



Research article

Impact of corporate governance mechanism on IFRS adoption: A comparative study of Saudi Arabia, Oman, and the United Arab Emirates

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ABSTRACT

The present study examines the impact of corporate governance mechanisms on compliance with IFRS and financial reporting quality in some selected Gulf countries. The study aims to investigate this issue using a sample of 98 firms listed in Saudi Arabia, Oman, and the United Arab Emirates over the period from 2015 up to 2018. Descriptive statistics, correlation, and regression analysis are conducted to estimate the results. The results reveal that audit committee attributes have a higher impact on compliance with IFRS and financial reporting quality than other corporate governance mechanisms. Further, the results show that there is no evidence to support that the collective effect of corporate governance mechanisms has changed to be more influential from Saudi GAAP to IFRS. The present study has several contributions and implications. It has a unique contribution as it attempts to compare the effect of corporate governance mechanisms on financial reporting quality and compliance with IFRS among a recent IFRS adopter; Saudi Arabia and early IFRS adopters; Oman and the United Arab Emirates. The study opens valuable insights to regulators, stock markets, practitioners, and academicians in this issue.

1. Introduction

The recent developments and reforms in corporate governance (CG) and the current debate on the adoption of IFRS in the international accounting literature have raised various serious gaps that have not yet been looked at. Many questions remain unanswered about the role of CG on the adoption of IFRS, especially in the Gulf member states. Almost all previous studies on the impact and relationship of CG and IFRS adoption have been carried out in developed countries (e.g., Bayerlein and AlFarooque, 2012; Chamisa et al., 2012; Cieslewicz, 2013; Fifield et al., 2012; Kent and Stewart, 2008; Palea, 2013; Persakis and Iatridis, 2016), but very few studies that have been conducted in this topic in the Gulf member states.

Some recent studies are focusing on investigating the Saudi business environment. For example, Al-ahdal et al. (2020) assessed CG and firm performance in the Gulf Cooperation Council (GCC) countries. Al-Ruithe and Benkhelifa (2020) explored the factors for implementing cloud data governance in the Kingdom of Saudi Arabia (KSA). Azid and Alnodel (2019) examined Shari'ah governance disclosure in financial institutions in KSA. Sian et al. (2020) discussed constraints in international audit firms in KSA. Buallay and Hamdan (2019) examined the moderating role

of firm size between CG and intellectual capital. Similarly, Hashed and Almaqtari (2020) investigated the impact of CG mechanisms and IFRS on earnings management (EM) in KSA. Further, similar studies have been conducted in GCC and MENA countries, including Saudi Arabia (e.g., Al-hadi et al., 2017), who investigated market risk disclosures and CG in GCC. Similarly, Tessema (2019) studied CG and information asymmetry, Arayssi and Jizi (2019), Mertzanis et al. (2019), and Buallay (2019) assessed CG and firm performance in MENA countries. However, none of these studies has provided evidence of CG's effect on compliance with IFRS and financial reporting quality (FRQ).

The main aim of the present study is to investigate the impact of CG mechanisms on IFRS adoption in the GCC countries namely; the Kingdom of Saudi Arabia (KSA), Oman, and the United Arab Emirates (UAE). Accordingly, the current research is of two-fold objectives. Firstly, it assesses the effect of CG mechanisms on compliance with IFRS. It attempts to examine the impact of CG mechanisms on compliance with IFRS in a recent IFRS adopter; KSA and early IFRS adopters; Oman and the UAE. Secondly, the study examines how CG mechanisms affect FRQ under IFRS in these countries. Finally, the study investigates whether there is a significant change in the impact of CG mechanisms on FRQ from the old

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accounting standards; Saudi GAAP to the new accounting standards; IFRS in KSA.

The present research has a unique contribution as it attempts to compare the effect of CG mechanisms on FRQ and compliance with IFRS among a recent IFRS adopter; KSA and early IFRS adopters; Oman and the UAE. These countries share similar cultures and socio-economic contexts. Hofstede's (1983) study reported that Arab countries specifically, Saudi Arabia and the UAE have the highest score for large power distance with strong uncertainty avoidance. Comparing these countries stem from some similarities in the financial reporting regimes and institutional settings of these countries. Comparison among these countries is also justified by the economic theory of network, which states that trading partner in a geographical region could be a reason that pushes developing countries to adopt IFRS standards (Ramanna and Sletten, 2009). This is the case in Europe that share close relationships which adopted IFRS in 2005 (Samaha and Khlif, 2016). The adoption of International Accounting Standards (IAS) in Oman was in 1996 and the UAE in 1999. Accordingly, both countries; Oman and the UAE are implementing International Financial Reporting Standards (IFRS) since IFRS replaced IAS in 2001 (Ramady, 2012, P. 180). Ramanna and Sletten (2009) indicate that some countries in some geographical regions are affected by their neighbors regarding IFRS adoption and tend to imitate them. This is further supported by memetic isomorphism, which refers to nations' tendency to imitate other nations (Pricope, 2016). In this context, less developed countries may adopt IFRS to imitate developed nations (Pricope, 2015).

IFRS adoption literature has also provided the concepts of "mimetic and normative" isomorphism. Mimetic isomorphism refers to the imitation of what institutions consider successful practices of other institutions. On the other hand, "normative" isomorphism indicates that the institution follows what is widely seen to be "best practice" and followed such as IFRS and US GAAP (Bakr and Napier, 2020). IFRS adoption is also justified by signaling theory, where companies tend to signal to investors by adopting extra mechanisms and additional information disclosures (Barth et al., 2008). In this context, Hope et al. (2006) argued that countries "bond" to IFRS in an effort to satisfy investors' demands. This is the case in Saudi Arabia, where the Vision 2030 was launched to attract foreign investments (Government of Saudi Arabia, 2016).

The present study of two-fold contributions; theoretical as well as practical contributions. From the theoretical perspective, the results of prior research derived from developed countries in this regard may less pertinent for emerging countries (Albu and Albu, 2012) which is the case of Saudi Arabia. Defond et al. (2019) indicate that IFRS is modeled on developed countries with strong institutional settings. Further, the unique institutional, legal, and investment settings in Saudi Arabia provide an interesting case for research to investigate how Saudi Arabia's institutional settings may decrease the ability of IFRS to attract foreign investors (Defond et al., 2019). On the other hand, as a practical contribution, examining IFRS adoption in Saudi Arabia is sound in evaluating whether IFRS has achieved the desired objectives of foreign investment attraction and fulfilling the needs of enhancing the quality of financial reporting or not. This potentially has implications for other developing economies that have recently adopted IFRS. Further, the current study could be beneficial to understand how Saudi Arabia manages the adoption of IFRS with meeting the requirements of Islamic law requirement (Nurunnabi et al., 2020). Accordingly, the current study opens valuable insights into different issues related to the current practices of IFRS compliance in these countries, earnings management, the quality of financial reporting, and the role of CG mechanisms in maintaining the best practices in these issues. Valuable insights are offered to professional accounting and auditing bodies, regulators, auditors, stock markets, practitioners, and academicians.

The study is organized as follows: section 2 presents corporate governance and accounting standards in KSA, Oman, and the UAE.

Section 3 introduces a literature review. Section 4 provides the research methodology. Section 5 estimates the results, and section 6 concludes.

2. Corporate governance and accounting standards in KSA, Oman, and the UAE

2.1. Corporate governance in KSA, Oman, and the UAE

In Saudi Arabia, the "Capital Market Authority (SCMA)" issued the CG code entitled "CG Regulations in the Kingdom of Saudi Arabi" in 2006. This code was firstly revised in 2009 (Altuwajri and Kalyanaraman, 2016; Ghabayen, 2012; Hill et al., 2015; Shehata, 2015) and recently, in 2017. In the Omani context, the code of CG, entitled "Code of CG for Muscat Securities Market (MSM) Listed Companies" was the first code to be issued in the region. The code was issued in 2002 by the Omani Capital Market Authority (OCMA) (Shehata, 2015) and was then lastly amended in 2015 (PCW, 2016). Concerning the UAE, a drafted CG code by the Emirates Securities and Commodities Authority (ESCA) was prepared in 2006 and was launched in 2007. The code was issued on a mandatory, comply/penalize basis starting from 30 April 2010, but it is lastly revised in 2016 (PCW, 2016), making the code of CG in the UAE mandatory.

The requirements of CG issues in the CG code of each country is varied from one country to another. While there is a limit of board size in the Saudi CG regulations in KSA, Oman and the UAE have no stipulated requirements in this issue. Following is Table (1), which illustrates the statutory requirements of CG mechanisms in CG codes of KSA, Oman, and the UAE:

2.2. Accounting standards in KSA, Oman, and the UAE

The six GCC member states except Saudi Arabia, do not have their accounting standards (Alsaqqa and Sawan, 2013). Saudi Arabia made a crucial step in 1986 to issue its national accounting and auditing standards, which were mainly adopted from the U.S. standards (Al-matari, Al-Swidi and Fadzil, 2012). In Saudi Arabia, the professional body responsible for developing accounting standards is the "Saudi Organization for Certified Public Accountants (SOCPA)". It released a project in 2013 to shift to IFRS. "IFRS in Saudi Arabia are similar to the standards issued by the IASB with possible modifications in three respects: adding more disclosure requirements, removing optional treatments; and amending the requirements that contradict Shariah or local law, taking into consideration level of technical and professional preparedness in the Kingdom" (Pricewaterhouse Coopers LLP, 2014). SOCPA approved an IFRS convergence Plan called the "SOCPA Project for Transition to International Accounting & Auditing Standards" (Manduca, 2016). "Under this plan, financial institutions are required to comply with IFRS as per the Saudi Arabian Monetary Authority requirement. All listed firms are required to comply with IFRS beginning from 2017; and other remaining firms are mandated to comply with IFRS by 2018" (Pricewaterhouse Coopers LLP, 2014).

