The Association between Audit Committee Characteristics and Corporate Social Responsibility Disclosure in GCC Countries

Mohamed Zaki Yassin

Faculty of Commerce, Tanta University, Egypt & College of Business Administration, University of Bahrain, Bahrain

1 Corresponding author email: myassin@uob.edu.bh

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Abstract:
This study aims to investigate the association between audit committee (AC) characteristics and corporate social responsibility disclosure (CSRD) in Gulf Cooperation Council (GCC) countries. The study adopts a stakeholder theory perspective to explore this relationship. An unweighted index consisting of 33 information items divided into three categories has been created to access the level of CSRD within the 225 listed companies sample included in this study. The study includes four independent variables which represent the AC characteristics namely, size, independence, financial expertise, and engagement. The study developed and tested four hypotheses to reveal the relationships between AC characteristics and CSRD. Using multiple regression analysis models on the collected data, the study finds that there is an insignificant positive association between CSRD and AC size and AC expertise. Whereas a significant negative relationship was found between CSRD and AC independence. The regression results also show a significant positive association between CSRD and AC engagement. The findings partially support the stakeholder theory perspective adopted in this study. The study concludes that the average CSRD in GCC countries is less than its counterpart in developed countries. The outcomes of this study may be of particular interest to governments, regulators and other stakeholders who need to exert more pressure on the management of GCC listed companies to enhance the level of CSRD in their financial reporting.
Keywords: Audit Committee Characteristics, Corporate Social Responsibility Disclosure, Stakeholder Theory, Firm Characteristics, GCC.

1. Introduction
Sheldon (1924) was the first author who discussed the negative influences of corporations’ operations on the social and environmental aspects. This debate expanded to reflect the concept of Corporate Social Responsibility (CSR) as a hot topic in the accounting literature during the last few decades. Hill et al. (2007, p.167) define CSR as “the economic, legal, moral, and philanthropic actions of firms that influence the quality of life of relevant stakeholders”. While CSR defined by McWilliams et al. (2011, p.117) as “actions that appear to further some social good, beyond the interests of the firm and that which is required by law”. Mallin et al. (2013) argued that various types of stakeholders are exercising pressures on corporations to mitigate their negative impacts on societies and environment. In addition, many authors indicated the negative consequences may happen if a corporation fails to provide a satisfactory Corporate Social Responsibility Disclosure (CSRD) of its activities such as losing reputation, declining firm value and bad publicity (Peloza and Shang 2011; Taran and Mirkin, 2020). Accordingly, the significance of CSRD has been increased as a trigger that measures the corporate compliance towards the society and environment. Therefore, many authors claimed that the corporations tend to increase their CSRD
to gain many advantages such as spread relevant information about corporations’ activities, relieve agency conflicts, convince stakeholders that they perform in an optimal manner, enhance information symmetric and increase demand and value of a brand (Watson et al., 2002; Barako et al., 2006; Shehata, 2014; Mousa et al., 2018).

However, CSRD may be used by managers to hide their opportunistic behaviour and to increase their reputation rather than to decrease information asymmetry. Furthermore, CSRD normally focuses on positive aspects and avoids disclosing any negative information regarding social and environmental issues (Appuhami and Tashakor, 2017). Consequently, the quality and quantity of CSRD is questionable and some studies discuss different aspects that enhance the quality of CSRD. Such as: *credibility*, which can be granted by the obligation of top management and by increasing the external verification. *Completeness*, CSRD should include information about all major issues that affect the environment and society. *Significance*, both quantitative and qualitative measures should be used to assess the corporations’ responsibilities. *Appropriate form*, CSRD needs to be long enough and clear to boost the usefulness level for stakeholders (Moravcikova et al., 2015; Bicer and Feneir, 2019).

2. An Overview on Institutional Background

GCC countries present the field study of this research. GCC consists of six countries they are Kingdom of Saudi Arabia, Bahrain, Kuwait, Oman,
Qatar, and United Arab Emirates. GCC countries share similar culture, religion, traditions, language, political and social characteristics. The economy in GCC countries mainly relies on the income of oil industries due to the significant oil and gas reserves in this area. All GCC countries have corporate governance codes, starting from 2002 in Oman then other countries published their corporate governance codes until 2010 in Bahrain and Kuwait. These codes show some points of similarities including AC’s requirements and differences in relation to corporate social responsibility (Shehata, 2015). Also, security markets in GCC set some guidelines regarding AC such as, AC should consist of at least three members the majority should be independent, and AC should conduct minimum four meeting per year. As for accounting standards, all security markets in GCC require listed companies to apply IFRS as there is no local accounting standards (Ali, 2021). In conclusion, GCC corporate governance codes and security markets regulations in GCC suggest a high level of confidence for stakeholders and more fairness and transparency of financial disclosure (Mousa et al., 2018).

To achieve more prosperity and enhance the economy, GCC governments seek to develop their security markets and to attract foreign and local investors. Apparently, one vehicle to achieve economics’ prosperity is extending the corporate disclosure and disclosing more information regarding environmental and social activities (e.g., CSRD) (Khasharmeh and Desoky, 2013). Accordingly, the recent update in the GCC countries
corporate governance codes paid more attention to corporate social responsibility. For instance, Bahraini updated code 2018 includes a separate principle for formulation of social responsibility policy and regarding the disclosure, the code stated “The Company shall provide, in its annual report, a report on corporate social responsibility activities. The report shall explain these activities and the amounts spent thereon and measure their impact and sustainability”. Similar attention regarding corporate social responsibility can be spotted in the other GCC updated corporate governance codes.

3 Theoretical Perspectives on CSRD and AC Characteristics
Relying on theoretical framework is often used in social accounting literature. Theory is essential to understanding and evaluating the corporate practices and trying to anticipate the future practices (Gray et al., 2010). Scholars approach an accounting social phenomenon with preconcerns and assumptions, theory can aid in articulating these concerns and it can support in formulating those assumptions. As Gray et al., (2010) stated “the lens of theory enables us to evaluate practice and policy against criteria that we deem appropriate ... Concern with social accounting is almost definitionally interwoven with a belief in the need for change; careful choice of theory can probably help us to consider current and potential practice and policy in a more thoughtful and coherent manner” (Gray et al., 2010, p.3).
Agency, signalling, legitimacy, stakeholder, and institutional theories are the most prominent theoretical frameworks used in accounting literature to investigate the various motivations and incentives to enhance both voluntary or mandatory disclosure including CSRD (i.e., Lanis and Richardson, 2012; Fernando and Lawrence, 2014; Shehata, 2014; Martínez et al., 2016; Mousa et al., 2018).

