

## Cultural Influences on the Quality of Anti-Corruption Disclosure in the Banking Sector

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### Abstract

*This paper aims to investigate the impact of cultural values on Anti-corruption disclosure (ACD) quality in the MENA region. ACD is an essential tool to fight against corruption. It is considered a major part of corporate social responsibility (CSR) reporting due to its inconsistency with sustainable development because of its severe social, economic, and environmental impacts. 354 observations from 55 MENA region banks are studied from 2013 to 2019. The countries that are studied include Lebanon, Egypt, Jordan, and Saudi Arabia. This study is among the first to study the impact of all of Hofstede's six cultural dimensions on ACD which enhances the knowledge in this area and fills the literature gap. A content analysis is accomplished for the bank's annual reports, CSR reports, and sustainability reports. Two measures are used for ACD: First, disclosure extent and extensiveness are measured using the number of words. Second: Disclosure breadth is measured through Transparency International-UNGC Reporting Guidance ratings of ACD. Several statistical methods were used: descriptive statistics, linear regression, and Pearson correlation. The findings show a significant negative association with power distance and a significant positive association with indulgence which supports the institutional theory and contributes to the literature by providing more insights to policy-makers and standards-setters to take cultural dimensions into consideration in the formation and enforcement of anti-corruption laws.*

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## 1. Introduction

Corruption is defined as the exploitation of public office for personal benefits (Bahoo, Alon, & Paltrinieri, 2020; OECD, 2008; World Bank, 2020). It is one of the most critical universal and moral dilemmas that impedes economic development and has a destructive impact on individuals, businesses, and communities. Thus, concentrated attempts to combat it have been the last decade's characteristic (Previtali & Cerchiello, 2023; Salem, Ezeani, & Song, 2023; UNGC, 2015). It adds a 10% burden to the cost of doing business internationally, with an even higher burden in developing countries. If corruption were an industry, it would be the third largest place globally, holding five percent of worldwide gross domestic product (GDP), or equivalent to 3 trillion dollars (UNGC, 2015).

Recently, combating corruption has been considered a significant part of Corporate Social Responsibility (CSR) reporting (Ghazwani, Alamir, Salem, & Sawan, 2024; Masud, Bae, Manzanares, & Kim, 2019; Sari, Cahaya, & Joseph, 2021; Yin & Zhang, 2019). The severe social, economic, and environmental implications that corruption has on society make it inconsistent with sustainable development (Aldaz, Alvarez, & Calvo, 2015; Branco & Delgado, 2012; Trapnell, Jenkins, & Chêne, 2017). Anti-corruption disclosure (ACD) is an important tool in fighting corruption and significantly improving transparency and accountability (Halter, De Arruda, & Halter, 2009; Previtali & Cerchiello, 2023; Sari et al., 2021) alongside corporate governance which is also an important tool (Ghazwani et al., 2024; Salem et al., 2023). Integrating anti-corruption commitment into the CSR program reflects the private sector's obligation to fight corruption (UNGC, 2009). In 2002, the

Global Reporting Initiative (GRI) was the first place to address corruption issues in its Sustainability Reporting Guidelines (Barkemeyer, Preuss, & Lee, 2015; GRI, 2002). Later in 2004, the first Global Compact Leaders' Summit declared that the Global Compact- the biggest corporate sustainability enterprise globally, had implemented a 10th principle that fights against corruption. This principle states that corporations should combat all corruption forms (UNGC, 2009). Disclosing corruption-related information helps in attaining several goals: it enhances accountability, promotes public awareness, compels corporations to apply anti-corruption principles, and aids in identifying areas of improvement (Hess, 2009; Previtali & Cerchiello, 2023). The 21st century began with a set of prominent corporate scandals (UNGC, 2015; Zarb, 2011). These scandals called attention to greed, corruption, and fraud and pointed up the need for stronger corporate governance, higher transparency, more disclosure, and more responsible management (Ghazwani et al., 2024; Salem et al., 2023; Zarb, 2011). ACD is voluntary, thus, its implementation may vary among different cultures, countries, and firms (Sari et al., 2021; Utami & Barokah, 2024).

Hofstede, Hofstede, and Minkov (2010) define culture as the collective organization of the mind that differentiates participants of a certain group from another. Originally, Hofstede's developed four scopes of national culture: individualism versus collectivism, masculinity versus femininity, power distance and uncertainty avoidance as a result of analyzing surveys collected from more than 116000 IBM workers in seventy-two countries over seven years from 1967 till 1973. At a later stage, 2 dimensions were added: long-term orientation versus short-term normative orientation and indulgence versus restraint (Hofstede et al., 2010).

Power distance refers to how a society perceives inequalities. In high-power-distance communities, people accept more conformity, obedience, unfairness, and hierarchy while in low-power-distance communities, people make every effort to attain balanced power distribution and reasoning for hierarchical arrangements (Blanc, Branco, & Patten, 2019; Hofstede et al., 2010). Individualism refers to preferring a distant social framework where persons prioritize themselves and their immediate families. However, collectivism refers to preferring knit social bonds with extended family members with expectations of care and loyalty from the group members (Hofstede, 2021; Hofstede et al., 2010). Masculinity refers to a tendency in a country for accomplishment, heroism, firmness, competitiveness, status, and success, whereas femininity refers to a tendency for modesty, empathy, cooperation, and life quality (Hofstede, 2021; Hofstede et al., 2010). Uncertainty avoidance refers to the degree of accepting uncertainty and whether individuals must attempt to have control over the future or just let it occur. As such, high uncertainty avoidance societies have strict codes of conduct, rules, and regulations to avoid uncertainty to the extent possible while low uncertainty avoidance societies are flexible and believe in practice rather than rules. (Hofstede, 1997, 2021; Hofstede et al., 2010). Long-term orientation refers to the extent to which societies link traditions with future preparedness. Such societies prefer to keep old traditions and customs and they perceive societal changes with doubt, while societies with high long-term orientation encourage modern education as an approach to getting ready for the future (Hofstede, 2021; Hofstede et al., 2010). Indulgence refers to a society that authorizes free expression, self-fulfilment, and enjoyment; conversely, restraint society refers to a society that restrains satisfaction of needs and controls it by compulsive social traditions (Hofstede, 2021; Hofstede et al., 2010).