The study aims to investigate the impact of CG mechanisms on compliance and financial reporting quality under IFRS in Saudi Arabia, Oman, and the UAE. These countries share the same culture and have quite similar institutional settings, which characterize them from other geographical areas such as Europe, Latin America, China, and India, which have already converged or adopted IFRS. Several studies have studied the direct impact of culture on accounting (e.g., Braun and Rodriguez, 2008; Hope et al., 2006; Clements et al., 2010). Using Hofstede's (1983) model that investigates uncertainty avoidance and power of distance in different countries, including KSA and the UAE, Gray (1988) indicates a link between cultural values of jurisdiction and international differences in accounting. Research by Hope et al. (2006) suggest that successful IFRS implementation is influenced by several factors such as country size, economic and political factors, and cultural differences. Prior studies provide evidence that local and international

Table 1. Statutory requirements of CG mechanisms in KSA, Oman and the UAE.

| Items | | Saudi Arabia | Oman | UAE |
|---|---|--|--|--|
| Board of Directors Characteristics | | | | |
| The principal source of code | | CG regulations | CG code | CG code |
| Date of Issuance | | 2006 | 2002 | 2007 |
| Recently revised/replaced | | 2017 | 2015 | 2016 |
| Issuing Entity | | Capital Market Authority (SCMA) | Capital Market Authority (OCMA) | Capital Market Authority (ECMA) |
| Comply or Explain | | Yes | Yes | Comply or-Pay Penalty |
| Board size | Minimum | Not less than three | Not stipulated | |
| | Maximum | Not more than 11 members | | |
| Board Structure | Board combination | An optimum combination of executive, non-executive, and independent directors. | All directors shall be non-executive directors, the percentage of independent directors to the total number of board members shall not be less than one third, with a minimum of two independent directors | An optimum combination of executive, non-executive, and independent directors. |
| | Non-executive directors | Not less than 50% (Majority) of board members should be non-executive directors | All directors shall be non-executive directors | Not less than 50% (Majority) of board members should be non-executive directors |
| | Board Independence | A minimum of one-third independent directors, or two members, whichever is greater | Shall not be less than one third, with a minimum of two independent directors. | A minimum of one-third independent directors |
| Board Meetings | At least four times a year, with a maximum time gap of one hundred and twenty days between any two meetings& one meeting in a year for independent directors. | Four times a year with a minimum of one meeting every three months. | At least four meetings per annum and the term between any two meetings shall not exceed four consecutive months. | Four times a year, unless the company's Articles of Association provide for more than that. |
| Audit Committee Attributes | | | | |
| Size | Minimum | Three | Three | Three |
| | Maximum | Five | Not stipulated | Not stipulated |
| Independence | | At least one independent member | The majority should be independent directors | The majority should be independent directors |
| Diligence | Meetings frequency per year | At least four | At least four | At least four |
| | Quorum | Not stipulated | The majority of independent directors should be presented | Not stipulated |
| Financial expertise | | Involve professional persons in the domains of financial and accounting matters. | At least one financial expert with accounting expertise. | All members shall be well-versed in financial and accounting at least one shall have practical experience in accounting and finance. |

Source: Almqatari and Shamim et al. (2020)"

accounting standards are impacted to a large extent by surrounding environmental factors – social, political, legal, and economic – that may affect the accounting system in a country (Nurunnabi et al., 2020). Cieslewicz (2013) indicates that people affect institutions by their culture where accounting depends on these institutions. Further, Hope et al. (2006) and Nurunnabi et al. (2020) advocate that accounting standards, including IFRS could be influenced by different factors, including culture, political regime, country size, and economy. Given these factors in general and the cultural factor in specific, Cieslewicz (2013) argue that accounting would be influenced by national economic culture. In this context, Yamani and Almasarwah (2019) indicate that culture negatively influences IFRS adoption as the culture factor has a significant effect on Saudi Arabia's life aspects. Al-Rehaily (1992) reports that religion significantly affects the other factors; economic, social, political, and legal regimes in Saudi Arabia. Accordingly, these issues make the investigation of Saudi Arabia unique and different from other countries as they are all linked with the accounting system and the instructional settings. Yamani and Almasarwah (2019) state that Saudi Arabia is an emerging economy with a unique monarchical economy and Islamic culture, which is different from other jurisdictions that adopted IFRS. In this regard, the study investigates KSA, Oman, and the UAE. They have a similar culture, religion, and some other similarities in the economic and political contexts that distinguish them from different geographical areas.

3. Review of literature

3.1. Board effectiveness

3.1.1. Board size

Several studies are in favor of large board size. They argue that a large board size includes diversified experience, which leads to providing their firms with better monitoring (Monks and Minow, 1995; Mambondiani, 2011; Brown et al., 2011). Some studies also suggest that a large board size strengthens the board of directors' effectiveness (Akhtaruddin et al., 2009; Goodstein et al., 1994; Yermack, 1996), and is predicted to reach more astute decisions than a small one (Alghamdi, 2012). On the other hand, some researchers have been in favor of smaller boards (e.g., Marshdeh, 2014; Bathula, 2008; Yermack, 1996; Ozkan, 2007; Ranti, 2011). They advocate that a smaller board is better in reaching a unified decision on essential issues (Al-Ebel, 2013), easier communication and coordination (Lipton and Lorsch, 1992; Abbott et al., 2004), more likely to provide better quality information (Vafeas, 2000), and increase the disclosure levels (Al-Shaer et al., 2017). Juhman (2017), Holland (2006), and Al-Akra et al. (2010) advocate that there is a significant association between the level of IFRS compliance and board size. Contradictory, Ba-Abbad and Wan- Hussin (2011) report that compliance with IFRS is not linked with board size. In the same context, Farber (2005), Ditropoulos and Asteriou (2010), Beasley (1996) and Fama and Jensen (1983)

indicate that there is a significant positive relationship between FRQ and CG attributes, including board size. However, Bradbury et al. (2006), Chalaki et al. (2012), Vafeas (2000), Klein (1998), Hermalin and Weisbach (1998) and Ahmed and Duellman (2006) report that there is no association between CG mechanisms comprising board size and the quality of financial reporting.

3.1.2. Board independence

Different studies reported that a higher portion of board independence is found to be linked with greater statutory disclosures (e.g., Nelson et al., 2010; Mangena and Pike, 2005; Forker, 1992; Owusu-Ansah and Yeoh, 2005; Chen and Jaggi, 2000; Samaha et al., 2012; Juhman, 2017). Further, Botti et al. (2013) indicate that a higher proportion of independent board members is associated positively with a low level of agency problems. They are also more likely to provide greater voluntary disclosures and decrease the information asymmetry between management and shareholders. Bradbury et al. (2006), Ahmed and Duellman (2006), Klein (1998), Vafeas (2000), and Hermalin and Weisbach (1998) document that there is a positive association between CG attributes including board independence and financial reporting quality. Further, Koh et al. (2007) argue that the effectiveness and efficiency of independent board members in their monitoring functions contribute positively to improving financial reporting quality. However, Cornett et al. (2009) and Onuorah et al. (2016) conclude that board independence is negatively related to financial reporting quality. Similarly, Petra (2007) and Larcker et al. (2007) indicate no link between CG attributes, including board independence and financial reporting quality.

3.1.3. Board diligence

Different studies pointed out that performance could be improved by greater frequency in board meetings (Vafeas, 1999; Jensen, 1993; Lipton and Lorsch, 1992; Jensen and Meckling, 1976). Several studies also agree that board meetings bring about benefits such as better firm performance, better cash flow rights of the largest shareholder of a company, better earning per share, set strategy, monitor management, and better audit quality, perform their duties in accordance with shareholders' interests, a negative association with earnings management, leads to board diligence, and increases the level of disclosure (Chou et al., 2013; Alghamdi, 2012; Francis et al., 2012; Karamanou and Vafeas, 2005; Ntim and Osei, 2011; Habbash and Alghamdi, 2016; Modum et al., 2013; Vafeas, 1999; Xie et al., 2003; Bathula, 2008; García Lara et al., 2009). However, Ebrahim (2007) and Habbash (2019) found that the number of meetings may not limit earnings management practices.

3.1.4. Board expertise

Several studies advocate that board expertise in areas such as accounting, consulting, financing, and law is more capable to aid management in making decisions (Alzahrani, 2014). A higher tenure of board experience is less likely to be linked with earnings management or earnings restatement (Xie et al., 2003; Agrawal and Chadha, 2005). Further, expertised board members are more able to detect any misstatements or instances of non-compliance (Mangena and Pike, 2005), and positively affect financial reporting quality (Onuorah et al., 2016; DeFond et al., 2005; Krishnan and Visvanathan, 2008). Further, García-Meca and Anchez (2018) affirm that managerial abilities and capabilities have a vital influence on financial reporting quality, which are less likely to be associated with the opportunistic behavior of managers to meet bank short-term earnings benchmarks. Besides, financially literate board members are more likely to address and understand financial statement issues (Rohaida, 2011). Contradictory, Abdullah et al. (2015) indicate a significant and negative relationship between mandatory disclosure levels and board expertise. Financially literate board members may use such expertise in an opportunistic manner by applying their legal loopholes expertise, which may negatively affect the disclosure levels.

3.2. Audit effectiveness

3.2.1. Audit committee size

Several studies report that larger audit committee size improves financial reporting quality (Alghamdi, 2012; Anderson et al., 2004; Archambeault and DeZoort, 2001; Yatim et al., 2006). Felo et al. (2003) point out that a large audit committee can identify and address potential problems in the financial reporting process. Different studies report a negative association between earnings management and a large audit committee (Yang and Krishnan, 2005; Cornett et al., 2008; Lin et al., 2006; Lin and Hwang, 2010). Similarly, some studies indicate that a large audit committee is positively associated with voluntary disclosure (Li et al., 2007, 2012; Akhtaruddin et al., 2009), provides meaningful corporate reporting (Klein, 2002), positively affects firm performance (Raghunandan and Rama, 2007), and leads to efficient in controlling management (Yang and Krishnan, 2005). However, Xie et al. (2003), Baxter and Cotter (2009), and Bedard et al. (2004) conclude that there is no significant impact or relationship between earnings management and the size of the audit committee. Conversely, Abbott et al. (2004) confirmed that the size of the audit committee had an insignificant effect on the quality of financial reporting.

3.2.2. Audit committee independence

Some studies argue that the proportion of independent members serving in the audit committee is positively associated and linked with voluntary disclosure level (Karamanou and Vafeas, 2005; Carcello and Neal, 2003; Forker, 1992; Akhtaruddin et al., 2009; Akhtaruddin and Haron, 2010; Mohamad and Sulong, 2010; Abeysekera, 2010; Yuen et al., 2009). Further, independence of audit committee is a critical restriction concerning earnings management (Klein, 2002), indicates a lower incidence of earnings restatement (Agrawal and Chadha, 2005), financial reporting process (Bradbury et al., 2006; Lin et al., 2006), has a negative relationship with financial statement fraud (Abbott et al., 2004), and is more likely to select industry-specialist auditors (Cheng et al., 2020). On the other hand, it is indicated that there is no significant relationship between low levels of earnings management and independent audit committees (Lin et al., 2006; Peasnell et al., 2005; Xie et al., 2003). Similarly, Ruth et al. (2011) and Li et al. (2012) did not find a relationship between independent non-executive directors in the audit committee and voluntary disclosure.

3.2.3. Audit committee diligence

Findings of previous studies suggest that frequent meetings of an audit committee are important in its monitoring effectiveness (Xie et al., 2003), can reduce the possibility of fraudulent financial reporting and financial fraud (Abbott et al., 2004; Raghunandan et al., 1998), increase the quality of financial reporting (Song and Windram, 2004), experience less financial restatement (Abbott et al., 2004), and a good level of disclosure about IFRS. Further, audit committee meetings are associated with a lower incidence of earnings management (Xie et al., 2003; Ebrahim, 2007; Abbott et al., 2004), has positive financial reporting restatements and negative corporate fraud (Abbott et al., 2004), and related positively with audit fees (Krishnan and Visvanathan, 2009). However, Baxter and Cotter (2009) advocate that there is no relationship between a higher number of audit committee meetings and mitigating of earnings management. They also reported that a higher number of audit committee meetings is not necessary to improve earnings quality.

