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Item Type	Article
Authors	Alshbili, I.;Elamer, Ahmed A.;Beddewela, E.
Citation	Alshbili I, Elamer AA and Beddewela E (2019) Ownership types, corporate governance and corporate social responsibility disclosures: Empirical evidence from a developing country. Accounting Research Journal. 33(1): 148-166.
DOI	https://doi.org/10.1108/ARJ-03-2018-0060
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Download date	2026-06-08 18:24:32
Link to Item	http://hdl.handle.net/10454/16710



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Journal:	<i>Accounting Research Journal</i>
Manuscript ID	ARJ-03-2018-0060.R2
Manuscript Type:	Article
Keywords:	Corporate social responsibility, corporate governance, content analysis, oil and gas industry, neo-institutional theory, developing countries

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1. Introduction

The growing importance of Corporate Social Responsibility (CSR) has propelled business organisations to engage in the disclosure of information pertaining to their CSR activities. Our review of literature highlights that, although there *are* existing studies which have examined the determinants of CSR Disclosure (CSR D) in several developed countries (e.g., Chan et al., 2014; Jizi et al., 2014), those studies examining the same in developing countries is limited (Khan et al., 2013) with minimal or low levels of CSR D being reported by companies operating in these contexts (Nurhayati et al., 2016). This disparity suggests that CSR D is influenced by the motives, choices and values of firm-level decision-makers (Khan et al., 2013). Thus a consideration of CSR D determinants, particularly that of ownership structure and board composition, within the developing country context, is worthy of being examined, given their potential to influence CSR D (Haniffa & Cooke, 2005). Furthermore, exploring this aspect through the lenses of neo-institutional theory is further limited (e.g., Amran & Haniffa, 2011; Ntim & Soobaroyen, 2013). These extant research gaps necessitate further CSR D studies in developing countries, specifically those which have a unique institutional environment, such as that of Libya (Alferjani et al., 2018).

Several significant institutional and economic attributes make Libya a unique and interesting environment for investigating the impact of ownership types and corporate governance in relation to CSR D. First, Libya is characterized by limited disclosure and transparency, resulting from fragile corporate disclosure regulations (Alferjani et al., 2018). Second, Libya is a country which has witnessed changes in its government regime; unlike developed countries, which are

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3 characterized by relative stability in their systems of governance (Alferjani et al., 2018; Elamer,
4 2017; Elamer et al., 2018). Third, the state and its institutional environment in Libya is weak, with
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6 local and non-state actors driving the political transition, driven by a free media, and an emergent
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8 civil society (Boduszyński & Pickard, 2013) resulting in a difficult and challenging business
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10 environment. Thus, there are marked differences between the institutional contexts of Libya as
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12 compared with other countries, cognisant of a fragile state.
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17 Further and notwithstanding the lack of evidence relating to the governance-CSR D nexus, to
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19 the best of our knowledge, there is only one research that has examined whether governance
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21 structure can affect CSR D. Benomran et al. (2015) examined the effect of corporate governance
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23 on the CSR and environmental reporting levels in Libyan companies using mixed methods.
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25 However, the paper is somewhat limited. First, the sample of Benomran et al. (2015) contains
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27 financial (38%) and non-financial firms, which may mislead the quantitative results due to the
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29 nature of financial firms. Second, although Benomran et al. (2015) partially examined the oil
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31 sector, their sample is limited; their sample only contains 12 companies (45% of total
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33 observations). We have extended the sample to include all oil and gas firms with a total of 112
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35 observations in a relatively more recent period. We have also included more ownership and
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37 governance structures within our research (e.g., foreign ownership, board meetings and CSR
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39 committee).
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45 Essentially, we expect to make several contributions to the existing literature. First, our
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47 research findings provide additional evidence to the limited empirical studies of CSR D itself in
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49 developing countries (e.g., Nurhayati et al., 2016), which suggest that on average the level of
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51 CSR D is still low in these countries in comparison to Western countries. Second, by examining
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53 the ‘determinants’ of CSR D in a developing country context, our research offers evidence that
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purports the influence of government ownership, joint venture ownership, foreign ownership, frequency of board meetings, and CSR committee existence on CSRD practices. These results contribute towards extending extant literature focusing on the implementation perspectives of CSRD practices by explaining how specific determinants contribute to or impede their development (Khan et al., 2013; Ntim & Soobaroyen, 2013), ultimately suggesting that better governed companies are more liable to follow a more socially responsible agenda than poorly governed companies. Third, our research adds to the limited empirical studies that uses a neo-institutional theoretical construct to examine the determinants of CSRD (Amran & Haniffa, 2011; Ntim & Soobaroyen, 2013).