Although the literature on ACD is increasing (Alqattan, 2023; Asare, Duho, Agyenim-Boateng, Onumah, & Simpson, 2021; Barkemeyer et al., 2015; Barros, dos Santos, Melo, dos Santos, & da Silva, 2022; Blanc et al., 2019; Blanc, Islam, Patten, & Branco, 2017; Blanc, Patten, & Branco, 2016; Branco & Matos, 2016; Duho, Agyenim-Boateng, Asare, & Onumah, 2023; Gago-Rodríguez, Márquez-Illescas, & Núñez-Nickel, 2020; Healy & Serafeim, 2016; Masud, Rahman, & Rashid, 2022; Nobanee & Ellili, 2018; Previtali & Cerchiello, 2023; Utami & Barokah, 2024) a small number of research papers have studied the relation between cultural variables and ACD (Blanc et al., 2019; Utami & Barokah, 2024). Instead, a lot of research papers have studied the relation between cultural values and CSR disclosure (Adnan, Hay, & Van Staden, 2018; Gallén & Peraita, 2018; Hooi, 2007; Perkins, Jeffrey, & Freedman, 2022; Pizzi, Del Baldo, Caputo, & Venturelli, 2022).

Due to the limited research on cultural variables in the ACD literature, this paper aims to enhance the knowledge in this area by addressing this gap. It is among the first to study the impact of all of Hofstede's six cultural variables (Hofstede et al., 2010) on ACD in the MENA region. Prior research has concentrated on the association between ACD and a few cultural dimensions without taking into account the six dimensions. For example, Blanc et al. (2019) studied secrecy and masculinity, while Utami and Barokah (2024) only studied uncertainty avoidance. To bridge this gap, a comprehensive study of all the cultural dimensions is performed in this research. This paper contributes to the literature by providing deeper insights for policymakers and standards-setters to take cultural dimensions into consideration in the formation and enforcement of anti-corruption laws while encouraging voluntary disclosures.

The structure of the paper is as such, Section two is about disclosure theories. The literature review and the hypotheses development are shown in Section 3 followed by materials and methods in Section 4. Section 5 shows the results and section 6 shows the research discussion and conclusions, future research, and limitations.

## **2. Theoretical Background**

Several theories explain the significance of voluntary disclosure in decreasing information asymmetry, enhancing transparency, and strengthening stakeholder trust.

### **2.1. Agency Theory**

It results from conflict of interest and information asymmetry between directors and stockholders. It claims that information asymmetry can be reduced by increasing the disclosure level (Jensen & Meckling, 1976).

### **2.2. Stakeholders Theory**

It focuses on building value for stakeholders and assumes that effective corporations generate benefits for all stakeholders. It considers corporate disclosure a valuable mean that meets influential stakeholders needs (Freeman, Harrison, Wicks, Parmar, & de Colle, 2010; Reverte, 2009; Salehi, Ammar Ajel, & Zimon, 2023).

### **2.3. Legitimacy Theory**

It claims that the firm and its society are interconnected via a social contract that reflects a mutual benefit between them where the former provides the latter with goods and services and the latter provides the former with economic, social, and political benefits (Branco & Rodrigues, 2006; Dowling & Pfeffer, 1975; Shocker & Sethi, 1973). This theory plays an essential role in CSR disclosure and assumes that the social contract with the society requires the firm to disclose the different socially favored actions in exchange for the society's approval (Deegan, 2002).

Therefore, we can conclude from the previously mentioned theories that corporations favor greater disclosure to avoid plenty of issues that they may encounter.

## **3. Literature Review**

Culture and corruption interact through formal institutions and social norms, which both vary among countries (Banuri & Catherine, 2012). Compared to different business research literature, finance and accounting studies on cultural dimensions are rare (Aggarwal & Goodell, 2013) thus, addressing this gap would enrich the literature. The institutional theory explains CSR reporting variances among countries that have differing cultures, governance, and economic systems (Gallén & Peraita, 2018). Additionally, cultural theory considers corruption as a product of culture and politics and assumes that it is exogenous to the economy. This theory does not only concentrate on the firm members, but it also focuses on the other components of an organization like norms and values (Paldam, 2002). Furthermore, according to clashing moral values theories, societal norms and values affect an individual's decision to engage in corruption (Hofstede et al., 2010). Hofstede's six cultural values are investigated in the research.

### **3.1. Power Distance (POWER)**

Significant paternalism is recognized in countries characterized by high POWER since superiors offer favors to their inferiors in exchange for loyalty; decisions are usually done based on loyalty and balance of favors rather than merit, thus, a substantial possibility of corruption exists with the appearance of nepotism and favoritism. Corruption by superiors is commonly concealed by subordinates, hence, individuals from high POWER countries more tolerant of corrupt practices compared to those from low POWER countries (Krishnamurti, Pensiero, & Velayutham, 2013). Blanc et al. (2019) examined the relation between ACD and Hofstede's cultural values using a sample of 105 public firms in UK and USA and found that high POWER firms have low levels of ACD. Perkins et al. (2022) stated a negative relation between voluntary carbon emission disclosures and POWER. Orij (2010) who tested the association between CSR disclosure and Hofstede's cultural dimensions using a sample of 600 large companies from 22 countries, also found that high POWER firms have lower levels of CSR reporting.

Further evidence comes from Gallén and Peraita (2018) who conducted a cross-country study on CSR disclosure and cultural dimensions incorporating the GDP per capita (GDPPC) of 44 countries. They found that in lower and middle GDPPC countries, CSR reporting is negatively associated with POWER. Maali and Al-Attar (2017) who studied the relationship between cultural dimensions and disclosure levels for firms from twenty-three countries found that high POWER negatively affects disclosure levels and transparency by multinational corporations.

Moreover, Zarzeski (1996) examined the association between enterprise accounting disclosure and both market and cultural factors in 256 companies across 7 countries, while Hope (2003) investigated the impact of legal origin and cultural values on the level of disclosure using a big sample of firms from 42 countries. Both studies found significant associations between POWER and financial disclosure. Halkos and Skouloudis (2017) who studied the association between cultural dimensions and CSR disclosure among 86 countries found that the impact of POWER on CSR reporting is insignificant. The findings of Salter and Niswander (1995) who studied the association between accounting values and systems and Hofstede's cultural values over 29 countries reveal also insignificant correlation between power distance POWER and financial disclosure.

Mohamed Adnan et al. (2018) who studied cultural dimensions and the reporting of CSR found that CSR disclosure is negatively associated with POWER. Hence, the following hypothesis is proposed.

