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The Relationship between Board Oversight and Risk: A Review of Conventional and Islamic Banks

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Abstract

This study discusses the empirical literature on the corporate governance and risk of conventional banks (CBs) and Islamic banks (IBs) in terms of board oversight focussing on the board of directors (BOD) characteristics and the board committees. The motivation of this review is to provide an understanding on the current state of literature in regards to how governance affect risk. The review suggests that the effects of corporate governance on risk are generally mixed. Overall, the relationship between board oversight and risk is in alignment with agency theory. This suggests that the boards are exerting their influence and oversight function on the risk management of the banks. This study finds that the literatures focus more on CBs and that research which compares the two banks type is still lacking. Additionally, studies examining IBs are mostly done with banks from specific countries or regions which might suggest that the risk profiles are region or country specific. Moreover, this review identifies the current research gap especially those that compare the corporate governance of both types of banks. The review contributes to an understanding of the importance of good governance on the management of risk and provide insights for researchers and policy makers.

Keywords: Banking, Corporate Governance, Board Characteristics, Islamic Banks, Risk

Introduction

The financial crisis that shocks the world in 2008 has put into centre stage the question of banks' governance and risk. The Bank for International Settlements (BIS) argues that the loss of integrity and trust in the stability of the banking sector especially the solvency and liquidity of the banks is rooted in the enormous accumulation of on- and off-balance sheet leverage (BIS, 2011). Interestingly, although IBs are considered to be riskier due to their adherence to shariah principles, the 2008 global financial crisis has put a spotlight on the resilience of IBs and CBs. Many banks went into bankruptcy especially the CBs since they were exposed to financial derivatives such as the Credit Default Swaps (CDS) that triggered the financial crisis. However, IBs did not have exposure to these derivatives since they are forbidden from investing in such instruments which minimised the impacts of the financial crisis on IBs (Islamic Financial Services Board (IFSB), 2010).

Agency theory proposes that good governance will contribute to the optimal risk for banks by ensuring the risk taken will maximise shareholders' value and return (Hart, 1995; Jensen and

Meckling, 1976). Nonetheless, the optimal risk for banks may not be in the interest of the society because shareholders lack the motivations to consider the negative externalities generated by the banks' risk exposure. Hence the banks must have the proper risk management capacity and that the board make sure the banks are always vigilant in terms of their risk exposure level.

This paper examines the empirical literature to review how corporate governance affects risk for both CBs and IBs, specifically those that examines board oversight. As the Islamic banking industry continues to grow, research in the field has become more common. Therefore, it is important to comprehend the relationship between corporate governance and risk and what is the extent of the difference between CBs and IBs. However, research focusing on these two components is still lacking particularly those that compare between the two types of banks. This review will provide insights into the current state of research and presents discussion for its future direction. Additionally, the review contributes to an understanding of the various governance variables affecting the risk in the dual banking system and provide empirical evidences for researchers and policy makers on the importance of good governance.

The rest of the paper is structured as follows. Section 2 delves into the literature on the corporate governance mechanisms in CBs, while the next section examines the literature on corporate governance mechanisms in IBs. Section 4 discusses the comparison between the two types of banks. The arguments for future research potential are discussed in Section 5. The paper ends with a final concluding remark.

Corporate Governance Mechanisms in Conventional Banks

Under agency theory, the division between control and ownership prompts managers to further their personal interests instead of shareholders (Fama and Jensen, 1983). Agency theory divides the control of the company into two components. On one side is the principals of the company, or shareholders who own the company. On the other side is the agents, composed by the company executives and managers who run the business on behalf of the principals. Within agency relationship, the principals hire and delegate the management of the company to the agents who are experts in managing the company and will serve in the best interests of the principals. Since there exists a clear separation between control and ownership of the company, the principals expect the agents to always act in the principals' interest, but this is not always the case where the agents sometime act in their self-interest. In addition, the agency relationship give rise to *agency costs*, the costs incurred by the principals to oversee the agents' action. The costs are necessary to assure all agents' actions are aligned with the principals' interests. Hart (1995) argues that in the absence of agency problem, there is no need for governance structure since the agents can be instructed to maximise profit or the value of the firm and their effort and other costs can be compensated directly.

To ensure that the agents will always act with the principals' best interest, the principals need to monitor the agents. Consequently, there should exist certain governance mechanisms that will ensure the alignment of interest and risk preference between the principals and agents (Jensen and Meckling, 1976). Several popular governance mechanisms are discussed in the literature that are employed in ensuring the alignment of interest between the agents and principals such as the BOD, the board committees, the chief executive officer (CEO), ownership structure, and executive compensation. This paper will focus on the BOD and the board committees since both mechanisms act as the first line of defence against misalignment of interest through its oversight duties whereby the BOD has the authority to select,

compensate, and dismiss the managers and to oversee major decisions (Fama and Jensen, 1983).