The rest of the paper is organised as follows: section two reviews the theoretical and empirical literature and develops our hypotheses. In section three, we discuss our study design before presentation and discussion of the empirical findings. The final section presents a conclusion.

2. Theorisation and Hypotheses Development

2.1 Neo-institutional Theory

Neo-institutional theory suggests that the institutional environment influences the procedures and understandings by which companies function, and emphasises how constitutive societal views come to be entrenched in organisations (DiMaggio & Powell, 1983; DiMaggio & Powell, 1991). It concentrates on the behaviour of companies who are motivated by pressures in broader society and focuses on how firms can attain support and gain legitimacy within a specific institutional milieu; by accommodating to norms, rules, and routine interests that are highly respected by the society. As such, through adopting and maintaining particular organisational structures, practices,

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3 and policies, firms can display their conformity and compliance to institutional pressures that
4 would result in “legitimacy” (Patten & Crampton, 2004).
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8 We adopt the neo-institutional theory for interpreting CSR practices, for the following
9 reasons. First, Ntim and Soobaroyen (2013) explain that neo-institutional theory offers a clear
10 foundation for examining the impact of “radical changes” in the institutional context upon
11 organisational practice adoption, which is currently the case in Libya. Neo-institutional theory
12 explains how firms accept and respond to such, altering institutional and social pressures and
13 anticipations to sustain legitimacy. Second, neo-institutional theory is a dominant theoretical
14 perspective that offers an explanation for how the mechanisms used by firms align perceptions of
15 their practice with social and cultural values (Amran & Haniffa, 2011). Consequently adopting
16 this theory, which has been suggested as having great potential in explaining CSR within the
17 context of developing countries (Milne & Patten, 2002), may provide evidence for its applicability
18 in Libya. In such countries, behaviour of management, including legitimacy, might not be
19 controlled by managers themselves, but rather by “institutional pressures” that construct
20 tendencies towards isomorphism within the organisational field (DiMaggio & Powell, 1983;
21 DiMaggio & Powell, 1991). We also adopt neo-institutional theory in line with previous studies
22 (Amran & Haniffa, 2011; Ntim & Soobaroyen, 2013).
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42 ***2.2 Government Ownership***

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44 From a neo-institutional standpoint, the government, as a social institution, has the coercive
45 authority of the state through the enforcement of law to control the behaviour of other social actors,
46 comprising of those at the organisational level (DiMaggio & Powell, 1983, 1991). Thus,
47 government ownership is expected to create pressures for firms to reveal extra information, since
48 the government body is trusted by the public and will need to meet the public’s expectations
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3 (Muttakin & Subramaniam, 2015). However, countries that have a poor governance system (i.e.
4 one with high levels of fraud and corruption) might lead to poor CSR practice. Indeed, Dhouibi
5 and Mamoghli (2013) suggest that the Tunisian government ownership negatively influenced the
6 extent of CSR practice. This suggests that the political connections in government owned
7 companies denigrates the enforcement actions through corrupt officials and weakens regulation
8 from authorities (Ntim & Soobaroyen, 2013).
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11 Empirically, Nazli and Ghazali (2007), Amran and Devi (2008), Said et al. (2009), Haji (2013),
12 Khan et al. (2013), Ntim and Soobaroyen (2013), and recently, Muttakin and Subramaniam (2015),
13 found that government ownership is statistically significant and positively linked to the extent of
14 CSR practices. Whilst Dam and Scholtens (2012) found that government ownership is negatively
15 linked to the extent of CSR practices. In spite of this mixed evidence, and since the majority of
16 empirical studies suggest a significant positive relationship; the subsequent first hypothesis is
17 formulated as follows:
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20 **H₁:** There is a positive and significant relationship between government ownership and the
21 extent of CSR practice.
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23 ***2.3 Joint Venture Ownership***