3.1 Agency Theory:
Agency theory is one of the oldest and most widely used theoretical frameworks to investigate the voluntary disclosure in general. This perspective assumes that there is a conflict between (the shareholders) the principals’ interest and (the directors) the agents’ interests. This conflict comes from the fact that there is information asymmetry between directors and shareholders because the former has more knowledge regarding the institutions and their activities. This may lead directors to maximise their benefits on the harm of the shareholders ones. Accordingly, shareholders need to afford agency costs (i.e., monitoring costs) to limit managers’ opportunistic behaviour (Jensen and Meckling, 1976; Lanis and Richardson, 2012).
Many authors argued that voluntary disclosure is a useful tool to mitigate the agency conflict and could help to reduce agency costs and convince shareholders that directors are acting in an optimum manner (Watson et al., 2002; Barako et al., 2006).
Fernando and Lawrence (2014) classified agency theory into “economic theories” which consider mainly the financial stakeholders with less focus on the concerns of other types of stakeholders.

3.2 Signalling Theory

According to signalling theory, organizations can use voluntary disclosure to attract and to satisfy wide variety of stakeholders. Organizations tend to disclose certain types of information as “signals” to their stakeholders in order to enhancing corporate reputation. CSRD is one of the signalling means by which organizations can disclose voluntary information regarding their social and environment practices. This voluntary disclosure beyond the mandatory disclosure required by regulations sends “signals” to external parties which increase their level of confidence regarding the organizations’ activities (Campbell et al., 2001). Omran and Ramdhony (2015) argued that organizations can achieve many strategic objectives by sending those signals and offering more CSRD, such as increase firm value, more ability to compete for scarce resources, reduce uncertainty and increase creditability. Hasseldine et al. (2005) and Thorne et al. (2014) suggested that CSRD should focus on both the quantity and the quality of the disclosed environmental and social information to create the optimal environmental reputation amongst the stakeholder’s groups.

Su et al. (2016) argued that firms within emerging economics context tend to send signals to their stakeholders when they implement proper
corporate social responsibility practices. In addition, they found that adequate corporate social responsibility practices positively associated with the financial performance in less developed security markets. Therefore, they concluded that the CSRD sends signals to stakeholders regarding the high firm’s capabilities and anticipated positive effects on the firm’s financial performance.

3.3 Legitimacy Theory

The notion of social contract between corporations and their societies is the core of the legitimacy theory. This social contract represents the unlimited expectations from the societies’ actors regarding the corporations’ practices. The society is expecting certain and proper environmental and social practices from the corporations. Accordingly, corporations need to act within those expectations and norms seeking legitimacy and acceptance of their societies to continue operating successfully. CSED is one of the corporations’ means to achieve this society approval and to ensure sustainability (Magness, 2006). O’Donovan (2002) highlighted that corporations in seeking more legitimate position they may change their tactics regarding environmental disclosure from symbolic to substantive disclosure. Omran and Ramdhony (2015) argued that CSRD can be investigating based on legitimacy theory for corporations working in more developed countries. In the same vein, Schmitz and Schrader (2015) claim that in situations where the corporations’ annual reports are the principal way to disclose
CSR information with their societies, legitimacy theory seems more appropriate. They pointed out that in those situations the voluntary CSRD is less likely to be significant because most of the society’s interests are protected by mandatory regulation, arguably, this the case of more developed countries.

### 3.4 Stakeholder Theory

Stakeholder theory focuses on the interrelation between a corporation and its stakeholders. It supports the notion of a corporation’s accountability towards its stakeholders by disclosing information regarding its activities and operations (Fernando and Lawrence, 2014). The concept stakeholder is defined as “any group or individual who can affect or is affected by the achievement of the firm's objectives” (Freeman 1984, p. 49). Many classifications offered in the accounting literature for the corporations’ stakeholders such as, internal, and external, primary, and secondary, voluntary, and involuntary, strategic and moral...etc. These different classifications indicate the wide range of interests and expectations of various stakeholders’ groups which perhaps conflicting expectations. Similarly, many types of interpretations and classifications are given to stakeholder theory in the accounting literature. However, the most prominent classification spotted in the literature and adopted by many scholars is dividing stakeholder theory to managerial or economic perspective and moral or ethical perspective (i.e., Belal and Owen, 2007; Deegan 2009; Gray et al., 2010; Fernando and Lawrence, 2014).
The managerial perspective of stakeholder theory emphasises meeting the expectations of the key stakeholders who control the resources needed by the corporation. The more critical resources controlled by a group of stakeholders the more effort required by corporation to satisfy and to meet the expectations of this group. According to this perspective, a corporation is responsible mainly towards its economically core stakeholders not all groups of stakeholders (Deegan 2009). A principal challenge for a corporation is to identify its critical stakeholders’ groups and determine to what extent it is responsible towards them (Fernando and Lawrence, 2014).

On the other hand, the ethical perspective of stakeholder theory assumes that a corporation is responsible towards all its stakeholders’ groups not only the powerful stakeholders. According to this perspective the management tries to meet the variety of expectations of all the corporation’s stakeholders. The ethical perspective does not give the economic and financial motivation the priority over other aspects to disclose information about corporations. It emphasises the moral role of corporations and their massive economic effects as well as social effects on people’s lives in their societies. According to this perspective, the corporation’s management faces a challenge to response fairly to all stakeholders needs and expectations which often characterized by contradictions and conflict of interests. To achieve the optimal balance among all the stakeholders’ interests is the core confrontation that a
corporation’s management should overcome (Deegan 2009; Gray et al., 2010; Fernando and Lawrence, 2014).

3.4.1 Stakeholder Theory and CSRD

Previous perspectives on agency, signalling and legitimacy theories show that CSRD can be, a tool to manage the agency conflict between shareholders and directors (agency view), a sign to good financial performance or good corporate governance practice (signalling view) and a way that a firm uses to legitimate its activities (legitimacy view). Since this research focuses on the importance and usefulness of CSRD for the broader external parties and not limited to the narrow view of the agency conflict between shareholders and directors or legitimacy or signalling views with higher emphasis on economic aspects. In addition, the current study investigates the AC impact on CSRD which is relatively new within the research field of study GCC context. Therefore, this study employs the stakeholder theory because it is broader than other theories and more comprehensive with both ethical perspective and economic one.

