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Exploring the nexus between Islamic financial institutions Shariah compliance disclosure and corporate governance: New insights from a cross-country analysis

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Abstract

We address the scarcity of empirical research on Shariah Compliance Disclosure (hereafter referred to as SCD) by presenting new evidence on the levels and range of SCD, of 807 bank-year observation of Islamic Financial Institutions (hereafter referred to as IFIs) in 19 countries for the period from 2010 to 2020 and its determinants. Using an unweighted disclosure index measured by manual content analysis categorized into Shariah Supervisory Board (hereafter referred to as SSB) information, audit process, Shariah compliance review and Zakat, several outcomes are documented. In general, the SCD level is above average (57.38%) and hence evidence an overall growth during the sample period. Further, the study examines the relationship between corporate governance (CG) and SCD and the results indicate that foreign investors, institutional investors, board size, board independence, SSB reputation and SSB size are vital and influence the extent of SCD level. The study also conducted several tests to examine the main findings' robustness. The findings deliver valuable in-depth empirical insights to regulatory bodies on the current SCD practises of IFIs to assist policymakers in modifying reporting frameworks or guidelines accordingly. In addition, this research can support academics, policymakers or standard setters and managers interested in seeking information about SCD and CG.

KEYWORDS

content analysis, cross-country analysis, financial disclosure, Islamic banking, Shariah compliance disclosure, Shariah supervisory board

1 | INTRODUCTION

Considering the increasing awareness of Shariah legislation, it is imperative for companies to transcend conventional reporting requirements and incorporate valuable information from an Islamic perspective. In the context of Islamic Financial Institutions (IFIs), the primary objective of reporting is to demonstrate the adherence of all business operations to Islamic laws, known as 'Shariah' (Maali et al., 2006; Zaher & Kabir Hassan, 2001). This necessitates the disclosure of all necessary Shariah compliance practises to stakeholders, including God (Allah), the community and the owners. Although corporate disclosure in IFIs has received considerable attention from researchers, existing studies have primarily focused on other types of disclosure such as corporate social responsibility (CSR) (e.g., Harun et al., 2020; Platonova et al., 2018), risk (e.g., Elamer et al., 2020) and ethical considerations (e.g., Belal et al., 2015; Sencal & Asutay, 2021), among others. Consequently, the comprehensive examination of Shariah compliance disclosure (SCD) in IFIs remains a notable gap in the literature. Our study aims to bridge this gap.

Furthermore, the existing studies in this field have predominantly been conducted within specific countries or regions (e.g., Belal et al., 2015; Elamer et al., 2020; Harun et al., 2020; Platonova et al., 2018), with limited attention given to a global perspective. Additionally, conflicting findings from prior research highlight the necessity for further studies, particularly with a focus on SCD. Expanding research efforts in this area will enhance the understanding of SCD practises and provide consistent and reliable insights. Corporate disclosure plays a pivotal role in reducing information asymmetry and ensuring well-informed investors. With the emergence of Islamic Banks (IBs) in the 1970s, investigating the corporate governance (CG) model from an Islamic perspective has gained significance in evaluating its compliance with Islamic principles. While both conventional and Islamic institutions share similar CG objectives, such as efficient management, effective disclosure and long-term corporate stability, Shariah compliance holds fundamental importance in Islamic finance. It is essential to consider Islamic laws to prevent reputational damage and hindered growth of IFIs when implementing sound CG and disclosure practices (Muneeza & Hassan, 2014). This motivates investigating our research context.

A distinctive feature of the governance structure of IFIs is the inclusion of a Shariah supervisory board (SSB) or committee responsible for ensuring adherence to Shariah principles and teachings (Elamer et al., 2020; Safieddine, 2009). This ‘two-tier’ system, contrasting with the ‘one-tier’ system used by conventional counterparts, grants the SSB a critical role in safeguarding stakeholders' interests by ensuring the Shariah compliance of all activities and operations. The SSB possesses the authority to prevent non-Shariah compliant activities, thereby exerting influence over the board of directors (Mollah & Zaman, 2015). In addition, the banking industry is characterized by high information asymmetry (Abedifar et al., 2020; Hassan & Aliyu, 2018), necessitating a strong emphasis on disclosure to mitigate this imbalance. From an Islamic perspective on CG, there is a profound emphasis on full disclosure and transparency, irrespective of the firm's performance (Haniffa & Hudaib, 2007). This perspective aligns with the notion that IFIs should prioritise transparency in reporting their business activities.

Although the existing literature extensively examines the level and determinants of disclosure within IFIs (Azid & Alnodel, 2019; Elamer et al., 2020; Harun et al., 2020; Mergaliyev et al., 2021; Noordin & Kassim, 2019; Sencal & Asutay, 2021), the evidence regarding SCD and its link to CG mechanisms is relatively limited. Existing studies have certain limitations that need to be addressed. For instance, Kasim (2012) focused on SCD in Takaful companies within a single country (Malaysia), limiting the generalizability of the findings to other countries or types of IFIs. Abdullah et al. (2013), Aribi et al. (2019), Azid and Alnodel (2019) and Ab Ghani et al. (2023) primarily analysed SSB reports for a single year, which may not provide a comprehensive understanding of SCD practices over time. Additionally, Abdullah et al. (2013) primarily focused on the characteristics of the SSB when examining the impact of CG mechanisms on Shariah disclosure, neglecting other essential governance factors. Similarly, Azid and Alnodel (2019) did not consider the characteristics of the SSB at all and solely focused on board characteristics and ownership in their analysis. However, the role of the SSB in Islamic CG is significant. Furthermore, Ab Ghani et al. (2023), Aribi et al. (2019) and Kasim (2012) specifically investigated the level of disclosure without thoroughly exploring the specific CG mechanisms that can enhance SCD practices. Therefore, further research is needed to comprehensively examine the impact of a comprehensive set of governance factors, including the characteristics of the SSB and other relevant mechanisms, on Shariah disclosure.

The main objective of this study is to introduce a new measure of disclosure in the annual reports of Shariah-compliant corporations across different countries. Additionally, this study aims to fill the existing research gap by investigating the relationship between CG mechanisms and SCD. By addressing these research objectives, this study contributes to the existing literature in several significant ways. First, it expands the understanding of disclosure practices in Shariah-compliant corporations by introducing a new measure that goes beyond the traditional focus on SSB reports and considers the entirety of the annual reports. It distinguishes itself from previous studies that primarily focused on measuring CSR, risk and Shariah governance disclosure. Although the disclosure indexes developed by Ab Ghani et al. (2023), Sencal and Asutay (2021), Azid and Alnodel (2019) and Aribi et al. (2019) are the closest to our study, it is important to note that their main emphasis is on the disclosure information found within the SSB report. In contrast, our research goes beyond the confines of the SSB report and encompasses the entire annual report. Through our extensive review of annual reports, we have discovered that not all Shariah-related information is exclusively disclosed within the SSB report. Consequently, our study captures a wider spectrum of Shariah-related disclosures by examining the entirety of the annual report. This differentiation enables us to gain a more comprehensive understanding of the disclosure practices employed by IFIs.

Second, this study aims to provide first-time evidence on the levels of SCD among IFIs worldwide from 2010 to 2020. This research departs from other studies that have primarily focused on examining the Shariah disclosure level at a national or regional level (Aribi et al., 2019; Belal et al., 2015) due to their limited samples (e.g., Belal et al., 2015 analysed 1 IFI; Abdullah et al., 2013 examined 23 IFIs). In contrast, this study addresses this limitation by analysing a larger sample of IFIs, consisting of 89 banks located in 19 countries, resulting in a considerable number of observations. By investigating SCD practices across different countries and over an extended period, this study provides valuable insights into the changes in Shariah disclosure practices among IFIs worldwide. Furthermore, it paves the way for developing a benchmark of acceptable SCD practices that could be recognised globally. Using an unweighted disclosure index, the analysis reveals that the SCD level in the sample of IFIs is above average (57.38%) and has shown significant improvement from 2010 to 2020. While some variations exist in any given year, the overall results demonstrate a positive trend in the growth of SCD practices. The analysis of the four themes (SSB, audit process, Shariah compliance review and Zakat) of SCD and individual items also uncovers interesting patterns.

Third, by exploring the influence of broader CG mechanisms, such as the board and ownership structure, on SCD, this study sheds light on the factors that contribute to effective disclosure practices within IFIs. This examination goes beyond the sole emphasis on the characteristics of the SSB, providing a more comprehensive understanding of the governance structures that promote transparency and accountability. The study offers new findings on the relationship between CG mechanisms and SCD by considering board size, board independence, ownership (block holder, institutional and foreign ownership) and SSB characteristics (SSB size, reputation and expertise). These findings can assist IFIs in identifying how internal CG mechanisms can enhance or impede SCD by revealing the main drivers for disclosing Shariah compliance. The results indicate that foreign investors, institutional investors, board size, board independence, SSB reputation and SSB size are vital factors influencing the extent of SCD. However, block holder ownership and SSB expertise are found to have an insignificant relationship with SCD. The study also conducted several tests to examine the robustness of the main findings and the outcomes of these additional tests provide evidence of the main results' reliability.

Overall, this study provides valuable evidence that enhances the existing literature on SCD and contributes to a better understanding of disclosure practices in IFIs. By conducting a comprehensive examination of SCD practices across different countries over an extended period, a valuable benchmark can be developed to evaluate and compare SCD practices globally. This benchmark can serve as a reference point for policymakers, even in countries where local laws on Shariah governance are absent or have a dual system. The development of a standardised framework for evaluating and promoting consistent SCD practices can contribute to greater transparency, accountability and trust in the Islamic finance industry, benefiting both IFIs and their stakeholders. Additionally, the study's findings have implications for the development of regulatory frameworks, guidelines and best practices that can support the continued growth and sustainability of IFIs while ensuring adherence to Shariah principles.

