The current issue and full text archive of this journal is available on Emerald Insight at:
www.emeraldinsight.com/1985-2517.htm

Comparative study between IFRS and AAOIFI disclosure compliance

Evidence from Islamic banks in Gulf Co-operation Council countries

Hana Ajili and Abdelfettah Bouri
Faculty of Economics and Management of Sfax, Sfax University, Sfax, Tunisia

Received 24 March 2016
Revised 16 November 2016
Accepted 17 November 2016

Abstract

Purpose – This study measures and compares the level of compliance with the disclosure requirements provided by the International Financial Reporting Standards (IFRS) and the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI). This study also aims to investigate the factors associated with this compliance in a sample of Islamic banks (IBs) in Gulf Cooperation Council member states.

Design/methodology/approach – The sample consists of 39 IBs between 2010 and 2014. Among the selected IBs, 23 banks were complying with the AAOIFI standards and 16 banks were complying with the IFRS standards. An unweighted disclosure index was used to measure the level of compliance with IFRS/AAOIFI disclosure requirements.

Findings – It was found that the level of compliance with IFRS is higher than that of compliance with AAOIFI. In addition, the results reveal that compliance with IFRS/AAOIFI disclosure requirements is higher for larger and older IBs. Finally, it was observed that compliance was more noticeable for IBs having a higher leverage and multinational subsidiaries.

Originality value – These findings would be of great help to regulators and policymakers to better understand the accounting disclosure practices of IBs.

Keywords Compliance, Islamic banks, International Financial Reporting Standards (IFRS), Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), Accounting disclosure

Paper type Research paper

1. Introduction

The recent development of Islamic banks (IBs) worldwide has accelerated the request for more transparency, reliability and comparability in the presentation of their financial statements. As a result, there is a subsequent need for accounting regulations that should assist the reporting practices. Since 1991, the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) has been established in Bahrain to develop and disseminate accounting and auditing standards relevant to Islamic financial institutions (IFIs). At present, while a growing number of IFIs in many countries use the AAOIFI

The authors would like to thank Dr Ayadi Hajji for his help with proofreading and editing the manuscript.

1985-2517
DOI 10.1108/JFRA-03-2016-0023

standards, the AAOIFI organization has no power to force the IBs to implement its standards (AAOIFI, 2010).

Several prior studies have examined the extent of International Financial Reporting Standards (IFRS) disclosure compliance in conventional contexts (Glaum and Street, 2003; Al-Shammari *et al.*, 2008; Al-Mutawaa and Hawaidy, 2010; Juhmani, 2012; Glaum *et al.*, 2013; Abdullah *et al.*, 2015). However, a few studies investigated the compliance of IBs with accounting standards (Vinnicombe, 2010; Sarea, 2012; Sarea and Hanefah, 2013). These studies investigated the compliance of IBs with the AAOIFI's standards in a single country, namely, Bahrain. As a consequence, this paper will first extend the sample to a larger number of IBs in the six Gulf Cooperation Council (GCC) countries where Islamic banking has been growing exponentially over the past three decades. Second, a review of the annual reports of the sampled GCC IBs shows that the consolidated financial statements of IBs in Bahrain, Oman and Qatar have been prepared in accordance with the Financial Accounting Standards (FAS) issued by the AAOIFI, but IBs in Saudi Arabia (KSA), Kuwait and United Arab Emirates (UAE) use IFRS standards. Therefore, we deemed it necessary to understand the comparability of reporting between the IFRS and the AAOIFI. Thus, the aim of this paper is to measure and compare the level of compliance with the disclosure requirements provided by the IFRS and AAOIFI in GCC IBs. Finally, this study endeavored to assess the characteristics of the IBs that provide more or less extensive compliance with disclosure requirements and to determine the main factors associated with accounting disclosure compliance.

Two self-constructed compliance checklists were developed to measure the compliance of 39 IBs with the AAOIFI and the IFRS disclosure requirements during 2010-2014. Using an unweighted disclosure index, we found that the level of compliance with IFRS was higher than the level of compliance with AAOIFI and that the difference in compliance levels was associated with bank attributes, namely, size, age, leverage and multi-nationality.

This study attempted to contribute to a better understanding of the IBs reporting. The field of IBs is increasingly interesting because these banks, based on Islamic law, have grown rapidly over the Past years and seem to present themselves as serious competitors to conventional ones. The main finding was the disclosure compliance of IBs in GCC countries as a result of their compliance with the Islamic laws. The empirical part of this study attempted a pioneering comparison between the compliance disclosure level of IBs operating in GCC countries based on both standards – IFRS and AAOIFI. This result offers useful insights provided to the stakeholders about the extent of compliance with accounting disclosure requirements. In addition, this kind of investigation would be of immense relevance to any accounting standard regulations, such as the International Accounting Standards Board (IASB) or the AAOIFI, to understand the accounting disclosure practices of IBs and the reasons behind their choice of the accounting reference. Consequently, it can improve the international accounting harmonization which would ameliorate the comparability of financial reporting presentation among IBs.

The remainder of the paper is organized as follows. Section 2 is a comprehensive review of the works published on the different aspects of the topic. In parallel, it outlines the main hypotheses of the study. Section 3 describes the methodology adopted in this work and the data collection. Section 4 reports the main findings of this study and discusses them. Section 5 presents the main conclusions of this paper.

2. Literature review

2.1 Islamic banking and accounting information

Accounting is generally defined as a process of identifying, measuring, recording, classifying and summarizing business transactions that helps stakeholders in making decisions (Amer, 2007). Various studies have investigated the effect of culture on accounting practices in different regions of the world. Gray (1988) and Perera (1989) claimed that culture is a determining factor for accounting practices. Indeed, Tsakumis (2007) examined the influence of national culture on accountants' application of accounting rules and showed that Greek accountants are less likely to disclose information than US accountants. More recently, Orij (2010) concluded that corporate social disclosure levels are likely to be influenced by national cultures. Culture was defined by Baydoun and Willett (2000) as a set of beliefs shared with community members in a defined language. They also argued that religious beliefs were a subset of those total beliefs and were therefore a part of culture. These scholars concluded that in Islamic societies, the presence of the Islamic religion as a cultural variable affected how certain accounting measures were interpreted and how accounting information had to be disclosed. Within this prospect, Ahmed (2012) stated that, Islamic accounting refers to a coherent set of ideas and practices based on the Islamic religion and aims to assure users that companies and organizations are run by Islamic law. For this reason, he warned against the simple addition of the words "Islam" or "Islamic perspective" to the classical definitions of accounting (Ahmed, 2012). Velayutham (2014) claimed that the main difference between conventional accounting and Islamic accounting was in the disclosure of information. This researcher argued that conventional disclosure practices lead to limited disclosure of financial information, while the disclosure practices based on Islamic requirements lead to full disclosure of financial information (Baydoun and Willett, 2000).

Mirza and Baydoun (2000) argued that the development of accounting and reporting standards is urgent for companies and IBs. However, the issue of how to develop an Islamic accounting system is still debated in the literature. Whereas some scholars called for basing Islamic accounting on international accounting standards (Ahmad and Hamad, 1992), others opted for referring to Islamic laws (Karim, 1995). A third group of researchers had a hybrid approach and called for concocting a foundation of Islamic accounting that draws on international accounting and Islamic laws (Yaya, 2004). However, despite all this divergence of opinions, two principles are considered central for the preparation of Islamic financial reports, namely, accountability and full disclosure. Khan (1994) argued that the full disclosure principle was impractical, especially regarding negative information related to the unfair treatment of employees, environmental pollution and cheating in the calculation of income tax. Maali *et al.* (2006) also found that social disclosure practices of IBs were minimal.

As can be seen through this brief review, the gap between theory and practice in Islamic accounting is still very wide. Furthermore, researchers have not yet reached a consensus on the fundamental principles and favorable practices in IBs. The theorists present an ideal image of the Islamic accounting which protects the interests of all stakeholders and the society in general, with the application of the principles of accountability and full disclosure. However, the reality is different because IBs remain faithful to the conventional accounting system in the preparation of their financial statements. Even banks that used the AAOIFI standards are not fully compliant with these standards. For all these reasons, this study intended to investigate the IBs accounting in the GCC with a special focus on their compliance with accounting disclosure requirements.

2.2 The extent of mandatory disclosure compliance

Actually, the IFRSs are the global accounting standards of choice. Indeed, 130 jurisdictions permit or require IFRS for domestic listed companies (IASPlus, 2012). However, additional information which was not stipulated by the IFRS requirement (such as *Zakah* calculations) was often considered necessary in the Islamic financial statements. Therefore, IFIs faced increasing pressure to establish an overriding standard-setting body which could develop acceptable accounting treatments (Vinnicombe, 2010). The AAOIFI is one of the key organizations involved to deal with these issues, with the ultimate aim of harmonizing financial practices with ethical requirements of Islamic law (Venardos, 2011). Unfortunately, Karim (1995) observed that the AAOIFI had no power of enforcement. That was why a significant number of IFIs presented their reports using IFRS or national GAAP based on IFRS such as IFIs in Pakistan, Indonesia, Malaysia, KSA and Turkey. Although compliance with IFRS disclosure requirements has been investigated in several previous studies, there are not many previous research studies which focus on the compliance with AAOIFI accounting standards.