Gray et al. (1996) highlighted the concept “right-to-know” in a line with stakeholder theory meaning that all stakeholders have the right to know financial and non-financial information as well as regulated and unregulated information about a corporation. Consequently, the corporation’s management will engage in CSRD to fulfil its responsibility towards its all groups of stakeholders “according to the ethical perspective” or towards the more powerful stakeholders
“according to the economic perspective”. Higher levels of CSRD about certain activities and operations means that the corporation maintain its stakeholders “right-to-know” philosophy. As a result, information asymmetry can be reduced, and the stakeholders’ satisfactions can be achieved. Stakeholder theory scholars claimed that widen the CSRD will bring certain benefits to a corporation such as less cost of obtaining capital, enhance the corporate image and reputation, attract more investors, and retain current shareholders, retention of employees and attract higher skilled employees, gain the overall approval and support of its stakeholders (Deegan 2009; Gray et al., 2010; Fernando and Lawrence, 2014).

4. Literature Review on CSRD

Over the past few decades, social and environmental matters gain much importance, and they are considered as a principal part of corporate’s activities. Therefore, several stakeholders’ groups seek information about corporate social and environmental operations and exert pressure to obtain this information. Consequently, a parallel attention is given to disclose social and environmental information that often referred to as Corporate Social Responsibility Disclosure (CSRD). Therefore, the traditional financial reporting is complemented by CSRD to present the entire corporate’s disclosure and to mitigate information asymmetry (Omran and Ramdhony, 2015).
There are several studies in accounting literature investigated the interrelation of various accounting aspects with CSRD in different contexts. One of the main streams of CSRD research is to examine the relationship between Corporate Governance (CG) characteristics and the extent of CSRD such as (Haniffa and Cooke, 2002 & 2005) in Malaysian context; (Khan, 2010) in Bangladeshi context; (Giannarakis et al., 2014) in USA context and (Mousa et al., 2018) in GCC context.

Also, the association between firm characteristics and CSRD considerably investigated in the accounting literature; for instant, (Khasharmeh and Desoky, 2013) in GCC context; (Muttakin et al., 2015) in Bangladeshi context; (Bidari and Djajadikerta, 2020) in Nepalese context.

Many other studies explored various dimensions of CSRD and their association with different issues; for example, with national institutions and industry characteristics (Young and Marais 2012); with risk management (Musallam 2018); with degree of multinational activities (Coffie et al., 2018); with managerial professional connections (Luo and Liu, 2020); with dividend payment decisions (Saeed and Zamir 2021); with financial reporting quality (Al Ani, 2021). Those studies showed mixed results regarding the relationships between CSRD and the phenomenon under investigation.

For instance, Bidari and Djajadikerta (2020) tested the association between some firm characteristics (size, age and profitability) and CSRD in
Nepalese banks. They found that CSRD is mainly descriptive disclosure in Nepalese banks and there are significant positive relationships between the extent of CSRD and two firm characteristics: bank size and profitability while the bank age was partially correlated with CSRD. Saeed and Zamir (2021) explored the linkage between dividends payment decisions and CSRD within emerging markets context. The results showed an inverse impact of CSRD and corporate dividends payments. In other words, the improvement in CSRD causes a declining in dividends payment. Also, the study examined the effect of the institutional ownership on the relationship between CSRD and dividends payment. The findings documented that the inverse impact between CSRD and dividends payments is stronger in firms with higher level of institutional ownership.

Within GCC context, Al Ani (2021) investigated the impact of CSRD on the earnings quality expressed in three measurements: earnings persistence, accrual quality and value relevance. No association found between CSRD and accrual quality and earnings persistence while the findings proved a significant positive association between CSRD and value relevance. The study concluded that CSRD mainly improves the value relevance of the earnings quality in three Gulf countries (BAH, KSA, and UAE).

Chi et al., (2020) explored the determinants of CSRD in private corporations compared with their counterpart in public sector. The study
pointed out the difference between demand for CSRD (stakeholders’ needs and expectations regarding social and environmental activities) and supply for CSRD (corporations’ willing to disclose social and environmental information). The findings showed that there is insignificant lower level on demand for CSRD in private corporations than public peers. As for supply for CSRD, the study highlighted that private corporations are less willing to disclose CSR information to their stakeholders compared with public peers. From another perspective, the study examined the effect of CSRD on the cost of debt in private corporations and public ones. In public corporation, the results supported the positive effect of CSRD in decreasing the cost of debt due to higher credit rating. On the other hand, these lower cost of debt benefits were not demonstrated in private corporations.

Luo and Liu (2020) studied the potential improvement of CSRD due to professional connections for the top corporations’ managers in Chinese context. They claimed that corporations whose directors have professional connections are more likely to lose reputation for any irresponsible social behaviours. Accordingly, those directors are more likely to extent CSRD in their corporations and their professional connections cause a significant impact on CSR decisions. In addition, authors referred to the monitoring role of social attention and its role to enhance the positive association between CSRD and professional connections.
Coffie et al., (2018) investigated the impact of degree of multinational activities and corporate governance on both quality and quantity of CSRD. The study proved a positive relationship between the level of multinational activities and CSRD’s quality and quantity. As for corporate governance, the study shown different association between corporate governance’s characteristics and CSRD. Board size and board composition (greater number of non-executive members) are both positively associated with quality and quantity of CSRD.

Also, the study tested the effect of the presence of independent corporate social responsibility committee on the quality and quantity of CSRD. The results shown a significant positive relationship only with CSRD’s quality. While the findings reported an insignificant negative association with CSRD’s quantity. Finally, on contradictory with literature review, the study proved a significant positive relationship between institutional investor (blocked ownership) and quality and quantity of CSRD.

Many authors indicated the significance of the AC role to improve and enhance the overall corporations’ performance, reduce the conflict with stakeholders and lead corporations towards more sustainable positions. However, accounting literature review did not pay much attention to the direct association between audit committee (AC) characteristics and CSRD. Such a relationship was implicitly investigated in a variety of studies which investigated the association between AC characteristics and different type of disclosures such as voluntary disclosure (i.e. Madi et al.,
2014; Othman et al., 2014; Samaha et al., 2015) financial reporting quality (i.e. Pomeroy and Thornton, 2008); intellectual assets disclosure (i.e. Li et al., 2012); sustainability disclosure (i.e. Buallay and Al-Ajmi, 2019; Adegboye et al., 2020) environmental and social disclosure (i.e. Shaukat et al., 2016; Bicer and Feneir, 2019). Except the study by Appuhami and Tashakor (2017) in Australia, the direct impact of AC characteristics on the comprehensive four dimensions of CSR did not spot in the literature. Appuhami and Tashakor (2017) argued that AC is responsible to support the long-run corporations’ objectives from different dimensions; social, environmental, and economic. They argued that the mere existence of AC along with reasonable features will positively affect the overall corporations’ disclosure including CSRD. Khlif and Samaha (2014) highlighted the critical role of AC to reveal useful and relevant information about the corporation for the current and potential investors. In addition to its role to control the top management’s activities to protect the stakeholder’s interests and to widen the voluntary corporate’s disclosure including CSRD. Also, Samaha et al., (2015) claimed that AC presents an observing instrument to enhance the overall quality and quantity of the firm reporting system. In general, AC is monitoring all corporate reporting policies and specially focuses on compulsory disclosure of corporate financial and non-financial information. Nonetheless, the role of AC has expanded to be more comprehensive and
incorporate voluntary disclosure including CSRD (Kolk and Pinkse, 2010; Appuhami and Tashakor, 2017).

