The relationship between corporate governance and financial performance in the Islamic and conventional banking industries: a Malaysian evidence

Received 28 January 2023
Revised 26 March 2023
20 July 2023
Accepted 21 August 2023

Muhammad Farooq
Institute of Business Management and Administrative Sciences, The Islamia University of Bahawalpur, Bahawalpur, Pakistan

Qadri Al-Jabri
School of Business Administration, University of Business and Technology, Jeddah, Saudi Arabia

Muhammad Tahir Khan
UE Business School, University of Education – Vehari Campus, Vehari, Pakistan

Asad Afzal Humayon
Department of Management Sciences, COMSATS University Islamabad, Vehari, Pakistan, and

Saif Ullah
Lahore Business School, The University of Lahore, Lahore, Pakistan

Abstract

Purpose – This study aims to investigate the relationship between corporate governance characteristics and the financial performance of both Islamic and conventional banks in the context of an emerging market, i.e. Malaysia.

Design/methodology/approach – This study includes 300 bank-year observations from Islamic and conventional banks over the period 2010–2021. The dynamic panel model (generalized method of moments [GMM]) was considered the primary estimation model that solves simultaneity, endogeneity and omitted variable problems as most governance variables are endogenous by nature. Hence, static models are considered biased after conducting the DWH test of endogeneity, and considering dynamic panel GMM is valid proven by Sargan and Hensen and first-order (ARI) and second-order (ARII) tests.

Findings – Based on the regression results, the authors discovered that board size, female participation in the board and director remuneration have a significant positive impact on bank performance, whereas board meetings have a significant negative impact. Furthermore, the board governance structure of commercial banks is found to be more passive than that of Islamic banks.

Practical implications – The study's findings added a new dimension to governance research, which could be a valuable source of knowledge for policymakers, investors and regulators looking to improve existing governance mechanisms for better performance of conventional and Islamic banks.

Journal of Islamic Accounting and Business Research

1759-0817
DOI 10.1108/JIABR-01-2023-0030

Originality/value – The goal of this study is to add to the existing literature by focusing on the impact of female board participation and other board governance mechanisms in both conventional and Islamic banks on bank performance.

Keywords Board structure, Bank performance, Gender diversity, Dynamic model, Islamic banks, Conventional banks

Paper type Research paper

1. Introduction

Following the 2008 global financial crisis, researchers were eager to learn more about the causes of the crisis. Furthermore, the world's leading financial institutions' unprecedented losses raised questions about corporate fairness, transparency and accountability. Researchers emphasize the potential role of corporate governance in such failure, in addition to other possible factors. According to Bebchuk *et al.* (2010), the increased propensity to take excessive risks resulted in greater losses for organizations and this is more severe when the governance mechanism is ineffective in the organizations. This is exactly the case with Bank Islam (Malaysian bank), which incurred losses amounting to RM202bn due to unexpected provision for non-performing loans in 2005 by loaning to companies in Sarajevo and South Africa where some of the companies no longer exist (Thajudeen, 2013). Furthermore, the regulatory and operational environments have an impact on the governance–performance relationship (Tai, 2015). Effective and efficient monitoring of a company is made possible by good corporate governance (Arifina and Tazilahb, 2016). The board of directors (BOD) has evolved into an important pillar of corporate governance (Khan and Zahid, 2020). The structures, quality and other strategic aspects of BOD determine the company's success and performance. The board is responsible for determining the company's overall strategy and ensuring that shareholder value is protected (Keenan, 2004). In the regulated environment literature, for example, the relationship between board characteristics and firm performance was discovered to be insignificant (Hwang and Jung, 2016; Adams *et al.*, 2010); however, Hassan *et al.* (2016) and Liu *et al.* (2014) discovered a significant positive relationship between board characteristics and firm performance in a semi-regulated environment.

Islamic banking has grown in popularity as a viable alternative to traditional banking (Aebi *et al.*, 2012). Globally, Islamic financial institutions (hereafter, IFIs) are expanding at a rate of 10% to 15% per year (Usman and Kibiya, 2021). Not only are IFIs increasing in number, but they are also increasing in size. According to the Islamic Financial Services Board (IFSB, 2020), the total worth of the Islamic Financial Services Industries (IFSI) is estimated at US$2.44tn in 2019, representing an 11.4% increase in assets in US dollar terms over US$2.19tn in 2018. Islamic banks (hereafter, IBs) are required to operate following Shari'ah principles. The main principle that justifies the need for IBs is the prohibition of riba (usury).

Islamic banking is distinguished from its conventional counterparts by its Shari'ah-compliant governance structure, which is firmly guided by the Shari'ah board (hereafter, SB). The Accounting and Auditing Organization for IFIs defines SB as "an independent body of specialized jurists in Fiqh-al-Muamalat (Islamic commercial law) to ensure compliance with Shari'ah principles by IFIs" (AAOIFI, 2015). The institution of SBs in IBs, in conjunction with regular BOD, transforms their governance into what we call "multi-layer" governance. This is in contrast to the "single-layer" governance structure of CBs, which typically consists of BOD. According to Mollah and Zaman (2015), SBs in IBs restrain the BOD and management from engaging in aggressive lending and high-risk activities,

thereby indirectly increasing the governance mechanism in IBs and thus increasing performance (Nainggolan *et al.*, 2022). In the presence of "multi-layer" governance in IBs, the governance structure of IBs is assumed to be more robust and efficient than that of CBs. Consequently, the BOD's mechanism in IBs should be more effective and efficient, leading to greater profitability than in CBs.

Despite having "multi-layer" governance, IB has experienced instances of poor corporate governance, unlike CBs. Corporate failures such as *the Ihlas* Finance House in Turkey, Dubai IB's financial scandal, the closure of the Islamic Bank of South Africa and the Islamic Investment Companies of Egypt were all examples of poor corporate governance (Hassan, 2006). In Malaysia, the 2005 financial scandal at Bank Islam was attributed to mismanagement due to poor corporate governance and a weak internal control mechanism (Parker, 2005). Because the regulations that govern IB differ from those that govern CBs, it would be interesting to look into the relationship between board characteristics and firm performance in both conventional and Islamic banking. Further, IBs also face distinct governance challenges such as complex governance structures, Shari'ah-compliance issues, the existence of the investment account holder, less transparency and weaker market forces. People are also unaware of Islamic banking, which adds to the difficulties (Islam and Rahman, 2017). Furthermore, Magalhães and Al-Saad (2013) observed that an additional challenge for IB was the need for the stakeholders to be confident that the IB is an efficient, stable, trustworthy provider of financial services and conforming to the Islamic Financial Law. Hence, we say that on the one hand, IBs assumed to have a strong governance mechanism through a "multi-layer" governance structure, but on the other hand, less awareness and trust of the general public is also a challenge to the IBs. The study of corporate governance is made more interesting by the risk of Shari'ah non-compliance, as well as other market risks. As a result, the current study seeks to answer the following research questions: what effect do board characteristics have on the financial performance of both IBs and CBs? Second, in recent years, researchers and legislators have focused more on gender diversity among board members (Arnaboldi *et al.*, 2020). Nili (2019) studied the presence of women directors on the board of 1,500 Standard and Poor (S&P) companies from the years 2007 to 2015 and found a gradual increase in the proportion of women directors from 11.9% in 2007 to 16.5% in 2015. Six European countries have had binding quotas in place since 2008 to encourage gender diversity on corporate boards (Bernile *et al.*, 2018). However, due to cultural differences, women's presence on board in Asian countries is still limited (Lee-Kuen *et al.*, 2017), and whether gender diversity increases business performance is still a question (Jabari and Muhamad, 2020). There is no study in the literature that studies the role of gender diversity in the board on financial performance in both CBs and IBs, except the study of Yar and Ahmed (2020), which is conducted in the context of Pakistan. As a result, the study's second goal is to investigate the impact of board gender diversity on financial performance in both CBs and IBs, which has yet to be investigated in the literature, particularly in Malaysia.

Whether the same board characteristics examined in CBs would also explain the performance in IBs is an open research question in empirical research. We also conducted a thorough review of the literature on board characteristics and financial performance in both conventional and IBs (see Table 1), which validated our assumption that there is a lack of research on the link between board characteristics and financial performance in the context of comparing CBs and IBs. Only six out of 32 studies presented in Table 1 focused on CBs and IBs simultaneously between 2014 and 2022. In response to the scarcity of such research, the present study investigates the effects of board characteristics on financial performance in both CBs and IBs.

Table 1.
Existing literature on board characteristics and banks performance

Study	Sample	Country	Study period	Board characteristics	Dependent variable
Tazilah *et al.* (2021)	16 IBs	Malaysia	2011–2018	Board size, CEO duality, board independence, Shari'ah committee, Shari'ah committee report	Financial performance
Tazilah and Rahman (2014)	17 IBs	Malaysia	2006–2009	Board size, independent chairman, board independence, size of SB committee, education	Risk management committee
Jabari and Muhamad (2020)	30 IBs	Indonesia, Malaysia	2010–2018	Board size, board independence, proportion of women in board	Financial performance
Usman and Kibiya (2021)	16 IBs	Malaysia	2015–2020	Board gender diversity, board nationality, board skills and expertise	Financial performance
Elgadi and Ghardallou (2021)	27 IBs	Sudan	2005–2013	Board size, gender diversity	Financial performance
Aslam and Haron (2020)	129 IBs	29 Islamic countries	2008–2017	Board size, NEDs, CEO duality, audit committee, SB, risk management committee	Financial Performance
Ajili and Bouri (2018)	44 IBs	Middle East countries	2010–2014	Board index, AC index, SSB index	Financial Performance
Alsartawi (2018)	49 IBs	GCC countries	2013–2016	Board independence, frequency of board meetings	Financial Performance
Hakimi *et al.* (2018)	13 IBs	Bahrain	2005–2011	Board size, CEO duality, board independence, SB size, institutional administration in board	Financial Performance
Lassoued (2018)	16 IBs	Malaysia	2005–2015	Board size, SB size, board independence	Financial Stability
Nomran *et al.* (2018)	15 IBs	Malaysia	2008–2015	Shari'ah Supervisory Board (SSB) size, SSB cross-membership, SSB educational qualification, SSB reputation, SSB expertise	Financial Performance
Khan and Zahid (2020)	79 IBs	19 Asian countries	2011–2016	SSB size, SSB education, board size, board independence, frequency of board meetings, ownership structure	Financial Performance
Nawaz (2019)	47 IBs	15 Islamic countries	2005–2010	Board size, SSB size, CEO duality, board independence, audit committee size	Financial performance

(*continued*)

Table 1.

Study	Sample	Country	Study period	Board characteristics	Dependent variable
Khan *et al.* (2018)	34 IBs	4 South Asian countries	2010–2016	Corporate governance index, SSB size, SSB education, board size, board independence, board meeting, institutional ownership	Financial P=performance
Pranata and Laela (2020)	12 IBs	Indonesia	2009–2017	Board ownership, board tenure, board independence, board expertise, board dual position	Maqashid Shari'ah performance
Al-Mutairi and Quttainah (2017)	82 IBs	15 countries	1993–2014	SSB size, outside directors in SSB, SSB interlocks, SSB expertise, SSB education, SSB membership in IFSB	Financial performance
Bukair and Rahman (2015)	40 IBs	Gulf Cooperation Council	2008–2011	Board size, board composition, CEO duality, investment account holder	Financial performance
Farag *et al.* (2018)	90 IBs	13 countries	2006–2014	Board size, SSB size, board independence	Financial performance
Handa (2018)	70 conventional banks	India	2008–2015	Board size, CEO duality, board committee, female directors, board meetings, average remuneration	Financial performance
Alsagr *et al.* (2018)	9 conventional banks	Saudi Arabia	2011–2016	Board size, board independence, audit committee size, foreign ownership, block holder ownership	Financial performance
Al-Matari (2020)	28 financial firms	Oman	2011–2017	Board size, NEDs, board meetings	Financial performance
Aktan *et al.* (2018)	15 financial firms (13 conventional banks)	Bahrain	2011–2016	Board size, board independence, CEO duality, ownership concentration, auditor's reputation, board meetings	Financial performance
Naushad and Malik (2015)	24 conventional banks	GCC countries	2012–2013	Board size, CEO duality, block holder ownership	Financial performance
El-Chaarani (2014)	40 conventional banks	Lebanon	2006–2010	Board size, board independence, CEO duality, ownership concentration, internal ownership	Financial performance

(*continued*)

Table 1.

