growing body of research (Abedifar et al. 2013; Alqahtani, Mayes & Brown 2017; Hasan 2020; Perry & Rehman 2011). The review of the literature supports Shariah laws (Islamic law) as a distinctive Islamic method of business governance that safeguards the financial system from adverse economic effects (Farook, Hassan & Lanis 2011; Quttainah & Almutairi 2017). The study's theories, which are grounded in the field of corporate governance, contend that the SSB's makeup and the nature of its interaction with banks' BD have an impact on IBs' performance and contribute to their resilience.

The SSB, an original IB corporate governance system, is discussed in this chapter, along with how it affects IB operations and overall business success. There are five sections in this chapter: (i) the definition, models, and mechanisms of traditional and "good" corporate governance; (ii) the role of Shariah governance in the direction, management, and operation of IBs in the GCC countries; (iii) the development of a set of hypotheses to be tested on Shariah governance mechanisms, corporate governance mechanisms, and bank characteristics, for which a number of variables are introduced; and (iv) a critical discussion of pertinent studies on the effect of the SSB. Hypotheses regarding the variables involved in Shariah and corporate governance mechanisms are presented after each variable is discussed.

4.2 Corporate Governance

4.2.1 Definitions of corporate governance

Corporate governance terminology has become widespread in line with the many viewpoints put forward by academics, regulators and professional bodies (Ali shah, Butt & Hasan 2009; Bebachuk, Cohen & Ferrell 2009). With rising concern regarding corporate scandal and fraudulent financial reporting, corporate governance is now considered highly important to both developed and developing economies. Still, scholars' debate what corporate governance means and how it is defined. Olayiwola (2010) presents an

emerging view that the concept of corporate governance needs to be viewed from at least two perspectives, narrow and broad, depending on the viewpoints of policymakers, practitioners and theorists (Brennan & Solomon 2008). From a narrow standpoint, the focus of governance is on satisfying shareholders' interests, whereas the broader view takes the more socially responsible position that corporations are accountable to a wider constituency of stakeholders (i.e. employees, government, customers and suppliers), not only shareholders (Letza, Sun & Kirkbride 2004; Maher & Andersson 2000). This has led to rapid growth in the area of corporate social responsibility and the OECD Principles of Corporate Governance.

According to Ramon (2001), it is difficult to establish a universal definition of corporate governance because of differences in culture, legal systems and historical development from country to country. Corporate governance is shaped by a particular country's culture, history and religion (Haniffa & Hudaib 2006; Licht, Goldschmidt & Schwartz 2005), suggesting that people and the organisations or businesses they operate in different countries have different cultures, traditions, ethical perspectives and expectations, in turn affecting their decisions (Ely & Thomas 2001; Haniffa & Hudaib 2006; Licht, Goldschmidt & Schwartz 2005). Because of the strong cultural background that is evident in the GCC region, corporations face challenges in the adoption and implementation of conventional corporate governance strategies. Firms in the GCC countries are predominantly family-owned businesses, but also experience government intervention in the private sector, with a political system based on monarchies and a legal system following Shariah regulations (Alnodel & Hussainey 2010; Baydoun et al. 2013). Understanding these principles and practices, which are based on religion and culture, may provide a better understanding of how to harmonise principles of corporate governance to enhance a firm's performance when operating in GCC countries.

Freeman and Evan (1990) defined corporate governance as a framework consisting of voluntary multi-lateral agreements within an organisation. Sir Adrian Cadbury (1992, p. 15), a former chairperson of the Committee on the Financial Aspects of Corporate Governance in the United Kingdom, offered an alternative broader definition of corporate governance, as 'the system by which companies are directed and controlled'. This definition was expanded by Steiner and Steiner (1991), who described corporate governance as a control mechanism within organisations whereby managers are permitted to effectively implement business strategies and plans to enhance shareholders' wealth.

Blair (1996) offered an alternative, broader perspective, stating that corporate governance is a collection of legal, cultural and institutional arrangements. Later, Monks and Minow (2004) defined corporate governance as a relationship between different parties (CEO, management, shareholders and employees).

Under a broader definition, corporate governance is recognised as a system encompassing three dimensions: principles, processes and outcomes (Gunay 2008). Put simply, corporate governance stresses transparency, responsibility, accountability and disclosure, irrespective of the type or nature of the business (G20/OECD Principles of Corporate Governance 2015; OECD 2015). The outlined definitions demonstrate the recent developments in the way corporate governance is perceived. Because the discipline of corporate governance in its own right is relatively new, researchers in different disciplines such as accountancy, law, economics and management are developing their own ideas about how it should be defined (Armstrong et al. 2015). Therefore, definitions of corporate governance vary, based on first, which corporate governance model has been adopted in different countries, and second, the laws of the country in which the jurisdiction applies. For example, the Anglo-Saxon model of corporate governance is prevalent in those nations that emphasise shareholder value, as adopted in conventional banks. In contrast, the IB model emphasises a broader group of stakeholders. These models are discussed in greater detail in Section 4.2.2 below.

One of the greatest challenges to corporate governance models used by conventional banks is that, in the context of business management, there may occur situations where the ownership of the firm has different interests from management (Claessens & Yurtoglu 2013); therefore, it is important to establish necessary processes and procedures via which governance matters and daily processes are carried out correctly (OECD 2015). The above definitions seek to align principal–agent objectives within a regulatory system to generate adequate accountability and transparency. With respect to the narrow corporate governance concept, Shleifer and Vishny (1997, p. 737) propose that ‘corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment’. This definition can be further developed to incorporate solutions to ongoing conflicts occurring between shareholders. For example, corporate governance was defined by La Porta et al. (2002) as a selection of mechanisms that permit outside investors to protect themselves against inside

investors. Charantimath (2005, p. 219) notes that ‘corporate governance brings the right people together at the right time to discuss the right (important) things’.

Second, corporate governance was defined by Brooks (2008, p. 33) as ‘the structure, which specifies the distribution of responsibilities and rights among different corporate participants in corporation, such as, the Board, the managers, shareholders and other stakeholders and spells out the rules and procedures for making decisions on corporate affairs’. Hence, it offers a directive via which organisational objectives can be defined and a plan developed to achieve such. According to Kaen (2003), corporate governance is about who manages businesses and why; this definition focuses on managing and offering supervision for organisational activities. These processes are mainly concerned with the behaviour of corporations, focusing on several measures: namely, performance, efficiency, growth and the rights of shareholders and other stakeholders (Claessens & Yurtoglu 2013). However, these vary from one country to another based on their orientation and how their legal system is structured (Shleifer & Vishny 1997). It seems that, given the disastrous repercussions of conventional bank collapses during the GFC and the large number of other corporate collapses outlined earlier, there has been a shift to looking more broadly at corporate governance. This has involved a move from the primarily internal focus outlined above, to one that considers the responsibility of boards to protect stakeholders. Later still, principles such as corporate social responsibility have included corporations’ responsibility to the communities in which they operate.

Claessens and Yurtoglu (2013) stated that there are two approaches to corporate governance. First, the internal approach emphasises the behavioural patterns of people within the firm such as the BD and its composition, and the roles played by multiple shareholders, stakeholders and external auditors with respect to a company’s performance (Claessens & Yurtoglu 2013; Kaen 2003; Kumar & Zattoni 2016; Monks & Minow 2004). Second, the external approach concentrates on the normative framework that explains the capital market rules permitting protection of investors’ and creditors’ rights such as disclosure and accounting, reporting and safeguard of the rights of minority shareholders (Claessens & Yurtoglu 2013; La Porta et al. 2002). Considering the above-mentioned arguments, first, Davies (2016) confirmed that corporate governance provides guidelines for business managers irrespective of a company’s nature, commercial or otherwise; a well-understood, recognised set of policies and guidelines assist managers and employees during certain scenarios.

Conversely, the minimalist approach to corporate governance utilises a set of rules to direct the behaviour of the corporation. These rules and regulations derive from the judiciary and legal system, and how a country structures its finance industry and labour market. This is supported by Baker and Anderson (2010), who stated that corporate governance comprises processes and systems applied to control and direct a firm to enhance performance and offer shareholders sustainable and profitable value. Still, monitoring has not been rigid enough; the required rigidity can, however, be found in the SSB of IBs, which ensures that the BD is subject to very rigid scrutiny.

Islamic scholars have made attempts to explain corporate governance through the lens of Shariah governance. Elasrag (2014) suggested that Shariah governance does not show significant differences from conventional corporate governance, with the main differences lying in the banning of certain products and practices and the importance given to all stakeholders, not merely shareholders. However, this suggests a narrow view of Shariah governance, which is, in fact, a special case of a wider decision-making theory that considers Islamic socio-scientific epistemology, built on centuries of Shariah regulations (Choudhury & Hoque 2006). Sourial (2004) highlighted that Shariah regulations offer guidelines on how to proceed with financial transactions that must reflect the morality of Islam. A detailed discussion about Shariah governance is provided later in section 4.3 in this chapter. The next section discusses the various models of corporate governance.

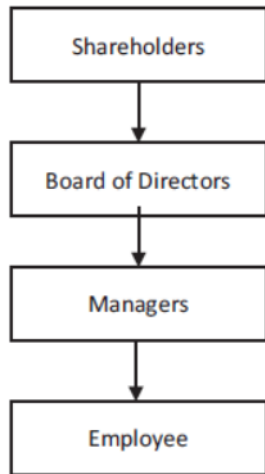


Figure 4.1: Anglo-Saxon model of corporate governance.

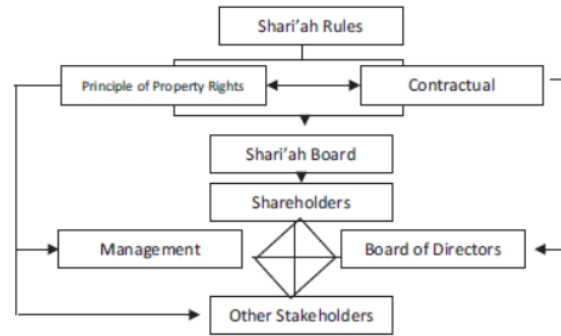


Figure 4.2: Islamic model of corporate governance.

Source: Adapted from Buallay (2019).

4.2.2 Models of corporate governance

Figure 4.1 shows the Anglo-Saxon model of corporate governance while Figure 4.2 shows the Islamic model of corporate governance. The following sections discuss these models in more detail. Generally, conventional models of corporate governance serve to develop value-based management and supervision of companies, and to mitigate against conflicts between shareholders and management. However, several comparative research studies have shown that a common corporate governance approach across all countries would not be ideal (Buallay 2019; Mollah & Zaman 2015; Nomran & Haron 2019). According to Shleifer and Vishny (1997), there are two distinct corporate governance patterns in developed countries, which form the basis of what is often referred to as ‘conventional’ governance. The first approach, the ‘outsider system’, focuses on shareholders and relies on the free market as a corrective mechanism (Cernat 2004; Hasan 2008). This approach motivates managerial staff to operate so that they maximise the return on investment for shareholders. The second approach, the ‘insider system’, places equal attention on all stakeholders (Iqbal & Mirakhor 2004). This approach utilises a wider perspective and takes care of the interests of one or more groups of stakeholders, such as suppliers, government or other public sector authorities, lenders, employees and the public. The first approach is also referred to as the Anglo-Saxon model and operates in countries such as the UK, Canada, the US and Australia. The second approach, also known as the

combination model, is a combination of the Anglo-Saxon model and local culture, values and regulations. This model is prevalent in other European nations, such as France, Germany and the Netherlands, and Japan. There is no doubt that good corporate governance yields a positive impact on business performance, with most studies confirming that good governance improves firm profitability, productivity and competitiveness and decreases risk (Ciftci et al. 2019; Claessens & Yurtoglu 2013). According to Bauer, Guenster and Otten (2004), organisations with better boards and corporate governance translate to better-governed companies.

4.2.2.1 Anglo-Saxon model

The Anglo-Saxon model of corporate governance focuses on protecting shareholders' interests (Cernat 2004). According to Muller (2006), shareholders, or capital providers, are regarded as the owners of the organisation (principals), who appoint managers (agents) to conduct business on their behalf to develop additional wealth for them. Hence, the principals' interests are of primary importance (Dalton et al. 1998). This model has strong links to capitalistic principles; hence the strong presence of this model in 'pure' capitalist nations (Lütz & Eberle 2007).

As a representative of the principals (shareholders), the BD's fiduciary duty is to safeguard shareholders' interests. Moreover, the members of the executive and non-executive directors are hired and fired by shareholders in the general meeting (Denis & Mcconnell 2003). However, there is a conflict between the managers and principals, which could lead to an agency cost. It is generally accepted that weak corporate governance within an organisation results in greater agency costs, and this accumulates over time owing to the failure to consider such costs (Moerland 1995).

This model has only one tier – the BD – and as such, it has limitations in the case of CEO selection and roles, for example. Only the capital providers (shareholders) have a significant impact in this model, rather than general and small shareholders, and the model prioritises shareholders' interests instead of the overall interests of all stakeholders.

4.2.2.2 The combined model

This model combines several models derived from the Anglo-Saxon model, which vary from country to country depending on culture, regulations, values and religion (Aguilera

& Cuervo-Cazurra 2009). Examples of this type of model include the Japanese model, the French model and the German model, as are explained separately below.

In the Japanese model of corporate governance, attention is given equally to a large group of stakeholders; hence, it can be regarded as the model showing the greatest resemblance to stakeholder theory (Allen & Zhao 2007). Stakeholder theory aims to protect all stakeholders in a balance way, as explained in greater detail in Section 4.4.2. The Japanese corporate governance system is built on traditional norms and customs, with an emphasis on family values. This is mainly because businesses were originally run by families, so the shareholders generally shared the same views on long-term investments (Chen et al. 2004). On average, shareholders retain their stock for prolonged periods of time (8 years); hence, managers should proceed to offer greater value to these shareholders.

The French model of corporate governance focuses equally on employees' welfare as on that of the company's shareholders and executives. The French model draws strong links to Marxist principles, which support French labour laws (Morin 2009). It is evident that this labour-oriented corporate governance has traditionally been strong in French companies and union members might be represented on company boards (Ahlering & Deakin 2007). Nevertheless, according to Goyer (2003), the French model of corporate governance has transformed into a model more akin to the Anglo-Saxon model, likely as a result of the establishment of American and British financial institutions within the French capitalist economy. According to Goyer (2003), significant equity percentages of the major companies in France are under the control of proprietors of such finance businesses. As a result of their influence, companies are gradually taking on an Anglo-Saxon corporate governance model.

Similar to the French model, the German model of corporate governance has also seen major movements towards the Anglo-Saxon model as the majority of the German corporations now focus on shareholders rather than other stakeholders (Lane 2003). Earlier, the German model was built on 'codetermination', which considers a synthesis of labour forces, management and business policies (Ewmi 2005). However, significant importance was accorded to the labour force, which is regarded as an important stakeholder of the company, forcing management to arrive at decisions only after assessing the effect it would have on employees (Driver & Thompson 2002). This

particular model has a two-tier management system, comprised of the board and representative members from the union to assist the board.

Based on the corporate governance models above, although there appear to be numerous similarities in developed countries, there is a clear distinction between each corporate governance structure and method of ownership. Notable differences in structure and ownership patterns include the long-term ownership approach of Japanese shareholders and the mandatory participation of labour representatives in Germany. Most corporate governance research has been conducted in developed countries; not enough has been done on corporate governance in developing countries and emerging economies (Bonn, Yoshikawa & Phan 2004; Gordini & Rancati 2017), with exceptions such as China and India. A similar situation is seen in emerging countries, such as Arab countries, Malaysia, Pakistan, Bangladesh and Indonesia, who have incorporated Shariah governance principles into business operations. It is imperative to gain a good understanding of corporate governance practices in different and emerging countries to bring about unified corporate governance models. This study focuses on CG in GCC to utilize the features of CG that differ between the developed and developing/emerging countries. China has started to place greater attention on its corporate governance model, which is based on continued economic growth (Van den Berghe & Carchon 2003; Wortman 1994). The section below assesses China as well as GCC countries as examples of emerging corporate governance models.

4.2.2.3 The Chinese model

The Chinese model of corporate governance is notably different from the models of the West (Allen & Zhao 2007). This model has evolved over several phases (Abbott & Snidal 2000). In the initial stages, after 1949, the Chinese economy was dominated by the state-owned enterprises and the Communist Party government was responsible for controlling all aspects of the economy (Li, Armstrong & Clarke 2014). On entry into the second stage of development in the mid-1980s, a policy of gradual privatisation was introduced. During this time, the effect of the state's role with regard to business activities started to diminish. In the third stage (starting 1993), a new corporate structure came into being with the implementation of new rules and regulations to hand over greater responsibility and participation to employees, depending on their skills and capacities. During this stage, state-run company shareholders still enjoyed preference over individual investors. In the

last stage (starting 2005), individual investors and market forces became dominant. These investors were given assistance by the Chinese government to procure the required facilities, finances and policies to enhance domestic and foreign direct investment in China (Schipani' & Liu 2009).

At present, the Chinese corporate governance model focuses on maintaining a balance between each shareholder of the organisation as well as those of the state (Haw et al. 2004; Glen & Singh 2005). The current model utilises the active participation of shareholders, the BD and management personnel to initiate corporate governance (Shao & Yu 2015). It has encouraged a great deal of participation in the business operations of many companies. Moreover, the successful execution of corporate regulations, legal and auditing systems has improved investors' trust and confidence. In general, the Chinese government has strong monitoring over the corporate governance system. For decision-making and internal policy, the BD has full authority.

4.2.2.4 CG system in GCC countries

Following the Asian Financial Crisis of 1997–98 (Claessens & Demirgüç-Kunt 2009) and the collapse of the subprime market in the US in 2008–09 (Islam & Verick 2010), the demand for more accountable and stable corporate governance systems among the GCC countries grew (Mohammed & Muhammed 2017a; Pillai & Al-Malkawi 2016; Shehata 2015). The groundwork had already been laid by the local regulatory authorities to set up a modern framework to improve corporate governance in many Western, developed countries (Al-Malkawi, Pillai & Bhatti 2014). Saidi (2011) stated that the Middle East and North Africa region must seek to integrate fundamental principles of effective corporate governance.

Unlike the devastation caused in Western countries, businesses in the GCC countries had minimal exposure to the GFC. Most GCC countries are yet to incorporate the most effective corporate governance principles since their businesses are mainly under family ownership policies and there are economic deficiencies (Saidi 2011). According to Al-Ghamdi & Rhodes (2015), approximately 60%–70% of businesses are under the control of families in GCC countries, which helps to explain the unwillingness to reveal financial information to the general public (Sophia, 2015). A study conducted by Dalwai, Basiruddin & Abdul Rasid in 2015 focusing on the efficiency of GCC countries

highlighted that the degree of transparency and disclosure offered by GCC corporations is poor; for example, on the number and composition of the BD.

In 2005, Hawkamah's Institute for Corporate Governance was established to develop and implement well-integrated corporate governance frameworks in the MENA countries and companies. By promoting transparency, accountability, fairness, disclosure, and responsibility, Hawkamah aims to "shape corporate governance practices and frameworks throughout the region." (Hawkamah, 2011). The GCC corporate governance codes were developed using international best practices and corporate governance principles, as discussed below.

The first GCC code for CG for listed companies was issued in 2002 by Oman (Shehata 2015). In 2006 and 2007, most GCC countries followed Oman and issued their own CG codes. A study by Saidi and Kumar (2007) found that the CG frameworks were implemented at different rates. This is attributed to an economy dominated by powerful and politically connected families, a weak capital market, as well as an isolation from global markets. As stated by Cossin and El-Agamy (2011), the development of CG in the Middle East and North Africa, including the GCC states, was influenced by the need to attract foreign direct investment (FDI), changes occurring in the financial markets, and the increasing competition that globalisation posed to family-run businesses. The second wave of CG development was predicted to result in the region experiencing better management practices of business corporations that are in line with regional cultural values.

The GCC countries have worked intensively to improve and update their corporate legislation and national CCG codes since the fall in international oil prices and the growing need to attract foreign direct investment to strengthen the role of the private sector. The CG codes in GCC countries are typically based on the "comply-or-explain" principle, whereby companies disclose their compliance with the code's provisions. Companies that fail to comply with a provision of the code must identify which provisions or articles are uncomplied with and explain and justify their non-compliance.

A study done by Salman and Nobanee (2019) investigated the recent development in the corporate governance codes of the GCC region in comparison with the G20/OECD Principles of Corporate Governance 2015 Edition. They state that all GCC countries,

except Bahrain, have recently updated their CG codes. The current CG code in Bahrain needs to be updated in order to conform to international best practices in terms of shareholders' and stakeholders' rights. It is important in the GCC region to continue and expand efforts to enhance CG in listed companies, banks, and state-owned enterprises.

In line with the G20/OECD Corporate Governance Principles guide policymakers in evaluating and improving corporate governance legal, regulatory, and institutional frameworks. As part of this process of developing good corporate governance, these guidelines also help stock exchanges, investors, corporations, and others. They have become the international benchmark in corporate governance since they were first released in 1999. Considering changes in both the financial and corporate sectors, the 2015 edition considers developments that may impact corporate governance policies and practices. There are six chapters in the Principles:

- i. Ensuring the basis for an effective corporate governance framework;
- ii. The rights and equitable treatment of shareholders and key ownership functions;
- iii. Institutional investors, stock markets, and other intermediaries;
- iv. The role of stakeholders;
- v. Disclosure and transparency; and
- vi. The responsibilities of the board.

In the CG regulations, BD and its committees are considered to be the first line of defense against management. Therefore, the purpose of this study is to examine the impact of CG mechanisms on bank performance. It is commonly acknowledged that financial issues are not the only sign of weak corporate governance, but rather environmental, social and human damage are also indicators of the soundness and sustainability of corporate governance (Boatright 1996; Greenwood 2007; Koutoupis et al. 2021). The common attribute of IBs is the predominant role of Islam in the Middle East and North Africa region and GCC region. Empirical evidence offered by Hidayah (2014) demonstrates the heavy reliance on cultural and Islamic religious beliefs of corporate governance principles in these countries. Shariah regulations (Islamic law) have been widely used as a guiding principle in CG practices in GCC countries; however, this can be subject to Shariah scholars' different interpretations of Islamic principles, presenting difficulties and inconsistencies in practice (Ahmed & Chapra 2002; Beckett 2003). Although Lim,

Matolcsy and Chow (2007) indicated evidence of Anglo-Saxon and a combination of models of CG principles being applied in GCC countries, there is also strong adoption of Shariah governance to guide Islamic financial institutions. Hence, the concept of what is widely known as ‘Shariah governance’ is emerging (Ahmed & Chapra 2002; Choudhury & Alam 2013; Choudhury & Hoque 2006). However, empirical studies are yet to be conducted on how Shariah governance manifests, how different stakeholders respond to it in practice, and its impact on firm performance.

From this literature review, it is clear that the Shariah governance model uses a two-board management system: first, as demanded by conventional law, the BD, and second, in accordance with Shariah law, the SSB. This model is similar to the German governance model in that it also has a two-board system. However, unlike Western economies, companies in countries such as China, Japan and the GCC integrate religion and culture into corporate governance practices. The literature has demonstrated a dearth of knowledge on the level to which each stakeholder (such as directors and Shariah scholars) perceives the effect of culture and Shariah regulations on the implementation of an Islamic-based corporate governance, in what ways and to what degree Shariah governance mechanisms are applied in IBs and how these mechanisms affect company performance. By focusing on CG in GCC countries, this research attempts to address this gap by utilising the differences between CG practices in developed and developing/emerging countries. Following the discussion of the various CG models above, Table 4.1 provides a summary of the main features of the different CG models. CG models differ in several aspects, including their foundation, their purpose, their source of CG, and their board structure.

Table 4.1: Summary of the Main Features of Different CG Models

Model	Developed countries				Emerging economies	
	Anglo-Saxon model (West)	Combined models			Emerging models	
	Anglo-Saxon	Japanese	French	German	Chinese	Islamic/Shariah
Foundation	Capitalist principles of Anglo-Saxon countries	Traditional and family values	Employees' welfare	Employees' welfare and management co-determinant	Dominated by state-owned enterprises	Islam
Purpose	Protecting the interests of shareholders	Various groups of stakeholders	Employees' welfare as much as the shareholders	Both the labour force and the management	Balancing the power of individual and state shareholders	To safeguard the rights and interests of various stakeholders
Source of CG	Free market as the correction mechanism to minimise agency cost	Based on traditional and family values	Labour oriented CG system	Constitutional law derived from co-determinants	Based on communal system	Shariah (Quran & Sunnah) and the concept of prohibited practices
Board structure	One-tier	Two-tier	One-tier	Two-tier	Two-tier	Two-tier

Source: Adapted from Bindabel (2017) and modified by the researcher.

4.2.3 Corporate governance mechanisms

It has become increasingly important for bank performance literature to examine how it is affected by corporate governance (Garas 2010; Mollah & Zaman 2015; Nomran, Haron & Hassan 2018). There has also become a stronger link between corporate governance mechanisms and bank performance, and studies have considered how to improve bank performance by designing more effective corporate governance systems (Frag et al. 2018; Hakimi et al. 2018). Several studies have shown that corporate governance mechanisms improve bank performance (Mollah & Zaman 2015; Nomran, Haron & Hassan 2018). There have been a substantial number of studies that indicate corporate governance mechanisms are vital determinants of bank performance.

Scholars such as Shleifer and Vishny (1997), John and Senbet (1998) and Gabrielson and Huse (2005) have evaluated the different mechanisms of corporate governance. They review the firm's internal mechanisms such as shareholders, board effectiveness, employees and owners as well as the business's external mechanisms, for instance, auditing standards, regulatory and legal responsibilities and quality of disclosure.

According to Haniffa and Hudaib (2006), the important mechanisms for internal corporate governance include ownership structure, composition of the BD (board size and independence) and a dual chair. The internal corporate governance mechanisms consist of rules that explain decisions and how power is distributed in the company throughout its units, departments and agencies. Conflicts of interest between parties is minimised through internal corporate governance mechanisms when they work properly. In terms of controlling and monitoring processes, BD is a key element of companies' decision-making processes (Samaha, Khelif & Hussainey 2015). Consequently, such mechanisms are firmly ingrained in how finance firms perform and have become popular in certain countries; for example, Japan (Bonn, Yoshikawa & Phan 2004).

When studying the relationship between BD structure and bank performance, Nomran & Haron (2020b) emphasise the importance of considering a country's geographical location. Results derived from studies in other countries may not apply to the GCC countries. In this study, BD structure in the GCC region is examined, specifically board size, board independence, and CEO duality. There has been relatively little research in this area. For this reason, the present study pays more attention to internal corporate governance mechanisms, particularly composition of the BD (board size and independence) and a dual chair. The following section discusses these mechanisms.

4.2.3.1 Board of directors (Size)

Boards of directors are at the top of all decision-control systems in any firm that monitors executive behavior for the benefit of shareholders (Buallay 2019; Mollah & Zaman 2015). The literature on corporate governance states that the members of the BD play a key role in strategising the direction firms take (Paniagua, Rivelles & Sapena 2018). Among its responsibilities are controlling, monitoring, and advising managers as well as connecting the organization with the external environment (Mollah & Zaman 2015). Moreover, in order to reduce agency conflict, curtail information asymmetry, and enhance transparency within a company, BD is an essential tool. In the literature surrounding bank performance, many aspects of the board of directors have generally been considered explanatory factors. BD structure has been studied in particular with regard to: board size (Bouteska 2020), board independence (Alkayed 2018; Bouteska 2020) and CEO duality (Bhuyan 2018; Bouteska 2020). In studies on these themes, mixed results have been found

regarding the relationship between BD structure and bank performance (Alkayed 2018; Bouteska 2020).

Generally, the size of BD is determined by how many directors are on the board at the same time. It has been identified as an important governance mechanism as well as a monitoring tool (Bhuyan 2018; Giannarakis 2014; Lee & Chen 2011). BD can reduce agency costs in listed companies since ownership and management are separate (Rao, Tilt & Lester 2012; Ntim & Soobaroyen 2013). In addition to its role as a monitoring body, the board is also an important part of the process of making strategic decisions (Alotaibi 2014; Boshnak 2017). It has been argued that directors represent shareholders, and that they ought to protect the shareholder's interests, since they have been elected by them (Healy & Palepu 2001; McWilliams, Siegel & Wright 2006). There are, however, conflicting results from other recent studies regarding the association between board size and bank performance (Dhouibi & Mamoghli 2013; Muttakin et al. 2018).

A positive association between board size and bank performance has been found in several studies (Farag et al. 2018; Hakimi et al. 2018). According to the supporters of this positive relationship, a number of reasons explain the association. Having a large board size has been argued to have an advantage over a smaller board size because a large board has more experience, expertise, and knowledge (Bhuyan, 2018). The diverse backgrounds of the directors can enable the company to gain a variety of experiences (Ahmed Haji 2013; Haniffa & Cooke 2002; Ntim & Soobaroyen 2013). If a large BD possesses a broad range of skills, expertise and knowledge, this will improve the quality of the company's strategic decisions (Abu- Dawleh et al. 2021; Dalton et al. 1998). Also, the BD is the most effective internal system of governance mechanism as it can reduce costs, resolve conflicts of interest and keep an eye on management (Bukair & Abdul Rahman 2015). Through the BD, agency costs and inconsistencies can be minimised, resulting in an improved market value (Haniffa & Hudaib 2006).

In contrast, other studies found a negative association between board size and bank performance (Ujunwa 2012). It has been argued that BD is viewed as an important corporate governance mechanism, as it controls and monitors the management of the company and reduces agency costs (Rao, Tilt & Lester 2012; Ntim & Soobaroyen 2013). However, a large board may have more problems communicating than a small one, including issues coordinating information and improper communication (Ujunwa 2012).

Additionally, poor communication among directors could slow down the decision-making process and undermine the effectiveness of the board (Cheng & Courtenay 2006; Kholeif 2008; Shehata 2013). As argued by Abdel-Fattah (2008), an effective board of directors requires more involvement from directors, including directors on large boards who have less discretion over disclosure policies. He believes that a large decision-making group may be unwieldy and inefficient.

4.2.3.2 Board of Directors (independence)

There has been a great deal of interest in the composition of boards of directors in relation to bank performance (Klein 1998). However, the importance of board independence as a corporate governance mechanism has recently been gaining more scholarly attention (Albassam 2014; Johanson & Østergren 2010; Lee & Chen 2011). Most of the attention is focused on developing countries (Ezzine 2011; Mahadeo, Oogarah-Hanuman & Soobaroyen 2011). The independence of boards affects management behavior (Rosenstein & Wyatt 1990; Shehata 2013). Independent directors make key managerial decisions and succeed in delivering relevant information, resources and legitimacy to companies and their components (Hillman, Withers & Collins 2009; Ibrahim et al. 2004; Yermack 1996). In addition to influencing management decision-making, it has been identified as a tool to control a company's operations and procedures (Dalton et al. 1998). Thus, board independence may affect policy decisions and consequently affect bank performance (Bouteska 2020).

In this study, board independence is measured according to the number of non-executive directors on the board, as has been done in previous studies (Ibrahim & Hanefah 2016; Bouteska 2020). According to Alkayed (2018), non-executive directors balance all stakeholders' needs instead of concentrating exclusively on shareholders' interests. Additionally, it has been suggested that non-executive directors enhance the effectiveness of the board and improve its monitoring procedures (Haniffa & Cooke 2005). A study by Barako (2007) supports this view, asserting that nonexecutive director's lower agency costs and mitigate conflicts of interest between managers and owners. According to Alkayed (2018), non-executive directors improve the performance of management and the effectiveness of the board. The non-executive directors have also been considered an internal control and monitoring tool (Alhazmi 2017; Fama & Jensen 1983). In this regard, researchers have paid more attention to the activities of non-executive directors (Alkayed

2018; Muttakin & Subramaniam 2015). As in many other areas of bank performance and corporate governance, previous studies show mixed and conflicting results regarding the connection between non-executive directors and bank performance (Muttakin & Subramaniam 2015; Alkayed 2018; Bouteska 2020).

A positive association has been reported between the number of non-executive directors on the board and bank performance (Al-Hawary 2011). According to this argument, non-executive directors enhance the board's ability to monitor. Based on agency theory, they believe non-executive directors reduce agency costs and improve monitoring. In fact, some scholars believe that increasing the independence of the board of directors can effectively limit opportunistic behavior by company managers (Alhazmi 2017; Jensen & Meckling 1976; Post et al. 2011). Furthermore, non-executive directors have been argued to act as an internal control mechanism, which influences decision-making and monitors management behavior (Alotaibi 2014). A non-executive director's strength and independence can be attributed to the fact that they are not employees of the company, thus they are not under any pressure or control from internal executives, including CEOs (Alhazmi 2017). These findings confirm the independence of the director as an essential corporate governance tool. Nevertheless, in GCC countries, it is not easy to get qualified and experienced independent non-executive directors, particularly in smaller countries (Baydoun et al. 2013). Thus, director independence, knowledge of board composition and ways to source experienced and qualified independent directors help to improve a company's performance. Consequently, new strategies can be formulated, and processes, policies and procedures harmonised, to improve how a firm goes about its business.

In contrast with the aforementioned arguments, which present a positive association between non-executive directors and bank performance, other authors suggest there is a negative relationship. According to Alotaibi (2014), both executive and non-executive directors are primarily concerned with the performance of the company. There is a claim that non-executive directors usually hold multiple positions, which causes them to be less involved with and less knowledgeable about a company's activities (Alotaibi 2014). It has been argued that block-holders usually elect non-executive directors who focus on their own interests and ignore other stakeholders, as evidenced by Abdel-Fattah (2008), and Crowther and Jatana (2005). Further, it has been argued that non-executive directors develop personal relationships with executive directors, which undermines their independence (Crowther & Jatana 2005; Patelli & Prencipe 2007).

4.2.3.3 *CEO duality*

CEO duality is another variable that this study will investigate within the focus on BD structure. A dual chair describes a situation in which an individual manages a company effectively as both CEO and the BD chair (Forker 2012). Most companies in GCC countries are family-owned, and duality is typical (Farook, Hassan & Lanis 2011; Safieddine 2009). The responsibilities of the CEO include presenting financial reports, managing the company, chairing executive meetings and notifying the chair of any important issues (Ujunwa 2012; Wu & Lin 2019). The OECD (2015) recommended the separation of the board chair from the CEO, adding that the former must be picked from the non-executive directors, and also stipulated that the responsibilities and roles of the CEO and the chair must be made very clear. Many studies have examined CEO duality and bank performance, with mixed results. Holding two positions may allow an executive chair to have a disproportionate amount of information about a company and exert greater control over its operations than a non-executive director. This is different from other situations, where these roles are separated (Bhuyan 2018).

Nevertheless, based on the stewardship theory developed by Donaldson and Davis (1991), some scholars have presented counter arguments. Stewardship theory states that separating the two roles is not important since effective management can be achieved if the roles are combined with clear and unequivocal authority and minimal interference. This theory also argues that people in a firm are pro-organisational and collectivist-minded rather than opportunistic (Manawaduge 2012). In contrast, agency theory recommends separating the chairperson and the CEO roles, as this will improve the independence of the board from management, resulting in better monitoring (Eisenhardt 1989). Thus, when it comes to dual roles, the research findings are not conclusive. Accordingly, this thesis investigates how handling two responsibilities (chairperson of BD and CEO) concurrently jeopardises the effectiveness of CG and the likely impact on how companies perform in GCC countries. The GCC countries' corporate governance codes recommend separating the roles of CEO and chairperson to: firstly, ensure a clear division of responsibilities; and secondly, to ensure that boards are able to execute their monitoring role efficiently.