As shown above, the previous CSRD research did not pay much attention to explicitly studying the association between AC characteristics and the comprehensive CSRD. However, many studies implicitly examined the relationship between AC characteristics and different matter can be classified under CSRD in general. More elaboration regarding studies investigated the relationship between AC characteristics and CSRD will be in next section.

5. Hypotheses Development

According to the objective of the current study, the association between audit committee characteristics namely (size, independence, financial expertise, and audit committee engagement) and CSRD are discussed as follows.

5.1 Audit Committee Size & CSRD

AC size refers to the number of members in the AC. Although, there is no optimal or standard AC size, many studies recommended three members at least to ensure existence of variety of expertise (Persons, 2011). The larger of AC size means the stronger monitoring over the corporation reporting and disclosure systems. However, previous studies suggested that AC size should not exceed five or six members to avoid some expected problems such as poor coordination and communication,
allocate of responsibilities and delaying the decision-making process (Li et al., 2012; Appuhami and Tashakor, 2017; Bicer and Feneir, 2019).

The previous studies found inconclusive findings with regard the association between AC size and CSRD\(^1\). Some empirical studies found a significant positive relationship between AC size and CSRD (Cornett et al. 2009; Li et al., 2012; Appuhami and Tashakor, 2017; Musallam, 2018).

On the other hand, other studies did not support such a positive association or found a negative relationship (Madi et al., 2014; Bicer and Feneir, 2019; Adegboye et al., 2020).

Based on the above discussion, the first hypothesis is formulated as follow:

\(H1: \text{There is a significant association between AC size and the level of CSRD.}\)

5.2 Audit Committee Independence & CSRD

AC independence indicates the number of independent/external members in the AC’s composition. Independent directors in AC play a crucial role to protect stakeholders’ interests and to achieve the committee’s goals. AC independence is a principal attribute which significantly affect the committee’s efficiency and effectiveness. Independent members sustain

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\(^1\) Some of these previous studies investigated explicitly the association between AC characteristics and voluntary, environmental, social or intellectual capital disclosures and implicitly with CSRD.
the ethical and moral environment within corporations and increase the confidence of corporate governance and reporting system (Buallay and Al-Ajmi, 2019). Regarding CSRD, some authors highlighted the special importance of AC independence because this type of disclosure is rarely governed by compulsory regulations. Consequently, top management may act according to opportunistic fashion that increase the information gap with regard CSR activities. Therefore, high degree of independence in AC can mitigate such an opportunistic behaviour and safeguard the stakeholders’ interests as well as boost the effectiveness of AC practices (Li et al., 2012; Appuhami and Tashakor, 2017).

Mere existence of independent members in AC is not enough for some authors who argued that the majority of AC members should be independent to ensure effective monitoring of top management’s activities and to enhance creditability of different types of voluntary disclosure including CSRD. This is arguably suggesting the ability of AC to improve the CSRD and protect stakeholders from possible deceptive disclosure (Mangena and Pike 2005; Appuhami and Tashakor, 2017). Furthermore, Pucheta-Martinez and De Fuentes (2007) claimed that an audit committee should exclusively include non-executive and independent members which leads to higher level of accountability and fair disclosures.

Most of the previous research found significant positive association between AC independence and CSRD (i.e., Persons, 2009; Madi et al.,
2014; Appuhami and Tashakor, 2017; Buallay and Al-Ajmi, 2019; Adegboye et al., 2020). However, other studies did not find a relationship between AC independence and CSRD (i.e., Li et al., 2012; Othman et al., 2014; Musallam, 2018). The above findings indicate that there is no full agreement regarding such an association.

Based on the above discussion, the second hypothesis is formulated as follow:

H2: There is a significant association between AC independence and the level of CSRD.

5.3 Audit Committee Financial Expertise & CSRD

AC financial expertise refers to the percentage/portion of financial experts (accounting and/or finance) in the committee. AC is recommended to have a minimum of one member with appropriate finance and/or accounting qualifications or relevant financial experience which provide AC with a necessary knowledge to effectively perform its monitoring role with regard accounting, reporting and disclosure issues (Li et al., 2012; Appuhami and Tashakor, 2017). Participation of financial experts is essential to AC because they will be able to understand and critique various accounting, reporting and disclosures practices. Also, financial experts can assess the level of compliance with regulations as well as assessing the degree of fairness/ethical disclosures that enhance the overall transparency (Mangena and Tauringana, 2007; Madi et al., 2014).
Consequently, many authors argued that more financial experts in AC will improve the level of voluntary disclosure including CSRD. In addition, those financial experts build confidence with external parties and market participants as well as make them respond positively to different types of corporate’s disclosures (i.e., Bédard et al. 2008; Li et al., 2012; Shaukat et al., 2016). Furthermore, they will be able to mitigate the disagreements in opinions between external auditors and corporates’ top management because they are aware of auditing standards and regulations (Mangena and Pike 2005). In addition, financial experts keen to sustain their reputation and to comply with their code of ethics. Therefore, they have the motivation to discover any fraud or indecent disclosure and unlikely to allow significant misstatements or asymmetry information disclosed to external parties (Persons, 2009). Many previous studies reported a significant positive relationship between AC financial expertise and voluntary disclosure including CSRD (i.e., Mangena and Pike 2005; Mangena and Tauringana, 2007). On contrary, some other findings suggested no association between AC financial expertise and voluntary disclosure (i.e., Li et al., 2012; Madi et al., 2014; Appuhami and Tashakor, 2017) or reported a significant negative association between them (i.e., Othman et al., 2014; Musallam, 2018; Buallay and Al-Ajmi, 2019). The above empirical findings suggest an inconclusive association between AC financial expertise and CSRD. Accordingly, the third hypothesis is formulated as follow:
H3: There is a significant association between AC financial expertise and the level of CSRD.