Board of Directors

Fama and Jensen (1983) argue that the BOD is the "apex of the decision control systems of organizations" with complete authority and monitoring over managers. However, the BOD should leave the management of operations to the managers since they are equipped with the expertise to do so but the BOD should always maintain overall control (Bouheni et al., 2016). The BOD must ensure that they continuously monitor all the important decisions made by the management to safeguard shareholder interest. Several studies in the field of banking have found important and consequential links between board structure and financial benchmark such as performance and risk. The BOD bears the highest responsibility in ensuring the integrity of the bank and together with the senior management team act as the "first line of defense" in implementing the bank's risk management strategies (Greuning and Bratanovic, 2020). Hence it is fitting that the BOD is the main corporate governance mechanism and accordingly, several characteristics have been argued to improve their monitoring and control capacities.

Board Independence

One of the defining characteristics of the BOD is their independence. Independence is usually assessed by the numbers or proportion of independent non-executive directors or outsider directors in the board. Hence, a board is considered to be more independent when there is a bigger proportion of independent non-executive members within the BOD. Outsider directors on the board are better at exercising their monitoring duties since they are not part of the bank and do not answer to the CEO. They are appointed by the shareholders and are accountable to them.

Studies looking at the connection between BOD independence and bank risk-taking have found positive relationship between these variables. Felicio et al (2018) find that higher insider representation positively influences bank risk. Moreover, Chen and Lin (2016) argue that a higher degree of independence motivates banks to take more credit risks, since independence is useful for shareholders to monitor and control the managers. In addition, Minton et al (2014) assert that independent directors with financial expertise led to higher risk in banks before the financial crisis since they are more inclined to allow the banks to undertake additional riskier projects because they have better awareness of the complex financial activities.

Besides that, several studies have also found a negative relationship between board independence and bank risk-taking. Pathan (2009) finds a negative relationship between independent directors and bank risk measures and asserts the balancing action that the independent directors perform between shareholders' interests and other relevant stakeholders. Moreover, Faleye and Krishnan (2017) also find a negative relationship between board independence and risk where if there is a financial distress within the economy, banks with more competent boards are reluctant to lend to risky commercial borrowers. Lassoued (2018) find that the percentage of independent members in the BOD has a positive impact on the financial stability of the IBs (measured by insolvency risk - Z-score). Similarly, Battaglia and Gallo (2017) argue that banks with higher proportion of independent directors had a lower probability of default during the 2007 financial crisis. Additionally, Lee and Hooy (2020)

suggest that that higher board independence lessens bank risk-taking, and that independent directors monitoring is critical even with significant government ownership and intervention. Meanwhile, there are studies that assert the connection between board independence and risk is not significant. For example, Loh and Sok-Gee (2017) find no significant relationship between the presence of independent directors and risk-taking of banks in the context of Malaysia since the independent directors are appointed on contract basis for political reason and by virtue of their personal connection with the CEO. Similarly, Rachdi and Ameer (2011) find insignificant link between independence and insolvency risk in the context of Tunisian banks.

Although the findings are mixed, but it can be argued that board independence is better at aligning the interest between the principals and agents and consequently increases risk-taking.

Board Size

Another important feature of the BOD that influence its effectiveness is size. Smaller boards are preferable since it has lower monitoring costs, but it is still inconclusive what is the optimum BOD size. Furthermore, larger boards do not necessarily correspond to better and effective monitoring since it incurs larger monitoring costs and induce free-rider problems which diminish firm value (Mehran et al., 2011).

Working in the area of board size and risk, Anginer et al (2016) claim that BOD with intermediate size is associated with lower bank capitalization, as shareholder interests is aligned with low capitalization, and that bank risk is transferred to the bank's creditors or to the financial safety net. However, Battaglia and Gallo (2017) assert that large board correspond with more higher risk-taking during the 2008 financial crisis. Moreover, their results suggest that the connection between board size and risk exhibits an inverted U-shaped relation. This imply that additional new directors increase bank's risk-taking, but the increase has a diminishing marginal gain. Hence, there is a point at which increasing the size of the board reduces bank risk-taking. This finding is similar to Loh and Sok-Gee (2017) results' that assert larger board size results in higher bank risk-taking of the listed commercial banks in Malaysia. Felicio et al (2018) observed the same findings in terms of systematic risk for European listed banks; Chen and Lin (2016) in terms of liquidity risk exposure; and that of Gulamhussen and Santa (2015) in terms of credit risk for banks from OECD countries.

Overall, the literature suggests that larger board increases risk-taking which is in alignment with agency theory. However, it is unclear whether an increase in size will result in better governance since bigger size does not necessarily mean quality.