*H<sub>1</sub>: There is a negative association between the quality of ACD and power distance.*

### *3.2. Individualism (INDV)*

In highly individualistic (INDV) societies, personal life decisions are determined by the individual rather than being influenced by friends, family, or peers. In contrast, collectivistic societies perceive nepotism and favoritism more positively than individualistic societies. Thus, it is suggested that the more individualistic a society is, the less probable that corruption will be tolerated (Krishnamurti et al., 2013). Pucheta-Martínez and Gallego-Álvarez (2020) found a negative association between firm environmental reporting practices and INDV. Blanc et al. (2019) found that firms with lower INDV have significantly lower levels of ACD. Perkins et al. (2022) found a significant negative relation between voluntary carbon emission disclosures and INDV. Orij (2010) and Mohamed Adnan et al. (2018) found a positive relation between INDV and the levels of CSR reporting. Salter and Niswander (1995); Zarzeski (1996) and Jaggi and Low (2000) who investigated the association between legal systems and cross-country corporate financial disclosures and Aggarwal and Goodell (2013) who studied transparency determinants of the world's largest multinational companies found that INDV positively affects the level of disclosure. On the other hand, Gallén and Peraíta (2018) results denote that in higher and middle GDPPC countries, CSR reporting negatively affects INDV. Alternatively, an insignificant association existed between INDV and CSR reporting in a research prepared by Halkos and Skouloudis (2017) while Maali and Al-Attar (2017) found an insignificant relation between INDV and disclosure and transparency of multinational corporations.

Hence, based on the existing literature, the following hypothesis is proposed.

*H<sub>2</sub>: There is a positive association between the quality of ACD and individualism.*

### *3.3. Masculinity (MASC)*

Operating in masculine-oriented societies tends to decrease a firm's social prospects and reduces the demand for social and environmental information (Williams, 1999). Blanc et al. (2019) found that MASC is not a significant determinant on the levels of ACD. Similarly, Halkos and Skouloudis (2017) found an insignificant effect of MASC on CSR reporting. Orij (2010) found that MASC negatively impacts CSR reporting, while Perkins et al. (2022) found a significant positive association between voluntary carbon emission disclosures and MASC. Further evidence from Gallén and Peraíta (2018) revealed that in higher and middle GDPPC countries, CSR reporting negatively affects MASC. Maali and Al-Attar (2017) found a negative correlation between MASC and disclosure level and transparency by multinational corporations. Similarly, Jaggi and Low (2000); Hope (2003) and Aggarwal and Goodell (2013) found that MASC and the level of disclosure are negatively correlated which was contradicted by Zarzeski (1996) study with a positive relationship. Between MASC and financial disclosure.

Based on the literature, the following hypothesis is proposed.

*H<sub>3</sub>: There is a negative association between the quality of ACD and masculinity.*

### *3.4. Uncertainty Avoidance (UA)*

Corruption is claimed to reduce uncertainty and ambiguity, leading to a positive association between UA level in a society and corporate corruption risk (Krishnamurti et al., 2013). In uncertain outcomes, corruption is likely to assist in attaining a more predictable results (Alam, 1995; Rashid, 1981). Pucheta-Martínez and Gallego-Álvarez (2020) found a positive association between corporate environmental disclosure practices and UA. Blanc et al. (2019) found that high UA firms have low ACD levels. While Utami and Barokah (2024) found an insignificant association between ACD and UA. The findings of Orij (2010) and Gallén and Peraíta (2018) reveal that CSR reporting is positively correlated to UA but Halkos and Skouloudis (2017) found that UA negatively affects CSR reporting. Maali and Al-Attar (2017) found a positive impact of UA on the level of disclosure and transparency by multinational corporations. Salter and Niswander (1995); Zarzeski (1996) and Hope (2003) found a negative relationship between disclosure and UA. Hence, built on the literature, the following is hypothesized.

Based on the literature, the following hypothesis is proposed.

*H<sub>4</sub>: There is a positive association between the quality of ACD and uncertainty avoidance.*

### *3.5. Long-Term Orientation (LTO)*

LTO is considered a contributing factor for magnification as well as escalation of corruption. It is not considered a "good" or bad" cultural dimension, but it collaborates with other cultural components to either prevent or boost corruption (Lanier & Kirchner, 2018). Pizzi et al. (2022) found that voluntary disclosure of sustainable development goals and LTO are positively associated. Pucheta-Martínez and Gallego-Álvarez (2020) found a negative association between corporate environmental disclosure practices and LTO. Halkos and Skouloudis (2017) found that LTO and CSR reporting are positively correlated. The findings of Gallén and Peraíta (2018) show that CSR reporting and LTO in countries with middle GDPPC are negatively



associated. Orij (2010) found an insignificant relation between LTO and CSR reporting. Likewise, Maali and Al-Attar (2017) found no significant association between LTO and the disclosure and transparency of multinational corporations. Hooi (2007) who studied the impact of cultural values on bank reporting using a sample of 37 banks from 17 countries, suggested that societies ranking high on LTO disclose more information than short-oriented ones. However, his hypothesis was not supported when he tested the level of financial disclosures in the banking industry (Hooi, 2007).

Based on the literature, the hypothesis below is proposed.

*H<sub>3</sub>: There is a negative association between the quality of ACD and LTO.*

### 3.6. Indulgence (INDL)

INDL is considered a contributing factor to the magnification and increase of corruption. Individuals with a long-term perspective might indulge in corrupt behavior partially because involvement in corrupt systems has been unluckily rewarded over extended periods (Lanier & Kirchner, 2018). Hofstede et al. (2010) claimed that INDL and the demand for human rights as freedom of expression are interrelated. Thus, it is thought that these societies prefer transparency and discourage secrecy (Maali & Al-Attar, 2017). Pucheta-Martínez and Gallego-Álvarez (2020) found a negative association between corporate environmental disclosure practices and INDL. Pizzi et al. (2022) found that Voluntary disclosure of Sustainable Development Goals and a balance between INDL and restraints are positively associated. Halkos and Skouloudis (2017) found a positive relationship between INDL and CSR reporting. The findings of Gallén and Peraíta (2018) presented mixed results where a significant positive association between CSR reporting and INDL was found in countries characterized by relatively high GDPPC and a negative relation in countries with middle GDPPC. In contrast, Maali and Al-Attar (2017) did not find a significant relation between INDL and the disclosure and transparency of multinational corporations.

Based on the literature, the hypothesis below is proposed.

*H<sub>4</sub>: There is a positive association between the quality of ACD and indulgence.*

Table 1 depicts a summary of the literature that studied disclosure with cultural values.