5.4 Audit Committee Engagement & CSRD

Continuous AC engagement throughout the whole financial year is crucial to achieve its objectives and enhance the efficiency and reliability of AC role (Adegboye et al., 2020). AC number of meeting is used in the current study as a trigger for AC engagement. AC number of meetings indicates the frequency of AC meeting during the financial period. AC is recommended to meet often enough to effectively carry out its responsibilities. More meetings mean sufficient time for discussion and accommodate disagreements in opinions among AC members and improve the reliability. Also, frequent AC meetings allow members to be informed and to act swiftly regarding any new issue (Appuhami and Tashakor, 2017). Bicer and Feneir (2019) argued that the quantity and quality of financial disclosure increase with more frequent AC number of meetings. In addition, more regular and constant AC meetings may lead to effective monitoring and to expand the corporate voluntary disclosure (Persons, 2009). Agrawal and Chadha (2005) pointed out that fewer number of meetings might not allow AC to effectively discover any potential accounting fraud and selective disclosure practices.

Although there is no ideal AC number of meetings per year there are some recommendations from big professional audit firms indicate that at least three to four AC meeting should be held per financial year.
(Appuhami and Tashakor, 2017). The accounting literature with regard the association between AC characteristics and CSRD show mixed and contradictory findings. Some empirical findings indicated a significant positive relationship between AC engagement and CSRD (i.e., Li et al., 2012; Appuhami and Tashakor, 2017; Musallam, 2018; Buallay and Al-Ajmi, 2019). On the other hand, other studies did not prove any significant association between AC engagement and CSRD (i.e., Madi et al., 2014; Bicer and Feneir, 2019).

Based on the above discussion, the fourth hypothesis is formulated as follow:

\[ H4: \text{There is a significant association between AC engagement and the level of CSRD.} \]

6. Research methodology

The current study investigates the association between CSRD and audit committee characteristics using Ordinary Least Square (OLS) regression, in addition, Pearson Correlation and descriptive statistic are employed.

6.1 Sample & Data Collection

This study based on a sample form the listed corporations in the security markets in the six Gulf Cooperation Council (GCC) countries. Table 1 shows the sampled corporations and their allocation over the six GCC countries. The financial and insurance institutions are excluded from the sample of this study due to the different disclosure’s requirements and
various regulations imposed by Central Bank in each GCC countries. The sample is selected from the listed companies in each security market in GCC based on data availability. As shown in Table 1 the total number of listed companies included in this study is 225.

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<th>Bahrain</th>
<th>KSA</th>
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<th>Qatar</th>
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<tr>
<td>-Listed companies</td>
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<td>194</td>
<td>175</td>
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<td>30</td>
<td>26</td>
<td>41</td>
<td>245</td>
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<td>-Excluded companies</td>
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<td>9</td>
<td>4</td>
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<td>-Included companies</td>
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<td>86</td>
<td>36</td>
<td>28</td>
<td>21</td>
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Notes: 1. Listed financial institutions were excluded. 2. Total companies included in the sample from GCC is 225 in 2018. 3. A full list of the sampled companies can be provided upon request. 4. KSA: Kingdom of Saudi Arabia and UAE: United Arab of Emirates.

6.2 Measurement of Study’s Variables:

6.2.1 Corporate Social Responsibility Disclosure (CSRD) as a Dependent Variable:

Throughout the CSRD literature, one of the main tackles faced scholars is how to measure the level of CSRD. Young and Marais (2012) developed a model to measure CSRD using 99 items presented in six categories generated from literature review; they are namely “labor issues, business ethics, community issues, environmental issues, business behavior issues, and finance and governance issues” (Young and Marais, 2012: pp. 6-7). In addition, there were two sub-categories: the aggregated CSR policy category and local CSR policy. All eight categories tested using Cronbach’s alpha to check reliability and all results exceeds 70%. The 99
items were spotted in corporate reporting and coded “1” for the present item and “0” for the missing item.

Appuhami and Tashakor (2017) relied on composite of three metrics to measure the level of CSRD. The first one used a dichotomous scale based on 99 items suggested by Young and Marais (2012) which scores “1” if item disclosed and “0” if otherwise. The other two metrics were based on the log of total number of “words” and “sentences” disclosed in the annual reporting concerning CSR.

Mousa et al., (2018) used a disclosure index consists of 41 items which presented in 4 main categories namely, (1) environmental and related information, (2) employee welfare information, (3) community involvement and social information and (4) products quality and safety information. Similarly, with the previous studies, the disclosure index was un-weighted to score the existence of an item “1” and “0” otherwise which indicate equal significance for all the 41 items.

Bidari and Djajadikerta (2020) implemented a disclosure index relied on the Global Reporting Initiative (GRI) guidelines. They divided the CSRD into three sub-categories: economic, social, and environmental disclosures. Also, they applied the un-weighted approach to score the existence of each item. They claimed that un-weighted approach is more useful to avoid any mis-ranking of disclosed items due to equally treatment.
Hackston and Milne (1996) provided a key instrument/index to measure CSRD. The index included many categories/dimensions of CSRD as follow: “theme (environment, energy, products/consumers, community, employee/human resources, general/other); evidence (monetary quantification, non-monetary quantification, declaration); news type (good news, bad news, neutral news); and amount (number of sentences)” (Hackston and Milne 1996: p. 84). For each category/dimension a wide checklist of items was developed. The index developed by Hackston and Milne (1996) was used by many other scholars (i.e., Deegan et al., 2002; Hassn, 2014; Coffie et al., 2018). Finally, many recent studies which focused on Chinese capital market (i.e., Marquis and Qian, 2014; Lua et al., 2016; Liao et al., 2018; Luo and Liu, 2020) relied on independent rating agencies; Hexun’s CSR rating or Runlin Global’s Rankings rating\(^2\) to measure CSRD.

In the current study, CSRD measured by using un-weighted index consists of (33) items represent three categories. The construction of this index followed a dichotomous scale which scores “1” if item disclosed and “0” if otherwise and equal weight for all items. The index used in this study is built inspired by indexes reviewed in the previous research (i.e., Young and Marais, 2012; Appuhami and Tashakor, 2017; Mousa et al.,

\(^2\) For more information and comparison between these two CSR rating, you can see Zhong et al., (2019).
2018). Table 2 shows a summary of dependent variable (CSRD) and its categories.