Street *et al.* (1999), Street and Bryant (2000), Al-Shammari *et al.* (2008), Hodgdon *et al.* (2009), Glaum *et al.* (2013) and Abdullah *et al.* (2015) examined the extent of company compliance with IAS/IFRS and found that companies do not comply fully with IAS/IFRS disclosure requirements. Glaum and Street (2003) investigated the level of compliance with both IAS and US Generally Accepted Accounting Principles (US GAAP) disclosure requirements. The study revealed that the average compliance level was significantly lower for companies applying IAS compared to companies applying US GAAP. Whereas most of the existing literature on the topic was focused on the firm disclosure, the study of Kahl and Belkaoui (1981) provided empirical evidence relevant to the financial disclosure of a sample of international banks. They indicated that the extent of disclosure was different among the countries examined.

Other scholars (Vinnicombe, 2010; Sarea, 2012; Sarea and Hanefah, 2013) measured the extent to which IFIs in Bahrain complied with the AAOIFI standards in their financial reporting. Their results showed that in general, most IBs in Bahrain had a high level of compliance with the AAOIFI accounting standards. Hence, it seems that compliance depends on the company conviction with the standards or may be on the power supporting the standards, such as governmental control or vigilance of the financial authorities in the country. Outside the GCC countries, El-Halaby and Hussainey (2016) measured to what extent IBs that adopted AAOIFI standards were consistent with AAOIFI requirements. Based on the investigation of 43 IBs across 8 countries, they found that the average compliance level with AAOIFI standards concerning the presentation of financial statements was 73 per cent. Based on a sample of 47 IBs in 14 countries, Farook *et al.* (2011) developed and tested a theoretical model of the determinants of IBs' social disclosures. They found that social disclosure by IBs varied significantly across the sample.

Theoretically, it was argued that the IFRS application in IBs was unsuccessful because these standards did not include the information required by the Islamic laws. Baydoun and Willett (2000) maintained that the presence of the Islamic religion as a cultural variable affected how certain accounting measures were interpreted and how accounting information was disclosed. In addition, Triyuwono (2000) indicated that Islamic accounting had an unlike theoretical background to conventional accounting and that a new approach needed to be well developed. In light of this review, the application of different standards would necessarily yield different compliance levels. Hence, it can be hypothesized that:

H1. The compliance level with the required disclosure of IBs applying AAOIFI standards is different from that of IBs applying IFRS standards.

2.3 The determinants of mandatory disclosure compliance

Prior theoretical work and empirical research on determinants of mandatory disclosure compliance provides evidence that compliance may vary systematically across companies, based on their individual attributes (Street and Bryant, 2000; Glaum and Street, 2003; Al-Shammari *et al.*, 2008). In this study, four factors which could be related to the level of compliance with IFRS/AAOIFI disclosure requirements in IBs were taken into consideration when developing the hypotheses. We selected only the special characteristics of Islamic banking and the most frequent and significant determinants applied in the literature. These determinants are size, age, leverage and multi-nationality.

2.3.1 Bank size. Size was very widely used in empirical studies as a variable associated with mandatory disclosure compliance. Agency theory proposes that larger firms have higher agency cost because they have a large number of shareholders and they carry out a greater number of contracts which are more complex than smaller firms (Watts and Zimmerman, 1986). Consequently, managers of large firms need to disclose more information to reduce these costs and reduce information asymmetry (Juhmani, 2012). In addition, the political cost theory is usually discussed in relation to the corporate size hypothesis (Alberti-Alhtaybat *et al.*, 2012). Large companies are politically visible and economically important (Al-Shammari *et al.*, 2008). Therefore, they act to protect their reputation and avoid government intervention (Watts and Zimmerman, 1986). Furthermore, larger companies have stronger incentives to comply with accounting standards to reduce political costs, and to lessen government intervention (Glaum *et al.*, 2013). However, previous empirical studies of the relationship between the disclosure compliance level and company size revealed conflicting findings. Several studies reported that company size was positively related to mandatory disclosure compliance (Ali *et al.*, 2004; Al-Shammari *et al.*, 2008; Hodgdon *et al.*, 2009; Juhmani, 2012). Furthermore, Kahl and Belkaoui (1981) indicated that there was a positive relationship between the size of the bank and the level of disclosure. In contrast, Ahmed and Nicholls (1994), Glaum and Street (2003) and Glaum *et al.* (2013) found no significant relationship between size and level of disclosure compliance. As can be clearly seen from this review, there is a controversy between researchers on the effect of size on disclosure practices. Whereas some maintained that the size plays a positive role in compliance with mandatory disclosure, some others denied the effect of this variable on this mandatory requirement. This study will attempt to investigate the effect of size of the GCC IBs on their compliance to IFRS and AAOIFI through the following hypothesis:

H2: Bank size is positively associated with the degree of compliance with IFRS/AAOIFI disclosure requirements.

2.3.2 Bank age. Age was also used in previous studies examining disclosure compliance. It is generally argued that older companies may tend to disclose more information than younger companies in their annual reports owing to their competitive cost-advantage (Demir and Bahadir, 2014). According to signaling theory, Akhtaruddin (2005) argued that older companies with more experience were likely to include more information in their annual reports to enhance their reputation and image in the market. The empirical evidence on the relationship between age and extent of disclosure compliance showed contradictory results. Many studies reported an insignificant association between age and level of disclosure compliance (Akhtaruddin, 2005; Al-Shammari *et al.*, 2008; Juhmani, 2012). However, others concluded that the company age had a positive association with the level of disclosure compliance (Owusu-Ansah, 1998). Company age is usually measured in terms of number of years passed since foundation. Based on the above review, we expected that age would have a positive effect on the company compliance to disclosure requirements. This is going to be tested through the following hypothesis:

H3. Bank age is positively associated with the degree of compliance with IFRS/AAOIFI disclosure requirements.

2.3.3 Bank leverage. The positive association between leverage and the extent of disclosure compliance can be explained by the signaling theory. From the prospect of this theory, companies with higher leverage have more incentives to disclose more financial information to satisfy the needs of their creditors (Alsaeed, 2006). In line with this idea, Al-Shammari *et al.* (2008) explained the motivation of highly leveraged firms to provide more details in their annual reports by their desire to reassure creditors that their interests are protected. Additionally, several empirical studies have supported this positive relation between compliance level and leverage (Jaggi and Low, 2000; Al-Shammari *et al.*, 2008; Iatridis, 2008). Nevertheless, some studies findings have ranged between a significant negative relation (Demir and Bahadir, 2014) to no significant relation between level of leverage and disclosure (Ali *et al.*, 2004; Hodgdon *et al.*, 2009). Based on the above discussion, this study opted for testing the following hypothesis:

H4. Bank leverage is positively associated with the degree of compliance with IFRS/AAOIFI disclosure requirements.

2.3.4 Bank multi-nationality. The relation between multi-nationality of a company and its level of compliance to disclosure requirements has been widely discussed in literature. Glaum and Street (2003) argued that multinational companies may be motivated to focus more on completeness and accuracy of the annual accounts because they are more likely to be subjected to additional reviews by several regulatory authorities. Several empirical studies (Jaggi and Low, 2000 and Al-Shammari *et al.*, 2008) have corroborated with these works. However, some other works differed with these findings and argued that there was no relation between multi-nationality and disclosure (Street and Gray, 2002; Hodgdon *et al.*, 2009). This study joined the debate and opted to test the following hypothesis:

H5. Bank multi-nationality is positively associated with the degree of compliance with IFRS/AAOIFI disclosure requirements.

3. Research methodology

3.1 Sample selection

This study examined the extent of compliance with IFRS/AAOIFI disclosure requirements and the factors associated with the level of compliance of IBs in GCC during the period 2010-2014. The choice of GCC IBs was motivated by the exponential growth of this type of banking in the region over the past three decades. During 2013, the GCC IBs share comprised 30 per cent of the total Islamic banking assets with a growth rate around 28 per cent[1]. A total of 44 IBs were identified according to information provided by the national central bank websites of the studied countries, namely, Bahrain, Kuwait, Qatar, KSA, UAE and Oman.