Study	Sample	Country	Study period	Board characteristics	Dependent variable
Sakawa and Watanabel (2018)	84 conventional banks	Japan	2006–2011	Board size, board independence	Financial performance
Mollah and Zaman (2015)	86 IBs, 86 conventional banks	25 countries	2005–2011	Shari'ah supervision, board structure, CEO power	Financial performance
Yar and Ahmed (2020)	6 IBs, 6 conventional banks	Pakistan	2008–2018	Women on board, Female CEO, women in supervisory board, women in audit committee, female CEO role duality	Financial performance
Haddad and Souissi (2022)	180 IBs	56 countries	2010–2019	SSB size, SSB meetings, SSB financial experts	Financial performance
Wasiuzzaman and Nair Gunasegavan (2013)	5 IBs, 9 conventional banks	Malaysia	2005–2009	Board size, board independence	Financial performance
Aslam *et al.* (2021)	5 IBs, 15 conventional banks	Pakistan	2006–2015	Board size, executive directors, independent directors, board committees	Financial performance
Mollah *et al.* (2017)	52 IBs, 104 conventional banks	14 Islamic countries	2005–2013	Corporate governance index, firm level of risk (Zscore)	Financial performance
Grassa and Matoussi (2014)	77 IBs, 85 conventional banks	GCC countries and Southeast Asian countries	2000–2009	Board meeting, board size, NEDs, women directors, foreign directors, old directors, directors fee, CEO age, CEO founder, SSB size, women in SSB, SSB interlock	Financial performance

Source: Authors' own work

No study is particularly conducted in the context of Malaysia. As a result, an in-depth single-country study may begin to improve our understanding of the board–financial performance relationship in both conventional banks and IBs. Further, our emphasis on IBs over CBs is significant because there is renewed debate about the role and performance of IBs, and some recent studies on stability, sustainability and profitability cast doubt on IBs' current state. To our knowledge, the literature on Islamic banking is normative and theoretical, with little empirical evidence on performance, particularly when comparing IBs to CBs (Mollah and Zaman, 2015; Bukhari *et al.*, 2013). As a result, our comparison of IBs and CBs is an important and timely contribution to this field, recognizing the scarcity of IBs governance research. Our research thus complements Adams and Mehran (2012), Andres and Vallelado (2008), Aebi *et al.* (2012), Francis *et al.* (2012), Pathan and Faff (2013), AlSagr *et al.* (2018), Handa (2018), Aktan *et al.* (2018) and Wintoki *et al.* (2012) who focused entirely on CBs, and the study of Tazilah *et al.* (2021), Tazilah and Rahman (2014), Jabari and Muhamad (2020), Elgadi and Ghardallou (2021), Pranata and Laela (2020), Ajili and Bouri (2018), Masruki *et al.* (2018), Alsartawi (2019), Aslam and Haron (2020) who entirely focused on IBs, whereas our study captures both IBs and CBs simultaneously. Second, no studies have been conducted on the impact of women on bank boards in comparison to CBs and IBs performance, except the studies of Jabari and Muhamad (2020), Elgadi and Ghardallou (2021) and Usman and Kibiya (2021), which studied board gender diversity and financial performance in the context of IBs only. No study has empirically tested the impact of director remuneration on financial performance in both CBs and IBs. This study examines how female directors and director remuneration affect financial performance, which is rarely discussed in existing literature. Third, in the empirical section, this study employee upgraded and updated the dynamic panel model rather than the traditional static model. The dynamic model addresses the problems of simultaneity, heterogeneity, endogeneity and autocorrelation (if it exists) as well as omitted variable biases (Khan *et al.*, 2021). This study also includes pre-estimation tests (DWH endogeneity) to confirm data issues and post-estimation tests (Sargan and Hensen test, ARI and ARII) to demonstrate the model's validity. This research is anticipated to be an invaluable source of information for policymakers, particularly those in the financial services industry, as they design governance structures to address a competitive market and even a future financial crisis.

The following reasons motivate us to choose Malaysia as a sample in the present study. First, Malaysia is a global center for Islamic finance. For the year ended 2018, Malaysia's banking sector, which included 16 IBs, accounted for 36.6% of total financing and 31.4% of total assets, respectively (Jabari and Muhamad, 2020). IBs have become extremely competitive in Malaysia, with both CBs and IBs competing for market share (Wasiuzzaman and Nair Gunasegavan, 2013). Malaysian IBs have expanded rapidly despite fierce competition, and one possible reason for this expansion is increased Muslim awareness of the importance of supporting the Islamic banking system (Kamarulzaman and Madun, 2013). Malaysia's Muslim population accounts for nearly 60% of the total (Amin *et al.*, 2013). According to an empirical study, Muslim customers in Malaysia form relationships with IBs because they believe these banks adhere to Shari'ah law. This implies that Shari'ah compliance is required in all IBs operations (Amin *et al.*, 2013). As a result, Malaysia was chosen for this study because, according to Hasan (2012), it is the only country in the region that uses the most extreme regulatory intervention. Furthermore, there is only one study in the literature, Wasiuzzaman and Nair Gunasegavan (2013) that conducted a comparative study of IBs and CBs with firm performance. This study used only two variables among board structure characteristics, namely, board size, and board independence, leaving out other aspects of board governance mechanism like board gender diversity, board meetings

and director remuneration. This study spans the years 2005 to 2009. Following that period, Malaysian codes of corporate governance (MCCG) were revised in 2012, 2017, and most recently on 28 April 2021, to strengthen the governance mechanism in Malaysian companies. There is now a greater emphasis on women's participation on the board, board composition, board activity, director remuneration and the effectiveness of the audit and risk management committee. As a result, in the context of these governance code revisions, it is necessary to revisit the board characteristics–firm performance relationship among IBs and CBs. To achieve the research objectives, the current study will collect data from 25 Malaysian banks (13 IB and 12 conventional banks) over ten years from 2010 to 2019. Traditional banks are more profitable than IBs. According to the regression results, director's remuneration and gender diversity have a positive significant relationship with profitability as measured by return on assets (ROA), while board meetings have a significant inverse relationship with profitability as measured by ROE. To further our analysis, we divide the sample into IBs and CBs. Based on generalized method of moments (GMM) results, we discovered that the presence of non-executive directors (NEDs) and director remuneration has a positive significant relationship with profitability in the case of IBs, whereas the same is found to be insignificant in Malaysian CBs. Similarly, board meetings were found to have a significant inverse relationship with profitability in CBs but not in IBs.

The paper is divided into five sections to achieve the research objective. Section 2 elaborates on the literature review and the study's hypothesis. Section 3 (methodology) covers details about sample selection, variable measurement and econometric techniques. Section 4 discusses the descriptive and regression results, and Section 5 concludes the paper.

2. Literature review and hypothesis development

Shari'ah principles forbid usury (riba) and encourage risk-sharing. Unlike traditional banking, where the bank lends money to the investor and expects a fixed return, IFIs are expected to share both the risk and the return on investment. Excessive uncertainty (gharar) is also prohibited by Shari'ah principles. Although the risk is recognized as a *de facto* component of investments, it must be capped with a "tolerable limit." The existing literature on bank corporate governance has primarily focused on the impact of board characteristics on bank performance (Liang *et al.*, 2013).

2.1 Gender diversity

Directors are primarily appointed to the board by shareholders, and they meet the expectations of the owners in a variety of dynamic ways, such as positively and significantly contributing to the firm and smoothly running the firm's functions and operations. Directors on boards bring a diverse set of skills, education levels, experience, knowledge and market reputation to the table, all of which contribute to the company's long-term value. Following the current corporate governance trend, this paper focused on the positive contributions of female board directors as well as the opportunities available to them to perform at the highest levels. Diversity on the board improves corporate performance by providing a variety of information and resources in a variety of ways. Companies with more women on their boards have better financial performance (Liu *et al.*, 2014), better social performance (Alazzani *et al.*, 2017), higher market value (Campbell and Mínguez-Vera, 2008) and superior governance efficiency (Adams and Ferreira, 2009). Another important study by Alazzani *et al.* (2019) suggests that having a more gender-diverse BOD increases the firm's disclosure of its corporate social responsibility, which in turn improves firm performance. Gender diversity and equality are addressed in

the Agenda's Sustainable Development Goals 5 and 10 (2030) (United Nations Inter-Agency Expert Group on Sustainable Development Goal Indicators, 2015). Gender diversity improves decision-making (Luanglath *et al.*, 2019). Several studies have found that having women in top management has a positive impact on a company's social and financial performance (Veltri *et al.*, 2021; Yasser *et al.*, 2017). Women in senior management are more concerned with social ties, risk awareness and stakeholder involvement, according to Amorelli and García-Sánchez (2020). MCCG 2017 mandates that each firm listed on the Bursa Malaysia have a gender diversity ratio of 30% on the board (Khan *et al.*, 2021). All publicly traded corporations must disclose their policy on female board representation, according to the MCCG (2017). Most researchers, including Nguyen *et al.* (2014) and Tu *et al.* (2015), discovered a significant relationship between gender diversity and firm performance, but others, including Abdullah (2014) and He and Huang (2011), discovered insignificant or negative relationships. According to Talavera *et al.* (2018), a more diverse board may make different decisions due to divergent directors' perspectives. As a result, the decision-making process may be slowed, contributing to lower bank performance.

Jabari and Muhamad (2020) investigated Malaysian and Indonesian firms and discovered that gender diversity is related to firm performance in both countries. In the context of Malaysia, studies like Julizaerma and Sori (2012) and Lee-Kuen *et al.* (2017) found that gender diversity is positively associated with financial performance, whereas Abdullah (2014) and Lim *et al.* (2019) found an inverse relationship between the two. Female presence in SB, according to Khan *et al.* (2023), contributes to the satisfaction of numerous stakeholders' interests and the enhancement of sustained competitive advantage, consequently increasing financial success in IBs. Jabari and Muhamad (2020) discovered that female presence in SB had a positive impact on the financial performance of IBs. By contrast, Khan *et al.* (2020) discovered a negative association between gender diversity in SB in IBs and financial performance, whilst Grassa (2016) showed no such relationship. The Malaysian government has paid particular attention to the role of women's representation at the decision-making level (Alazzani *et al.*, 2019). According to the latest MCCG issued on 28 April 2021, "The board comprises at least 30% women directors." Based on the preceding discussion, we develop the hypothesis as follows:

H1. Female directors on the boards have a relationship with the financial performance of both conventional and Islamic banks in Malaysia.

2.2 Board size

The primary responsibility of the board, according to the agency theory, is to effectively monitor the activities of management to maintain the company's integrity, objectivity, accountability and transparency (Hegazy and Hegazy, 2010). The number of board members is an important component of a company's management productivity (Naciti, 2019). According to Andres and Vallelado (2008), the board size of banks is expected to be largely due to the complexity of the business, asymmetric information and changing market behavior as it exercises better monitoring and advising. As a result, restricting the number of directors on the board or selecting favorable board members may improve corporate performance. The resource dependency principle holds that larger boards increase firm efficiency, implying that board size and company performance are positively related. Previous research found positive relationships, such as Sheikh and Kareem (2015) and Ilaboya and Ohiokha (2016) who argued that larger boards contribute significantly to firm performance. A larger board increases boardroom transparency (Levit and Malenko, 2016) and is more efficient because it has a greater diversity of information, expertise and abilities

to oversee and manage the organization's activities (Zagorchev and Gao, 2015). Extant literature such as Nguyen *et al.* (2014), Haider and Fang (2016) and Rahim *et al.* (2015) reported the negative impact of wide BOD on financial performance because this may contribute to agency cost, pause in decision-making, loss of coordination and an inept board surveillance function. Consistent with this negative relationship, According to Adnan *et al.* (2011), larger boards are less efficient due to the slow pace of decision-making, making it more difficult to obtain organizational consensus. On the other hand, Wintoki *et al.* (2012) fail to find any association between board size and profitability.

In the case of IBs, no consensus has been found regarding the relationship between board size and firm performance, for example, Grassa and Matoussi (2014), Bukhari *et al.* (2013) and Quttainah *et al.* (2013) found a positive impact of board size on financial performance, whereas Grassa *et al.* (2010) and Juras and Hinson (2008) found no association. Researchers also investigated the characteristics of SBs and their impact on IB financial performance. In this context, Quttainah *et al.* (2013), Matoussi and Grassa (2012) and Hakimi *et al.* (2018) discovered a negative relationship between SB size and financial performance by arguing that smaller board sizes increase coordination and communication, which in turn increases IB financial performance. Researchers such as Safiullah and Shamsuddin (2018), Farag *et al.* (2018), Abdallah (2021), Hakimi *et al.* (2018), Khan and Zahid (2020) and Mollah and Zaman (2015), on the other hand, favored larger boards, claiming that a larger SB board provides a greater body of expertise and resources that are critical to the organization's performance. Based on empirical evidence, prior literature and theoretical support, this study hypothesized the relationship between board size and corporate performance as follows:

H2. There is a relationship between board size and financial performance in both conventional and Islamic banks in Malaysia.