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25 From the neo-institutional theory perspective, companies with a joint venture type ownership
26 might be pressured either informally or formally by their home institutional agents to adopt
27 specific organisational practices in their host-countries (Amran and Devi, 2008). Empirical
28 research which examines the relationship between joint venture ownership and CSR have
29 reported a positive relationship between joint venture ownership and CSR (Amran and Devi,
30 2008; Amran and Haniffa, 2011). Consequently, the second hypothesis is articulated as follows:
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3 **H₂**: There is a positive and significant relationship between a firm that has foreign business
4 partners and the extent of CSR practice.
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6 7 **2.4 Foreign Ownership**

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9 For foreign owned companies, CSR might work as a legitimating strategy to achieve continued
10 inflows of capital and to attract new potential investors at the host-country level (Amran & Haniffa,
11 2011; Haniffa & Cooke, 2005). Therefore foreign owned companies are more likely to be
12 sensitised and aware of the increased pressures for businesses to be socially responsible in the
13 wider global community; thus they may be compelled to concede to mimetic pressures through
14 CSR (Muttakin & Subramaniam, 2015). Empirically, the literature is in line with the view that
15 foreign ownership is associated with a high extent of CSR practices (Haniffa & Cooke, 2005;
16 Khan et al., 2013; Muttakin & Subramaniam, 2015). Therefore, the third hypothesis is formulated
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30 **H₃**: There is a positive and significant relationship between foreign ownership and the extent
31 of CSR practice.
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33 **2.5 Board Size**

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35 From an efficiency and legitimacy perspective, corporate boards with a large number of members
36 are linked with high managerial monitoring that could develop operations by accommodating to
37 the firms' conferred norms and regulations (Alnabsha et al., 2018; Elamer et al., 2018; Ntim &
38 Soobaroyen, 2013). Consequently, large boards are expected to be involved more in CSR
39 practices than their smaller counterparts (Elmagrhi et al., 2016, 2018). In contrast, others argue for
40 smaller sized boards, stating that boards which are small in size are more valuable in supervising
41 actions of management than large boards.
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3 The majority of prior empirical evidence suggests that board size impacts positively on the
4 extent of CSRD (Esa & Nazli, 2012; Said et al., 2009; Suyono & Al Farooque, 2018). However,
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6 Sufian and Zahan (2013) report no relationship between board size and the extent of CSRD
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8 practices. Consequently, the fourth hypothesis is articulated as follows:
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12 **H₄**: There is a positive and significant relationship between board **size** and the level of CSRD
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14 practice.
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16 ***2.6 Frequency of Board Meetings***

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18 The frequency of board meetings can help to improve effectiveness of a company in terms of
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20 managerial monitoring and performance. Haji (2013) and Jizi et al. (2014) suggest that the number
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22 of board meetings is perceived as a sign of an active and dedicated board in managing and
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24 addressing organisational issues. This implies that active board members should contribute to
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26 different initiatives including CSRD practices towards intentionally building a better corporate
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28 image. In this regard, the Libyan Commercial Activity Law No. 23 of 2010 requires that firms
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30 which are, either fully or partially, owned by the state are to have six mandatory board meetings
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32 per year. Consequently, the fifth hypothesis to be tested is articulated as follows:
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37 **H₅**: There is a positive and significant relationship between number of board meetings and the
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39 extent of CSRD practice.
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41 ***2.7 Presence of CSR Committees***

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43 Theoretically, from a neo-institutional theory perspective, the presence of a CSR committee is
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45 associated with better monitoring and therefore may positively influence CSRD practice (Ntim &
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47 Soobaroyen, 2013). The presence of a CSR committee is linked with better governed companies
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49 who are likely to be involved in disclosure activities, as a technique for signalling their quality of
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51 corporate governance (Beekes & Brown, 2006). According to Mallin and Michelon (2011), the
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3 existence of a CSR committee within a firm helps to improve corporate behaviour to meet
4 stakeholders' expectations. Similarly, Petrovic-Lazarevic (2010) advocates that an enhanced
5 corporate governance structure, including a CSR committee, helps to ensure that the firms' social
6 values are aligned with those of the community. Hence, it is expected that firms which have a CSR
7 committee will disclose more CSR information. Given the positive impact of CSR committees on
8 CSR practices found by prior literature (e.g., Faisal & Achmad, 2014; Ntim & Soobaroyen,
9 2013), the sixth hypothesis is articulated as follows:

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19 **H₆**. There is a positive and significant relationship between the presence of CSR committee
20 and the extent of CSR practice.
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23 24 **3. Research Design**

25 26 **3.1 Sample**

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29 The sample consists of all oil and gas companies operating in the Libyan oil and gas industry for
30 the period 2009-2013. As some companies had already left the country due to the on-going conflict
31 and lack of security in Libya (Chivvis & Martini, 2014), 28 firms with a total of 112 firm-years
32 observations were gathered. The final sample consisted of only 106 firm-years observations, due
33 to missing and incomplete information of 6 annual reports. The data was gathered from three main
34 sources. We excluded 2011 for three reasons. The Libyan revolution took place in 2011. Second,
35 most of the oil and gas companies were not operating in the country during 2011, therefore, the
36 data was not available. Finally, the post revolution government has reiterated its willingness to
37 comply with certain social and environmental expectations by issuing and providing
38 HSE.GDL.001.00 and HSE.PRO.002.00 social responsibility monitoring reporting requirements
39 guidelines post-2011. The goal of these requirements is to effectively communicate the present
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3 social responsibility to generate sustainability in the long term; appreciating the complexity of the
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5 social, economic and cultural context to meet the national requirements, and ensure adherence to
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7 internal pressures and obtain internal legitimacy (NOC Department, 2014).
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10 We used annual reports because various stakeholders use annual reports as the main source of
11
12 assured information which has a higher prospective to have impact because of its wide spread
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14 delivery (Unerman, 2000). Furthermore, their use in capturing CSRD is generally preferred
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16 (Amran & Devi, 2008; Haniffa & Cooke, 2005; Nazli & Ghazali, 2007), and longitudinal analysis
17
18 can be feasible, which allows the researchers to trace the development of any CSR changes.
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22 **3.2 Measuring CSRD**

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24 The extent of CSRD by firms was investigated by the use of a weighted content analysis technique
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26 (Jizi et al., 2014; Khan et al., 2013; Ntim & Soobaroyen, 2013). Previous studies have tended to
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28 use four main approaches to measure the level of CSRD namely, disclosure index of 0 and 1,
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30 sentences, pages and words (Gray et al., 1995b). We reject the first as it does not indicate how
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32 much emphasis is given to a specific subject area and therefore the total number of CSRD might
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34 be misleading. We also ignored the sentences and pages methods as the analysis of photographs
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36 and pictures is far more subjective than the interpretation of words. For instance, two sentences
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38 which are the same, but in dissimilar font sizes might create dissimilar outcomes if the proportion
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40 of pages is used as measurement units. Thus, consistent with the guidelines provided by several
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42 prior studies (e.g. Haniffa & Cooke, 2005), the individual words method was used to measure the
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44 level of CSRD. Although counting words has been critiqued by some (Unerman, 2000), it has been
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46 utilized in several earlier studies (e.g. Esa & Nazli, 2012; Haniffa & Cooke, 2005). Using words
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48 in this research has thus offered us a more limited analysis, being capable of much easier
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50 categorization, and was considered to be better for articulating the significance placed on a
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disclosure category as well as full robustness against error in computing the amount of disclosure (Wilmshurst & Frost, 2000). Moreover, counting words is an ideal measure when “it is intended to measure the amount of total space devoted to a topic and to ascertain the importance of that topic” (Wilmshurst & Frost, 2000, p. 17) as it is a more reliable and accurate approach. Additionally, we follow previous studies (Gray et al., 1995b; Mashat, 2005) to examine the content of five CSR categories namely environment, human resources, energy, community involvement, and product and consumer.

Reliability and consistency are crucial in the use of content analysis to ensure that the allocated unit of analysis is reliable (Jizi et al., 2014). To ensure reliability in the measurement used, 8 firms’ annual reports were first autonomously coded by the researchers and a few other colleagues, on a sample of text to increase the reliability of the research study. The scores provided by two independent coders, along with the score computed by one of the authors, were utilized to assess the scoring method reliability.