Board Meeting

Another important board governance mechanism is the frequency of board meeting. It is considered as a signal of governance and another way of exerting control into the management since boards that meet rarely exert limited influence (Calomiris and Carlson, 2016). Another important aspect of board meeting is that it relates to the ideas of busy directors. Busy directors may be more competent, but they may also become reluctant to attend meetings frequently, especially if they are serving multiple boards. For this reason, it is possible that they are less effective than non-busy ones since they might not be able to dedicate enough attention to any particular board, but it is also argued that the directors who are "busy" are chosen to be on several boards because of their capability and expertise, which make-up for their busyness (Adams et al., 2010).

Felicio et al (2018) assert that number of meetings has a positive impact on systematic risk. They argue that when board meetings are held more frequently, directors would be more informed of the banks' actions and thus lead to more to more risk-taking to gain higher profit which is in line with shareholders' interests. On the other hand, Battaglia and Gallo (2017) note a negative relation between the frequency of board meetings and risk. They argue that higher meetings frequency is to be perceived as a representation of the board to the external factors and thus to be associated with a decrease in the level of risks. Moreover, Elyasiani and Zhang (2015) contend that BHC risks and the busyness of directors exhibits a negative relationship and that busy directors lead to lower risk (high Z-scores). They argue that the experience and skills acquired with multiple directorships promote better management of the BHC and thus help in reducing risks.

The mixed findings regarding board meeting and busyness could be attributed to the facts that even though more meetings are better for monitoring the managers but at the same time as directors' expertise come into play, they are able to better manage the risk.

Board Gender Diversity

Furthermore, recent studies also delve into the issue of gender diversity in the BOD. A more gender diverse board is considered to be more competent in its monitoring duties since gender diversity could bring in more information and different perspectives into the board and thus lead to a better performance of the firm. Adams and Ferreira (2009) indicate that female directors add values to the board and the board gender composition is positively related to measures of board effectiveness since they allocate more effort to monitor the firm. They discern that attendance records are better for female directors, the attendance of male directors improves with a more gender-diverse board, and that women are more inclined to join monitoring committees. Nevertheless, in term of risk-taking, it is generally considered that women tend to make less risky investments than men (Charness and Gneezy, 2012).

Additionally, Farag and Mallin (2017) argue that significant female members on the BOD have the capability to curtail banks' exposure to financial crisis, but their results suggest no risk averseness in female directors. They further assert that the degree of female directors risk-taking may be based on their roles (non-executive or executive) and that the risk-taking behaviour of executive directors may be gender neutral, indicating that diverse boards are associated with effective governance characteristics. Moreover, Gulamhussen and Santa (2015) also assert a negative relationship between diversity in board and risk-taking which suggest conservatism in strategic and risk oversight. On the other hand, Lee and Hooy (2020) assert that there is no effect on the role of female directors on banks' risk in Asian emerging markets. They suggest that role of female directors in the Asian banking sector is still expanding since the rate of female directors' presence in the board is rising.

In line with this, it can be justified that a diverse board is better for banks since it leads to better performance and less risk, since women are still considered as outsider not only in the business world especially more so in the financial market that consist primarily of men.

Board Education and Expertise

The functioning of the board in monitoring and advising the managers is conditioned on the fact that the members of the BOD are able to exercise this duty. Since banks has increasingly become more involved in sophisticated business and have increased their size and complexity (Mehran et al., 2011), firm value can be increased with better awareness of the risky

investments. There are no general consensus of what constitute a financial expertise but Minton et al (2014) consider members as a financial expert if they fall into one of these categories: (i) has held an executive position at a banking institution, (ii) holds an executive position at a nonbank financial institution, (iii) holds a finance-related position of a nonfinancial firm, (iv) holds an academic position in a related field, or (v) works as a hedge fund or private equity fund manager, or venture capitalist.

In a study of US financial institutions, Minton et al (2010) assert that level of financial expertise among independent directors before and during the 2008 financial crisis has a positive connection with risk. With the expertise of the board, shareholders were benefited by the risk-taking before the crisis but during the crisis, it resulted in lower performance. They also argue that without the presence of financial expertise, banks with a high propensity of risks would have worse performance. Identically, in a more specific sample of US banks, Minton et al (2014) find that during the early stage of the crisis, financial expertise among independent directors has a positive impact on risk-taking and argue that the results are contradicting the regulators' notion that better board expertise would lower risk profile. Moreover, Fernandes and Fich (2009) use the average years of professional experience in the financial sector of the banks' outside directors as a different proxy for expertise and assert that as financial experience increases, banks are less likely to fail.

Further research is needed to understand the relevance of expertise on risk-taking in banks and how it is affected by other characteristics of the board.

Board Committees

As stated earlier, one of the primary functions on the BOD is to ensure that all relevant systems and strategies are in place for the survival of the firm. One way the board can be more effective in performing this function is by setting up relevant committees with specific tasks. Board committees perform separately designated monitoring task delegated by the full board and are comprise of a portion of the board member. The committees whose roles are to act as independent monitors especially in term of risk-taking are audit, risk management and executive compensation.