4.2.4 Good corporate governance

The main principles of effective corporate governance are captured in four fundamental concepts: accountability, responsibility, transparency and fairness (OECD 2015). Globally, three organisations are typically seen as charged with enhancing the guidelines and principles of CG: (i) the World Bank, (ii) the International Monetary Fund and (iii) the OECD (Boyd, De Nicolò & Loukoianova 2009). It has been more than 50 years since the World Bank became a strong partner of the GCC countries. A technical assistance program has been launched by the governments of Bahrain, Kuwait, Qatar, Saudi Arabia, the United Arab Emirates, and Oman to take advantage of the Bank's global knowledge and development experience. Globally, the International Monetary Fund works to achieve sustainable growth and prosperity for all of its 190 member countries including GGC region. In order to increase productivity, job creation, and economic well-being, it supports economic policies that foster financial stability and monetary cooperation. Since 2003, the OECD has supported the MENA region's work including GCC region to improve public governance and investment. Development reforms are a key component of the MENA-OECD programme (OECD 20015) that aim to improve the investment climate, modernise governance structures and operations, strengthen regional and international partnerships, and promote sustainable economic growth. It is obvious that international organisations have put effort into improving the GCC codes. For example, Kuwaiti codes clearly state that they are based on internationally accepted best practices and OECD corporate governance principles. Furthermore, Qatar considered international governance best practices such as the OECD principles and the International Corporate Governance Network.

Nevertheless, these principles are used as a reference for corporations, investors, stock exchanges and other parties that help in developing good CG. It should be noted that these principles are not legally binding (Ladipo & Nestor 2009), as can be seen in countries that do not meet the standards as a result of religious, political or cultural circumstances (O'Sullivan 2000). The OECD (2015) highlighted that good CG can be achieved when both voluntary and regulatory actions are combined. The implication is that a nuanced approach considering differences in religion, politics, culture and regulations may remove any roadblock hindering the good functioning of corporate governance principles.

Good CG is required to

- i. maximise the contributions of firms to the economy;
- ii. prevent personal gain or advantage,
- iii. attain continual growth in productivity,
- iv. minimise the amount of risk connected to fraud,
- v. be publicly accepted and maintain a good image/reputation and
- vi. improve the company's performance so more profits are made (Aguilera & Cuervo-Cazurra 2009).

According to Fan, Wei and Xu (2011), performance and corporate accountability are concurrently improved by good governance, which attracts human and financial resources in the best manner possible. According to Hope (2003, p. 3), 'Good governance, in all its facets, has been demonstrated to be positively correlated with the achievement of better growth rates.' Therefore, it is evident that good corporate governance helps in the drafting and enforcement of procedures, policies and structures needed to improve organisational performance.

The World Bank collaborated with the OECD to promote self-assessment and assess the performance of companies in developing countries to identify strengths and weaknesses (Jesover & Kirkpatrick 2005). By carrying out legal and regulatory reforms and adopting best practices, corporate governance will be improved at both the international and national levels. This is in line with the comprehensive development framework of the World Bank, which emphasises good governance as an important factor in effective development (Iskander & Chamliou 2000). Added to this, the IMF has greatly contributed to corporate governance by creating codes of good practices, which are mainly aimed at ensuring the transparency of governments' monetary and financial policies. The code emphasises concerns such as government responsibilities, the availability of information to the public and clarity of roles (Vreeland 2003). Thus, developing a model for ongoing evaluation of the performance of companies will help identify those areas for improved good governance practices. Good corporate governance attracts investors and ensures that they make a good return on their investment; otherwise, they may start showing concern about the business model securing their investment (Zerban & Ateia 2016). According to Grais and Pellegrini (2006), good corporate governance minimises the exposure of emerging market economies to financial crises, reduces capital and transaction costs and

strengthens property rights, which results in capital market development. Further, the important components of good governance include auditing standards and practices as well as financial reporting (Saidi 2011). However, weak corporate governance reduces investors' confidence and hinders outside investment. As a result, one question that arises is how can good corporate governance be provided to investors or shareholders?

Researchers have extensively explored the influence of good corporate governance on firm performance in both developing and developed countries. However, studies on this issue provide conflicting reports on the relationship between firm performance and good corporate governance practices. While some empirical studies have reported a negative relationship (Bauer, Guenster & Otten 2004; Giroud & Mueller 2009) and others have found an insignificant or no relationship (Gupta, Krishnamurti & Tourani-Rad 2013; Rasheed & Zaki 2018), most analyses have shown a significant positive relationship between good corporate governance and a firm's financial position (Abdallah & Ismail 2017; Armstrong et al. 2015).

There are differing perspectives on the understanding and implementation of the recommended good corporate governance principles and standards, even though these are now accepted in many countries. Given the current challenges and opportunities in the global economy, there is an increasing need for good corporate governance practices because they provide an important competitive advantage tool. Exploring corporate governance from a cross-country point of view, Claessens and Yurtoglu (2013) noted that it is impossible to have just one global framework. Additionally, interpretation and implementation processes will always vary since social norms differ from country to country (Licht, Goldschmidt & Schwartz 2005). According to Arcot and Bruno (2006), good corporate governance practices should be tailored according to the firm. Lewis (2005) noted that Shariah law has a huge impact on the daily activities of people in Islamic countries. Thus, corporate governance may differ in Islamic countries and the general model may not work well in these economies, as people still have to conform to Shariah regulations and other social/religious conventions, as discussed next.

4.3 Shariah Governance

Given the size of Islamic banking, not much attention has been paid to Shariah governance. While there is no agreed general definition, Elasrag (2014) defined Shariah

governance as a system that controls and directs firms with the aim of achieving the goal of the firm by ensuring that stakeholders' interests are protected. This is different from conventional corporate governance, which pays more attention to the protection of shareholders. Shariah governance defines the corporate structure, the processes to be followed and its administration to ensure that every financial activity follows Shariah regulations (Safieddine 2009). It has been suggested that, if the activities of IBs do not comply with Shariah regulations, their integrity would be questioned, and customers' trust would decline (Alman 2012). Consequently, good Shariah governance ensures the success of IBs and can equally be used to gain the confidence of customers, which will subsequently increase the profitability of the bank and result in a higher market share (Kashif et al. 2015).

Choudhury and Hoque (2006) and Farook, Hassan and Lanis (2011) argued that the structure of Islamic firms is more complex than that of conventional firms as a result of long-term historical, cultural and religious factors. Hence, for a stronger corporate governance framework, it is important to examine and scrutinise Shariah governance by stakeholders for the entire industry. Faiz (2011) stated that Shariah governance practices as carried out by Islamic firms throughout the world vary because regulators adopt a non-prescriptive approach. How corporate governance is viewed in Islam stems from Islamic epistemology, which is based on the divine oneness of God. It ensures that corporate goals are achieved without disregarding the duty to protect societal welfare and order (Choudhury & Alam 2013). Shariah governance is a stakeholder-oriented model that utilises a broader theory of decision-making to protect stakeholders' rights; these stakeholders are exposed to different types of risk due to the activities of the firm (Iqbal & Molyneux 2016). Nevertheless, Beckett (2003) and Hasan (2008) argued that the Anglo-Saxon model is adopted by most Islamic financial institutions, because economic activities of Muslims were greatly influenced by Western business practices during colonial and post-colonial times. According to Chapra and Ahmed (2002), unlike conventional firms, depositors, instead of shareholders, in IBs make available a large pool of funds, and this totally changes the structure and nature of corporate governance. The amount paid to depositors by IBs depends on the profit the bank makes (Ariff & Iqbal 2011). Therefore, Islamic depositors are vulnerable to greater risk, based on equity-based contracts and profit-loss sharing (Safieddine 2009). All properties must conform to

Shariah regulations, and all stakeholders should have an equal right to enjoy a property (Mirakhor & Iqbal 2004).

There are also other differences when it comes to enforcement. For instance, Hasan and Dridi (2011) contended that from the Islamic perspective, changes in the corporate governance model could be difficult to achieve since God defined the relevant laws and regulations. Nonetheless, from the conventional point of view, the level of corporate governance quality desired is enforced by introducing new laws and regulations. When it comes to Shariah governance, what is needed is to interpret the extant laws in a way that is unique to the corporation and its business environment. From the Islamic point of view, there is an extremely high degree of subjective judgement and decision-making involved in corporate governance (Abu-Tapanjeh 2009; El-Gamal 2006). Vinnicombe (2010) stated that Islamic firms generally comply well with Shariah regulations but reveal a low level of compliance in certain areas such as the disclosure of *Zakat* as a result of the conflict of interest between the involved parties.

The volume of research published on Shariah governance of IBs is increasing. Hassan (2011) carried out a study of the Shariah governance system and Shariah practices in various countries. The study findings show noticeable differences and a variety of Shariah governance practices across these countries and acknowledges weaknesses and defects in the existing Shariah governance framework for Islamic financial institutions. Hence, the present study investigates Shariah governance of IBs in the GCC countries, which follows the decentralised model. In general, one of the most important mechanisms is the SSB, which can be used to deal with Shariah governance both at the institutional (SSB at the bank level) and national (within a jurisdiction) levels.

4.3.1 The SSB

An SSB is a vital element of business that promotes the growth and stability of the Islamic finance industry (Buallay 2019; Nomran, Haron & Hassan 2018). An SSB is defined as an independent body that consists of jurists who specialise in Islamic finance and Islamic commercial jurisprudence (AAOIFI 2015). The SSB serves as an additional layer of governance in combination with the usual BD and other committees serving Islamic financial institutions (Nomran, Haron & Hassan 2018). The main responsibility of the SSB is not only to ensure that financial transactions and activities comply with Shariah

regulations, but to increase the credibility of the institution in the eyes of all stakeholders (Lahsasna & Saba 2014). The role of the SSB is to monitor and maintain Shariah governance best practices unique to IBs. The SSB has the authority to attend BD meetings to deliberate on decisions concerning Shariah regulations (AAOIFI 2015). The AAOIFI (2015) recommends that the SSB should have at least three members with an extensive understanding of Islamic jurisprudence (*Fiqh al-Muamalat*), and who are appointed by shareholders at the annual general meeting. The SSB may include one member who does not specialise in *Fiqh al-Muamalat* but who should still be an expert in the field of Islamic financial institutions. It is crucial that the SSB has a deep knowledge of all the various aspects of banking, both in connection to modern finance and Shariah regulations (Mollah et al. 2017). SSB members can be appointed from internal or external sources, and receive salaries or payments based on meetings attended. Also, SSB members have the right to be appointed to SSBs of different companies. However, Algaoud and Lewis (2007) argued that retaining internal SSB members helps to understand and assess the individual organisation, thus improving the overall environment.

Despite the increasing volume of total assets, the number of banks and the various new products in the Islamic banking industry, few studies have investigated the effect of Shariah governance on IBs' performance. Recently, in the GCC area, there has been a rapid increase in the number of IBs as well as the total assets they manage. At the end of 2011, commercial banks combined total assets amounted to US\$127 billion (Ernst & Young 2012). Islamic financial transactions are also becoming more complex; for example, *Mudarabah* (profit-sharing). Theoretically, the unique agency problems faced by Islamic financial institutions such as *Mudarabah* can increase adverse selection and moral hazard problems. This can exacerbate agency problems by increasing opportunities for managerial expropriation of corporate resources (Safieddine 2009). Thus, agency theory proposes that increased monitoring by management, or also by the SSB, might positively influence the monitoring and control of activities of banks. Consequently, the SSB is now the most crucial part of the internal Shariah governance system and has a positive impact on the day-to-day activities of the Islamic banking industry (Nomran & Haron 2020b). Further, the SSB can help improve the financial stability of Islamic businesses (Garas 2010; Nomran, Haron & Hassan 2018).

The scarcity of studies investigating the impact of Shariah governance on the performance of IBs has led to analysis of those factors that affect the BD and relying on these to reveal

the determinants of the characteristics of the SSB that affect the performance of IBs. These include BD size, qualifications, experience, reputation and independence (Bukair & Abdul Rahman 2015). The objective of Shariah governance is to reach the same goal as conventional corporate governance but within the ethical rules of Islam (Bhatti & Bhatti 2010). Arguably, the same variables and factors that affect the BD could equally affect the SSB (Nomran, Haron & Hassan 2018). In addition, theories such as agency theory, stakeholder theory and resource dependence theory could be expanded to better explain how the characteristics of an SSB affect how IBs perform, as documented by Farook et al. (2011), Alman (2012), and Nomran, Haron and Hassan (2017, 2018). These theories are discussed in greater detail earlier in Chapter 3.

Agency theory currently dominates corporate governance studies when it comes to maximising value and orientation towards the owners, which is evident in the self-interest and the desire for profit, while shareholders and managers agree that firms enter into contracts with society to create positive relationships that benefit all parties. If such contract is breached, strong government measures could be taken against the firm. In this situation, the SSB can help solve this problem faced by agency theory by advising the BD of the bank's activities, noting that they should be consistent with societal expectations (Frag, Mallin & Ow-Yong 2018). As previously noted, the primary job of the SSB is to supervise the implementation of Shariah regulations for all Islamic financial activities. The SSB must also stop financial transactions that do not comply with Shariah regulations, even if these would benefit shareholders (Frag, Mallin & Ow-Yong 2018; Nomran, Haron & Hassan 2017). The job of the SSB is to act in the best interests of all stakeholders and enhance the credibility and transparency of Islamic financial institutions so that Shariah regulations are followed (Abdul Rahman & Bukair 2013).

In the context of the GCC countries (Refer to Chapter 2, section 2.4.2), the role of SSB members can be but is not limited to issuing *fatwas*, making legal decisions, approving new contracts and products, and auditing the executive processes of financial products in conjunction with internal Shariah auditors. They can also help with the distribution of net profits between investment account holders and shareholders. The SSB also provides consultation services with the aim of finding Shariah-compliant solutions during the contract implementation period, as well as explaining how to calculate *Zakat*, guiding management on how to distribute illegal income for carrying out charity work, providing lectures / training sessions, and making clients aware of the latest published rulings (Garas

2010; IFSB 2020). It is therefore crucial to consider the effectiveness of Shariah governance. If this is not done, the financial market may collapse due to failed IBs, resulting in grave damage to the growing Islamic financial sector. Subsequently, an SSB's place in the hierarchy has been the subject of debate between researchers and thinkers regarding the best model that supports the structure and position of the SSB (Mollah & Zaman 2015).

4.4 Previous Empirical Studies on the SSB and Bank Performance

Research on Shariah governance in Islamic banking is not only limited but lacks studies on the influence wielded by SSBs on the performance of IBs (Garas 2010; Mollah & Zaman 2015; Nomran, Haron & Hassan 2018). Most empirical studies on Shariah governance examine the impact of SSB characteristics on disclosure (Abdul Rahman & Bukair 2013; Farook, Hassan & Lanis 2011), earnings management (Quttainah & Almutairi 2017; Quttainah, Song & Wu 2013) and credit ratings of IBs (Grassa 2016). Nevertheless, some empirical studies have examined the impact of SSB characteristics on financial performance, as presented in Table 4.2 below. To provide a wider view regarding the impact of SSBs on how well IBs perform, this section discusses these studies.

Table 4.2: Previous Studies of the SSB and Bank Performance

Authors	Country	Sample/period	Independent variables	Dependent variables	Control variables	Analytical approach	Theoretical framework	Findings
Grass and Matoussi (2014a)	Southeast Asian & GCC countries.	77 IBs, 85 CBs 2000–2009	BD meeting; BD size; non-executive director; outside director; woman director; old director; foreign director; director fees CEO tenure; CEO duality; CEO founder; CEO age; number on BD; committees SSB size; SSB cross-membership; SSB expertise; SSB women	ROA ROE	Bank size Bank age	Regression analysis t-test		For IBs in GCC countries: (+) Director fees (+) CEO duality (+) CEO age (+) SSB expertise For IBs in Southeast Asian countries: (-) SSB size (-) SSB cross-membership
Mollah and Zaman (2015)	25 countries	86 IBs 86 CBs 2005–2011	BD size; BD independence CEO chair duality; CEO internal SSB size	ROIAE ROIAA ROAE ROAA Tobin's Q	Big4_adtr, Risk_disclosure, 1/z, EQTA, NLTA, Log_TA. Log of GDP per capita Percent of Muslim population Inflation rate	Random effect (GLS) Two-step system (GMM)	Agency theory	(-) BD size (-) BD independence (-) CEO chair duality (-) CEO internal (+) SSB size
Hassan, Rizwan and Sohail (2017)	Pakistan.	5 IBs 12 CBs 2011–2015	Board size SSB size Board independence	Capital adequacy Asset quality Management	Bank size.	Regression analysis	Agency theory	CG and SSB have a significant impact on bank performance

Authors	Country	Sample/period	Independent variables	Dependent variables	Control variables	Analytical approach	Theoretical framework	Findings
Nomran, Haron and Hassan (2018)	Malaysia.	15 IBs 2008–2015	SSB size; SSB cross-membership; SSB educational qualification; SSB reputation; SSB experience; SSB change in composition	quality Earnings Liquidity	Bank size Bank age	GMM	Agency theory Resource dependence theory Stewardship theory	(+) SSB size
				ROA ROE ROIAE				(+) SSB cross-membership (-) SSB educational qualification (+) SSB reputation (-) SSB experience (-) SSB change in the composition

Previous studies have investigated the various characteristics of an SSB that determine how effective it is in carrying out its mission, as well as its impact on performance regardless of its institutional hierarchy. As shown in Table 4.2, Farook, Hassan and Lanis (2011), as well as Abdul Rahman and Bukair (2013), Nomran, Haron and Hassan (2017) and Ajili and Bouri (2018b), determined the effects of reputation, SSB size, cross-membership and education qualifications. Grassa (2015) also considered SSB cross-membership, size, the presence of women board members, experience, and advisory or work supervisory body. A few studies have examined the features of the SSB that affect performance within the central pyramid's framework. This depends on the level of interference in the management and organisation of Islamic businesses by Shariah bodies – for example, Malaysia is found to have a strong Shariah governance structure (Nomran, Haron & Hassan 2018). The most important variables were explored, including experience, education level, cross-membership, reputation and annual change. Nugraheni (2018) evaluated the same variables to investigate the impact of characteristics of an SSB on the social performance of Indonesia's IBs.

Regarding the impact of an SSB on the performance of IBs, the findings of previous studies are inconclusive. This could be because of the various models of SSB bodies and their legitimacy regarding the regulations and laws guiding their work, or because of challenges in choosing samples and their statistical treatment (Abdul Rahman & Bukair 2013). Further, evidence of the performance of banks in the conventional banking sector cannot be generalised when it comes to IBs and the laws guiding their activities. As a result, the aim of the present study is to examine the characteristics of the SSB and how it affects the performance of IBs in the GCC countries. To the best of our knowledge, this is the first research study in this field, as the GCC countries are attempting to design legal frameworks for IBs.

The literature on the relationship between SSBs and bank performance is limited but growing (Grassa, Matoussi & Trabelsi 2010; Mollah & Zaman 2015). Results of previous studies, however, are mixed. Grass and Matoussi (2014a) examined the impact of corporate governance mechanisms on the performance of 77 IBs and 85 conventional banks in both GCC and Southeast Asian countries over 2000–2009. They found that the board fee, CEO duality and CEO age all had positive and significant influences on the performance of IBs, and emphasised the important role played by SSBs in creating IB market value and performance. Mollah and Zaman (2015) investigated the effect of SSBs,

board structure and CEO power on the performance of IBs in 25 countries. Their results showed that SSBs positively affect bank performance when members have a supervisory role; however, when SSBs have only an advisory role, their impact is negligible.

Using a sample of five IBs and 12 conventional banks in Pakistan from 2011 to 2015, Hassan, Rizwan and Sohail (2017) studied the effect of the Shariah Advisory Board, board size and board independence on the performance of IBs. They found that corporate governance mechanisms and these boards have a significant impact on IBs. Recently, Nomran, Haron and Hassan (2018) investigated the effects of SSB characteristics on the performance of 15 Malaysian IBs from 2008 to 2015, and discovered a significant relationship between SSB size, doctoral degree and change in the SSB composition and IBs' performance. Moreover, their results support the view that SSBs with cross-membership and wider reputations have a significant impact on IBs' performance. Their study also suggested a need for more empirical investigation into the ideal SSB size for IBs. Further, this study will measure firm performance using four measures—ROA, ROE, Tobin's Q and *Zakat* ratio—as comprehensive measures.

4.5 Previous Empirical Studies on the SSB and Efficiency

The performance of banks has focused on efficiency for many years (Beck, Demirgüç-Kunt & Merrouche 2013; Rosman, Wahab & Zainol 2014; Salman & Nawaz 2018). While a great many of these studies focus on conventional banks, the growth of IBs and their performance and resilience have created an interest in assessing IBs' efficiency. This section explores this further through a review of the literature (as summarised in Table 4.3) with the aim of testing the hypotheses that Shariah principles are effective in ensuring efficiency when they are properly interpreted, applied and monitored, and when there is a relationship with the BD that ensures that it adheres to the SSB's interpretations of Shariah.

Table 4.3: Previous Studies on the Effect of SSBs on Bank Efficiency

Authors	Sample/period	Approach	Inputs/outputs	Independent variables	Dependent variables	Control variables	Analytical approach	Findings
Mokhtar, Abdullah & Alhabshi (2008)	288 panel data of 20 Islamic window-banks, 2 full-fledged IBs and 20 conventional banks in Malaysia 1997–2003	Intermediation approach Input-oriented approach VRS Non-parametric frontier method, DEA	Inputs: • deposits • total overhead expenses Outputs: • earning assets				DEA DEAP version 2.1, DEA computing software developed by Coelli (1996)	In general, Islamic banking has become more efficient during the study period.
Brack & Jimborean (2010)	Banks in Germany, Spain, US, UK, France, Italy 1994–2006	Intermediation approach	Inputs: • fixed assets • labour • borrowed funds Outputs: • deposits • customer credits • net fee & commission income				DEA Tobit regression analysis DEA-Solver program	Results show that French and Spanish banks are more efficient, while other countries' banks are less efficient.
Ong, Lim & Teh (2011)	9 domestic banks and 12 foreign banks in Malaysia 2002–2009	Intermediation approach VRS Output-oriented	Inputs: • deposits • fixed assets Outputs: • loans • investments				DEA Tobit regression analysis	Foreign banks are less efficient than domestic banks, implying that domestic banks are more cost-effective.

Authors	Sample/period	Approach	Inputs/outputs	Independent variables	Dependent variables	Control variables	Analytical approach	Findings
Kusuma & Ayumardani (2016)	11 Islamic banks in Indonesia 2010–2014			CG efficiency Bank size	ROA	Bank size	DEA to calculate CG efficiency Paired samples test Regression analysis	(+) CG efficiency
Mezzi (2017)	60 banks in 15 countries including GCC countries 2004–2012	Intermediation approach Output-oriented [1] cost-technical efficiency model	Inputs: • staff costs • physical capital • total deposits • income paid to depositors • administrative • expenditure Outputs: • total debt assets (Mourabaha, Ijara) • total assets of participations • (Moudharaba)	BD size BD independence Concentration of ownership SSB size Existence of a central SSB (CSGM)	Efficiency (TE, PTE and scale efficiency (SES).		DEA Regression analysis	(+) BD size (+) BD independence (+) Concentration of ownership (+) Existence of a central SSB
Alqahtani, Mayes & Brown (2017)	80 banks in GCC countries 1999–2012	Intermediation approach Constant returns to scale (CRS)	Inputs: • labour • deposits Outputs: • loans • earning assets				DEA Tobit and truncated estimators with boot-strapping	During the GFC, Islamic banks were more cost efficient than conventional banks.
Řepková (2015)	Commercial banks in Czech Republic 2001–2012	Intermediation approach CRS (CCR) and VRS (BCC)	Inputs: • labour • deposits Outputs:				DEA Panel regression analysis	(+) The level of capitalization, liquidity risk and riskiness of

Authors	Sample/period	Approach	Inputs/outputs	Independent variables	Dependent variables	Control variables	Analytical approach	Findings
			• loans • net interest • income					portfolio. (-) ROA, interest rate and GDP in CCR model. In BCC model, (+) the liquidity risk and riskiness of portfolio, and (-) GDP.
Zeineb and Mensi (2018)	56 IBs in GCC countries 2004–2013			SSB size CEO duality Institutional ownership Private ownership Foreign ownership	Efficiency Z-score	Bank size Loan- deposit Debt-ratio Credit- growth GDP	(DEA)/stochastic frontier analysis (SFA) Seemingly unrelated regressions	(-) SSB size (-) CEO duality (-) Institutional ownership
Hassan et al. (2018)	4 fully fledged IBs in Saudi Arabia 2008–2016	Intermediation approach Output-oriented approach CRS model VRS model	Inputs: • deposits • assets • capital Outputs: • investments • advances • income		Efficiency Technical and pure technical efficiency		DEA	
Khokhar et al. (2019)	63 banks (21 Islamic and 42 conventional) in GCC countries 2010–2016		Inputs: • deposits • assets • capital Outputs:		Efficiency		DEA	Islamic banking is as efficient as or even better than conventional

Authors	Sample/period	Approach	Inputs/outputs	Independent variables	Dependent variables	Control variables	Analytical approach	Findings
			• investment • advances • income					banking.
Alexakis et al. (2019)	IB & CB in GCC countries 2006–2012	Intermediation approach Meta-frontier DEA	Inputs: • deposits and short-term funding • fixed assets • general and administration expenses • equity Outputs: • total loans • other earning assets		Efficiency i)cost performance ii)revenue performance iii)profit performance		DEA, SFA	Islamic banks are worse than conventional ones on cost and profit performance, but on par with them on revenue performance.
Banna & Alam (2020)	153 IB of 32 countries 2011–2017	Intermediation approach VRS input-oriented (cost minimisation) model	Inputs: • short-term funding • deposits and staff expenses • fixed assets Outputs: • earning assets • loans		Efficiency		DEA Double bootstrapping regression	As a result of the GFC, Islamic banks' efficiency trends have been inconsistent in most countries.

Source: Researcher's construction.

Much research stresses the importance of efficiency in gaining a competitive advantage and survival (Karimzadeh 2012). Researchers have identified banking efficiency as extremely important for economic expansion, since any lack of efficiency growth will undermine the nation's economy (Adeabah, Gyeke-Dako & Andoh 2019; Mezzi 2017). Research has also identified that such performance rests on good CG. If stakeholders are not considered, especially in IBs, then the service is not seen as effective and the balance needed for improved productivity is lost. It is argued that this is one of IBs' strengths, given their foundation rests on ethical standards. The link between good CG and efficiency is at the heart of this (Al-Hussain & Johnson 2009). Researchers have also stressed the importance of an effective legal framework to ensure good CG (Abdel-Baki & Sciabolazza 2014). In the same vein, with reference to IBs, important research such as that undertaken by Mollah and Zaman (2015) looking at the role of SSBs and comparing them to conventional banks, has supported the belief in the power of SSBs to improve efficiency. Other researchers such as Mollah et al. (2017) have noted the importance of well-organised CG mechanisms in improving performance. In contrast, some research has identified that board size is not crucial to performance (Ramdani & Witteloosuijn 2009). Moreover, the governance structure in IBs plays a crucial role in risk-taking as well as efficiency. Still, such an argument appears to narrow the scope of vision and neglect the fact that, in the banking industry, different factors affect efficiency, and focusing solely on one is not acceptable. In this context, management cannot be ignored as management efficiency directly affects efficiency in banking as it is responsible for making business decisions based on perceived risks. If management makes the wrong decision, the bank may be declared bankrupt.

Another recent systematic literature review on Shariah governance mechanisms and firm performance in Islamic banking by Nomran and Haron (2020a) highlighted a few studies that investigate the impact of Shariah governance on efficiency; these are presented below.

Kusuma and Ayumardani (2016) analysed the efficiency of corporate governance (as an independent variable) and its impacts on Indonesian IBs (ROA) using quarterly data for the period between 2010 and 2014. They used a measurement of CG efficiency consisting of three variables: board size, board commissioner size and SSB size. Data Envelopment Analysis (DEA) was employed to measure CG efficiency, while regression analysis was

used to analyse the relationship between CG and IB performance. The study found that the efficiency level of CG of Indonesian IBs improved significantly during the study period. Additionally, it was found that CG efficiency significantly affects IB performance.

Nawaz (2019) examined the effect of the intellectual coefficient of IC (VAIC), human capital efficiency, structural capital efficiency, capital employed efficiency and Shariah governance, as measured by SSB size, on the performance of 47 IBs in the GCC region over the period 2005–2010. The study took into consideration the pre-crisis (2005–2007) and post-crisis (2009–2010) periods. The findings indicate that higher IC efficiency helps IBs to improve their performance (ROA and Tobin's Q) during both before- and after-crisis periods. The study concluded that the knowledge resource (i.e. IC) is the main line of defence for IBs against negative shocks. Finally, the study asserted that Shariah governance alone may fall short in explaining the growth trends in the Islamic finance industry.

A few years ago, the study by Mezzi (2017) examined the impact of CG mechanisms (as an independent variable) on the performance of IBs by employing efficiency as the performance measurement. The study found a positive and significant impact of board director size, board director independence and the existence of centralised Shariah governance model on the efficiency of IBs. A positive and significant (though weak) relationship was also found between concentration of ownership and the efficiency of IBs.

Zeineb and Mensi (2018) examined the effect of corporate governance mechanisms (as an independent variable) on efficiency and risk of 56 IBs in GCC countries during the period 2004–2013. They included five corporate governance variables: SSB size, CEO duality, institutional, private and foreign ownership. The findings indicated that implementing rigorous corporate governance structures correlate with higher efficiency levels. Moreover, it was found that the governance structure of IBs allows them to take greater risk to achieve a high efficiency level. Further, the findings show that IBs' efficiency and risk are positively related.

A significant oversight in many studies is the lack of any inclusion in their calculations of Islamic principles such as *Zakat*. A drawback of using only ROA, ROE and Tobin's Q

as performance indicators for IBs is that these indicators do not capture all important expectations on such banks. The most important of these is that they adhere to Islamic principles and practices in their finance/banking operations. One of the main purposes of installing an SSB is to oversee how those principles and practices have been applied in banking decision-making and to ensure practices comply with Islamic law. The failure of much research to consider such expectations may be important in the lack of consensus on how IB performance is measured.

To overcome this failure to acknowledge traditional measurements, Yusuf and Derus (2013), Nomran and Haron (2019) and most recently Nomran and Haron (2021) have identified '*Zakat*' as a performance measure that can serve as a proxy for the expected performance of IBs or their compliance with Islamic principles. Thus, in addition to conventional performance indicators, this study uses the Shariah approach of the *Zakat* ratio, computed by dividing *Zakat* by the net total assets, as recommended by Ibrahim et al. (2004). Laeven and Levine (2009) suggested the use of various proxies to validate findings. In line with Mohammed and Muhammed (2017b) and Nomran and Haron (2019), the current study adopts both Shariah and conventional metrics to measure performance (the dependent variable).

4.6 Hypothesis Development

To answer the research questions, six hypotheses were identified by the researcher based on the literature review. Five hypotheses were derived from the ideal composition of an SSB to fill the gap defined on the base of agency, resource dependence, and stakeholder theories and to address research RQ1, while the sixth hypothesis is related to the moderating effect of BD structure on the relationship between SSB composition and bank performance to fill the gap defined based on the agency theory. It was devised specifically to answer RQ2. The research questions are stated here:

RQ1: To what extent does SSB composition affect banks' performance?

RQ2: Does the BD influence the role of SSBs?

4.6.1 SSB size

From the literature review, it is safe to infer that there are still significant issues regarding the functions of SSBs in IBs that require further investigation. One major issue is the difference in SSB size across IBs. Having three people on the SSB is common for IBs, and this aligns with the AAOIFI (Abdul Rahman & Bukair 2013; Alman 2012). However, there are arguments pointing to the fact that having an SSB with three people on it may affect the performance of the SSB in terms of postponed meetings and difficulties in reaching a quorum (Garas 2010). Further, it is easier for the BD and management to control small SSBs. In contrast, some argue that with larger SSB sizes, the board will have access to more experienced scholars (Hamza 2016). It is also suggested that a large SSB will increase the level of compliance with Shariah regulations (Farook, Hassan & Lanis 2011).

In relation to corporate boards, certain corporate governance studies have suggested that it is better to have a smaller board since this will offer better communication and be more effective (Bonn, Yoshikawa & Phan 2004; Yermack 1996). Some argue that eight or nine is the ideal size for a board (Lipton & Lorsch 1992), while Jensen (1993) argues that the most effective size is either seven or eight. An SSB should not have fewer than three members, which is in line with the AAOIFI approved minimum size (Jaffer 2004). However, researchers such as Rahman and Bukair (2013) suggest that the best SSB size varies from three to seven, though this is yet to be backed by any empirical evidence. This has led to the question of whether one SSB size can be recommended for all IBs across all jurisdictions. To date, few studies have attempted to address this empirically; hence, this study seeks to recommend an appropriate SSB size to ensure good performance in banks.

Large SSBs that comprise scholars from different schools of *Fiqh* with different experience and skills can lead to good interpretations of bank functioning; therefore, bank performance improves (Hamza 2016). Relatively few published empirical studies investigate the impact of SSB size on the performance of IBs; examples include Matoussi and Grassa (2012), Mollah and Zaman (2015) and Nomran, Haron and Hassan (2018). These researchers found that SSB size has a significant impact on how well IBs perform. However, agency theory assumes that a small SSB reduces agency costs and improves harmony between board members (Quttainah, Song & Wu 2013; Yermack 1996). Some

studies on corporate governance suggest that keeping a small corporate board can improve communication and performance (Jensen 1993; Lipton & Lorsch 1992; Yermack 1996). In contrast, resource dependence theory assumes a larger board is better because it enhances effective decision-making and the connections between the external environment and the company (Lückerath-Rovers 2013; Yermack 1996). The lack of consistency in the aforementioned research suggests a need for closer attention to the impact of board size; though any attempt to do so is likely to encounter much debate.

It is often suggested that an ideal board is one that maximises firm performance and market value (Gertner & Kaplan 1996); thus, any board size that improves the performance of the firm is considered worthy (Guest 2019). The board and management will find it easier to control smaller SSBs compared with larger ones. For the desired firm performance, the SSB size in jurisdictions such as the UAE, Kuwait, Malaysia, Nigeria, Bahrain, Jordan, Libya, Palestine, Syria, Saudi Arabia and Oman must have at least three members (Grassa 2015; Safieddine 2009). However, in jurisdictions such as Yemen, SSBs must not be smaller than three or larger than seven professionals, while in jurisdictions such as Iraq, the membership quota is between three and five. Indonesia requires a minimum of two and a maximum of five scholars (Grassa 2015). Consequently, there are no general restrictions on the number of SSB scholars (Abdul Rahman & Bukair 2013), and neither is there one ideal SSB size for all IB jurisdictions (Garas 2010). Regarding the SSB framework in most of the GCC countries, it is recommended the minimum of SSB size should be three members to ensure ability to fulfil the monitoring role efficiently. However, it is suggested the minimum of SSB size should not be less than five members in the UAE.

SSB can be viewed as a mechanism that increases public trust while providing legitimacy for IBs (Mollah and Zaman 2015). Achieving customer and investor attraction tends to improve IB performance. Considering the arguments above, and in line with previous empirical evidence supported by agency theory, stakeholder theory, resource dependence theory and legitimacy theory, it appears that a knowledge gap exists regarding SSB size and its impact on bank performance. In an attempt to move towards a resolution of this issue and fill this gap in our knowledge, the following hypothesis is developed to address the RQ1:

H1: There is a positive relationship between SSB size and bank performance.

4.6.2 SSB expertise

From the viewpoint of resource dependence theory, an organisation has to make connections to its external environment to succeed (Pfeffer & Salancik 2003). Using such a theoretical framework, it can be argued that an organisation's SSB is its key connection with the external environment because the SSB can bring different resources to the organisation. These skills include expertise and knowledge (Francis, Hasan & Wu 2015). These various resources can help improve effective strategic decision-making so that firm performance improves (Francis, Hasan & Wu 2015; Ujunwa 2012). Moreover, to make connections with opportunities in the external environment, resource dependence theory favours expertise and education qualifications (Lückerath-Rovers 2013; Ujunwa 2012).