The rest of this article proceeds as follows: Section 2 reviews the literature on the impact of CG on disclosure and develops the hypotheses. Section 3 outlines the construction of the disclosure index and describes the research design and data; Section 4 presents the empirical results, while Section 5 concludes.

2 | THE IMPACT OF CG ON DISCLOSURE

2.1 | Theoretical background

The existing literature suggests that corporate disclosure (CD) and CG mechanisms cannot be adequately explained using a single theory (Elamer et al., 2021; Enache & Hussainey, 2020). Consequently, to explore the relationships between disclosure and CG mechanisms, several studies (Elamer et al., 2021; Harun et al., 2020) have employed multiple theoretical perspectives, including agency, signalling, stakeholder, stewardship, resource dependency and legitimacy theories. For instance, agency theory has emerged to address the conflict of interest between managers and shareholders (Joseph et al., 2014). Previous research has demonstrated significant information asymmetry in the banking industry, particularly in IFIs compared to conventional counterparts (Abdelsalam et al., 2016; Farag et al., 2018; Safieddine, 2009). This disparity stems from the profit, loss and risk-sharing principles, coupled with the requirement for strict Shariah compliance. As a result, IFIs necessitate robust Shariah governance mechanisms and greater accountability to shareholders to ensure compliance (Safieddine, 2009). Shariah non-compliance can lead to reputational damage, diminished stakeholder confidence and even institutional failure or collapse, underscoring the need for diligent implementation of Shariah governance mechanisms (Safieddine, 2009). Furthermore, providing reliable and explicit information regarding IFIs' Shariah compliance can reduce information asymmetry and instil greater investor confidence.

Nevertheless, some scholars argue against exclusively relying on agency theory due to the religious element inherent in Islamic finance. They contend that agency theory overlooks the socio-cultural relationships that permeate financial institutions (Aguilera & Jackson, 2003). These socio-cultural dimensions encompass the mandate of complete Shariah compliance, which goes beyond conventional economic principles. Moreover, this study emphasises two critical aspects: Shariah-compliant disclosure (SCD) and Islamic CG, which align more closely with the stakeholder view. Unlike agency theory, stakeholder theory addresses conflicts of interest that may arise between managers and other stakeholders. Similarly, from a signalling theory perspective (Spence, 1973), disclosure serves to inform stakeholders about an institution's performance, including disclosure decisions. Therefore, SCD can signal an institution's Shariah compliance practices and the associated risk exposure to the market.

Additionally, based on legitimacy theory, the legitimacy of a firm's operations can determine its survival or failure (Aguilera & Jackson, 2003). Thus, IFIs must adhere to these rules and values to operate legitimately and be recognised as IFIs. Failure to meet acceptable standards may result in the Islamic public revoking their support and withdrawing funds and investments, leading to reduced profitability and overall performance of IFIs. Consequently, in managing legitimacy, IFIs are expected to disclose all Shariah compliance practices and activities to justify their continued existence in the market and maintain a high level of legitimacy (Maali et al., 2006). Lastly, from a resource dependence perspective, increased SCD can establish a crucial connection between IFIs and essential resources, such as access to finance and investors (Nicholson & Kiel, 2007). Accordingly, based on these theories, prior studies (Elamer et al., 2021; Enache & Hussainey, 2020; Ntim et al., 2012) argue that employing different theoretical viewpoints is complementary rather than competitive. Therefore, this study adopts a multi-theoretical framework to investigate the relationships among the research variables (i.e., SCD and CG mechanisms) in IFIs.

2.2 | Hypotheses development

2.2.1 | SSB structure and Shariah compliance disclosure

The SSB serves as a deterrent against Shariah non-compliance practices in IFIs. The effectiveness of Shariah compliance in IFIs depends on the decisions made by the board of directors, with the presence of the SSB aiming to enhance the internal mechanisms of IFIs by prioritising Shariah compliance issues. From a theoretical perspective, agency theory suggests that the structure of the SSB can mitigate agency conflicts between managers and owners. For instance, a larger SSB with diverse expertise can contribute to better monitoring and an increase in Shariah-compliant disclosure (SCD). Therefore, IFIs with larger SSB sizes, encompassing a variety of skills and experiences, are more likely to achieve better disclosure. Moreover, an SSB with an accounting or financial background can signal better management monitoring (signalling theory), which in turn aids in securing critical resources (resource dependence theory) by ensuring complete Shariah compliance at all levels. This commitment to Shariah compliance provides legitimacy, as stakeholders feel assured and have confidence in the financial institutions (stakeholder and legitimacy theories). Legitimised operations help reduce agency conflicts and information asymmetry (agency theory), thereby improving SCD.

Empirically, several studies have shown a positive relationship between SSB size and disclosure in IFIs (e.g., Grassa et al., 2018; Mallin et al., 2014; Noordin & Kassim, 2019). For example, Grassa et al. (2018) investigated the relationship between SSB size and product and service disclosure, finding a significant positive association. However, other studies have reported a negative relationship or no significant relationship (Abdullah et al., 2013; Harun et al., 2020). Additionally, Nawaz and Virk (2019) emphasised the importance of SSB reputation in IFIs, suggesting that reputed Shariah scholars can be used by management to attract potential investors seeking Shariah compliance. They also recommended the inclusion of non-Shariah experts in the SSB or merging the SSB with the regular board to prevent entrenched managers from colluding and pursuing their own agendas. Several studies (Abdullah et al., 2013; Noordin & Kassim, 2019) have documented a significant positive link between SSB expertise and the level of disclosure. Based on the theories discussed above and the empirical evidence, the following hypothesis is proposed:

> **Hypothesis 1.** *The structure of the SSB (including size, reputation and expertise) positively influences the level of Shariah compliance disclosure in IFIs.*

2.2.2 | Board structure and Shariah compliance disclosure

The board of directors plays a critical role as a robust CG mechanism in restraining management behaviour and reducing agency costs (Joseph et al., 2014). From an agency theory perspective, a smaller board of directors is associated with lower agency costs and reduced disagreements among board members. CG studies have demonstrated that a smaller board size is preferred as it enhances coordination and improves communication among members (Elamer et al., 2020). On the contrary, other studies (Grassa et al., 2018; Harun et al., 2020) have shown that a larger board size is preferred from the standpoint of resource dependence theory, as a larger board encompasses members with diverse experiences and backgrounds. Additionally, the theory suggests that the presence of independent directors can mitigate information asymmetry (Elamer et al., 2020). Moreover, signalling, legitimacy, stakeholder and resource dependence theories posit that a larger board and independence can enhance SCD to signal to the public about an IFI's adherence to Shariah principles.

Existing empirical studies (Elamer et al., 2020; Grassa et al., 2018; Harun et al., 2020) have presented mixed findings, ranging from a significant positive link to a negative relationship, regarding the relationship between SCD and board structure. However, studies specifically analysing the relationship between SCD and board structure are scarce (Azid & Alnodel, 2019). Therefore, this study presents a unique opportunity to contribute to the existing literature. Building upon the arguments and findings from prior disclosure studies, as well as signalling and agency theory, the present study expects that a larger board size and independence will positively influence the level of disclosure. This is because the delegation of tasks can be assigned effectively, specifically pertaining to SCD, to attract potential investors and customers. Thus, the subsequent hypothesis for this study is:

> **Hypothesis 2.** *Board structure (including board size and independence) positively influences the level of Shariah compliance disclosure in IFIs.*

2.2.3 | Ownership structure and Shariah compliance disclosure

Earlier literature (Elamer et al., 2020; Elamer et al., 2021; Eng & Mak, 2003; Grassa et al., 2018) has argued that ownership structure is a crucial mechanism that affects disclosure practices. Theoretical perspectives suggest that block holder ownership can influence disclosure in two distinct ways. First, agency theory posits that block shareholders face fewer agency conflicts as they have direct access to critical information, thus reducing the need for higher disclosure (Elamer et al., 2020). Similarly, legitimacy theory suggests that firms with large block shareholders have less incentive to demonstrate accountability to the public, potentially resulting in reduced corporate disclosure. Second, signalling, stakeholder and resource dependence theories posit that block shareholders may enhance SCD to signal the external environment about the IFI's accountability, secure vital resources and build stakeholders' trust (Elamer et al., 2020).

Moreover, Grassa et al. (2018) highlight that institutional investors are the most influential owners in the banking sector. Consequently, managers are expected to disclose detailed information to attract institutional investors, who hold significant power and have specific expectations (Chen & Roberts, 2010). Therefore, the presence of institutional investors can improve SCD practices. Furthermore, foreign stockholders may face disadvantages compared to domestic stockholders in terms of corporate disclosure (Choe et al., 2005). However, as established by Elamer et al. (2021), a high percentage of foreign investors, particularly in an unstable political environment with corruption issues and regulations, can help reduce agency conflicts, resulting in a positive effect on disclosure levels. Similarly, a high percentage of foreign ownership in IFIs can incentivise managers to disclose more Shariah compliance information and provide web pages in English to facilitate informed decision-making by foreign stakeholders and potential investors. Based on the discussion and findings presented above, the following hypothesis will be tested:

> **Hypothesis 3.** *Ownership structure (including block holder, institutional and foreign ownership) positively influences the level of Shariah compliance disclosure in IFIs.*

3 | RESEARCH DESIGN AND CONSTRUCTION OF THE DISCLOSURE INDEX

3.1 | Construction of the disclosure index

A self-constructed disclosure index was developed to assess the extent of SCD. Previous literature (Azid & Alnodel, 2019; Haniffa & Hudaib, 2007; Maali et al., 2006; Mergaliyev et al., 2021; Sencal & Asutay, 2021) has explored diverse strategies in developing disclosure indexes. In this regard, this research adopts the suggested index by Aribi et al. (2019) and Noordin and Kassim

(2019), which focused on the accountability of IFIs through SSB reports and the influence of SSB composition on Shariah governance disclosure, respectively.