**Table 1.** Literature summary.

| Author(s)                   | Dependent variables                | Independent variables   | Results   |
|-----------------------------|------------------------------------|---|---|
| Salter and Niswander (1995) | Financial disclosures              | POWER, INDV, MASC, and UA   | They found that the adopted model is weak in verifying regulatory and professional structures from a cultural perspective.  |
| Zarzeski (1996)             | Financial disclosures              | Market forces (Customers' foreign sales, firm size, and debt ratio) and cultural values (POWER, INDV, MASC, and UA) | The findings show that cultural secretiveness, customers' foreign sales and firm size affects financial disclosure. Conversely, a significant negative association was found with leverage.   |
| Jaggi and Low (2000)        | Financial disclosures              | Legal system (Common law versus code law) and cultural values (POWER, INDV, MASC, and UA)                           | More disclosure was associated with common law countries in comparison to those with prevailing code law. On the other hand, with respect to the cultural variables, code law countries revealed mixed results while common law countries results were insignificant with disclosure. |
| Hope (2003)                 | Firm-level disclosure levels       | Legal origin and cultural values (POWER, INDV, MASC, and UA)  | An insignificant relation was found between the firms' disclosure choices and both cultural values and legal origin.  |
| Hooi (2007)                 | Banking disclosures                | POWER, INDV, MASC, UA, and LTO  | A significant positive relation exists between UA and banking disclosures.  |
| Orij (2010)                 | CSR disclosure                     | POWER, INDV, MASC, UA, and LTO  | A positive relation exists between CSR disclosure and national cultures.  |
| Aggarwal and Goodell (2013) | MNC transparency                   | POWER, INDV, MASC, UA, legal origin, home-country governance, financial architecture                                | Regarding the cultural variables, a significant relation appeared between MNC transparency and INDV. While a significant negative association was found with POWER, MASC and UA.  |
| Maali and Al-Attar (2017)   | Reporting and disclosure practices | POWER, INDV, MASC, UA, LTO, and INDL  | The findings show that reporting and disclosure practices are affected by national cultures. A positive association was found with UA while a negative association was found with POWER and MASC.   |

|   |   |   |   |
|---|---|---|---|
| Halkos and Skouloudis (2017)                | CSR disclosure  | POWER, INDV, MASC, UA, LTO, and INDL  | A positive relation existed with LTO and INDL. A negative association existed with UA.  |
| Gallén and Peraita (2018)                   | CSR disclosure  | POWER, INDV, MASC, UA, LTO, and INDL  | The findings reveal that in higher GDPPC countries INDV and MASC negatively affect disclosure. However, UA and INDL positively affect disclosure. Conversely, When focusing on countries having lower GDPPC countries a significant negative association was found with POWER. Yet, a significant positive association existed with UA. In countries having middle GDPPC, a significant negative association was found with POWER, INDV, MASC and INDL. |
| Adnan et al. (2018)                         | CSR disclosure  | National culture (POWER, INDV, MASC, and UA) and corporate governance variables   | A negative association was found with power distanced countries. A positive association was found with individualistic countries, government ownership, and CSR committees.   |
| Blanc et al. (2019)                         | Anti-corruption disclosure                            | Secrecy, MASC, media exposure, home country press freedom, UNGC signatories, women on board, industry risk, size and profit | A negative association was found between companies from more 'secretive' countries and anti-corruption disclosure.  |
| Pucheta-Martínez and Gallego-Álvarez (2020) | Corporate environmental disclosure                    | POWER, INDV, MASC, UA, LTO, and INDL  | A negative association was found with individualist, masculine and indulgent cultures and with LTO countries as well. A positive association was found with UA.   |
| Pizzi et al. (2022)                         | Voluntary disclosure of Sustainable Development Goals | POWER, INDV, MASC, UA, LTO, and INDL  | A positive association was found with LTO and a balance between INDL and restraints.  |
| Perkins et al. (2022)                       | Voluntary carbon emission disclosures                 | POWER, INDV, MASC, UA, and LTO  | A positive association was found with MASC while a negative association was found with INDV and POWER.  |
| Utami and Barokah (2024)                    | Anti-corruption disclosures                           | Corporate governance (Firm ownership mechanism, Firms' audit quality, Country-level accounting competence) and Culture (UA) | A positive association was found with high-quality auditors, government ownership, and accounting competence.   |

## 4. Materials and Methods

### 4.1. Data Selection

Our sample focuses on MENA region countries, specifically Lebanon, Egypt, Jordan, and Saudi Arabia. In total, 55 banks were examined as follows: 20 in Lebanon, 11 in Egypt, 14 in Jordan, and 10 in Saudi Arabia. The paper covers 354 observations for the period from 2013 to 2019. This period was selected to disregard the impact of the Arab Spring, which occurred between 2010 and late 2012, as well as the COVID-19 pandemic and the economic crisis that began at the end of 2019. Observations with missing data were excluded. The study focused on local banks. Secondary data was collected by downloading the banks' annual reports, CSR reports, and sustainability reports from the banks' websites. Content analysis was used since it is the prevailing method to study ACD (Ghazwani et al., 2024; Masud et al., 2019; Sari et al., 2021). Content analysis provides a systematic evaluation of firm's anti-corruption extent and quality. With respect to ACD extensiveness, content analysis permits measuring the narrative disclosure through word count. Besides, regarding ACD quality, content analysis allows us to answer the index questions from the annual reports provided by the firms and it allows us to compare several years as well. A Random sampling technique was considered to be the most suitable for this research.

#### 4.2. Dependent Variable

ACD quality is the dependent variable in this research paper. Two measures were employed to examine ACD: First, disclosure extent is measured using word count as applied in previous studies (e.g. Branco & Rodrigues, 2008; Islam, Haque, & Gilchrist, 2017; Lopatta, Jaeschke, Tchikov, & Lodhia, 2017). To ensure consistency in the coding process and document ACD quality, this study adopts the narrative disclosure framework proposed by Islam et al. (2017) which consists of 13 words. Second: Disclosure breadth is measured using Transparency International (2012) index (e.g. Krishnamurti, Shams, & Velayutham, 2018; Muttakin, Mihret, & Khan, 2018). This index is widely used in the literature (Blanc et al., 2019; Krishnamurti et al., 2018). It covers different issues affecting corporate transparency. It also includes thirteen questions, and each question is scored between zero and one. The highest grading of these questions' answers is thirteen points (Transparency International, 2012).

#### 4.3. Independent Variables

Hofstede's six cultural system dimensions: power distance, individualism, masculinity, uncertainty avoidance, long-term orientation, and indulgence, are the independent variables measured by Hofstede's country classification (Blanc et al., 2019; Gallén & Peraita, 2018; Halkos & Skouloudis, 2017; Ioannou & Serafeim, 2012; Lanier & Kirchner, 2018). These cultural dimensions are used because they are highly studied in literature and because they characterize features of a culture's beliefs and their impact on the behavior of a society.

#### 4.4. Control Variables

The control variables that are examined in our research are the following: firm size, leverage, and audit firm size.

##### 4.4.1. Firm Size (SIZE)

More disclosure is expected from large firms to preserve their reputation since they have greater visibility and are subject to increased scrutiny. Yin and Zhang (2019) and Masud et al. (2019) found that firm SIZE positively affects ACD. SIZE is measured using the total assets of the banks (Aldaz Odriozola & Álvarez Etxeberria, 2021; Blanc et al., 2019; Masud et al., 2019).