It is suggested that SSB members who have financial expertise are more effective in their duties than members without this (Abdul Rahman & Bukair 2013). In IBs, Islamic scholars compose the majority of SSB members; some even have accounting, banking, economic or financial expertise (Nomran, Haron & Hassan 2018). It is suggested that where there is a lack of SSB scholars with experience in banking, this will affect their ability to make effective decisions about financial transactions (Ginena 2014). Consequently, many IBs have replaced their entire SSB and demand members who have expert knowledge in Shariah regulations, accounting and finance as this is seen to empower SSBs to improve the business strategies of IBs (Grassa 2016; Matoussi & Grassa 2012). Referring to the GCC countries, it is recommended to appoint SSB members who are experienced and have adequate knowledge of financing in general and Islamic financing in particular. Specifically, some countries in the GCC region specify years of experience; for example, in Bahrain, it is suggested to appoint SSB members who have worked for at least seven years in Shariah-related scholarly pursuits (e.g. teaching, research, issuing *fatwas*, etc.). On the basis of this, there appears to be a gap in the knowledge related to SSB expertise and how they can enhance bank performance. This research fills this gap. Accordingly, and in line to resource dependence theory, the following hypothesis is developed to address RQ1:

H2: There is a positive relationship between SSB expertise and bank performance.

4.6.3 SSB educational level

It has been suggested that board members with a high level of education are better able to deal with new actions (M. K. Hassan et al. 2018). Consequently, it has been posited that the qualifications of each member is a crucial determinant of a board's expertise (Kakabadse et al. 2015). Those qualified members can be considered a strategic resource (Van der Walt et al. 2006). This view is in line with resource dependence theory, which considers the role of the corporate board a resource to the company (Dalton et al. 1998). According to this theory, such board members also enhance their firm's competitiveness and improve its profitability (Gabrielsson & Huse 2005). It is generally accepted that an SSB member with a doctoral degree in a relevant field will understand more about Islamic finance and banking (Abdul Rahman & Bukair 2013; Nomran, Haron & Hassan 2018) than a less educated member. Nevertheless, there are some scholars who do not have any academic qualification or degree whatsoever, even in Shariah-related studies (Bakar 2016). In the SSB framework devised by the governments of GCC countries, it is recommended to appoint SSB members who hold an academic qualification in the field of Shariah and/or *Fiqh al-Muamalat*. Although it is not specified in each country, it is clearly stated in the SSB in Bahrain, Kuwait, and Oman that SSB must hold at least a Bachelor degree in Islamic Shariah, specifically *Fiqh al-Muamalat* from a recognised institution.

Based on the argument above, it appears that there is a knowledge gap regarding SSB scholars' educational level or qualification and its impact on bank performance. This research fills this gap. Accordingly, the following hypothesis is developed based on resource dependence theory to address the RQ1:

H3: There is a positive relationship between SSB members' education levels and bank performance.

4.6.4 SSB cross-membership

Cross-membership, which describes directors sitting on more than one company board at the same time, is one of the most-discussed issues in corporate governance studies (Nomran, Haron & Hassan 2018). According to resource dependence theory, cross-membership enables organisations to make connections with their external environments through the relationships and contacts of their board members. Cross-membership can

enable SSBs to provide important resources for their firms by monitoring external firms and spreading relevant information (Noordin & Kassim 2019). Therefore, cross-membership has been suggested to helpfully inform a firm about other firms' activities and policies (Haniffa & Hudaib 2006). SSBs' cross-membership is a significant aspect of SSB composition (Abdul Rahman & Bukair 2013) because most SSB scholars sit on more than one IB board at the same time (Grassa 2016). It has also been stated that cross-memberships enables SSB members to engage in more debate regarding Shariah regulations of IB practices, which can enhance their knowledge about how to implement Shariah regulations (Farook, Hassan & Lanis 2011). Moreover, the cross-memberships of SSB scholars can improve their efficiency and, consequently, IB performance by combining their experience and knowledge (Grassa 2016).

Considering this argument, it can be concluded that there is a knowledge gap when it comes to the subject of SSB cross-membership in IBs. Therefore, in accordance with resource dependence theory, the following hypothesis is developed to address the RQ1:

H4: There is a positive relationship between SSB cross-membership and bank performance.

4.6.5 SSB reputation

From the standpoint of resource dependency theory, important resources, such as skills, knowledge and information, are made available to the firm by the board, which can boost firm performance (Hillman, Withers & Collins 2009). Apart from the board members' knowledge, they also bring to the firm their reputation (Pfeffer & Salancik 2003) – an essential resource to improving performance. Technically, reputation is part of human capital – an essential resource that plays a huge part in improving the performance of companies; members of the board bring that to companies as well as their education and experience (Clarysse, Knockaert & Lockett 2007). Therefore, there is a link between the performance of companies and reputable directors (Hillman, Withers & Collins 2009). In the same vein, there is a link between the performance of IBs and reputable SSB members. Researchers believe that reputable SSB members have a good understanding of the current impacts of Islamic banking as reputation is a representation of industry knowledge (Farook, Hassan & Lanis 2011).

SSB members offer their experience and knowledge to their banks, including their reputation. In addition, the presence of reputable members can help increase an IB's credibility vis-à-vis its customers and stakeholders. In this case, many authors have stated that the conformity of a bank's products and services with the principles of Shariah and the ethical convictions of its clients strengthen their satisfaction and trust, which is crucial when it comes to sustaining the IB (Amin et al. 2013). Since the SSB is the only body that ensure compliance, the presence of reputable members is believed to be an important factor in attracting depositors and customers. Consequently, this can improve the IB's financial performance and minimise liquidity risk (Farook, Hassan & Lanis 2011; Nomran, Haron & Hassan 2018). Each SSB framework in the GCC stipulates appointing members who are recognised for their honesty, integrity and good reputation in all their financial dealings, and have had no convictions for crime or felony. In light of the argument above, it seems that there is a knowledge gap about SSB reputation. Thus, it is expected that there is a positive relationship between the financial performance of the bank and the presence of reputable members on the SSB. Based on resource dependence theory, we posit the following hypothesis to address the RQ1:

H5: There is a positive relationship between SSB reputation and bank performance.

4.6.6 The moderating role of the BD

While acknowledging that monitoring, accountability and control mechanisms already exist whenever a BD fulfils its key duties, Mollah and Zaman (2015) argue that the existence of an SSB may nevertheless enhance this by adding a new layer of monitoring and supervising and the imposing of constraints on operations. Moreover, SSBs might protect the interests of depositors by preventing the BD and management from becoming entangled in major risk-taking activities and aggressive financing, which can compromise bank performance (Mollah & Zaman 2015). As mentioned above, SSB members are expected to fulfil their key duties independently of the BD. SSBs also have the authority to attend board meetings to deliberate over discussions involving religious aspects and alignment with Islamic financial principles (AAOIFI 2015). However, it has been argued that such important role of an SSB has in practice been challenged by the BD, who are generally all too eager to push SSBs to accept BD policies and directions, undermining the functionality and role of SSBs. The current study takes these considerations into account and provides an overview of the theoretical debate, with an aim to verify a)

whether the makeup and structure of the BD can influence SSB decisions related to Shariah issues and b) whether this leads to inconsistent bank performance in terms of profitability and efficiency.

Boards and their size have attracted the attention of scholars over the last decade as they are seen to play a key role in banks' success and growth. The composition of a BD varies from company to company in terms of structure (Ghaffar 2014), which includes notions of board size, board independence and the powers vested in the chairperson of the board. Board size refers to the number of directors on the board who are elected by shareholders (Assenga, Aly & Hussainey 2018). It has been argued that a larger board is less efficient than a smaller one. A large board may be more prone to contain free riders, resulting in potentially serious agency problems (Bukhari 2014). According to Ahmad and Omar (2016), a smaller board takes more responsibility for monitoring the company's operations. Ladipo and Nestor (2009) found that smaller boards were in fact more efficient in enhancing bank value. On this issue, we argue that a larger board could exert greater pressure on and control over an SSB.

Board independence reflects the balance between executive and non-executive directors (Assenga, Aly & Hussainey 2018). Agency theory assumes that many independent outside directors on the BD enhances the board's independence and effectively separates its monitoring roles (Donaldson & Davis 1991). The independence of the board is necessary in implementing effective internal control systems, which ultimately upgrades efficiency and performance. According to Dalton et al. (1998), the independence of directors is an essential requirement for board effectiveness. A comprehensive study carried out nearly 20 years ago by Hossain, Prevost and Rao (2001) confirmed that having more independent members on a board, results in better performance through efficient monitoring and advisory functions. Based on the above discussion, we find that SSB members could make decisions without pressure if most board directors are independent.

A chairperson can be appointed from outside or inside the firm; for example, from among former CEOs or directors (Mertzanis, Basuony & Mohamed 2019). CEO duality occurs when the chairperson of the board also holds the CEO position (Dalton et al. 1998). According to agency theory, CEO duality weakens the monitoring powers of the board and increases internal governance costs (Fama & Jensen 1983; Lipton & Lorsch 1992). Malkawi and Pillai (2014) (2013) and Al-Matari, Al-Swidi & Fadzil (2012) proved there

is a negative relationship between CEO duality and firm performance, as duality enables CEOs to gain sufficient controlling power and use their authority to advance their own interests. Boyd and De Nicolò (2009) asserted that duality provides more power to a CEO if he/she acts as chairperson of the board. Therefore, a company can reduce conflicts of interest between shareholders and management by separating the roles of management and control. It can be argued that when a CEO and chairperson of the board are separate, each will have less influence on SSBs.

In the SSB frameworks devised in the GCC countries, it is the responsibility of the management to approve the Shariah governance framework for the bank and monitor its effectiveness. Management is required to rely entirely on the SSB for all Shariah resolutions and opinions, and it must present all contracts, operations, and transactions to the SSB for its Shariah rulings. The SSB should ensure that its resolutions are the result of well articulated discussions. Based on the above discussion, there seems to be a knowledge gap that needs to be addressed here. In line with previous empirical evidence supported by agency theory, the following hypothesis is proposed to address RQ2:

H6: The relationship between SSB composition and bank performance is moderated by the structure of the BD.

4.7 Development of theoretical framework of the study

This section explains the development of the theoretical framework of this study. Figure 4.3 illustrates this framework showing the explanatory variables include the SSB composition (SSB size, SSB expertise, SSB educational level, SSB cross-membership, and SSB reputation) and BD structure (board size, board independence, and CEO duality). The independent variables are ‘bank performance’ uses ROA, ROE, Tobin’s Q, ZOE, and a managerial performance proxy technical efficiency, which will be estimated using data envelopment analysis (DEA). The control variables are bank size, bank age and leverage and these can all have a significant effect on the explanatory variables.

Grassa and Matoussi (2014a), Nomran, Haron and Hassan (2018), Nomran and Haron (2019), and Mezzi (2017) suggested that SSB composition including size, expertise, education level, cross-membership, and reputation are good tools to measure bank performance in the GCC countries. Meanwhile Farook et al. (2011), Rahman and Bukair (2013), Abdul Rahman and Bukair (2013), Farook, Hassan and Lanis (2011), Mollah and

Zaman (2015) and Nomran and Haron (2019) advocated utilising an SSB-index to examine how the BD's structure moderated the relationship between SSBs and bank performance, as it considers the impact of other important SSB characteristics. Echoing this, Mollah and Zaman (2015) and Nomran and Haron (2019) recommended the use of a BD index to investigate such a moderating effect.

Bank performance can be measured by a variety of methods. Grassa and Matoussi (2014a), Nomran, Haron and Hassan (2018), Nomran and Haron (2019), and Mezzi (2017) used accounting-based measures (return on assets (ROA) and return on equity (ROE), and a market-based measure (Tobin's Q) to investigate the impact of SSB composition. As well, Alqahtani, Mayes and Brown (2017), Banna et al. (2019), and Mezzi (2017) used the Data Envelopment Analysis (DEA) to estimate efficiency index. Looking at the Islamic bank perspective, Mohammed and Muhammed (2017) suggested that it is more appropriate to measure the performance of IBs using Zakat based on Shariah precepts. In contrast to previous studies, the current study investigates not one single SSB mechanism on one single bank performance but a suite of mechanisms which have been demonstrated as important. They capture different characteristics of bank performance given that most measurements only looked at efficiency of banks' performance. So, the literature suggests that SSB composition and the moderating effect of the BD's structure on the relationship between SSBs and bank performance can all be studied to examine their impact on bank performance through the agency, resource dependence, stakeholder and legitimacy theories.

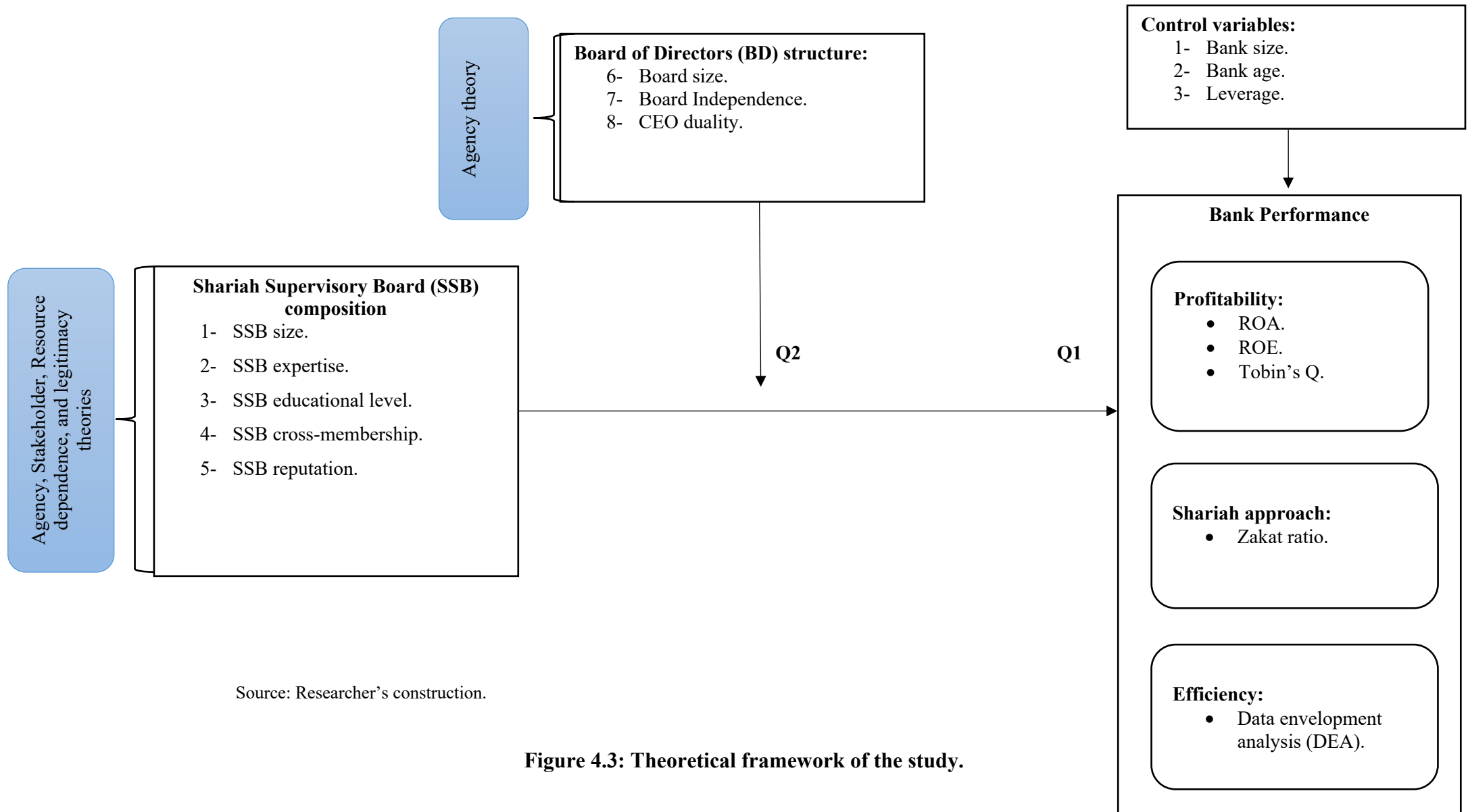


Figure 4.3: Theoretical framework of the study.

Table 4.4: Previous Studies of the Effect of SSBs on Bank Performance

Authors	Country	Sample/period	Independent variables	Dependent variables	Control variables	Analytical approach	Theoretical framework	Findings
Almutairi and Quttainah (2017)	15 countries from Middle East, Asian countries, Bangladesh and Pakistan	82 IBs 1993–2014	SSB size Outside members on SSB SSB cross-membership SSB membership on IFBS SSB expertise SSB education	ROA ROE Tobin's Q	Size, growth, loan ratio, change cash flow, allow, risk assets, LLP, Beglla, change loan, NPL, IndNPL	t-test Multivariate data analysis Clustered regression Two-stage least-squares regression	Agency theory Stakeholder theory	(+) SSB size (+) Outside members on SSB (+) SSB cross-membership (+) SSB membership on IFBS (+) SSB education
Quttainah et al. (2017)	15 countries (Bahrain, Bangladesh, Egypt, Indonesia, Iran, Jordan, Kuwait, Lebanon, Malaysia, Pakistan, Qatar, Saudi Arabia, Sudan, Turkey, and the UAE)	34 IBs	SSB size SSB interlocks BD independence BD interlocks SSB education	ROA ROE Asset growth	EIUCR, Assets (log), LLP, Middle East, CSRS	OLS cluster robust standard-error estimation Two-stage-least squares regression (including instrumental variable) to address endogeneity	Agency theory Resource dependence theory	(+) SSB size (+) SSB interlocks (+) BD independence (+) BD interlocks (+) SSB education

Authors	Country	Sample/period	Independent variables	Dependent variables	Control variables	Analytical approach	Theoretical framework	Findings
Nomran et al (2017)	Malaysia and Indonesia	25 banks 2007–2015	SSB size SSB cross-membership SSB educational qualification SSB reputation SSB experience SSB composition change	ROA ROE	Bank size Bank age	Random-effects GLS	Agency theory Stewardship theory Resource dependence theory	(+) SSB size (+) SSB cross-membership (-) SSB reputation (-) SSB composition change
Ajili and Bouri (2018)	GCC countries	44 IBs 2010–2014	CG score BD score AC score SSB score (existence of SSB, SSB size, SSB expertise, SSB education)	ROA ROE	Bank size Bank age Leverage	Random effect (GLS) Durbin–Wu–Hausman test to check endogeneity	Agency theory Stakeholder theory	No significant impact found
Farag et al. (2018)	13 countries (Bahrain, Bangladesh, Indonesia, Jordan, Kuwait, Malaysia, Pakistan, Qatar, Saudi Arabia, Syria, Sudan, UAE and the UK)	90 IBs 2006–2014	BD size BD independence SSB size	ROA ROE ROOA (Return on operating assets) ROOE (Return on operating equity)		Fixed effects model GMM	Agency theory Resource dependence theory Legitimacy theory	(+) BD size (+) SSB size

Authors	Country	Sample/period	Independent variables	Dependent variables	Control variables	Analytical approach	Theoretical framework	Findings
Hakimi et al. (2018)	Bahrain	13 IBs 2005–2011	BD size BD duality Independent BD Institutional administrators on BD SSB size SSB expertise	ROA ROE	Bank size Leverage	GLS RE GMM	Agency theory	(+) BD size (+) BD duality (+) SSB size
Zeineb and Mensi (2018)	GCC countries	56 IBs 2004–2013.	SSB size CEO duality Institutional ownership Private ownership Foreign ownership	Efficiency Z-score	Bank size Loan deposit Debt ratio Credit growth GDP	(DEA)/stochastic frontier analysis (SFA) Seemingly unrelated regressions	Agency theory	(-) SSB size (-) CEO duality (-) Institutional ownership
Alsartawi (2019)	GCC countries	48 IBs 2013–2017	SSB independence SSB frequency of meetings	ROA	Bank size Bank age Leverage Institutional investor, auditor type	Multiple regression analysis.	Agency theory Stewardship theory	(-) SSB independence (-) SSB frequency of meetings

Authors	Country	Sample/period	Independent variables	Dependent variables	Control variables	Analytical approach	Theoretical framework	Findings
Nomran and Haron (2020b)	23 countries.	113 IBs 2007–2015	SSB size	ROA ROE ROIAE ROIAA	Bank size Bank age GDP Inflation rate	GMM	Agency theory Resource dependence theory Stewardship theory	(+) small SSB size
Baklouti (2020)	12 countries	42 IBs 2011–2018	SSB size SSB cross-membership SSB expertise SSB reputation SSB meetings Proportion of women on SSB	ROA ROE	Bank size Bank age GDP Proportion of Muslim population	GLS	Resource dependence theory Upper echelons theory	(+) large SSB size (-) SSB cross-membership (not sig) SSB expertise (not sig) SSB reputation (+) SSB meetings (not sig) proportion of women on SSB

Source: Adapted from Nomran and Haron (2020a) and modified by the researcher.

4.8 Chapter Summary

This chapter has provided a detailed analysis of the literature published on conventional corporate governance, Shariah governance and the impact of the SSB on bank performance. It has highlighted and explained the different perspectives on corporate governance as it is carried out in conventional banks and the Islamic banks in the GCC countries, and how such governance functions. The literature review investigated and compared Shariah and conventional corporate governance, various corporate governance models adopted in different parts of the world and corporate governance mechanisms. In the process, the literature review identified the merits and limitations of the reviewed concepts, approaches and issues, and identified gaps that this study seeks to fill. This chapter also discussed previous empirical studies of the impact of SSBs on bank performance. It was brought to the researcher's attention that these previous studies have been limited in scope and restricted to investigation of limited variables related to SSB and bank performance. Hence, there is a gap in the literature that requires further empirical investigation and this led to developing hypotheses in this chapter. The next chapter presents the research methodology used to conduct the study.

Chapter 5: Research Methodology

5.1 Overview

The previous chapter presented a literature review on the impact of Shariah governance on bank performance. The review indicated a notable increase in the amount of IBs following the 2008 GFC, with a focus on SSBs and bank performance, the use of profitability as a major indicator of performance and the use of individual countries as case studies. However, SSBs as considered in the research were very limited in scope – treated as homogenous units that all performed similarly and applied Shariah regulations uniformly and without influence. The research also focused far too strongly on profitability as the measure of success. Consequently, the literature review suggested that current research has significant limitations. The focus on profitability and the limited number of variables and countries explored neglects traditional Shariah measurement of performance, which would involve a wide range of variables to obtain a broader, more accurate view of the impact of SSBs on bank performance.

This study considers a broader range of variables; namely, Shariah measurement, efficiency, diversity of SSBs and the potential moderating influence of the structure of the BD. As such, the aim of the current study is to move away from a narrow, simplistic understanding of the relationship between SSBs and bank performance. Hence, the methodology in this chapter was devised to achieve a broader vision. According to Saunders et al. (2009), a research strategy should provide a general plan for answering the questions systematically, including the data collection method and using the results to support valid and verified conclusions. This chapter is structured as follows. Section 5.2 presents the research method. Section 5.3 discusses empirical research models. Section 5.4 presents the estimation of the study models. Section 5.5 introduces the dependent, independent and control variables. Section 5.6 describes the data sources and data collection. Section 5.7 explains the sample selection and justifies the sampling strategy. Section 5.8 describes the analytical procedures employed for the regression analysis. Finally, Section 5.9 summarises the chapter.

5.2 Research Method

The literature review identified that most studies into IBs are based on a positivist paradigm. According to Creswell and Creswell (2018), positivism is a scientific philosophy that contends that application of sensory experience to collect data, together with logical and

mathematical manipulation of the data, provides an authoritative source of knowledge. In the positivists' view, reality is stable and can be observed from a distance, and an objective description of the phenomenon under study is given with minimal external interference (Creswell & Creswell 2018). Positivistic models involve manipulating one independent variable to establish its relationships with other dependent variables in the social world. The positivist nature of this study is noted as its aim is to explain existing practices and focus on secondary data. This method is appropriate for studies that aim to generalise their findings to a wider population or context, as does the current study.

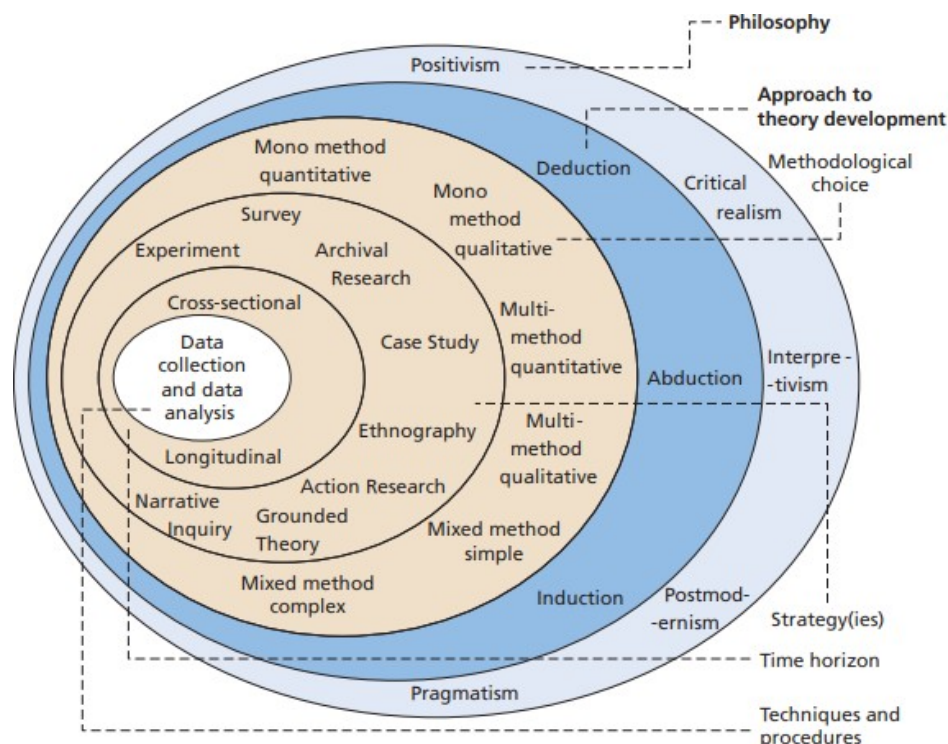
The basis of this is an ontology where individuals' conception of reality is objective. This means that evaluations are made independent of social actions. This is a common feature of quantitative research. In other words, the perspective on which the research is based rests on a belief that social phenomena have an existence that is 'independent of social actors'. Creswell and Creswell (2018) explained quantitative approaches as employing statistical, tabulated or numeric and other non-descriptive approaches for a given topic. Thus, quantitative approaches refer to research centred on the methodological principles of positivism and neo-positivism.

In contrast, a constructivist ontological perspective perceives that it is through acknowledging social phenomena and interactions that we create our reality. This is linked to qualitative approaches to research (Creswell & Creswell 2018; Lune & Berg 2017; Saunders, Lewis & Thornhill 2019). As Lune and Berg (2017) explained, it is the social phenomena that are produced through social interaction that provide knowledge, and because this interaction is constantly changing, then so is knowledge. Each of these positions creates an epistemology based on assumptions about human knowledge and how we obtain it. These assumptions naturally determine how we undertake our research. While these approaches are the most common, more recently, a combination of the two has emerged, known as a mixed method. A mixed method refers to an incorporation of elements of both quantitative and qualitative approaches, and as such, uses a combination of epistemological and ontological frameworks. The basic assumption of this methodology is that such integration provides insights beyond those provided by either qualitative or quantitative data alone. The outcome is the presentation of a fuller explanation of a problem (Creswell & Creswell 2018).

According to Creswell and Creswell (2018), each of these methods has its strengths and weaknesses. As noted, qualitative research is conducted based on non-numerical

approaches, whereby the three steps of data collection, analysis and presentation of findings involve descriptive methods (Creswell & Creswell 2018; Lune & Berg 2017). Lune and Berg (2017) argued that qualitative research methods involve collecting experiential information from the study subjects with the aim of establishing social relationships between certain phenomena. Lune and Berg (2017) further pointed out that qualitative methods are flexible, and useful for studying social behaviour and attitudes. However, in most cases, time and cost constraints of qualitative research limit its application to contexts that require a small sample population.

In contrast, since quantitative methods permit relatively large study samples and longitudinal data, the findings of such studies have a greater capacity for generalisation (Lune & Berg 2017). Further, quantitative methods overcome some of the major weaknesses common in research such as lack of transparency and reliability, high costs involved in terms of time, potential for researcher bias and difficulty in recruiting participants for the study (Lune & Berg 2017). Subsequently, and in line with Ajili and Bouri (2018b) and Nomran, Haron and Hassan (2018), who undertook similar studies to the current one, this thesis will use the quantitative approach since the study of the impact of SSB composition on bank performance enables the researcher to extract numerical financial data from a large sample and longitudinal data. Consequently, the rules that drive sample selection, data collection methods and analysis are based on the objective ontological position. Figure 5.1 shows the relationship between these elements (Saunders, Lewis & Thornhill 2019).



Source: Saunders, Lewis & Thornhill (2019)

Figure 5.1: The research onion.

The above figure represents the stages involved in developing a research study and was developed by Saunders, Lewis and Thornhill (2019). Basically, the onion layers describe the stages of a research process in greater detail. This provides a useful framework for designing a research methodology. The value of this approach lies in its adaptability for almost any type of research methodology and its flexibility in application (Bryman, 2012). Saunders, Lewis and Thornhill (2019) noted that using the research onion one has to go from the outer layers to the inner layers. The onion's layers describe more detail about each stage of the process (Saunders, Lewis & Thornhill 2019). According to these same authors, the research process is like unwrapping an onion layer by layer. To see the inner layer, the outer one must be removed first. It is important to begin with one step before moving on to the next. This applies to achieving a goal in research. In order to appropriately address all methodological aspects of this study, the research onion (Figure 5.1 above) will be used as a guide, as it provides a well-defined framework for the entire research process. To complete the research process, a researcher must peel away several layers of the onion. In this chapter, we take a closer look at the layers, data collection and analysis methods.

5.3 Empirical Research Models

Following the extensive literature review pertaining to Shariah governance, corporate governance and bank performance, the current study utilises two models to answer the research questions. To ensure a wider angle of vision, a number of variables with special characteristics were incorporated into the two models. This is a significant feature of our approach, justified for several reasons. The variables added to the first model allowed for the extension of the angle of vision, which is a main feature of this study. This addition provided a comprehensive specification and additionally allowed the research to test their contribution and dominance (individually) on bank performance. Five independent variables were identified: SSB composition (SSB size, SSB educational level, SSB cross- membership and SSB reputation). The moderating role of BD structure includes board size, board independence and CEO duality.

In addition to the independent variables, the study included bank characteristics (bank size, bank age and leverage) as control variables. These provided an appropriate and more realistic environment for gathering reliable empirical evidence. Further, the inclusion of control variables minimised the risk of endogeneity. Both models included variables that had not previously been tested in the GCC region or had undergone only limited testing in developing countries. Finally, the two synthesised models were tested using updated data from major developing countries, including Bahrain, Kuwait, Qatar, Saudi Arabia and the UAE. The broadening of the focus was believed to enhance the aim of providing more precise and reliable results for useful, practical policy analysis.

A range of models have been used by researchers to examine the relationship between SSBs and bank performance (Ajili & Bouri 2018b; Baklouti 2020; Hassan, Rizwan & Sohail 2017; Mollah & Zaman 2015), as identified in Table 5.1.

Table 5.1: Models Exploring the Relationship Between SSBs and Bank Performance

Authors/Year	Model Explanation
Mollah and Zaman (2015)	Dependent variables: Bank Performance – ROIAE, ROIAA, ROAE, ROAA, Tobin's Q. Explanatory variables: Examined Board of Directors mechanisms (Board of Directors size, Board independence, CEO duality, CEO recruited internally) and only SSB size.
Hassan, Rizwan and Sohail (2017)	Dependent variables: Bank Performance – Capital Adequacy, Assets Quality, Management Quality, Earning (ROA, ROE) and Liquidity. Explanatory variables: Examined only Board size, Board independence, and SSB size. Only control for bank size.
Ajili and Bouri (2018b)	Dependent variables: Bank Performance - ROA and ROE. Explanatory variables: Examined the impact of the overall CG- index, and the impact of the sub-indices BOD-index, AC-index, SSB-index.
Baklouti (2020)	Dependent variables: Bank Performance - ROA and ROE. Explanatory variables Examined the impact of SSB composition (SSB size, SSB, cross-membership, SSB expertise, SSB reputation, SSB meetings, Proportion of women on SSB).

Source: Researcher's construction.

A close analysis of these models identified the narrowness of much published research. Such narrowness has created a very simplistic view of the influence of SSBs on bank performance. The narrowness was identified in the use of a general governance index and the provision of what can be regarded as a generalised conclusion about governance. Such a limitation was the result of a focus on SSB mechanisms as separate, or at least a core, corporate governance theme. Ensuring more meaningful conclusions demanded greater consideration of the impact of individual governance mechanisms; for example, the roles of the BD and the SSB in IB performance. Further limitations were noted in the studies that only focused on SSB size, ignoring other important SSB characteristics such as SSB expertise, SSB educational level, SSB cross- membership and SSB reputation. Other studies failed to address the issue of endogeneity. Studies that narrowed their vision to bank size as a control variable should have included a broader range of variables such as bank age and leverage if they were to provide less simplistic analysis. Yet more studies only used a single bank performance measurement such as ROA or ROE to measure IB performance but neglected to measure it using the Shariah approach and a market-based measurement or efficiency. Finally, it must be noted that all of these issues compromised the generalisability of much of the published research on this issue as studies only focused on IBs in one country, for instance Indonesia or Malaysia and/or on only one variable. Consequently, the findings could not be generalised to banks in different countries, seriously limiting the generalisability of the findings.

Table 5.2: Most Appropriate Models

Authors/Year	Model Explanation
Grassa and Matoussi (2014a)	Dependent variables: Bank Performance - ROA and ROE. Explanatory variables - Examined number of Board of director's mechanisms and Shariah Board variables (size, expertise, cross membership).
Nomran, Haron and Hassan (2018)	Dependent variables: Bank performance - ROA, ROE, ROIAE Explanatory variables: Examined the impact of SSB composition (SSB size, SSB cross membership, SSB educational qualification, SSB reputation, SSB expertise, Change in the SSB composition. Control variables; bank size and age.
Nomran and Haron (2019)	Dependent variables: Bank performance - ROA, ZOE. Explanatory variables: Examined the impact of SSB composition (SSB size, SSB cross membership, SSB educational qualification, SSB reputation, SSB expertise, SSB reputation). Also, examine the interaction between SSB and Board of Directors.
Alqahtani, Mayes and Brown (2017)	Dependent variables: Bank performance – Cost Efficiency, Profit Efficiency (Using DEA method). Explanatory variables:
Banna et al. (2019)	Dependent variables: Firm Efficiency – managerial ability (Using DEA method). Explanatory variables: Examined firm size, age, regulated, financial intermediation, Legal status, Outreach. Dependent variable: Firm performance – ROA. Explanatory variables: managerial ability, firm size, loan loss rate, GDP growth, inflation rate, unemployment.
Mezzi (2017)	Dependent variables: Bank performance - Efficiency (Using DEA model). Explanatory variables: Examined the impact of Board size, independent directors, ownership structure, SSB size, existence of a central SSB. Control variables; bank size, debt financing intensity, ROA, quality management, risk of failure, financial crisis, economic growth.

Source: Researcher's construction.

Table 5.2 presents study models which have been used in previous studies similar to the current study with Shariah governance and performance. Those studies which mainly used market-based accounting information are used for formulating study models for the current study because of their simplicity, clarity, effectiveness, and connection to market capitalisation of a given entity. The current study extends models used in previous studies by incorporating other bank performance measurements such as Tobin's Q, ZOE and DEA, and by incorporating the moderating role of the BD. In this study, a limited number of variables are used since they are easy to observe and calculate, and because they have also been thoroughly examined (Grassa 2016; Nomran & Haron 2019; Nomran, Haron & Hassan 2018). In line with the selected theories – namely, agency theory, stakeholder theory and resource dependence theory – and aligning with the models proposed by Grassa and Matoussi (2014a), Nomran, Haron and Hassan (2018), Nomran and Haron (2019),

Alqahtani, Mayes and Brown (2017), Banna et al. (2019) and Mezzi (2017), we developed the following study models to test our hypotheses.