The current study examines the level of Shariah disclosure of IFIs worldwide. To fulfil this objective, following prior studies (Belal et al., 2015; Haniffa & Hudaib, 2007; Harun et al., 2020; Maali et al., 2006; Mergaliyev et al., 2021), the research method adopted is content analysis. Krippendorff (2004, p. 18) defined content analysis as 'a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use.'

A checklist of disclosure items for SCD indicators was developed based on guidelines stated by industry-standard setters such as AAOIFI, BNM, IFSB and relevant prior studies (Belal et al., 2015; Haniffa & Hudaib, 2007; Maali et al., 2006; Mergaliyev et al., 2021). The study's SCD index was built through the following two main steps:

I. Initially, the checklist developed by Aribi et al. (2019) was adopted, which includes a list of components that should be disclosed by Islamic financial institutions (IFIs) based on stakeholder expectations. These components were grouped into five themes: Report format, SSB background, audit process, unlawful transactions and zakat.
II. The adopted checklist from step (I) was then modified to develop the SCD Index. Themes and sub-themes that were not explicitly linked to Shariah compliance, such as report format and pictures of members, were discarded. Themes such as report format and SSB background were summarised and grouped under SSB information. Similarly, unlawful transactions were summarised under the Shariah compliance review.

While the disclosure indexes developed by Sencal and Asutay (2021), Azid and Alnodel (2019) and Aribi et al. (2019) are relevant to our study, it is important to note that their emphasis is primarily on the disclosure information contained within the SSB report. In contrast, our research extends beyond the SSB report and encompasses the entire annual report. Additionally, it is worth noting that Aribi et al. (2019) focused primarily on the accountability of IFIs, which resulted in the inclusion of non-Shariah-related information in their disclosure index, such as report format (e.g., title, addressee) and background information on SSB members (e.g., member pictures). In contrast, our study's disclosure index is specifically designed to comprehensively measure SCD, ensuring a more focused approach. To achieve this, we have combined relevant themes and checklists developed by Sencal and Asutay (2021), Azid and Alnodel (2019), Aribi et al. (2019), Belal et al. (2015), Haniffa and Hudaib (2007) and Maali et al. (2006). Furthermore, we have incorporated relevant guidelines from standard setters such as AAOIFI and IFSB. This holistic approach allows us to capture the essential aspects of SCD in our measurement framework.

The disclosure checklist consists of four themes and 23 sub-themes. All indicators can be found in Table A1 in the appendix. Two approaches can be utilised to compute the extent of SCD: un-weighted index (binary coding) and weighted index (ordinal coding). The unweighted approach involves assigning a weight of one to items that are disclosed and zero to items that are not disclosed in the annual reports. On the other hand, the weighted approach assesses the disclosed items on a gradual scale, taking into account qualitative information, quantified information, or a combination of both. Each approach has its advantages and disadvantages.

In our research, we adopt the unweighted approach to calculate SCD for several reasons. Firstly, this approach helps determine whether each item is disclosed or not, which is suitable for our study that focuses on the presence or absence of SCD items rather than the quality of Shariah-related disclosures. Secondly, the un-weighted approach is easily replicable and less subjective since it assigns equal scores and importance to all items (Mergaliyev et al., 2021). Thirdly, previous studies have yielded similar results regardless of the chosen approach (Elamer et al., 2020; Ntim et al., 2012). Lastly, the un-weighted approach has been widely used in recent studies related to this topic, allowing for clear comparisons with the results of our study and existing disclosure studies among IFIs (Belal et al., 2015; Harun et al., 2020; Mergaliyev et al., 2021).

The following method is used to measure the SCD level of the sample of IFIs:

$$\mathrm{SCD}\,(\mathrm{i},\mathrm{t}) = \sum\nolimits_{i=0}^{N} \; Score\,(j), \tag{1}$$

where SCD stands for Shariah Compliance Disclosure, i is the checklist outcome for the individual IFI, t indicates the year, N is the index number of items and J attitudes of each item included in the checklist. The actual mark for every IFI was apportioned by the maximal score and standardized as follow:

$$\mathrm{SCD}\,(\mathrm{I},\mathrm{t}) = \sum \left(\frac{\sum_{i=0}^{N} \; Score\,(j)}{N} \right) x100 = \frac{total\,score(i,t)}{N} x100. \tag{2}$$

Table 1 reports descriptive statistics of SCD practices in IFIs over the period from 2010 to 2020 in panel A and further across countries in panel B. The SCD values report a mean value of 57.38% spanning from 4% as the lowest to 91% as the highest. There is also a clear improvement of SCD levels over time, indicating that IFIs have recognized the need for communicating Shariah compliance information. Furthermore, the average SCD score of the SCDI improved, from 51.6% in 2010 to 63.8% in 2020 (increment of 12.2%), with a mean disclosure level of 57.38%.

The overall mean disclosure is 57.38%, and this finding shows an above-average SCD level. It is higher than prior studies (Belal et al., 2015; Harun et al., 2020), which found lower or below-average disclosure levels in IFIs. The higher level could be because these studies examined other kinds of disclosure. For instance, CSR disclosure by Harun et al. (2020). However, the study findings are less than the outcomes documented by previous studies (Abdullah et al., 2013) for sampled Islamic banks at 66 per cent. The higher overall average Shariah-related disclosure level documented by the literature (Abdullah et al., 2013) could be because they separated between SSB-related and zakat disclosures. Merging the two into one could reduce the average disclosure, especially as they have reported low zakat disclosures. In addition, their study sample (23) and the scope (Malaysia and Indonesia) could be contributing factors. In contrast, this study sample is larger (89) and across 19 countries.

Furthermore, the results contradict the findings of different studies (Aribi et al., 2019; Kasim, 2012), who also found lower than expected Shariah-related information and a level of the disclosure below average. These results can be explained by their sample size (12 and 7, respectively) and scope. Nevertheless, the above-average outcome is relatively consistent with (Elamer et al., 2020), who examined the effect of SSB and governance structures on the level of operational risk disclosure practices of 63 IBs in MENA countries. They reported that the mean disclosure level was above average at 53.73%.

Altogether, the findings reveal that most IFIs recorded SCD levels increase over time. The result means an ascending trend in the mean SCD being communicated by the sample IFIs. This increase may be because IFIs are more aware of the need to ensure Shariah compliance for sustainable growth, encouraging them to divulge more information about their Shariah compliance.

As evident in panel B of Table 1, Oman had the maximum overall SCD level, followed by Jordan, Bahrain and the Maldives. These top four countries disclosed over 70% of Shariah compliance information. The Bahamas was ranked eighteenth, recording the minimum SCD level in the study sample with only 24% Shariah compliance information communicated. The high disclosure level could be specific to their mandatory adoption of AAOIFI standards and guidelines for Oman, Jordan and Bahrain. Furthermore, it can be argued that Bahrain's high level could be due to Bahrain being the host country for AAOIFI. The standards have been practical since 1991. Hence, the disclosure level is not surprising. Also, the high disclosure level of the two IFIs in Oman right from the start could be because they only started operating in 2013 and 2014. Hence, they were more aware of the need to divulge more Shariah compliance information to increase stakeholders' trust in dealing with them. Maldives' higher SCD level, despite following AAOIFI standards voluntarily and being a Muslim country, does not indicate that the Maldives Islamic bank wants to be seen as religious. Instead, the higher SCD level shows a genuine dedication by the Maldives Islamic bank to communicating Shariah information. Although Sudan is one country that adopts the AAOIFI standards mandatorily, the disclosure level is surprising because all IFIs in Sudan scored less than 50%. Also, the level of SCD was the same over the 11 years except for the United capital bank year 2018.

Overall, the mean of SCD in five countries (Bahrain, Qatar, Sudan, Jordan and Oman) that adopt the AAOIFI standards adopt the AAOIFI is higher compared to countries that do not follow the AAOIFI standards. This outcome is consistent with (Aribi et al., 2019), who reported similar values. Further analysis also reveals that the average SCD level for GCC countries is approximately 60% compared to 56% for non-GCC countries. Similar results were documented by (Elamer et al., 2020), reporting higher operational risk disclosure among GCC countries than non-GCC countries. This finding could be because the Gulf region is the largest domicile for Islamic finance assets, with almost 49 per cent share in global Islamic finance assets (Islamic Financial Services Board, 2021) and serves as an ideal market for IFIs. Therefore, the result is not surprising; however, a SCD level of 56% for non-GCC countries is still high, especially compared to the 60% for GCC countries. This outcome reinforces the view that Islamic finance's success is necessarily not dependent on GCC or Muslim countries (AlAbbad et al., 2021). However, these findings indicate that a universal standard such as the AAOIFI standards must be implemented to ensure invariable disclosure levels by IFIs (Nawaz & Virk, 2019; Shahzad Virk et al., 2022).

Our SCDI is split into four themes. These four themes are (i) SSB information, with six items; (ii) Audit process, with eight items; (iii) Shariah compliance review, with six items and (iv) Zakat, with three items. Panel A of Table 2 shows SCD for each of the four themes and it is evident that there are differences among the sampled IFIs regarding the extent of disclosure of each theme.