3.3 Model Specification

To test the association between the level and determinants of CSRD, this research follows prior studies (Jizi et al., 2014; Khan et al., 2013), by using a regression model. This regression model is set out below:

$$\begin{aligned}
 CSRD_{it} &= \alpha_0 + \beta_1 GOVOWN_{it} + \beta_2 JVOWN_{it} + \beta_3 FOROWN_{it} + \beta_4 BSIZE_{it} + \beta_5 FBM_{it} + \beta_6 \\
 &CSR_{it} + \beta_7 PC_{it} + \sum_{i=1}^n \beta_i CONTROLS_{it} + \varepsilon_{it}
 \end{aligned}$$

where, *CSR*D refers to the corporate social responsibility disclosure score measured by number of words. *GOVOWN*, dummy variable with the value of 1 if the company is fully government owned

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3 and 0 otherwise. *JVOWN*, dummy variable with the value of 1 if the company is joint venture
4 owned and 0 otherwise. *FOROWN*, dummy variable with the value of 1 if the company is fully
5 foreign owned and 0 otherwise. *BFSIZE*, board size as measured by the number of members on the
6 board. *FBM*, frequency of board meetings measured by the total of board meetings held each year.
7
8 *CSRC*, corporate social responsibility committee is measured with a dummy variable with the
9 value of 1 if the company' has CSR committee, 0 otherwise. *PC*, parent company factor is
10 measured with a dummy variable with the value of 1 if the company' parent disclose CSR
11 information, 0 otherwise.
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21 *CONTROLS* refer to the four control variables; namely firm size as measured by number of
22 employees, firm age, measured by the number of years from inception, profitability measured by
23 net income over total assets and four years of dummies for 2009 to 2013 to reduce the potential of
24 omitted variable bias (Elamer & Benyazid, 2018; Haji, 2013; Jizi et al., 2014; Khan et al., 2013).
25
26 α refers to Constant term or intercept, *it* period indicators, and ε the error term.
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34 **4. Results and Discussion**