3.2.4. Audit committee expertise

A firm is more likely to avoid restatement issuance when it has an audit committee containing at least one financially expertised member (Abbott et al., 2004). This implies that a financial background is critical for the audit committee to function efficiently and professionally (Yatim et al., 2006). Empirical evidence suggests that the financial expertise of an audit committee enhances its monitoring function and hence, leads to an increase in a firms' financial reporting quality (Rohaida, 2011),

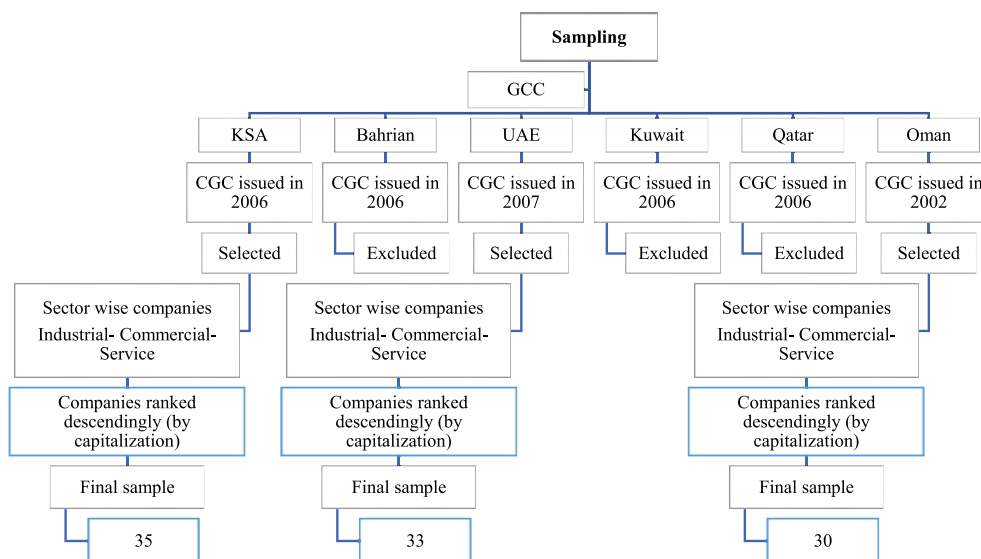


Figure 1. Sampling (Source: Almaqtari & Shamim et al., 2020).

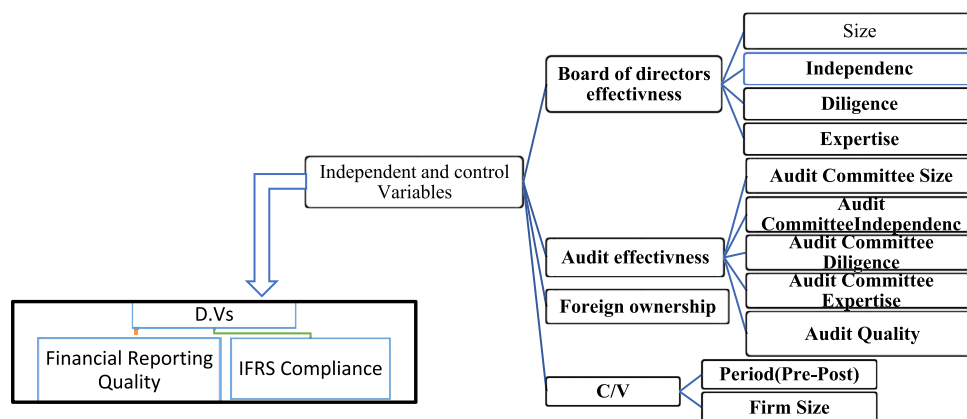


Figure 2. Research Framework. (Source: Author, 2020).

increases its effectiveness (DeFond et al., 2005; Krishnan and Visvanathan, 2008; Yatim et al., 2006; Lary and Taylor, 2012; Aboagye-Otchere et al., 2012), reduces information asymmetry and enhances voluntary corporate disclosure (Akhtaruddin and Haron, 2010; Aboagye-Otchere et al., 2012; Mangena and Pike, 2005; Salehi and Shirazi, 2016; Song and Windram, 2004), and is linked with a greater financial reporting quality (Song and Windram, 2004; DeFond et al., 2005). Contradictory, Kent and Stewart (2008) reported a negative association between mandatory disclosures and the financial expertise of audit committee members.

3.2.5. Audit quality

Auditor choice refers to the choice of (Big-Four) external auditors that a company may select among other auditors (Beisland et al., 2015; Soliman and Elsalam, 2012). A firm audited by a Big-Four auditor attends to provide IFRS voluntary disclosures pre-IFRS adoption (Tarca, 2004). Further, a firm audited by a Big-Four auditor may convey higher compliance levels and familiarity with IFRS requirements (Street and Gray, 2001). Karim and Ahmed (2005) investigated IFRS compliance determinants for a sample of 188 companies from Bangladesh during 2002. A compliance index was constructed comprising 411 items. The findings indicate that there is a significant positive association between both auditor type measured by Big-Four v.s. non-Big-Four and the level of IFRS compliance. Onuorah et al. (2016) revealed that a firm's quality of financial reporting as measured by discretionary accruals is positively influenced by the quality of external audits. However, weak enforcement

mechanisms damage the perceived quality of IAS/IFRS in countries that have weak regulatory enforcement. Further, Davidson et al. (2005) stated that there is no relationship between the presence of a Big 5 auditor and earnings management.

3.2.6. Foreign ownership

Alhazaimh et al. (2014), Al-Janadi et al. (2016), and Al-bassam et al. (2018) agree that there is an association between CG practices especially, ownership structure and voluntary disclosure. Likewise, it was observed that there is an increase in foreign ownership of Swedish companies in countries that adopted IFRS, particularly those companies from Europe (Hambreg et al., 2013). Several studies advocate that foreign ownership should encourage firms to be better prepared for IFRS adoption (Guerreiro et al., 2012). Some other studies state that foreign ownership has a positive relationship with financial disclosure (Yasser et al., 2016), enhances their financial reporting quality (Lee et al., 2013), is more timely recognition of economic gains (Bagaeva, 2008), and increases financial statement comparability based on IFRS (DeFond et al., 2011a). Gordon et al. (2012) also found a significant positive link between IFRS adoption and foreign direct investment inflows. Lee et al. (2013) revealed that Chinese listed firms with a higher percentage of foreign ownership are expected to improve their financial reporting quality under IFRS-converged Chinese Accounting Standards (CAS). Likewise, Sritthanpong (2013) found that foreign ownership has a significant positive impact on financial reporting quality of Thai companies.

Table 2. Operational definition of variables.

| Variables | | Acronym | Description |
|--------------------------|-----------------------------|----------|--|
| Dependent Variables | Dependent variables | | |
| | Compliance with IFRS | IFRS | Checklist |
| | Financial Reporting Quality | FRQ | MCNicholas Model (2002) |
| Independent Variables | | | |
| Board of directors | Size | BSZE | Total No. of the members of B.O.D |
| | Independence | BIND | No. of Independent board members/total No. of B.O.D |
| | Diligence | BDEL | Total No. of meetings attended by all board members/total No. of meetings held during the year |
| | Expertise | BEXP | No. of the board with financial and managerial expertise to the total No. of board members |
| Audit Effectiveness (AC) | AC Size | ACSIZE | Total No. of the members of AC |
| | AC Independence | ACIND | No. of Independent AC members/total No. of AC members |
| | AC Diligence | ACDEL | Total No. of meetings attended by all AC members/total No. of meetings held during the year |
| | AC Expertise | ACEXP | No. of the board with financial and managerial expertise to the total No. of board members |
| | Audit quality | Big-Four | 1 if a firm audited by a Big-Four or 0 otherwise |
| Foreign ownership | | FOWN | % of shares held by foreigners |
| Control Variables | | | |
| Firm Size | | AS | Natural log of total assets |
| PRE POST | | PREPOST | Is a dummy variable of 0 for Saudi GAAP and 1 for IFRS |

(Source: Author, 2020)*

4. Research methodology

4.1. Sample selection

Figure (1) shows that the sample of the present study comprises 98 listed firms from KSA, Oman, and the UAE (see Appendix A). Different criteria followed for sample selection, which is as follows:

- The selected countries (KSA, Oman, and the UAE) have been selected based on the issuance of their corporate governance codes (CGC).
- Firms listed in the respective country's stock market (KSA: Tadawl, Oman: Muscat, the UAE: Dubai) except for financial institutions (banks, insurance companies, mutual funds, and financing business houses) because they have different financial reporting requirements especially, Islamic financial institutions.
- Financial statements of the selected firms should be prepared based on IFRS.
- Availability of IFRS and CG information for the study period.
- In terms of market capitalization, top companies have been given priority in the selection after considering the above criteria.

After consideration of the above criteria, 98 listed firms are selected. The present research covers the period spanning from 2015 to 2018. This period is the most recent years in which KSA companies have applied IFRS. Different data sources have been used to extract the data required for the current study. Corporate governance variables, IFRS checklist items, and the other financial information that have been used by the study are extracted manually from each company's published annual reports using content analysis.

4.2. Operational definitions and measurements of variables

The present study seeks to examine the impact of CG mechanisms on IFRS adoption. Following is a description of the study variables, which are also provided in Figure (2).

4.2.1. Independent variables of corporate governance mechanisms

Three categories of corporate governance mechanisms have been investigated which include: board of directors' effectiveness, audit effectiveness (audit committee attributes and audit quality), and foreign ownership. Table (2) demonstrates the definition and measurement of the variables used by the study.

4.2.2. Dependent variables

4.2.2.1. Compliance with IFRS. The majority of the studies of compliance with accounting standards conducted in different countries are either based on a self-constructed index (e.g., Abd-Elsalam and Weetman, 2007; Juhman, 2017; Alfaraih, 2009), a Big-Four disclosure checklist (e.g., Glaum and Street, 2003) or survey of opinions (e.g., Uyar et al., 2016). Following self-constructed index studies, a checklist that includes 459 mandatory items required to be disclosed by the selected companies at the end of the financial year of 2018 is used. Street and Gray (2001) and Al-Shiab (2003) used the Partial Compliance (PC) method for weighting compliance index. This measurement method treats the standards in an equal way to avoid higher weight for some standards that have higher items (Al-Shiab, 2003). Thus,

$$PC_j = \frac{\sum_{i=1}^X X_i}{R_j} \quad (\text{Eq.1})$$

PC_j denotes the total score of compliance with IFRS for each company and $0 \leq PC_j \leq 1$. X_i indicates the level of compliance with an individual accounting standard mandatory requirements. The aggregated score of a particular accounting standard mandatory requirements (X) is divided by the total number of the applicable standards for the respective company j i.e. R_j. Following is Table (3), which presents the compliance checklist that is used by the present study:

The inter-rater reliability method was used to confirm the reliability of the research instrument. This test of reliability can be used in the case of ordinal data and small sample size. It is also used in content analysis (Krippendorff, 1980). For testing the inter-rater reliability, the coefficient of Krippendorff's alpha is used to examine the inter-rater reliability. The value of Krippendorff's alpha was 0.82, which is higher than the required value (0.70). This suggests that the compliance index and the quality scores are reliable.