TABLE 1 Average level of disclosure across countries and years

Panel A: Average level of disclosure over time					
Year	Mean	SD	Min	Max	*N*
2010	51.6	18.9	9.0	83.0	56
2011	51.5	19.5	4.0	87.0	62
2012	54.6	17.3	4.0	87.0	66
2013	56.8	16.2	13.0	87.0	70
2014	56.5	16.9	13.0	87.0	79
2015	57.6	16,9	13.0	91.0	81
2016	58.9	16.2	13.0	91.0	85
2017	58.3	17.2	13.0	91.0	87
2018	59.1	16.9	4.0	91.0	87
2019	60.8	16.2	26.0	91.0	85
2020	63.8	14.7	26.0	91.0	49
Total	57.38	17.20	4.00	91.00	807

Panel B: Average level of disclosure across countries						
Country	Mean	SD	Min	Max	*N*	Ranking
Bahamas	23.6	7.3	4.0	26.0	9	18
Bahrain	**73.2**	10.1	52.0	87.0	117	**3**
Bangladesh	54.8	16.2	22.0	78.0	80	9
Brunei	63.8	3.1	61.0	70.0	9	6
Egypt	47.0	18.1	35.0	83.0	6	15
Indonesia	48.9	6.3	39.0	65.0	70	14
Jordan	**74.5**	14.3	26.0	91.0	31	**2**
Kuwait	55.9	12.9	26.0	78.0	59	8
Malaysia	63.9	12.5	22.0	78.0	130	7
Maldives	**71.6**	3.9	65.0	74.0	9	**4**
Nigeria	68.7	2.3	65.0	70.0	8	5
Oman	**83.8**	4.5	78.0	87.0	14	**1**
Pakistan	51.3	17.0	4.0	74.0	67	13
Qatar	54.5	7.4	43.0	65.0	42	10
Saudi Arabia	30.2	8.1	22.0	48.0	42	17
Sri Lanka	52.9	5.5	43.0	57.0	10	11
Sudan	35.5	14.4	13.0	48.0	29	16
UAE	54.8	14.3	30.0	74.0	46	9
UK	51.9	10.1	35.0	65.0	29	12
Total	57.3	17.20	4.0	91.0	807	

Specifically, 72.24% of the sampled IFIs disclosed SSB information, while 53.46% of the sampled IFIs disclosed their audit process information. The level of disclosure related to Shariah compliance review and Zakat information is 51.53% and 50.61%, respectively. The results are higher than the (Aribi et al., 2019) findings; they documented 0.58 for SSB background and 0.4 for both the audit process and Zakat. This difference in findings could be due to the size of their sample (12) and scope. Therefore, extending their sample and scope could result in similar outcomes.

Further analysis in panel B of Table 2 reveals that the sampled IFIs communicate more SSB information than other SCD information. It comprises information such as

TABLE 2 Themes analysis of Shariah Compliance Disclosure (SCD)

Panel A: The level of SCD by themes					
SCD index	**No. of items**	**Minimum**	**Maximum**	**Mean**	**Ranking**
SSB information	6	0	100	72.24	1
Audit process	8	0	88	53.46	2
Shariah compliance	6	0	83	51.53	3
Zakat	3	0	100	50.61	4

Panel B: Level of disclosure sub-theme analysis		
SCD index	**%**	**Ranking**
Names of the Shariah Supervisory Board (SSB) members	93.43%	4
Profile of each SSB member	41.39%	17
Duties, responsibilities and authorities of SSB members	98.02%	**2**
Renumeration of SSB members	53.28%	13
Report of SSB	91.33%	5
The report signed by all members	56.01%	11
Number of meetings held	45.60%	15
Scope of audit (nature of work performed)	95.42%	**3**
Examination of documents based on sample	20.07%	21
Examination of all documents	73.73%	8
Shariah compliance opinion (contracts, transactions, profit and loss allocation)	87.36%	6
Provision of fatwa (consultancy) for new products	35.07%	19
Follow-up Fatwa	29.37%	20
Existence or liaise with Shariah internal auditor	38.66%	18
The main business activities are committed to Shariah principles	99.38%	**1**
Disclosing Shariah non-compliance events	67.16%	9
How non-halal income is disposed or intended to be disposed	59.98%	10
Policy for providing Gard al-Hassan (benevolent loans)	3.35%	22
Debt policy for dealing with insolvency clients is designed per Shariah	0.00%	23
Islamic financial products descriptions	78.81%	7
SSB attestation that Zakat has been computed according to Shariah	55.14%	12
SSB verification that sources and uses of Zakat are per Shariah	44.49%	16
Zakat to be paid by individuals	52.17%	14

(a) names of SSB members, (b) profile of SSB, (c) duties, responsibilities and authorities of SSB, (d) remuneration of SSB, (e) SSB report and (f) report signed by all members. The minor information disclosed by the sampled IFIs relates to zakat information. Zakat is central and key to Islamic believers, including the IFIs, so it is surprising to be the least disclosed theme. The reason for being the lowest disclosure theme could be due to the Islamic ethics governing Zakat, which promotes the concept that giving should be done in private and not publicized so as not to harm the receiver's dignity or the giver's primary intention. Besides, Zakat giving is primarily informal and unstructured (Platonova et al., 2018).

Additionally, the possible reason for the sampled IFIs divulging more information regarding SSB may be the importance of SSB among IFIs. Though their existence does not automatically imply Shariah compliance with the IFIs, communicating more information regarding SSB assures stakeholders that management is concerned with SSB's role. However, reviewing annual reports, some IFIs did not disclose any additional information about SSB apart from the SSB report. Perhaps, management perceives the SSB reports as adequate for stakeholders' interests. Therefore, the SSB needs to enlighten the management of IFIs on the need for other SCD information. For instance, the audit process and Shariah compliance review are essential for stakeholders to ascertain the steps undertaken to guarantee the Shariah compliance of all activities. Similarly, auditing Zakat information is vital to the stakeholders; hence it will require the SSB opinion on Zakat-related information (calculation and distribution) to be accurate and follow Shariah. These results suggest that the SSB must enlighten management about the essence of high disclosure level to increase stakeholders' confidence in all activities at all levels that are in line with Shariah principles.

The disclosure levels of each item among the sampled IFIs reported in panel B of Table 2 shows a disclosure level ranging from 0% to 99.38% as the highest score. The main business activities that are committed to Shariah principles are the highest items (99.38%), followed closely by duties, responsibilities and the authority of SSB members (98.02%). Besides, the audit scope, SSB names and SSB report also show over 90% disclosure level among the sample IFIs. Also, 87% of the sample communicated about Shariah compliance opinion. A high disclosure level for these items is anticipated, mainly as the primary objective of reporting in IFIs is to communicate that all operations align with Shariah principles. However, from the entire sampled IFIs, none disclosed information concerning debt policy for dealing with insolvency clients is designed per Shariah. This outcome is quite surprising because the products and services of IFIs such as Mudaraba (profit sharing) and Ijara (leasing), there could be instances when the client could fail to make payment on time or even become insolvent. Therefore, users will be interested in how IFIs deal with such situations in a Shariah way. As established in the Quran, 'If the debtor is in a difficulty, grant him time till it is easy for him to repay. But if ye remit it by the way of charity, that is best for you if ye only knew' (Qur'an, 2:280). This outcome implies that communicating such a policy is vital for stakeholders.

Additionally, only 3.35% of the sample communicated about the provisioning policy of the 'qard al-hassan' (benevolent loans). According to Haniffa and Hudaib (2007), qard al-hassan is peculiar to IFIs but could be misused if no explicit policy exists. These findings of IFIs not communicating about qard al-hassan and debt policy for insolvency clients are surprising. Notably, (Haniffa & Hudaib, 2007; Maali et al., 2006) documented the same outcomes a couple of decades ago. They would have anticipated that IFIs would be more aware of the need to disclose such information. Equally, Belal et al. (2015) also found that the Islami Bank Bangladesh Limited did not disclose some items, including qard al-hassan (interest-free loans) and how the bank deals with insolvent clients. Besides, the communication of non-Shariah earnings, expenditures or activities strengthens the transparency of the IFIs. Also, approximately 67% of the sample IFIs disclosed Shariah non-compliance events. However, of the 67% disclosing non-Shariah events, only approximately 60% communicated how the non-Shariah income was disposed of. Also, approximately 79% disclosed Islamic financial products descriptions in the study sample, consistent with the 79.72 reported by Grassa et al. (2018). This outcome is encouraging to see primarily because of the non-Muslims' interest (AlAbbad et al., 2021) and even some Muslims who do not have an in-depth understanding of Arabic. Therefore, this description is expected to help further understand more about Islamic financial products. Again, disclosing the remunerations of SSB members is anticipated to enhance the transparency of IFIs. 53% of the sample IFIs communicated SSB members' remuneration, slightly higher than the 50% documented by Aribi et al. (2019). Also, the average number of meetings is less than average (46%), which is bad for IFIs. It is essential to divulge the number of meetings to ascertain how frequent and efficient they are in discussing or addressing Shariah-related concerns. However, the outcome is better than Aribi et al. (2019), who reported that only two among their sample reported the number of meetings.

Overall, with IFIs practices still not being viewed as truly 'Islamic' (Khan, 2010), the SSB should encourage management to disclose all relevant Shariah information to avoid any doubt by stakeholders or creating any misconception. Mainly, information concerning debt policy for dealing with insolvency clients had none of the sample IFIs disclosed.