35 **4.1 Descriptive Statistics of CSR**

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37 The overall average of the extent of CSR for the entire sample totalled a mean score of 227.15
38 words. However, the findings in the year 2009 show that the extent of CSR ranged from 1 to 501
39 words, with a mean score of 226.16 words. In contrast, in the year 2010, the extent of CSR score
40 is ranged from 3 to 479 words with a mean score of 200.64 words. In the year 2012 and 2013, the
41 extent of CSR score ranged from 4 to 512 words, with a mean score of 252.46, and from 50 to
42 453 words, with a mean score of 229.48, respectively. The findings demonstrate that the extent of
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3 CSRD scores slightly increased from the year 2009 to 2013 as indicated by the mean scores of
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5 226.16 and 229.48 words, respectively.
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8 The simultaneous increase in the overall mean of CSRD practices might be attributed to
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10 numerous contextual changes; such as the establishment of HSE.GDL.001.00 and
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12 HSE.PRO.002.00 social responsibility monitoring reporting guidelines, and the opening of a
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14 Sustainable Development Department within the NOC in Libya. This suggests that firms would
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16 engage in a higher level of CSRD practices following changes as they would want to respond to
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18 the state's initiatives, aspirations and interests in the environmental effects of business activities
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20 within the social spheres - for legitimacy purposes. However, a failure to respond to such changes
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22 may result in a break of the social contract, therefore possibly risking the existence of the company
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24 (Haji, 2013).
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36 On an individual category basis, most of the oil and gas firms disclosed information related to
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38 human resources (mean = 113.00 words). The second most disclosed type of CSR information
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40 related to environment (mean = 88.52 words). The extent of energy score ranged from 0 to 182
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42 words with a mean score of 12.99 words. This is followed by the community involvement category
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44 and the consumer category respectively. Table 2 summarises the descriptive statistics for the
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46 CSRD on an individual category basis.
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3 Empirically, the findings on the overall level of CSR is low when compared with Western
4 countries, such as US (Jizi et al., 2014), and Australia (Loh et al., 2015). Yet it is equivalent to
5 previous Libyan studies (Mashat, 2005). On an individual category basis, these findings are largely
6 consistent with the observation that firms that operate in controversial industries usually disclose
7 more information on human resources and environment categories. For example, and in line with
8 the results of past evidence contextually (Mashat, 2005) and globally (Gray et al., 1995a), Jizi et
9 al. (2014) report that the most disclosed type of CSR information is mainly related to human
10 resources. This finding implies that employees are vital assets to companies and therefore, by
11 disclosing more information on this category, it may have an important influence on current and
12 future investors' assessment of companies. As such, oil and gas firms seem to pay a great deal of
13 attention to legitimization strategies related to human resources and environment categories when
14 preparing their annual reports due to the sensitivity of the industry where such companies work.
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31 The descriptive statistics for all independent variables used in this research are provided in
32 Table 3. The average government ownership (GOVOWN) of the research sample is 31%, while
33 the average of joint venture ownership (JVOWN) is 27%, and the average foreign ownership
34 (FOROWN) is 42%. The average frequency of board meetings (FBM) of the sample is 7.88%,
35 whilst the average of the board size (BSIZE) is 5.05%, and the average presence of a CSR
36 committee (CSRC) is 15% and 38% for the parent company factor (PACOM).
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51 Table 4 provides the correlation matrix amongst the variables used. We use a Spearman
52 correlation matrix in order to test the direction and degree of a linear relationship between
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3 the variables as it aids in identifying the potential existence of multicollinearity amongst the
4 variables. To check the problem of multicollinearity, the rule of thumb is when the correlation is
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6 > 0.800 (Gujarati, 2003), it indicates that the multicollinearity problem does exist. In table 4, the
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8 correlation matrix for the dependent, explanatory and control variables utilized for the CSR
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10 model are shown. The directions of Pearson correlation coefficients are relatively low, indicating
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12 strong justifications that the multicollinearity problem amongst the variables in the model does *not*
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14 exist.
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26 We further conducted two tests namely Variance Inflation Factor (VIF) and Tolerance to detect
27 whether the multicollinearity problem among the variables does exist. It is suggested that there
28 could be a multicollinearity problem when values of VIF are greater than 10 (Gujarati, 2003) and
29 tolerance level values < 0.1 . The values of VIF and the tolerance statistic test for all variables used
30 in this model fall between a minimum of 1.50 and a maximum of 8.62 for VIF and between 0.116
31 and 0.665 for the tolerance respectively. The values of both the VIF and the tolerance statistic do
32 not indicate any serious collinearity in the model. We also examined the homoscedasticity by
33 placing the “standardized residuals” against the “standardized predicted” on a graph. The results
34 indicate that the points are randomly and evenly dispersed and scattered around the horizontal line,
35 therefore the assumption of homoscedasticity has been met and satisfied.
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49 We ran two additional tests: one related to the presence of autocorrelation by using Durbin-
50 Watson test value and the other one related to the exploring the linearity by using Cook’s distance
51 values. According to Gujarati (2003), the rule thumb of checking autocorrelation is a value close
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3 to 2 shows non-autocorrelation whereas a value near to 0 shows positive autocorrelation and a
4 value nearby 4 indicates negative autocorrelation. The results of the Durbin-Watson value in this
5 research is 2.31 among the model used. The values of Cook's distance for the model ranged
6 between the minimum value of 0.000 and the maximum value of 0.087. Therefore the findings of
7 both tests indicate non-autocorrelation and no linear relationship among the variables utilized in
8 this model.
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12 The analysis of the influence of determinants of CSRD on oil and gas companies' CSRD for
13 the four-year period was undertaken using two models; one including company characteristics and
14 the other one without company characteristics variables. This was done to isolate any potential
15 effects of firm company characteristics on CSRD. The findings are reported below in Table 5.
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INSERT TABLE 5 ABOUT HERE

Our results support hypothesis one, which predicted that there is a statistically significant and positive relationship between government ownership and the extent of CSRD practices. This finding contradicts the evidence of negative influence by Dam and Scholtens (2012), however it offers support for similar results of existing empirical studies in the literature (e.g. Amran & Devi, 2008; Amran & Haniffa, 2011; Haji, 2013; Muttakin & Subramaniam, 2015; Nazli & Ghazali, 2007; Ntim & Soobaroyen, 2013; Said et al., 2009). Furthermore, it is also supported by the neo-institutional theory assumption that companies that are owned by the government can be institutionalized by the government's objectives, beliefs and initiatives concerning CSRD practices. Theoretically such a finding implies that the government can be considered as exerting coercive pressure on government-owned firms to disclose their CSR information. This suggests