This study relied on data from the English version of the annual reports available on the banks official websites. Five banks of the sample failed to publish their annual reports on their websites. Therefore, they were excluded from the study. Table I Panel A presents the initial sample and the final sample of the selected IBs with their country distribution. Among the 39 selected banks, 23 banks prepared their consolidated financial statements in accordance with the AAOIFI requirements. However, the remaining 16 banks prepared their

	Sub-sample A: companies using AAOIFI				Sub-sample B: companies using IFRS				
	Bahrain	Qatar	Oman	Sub-total	Kuwait	KSA	UAE	Sub-total	Total
Panel A									
Initial sample	18	5	2	25	5	7	7	19	44
Exclusions	1	1		2			3	3	5
Final sample	17	4	2	23	5	7	4	16	39
Panel B									
Initial observations	85	20	10	115	25	35	20	80	195
Exclusions									
Non-published annual reports	5		6	11	2	4	1	7	18
Arabic annual reports				0	2	1		3	3
Financial statements	2			2	3		3	6	8
Incompleted annual reports	1			1		4		4	5
Final observations	77	20	4	101	18	26	16	60	161

Table I.
Sample selection

consolidated financial statements in accordance with the IFRS requirements. Table I Panel B indicates that the initial number of observations was 195 (39 banks in 5 years) and that 34 observations were excluded for different reasons such as:

- the failure of the bank to publish the annual reports;
- the submission of the annual reports only in an Arabic version;
- the success of the bank to present the financial statement but its failure to present the annual report; and
- the failure of the bank to publish a complete version of its annual report.

After exposing the banks to this test, the final number of the retained observations was 161.

3.2 Dependent variable: disclosure compliance index

The consultation of the previous literature on measuring the level of disclosure in annual reports showed that most studies used a disclosure index as a way to measure the level of compliance with accounting standards (Cooke, 1989, 1992; Tower *et al.*, 1999; Street and Bryant, 2000; Glaum and Street, 2003; Al-Shammari *et al.*, 2008; Hodgdon *et al.*, 2008, 2009; Al-Akra *et al.,* 2010; Ballas and Tzovas, 2010; Yiadom and Atsunyo, 2014). Hence, this study opted for a self-constructed compliance index that would be consistent with prior compliance studies and would focus on the matter disclosed in the financial statements and notes.

The constructed disclosure index designated the degree or level of compliance with the accounting disclosure requirements by each sampled bank. The annual reports revealed two types of banks: those complying with the IFRS standards and those complying with the AAOIFI standards. The former were IBs in KSA, Kuwait and UAE, while the latter were IBs in Bahrain, Oman and Qatar.

Thus, the present research adopted two disclosure compliance checklists: IFRS and AAOIFI checklist. The items of these checklists were derived from presentation and disclosure requirements issued by IFRS and AAOIFI standards, respectively.

3.2.1 The IFRS checklist. At the end of 2014, the IASB published 44 IAS/IFRS. The index was based on most of the IFRS standards which were estimated adequate and relevant to this study. However, some IFRS/IAS standards were excluded from the index for the following reasons:

- They were not applicable to GCC context: IAS 12, 19, 26, 29. This exclusion relied on Al-Shammari *et al.* (2008), who focused on the GCC companies. They discussed each IAS with two external auditors employed by Ernst & Young and KPMG in Kuwait. These auditors asserted that the IAS 12, 19, 26 and 29 were not applicable to GCC states.
- They were not applicable during the period of the study: IFRS 14 and 15.
- They were not applicable to banks: IAS 2, 11, 20 and 41; IFRS 4 and 6.
- They did not deal with disclosure: IAS 39; IFRS 9, 10 and 11.
- Other standards: IAS 32 and 34; IFRS 1.

All in all, 19 standards among IAS/IFRS were excluded. Appendix 1 provides further details on the excluded standards. After excluding the 19 irrelevant standards, only 25 of the 44 standards were considered applicable to this study, including IAS 1, 7, 8, 10, 16, 17, 18, 21, 23, 24, 27, 28, 31, 33, 36, 37, 38 and 40 and IFRS 2, 3, 5, 7, 8, 12 and 13. Appendix 2 lists the standards included in the study, their dates into force and citations of relevant literature justifying their inclusion.

After setting standards included in the IFRS index, a checklist was developed. It contained the IFRS disclosure requirements that were published in the IFRS volume issued by the IASB. Each IAS/IFRS was examined for mandatory disclosure requirements. The information that was explicitly voluntary or simply encouraged was considered irrelevant for this study and therefore excluded from our checklist. The disclosure checklist focused on the matter disclosed in the financial statements and notes, but the items presented elsewhere in this annual report were not taken into account.

For the 25 standards included in the IFRS index, 338 mandatory disclosure requirements were obtained. Table II shows the number of items in the checklist for each IAS/IFRS standard included in the index. Based on these requirements, a complete checklist was then developed to measure the degree of compliance of IBs in the GCC countries with accounting disclosure requirements issued by the IASB.

3.2.2 The AAOIFI checklist. Despite the abundance of works on compliance with international accounting standards (IAS/IFRS), little information is available on compliance with Islamic accounting standards issued by AAOIFI. For this reason, the construction of the AAOIFI checklist relied on the same procedure adopted for the IFRS checklist.

To measure compliance with accounting standards issued by AAOIFI, this research initially used all the 26 FAS issued to date by AAOIFI. A number of financial products processed in AAOIFI standards were not used by most IBs and were not considered relevant to users of Islamic financial statements (Vinnicombe, 2010). Therefore, a check on the sample of the study was conducted to determine the most commonly used products.

Appendix 3 shows the number of banks using each product. All products used by less than 40 per cent of banks were excluded. Thus, the AAOIFI checklist consisted of the following products: *Murabaha*, *Mudaraba*, *Musharaka*[2], restricted and unrestricted investment accounts. These products were covered by five standards (FAS 2, FAS 3, FAS 4, FAS 5 and FAS 6). Another issue, the *Zakah*, covered by AAOIFI accounting standards, was included in the compliance index, given that more than 80 per cent of the sample banks used *Zakah* as a religious tax. FAS 9, namely, *Zakah*, was adopted in 2009 and covered the measurement and disclosure requirements of *Zakah*, and its presentation in the financial statements. The AAOIFI index therefore consisted of seven standards counting FAS 1

Standards	Titles	Disclosure items
IAS 1	Presentation of Financial Statements	80
IAS 7	Cash-Flow Statements	14
IAS 8	Accounting Policies, Changes in Accounting Estimates and Errors	3
IAS 10	Events after the Balance-Sheet Date	3
IAS 16	Property, Plant, and Equipment	15
IAS 17	Leases	9
IAS 18	Revenue	2
IAS 21	Effects of Changes in Foreign Exchange Rates	2
IAS 23	Borrowing Costs	2
IAS 24	Related Party Disclosures	6
IAS 27	Consolidated and Separate Financial Statements	4
IAS 28	Investments in Associates	4
IAS 32	Financial Instruments: Disclosure and Presentation	4
IAS 33	Earnings Per Share	6
IAS 36	Impairment of Assets	6
IAS 37	Provisions, Contingent Liabilities, and Contingent Assets	10
IAS 38	Intangible Assets	5
IAS 40	Investment Property	8
IFRS 2	Share-Based Payment	15
IFRS 3	Business Combinations	1
IFRS 5	Non-Current Assets Held for Sale and Discontinued Operations	7
IFRS 7	Financial Instruments: Disclosures	84
IFRS 8	Operating Segments	17
IFRS 12	Disclosure of Interest in Other Entities	23
IFRS 13	Fair Value Measurement	8
Total		338

Table II. The number of items in the checklist for each IAS/IFRS standard included in the index

dealing with the presentation and disclosure in the financial statements of banks and IFIs. Each FAS retained in the AAOIFI index was studied to identify the mandatory disclosure requirements. Table III presents the 94 obtained mandatory disclosure requirements.

Finally, the IFRS and AAOIFI checklists were validated by comparison with special checklists for banks developed by PricewaterhouseCoopers and KPMG[3], and the confirmation of a chartered accountant with specific knowledge of accounting in IBs.

Demir and Bahadir (2014) argued that the level of disclosure compliance could be determined by using the weighted or the unweighted approaches. In line with previous

Standards	Titles	Disclosure items
FAS 1	General Presentation and Disclosure in the Financial Statements of Islamic Banks and Financial Institutions	69
FAS 2	Murabaha and Murabaha to the Purchase Orderer	1
FAS 3	Mudaraba Financing	1
FAS 4	Musharaka Financing	1
FAS 5	Disclosure of Bases For Profit Allocation Between Owners' Equity and Investment Account Holders	12
FAS 6	Equity of Investment Account Holders and their Equivalent	3
FAS 9	Zakah	7
Total		94

Table III. The number of items for each FAS included in the AAOIFI checklist works (Cooke, 1989; Al-Shammari *et al.*, 2008; Akhtartuddin *et al.*, 2009; Juhmani, 2012), this study adopted the unweighted approach because of the equal importance of each item.

For scoring, each disclosure item on the checklist was assigned a value of 1 if it was disclosed in the annual report, 0 if the item was applicable but was not disclosed and NA if it was not applicable. A review of the complete annual report minimized the possibility that companies were penalized for disclosures that were not applicable (Glaum and Street, 2003).