Table 2: Dependent Variable (CSRD)

<table>
<thead>
<tr>
<th>Category</th>
<th>Range of Items</th>
<th>No of Items</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>(I) Social, Environmental and Ethical Issues</td>
<td>01-12</td>
<td>12</td>
<td>TOTAL1</td>
</tr>
<tr>
<td>(II) Human Recourses and Career Development Issues</td>
<td>13-25</td>
<td>13</td>
<td>TOTAL2</td>
</tr>
<tr>
<td>(III) Corporate Behaviour, and Consumer Issues</td>
<td>26-33</td>
<td>8</td>
<td>TOTAL3</td>
</tr>
<tr>
<td><strong>Total CSRD</strong></td>
<td>01-33</td>
<td>33</td>
<td>TOTALALL</td>
</tr>
</tbody>
</table>

6.2.2 Independent and Control Variables:

This study includes four independent variables represent the audit committee’s characteristics, namely, audit committee size (ACSIZE), audit committee independence (ACINDE), audit committee financial expertise (ACEXPE) and audit committee engagement (ACMEET). In addition, the study includes four control variables which been considered in accounting literature as factors affecting CSRD. Two board characteristics, they are the board composition (BCOMP) as a proxy for board independence and the number of females in the board of directors (BFEMAL). Two firm characteristics, they are net income (NINCOME) as a proxy for the firm’s profitability and total sales (TSALES) as a proxy for firm size. Table 3 shows a summary of independent and control variables.
Table 3: Independent Variables and Control Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Symbol</th>
<th>Predicted sign</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC Size</td>
<td>ACSIZE</td>
<td>+ or -</td>
<td>Number of AC members</td>
</tr>
<tr>
<td>AC Independence</td>
<td>ACINDE</td>
<td>+</td>
<td>The percentage of external members in AC to total members</td>
</tr>
<tr>
<td>AC Financial Expertise</td>
<td>ACEXPE</td>
<td>+ or -</td>
<td>The percentage of members in AC financial background</td>
</tr>
<tr>
<td>AC Engagement</td>
<td>ACMEET</td>
<td>+</td>
<td>Number of meetings conducted by AC each year</td>
</tr>
<tr>
<td><strong>Control:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board Independence</td>
<td>BCOMP</td>
<td>+</td>
<td>Number of independent board members</td>
</tr>
<tr>
<td>Board Female Members</td>
<td>BFEMAL</td>
<td>+</td>
<td>Number of female board of directors</td>
</tr>
<tr>
<td>Firm Profitability</td>
<td>NINCOME</td>
<td>+</td>
<td>The firm’s net income</td>
</tr>
<tr>
<td>Firm Size</td>
<td>TSALES</td>
<td>+ or -</td>
<td>The firm’s total sales</td>
</tr>
</tbody>
</table>

Notes: 1- Data needed for these variables were collected for 2018 financial period.; 2- Predicted signs of independent and control variables are based on their expected effects on CSR. 3- Firm profitability and firm size are in US$.

6.3 Model Specification:

The model:

This study investigates the relationship between AC characteristics and CSR. To measure such a relationship between dependent variable CSR and the independent variables (ACSIZE, ACINDE, ACEXPE and ACMEET) along with the control variables (BCOMP, BFEMALE, NINCOME and TSALES), the following models are formulated and have been run:

**Model 1:** Corporate social responsibility disclosure = audit committee characteristics

**Model 2:** Corporate social responsibility disclosure = audit committee characteristics + control variables

Model 1:
\[ Y \text{(TOTALALL)} = \beta_0 + \beta_1 ACSIZE_{it} + \beta_2 ACINDE_{it} + \beta_3 ACEXPE_{it} + \beta_4 ACMEET_{it} + \varepsilon \]

Model 2:
\[ Y \text{(TOTALALL)} = \beta_0 + \beta_1 ACSIZE_{it} + \beta_2 ACINDE_{it} + \beta_3 ACEXPE_{it} + \beta_4 ACMEET_{it} + \beta_5 BCOMP_{it} + \beta_6 BFEMAL_{it} + \beta_7 NINCOME_{it} + \beta_8 TSALES_{it} + \varepsilon \]

Where:
- \( Y \) = the CSRD (the dependent variable: TOTALALL).
- \( \beta_0 \) = a constant.
- \( \beta_i, i=1,...,8 \) are parameters.
- and \( \varepsilon \) is error term.

7. Data Analysis and Results

For testing the hypotheses, Corporate Social Responsibility Disclosure (CSRD) as dependent variable was regressed on the four independent variables and the four control variables as indicated in Table 3. The findings of the descriptive statistics, correlation analysis and regression analysis are shown in the below three sub-sections:

7.1 Descriptive Statistics

Table 4 summarises the findings of the descriptive statistics. The findings of the descriptive analysis for all variables show that the minimum score for all categories of dependent variable (CSRD) is zero which indicate that some of the companies included in this sample did not disclose any information regarding CSR. Whereas some companies disclosed all items of CSR in each of the three categories included in the index. Alible, the
maximum disclosed items in the whole index (TOTALALL) are 29 items (87.8%). The mean of the disclosed items across the sample is 14.28 (43.3%) which shows moderate disclosure of CSR in GCC countries. However, this result is a bit higher than the previous studies conducted in GCC context regarding CSRD. (For example, Mousa et al., 2018 (39%); Khasharmeh and Desoky, 2013 (33.2%) and Khasharmeh and Suwaidan, 2010 (26%)). This indicates the more concern given by GCC companies to the CSRD with the passage of time. On the categories level, the highest is Social, Environmental and Ethical Issues with mean 6.15 (51.3%) and the lowest is Corporate Behaviour, and Consumer Issues with mean 2.99 (37.4%).

As for the AC size, the analysis shows that all the companies have AC with at least three members and maximum six. However, the analysis indicates that the AC composition in some GCC companies is not included any independent member or a member with financial background. This result highlights the incompliance with corporate governance codes in GCC which require at least one independent member in AC as well as a minimum of one member with financial background (Shehata, 2015). Even the AC exist in all companies within the study sample, it seems that this is a ceremonial existence in some companies because it did not conduct any meetings during the whole year. Nevertheless, the mean is 4.9 meetings per year which illustrates a good degree of AC engagement in GCC companies. The mean for board
independence is 5.42 that shows a reasonable level of independency in the companies included in this sample. However, the average female involvement in the board is only 14% across the companies in GCC.