4.2.2.2. Financial reporting quality. This study measures FRQ using McNichols (2002) model. This model was used by prior studies to measure FRQ in different contexts (e.g. Chalaki et al., 2012; Klai and Omri, 2011; Persakis and Emmanuel, 2016; Persakis and Iatridis, 2016; Rohaida, 2011). McNichols (2002) considered financial reporting quality could be better expressed and measured by the standard deviation of the residuals or the error terms. The higher values of the model residuals signify a higher level of discretionary accruals and so a low quality of financial information. The model equation is as follows:

Table 3. Compliance index of IFRS and Ind. AS

| Standard | Number of items | | | | | |
|--|--|--------------------|-----------|-----------|-------------|-----|
| | (Alfaraih (2009)) | (Tsalavoutas 2009) | Delliotte | By Expert | Final index | |
| Panel A: IASs/IFRS included in the compliance index | | | | | | |
| IFRS1 | First-time Adoption of International Financial Reporting Standards | | 14 | 30 | 17 | 14 |
| IFRS2 | Share-based Payment | 12 | 12 | 13 | 10 | 12 |
| IFRS3 | Business Combinations | 16 | 20 | 2 | 11 | 12 |
| IFRS4 | Insurance Contracts | 11 | | 15 | 13 | 11 |
| IFRS5 | Non-current Assets Held for Sale and Discontinued Operations | 14 | 10 | 2 | 9 | 14 |
| IFRS6 | Exploration for and Evaluation of Mineral Resources | | 3 | 7 | 6 | 3 |
| IFRS7 | Financial Instruments: Disclosures (entity has not yet adopted IFRS 9) | | | 57 | 19 | 11 |
| IFRS 8 | Operating Segments | | | 3 | 4 | 7 |
| IFRS 10 | Consolidated Financial Statements | | | 1 | 3 | 1 |
| IFRS 11 | Joint Arrangements | | | 6 | 5 | 3 |
| IFRS 12 | Disclosure of Interests in Other Entities | | | 9 | 4 | 21 |
| IFRS 13 | Fair Value Measurement | | | 2 | 4 | 3 |
| IFRS 14 | Regulatory Deferral Accounts (effective 1 January 2016) | | | 18 | 8 | 6 |
| IAS 1 | Presentation of Financial Statements | 45 | 72 | 120 | 52 | 45 |
| IAS 2 | Inventories | 8 | 8 | 9 | 9 | 8 |
| IAS 7 | Statement of Cash Flows | 14 | 10 | 22 | 18 | 14 |
| IAS 8 | Accounting Policies, Changes in Accounting Estimates and Errors | 15 | 16 | 6 | 11 | 16 |
| IAS 10 | Events after the Reporting Period | 6 | 4 | 4 | 7 | 6 |
| IAS 11 | Construction Contracts | 8 | 8 | 9 | 11 | 8 |
| IAS 12 | Income Taxes | | 11 | 19 | 15 | 11 |
| IAS 16 | Property, Plant and Equipment | 15 | 15 | 2 | 22 | 15 |
| IAS 17 | Leases | 21 | 19 | 7 | 27 | 21 |
| IAS 18 | Revenue | 7 | 3 | 2 | 9 | 7 |
| IAS 19 | Employee Benefits | | 23 | 5 | 8 | 23 |
| IAS 20 | Accounting for Government Grants and Disclosure of Government Assistance | | 3 | 2 | 6 | 5 |
| IAS 21 | The Effects of Changes in Foreign Exchange Rates | 6 | 8 | 3 | 9 | 8 |
| IAS 23 | Borrowing Costs | 3 | 3 | 2 | 3 | 8 |
| IAS 24 | Related Party Disclosures | 9 | 17 | 14 | 14 | 21 |
| IAS 27 | Separate Financial Statements | 11 | 11 | 3 | 16 | 11 |
| IAS 28 | Investments in Associates and Joint Ventures | 15 | 13 | 2 | 19 | 15 |
| IAS 32 | Financial Instruments: Presentation | 35 | 31 | 5 | 21 | 35 |
| IAS 33 | Earnings per Share | 9 | 7 | 3 | 11 | 9 |
| IAS 36 | Impairment of Assets | 14 | 39 | 2 | 17 | 14 |
| IAS 37 | Provisions, Contingent Liabilities and Contingent Assets | 13 | 15 | 3 | 11 | 13 |
| IAS 38 | Intangible Assets | 14 | 14 | 15 | 19 | 14 |
| IAS 40 | Investment Property (Entity has not yet adopted IFRS 16 Leases) | 14 | 21 | 7 | 15 | 14 |
| Total | | | | | | 459 |
| Panel B: IASs/IFRS excluded from the compliance index | | | | | | |
| IFRS 9 | Financial Instruments | | | | | |
| IFRS 15 | Revenue from Contracts with Customers (effective 1 January 2018) | | | | | |
| IAS 26 | Accounting and Reporting by Retirement Benefit Plans | | | | | |
| IAS 29 | Financial Reporting in Hyperinflationary Economies | | | | | |
| IAS 34 | Interim Financial Reporting | | | | | |
| IAS 39 | Financial Instruments: Recognition and Measurement (for entities that have not adopted IFRS 9) | | | | | |
| IAS 41 | Agriculture | | | | | |

(Source: Author, 2020)

$$\frac{TCA_{j,t}}{AS_{j,t}} = \beta_{0j} + \beta_{1j} \frac{CFO_{j,t-1}}{AS_{j,t}} + \beta_{2j} \frac{CFO_{j,t}}{AS_{j,t}} + \beta_{3j} \frac{CFO_{j,t+1}}{AS_{j,t}} + \beta_{4j} \frac{\Delta REV_{j,t}}{AS_{j,t}} + \beta_{5j} \frac{PPE_{j,t}}{AS_{j,t}} + \varepsilon_{j,t} \tag{Eq.2}$$

Where; $TCA_{j,t}$ of a firm j is aggregate current accruals in year t , $CFit$ denotes the current period operating cash flows, $CFit-1$ and $CFit+1$ refer to operating cash flows of the previous and next periods respectively, $\Delta REVit$ is the change in revenues and $PPEit$ signifies the property, plant, and equipment of a firm.

4.3. Model specification

The current research uses different models to examine the influence of CG on IFRS adoption. Based on the objectives of the study, model (1) is used to examine the impact of CG mechanisms on compliance with IFRS, and model (2) is employed to assess the effect of CG mechanisms on FRQ. Following is the presentation of the models that are used by the study:

$$IFRS_{it} = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 BIND_{it} + \beta_3 BDEL_{it} + \beta_4 BEXP_{it} + \beta_5 ACSIZE_{it} + \beta_6 ACIND_{it} + \beta_7 DEL_{it} + \beta_8 ACEXP_{it} + \beta_9 FOWN_{it} + \beta_{10} Big - Four_{it} + \beta_{11} AS_{it} + \epsilon_{it}$$

Model (1)

$$IFRSUAE_{it} = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 BIND_{it} + \beta_3 BDEL_{it} + \beta_4 BEXP_{it} + \beta_5 ACSIZE_{it} + \beta_6 ACIND_{it} + \beta_7 DEL_{it} + \beta_8 ACEXP_{it} + \beta_9 FOWN_{it} + \beta_{10} Big - Four_{it} + \beta_{11} AS_{it} + \epsilon_{it}$$

Model (1UAE)

This model is further divided into the following sub-models:

$$IFRSKSA_{it} = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 BIND_{it} + \beta_3 BDEL_{it} + \beta_4 BEXP_{it} + \beta_5 ACSIZE_{it} + \beta_6 ACIND_{it} + \beta_7 DEL_{it} + \beta_8 ACEXP_{it} + \beta_9 FOWN_{it} + \beta_{10} Big - Four_{it} + \beta_{11} AS_{it} + \epsilon_{it}$$

Model (1KSA)

$$FRQ_{it} = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 BIND_{it} + \beta_3 BDEL_{it} + \beta_4 BEXP_{it} + \beta_5 ACSIZE_{it} + \beta_6 ACIND_{it} + \beta_7 DEL_{it} + \beta_8 ACEXP_{it} + \beta_9 FOWN_{it} + \beta_{10} Big - Four_{it} + \beta_{11} Period_{it} + \epsilon_{it}$$

Model (2)

This model is also divided into the following sub-models:

$$IFRSOMAN_{it} = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 BIND_{it} + \beta_3 BDEL_{it} + \beta_4 BEXP_{it} + \beta_5 ACSIZE_{it} + \beta_6 ACIND_{it} + \beta_7 DEL_{it} + \beta_8 ACEXP_{it} + \beta_9 FOWN_{it} + \beta_{10} Big - Four_{it} + \beta_{11} AS_{it} + \epsilon_{it}$$

Model (1OMAN)

$$FRQKSA_{it} = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 BIND_{it} + \beta_3 BDEL_{it} + \beta_4 BEXP_{it} + \beta_5 ACSIZE_{it} + \beta_6 ACIND_{it} + \beta_7 DEL_{it} + \beta_8 ACEXP_{it} + \beta_9 FOWN_{it} + \beta_{10} Big - Four_{it} + \beta_{11} Period_{it} + \epsilon_{it}$$

Model (2KSA)

Table 4. Descriptive Statistics of CG attributes.