3.2 | Data and method

To address the research questions, all data was obtained from annual reports from 2010 to 2020 regarding SCD and CG mechanisms collected from IFI's website. The selection of the study's sample size was based on the trade-off between manual data collection limitation and the need to have significant data to fulfil the study's aim. However, one main concern about a statistical problem is the possibility of survivorship bias within the sample (Ntim et al., 2012). Hence, the study variables were gathered each year-end for 11 years to avoid concentrating on survived IFIs. In fact, 157 IFIs identified as Islamic banks and financial institutions were examined one by one via website addresses supplied by the Fitch Connect and Osiris database to verify if the said IFIs were fully-fledged with one hundred percent Shariah-compliant assets. The selected IFIs were checked individually for data

TABLE 3 Definitions of variables

Variables	Measurement	Sources	References
Dependent variables			
Shariah compliance disclosure index (SCDI)	The percentage of Shariah compliance disclosure by IFIs	Annual report	AAOIFI, BNM; IFSB; Noordin and Kassim (2019); Aribi et al. (2019)
CG variables			
Block holder ownership	Shareholder with 5% holding or more	Annual report	Elamer et al. (2021); Grassa et al. (2018)
Institutional ownership	% Of shares owned by institutional shareholders	Annual report	Harun et al. (2020); Grassa et al. (2018)
Foreign ownership	% Of shares owned by foreign shareholders	Annual report	Harun et al. (2020)
Board size	Number of board members	Annual report	Elamer et al. (2021); Harun et al. (2020)
Board independence	The proportion of independent non-executive directors on the board	Annual report	Elamer et al. (2021); Nawaz (2019)
Shariah Supervisory Board (SSB) size	Number of SSB members	Annual report	Nawaz et al. (2021); Harun et al. (2020)
Shariah Supervisory Board (SSB) reputation	Number of reputable Shariah scholars on the SSB, as a % of the total SSB members.	Annual report	Nawaz et al. (2021)
Shariah Supervisory Board (SSB) expertise	Dichotomous: if any of SSB member have an economic or accounting knowledge: 1; otherwise: 0.	Annual report	Shahzad Virk et al. (2022); Nawaz et al. (2021)
Control variables			
Firm size	Log of total asset	Osiris/Fitch connect	Nawaz (2019); Mergaliyev et al. (2021)
Leverage	Total debt to total equity	Osiris/Fitch connect	Nawaz (2019); Mergaliyev et al. (2021)
Operating region	Dummy (Gulf vs. Non-gulf)		Elamer et al. (2020); Nawaz (2019)
AAOIFI standards adoption	Dummy (mandatory vs. voluntary)	Annual report	Grassa et al. (2018)

availability from 2010 to 2020. For consistency, based on the study's objectives, IFIs without SSB were excluded, for instance, IFIs in Iran and Turkey (Grassa et al., 2018; Mallin et al., 2014). The final sample size is 89 IFIs operating in 19 countries and consisting of 807 bank-year observations and unbalanced panel data from 2010 to 2020.We employ the feasible generalised Panel-data model in examining whether SCD variations are influenced by CG variables. This model was used to control for autocorrelation within panels and cross-sectional correlation and heteroskedasticity across panel which cannot be addressed by a fixed effects model which may yield inconsistent estimated of the parameters (Bai et al., 2021; Reed & Ye, 2011). We estimate the following regression model:

$$\mathrm{SCDI}_{it} = \alpha_0 + \beta_1\,\mathrm{CG\ Mechanisms}_{it} + \beta_2\,\mathrm{Additional}\mathit{Variable}_{it} + \beta_3\,\mathit{Year\ Fixed\ Effect} + \varepsilon_{it}, \tag{3}$$

where the dependent variable is 'SCDI' SCD Index, CG mechanisms is a set of variables including block ownership, institutional ownership, foreign ownership, board size, board independence, SSB size, SSB reputation, SSB expertise and additional variables are included to control for firm-specific and country characteristics. β is the vector of coefficients; α and ε are an individual intercept and error term respectively. In what follows, we provide an overview of all the explanatory variables included in X. See Table 3 for the definition of variables.

The study used several characteristics related to ownership structure, board structure and SSB structure as explanatory variables to measure an IFI's governance effectiveness. The ownership structure effects are measured using three indicators: (1) Block holder ownership (BLOCK OWN), measured as a shareholder with five percent holding or more; (2) Institutional ownership (INSTI OWN), measured as a ratio of shares owned by institutional shareholders; (3) Foreign ownership (FOR OWN) measured as a proportion of shares owned by foreign shareholders (Elamer et al., 2021; Harun et al., 2020). The board structure effects are measured using two variables: (1) Board size (BOARD SIZE), the total number of a board of directors' members. (2) BOD independence (BOARD IND), the ratio of independent non-executive directors on the board (Elamer et al., 2021; Nawaz, 2019). The SSB structure effects are measured using three indicators: (1) SSB size (SSB size), measured as the total number of SSB members; (2) SSB reputation (SSB REP), measured as a percentage of reputable Shariah scholars on the SSB; (3) SSB expertise (SSB EXP), measured using a dummy variable. It takes the value of 1 if any SSB member has finance, economic or accounting knowledge and 0 otherwise (Nawaz et al., 2021; Shahzad Virk et al., 2022).

Finally, we control for different firm specific factors: *Firm size* is one of the most popular control variables employed as a CG disclosure determinant. A significant strand of empirical literature documented a positive relationship between firm size and disclosure level (Elamer et al., 2020; Grassa et al., 2018).

Leverage is known as a vital determining factor of the level of disclosure practices (Grassa et al., 2018; Harun et al., 2020; Mergaliyev et al., 2021). According to the agency theory, highly leveraged firms could increase monitoring costs. To lessen these costs and prove their ability to meet creditors' obligations, companies will communicate extra information to gain their confidence (Ntim & Soobaroyen, 2013).

3.2.1 | Operating region

The Gulf region still has the most considerable Islamic finance assets, with almost a 49 per cent share in global Islamic finance assets (Islamic Financial Services Board, 2021) and serves as a perfect market for IFIs. Prior studies have documented variations in the performance of IFIs operating in Gulf and non-Gulf countries (Elamer et al., 2020; Nawaz, 2019; Nawaz et al., 2021). For instance, Elamer et al. (2020) documented increased operational risk disclosure in GCC countries than in others in the MENA region. We follow prior study and create a dummy variable equals 1, if the IFI in one of the Gulf countries and zero otherwise. (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, UAE), 0 otherwise.

AAOIFI standards does not have the power to enforce its standards and guidelines on IFIs. Hence, IFIs can choose to adopt AAOIFI, IFRS or their own country's standards (Nawaz et al., 2021). Prior literature such as Grassa et al. (2018) reported a negative influence of AAOIFI standards on product and service disclosure among 78 IBs across 11 countries. Therefore, following Grassa et al. (2018), the AAOIFI standard is measured using a dummy variable, 1, if the IFI adopts AAOIFI standards, 0 otherwise.

TABLE 4 Descriptive statistics of all variables

Variable	Mean	Std. dev.	Min	Max
SCDI	57.40	17.20	4.00	91.00
BLOCK OWN	1.987	1.645	0	7
FOREIGN OWN	12.952	26.129	0	100
INSTI OWN	55.436	38.689	0	100
BOARD SIZE	8.638	3.384	3	26
BOARD IND	30.028	28.494	0	100
SSB SIZE	4.252	2.303	1	15
SSB REP	15.694	24.853	0	100
SSB EXP	0.344	0.475	0	1
FIRM SIZE	3.322	0.887	0.269	4.925
LEVERAGE	8.011	5.564	−0.00	42.96
OPE REG	0.397	0.49	0	1
AAOIFI STD	0.263	0.441	0	1

Note: All variables are defined as follows: Shariah compliance disclosure (SCD), block holder ownership (BLOCK OWN), foreign ownership (FOREIGN OWN), institutional ownership (INSTI OWN). board size (BOARD SIZE), board independence (BOARD IND), SSB size (SSB SIZE), SSB reputation (SSB REP), SSB expertise (SSB EXP), operating region (OPE REG) adoption of AAOIFI standards (AAOIFI STD).

Table 4 provides the findings for descriptive statistics for all study variables employed to fulfil the research aims and objectives. The summary analysis indicates the distribution of all research variables.

Ownership structure variables, the mean number of block holders' investors are approximately 2, ranging from 0 to 7. This finding suggests that some IFIs do not have block holder investors. The reported highest of 7 block holders' ownerships in the sample IFIs supports the findings of prior studies (Grassa et al., 2018; Harun et al., 2020). The institutional ownership average value is 55%, ranging from 0% to 100%. This outcome suggests that institutional investors among IFIs hold more significant stakes and could motivate them to monitor management effectively. The result is relatively similar to the

TABLE 5 Pearson's correlation matrix

	SCDI	BO	FO	IO	BS	B IND	SSB S	SSB R	SSB E	FS	LEV	OR	AS
SCDI													
BLOCK OWN	0.082**												
FOREIGN OWN	0.308***	0.092***											
INSTI OWN	0.213***	0.034	−0.104***										
BOARD SIZE	0.107***	−0.044	0.170***	−0.392***									
BOARD IND	0.261***	0.000	0.119***	0.092***	−0.089**								
SSB SIZE	0.085**	−0.228***	−0.042	−0.109***	**0.522*** **	0.098***							
SSB REP	0.171 ***	0.142***	0.178***	−0.120***	0.101**	0.002	−0.103***						
SSB EXP	0.039	0.010	−0.239***	0.264**	−0.238***	0.188***	0.157***	−0.013					
FIRM SIZE	−0.114 ***	−0.057	−0.054	−0.170*	0.070**	0.081**	0.192***	0.133***	0.011				
LEVERAGE	0.104***	−0.139***	−0.226***	0.160***	0.137***	0.123***	0.362***	−0.074**	0.211***	0.150***			
OPE REG	0.112***	0.092***	0.249***	−0.235***	0.037	0.400***	−0.182***	0.474***	−0.267***	0.283***	−0.368***		
AAOIFI STD	0.299***	0.160***	0.455***	−0.030***	0.054	0.228***	−0.202***	0.248***	−361***	−191**	−0.243***	0.414***	

Note: Variables are defined as: Shariah compliance disclosure index (SCDI), block holder ownership (BO), foreign ownership (FO), institutional ownership (IO). board size (BS), board independence (B IND), SSB size (SSB S), SSB reputation (SSB R), SSB expertise (SSB E), firm size (FS), LEV (LEVERAGE), operating region (OR) adoption of AAOIFI standards (AS). ***, ** and * indicate that correlation is significant at the levels 1%, 5% and 10% respectively.