2.3 Board composition

In corporate boardrooms, NEDs play an important role. Although they are not involved in the organization's day-to-day operations, they are critical in monitoring the organization's activities to achieve high performance (Mohammad *et al.*, 2019). NEDs, according to Almutairi and Quttainah (2017), play an important role in the organization's corporate policy, and firm transparency improves as board independence increases. Zabri *et al.* (2016) confirmed that independent directors brought independence to the board and added to the diversity of skills and expertise of the directors. Furthermore, by analyzing managerial efficiency, it is evident that their primary responsibility is to effectively contribute to the development of company strategies and achieve long-term growth. According to Khan and Zahid (2020), independent directors have fewer conflicts with management while performing their duties. Many previous studies have found that the presence of NEDs is related to the board's ability to make better decisions for the organization (Hussien *et al.*, 2019; Mollah *et al.*, 2017). Some studies discovered a negative relationship and justified it by claiming that external director cannot always monitor and perform their duties independently and is influenced by various authorities (Alhaji *et al.*, 2012). Bukair and Abdul Rahman (2015) claimed that board independence had a negative impact on IB's financial performance by NEDs' lack of banking and Shari'ah knowledge and poor monitoring efficiency. The same negative relationship was found by Grassa and Matoussi (2014), whereas Farag *et al.* (2018) and Haris *et al.* (2019) discovered no association between NEDs and banking performance. In the context of Pakistan, Sheikh and Kareem (2015) discovered an insignificant relationship between board composition and financial performance in IBs. Outsider directors in SB, according to Almutairi and Quttainah (2017),

are beneficial to the financial performance of IBs because of their advising and resource allocation duties, making them stronger monitors and a valuable method of increasing bank performance. In IBs, a similar positive association was discovered by Bukair and Rahman (2015) and Andres and Vallelado (2008), although Nawaz failed to identify any impact of SB independence in IBs. According to the MCCG-2021, at least half of the board members comprise independent directors. For larger companies, the board comprises a majority of independent directors. This study hypothesized the following relationship based on the evidence presented above:

H3. Non-executive directors have a relationship with the financial performance of both conventional and Islamic banks in Malaysia.

2.4 Board meetings

It has been argued that increasing the number of BOD meetings increases the likelihood of effective board monitoring and control, thus increasing firm value. Vafeas (1999) investigated the relationship between firm value and the frequency of board meetings for 307 companies for the first time, from 1990 to 1994, and found an inverse relationship between the two. In supporting the findings, Vafeas (1999) argued that market participants assigned less value to boards that met more frequently. The primary monitoring tool for the board is the board meeting. It allows members to debate and share ideas on tactics that management can use and oversee. According to Masulis *et al.* (2012), increasing board meetings can benefit the company by increasing managerial inspection and policy decision-making. The recurring board meeting demonstrates the board's capacity to provide leadership in companies through periodic monitoring and suggestion functions. It is regarded as the primary monitoring tool of the board. Aktan *et al.* (2018) also stated that as the frequency of board meetings decreases, so does the autonomy of management decision-making. The complexity and value of information increase the importance of boards' advising functions in the banking industry. A regular meeting can have an impact on corporate performance in both positive and negative ways (Andres and Vallelado, 2008). Regular board meetings have been shown to have a positive impact on board interactions and corporate performance. However, the impact on Bahraini financial enterprises' return on equity (ROE) is negative and significant (Aktan *et al.*, 2018). In Islamic banking, Balkouti (2022) stated that increasing the SB meeting leads to increased surveillance of all transactions, which leads to improved financial performance. Garas (2012) discovered a similar beneficial association between SB meetings and financial performance in IBs. Musleh Alsartawi (2019), on the other hand, discovered a negative association between the two. The MCCG-2021 mandates that regular board meetings be held with adequate notice of the agenda to be covered and that the number of meetings held annually be made public. Furthermore, the board must also disclose the number of board meetings held each year and each director's attendance. Based on our discussion, we came up with the following hypothesis:

H4. Board meetings have an impact on the financial performance of conventional and Islamic banks in Malaysia.

2.5 Director's remuneration

The best way to resolve the conflict of interest between managers and shareholders, according to Smith (1776) and Berle and Means (1932), is to compensate the managers so that they can act in the best interests of the shareholders. Compensation is the monetary

reward given to managers for their efforts in working hard and taking on the risk of the shareholders. Decision-making and planned management approaches that have a substantial impact on business performance will be rewarded by managers' salaries. Several strategies, such as short-term and fixed-term pay incentives, are included in the entire compensation package (Razali, 2018). The salary of directors may be tied to the organization's concept, in which managers are agents of the shareholders who aim to enhance the firm and the primary in exchange for a certain payment. According to Handa (2018), a manager's average remuneration has a considerable impact on bank performance. Similarly, Zhou *et al.* (2011) compared the pay–performance sensitivity of managers and directors for the period 2001–2009 for a sample of 18 Chinese banks. The bank's performance was measured using ROE, non-performing loans and core capital adequacy ratios. They found that ROE has a considerable positive association with director remuneration. In another study, Abdullah (2006) looked into the amount of directors' salary and its relationship to business success but fails to find any relationship between the two. Furthermore, a study conducted by Wooi and Ming (2009) on the pay–performance structure of Malaysian Government Linked Corporations found a substantial negative relationship between management remuneration and ROE. Using data from Australian banks from 1992 to 2005, Doucouliagos *et al.* (2007) looked at the link between director remuneration and firm value. The study found no link between director compensation and business performance. The MCCG (2017) required complete disclosure of director compensation, including fees, salaries, incentives, cash and other benefits. The following hypothesis was developed based on the preceding discussion:

H5. Director's remuneration has a relationship with the financial performance of conventional and Islamic banks in Malaysia.

2.6 Theoretical framework

Based on the above discussion, the conceptual framework of the present study is presented in Figure 1 below.

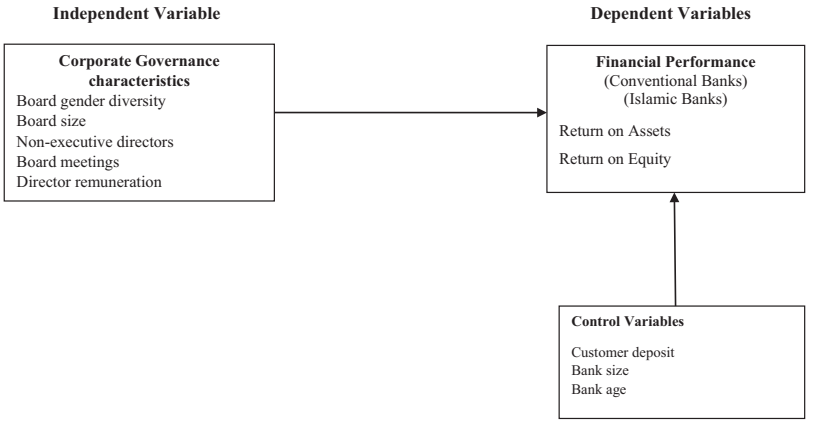

Figure 1.
Theoretical framework of the study

Source: Author's own work

3. Research methodology

3.1 Sample of the study

The present study aims to investigate the board characteristics–banks performance relationship in both CBs and IBs. Primarily, all the IBs and conventional banks that were listed to the Central Bank of Malaysia were among the sample of the study. To become part of the study, certain criteria must be fulfilled by the bank. First, to be included in the study, banks must have complete data on profitability, corporate governance and control variables, so all financial institutions that did not have complete data on required variables were excluded. There is no merger or acquisition took place during the study period. Bank remains listed during the entire study period. There must not be a discontinuity of business during the study period. As a result, the final sample of the study includes 12 traditional and 13 IBs. Table 2 contains a list of the banks. The data for the required variables were obtained from the annual reports of the respective financial institutions. We gathered data from annual reports for two reasons: first, it saves time because data can be easily collected in a short period, and second, annual reports are prepared following the proper regulations and thus contain no falsified information.

3.2 Variables of the study

In this study, we calculate bank profitability using two metrics: ROA and ROE. In terms of return on shareholder assets, the ROE is one of the most widely used accounting metrics in value appraisal (Isidro and Sobral, 2015; Low *et al.*, 2015). ROE is the better measurement of profitability as it did not consider the impact of leverage on profitability. The characteristics of the board are used as a proxy for corporate governance. Board size, board composition, board gender diversity, board meetings and director remuneration are indicators of the level of board governance mechanisms in IBs and conventional banks. Furthermore, following the study of Jan *et al.* (2021), Baklouti (2022), El-Chaarani (2014), Grassa and Matoussi (2014), Nomran *et al.* (2018), Nawaz (2019) and Khan *et al.* (2023), bank size, bank deposit and bank age were used as control variables. Table 3 displays the measurement details for the variables under consideration.

3.3 Estimation model of the study

This paper begins with a basic and standard static estimation method based on the OLS panel regression technique. Shan and McIver (2011) investigated the relationship using

S. No.	Islamic banks	S. No.	Conventional banks
1	Bank Islam	1	HSBC Bank Malaysia Berhad
2	Affin Islamic Bank Berhad	2	Allied Bank Berhad
3	Alliance Islamic Bank	3	Affin Bank
4	Hong Leong Islamic Bank	4	Maybank
5	Alkhair International Islamic Bank	5	CIMB Bank
6	Dubai Islamic Bank	6	Public Bank Berhad
7	CIMB Islamic Bank	7	RHB Bank
8	RHB Islamic Bank	8	Hong Leong Bank
9	Public Islamic Bank	9	AmBank Group
10	HSBC Amanah	10	United Overseas Bank
11	Bank Mumalat	11	Bank Rakyat
12	Standard Chartered Saadiq Berhad	12	OCBC Bank
13	AmIslamic Bank		

Source: Authors' own work

Table 2.
List of the banks

Variables	Acr	Definitions	Reference
Dependent variables			
Return on assets	ROA	Net income to total assets in a financial year	(Aktan *et al.*, 2018)
Return on equity	ROE	Ratio of net income to total owner's equity	
Independent variables			
Gender diversity	FM	Percentage of female directors to total directors on the board	
Board size	Bsize	Total number of directors on the board	(Wintoki *et al.*, 2012)
Non-executive directors	NED	Percentage of non-executive directors to total directors	(Nguyen *et al.*, 2014)
Board meeting	BM	Number of board meetings in a year	(Andres and Vallelado, 2008)
Director remuneration	DR	Average remuneration of the directors	(Razali, 2018)
Control variables			
Bank size	BS	Total assets in a bank	(Zeitun, 2012)
Customer deposit	CD	Net of total deposit of the customer	(Adusei, 2011)
Bank age	BA	Number of years since the bank in incorporated	(Ajili and Bouri, 2018)

Source: Authors' own work

Table 3. Measurement of variables

traditional static models and generalized least squares. The basic regression model used in this study is shown in equation (1):

$$Y_{it} = a_0 + \sum\nolimits_{k=1} \beta_k X_{k,it} + \varepsilon_{it} \quad (1)$$

This research looked at both static and dynamic models. Using a panel model known as a framework GMM, the research then investigates the complex relationship between a dependent variable and an independent variable of the study's endogeneity problems. Therefore, for the dynamic relationship, the estimation equation is given below. By using these equations for regression analysis, the variables are considered strictly exogenous, and thus the issue of endogeneity between regressors is not considered in these models:

$$ROA_{it} = a_0 + \beta_1 BZ_{it} + \beta_2 NED_{it} + \beta_3 BM_{it} + \beta_4 FM_{it} + \beta_5 DR_{it} + \beta_6 CD_{it} + \beta_7 BS_{it} + \beta_8 BA_{it} + \varepsilon_{it}$$

$$ROE_{it} = a_0 + \beta_1 BZ_{it} + \beta_2 NED_{it} + \beta_3 BM_{it} + \beta_4 FM_{it} + \beta_5 DR_{it} + \beta_6 CD_{it} + \beta_7 BS_{it} + \beta_8 BA_{it} + \varepsilon_{it}$$

Whereas
ROA_{it} = *Firm profitability measures through ROA;*
ROE_{it} = *Firm profitability measures through ROE;*
$Bsize_{it}$ = *Board size for the firm;*
NED_{it} = *Percentage of NEDs to total directors in the firm;*
BM_{it} = *Number of board meetings held in a financial year in a firm;*
FM_{it} = *Female board members in the board;*
DR_{it} = *Remuneration paid to the directors during the financial year;*
CD_{it} = *Customer deposit for the firm;*
BS_{it} = *Total bank deposit for the firm;*
BA_{it} = *Bank age for the firm;*
a_0 = *Intercept for the firm; and*
E_{it} = *Residual.*

However, Khan *et al.* (2021) and Nguyen *et al.* (2014) have confirmed the possible complex indigenousness between the CG structure and company performance. As a result, the study will use a dynamic model as a proxy for corporate performance for both dependent variables. *This paper uses the most suitable model as a panel regression model, which is system GMM:*

$$ROA_{it} = a_0 + a_1 ROA_{it-1} + \beta_1 BZ_{it} + \beta_2 NED_{it} + \beta_3 BM_{it} + \beta_4 FM_{it} + \beta_5 DR_{it} + \beta_6 CD_{it} + \beta_7 BS_{it} + \beta_8 BA_{it} + \mu_i + \eta_t + \varepsilon_{it}$$

$$ROE_{it} = a_0 + a_1 ROE_{it-1} + \beta_1 BZ_{it} + \beta_2 NED_{it} + \beta_3 BM_{it} + \beta_4 FM_{it} + \beta_5 DR_{it} + \beta_6 CD_{it} + \beta_7 BS_{it} + \beta_8 BA_{it} + \mu_i + \eta_t + \varepsilon_{it}$$

In the above model in an equation,
μ_i = *"unobserved firm fixed effects."*
η_t = *"time-specific effects that are time-variant."*
ε_{it} = *"the classical error term."*

3.5 Estimation methodology

For panel data, fixed and random effects, models are commonly used in banking literature. However, it is suggested that the long-term profitability of banks may have an impact on profits the following year (Athanasoglou *et al.*, 2008). As a result, there is a problem with these models when there is a lagged dependent variable or (any other regressor), especially when there are few periods and numerous observations (Nickell, 1981). Arellano and Bond (1991) developed the difference GMM model to handle this problem by differencing all regressors and using GMM (Hansen and Singleton, 1982).