| Variables | KSA | | | | Oman | | | | UAE | | | |
|---|----------|-----------|---------|----------|----------|---------|---------|--------|----------|----------|---------|---------|
| | Min | Max | Mean | S.D | Min | Max | Mean | S.D | Min | Max | Mean | S.D |
| Dependent Variables | | | | | | | | | | | | |
| Compliance with IFRS | | | | | | | | | | | | |
| IFRS | 0.7 | 0.95 | 0.79 | 0.07 | 0.63 | 0.95 | 0.86 | 0.07 | 0.61 | 0.95 | 0.82 | 0.06 |
| Financial Reporting Quality MC Nicholas Model (2002) | | | | | | | | | | | | |
| TCA | -8890.95 | 2597.94 | 195.99 | 1346.87 | -1988.17 | 159.38 | -40.47 | 303.89 | -4520.05 | 890.59 | -65.99 | 957.38 |
| CFit-1 | -419.96 | 1780.41 | 36.52 | 231.32 | -29.25 | 580.73 | 55.70 | 123.26 | -311.98 | 2131.78 | 185.98 | 455.03 |
| CFit | -419.96 | 1627.29 | 37.11 | 220.78 | -29.25 | 580.73 | 60.79 | 130.89 | -311.98 | 2131.78 | 179.96 | 412.27 |
| CFit+1 | -291.26 | 1676.73 | 60.75 | 271.90 | -29.25 | 573.46 | 61.99 | 130.60 | -252.38 | 1528.51 | 160.45 | 331.02 |
| ΔREV | 18.32 | 12194.12 | 1545.17 | 2321.98 | .02 | 1338.78 | 248.13 | 343.61 | .00 | 3988.99 | 698.50 | 1004.67 |
| PPE AS | 17.50 | 94556.10 | 5113.22 | 15485.81 | 2.02 | 1564.78 | 222.77 | 405.64 | .30 | 2586.00 | 480.73 | 798.94 |
| AS | 65.50 | 107461.74 | 6772.49 | 17718.14 | 3.20 | 2166.68 | 361.49 | 574.63 | 13.96 | 26320.10 | 2732.26 | 4845.64 |
| Independent Variables | | | | | | | | | | | | |
| BFSIZE | 5 | 11 | 9 | 1.66 | 3 | 10 | 7 | 1.51 | 3 | 11 | 8 | 1.60 |
| BIND | 0.33 | 0.89 | 0.48 | 0.15 | 0.33 | 1 | 0.63 | 0.18 | 0.33 | 1 | 0.68 | 0.21 |
| BDEL | 0.75 | 1 | 0.90 | 0.07 | 0.67 | 1 | 0.89 | 0.07 | 0.62 | 1 | 0.85 | 0.09 |
| BEXP | 0.22 | 1 | 0.59 | 0.06 | 0.33 | 1 | 0.60 | 0.66 | 0.36 | 1 | 0.68 | 0.20 |
| ACSIZE | 3 | 5 | 4 | 0.83 | 3 | 5 | 4 | 0.69 | 3 | 6 | 3 | 0.56 |
| ACIND | 0.75 | 1 | 0.94 | 0.10 | 0.33 | 1 | 0.73 | 0.17 | 0.33 | 1 | 0.84 | 0.18 |
| ACDEL | 0.00 | 1 | 0.95 | 0.14 | 0.65 | 1 | 0.88 | 0.08 | 0.65 | 1 | 0.93 | 0.08 |
| ACEXP | 0.40 | 1 | 0.85 | 0.08 | 0.25 | 1 | 0.61 | 0.21 | 0.25 | 1 | 0.72 | 0.23 |
| FOWN | 0 | 0.28 | 0.04 | 0.07 | 0 | 0.69 | 0.19 | 0.23 | 0 | 0.97 | 0.27 | 0.25 |
| BIG-FOUR | 0 | 1 | 0.58 | 0.50 | 0 | 1 | 0.22 | 0.42 | 0 | 1 | 0.41 | 0.50 |
| Big-Four (Frequencies) | | | | | | | | | | | | |
| Descriptions | Freq. | % | Valid % | Cum. % | Freq. | % | Valid % | Cum. % | Freq. | % | Valid % | Cum. % |
| Big-Four | 19 | 57.6 | 57.6 | 100 | 15 | 21.7 | 21.7 | 100 | 27 | 40.9 | 40.9 | 100 |
| Non-Big1 | 14 | 42.4 | 42.4 | 42.4 | 54 | 78.3 | 78.3 | 78.3 | 39 | 59.1 | 59.1 | 59.1 |
| Total | 33 | 100 | 100 | | 69 | 100 | 100 | | 66 | 100 | 100 | |
| AS | 4.18 | 11.58 | 8.82 | 9.78 | 1.16 | 7.68 | 5.89 | 6.35 | 2.64 | 10.18 | 7.91 | 8.49 |

Note is “BFSIZE is board size; BIND is board independence; BDEL is board diligence; BEXP is board expertise; ACSIZE is audit committee size; ACIND is audit committee independence; ACDEL is audit committee diligence; ACEXP is audit committee expertise; FOWN is foreign ownership; Big-Four is audit quality; AS is firm size (Million U.S.\$)”.

“TCA is the aggregate current accruals in year t, CFit is the operating cash flows of the current period, CFit-1 is the operating cash flows of the previous period, CFit+1 is the operating cash flows of the next period, ΔREV is the change in revenues and PPE is the level of property, plant and equipment and AS is the total assets of a firm”.

$$FRQOAMN_{it} = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 BIND_{it} + \beta_3 BDEL_{it} + \beta_4 BEXP_{it} + \beta_5 ACSIZE_{it} + \beta_6 ACIND_{it} + \beta_7 DEL_{it} + \beta_8 ACEXP_{it} + \beta_9 FOWN_{it} + \beta_{10} Big - Four_{it} + \epsilon_{it}$$

Model (2OMAN)

$$FRQKSAIFRS_{it} = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 BIND_{it} + \beta_3 BDEL_{it} + \beta_4 BEXP_{it} + \beta_5 ACSIZE_{it} + \beta_6 ACIND_{it} + \beta_7 DEL_{it} + \beta_8 ACEXP_{it} + \beta_9 FOWN_{it} + \beta_{10} Big - Four_{it} + \epsilon_{it}$$

Model (2KSAIFRS)

$$FRQUAE_{it} = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 BIND_{it} + \beta_3 BDEL_{it} + \beta_4 BEXP_{it} + \beta_5 ACSIZE_{it} + \beta_6 ACIND_{it} + \beta_7 DEL_{it} + \beta_8 ACEXP_{it} + \beta_9 FOWN_{it} + \beta_{10} Big - Four_{it} + \epsilon_{it}$$

Model (2UAE)

$$FRQKSAGAAP_{it} = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 BIND_{it} + \beta_3 BDEL_{it} + \beta_4 BEXP_{it} + \beta_5 ACSIZE_{it} + \beta_6 ACIND_{it} + \beta_7 DEL_{it} + \beta_8 ACEXP_{it} + \beta_9 FOWN_{it} + \beta_{10} Big - Four_{it} + \epsilon_{it}$$

Model (2KSA-Saudi GAAP)

Table 5. Correlation matrix.

| | IFRS | FRQ | BSIZE | BIND | BDEL | BEXP | ACSIZE | ACIND | ACDEL | ACEXP | FOWN | BIG4 | AS | PREPOST |
|---|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|------|---------|
| Panel A: Correlation Matrix – Saudi Arabia | | | | | | | | | | | | | | |
| IFRS | 1 | | | | | | | | | | | | | |
| FRQ | 0.04 | 1 | | | | | | | | | | | | |
| BSIZE | 0.03 | -0.04 | 1 | | | | | | | | | | | |
| BIND | 0.51 | -0.18 | 0.15 | 1 | | | | | | | | | | |
| BDEL | -0.13 | 0.17 | -0.03 | -0.26 | 1 | | | | | | | | | |
| BEXP | 0.68 | -0.09 | -0.17 | 0.69 | -0.26 | 1 | | | | | | | | |
| ACSIZE | -0.09 | -0.13 | 0.48 | -0.19 | 0.42 | -0.25 | 1 | | | | | | | |
| ACIND | 0.29 | 0.16 | -0.36 | 0.09 | -0.18 | 0.29 | -0.78 | 1 | | | | | | |
| ACDEL | 0.17 | 0.28 | -0.06 | -0.32 | 0.29 | 0.01 | 0.23 | -0.09 | 1 | | | | | |
| ACEXP | 0.05 | 0.11 | -0.30 | -0.10 | 0.23 | 0.12 | -0.16 | 0.30 | 0.38 | 1 | | | | |
| FOWN | -0.09 | 0.00 | 0.32 | -0.12 | 0.24 | -0.13 | 0.37 | -0.19 | 0.15 | 0.01 | 1 | | | |
| BIG4 | 0.06 | -0.22 | 0.26 | 0.06 | -0.01 | -0.06 | 0.37 | -0.17 | -0.40 | -0.02 | 0.17 | 1 | | |
| AS | -0.21 | 0.14 | 0.00 | -0.11 | -0.06 | 0.04 | 0.16 | 0.02 | -0.05 | 0.00 | -0.06 | -0.21 | 1 | |
| PREPOST | 0.00 | -0.01 | 0.17 | 0.00 | -0.21 | 0.09 | 0.02 | -0.19 | -0.09 | -0.16 | -0.34 | -0.26 | 0.16 | 1 |
| Panel B: Correlation Matrix – Oman | | | | | | | | | | | | | | |
| IFRS | 1 | | | | | | | | | | | | | |
| FRQ | 0.07 | 1 | | | | | | | | | | | | |
| BSIZE | -0.15 | 0.11 | 1 | | | | | | | | | | | |
| BIND | -0.11 | 0.05 | 0.03 | 1 | | | | | | | | | | |
| BDEL | -0.27 | 0.00 | -0.01 | -0.12 | 1 | | | | | | | | | |
| BEXP | 0.25 | -0.15 | -0.08 | 0.05 | 0.02 | 1 | | | | | | | | |
| ACSIZE | -0.39 | -0.01 | 0.42 | -0.11 | 0.32 | 0.09 | 1 | | | | | | | |
| ACIND | -0.14 | 0.27 | 0.19 | 0.61 | 0.15 | 0.02 | 0.03 | 1 | | | | | | |
| ACDEL | 0.64 | 0.11 | -0.03 | -0.07 | -0.11 | 0.38 | -0.15 | -0.07 | 1 | | | | | |
| ACEXP | 0.13 | 0.10 | 0.14 | 0.10 | 0.20 | 0.54 | 0.21 | 0.34 | 0.17 | 1 | | | | |
| FOWN | 0.33 | 0.21 | -0.05 | 0.09 | -0.34 | -0.03 | -0.52 | 0.10 | 0.17 | 0.05 | 1 | | | |
| BIG4 | -0.13 | -0.05 | 0.08 | 0.05 | 0.39 | -0.23 | 0.08 | 0.02 | 0.20 | 0.05 | -0.12 | 1 | | |
| AS | 0.14 | 0.16 | 0.50 | 0.03 | -0.34 | -0.29 | -0.08 | -0.04 | -0.07 | -0.03 | 0.22 | 0.00 | 1 | |
| Panel A: Correlation Matrix – UAE | | | | | | | | | | | | | | |
| IFRS | 1 | | | | | | | | | | | | | |
| FRQ | 0.25 | 1 | | | | | | | | | | | | |
| BSIZE | 0.34 | -0.14 | 1 | | | | | | | | | | | |
| BIND | 0.19 | -0.08 | 0.25 | 1 | | | | | | | | | | |
| BDEL | 0.06 | -0.04 | 0.03 | 0.01 | 1 | | | | | | | | | |
| BEXP | 0.03 | 0.04 | -0.15 | 0.06 | -0.12 | 1 | | | | | | | | |
| ACSIZE | 0.28 | -0.03 | 0.43 | 0.14 | -0.23 | -0.27 | 1 | | | | | | | |
| ACIND | 0.20 | 0.13 | 0.10 | 0.52 | 0.00 | 0.15 | -0.01 | 1 | | | | | | |
| ACDEL | 0.19 | 0.00 | 0.22 | -0.20 | 0.50 | -0.22 | -0.09 | -0.06 | 1 | | | | | |
| ACEXP | -0.07 | -0.03 | -0.27 | 0.07 | -0.16 | 0.69 | -0.36 | 0.12 | -0.17 | 1 | | | | |
| FOWN | -0.22 | 0.08 | 0.12 | -0.29 | -0.17 | -0.27 | 0.08 | -0.10 | 0.03 | -0.05 | 1 | | | |
| BIG4 | 0.18 | 0.20 | -0.02 | -0.20 | -0.05 | -0.16 | 0.25 | -0.09 | -0.01 | -0.29 | -0.10 | 1 | | |
| AS | 0.65 | 0.19 | 0.38 | 0.08 | 0.03 | 0.12 | -0.01 | 0.26 | 0.11 | 0.09 | 0.03 | -0.10 | 1 | |

Note: “BSIZE is board size; BIND is board independence; BDEL is board diligence; BEXP is board expertise; ACSIZE is audit committee size; ACIND is audit committee independence; ACDEL is audit committee diligence; ACEXP is audit committee expertise; FOWN is foreign ownership; Big-Four is audit quality; AS is firm size (Million U.S.\$)”.