The disclosure compliance index (DCI) for each bank was computed as a ratio of the total number of the required disclosures disclosed by the bank to the total number of applicable disclosures.

3.3 Independent variables

To explain the level of GCC IBs' compliance with the mandatory IFRS/AAOIFI disclosure requirements, the specific characteristics relevant to the case of IBs were tested. Thus, the independent variables examined in this study consisted of the accounting standards and the four bank characteristics, namely, bank size, bank age, bank leverage and bank multi-nationality.

Data for accounting standards choice (IFRS vs AAOIFI), bank age and bank degree of multi-nationalization were hand-collected from banks' annual reports. Data used to compute the bank size and the bank leverage were collected from Datastream. Table IV shows a description of how the independent variables were measured.

3.4 Control variables

The control variables used in this study were the country, the financial year, rule of law and IAS adoption. The two first variables were examined by Al-Shammari *et al.* (2008), who argued that IAS compliance varied in function of countries and financial years. Country (COUNT) was coded 1 for Kuwaiti banks, 2 for Saudi banks, 3 for Emirati banks, 4 for Bahraini banks, 5 for Qatari banks and 6 for Omani banks. Financial year (YEAR) was attributed 1 for year 2010, 2 for year 2011, 3 for year 2012, 4 for year 2013 and 5 for year 2014.

In addition, the levels of enforcement and investor protection have been used as country determinants in many prior accounting studies. Berglöf and Pajuste (2005) argued that there was a strong country effect in what companies disclose and consequently what is disclosed depending on the legal framework and practice in a given country. Similarly, Kabir and Laswad (2015) and de Villiers and Marques (2016) used the World Bank's "rule of law" index as a proxy for legal enforcement. Enikolopov *et al.* (2014) also used this measure as a proxy for quality of legal investor protection and argued that higher rule of law value corresponds to better legal enforcement and more investor protection. Hence, this study adopted the legal

Table IV.
Summary of the independent variables

Variable	Definition	Expected sign
Accounting standards	1 for bank using AAOIFI and 0 for bank using IFRS	±
Size	Natural log of total assets	+
Leverage	Total debt to total assets	+
Age	Number of years since foundation	+
Multi-nationality	1 if the bank is a subsidiary of a multinational corporation and 0 otherwise	+

enforcement in general and used the rule of law (LAW) variable from the World Bank's World Governance Indicators data set compiled by Kaufmann *et al.* (2010).

Equally, Preiato *et al.* (2015) reported that academics and practitioners agreed that enforcement of applicable accounting standards, in particular, has a bearing on financial reporting practice and related market outcomes. For this reason, this study added enforcement of accounting standards as a variable. Hence, 1 was allotted if a country adopted IAS for all companies and 0 if it did not. This measure (IAS) was also used by Al-Shammari *et al.* (2008).

3.5 Regression model

This study focused on the association between the dependent variable (the DCI), the independent variables (standards, size, age, leverage and multi-nationality) and control variables (country, year, rule of law and IAS adoption).

The multivariate approach was used to examine whether the banks' attributes were associated with the level of compliance with AAOIFI/IFRS disclosure requirements of IBs in GCC. The model specification is shown below:

$$\begin{aligned} \mathrm{DCI}_{\mathrm{it}} = {} & \beta_0 + \beta_1\mathrm{STAND}_{\mathrm{it}} + \beta_2\mathrm{SIZE}_{\mathrm{it}} + \beta_3\mathrm{AGE}_{\mathrm{it}} + \beta_4\mathrm{LEV}_{\mathrm{it}} + \beta_5\mathrm{MULTI}_{\mathrm{it}} \\ & + \beta_6\mathrm{COUNT}_{\mathrm{it}} + \beta_7\mathrm{YEAR}_{\mathrm{it}} + \beta_8\mathrm{LAW}_{\mathrm{it}} + \beta_9\mathrm{IAS}_{\mathrm{it}} + \varepsilon_{\mathrm{it}} \end{aligned} \tag{1}$$

where: $\mathrm{DCI}_{\mathrm{it}}$ = the disclosure compliance index of observation; $\mathrm{STAND}_{\mathrm{it}}$ = accounting standards of observation; $\mathrm{SIZE}_{\mathrm{it}}$ = size of observation; $\mathrm{AGE}_{\mathrm{it}}$ = age of observation; $\mathrm{LEV}_{\mathrm{it}}$ = leverage of observation; $\mathrm{MULTIN}_{\mathrm{it}}$ = multi-nationality of observation; $\mathrm{COUNT}_{\mathrm{it}}$ = country of observation; $\mathrm{YEAR}_{\mathrm{it}}$ = year of observation; $\mathrm{LAW}_{\mathrm{it}}$ = World Governance Indicator of observation; $\mathrm{IAS}_{\mathrm{it}}$ = IAS adoption of observation; β_0 = intercept; β = estimated coefficient for each item; and $\varepsilon_{\mathrm{it}}$ = error term.

Equation (1) is a multiple-regression model that tests the relationship between the DCI, the bank variables (accounting standards, size, age, leverage, multi-nationality, country and year) and the country variables (rule of law and IAS adoption).

4. Empirical results

4.1 Descriptive statistics

This section provides the descriptive statistics for the dependent variable (IFRS/AAOIFI DCI) and the independent variables (IBs' specific characteristics).

4.1.1 Dependent variable (disclosure compliance index). Table V presents the descriptive statistical analysis (mean, standard deviation, maximum, minimum and median) of the compliance index for all IBs and the two sub-indices for banks using IFRS and AAOIFI, respectively.

The overall average level of disclosure compliance of IBs in the GCC during 2010-2014 was 73.4 per cent with a standard deviation of 6.4 per cent. The highest compliance level was 89.3 per cent and the lowest compliance level was 55.9 per cent. This result shows that,

Variables	*N*	Mean	SD	Maximum	Minimum	Median
DCI-all Islamic banks	161	73.403	6.375	89.286	55.882	74.576
DCI-IFRS only	60	74.605	8.053	89.286	55.882	76.601
DCI-AAOIFI only	101	72.688	5.037	81.356	61.194	73.770

Table V. Descriptive statistics for dependent variable (DCI) although all sampled IBs in GCC claimed that their financial statements were prepared in total compliance with the IFRS requirements or AAOIFI requirements, no bank fully complied with all the accounting required disclosures. In addition, some IBs complied with less than 60 per cent of the mandatory disclosures, but none of those firms received qualified audit opinions regarding IFRS non-compliance. This observation may question the auditor's role in IBs. Indeed, normally the auditor would be required to report to stakeholders whether the bank fully complies with IAS/AAOIFI requirements. Unfortunately, this study revealed that this was not the case in the investigated context.

Table V also shows the level of disclosure compliance for banks using IFRS and banks using AAOIFI. The results revealed that the average level of compliance for banks using IFRS was 74.6 per cent, with 89.3 and 55.9 per cent being the maximum and minimum compliance levels, respectively. This finding is very close to the 75 per cent compliance level reported by Al-Shammari *et al.* (2008), who studied disclosure compliance with IFRS requirements of companies in the GCC countries.

In addition, the study revealed that the level of compliance for banks using AAOIFI ranged between 61.2 and 81.4 per cent, with an average of 72.7 per cent. This finding is in line with Vinnicombe (2010) and El-Halaby and Hussainey (2016), who reported that the average compliance level with AAOIFI standards was 73 per cent. Hence it can be observed that the level of compliance with IFRS was higher than that with AAOIFI. Thus, descriptive statistics suggested that disclosure compliance among GCC IBs may be influenced by accounting standards effects.

To test the differences of means between banks adopting IFRS requirements and those adopting AAOIFI ones, a *t*-test was performed. A distinction between IFRS (0) and AAOIFI (1) banks was made. It was observed that the mean difference was statistically significant with a level of 3.3 per cent ($p < 0.05$). This result may imply that there was a serious difference between the banks in terms of disclosure requirements. In addition, it seemed that the average compliance level with AAOIFI was less than with IFRS.

Table VI shows the mean disclosure compliance level over time and by country. As can be seen in Panel A, the mean level of IFRS disclosure compliance increased over time, from 75.6 per cent in 2010 to 76.7 per cent in 2012. Then, it decreased to 71.3 per cent in 2013. A possible explanation for this decrease of level of compliance with IFRS would be that in 2013, two new

Table VI.
Mean disclosure compliance by country over time

Years	IFRS	Kuwait	KSA	UAE
Panel A: Mean IFRS compliance				
2010	75.559	79.948	73.350	76.315
2011	76.140	79.730	74.756	75.523
2012	76.644	73.360	75.952	80.967
2013	71.324	70.677	69.025	77.003
2014	73.261	70.241	74.040	78.130
Total	74.605	73.715	73.356	77.636
	AAOIFI	Bahrain	Qatar	Oman
Panel B: Mean AAOIFI compliance				
2010	70.862	71.869	67.086	
2011	72.613	73.273	69.974	
2012	73.829	73.566	74.882	
2013	72.946	73.743	74.385	64.085
2014	73.069	73.639	74.501	65.930
Total	72.688	73.223	72.166	65.007

standards were introduced, i.e. IFRS 12 and IFRS 13. Therefore, compliance of the banks in question with these standards would not have been immediate. Panel B shows a significant improvement in the mean level of AAOIFI disclosure compliance, from 70.9 per cent in 2010 to 73.1 per cent in 2014. This increase may be related to the accumulation of experience and expertise in the application of accounting AAOIFI standards by IBs in GCC.