Model 5.1: To examine *H1, H2, H3, H4* and *H5*, we developed the following study model:

$$perf = \beta_0 + \beta_1 SSBS + \beta_2 SSBEP + \beta_3 SSBED + \beta_4 SSBC + \beta_5 SSBR + \sum_{j=1}^n \alpha_j x_j + \varepsilon$$

where ‘*perf*’ refers to the *dependent variable*, bank performance, measured using return on assets (ROA), return on equity (ROE), Tobin’s Q, *Zakat* ratio, and technical efficiency measured using DEA. β_0 is the intercept of the regression model, and β_1 to β_5 are the estimated coefficients for the main testing variables. The *independent variables* included SSBS (SSB size), SSBEP (SSB experience), SSBED (SSB educational level), SSBC (SSB cross-membership) and SSBR (SSB reputation). α_j is the vector of estimated coefficients for the control variables, and ε represents the error term.

Model 5.2: To examine *H6* on the interactions, we developed the following study model:

$$perf = \beta_0 + \beta_1 SSBS + \beta_2 SSBEP + \beta_3 SSBED + \beta_4 SSBC + \beta_5 SSBR + \beta_6 SSB_index + \beta_7 BD_index + \beta_8 SSB_index * BD_index + \sum_{j=1}^n \alpha_j x_j + \varepsilon$$

where ‘*perf*’ refers to the *dependent variable*, bank performance, measured using return on assets (ROA), return on equity (ROE), Tobin’s Q, *Zakat* ratio, and technical efficiency measured using DEA. β_0 is the intercept of the regression model, and β_1 to β_5 are the estimated coefficients for the main testing variables. The interaction between the composition of the SSB (SSB size, SSB educational level, SSB cross-membership and SSB reputation) = β_6 SSB_index and β_7 BD_index (board size, board independence, CEO duality) is β_8 SSB_index * BD_index. α_j is the vector of estimated coefficients for the control variables, and ε represents the error term.

5.4 Estimation of the Study Models

This study uses two models (Model 5.1 and Model 5.2) to investigate the impact of SSB composition and BD structure on bank performance, measured using ROA, ROE, Tobin’s Q, *Zakat* ratio and DEA. Multivariate pooled-ordinary least squares (OLS) regression analyses and Tobit regression are used to estimate the two models. OLS regression has been used to estimate the two models by substituting ROA, ROE, Tobin’s Q and *Zakat* ratio as the dependent variable. Tobit regression is used to re-estimate the two models by substituting

DEA as the estimated relative efficiency index, since the DEA index is limited to 0 and 1. Tobit regression analysis is more suitable than OLS, which cannot handle the limited nature of the dependent variable (DEA estimated efficiency score) (Alqahtani, Mayes & Brown 2017; Banna et al. 2019; Mezzi 2017). Previous studies have suggested that generalised linear models may not be appropriate for DEA estimated efficiency scores (Alqahtani, Mayes & Brown 2017; Banna & Alam 2020; Zeineb & Mensi 2018) because of their limited nature.

5.5 Measurement of Variables

This section presents definitions and measurements of the dependent and independent variables used in this study. The dependent variable ‘bank performance’ uses ROA, ROE, Tobin’s Q, ZOE, and a managerial performance proxy technical efficiency, which will be estimated using data envelopment analysis (DEA). The explanatory variables include the SSB, the BD and a number of control variables (variables exerting a significant effect on the dependent variables). Table 5.3 contains a full description of all the variables used in this study’s models. The following subsections discuss each variable and its measurement.

Table 5.3: Operational Definitions of Model Variables

Variable	Label	Measurement	Reference
Dependent variables (perf)			
Return on assets	ROA	Net income/ average total assets.	(Mollah & Zaman 2015)
Return on equity	ROE	Net income/ average total equity.	(Mollah & Zaman 2015)
Tobin’s Q	Tobin’s Q	(Market value of equity + book value of liabilities)/ book value of assets.	(Mollah & Zaman 2015)
<i>Zakat</i> ratio			
<i>Zakat</i> on equity (net asset)	ZOE	<i>Zakat</i> amount divided by net asset.	(Mohammed & Muhammed 2017a; Nomran & Haron 2019)
DEA	Efficiency	CRS model VRS model	(Alqahtani, Mayes & Brown 2017; Banna et al. 2019; Mezzi 2017)
Independent variables			
SSB			
SSB size	SSBS	Number of SSB members on the SSB of Islamic banks at the end of each year.	(Farook, Hassan & Lanis 2011; Nomran & Haron 2019)
SSB expertise	SSBEP	Percentage of members of the SSB having accounting/ finance knowledge.	(Grassa 2016; Nomran, Haron & Hassan 2018)
SSB educational level	SSBED	Percentage of members of the SSB with a PhD degree.	(Abdul Rahman & Bukair 2013; Nomran, Haron & Hassan 2018)

Variable	Label	Measurement	Reference
SSB cross-membership	SSBC	Percentage of SSB members who sit on the SSBs of different Islamic financial institutions at the same time.	(Abdul Rahman & Bukair 2013; Grassa 2016; Nomran, Haron & Hassan 2018)
SSB reputation	SSBR	Percentage of SSB members who sit on Board of AAOIFI and at least another SSB membership in other IFIs.	(Nomran & Haron 2020b; Rahman & Haron 2019)
SSB-index	SSB-index	SSBS + SSBEF + SSBED + SSBC + SSBR	(Abdul Rahman & Bukair 2013; Farook, Hassan & Lanis 2011; Mollah & Zaman 2015; Nomran & Haron 2019)
Moderator: BD structure (BD) index = BDS + BDIN + CEOD			
Board size	BDS	Total number of members on the board.	(Bukair & Abdul Rahman 2015; Rafique Yasser, Al Mamun & Rodriqs 2017).
Board independence	BDIN	The percentage of non-executive directors to total number of directors on the Board.	(Bukair & Abdul Rahman 2015; Nawaz 2015)
CEO duality	CEOD	A dummy variable: 1 if the CEO is a different person from the chairman of the Board, 0 otherwise.	(Bukair & Abdul Rahman 2015)
BD index	BD-index	BDS + BDIN + CEOD	(Mollah & Zaman 2015; Nomran & Haron 2019)
Control variables; both models include a vector to represent all control variables.			
Bank characteristics			
Bank size	SIZE	Total of assets.	(Ajili & Bouri 2018a; Matoussi & Grassa 2012; Mollah & Zaman 2015; Nomran & Haron 2019)
Bank age	AGE	Natural log of the total number of years since a bank was established.	(Ajili & Bouri 2018a; Hamza 2016; Matoussi & Grassa 2012; Nomran & Haron 2019)
Leverage	LEV	Total debt/total assets.	(Ajili & Bouri 2018b; Al-Saidi & Al-Shammari 2013; Rafique Yasser, Al Mamun & Rodriqs 2017)

Source: Researcher's construction.

5.5.1 Methods of measuring bank performance

5.5.1.1 ROA and ROE

Return on Asset (ROA) is a financial ratio used to determine how profitable a business is relative to its total assets. Return on Equity (ROE) is a measure of financial performance calculated by dividing net income by the amount of shareholders' equity in a company. This study uses ROA and ROE as proxies for profitability of the firm to reflect how efficiently the company utilises its assets and investments to make a profit (Frijns, Dodd & Cimerova 2016; Hooy & Ali 2016). To some extent, these measures are reflections of past or short-

term financial performance; however, in general, ROA and ROE strongly hint at the effectiveness of managing a firm's assets and financing activities for the benefit of shareholders and to address their economic interests (Ibrahim & Samad 2011). There are many studies that used ROA and ROE to measure financial performance such as Grassa and Matoussi (2014a), Mollah and Zaman (2015), and Nomran, Haron and Hassan (2018). In this study, the measurements applied are as follows; ROA is measured as net income divided by average total assets, while ROE is measured as net income divided by average total equity (Mollah & Zaman 2015). In general, the high ROA and ROE indicate that a firm has performed well in a given period. Moreover, if those measurements are high, it means that assets are used more effectively to the benefit of shareholders and to serve the shareholders' economic interests (Ibrahim & Samad 2011).

5.5.1.2 Tobin's Q

Tobin's Q (a market-based measure) is defined as the ratio calculated by dividing equity market value by equity book value. This is used to proxy for shareholder value (Mollah & Zaman 2015). Tobin's Q measures market performance or long-term firm value (Hassan & Marimuthu 2018; Rafique Yasser, Al Mamun & Rodrigs 2017). Previous studies It has been used in previous studies to represent a firm's market value since it includes both creditors' and shareholders' wealth standing (Carter et al. 2010; Mollah & Zaman 2015). It also refers to the market behaviour of a financial security issued by the firm or the firm's assets. This reflects the external expectations and perceptions of the long-term value or future of an organisation (Thaler 2004). Tobin's Q also predicts the firm's ability to obtain future cash flows and investment opportunities (Carter et al. 2010). A high Tobin's Q indicates success in the way that the firm has leveraged investment to improve its competitive position in the market. It values a firm more in terms of its market value than its book value. A higher Tobin's Q indicates that governance structures implemented by the firm are effective (Weir, Laing & McKnight 2002). The measurement applied in this study is $(\text{Market value of equity} + \text{book value of liabilities}) / \text{book value of assets}$ (Mollah & Zaman 2015).

Based on the above discussion, the use of accounting and market-based measures provides both long-term and short-term expectations of a company's business performance in this study (Hassan, Rizwan & Sohail 2017; Hooy & Ali 2016; Nomran & Haron 2019).

Based on the above discussion, the use of accounting and market-based measures provides both long-term and short-term expectations of a company's business performance in this study (Hassan, Rizwan & Sohail 2017; Hooy & Ali 2016; Nomran & Haron 2019).

5.5.1.3 ZOE

Nomran and Haron (2019) and most recently Nomran and Haron (2021) have identified ‘*Zakat*’ as a performance measure that can serve as a proxy for the expected performance of IBs or their compliance with Islamic principles. *Zakat*, a pillar of the Islamic faith, refers to a fixed proportion levied on property such as gold, silver, merchandise and income-producing animals as well as farming land that is then distributed among the rightful beneficiaries. It is considered a form of charity for the very poor and destitute and is paid on the net balance after a Muslim has spent on necessities, family expenses, due credits, donations and taxes. It is a mandatory obligation of every Islamic individual and organisation to donate a fixed proportion of their wealth for charitable causes. Therefore, IBs’ contribution to *Zakat* can be used as a proxy for compliance with Islamic principles and thereby as an indicator of performance (Mohammed & Muhammed 2017b). This proxy has been used in previous studies such as Mohammed & Muhammed (2017a); and Nomran & Haron (2019). A high contribution to *Zakat* indicates a higher level of wealth creation by the banks and hence operational activities. Consequently, the existence of an SSB is believed to play an important role in ensuring IBs comply with Shariah regulations as the SSB is supposed to monitor how a bank calculates, collects and pays *Zakat*. By reviewing profitability and Shariah measurement, this study extends our understanding of the impact of SSBs on bank performance. The measurement applied in this study is *Zakat* ratio (*Zakat* on equity) which is *Zakat* amount divided by net asset, as recommended by Ibrahim et al. (2004).

5.5.1.4 Using DEA to measure bank efficiency

This study pays close attention to the efficiency of IBs. Performance measurements used in the past measure a bank’s individual performance, independent of other banks. Consequently, there was a lack of consideration of how a given bank operated when compared with another. A bank’s efficiency can be obtained by calculating its efficiency frontier and scores using a parametric approach (via econometric or stochastic frontier approach (SFA) models) or a non-parametric approach (such as DEA). Despite the increasing amount of research done on the banking industry, there remains no consensus on the best method to use to measure a bank’s efficiency. As an alternative performance measure, this study uses the DEA estimated efficiency index as a relative measure of performance to evaluate the efficiency of IBs in GCC countries. This method is similar and

comparable to those employed in other studies (Alqahtani, Mayes & Brown 2017; Banna & Alam 2020; Brack & Jimborean 2010; Mezzi 2017; Seelanatha 2007).

A two-stage procedure is applied to investigate the impact of SSB composition on the efficiency of IBs in GCC countries. In the first stage, a non-parametric (DEA) method is used for benchmarking purposes and to identify the relative efficiency of the banks investigated. Once DEA is used to benchmark an efficiency index for individual banks in the sample, an estimated efficiency index will be used in the second stage to examine how SSB composition affects relative performance. To regress the data, this study uses a truncated Tobit regression, since the DEA estimated efficiency index is limited to 1 and 0. These stages are consistent with other studies (Alqahtani, Mayes & Brown 2017; Banna & Alam 2020; Brack & Jimborean 2010; Mezzi 2017; Seelanatha 2007). Detailed explanations of the two-stage procedure are given below.

Stage 1: estimating relative efficiency using DEA

DEA

The DEA is a non-parametric method (mathematical programming method) that selects the best decision-making units, which are then characterised by quantities of outputs and inputs (Alber et al. 2019; Alharthi 2017; Wanke & Barros 2014). Farrell (1957) is credited with first proposing the idea of basing the observation of productive activities on the construction of a non-parametric efficiency frontier. This method primarily scouts for decision-making units that use less resources to achieve the maximum production outcomes. Introducing the term ‘Data Envelopment Analysis’, Charnes, Cooper and Rhodes (1978) developed a model to measure the efficiency of each decision-making unit (DMU), by evaluating a maximum of a ratio of weighted outputs to weighted inputs. The suggestion here is that the greatest efficiency is obtained when more outputs are produced from given inputs. This definition of efficiency does not require pre-assigned values and allows for multiple outputs and inputs to be measured without requiring pre-assigned weights. According to Rosman, Wahab and Zainol (2014), multiple inputs and outputs are reduced to a single ‘virtual’ input and single ‘virtual’ output by optimal weights. Therefore, the efficiency measure is a function of the virtual input-output combination multiplier.

Benefits of using DEA

DEA is seen as advantageous for this study as it captures the impact of several accounting indicators together to measure overall relative performance. Moreover, DEA can serve to compare and contrast performances at higher levels of operation; for example, from industry to industry in different states, regions or countries (Akinsoyinu 2015). Since it does not require a pre-specified functional form, the DEA method has been used in a wide range of contexts including in GCC countries. Consequently, many in the banking industry are familiar with the DEA method (Alqahtani, Mayes & Brown 2017; Banna & Alam 2020; Brack & Jimborean 2010; Mezzi 2017; Seelanatha 2007). While the measurements identified in the previous section help to understand the individual performance of firms, production frontier-based relative efficiency enables a comparison of the performance of similar firms. Therefore, it is seen as appropriate for this study.

Since its formulation by Charnes, Cooper and Rhodes (1978), the original DEA model has been extensively refined. Most of these were in response to shortcomings found in the original model during applications to real-life problems. The basic DEA models are outlined below.

DEA models (CRS & VRS models)

Two basic DEA models have been used in previous studies. The first of these is the constant returns to scale (CRS) variant developed by Charnes, Cooper and Rhodes (1978) (CCR). This model assumes that proportional increases of inputs result in proportional increases of outputs. In the literature, the CRS model is usually referred to as the CCR model (Akinsoyinu 2015; Brack & Jimborean 2010; Mezzi 2017). The second model, the variable returns to scale model (VRS), was devised by Banker, Charnes and Cooper (BCC) (1984). The VRS model recognises that production technology may exhibit increasing, constant or decreasing returns to scale.

The CRS assumes that all banks operate at their fullest capacity. On the other hand, the VRS assumes that not all banks are operating optimally because of financial constraints and imperfect competition (Banna et al. 2019). Indeed, banks are likely to face economies or diseconomies of scale. So, if focusing solely on the CRS model when not all banks are not operating at their best, the calculation of technical efficiency will be affected by scale efficiency. In the VRS model, technological advances and regulatory changes are

considered, which may vary between banks of various sizes. For these reasons, this study will apply both models to benchmark how well banks are performing.

The CRS assumption refers to technical efficiency (TE) and is used to measure the ability of a bank to maximise its outputs with a given set of inputs. The technical efficiency of a bank is its ability to better transform resources into financial services (Bozec, Dia & Bozec 2010). The VRS assumption refers to pure technical efficiency (PTE), which measures technical efficiency without the effect of scale efficiency. This will be explained in detail in the DEA model formulation (Equations (5.6) and (5.7)).

Input-output specification

Either the input-oriented or output-oriented approach can be used to construct a production frontier to measure relative efficiency using DEA. The purpose of the input-oriented approach (input minimisation) is to minimise inputs to produce a given output level. This approach measures cost efficiency. In contrast, the aim of the oriented-output approach (output maximisation) is to maximise output with an existing input level. This approach measures profit efficiency. This study uses the output-oriented approach to measure relative (benchmark) performance, since it allows for insights into how managers utilise resources to maximise outputs.

Approaches to input-output specification

It is important to note that even though much work has been undertaken on the measurement of bank outputs and inputs, the processes in relation to how this is done still cause much debate among researchers. Currently, the literature retains a focus on approaches to input-output definition and measurement developed in the 1970s, including the production approach and the intermediation approach (Sealey & Lindley 1977). Changes to these approaches are still being developed.

Leong and Dollery (2004) identified three approaches to specifying input-output: production, intermediation and assets. In the production approach, banks are viewed as producers of goods and services that use labour and capital to generate deposits and loans (Avkiran 2000). In this approach, deposits are considered outputs because they are seen as services offered by banks (Golany & Storbeck 1999). Unlike the production approach, intermediation treats deposits as inputs because deposits are used to produce other outputs such as loans and investments (Favero & Papi 1995). From the accounting perspective, the

assets approach is like the intermediation approach (Camanho & Dyson 2005); it considers assets and the production of loans as outputs, while labour, capital, deposits and other liabilities are deemed inputs.

Following previous research (Alexakis et al. 2019; Alqahtani, Mayes & Brown 2017; Banna & Alam 2020), this study will use the intermediation approach because it fits well with the objectives of this study. Accordingly, this study assumes that IBs provide intermediation services by collecting deposits and other funds that are, in turn, invested in productive sectors, generating profit without Riba. By using multiple input and output settings, the intermediation approach encourages an examination of all IBs' efficiency, instead of different branches of the same bank (Sealey & Lindley 1977). Moreover, this will help to identify if SSBs influence bank performance. Therefore, based on the intermediation approach, three inputs – staff costs, other operating expenses and total deposits – and three outputs – other fees and commission income, other operating income and earning assets – were identified.

The DEA model formulation

A number of DEA models that use mathematical programming are available in the literature. For the purposes of this study, the basic DEA model BCC and CCR have been chosen. In DEA, relative efficiency of the DMUs of concern are measured by the ratio of weighted outputs to weighted inputs. DEA adds to Ferrell's (1957) single-output to a single-input technical measure, shifting to a multiple-output to multiple-input technical measure. The assumption at the heart of this model is that the j^{th} DMU uses a 'm' dimensional input vector, x_{ij} ($i = 1, 2, \dots, m$), to produce an 's' dimensional output vector, y_{rj} ($r = 1, 2, \dots, k$). The DMU under evaluation is denoted by '0':

$$h_j = \frac{\sum_{r=1}^s \mu_r y_{rj}}{\sum_{i=1}^m v_i x_{ij}} \quad (5.1)$$

where h_j is the relative efficiency, x and y are the input and output vectors, respectively, and u_r and v_i are the weights of output r and input i , respectively. This ratio allows for multiple inputs and outputs in estimating productivity, and it measures relative productivity based on input and output weights. Nevertheless, it is difficult to identify a unique set of weights for all DMUs given that different they have their own input and output combinations (Charnes, Cooper & Rhodes 1978). As early as 1978, Charnes, Cooper, and Rhodes attempted to

address this issue, proposing the use of a set of weights that accommodates those differences – the suggestion is that each DMU should assign weights that allow it to be shown more favourably compared with all other DMUs under comparison. This suggests that, rather than being fixed in advance, the respective weights for each DMU could be derived using the actual observed data (Cooper, Seiford & Tone 2007). For obtaining values for input weights and output weights, CCR presented the following fractional programming problem.

The basic CCR formulation

$$\max h_0(\mu, v) = \frac{\sum_{r=1}^s \mu_r y_{r0}}{\sum_{i=1}^m v_i x_{i0}} \quad (5.2)$$

subject to

$$\frac{\sum_{r=1}^s \mu_r y_{rj}}{\sum_{i=1}^m v_i x_{ij}} \leq 1, j = 1, 2, \dots, j_0, \dots, n$$

$$\mu_r \geq \varepsilon = 1, 2, \dots, s$$

$$v_i \geq \varepsilon = 1, 2, \dots, m$$

where h_0 is the relative efficiency, x and y are the input and output vectors respectively, u_r and v_i are the weights of output r , and input i , n , m and k denote the number of DMUs, inputs and outputs respectively. The objective in this fractional programming problem is to estimate the optimal input and output weights for each DMU. It measures the relative efficiency of DMU₀ in comparison to the performance of other banks in the industry, as determined by the above fractional programming problem. As such, the weighted input and output ratio is maximised subject to given constraints. These constraints are extremely important and can be shown as such; the model limits the estimated efficiency of the DMUs to one; the above model indicates that all variables, including input and output weights, must be non-negative. Estimated input and output weights are used to obtain the efficiency index ‘ h ’. In Equation 5.3 below, it is shown that fractional programming can be rewritten as a linear programming model (CCR).

The basic CCR formulation (multiplier form)

$$\max h_0(\mu, v) = \sum_{r=1}^s \mu_r y_{r0} \quad j..$$

subject to (5.3)

$$\begin{aligned} \sum_{i=1}^m v_i x_{ij} &= 1 \\ \sum_{r=1}^s \mu_r y_{r0} \quad j.. - \sum_{i=1}^m v_i x_{ij} &\leq 0; j = 1, \dots, n \\ \mu_r &\geq \varepsilon = 1, 2, \dots, s \\ v_i &\geq \varepsilon = 1, 2, \dots, m \end{aligned}$$

The objective of the above linear programming problem is to maximise the sum of weighted outputs of DMU₀ subject to virtual inputs of DMU₀ at the same time as keeping the constraint that no virtual inputs from other DMUs can exceed the virtual outputs. The same objective function is seen in both the fractional programming problem and the linear programming problem. CCR-inefficient firms are given an efficiency ratio $h_0 < 1$; banks that are efficient have efficiency indices equal to 1. In addition, at least one efficient unit serves as a reference unit for estimating the relative weight of the inefficient units. By applying both linear programming problems above, we can directly estimate ‘ θ ’.

The basic CCR formulation (dual problem/envelopment form)

$$\text{Min } \theta$$

subject to

$$\begin{aligned} \theta x_{ij_0} - s_i - \sum_j x_{ij} \lambda_j &= 0 \quad \text{for } i = 1, 2, \dots, m \\ -s_{r0} + \sum_j y_{rj} \lambda_j &= y_{rj_0} \quad \text{for } r = 1, 2, \dots, k \\ s_i, s_{r0}, \lambda_j &\geq 0 \end{aligned} \tag{5.4}$$

where y_{rj} is the value of r^{th} output produced by DMU j using x_{ij} value of i^{th} input. θ denotes the CCR efficiency of DMU j . Both y_{rj} and x_{ij} are exogenous variables and λ_j is a vector of weights (intensity variables) assigned to each DMU under observation. The input and output slack are represented by variables s_i and s_r respectively. Each firm's weights determine how its technology is combined to create the production frontier. As a result, each weight is a decision variable derived from the linear programming model, as shown in Equation 5.4. The first constraint in this model suggests that the combination of the input of bank j is less than or equal to a linear combination of inputs in the firm on the frontier. Further, the second constraint ensures that the observed output of bank j is less than or equal to a linear combination of outputs in the bank on the frontier. By limiting the values to equal to or greater than 0 (CCR), the final constraint ensures the main decision variable θ_j (efficiency of j^{th} bank) lies between 1 and 0.

Based on the values given under the slack variables, the DMUs' operation can be improved without affecting their current operational state. At an optimal scale of operation, DMUs have zero values for both s_i and s_r . So if, in a unit under review, both input slack s_i and output slack s_r are equal to zero, no improvement in efficiency is possible. Some DMUs, however, may have slack variables that are not zero; this indicates that further efficiency improvements can be gained by reducing (increasing) specific inputs (outputs). Having a non-zero slack variable in a certain DMU indicates that the DMU is not functioning at its optimal scale.

There are a number of assumptions inherent within the original CCR model that must be understood. In the original CCR model, all DMUs were assumed to operate at the optimal scale. However, in the BCC–DEA formulation, this assumption was relaxed. The CCR model was used to estimate technical efficiency (TE). In the BCC, the scale effect is accommodated by including a third constraint within the efficiency evaluation model that relaxes the assumption of constant returns to scale. The CCR generally uses a convex combination of the efficient units as opposed to the linear combination. Therefore, the original CCR model can be modified by adding another constraint ($\sum \lambda_j = 1$). It is possible to estimate the efficiency of these two models using the three components of efficiency: technical, pure technical (PTE), and scale. The BCC–DEA formulation is presented below.

The basic BCC formulation (dual problem/envelopment form)

$$\begin{aligned} \max h_0(\mu, v) &= \sum_{r=1}^s \mu_r y_{r0} + \mu_0 \quad i.. \\ \text{subject to} \end{aligned} \tag{5.5}$$

$$\begin{aligned} \sum_{i=1}^m v_i x_{ij} &= 1 \\ \sum_{r=1}^s \mu_r y_{r0} \quad i.. - \sum_{i=1}^m v_i x_{ij} + \mu_0 &\leq 0 ; j = 1, \dots, n \\ \mu_r &\geq \varepsilon = 1, 2, \dots, s \\ v_i &\geq \varepsilon = 1, 2, \dots, m \end{aligned}$$

In the above linear programming models, the objective is to keep the input combination i at a minimum level to produce an output that is equal to the output of bank j . Consequently, it is the optimisation solution to the above models that is seen to determine the lowest fraction of inputs needed to produce output at least as great as that actually produced by bank j . Hence, this process suggests that θ_j is equal to or less than one. This means that if the value of θ_j is less than one, the firm is not as efficient as the firm on the frontier. In contrast, if the value of θ_j is equal to one, firm j is as efficient as other firms on the frontier.

By applying CCR and BCC formulations, TE and PTE can be estimated. However, because we know that a firm's TE is a function of PTE and SE, PTE should be separated from the TE to identify SE (Coeli, Rao & Battese 1998).

where

$$TE_{CCR} = PTE_{BCC} \times SE \tag{5.6}$$

$$SE = TE_{CCR} \div PTE_{BCC} \tag{5.7}$$

where

TECCR = Technical efficiency
PTEBCC = Pure technical efficiency
SE = Scale efficiency

Such analysis will be helpful in determining current operational scales' effectiveness as this study estimates the SE for each DMU based on the estimated efficiency in the BCC and CCR models. PTE tests management performance, while scale efficiency provides management information. If a difference between the TE and PTE scores of a particular DMU is found, this indicates the existence of inefficiency of SE. Therefore, a bank can choose the desired amount and type of resources to allocate to the scale of the bank or choose a scale of production that achieves a predictable level of output.

Using a longitudinal study that spanned a 10-year data set compiled from banks in the GCC countries, gradual changes in financial and regulatory environments were found. This demonstrates the effectiveness of constructing a separate frontier for each year and suggests this is more appropriate for estimating the efficiency of banks. There are limitations to this study if we consider the number of banks in GCC countries because this limits the number of observations to construct a production frontier with reasonable discriminatory power. Inputs and outputs in the model influence the ability of DEA techniques to distinguish inefficient units from efficient units. Studies that improved the discriminatory power of small samples have employed two approaches:

1. pooled data: we construct a common production frontier for our entire sample. For the whole sample period, each DMU counts separately.
2. window analysis (Asmild et al. 2004; Charnes, Cooper & Golany 1985; Seelanatha 2007): using moving averages and pooled data, production frontiers are constructed based on a predetermined window period. During a window period, each DMU is considered a separate DMU.

The use of pooled data to construct a production frontier has two advantages. First, it enables comparisons between the performances of a DMU in a particular period and its own performances in other periods. Another advantage is the increase in discriminative power of DEA models by incorporating more data points in the analysis. In this regard, it is important to note that there are no predefined criteria for determining the window period. However, a three-year period has been chosen by many studies as appropriate. An observation of a window's size is viewed inter-temporal once it is defined (Asmild et al. 2004). In efficiency analysis, all observations pertaining to a window period are treated as separate DMUs. This means that their original form is ignored. One important limitation in these approaches is their disregard of technological changes that may take

place within two consecutive periods. This suggests there may be some distortion in estimated productivity and efficiency scores. While such distortions may be slight, they could be significant in estimated productivity and efficiency on common frontiers that are constructed using whole sample data. In an attempt to limit the potential for such distortion, the current study follows the second approach (constructing production frontiers based on three-year windows).

Stage 2: Tobit regression analysis

The second stage referred to above is discussed later in this chapter in Section 5.5.

5.5.2 Measurements of SSB composition

As the main testing variable, this study investigates the impact of the composition of the SSB on bank performance. Following previous analyses, this study uses five variables in the composition of the SSB as explanatory variables (Buallay, Hamdan & Zureigat 2017; Hussainey & Al-Nodel 2008): SSB size, SSB expertise, SSB education level, SSB cross-membership and SSB reputation. These measures are utilised for two reasons: first, they can be observed and calculated easily; and second, they have been thoroughly investigated (Grassa 2016; Nomran & Haron 2019; Nomran, Haron & Hassan 2018).

5.5.2.1 SSB size

SSB size refers to the number of SSB members on the SSB of Islamic banks at the end of each year. This study uses SSB size to proxy the effectiveness of SSB and its influence on bank performance. Both the size and composition of an SSB can be instrumental in the effectiveness of Shariah governance mechanisms as an additional layer of monitoring banks' operational activities (Mollah & Zaman 2015; Nomran & Haron 2020b). As an example, Ajili and Bouri (2018a) used the size of the SSB to measure its quality. Previous studies used SSB size as the proxy for Shariah supervision such as Farook, Hassan and Lanis (2011); Mollah and Zaman (2015). The current study measures SSB size by counting the total number of members on the SSB at the end of each year (Farook, Hassan & Lanis 2011; Nomran & Haron 2019).

5.5.2.2 SSB expertise

SSB expertise is defined as members of the SSB who have accounting/ finance knowledge. This study uses SSB expertise to proxy the effectiveness of SSB and its impact on bank performance. It has been argued that SSB scholars who have knowledge of accounting and finance can exert a positive impact on bank performance (Grassa 2016; Rahman & Haron 2019). This variable has been used in previous research to investigate its impact on bank performance (Grassa 2016; Nomran, Haron & Hassan 2018). This study uses SSB expertise which will be measured as the percentage of SSB members who have accounting or financial knowledge or expertise (Grassa 2016; Nomran, Haron & Hassan 2018).

5.5.2.3 SSB educational level

SSB educational level refers to the qualifications of SSB scholars. This study uses this variable to proxy the effectiveness of SSB and its impact on bank performance. SSB scholars who have a doctoral degree may be more experienced when it comes to Islamic finance and related banking fields (Abdul Rahman & Bukair 2013). Moreover, they may have greater analytical capabilities and are a great resource for policy development and innovation. Such advantages can positively affect decision-making (Quttainah & Almutairi 2017). Hence, SSB members with higher academic qualifications could exercise and hone their ability to integrate Islamic tenets into banking practices (Safiullah & Shamsuddin 2018). Prior studies used this variable (Abdul Rahman & Bukair 2013; Nomran, Haron & Hassan 2018). In this study, SSB educational level will be measured as the percentage of SSB members who have a PhD degree (Abdul Rahman & Bukair 2013; Nomran, Haron & Hassan 2018).

5.5.2.4 SSB cross-membership

SSB cross-membership refers to those SSB's members serving on more than one SSB at the same time. This study uses SSB cross-membership to proxy the effectiveness of SSB and its impact on bank performance. Previous studies have found that SSB cross-membership actually helps bank performance (Nomran, Haron & Hassan 2018; Quttainah & Almutairi 2017). Cross- membership can boost the understanding and knowledge of the SSB, and particularly Shariah practices, through discussions among members who work in different contexts (Farook, Hassan & Lanis 2011). In this study, SSB cross-

membership will be measured as the percentage of members who sit on more than one SSB of various Islamic financial institutions at the same time (Abdul Rahman & Bukair 2013; Grassa 2016; Nomran, Haron & Hassan 2018).

5.5.2.5 SSB reputation

SSB reputations refer to members whose honesty, integrity, and good reputation are confirmed by their past convictions for moral turpitude, felonies, or criminal offenses. This study uses SSB reputation to proxy the effectiveness of SSB and its impact on bank performance. The reputation of SSB scholars can reflect their extensive knowledge on the contemporary activities of Islamic banking (Farook, Hassan & Lanis 2011). Therefore, involvement of highly reputed SSB scholars could enhance the performance of IBs (Nomran, Haron & Hassan 2018). Having reputable scholars on the SSB of an IB improves the effectiveness of Shariah monitoring since such scholars are well-positioned to minimise the risks of noncompliance (Safiullah & Shamsuddin 2018). In this study, SSB reputation will be measured as the percentage of members who sit on the board of the AAOIFI and have at least one SSB membership at another Islamic financial institution at the same time (Nomran, Haron & Hassan 2018; Safiullah & Shamsuddin 2018). The peak Shariah board operating is the AAOIFI and scholars affiliated with it are likely to have a better reputation. This board comprises well-known and highly respected Shariah scholars who, to a great extent, are the great Shariah minds of Islamic finance (Bakar 2016).

5.5.2.6 SSB index

SSB index is the sum the dichotomous mechanisms of the SSB compositions. This study uses SSB index to proxy Shariah governance. This study uses this because by combining SSB with BD index, multicollinearity can be mitigated effectively (Safiullah & Shamsuddin, 2018). Only a few empirical studies have examined the impact of two-tier board structure on either the performance of IBs (Mollah & Zaman, 2015; Farag et al. 2017; Ajili & Bouri 2018) or risk-taking of IBs (Safiullah & Shamsuddin, 2018). Only Mollah and Zaman (2015) examine the interactive effects of SSB and BD on IB performance, while Safiullah and Shamsuddin (2018) examine the same effect but on IB risk-taking. However, Mollah and Zaman (2015) have some limitations regarding the performance of two-tier board structure and IBs. It was based solely on SSB size and

neglected many other important SSB mechanisms, such as expertise, education, cross-membership, and reputation that may affect the performance of SSBs.

According to many researchers, analysing CG through individual items does not truly reflect the effect of governance (see, for example, Brown et al. 2011). Due to this limitation, this study uses an SSB index following Farook et al. (2011) and Rahman and Bukair (2013), and Nomran and Haron (2019) which considers other important SSB mechanisms. In line with Farook et al. (2011) and Rahman and Bukair (2013), Nomran and Haron (2019), an SSB index takes a score ranging from 0-1 based on the dichotomous mechanisms of the SSB as follows:

SSB size: "1" for banks with five or more scholars and "0" otherwise.

SSB expertise: "1" if at least one scholar has accounting/economic/finance experience and knowledge, "0" otherwise.

SSB educational level: "1" if there is at least one scholar with a PhD, and "0" otherwise.

SSB cross-membership: "1" if at least one scholar has cross-membership; "0" otherwise.

SBS reputation: "1" if at least one member of the SSB sits on the SSB of AAOIFI, and "0" otherwise.

5.5.3 Measurements of moderator variables

The structure of the BD serves as the moderator variable in this study. Board structure includes board size, board independence and the powers vested in the chairperson of the board. According to the GCC countries' CG codes, boards should count between five and 11 members. Also, at least one-third of board members should be independent. The roles of CEO/general manager and chairperson should not be combined. Previous studies used BD index to measure board structure (Mollah & Zaman 2015; Nomran & Haron 2019). In line with previous studies, this study uses a board index (BD index) as a proxy for the structure of the BD. The variable BD index is dichotomous (Dummy: 0 or 1). In order to transform these values into something meaningful, a (%) value is substituted for (0 & 1), which logically represent the minimum and maximum of the value. This study uses dummy; "1" if BD size < median, BD independence > median, otherwise: "0" "1" if the CEO differs from the chairperson, and 0 otherwise (Bukair & Abdul Rahman 2015).