52% institutional ownership documented by Mergaliyev et al. (2021).Moreover, foreign ownership ranged from 0% to 100%, with an average value of approximately 13%. This result is lower than the 19% reported by Harun et al. (2020).

Concerning board structure variables, the mean board size is 9, with the maximum and minimum board sizes 26 and 3, respectively. The average board size is similar to most relevant studies (Mergaliyev et al., 2021; Mollah & Zaman, 2015; Nawaz et al., 2021; Nawaz & Virk, 2019). Additionally, the average percentage of independent directors is 30.03%, ranging from 0% to 100%. This result suggests that some IFIs, such as Liquidity Management Centre (Bahrain), have no independent board directors. In contrast, others have only independent boards of directors, such as Alliance Islamic bank (Malaysia). The average independent director ratio (30.03%) is smaller than the 65% documented by Nawaz et al. (2021).

Regarding SSB structure variables, the average SSB size is 4, with the maximum and minimum SSB size being 1 and 15, respectively. This result suggests that some IFIs had only one SSB member, such as Orix modaraba (Pakistan), while others have as high as 15, for instance, BIMB Holdings (Malaysia). The mean average implies that most of the sample IFIs comply with the AAOIFI Governance Standard No.1, asserting that the recommended SSB size in IFIs should have at least three members. The mean of the SSB size supports most relevant studies (Mollah & Zaman, 2015; Nawaz et al., 2021).

The means ratio of reputable SSB members is approximately 16%, ranging from 0% to 100%. This result suggests that some IFIs did not have any reputable SSB members, for instance, Amana bank (Sri Lanka), while others had all SSB members as reputable scholars, such as Meezan Bank (Pakistan). The average reputable SSB members ratio (15.69%) is less than the 26% found by Nawaz et al. (2021) and 50% reported by Shahzad Virk et al. (2022). Concerning SSB expertise, as a dummy variable, the mean value is 34%.

Finally, regarding control variables, the average values ascertained are 3.32 for firm size and 8.01 for leverage which are very similar to average results reported by Mergaliyev et al. (2021) and Harun et al. (2020). The correlation matrix, reported in Table 5 shows that there is no multicollinearity problems among study variables (Elamer et al., 2020).

4 | RESULTS

Model (1) of Table 6 presented the primary regression model with some mixed results regarding the impact of CG on SCD. Specifically, the finding shows SSB size positively influences SCD, indicating the acceptance of H1. The result indicates that IFIs with a larger SSB size disclose more SCD than IFIs with a smaller SSB size. This finding is consistent with the resource dependency theory and corroborates the findings of previous studies (e.g., Grassa et al., 2018; Mallin et al., 2014; Noordin & Kassim, 2019) that IFIs with larger SSB sizes, comprising individuals with diverse skills and experience, are more likely to achieve better disclosure. Furthermore, it suggests that a larger SSB size facilitates task delegation, allowing specific members to focus on corporate reporting, including SCD aspects.

However, this finding contradicts the results of Sencal and Asutay (2021), Harun et al. (2020) and Abdullah et al. (2013), as it does not support the assertion of agency theory that an increase in SSB members leads to less efficient operations of corporations (Jensen, 1993). Moreover, it is not deemed cost-effective due to the challenges associated with coordinating efforts among member. SSB's reputation positively influences the level of SCD in IFIs. The result shows a positively significant link between the coefficient of SSB reputation and SCD, implying the accepted H2. The result agrees with the signalling theory perspective, suggesting that the management of IFIs can use the reputation of an SSB to signal to the public about their Shariah compliance accountability. This result supports the assertion that reputed Shariah scholars can be used by management as bait to attract potential investors seeking Shariah compliance (Nawaz & Virk, 2019; Shahzad Virk et al., 2022). However, the coefficient of SSB expertise is found to be insignificant, leading to the rejection of H3. This outcome contradicts the suggestion that SSB members with financial knowledge tend to be more transparent and recognise the importance of disclosing information to stakeholders (Abdullah et al., 2013; Nawaz & Virk, 2019; Noordin & Kassim, 2019). potential explanation for this inconsistency is that the members of the SSB primarily specialise in Islamic commercial jurisprudence, with a focus on verifying Shariah compliance within IFIs at all levels. Consequently, the lack of expertise in Shariah advisory among some SSB members may not contribute significantly to improving the levels of disclosure regarding Shariah compliance in the study sample.

As regards board structure, our results reveal that board size is significantly positive with SCD. The outcome implies that the larger the board size, the better the SCD level. The result supports both the agency and resource dependence theories. Empirically, this result is consistent with previous studies (Grassa et al., 2018; Harun et al., 2020), but it contradicts the findings of Azid and Alnodel (2019) and Elamer et al. (2020), as both studies reported a significant negative relationship.

TABLE 6 Regression results of the determinants of SCD

Variables	Model (1)	Model (2)	Model (3)
L. SCDI			0.677***
			(0.015)
SSB SIZE	0.009***	0.008***	0.001
	(0.002)	(0.002)	(0.001)
SSB REP	0.001***	0.001***	0.002***
	(0.000)	(0.000)	(0.000)
SSB EXP	0.001	0.017***	0.038***
	(0.013)	(0.006)	(0.013)
BOARD SIZE	0.006***	0.009***	0.003***
	(0.002)	(0.001)	(0.001)
BOARD IND	0.001***	0.001***	0.001***
	(0.000)	(0.000)	(0.000)
BLOCK OWN	−0.001	0.007***	0.009***
	(0.003)	(0.002)	(0.002)
FOREIGN OWN	0.001***	0.001***	−0.000
	(0.000)	(0.000)	(0.000)
INSTI OWN	0.001***	0.001***	0.001***
	(0.000)	(0.000)	(0.000)
FIRM SIZE	−0.000***	−0.000***	−0.000***
	(0.000)	(0.000)	(0.000)
LEVERAGE	0.001	0.003***	−0.000
	(0.001)	(0.001)	(0.000)
OPE REG	−0.004	0.038***	−0.020*
	(0.017)	(0.009)	(0.011)
AAOIFI STD	0.097***	0.048***	0.028***
	(0.017)	(0.008)	(0.008)
Constant	0.290***	0.250***	0.055***
	(0.025)	(0.015)	(0.009)
Year effect	Y	Y	Y
Observations	796	704	705
Number of firms	88	88	88
chi^2-P	0.000	0.000	0.000
J-test Hansen			0.418
AR (1)			0.000
AR (2)			0.321

Note: This table reports the regression results for the determinants of SCD among IFIs. All variables are defined as follows: block holder ownership (BLOCK OWN), foreign ownership (FOREIGN OWN), institutional ownership (INSTI OWN). board size (BOARD SIZE), board independence (BOARD IND), SSB size (SSB SIZE), SSB reputation (SSB REP), SSB expertise (SSB EXP), operating region (OPE REG) and adoption of AAOIFI (AAOIFI STD). *, **, *** indicates significance at 10%, 5% and 1%, respectively.

Furthermore, we observe a significant positive association between board independence and SCD levels. This finding suggests that independent directors in IFIs are well-informed, possessing an Islamic finance degree or insights into Shariah compliance, enabling them to recommend improvements in SCD. This finding aligns with agency and resource dependency theories and supports earlier literature (Elamer et al., 2020; Nicholson & Kiel, 2007). However, it does not support the findings of Harun et al. (2020) who reported no association.

Regarding ownership structure, foreign ownership has a positive link between foreign ownership and SCD level. This is consistent with the stakeholder-agency theory perspective that foreign investors need a high degree of Shariah compliance information to avoid the confiscation risk of IFI resources or licence being revoked. Additionally, IFIs owned by foreign investors may be more aware of the pressure to ensure that all global operations are Shariah-compliant. Thus, SCD (Shariah-compliant disclosure) is perhaps a legitimising technique to maintain capital inflows and gain the interest of potential investors. Our results do not support previous studies that found either a negative relationship (Elamer et al., 2020) or no significant relation (Harun et al., 2020) between foreign ownership and the disclosure level.

Institutional ownership is found to have a positive influence on the level of SCD in IFIs. This suggests that institutional investors have significant explanatory power over the SCD level in these institutions. Referring back to the descriptive statistics discussed earlier (see Table 4), the mean institutional ownership is above average at 55%, confirming that institutional investors are the most influential owners in the banking sector (Grassa et al., 2018). Therefore, theoretically, the study results assert that a higher percentage of institutional investors appears to reduce the information gap between management and stakeholders, leading to an increase in the level of Shariah-compliant disclosure (SCD). This finding supports the agency theory, which predicts that managers would disclose more information to mitigate potential conflicts between managers and institutional investors.