Arellano and Bover (1995) and Blundell and Bond (2000) extend the difference of the GMM model by developing a system GMM estimator that includes both lagged levels and lagged differences. The system GMM estimator is based on the assumption that the first differences of instrumental variables are unrelated to the fixed effects. It enables the introduction of more instruments and has the potential to significantly improve efficiency. Furthermore, the GMM system accounts for unobserved heterogeneity as well as the persistence of the dependent variable. As a result, the study considers the dynamic panel GMM as the primary estimation procedure and will only consider the results of GMM estimation techniques because the study discovered the issue of endogeneity between

regressors, and thus, the results of static models (OLS/FE) are reported but will be considered biased.

4. Data analysis and discussion

4.1 Descriptive statistics

Table 4 displays the descriptive statistics for the variables under investigation. First, descriptive statistics for entire samples are presented. Table 4 also includes descriptions of CBs and IBs. Finally, the results of a *t*-test to see if there is a significant difference between the two types of banks, CBs and IBs, are presented. The study includes 300 firm-year observations, with 144 from CBs and 156 from IBs.

The descriptive results of the entire sample data revealed that the sample firms had an average ROA of 10% and an ROE of 11%. The sample data contains 12%, female board members. The average board has eight members, with non-executive independent directors accounting for 58% of the total directors. In a sample Malaysian bank, 12 board meetings are held during the fiscal year.

Furthermore, category-wise descriptive results show that CBs have a 13% ROA on average, whereas IBs have an 8% ROA. Similarly, CBs have a higher ROE than IBs (18% vs 12%). CBs' higher profitability demonstrates their greater funding capacity than IBs. This higher profitability of CBs supports Fah and Hassan's (2014) findings that CBs have higher ROA and ROE than IBs. Furthermore, Aslam and Haron (2020) researched CBs and IBs in Pakistan and discovered that CBs have a higher profitability ratio than IBs. The higher profitability ratio of CBs is due to higher asset quality and higher net financing over IBs, as suggested by Wasiuzzaman and Nair Gunasegavan (2013). Similarly, CBs have a higher proportion of female directors on their BOD than IBs (14% vs 11%). The results show that both banks failed to meet the MCCG requirement that at least 30% of board members be female directors. CBs have a larger board than IBs (ten vs seven). This is consistent with the findings of Wasiuzzaman and Nair Gunasegavan (2013), who discovered that CBs have a greater number of board members than IBs in Malaysian banks. The presence of NEDs in both types of banks almost is the same (60% vs 56%). Similarly, there is the same number of board meetings held in financial years in both CBs as well as IBs (13 vs 12). In terms of DR, the results show that directors working in CBs earn more than their counterpart directors working in IBs. In addition, concerning the control variables, it was discovered that CBs

	Total sample				Conventional banks				IBs				
Variables	Mean	SD	Min	Max	Mean	SD	Min	Max	Mean	SD	Min	Max	*t*-test
ROA	0.10	0.28	0.05	1.87	0.13	0.29	0.05	1.85	0.08	0.22	0.06	1.91	0.00**
ROE	0.11	3.13	0.06	0.22	0.18	3.90	0.06	24.29	0.12	2.34	0.04	0.21	0.07
FM	0.12	10.50	0	0.41	0.14	12.59	0	0.33	0.11	9.12	0	0.32	0.11
Bsize	7.7	2.15	3	13	10.02	1.10	5	14	7.11	1.61	4	11	0.06
NED	0.58	14.2	0.34	0.82	0.60	11.2	0.30	0.72	0.56	14.23	0.22	0.83	0.21
BM	12.40	4.11	5	22	13.34	3.7	6	22	12.12	3.67	5	23	0.11
DR	0.10	1.53	0.10	10.05	1.41	2.45	0.09	10.15	0.52	0.32	0.14	1.99	0.46
CD	91.22	94.25	8.20	385.4	156.4	110.24	35.11	385.42	36.19	26.59	8.20	135.01	0.00**
BS	145.6	180.5	6.81	768.40	260.9	215.21	48.63	768.33	47.54	42.21	6.79	210.2	0.00**
BA	36.80	29.57	5	116	59.42	28.43	16	116	15.10	8.05	5	38	0.00**
Obs.		300				144				156			

Table 4.
Descriptive statistics

Notes: Significant at: *@5% and **@1% levels
Source: Authors' own work

have higher customer deposit (CD) and BS than IBs do. Similarly, CBs are much older than IBs.

Finally, independent *t*-tests for the variables are performed in descriptive statistics to determine whether the difference between these two banks is significant. CBs have a higher ROA than IBs, which is significant at the 1% level with a *p*-value of 0.000. CD, BS and BA are also higher in CBs than IBs and are significant at the 1% level with a *p*-value of 0.000.

4.2 Correlation analysis

The correlation matrix is defined as "one of the econometric tools used to investigate the trend of variable association." It denotes the strength of the relationship between the variables in the study. It also indicates whether or not multicollinearity exists. According to Gujarati *et al.* (2012), if the correlation value between two variables exceeds 0.70, it indicates that these variables have a multicollinearity problem. According to the Pearson correlation matrix shown in Table 5, the highest correlation between the variables is 0.62, which is also insignificant. The remaining correlation is less than the standard of 0.70, indicating that there is no collinearity between variables.

The correlation result shows that both profitability measures i.e. ROA and ROE have a positive but insignificant relationship with board size. The presence of NEDs to shows an insignificant but negative association with ROA and ROE. Similarly, board gender diversity shows a positive but insignificant relationship with profitability. Board size shows a significant positive relationship with profitability in terms of ROA. Board meeting shows a significant but negative impact on ROA and ROE. Concerning control variables, correlation results show that entire control variables, i.e. cash deposit, bank size and bank age shows positive but insignificant interaction with both profitability measures, i.e. ROA and ROE.

4.3 Regression analysis

As previously stated, in this study, we used both static and dynamic panel models to observe the study's findings. Table 6 presents the regression results using the OLS, FEM and GMM models to conclude the findings of the study. To determine whether the model is properly specified before applying the GMM model, there should be evidence of high first-order autocorrelation but no evidence of significant second-order autocorrelation. Furthermore, the Hansen and Sargent over-identification restriction test is used to determine their validity (Arellano and Bond, 1991; Roodman, 2009). The Sargan test's insignificant

Variables	ROA	ROE	BS	NED	DR	FM	BM	BS	CD	BA
ROA	1									
ROE	0.62	1								
Bsize	0.46*	0.18	1							
NED	–0.10	–0.17	–0.31	1						
DR	0.29	0.11	–0.02**	–0.16***	1					
FM	0.45	0.31	–0.07	–0.05*	0.11***	1				
BM	–0.03**	–0.04**	–0.06	–0.24	–0.30	0.14**	1			
BS	0.32	0.14	0.44	0.19	0.05	–0.05*	0.37	1		
CD	0.33	0.17	0.63	0.24	–0.04*	0.02**	0.51	0.40	1	
BA	0.37	0.17	0.31	0.19*	–0.03	0.02	0.39	0.48	0.36	1

Notes: *, ** and *** refers to the significant level of 10, 5 and 1%, respectively
Source: Authors' own work

Table 5.
Correlation analysis

Table 6.
Impact of board governance on firm performance

Variables	OLS		FEM		Dynamic GMM	
	ROA	ROE	ROA	ROE	ROA	ROE
L. ROA					–0.125** (0.115)	
L. ROE						–0.023*** (0.072)
Bsize	2.560*** (0.025)	1.682 (0.320)	0.293** (0.192)	1.034 (0.216)	0.039* (0.042)	0.823** (0.203)
NED	–1.017 (0.031)	–1.128 (0.189)	–0.315 (0.126)	0.204 (0.089)	0.029 (0.113)	0.408 (0.204)
DR	1.104* (0.040)	3.729** (0.015)	1.284* (0.002)	1.153 (0.003)	0.092*** (0.001)	0.204 (0.001)
FM	1.073** (0.067)	1.103 (0.039)	0.105* (0.593)	0.513 (0.489)	0.062*** (0.402)	0.051 (0.492)
BM	–3.982*** (0.031)	–3.810 (0.010)	–0.062* (0.023)	1.026 (0.027)	–0.135** (0.018)	–0.205 (0.018)
CD	–1.163 (0.010)	0.543 (0.012)	0.384 (0.073)	0.203 (0.082)	–1.230* (0.103)	–0.608 (0.683)
BS	0.682 (0.043)	–0.137 (0.062)	–0.693 (0.023)	–6.104 (0.063)	0.713 (0.042)	–2.294 (0.203)
BA	3.015** (0.016)	–1.028 (0.013)	–1.821 (0.003)	–2.607 (0.013)	–0.376 (0.021)	–0.354 (0.014)
Constant	–0.569 (0.204)	0.398 (0.239)	2.239 (0.109)	2.062 (0.892)	–5.873 (0.113)	3.315 (0.892)
Obs.	300	300	300	300		
R-squared	0.4504	0.3201	0.6703	0.9886		
F-stat	7.783	5.472	10.04	8.023		
No. of groups					110	120
No. of inst					47	41
Sargan J. stat					41.47 (0.181)	43.41 (0.602)
AR(1)					2.14 (0.001)	1.02 (0.042)
AR(2)					0.59 (0.592)	0.71 (0.542)

Notes: Standard errors in parentheses. ***$p < 0.01$; **$p < 0.05$; *$p < 0.1$
Source: Authors' own work

value indicates that the instruments used in the equation are correct. Furthermore, because the value of AR(2) is insignificant in both profitability proxy measures, there is no autocorrelation in the data.

The regression results presented in Table 6 show that our first variable of interest, the board size, has a significant positive impact on ROA in OLS, FEM and dynamic GMM estimator. In terms of ROE, both OLS and FEM results show that board size has an insignificant association, but the same has a significant positive impact on ROE using the dynamic GMM estimator. A larger BOD is better equipped with more expertise and can make more effective strategic decisions. Kutum (2015), Sobhan (2021) and Pucheta-Martínez and Gallego-Álvarez (2020) discovered the same positive significant relationship in their respective studies. This positive association supports our hypothesis that a significant board size in Malaysian banks improves their performance and thus contributes to the banks' strength. NEDs have an insignificant impact on both profitability measures such as ROA and ROE in OLS, FEM and a dynamic GMM regression analysis. This insignificant association does not support the notion that independent directors improve disclosure quality and reduce information asymmetry (Al-Sartawi *et al.*, 2017), bringing more experience and knowledge (Balsmeier *et al.*, 2014), and thus better operational and share performance (Mobbs, 2013). This contradicts the findings of Farag *et al.* (2018), who discovered that NEDs are positively associated with profitability. This demonstrates that Malaysian bank boards of directors lack true independence and the necessary degree of abilities and expertise to fulfill their roles objectively. Directors' remuneration shows a significant positive impact on Malaysian bank performance in the case of the OLS, FEM and dynamic GMM model. In connection with ROE, the OLS model shows a significant positive relationship while FEM and GMM prove to be insignificantly associated with ROE. This outcome shows the manager's drive to effectively increase the shareholders' wealth to achieve bank success through payment. The findings support the findings of Handa (2018) and Razali (2018), who discovered a positive relationship between DR and bank profitability in Malaysian enterprises and banks listed in India. Based on OLS, FEM and dynamic GMM estimator regression results, gender diversity was found to be significantly positively associated with ROA. This significant impact supports the findings of Handa (2018) and Owen and Temesvary (2018), who find a significant positive impact of board gender diversity on firm profitability. Board meeting shows significantly inversely associated with both profitability measures in static and dynamic models. This negative association supports the argument of Vafeas (1999) who argues that regular board meeting weakens the ability of the board to consider the issues that consider the interest of the company and increase the cost as well (Al-Sartawi *et al.*, 2017). In support of the findings, we argued that regular board meetings without any focused and purposeful discussion increase the financial cost to the organization, lowering its profitability.