<table>
<thead>
<tr>
<th>Table 4: Descriptive Statistics of Dependent, Independent and Control Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variables</strong></td>
</tr>
<tr>
<td>(I) Social, Environmental and Ethical Issues (TOTAL1)</td>
</tr>
<tr>
<td>(II) Human Resources and Career Development Issues (TOTAL2)</td>
</tr>
<tr>
<td>(III) Corporate Behaviour, and Consumer Issues (TOTAL3)</td>
</tr>
<tr>
<td>Total CSRD (TOTALALL)</td>
</tr>
<tr>
<td><strong>Independent Variables:</strong></td>
</tr>
<tr>
<td>AC Size (ACSIZE)</td>
</tr>
<tr>
<td>AC Independence (ACINDE)</td>
</tr>
<tr>
<td>AC Financial Expertise (ACEXPE)</td>
</tr>
<tr>
<td>AC Engagement (ACMEET)</td>
</tr>
<tr>
<td><strong>Control Variables:</strong></td>
</tr>
<tr>
<td>Board Independence (BCOMP)</td>
</tr>
<tr>
<td>Board Female Members (BFEMAL)</td>
</tr>
<tr>
<td>Firm Profitability $ (NINCOME)</td>
</tr>
<tr>
<td>Firm Size $ (TSALES)</td>
</tr>
</tbody>
</table>

Table 5 shows detailed results regarding the (33) items included in the index adopted in this study divided over three main categories. Items 12, 1 & 13 represent the highest disclosed items in the overall index with 83%, 68% & 67% respectively. Items 25, 20 & 17 represent the lowest disclosed item in the overall index with 8%, 11% and 14% respectively, all these three lowest items included in the second category.
Table 5: CSR Items Disclosed in the Index Adopted in this Study

<table>
<thead>
<tr>
<th>(I) Social, Environmental and Ethical Issues</th>
<th>Mean</th>
<th>SD</th>
<th>Category Rank</th>
<th>Index Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Environmental strategy</td>
<td>0.68</td>
<td>0.466</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Use of scarce resources, waste, and recycling initiatives</td>
<td>0.52</td>
<td>0.501</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Use of innovative ecological technologies</td>
<td>0.61</td>
<td>0.489</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. <em>Air and water pollution prevention</em></td>
<td>0.28</td>
<td>0.450</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>5. Management of environmental hazard</td>
<td>0.30</td>
<td>0.458</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Adoption of environmental standards</td>
<td>0.64</td>
<td>0.481</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. R&amp;D on sustainability solutions</td>
<td>0.33</td>
<td>0.472</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Community infrastructure assistance</td>
<td>0.56</td>
<td>0.497</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Enhance of local employment and education program</td>
<td>0.55</td>
<td>0.499</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Participate in social and medical activities</td>
<td>0.37</td>
<td>0.485</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Donations for education and sports programs</td>
<td>0.48</td>
<td>0.501</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. <strong>Use of environmentally friendly backing and raw material</strong></td>
<td><strong>0.83</strong></td>
<td><strong>0.379</strong></td>
<td>***</td>
<td>****</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(II) Human Recourses and Career Development Issues</th>
<th>Mean</th>
<th>SD</th>
<th>Category Rank</th>
<th>Index Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. <em>Enhancement of labour training and development</em></td>
<td>0.67</td>
<td>0.471</td>
<td>***</td>
<td></td>
</tr>
<tr>
<td>14. Education of employees/human development</td>
<td>0.45</td>
<td>0.498</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Working conditions (health, safety)</td>
<td>0.60</td>
<td>0.492</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Employee's work/life balance</td>
<td>0.32</td>
<td>0.466</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Employee's social activities</td>
<td>0.14</td>
<td>0.350</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Staff incentives schemes</td>
<td>0.40</td>
<td>0.491</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Staff pension and retirement polices.</td>
<td>0.54</td>
<td>0.500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Staff financial aids and loans</td>
<td>0.11</td>
<td>0.315</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Staff equal opportunity and Diversity</td>
<td>0.58</td>
<td>0.495</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Responsible management of employment</td>
<td>0.38</td>
<td>0.486</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23. Employee’s fair evaluation policies.</td>
<td>0.46</td>
<td>0.500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. Staff accommodation and other facilities</td>
<td>0.42</td>
<td>0.495</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. <em>Responsibility towards employees’ families</em></td>
<td>0.08</td>
<td>0.265</td>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(III) Corporate Behaviour, and Consumer Issues</th>
<th>Mean</th>
<th>SD</th>
<th>Category Rank</th>
<th>Index Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>26. Protecting consumers’ health and safety</td>
<td>0.40</td>
<td>0.492</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Accountability towards stakeholders</td>
<td>0.44</td>
<td>0.498</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. Customer relationship management</td>
<td>0.39</td>
<td>0.488</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29. Decent solutions of consumer complaints and conflicts</td>
<td>0.45</td>
<td>0.498</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. <em>Contribution towards community developments</em></td>
<td>0.19</td>
<td>0.391</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>31. Company’s community aids and donations</td>
<td>0.32</td>
<td>0.468</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. <em>Company’s grants and rewards</em></td>
<td>0.49</td>
<td>0.501</td>
<td>***</td>
<td></td>
</tr>
<tr>
<td>33. Raising the level of education in the community</td>
<td>0.31</td>
<td>0.464</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Lowest in a category ** Lowest in the overall index *** Highest in a category **** Highest in the overall index.

7.2 Correlation Analysis

35
Table 6 summarizes the correlations analysis to show the relationship between CSRD (dependent variables) and the AC characteristics (independent variables) and board and firm characteristics (control variables).

Table 6: Correlations Results

<table>
<thead>
<tr>
<th></th>
<th>ACSIZE</th>
<th>ACIND</th>
<th>ACEXP</th>
<th>ACMEE</th>
<th>BCOM</th>
<th>BFEMA</th>
<th>NINCOM</th>
<th>TSALE</th>
<th>TOTALA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACSIZE</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACINDE</td>
<td>-.141*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACEXP</td>
<td>-.102</td>
<td>-.008</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACMEE</td>
<td>.164*</td>
<td>-.140*</td>
<td>.116</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BCOMPO</td>
<td>.079</td>
<td>.336*</td>
<td>.134*</td>
<td>.037</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BFEMAL</td>
<td>.086</td>
<td>.113</td>
<td>.051</td>
<td>-.012</td>
<td>.260**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NINCOME</td>
<td>E</td>
<td>.194**</td>
<td>-.120</td>
<td>-.044</td>
<td>.068</td>
<td>.035</td>
<td>-.036</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>TSALE</td>
<td>.311**</td>
<td>-.114</td>
<td>-.016</td>
<td>.140*</td>
<td>.054</td>
<td>-.073</td>
<td>.694**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>TOTALA</td>
<td>LL</td>
<td>-.036</td>
<td>-.349**</td>
<td>.114</td>
<td>.180**</td>
<td>-.167*</td>
<td>-.151*</td>
<td>.056</td>
<td>.110</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed). ** Correlation is significant at the 0.01 level (2-tailed).

Notes: A- Significant correlations are in bold.
B- Dependent, independent and control variables are defined in table (3).
C- Pearson correlation was performed for all variables.