Table VI also shows a disparity in the level of disclosure compliance from one IB in the GCC to another. Panel A shows that the UAE IBs achieved 77.6 per cent, which was the highest mean compliance level with IFRS standards over all years. However, the lowest level of compliance with the same standards, 73.4 per cent, was recorded in IBs of KSA. Panel B shows the percentage of compliance with the AAOIFI standards. The first observation would be that the Omani IBs showed only 65 per cent of compliance with these standards, which was the lowest recorded percentage in the GCC. This observation can be explained by the fact that only two IBs are established in Oman which starting from 2013 and might be still in need for experienced Islamic bankers. "The second observation would be that, for the five observed years, the Bahrini IBs reached a mean of 73.2 per cent of compliance, which was the highest mean in the GCC". This observation can be explained by Vinnicombe's (2010) contention that the AAOIFI organization was established in the Kingdom of Bahrain, and the Central Bank of Bahrain required all licensed IBs to comply with AAOIFI standards.

4.1.2 Independent variables (IBs specific characteristics). As can be seen in Table VII, bank sizes ranged between US$1.567m to US$434878.084m, with a mean of US$43182.931m and standard deviation of US$78.300m. This size distribution was, as usual, skewed. Skewness was mitigated by utilizing the natural logarithm of size in the regression analysis, consistent with prior studies (Wallace *et al.*, 1994; Glaum and Street, 2003). IBs complying with IFRS standards and having an average size of US$84696.734m were, on average, larger than IBs complying with AAOIFI accounting standards and having an average size of US$9800.698m. This finding shows that large IBs in GCC adopted IFRS standards to prepare their financial statements. IBs' age ranged between 1 and 65 years, with a mean of 19 years. The oldest IB complying with IFRS standards was 65 years, while the oldest IB complying with AAOIFI standards was 36 years. Leverage mean was 0.654 with a standard deviation of 0.304. The lowest leverage ratio was 0.011, which is achieved by an IB complying with AAOIFI standards. However, the highest leverage

Variable	Mean	SD	Maximum	Minimum	Median
All Islamic banks					
SIZE (US$m)	43182.931	78.300	434878.084	1.567	2578.485
AGE	19.372	14.711	65	1	14
LEV	0.654	0.304	0.930	0.011	0.827
MULTIN	0.492	0.501	1	0	0
Islamic bank complying with IFRS standards					
SIZE (US$m)	84696.734	101.000	434878.084	121.441	3930.000
AGE	26.875	16.737	65	1	30.5
LEV	0.848	0.109	0.930	0.201	0.874
MULTIN	0.436	0.499	1	0	0
Islamic bank complying with AAOIFI standards					
SIZE (US$m)	9800.698	21.100	96088.391	1.567	832.804
AGE	13.544	9.525	36	1	10
LEV	0.498	0.321	0.916	0.011	0.476
MULTIN	0.535	0.501	1	0	1

Table VII. Descriptive statistics for independent variables ratio was 0.930, which is achieved by an IB complying with IFRS standards. This would imply that IBs complying with IFRS standards were more indebted. Finally, 50 per cent of the studied IBs had multinational subsidiaries.

4.2 Correlation analysis

Table VIII displays the Pearson correlations between the dependent variable (DCI) and the independent and the control variables as well as the correlations among these variables.

As can be seen in Table VIII, the dependent variable DCI was related to all the independent variables and the highest correlation was with the bank multi-nationality. The positive and significant correlations (1 per cent level) between bank age, bank leverage, bank size and the level of compliance with disclosures requirements were consistent with expectations. In addition, the negative and significant association (10 per cent level) between standards and compliance level was also consistent with expectations. Thus, these results provide a preliminary support for *H1*, *H2*, *H3*, *H4* and *H5*.

Furthermore, Table VIII shows that all the independent variables except bank multi-nationality correlated with each other, reaching the highest correlation coefficient of 0.6845, that is less than 0.80. Hence, the results do not suggest any serious collinearity between the independent variables. The variance inflation factor (VIF) was another measure of multicollinearity. As presented in Table IX, the highest VIF value was 1.95, that is less than 2. Thus, the correlation and the VIF measures both suggest that multicollinearity was not a problem for the regression model, as was reported by Gujarati (2003).

4.3 Multivariate analysis

Before applying the regression analysis, several checking assumptions of the multiple regression analysis had to be achieved. We tested for autocorrelation and heteroscedasticity using the Durbin Watson and the Modified Wald tests. The results revealed the presence of heteroscedasticity problems. Heteroscedasticity is present when the size of the error term differs across values of an independent variable. Whereas the ordinary least-squares (OLS) regression gives equal weight to all observations, heteroscedasticity makes OLS coefficients inefficient and invalid. In this case, the generalized least squares (GLS) regression would be more appropriate, as it provides the best linear unbiased estimators under heteroscedasticity. Therefore, we used the GLS method, which takes into account the presence of heteroscedasticity.

Table IX shows the GLS results of Model (1), where the estimation was robust to heteroscedasticity. The explanatory power of the model *R*-square pointed out that 45.56 per cent of the variation in mandatory disclosure compliance can be explained by variations in the independent and control variables included in the model. In addition, the results of the regression revealed that the model is statistically significant at 0.000.

We expected a significant association between the degree of compliance with IFRS/AAOIFI disclosure requirements and the specific bank characteristics, namely, standard choice, size, age, leverage and multi-nationality. As can be seen in Table IX, the results revealed that the level of compliance was significantly different between the banks adopting the IFRS standards and those adopting the AAOIFI ones. This result was consistent with El-Halaby and Hussainey (2015), who argued that variances in disclosure level were based on adopted accounting standards. The negative coefficient would be a good indicator that IBs adopting the IFRS standards showed a greater compliance than those adopting the AAOIFI ones. This can be explained by the fact that AAOIFI standards were weaker and less rigorously applied than IFRS. This finding supports the commonly shared belief that the AAOIFI application in IBs suffers from an enforceability problem.

Table VIII. Pearson correlation coefficient matrix

Variable	DCI	STAND	AGE	SIZE	LEV	MULTIN	YEAR	COUNT	LAW
STAND	−0.1458*	1.0000							
AGE	0.3187***	−0.4508***	1.0000						
SIZE	0.3356***	−0.6020***	0.4898***	1.0000					
LEV	0.3363***	−0.5730***	0.5449***	0.6845***	1.0000				
MULTIN	0.3858***	0.0980	0.0472	0.0989	0.0444	1.0000			
YEAR	−0.0154	−0.0305	0.0436	0.0243	0.0248	−0.0813			
COUNT	0.1119	0.4339***	−0.2491***	−0.1999***	−0.1284	0.2207***	0.1155	1.0000	
LAW	0.0094	0.2499***	−0.0998	0.0860	0.0530	0.1963**	0.1742**	0.6009***	1.0000
IAS	0.0839	0.5193***	−0.3099*	−0.5915***	−0.4357*	−0.0690	0.0020	−0.1392*	−0.3466***

Note: *, ** and *** indicate significance at 0.1, 0.5 and 0.01, respectively

Variable	Expected sign	Coef.	z	$p > z$	VIF
Constant		40.2437	7.55***	0.000	
Standards	±	−0.3239	−3.26 ***	0.002	1.95
Size	+	1.4539	6.70***	0.000	1.92
Age	+	0.1139	5.15***	0.000	1.60
Leverage	+	0.4635	0.38	0.707	1.85
Multi-nationality	+	2.0791	3.38***	0.001	1.43
Country		0.1988	4.13***	0.000	1.58
Year		−0.1141	−0.67	0.506	1.15
Law		0.1088	1.66*	0.098	1.75
IAS		3.3617	3.93***	0.000	1.82
Modified Wald = 0.0000		R-squared = 0.4556			
LBI = 1.9026342		Wald chi^2(9) = 419.01			
		Prob > chi^2 =0.0000			

Notes: This table presents the results of regression models that examined the relationship between level of disclosure compliance and independent variables. With: Standards = 0 for banks using IFRS and 1 for banks using AAOIFI; Size = log of total assets; Age = number of years since foundation; Leverage = ratio of total debt to total assets; Multi-nationality = 1 if the bank is a subsidiary of a multinational corporation and 0 otherwise; Country = 1 if bank is from Kuwait, 2 if bank is from KSA, 3 if bank is from UAE, 4 if bank is from Bahrain, 5 if bank is from Qatar and 6 if bank is from Oman; Year = 1 for year 2010, 2 for year 2011, 3 for year 2012, 4 for year 2013 and 5 for year 2014; Law = World Governance Indicators compiled by Kaufmann *et al.* (2010); IAS = 1 if country adopted IAS for all companies and 0 otherwise; * and *** indicate significance at 0.1 and 0.01, respectively

Table IX.
Results of multivariate analysis

Additionally, the results suggest that the total assets used as a proxy for size were significant for the explanation of variation of compliance with IFRS/AAOIFI disclosure requirements. This finding was in line with Ali *et al.* (2004), Al-Shammari *et al.* (2008) and Juhmani (2012).