In terms of control variables, CD is found to be insignificantly associated with both ROA and ROE. Similarly, bank age has an insignificant impact on both profitability measures, which is consistent with Maroua (2015), who discovered no association between bank age and European bank performance. Furthermore, this insignificant association supports the findings of Aktan *et al.* (2018) and Obamuyi (2013).

4.4 Dynamic analysis for conventional and Islamic banks as subsample

After investigating the impact of board characteristics on profitability, we broaden our analysis by categorizing the sample data into CBs and IBs and then examining what role BOD plays in the profitability of these banks. Table 7 shows the results of using the dynamic GMM estimation technique. Furthermore, the results of the ARI, ARII and Sargan

Variables	IBs		Conventional banks	
	ROA	ROE	ROA	ROE
L. ROA	3.402*** (0.289)		–1.159 (0.382)	
L. ROE		–0.309 (0.120)		–0.193 (0.032)
Bsize	–0.129** (0.032)	0.473 (0.110)	1.230* (0.129)	1.315 (0.031)
NED	2.512* (0.117)	0.146*** (0.081)	1.305 (0.067)	0.483 (0.115)
DR	2.821** (0.002)	1.893* (0.029)	0.493 (0.014)	–0.146 (0.010)
FM	0.475* (0.062)	1.130*** (0.038)	1.242 (0.531)	1.352** (0.472)
BM	–1.762 (0.013)	–1.575 (0.013)	–1.793*** (0.011)	–2.092*** (0.014)
CD	–2.413*** (0.017)	–2.892*** (0.021)	1.315 (0.101)	1.814 (0.163)
BS	2.583*** (0.020)	2.037*** (0.037)	–0.315 (0.057)	–0.239 (0.021)
Bage	1.581** (0.028)	1.693*** (0.017)	0.473 (0.029)	1.683 (0.118)
Constant	2.215 (0.233)	1.897 (0.491)	2.016 (0.183)	1.892 (0.306)
Obs.	136	136	140	140
No. of groups	42	34	46	38
No. of inst	29	22	28	23
Sargan J. stat	51.53 (0.315)	41.04 (0.572)	47.21 (0.631)	501.37 (0.683)
AR(1)	–1.10 (0.0821)	–1.18 (0.0403)	–1.13 (0.0487)	–1.23 (0.0420)
AR(2)	0.63 (0.515)	0.65 (0.502)	0.71 (0.452)	0.61 (0.799)

Notes: Standard errors in parentheses. ***$p < 0.01$; **$p < 0.05$; *$p < 0.1$
Source: Authors' own work

Table 7. Impact of board governance on firm performance (bank-wise)

and Hansen tests confirm the model's validity, indicating that dynamic models are more appropriate than traditional static models.

4.4.1 Regression analysis for Islamic banks. First, we investigate the relationship between board characteristics and profitability for a sample of IBs. According to the results presented in Table 7, the board size of IBs has a negative significant relationship with ROA and is insignificantly associated with ROE. This significant negative relationship supports the findings of Hassan *et al.* (2017) and Naushad and Malik (2015), who studied Pakistani and GCC countries, respectively, and found this significant negative relationship between board size and profitability. Furthermore, this significant negative relationship supports the findings of Elgadi and Ghardallou (2021), who studied 27 Sudanese IBs and discovered a significant negative relationship. This negative impact demonstrates that larger board sizes in Malaysian IBs cause communication and coordination issues, which eventually impede the decision-making process, resulting in lower profitability. They argue that larger board size has a detrimental effect on the profitability of IBs.

The proportion of NED was discovered to be significantly positively associated with both ROA and ROE, which supports the findings of Farag *et al.* (2018) who discovered a significant positive relationship in IBs of different countries. This positive association further supports the findings of Mashayekhi and Bazaz (2008) and Al-Manaseer *et al.* (2012) that the presence of independent directors has a significant but positive impact on profitability. These results suggest that the prediction of agency theory of a positive relationship between independent directors and profitability is also applicable in the Malaysian context. Furthermore, the significant positive impact of independent directors on financial performance in Malaysia demonstrates that independent directors in Malaysian banks are not chosen solely to meet regulatory requirements, but are truly independent and perform their statutory and fiduciary duties independently, which in turn improves bank performance.

Directors' remuneration has a significant positive relationship with profitability as measured by ROA and ROE. The findings are consistent with those of Handa (2018) and Razali (2018). Higher pay motivates and retains directors to carry out their duties and work harder in the best interests of the shareholders. The results also support the findings of Awan and Jamali (2016), who discovered a significant positive relationship between compensation earnings and profitability as measured by ROA and Tobin's Q.

Female board participation too has a significant positive effect on both profitability measures, i.e. ROA and ROE. This increase in profitability supports the claim of Duppati *et al.* (2019) and Geeta *et al.* (2020) that gender diversity improves the bank's financial performance. Women have unique traits and skills (Brammer *et al.*, 2007), a high-risk aversion attitude (Del Prete and Stefani, 2013), better able to resolve problems and greater commitment to innovations (Gadjah, 2017), hard workers (Carter *et al.*, 2003) and an increased capacity for decision-making (Rovers, 2011), all of which contribute to the bank's financial performance improvement. This positive relationship demonstrates that Malaysian IBs have diversity on their boards and have reaped the benefits of diversity through improved decision-making, broader knowledge and expertise of board members and increased profitability.

Finally, board meetings are found to be insignificantly associated with profitability. This demonstrates that the number of board meetings in Malaysian IBs has no significant impact on profitability. This negligible impact is consistent with the findings of Khan and Khan (2017), Mayur and Saravanan (2017) and Malik and Makhdoom (2016). Among control variables, CD shows a significant negative whereas bank size and bank age show a significant positive impact on profitability.

4.4.2 Regression results for conventional banks. Table 7 also presents the board characteristics–profitability relationship in the context of CBs. The board size shows a significant positive impact with profitability measured through ROA, but the same is not the case with the profitability measured through ROE. The findings support the resource dependence theory, which contends that a strict board is required to monitor management's activities and mitigate financial fraud. Large-sized boards allow for the dissemination of diverse knowledge, especially when it comes to acquiring resources for the firm and mitigating environmental risks (Anum Mohd Ghazali, 2010). Other authors in literature back up this positive relationship (Danoshana and Ravivathani, 2019; Mayur and Saravanan, 2017; Merendino and Melville, 2019; Sahu and Manna, 2013, etc.).

In conventional Malaysian banks, the presence of NEDs and director remuneration has an insignificant impact on both profitability measures, namely, ROA and ROE. This shows the passive role of the NEDs in the board of director meeting of the respective bank. This insignificant relationship shows that independent directors are appointed just to comply with the governance requirement by the bank. They did not have the required skills, knowledge and expertise to perform their role in true spirit, hence failed to have any impact on firm profitability. This insignificant impact of independent directors on profitability contradicts the findings of Alhassan *et al.* (2015) that independent board members, unlike dependent board members, may limit opportunistic management behavior, essentially protecting the shareholders' interests. As independent directors are just mere a director, their remuneration fails to put any significant impact on firm performance.

Female board participation is significantly positively associated with ROE. The same is true for IBs, where female board representation had a significant positive impact on both profitability measures, i.e. ROE and ROA. This positive relationship backs up the findings of Đặng *et al.* (2020), Cardillo *et al.* (2020), Aggarwal *et al.* (2019), Ullah *et al.* (2019), who all found a positive relationship between gender diversity and profitability in their respective

S&P 500, European banks, Indian and Pakistani firms. Similarly, this positive relationship supports the findings of Papangkorn *et al.* (2019), who discovered that board gender diversity is positively associated with firm performance during the 2008 financial crisis.

The board meeting demonstrates a significant negative relationship with profitability in terms of ROA and ROE. This supports Jensen's (1993) argument that day-to-day tasks consume the majority of meeting time, reducing the external directors' opportunities to perform management monitoring. Previously, some studies discovered a negative relationship between board meetings and performance (Malik and Makhdoom, 2016; Rodriguez-Fernandez *et al.*, 2014). Control variables such as customer deposit, bank age and bank size have an insignificant relationship with bank profitability.

5. Conclusion

There are significant distinctions between CBs and IBs. IBs offer *Shari'ah*-compliant financing and have a *Shari'ah*-monitoring board as a key feature of their governance. In theory, the effect of the board of IBs differs from that of CBs. The purpose of the present study is to look at the impact of board gender diversity and other board governance mechanisms on Malaysian conventional and IBs from 2010 to 2021. There is a gap in the literature addressing gender diversity in the banking industry, which has been the subject of much debate. We clarified the role of female directors and managers in attracting stakeholders and improving banks' financial and social performance. According to the descriptive analysis, CBs outperform IBs in terms of accounting profitability. Similarly, CBs have a higher proportion of female board members, a larger number of NEDs and more board meetings than IBs. We conducted regression analysis in two parts in this study: first, we examined the entire sample as a whole to examine the board characteristics–profitability relationship, and then we separated the sample data into IBs and CBs to examine this relationship. To examine the study's findings, we used both static and panel data techniques.

Based on regression analysis, we discovered that the size of the board has a significant positive impact on profitability. Similarly, director remuneration has a positive impact on profitability in both OLS and dynamic GMM estimation techniques. A significant negative relationship exists between board meetings and profitability. Further, in IBs, board size and customer deposit were found to be significantly inversely associated with profitability, whereas the presence of NEDs, director's remuneration and board gender diversity were found to be significantly positively associated with profitability. The number of board meetings held in a financial year in IBs fails to show any significant impact on profitability. These findings differ significantly from those of CBs in the context of the board characteristics–performance relationship. Only board size is significantly positively associated with profitability in CBs, whereas board meetings are significantly negatively associated with profitability. Other board characteristics, such as the presence of NEDs and director remuneration, as well as control variables such as customer deposit, bank size and bank age, have no significant impact on profitability.

The study has important policy implications for regulators, investors, policymakers and other financial institutions. Overall, the study's findings will help us better understand the impact of BOD characteristics and gender diversity on CBs and IBs performance. Board size in IBs has a strong negative correlation with profitability, which indicates that higher board sizes in Malaysian IBs hamper decision-making by causing communication and coordination problems. This leads to reduced profitability. To lessen the risk of communication and coordination issues, IBs should select the optimal level of BOD, and they should underline their qualification and experience as well. Regulators should also

establish standards for education and experience and compel IBs to follow these in true spirit before being selected as BOD. Board meetings have a significant inverse relationship with profitability, which should be of concern to policymakers. Policymakers and regulators issue policy guidelines for board meetings to make them more purposeful and beneficial in terms of financial performance. The findings recommended that board meetings be held quarterly to examine the most relevant quarterly financial statements and reports, which would lower the cost of holding such meetings while increasing the bank's profitability. This detrimental impact of board meetings on financial performance is also a source of worry for both CB and IB shareholders. They should highlight this issue at annual general meetings and urge the BOD to take tangible steps to make board meetings more productive so that the organization's goals may be met more effectively. Furthermore, NEDs and director remuneration have an insignificant impact on profitability in CBs, whereas they have a significant positive impact on profitability in IBs. This demonstrates that CBs' BOD lacks true independence. This implies that regulators and policymakers place a larger emphasis on the governance mechanism in CBs and establish tight rules for the selection and quality of directors to be selected as independent directors. Furthermore, it is advised that the remuneration of executive directors be linked to financial performance, particularly in CBs, so that they get motivated and place a greater emphasis on the profitability of the banks. Board gender diversity has a significant positive impact on profitability in both CBs and IBs. The results show that having women on the board helps the IB ensure Shari'ah compliance, which not only boosts customer confidence but also increases profitability. Hence, the results imply that regulators should encourage banks to include more female board members. This will not only improve the board's monitoring capacity but will also benefit the banks in terms of increased profitability. To improve their financial performance, both IBs and CBs should consider hiring women who are more likely to bring experience, knowledge and value to the BOD. According to the findings, the ratio of female board members in conventional banks is only 13% and 9% in IBs, which is extremely low. Because of the positive impact on profitability, banks should increase the number of female board members on their boards. Second, according to Carter *et al.* (2003), the inclusion of female members on the board is expected to increase board independence because women on the board will have a different perspective (based on culture, gender and ethnicity) than traditional directors. Third, the ethical issues that arise in boardrooms as a result of women's underrepresentation in this regard can be eliminated (Nekhili and Gatfaoui, 2013). As a result, policymakers in Malaysia's banking sector must implement reforms to increase the proportion of female directors in conventional banks and IBs to close the gender diversity gap. The study's findings can help investors choose financial institutions. The present study also helps investors decide which factors are important before investing in CBs and IBs.