5.5.3.1 Board size

BD size refers to the number of directors who are on the board at the same time. This study uses BD size to proxy BD structure. BD size is considered an essential monitoring tool and mechanism for effective governance (Farag, Mallin & Ow-Yong 2018; Hakimi et al. 2018). In previous studies, the total number of members of the BD each financial year has been used during to measure board size (Bukair & Abdul Rahman 2015; Nomran & Haron 2019; Rafique Yasser, Al Mamun & Rodrigs 2017). The current study investigates the impact of board size, measured by the total number of members of the BD at the end of each year (Bukair & Abdul Rahman 2015; Rafique Yasser, Al Mamun & Rodrigs 2017).

5.5.3.2 Board independence

Board independence refers to the proportion of independent non-executive directors on the board. This study uses board independence to proxy BD structure. This study uses board independence to proxy BD structure. The quality of the board's decisions and deliberations may be affected by its independence, which may also affect its ability to offer strategic direction and improve performance (Alsartawi 2019). The CG codes of GCC countries state that at least one- third of members of the board should be independent. The present study will use the percentage of non-executive directors on the BD as a measure of board independence (Bukair & Abdul Rahman 2015; Nawaz 2015).

5.5.3.3 CEO duality

CEO duality describes a situation where an individual simultaneously acts as both CEO and chairperson of the board (Dalton et al. 1998). Unlike non-executive directors, an executive chairperson has more access to an organisation's information. In addition, the individual is likely to enjoy concentrated power because these two positions are held. As a result, he or she may start to exhibit opportunistic behaviour, and monitoring processes could be weakened, affecting firm performance. In this study, CEO duality will be measured as a dummy variable, with a value of 1 when the CEO differs from the chairperson, and 0 otherwise (Bukair & Abdul Rahman 2015).

5.5.4 Measurements of bank characteristics

Besides the dependent and independent variables, the current study uses a set of control variables important in explaining variations in firms' performance. The current study uses control variables for bank characteristics including bank size, age of the bank and leverage (Matoussi & Grassa 2012; Mollah & Zaman 2015; Musibah & Alfattani 2014). These control variables will be used in the regression models to investigate other factors that could affect bank performance, as well as to examine the relationship between Shariah governance and bank performance. Control variables are also included to control for potential omitted variable bias (Al-Bassam et al. 2018; Frijns, Dodd & Cimerova 2016). Thus, assessing various studies, it seems a common practice to add bank size, age and leverage ratio as control variables. These variables are explained in the following subsections.

5.5.4.1 Bank size

Bank size variable is measured as the total assets of the bank in the given year. A bank size is used as a proxy for its complexity, since larger banks tend to engage in more activities, including diversifying their businesses by entering new markets and/or different sectors (Acero & Alcalde, 2012; Anderson et al., 2011). According to Short and Keasey (1999), the size of a firm may affect its performance in three ways. First, large organisations can generate funds internally, and can easily access external funds to invest in projects that make profits. Second, large organisations can use entry obstacles to boost their performance. Third, large organisations may benefit from wider connections and greater market power and economies of scale to achieve a higher firm value and performance (Beiner et al. 2006). However, small organisations may also do well compared with larger organisations, since they may have more opportunity to grow (Haniffa & Hudaib 2006). Several studies have reported that firm size positively affects firm performance (Frijns, Dodd & Cimerova 2016; Pillai & Al-Malkawi 2018). Consequently, in line with previous studies considering the relationship between Shariah governance and bank performance (Matoussi & Grassa, 2012; Mollah & Zaman 2015; Nomran & Haron 2019), the current study will use the natural logarithm of total assets as a proxy for bank size.

5.5.4.2 Bank age

Bank age is a proxy for the experience of banks. There is a greater chance that older banks have greater skills and experience, a wider variety of activities, better disclosure and more liquid trading; as such, they have captured the interest of analysts (Ajili & Bouri 2018a; Matoussi & Grassa 2012; Nomran & Haron 2019). These factors may cause less financial risk and bankruptcy, but also imply less flexibility when adjusting to change in the business environment, leading to fewer opportunities for growth. In contrast, newer banks have less experience. They are still trying to establish themselves in the market, are looking to recoup their cost structure, and are more exposed to adverse market conditions. Nevertheless, they have good potential to grow and consequently, the age of a firm may affect its performance. In line with earlier studies (Ajili & Bouri 2018a; Hamza 2016; Matoussi & Grassa 2012; Nomran & Haron 2019), the present study will control for bank age by using the natural log of the total number of years since a bank was established.

5.5.4.3 Leverage

Leverage is the amount of debt in a company's capital structure. Researchers have argued that leverage can affect company performance. In contrast, more debt is perceived as an internal governance mechanism that helps to mitigate agency problems, as this can minimise the chances of opportunistic managers obtaining 'free cash flows' (Jensen & Meckling 1976). In addition, lenders are more likely to exert effective control of managerial behaviour compared with shareholders (Agrawal & Knoeber 1996). As a result, firm performance can be positively affected. On the contrary, firms with high leverage do not fully maximise their commercial opportunities, since they are not likely to obtain new debt. Greater leverage may lead to bankruptcy and increase financial risk, undermining firm performance (Ntim 2015).

Many empirical studies have used the leverage ratio as a control variable in terms of the relationship between governance mechanisms and firm performance. Earlier studies have documented that leverage affects firm performance negatively (Bukair & Abdul Rahman 2015; Frijns, Dodd & Cimerova 2016; Grassa 2016; Pillai & Al-Malkawi 2018). Nevertheless, research carried out by Al-Saidi and Al-Shammari (2013), Haniffa and Hudaib (2006) and Pillai and Al-Malkawi (2016) reported a significant relationship between leverage and firm performance. Thus, and in line with previous literature (Ajili

& Bouri 2018b; Al-Saidi & Al-Shammari 2013; Rafique Yasser, Al Mamun & Rodrigs 2017), this study will use the percentage of total debt to total assets as a proxy for leverage.

5.6 Data Collection

Required data to estimate the two study models explained above were mainly collected using three main secondary data sources: the BankFocus database, banks' official websites and the annual reports of the 19 banks over the period 2010–2019. The data related to the dependent variables (i.e. ROA, ROE and Tobin's Q) were mainly collected from the BankFocus database, with other data drawn from annual reports. The *Zakat* ratio and DEA were collected from the annual reports of each bank. To obtain the DEA efficiency scores of IBs, we apply a DEA solver using the CRS and VRS models. These scores are used as dependent variables in the second stage, the regression analysis. To achieve accurate results, data were extracted from the consolidated data in US\$. Figures were converted using the fiscal year-end exchange rate of each country's currency. The required data for governance variables (independent variables; i.e. SSB composition and board structure) were collected from the banks' annual reports. The control variables were collected from annual reports and official websites.

5.7 Sample Selection

The sample chosen for this study was obtained from listed IBs operating in the GCC region (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the UAE). This study identified variables that may significantly influence the role and practices of SSBs, which could have ramifications for how well banks perform. There were several reasons for choosing the GCC region. First, it has a growing, stable and efficient financial and banking system (Al-Musalli & Ismail 2012). Islamic banking, as one of the most important segments of the Islamic financial market, has grown rapidly since its inception in the mid-1970s (Mallin, Farag & Ow-Yong 2014). The selected GCC IBs have been operating in the region for the past three decades. Further, GCC IBs' assets reached a value of US\$ 1253 billion, represented 44% of the total Islamic banking assets in 2019 (IFSB 2020). Second, Islam and its principles constitute the basis of and permeate virtually all aspects of daily life in these societies (Abu-Tapanjeh 2009). Moreover, most IBs are in these countries, and these banks have SSBs (Al-Malkawi & Pillai 2018). Finally, there is a large amount

of data available in these countries, making more extensive analysis possible. This classification is based on similarities in their economic, environmental, political, social and cultural factors and their long-held compliance with Islamic regulations for business dealings.

The highly regulated banking industry in the GCC region is comprised of a number of different Islamic banking firms, including listed and non-listed IBs, Islamic Shariah-window banks⁴ and fully fledged IBs.⁵ However, this study is limited to the fully fledged IBs trading from 2010 to 2019 in the GCC countries. The authenticity of this study is maintained by using reputable sources such as the BankFocus database to extract secondary data from the study's primary sample. This study is limited to firms in the banking industry since these are subject to stricter regulatory scrutiny than any other industry. Further, banks' financial structure differs markedly from those of other industries (Elbadry, Gounopoulos & Skinner 2015; Ntim 2015).

To obtain the final sample, three filtering processes or criteria are used. First, the researcher identified the data for 40 IBs and then filtered these to keep only listed IBs for reasons of data availability. Second, following Mollah et al. (2017) and Alabbad, Hassan and Saba (2019), only listed IBs that provided consolidated financial information⁶ were included. Following this criterion, 16 IBs were eliminated, giving a total sample of 24 IBs. Next, as per Beck et al. (2013), the remaining banks were filtered according to the accessibility and availability of their governance and financial data, respectively, from 2010 to 2019. To ensure a fair comparison, a balanced panel dataset was constructed, and five banks with incomplete datasets spanning the full 10 years (2010–2019) were excluded. The final sample included 19 fully-fledged IBs operating in Bahrain, Kuwait, Qatar, Saudi Arabia and the UAE, providing a total of 190 observations. As a result, it was possible to undertake a regression analysis, which enhanced the study reliability. The sample distribution is presented in Table 5.4.

⁴ Islamic Shariah-window banks offer Islamic finance services or Shariah-compliant products besides conventional banking.

⁵ Fully fledged IBs refer to IBs that offer financial activities that all adhere to Shariah regulations (Islamic law).

⁶ The database provides six accounting consolidation codes: C1, C2, U1, U2, C* and U*. The codes C1, C2 and C* indicate that the parent bank's financial statements are consolidated with those of its branches; codes U1, U2 and U* indicate that the parent bank's financial statements are not consolidated with those of its branches. Unconsolidated statements do not provide the full financial standing of those banks.

Table 5.4: Study Sample

Country	All IBs (Criterion 1)	Sample of IBs (Criterion 2)	Missing data (Criterion 3)	Final sample (Criterion 2 – Criteria)	Total # of observations in the final sample (10 years)
Bahrain	18	6	0	6	60
Kuwait	5	5	0	5	50
Qatar	5	4	0	4	40
Saudi Arabia	4	4	1	3	30
UAE	8	5	4	1	10
Total	40	24	5	19	190

5.8 Analytical Procedures

5.8.1 Data validity and regression assumptions

To investigate the relationship between Shariah governance and bank performance in the GCC countries, two multiple regression models are derived using secondary data. In these models, SSB composition is the independent variable, while firm performance is the dependent variable and BD structure is the moderator variable. This study uses multiple regression analysis to investigate the relationships between the dependent and independent variables. As indicated by Gujarati (2003) and Hair et al. (2010), for a multiple regression model, six fundamental assumptions (listed below) must be met to validate the parametric tests:

1. There must be a linear relationship between each independent variable and the dependent variable.
2. Residual errors should be normally distributed.
3. Multicollinearity issues should not affect the variables.
4. Autocorrelation issues should not affect the variables.
5. An investigation should be carried out to find any outliers in the data before the statistical analysis is done.
6. There should be a constant error in the homoscedasticity assumption (i.e. the estimated model).

This study tests the assumptions of linearity, normality, multicollinearity, autocorrelation, outliers and homoscedasticity, and finds that the assumptions are satisfied.

5.8.2 Data analysis methods

In this study, diagnostic tests, descriptive tests and regression tests are carried out using SPSS and STATA software. The proposed models and tests are considered appropriate and sufficient for answering the research questions. They are similar to those used in studies such as Ajili and Bouri (2018b) and Nomran, Haron and Hassan (2018). It is worth noting that some techniques and tests could perform the same statistical analysis, but the tests used in this study were considered the most suitable in light of the following. First, similar studies of SSBs and bank performance were searched to identify the tests used in similar analyses. Second, additional discussions were held with the statistics support centre of the university. Third, two or more tests were selected for each analysis to increase confidence in the results.

5.8.3 Diagnostic tests

This study carries out many diagnostic tests to ensure that the assumptions of a linear regression are met and to check the validity of the data, including tests for linearity, normality, multicollinearity, autocorrelation, outliers and heteroscedasticity. To check the *linearity* of the variables, two tests are carried out: Cook's distance and the leverage values tests (Al-Bassam et al. 2018; Ntim 2015). It has been argued that if these values are greater than one, non-linearity poses a threat (Maddala & Lahiri 2009). Appendix 1 (Table A1) shows that Cook's distance values are between 0.000 and 0.807, while leverage values range from .020 to .406. As neither are greater than 1 (the critical value), this suggests that the association among the variables used in the model is linear. The Shapiro-Wilk and Histogram tests are used to test *normality*. These tests produce numerical and graphical results. Normality does not present challenges in samples greater than 200; as this study has 190 observations, it is unlikely that normality would be an issue, but we nonetheless test this to increase confidence.

The normal distribution of continuous variables is also tested using probability–probability (P-P), quintile–quintile (Q-Q) and histograms (Al-Bassam et al. 2018; Elamer et al. 2019; Farook, Hassan & Lanis 2011; Mollah & Zaman 2015). The dependent variables appear to be normally distributed. However, the explanatory variables show mixed results. For example, SSB educational level and SSB cross-membership are skewed. Given this, we create new variables and transform these into dichotomous

variables to solve the problem of skewness. In addition, skewness and kurtosis tests are run to ensure that most of the variables have a normal distribution; for example, they provide additional verification for the relatively normal distribution of explanatory and control variables. Appendix 1 (Table A2) shows that the skewness values for most of the continuous variables fall between 0.021 and 2.853. For kurtosis, the variables fall between 0.681 and 8.952 – moderately mesokurtic in some data. However, some non-normality in the data is acceptable, as it is difficult to ensure a perfectly normal distribution for any research data (Gujarati 2003). Likewise, this study comprises 190 bank-year observations, which represents a relatively large sample, minimising the negative effect of any non-normality in some variables (Brooks 2008). The histogram depicting the distribution of the variables is presented in Appendix 2.

One assumption that should not be violated involves *multicollinearity*. The multicollinearity assumption is tested by using a correlation matrix among the variables. The correlation matrix also helps to examine the direction and magnitude of the linear relationship between the variables. Appendix 1 (Table A4) reports a correlation matrix for all the explanatory, control and dependent variables, respectively. As has already been reported, the skewness and kurtosis statistics in Appendix 1 (Table A2) show that the variables exhibit slight non-normal behaviour. Accordingly, Appendix 1 (Table A4) Pearson's parametric correlation coefficients, which reveal similar patterns. This suggests that any remaining non-normalities in the variables may be trivial, so it may be statistically tolerable to use the OLS regression technique to estimate the specified structural equations. The matrix in Table A4 suggests that correlations among the variables are relatively low, indicating no serious multicollinearity problems affecting the use of the OLS regression model (Elamer et al. 2019; Liu et al. 2015; Nomran & Haron 2020b).

After the tests related to normality and transforming the data are carried out, multicollinearity may still pose a threat. Hence, a Variance Inflation Factor (VIF) is used and tolerance statistics tests run to examine the existence of multicollinearity among the variables (Gujarati 2003). Multicollinearity may be a problem when tolerance is close to 0 and VIF values are over 10 (Gujarati 2003; Kajanathan 2012). Tolerance statistics and VIF values are reported in Appendix 1 (Table A2), the former ranging between 0.313 and 0.807, and the latter between 1.239 and 3.191. Both VIF values and tolerance statistics

provide additional evidence that there is no serious multicollinearity problem in interpreting the results of the OLS regressions.

To check for the existence *autocorrelation* or serial correlation, the Durbin-Watson test is applied (Ntim 2015; Pillai & Al-Malkawi 2018). This test is used to check for a relationship between an error and its lagged value. The Durbin-Watson statistic always has a value between 0 and 4. Values below 2 indicate positive autocorrelation, and values equal to or above 2 indicate negative autocorrelation. Thus, we cannot reject the null hypothesis of no autocorrelation (Brooks 2008; Gujarati 2003). The values of Durbin-Watson in the models here are ROA: 1.449, ROE: 1.457, Tobin's Q: 0.669 and *Zakat* ratio: 0.372 (see Appendix 1). This confirms that the data exhibit no autocorrelation issues. Two tests are conducted to check for *outliers*. Cook's distance test measures what happens when an observation in the regression model is deleted, and the Mahalanobis distance test measures the distance between the distribution of the sample and each point (see Appendix 1). The reliability and effectiveness of these tests in detecting outliers in the sample is met.

Finally, both numerical and graphical tests are performed to ensure that the *homoscedasticity* assumption is satisfied. The residual errors are plotted against the independent variables, offering a visual result used to determine evidence of heteroscedasticity. The numerical method used to investigate homoscedasticity is the Breusch-Pagan test. The existence of outliers that could cause heteroscedasticity in the variables is tested using scatter plots and the Breusch-Pagan test. The non-constant variance of the error term in the estimated model causes heteroscedasticity. Scatter plots for independent variables suggest the non-existence of severe outliers, with distributions appearing fairly random and linear. However, two independent variables (SSB educational level and SSB cross-membership) are skewed. Given this, we create a new variable and transform it to a dichotomous variables to solve the problem of skewness.

To summarise, several diagnostic tests were run to check OLS assumptions: P-P, Q-Q; histograms; skewness and kurtosis; correlation matrix; VIF, tolerance statistics, scatter plots, Breusch-Pagan, Cook's distance, leverage values and Durbin-Watson. The results of these tests suggest that the OLS assumptions, in general, are met. However, there are some variables that do not follow a normal distribution, and consequently, they were transformed. Also, because of the large sample size used in this study, this relative

violation of the normality assumption does not create a serious issue regarding the estimated coefficients.

5.8.4 Descriptive tests

Descriptive statistics refer to the numbers that provide a summary of the collected data and are aimed at illustrating the characteristics of the sample. They encompass several statistics, including frequency distribution, measures of central tendency (mean, mode and median) and measures of variability (maximum, minimum, range and standard deviation) (Holcomb 2016). Besides providing a general understanding of the sample population, descriptive statistics are useful for identifying important characteristics that can influence a study (Holcomb 2016). The descriptive statistics used in this study include mean, median, maximum, minimum, range, standard deviation and percentage.

5.8.5 Regression tests

Based on the diagnostic tests above, this study uses multivariate pooled-ordinary least squares (OLS) regression analyses to examine the relationship between dependent (ROA, ROE, Tobin's Q and *Zakat* ratio) and independent variables. According to Hillmer and Hilmer (2014), OLS is 'the best linear unbiased estimator (BLUE)' for a regression test model when its assumptions are satisfied. OLS regression can be very powerful if its assumptions are satisfied, and it offers better and more accurate models (Gujarati 2003). With reference to DEA, this study uses Tobit regression analysis to handle the constraint on efficiency scores.

To investigate whether there is any significant association between SSB composition and bank performance, Chapter 4 developed six hypotheses based on previous Shariah governance studies and the proposed theoretical framework. The first five hypotheses address the relationship between the five aspects of SSB composition and bank performance. The sixth addresses whether the BD influences the relationship between SSB composition and bank performance. These hypotheses are tested using a number of statistical tools, including descriptive statistics, Pearson correlation and multivariate analyses (OLS and Tobit regression models).

The framework developed in this study (see Figure 4.3) suggests that BD structure moderates the relationship between SSB composition and bank performance. The

moderator is not part of a causal sequence but qualifies the relationship between SSB composition and bank performance. The framework suggests that the strength and form of the association between SSB and bank performance variables may depend on the value of the moderating variable. In a moderation relationship between two variables, it depends on the value of the moderator variable (Fairchild & MacKinnon 2009). However, the arrangement of variables in the framework does not change the meaning as long as the moderator factors are structured as a supporting variable.

5.9 Chapter Summary

The research sample consists of data from 19 IBs in the GCC region. The study is longitudinal in nature, covering the time frame 2010–2019. The collection of secondary data is most appropriate for testing the hypotheses. The three main sources of data include the BankFocus database, banks' official websites and banks' annual reports. The independent variables in the study include SSB size, SSB expertise, SSB educational level, SSB cross-membership and SSB reputation, while the dependent variables include ROA, ROE, Tobin's Q, *Zakat* ratio and DEA. Further, BD index is a moderating variable. Analysis of data includes conducting multiple regression analyses, Pearson's correlation coefficient and descriptive statistics. Regarding bank efficiency, two steps are applied to examine the impact of SSB composition on the efficiency of IBs in the GCC countries. The DEA method is applied in the first stage to obtain efficiency scores for multiple inputs and outputs, while a Tobit regression analysis is implemented in the second stage to handle the constraint on efficiency scores.

The next chapter presents descriptive statistics for SSB composition, control variables and bank performance including ROA, ROE, Tobin's Q, *Zakat* ratio and DEA. Moreover, it presents the results of the multivariate regression analysis to assess whether SSB composition helped improve bank performance. It also presents the findings from several robustness analyses and discusses the potential endogeneity problem.

Chapter 6: Empirical Results and Discussion

6.1 Overview

The previous chapter presented the research methodology employed in this study. This chapter presents and discusses the results and provides evidence on the research questions raised. This study investigates the impact of SSB composition on bank performance and the moderating effect of the structure of the BD on such relationship. To answer the research questions and to achieve the objectives of this study, Section 6.2 presents the descriptive statistics of the test and control variables. Section 6.3 analyses the relationship among the variables of this study. The results of the multivariate regression analysis and discussions of the results are presented in Section 6.4. Section 6.5 considers potential endogeneity issues. A robustness test is undertaken in Section 6.6. Section 6.7 concludes this chapter.

6.2 Descriptive Statistics

Table 6.1 presents the descriptive statistics of variables used in the study (independent, control and dependent). The study sample covers the 10-year period 2010–2019. Descriptive statistics include parameters that represent the mean, standard deviation, minimum and maximum, and measures that explain the nature of the distribution characteristics (skewness and kurtosis) of the collected test data. Descriptive statistics are useful for identifying statistical properties required in analysis of data to obtain unbiased predictions. In general, there are differences between the variables in the sample, but they provide an appropriate dataset to run the regression analysis and provide reliable results.

As explained in Chapter 5, several diagnostic tests were performed to ensure that the assumptions of a linear regression were satisfied and to confirm the validity of the data. These include linearity of the relationship between dependent and independent variables, normal distribution of the error terms, independence of error terms, and constant variance of error terms, or homoscedasticity (Osborne 2013). Tools that are usually employed to statistically test if a distribution deviates greatly from the standard normal distribution were used to test the normality assumption (Osborne 2013). The kurtosis and skewness were also examined.

In Table 6.1, it is evident that the skewness values for most of the continuous variables are between 0.021 and 2.853. These values are within the acceptable range of -3 to 3 (Gujarati 2003). The kurtosis values lie between 0.681 and 8.952, indicating a slight mesokurtic distribution in some data. Nevertheless, some non-normality in the data is tolerable, as it is not easy to ensure that any research dataset has a perfect normal distribution (Gujarati 2003). In addition, this study consists of 190 bank-year observations, considered a big sample, which could thus reduce the negative impact of any non-normality in certain variables (Brooks 2008).

Table 6.1: Descriptive Statistics of the Variables - Overall Sample

Variables	N	Minimum	Maximum	Mean	Std. Dev	Skewness	Kurtosis
Explanatory variables							
SSB size	190	3.000	6.000	4.150	0.986	0.201	-1.186
SSB expertise	190	0.000	1.000	0.490	0.317	0.173	-0.923
SSB educational level	190	0.000	1.000	0.490	0.501	0.021	-2.021
SSB cross- membership	190	0.000	1.000	0.490	0.501	0.042	-2.020
SSB reputation	190	0.000	1.000	0.460	0.308	0.033	-0.959
SSB index	190	0.000	5.000	4.010	1.040	1.738	3.606
BD index	190	8.000	22.000	14.770	3.345	-0.707	2.412
Control variables							
Bank size	189	8.600	10.810	9.920	0.505	-0.445	-0.555
Bank age	189	1.000	48.000	21.980	0.136	0.235	-1.425
Leverage	190	0.000	0.800	0.170	0.139	2.853	8.952
Dependent variables							
ROA (Return on assets)	189	-0.256	0.783	0.008	0.027	-5.730	4.314
ROE (Return on equity)	190	-0.121	0.291	0.664	0.142	-5.168	4.587
Tobin's Q	190	0.200	1.506	1.033	0.148	1.533	5.718
ZOE (<i>Zakat</i> on equity)	188	0.000	1.000	0.484	0.501	0.064	-2.017
Technical efficiency score (CRS)	190	0.081	1.000	0.743	0.260	0.511	1.015
Pure technical efficiency score (VRS)	190	0.214	1.000	0.879	0.195	1.401	0.614

Table 6.2: Descriptive Statistics of the Variables - Individual Countries

Variables	Bahrain	Kuwait	Qatar	Saudi Arabia	UAE	Overall
SSB size	4.2800 (0.804)	3.980 (1.115)	3.100 (0.441)	4.930 (1.142)	5.000 (0.000)	4.150 (0.986)
SSB expertise	0.412 (0.156)	0.326 (0.240)	0.735 (0.435)	0.711 (0.179)	0.201 (0.000)	0.490 (0.317)
SSB educational level	0.690 (0.188)	0.850 (0.269)	0.990 (0.044)	0.881 (0.086)	0.721 (0.103)	0.490 (0.501)
SSB cross-membership	0.862 (0.164)	0.744 (0.264)	0.750 (0.438)	0.711 (0.058)	0.100 (0.000)	0.490 (0.501)
SSB reputation	0.571 (0.296)	0.149 (0.168)	0.505 (0.300)	0.558 (0.160)	0.856 (0.000)	0.460 (0.308)
SSB index	9.231 (5.350)	2.119 (2.398)	6.913 (4.390)	7.825 (1.764)	8.800 (0.000)	4.010 (1.040)
BD index	15.800 (3.302)	14.820 (4.303)	13.700 (2.232)	14.300 (2.002)	11.000 (4.191)	14.770 (3.345)
Bank size	9.621 (0.420)	9.792 (1.494)	9.933 (0.598)	10.1872 (0.204)	10.454 (0.091)	9.920 (0.505)
Bank age	21.833 (11.144)	27.500 (16.970)	17.750 (11.274)	19.500 (14.701)	17.500 (3.027)	21.980 (0.136)
Leverage	0.162 (0.124)	0.129 (0.112)	0.243 (0.191)	0.170 (0.105)	0.089 (0.023)	0.170 (0.139)
ROA (Return on assets)	0.049 (0.037)	0.008 (0.007)	0.0152 (0.034)	0.014 (0.006)	0.016 (0.002)	0.008 (0.027)
ROE (Return on equity)	0.002 (0.202)	0.072 (0.051)	0.102 (0.125)	0.100 (0.051)	0.1965 (0.026)	0.664 (0.142)
Tobin's Q	0.957 (0.068)	1.054 (0.238)	1.095 (0.082)	1.071 (0.076)	1.022 (0.025)	1.033 (0.147)
ZOE (Zakat on equity)	0.006 (0.038)	0.001 (0.001)	0.000 (0.000)	0.003 (0.005)	0.000 (0.000)	0.484 (0.501)
Technical Efficiency score (CRS)	0.808 (0.218)	0.504 (0.188)	0.942 (0.146)	0.832 (0.238)	0.495 (0.166)	0.743 (0.260)
Scale Efficiency score (VRS)	0.908 (0.179)	0.726 (0.240)	0.987 (0.056)	0.921 (0.141)	0.904 (0.088)	0.879 (0.195)

Note: Standard deviations are in parentheses.

Table 6.2 reports the country-wise descriptive statistics for all test and control variables. The recorded mean and standard deviation values show that there is not much variation in the distribution of test and control variables across the countries in the sample. The recorded averages and low standard deviations show that there are no problems of outliers that could adversely affect the estimated regression coefficient.

6.2.1 SSB composition

With respect to the independent/explanatory variables, the outcomes of each independent variable (SSB composition) are discussed in the following subsections.

6.2.1.1 SSB size

Table 6.1 shows that, on average, there were 4.15 (SD = 0.986) scholars on the SSB of IBs, which is above the minimum of three recommended by the AAOIFI.⁷ SSB size among the sampled IBs varies from three to six scholars. Nomran and Haron (2019) and Grassa and Matoussi (2014a) reported a mean SSB size of 4.27 and 4.32 in GCC and Southeast Asian countries, respectively. Shariah governance literature, for example, Safiullah and Shamsuddin (2018) and Mollah and Zaman (2015), found a mean SSB size of 4.15 in GCC and 4.17 in Southeast Asian countries. Based on these, the data in this study are appropriate.

6.2.1.2 SSB expertise

SSB expertise shows that, on average, 0.49 (SD = 0.317) members of the SSB hold the relevant expertise in accounting and/or finance. This is consistent with previous studies (Al-Aqra' 2020; Grassa & Matoussi 2014b; Nomran & Haron 2019).

6.2.1.3 SSB educational level

The percentage of SSB scholars who have a PhD degree is used to proxy SSB educational level (Abdul Rahman & Bukair 2013; Nomran, Haron & Hassan 2018). On average, 0.49 (SD = 0.501) of Shariah scholars have a PhD degree. The mean (0.49) is higher than the mean (0.23) noted by Al-Aqra' (2020). However, Nomran, Haron and Hassan (2018), Safiullah and Shamsuddin (2018) and Quttainah and Almutairi (2017) reported a higher average percentage.

6.2.1.4 SSB cross-membership

SSB cross-membership is measured by the percentage of SSB scholars who sit on another SSB at another Islamic financial institution (Abdul Rahman & Bukair 2013; Grassa 2016;

⁷ AAOIFI requires at least three members on the SSB who are thoroughly and professionally conversant with Islamic jurisprudence (*Fiqh al-Muamalat*) (AAOIFI 2015).

Nomran, Haron & Hassan 2018). On average, 0.49 (SD = 0.501) of Shariah scholars hold cross-membership, with the statistics recorded in previous studies mixed (Al-Aqra' 2020; Grassa & Matoussi 2014b; Nmran, Haron & Hassan 2018; Quttainah & Almutairi 2017).

6.2.1.5 SSB reputation

As explained in the previous chapter, reputable SSB scholars can also understand the current state of Islamic banking since they are knowledgeable about the industry (Farook, Hassan & Lanis 2011). Consequently, they enhance the performance of IBs (Nomran, Haron & Hassan 2018). Having reputable SSB scholars on the SSB of an IB improves the effectiveness of Shariah monitoring since such scholars are well-positioned to minimise the risks from noncompliance (Safiullah & Shamsuddin 2018).

On average, 0.46 (SD = 0.308) of SSB scholars sit on the board of AAOIFI and are SSB members in another Islamic financial institution. This average (0.46) is higher than the average (0.07) reported by Nomran, Haron and Hassan (2018) and the average (0.302) reported for GCC IBs in Nomran and Haron (2019). However, it is still lower than the average (0.55) documented by Quttainah, Song and Wu (2013).

6.2.2 Bank characteristics

Table 6.1 also presents the descriptive statistics of control variables including bank size, bank age and leverage. First, the range of bank size measured by the natural log of banks' total assets is between 8.60 and 10.81, with an average of 9.92 (SD = 0.505). Second, bank age has an average of almost 22 years (SD = 0.136), with a minimum of one year and a maximum of 48 years. Third, leverage among the sampled IBs in the GCC countries is 0.17 (SD = 0.139), with a minimum of 0.00 and a maximum of 0.80. These control variables were included to control for the impact of potential omitted variables bias (Al-Bassam et al. 2018; Frijns, Dodd & Cimerova 2016). They are also important in explaining variations in firm performance.

6.2.3 Bank performance

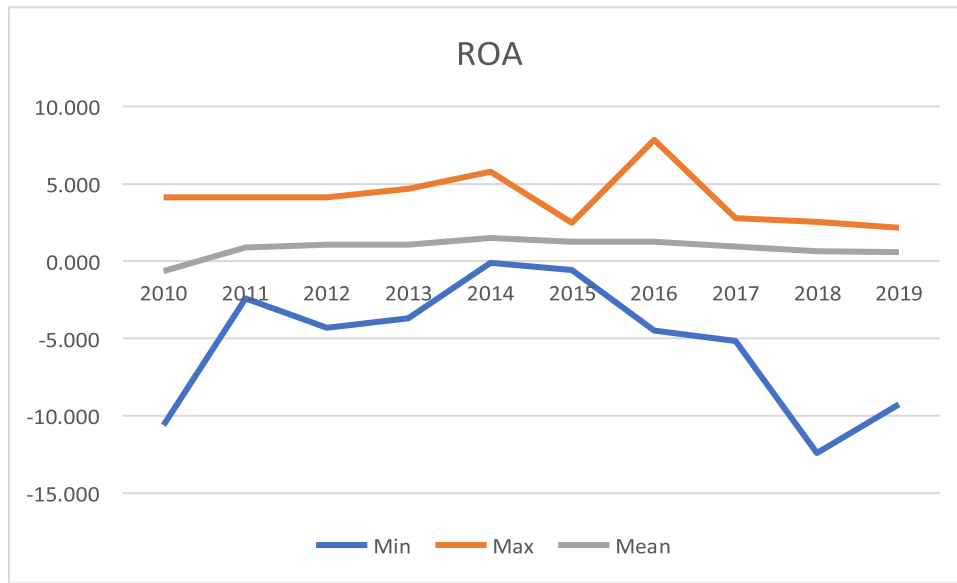
As mentioned in the previous chapter, this study uses two accounting-based measures (ROA, ROE), one market-based measure (Tobin's Q), one measure based on the Shariah approach (ZOE) and one operations performance measure (DEA estimate efficiency) as

performance indicators. Table 6.3 provides descriptive statistics for each performance indicator used.

Table 6.3: Descriptive Statistics of the Dependent Variables by Year

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Overall
ROA											
Mean	-0.650	0.890	1.090	1.080	1.490	1.230	1.240	0.950	0.650	0.570	0.860
Std. Dev	0.066	0.012	0.018	0.017	0.012	0.007	0.021	0.016	0.032	0.025	0.027
Minimum	-10.620	-2.400	-4.330	-3.690	-0.120	-0.580	-4.500	-5.160	-12.410	-9.290	-12.410
Maximum	4.120	4.120	4.100	4.700	5.780	2.480	7.830	2.780	2.530	2.150	7.830
ROE											
Mean	-3.990	4.830	6.310	7.510	9.700	9.250	9.450	8.630	8.060	6.120	6.643
Std. Dev	0.334	0.999	0.141	0.098	0.065	0.079	0.085	0.075	0.118	0.115	0.142
Minimum	-12.150	-17.230	-42.310	-16.060	-2.850	-12.970	-13.400	-15.790	-36.170	-31.980	-12.15
Maximum	18.510	18.220	24.190	20.040	22.600	22.170	29.060	22.240	20.940	15.850	29.06
Tobin's Q											
Mean	0.994	0.997	1.020	1.059	1.087	1.030	1.031	1.023	1.032	1.051	1.033
Std. Dev	0.250	0.250	0.185	0.126	0.108	0.096	0.068	0.064	0.088	0.088	0.147
Minimum	0.500	0.561	0.572	0.776	0.913	0.798	0.938	0.919	0.899	0.926	0.500
Maximum	1.504	1.506	1.466	1.344	1.266	1.189	1.166	1.545	1.214	1.226	1.506
ZOE											
Mean	0.330	0.230	0.120	0.090	0.080	0.060	0.140	0.110	0.210	1.750	0.484
Std. Dev	0.007	0.004	0.207	0.002	0.001	0.000	0.002	0.001	0.004	0.068	0.501
Minimum	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Maximum	2.400	1.200	0.730	0.530	0.370	0.310	1.110	0.450	1.360	29.620	1.000
Number of Observations	18	19	19	19	19	19	19	19	19	19	189

6.2.3.1 ROA

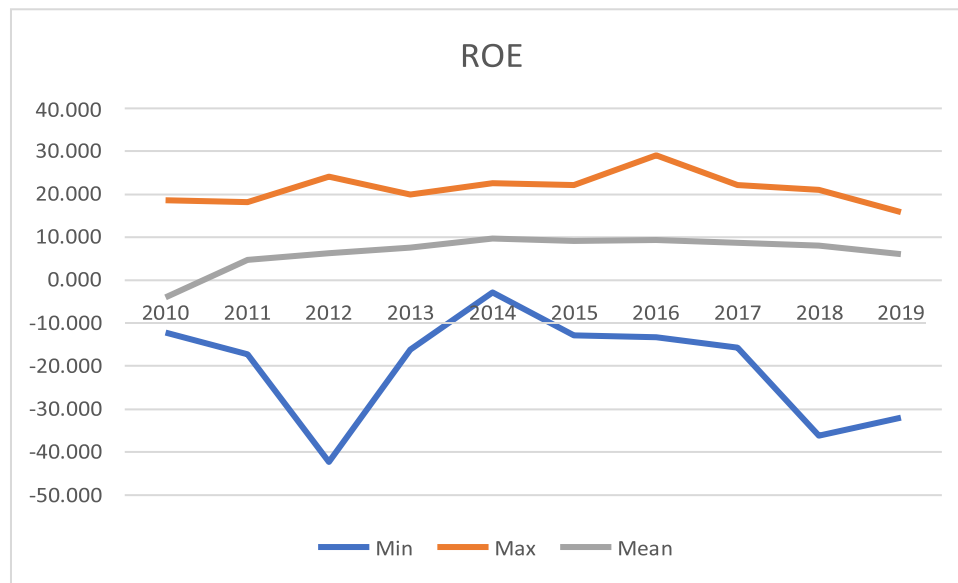


Source: Researcher's construction.