##### 4.4.2. Leverage (LEV)

High LEV firms are claimed to have more disclosure to be more transparent towards creditors and lenders. Masud et al. (2019) found that the LEV ratio positively affects ACD disclosure. Nobanee and Ellili (2018) found an insignificant association between the LEV ratio and anti-money laundering disclosure. Gong, Xu, and Gong (2018) found that the LEV ratio positively affects CSR reporting. LEV is measured using the debt ratio.

$$\text{The debt ratio} = \text{total liabilities} / \text{total assets} * 100$$

This measurement is from previous literature (Alonso Carrillo, Priego De La Cruz, & Nunez Chicharro, 2019; Axjonow, Ernstberger, & Pott, 2018; Hanifa & Rashid, 2005; Masud et al., 2019; Raffournier, 1995).

##### 4.4.3. Audit Firm Size (AUDIT)

Big Four audit firms tend to disclose more information. Healy and Serafeim (2016) found that AUDIT positively affects ACD. Gong et al. (2018) reported that AUDIT positively influences CSR reporting. Alsaeed (2006); Hashim and Mohd Saleh (2007); Huafang and Jianguo (2007); Barako (2007); Aljifri and Hussainey (2007) and Lal Joshi and Gao (2009) found that AUDIT positively affects voluntary disclosure. In this paper, AUDIT is coded as 1 if audited by the big 4, and 0 if not (Gong et al., 2018; Healy & Serafeim, 2016; Iatridis, 2013). Independent variables are listed in Table 2.

Based on the literature review and the hypotheses development, the following regression model is proposed.

$$ACD_i = \alpha_1 - \beta_1 POWER_i + \beta_2 INDV_i - \beta_3 MASC_i + \beta_4 UA_i - \beta_5 LTO_i + \beta_6 INDL_i + \beta_7 SIZE_i + \beta_8 LEV_i + \beta_9 AUDIT_i + \varepsilon_i$$

**Table 2.** Independent and control variables.

| Variable | Definition            | Literature   | Measure                                |
|----------|-----------------------|--|--|
| POWER    | Power distance        | Ioannou and Serafeim (2012); Houqe and Monem (2016); Halkos and Skouloudis (2017); Gallén and Peraita (2018); Blanc et al. (2019); Pucheta-Martínez and Gallego-Álvarez (2020); Pizzi et al. (2022) and Perkins et al. (2022). | Hofstede's country classification      |
| INDV     | Individualism         | Ioannou and Serafeim (2012); Houqe and Monem (2016); Halkos and Skouloudis (2017); Gallén and Peraita (2018); Blanc et al. (2019); Pucheta-Martínez and Gallego-Álvarez (2020); Pizzi et al. (2022) and Perkins et al. (2022). |  |
| MASC     | Masculinity           | Halkos and Skouloudis (2017); Gallén and Peraita (2018); Blanc et al. (2019); Pucheta-Martínez and Gallego-Álvarez (2020); Pizzi et al. (2022) and Perkins et al. (2022).  |  |
| UA       | Uncertainty avoidance | Houqe and Monem (2016); Halkos and Skouloudis (2017); Gallén and Peraita (2018); Blanc et al. (2019); Pucheta-Martínez and Gallego-Álvarez (2020); Pizzi et al. (2022); Perkins et al. (2022) and Utami and Barokah (2024).    |  |
| LTO      | Long-term orientation | Halkos and Skouloudis (2017); Lanier and Kirchner (2018); Gallén and Peraita (2018); Pizzi et al. (2022) and Perkins et al. (2022).  |  |
| INDL     | Indulgence            | Halkos and Skouloudis (2017); Lanier and Kirchner (2018) and Pizzi et al. (2022).  |  |
| SIZE     | Firm size             | Lopatta et al. (2017); Krishnamurti et al. (2018); Blanc et al. (2019); Masud et al. (2019) and Utami and Barokah (2024).  | Total assets                           |
| LEV      | Leverage              | Raffournier (1995); Hanifa and Rashid (2005); Axjonow et al. (2018); Alonso Carrillo et al. (2019); Masud et al. (2019) and Perkins et al. (2022).   | ROA =Net profit *<br>100/ Total assets |
| AUDIT    | Audit firm size       | Iatridis (2013); Healy and Serafeim (2016); Gong et al. (2018) and Utami and Barokah (2024).   | 1 for big 4,<br>0 if not               |

## 5. Results

### 5.1. Descriptive Statistics

The word count means 177. As for the 13 disclosure questions, the mean is 4 with a range between 0 and 10.5. This reflects that ACD in the MENA region is still in the infancy stage. With respect to the independent variables, POWER has a mean of 76.99 and ranges between 70 and 95. This high score denotes accepting inequalities, conformity, obedience, unfairness, and hierarchy within the society. INDV has a mean of 31.57 and ranges between 25 and 40, which reflects a collectivistic society that prefers a close and connected framework with the expectation of being cared for by relatives or other members of a particular group in the interest of absolute loyalty. MASC has a mean of 54.96 and ranges between 45 and 65, which refers to the tendency in a country for achievement, heroism, assertiveness, competitiveness, status, and success. UA has a mean of 65.38 and ranges between 50 and 80, which reflects a high preference for avoiding uncertainty and having strict codes of belief and behavior and are not open to change. LTO has a mean of 18.18 and ranges between 7 and 36. The very low score shows that such societies prefer to keep old traditions and customs, and they perceive societal changes with doubt. INDL has a mean of 32.86 and ranges between 4 and 52. This low score denotes to a society that is restraint which restrains satisfaction of needs and controls them by severe social traditions and norms. In the same manner, the categorical control variables' descriptive analysis indicates that regarding AUDIT, 96% of the observations have an auditor whose firm is classified as big four, while 4% of the observations do not have an auditor from the big four audit firms (Table 3).