Table 6 shows a significant relationship at the level of 0.01 between CSRD and two of the independent variables: AC independence (ACINDE) with negative effect and AC engagement (ACMEET) with
positive effect. However, there is no significant relationship found between CSRD and other independent variables such as AC size (ACSIZE) and AC financial expertise (ACEXPE). With regard the control variables, there is a significant association at the level of 0.05 between CSRD and board independence (BCOMP) and board female members (BFEMALE) with coefficient values -0.167 and -0.151, respectively. On the other hand, there is no significant association found between CSRD and firm profitability (NINCOME) and firm size (TSALES).

Also, the correlation analysis indicates some significant association among independent variables and control variables. For example, the association between ACSIZE and ACINDE, ACMEET and TSALES with coefficients -0.141, 0.164 and 0.194, respectively. All the coefficients in the above example and others shown in Table 6 are less than 0.7 which suggests there is no major multicollinearity problem in this study.

7.3 Regression Analysis
Models “1 and 2” represent the total CSRD (TOTALALL) and Table 7 reported the regression findings. Both regression models are significant at (0.000). They show explanatory power adjusted ($R^2$) 0.142 and 0.146 with F value of 9.994 and 5.670, respectively. According to Field (2013) a good regression model should have F value more than 1.00, and this is shown in both models. These results indicate that the four independent
variables included in this study’s sample may explain 14.2% of the variation in CSRD and this percentage increases to 14.6% if the four control variables are added. This result is less than the reported adjusted \( R^2 \) 0.274 in a similar study conducted by Appuhami and Tashakor, (2017). However, we can identify two reasons for that. First, Appuhami and Tashakor, (2017) adopted 6 independent variables and 5 control variables in their model which expected to add more explanatory power. Second, their study conducted in developed countries context (Australia) and the current study has been conducted in less developed countries context (GCC).

The regression results show positive insignificant association between AC size (ACSIZE) and CSRD. This suggests the rejection of first hypothesis in this study \( H1: \) There is a significant association between
AC size and the level of CSRD. This finding is in line with Othman et al., (2014); Bicer and Feneir, (2019); and Budiharta and Br Kacaribu, (2020). This positive insignificant association partially supports the stakeholder theory perspective adopted in this study.

As for AC independence (ACINDE), the regression results show negative significant relationship with CSRD. This suggests the acceptance of second hypothesis in this study *H2: There is a significant association between AC independence and the level of CSRD.* However, the literature provided many studies that reported a significant positive association between AC independence and CSRD such as Madi et al., (2014); Appuhami and Tashakor, (2017); Adegboye et al., (2020). This contradictory findings with previous studies may lead to look at this association from the stewardship theory’s lenses. Stewardship theory argues that the executive members are more knowledgeable than non-executive members and their knowledge can positively affect many businesses’ aspects (Salehi et al., 2018). Arguably, from stewardship perspective, most executive members in audit committee can enhance and extend the CRSD within GCC countries’ context.

The regression results indicate a positive insignificant relationship between AC financial expertise (ACEXPE) and CSRD. This suggests the rejection of third hypothesis in this study *H3: There is a significant association between AC financial expertise and the level of CSRD.* This finding is compatible with many previous studies such as Li et al.,
Finally, the regression results show a positive significant association between AC engagement (ACMEET) and CSRD. This suggests the acceptance of fourth hypothesis in this study $H4$: *There is a significant association between AC engagement and the level of CSRD*. This result is consistent with majority findings in previous studies such as Li et al., (2012); Appuhami and Tashakor, (2017); Musallam, (2018); Buallay and Al-Ajmi, (2019). This finding supports the stockholder theory perspective, and it suggests that more engagement and frequent meetings of AC may lead to enhance the corporate disclosure including CSRD.

In conclusion, the regression results suggest that there is significant association between CSRD level and two of the independent variables adopted in this study, AC independence and AC engagement which led to accept hypotheses 2 and 4 in this study. However, the significant association between CSRD and the other two independent variables “AC size and AC financial expertise” is not proved which led to reject hypotheses 1 and 3. The overall statistical results are partially support the stakeholder perspective that adopted in this study. These findings recommend that the companies within GCC countries’ context need to pay more attention and enhance their CRSD.

8. Conclusions, Limitations and Recommendations:
This study examined the relationship between AC characteristics and CSRD within GCC countries. The study measured the CSRD using an index of 33 information items divided across three main categories. The results reported a total average CSRD of 43.3% which is slightly higher than previous studies which similarly explored CSRD within GCC countries. This result suggests a minor improvement in CSRD within GCC countries with the passage of time.

Four research hypotheses were developed and tested in this study. The regression results confirmed the acceptance of hypotheses 2 and 4 which both denoted a significant correlation between AC independence, AC engagement and CSRD. Hypotheses 1 and 3 were rejected based upon the insignificant relationship between AC size, AC financial expertise and CSRD demonstrated by the regression results.

This study adopted a stakeholder theory perspective which is rarely used in similar studies, for that reason, the study offers a unique contribution to the accounting literature regarding CSRD. Furthermore, there is a general lack of CSRD research within GCC countries indicating that there is a gap in the accounting literature which this study attempts to fill.

There are many implications of this study. Firstly, the findings showed some improvements in CSRD within GCC countries compared to previous studies, however the overall disclosure is still less than that of developed countries. These findings should encourage governments, regulators and interested parties to apply more pressure on GCC companies to enhance their CSRD levels. Secondly, the study revealed a degree of companies’ incompliance with corporate governance codes in GCC countries which suggests that stricter
policies should be enforced by governments and security markets to ensure higher levels of companies’ compliance. Lastly, for stakeholders, the findings of this study imply a need to motivate managements to disclose more information regarding corporate behavior and consumer issues, which was the third category in CSRD index and reported the lowest disclosure’s level.

This study suffered from a number of limitations such as the relatively small sample size utilized. In addition, the study adopted an index which only used 33 information items to assess CSRD, this number could potentially be extended in future research. Finally, some AC characteristics were not included in this study such as AC gender diversity and multiple directorships of AC members.

Future research may avoid these limitations by extending the sample size, increasing the number of items used to measure CSRD levels and incorporate more AC characteristics. Adopting a different theoretical perspective other than the stakeholder theory would be a valuable contribution to the CSRD literature. For instance, adopting a stewardship theory perspective may offer a deeper understanding of the significant negative association between AC independence and CSRD. Finally, it will be very useful to conduct future research on this topic relying on data collected after the Covid-19 pandemic and compare the results with this study which is based on data collected shortly prior to the pandemic.
References


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