The next finding of this study was the positive association between bank age and the level of disclosures compliance. This was in total agreement with Owusu-Ansah (1998). This result would support the hypothesis that older IBs are likely to comply more with disclosure requirements because they have more experience and they have improved their reporting systems over time.

In addition, these results can be considered further evidence that bank multi-nationality can have a positive effect on the level of mandatory disclosure compliance. This finding is consistent with Jaggi and Low (2000) and Ali *et al.* (2004). This can be explained by the fact that multinational IBs which are subsidiaries of multinational corporations have a stronger incentive to comply more with mandatory disclosure to protect their international reputation and to reduce the political risk. Thus, these results can serve as further evidence that the level of IFRS/AAOIFI disclosure compliance is associated with different bank attributes included in the model.

However, our results revealed an insignificant association between bank leverage and the level of disclosure compliance with IFRS/AAOIFI. This finding would imply the rejection of our fourth hypothesis predicting that IBs with higher leverage would comply more readily with mandatory disclosure requirements. This is in line with Ahmed and Nicholls (1994), Ali *et al.* (2004) and Hodgdon *et al.* (2009), who found no significant relation between leverage and the level of information disclosure.

In terms of the control variables, country had a significant impact on disclosure compliance. This result suggested that the level of compliance with IFRS/AAOIFI disclosure requirements differed significantly from country to country within the GCC. This was in line with prior studies indicating that differences in the level of compliance reflected the country of origin (Kahl and

Belkaoui, 1981; Street and Bryant, 2000; Al-Shammari *et al.*, 2008). However, the results showed that year had an insignificant association with disclosure, which may be explained by the fact that the number of years examined (five years) was not sufficient to change the attitude of bank managers concerning their disclosure policy.

With respect to country variables, results reported a positive and significant impact of the rule of law and IAS adoption at the level of accounting disclosure compliance. Thus, it can be argued that IBs from countries where the legal and accounting enforcement was higher seemed to be more compliant with accounting disclosure requirements and, consequently, the transparency level was higher.

5. Conclusion

This study was conducted to investigate the level of compliance of 39 IBs in GCC with IFRS and AAOIFI disclosure requirements between 2010 and 2014. It examined the impact of banks' specific attributes, which include size, age, leverage and multi-nationality, on the disclosure compliance level. A self-constructed index DCI based on IFRS and AAOIFI checklists measured the extent of compliance with mandatory disclosures required by 25 IAS/IFRS and 7 FAS.

The main findings of this study can be summarized as follows. First, the overall average level of disclosure compliance was 73.4 per cent. Second, the average level of compliance of the banks using IFRS was more important than the average level of compliance of the banks using AAOIFI standards. Third, we observed that no IB in the GCC fully complied with all the IFRS and AAOIFI disclosure requirements. Indeed, the multivariate analyses showed significant differences in compliance levels across banks that adopted IFRS and banks that adopted AAOIFI. This result would imply that the level of compliance was significantly lower for AAOIFI IBs than for IFRS ones. Hence, this study would underscore the enforceability issue of the AAOIFI standards. In addition, the findings of this study confirmed the hypotheses formulated about the effect of the bank size, age and multi-nationality on its compliance with standards. Thus, it could be concluded that larger, older and multinational IBs showed a higher compliance with accounting disclosure requirements.

These findings can be considered a contribution to the current debate in the literature regarding the appropriate accounting references for IBs reporting: the IFRS standards, the AAOIFI standards, other standards or the combination of all of the above. This study was a pioneering trial of a comparison between IFRS and AAOFI adoption, which may serve as a model for future research in the area of financial reporting of IBs. This study was also a tentative contribution to the literature on disclosure practices in Islamic banking. The GCC IBs market is one of the most important Islamic banking markets in the world in which the application of IFRS and AAOIFI standards is mandatory. Therefore, our study could be significant and our findings may be of great help to both AAOIFI and IASB to improve the comparability of Islamic banking reporting.

On another scale, this study may have some practical implications. Indeed, this study may raise the awareness of stakeholders in Islamic banking about the discrepancy between the real behavior of the banks and the expected compliance with disclosure requirements. Finally, our results should alert the national regulators of the GCC countries about the diligences carried out by auditors. This study revealed that there was a problem of compliance with accounting disclosure requirements in the sampled IBs. However, the auditors' reports asserted that there was a full compliance with IFRS or AAOIFI. Hence, the supervisors should impose more diligences to auditors especially concerning the compliance with mandatory disclosure because the auditors' report is the main assurance to the banks' stockholders.

It is our belief that this topic deserves more investigation and deeper research because of the continuous growth of Islamic banking. To improve such an endeavor, it would be very interesting to understand a number of limitations that marked our study. First, the empirical investigation was limited to annual reports of IBs in GCC countries. Future studies could cover other IBs in other countries as well as other types of IFIs. Future studies could also examine the disclosure practices in corporate social reports, which would be very important to IBs. Second, IBs' disclosure practices may be influenced by certain variables not included in our model. Hence, other internal and external characteristics such as profitability and ownership structure should be tested in future works. Third, the disclosure index used in the study may be affected by the inherent subjectivity of data. To minimize the likelihood of errors, the entire annual report and financial statement footnotes were reviewed in our study and the index measurement was consistent with prior studies.

Notes

1. The Banker, special report on the Top Islamic Financial Institutions, November 2013.
2. Kamla (2009) claimed that "the most dominant financing techniques promoted by Islamic banks as specifically Islamic are *Mudarabah* (a partnership in profit between the provider(s) of labour and the providers of capital. Profit is shared as agreed by the two parties and the losses are borne by the provider(s) of funds), *Musharakah* (an investment based technique, each party contributing to a partnership's capital in equal or varying degrees, with losses shared in proportion to the contributed capital) and *Murabaha* (the sale of goods at cost plus an agreed profit mark up)".
3. For IFRS checklist, we used "Illustrative IFRS consolidated financial statements Banks" produced by PricewaterhouseCoopers and "Illustrative financial statements: Banks" and "guide to annual financial statements: illustrative disclosures for banks" produced by the KPMG International Standards Group. For AAOIFI checklist, we used "AAOIFI illustrative consolidated financial statements for Islamic banks" produced by KPMG Qatar.

References

AAOIFI (2010), *Accounting and Auditing Standards for Islamic Financial Institutions*, Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), Bahrain.

Abdullah, M., Evans, L., Fraserb, I. and Tsalavoutas, I. (2015), "IFRS mandatory disclosures in malaysia: the influence of family control and the value (ir)relevance of compliance levels", *Accounting Forum*, Vol. 39 No. 4, pp. 328-348.

Ahmad, S.N.S. and Hamad, M. (1992), "Accounting Standard and Islamic Banks", *Accamedia*, Vol. 11 No. 1, pp. 46-61.

Ahmed, A. (2012), "Accounting in Islamic perspective: a timely opportunity a timely challenge", *ASA University Review*, Vol. 6 No. 2, pp. 11-31.

Ahmed, K. and Nicholls, D. (1994), "The impact of non-financial company characteristics on mandatory disclosure compliance in developing countries; the case of Bangladesh", *International Journal of Accounting*, Vol. 29, pp. 62-67.

Akhtaruddin, M. (2005), "Corporate mandatory disclosure practices in Bangladesh", *The International Journal of Accounting*, Vol. 40 No. 4, pp. 399-422.

Akhtaruddin, M., Hossain, M.A., Hossain, M. and Yao, L. (2009), "Corporate governance and voluntary disclosure in corporate annual reports of Malaysian listed firms", *Journal of Applied Management Accounting Research*, Vol. 7 No. 1, pp. 1-21.

Al-Akra, M., Eddie, I.A. and Ali, M.J. (2010), "The influence of the introduction of accounting disclosure regulation on mandatory disclosure compliance: evidence from Jordan", *The British Accounting Review*, Vol. 42 No. 3, pp. 170-186.

Alberti-Alhtaybat, L.V., Hutaibat, K. and Al-Htaybat, K. (2012), "Mapping corporate disclosure theories", *Journal of Financial Reporting and Accounting*, Vol. 10 No. 1, pp. 73-94.

Ali, M., Ahmed, K. and Henry, D. (2004), "Disclosure compliance with national accounting standards by listed companies in South Asia", *Accounting and Business Research*, Vol. 34 No. 3, pp. 183-199.