**Table 3.** Descriptive analysis of the variables.

| <b>Continuous variables:</b> |           |           |         |         |               |          |                    |          |                   |         |
|------------------------------|-----------|-----------|---------|---------|---------------|----------|--------------------|----------|-------------------|---------|
| Item                         | Words     | Questions | POWER   | INDV    | MASC          | UA       | LTO                | INDL     | SIZE              | LEV     |
| Mean                         | 177.7994  | 3.9195    | 76.9915 | 31.5678 | 54.9576       | 65.3814  | 18.1864            | 32.8559  | 18281264122.9006  | 0.8555  |
| Std. deviation               | 117.10958 | 2.19383   | 9.60568 | 6.37694 | 9.18404       | 12.59227 | 9.69239            | 16.02598 | 26701036138.87059 | 0.11949 |
| Range                        | 946.00    | 10.50     | 25.00   | 15.00   | 20.00         | 30.00    | 29.00              | 48.00    | 332883166576.40   | 0.67    |
| Minimum                      | 3.00      | .00       | 70.00   | 25.00   | 45.00         | 50.00    | 7.00               | 4.00     | 423833423.60      | 0.29    |
| Maximum                      | 949.00    | 10.50     | 95.00   | 40.00   | 65.00         | 80.00    | 36.00              | 52.00    | 333307000000.00   | 0.96    |
| <b>Dichotomous variable:</b> |           |           |         |         |               |          |                    |          |                   |         |
| <b>AUDIT:</b>                |           |           |         |         |               |          |                    |          |                   |         |
| Value                        | Frequency |           | Percent |         | Valid percent |          | Cumulative percent |          |                   |         |
| 0.00                         | 13        |           | 3.7     |         | 3.7           |          | 3.7                |          |                   |         |
| 1.00                         | 341       |           | 96.3    |         | 96.3          |          | 100.0              |          |                   |         |
| Total                        | 354       |           | 100.0   |         | 100.0         |          |                    |          |                   |         |

Regarding the dependent variable ACD, “audit” and “policy” words have the highest mean, while “bribe” and “bribery” words have the lowest mean (Table 4). The overall means are generally low, indicating a low level of the word count. Thus, the extent and extensiveness of ACD seems to be very restrained.

**Table 4.** Descriptive analysis of the 13 words of ACD.

| Item             | Mean  | Standard deviation | Range |
|------------------|-------|--------------------|-------|
| Accountability   | 2.36  | 3.32               | 0-26  |
| Assurance        | 4.31  | 4.48               | 0-43  |
| Audit            | 55.43 | 47.17              | 0-342 |
| Bribe            | 0.03  | 0.19               | 0-2   |
| Bribery          | 0.64  | 1.51               | 0- 12 |
| Corruption       | 1.77  | 3.98               | 0-31  |
| Ethics           | 3.04  | 3.98               | 0-24  |
| External auditor | 5.21  | 7.57               | 0-71  |
| Fraud            | 6.02  | 6.96               | 0-70  |
| Internal control | 12.16 | 10.41              | 0-71  |
| Policy           | 57.94 | 42.01              | 0-332 |
| Training         | 19.54 | 18.96              | 0-100 |
| Values           | 9.40  | 12.53              | 0-100 |

With respect to the thirteen questions of the Transparency International index, the descriptive statistics reveal a very modest level of ACD. Where only two questions have a high score of 1. Questions 2 and 3 that have a percentage of 88% and 78% respectively. While questions 4 and 7 have a percentage of 40% and 45% respectively. The rest of the questions received very low scores. Thus, the breadth of disclosure seems to be limited. This may return to the voluntary nature of ACD (Table 5).

**Table 5.** Descriptive analysis of the 13 questions of ACD.

| Questions | Option | Frequency | Percentage |
|-----------|--------|-----------|------------|
| 1         | 0      | 37        | 10.45%     |
|           | 0.5    | 215       | 60.73%     |
|           | 1      | 102       | 28.81%     |
| 2         | 0      | 44        | 12.43%     |
|           | 1      | 310       | 87.57%     |
| 3         | 0      | 78        | 22.03%     |
|           | 1      | 276       | 77.97%     |
| 4         | 0      | 212       | 58.89%     |
|           | 1      | 142       | 40.11%     |
| 5         | 0      | 326       | 92.09%     |
|           | 0.5    | 2         | 0.56%      |
|           | 1      | 26        | 7.34%      |
| 6         | 0      | 312       | 88.14%     |
|           | 0.5    | 7         | 1.98%      |
|           | 1      | 35        | 9.89%      |
| 7         | 0      | 195       | 55.08%     |
|           | 0.5    | 1         | 0.28%      |
|           | 1      | 158       | 44.63%     |
| 8         | 0      | 319       | 90.11%     |
|           | 0.5    | 11        | 3.11%      |
|           | 1      | 24        | 6.78%      |
| 9         | 0      | 348       | 98.31%     |
|           | 0.5    | 3         | 0.85%      |
|           | 1      | 3         | 0.85%      |
| 10        | 0      | 252       | 71.19%     |
|           | 0.5    | 5         | 1.41%      |
|           | 1      | 97        | 27.40%     |
| 11        | 0      | 280       | 79.10%     |
|           | 0.5    | 4         | 1.13%      |
|           | 1      | 70        | 19.77%     |
| 12        | 0      | 332       | 93.79%     |
|           | 0.5    | 9         | 2.54%      |

|    |   |     |        |
|----|---|-----|--------|
|    | 1 | 13  | 3.67%  |
| 13 | 0 | 351 | 99.15% |
|    | 1 | 3   | 0.85%  |

### 5.2. Linear Regression

The linear regression of the 13 questions with the independent variables showed that SIZE (p-value<0.001) and LEV (p-value=0.001) are positively associated with ACD (Table 6). Additionally, a negative association was found between AUDIT (p-value=0.024) and ACD. The positive association between SIZE and ACD is compatible with the results of Yin and Zhang (2019); Masud et al. (2019) and Utami and Barokah (2024) who found that SIZE positively affects ACD. The positive relationship between LEV and ACD aligns with Masud et al. (2019) and Gong et al. (2018) who found a positive relation between LEV ratio and ACD reporting and CSR reporting respectively. The negative relation between AUDIT and ACD contradicts Healy and Serafeim (2016) who found that AUDIT positively affects ACD.

**Table 6.** Linear regression of the ACD questions with the independent variables.

| Model |            | Unstandardized coefficients |            | Standardized coefficients | t      | Sig.  |
|-------|------------|-----------------------------|------------|---------------------------|--------|-------|
|       |            | B                           | Std. error | Beta                      |        |       |
| 1     | (Constant) | 2.542                       | 1.466      |                           | 1.734  | 0.084 |
|       | POWER      | -0.005                      | 0.017      | -0.020                    | -0.271 | 0.786 |
|       | INDV       | 0.014                       | 0.020      | 0.039                     | 0.668  | 0.504 |
|       | INDL       | -0.013                      | 0.010      | -0.093                    | -1.315 | 0.190 |
|       | SIZE       | 1.678E-011                  | 0.000      | 0.204                     | 3.562  | 0.000 |
|       | LEV        | 3.347                       | 1.041      | 0.182                     | 3.216  | 0.001 |
|       | AUDIT      | -1.505                      | 0.664      | -0.129                    | -2.269 | 0.024 |

Linear Regression of the 13 words with independent variables showed that POWER (P-value<0.001) has a significant negative association with ACD. Additionally, INDL (P-value<0.001), SIZE (P-value=0.006) and LEV (P-value=0.008) have a significant positive association with ACD (Table 7). The negative relation between POWER and ACD is consistent with Aggarwal and Goodell (2013); Maali and Al-Attar (2017); Gallén and Peraita (2018); Adnan et al. (2018) and Perkins et al. (2022). The significant positive association with INDL is consistent with Halkos and Skouloudis (2017) who found a positive correlation between INDL and CSR reporting. The findings of Gallén and Peraita (2018) show contradicting results where a significant positive association between CSR reporting and INDL was found in high GDPPC countries and a significant negative association between CSR reporting and INDL was found in countries with middle GDPPC. The results contradict Pucheta-Martínez and Gallego-Álvarez (2020) who found a significant negative association between corporate environmental disclosure practices and INDL.