Nonetheless, this study has some limitations that should be addressed in future research. To begin, the sample includes IBs and conventional banks in Malaysia, which have different regulatory and governance policies than other countries. As a result, the same study could be repeated in the future using samples from other emerging economies to gain a better understanding of the board characteristics–profitability relationship. Second, we used only three control variables in this study: bank size, bank age and customer deposit leaving out other bank characteristics that may have an impact on bank profitability, such as leverage (Al-Matari, 2020; Bukair and Rahman, 2015; El-Chaarani, 2014; Nawaz, 2019; Grassa and Matoussi, 2014), cash to total asset ratio (Farag *et al.*, 2018), total assets to market capitalization ratio (Naushad and Malik, 2015), In the same vein, macroeconomic factors such as inflation (Wasiuzzaman and Nair Gunasegavan, 2013) and annual change in gross

domestic product (GDP) (Bukair and Rahman, 2015) influence bank profitability. As a result, it is suggested that in future studies, these variables be included in the model to gain a better understanding of the CG–profitability link in CBs and IBs. Third, the present study could be extended by taking other board governance characteristics like age, culture, nationality, education, etc. In addition, we measured profitability in this study using only two metrics: ROA and ROE. In the future, it will be necessary to measure profitability using Tobin's Q and economic value added (EVA) to gain a better understanding of the CG–profitability relationship in conventional as well as IBs in the Malaysian context. Finally, this study can be expanded in the future by including scholar interviews, Malaysian central bank regulations and demographic institutions to assess the independence and effectiveness of BOD governance mechanisms. Finally, the literature shows that ownership structure has a significant impact on board governance mechanisms; thus, this study can be expanded in the future by including any moderating impact of ownership variables such as family ownership, institutional ownership or foreign ownership, among others.

References

AAOIFI (2015), "Accounting and auditing organization for Islamic financial institutions", available at: www.aaoifi.com (accessed 20 May 2017).

Abdallah, M. (2021), "Disclosure, Shariah governance and financial performance in Islamic banks", *Asian Journal of Economics and Banking*, Vol. 5 No. 3, pp. 234-254.

Abdullah, S.N. (2006), "Directors' remuneration, firm's performance and corporate governance in Malaysia among distressed companies", *Corporate Governance*, Vol. 6 No. 2, pp. 162-174.

Abdullah, R. (2014), "Redefining internal audit performance: impact on corporate governance", *Faculty of Business and Law*, Edith Cowan University, Joondalup, Western Australia.

Adams, R.B. and Ferreira, D. (2009), "Women in the boardroom and their impact on governance and performance", *Journal of Financial Economics*, Vol. 94 No. 2, pp. 291-309.

Adams, R., Hermalin, B.E. and Weisbach, M. (2010), "The role of boards of directors in corporate governance: a conceptual framework and survey", *Journal of Economic Literature*, Vol. 48 No. 1, pp. 58-107.

Adams, R.B. and Mehran, H. (2012), "Bank board structure and performance: evidence for large bank holding companies", *Journal of Financial Intermediation*, Vol. 21 No. 2, pp. 243-267.

Adnan, M.A., Htay, S.N.N., Rashid, A., Majdi, H., Meera, M. and Kameel, A. (2011), "A panel data analysis on the relationship between corporate governance and bank efficiency", *Journal of Accounting, Finance and Economics*, Vol. 1 No. 1, pp. 1-15.

Adusei, M. (2011), "Board structure and bank performance in Ghana", *Journal of Money, Investment and Banking*, Vol. 19 No. 1, pp. 72-84.

Aebi, V., Sabato, G. and Schmid, M. (2012), "Risk management, corporate governance, and bank performance in the financial crisis", *Journal of Banking and Finance*, Vol. 36 No. 12, pp. 3213-3226.

Aggarwal, R., Jindal, V. and Seth, R. (2019), "Board diversity and firm performance: the role of business group affiliation", *International Business Review*, Vol. 28 No. 6, p. 101600.

Ajili, H. and Bouri, A. (2018), "Corporate governance quality of Islamic banks: measurement and effect on financial performance", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 11 No. 3, pp. 470-487, doi: 10.1108/IMEFM-05-2017-0131.

Aktan, B., Turen, S., Tvaronavičienė, M., Celik, S. and Alsadeh, H.A. (2018), "Corporate governance and performance of the financial firms in Bahrain", *Polish Journal of Management Studies*, Vol. 17 No. 1, pp. 39-58.

Alazzani, A., Hassanein, A. and Aljanadi, Y. (2017), "Impact of gender diversity on social and environmental performance: evidence from Malaysia", *Corporate Governance: The International Journal of Business in Society*, Vol. 17 No. 2, pp. 266-283.

Alazzani, A., Wan-Hussin, W.N. and Jones, M. (2019), "Muslim CEO, women on boards and corporate responsibility reporting: some evidence from Malaysia", *Journal of Islamic Accounting and Business Research*, Vol. 10 No. 2, pp. 274-296.

Alhaji, I.A., Yusoff, W.F. and Alkali, M. (2012), "Corporate governance and firm performance: a comparative analysis of two sectors of Malaysian listed companies", 2nd International Conference on Management, pp. 11-12.

Alhassan, A., Bajaher, M. and Alshehri, A. (2015), "Corporate governance, firm attributes and financial performance of Saudi listed banks", *World Review of Business Research*, Vol. 5 No. 3, pp. 282-295.

Al-Matari, E.M. (2020), "Do characteristics of the board of directors and top executives have an effect on corporate performance among the financial sector? Evidence using stock", *Corporate Governance: The International Journal of Business in Society*, Vol. 20 No. 1, pp. 16-43.

Almutairi, A.R. and Quttainah, M.A. (2017), "Corporate governance: evidence from Islamic banks", *Social Responsibility Journal*, Vol. 13 No. 3, pp. 601-624.

AlSagr, N., Belkhaoui, S. and Aldosari, A. (2018), "The effect of corporate governance mechanisms on bank performance evidence from Saudi banking sector", *Asian Economic and Financial Review*, Vol. 8 No. 8, pp. 1111-1125.

Alsartawi, A.M. (2019), "Board independence, frequency of meetings and performance", *Journal of Islamic Marketing*, Vol. 10 No. 1, pp. 290-303.

Al-Manaseer, M.F.A., Al-Hindawi, R.M., Al-Dahiyat, M.A. and Sartawi, I.I. (2012), "The impact of corporate governance on the performance of Jordanian banks", *European Journal of Scientific Research*, Vol. 67 No. 3, pp. 349-359.

Al-Sartawi, A.M.M., Alrawahi, F. and Sanad, Z. (2017), "Board characteristics and the level of compliance with IAS 1 in Bahrain", *International Journal of Managerial and Financial Accounting*, Vol. 9 No. 4, pp. 303-321.

Amin, M., Isa, Z. and Fontaine, R. (2013), "Islamic banks: contrasting the drivers of customer satisfaction on image, trust, and loyalty of Muslim and non-Muslim customers in Malaysia", *International Journal of Bank Marketing*, Vol. 31 No. 2, pp. 79-97.

Amorelli, M.F. and García-Sánchez, I.M. (2020), "Critical mass of female directors, human capital, and stakeholder engagement by corporate social reporting", *Corporate Social Responsibility and Environmental Management*, Vol. 27 No. 1, pp. 204-221.

Andres, P. and Vallelado, E. (2008), "Corporate governance in banking: the role of the board of directors", *Journal of Banking and Finance*, Vol. 32 No. 12, pp. 2570-2580.

Anum Mohd Ghazali, N. (2010), "Ownership structure, corporate governance and corporate performance in Malaysia", *International Journal of Commerce and Management*, Vol. 20 No. 2, pp. 109-119.

Arellano, M. and Bond, S. (1991), "Some tests of specification for panel data: monte Carlo evidence and an application to employment equations", *The Review of Economic Studies*, Vol. 58 No. 2, pp. 277-297.

Arellano, M. and Bover, O. (1995), "Another look at the instrumental variable estimation of error-components models", *Journal of Econometrics*, Vol. 68 No. 1, pp. 29-51.

Arifina, N.B. and Tazilahb, M.D.A.B.K. (2016), "Government ownership, debts, board characteristics and performance of government link companies in Malaysia", *International Conference on Business, Accounting, Finance, and Economics*, BAFE.

Arnaboldi, F., Casu, B., Kalotychou, E. and Sarkisyan, A. (2020), "Board diversity reforms: do they matter for EU bank performance?", *European Financial Management*, Vol. 26 No. 2, pp. 416-454.

Aslam, E. and Haron, R. (2020), "Does corporate governance affect the performance of Islamic banks? New insight into Islamic countries", *Corporate Governance: The International Journal of Business in Society*, Vol. 20 No. 6, pp. 1073-1090.

Aslam, E., Haron, R. and Ahmad, S. (2021), "A comparative analysis of the performance of Islamic and conventional banks: does corporate governance matter?", *International Journal of Business Excellence*, Vol. 24 No. 1, pp. 53-67.

Athanasoglou, P.P., Brissimis, S.N. and Delis, M.D. (2008), "Bank-specific, industry-specific and macroeconomic determinants of bank profitability", *Journal of International Financial Markets, Institutions and Money*, Vol. 18 No. 2, pp. 121-136.

Awan, A.W. and Jamali, J.A. (2016), "Impact of corporate governance on financial performance: Karachi stock exchange, Pakistan", *Business and Economic Research*, Vol. 6 No. 2, pp. 401-411.

Baklouti, I. (2022), "Is the sharia supervisory board a friend or an enemy of Islamic banks?", *Journal of Islamic Marketing*, Vol. 13 No. 2, pp. 526-541.

Balsmeier, B., Buchwald, A. and Stiebale, J. (2014), "Outside directors on the board and innovative firm performance", *Research Policy*, Vol. 43 No. 10, pp. 1800-1815.

Bebchuk, L.A., Cohen, A. and Spamann, H. (2010), "The wages of failure: executive compensation at bear Stearns and Lehman 2000-2008", *Yale Journal on Regulation*, Vol. 27 No. 2, pp. 257-282.

Berle, A.A. and Means, G.G.C. (1932), *The Modern Corporation and Private Property*, Transaction Books, NJ.

Bernile, G., Bhagwat, V. and Yonker, S. (2018), "Board diversity, firm risk, and corporate policies", *Journal of Financial Economics*, Vol. 127 No. 3, pp. 588-612.

Blundell, R. and Bond, S. (2000), "GMM estimation with persistent panel data: an application to production functions", *Econometric Reviews*, Vol. 19 No. 3, pp. 321-340.

Brammer, S., Williams, G. and Zinkin, J. (2007), "Religion and attitudes to corporate social responsibility in a large cross-country sample", *Journal of Business Ethics*, Vol. 71 No. 3, pp. 229-243.

Bukair, A.A. and Rahman, A.A. (2015), "Bank performance and board of directors attributes by Islamic banks", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 8 No. 3, pp. 291-309.

Bukhari, K.S., Awan, H.M. and Ahmed, F. (2013), "An evaluation of corporate governance practices of Islamic banks versus Islamic bank windows of conventional banks", *Management Research Review*, Vol. 36 No. 4, pp. 400-416.

Campbell, K. and Mínguez-Vera, A. (2008), "Gender diversity in the boardroom and firm financial performance", *Journal of Business Ethics*, Vol. 83 No. 3, pp. 435-451.

Cardillo, G., Onali, E. and Torluccio, G. (2020), "Does gender diversity on banks' boards matter? Evidence from public bailouts", *Journal of Corporate Finance*, Vol. 71, p. 101560.

Carter, D.A., Simkins, B.J. and Simpson, W.G. (2003), "Corporate governance, board diversity, and firm value", *The Financial Review*, Vol. 38 No. 1, pp. 33-53.

Đặng, R., Houanti, L.H., Reddy, K. and Simioni, M. (2020), "Does board gender diversity influence firm profitability? A control function approach", *Economic Modelling*, Vol. 90, pp. 168-181.

Danoshana, S. and Ravivathani, T. (2019), "The impact of the corporate governance on firm performance: a study on financial institutions in Sri Lanka", *SAARJ Journal on Banking and Insurance Research*, Vol. 8 No. 1, pp. 62-67.