5. Empirical analysis

5.1. Descriptive analysis

Table (4) shows descriptive statistics in the form of minimum, maximum, mean, and standard deviation for the variables of the study. The results demonstrate that Oman and the UAE have an average of IFRS compliance of 86% and 82%, respectively; however, KSA has 79%. The lowest percentage of IFRS compliance is observed in the case of the UAE (61%), followed by Oman (63%), and KSA (70%). This is consistent with Al-shammari et al. (2008). They examined the level of IAS compliance by GCC companies during the period from 1996 to 2002 and reported a significant improvement in the compliance levels. The compliance levels increased from 68% in 1996 to 82% in 2002, with an overall compliance of 75% for all GCC companies. However, the study reported that there was a significant variation in compliance levels among countries and companies. The aggregated compliance level for all GCC companies during the study period was 75% and there was an increase in compliance over time from 68% in 1996 to 82% in 2002. On the other hand, FRQ shows a positive mean in the case of K.S.A. (196) million U.S. \$ but negative in the case of Oman (-41 million U.S. \$.) and the U.A.E. (-66 million U.S. \$.). Further, the reciprocal of the natural logarithm of total assets shows that the highest total assets is observed in the case of listed companies from KSA which have maximum total assets of 107461.74 million U.S \$, followed by listed firms from the UAE (26320.10 million U.S \$) and then firms listed in Oman (2166.68 million U.S \$). This indicates that KSA listed firms have the highest average total assets (6772.49 million U.S \$), followed by the UAE listed firms (Mean =

2732.26 million U.S \$) and finally firms listed in Oman (Mean = 361.49 million U.S \$). This could be interpreted that companies in K.S.A firms have maintained more current assets over current liabilities, which is opposite in the case of Oman and U.A.E. Further, the reconciliation of figures in the financial reports as a result of the adoption of IFRS may affect the average values of KSA firms.

With regard to board characteristics, the results show the average board size in Omani listed firms is 7 members followed by 8 for the U.A.E listed companies and 9 for K.S.A listed companies. This indicates that Omani listed companies have the lowest board size. In the same context, the UAE listed companies have the highest average board independence; 68%, followed by Omani listed companies; 63 % against 48% in the Saudi listed companies. Concerning board diligence, KSA firms have the highest average (90%) as compared with Omani and the UAE firms, which have 87% and 85%, respectively. In the same vein, Saudi listed companies have the lowest percentage of the board being financially literate (22%), followed by Omani listed companies; 33% and 36% for the U.A.E listed companies. Concerning audit committee attributes, the results demonstrate that ACSIZE has an average of 4 members for KSA and Oman and 3 for the UAE firms. Further, ACIND indicates that the average ACIND is the highest in the case of KSA firms; 94% against 73% and 84% for Omani and the UAE firms, respectively. Furthermore, ACDEL has an average of 95 in the case of KSA, 88% in Oman, and 93% in the UAE. In addition, the average of ACEXP is lowest in the case of Oman (61%) followed by the UAE (72%) and KSA (85%). This suggests that an average of 61%, 72%, and 85% of audit committee members in Oman, the UAE, and KSA respectively are financially literate in the fields of accounting,

Table 6. OLS regression Analysis.

| Compliance with IFRS (Model 1) | | | | FRQ (Model 2) | | | |
|--------------------------------|-------------|--------------|-------------|--------------------|-------------|--------------|-------------|
| Variables | Model-1 KSA | Model-1 Oman | Model-1 UAE | Variables | Model-2 KSA | Model-2 Oman | Model-2 UAE |
| C | ***-0.40 | ***0.42 | ***0.37 | C | ***-2.26 | ***-1.30 | **3.03 |
| | 0.05 | 0.03 | 0.05 | | 0.79 | 0.03 | 1.54 |
| BFSIZE | ***0.01 | -0.01 | -0.01 | BFSIZE | -0.02 | -0.01 | ***0.23 |
| | 0.00 | 0.01 | 0.01 | | 0.01 | 0.02 | 0.05 |
| BIND | -0.04 | -0.03 | -0.01 | BIND | ***0.34 | -0.08 | 0.32 |
| | 0.03 | 0.04 | 0.04 | | 0.10 | 0.14 | 0.49 |
| BDEL | 0.01 | 0.06 | ***0.06 | BDEL | 0.75 | ***0.44 | 0.12 |
| | 0.09 | 0.05 | 0.02 | | 0.48 | 0.04 | **0.13 |
| BEXP | ***0.45 | -0.01 | -0.01 | BEXP | ***0.94 | 0.09 | -1.49 |
| | 0.14 | 0.01 | 0.01 | | 0.10 | 0.09 | 0.52 |
| ACSIZE | **0.02 | ***-0.03 | ***-0.02 | ACSIZE | ***0.18 | -0.01 | **2.80 |
| | 0.01 | 0.00 | 0.01 | | 0.03 | 0.02 | 1.17 |
| ACIND | *0.17 | *-0.02 | ***-0.03 | ACIND | ***1.13 | ***0.53 | ***1.10 |
| | 0.08 | 0.01 | 0.00 | | 0.11 | 0.11 | 0.58 |
| ACDEL | *0.23 | ***0.57 | ***0.61 | ACDEL | 0.22 | ***0.28 | 0.47 |
| | 0.12 | 0.03 | 0.07 | | 0.28 | 0.02 | 0.95 |
| ACEXP | ***0.44 | *0.04 | *0.04 | ACEXP | -0.10 | 0.14 | 0.74 |
| | 0.07 | 0.02 | 0.02 | | 0.09 | 0.14 | 0.45 |
| FOWN | ***-0.17 | ***-0.01 | 0.00 | FOWN | ***0.02 | ***0.15 | **0.70 |
| | 0.03 | 0.00 | 0.00 | | 0.00 | 0.05 | 0.34 |
| BIG4 | -0.01 | ***-0.04 | ***-0.04 | BIG4 | *-0.24 | ***0.24 | -0.09 |
| | 0.01 | 0.01 | 0.01 | | 0.12 | 0.02 | 0.19 |
| AS | **0.03 | *0.03 | 0.03 | PREPOST | ***-0.36 | | |
| | 0.01 | 0.02 | 0.02 | | 0.1 | | |
| Adj.R-sq. | 0.33 | 0.55 | 0.57 | Adjusted R-squared | 0.17 | 0.74 | 0.48 |
| Prob (F-statistic) | 0.00 | 0.00 | 0.00 | Prob (F-statistic) | 0.00 | 0.00 | 0.00 |

Note is “BFSIZE is board size; BIND is board independence; BDEL is board diligence; BEXP is board expertise; ACSIZE is audit committee size; ACIND is audit committee independence; ACDEL is audit committee diligence; ACEXP is audit committee expertise; FOWN is foreign ownership; Big-Four is audit quality; AS is firm size”.

***, **, and * indicates the significance levels at 1%, 5% and 10% respectively. Figures presented in each cell are coefficients and standards errors respectively.

finance, CG, and other related areas. With regard to audit quality measured by Big-Four international auditors, the results provide descriptive statistics and frequency of the number of companies that audited by a Big-Four. The results show that 22% of the selected companies from Oman audited by a Big-Four, followed by 41% for the UAE listed companies and 58 % in the case of KSA listed companies audited by a Big-Four. In terms of foreign ownership, the maximum shares owned by foreigners reached 97% of the total shares in some of the UAE companies followed by 69% in some Omani listed firms and 28% in the case of some Saudi listed companies.

5.2. Correlation analysis

Table (5) presents a correlation analysis and illustrates the strength and direction of the relationship between the variables. The correlation is presented in three panels for the three countries; KSA (Panel A), Oman (Panel B), and the UAE (Panel C). The correlation coefficients reveal that IFRS compliance in Saudi firms has a significant positive relationship with BSIZE, BIND, BEXP, ACIND, ACDEL, ACEXP, and BIG-4 but a negative correlation with BDEL, ACSIZE, FOWN, and AS. Further, FRQ indicates a positive correlation with BDEL, AC attributes, and AS but a negative association with BSIZE, BIND, BEXP, and BIG-4. In the case of Omani firms, Panel (B) illustrates that IFRS has a significant negative relationship with board and AC characteristics except for BEXP, ACDEL, and ACEXP. It also has a positive relationship with FOWN and AS but a negative link with BIG-4. In the same context, BEXP, ACDEL, ACEXP, FOWN, and AS but a negative relationship with BDEL, and ACSIZE. FRQ exhibits a positive relationship with all variables except for BEXP, ACSIZE, and BIG-4. Similarly, Panel (C) demonstrates that IFRS in the UAE firms is positively associated with all variables except for ACEXP and FOWN. However, FRQ associates negatively with BSIZE, BIND, BDEL, ACSIZE, and ACEXP. Overall, the correlation among all independent variables is low (less than 0.70), which implies the absence of multicollinearity problems in this study. As a rule of thumb, multicollinearity may exist if a correlation between variables is more than 0.70 in the correlation matrix.

5.3. Results and discussions

Table (5) presents an estimation of regression analysis for the models of the study. The results demonstrate that the models are fit. This is indicated by a probability of 0.00 (P-Value < 0.01) with a confidence interval of 99%. Further, the adjusted R² is 0.33 in the case of KSA for IFRS compliance model, 0.17 for FRQ model. This signifies that the model variables contribute about 33% and 17% of the variability of the dependent variables; IFRS and FRQ. Similarly, the adjusted R² is 0.55 in the case of Oman and 0.57 in the UAE firms for IFRS compliance. This indicates that CG variables contribute about 55% and 57% to compliance with IFRS in Omani and the UAE firms, respectively. Further, the results show that adjusted R² is 0.74 in the case of Oman and 0.48 in the case of the UAE for FRQ. This signifies that CG variables contribute about 74% and 48% of the variability of FRQ in Oman and the UAE, respectively.

Overall, the value of the adjusted R-squared of the model (2 IFRSKSA) - the new accounting standards - in Table (6) is (0.49), which is less than the adjusted R-squared of the model (2 KSA SaudiGAAP); the old accounting standards (0.56). This indicates that CG mechanisms of Saudi companies are explaining about 49% of the variability of FRQ under the new accounting standards; IFRS and 56% under the old accounting standards.