**Table 7.** Linear regression of ACD word count with independent variables.

| Model |            | Unstandardized coefficients |            | Standardized coefficients | t      | Sig.  |
|-------|------------|-----------------------------|------------|---------------------------|--------|-------|
|       |            | B                           | Std. error | Beta                      |        |       |
|       | (Constant) | 235.023                     | 77.501     |                           | 3.033  | 0.003 |
|       | POWER      | -3.508                      | 0.885      | -0.288                    | -3.964 | 0.000 |
|       | INDV       | -1.336                      | 1.068      | -0.073                    | -1.251 | 0.212 |
|       | INDL       | 3.168                       | 0.514      | 0.433                     | 6.168  | 0.000 |
|       | SIZE       | 6.916E-010                  | 0.000      | 0.158                     | 2.776  | 0.006 |
|       | LEV        | 147.123                     | 55.034     | 0.150                     | 2.673  | 0.008 |
|       | AUDIT      | 12.970                      | 35.093     | 0.021                     | .370   | 0.712 |

### 5.3. Pearson Correlation

Pearson correlation between word counts of ACD with cultural systems showed that LTO, INDL, and SIZE are associated positively with the outcome with a weak association of 17%, 28%, and 13% respectively. Pearson correlation between the total answers to the 13 questions and cultural systems showed that INDL is negatively associated with the ACD with a weak association of 17%. Additionally, SIZE and LEV are positively associated with a weak correlation of 17% and 24% respectively (Table 8).

**Table 8.** Pearson correlation of the variables.

| Variables |                     | Words   | Questions | POWER    | INDV     | MASC     | UA       | LTO      | INDL     | SIZE     | LEV      |
|-----------|---------------------|---------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Words     | Pearson correlation | 1       | 0.342**   | 0.070    | -0.076   | -0.079   | 0.036    | 0.168**  | 0.283**  | 0.134*   | 0.004    |
|           | Sig. (2-tailed)     |         | 0.000     | 0.186    | 0.156    | 0.140    | 0.502    | 0.002    | 0.000    | 0.011    | 0.941    |
| Questions | Pearson correlation | 0.342** | 1         | 0.001    | 0.043    | 0.086    | -0.010   | -0.071   | -0.169** | 0.171**  | 0.236**  |
|           | Sig. (2-tailed)     | 0.000   |           | 0.991    | 0.420    | 0.108    | 0.845    | 0.182    | 0.001    | 0.001    | 0.000    |
| POWER     | Pearson correlation | 0.070   | 0.001     | 1        | -0.336** | 0.497**  | 0.426**  | 0.940**  | 0.574**  | 0.460**  | 0.063    |
|           | Sig. (2-tailed)     | 0.186   | 0.991     |          | 0.000    | 0.000    | 0.000    | 0.000    | 0.000    | 0.000    | 0.235    |
| INDV      | Pearson correlation | -0.076  | 0.043     | -0.336** | 1        | 0.621**  | -0.984** | -0.398** | -0.244** | -0.206** | 0.233**  |
|           | Sig. (2-tailed)     | 0.156   | 0.420     | 0.000    |          | 0.000    | 0.000    | 0.000    | 0.000    | 0.000    | 0.000    |
| MASC      | Pearson correlation | -0.079  | 0.086     | 0.497**  | 0.621**  | 1        | -0.501** | 0.318**  | 0.052    | 0.203**  | 0.340**  |
|           | Sig. (2-tailed)     | 0.140   | 0.108     | 0.000    | 0.000    |          | 0.000    | 0.000    | 0.333    | 0.000    | 0.000    |
| UA        | Pearson correlation | 0.036   | -0.010    | 0.426**  | -0.984** | -0.501** | 1        | 0.430**  | 0.173**  | 0.258**  | -0.161** |
|           | Sig. (2-tailed)     | 0.502   | 0.845     | 0.000    | 0.000    | 0.000    |          | 0.000    | 0.001    | 0.000    | 0.002    |
| LTO       | Pearson correlation | 0.168** | -0.071    | 0.940**  | -0.398** | 0.318**  | 0.430**  | 1        | 0.814**  | 0.409**  | -0.083   |
|           | Sig. (2-tailed)     | 0.002   | 0.182     | 0.000    | 0.000    | 0.000    | 0.000    |          | 0.000    | 0.000    | 0.120    |
| INDL      | Pearson correlation | 0.283** | -0.169**  | 0.574**  | -0.244** | 0.052    | 0.173**  | 0.814**  | 1        | 0.196**  | -0.272** |
|           | Sig. (2-tailed)     | 0.000   | 0.001     | 0.000    | 0.000    | 0.333    | 0.001    | 0.000    |          | 0.000    | 0.000    |
| SIZE      | Pearson correlation | 0.134*  | 0.171**   | 0.460**  | -0.206** | 0.203**  | 0.258**  | 0.409**  | 0.196**  | 1        | 0.054    |
|           | Sig. (2-tailed)     | 0.011   | 0.001     | 0.000    | 0.000    | 0.000    | 0.000    | 0.000    | 0.000    |          | 0.313    |
| LEV       | Pearson correlation | 0.004   | 0.236**   | 0.063    | 0.233**  | 0.340**  | -0.161** | -0.083   | -0.272** | 0.054    | 1        |
|           | Sig. (2-tailed)     | 0.941   | 0.000     | 0.235    | 0.000    | 0.000    | 0.002    | 0.120    | 0.000    | 0.313    |          |

**Note:** \*\* significant at the 0.01 level.

\* significant at the 0.05 level.



#### 5.4. F Statistics Test

According to Tables 9 and 10, the significant F value (P-value<0.000) for both words and questions. A value less than 0.05 indicates that ACD in the MENA region banking sector is affected by all the independent variables simultaneously. Hence, the model in this paper is proper for further research.