Al-Mutawaa, A. and Hawaidy, A.M. (2010), "Disclosure level and compliance with IFRSs: an empirical investigation of Kuwaiti companies", *International Business and Economics Research Journal*, Vol. 9 No. 5, pp. 33-50.

Alsaeed, K. (2006), "The association between firm-specific characteristics and disclosure", *Managerial Auditing Journal*, Vol. 21 No. 5, pp. 476-496.

Al-Shammari, B., Brown, P. and Tarca, A. (2008), "An investigation of compliance with international accounting standards by listed companies in the Gulf Co-operation Council Member States", *The International Journal of Accounting*, Vol. 43 No. 4, pp. 425-447.

Amer, S. (2007), "Development of Islamic accounting theory: principle of shahadat second principle", *International Review of Business Research Papers*, Vol. 3 No. 3, pp. 56-68.

Ballas, A.A. and Tzovas, C. (2010), "An empirical investigation of Greek firms' compliance with IFRS disclosure requirements", *International Journal of Managerial and Financial Accounting*, Vol. 2 No. 1, pp. 40-62.

Baydoun, N. and Willett, R. (2000), "Islamic corporate reports", *Abacus*, Vol. 36 No. 1, pp. 71-90.

Berglöf, E. and Pajuste, A. (2005), "What do firms disclose and why? Enforcing corporate governance and transparency in Central and Eastern Europe", *Oxford Review of Economic Policy*, Vol. 21 No. 2, pp. 178-197.

Cooke, T. (1989), "Disclosure in the corporate annual reports of Swedish companies", *Accounting and Business Research*, Vol. 19 No. 74, pp. 113-124.

Cooke, T. (1992), "The impact of size, stock market listing and industry type on disclosure in the annual reports of Japanese Listed Corporations", *Accounting and Business Research*, Vol. 22 No. 87, pp.229-237.

De Villiers, C. and Marques, A. (2016), "CSR disclosures: predispositions and consequences", *Accounting and Business Research*, Vol. 46 No. 2, pp. 167-195.

Demir, V. and Bahadir, O. (2014), "An investigation of compliance with International Financial Reporting Standards by listed companies in Turkey", *Accounting and Management Information Systems*, Vol. 13 No. 1, pp. 4-34.

El-Halaby, S. and Hussainey, K. (2015), "The determinants of social accountability disclosure: evidence from Islamic banks around the world", *International Journal of Business*, Vol. 20 No. 3, pp. 202-223.

El-Halaby, S. and Hussainey, K. (2016), "Determinants of compliance with AAOIFI standards by Islamic banks", *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 9 No. 1, pp. 143-168.

Enikolopov, R., Petrova, M. and Stepanov, S. (2014), "Firm value in crisis: effects of firm-level transparency and country-level institutions", *Journal of Banking & Finance*, Vol. 46, pp. 72-84.

Farook, S., Kabir Hassan, M. and Lanis, R. (2011), "Determinants of corporate social responsibility disclosure: the case of Islamic banks", *Journal of Islamic Accounting and Business Research*, Vol. 2 No. 2, pp. 114-141.

Glaum, M. and Street, D.L. (2003), "Compliance with disclosure requirements of Germany's new market: IAS versus US GAAP", *Journal of International Financial Management and Accounting*, Vol. 14 No. 1, pp. 64-100.

Glaum, M., Schmidt, P., Street, D.L. and Vogel, S. (2013), "Compliance with IFRS 3- and IAS 36-required disclosures across 17 European countries: company and country-level determinants", *Accounting and Business Research*, Vol. 43 No. 3, pp. 163-204.

Gray, S.J. (1988), "Towards a theory of cultural influence on the development of accounting systems internationally", *Abacus*, Vol. 24 No. 1, pp. 1-16.

Gujarati, D.N. (2003), *Basic Econometrics*, 3rd ed., McGraw-Hill, New York, NY.

Heniwati, E. (2015), "Measuring companies' compliance with IFRS-based PSAK disclosures", *International Review of Business*, Vol. 15, pp. 91-110.

Hodgdon, C., Tondkar, R.H., Adhikari, A. and Harless, D.W. (2008), "Compliance with IFRS disclosure requirements and individual analysts' forecast errors", *Journal of International Accounting, Auditing & Taxation*, Vol. 17 No. 1, pp. 1-13.

Hodgdon, C., Tondkar, R.H., Adhikari, A. and Harless, D.W. (2009), "Compliance with International Financial Reporting Standards and auditor choice: new evidence on the importance of the statutory audit", *The International Journal of Accounting*, Vol. 44 No. 1, pp. 33-55.

IASPlus (2012), *Use of IFRS by Jurisdiction*, available at: www.iasplus.com/en/resources/ifrs-topics/use-of-ifrs (accessed 31 August 2015).

Iatridis, G. (2008), "Accounting disclosure and firms' financial attributes: evidence from the UK stock market", *International Review of Financial Analysis*, Vol. 17 No. 2, pp. 219-241.

Jaggi, B. and Low, P. (2000), "Impact of culture, market forces, and legal system on financial disclosures", *International Journal of Accounting*, Vol. 35 No. 4, pp. 459-519.

Jobair, M., Hossain, I. and Ahmed, K. (2014), "Compliance of IFRS 7: a study on the state owned specialized banks of Bangladesh", *European Journal of Business and Management*, Vol. 6 No. 2, pp. 46-53.

Juhmani, O. (2012), "Factors influencing the extent of corporate compliance with IFRSs: evidence from companies listed in Bahrain Stock Exchange", *Journal of International Business and Economics*, Vol. 12 No. 2, pp. 67-79.

Kabir, H. and Laswad, F. (2015), "The impact of improvements in institutional oversight on IFRS accrual quality in Europe", *Australian Accounting Review*, Vol. 25 No. 4, pp. 428-444.

Kahl, A.L. and Belkaoui, A. (1981), "Bank annual report disclosure adequacy internationally", *Accounting and Business Research*, Vol. 11 No. 43, pp. 189-196.

Kamla, R. (2009), "Critical insights into contemporary Islamic accounting", *Critical Perspectives on Accounting*, Vol. 20 No. 8, pp. 921-932.

Karim, R.A.A. (1995), "The nature and rationale of a conceptual framework for financial reporting by islamic banks", *Accounting and Business Research*, Vol. 25 No. 100, pp. 285-300.

Kaufmann, D., Kraay, A. and Mastruzzi, M. (2010), *The Worldwide Governance Indicators Project*, The World Bank, New York, NY, available at: www.govindicators.org

Khan, M.A. (1994), "Accounting issues and concepts for Islamic Banking", *Development of an Accounting System for Islamic Banking*, The Institute of Islamic Banking & Insurance, London.

Maali, B., Casson, P. and Napier, C. (2006), "Social reporting by Islamic banks", *Abacus*, Vol. 42 No. 2, pp. 266-289.

Mirza, M. and Baydoun, N. (2000), "Accounting policy in a Riba free environment, accounting, commerce, and finance", *The Islamic Perspective Journal*, Vol. 4 No. 1, pp. 30-40.

Orij, R. (2010), "Corporate social disclosures in the context of national cultures and stakeholder theory", *Accounting, Auditing & Accountability Journal*, Vol. 23 No. 7, pp. 868-889.

Owusu-Ansah, S. (1998), "The impact of corporate attributes on the extent of mandatory disclosure and reporting by listed companies in Zimbabwe", *International Journal of Accounting*, Vol. 33 No. 5, pp. 605-631.

Perera, M.H. (1989), "Towards a framework to analyze the impact of culture on accounting", *International Journal of Accounting*, Vol. 24 No. 1, pp. 42-56.

Preiato, P.J., Brown, H. and Tarca, A. (2015), "A comparison of between-country measures of legal setting and enforcement of Accounting Standards", *Journal of Business Finance & Accounting*, Vol. 42 Nos 1/2, pp. 1-50.

Sarea, A.M. and Hanefah, M.M. (2013), "Adoption of AAOIFI accounting standards by Islamic banks of Bahrain", *Journal of Financial Reporting and Accounting*, Vol. 11 No. 2, pp. 131-142.

Sarea, A.M. (2012), "The level of compliance with AAOIFI Accounting Standards: evidence from Bahrain", *International Management Review*, Vol. 8 No. 2.

Street, D.L. and Bryant, S.M. (2000), "Disclosure level and compliance with IASs: a comparison of companies with and without US listings and filings", *The International Journal of Accounting*, Vol. 35 No. 3, pp. 305-329.

Street, D.L. and Gray, S.J. (2001), *Observance of International Accounting Standards: Factors Explaining Non-Compliance by Companies Referring to the Use of IAS*, ACCA Research Monograph.

Street, D.L. and Gray, S.J. (2002), "Factors influencing the extent of corporate compliance with International Accounting Standards: summary of a research monograph", *Journal of International Accounting, Auditing & Taxation*, Vol. 11 No. 1, pp. 51-76.