5.3.1. Board size

The results reveal that there is no significant impact of BSIZE on IFRS compliance in the case of Oman and the UAE at any level of significance (P-value > 0.10, 0.05 and 0.01) but there is a significant positive influence at the level of 1% (P-value < 0.01) in the case of KSA. This indicates that BSIZE in KSA affects compliance with IFRS suggesting that a high

number of BSIZE could increase the level of IFRS compliance. The insignificant impact of board size on compliance with IFRS is consistent with Ba-Abbad and Wan- Hussin (2011) who indicated that board size is not linked with the level of compliance with IFRS disclosure. However, the significant impact of board size on the level of compliance with IFRS in KSA is consistent with (Juhman, 2017; Holland, 2006; Al-Akra et al., 2010) who argue that directors' influence disclosures and board size is significantly associated with the level of corporate compliance with IFRS disclosure.

While the impact of BSIZE on financial reporting quality shows a statistically insignificant negative impact in the case of KSA and Oman, but it exhibits a significant positive effect in the case of the UAE at the level of 1% (p value = 0.00 < 0.01). This signifies that board size is negatively associating with financial reporting quality in Oman and KSA, but it has a significant positive effect in the UAE. This could be attributed to the total assets of the listed companies in each country. As it is clearly seen from Table (4), the total assets in the case of Oman is the lowest among other countries. KSA has high total assets, which makes the board size incompatible with board size. With regard to financial reporting quality under the different sets of accounting standards, the results show that board size has a significant negative effect on FRQ under the new accounting standards; (KSA: IFRS) at the level of 5%, but it has a significant positive effect in the case of old accounting standards; (KSA: Saudi ASs) at the level of 10%. Accordingly, the effect of BSIZE on FRQ has changed from the old accounting standards; (KSA: Saudi ASs) to the new accounting standards; (KSA: IFRS) and from early IFRS adopters; Oman and the UAE to late IFRS adopters (KSA: IFRS). This suggests that BSIZE has a significant negative effect on the adoption process of IFRS in KSA.

Prior studies also have documented evidence of the impact of board size on the quality of financial reporting. For example, Farber (2005), Ditropoulos and Asteriou (2010), Beasley (1996), and Fama and Jensen (1983) found that there is a relationship between CG attributes, including board size and financial reporting quality. Contradictory, Xie et al. (2003), Bradbury et al. (2006), Chalaki, et al. (2012), Vafeas (2000), Klein (1998), Hermalin and Weisbach (1998), and Ahmed and Duellman (2006) reported that there is no association between CG mechanisms comprising board size and the quality of financial reporting.

5.3.2. Board independence

BIND exhibits a statistically insignificant effect on compliance with IFRS and FRQ in all cases except for FRQ in KSA. While it has a statistically significant positive effect on FRQ in KSA at the level of 1% (P-value = 0.00 > 0.01), it has no significant impact on FRQ in Oman and the UAE and on compliance with IFRS in all countries. Looking to the results in Table (6) that demonstrate the effect of BIND under the two sets of accounting standards in KSA, BIND exhibits statistically insignificant effect on FRQ in both cases; Saudi GAAP and IFRS. Mangena and Pike (2005) and Forker (1992) indicated that independent directors would enhance the monitoring of the quality of firm disclosures. Further, it is found that greater board independence is associated with more comprehensive statutory and greater disclosure (e.g., Nelson et al., 2010; Chen and Jaggi, 2000; Owusu-Ansah and Yeoh, 2005; Chen and Jaggi, 2000; Juhman 2017). Different studies also advocate that there is a positive relationship between board independence and different aspects of financial reporting (e.g., Hashed and Almaqtari, 2020; Almaqtari & Hashed et al., 2020; Farhan et al., 2020; Almaqtari & Shamim et al., 2020; Almaqtari & Al-Hattami et al., 2020; Al Maqtari et al., 2020; Farhan et al., 2020). Furthermore, Bradbury et al. (2006), Ahmed and Duellman (2006), Klein (1998), Vafeas (2000), and Hermalin and Weisbach (1998) documented that there is a positive relationship between CG attributes including board independence and financial reporting quality. However, Cornett et al. (2009) and Onuorah et al. (2016) reported that board independence is negatively related to financial reporting quality. Similarly, Petra (2007) found no relationship between CG attributes, including board independence and financial reporting quality.

5.3.3. Board diligence

Board diligence (BDEL) indicates a statistically insignificant effect in all cases for both IFRS compliance and FRQ except for IFRS compliance in the case of the UAE firms. BDEL has a significant effect at the level of 1% ($p = 0.00 < 0.01$) on compliance with IFRS in the case of the UAE firms. Further, the results show that BDEL has a significant effect at the level of 1% ($p = 0.00 < 0.01$) on compliance with IFRS FRQ in Oman. In the same context, comparing the impact of BDEL under IFRS and Saudi GAAP, the results show the effect of BDEL has changed from Saudi GAAP to IFRS to be significant. This indicates that BDEL has a statistically significant influence on FRQ under IFRS. A possible explanation of the significant results might increase board meetings to discuss IFRS issues. However, board meetings may not indicate board effectiveness. Board effectiveness measured by frequent attendance of board meetings could be better evaluated by the proposals and agendas discussed in the board meetings and the decisions made accordingly. The absolute number of board meetings may not mean higher effectiveness, especially when some firms pay some incentives and remuneration for attending board meetings. This contradicts Vafeas (1999) and Brick and Chidambaran (2010), who reported a positive effect of BDEL with disclosure requirements.

5.3.4. Board expertise

In terms of board expertise (BEXP), the results demonstrate that there is a significant positive impact of BEXP on compliance with IFRS and FRQ only in the case of KSA at the level of 1% (P-value < 0.01), but there is no significant effect in the case of Oman and the UAE. This indicates that BEXP is linked with IFRS compliance and FRQ positively. This could be attributed to that KSA firms increased financially literate members in the board to cope with IFRS adoption. Importantly, BEXP exhibits a significant effect on financial reporting quality under IFRS and Saudi GAAP at

the level of 1% ($p = 0.00 < 0.01$), but the coefficient in the case of IFRS is higher than Saudi GAAP. This could be interpreted as that when companies shift from one set of accounting standards to another set, they may increase the number of financially literate members, which could contribute to the quality of financial reporting. The significant impact of board expertise is consistent with Alzharani et al. (2011), who indicated that BEXP influences financial statement preparation. Further, Mangena and Pike (2005) argued that BEXP is able to detect any misstatements or instances of non-compliance. Likewise, Xie et al. (2003), García-Meca and Anchez (2018), and Onuorah et al. (2016) found a positive association between BEXP and financial reporting quality. However, this contradicts Abdullah et al. (2015), who indicated that board expertise is significantly and negatively associated with mandatory disclosure levels and that board members may use such expertise opportunistically by applying their knowledge of legal loopholes, which may be used to avoid mandatory disclosure.

5.3.5. Audit committee size

Table (6) demonstrates that audit committee size (ACSIZE) has a significant impact on compliance with IFRS and FRQ in all three countries except in the case of FRQ in Oman. This effect is negative in the case of Oman and the UAE and positive in KSA, denoting that it has a significant positive effect in KSA. This could be attributed to firm size. With regards to the effect of ACSIZE under the different sets of accounting standards, the results in Table (7) show that the effect of ACSIZE has an insignificant effect under the two sets of accounting standards; Saudi GAAP and IFRS. This indicates that ACSIZE has no significant effect on the transition to IFRS in KSA.

The results are consistent with Menon and Williams (1994), Barako et al. (2006), and Al-Akra et al. (2010), who indicate that there is a

Table 7. Accounting Standards wise OLS results estimation of model (2).

| IFRS Adopters | Late IFRS Adopter | | Early IFRS Adopters | |
|--------------------|-------------------|-------------------------|---------------------|------------|
| | Model (2KSAIFRS) | Model (2KSA-Saudi GAAP) | Model2 Oman | Model2 UAE |
| C | ** -1.25 | *** -3.75 | *** -1.30 | ** 3.03 |
| | 0.62 | 0.88 | 0.03 | 1.54 |
| BFSIZE | ** -0.05 | * 0.50 | -0.01 | *** 0.23 |
| | 0.02 | 0.27 | 0.02 | 0.05 |
| BIND | 0.23 | -0.18 | -0.08 | 0.32 |
| | 0.31 | 0.30 | 0.14 | 0.49 |
| BDEL | ** 0.01 | -0.14 | *** 0.44 | 0.12 |
| | 0.64 | 0.58 | 0.04 | ** 0.13 |
| BEXP | *** 1.40 | *** 0.13 | 0.09 | -1.49 |
| | 0.49 | 0.04 | 0.09 | 0.52 |
| ACSIZE | 0.09 | -0.52 | -0.01 | ** -2.80 |
| | 0.11 | 0.33 | 0.02 | 1.17 |
| ACIND | *** 0.84 | ** 0.34 | *** 0.53 | *** 1.10 |
| | 0.19 | 0.09 | 0.11 | 0.58 |
| ACDEL | -0.10 | * 1.40 | *** 0.28 | 0.47 |
| | 0.26 | 0.78 | 0.02 | 0.95 |
| ACEXP | *** -1.16 | -0.07 | 0.14 | 0.74 |
| | 0.34 | 0.14 | 0.14 | 0.45 |
| FOWN | *** 0.02 | * -0.02 | *** 0.15 | ** 0.70 |
| | 0.01 | 0.01 | 0.05 | 0.34 |
| BIG-4 | -0.08 | ** -0.68 | *** 0.24 | -0.09 |
| | 0.12 | 0.25 | 0.02 | 0.19 |
| Adjusted R-squared | 0.49 | 0.56 | 0.74 | 0.48 |
| Prob (F-statistic) | 0.00 | 0.00 | 0.00 | 0.00 |

Note is “BFSIZE is board size; BIND is board independence; BDEL is board diligence; BEXP is board expertise; ACSIZE is audit committee size; ACIND is audit committee independence; ACDEL is audit committee diligence; ACEXP is audit committee expertise; FOWN is foreign ownership; Big-Four is audit quality; AS is firm size”.

***, **, and * indicates the significance levels at 1%, 5% and 10% respectively.

Figures presented in each cell are coefficients and standards errors respectively.

positive association between audit committee size and disclosure level. Further, the results are similar to [Felo et al. \(2003\)](#), [Yang and Krishnan \(2005\)](#), and [Bedard et al. \(2004\)](#), who reported that larger audit committees positively influence financial reporting quality. But these results contradict [Kent and Stewart \(2008\)](#) and [Abdullah et al. \(2015\)](#), who found a significant negative impact on compliance levels, and [Davidson et al. \(2005\)](#), who did not find a significant result for audit committee size on financial reporting quality.