Audit Committee

Studies on the effect of audit committee (AC), are relatively scarce with mixed finding. For example, Bedard et al (2004) explore the connection between the expertise, independence, and activity level of AC and aggressive earnings management. They assert that the presence of a financial expert on the AC and a committee composed of only independent directors have a negative connection with the likelihood of aggressive earnings management. Moreover, Wang et al (2012) identify a positive connection between the number of committee and Big-4 auditors to the operating performance of BHCs. They further argue that separation of function between the committee is beneficial for performance and that having the Big-4 as auditor have a reputation of providing good signals to investors. However, Grove et al (2011) find no association between the percentage of affiliated directors on AC and overall firm performance.

In term of risk-taking, Sun and Liu (2014) assert that there are higher total risk and idiosyncratic risk when banks have busy directors on their AC, but these risks are lower when the AC members have longer tenure. They argue that high AC competency may inhibits bank risk-taking since members with more experience are able to restrain and monitor management's risky investments while busy members may not administer enough

monitoring effort. Moreover, Gulamhussen and Santa (2015) find that risk is negatively influenced by the presence of women in AC due to stricter monitoring and conservative risk oversight.

Risk Management Committee

In addition to AC, another important committee that is set up to improve the function of the board is the risk management committee (RMC). Previously, the risk management function is under the care of the AC or the asset and liability management committee (Minton et al., 2014). Among the responsibilities of the RMC is to advise the BOD regarding the nomination, selection, and replacement of the chief risk officer (CRO). Furthermore, the RMC should report and consult the BOD regarding the risk-taking strategies and monitors the level of risk exposure while maximising returns (Tao and Hutchinson, 2013).

Empirical studies examining the effects of RMC is still limited. For instance, Ellul and Yerramilli (2013) investigate the effect of risk management on tail risk exposures of BHCs in the US by constructing a risk management index (RMI) to assess the effectiveness and independence of the risk management function. They identify that BHCs with better RMI before the financial crisis have lower tail risk and lower non-performing loans which suggest that an effective risk management function can reduce tail risk exposures at banks. In addition, Tao and Hutchinson (2013) identify a positive connection between RMC characteristics and risk for Australian financial firms but the association between RMC size and risk is insignificant. Moreover, Aebi et al. (2012) argue that when CRO reports exclusively to the BOD, banks have better performance during the financial crisis whereas banks in which the CRO reports directly to the CEO perform worse which suggest that the CEO and CRO may have opposing interests. Furthermore, they argue that the existence of a risk committee does not have a significant relationship with bank performance but a more devoted risk committee with high meeting frequency have a positive effect on performance. However, Minton et al. (2014) find that the existence of risk committee is unrelated to banks total risk but has a positive connection with firm stock performance similar to (Aebi et al., 2012).

Compensation Committee

Jensen and Meckling (1976) state that one course of action to ensure the alignment of interest between shareholders and managers is to provide proper compensation to the managers. The committee that is responsible for this task is the compensation committee (CC). Since managers are more concerned about their reputation, they are less likely to take up risky investments (Hirshleifer and Thakor, 1992). The CC should ensure that the remuneration packages must be able to encourage the managers to take more good investments that boost the value of the firm.

As with the other two committees, studies examining the effect of CC are still limited and the findings are mixed especially its relationship with risk. For examples, Anderson and Bizjak (2003) argue that CC structure does not affect incentive contracts since they find limited indication that CC with higher portion of outsider use more performance-based pay. Moreover, they assert that there was no evidence of exaggerated or lower incentives for committees with higher insiders or the CEO, and no salary decrement or total incentives increment when CEOs leaves the CC. Likewise, Grove et al. (2011) find no association between affiliated directors' percentage on the CC and the performance of banking firms or firm performance.

Meanwhile, Tao and Hutchinson (2013) find a positive connection between CC characteristics and risk for Australian financial firms in the period before the start of the financial crisis. They assert that risk and firm performance exhibit a negative association which points towards the bad effect of excessive risk-taking on firm performance. They also find that when directors are serving on both the CC and RMC, it negatively affects risk but their result is not significant. However, the connection between dual membership and risk is positive and it has significant association with performance.

Summary

The relationship between corporate governance and bank risk-taking is special because banks have certain distinct features such as heightened regulations that differentiate it from non-financial firms. Several studies have explored multiple corporate governance mechanisms and their effect on riskiness of banks with the insight of agency theory such as Pathan (2009), Safiullah and Shamsuddin (2018); Neifar and Jarboui (2018) among others. Within agency theory perspective, the mechanism that is paramount and essential in monitoring the managers is the board. An effective and strong BOD is crucial in aligning shareholders' and managers' risk preference and prevent excessive risk aversion on the part of the managers. Several studies find significant relationship between board characteristics and bank risk-taking. Essentially, stronger board working in shareholders' interest (Pathan, 2009), higher board independence (Chen and Lin, 2016), independent directors with financial expertise (Minton et al., 2014), large bank board size (Battaglia and Gallo, 2017), and higher frequency of meetings (Felicio et al., 2018) positively affect bank risk-taking. Meanwhile, more diverse board in term of higher female representation (Gulamhussen and Santa, 2015), board chairman is also the CEO (Zeineb and Mensi, 2018), and busyness of directors (Elyasiani and Zhang, 2015) negatively affect bank risk-taking.