Figure 6.1: Descriptive statistics for ROA from 2010 to 2019.

ROA is used to proxy the profitability of a firm. Given that managers are in charge of the operations of the business and determine how the assets of a firm can be used. ROA is generally used to evaluate how good the governance system of a firm is with respect to securing and ensuring efficient management (Epps & Cereola 2008). This study measured ROA by dividing the net income of the bank by the average total assets held by the bank. The overall average for ROA was 0.86%, but the minimum and maximum means were -0.65% in 2010, 0.89% in 2011, 1.09% in 2012, 1.08% in 2013 and 1.49% in 2014. This shows that the profitability of banks has increased, which is an indication that they are using their assets more efficiently. However, there was a slight decrease in the mean value to 1.23% in 2015. A slight increase was recorded in 2016, with the mean value rising to 1.24% ; however, the mean value was decreased to 0.95% in 2017, 0.65% in 2018, and 0.57% in 2019. For all banks in the study sample, the ROA ranged between -12.410 and 0.783 , with an average of 0.0086 ($SD = 0.0274$).

6.2.3.2 ROE

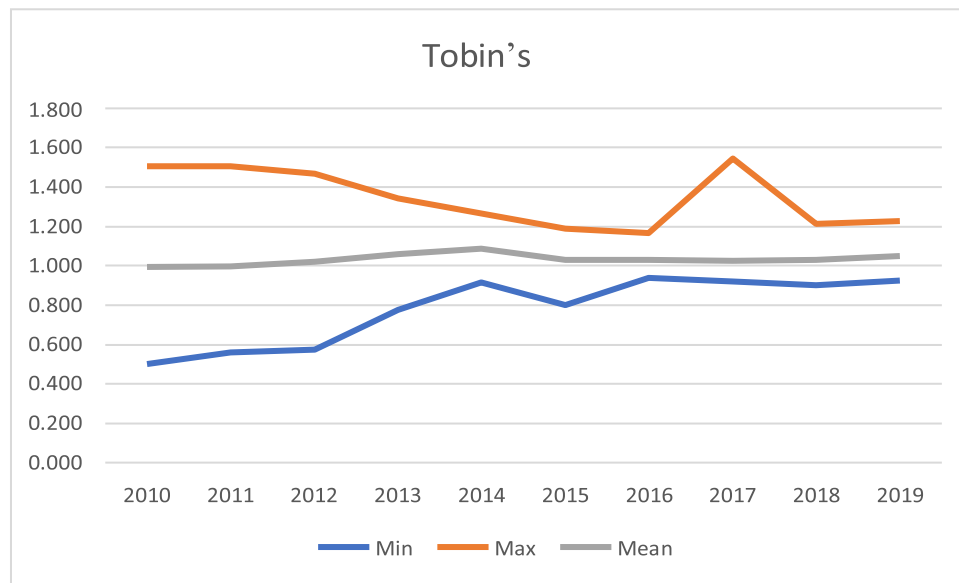


Source: Researcher's construction.

Figure 6.2: Descriptive statistics for ROE from 2010 to 2019.

Table 6.3 presents the descriptive statistics for ROE as defined by the net income to average total equity. ROE is a measure of the profit made from shareholders' investment (Epps & Cereola 2008). The overall average of ROE is 0.664 (SD = 0.142). This is in line with the finding of Nomran and Haron (2020b), who reported a mean ROE for IBs of about 0.740. In general, there was some variation in the results for the ROE descriptive statistics, with a notable increase in the mean value from -3.99% in 2010, 4.83% in 2011, 6.31% in 2012, 7.51% in 2013 to 9.70% in 2014. This reveals that a higher ROE strongly suggests a bank can make more profit without requiring much capital. It equally shows how well the management of a bank is utilising the capital provided by shareholders. From 2015 to 2019, there was a slight decrease in the mean values as follow; 9.25%, 9.45%, 8.63%, 8.06%, and 6.12% respectively.

6.2.3.3 Tobin's Q

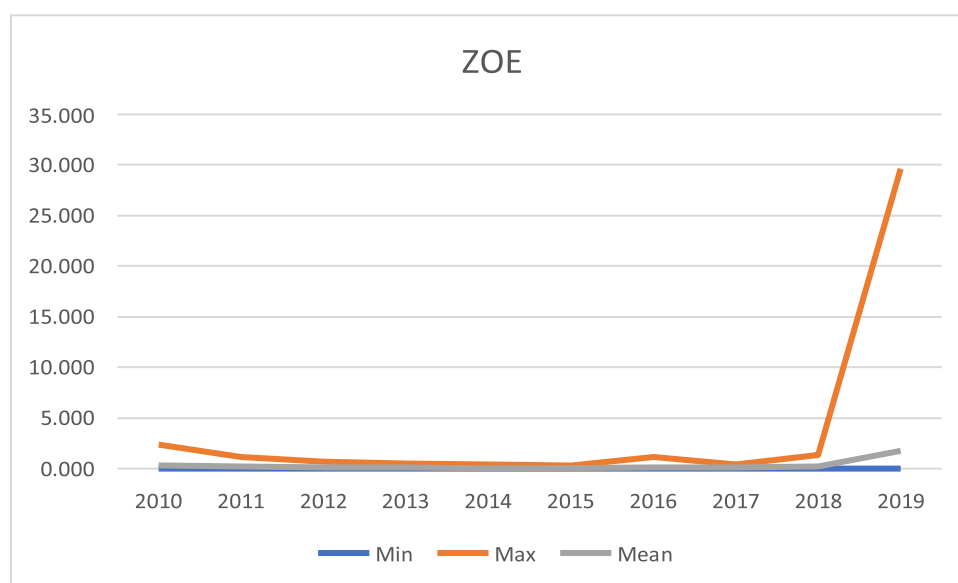


Source: Researcher's construction.

Figure 6.3: Descriptive statistics for Tobin's Q from 2010 to 2019.

A higher Tobin's Q value indicates a more effective governance mechanism and a better perception of the performance of the company by the market. The Tobin's Q ratio is defined as the ratio of enterprise value (the total of market value of equity and book value of liabilities) to book value of assets. Weir, Laing and McKnight (2002) stated that a higher Tobin's Q indicates how closely managers' and shareholders' interests have been aligned, while a smaller Tobin's Q value reflects significant managerial discretion. Table 6.3 also shows Tobin's Q ranges between 0.500 and 1.506, with an average of 1.033 (SD = 0.147).

6.2.3.4 ZOE



Source: Researcher's construction.

Figure 6.4 Descriptive statistics for ZOE from 2010 to 2019.

The overall mean of ZOE ratio, measured by *Zakat* amount divided by net assets, is 0.484 (SD = 0.501), with a minimum of 0.00 and a maximum of 1.00. The mean of ZOE here (0.4840) is higher than the mean (0.002) in the study by Nomran and Haron (2019).

Overall, the values of ROA and ROE increased between 2010 and 2011, while the values of Tobin's Q were steady and ZOE decreased. The values of ROA, ROE and Tobin's Q rose slightly between 2011 and 2014, while the ZOE value decreased. However, between 2016 and 2018, ROA, ROE and Tobin's Q decreased, while ZOE increased. In 2019, ROA and ROE decreased, but Tobin's Q slightly increased. These differences in the values of dependent variables indicate that the performance measure type used is crucial since using only one measure could be deceptive. Hence, it is important to utilise different measures to provide reliable results.

6.2.3.5 Relative efficiency of IBs

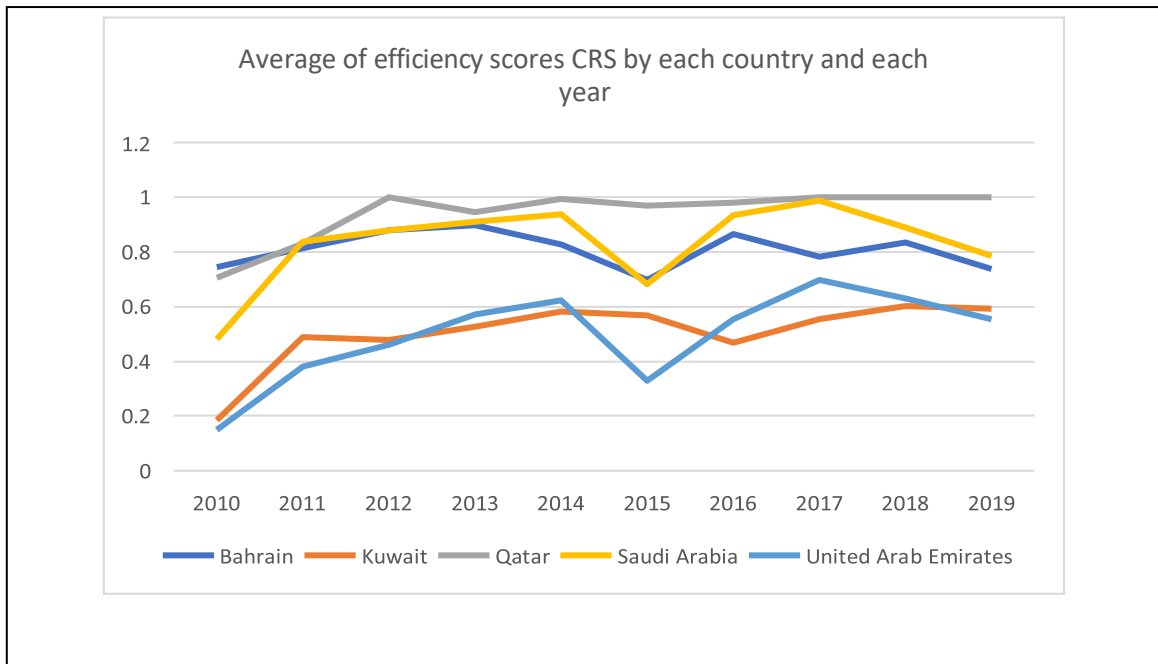
The study estimates IBs' efficiency by using CRS and VRS DEA models. Descriptive statistics of the estimated efficiency scores for the IBs are presented in Table 6.1. As the statistics show, the overall average efficiency score of IBs using the CRS model is 0.7439 (SD = 0.2607) and using the VRS model is 0.8791 (SD = 0.1955). The recorded low standard deviation values indicate that values are clustered close to the mean, indicating

that there is no outlier issue. The estimated annual average efficiency scores for IBs for each country are presented in Tables 6.4 and 6.5.

Table 6.4: Average of Technical Efficiency Scores by Each Country and Each Year (CRS)

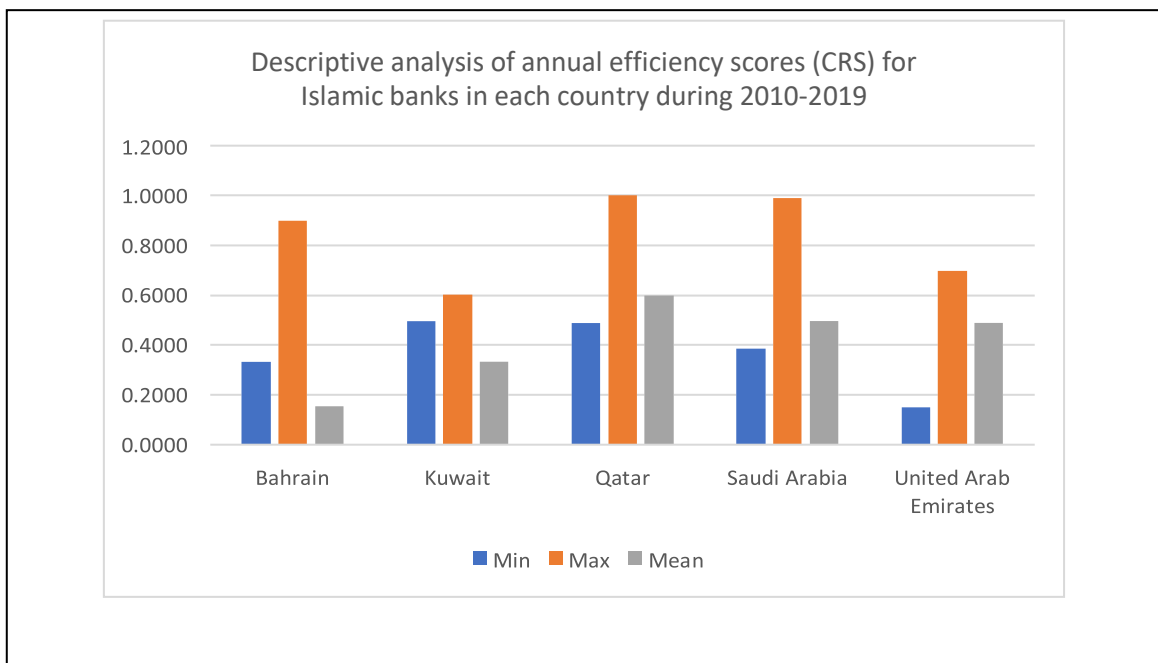
Year	Bahrain	Kuwait	Qatar	Saudi Arabia	UAE	Average
2010	0.7447	0.1846	0.7052	0.4818	0.1502	0.4533
2011	0.8132	0.4879	0.8315	0.8382	0.3801	0.6702
2012	0.8804	0.4794	1.0000	0.8800	0.4621	0.7404
2013	0.8976	0.5276	0.9451	0.9094	0.5715	0.7702
2014	0.8263	0.5809	0.9951	0.9366	0.6252	0.7928
2015	0.6974	0.5681	0.9687	0.6838	0.3301	0.6496
2016	0.8664	0.4670	0.9811	0.9356	0.5534	0.7607
2017	0.7843	0.5538	1.0000	0.9882	0.6980	0.8049
2018	0.8331	0.6022	1.0000	0.8906	0.6303	0.7912
2019	0.7375	0.5915	1.0000	0.7856	0.5533	0.7336
Average	0.8081	0.5043	0.9427	0.8330	0.4954	0.7167
Std. Dev	0.2183	0.1886	0.1466	0.2386	0.1665	0.1980

In general, the results show an improvement in the efficiency scores (CRS) of IBs across countries over 2010–2019. Qatar’s banks appear to be ahead of the other GCC countries, with an average efficiency score of 0.9427 (SD = 0.1466), followed by Saudi Arabian banks with an efficiency score of 0.8330 (SD = 0.2386), and Bahrain banks with an efficiency score of 0.8081 (SD = 0.2183). Kuwaiti and UAE banks have average efficiency scores of 0.5043 (SD = 0.1886) and 0.4954 (SD = 0.1665), respectively. Figures 6.5 and 6.6 below illustrate the average efficiency scores (CRS) and the descriptive statistics of annual efficiency scores (CRS) of IBs by country and year respectively.



Source: Researcher's construction.

Figure 6.5: Average of efficiency scores (CRS) of IBs by country and year.



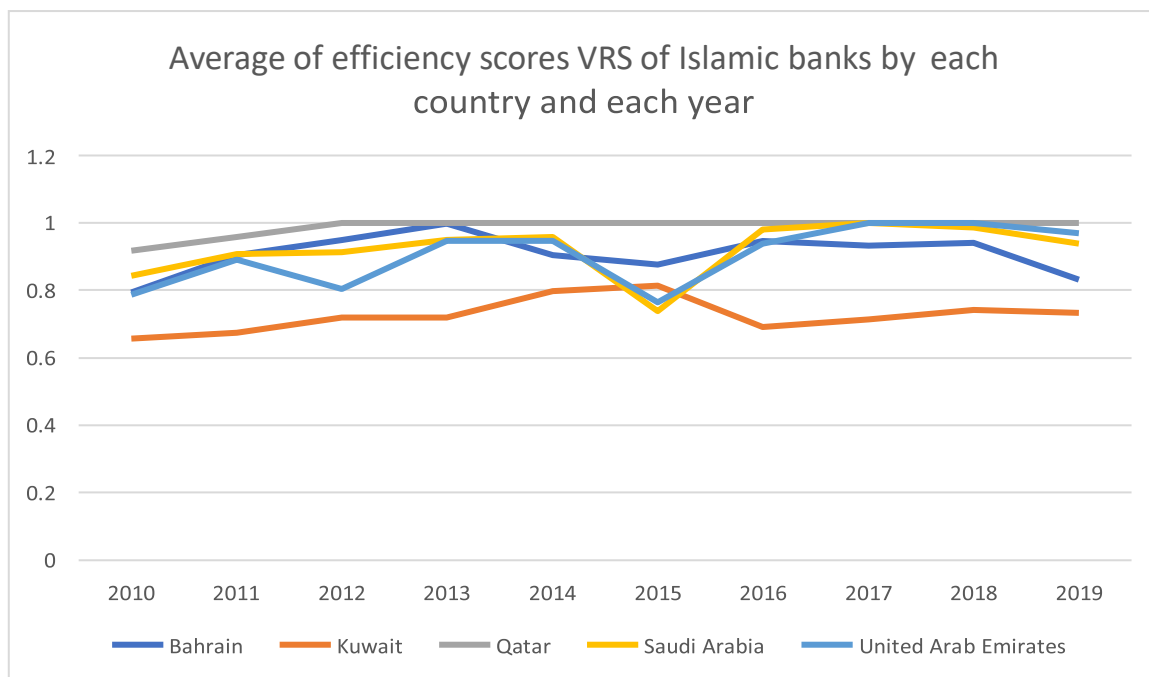
Source: Researcher's construction.

Figure 6.6: Descriptive statistics of annual efficiency scores (CRS) for IBs in each country during 2010–2019.

Table 6.5: Average PTE Score by Country and Year (VRS)

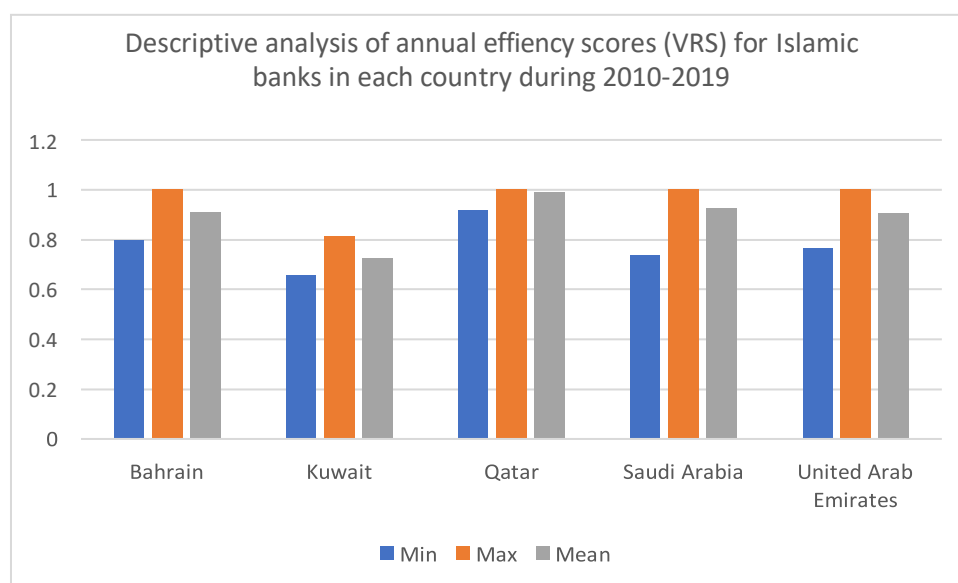
Year	Bahrain	Kuwait	Qatar	Saudi Arabia	UAE	Average
2010	0.7942	0.6576	0.9178	0.8442	0.7873	0.8002
2011	0.9044	0.6755	0.9583	0.9082	0.8900	0.8673
2012	0.9492	0.7199	1.0000	0.9137	0.8036	0.8773
2013	0.9982	0.7209	1.0000	0.9512	0.9478	0.9236
2014	0.9057	0.7974	1.0000	0.9582	0.9482	0.9219
2015	0.8779	0.8144	1.0000	0.7385	0.7647	0.8391
2016	0.9461	0.6928	1.0000	0.9802	0.9374	0.9113
2017	0.9320	0.7134	1.0000	1.0000	1.0000	0.9291
2018	0.9404	0.7418	1.0000	0.9850	1.0000	0.9334
2019	0.8326	0.7344	1.0000	0.9388	0.9687	0.8949
Average	0.9081	0.7268	0.9876	0.9218	0.9048	0.8898
Std. Dev	0.1795	0.2409	0.0564	0.1410	0.0888	0.1545

The average efficiency scores measured using the VRS DEA model and presented in Table 5.5 show improvements in the efficiency of IBs over the study period. Qatari banks appear to be ahead of the other GCC countries, with average efficiency score around 0.9876 (SD = 0.0564), followed by Saudi banks with an efficiency score 0.9048 (SD = 0.1410), Bahrain banks with an efficiency score of 0.9081 (SD = 0.1795), and UAE banks with an efficiency score of 0.9048 (0.0888). Finally, Kuwait has the lowest efficiency score, this being 0.7068 (SD = 0.2409). As shown below, Figure 6.7 depicts the average efficiency scores (VRS) of IBs by country and year, while Figure 6.8 shows a descriptive analysis of annual efficiency scores (VRS) for IBs by country during 2010–2019.



Source: Researcher's construction.

Figure 6.7: Average efficiency scores (VRS) of IBs by country and year



Source: Researcher's construction.

Figure 6.8: Descriptive analysis of annual efficiency scores (VRS) for IBs in each country during 2010–2019.

The statistical analysis of efficiency shows a mixed trend among IBs in the GCC countries. Overall, the average efficiency score at both levels (year and country) indicates that Qatar is the most efficient on average, followed by Saudi Arabia, Bahrain, the UAE, with Kuwait the least efficient. This higher performance could be the outcome of factors

such as effective and enforced banking legislation/regulation, operational expertise and application of Islamic financial instruments. Lower efficiency performance could be attributed to factors obstructing maximisation of output, in terms of other fees and commission income, other operating income or earning assets.

6.3 Correlation Analysis

Table 6.6 presents the estimated correlation coefficients for the test variables. Correlation coefficients are used to identify the strength and direction of the relationship between two variables. They are also used to identify any multicollinearity problem among the independent variables (Faul et al. 2009), which would affect the accuracy of estimated coefficients of regression and the statistical power of the regression (Ntim 2015).

This study uses Pearson correlation coefficients to measure the correlation among variables used in the study. Pearson is a parametric test, used to measure the nature of the relationship between linearly related variables (Bishara & Hittner 2012). This test has been used often in previous studies (Ajili & Bouri 2018b; Nomran & Haron 2019; Quttainah & Almutairi 2017). As revealed in Table 5.6, the strength and direction of the Pearson test coefficients are less than 0.90, indicating that there are no high correlations among the variables, in turn suggesting no major multicollinearity problem (Elamer et al. 2019; Liu et al. 2015). Therefore, this study included all the independent variables in the regression models.

Table 6.6: Pearson Correlations (Parametric) for All Variables

	SSBS	SSBEP	SSBED	SSBC	SSBR	SSBindex	BDindex	SIZE	AGE	LEV	ROA	ROE	Tobin'sQ	ZOE	CRS	VRS
SSBS	1															
SSBEP	-0.313**	1														
SSBED	-0.571**	0.362**	1													
SSBC	-0.245**	0.229**	0.042	1												
SSBR	0.142	0.411**	-0.306**	0.477**	1											
SSBindex	-0.151*	-0.149*	0.132	0.000	-0.086	1										
BD index	0.426**	-0.229**	-0.165*	-0.091	-0.042	0.133	1									
SIZE	0.255**	0.219**	0.076	0.288**	0.176*	-0.125	0.134	1								
AGE	0.186*	-0.056	-0.229**	0.095	-0.153*	0.089	0.039	0.394**	1							
LEV	-0.325**	-0.093	0.160*	-0.187**	-0.075	0.111	-0.155*	-0.577**	-0.464**	1						
ROA	0.045	0.198**	0.069	0.105	0.110	-0.126	0.057	0.325**	0.044	0.068	1					
ROE	0.099	0.178*	0.088	0.141	0.107	-0.172*	-0.005	0.446**	0.087	-0.046	0.928**	1				
Tobin'sQ	-0.199**	0.278	0.501**	-0.238	-0.023*	0.536	-0.030	0.536	0.0239**	-0.225	0.246**	0.281**	1			
ZOE	0.475	0.070	0.058	0.019	0.000	0.329**	0.004	0.448	0.026	0.274	0.864	0.979	0.605	1		
CRS	-0.231**	0.327**	-0.009	0.026	0.299**	-0.158*	-0.275**	0.042	-0.007	0.154*	-0.033	-0.062	0.077	0.060	1	
VRS	-0.102	0.116	0.073	0.110	0.269**	-0.199**	-0.174*	0.017	-0.088	0.091	-0.012	-0.002	0.041	0.050	0.656**	1

Notes: *** significant at 1%, ** significant at 5%, * significant at 10%; SSBS (SSB size), SSBEP (SSB experience), SSBED (SSB educational level), SSBC (SSB cross - membership), SSBR (SSB reputation), SSB index (SSBS + SSBEP + SSBED + SSBC + SSBR) and the BD index (including board size, board independence and CEO duality). Return on average assets (ROA), return on average equity (ROE), Tobin's Q, Zakat on equity ratio (ZOE), technical efficiency score (CRS) and pure technical efficiency score (VRS).

6.3.1 Pearson correlation

Table 6.6 presents the Pearson correlation coefficient matrix for Shariah governance variables and bank performance. The strength of the Pearson correlation is described as follows: 0.20–0.39 ‘low’, 0.40–0.69 ‘moderate’, 0.70–0.89 ‘high’ and 0.90 and above ‘very high’ (Cohen & Holiday 1982). The Pearson analysis indicates that various associations were found between the variables and bank performance. These correlations differed in terms of strength and direction, as discussed in more detail below.

6.3.1.1 SSB size (SSBS)

SSB size had a negative and significant correlation with Tobin’s Q and efficiency CRS at the 5% significance level. However, SSB size had no significant association with ROA, ROE, ZOE and efficiency VRS.

6.3.1.2 SSB expertise (SSBEP)

There was a positive and significant correlation between SSB expertise (SSBEP) and ROA and efficiency CRS at 5% and ROE at 10%. In contrast, SSB expertise was not significantly correlated with Tobin’s Q, ZOE and efficiency VRS.

6.3.1.3 SSB educational level (SSBED)

The results also confirmed a significant positive association between the SSB educational level and Tobin’s Q at 5%, but no significant association was found between the SSB educational level and ROA, ROE, ZOE and efficiency.

6.3.1.4 SSB cross-membership (SSBC)

SSB cross-membership had a negative and significant association with ZOE at 10%, but no significant association with ROA, ROE, Tobin’s Q and efficiency.

6.3.1.5 SSB reputation (SSBR)

SSB reputation was significantly and negatively correlated with Tobin’s Q and ZOE at 10% and 5%, respectively; however, it was not significantly associated with ROA and ROE. Regarding efficiency, there was a positive and significant relationship with SSB reputation and efficiency CRS and VRS at 5%.

In reference to the control variables, bank size had significant and positive correlations with ROA and ROE both at 5%. These positive correlations suggest that larger IBs are more likely to perform well. In contrast, bank size had no significant correlation with Tobin's Q, ZOE and efficiency. Regarding bank age, this had a significant and negative correlation with Tobin's Q at 5%. Also, bank age had a significant and positive correlation with ZOE at 10%. However, no significant correlation was found between bank age and ROA, ROE and efficiency. Last, leverage was positively and significantly associated with Tobin's Q at 5% and efficiency CRS at 10%, but not significantly associated with ROA, ROE, ZOE and efficiency VRS. These findings support the inclusion of bank characteristics as control variables in the regression models.

To sum up, the results of the Pearson test highlight the significance level and direction of the above correlations differed. The variation in these correlations shows that SSB composition is a statistically significant factor concerning how well banks perform. Consequently, the relationship between SSB composition and bank performance is further examined and analysed using multivariate analysis. The next sections carry out a multivariate analysis, which is more reliable than a correlation analysis.

6.3.2 Multicollinearity

Despite the tests performed in relation to normality and transformation of the data, multicollinearity may still cause a problem. Therefore, to further investigate of existence of multicollinearity, a Variance Inflation Factor (VIF) and tolerance statistics tests were used (Kajananthan 2012). Multicollinearity may become problematic if tolerance is near 0 and the values of VIF are over 10 (Gujarati 2003). Table 6.7 presents the values of VIF and tolerance statistics, with tolerance statistics falling between 0.313 and 0.807 and VIF ranging from 1.239 to 3.191. Both tolerance statistics and VIF values offer extra proof of no serious issues regarding multicollinearity while explaining the findings of the OLS regressions.

Table 6.7: Variance Inflation Factor (VIF)

Variables	Tolerance	VIF
SSB size	0.313	3.191
SSB expertise	0.449	2.226
SSB educational level.	0.340	2.945
SSB cross-membership.	0.476	2.101
SSB reputation	0.338	2.955
BD index	0.807	1.239
Bank size	0.449	2.227
Bank age	0.563	1.777
Leverage	0.510	1.961

6.4 The Impact of SSB Composition on Bank Performance

The study investigates the impact of SSB composition on bank performance, and the effect of the BD structure on this relationship. The study used multivariate pooled-ordinary least square (OLS) regression to investigate the relationship between the dependant variables (ROA, ROE, Tobin's Q, ZOE ratio and DEA) and independent variables (SSB composition).

The linear regression assumptions, such as linearity, normality, multicollinearity, autocorrelation, outliers and homoscedasticity, are met (see Appendices 1 and 2 for detailed results) by using appropriate diagnostic tests, as detailed in Chapter 5. The findings of the diagnostic tests encourage the choice of OLS over other regression approaches. OLS regression is known as an efficient regression method and delivers accurate estimated models when the linear regression assumptions are satisfied (Bouteska 2020; Chamberlain, Hidayat & Khokhar 2020; Gujarati 2003). Thus, it was used in this study because: firstly, the regression assumptions were met; and secondly, the data collected here include several variables to investigate the impact of SSB composition on bank performance.

Model 1 investigates the impact of SSB composition on bank performance (ROA, ROE, Tobin's Q, ZOE ratio and DEA) and addresses the study's research question 1 (RQ1: To what extent does SSB composition affect bank performance?). Model 2 serves to examine whether the BD structure influences the relationship between SSB and bank performance. This model aims to answer the study's research question 2. The model was separately

estimated using multivariate pooled-ordinary least square (OLS) regression analyses by substituting ROA, ROE, Tobin's Q and *Zakat* ratio as dependent variables. In regard to the DEA measure, the study used the Tobit regression approach because the dependent variable, estimated efficiency scores, are limited to 1 and 0.

Model 1: To examine *H1*, *H2*, *H3*, *H4* and *H5* we developed the following study model (see Chapter 4 for greater detail):

$$perf = \beta_0 + \beta_1 SSBS_{it} + \beta_2 SSBEP + \beta_3 SSBED + \beta_4 SSBC + \beta_5 SSBR + \sum_{j=1}^n \alpha_j x_j + \varepsilon$$

Model 2: To examine *H6* of the interactions, we developed the following study model:

$$perf = \beta_0 + \beta_1 SSBS_{it} + \beta_2 SSBEP + \beta_3 SSBED + \beta_4 SSBC + \beta_5 SSBR + \beta_6 SSB_index + \beta_7 BD_index + \beta_8 SSB_index * BD_index + \sum_{j=1}^n \alpha_j x_j + \varepsilon$$

The above model is estimated using the OLS regressions by substituting ROA, ROE, Tobin's Q and *Zakat* ratio as the dependent variables used to proxy bank performance. The estimated coefficients are presented in Table 6.8 below. The above model was re-estimated using the Tobit regression approach, substituting the efficiency scores using the CRS and VRS models. The estimated coefficients for the Tobit regressions are presented in Table 6.12.

Table 6.8: OLS Regression Results for IB Performance (Model 1)

	ROA		ROE		Tobin's Q		ZOE	
Variable	Beta	t-test	Beta	t-test	Beta	t-test	Beta	t-test
SSB size	0.190*	1.65	0.240**	2.14	0.029***	2.80	0.082	0.68
SSB expertise	0.288***	2.98	0.192**	2.05	0.105***	2.88	0.065	0.65
SSB educational level	-0.052	-0.46	0.009	0.08	0.161***	2.97	0.085	0.75
SSB cross-membership	0.131	1.39	0.138	1.52	0.137***	3.20	0.018	0.19
SSB reputation	-0.137	-1.23	-0.132	-1.22	-0.146***	-3.38	-0.050	-0.60
Bank size	0.462***	4.78	0.558***	5.95	0.060***	4.40	0.038	0.37
Bank age	0.017	0.20	-0.019	-0.22	-0.002**	-2.57	0.091	1.03
Leverage	-0.482***	-5.32	-.384***	-4.36	-0.102	-1.30	0.008	0.08
Constant	-29.908***	4.69	-170.410***	23.53	-0.207**	2.12	-0.301	0.89
Durbin-Watson statistics	1.449		1.457		0.669		0.372	
F-value	6.624		8.290		19.897		5.527	
Sig.	0.000		0.000		0.000		0.000	
R-squared	0.250		0.294		0.468		0.219	
Adjusted R-squared	0.212		0.259		0.444		0.180	
No. of observations	189		189		190		187	
Notes: *** significant at 1%, ** significant at 5%, * significant at 10%.								

To answer research question 1, the regression results are presented in Table 6.8, which show the relationship between SSB composition and bank performance. All of the models are shown to fit well in explaining the impact of SSB on bank performance; however, the adjusted R-squared is different for each bank performance measurement, where R-squared indicates ability of the explanatory variables to explain the dependent variable of the estimated model. In other words, the determinants of each bank performance measurement may be qualitatively different. Below, we review the regression results based on the research hypotheses.

6.4.1 The impact of the SSB on ROA

Model 1 was used to investigate SSB composition factors affecting bank performance as measured by ROA. The first column of Table 6.8 presents the estimated coefficients for Model 1 with ROA as the dependent variable. The estimated 'F' stat shows the model is well fit to explain the impact of SSB on ROA. The estimated 'R square' indicates variables included in the model explain 21.2% of the variation of ROA of IBs in GCC countries during the period 2010–2019. The model included five independent variables. Of these, SSB size and SSB expertise were found to have significant positive relationships with ROA. Moreover, the above table shows the coefficient (β) of each tested variable, which explains the direction and strength of the association between the independent variables (SSB composition and the control variables) and the dependent variable (ROA). A detailed discussion of the results is presented in the following section.