**Table 9.** F Statistics test results for words.

| Model |            | Sum of squares | df  | Mean square | F     | Sig.  |
|-------|------------|----------------|-----|-------------|-------|-------|
| 1     | Regression | 500566.561     | 6   | 83427.760   | 7.052 | 0.000 |
|       | Residual   | 3738267.743    | 316 | 11829.961   |       |       |
|       | Total      | 4238834.303    | 322 |             |       |       |

**Table 10.** F Statistics test results for questions.

| Model |            | Sum of squares | df  | Mean square | F     | Sig.  |
|-------|------------|----------------|-----|-------------|-------|-------|
| 1     | Regression | 182.473        | 6   | 30.412      | 6.955 | 0.000 |
|       | Residual   | 1381.734       | 316 | 4.373       |       |       |
|       | Total      | 1564.207       | 322 |             |       |       |

#### 5.5. Data Quality Tests

A comprehensive evaluation was conducted on the ACD index reliability and validity. Cronbach's alpha test was utilized to test reliability and Pearson's Product-Moment Correlation was used to test validity.

##### 5.5.1. Reliability Test

This research has employed Cronbach's alpha test. A Cronbach's coefficient D value of 74% for the entire disclosure index was found. An alpha of .7 is considered the minimum acceptable threshold, even though in certain cases lower coefficients are also considered satisfactory and accepted, based on the research objectives (Hair & Page, 2015; Saunders, Lewis, & Thornhill, 2012). Saunders claims that if the coefficient value is above or equal to 0.7, the index is reliable (Saunders et al., 2012). Thus, we can conclude that the index questions are reliable as the coefficient exceeds 0.7 (Table 11).

**Table 11.** Reliability test.

| Cronbach's alpha | N of items |
|------------------|------------|
| 0.740            | 13         |

##### 5.5.2. Validity Test

Table 12 indicates that the ACD index is valid given that all the values are positive and are higher than the Critical Values for Pearson's r which is 0.098.

**Table 12.** Validity test results.

| Question's Number | R table |
|-------------------|---------|
| 1                 | 0.570   |
| 2                 | 0.498   |
| 3                 | 0.512   |
| 4                 | 0.660   |
| 5                 | 0.526   |
| 6                 | 0.571   |
| 7                 | 0.504   |
| 8                 | 0.300   |
| 9                 | 0.317   |
| 10                | 0.707   |
| 11                | 0.607   |
| 12                | 0.195   |
| 13                | 0.214   |

## 6. Discussion and Conclusions

### 6.1. Implications

Our research aims to investigate the influence of cultural values on ACD quality in 55 banks in Four MENA region countries from 2013 to 2019. ACD is a crucial component of CSR reporting and a critical tool to fight corruption. Fighting against corruption enhances sustainable development because of its social, economic, and environmental impacts. Research in this area of literature is still limited (ex. Blanc et al. (2019)). From a theoretical perspective, CSR, specifically ACD literature is extended to fill prior research gap by studying the impact of Hofstede's six cultural variables on the level of ACD. This also includes the two newly added variables: LTO and INDL that are understudied. Expanding the former research enhances the

knowledge in this area. The literature shows that the cultural variables affect the disclosure level (Blanc et al., 2019; Gallén & Peraita, 2018; Halkos & Skouloudis, 2017; Houqe & Monem, 2016; Ioannou & Serafeim, 2012; Lanier & Kirchner, 2018). Thus, our hypotheses aim to examine whether the cultural variables affect ACD within the MENA region.

In the model of the study, ACD is the dependent variable, and the cultural variables are the independent variables. Additionally, the control variables are firm size, leverage, and audit firm size. Our paper contributes to prior research by offering valuable insights to policymakers and standards-setters to consider cultural dimensions in the formation and enforcement of anti-corruption laws while encouraging voluntary disclosures.

Our statistical analysis shows several interesting outcomes that assist in understanding the association between ACD and cultural variables in the MENA region banking sector. First, the descriptive statistics show that the countries under study exhibit high POWER. They accept inequalities, obedience, unfairness, and hierarchy within the society. The prevailing societies are collectivistic which means that a close and connected framework with the relatives is preferred. The level of MASC is high which refers to the tendency for achievement, heroism, assertiveness, competitiveness, status, and success. The societies demonstrate high UA, indicating risk aversion, strict adherence to codes of belief, and resistance to change. LTO score is very low which explains the tendency to maintain old traditions and customs. Finally, INDL has also a low score which indicates a restrained society that restrains needs' fulfilment and controls them by firm social traditions and norms.

Second, using Transparency International-UNGC Reporting Guidance ratings of ACD, the linear regression findings show that none of the cultural variables affects the quality of ACD. Third, using Islam et al. (2017) narrative disclosure measure, the linear regression findings show that POWER negatively affects the quality of ACD. The negative relation between POWER and ACD aligns with institutional theory, which explains the variances in CSR reporting among countries with different cultures, governance, and economic systems. It also provides valuable insights to policymakers and standards-setters to emphasize on cultural dimensions while encouraging voluntary disclosures. These results support Blanc et al. (2019) who found that high POWER firms have low levels of ACD, Gallén and Peraita (2018) and Orij (2010) who also found that high POWER firms have lower levels of CSR reporting, and Maali and Al-Attar (2017) found that high POWER negatively affects disclosure level and transparency by multinational corporations. The significant positive association with INDL is consistent with Halkos and Skouloudis (2017) who found a positive correlation between INDL and CSR reporting. The findings of Gallén and Peraita (2018) reveal contradicting results where a significant positive relation between CSR reporting and INDL was found in countries having high GDPPC while a negative association was found in countries with middle GDPPC. Fourth, the control variables, SIZE, LEV, and AUDIT are significantly associated with ACD. The positive association between SIZE and ACD supports Yin and Zhang (2019), and Masud et al. (2019) who found that SIZE positively affects ACD. The positive relation between LEV and ACD supports the results of Masud et al. (2019) and Gong et al. (2018) who found that the LEV ratio positively affects ACD and CSR reporting respectively. The negative relation between AUDIT and ACD contradicts Healy and Serafeim (2016) who found that AUDIT positively affects ACD. This unexpected result suggests that further investigation is necessary to understand the potential determinants that affect the role of audit firms in ACD disclosures.

## 6.2. Limitations and Future Research

Similar to other papers, this paper has some limitations despite its contributions. Only MENA region countries are studied in this research, thus, future studies should expand the scope to include more countries. Furthermore, only the banking sector is studied in this paper, thus, other sectors could be studied and compared in the future. Moreover, in this paper, we only concentrated on the cultural variables although many other social, economic, and political variables could be studied with ACD as well. The previously mentioned limitations can be considered a base for future research.

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