Furthermore, another mechanism that is gaining recognition in understanding the relationship between corporate governance and bank risk-taking is the existence and structure of board committees. Arguably, the most important committee is the AC since competent and independent auditors plays essential role in ensuring that managers perform their function properly and provide proper disclosure and transparency to the shareholders. Besides that, other committees that are performing important monitoring role are the RMC and the CC. This is because when a director is a member of both committees, the problem of information asymmetry is reduced, and it lessen the negative impact between risk and firm performance especially for firms with high risk.

In term of measuring the extent of several corporate governance mechanisms, instead of focusing on a particular mechanism, several studies employ corporate governance index in capturing the full magnitude of corporate governance effect on risk. The corporate governance index varies according to studies and usually include several widely use governance mechanisms. For example, Ellul and Yerramilli (2013) devise a RMI by evaluating six risk management variables using principal component analysis. They argue that a robust risk management capacity can lower risk vulnerabilities especially during critical situations. Additionally, some studies employ the Environmental, Social and Governance (ESG) scores issued by ASSET4-Thomson Reuters. For example, Tommaso and Thornton (2020) investigate the effect of the ESG scores and board characteristics on bank risk in European countries. They suggest that high ESG scores resulted in less bank risk-taking, but the effect is dependent on the board characteristics (smaller, higher independence and greater gender diversity).

With the complexity and opaqueness of the banking industry, it is imperative that the corporate governance mechanisms are able perform their function shrewdly. Moreover, it is essential that these the BOD and its committees meet frequently, have appropriate number of members especially those with expertise, and that they report directly to the BOD. This is to prevent any undesirable and excessive risk-taking by the managers that may lead to another financial crisis.

Corporate Governance Mechanisms in Islamic Banks

In essence, Islamic banking's foundational values encompass activities that cultivate entrepreneurship, trade and commerce that bring about societal development or benefit are encouraged. However, certain ventures are prohibited if it involves giving and taking interest (*riba*), gambling (*maysir*), and speculative trading (*gharar*). In addition, although taking risk in business is allowed, investing or doing business that involves prohibited or *haram* activities such as alcohol are also forbidden. Since IB is a business that has a separation between ownership and control, conflict of interest may arise. Similar to CB, IB also faces agency problems (Samad et al., 2005) such as, its agents are likely to behave in their own interest rather than the shareholders. However, Safieddine (2009) suggests that agency relationship in IB is more complex and unique due to the agents' obligation to comply by *shariah* principles and the rights of the depositors and investment account holders (IAHs). The author asserts that the division between control and ownership is not the only source of agency problems for IB. Besides, the problems also stem from the separation of cash flow and control rights for IAHs since the IAHs are principals, but they have no right to appoint the agents (unlike the shareholders).

For an IB, agency problems may also arise due to the financial contract employed in its business where deposits are considered as capital and that IB is regarded as entrepreneur with depositors as partner that will share profit or loss. Hence, IB is in a position where there exists multiple principal-agent relationship. For example, under *musharakah* financing, the bank depends on its partners to administer the enterprise. Since monitoring the enterprise will incur additional costs, the bank must rely on managers or other partners to supervise the enterprise, even though they may have an incentive to maximize their personal interests (Samad et al., 2005). This means that IB requires governance mechanisms that are at least akin to those of CB. However, Alam et al (2017) assert that corporate governance in IB is more intricate since IB activities must adhere to the *shariah* principles, the undertaking of profit-and-loss-sharing (PLS) business model, the idea that IB is the trustee of wealth, and the consideration of society's welfare. To adhere to *shariah* principles, IB must conduct their business to the standard and guidelines outlined by the Islamic Financial Services Board (IFSB) and the Accounting and Auditing Organizations for Islamic Financial Institutions (AAOIFI).

For example, the IFSB outlines that IB must set up a comprehensive governance policy framework to ensure a good governance culture and this framework must establish the roles and responsibilities of each governance structure, such as the Board of Directors (BOD), the Shariah Supervisory Boards (SSB), the BOD committees, the executive management, and the internal and external auditors (IFSB, 2006). Furthermore, the IFSB outlines what constitute a Shariah Governance System whereby IB must set up a *shariah* boards composed of a panel of *shariah* scholars acting as advisers usually known as a Shariah Committee or Shariah Supervisory Board (SSB).