Street, D.L., Gray, S.J. and Bryant, S.M. (1999), "Acceptance and observance of international accounting standards: an empirical study of companies claiming to comply with IASs", *The International Journal of Accounting*, Vol. 34 No. 1, pp. 11-48.

Tower, G., Hancock, P. and Taplin, R. (1999), "A regional study of listed companies' compliance with international accounting standards", *Accounting Forum*, Vol. 3 No. 3, pp. 293-305.

Triyuwono, I. (2000), "Shariah accounting: implementation of justice in a form of trust metaphor", *Journal of Accountancy and Auditing*, Vol. 4 No. 1, pp. 1-34.

Tsakumis, G.T. (2007), "The influence of culture on accountants' application of financial reporting rules", *Abacus*, Vol. 43 No. 1, pp. 27-48.

Velayutham, S. (2014), "Conventional accounting vs Islamic accounting: the debate revisited", *Journal of Islamic Accounting and Business Research*, Vol. 5 No. 2, pp. 126-141.

Venardos, A.M. (2011), *Islamic Banking in South East-Asia: Its Development & Future*, 3rd ed., World Scientific Publishing.

Vinnicombe, T. (2010), "AAOIFI reporting standards: measuring compliance", *Advances in International Accounting*, Vol. 26 No. 1, pp. 55-65.

Wallace, R., Naser, K. and Mora, A. (1994), "The relationship between the comprehensiveness of corporate annual reports and firm characteristics in Spain", *Accounting and Business Research*, Vol. 25 No. 97, pp. 41-53.

Watts, R.L. and Zimmerman, J.L. (1986), *Positive Accounting Theory*, Prentice-Hall, Englewood Cliffs, NJ.

Yaya, R. (2004), "Would the objectives and characteristics of Islamic accounting for Islamic business organizations meet the Islamic socio-economic objectives?", *Jurnal Akuntansi & Auditing Indonesia*, Vol. 8 No. 2, pp. 141-163.

Yiadom, E.M. and Atsunyo, W. (2014), "Compliance with international financial reporting standards by listed companies in Ghana", *International Journal of Business and Management*, Vol. 9 No. 10, pp. 87-100.

Further reading

Beaver, W.H. (1978), "Current trends in corporate disclosure", *The Journal of Accountancy*, Vol. 145, pp. 44-52.

Hameed, S. (2009), *Accounting and Auditing for Islamic Financial Institutions*, 1st ed., INCEIF, Kuala Lumpur.

Sarea, A.M. (2013), "The move towards global accounting standards for Islamic financial institutions: evidence from AAOIFI", *Journal of Islamic Economics Banking and Finance*, Vol. 9 No. 4, pp. 152-163.

Sartini, S. (2005), "Islamization of accounting", *Journal of Economics and Business Analysis*, Vol. 3 No. 2, pp. 197-203.

Appendix 1

Standards	Title	Justification of exclusion
IAS 2	Inventorie	Not applicable to banks (IAS 2 is not applicable to the financial instruments)
IAS 11	Construction Contracts	The study focuses on banks, not on the construction companies
IAS 12	Income Taxes	Not applicable to GCC companies
IAS 19	Employee Benefits	Not applicable to GCC companies
IAS 20	Accounting for Government Grants and Disclosure of Government Assistance	Not applicable to sampled banks (the sampled banks didn't have government grants and other forms of government assistance)
IAS 26	Accounting and Reporting by Retirement Benefit Plans	Not applicable to GCC companies
IAS 29	Financial Reporting in Hyperinflationary Economies	Not applicable to GCC companies
IAS 32	Financial Instruments: Disclosure and Presentation	The study uses IFRS 7 (Financial Instruments: Disclosures)
IAS 34	Interim Financial Reporting	The study focuses on the annual reports and not on interim reports
IAS 39	Financial Instruments: Recognition and Measurement	There is no disclosure requirement
IAS 41	Agriculture	The study focuses on banks, not on agricultural companies
IFRS 1	First-time Adoption of International Financial Reporting Standards	The sampled banks do not adopt for the first time IFRS
IFRS 4	Insurance Contracts	Not applicable to banks (it does not apply to financial assets and financial liabilities within the scope of IAS 39 Financial Instruments: Recognition and Measurement)
IFRS 6	Exploration for and Evaluation of Mineral Resources	The study focuses on banks, not on exploration companies
IFRS 9	Financial Instruments	There is no disclosure requirement
IFRS 10	Consolidated Financial Statements	There is no disclosure requirement
IFRS 11	Joint Arrangements	There is no disclosure requirement
IFRS 14	Regulatory Deferral Accounts	Came into force in January 2016
IFRS 15	Revenue from Contracts with Customers	Came into force in January 2017

Table AI.
IFRS excluded from the disclosure index and the reasons for their exclusion

Appendix 2

Standards	Title	Dates into force	Inclusion supported by
IAS 1	Presentation of Financial Statements	1975	Al-Shammari *et al.* (2008), Al-Akra *et al.* (2010), Heniwati (2015)
IAS 7	Cash-Flow Statements	1979	Al-Akra *et al.* (2010), Heniwati (2015)
IAS 8	Accounting Policies, Changes in Accounting Estimates and Errors	1979	Al-Akra *et al.* (2010), Heniwati (2015)
IAS 10	Events after the Balance-Sheet Date	1980	Al-Shammari *et al.* (2008), Al-Akra *et al.* (2010), Heniwati (2015)
IAS 16	Property, Plant, and Equipment	1983	Al-Shammari *et al.* (2008), Street *et al.* (1999), Hodgdon *et al.* (2008, 2009), Al-Akra *et al.* (2010), Heniwati (2015)
IAS 17	Leases	1984	Street and Bryant (2000), Hodgdon *et al.* (2008, 2009), Al-Akra *et al.* (2010), Heniwati (2015)
IAS 18	Revenue	1984	Al-Shammari *et al.* (2008), Al-Akra *et al.* (2010)
IAS 21	Effects of Changes in Foreign Exchange Rates	1985	Al-Shammari *et al.* (2008), Al-Akra *et al.* (2010), Heniwati (2015)
IAS 23	Borrowing Costs	1986	Al-Shammari *et al.* (2008), Street and Bryant (2000), Hodgdon *et al.* (2008, 2009), Al-Akra *et al.* (2010), Heniwati (2015)
IAS 24	Related Party Disclosures	1986	Al-Shammari *et al.* (2008), Al-Akra *et al.* (2010), Heniwati (2015)
IAS 27	Consolidated and Separate Financial Statements	1990	Al-Shammari *et al.* (2008), Al-Akra *et al.* (2010), Heniwati (2015)
IAS 28	Investments in Associates	1990	Al-Shammari *et al.* (2008), Al-Akra *et al.* (2010), Heniwati (2015)
IAS 31	interests in joint ventures	1992	Al-Akra *et al.* (2010)
IAS 33	Earnings Per Share	1999	Al-Shammari *et al.* (2008), Street and Bryant (2000), Hodgdon *et al.* (2008, 2009), Al-Akra *et al.* (2010), Heniwati (2015)
IAS 36	Impairment of Assets	1999	Hodgdon *et al.* (2008, 2009), Al-Akra *et al.* (2010)
IAS 37	Provisions, Contingent Liabilities, and Contingent Assets	1999	Al-Shammari *et al.* (2008), Hodgdon *et al.* (2008, 2009), Al-Akra *et al.* (2010), Heniwati (2015)
IAS 38	Intangible Assets	1999	Hodgdon *et al.* (2008, 2009)s, Al-Akra *et al.* (2010), Heniwati (2015)
IAS 40	Investment Property	2001	Al-Akra *et al.* (2010), Heniwati (2015)
IFRS 2	Share-Based Payment	2005	Al-Akra *et al.* (2010), Heniwati (2015)
IFRS 3	Business Combinations	2004	Al-Akra *et al.* (2010), Heniwati (2015)
IFRS 5	Non-Current Assets Held for Sale and Discontinued Operations	2005	Al-Akra *et al.* (2010), Heniwati (2015)
IFRS 7	Financial Instruments: Disclosures	2007	Jobair *et al.* (2014)
IFRS 8	Operating Segments	2009	Heniwati (2015)
IFRS 12	Disclosure of Interest in Other Entities	2013	Unexamined in the previous literature
IFRS 13	Fair Value Measurement	2013	Unexamined in the previous literature

Table AII. Standards included in the IFRS index

Appendix 3

Table AIII. The products used by the sample banks ($n = 23$)

Products	No. of banks	% of banks
Murabaha	23	1
Mudaraba	18	0.78
Mucharaka	10	0.43
Ijarah	8	0.35
Ijarah Muntahia Bittamleek	7	0.30
Unrestricted investment accounts	12	0.52
Restricted investment accounts	11	0.48
Istisna	5	0.22
Salam	1	0.04

Corresponding author
Hana Ajili can be contacted at: ajilihana@hotmail.fr