5.3.6. Audit committee independence

The results show that ACIND has a significant impact on compliance with IFRS and FRQ in all three countries. It has a significant positive effect on IFRS compliance in KSA at the level of 10% (P-value < 0.10), but it has a negative effect in the case of Oman and the UAE at the level of 10% and 1%, respectively. Further, ACIND has a significant positive effect on FRQ at the level of 1% (P-value = 0.00 < 0.01) in all three countries. The significant positive effect of ACIND in KSA could be attributed to the preparedness made by KSA to shift from the local GAAP to IFRS, which may require that audit committees in the listed companies to be comprised of a majority of independent members. As far as the different sets of accounting standards are considered, ACIND has the same significant effect at the level 1% ($p = 0.00 > 0.01$) under both sets of accounting standards; however, the coefficient in the case of IFRS is higher than Saudi GAAP indicating a slight positive change in the role of ACIND in the transition process to IFRS.

The significant impact of board independence on compliance with IFRS is consistent with [Juhman \(2017\)](#) and [Al-Akra et al. \(2010\)](#), who found a significant positive association between disclosure index and audit committee independence. This contradicts [Kent and Stewart \(2008\)](#) and [Ba-Abbad and Wan-Hussin \(2011\)](#), who found no association. Further, the results of the significant impact of audit committee independence on financial reporting quality are consistent with [Jensen and Meckling \(1976\)](#), [Bedard et al. \(2004\)](#) [Abbott et al. \(2000\)](#), who found an association between them. However, the insignificant impact of audit committee independence is provided by [Yang and Krishnan \(2005\)](#) and [Bazrafshan et al. \(2015\)](#), who did not find any significant association between audit committee independence and their earnings management measures.

5.3.7. Audit committee diligence

ACDEL exhibits a significant positive effect on compliance with IFRS at the level of 10% in KSA and at the level of 1% in the case of Oman and the UAE. It is implied that the proportion of meetings attended to the total number of meetings held by directors of the sampled companies from KSA, Oman, and the UAE is associated with IFRS compliance. Further, ACDEL exhibits a significant positive effect on FRQ only in the case of Oman at the level of 1% level of significance ($p = 0.00 < 0.01$). Furthermore, the impact of ACDEL on financial reporting quality under the different sets of accounting standards in KSA reveals an insignificant effect in the case of IFRS but a significant negative effect at the level of 10% in the case of Saudi GAAP. However, this effect could be better evaluated by the meeting agendas of the audit committee rather than the absolute number of meetings.

[Abdullah et al. \(2015\)](#) and [Salehi and Shirazi \(2016\)](#) found no significant association between the number of audit committee meetings and compliance level with mandatory disclosures. Contradictory [Bedard et al. \(2004\)](#) and [Xie et al. \(2003\)](#) found no significant association between the frequency of audit committee meetings with the likelihood of aggressive earnings management. However, [Song and Windram \(2004\)](#), [Abbott et al. \(2000\)](#) and [Beasley et al. \(2000\)](#) argue that there is a significant association between financial statement fraud or earnings restatements and audit committee activity.

5.3.8. Audit committee expertise

Audit committee expertise (ACEXP) shows a statistically significant positive impact on compliance with IFRS in all three countries. It has a

statistically significant effect at the level of 1% in the case of KSA at the level of 10% in the case of Oman and the UAE. [Bepari and Mollik \(2015\)](#), [Mangena and Pike \(2005\)](#), [Song and Windram \(2004\)](#), and [Salehi and Shirazi \(2016\)](#) reported a significant relationship between audit committee expertise and compliance or disclosure levels. This is not consistent with [Kent Stewart \(2008\)](#), who reported a negative association. On the other hand, ACEXP indicates an insignificant effect on FRQ in all three countries, which may be considered a negative indication of audit committee members' role in constraining earnings management. This contradicts with [Bedard et al. \(2004\)](#), [Beasley et al. \(2009\)](#), [Cohen et al. \(2004\)](#), and [Cheng et al. \(2020\)](#), who found that a relationship between audit committee expertise and quality of financial reporting. In the same context, [Rohaida \(2011\)](#) suggests that an audit committee's financial expertise should enhance its monitoring function and increase firms' financial reporting quality. Further, the influence of ACEXP under the different sets of accounting standards exhibits a significant change from Saudi GAAP to IFRS. It exhibits a significant negative effect at the level of 1% under IFRS but an insignificant effect in the case of Saudi GAAP. This may put a question on the role of audit committees in these countries. [Almaqtari and Hashed et al. \(2020\)](#) found that FRQ quality in India has improved gradually after the conversion to the equivalent IFRS standards (Indian Accounting Standards).

5.3.9. Audit quality

While there is no significant impact at any level of significance; 1%, 5%, and 10% (P-value > 0.10) of Big-Four on IFRS compliance in the case of KSA, it is statistically significant in the contexts of the UAE and Oman. The results provide evidence of a significant negative impact at the level of 1% in the case of Oman and the UAE. This indicates that Big-4 is not contributing positively to IFRS compliance, which could be attributed to that BIG-4 are used by a management of a firm only to signal to outsiders that they have a BIG-4 auditor. Further, the role of Big-4 in FRQ is found to have a significant effect in the case of KSA at the level of 10% and at the level of 1% in the case of Oman but no significant effect in the case of the UAE. However, the impact of Big-4 in KSA and the UAE is negative but positive in the case of Oman. On the other hand, the results in [Table \(7\)](#) show that there is no significant effect of Big-4 in the case of IFRS, but it has a significant negative effect in the case of Saudi GAAP. [Street and Bryant \(2000\)](#) found a significant association between the type of auditing standards referred to in the audit report and compliance with IAS. Similarly, [Juhman \(2017\)](#), [Karim and Ahmed \(2005\)](#), [Tsalavoutas \(2011\)](#), [Al-Akra et al. \(2010\)](#), [Glaum and Street \(2003\)](#), and [Street and Gray \(2001\)](#) concluded a strong significant positive association between disclosure index and audit firm size especially, Big-Four and big 5. Similar studies also in favor of larger audit firms, auditor type, audit quality and its positive impact with increased disclosure and compliance (e.g., [Alfaraih, 2009](#); [Owu-su-Ansah, 2005](#); [Glaum and Street, 2003](#); [Tsalavoutas, 2009](#); [Al-Akra et al., 2010](#); [Hodgdon et al., 2009](#); [Street and Gray, 2001](#)). Further, [Fekete et al. \(2008\)](#) indicated that there is no significant impact of auditor type. [Onuorah et al. \(2016\)](#) revealed that quality of external audit has a positive impact on financial reporting quality, guarantee the integrity of financial reports ([Watts and Zimmerman, 1983](#)) and reliable financial information ([Becker et al., 1998](#)).

5.3.10. Foreign ownership

Concerning foreign ownership, the results show a significant impact of foreign ownership (FOWN) on IFRS compliance in the case of KSA and Oman except in the case of the UAE. The results show that there is a statistically significant negative impact at the level of 1% (P-value < 0.10) in the case of KSA and Oman. [El-Gazzar et al. \(1999\)](#) and [Gordon et al. \(2012\)](#) indicate that there is an association between compliance levels and foreign ownership. Further, the results show that foreign ownership is a predictor and one of the main contributors to financial reporting quality in KSA, Oman, and the UAE. Foreign

ownership has a statistically significant impact on financial reporting quality at the level of 1% in the case of KSA and Oman ($p = 0.00 < 0.01$) and at the level of 5% in the UAE. The impact of foreign ownership has changed to be positive and more significant from the local accounting standards to the new accounting standards; IFRS in the case of KSA. Consistent with the findings of the present study, Lee et al. (2013) revealed that listed firms in China that have a higher percentage of foreign ownership would be expected to enhance their financial reporting quality more under IFRS-converged Chinese Accounting Standards (CAS). Similarly, subsequent research found a positive relationship between the increase in foreign ownership, governance transparency, and earning responsive coefficient (Dong and Xue, 2010). Contradictory, Chalaki et al. (2012) found no relationship between CG attributes, including ownership concentration, institutional ownership, and financial reporting quality.

Finally, the results in Table (6) demonstrate that firms size has a significant negative effect at the level of 5% on compliance with IFRS in the case of KSA and a positive effect at the level of 10% in the case of Oman, but the insignificant effect in the case of the UAE. Further, in the context of FRQ, the results show that PREPOST has a significant negative effect at the level of 1% on FRQ in KSA. This indicates the collective effect of CG variables on FRQ under the different sets of accounting standards; Saudi GAAP and IFRS. This signifies that the collective role of CG mechanisms in the case of Saudi GAAP is better than in the case of IFRS, which indicates that Saudi firms may need a longer time to reach the desirable level of FRQ under IFRS.

6. Conclusion

The present study attempts to examine the impact of corporate governance mechanisms on compliance with IFRS and financial reporting quality in some selected Gulf countries. The study aims to investigate this issue using a sample of 98 firms listed in KSA, Oman, and the UAE over the period from 2015 up to 2018. Corporate governance mechanisms are treated as independent variables, which include board effectiveness ("board size, independence, diligence, and expertise), audit effectiveness (audit committee size, audit committee independence, audit committee diligence, audit committee expertise, and audit quality), and foreign ownership" which are functioned against the dependent variables; compliance with IFRS and financial reporting quality. Descriptive statistics, correlation, and regression analysis are conducted to estimate the results. The results reveal that audit committee attributes have a higher impact on compliance with IFRS and financial reporting quality than other corporate governance mechanisms. Further, the results show no evidence to support that the collective effect of corporate governance mechanisms has changed to be more influential from Saudi GAAP to IFRS. Overall, the results demonstrate that the impact of corporate governance mechanisms on financial reporting quality differs from the Saudi GAAP to IFRS.

The present research contributes to the strand literature of corporate governance, financial reporting quality, and accounting standards in KSA, Oman, and the UAE. It brings useful insights and empirical evidence for auditors, managers, analysts, regulators, investors, academicians, and other interested parties. The present study has a unique contribution as it attempts to compare the effect of corporate governance mechanisms on financial reporting quality and compliance with IFRS among a recent IFRS adopter; KSA and early IFRS adopters; Oman and the UAE. The study provides evidence from KSA following its IFRS adoption. Accordingly, the findings of the current study could be beneficial for regulators as it evaluates whether IFRS has achieved the desired objectives and fulfilling the needs of enhancing the quality of financial reporting in KSA or not. Further, the study highlights the level of compliance with IFRS and FRQ in KSA after the introduction of IFRS. Accordingly, there is a need to establish a supervisory board for financial reporting quality in Saudi Arabia to oversee the issues of compliance with accounting standards and enhance FRQ.

Declarations

Author contribution statement

Faozi A. Almaqtari: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Abdulwahid Abdullah Hashed: Conceived and designed the experiments; Wrote the paper.

Mohd Shamim: Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

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Data availability statement

Data is extracted from the published annual reports of the listed companies in Saudi Arabia: Tadawul, Oman: Muscat, the United Arab Emirates: Dubai. <https://www.tadawul.com.sa/wps/portal/tadawul/market-participants/issuers/issuers-directory?locale=en>; <https://www.msm.gov.om/companies.aspx>; <https://www.dfm.ae/issuers/liste-d-securities/securities>.

Declaration of interests statement

The authors declare no conflict of interest.

Additional information

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