Several empirical analyses have been done in relation to the effects of SSB. Almutairi and Quttainah (2017) suggest larger SSBs have higher efficiency in performing their monitoring

and advisory roles than small SSBs. For this reason, they argue that expanding the size of SSBs will boost the monitoring of management behaviour and lead to better performance. However, Mersni and Othman (2016) argue that smaller SSBs are more competent in performing their monitoring role, whereas the existence of an external *shariah* AC is useful in avoiding earnings manipulation. Similarly, Zeineb and Mensi (2018) assert that SSB size has a positive effect on insolvency risk (Z-score), which reduces risk and efficiency. They suggest that smaller SSB will perform their monitoring role more seriously and put in more efforts. Likewise, Mollah and Zaman (2015) assert the positive impact of SSB on performance when they conduct supervisory role, however the effect is inconsequential when they only conduct advisory role.

For IBs, the existence of the SSB also influences the risk-taking profiles of the banks. For example, Mollah et al (2017) deduce that the governance framework in IBs serve an essential part in risk-taking profile and performance that is distinctive from CBs. They argue that IBs governance structure permits them to undertake riskier investments and achieve superior performance due to product intricacy and different financing mechanisms. Moreover, AlAbbad et al (2019) look into the connection between SSB's characteristics and risk-taking profiles of IBs from 18 countries over the period 2000 to 2011. They assert that SSB with more members especially those that consist of busy scholars induce greater risk-taking. On the contrary, they suggest that SSB with more foreign scholars' members induces lower risk-taking since these members are motivated to maintain and develop their reputation. They also indicate that the style of the SSB and the decisions of the *shariah* governance play a vital role in developing the risk-taking profiles of the banks, especially in countries where the SSB is governed by the bank instead of by the central bank or the government. Additionally, Fatmawati et al (2020) investigate the practice of *shariah* governance for IBs from 11 countries. They state that the countries are setting up a national level Shariah board in order to provide an integrated and centralised Shariah supervision system that will provide coherence across the Islamic finance sector. Their findings also suggest that different approaches have been embraced by the countries in establishing *shariah* governance regulations and measures, namely, strict, moderate, and flexible. They assert that the different approaches taken by the countries affect the practices of *shariah* governance at the institutional level.

Besides the unique existence of the SSB, IBs are also required to adhere to the same corporate governance mechanism followed by the CBs especially in terms of BOD characteristics. For example, Basiruddin and Ahmed (2019) examine the relationship between BOD and its sub-committees' attributes on *shariah* non-compliant risk (SNCR). Their results indicate that banks with superior governance have lower SNCR. Moreover, they assert that smaller BOD size, higher independence, financial expertise, and higher frequency of *shariah* committee meetings reduces SNCR. Additionally, Kabir et al (2020) examine the factors affecting the credit risk of CBs and IBs in Bangladesh for the period of 2001–2018. Their results suggest that larger board size increases credit risk for CBs but reduces risk for IBs. They also state that board independence has a negative effect on credit risk of both banks. Meanwhile, Neifar and Jarboui (2018) explore the connection between corporate governance and Operational Risk (OR) voluntary disclosure for 34 IBs from 2008 to 2014. Their results suggest independent directors has a positive effect on risk disclosure. They argue that this is because more independent directors in the board will provide better decisions, thus providing better reporting.

In comparison, instead of the examining corporate governance mechanisms individually, several studies also employ an index that aggregate the governance mechanisms. For example, Mollah et al (2017) formulate a governance index based on 12 boardroom characteristics for a sample of both CBs and IBs from 14 countries between 2005 to 2013. They suggest that the governance index is positively related to Z-score. But, if the sample are split according to size, the index is only significant and positive for large banks only. Meanwhile, the index has a negative effect on the Z-score for small banks which they attributed to the resource constraint faced by the small banks in managing risk. Moreover, Safiullah and Shamsuddin (2018); Safiullah and Shamsuddin (2019) formulate a corporate governance index based on eight individual attributes of BOD. Using a sample of both CBs and IBs from 28 countries between 2003 to 2014, Safiullah and Shamsuddin (2018) suggest that the relationships between board governance and risk are mixed depending on the risk measures. They assert that higher governance index score leads to bigger credit and liquidity risks, but the relationship is statistically weak, and the model specification is not robust. On the other hand, they also assert that higher governance index score leads to lower insolvency and operational risks, but it is significant only for the stock return volatility and Z-score proxies. Likewise, Safiullah and Shamsuddin (2019) assert that higher governance index score leads to lower profit inefficiency for IBs, but only when proxied by risk-unadjusted inefficiency.