6.4.1.1 SSB size

The first hypothesis (H1) predicts a positive relationship between SSB size and bank performance. The estimated coefficient of β (0.190) for the SSB size in Model 1 shows a statistically significant positive relationship between SSB size and bank performance (measured by ROA) at the significance levels of 10%; therefore, H1 is empirically supported. Thus, it is evident that having more SSB scholars on an SSB is associated with superior bank performance as measured by ROA. This result is consistent with the findings of Baklouti (2020), Farag, Mallin and Ow-Yong (2018), Hakimi et al. (2018), Mollah and Zaman (2015), Nomran, Haron and Hassan (2018) and Quttainah and Almutairi (2017). They all recorded that larger SSBs were more efficient in monitoring and creating value for banks. This result also supports agency theory, which argues that, in

larger businesses, a large BD can be instrumented to enhance official operational activities such as monitoring and control (Coles, Daniel & Naveen 2008). This result also supports resource dependence theory, which argues that a large BD enhances effective decision-making capacity and makes better use of the connections between the external environment and the company (Lückerath-Rovers 2013; Yermack 1996). However, this finding is not consistent; Jensen (1993) asserted that large BDs are less able to enact critical and effective strategic processes and decisions. Overall, this study provides empirical evidence to support the claim that the size of the SSB is important to gaining higher profitability.

6.4.1.2 SSB expertise

The second hypothesis (H2) expects a positive relationship between SSB expertise and bank performance. Supporting H2, the study found a statistically significant relationship between ROA and SSB expertise. The significant and positive relationship indicates that members of the SSB with accounting/finance expertise lead to better board oversight and serve the interests of shareholders better.

Further, among the SSB composition variables, SSB expertise has the highest coefficient ($\beta = 0.288$), implying that the SSB expertise variable has the greatest effect of all tested SSB composition variables. This confirms the argument that SSB scholars with financial expertise are more effective in their duties than members without it (Abdul Rahman & Bukair 2013).

This result agrees with the empirical findings of Grassa and Matoussi (2014a), who found significant positive correlations between SSB expertise and bank performance. However, this result differs from that of Nomran, Haron and Hassan (2018), who detected a negative relationship between SSB expertise and bank performance. Elsewhere, Hakimi et al. (2018) found no significant relationship between these factors. The positive association is supported by resource dependence theory, which favours expertise and education qualifications of board members (Lückerath-Rovers 2013; Ujunwa 2012). Thus, this study provides empirical evidence showing the importance of SSB expertise to improving bank performance.

6.4.1.3 SSB educational level

As stated in the H3, a significant relationship between SSB educational level and bank performance is expected. The multivariate regression indicates a weakly negative (coefficient β ranging between -0.052 and 0.009), insignificant association. Thus, there is no empirical evidence to support or reject H3. This means that there are other variables explaining the variation in bank performance better than SSB educational level.

6.4.1.4 SSB cross-membership

H4 predicts that SSB cross-membership should have a positive and significant relationship with bank performance. The OLS regression results shown in Table 6.8 indicate an insignificant relationship between SSB cross-membership and bank performance as measured by ROA. Thus, there is no evidence to accept or reject H4.

6.4.1.5 SSB reputation

The fifth hypothesis H5 predicts a positive relationship between SSB reputation and bank performance. The obtained result suggests there is an insignificant relationship between the SSB reputation and bank performance (measured by ROA). Thus, there is no empirical evidence to support H5.

In respect to the control variables, bank size and leverage were noted as having a relationship with ROA at the 1% significance level. There was a positive relationship between bank size and ROA; however, there was a negative relationship between leverage and ROA. This suggests that larger IBs in the sample were more likely to perform well. Regarding leverage, the result means that higher levels of debt decrease bank performance. In other words, the findings indicate that the higher the debt ratio, the lower the ROA. The cost of operations may be the reason for an increased debt ratio in firms (Dechow, Sloan & Sweeney 1996). With an increased debt ratio, the firm may not be able to obtain new credit and could lose valuable investment opportunities. This is also linked to the negative effect of a higher debt ratio on paid dividends. Additionally, increased leverage is a sign of financial stress.

Bank age does not have any impact on bank performance as measured by ROA. This could be because some of the IBs were relatively new and did not have a lot of experience (Table 6.1 shows the minimum bank age is one year). This is in line with Ajili and Bouri

(2018b), who found no significant correlation between bank age and bank performance. Table 6.9 provides a summary of the hypotheses developed to investigate the relationship between SSB composition and bank performance as measured by ROA. SSB size, SSB expertise, SSB educational level, SSB cross-membership and SSB reputation were hypothesised to be positively related to ROA (*H1, H2, H3, H4 and H5*).

Table 6.9: Summary of Hypotheses Testing and Findings for Model (ROA)

Independent variable	Dependent variables (ROA)	
	Hypothesis & expected sign	Result
SSB size	H1 (+)	Supported (+) & significant.
SSB expertise	H2 (+)	Supported (+) & significant.
SSB educational level	H3 (+)	No evidence to support or reject.
SSB cross-membership	H4 (+)	No evidence to support or reject.
SSB reputation	H5 (+)	Not evidence to supported or reject.

6.4.2 The impact of the SSB on ROE

Model 1 is re-estimated substituting ROE as the dependent variable to examine the impact of SSB on bank performance. The estimated ‘F-value’ presented in Table 6.8 reveals that Model 1 is well able to explain the factors affecting ROE. This model’s R-squared is 25.9%, suggesting that the composition of SSB, in addition to the three control variables, explained approximately 25.9% of the variation of ROE for IBs in GCC countries. There are five independent variables included in this model, with two (SSB size and SSB expertise) showing significant and positive relationships with ROE. However, the other independent variables, SSB educational level, SSB cross-membership and SSB reputation, did not provide statistically significant evidence to support or reject the hypothesised relationships. In addition, Table 6.8 shows the coefficient (β) of each variable tested, which describes the strength and direction of the relationship between the dependent variable (ROE) and the independent variables (SSB composition). These are discussed below in more detail.

6.4.2.1 SSB size

Confirming the predicted relationship in H1, the study found a positive significant association between SSB size and bank performance, indicating that the presence of more SSB scholars on an SSB is linked to better bank performance. Empirically, this finding is

consistent with Baklouti (2020), Farag, Mallin and Ow-Yong (2018), Hakimi et al. (2018), Mollah and Zaman (2015), Nomran, Haron and Hassan (2018) and Quttainah and Almutairi (2017), who stated that larger SSBs are more effective in creating value for banks and supervising. In contrast, this finding is inconsistent with the study carried out by Ajili and Bouri (2018b), who found that such significant association does not exist.

This finding is in line with the theoretical assumption of agency theory that, in larger companies, the complicated nature of official duties often means that a large number of directors are required to enhance official operations, such as company control and monitoring (Coles, Daniel & Naveen 2008). The positive result is also consistent with the reasoning behind resource dependence theory, which contends that a small BD cannot match a large BD in terms of effective decision-making and fully utilising the connections between the company and the external environment (Lückerath-Rovers 2013; Yermack 1996). However, this finding contradicts that of Jensen (1993), who argued that the board's ability to enact critical and effective strategic decisions and processes continues to lessen with an increasing number of directors. In summary, this study provides empirical evidence showing the importance of a large SSB to improving bank performance.

6.4.2.2 SSB expertise

The second hypothesis H2 predicts a positive and significant relationship between SSB expertise and bank performance. The results show a statistically positive association between SSB expertise and bank performance, measured by ROE, at the significance level of 5% ($\beta = 0.192$). Thus, this leads us to accept H2. The significant and positive relationship shows that Shariah scholars with accounting/finance expertise lead to improved board supervision and serve shareholders' interests better.

Additionally, as for the relationship between SSB expertise and ROA, the relationship between SSB expertise and ROE has the highest coefficient ($\beta = 0.192$) among the SSB composition variables. High SSB expertise coefficients, in comparison to the other SSB composition variables, shows that the SSB expertise variable has the most significant impact of all tested SSB composition variables. This validates the argument that SSB scholars who are knowledgeable in finance are more effective in their roles than members who are not knowledgeable (Abdul Rahman & Bukair 2013).

This finding supports the empirical results of Grassa and Matoussi (2014a), who noted a significant positive relationship between SSB expertise and bank performance. However, it differs from that of Nomran, Haron and Hassan (2018), who recorded a negative such relationship. Hakimi et al. (2018) did not find any relationship between these variables. The positive result is supported by resource dependence theory, which finds benefits in board members' expertise and education qualifications (Lückerath-Rovers 2013; Ujunwa 2012). In general, this study provides empirical evidence showing that SSB expertise leads to improved board supervision and serves shareholders' interests better, which results in improved bank performance.

6.4.2.3 SSB educational level

H3 expects a positive relationship between SSB educational level and bank performance (ROE). The multivariate regression shows an insignificant such relationship. Subsequently, we do not find evidence to support or reject *H3*. This implies there are other variables that can explain the changes in bank performance better than the educational level of the SSB members.

6.4.2.4 SSB cross-membership

H4 posits a significant and positive association between SSB cross-membership and bank performance. The OLS regression results presented in Table 6.8 demonstrate an insignificant relationship between SSB cross-membership and bank performance (ROE). Therefore, there is no evidence to support or reject *H4*.

6.4.2.5 SSB reputation

H5 expects a significant positive relationship between SSB reputation and bank performance, as measured by ROE. The results show an insignificant such relationship, which provides no evidence to support or reject *H5*.

With regard to the control variables, bank size and leverage were recorded as significantly related to ROE at the 1% level. A positive association exists between bank size and ROE while there was a negative association between leverage and ROE. These results are similar to these results for ROA. This shows that in the sample, larger IBs are likely to perform well, while an increased debt ratio is likely to reduce the performance of banks.

However, the age of a bank does not have any effect on its performance, as measured by ROE. This result is the same as that for ROA and confirms that IBs in the study sample did not have a lot of experience and were relatively new. Table 6.10 provides a summary of the hypotheses developed to examine the relationship between SSB composition and bank performance measured by ROE. SSB size, SSB expertise, SSB educational level, SSB cross-membership and SSB reputation were hypothesised to be positively related to ROE.

Table 6.10: Summary of Hypotheses Testing and Findings for Model (ROE)

Independent variable	Dependent variable (ROE)	
	Hypothesis & expected sign	Result
SSB size	H1 (+)	Supported (+) & significant.
SSB expertise	H2 (+)	Supported (+) & significant.
SSB educational level	H3 (+)	No evidence to support or reject.
SSB cross-membership	H4 (+)	No evidence to support or reject.
SSB reputation	H5 (+)	No evidence to support or reject.

6.4.3 The impact of the SSB on Tobin's Q

Besides using accounting-based measures, this study uses Tobin's Q as a market-based measure of performance indicator to examine the impact of an SSB on bank performance. Model 1 is used to investigate the impact of SSB composition on bank performance measured by Tobin's Q. With reference to the association between SSB composition and Tobin's Q, and as noted in Table 6.8, the estimated F-value of the OLS regression analysis shows that this model is a good and valid fit to explain the factors influencing Tobin's Q. The recorded R-squared is 44% – higher than those for ROA and ROE, which are 21.2% and 25.9%, respectively. This means that SSB composition, along with the three control variables, explained around 44% of the variation in Tobin's Q for IBs in GCC countries. Further, explanatory variables SSB size, SSB expertise, SSB educational level and SSB cross-membership have a statistically significant positive association with Tobin's Q, all at the 1% significance level. In contrast, SSB reputation is negatively and significantly associated with Tobin's Q at the 1% significance level. More detail for each association between SSB composition and Tobin's Q is given below.

6.4.3.1 SSB size

The first hypothesis (H1) predicts a positive and significant association between SSB size and bank performance. According to the results of the OLS analyses, SSB size is found to be associated positively and statistically with bank performance (measured by Tobin's Q), at the significance level of 1% ($\beta = 0.029$). Therefore, H1 is empirically supported and accepted. This means that the sampled IBs with large SSB size tended to have higher market valuations, indicating that larger boards may prove more successful in monitoring and advising functions for IBs, generating more value and thereby achieving higher market valuations. Empirically, this result is similar to those of Mollah and Zaman (2015) and Buallay (2019), who found that larger SSBs were positively linked to firms' market values. In contrast, this finding is not in line with Ajili and Bouri (2018a), who contended that there was no such significant association. This evidence is consistent with the theoretical expectation of resource dependence theory, which argues that a large board is better than a small board at strategic decision-making (Dalton et al. 1998; John & Senbet 1998). A larger board enhances effective decision-making and makes full use of the connections between the external environment and the company (Lückerath-Rovers 2013; Yermack 1996).

This result is inconsistent with agency theory, which argues that small boards are more efficient than large boards because shareholder interests can be compromised if the board is too large (Jensen 1993). Moreover, a large board helps to reduce agency problems during periods of financial turbulence by effectively performing its strategic function (Mintzberg 1983). The current study provides empirical evidence regarding the importance of a large SSB to improving bank performance.

6.4.3.2 SSB expertise

The second hypothesis H2 expects a positive and significant relationship between SSB expertise, as measured by the percentage of SSB scholars who have accounting or financial knowledge, and bank performance. The results show that SSB expertise is positively associated with bank performance (measured by Tobin's Q). The results are statistically significant at the 1% level ($\beta = 0.105$). Thus, H2 is supported and accepted.

The significant and positive relationship indicates that Shariah scholars with accounting/finance expertise lead to better board oversight and serve the interests of the shareholders better. This leads to increased firm value.

Further, among the SSB composition variables, SSB size and SSB expertise have the highest coefficients (β), ranging between 0.029 and 0.105. The high coefficients of SSB size and SSB expertise, compared with the other SSB composition variables, means that these variables have the greatest effect of all tested SSB composition variables. This confirms the argument that SSB scholars who have financial expertise are more effective in their duties by increasing the quality of the strategic decisions taken by the SSB (Abdul Rahman & Bukair 2013; Quttainah & Almutairi 2017).

This result agrees with the empirical findings of Grassa and Matoussi (2014a), who found significant positive correlations between SSB expertise and bank performance. However, this result differs from that of Nomran, Haron and Hassan (2018), who detected a negative relationship between SSB expertise and bank performance. Elsewhere, Hakimi et al. (2018) found no significant relationship between these factors. A positive association is supported by resource dependence theory, which favours expertise and education qualifications of board members (Lückerath-Rovers 2013; Ujunwa 2012). The current study provides empirical evidence that could help policy makers to improve bank performance by including greater expertise on SSBs.

6.4.3.3 SSB educational level

With regards to H3, a positive relationship is expected between SSB educational level and bank performance. The multivariate regression indicates a statistically significant positive association between SSB educational level and bank performance at the 1% level ($\beta = 0.161$). This result supports H3, which is thus supported and accepted. This means that the higher level of education, the higher the value of IBs. Empirically, this is consistent with the work done by Musibah and Alfattani (2014) and Nomran and Haron (2019), who found a positive relationship between these factors in the GCC countries. The positive result is in contrast to Nomran and Haron (2018), who found a negative effect of SSB educational level on bank performance. They explained this negative result may reflect a need to have SSB scholars with PhDs in other specific skills such as accounting and finance.

This finding is consistent with resource dependence theory, according to which an organisation's board is its key connection with the external environment because it can introduce different resources to the organisation, such as skills, expertise and knowledge (Francis, Hasan & Wu 2015). These various resources can help improve effective strategic decision-making so that firm performance improves (Francis, Hasan & Wu 2015; Ujunwa 2012). Moreover, to make connections with opportunities in the external environment, the resource dependence theory favours expertise and education qualifications (Lückerath-Rovers 2013; Ujunwa 2012).

6.4.3.4 SSB cross-membership

In this study, H4 predicts a positive and significant association between SSB cross-membership and bank performance. The OLS regression results shown in Table 6.8 report that the relationship between SSB cross-membership and Tobin's Q is positive and significant at the 1% level ($\beta = 0.173$). Thus, this result supports H4. This positive and significant relationship indicates that SSB scholars sitting on more than one SSB have an impact on IBs' performance.

This result is in line with previous studies such as Almutairi and Quttainah (2017) and Nomran et al. (2018), who found a positive relationship between these factors. The positive result can perhaps be explained by the benefit of cross-memberships of SSB scholars to board effectiveness. Grassa (2016) argued that cross-memberships enhance the knowledge and experience of SSB scholars, and thus improve the performance of IBs. However, this result is not in line with Grass and Matoussi (2014a), Nomran et al. (2017), Nugraheni (2018), Muda (2017) and Al-Agra' (2020), who discovered there is a negative relationship between SSB cross-membership and bank performance.

The current study finding is consistent with resource dependence theory, which argues that cross-memberships expose SSB scholars to more debates related to the Islamic banking industry. Hence, SSBs scholars with more cross-memberships make an impact on IBs' performance in the GCC countries.

6.4.3.5 SSB reputation

H5 expects a positive and significant relationship between SSB reputation and bank performance. The obtained result suggests a significant and negative relationship between

SSB reputation and bank performance (measured by Tobin's Q) at the 1% level ($\beta = 0.146$), leading us to reject *H5*. This suggests that the proportion of SSB scholars who sit on the reputable AAOIFI Board and also have at least one SSB membership in another Islamic financial institution has a negative and significant relationship with IBs' performance in GCC countries. The reason for the negative impact could be SSB scholars' preoccupation with attending and following up on SSB meetings, the loss of confidentiality of information, and potential misuse of information. This in turn would have a negative impact on bank performance.

This result is not consistent with Nomran, Haron and Hassan (2018), who found a positive and significant association between SSB reputation and bank performance. It also contradicts other studies that found a significant association between these variables (Hakimi et al. 2018; Matoussi & Grassa 2012). Furthermore, this result is not in line with resource dependency theory, which assumes that a corporate board provides important resources for companies, such as reputation, that improve performance.

As discussed in Chapter 5, bank size, bank age and leverage are included as control variables in the study model because they are important in explaining variations in firm performance. In addition, the control variables were included to control for the impact of potential omitted variables bias (Al-Bassam et al. 2018). Table 6.8 shows that bank size had a positive and significant association with Tobin's Q at the 1% level and bank age had a negative association with Tobin's Q at the 5% level. However, there is no evidence of leverage affecting Tobin's Q.

Table 6.11: Summary of Hypotheses Testing and Findings for Model (Tobin's Q)

Independent variable	Dependent variable (Tobin's Q)	
	Hypothesis & expected sign	Result
SSB size	H1 (+)	Supported (+) & significant.
SSB expertise	H2 (+)	Supported (+) & significant.
SSB educational level	H3 (+)	Supported (+) & significant.
SSB cross-membership	H4 (+)	Supported (+) & significant.
SSB reputation	H5 (+)	Rejected (-) & significant.

6.4.4 The impact of the SSB on ZOE

When considering the ZOE ratio as the dependent variable, there is no significant relationships between SSB composition and ZOE. The potential reason for the non-significance of these results is that relatively few IBs pay *Zakat*. This is consistent with the results of the descriptive statistics in Table 6.1, which shows that more than 52% of banks sampled over the study period disclosed not collecting or paying *Zakat* on their profits on behalf of shareholders. However, some banks are required to calculate and notify individual shareholders of *Zakat* payable per share. In the UAE and Qatar, these calculations are approved by their SSB. The mean of the *Zakat* variable (untabulated ZOE mean .4840) is very low, confirming that the explanatory power of this variable could not be significant.

6.4.5 The impact of SSB on efficiency (DEA)

This section presents and discusses the empirical results on the relationship between SSB composition and bank efficiency. As mentioned in Chapter 5, a two-stage procedure has been applied to investigate the impact of an SSB on the estimated relative efficiency of IBs. First, we use the DEA-Solver program to determine the efficiency scores for IBs in GCC countries (descriptive statistics for these efficiency scores were presented in Subsection 6.2.3.5). Second, the impact of SSB composition on bank efficiency is presented below.

Following previous research, this study uses the Tobit regression approach to investigate the impact of SSB composition on bank efficiency (Alqahtani, Mayes & Brown 2017; Banna & Alam 2020; Zeineb & Mensi 2018). Model 1, related to RQ1, is used to identify the factors affecting bank efficiency as a performance indicator. Model 2, used to find whether BD structure influences the relationship between SSB and bank efficiency, has been re-estimated using DEA estimated relative efficiency as a proxy of bank performance (dependent variable). The following section presents the second-stage regression results (see Table 6.12) and discusses the findings in detail.

Table 6.12: Tobit Regression Results for CRS and VRS

Variable	Model 1				Model 2			
	CRS		VRS		CRS		VRS	
	Coefficient	t-test	Coefficient	t-test	Coefficient	t-test	Coefficient	t-test
SSB size	0.0887***	2.82	0.0770**	2.48	0.0744	1.62	0.0250	1.48
SSB expertise	0.2643**	2.41	0.2809**	2.65	0.0944	0.61	0.0232	0.25
SSB educational level	0.1387	0.85	-0.1902	-1.24	0.2332	1.00	0.0656	0.55
SSB cross-membership	-0.6679***	-4.11	-0.6224***	-3.87	0.1701	0.72	0.1605*	1.76
SSB reputation	0.7009***	5.24	0.6592***	4.95	0.1387	0.85	0.0386	0.30
SSB index	-	-	-	-	-0.1387	-0.85	0.2205	0.87
Board of Directors index	-	-	-	-	0.2791	1.19	-0.2319	-1.03
SSB index * BD index	-	-	-	-	-0.1035***	-3.64	-0.2696**	-2.31
Bank size	0.0699**	1.74	0.0462	1.18	0.0374	1.16	0.0183	0.30
Bank age	0.0059**	2.38	0.0053**	2.28	0.0029	1.55	0.0035	1.06
Leverage	0.2205	0.87	0.2817	1.07	-0.1410	-0.68	0.3477	0.88
Year fixed effect	Included		Included		Included		Included	
Constant	0.5357*	1.92	0.4989*	1.91	0.1035	1.43	0.4981*	1.91
LR $\chi^2(12)$	66.30		85.19		30.36		39.44	
Pseudo R ²	0.2865		0.3681		0.1840		0.1772	
Log likelihood	108.246		172.376		100.148		99.431	
No. of observations	190		190		190		190	
Notes: *** significant at 1%, ** significant at 5%, * significant at 10%.								

Table 6.12 presents the outcome of the Tobit regression models. The log-likelihood statistics and related probabilities indicate that the two regression models, used to regress estimated efficiency scores using the CRS and VRS DEA models, are good and valid for explaining the factors affecting the estimated relative efficiency scores (both CRS and VRS). The relatively high values of the estimated Tobit adjusted R-squared of the two models indicate that the SSB composition variables, along with the three control variables, explain around 28% of the variation in CRS and 36% of the variation in VRS for IBs in the GCC countries during the period 2010–2019. The results of the Tobit analysis reinforce the results of the OLS analysis; results are very similar. The coefficient (β) of each explanatory variable is discussed in more detail below.

6.4.5.1 SSB size

As predicted in H1, SSB size should have a positive effect on banks' relative efficiency. Confirming the expected hypothesised relationship, the estimated coefficients for SSB size in both regressions (CRS, $\beta = 0.0887$; VRS, $\beta = 0.0770$) were significant and positive. This means that an increase in the size of the SSB would lead to an increase in banks' expected efficiency score of 0.0887 for CRS and 0.0770 for VRS, holding all other variables of the model constant. These results imply that banks with a large SSB are able to be much more effective than others. This is in line with Kusuma and Ayumardani (2016), Mezzi (2017, 2018) and Zeineb and Mensi (2018), who examined the impact of CG mechanisms (as an independent variable) on the performance of IBs by employing efficiency as the performance measurement. They found a positive and significant impact of CG mechanisms (including SSB size) on IB efficiency. Our results provide empirical evidence showing that the size of the SSB is an important factor in explaining bank efficiency.

6.4.5.2 SSB expertise

As predicted in H2, the results show a statistically significant positive relationship between SSB expertise and bank efficiency (measured by CRS and VRS) at the 5% level ($\beta = 0.2643, 0.2809$, respectively). This result leads us to support and accept H2. This indicates that the higher the percentage of SSB expertise on the SSB, the higher the efficiency score. A 1% increase in SSB expertise increases the efficiency score by $\beta =$

0.2643 for CRS and $\beta = 0.2809$ for VRS. This provide empirical evidence indicating that SSB expertise is an important factor in enhancing bank efficiency.

6.4.5.3 SSB educational level

The third hypothesis H3 expects a positive and significant relationship between SSB educational level and bank efficiency. The Tobit regression shows a negligible relationship between SSB educational level and bank efficiency (measured by CRS and VRS). This outcome provides no evidence to support or reject H3. This implies that there are other variables that can better explain changes in bank efficiency than the educational level of the SSB scholars. This result confirms the OLS regression results as well.

6.4.5.4 SSB cross-membership

H4 predicts a positive and significant relationship between SSB cross-membership and bank efficiency. The coefficient for SSB cross-membership has a negative coefficient, indicating that the lower the SSB cross-membership, the higher the inefficiency score. This leads us to reject H4. The score coefficient is statistically significant at the 1% level for CRS ($\beta = -0.6679$) and for VRS ($\beta = -0.6224$).

6.4.5.5 SSB reputation

H5 expects a positive and significant relationship between SSB reputation and bank efficiency. The results show positive and significant relationships between SSB reputation and bank efficiency for both CRS ($\beta = 0.7009$) at the 1% level, and VRS ($\beta = 0.6592$) at the 1% level. Thus, the finding of this study supports H5. This suggests that the efficiency of IBs in GCC countries is affected by SSB composition (SSB size, SSB expertise, SSB cross-membership, SSB reputation). This is in line with Kusuma and Ayumardani (2016), Mezzi (2017) and Zeineb and Mensi (2018), who found a positive and significant impact of CG mechanisms on the efficiency of IBs. This provides empirical evidence indicating that SSB reputation is an important mechanism to improve bank efficiency.

In terms of the control variables, the impact of bank size and bank age on CRS was significant and positive at the 5% level. As a result, larger and old IBs will likely perform efficiently in the sample. In the VRS model, only bank age was significantly correlated

with VRS at the 5% level. However, there was no evidence regarding the relationship between leverage and CRS or VRS.

Table 6.13: Summary of Hypotheses Testing and Findings for Model (CRS) and (VRS)

Independent variable	Hypothesis & expected sign	Dependent variables (CRS)	Dependent variables (VRS)
		Result	Result
SSB size	H1 (+)	Supported (+) & significant	Supported (+) & significant
SSB expertise	H2 (+)	Supported (+) & significant	Supported (+) & significant
SSB educational level	H3 (+)	No evidence to support or reject	No evidence to support or reject
SSB cross-membership	H4 (+)	Rejected (-) & significant	Rejected (-) & significant
SSB reputation	H5 (+)	Supported (+) & significant	Supported (+) & significant

6.4.6 The moderating role of BD structure

As mentioned above, there are two layers of internal governance in IBs – the BD and the SSB. SSBs might protect the interests of depositors by preventing the BD and management from becoming entangled in major risk-taking activities and aggressive financing, which can compromise bank performance (Mollah & Zaman 2015). SSB scholars are expected to fulfil their key duties independently of the BD. Also, SSBs have the authority to attend board meetings to deliberate over discussions involving religious aspects and alignment with Islamic financial principles (AAOIFI 2015). However, it has been argued that such an important role of an SSB has, in practice, been challenged by the BD, who are all too eager to push SSBs to accept their policies and directions. This pressure could undermine the functionality and role of SSBs. The current study took these considerations into account and provided empirical evidence to support the theoretical debate around this issue.

To answer research question 2 (RQ2), ‘Does the BD affect the role of SSBs?’, the study used Model 2, designed to examine if the BD structure influences the relationship between the SSB and bank performance measured by ROA, ROE, Tobin’s Q, ZOE ratio and DEA.

Table 6.14 shows that the estimated F-value of the OLS regression analysis is significant for Model 2. Further, this indicates that this model is well able to explain the moderating impact of BD structure on the relationship between SSB composition and bank performance. The recorded R-squareds are 0.255 for ROA, 0.272 for ROE, 0.545 for Tobin's Q, and 0.191 for ZOE at the 1% significance level. This means that a change of one unit in SSB composition increases ROA by 25%, ROE by 27% and Tobin's Q by 54%. Thus, SSB composition, along with the three control variables, explain around 25%, 27% and 54% of the variation in ROA, ROE and Tobin's Q, respectively for IBs in GCC countries. Further, this relationship is moderated by the BD structure. There is a significant and negative interaction between SSB and the BD, as shown in Table 6.14. The outcome is statistically significant at the 5% level for ROA, at the 1% level for ROE and at the 5% level for Tobin's Q, with the different coefficients being $\beta = -.005$ for ROA, $\beta = -.186$ for ROE, and $\beta = -.181$ for Tobin's Q; however, there is no evidence provided to accept or reject the expected relationship with ZOE. Regarding the two models for DEA, the CRS ($\beta = -0.1035$) is significant at the level 1% and the VRS ($\beta = -0.2696$) at the 5% level, as shown in Table 6.12.

Table 6.14: OLS Regression Results for IB Performance (Model 2)

Variable	ROA		ROE		Tobin's Q		ZOE	
	Beta	t-test	Beta	t-test	Beta	t-test	Beta	t-test
SSB size	0.146*	1.185	0.195*	1.65	0.237**	2.63	-0.118	-0.85
SSB expertise	0.281***	2.88	0.185**	1.94	0.282***	3.96	-0.096	-0.87
SSB educational level	-0.065	-0.51	-0.012	-0.09	0.127	1.38	0.011	0.08
SSB cross-membership	0.116	1.22	0.125	1.35	0.228***	3.27	-0.059	-0.55
SSB reputation	0.325	0.88	0.167	0.47	-0.169	-0.63	0.588	1.41
SSB index	-0.212	-1.12	-1.445	-1.53	-0.014*	-1.70	0.015	1.22
BD index	0.093	1.29	-0.032	-0.45	0.063	1.14	0.063	0.20
SSB index * BD index	-0.005**	2.59	-0.186***	2.80	-0.181**	2.65	0.000	0.13
Bank size	0.427***	3.94	0.539***	5.10	0.207**	2.60	0.098	0.79
Bank age	0.025	0.30	-0.034	-0.39	-0.243***	-3.78	0.042	0.43
Leverage	-0.446***	-5.04	-0.360***	-4.18	-0.722***	-11.14	0.182*	1.81
Constant	-29.648***	4.72	-170.001***	23.769	-0.789	0.205	-0.301	0.89
Durbin-Watson statistics	1.429		1.437		0.784		0.472	
F-value	6.073		7.364		12.132		4.251	
Sig.	0.000		0.000		0.000		0.000	
R-squared	0.255		0.272		0.545		0.191	
Adjusted R-squared	0.213		0.223		0.500		0.172	
No. of observations	189		189		190		187	

Notes: *** significant at 1%, ** significant at 5%, * significant at 10%.

These significant and negative results lead us to accept *H6*. This result is in line with Nomran and Haron (2019), Mollah and Zaman (2015) and Safiullah and Shamsuddin (2018), who found that the interaction between the SSB and the BD is negatively related to bank performance. This result supports the argument of the current study, that the role of the SSB has, in practice, been challenged by the BD, who are all too eager to push SSBs to accept their policies and directions.

This evidence adds to the current body of knowledge as, when combined with the aforementioned Shariah composition, it suggests that BDs can be a significant variable in the impact of SSBs on performance. This clearly identifies a need for more extensive research into the composition of these boards. The current research adds to the identification of factors that may affect how SSBs perform their duties, with BD structure an important factor in determining a positive or negative relationship between the SSB and the BD.

While current research does look at the composition of BDs (Assenga, Aly & Hussainey 2018; Azam, Khalid & Zinnaira Zia 2019; Terjesen, Couto & Francisco 2016), more research is required that looks more closely at the relationship between the BD and the SSB. The current study has pointed out the importance of this relationship, and in so doing, moves the focus away from studies that look at SSBs in isolation. As such, the current study emphasises the importance of SSBs to bank performance in the context of the GCC countries. This also suggests a need to consider other factors that may affect both BDs and SSBs, such as the macroeconomy. Current research does consider the impacts of macroeconomic factors on profitability (Al-Qudah & Jaradat 2013; Rashid & Jabeen 2016; Zainal Abidin & Haseeb 2018).

Overall, the above results indicate that SSBs (size, expertise, educational level and cross-membership) can have a positive and significant impact on bank performance. Also, BD structure can have a negative and significant moderating impact on the relationship between SSBs and bank performance. These findings indicate that Shariah governance practices are significant in the GCC countries; therefore, these practices need to be given more attention to improve and enhance IBs' performance.

To do so, SSBs need to practice their roles fully independently of the BD. SSBs might also protect the interests of depositors by monitoring and preventing the BD from

becoming entangled in major risk-taking activities and aggressive financing, which can compromise bank performance (Mollah & Zaman 2015).

To conclude, the variation in IB performance is due to differences in factors such as bank history, experience, size, decision-making, governance structure and operational processes. The outcomes of this study have important policy implications and may also help management reconsider their decisions with deliberate care and effectiveness to achieve desired outcomes.

Table 6.15: Summary of Hypotheses Testing and Findings for All Models

Independent variables	Hypothesis & expected sign	Performance indicator used as the dependent variable				
		ROA	ROE	Tobin's Q	CRS	VRS
SSB size	H1 (+)	Supported (+)	Supported (+)	Supported (+)	Supported (+)	Supported (+)
SSB expertise	H2 (+)	Supported (+)	Supported (+)	Supported (+)	Supported (+)	Supported (+)
SSB educational level	H3 (+)	-	-	Supported (+)	-	-
SSB cross-membership	H4 (+)	-	-	Supported (+)	-	-
SSB reputation	H5 (+)	-	-	-	Supported (+)	Supported (+)
Moderating role of BD	H6 (-)	Supported (-)	Supported (-)	Supported (-)	Supported (-)	Supported (-)

6.5 Endogeneity

Endogeneity is considered by some researchers to represent a major problem in the field of accounting and finance (Aebi, Sabato & Schmid 2012). For the purpose of providing additional evidence of the relationship between SSB composition and bank performance, and to address endogeneity, a variable that correlates with SSB composition but not the error term of equations is required for the analysis. By using two-stage least squares (2SLS) regression, an instrumental variable can be constructed. As a result, here, the researcher tried to tackle any potential endogeneity problems in the data by utilising 2SLS regression. Consistent with Grassa (2016) and Quttainah, Cocco and Al- Zufairi (2017), 2SLS regression analysis was used here to re-evaluate the relationships between SSB composition and bank performance, where SSB composition variables are the explanatory variables, the BD variables are endogenous, and the control variables are the instruments

(bank age, leverage and bank size). As a result of using the instrument, a Hausman test is performed to determine if SSB composition are not correlated with error terms. In this study, the results fail to reject the null. The validity of the chosen instruments suggests the endogeneity of SSB composition is not a major concern.

The results of 2SLS presented in Table 6.16 are similar to the main results presented in Tables 6.8 and 6.14, suggesting that, generally, this study's results are robust to possible endogeneity problems that could result from the simultaneous association between Shariah governance mechanisms and bank performance. To summarise, the finding of this further analysis shows there are no endogenous associations influencing the study's findings.

Table 6.16: Results for the 2SLS Regression

Variable	ROA		ROE		Tobin's Q		ZOE	
	Beta	t	Beta	t	Beta	t	Beta	t
SSB size	0.602***	3.58	0.730***	4.32	-1.915***	3.69	0.201	0.72
SSB expertise	1.080***	3.02	0.483***	3.67	0.213	0.79	0.048	0.176
SSB educational level	0.111	0.40	1.475***	3.34	0.636***	4.33	-0.003	-0.02
SSB cross-membership	0.246*	1.93	0.572*	1.87	-0.640***	4.88	0.078	0.60
SSB reputation	0.662**	2.43	0.940***	3.03	0.376	1.39	0.107	0.45
SSB index	0.500	1.42	0.949**	2.28	0.257	0.74	0.283	0.52
BD index	0.242	0.36	1.411	1.21	3.455	1.49	0.666	0.83
SSB index * BD index	-0.574***	3.45	-0.726***	4.15	-0.507***	3.30	0.206	1.25
All control variables	Included		Included		Included		Included	
No. of observations	189		189		189		187	
F	4.732		3.492		10.161		0.518	
Adjusted R-squared	0.14		0.13		0.26		0.07	

Notes: *** significant at 1%, ** significant at 5%, * significant at 10%.