Empirically, the significant positive relationship results are inconsistent with prior studies' findings (Grassa et al., 2018; Mergaliyev et al., 2021). Finally, we find no evidence of a relationship between blockholder ownership and SCD disclosure, which contradicts previous studies (e.g., Elamer et al., 2020; Grassa et al., 2018) that reported a significant positive link between blockholder investors and the level of disclosure. Additionally, this result is inconsistent with the multi-theoretical perspective (signalling, stakeholder and resource dependence theories) suggesting that IFIs with high block ownership would enhance SCD to signal accountability to a broader range of stakeholders (Elamer et al., 2020). A possible reason for this discrepancy could be attributed to the fact that in IFIs, the majority of equity, typically above 70%, is owned by the top five investors (Grassa et al., 2018). These investors have easier access to information as and when required.

As for the control variables, as presented in model (1) of Table 6, the regression analysis shows that only firm size and the AAOIFI standard adoption reported to be statistically significant. This result shows that IFIs that adopt AAOIFI standards are more likely to divulge more Shariah-related information. The remaining two (leverage and operating region) are not related at all levels.

Prior governance literature (Elamer et al., 2021; Enache & Hussainey, 2020) raises concern about potential endogeneity problems. Endogeneity problems exist when the dependent, independent variables and the error terms in regression are highly related (Ntim et al., 2012). The existence of endogeneity could raise serious issues regarding the validity of research results (Ullah et al., 2018; Wintoki et al., 2012). In this regard, this study carries two robustness tests to tackle potential endogeneity issues in the primary regression model.

First, a lagged structure model was estimated to prevent potential endogeneity problems that might emerge simultaneously between CG mechanism variables and the SCDI. In the lagged model, all variables in the Model are precisely like the primary Model, except for the one-year lag introduction. As evident in model (2) of Table 6 the lagged model provide significant coefficients for all variables.

In addition to the lagged structure, an extra robustness check to ensure the potential existence of endogeneity problems does not significantly impact the main findings estimated by the PCSE model, the two-step GMM estimator is employed (Arellano & Bover, 1995). Mollah and Zaman (2015) established that this procedure permits using all the independent variables as endogenous. In addition, IFI characteristics are deemed endogenous variables, while the country's characteristics are exogenous. To distinguish between a 'static' and a 'dynamic,' lagged values of past SCD are added to the model. Following prior studies (Elamer et al., 2020; Ullah et al., 2018; Wintoki et al., 2012), the dynamic GMM model is utilized as an extra robustness check to ensure the potential existence of endogeneity problems emerging from the link between SCD and CG mechanisms.

The study employed several specification tests such as first-order serial correlation (AR [1]), second-order correlation (AR [2]) and Hansen J-Statistics to ascertain if the GMM estimation is valid. The reported outcome in Model (3), Table 6 suggests that both AR (2) and Hansen J-statistics are insignificant with a p-value above 5%, while AR (1) is statistically significant at 1%. This result implies that the instruments added in the GMM model are exogenous; thus, the study used valid instruments (Ullah et al., 2018). Overall, after addressing all kinds of endogeneity issues, the GMM estimated results remain mostly the same as those presented in the lagged model, except for SSB size and foreign ownership becoming insignificant. This result is relatively similar to Elamer et al. (2021) reporting that the relationship between bank risk disclosure and credit rating with high foreign investors.

4.1 | Further analysis

We conducted several additional analyses to assess the reported findings on sub-sample estimations or alternative measures (themes analysis). First, to determine whether the SCD level varies among the IFIs operating in GCC countries and non-GCC countries, the study further explored the impact of CG mechanisms on SCD by separating the sample into GCC countries (1) and non-GCC countries (2). The reason behind this sample division into GCC and non-GCC is that most IFIs are in GCC countries with the most significant Islamic finance assets (49%) in global Islamic finance assets (Islamic Financial Services Board, 2021). Also, most IFIs operating in the GCC region have no competitors. Besides, GCCs' IFIs are owned by institutions or wealthy individuals who are investors in other IFIs operating in non-GCC countries. Second, the study compares IFIs that adopt the AAOIFI standards mandatorily with voluntary ones. This study fills the gap in that it divides the sample into countries that adopt AAOIFI standards mandatorily (3) and those that follow voluntarily (4). The extra analyses are presented in panel A of Table 7.

This result implies that a higher percentage of institutional investors decrease SCD in GCC countries, although the full sample and non-gulf region countries found the opposite. This outcome could be interpreted as institutional investors' ability to drive IFIs to communicate less SCD. Grassa et al. (2018) established that those institutional investors are the most influential owners in the banking sector. Therefore, IFIs among GCC countries with more institutional ownership prefer disclosing information directly to institutional investors without considering other stakeholders' rights, leading to less disclosure of annual reports. In other words, institutional investors among GCC IFIs are self-opportunistic. Thus, IFIs operating in GCC countries with more prominent institutional investors have less incentive to divulge SCD practices. Likewise, more significant SSB expertise members harm GCC countries' SCD level. Therefore, the significant negative sign indicates among IFIs in GCC countries, the Shariah knowledge of SSB members is the primary component in warranting complete Shariah compliance of IFIs operations.

TABLE 7 Further analysis

Panel A: Sub sample analyses				
Variables	**(1) GCC region**	**(2) Non-gulf region**	**(3) Mandatory AAOIFI**	**(4) Voluntary AAOIFI**
SSB SIZE	0.052***	0.001	0.017	0.002
	(0.012)	(0.004)	(0.016)	(0.004)
SSB REP	0.001	0.002***	0.004***	0.001***
	(0.001)	(0.001)	(0.001)	(0.001)
SSB EXP	−0.066*	0.070***	0.033	0.065***
	(0.034)	(0.023)	(0.057)	(0.020)
BOARD SIZE	−0.003	0.002	−0.001	−0.002
	(0.006)	(0.003)	(0.007)	(0.003)
BOARD IND	0.001***	0.001***	0.003***	0.001**
	(0.000)	(0.000)	(0.000)	(0.000)
BLOCK OWN	0.013*	0.003	0.033***	0.001
	(0.007)	(0.007)	(0.009)	(0.005)
FOREIGN OWN	−0.000	0.002**	0.000	0.001**
	(0.000)	(0.001)	(0.000)	(0.000)
INSTI OWN	−0.001***	0.001***	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Control variables	Y	Y	Y	Y
Year effect	Y	Y	Y	Y
Constant	Y	Y	Y	Y

Panel B: Themes analyses				
Variables	**(1) SSB INFO**	**(2) AUDIT PROCESS**	**(3) SC REVIEW**	**(4) ZAKAT**
SSB SIZE	0.004	0.002	0.004	0.022***
	(0.004)	(0.003)	(0.003)	(0.005)
SSB REP	0.002***	0.002***	0.001**	0.001*
	(0.000)	(0.000)	(0.000)	(0.001)
SSB EXP	0.058***	−0.010	0.028*	0.059**
	(0.020)	(0.015)	(0.015)	(0.028)
BOARD SIZE	−0.001	0.004*	0.005***	0.011***
	(0.002)	(0.002)	(0.002)	(0.003)
BOARD IND	0.001***	0.001***	0.000	0.001***
	(0.000)	(0.000)	(0.000)	(0.000)
BLOCK OWN	0.002	0.002	0.000	−0.044***
	(0.005)	(0.004)	(0.004)	(0.007)
FOREIGN OWN	0.001***	0.000	0.000	0.001**
	(0.000)	(0.000)	(0.000)	(0.001)
INSTI OWN	0.000	0.001***	0.000**	0.003***
	(0.000)	(0.000)	(0.000)	(0.000)
Control variables	Y	Y	Y	Y

(Continues)

TABLE 7 (Continued)

Panel B: Themes analyses				
Variables	**(1) SSB INFO**	**(2) AUDIT PROCESS**	**(3) SC REVIEW**	**(4) ZAKAT**
Year effect	Y	Y	Y	Y
Constant	Y	Y	Y	Y

Note: This table reports the regression results for the determinants of SCD. All variables are defined as follows: block holder ownership (BLOCK OWN), foreign ownership (FOREIGN OWN), institutional ownership (INSTI OWN). board size (BOARD SIZE), board independence (BOARD IND), SSB size (SSB SIZE), SSB reputation (SSB REP), SSB expertise (SSB EXP), operating region (OPE REG) adoption of AAOIFI (AAOIFI STD). *, **, *** indicates significance at 10%, 5% and 1%, respectively.

Also, from the analysis, statistically higher block holder investors among IFIs operating in GCC countries and following AAOIFI standards mandatorily influence SCD. This outcome implies that the higher number of block holder investors increases SCD. Thus, block holder investors are likely to encourage long-term investments in Shariah compliance for IFI reputation, which could be why block holder investors promote Shariah compliance practices in IFIs operating in GCC countries and follow AAOIFI standards mandatorily. This result supports the signalling, stakeholder and resource dependence theories' expectation that block holder investors might improve SCD to signal to the public about their Shariah accountability, ascertain the public's trust and legitimize their operations (Elamer et al., 2020). However, the study outcomes do not support the agency theory perspective that higher block holder investors can access information when required; hence, management has less incentive to divulge more information.

On the contrary, the findings indicate that the number of foreign ownerships increases SCD only for IFIs that follow AAOIFI standards voluntarily and non-Gulf region countries. This outcome aligning with agency theory. Therefore, theoretically, the findings suggest that high foreign ownership lessen the information asymmetry gap between management and stakeholders and hence, might increase the SCD level by IFIs that follow AAOIFI standards voluntarily. In other words, higher foreign investors work better and more effectively enhancing SCD levels among sample IFI that follow AAOIFI standards voluntarily.