Del Prete, S. and Stefani, M.L. (2013), "Women on Italian bank boards: are they 'gold dust': banca d'Italia", *Questioni di Economia e Finanza*, Vol. 175, pp. 5-31.

Doucouliagos, H., Haman, J. and Askary, S. (2007), "Directors' remuneration and performance in Australian banking", *Corporate Governance: An International Review*, Vol. 15 No. 6, pp. 1363-1383.

Duppati, G., Rao, N., Scrimgeour, F. and Matlani, N. (2019), "Gender diversity reporting, performance and exogenous shocks: evidence from New Zealand", *International Journal of Comparative Management*, Vol. 2 Nos 3/4, pp. 203-228.

El-Chaarani, H. (2014), "The impact of corporate governance on the performance of Lebanese banks", *The International Journal of Business and Finance Research*, Vol. 8 No. 5, pp. 35-46.

Elgadi, E. and Ghardallou, W. (2021), "Gender diversity, board of director's size and Islamic banks performance", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 15 No. 3, pp. 664-680.

Farag, H., Mallin, C. and Ow-Yong, K. (2018), "Corporate governance in Islamic banks: new insights for dual board structure and agency relationships", *Journal of International Financial Markets, Institutions and Money*, Vol. 54 No. 1, pp. 59-77.

Francis, B.B., Hasan, I. and Wu, Q. (2012), "Do corporate boards matter during the current financial crisis?", *Review of Financial Economics*, Vol. 21 No. 2, pp. 39-52.

Gadjah, M. (2017), "Female directors and firm performance: evidence from the UK listed firms", *International Journal of Business*, Vol. 19 No. 2, p. 145.

Garas, S.N. (2012), "The conflicts of interest inside the shari'a supervisory board", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 5 No. 2, pp. 88-105.

Geeta, D., Narendar, V.R., Neha, M., Frank, S. and Debasis, P. (2020), "Gender diversity and firm performance: evidence from India and Singapore", *Applied Economics*, Vol. 52 No. 2, pp. 1-13.

Grassa, R. (2016), "Corporate governance and credit rating in Islamic banks: does Shariah governance matters?", *Journal of Management and Governance*, Vol. 20 No. 4, pp. 875-906.

Grassa, R. and Matoussi, H. (2014), "Is corporate governance different for Islamic banks? A comparative analysis between the Gulf cooperation council and southeast Asian countries", *International Journal of Business Governance and Ethics*, Vol. 9 No. 1, pp. 27-51.

Grassa, R., Matoussi, H. and Trabelsi, S. (2010), "The impact of shariah supervisory board characteristic's on Islamic bank performance", *Corporate Governance and the Global Financial Crisis Conference*.

Gujarati, D.N., Porter, D.C. and Gunasekar, S. (2012), *Basic Econometrics*, Tata McGraw-Hill education.

Haider, J. and Fang, H.X. (2016), "Board size, ownership concentration and future firm risk", *Chinese Management Studies*, Vol. 10 No. 4, pp. 692-709.

Hakimi, A., Rachdi, H., Ben Selma Mokni, R. and Hssini, H. (2018), "Do board characteristics affect bank performance? Evidence from the Bahrain Islamic banks", *Journal of Islamic Accounting and Business Research*, Vol. 9 No. 2, pp. 251-272.

Handa, R. (2018), "Does corporate governance affect financial performance: a study of select Indian banks", *Asian Economic and Financial Review*, Vol. 8 No. 4, pp. 478-486.

Hansen, L.P. and Singleton, K.J. (1982), "Generalized instrumental variables of nonlinear rational expectations models", *Econometrica*, Vol. 50 No. 5, pp. 1269-1286.

Haris, M., Yao, H., Tariq, G., Malik, A. and Javaid, H.M. (2019), "Intellectual capital performance and profitability of banks: evidence from Pakistan", *Journal of Risk and Financial Management*, Vol. 12 No. 2, pp. 56-69.

Hasan, Z. (2012), *Shari'ah Governance in Islamic Banks*, Edinburgh University Press, Edinburgh.

Hassan, K.M. (2006), "The x-efficiency in Islamic banks", *Journal of Islamic Studies*, Vol. 13 No. 1, pp. 50-78.

Hassan, Y., Naser, K. and Hijazi, R. (2016), "The influence of corporate governance on corporate performance: evidence from Palestine", *Afro-Asian J. of Finance and Accounting*, Vol. 6 No. 3, pp. 269-287.

Hassan, M., Rizwan, M. and Sohail, H.M. (2017), "Corporate governance, Shariah advisory boards and Islamic banks' performance", *Pakistan Journal of Islamic Research*, Vol. 18 No. 1, pp. 359-366.

He, J. and Huang, Z. (2011), "Board informal hierarchy and firm financial performance: exploring a tacit structure guiding boardroom interactions", *Academy of Management Journal*, Vol. 54 No. 6, pp. 1119-1139.

Hegazy, M.A. and Hegazy, K. (2010), "Corporate governance in the UK: audit committees and disclosure arrangements – a web-based analysis", *Journal of Business Studies Quarterly*, Vol. 1 No. 2, pp. 32-55.

Hussien, M.E., Alam, M.M., Murad, M.W. and Wahid, A. (2019), "The performance of Islamic banks during the 2008 global financial crisis: evidence from the Gulf cooperation council countries", *Journal of Islamic Accounting and Business Research*, Vol. 10 No. 3, pp. 407-420.

Hwang, S. and Jung, Y. (2016), "The relationship between corporate governance, foreign investors' shareholdings, and corporate performance: the case of South Korea", *Afro-Asian J. of Finance and Accounting*, Vol. 6 No. 4, pp. 318-338.

Ilaboya, O.J. and Ohiokha, I.F. (2016), "Firm age, size and profitability dynamics: a test of learning by doing and structural inertia hypotheses", *Business and Management Research*, Vol. 5 No. 1, pp. 29-39.

Isidro, H. and Sobral, M. (2015), "The effects of women on corporate boards on firm value, financial performance, and ethical and social compliance", *Journal of Business Ethics*, Vol. 132 No. 1, pp. 1-19.

Islam, J.U. and Rahman, Z. (2017), "Awareness and willingness towards Islamic banking among Muslims: an Indian perspective", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 10 No. 1, pp. 92-101.

Jabari, H.N. and Muhamad, R. (2020), "Gender diversity and financial performance of Islamic banks", *Journal of Financial Reporting and Accounting*, Vol. 19 No. 3, pp. 412-433.

Jan, A.A., Lai, F.W. and Tahir, M. (2021), "Developing an Islamic corporate governance framework to examine sustainability performance in Islamic banks and financial institutions", *Journal of Cleaner Production*, Vol. 315, p. 128099.

Jensen, M.C. (1993), "The modern industrial revolution, exit, and the failure of internal control systems", *The Journal of Finance*, Vol. 48 No. 3, pp. 831-880.

Julizaerma, M.K. and Sori, Z.M. (2012), "Gender diversity in the boardroom and firm performance of Malaysian public listed companies", *Procedia – Social and Behavioral Sciences*, Vol. 65, pp. 1077-1085.

Juras, P.E. and Hinson, Y.L. (2008), "Examining the effect of board characteristics on agency costs and selected performance measures in banks", *Academy of Banking Studies Journal*, Vol. 7 Nos 1/2, p. 87.

Kamarulzaman, Y. and Madun, A. (2013), "Marketing Islamic banking products: Malaysian perspective", *Business Strategy Series*, Vol. 14 Nos 2/3, pp. 60-66.

Keenan, J. (2004), "Corporate governance in UK/USA boardrooms", *Corporate Governance*, Vol. 12 No. 2, pp. 172-176.

Khan, M.T., Al-Jabri, Q.M. and Saif, N. (2021), "Dynamic relationship between corporate board structure and firm performance: evidence from Malaysia", *International Journal of Finance and Economics*, Vol. 26 No. 1, pp. 644-661.

Khan, M.H., Fraz, A., Hassan, A. and Abedifar, P. (2020), "Female board representation, risk-taking and performance: evidence from dual banking systems", *Finance Research Letters*, Vol. 37, p. 101541.

Khan, M. and Khan, I. (2017), "Corporate governance in Islamic banking: the role of the board of directors", *COMSATS Journal of Islamic Finance*, Vol. 2 No. 1, pp. 47-55.

Khan, I., Khan, I.U., Uddin, M.J., Khan, S.U. and Marwat, J. (2023), "Diversity of shari'ah supervisory board and the performance of Islamic banks: evidence from an emerging economy of Pakistan", *Journal of Islamic Accounting and Business Research*.

Khan, I. and Zahid, S.N. (2020), "The impact of shari'ah and corporate governance on Islamic banks performance: evidence from Asia", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 13 No. 3, pp. 483-501.

Khan, I., Zahid, S.N. and Akhtar, T. (2018), "Shari'ah governance and Islamic banks performance: evidence from South Asia", *South Asian Journal of Management Sciences*, Vol. 12 No. 2, pp. 173-187.

Kutum, I. (2015), "Board characteristics and firm performance: evidence from Palestine", *European Journal of Accounting Auditing and Finance Research*, Vol. 3 No. 3, pp. 32-47.

Lassoued, M. (2018), "Comparative study on credit risk in Islamic banking institutions: the case of Malaysia", *The Quarterly Review of Economics and Finance*, Vol. 70, pp. 267-278.

Lee-Kuen, I.Y., Sok-Gee, C. and Zainudin, R. (2017), "Gender diversity and firms' financial performance in Malaysia", *Asian Academy of Management Journal of Accounting and Finance*, Vol. 13 No. 1, pp. 41-62.

Levit, D. and Malenko, N. (2016), "The labor market for directors and externalities in corporate governance", *The Journal of Finance*, Vol. 71 No. 2, pp. 775-808.

Liang, Q., Xu, P. and Jiraporn, P. (2013), "Board characteristics and Chinese bank performance", *Journal of Banking and Finance*, Vol. 37 No. 8, pp. 2953-2968.

Lim, K.P., Lye, C.T., Yuen, Y.Y. and Teoh, W.M.Y. (2019), "Women directors and performance: evidence from Malaysia", *Equality, Diversity and Inclusion: An International Journal*, Vol. 38 No. 8, pp. 841-856.

Liu, Y., Wei, Z. and Xie, F. (2014), "Do women directors improve firm performance in China?", *Journal of Corporate Finance*, Vol. 28, pp. 169-184.

Low, D.C.M., Roberts, H. and Whiting, R.H. (2015), "Board gender diversity and firm performance: empirical evidence from Hong Kong, South Korea, Malaysia and Singapore", *Pacific-Basin Finance Journal*, Vol. 35, pp. 381-401.

Luanglath, N., Ali, M. and Mohannak, K. (2019), "Top management team gen- der diversity and productivity: the role of board gender diversity", *Equality, Diversity and Inclusion: An International Journal*, Vol. 38 No. 1, pp. 71-86.

Magalhães, R. and Al-Saad, S. (2013), "Corporate governance in Islamic financial institutions: the issues surrounding unrestricted investment account holders", *Corporate Governance: The International Journal of Business in Society*, Vol. 13 No. 1, pp. 39-57.

Malik, M.S. and Makhdoom, D.D. (2016), "Does corporate governance beget firm performance in fortune global 500 companies?", *Corporate Governance*, Vol. 16 No. 4, pp. 747-764.

Masulis, R.W., Wang, C. and Xie, F. (2012), "Globalizing the boardroom—The effects of foreign directors on corporate governance and firm performance", *Journal of Accounting and Economics*, Vol. 53 No. 3, pp. 527-554.

Maroua, B. (2015), "The impact of the multi-stakeholders governance on the performance of cooperative banks: evidence of European cooperative banks", *Procedia – Social and Behavioral Sciences*, Vol. 195, pp. 713-720.

Masruki, R., Hanefah, M.M. and Wahab, N.A. (2018), "Shariah Supervisory Board (SSB) and performance of Islamic banks in Malaysia", *International Journal of Engineering & Technology*, Vol. 7, pp. 710-714.

Mashayekhi, B. and Bazaz, M.S. (2008), "Corporate governance and firm performance in Iran", *Journal of Contemporary Accounting and Economics*, Vol. 4 No. 2, pp. 156-172.

Matoussi, H. and Grassa, R. (2012), "Is corporate governance different for Islamic banks? A comparative analysis between the Gulf cooperation council context and the southeast Asia context", *International Journal of Business Governance and Ethics*, Vol. 9 No. 1, pp. 27-51.

Mayur, M. and Saravanan, P. (2017), "Performance implications of board size, composition and activity: empirical evidence from the Indian banking sector", *Corporate Governance: The International Journal of Business in Society*, Vol. 17 No. 3, pp. 466-489.