6.6 Robustness Tests

As discussed in Chapter 5, if the linear regression assumptions are met, OLS regression provides accurate estimated models (Gujarati 2009). In the present study, the regression assumptions were met. Hence, OLS regression was applied since it provides robust results. To ensure the robustness of the study findings, we run the OLS regression analysis

by controlling for country and year dummy variables. The results re-confirm the robustness of the study's main findings.

6.7 Chapter Summary

This chapter empirically examined the relationships between the dependent variables (ROA, ROE, Tobin's Q, ZOE and DEA) and the independent variables (SSB composition) in the GCC nations' IBs for the period 2010–2019. The results of the multivariate analysis of bank performance measured by ROA and ROE indicate that SSB size and SSB expertise have a significant and positive relationship with bank performance. Regarding the moderating role of the BD, the interaction between the SSB and the BD is significant and negative for ROA, ROE, Tobin's Q and DEA. Meanwhile, SSB size, SSB expertise, SSB educational level and SSB cross-membership were found to have a significant positive association with Tobin's Q. The results of the Tobit regression show that SSB size, SSB expertise, SSB cross-membership and SSB reputation have significant relationships with DEA.

These relationships are moderated by the BD structure. There is a significant and negative interaction between the SSB and the BD, as shown in Table 6.14. The result is statistically significant at the 5% level for ROA, at the 1% level for ROE and at the 5% level for Tobin's Q, with the different coefficients being $\beta = -.005$ for ROA, $\beta = -.186$ for ROE, and $\beta = -.181$ for Tobin's Q; however, no evidence was found to accept or reject the expected relationship with ZOE. The next chapter concludes the study by summarising the main results, explaining its limitations and contributions, and providing recommendations for future research to be conducted on this topic.

Chapter 7: Conclusion

7.1 Introduction

This chapter concludes the thesis by summarising its main findings in relation to the study questions. The aim of this study was to investigate the relationship between Shariah governance mechanisms and bank performance, and in particular, the impact of SSB composition on IBs' performance (profitability, Shariah measurement and efficiency) in the GCC countries. This chapter is organised as follows. Section 7.2 provides an overview of the study and Section 7.3 summarises the key findings which is followed by identifying the study's practical contributions and implications in Section 7.4. The chapter concludes with a discussion on the limitations of the study and suggestions for future research.

7.2 Overview of the Current Study

During the 2008 GFC, IBs were generally able to insulate themselves from the worst effects compared to conventional banks. It has been argued that a possible reason for this resilience may lie in the difference in their financial transactions; differences that are guided by Shariah regulations (Islamic law). IBs have an SSB that is responsible for ensuring that the bank's activities and financial transactions comply with Shariah law and its ethical objectives. Early research investigated the structure of IBs with a focus on the differences between corporate governance in conventional banks and Shariah governance in IBs in an attempt to better understand the dynamics of of Ismaic banking. A focus on classification of types of regulations and inherent implications when these regulations were uniformly applied fails to take note of the diversity between boards. This failure to note differences in the size of the board, and the expertise, educational level and cross-membership of its members, suggests a failure to consider the complex nature of SSBs. The empirical research on the role of SSBs and the process by which they may improve IBs' financial performance is limited. By extending the scope of vision to include the inherent diversity of the composition of these boards, this study adds to our current understanding of the function of SSBs.

While some research has explored the relationship between SSBs and IBs' financial performance, there is a notable gap in this research. The current research aims to extend existing knowledge on how the composition of SSBs affect IBs' financial performance.

The research goes beyond issues of profitability to include efficiency and Shariah measurement. In addition, it was deemed essential to identify the moderating effect of the Board of Directors (BD) structure on the relationship between SSBs and IBs' financial performance, as this relationship adds another element to the complex work carried by the SSB.

This dissertation sought to investigate whether the composition of the SSB as an internal Shariah governance mechanism affects bank performance by increasing monitoring and supervision and constraining operations. An overview of and justification to research the impact of the SSB on IBs' performance within the GCC countries was provided in Chapter 1. Chapter 2 documented each GCC country's IBs' and SSB governance frameworks and how these differ from conventional banks. The purpose of Chapter 3 was to explain theories of corporate governance and how the SSB can impact IB performance. It provided a theoretical framework based on agency theory, resource dependence theory, stakeholder theory, and legitimacy theory. A critical review of the literature in Chapter 4 revealed previous empirical studies on SSBs and bank performance, identifying that these studies were limited in scope and restricted to the investigation of a few variables related to SSB and bank performance.

Hence, there was a gap in the literature that needed more empirical investigation. In Chapter 5, the methodology and methods used in the current study were presented. This chapter explained the sample selection, data collection and types of data. It also described how SSB variables and bank performance indicators were measured in the study. The findings and discussion were presented in Chapter 6. These findings confirmed that SSB composition is a significant governance mechanism that can affect Islamic banks' performance. The findings suggested evidence that could be added to the current body of knowledge as, when combined with SSB composition, it suggests the BD can be a significant variable in the impact of SSBs on performance. This clearly identified a need for more extensive research into the composition of these boards. The current research adds to the identification of factors that may affect how SSBs perform their duties, with BD structure an important factor in determining a positive or negative relationship between the SSB and the BD.

7.3 Summary of the Main Findings

It was noted in Chapter 4 that, despite the depth of research in the field of Islamic finance, it was still limited to empirical studies that examine the impact of SSB composition on banks' performance. These studies explored different measurements such as ROA and ROE. A critical review was conducted of studies that examined the impact of SSB on profitability, the differences between Islamic and conventional banking, and the impact of financial crises on Islamic and conventional banks.

The review of different corporate governance theories highlights the importance of the BD as an essential component of internal governance since these are instrumental in monitoring internal management so that managers can successfully achieve business objectives and enhance firm performance. The relationship between Shariah governance mechanisms and bank performance was examined, and in particular, the impact of SSB composition on IBs' performance profitability, Shariah measurement and efficiency in the GCC countries. This was achieved by defining governance variables (independent variables) and five performance measures (dependent variables). Further, the research attempted to identify the moderating effect of the BD structure on the relationship between SSBs and IBs' financial performance. The remainder of this section summarises the results in relation to the research questions.

7.3.1 RQ1: To what extent does SSB composition affect banks' performance?

This study found that there is a positive relationship between Shariah governance mechanisms and IBs' performance in GCC countries. More specifically, SSB size and SSB expertise were positively related to bank performance when using ROA and ROE. On the other hand, SSB educational level, SSB cross-membership and SSB reputation did not show any relationship with bank performance as measured by ROA and ROE. This is reasonable because these factors signify improved Shariah governance practice. The benefit of improved governance can take the form of a possible reduction in the firms' cost of capital, which subsequently improves banks' value. A positive relationship between SSB size and ROA and ROE supports the view that IBs with larger boards may provide for more efficient monitoring of activities. This is in line with the findings of previous studies that found significant positive relationships between SSB composition

and bank performance (Farag, Mallin & Ow- Yong 2018; Grassa & Matoussi 2014b; Mollah & Zaman 2015; Nomran, Haron & Hassan 2018).

When Tobin's Q was applied, it emerged that SSB size, SSB expertise, SSB educational level and SSB cross-membership all had a significant positive association with bank performance, whereas SSB reputation had a significant negative association with Tobin's Q. This result is in line with Mollah and Zaman (2015) and Quttainah and Almutairi (2017). This has a significant impact on shareholder value. The SSBs play a significant role in protecting shareholder interests in IB.

The study reported no significant results related to the ZOE ratio variable. The potential reason for this is that few IBs pay *Zakat*. This is consistent with the outcomes of the descriptive statistics in Table 6.1, which shows that more than 52% of banks sampled over the study period indicated that they do not collect or pay *Zakat* on their profits on behalf of shareholders. However, some banks are required to calculate and notify individual shareholders of *Zakat* payable per share. These calculations are approved by the bank's SSB in the UAE and Qatar. The mean of the *Zakat* variable (0.4840; see Table 6.1) is very low, which confirms that the explanatory power of this variable could not be significant. When using DEA, this study noted that the efficiency of IBs in the GCC countries is affected by SSB composition (SSB size, SSB expertise, SSB cross-membership and SSB reputation).

7.3.2 RQ2: Does the BD influence the role of SSBs?

The study detected a significant and negative influence of the BD on the role of SSBs. This result is in line with Nomran and Haron (2019), Mollah and Zaman (2015) and Safiullah and Shamsuddin (2018), who argued that the interaction between the SSB and the BD is negatively related to bank performance. The role of an SSB has been, in practice, challenged by the members of a bank's board, who are all too eager to push SSBs to accept their policies and directions. This evidence adds to the current body of knowledge as, when combined with the aforementioned Shariah composition, it suggests that BDs can be significant in shaping SSBs' functioning. This clearly identifies a need for more extensive research into the composition of these boards. The current research adds to the identification of factors that may affect how SSBs perform their duties, with BD structure

an important factor in determining a positive or negative relationship between the SSB and the BD.

The functioning of SSBs reveals five main issues of corporate governance: independence, confidentiality, competence, consistency, and disclosure. It is important for the SSB to be independent from the bank's management. The SSB is usually appointed by the shareholders, represented by the BD. Given that SSBs are employees of the financial institution and report to the BD, remuneration of SSB's scholars is decided by management and approved by the Board. There could be a conflict of interest between members of the SSB and how they assess the nature of a particular bank's operations. All SSB scholars are generally expected to submit unbiased opinions regarding their assignments. For instance, the SSB's opinion may prohibit a bank from engaging in certain profitable transactions or cause illicit income to be reallocated to charity, resulting in unethical financial performance. SSBs need fulfil their roles fully independently from the BD and protect the interests of depositors by monitoring and preventing the BD from becoming entangled in major risk-taking activities and aggressive financing, which can compromise bank performance (Mollah & Zaman 2015).

Overall, the above results indicate that SSBs (size, expertise, educational level and cross-membership) can exert a positive and significant impact on bank performance. Also, BD structure can exert a negative and significant moderating impact on the relationship between SSBs and bank performance. These findings indicate that Shariah governance practices are significant in the GCC countries; therefore, these practices need to be given more attention to improve and enhance IBs' performance.

We can conclude that the variations in the outcomes of banking performance in the GCC countries are due to differences in banking history, political circumstances, experience, size, prudence in decision-making, governance and operational processes at the national and institutional or bank level. The results have important policy implications in that the respective banks should seriously seek to achieve what Shariah law ordains to be acceptable. Our results might also help management to reconsider their decisions with deliberate care and thoughtfulness. A Future study that compares the performance of the GCC banking industry against other regions would benefit the larger readership as well as stakeholders in Islamic and conventional banking.

7.4 Practical Contributions and Implications of the Study

The findings of this study provide many interesting insights into the Islamic banking industry of the GCC countries and other Muslim countries and suggest the policy implications of such. In this research, several theories are applied empirically to explain how Shariah governance works in the GCC region, thus contributing to the theoretical corpus of knowledge. The main results indicate that SSBs (size, expertise, educational level and cross- membership) have significant effects on IB performance in the GCC region. Also, BD structure can exert a negative and significant moderating impact on the relationship between SSBs and bank performance. Several notable implications of this thesis can be drawn for regulators (central banks), clients, investors, shareholders, and researchers, such as enhancing bank performance, improving Shariah governance framework, and conducting further research. For these reasons, IBs in the GCC region should focus on SSB practices as an important element to enhance bank performance and attract customers.

For government policymakers or regulators, there is a clear identification that a dedicated legal framework is essential for the growth and development of Islamic banking in the GCC region. Moreover, a more conducive banking environment and incentives to local banks should be developed to promote the Islamic banking industry at the regional level and to strengthen the GCC countries' position in the global Islamic banking industry. The study findings have implications for regulators in terms of SSBs (size, expertise, educational level and cross- membership) as well as BD structure. As mentioned in Chapter 1, in the GCC countries, the Shariah governance framework is generally categorised into two types, either regulated through legal and supervisory requirements, as in Bahrain, Kuwait, UAE and Qatar, or self-regulated, as is the practice in Saudi Arabia. The GCC countries have developed their own Shariah guidelines and standards of practice for Islamic financial institutions. This is known as a decentralised Shariah governance model which is the practice in GCC countries (Graiss & Pellegrini 2006; Hamza 2013). Regulators are required to pay a special attention to set standards related to SSB, and banks must publish this on their websites or in their yearly reports. Regulators can use the results of this study to improve the existing regulatory framework regarding SSB mechanisms for better Islamic bank performance in terms of appointing large SSBs, SSBs with finance experience and who are knowledgeable in *Fiqh al-Muamalat*.

It might also be helpful for global institutions such as AAOIFI to pursue reformation of standards related to SSBs' composition. This is referred to in AAOIFI GS No. 1 which relates to SSB composition. The GCC countries are members of AAOIFI; however, not all GCC countries adhere to its standards. Thus, this study could encourage regulators in the GCC countries to ensure that AAOIFI standards are actually helpful in harmonising Shariah governance practices as carried out by the IB. Stakeholders such as clients and investors will find the results useful when deciding whether to invest in a bank. Investors aim to make a profit from their investments. Thus, this study's findings will provide investors with an understanding of how banks perform, thereby increasing investor confidence and encouraging further foreign investments. Compliance with Shariah is a core component of IB and gives legitimacy to their activities (Hasan & Sabirzyanov, 2015). IBs will gain more trust from society by consistently adhering to Shariah regulations. Therefore, the level of legitimacy received from society can be influenced by how IBs communicate their adherence to Shariah (Colleoni 2013). SSBs can be considered an internal mechanism that increases public trust if and when they grant legitimacy to IBs (Mollah & Zaman, 2015).

The results of this research will assist shareholders to identify the ideal SSB composition to help improve bank performance in the GCC countries, where each IB has its own SSB and SSB scholars are appointed by shareholders at the annual general meeting. Additionally, this study sheds light on possible avenues for strengthening Shariah governance in the GCC and helps evaluate its effectiveness in ensuring compliance in terms of SSB. This study helps not only to better utilise the role of the SSB to achieve future business goals, but also to devise strategies to deal with future financial crises.

In the SSB frameworks that GCC countries have set up, the management of banks is responsible for approving the Shariah governance framework and monitoring its effectiveness. An SSB is required to provide all Shariah-related resolutions and opinions directly to management. As a result, all contracts, operations, and transactions must be presented to the SSB for its Shariah compliance opinion and ensure that its resolutions are the result of clear, concise discussions. Thus, this study encourages regulators to set restricted criteria that ensure the independence of SSB. Current regulations leave the criteria up to each bank, which increases the likelihood of conflicts of interest and independence issues. Regulators should work on improving these types of Shariah

governance model by establishing a centralised Shariah Board to ensure banking modes and instruments are compatible with Shariah.

7.5 Limitations and Suggestions for Future Research

This study provides a significant contribution to our understanding of governance practices in the GCC countries and their role in influencing the performance of IBs. Further analysis is recommended into the factors which contribute to improving Shariah governance practice in the GCC region and in other jurisdictions. There are several limitations that should be noted. Although these limitations do not affect the validity, reliability and generalisability of the results and the proposed reforms derived from this research, these barriers and their implications for specific areas of data collection and analysis should be considered. The limitations of this research can be summarised as follows, which can be used as an opportunity for further research.

First, the major limitations of the study lie in the nature of the data collected. The data collection was limited to publicly available data sources such as the BankFocus database and banks' annual reports. If there are problems relating to disclosure or professional accounting practices, that would limit the validity of the findings. Therefore, the study may not be reflective of the current governance practices of IBs. Further, since the measures used to determine the financial performance of the banks, such as ROA and ROE, are susceptible to engineering, the data may not be reliable (Issah & Antwi 2017). The use of secondary data also limits the opportunity to gather specific information needed to analyse other dimensions such as the qualitative characteristics of SSB scholars and the BD.

Further research is recommended by undertaking a mixed methods approach to obtain a deeper understanding of what contributes to enhancing bank performance, which cannot be found in secondary data alone. An in-depth analysis of the Shariah governance framework and models will raise questions. The significance of these questions lies in the introduction of new rules/guidelines that can enhance governance effectiveness and enhance IBs' decision-making processes, thereby improving performance. Moreover, by using primary data and conducting interviews with open-ended questions, the study of SSB will assist in developing new theories on shareholders' control and decision-making

practices. This will help to refine the Shariah governance framework, and in turn, enhance bank performance.

Second, this study focuses on IBs in GCC countries due to the fact that they share characteristics such as history, religion, culture, and social norms. In the GCC, the banking sector dominates the financial system, and IBs have been growing rapidly, making them a significant source of financial intermediation (Mollah et al. 2017). Each country in the GCC region has its own Shariah governance framework. Their Shariah governance model is decentralised. Although this study focuses on IBs in GCC countries, it is also important to understand the governance practices carried out in CBs of GCC countries. Future research could be in the form of a comparative assessment of governance practices between IBs and CBs in GCC countries. This would provide an opportunity to examine whether the practices are affected in a similar fashion or otherwise.

Moreover, a comparison of the relationships between SSB composition and the performance of IBs across countries that adopt different Shariah governance models could provide a better overview of Shariah best practices for IBs, especially given some countries adopt more centralised models such as Pakistan, Sudan, and Malaysia, and it is still debated whether the centralised or decentralised model is better. It is therefore recommended to take this aspect into account in future research.

Third, another main limitation of this study is focusing on a specific number of variables which could be collected. This study does not incorporate other SSB characteristics; for example, SSB remuneration and number or type of meeting because not all samples include them in their annual reports. Also, not all IBs report the *Zakat* payments in their annual reports, which leads to reduce the sample. Thus, future research may investigate more governance mechanisms such as SSB remuneration and meetings to test their relationship with bank performance to find out more about the dynamics. Also, future research can investigate the impact of SSB on corporate social responsibility disclosure. Corporate social responsibility disclosure is referred to as informing stakeholders about philanthropic, charitable or society-building activities that are carried out by a company or corporation (Van Marrewijk 2003; Basu and Palazzo 2008).

Fourth, this study's chosen period of analysis was 2010 to 2019. The framework of this study was developed and completed in early 2020, just before the COVID-19 pandemic erupted. So we could not control for the impact of the pandemic. The study sample and period could be expanded in future research by adding more samples and periods. Given the impact of COVID-19 on banking, the likes of which we have not seen in decades or perhaps at all, Shariah-compliant equities performed remarkably better than their conventional banking counterparts (Hasan 2020; Mansour, Ajmi & Saci 2021; Wahyudi et al. 2021). How the SSB functions as a valuable mechanism that provides stability and profitability to IBs during such crises should be investigated. Future research needs to examine the situation before, after and during the COVID-19 pandemic to capture the effect of the pandemic on bank performance and bank resilience. Also, future research could compare the impact of SSBs on IBs' financial performance during the 2008 GFC and 2020 COVID-19 pandemic.

It is worth noting that some GCC countries have updated or issued their Shariah governance framework after the framework of this study was developed, for example, Saudi Arabia. Saudi Arabia issued its Shariah governance framework in early 2020, so what its affect on banks has been not yet known. Future studies can take this into consideration and collect data after banks operating in Saudi Arabia have implemented this framework. Also, when collecting data for this thesis, it was observed that SSB scholars are serving more than one bank in the same year. The GCC Shariah governance framework states that it is not permissible for SSB to do this. Future research can take this into account and collect data after banks apply the updated framework and examine what the outcomes have been.

Last but not least, while current research does explore the composition of BDs (Assenga, Aly & Hussainey 2018; Azam, Khalid & Zinnaira Zia 2019; Terjesen, Couto & Francisco 2016), there needs to be more research in future that looks more closely at the relationship between the BD and the SSB. The current study has pointed out the importance of this relationship and in so doing moved the focus away from studies that look at SSBs in isolation. As such, this thesis emphasises the importance of SSBs on bank performance in the context of the GCC countries. This also suggests a need to consider other factors that may affect both BDs and SSBs such as macroeconomic factors, which the current research does consider in the context of profitability (Al-Qudah & Jaradat 2013; Rashid & Jabeen 2016; Zainal Abidin & Haseeb 2018).

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Appendices

Appendix 1: Diagnostic Test Results (OLS Assumptions Tests)

Table A1: Cook's Distance, Leverage Value and Mahalanobis's Distance Tests

Description	N	Minimum	Maximum	Mean
Cook's distance ROA	189	.000	.807	.008
ROE	189	.000	.767	.007
Tobin's Q	189	.200	1.506	.013
ZOE	189	.000	.082	.006
Leverage value	189	.020	.406	.048
Mahalanobis's distance	189	3.840	76.241	8.952

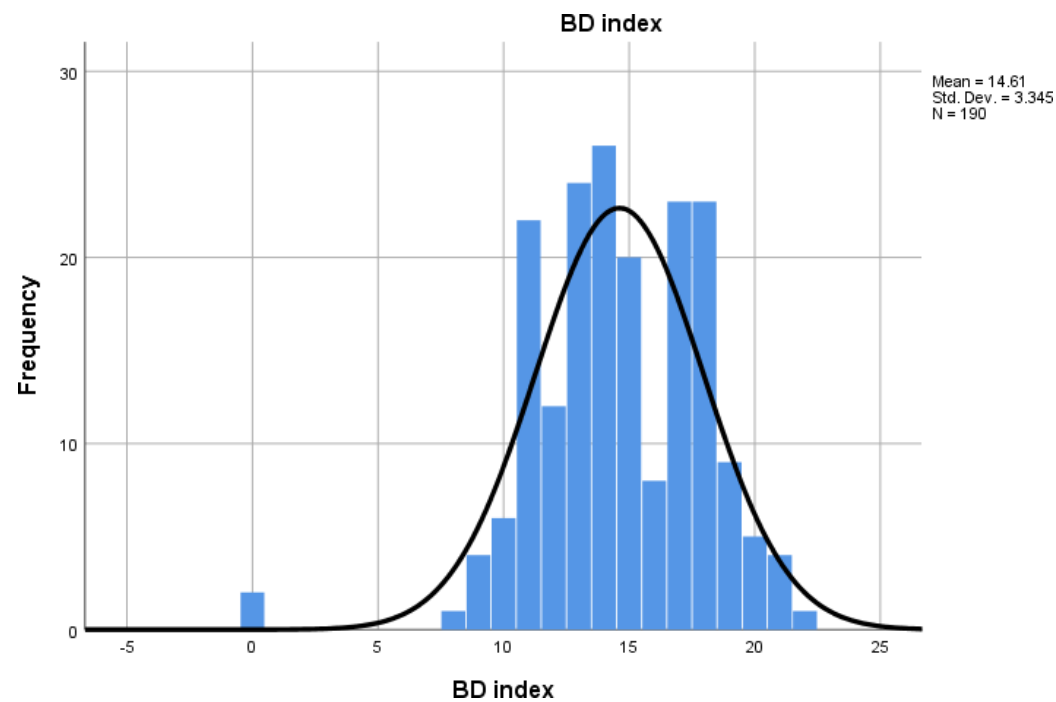
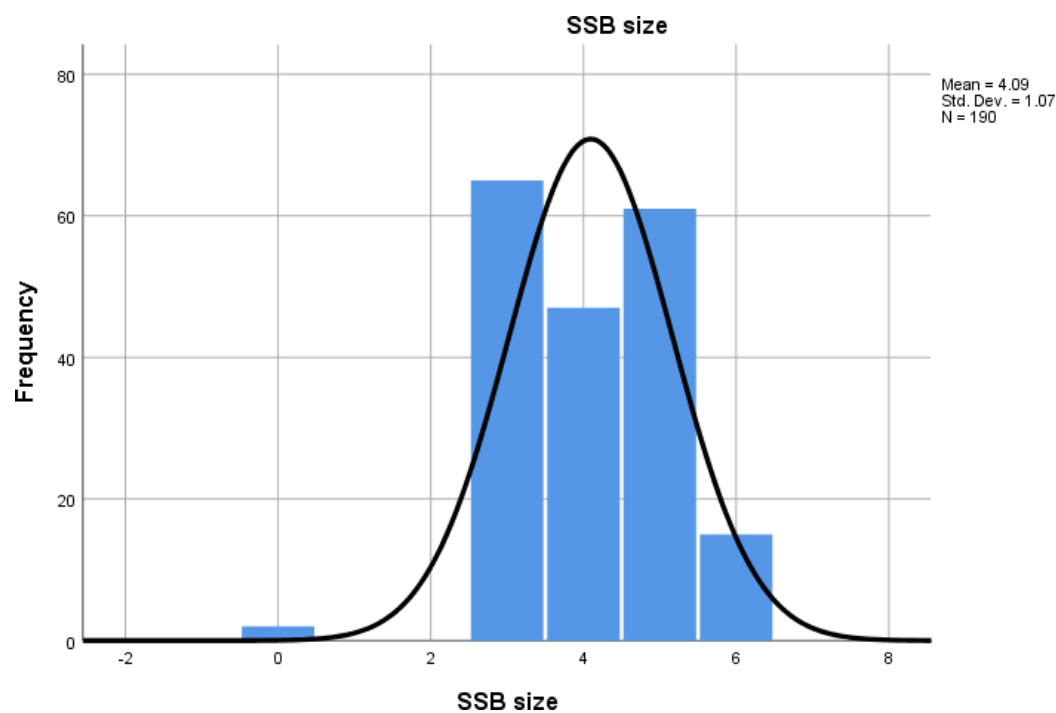
Table A2: Results of Tolerance, VIF, Skewness and Kurtosis Tests

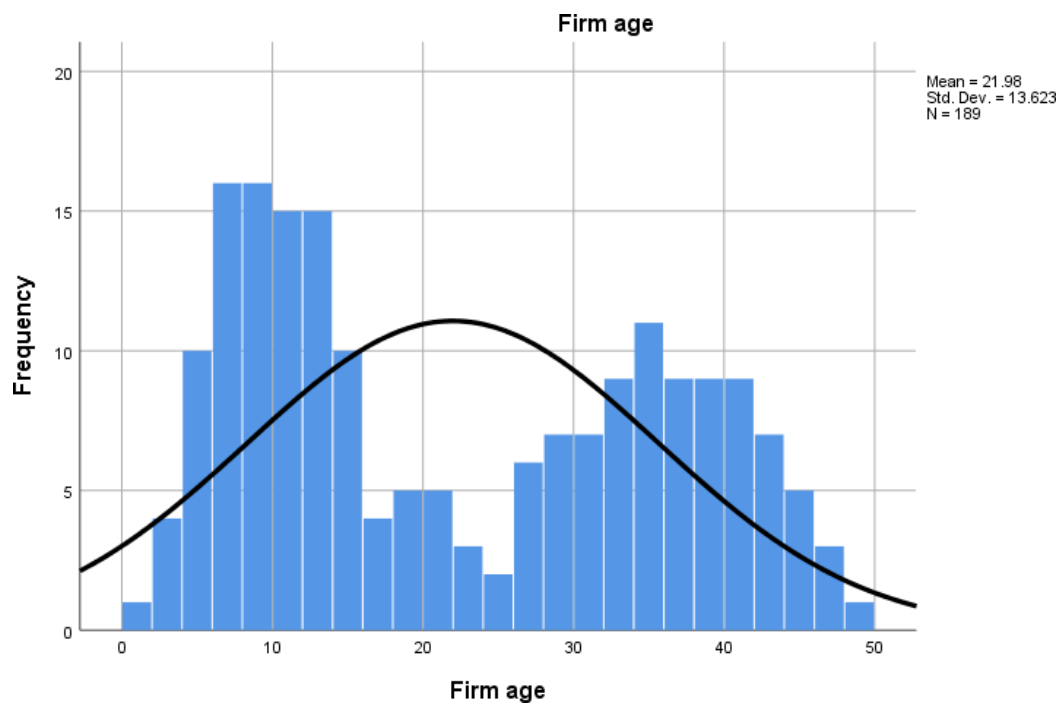
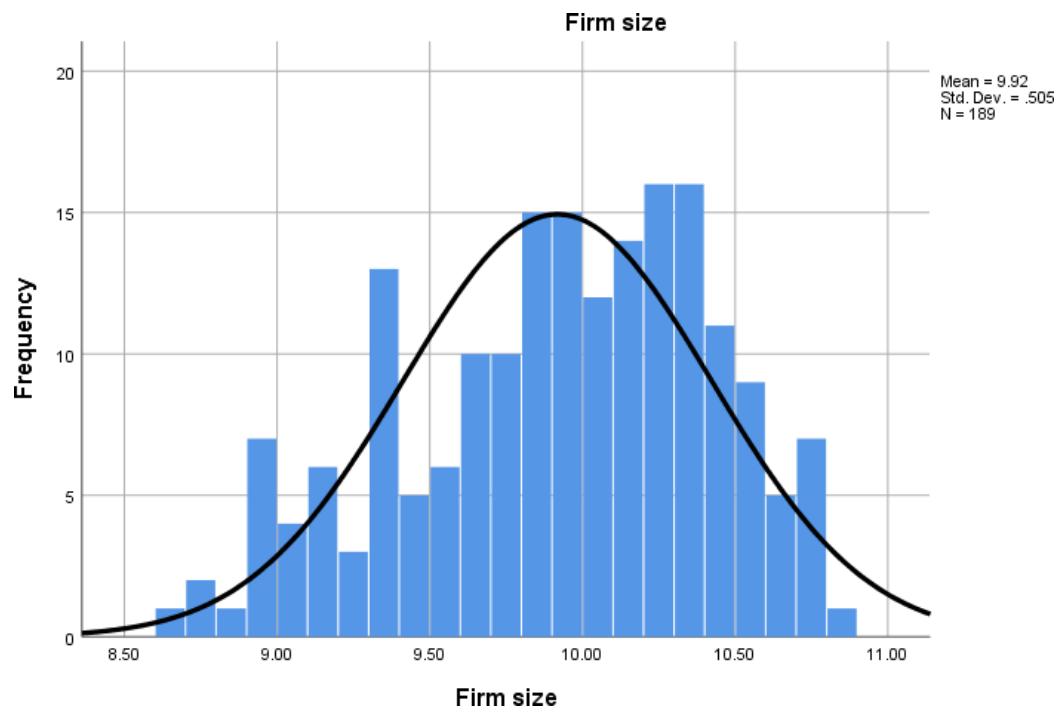
Variables	Tolerance	VIF	Skewness	Kurtosis
SSB size	.313	3.191	.201	.201
SSB expertise	.449	2.226	.173	-.923
SSB educational level	.340	2.945	.021	-2.021
SSB cross-membership	.476	2.101	.042	-2.020
SSB reputation	.338	2.955	.033	-0.959
SSB index	.819	1.220	1.738	3.606
BD index	.807	1.239	-0.707	2.412
Bank size	.449	2.227	-.445	-0.555
Bank age	.563	1.777	.235	-1.425
Leverage	.510	1.961	2.853	8.952

Table A3: Results of R Square, Adjusted R Square and Durbin-Watson Tests

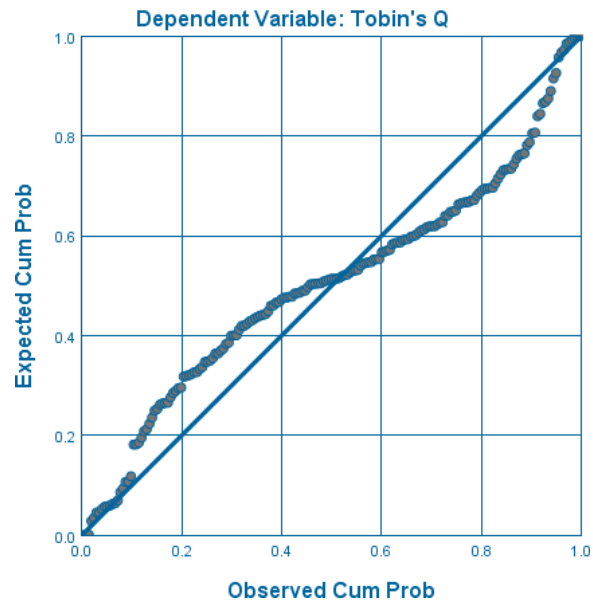
Dependent variable	R Square	Adjusted R Square	Durbin-Watson test
ROA	.250	.212	1.449
ROE	.294	.259	1.457
Tobin's Q	.468	.444	.669
ZOE	.219	.180	.372

Appendix 2: Variable Normal Histograms





Normal P-P Plot of Regression Standardized Residual



Scatterplot

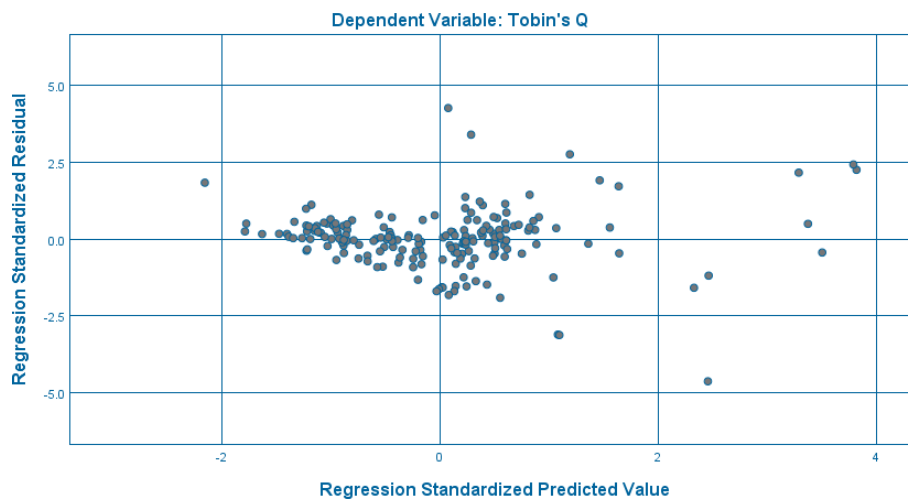


Table A4: Pearson Correlations (Parametric) for All Variables

	SSBS	SSBEP	SSBED	SSBC	SSBR	SSBindex	BDindex	SIZE	AGE	LEV	ROA	ROE	Tobin'sQ	ZOE	CRS	VRS
SSBS	1															
SSBEP	-0.313**	1														
SSBED	-0.571**	0.362**	1													
SSBC	-0.245**	0.229**	0.042	1												
SSBR	0.142	0.411**	-0.306**	0.477**	1											
SSBindex	-0.151*	-0.149*	0.132	0.000	-0.086	1										
BD index	0.426**	-0.229**	-0.165*	-0.091	-0.042	0.133	1									
SIZE	0.255**	0.219**	0.076	0.288**	0.176*	-0.125	0.134	1								
AGE	0.186*	-0.056	-0.229**	0.095	-0.153*	0.089	0.039	0.394**	1							
LEV	-0.325**	-0.093	0.160*	-0.187**	-0.075	0.111	-0.155*	-0.577**	-0.464**	1						
ROA	0.045	0.198**	0.069	0.105	0.110	-0.126	0.057	0.325**	0.044	0.068	1					
ROE	0.099	0.178*	0.088	0.141	0.107	-0.172*	-0.005	0.446**	0.087	-0.046	0.928**	1				
Tobin'sQ	-0.199**	0.278	0.501**	-0.238	-0.023*	0.536	-0.030	0.536	0.0239**	-0.225	0.246**	0.281**	1			
ZOE	0.475	0.070	0.058	0.019	0.000	0.329**	0.004	0.448	0.026	0.274	0.864	0.979	0.605	1		
CRS	-0.231**	0.327**	-0.009	0.026	0.299**	-0.158*	-0.275**	0.042	-0.007	0.154*	-0.033	-0.062	0.077	0.060	1	
VRS	-0.102	0.116	0.073	0.110	0.269**	-0.199**	-0.174*	0.017	-0.088	0.091	-0.012	-0.002	0.041	0.050	0.656**	1

Notes: *** significant at 1%, ** significant at 5%, * significant at 10%; SSBS (SSB size), SSBEP (SSB experience), SSBED (SSB educational level), SSBC (SSB cross-membership), SSBR (SSB reputation), SSB index (SSBS + SSBEP + SSBED + SSBC + SSBR) and the BD index (including board size, board independence and CEO duality). Return on average assets (ROA), return on average equity (ROE), Tobin's Q, Zakat on equity ratio (ZOE), technical efficiency score (CRS) and pure technical efficiency score (VRS).