Additionally, as already mentioned, the study's SCD index includes 23 items divided into four main themes: SSB information, audit process, Shariah compliance review and Zakat. Each theme has different items, suggesting that the study's results might be sensitive to each theme's weight. Thus, to ascertain if the link between each theme and the independent variables is the same as the main findings, this research re-runs the model with each theme as a dependent variable (SSB information, audit process, Shariah compliance review and Zakat). Therefore, this part of the study provides the comparisons among the four themes independently. Each theme is replaced with SCD one by one, resulting in four models. For reasonable and valid comparability with the overall SCD, each of the four models comprises the exact CG mechanisms and control variables investigated in the original analysis.

The findings are presented in panel B of Table 7. Models (1) to (4) show the findings of the individual theme disclosure. The findings show some sensitivity to the theme analysis. However, the impact of all variables on the Zakat component appeared to be more profound than other SCD components. Remarkably and unlike other models, the results reported a negatively significant link between block holder investors and Zakat disclosure. Generally, block holder investors have access to private information (Elamer et al., 2020), including Zakat disclosure, reducing management's incentive to divulge extra information. The significant negative relationship between block holder investors and Zakat disclosure could also mean that higher block holder investors dislike management's decision to communicate more on Zakat-related disclosure in the annual reports. They might probably have other efficient ways of ascertaining any information as and when they require from management, for instance, through one-to-one meetings. Bearing in mind the relevance of communicating Zakat-related information, results imply that although no significant relation was found between block holder shareholders and the overall SCD, Zakat disclosure is material enough to be negatively influenced by block holder investors. Theoretically, this study argues that the block holder investors seem to increase the asymmetric information gap between the management and owners, thus reducing the level of Zakat information in the sampled IFIs. This outcome suggests that a higher number of block holder investors adversely affects Zakat's disclosure level. Given the Islamic ethics governing Zakat, which promotes the private giving concept, few block holder investors appear to be better and more effective at enhancing Zakat's disclosure level.

5 | CONCLUSION

Unlike existing studies on SCDs, which predominantly focus on a single year or a specific country, this study takes a broader approach by examining the level and extent of SCD using a self-constructed index. Furthermore, it aims to identify the determinants of SCD levels. With a sample of 89 IFIs across 19 countries, encompassing 807 observations spanning from 2010 to 2020, our study explores these aspects through the lens of multiple theoretical frameworks, including agency, stakeholder, legitimacy, resource dependence and signalling theories.

The findings of this study contribute to the literature in several ways. First, we find that the level of SCD is above average and has significantly improved over time. These findings suggest that the cumulative efforts exhibited by both local and international regulatory bodies in developing a robust system of governance appropriate for IFIs seem to be yielding positive results. However, our results also reveal considerable differences in SCD among the sampled IFIs. Further analysis indicates that these differences can be attributed to jurisdictions (GCC and non-GCC countries) and the adoption of the AAOIFI standards (mandatory and voluntary). Additionally, the results highlight that the sample IFIs tend to communicate more information about certain items compared to others. Second, our study identifies several determinants that influence the level of SCD. We find that IFIs with a high percentage of foreign ownership, institutional ownership, board independence and a reputable SSB, along with larger board and SSB sizes, exhibit higher levels of SCD. These findings are robust and consistent with the expectations of the multi-theoretical framework. Thus, this study extends and contributes new insights to the existing literature. Moreover, this study introduces a new measure for SCD that is independent and not a subdivision of other types of disclosure. By combining relevant themes and checklists developed by various researchers and incorporating guidelines from standard setters such as AAOIFI and IFSB, we provide a comprehensive and robust measure of SCD. Additionally, our study offers first-time evidence on the levels of SCD among IFIs worldwide from 2010 to 2020, encompassing a large sample size and a considerable number of observations. These empirical findings contribute to a better understanding of the changes in Shariah disclosure over time among IFIs globally. Furthermore, our study contributes to the literature by providing empirical evidence of the impact of various CG mechanisms on SCD among IFIs.

The study has significant implications for various stakeholders involved in IFIs, including the IFIs themselves, standard setters, policymakers, shareholders and other interested parties. The results support the ongoing revised Shariah governance framework that emphasises the importance of sound Shariah governance, disclosure and transparency practices within IFIs. Policymakers and standard setters, such as AAOIFI, IFSB and central banks in Malaysia, Bahrain and Pakistan, should be motivated to further strengthen enforcement mechanisms to promote higher levels of SCD. For instance, establishing an enforcement committee that targets IFIs claiming mandatory adoption of AAOIFI standards could be a proactive measure. Policymakers should emphasise to IFIs that they are not solely accountable to Allah (God), but also to other stakeholders who rely on comprehensive disclosure to make informed decisions when engaging with them. The introduction of universally standardised disclosure frameworks, such as the AAOIFI standards, could also ensure consistent levels of disclosure and foster trust in the industry.

Despite the robustness of the study findings and its valuable contribution, there are still some limitations that need to be acknowledged. First, while the construction of the index was carefully done through an extensive critical review of relevant literature, it is important to note that the disclosure practices of IFIs can vary across different jurisdictions. Therefore, the reasons for (non) disclosure provided by the index may not be universally applicable to all IFIs. To enhance future studies, it would be beneficial to improve the construction of the SCD index by considering jurisdiction-specific Shariah-related information. Second, although the study sample is relatively large, it is worth mentioning that not all IFIs could be randomly included due to limitations in accessing English versions of their annual reports. This may have introduced some bias into the sample. Lastly, the analysis would benefit from the inclusion of additional CG mechanisms. The study did not consider important variables such as audit committees and board diversity, which restricts the scope of the research. Therefore, future studies should incorporate a broader range of variables, including country and bank-specific factors, as well as internal and external CG mechanisms (e.g., board diversity, sub-committees and government regulations), in addition to the variables utilised in this study.

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DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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APPENDIX A

TABLE A1 Shariah compliance disclosure index (SCDI)

Themes	Sub-themes	Item/scoring (1 if disclose, 0 otherwise)	References
Information about SSB	1.	Names of the Shariah Supervisory Board (SSB) members	Aribi et al. (2019); BNM; Haniffa and Hudaib (2007); Noordin and Kassim (2019); Abdullah et al. (2013)
	2.	Profile of each SSB member	Aribi et al. (2019); Belal et al. (2015); BNM; Haniffa and Hudaib (2007); Maali et al. (2006); Noordin and Kassim (2019)
	3.	Duties, responsibilities and authorities of SSB members	IFSB, AAOIFI, Belal et al. (2015); Haniffa and Hudaib (2007)
	4.	Renumeration of SSB members	IFSB; Aribi et al. (2019); Belal et al. (2015); Haniffa and Hudaib (2007); Noordin and Kassim (2019); Abdullah et al. (2013)
	5.	Report of SSB	AAOIFI; Belal et al. (2015); Maali et al. (2006); Abdullah et al. (2013)
	6.	The report signed by all members	AAOIFI; Aribi et al. (2019); Belal et al. (2015); Haniffa and Hudaib (2007); Noordin and Kassim (2019)
Audit process	7.	Number of meetings held	Aribi et al. (2019); Belal et al. (2015); Haniffa and Hudaib (2007); Maali et al. (2006); Noordin and Kassim (2019)
	8.	Scope of audit (nature of work performed)	AAOIFI; Aribi et al. (2019); Haniffa and Hudaib (2007); Noordin and Kassim (2019); Abdullah et al. (2013)
	9.	Examination of documents based on sample	AAOIFI; Aribi et al. (2019)
	10.	Examination of all documents	Aribi et al. (2019)
	11.	Shariah compliance opinion (pertaining to contracts, transactions, dealings, profit and loss allocation)	Sencal and Asutay (2021); Azid and Alnodel (2019); AAOIFI; Aribi et al. (2019); Belal et al. (2015); Haniffa and Hudaib (2007); Maali et al. (2006); Noordin and Kassim (2019); Abdullah et al. (2013)
	12.	New products fatwa (consultancy)	AAOIFI; Aribi et al. (2019); Noordin and Kassim (2019)
	13.	Follow-up Fatwa	AAOIFI; Aribi et al. (2019)
	14.	Shariah internal auditor liaising	Aribi et al. (2019)
Shariah compliance review	15.	The business operations are committed to Shariah rules	AAOIFI; Belal et al. (2015); Haniffa and Hudaib (2007); Maali et al. (2006); Noordin and Kassim (2019)
	16.	Communicating Shariah non-compliance events	Belal et al. (2015); Haniffa and Hudaib (2007); Maali et al. (2006); Noordin and Kassim (2019)
	17.	Disposal of non-Shariah income or intended to be disposed	Belal et al. (2015); Haniffa and Hudaib (2007); Maali et al. (2006); Noordin and Kassim (2019)
	18.	Qard al-hassan (benevolent loans) policy	Belal et al. (2015); Haniffa and Hudaib (2007); Maali et al. (2006); Noordin and Kassim (2019)
	19.	Debt policy for dealing with insolvency client is designed in accordance with Shariah	Belal et al. (2015); Haniffa and Hudaib (2007); Maali et al. (2006); Noordin and Kassim (2019)
	20.	Islamic financial products descriptions	Haniffa and Hudaib (2007); Noordin and Kassim (2019)

TABLE A1 (Continued)

Themes	Sub-themes	Item/scoring (1 if disclose, 0 otherwise)	References
Zakat	21.	SSB declaration that Zakat calculation is in line with Shariah	Aribi et al. (2019); Haniffa and Hudaib (2007); Noordin and Kassim (2019)
	22.	SSB verification that sources and uses of Zakat are in accordance with Shariah	Aribi et al. (2019); Belal et al. (2015); Haniffa and Hudaib (2007); Maali et al. (2006); Noordin and Kassim (2019); Abdullah et al. (2013)
	23.	Zakat to be paid by individuals	Haniffa and Hudaib (2007); Noordin and Kassim (2019)