Merendino, A. and Melville, R. (2019), "The board of directors and firm performance: empirical evidence from listed companies", *Corporate Governance: The International Journal of Business in Society*, Vol. 19 No. 3, pp. 508-551.

Mobbs, S. (2013), "CEOs under fire: the effects of competition from inside directors on forced CEO turnover and CEO compensation", *Journal of Financial and Quantitative Analysis*, Vol. 48 No. 3, pp. 669-698.

Mohammad, A., Mehrdad, G., Babak, J. and Aliasghar, T. (2019), "Does board independence moderate the relationship between environmental disclosure quality and performance? Evidence from static and dynamic panel data", *Corporate Governance: The International Journal of Business in Society*, Vol. 19 No. 3, pp. 580-610.

Mollah, S., Hassan, M.K., Al Farooque, O. and Mobarek, A. (2017), "The governance, risk-taking, and performance of Islamic banks", *Journal of Financial Services Research*, Vol. 51 No. 2, pp. 195-219.

Mollah, S. and Zaman, M. (2015), "Shari'ah supervision, corporate governance and performance: Conventional vs. Islamic banks", *Journal of Banking and Finance*, Vol. 58, pp. 418-435.

Musleh Alsartawi, A. (2019), "Performance of Islamic banks: do the frequency of sharīʿah supervisory board meetings and independence matter?", *ISRA International Journal of Islamic Finance*, Vol. 11 No. 2, pp. 303-321.

Naciti, V. (2019), "Corporate governance and board of directors: the effect of a board composition on firm sustainability performance", *Journal of Cleaner Production*, Vol. 237, p. 117727.

Nainggolan, Y.A., Prahmila, D.I. and Syaputri, A.R. (2022), "Do board characteristics affect bank risk-taking and performance? Evidence from Indonesian and Malaysian Islamic banks", *Journal of Management and Governance*, pp. 1-31.

Naushad, M. and Malik, S.A. (2015), "Corporate governance and bank performance: a study of selected banks in GCC region", *Asian Social Science*, Vol. 11 No. 9, pp. 226-234.

Nawaz, T. (2019), "Exploring the nexus between human capital, corporate governance and performance: evidence from Islamic banks", *Journal of Business Ethics*, Vol. 157 No. 2, pp. 567-587.

Nekhili, M. and Gatfaoui, H. (2013), "Are demographic attributes and firm characteristics drivers of gender diversity? Investigating women's positions on French boards of directors", *Journal of Business Ethics*, Vol. 118 No. 2, pp. 227-249.

Nguyen, T., Locke, S. and Reddy, K. (2014), "A dynamic estimation of governance structures and financial performance for Singaporean companies", *Economic Modelling*, Vol. 40, pp. 1-11.

Nickell, S. (1981), "Biases in dynamic models with fixed effects", *Econometrica*, Vol. 49 No. 6, pp. 1417-1426.

Nomran, N.M., Haron, R. and Hassan, R. (2018), "Shari'ah supervisory board characteristics effects on Islamic banks' performance: evidence from Malaysia", *International Journal of Bank Marketing*, Vol. 36 No. 2, pp. 290-304, doi: 10.1108/IJBM-12-2016-0197.

Obamuyi, T.M. (2013), "determinants of banks' profitability in a developing economy: evidence from Nigeria", *Organizations and Markets in Emerging Economies*, Vol. 4 No. 2, pp. 97-111.

Owen, A.L. and Temesvary, J. (2018), "The performance effects of gender diversity on bank boards", *Journal of Banking and Finance*, Vol. 90, pp. 50-63.

Papangkorn, S., Chatjuthamard, P., Jiraporn, P. and Chueykamhang, S. (2019), "Female directors and firm performance: evidence from the great recession", *International Review of Finance*, Vol. 21 No. 2, pp. 598-610.

Parker, M. (2005), "Scandal-Hit bank Islam Malaysia declares huge losses", available at: www.arabnews.com/node/277580

Pathan, S. and Faff, R. (2013), "Does board structure in banks really affect their performance?", *Journal of Banking and Finance*, Vol. 37 No. 5, pp. 1573-1589.

Pranata, M.W. and Laela, S.F. (2020), "Board characteristics, good corporate governance and Maqâshid performance in Islamic banking", *Journal of Islamic Monetary Economics and Finance*, Vol. 6 No. 2, pp. 463-486.

Pucheta-Martínez, M.C. and Gallego-Álvarez, I. (2020), "Do board characteristics drive firm performance? An international perspective", *Review of Managerial Science*, Vol. 14 No. 6, pp. 1251-1297.

Quttainah, M.A., Song, L. and Wu, Q. (2013), "Do Islamic banks employ less earnings management?", *Journal of International Financial Management and Accounting*, Vol. 24 No. 3, pp. 203-233.

Rahim, M.F.A., Johari, R.J. and Takril, N.F. (2015), "Revisited note on corporate governance and quality of audit committee: Malaysian perspective", *Procedia Economics and Finance*, Vol. 28, pp. 213-221.

Razali, M.W.M. (2018), "The board diversity and firm performance: Malaysia context", *UNIMAS Review of Accounting and Finance*, Vol. 2 No. 1.

Rodriguez-Fernandez, M., Fernandez-Alonso, S. and Rodriguez-Rodriguez, J. (2014), "Board characteristics and firm performance in Spain", *Corporate Governance*, Vol. 14 No. 4, pp. 485-503.

Roodman, D. (2009), "How to do xtabond2: an introduction to difference and system GMM in Stata", *The Stata Journal: Promoting Communications on Statistics and Stata*, Vol. 9 No. 1, pp. 86-136.

Rovers, M.L. (2011), "Women on boards and firm performance", *Journal of Management and Governance*, Vol. 17, pp. 491-509.

Safiullah, M. and Shamsuddin, A. (2018), "Risk in Islamic banking and corporate governance", *Pacific-Basin Finance Journal*, Vol. 47, pp. 129-149.

Sahu, T.N. and Manna, A. (2013), "Impact of board composition and board meeting on firms' performance: a study of selected Indian companies Vilakshan", *The XIMB Journal of Management*, Vol. 10 No. 2, pp. 99-112.

Sakawa, H. and Watanabel, N. (2018), "Board structures and performance in the banking industry: Evidence from Japan", *International Review of Economics and Finance*, Vol. 56, pp. 308-320.

Shan, Y.G. and McIver, R.P. (2011), "Corporate governance mechanisms and financial performance in China: panel data evidence on listed non-financial companies", *Asia Pacific Business Review*, Vol. 17 No. 3, pp. 301-324.

Sheikh, N.A. and Kareem, S. (2015), "The impact of board structure, ownership concentration, and CEO remuneration on performance of Islamic commercial banks in Pakistan", *Pakistan Journal of Islamic Research*, Vol. 15 No. 1, pp. 49-59.

Smith, A. (1776), *The Wealth of Nations (1776)*, Modern Library, New York, NY, p. 740.

Sobhan, R. (2021), "Board characteristics and firm performance: evidence from the listed non-banking financial institutions of Bangladesh", *International Journal of Management, Accounting and Economics*, Vol. 8 No. 1, pp. 25-41.

Tai, L. (2015), "The impact of corporate governance on the efficiency and financial performance of GCC national banks", *Middle East Journal of Business*, Vol. 10 No. 1, pp. 12-22.

Talavera, O., Yin, S. and Zhang, M. (2018), "Age diversity, directors' personal values, and bank performance", *International Review of Financial Analysis*, Vol. 55, pp. 60-79.

Tazilah, M.D.A.K. and Rahman, R.A. (2014), "Risk management and corporate governance characteristics in the Malaysian Islamic financial institutions", *Research Journal of Finance and Accounting*, Vol. 5 No. 12, pp. 116-127.

Tazilah, M.D.A.K., Majid, M., Awee, A. and Keang, A.A.L.A. (2021), "Corporate governance characteristics and financial performance: evidence from Islamic banks in Malaysia", *Management and Accounting Review*, Vol. 20 No. 1, pp. 39-60, doi: 10.24191/mar.v20i01-03.

Thajudeen, K.S. (2013), *Issues in Corporate Governance in Islamic Financial Institutions: A Case Study on Bank Islam*, INCEIF Working Paper, pp. 1-15.

Tu, T.T.T., Loi, H.H. and Yen, T.T.H. (2015), "Relationship between gender diversity on boards and firm performance-case study about ASEAN banking sector", *International Journal of Financial Research*, Vol. 6 No. 2, pp. 150-159.

Ullah, I., Fang, H. and Jebran, K. (2019), "Do gender diversity and CEO gender enhance firm's value? Evidence from an emerging economy", *Corporate Governance: The International Journal of Business in Society*, Vol. 20 No. 1, pp. 44-66.

United Nations Inter-Agency Expert Group on Sustainable Development Goal Indicators (2015), "Results of the list of indicators reviewed at the second IAEGSDG meeting", United Nations Statistics Division, New York, NY, available at: http://unstats.un.org/sdgs/files/meetings/iaeg-sdgs-meeting02/Outcomes/Agenda%20Item%204%20-%20Review%20of%20proposed%20indicators%20-%202%20Nov%202015.pdf

Usman, M. and Kibiya, I.U. (2021), "Board diversity and financial performance of Islamic banks in Malaysia", *Gusau Journal of Accounting and Finance*, Vol. 2 No. 4, pp. 13-13.

Vafeas, N. (1999), "Board meeting frequency and firm performance", *Journal of Financial Economics*, Vol. 53 No. 1, pp. 113-142.

Veltri, S., Mazzotta, R. and Rubino, F.E. (2021), "Board diversity and corporate social performance: does the family firm status matter?", *Corporate Social Responsibility and Environmental Management*, Vol. 28 No. 6, pp. 1664-1679.

Wasiuzzaman, S. and Nair Gunasegavan, U. (2013), "Comparative study of the performance of Islamic and conventional banks: the case of Malaysia", *Humanomics*, Vol. 29 No. 1, pp. 43-60.

Wintoki, M.B., Linck, J.S. and Netter, J.M. (2012), "Endogeneity and the dynamics of internal corporate governance", *Journal of Financial Economics*, Vol. 105 No. 3, pp. 581-606.

Wooi, H.C. and Ming, T.C. (2009), "Director's pay performance: a study on Malaysian government-linked companies", *Banker's Journal Malaysia*, Vol. 133, pp. 28-33.

Yar, S. and Ahmed, S.Y. (2020), "Impact of board gender diversity on the financial performance of conventional and Islamic banks–an evidence from Pakistan", *MPRA*, No. 98798, pp. 1-28.

Yasser, Q.R., Al Mamun, A. and Ahmed, I. (2017), "Corporate social responsibility and gender diversity: insights from Asia pacific", *Corporate Social Responsibility and Environmental Management*, Vol. 24 No. 3, pp. 210-221.

Zabri, S.M., Ahmad, K. and Wah, K.K. (2016), "Corporate governance practices and firm performance: evidence from top 100 public listed companies in Malaysia", *Procedia Economics and Finance*, Vol. 35, pp. 287-296.

Zagorchev, A. and Gao, L. (2015), "Corporate governance and performance of financial institutions", *Journal of Economics and Business*, Vol. 82 No. 1, pp. 17-41.

Zeitun, R. (2012), "Determinants of Islamic and conventional banks performance in GCC countries using panel data analysis", *Global Economy and Finance Journal*, Vol. 5 No. 1, pp. 53-72.

Zhou, W., Georgakopoulos, G., Sotiropoulos, I. and Vasileiou, K.Z. (2011), "The impact of executive payment on firm performance of the financial enterprises in China", *Asian Social Science*, Vol. 7 No. 8, pp. 65-80.

Further reading

Al-Musalli, M.A. and Ismail, K.I. (2012), "Corporate governance, bank specific characteristics and intellectual capital performance of banks in Arab Gulf cooperation council countries", *Asian Academy of Management Journal of Accounting and Finance*, Vol. 8 No. 1, pp. 115-135.

Choudhury, M.A. and Hoque, M.Z. (2006), "Corporate governance in Islamic perspective", *Corporate Governance: The International Journal of Business in Society*, Vol. 6 No. 2, pp. 116-128.

Safieddine, A. (2009), "Islamic financial institutions and corporate governance: new insights for agency theory", *Corporate Governance: An International Review*, Vol. 17 No. 2, pp. 142-158.

Securities Commission Malaysia (2017), "Malaysian code on corporate governance", available at: www.sc.com.my/api/documentms/download.ashx?id=70a5568b-1937-4d2b-8cbf-3aefed112c0a

Tashkandi, A.A. (2023), "Shariah supervision and corporate governance effects on Islamic banks' performance: evidence from the GCC countries", *Journal of Business and Socio-Economic Development*, Vol. 3 No. 3, pp. 253-264.

Corresponding author
Muhammad Farooq can be contacted at: alihussnain155@yahoo.com