Comparing Corporate Governance in Conventional and Islamic Banks

With regard to empirical studies comparing the relation of corporate governance and risk between CBs and IBs, there is limited research devoted at this particular area. Similar to studies done on conventional banking system, the studies on IBs employs similar corporate governance mechanisms such as board characteristics (Lassoued, 2018; Neifar and Jarboui, 2018), board committees (Neifar and Jarboui, 2018), corporate governance index (Otero et al., 2019; Mollah et al., 2017) and the Shariah Supervisory Boards (SSB) characteristics (Neifar and Jarboui, 2018; Zeineb and Mensi, 2018). In addition, the risk metrics used are also varied. Some studies focus on a single risk metric while other employ several risk metrics. For example, some studies focus on the insolvency risk metric Z-score (Mollah et al., 2017; Zeineb and Mensi, 2018; Otero et al., 2019) while some studies use several risk metrics such as the credit risk, liquidity risk, operational risk, and insolvency risk (Abedifar et al., 2013; Safiullah and Shamsuddin, 2018).

Moreover, the results from these studies are mixed. Abedifar et al (2013) find that small IBs that are leveraged or based in countries with high Muslim populations have lower credit risk than CBs while for insolvency risk, small IBs are more stable. In addition, Mollah et al (2017) argue that the existence of SSB in IBs could lead them to take more risks since they have stronger capital base especially for big IBs. This is because big IBs are better prepared to manage risk with higher total assets unlike small IBs that are lacking in economies of scale and limited by capital constraints. They assert that the CGI has a positive impact on the Z-scores which imply IBs have a lower insolvency risk than CBs. This finding that the governance structure of IBs permits them to undertake more risks is supported by Zeineb and Mensi (2018) where they argue that better governed banks show an enhancement in efficiency scores. Similarly, Otero et al (2019) assert that corporate governance operating with shareholders' interests could contribute to higher risk especially for IBs. They assert that bank-level and country-level governance, government-owned banks, and the presence of institutional investors have a positive connection with risk-taking. They find a significant and

positive impact of bank-level and country-level governance, government-owned banks, and the presence of institutional investors on risk-taking.

On the other hand, Lassoued (2018) find that the independent members percentage in the BOD has a positive relationship with IBs' financial stability. Meanwhile, they assert that the SSB and board size have no impact on financial stability. Likewise, Safiullah and Shamsuddin (2018) assert higher liquidity risk, lower credit risk, lower insolvency risk, but similar operational risk in IBs as compared to CBs. Moreover, they state that operational and insolvency risks in IBs decreases with an increase in SSB size and SSB members' academic qualifications. However, an increase in the number of reputed Shariah scholars on the SSB increases the risks. Meanwhile, SSB attributes do not have significant effect on liquidity and credit risks.

Additionally, Kabir et al (2020) examine the factors affecting the credit risk of CBs and IBs in Bangladesh for the period of 2001–2018. Their results suggest that several macroeconomic variables such as real interest rate and inflation rate increase credit risk while GDP growth reduces credit risk. Moreover, they state that larger board size increases credit risk for CBs but reduces risk for IBs. Meanwhile, they state that board independence has a negative effect on credit risk of both banks. Likewise, they also assert that higher insider ownership increases risk while higher institutional ownership lowers risk for both banks.

One of the main factors that differentiate IBs from CBs is the existence of a SSB that enhances the governance in IBs and boost them to undertake more risks. Governance in the conventional banking system will ensure that the deposits and the interest rates are prefixed based on the prevailing rate, but the depositors of IBs are considered as partners to the banks that will share both the profits and loss similar to the shareholders since interest rates are strictly prohibited (Alam et al., 2017). Other than the existence of the SSB, the governance of IBs is similar to those of CBs and other publicly listed companies. The similarity can be attributed to the facts that the business model of both banks is analogous with each other. Both CBs and IBs encounter the same moral hazard problem and incurred agency costs in their business. Thus, it is fitting that the governance mechanisms employed by the CBs are also employed by the IBs. However, some researchers do argue that the extra governance of IBs has allowed them to take on more risk and achieve better efficiency (Zeineb and Mensi, 2018; Otero et al., 2019). Unless there is a clear evidence that the governance mechanisms have different effects toward CBs and IBs, both banks should utilize all available mechanisms in order to preserve the stability and security of each bank.

Issues and Challenges for Future Research

Given the discussion on the connection between board oversight and risk for both CBs and IBs, several elements are of interest for future research. Since much research in this area has been done regarding CBs, IBs have a well-defined benchmark on what constitute good corporate governance practices. Since CBs operate solely for the maximisation of profits and shareholders' value, agency theory is widely employed to expound the association between corporate governance and risk. However, IBs are distinct in the sense that its business model also advocates for society's welfare, fairness, and justice. Hence, it can be argued that IBs governance is better described by other theory such as the Stakeholder theory where all the decisions taken by IBs should consider the effects of its decision on all stakeholders connected to the banks (Freeman, 1984). With this difference, future studies can examine if IBs are distinct from CBs with the emphasis on promoting better social welfare through its governance decision and risk-taking behaviours. For example, studies can investigate whether

IBs includes more women in its boards in order to promote more gender equality and thus better manage its risk since there is evidence that higher women representation on the BOD significantly reduce banks' vulnerability to financial crisis (Frag and Mallin, 2017).

Additionally, since IBs have an extra level of governance with the existence of the SSB, future studies may explore further whether the characteristics and functions of the SSB from different regions are affecting their risk-taking behaviours. This is because the *shariah* governance of IBs are still dependent on the countries or region in which the banks operate. For example, Fatmawati et al (2020) assert that there are different approaches embraced by the countries in establishing *shariah* governance regulations and measures, namely, strict, moderate, and flexible. Hence there is a need to examine whether if the risk of the IBs is also region dependent, not only because the characteristics of the SSBs is influencing the risk of IBs (AlAbbad et al., 2019), but perhaps due to the different Islamic banking regulatory systems within these countries.

Moreover, there is a need for future studies to inspect whether the current governance structure of CBs and its effect of risk is what needed for IBs. Since the evidence is mostly mixed, where certain studies found that strong and assertive board increases risk (Pathan, 2009; Minton et al., 2014), while other studies claim otherwise (Vallasca et al., 2017; Loh and Sok-Gee, 2017), hence a better understanding of how governance effect risk will be helpful especially for government and policy makers. Studies have shown that IBs take on more risk (Mollah et al., 2017; Otero et al., 2019), therefore there might be a need for a more fine-tuned board structure for IBs to mitigate excessive risk-taking. On the other hand, instead of a different board structure, perhaps the SSB must play a more proactive role in the IBs governance, not only in *shariah* compliant but also in risk management since certain characteristics of the SSB affect banks risk-taking (Safiullah and Shamsuddin, 2018). As the Islamic banking industry continues to grow, perhaps there is a need for a more well defined and distinct governance structure for IBs.

Furthermore, in term of corporate governance variables, the review shows that most studies examine the effect of each variable individually, but some employ a corporate governance index (Otero et al., 2019; Mollah et al., 2017; Safiullah and Shamsuddin, 2018). This index gives an overall governance indicator since it includes several widely used governance measures. Therefore, future studies might employ similar index in their study to examine overall governance standard instead of focusing on certain measures. Meanwhile, for risk, some studies focus on only one type of risk or risk proxy in their research such as the Merton's distance-to-default (Kabir et al., 2020), or the Z-score (Zeineb and Mensi, 2018). In comparison, other studies employ several risks in their research for a more robust risk-taking profile of the banks (Chen and Lin, 2016; Safiullah and Shamsuddin, 2018; Felício et al., 2018). Based on this review, no studies have constructed or included an overall risk-taking index for their research. It is interesting to see future studies that proposes and examined such risk-taking index in their research so that the overall risk profile of banks can be consolidated into one variable.

Conclusion

Banks will continue to play a central role in the economy. As the world continues to evolve, banks need to ensure that they are ready for any challenges the future might hold. Moreover, customers will also continue to demand the banks to offer products that are in line with their religious and moral beliefs. Both CBs and IBs are engaging in the same business albeit with several fundamental differences. Additionally, IBs are also constrained by *shariah* principles.

The myriad of laws and regulations is what make both CBs and IBs unique especially in term of board oversight and risk. Interestingly, the mixed empirical findings suggest that there are still many unknown areas to explore to fully understand the nature of both corporate governance and bank risk-taking.

In terms of corporate governance, the review suggests that most findings are in line with agency theory where better governance leads to higher risk preference. However, certain governance mechanisms seem to contribute to lower risk such as higher board gender diversity, effective board committees and higher concentration ownership. For IBs, they are unique since they have an extra governance mechanism in the form of the SSB. Nevertheless, studies examining the effect of the SSB are still limited. The limited studies regarding the SSB might be because the function and duty of the SSB are only defined to ensuring that the IBs are adhering to *shariah* principles and that they have no direct influence in other domain of the banks such as risk-taking.

On the other hand, the findings for the risk profiles of CBs and IBs are also generally mixed. The difference in risk profiles mostly depend on the type of risk being studied and the size of the banks. Moreover, the studies are mostly done with banks from specific countries or regions which might suggest that the risk profiles are region specific. In addition, the difference is also variable specific where different proxies for the same risk yielded different results. These findings suggest that to better understand the overall risk profile of CBs and IBs, studies should include comprehensive appropriate variables. This is because there is an interconnection between risks since what happens to a specific risk might affect other risks. As an example, if a bank faces a credit risk problem, it might affect its ability to manage its liquidity and market risks that could lead to considerable loss or insolvency.

In order to prevent another banking crisis that could devastate the global economies, boards of directors must continuously play their duties and responsibilities, along with other stakeholders such as the regulators and governments. Therefore, it is important to continuously explore how corporate governance mechanisms works and explore if there is any difference in its implementation between CBs and IBs. Accordingly, it is imperative to fully understand the connection between corporate governance mechanisms particularly board oversight and bank risk-taking so that better decision can be made regarding certain corporate governance regulation so that banks are govern with the highest standards and charters.

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