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3 that such firms tend to be more politically sensitive as their activities are more in the eyes of the
4 public, and thus, there is a strong expectation for such companies to be aware of their public
5 responsibility. Thus they are more involved in socially responsible actions to legitimize their
6 presence (DiMaggio & Powell, 1983, 1991; Nazli & Ghazali, 2007). Consequently, the implication
7 of this finding suggests that the government can enact regulations through the coercive power of
8 the state to regulate the behaviour of lower members of society.
9

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11 Hypothesis two, which predicted a statistically significant and positive relationship between a
12 firm that has a foreign business partner and the extent of CSRD practices, is empirically supported
13 by our data. This implies that companies that have foreign partners, such as Mellita Oil and Gas
14 company and Zueitina Oil company from the US and Germany, are influenced by the culture of
15 their overseas partners who have a high awareness of CSRD practice. Theoretically this finding
16 suggests that the level of coercive isomorphism pressure, if not mimetic, on the local partner to
17 adopt CSRD may be compelling enough to encourage firms to disclose significantly.
18
19 Consequently, the implication of this finding is that local companies are likely to meet the
20 expectations of foreign investors on CSRD. Therefore, a mutual understanding in all features of
21 business operations, including CSRD with foreign partners, seems to be a wise strategy.
22
23 Empirically our finding does not lend support to the findings of previous studies that suggest
24 foreign partners have an insignificant influence on the extent of CSRD practices (Amran & Devi,
25 2008; Amran & Haniffa, 2011).
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28
29 Hypothesis three, which predicted that foreign ownership positively influences the extent of
30 CSRD practice, is also empirically supported. Theoretically this finding suggests that the need for
31 legitimacy and public accountability is more of an issue in companies with foreign ownership
32 because of powerful outsider interest. This is reinforced by increased noticeability to stakeholders
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3 at the host-country level and leads to heightened expectations and monitoring of their CSR
4 practice. Therefore, foreign owned companies might be sensitised and aware of the increased
5 pressures for businesses to be socially responsible in the wider global community, and may also
6 be compelled to concede to mimetic pressures through CSR. Thus, CSR is being used as,
7 perhaps, a practical legitimising strategy to achieve continued inflows of capital and to attract new
8 potential investors at the host-country level. The implication of this finding therefore suggests that
9 foreign companies have better financial knowledge and information advantages linked to
10 contextual matters over local companies, therefore managers of foreign firms tend to invest more
11 in CSR practices in line with the expectations of their shareholders. This is perhaps done to re-
12 establish or strengthen their competitiveness and make themselves stand out in the expectation that
13 this may give them the priority in the future of securing new contracts for oil and gas exploration.
14 Empirically, this finding contradicts the results of prior studies in the context of developing
15 countries (Amran & Haniffa, 2011; Said et al., 2009), however provides support for similar
16 findings by Haniffa and Cooke (2005), Khan et al. (2013), and Muttakin and Subramaniam (2015).

17
18 Hypothesis four, which predicted that there is a statistically significant and positive
19 relationship between board size and the extent of CSR practice, is empirically rejected. The
20 insignificant influence of board size on the extent of CSR practice provides support for similar
21 results by Sufian and Zahan (2013) and Haji (2013), however it contradicts the findings of Said et
22 al. (2009), Ntim and Soobaroyen (2013), and Jizi et al. (2014). The current evidence is not
23 consistent with the predictions of neo-institutional theory. However, from a legitimisation view,
24 it implies that larger boards are linked to fewer CSR practices. In other words, the presence of
25 different stakeholders on larger boards is associated with less managerial monitoring, therefore
26 leading to less demand of CSR practices. The implication of this finding suggests that as a

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3 board's size increases, there is a greater possibility that managers' monitoring will decrease. In
4
5 other words, the larger boards are associated with more communication and a coordination
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7 problem, which can impact negatively on the role of a board monitoring CSR. The other
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9 implication of this finding is that appointments of a larger board may be made to meet affirmative
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11 action provisions, such as concentrating on providing direction for the company on other targets,
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13 rather than their contributions to board decisions on issues of environmental and social information
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15 disclosure.
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19 Hypothesis five, which predicted a statistically significant and positive relationship between
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21 the frequency of board meeting and the extent of CSR practice, is empirically accepted.
22
23 Theoretically the frequency of board meetings helps companies to improve managerial monitoring
24
25 and performance. It constitutes a way of enhancing legitimacy by serving as sign of an active and
26
27 dedicated board in managing and addressing organisational social issues. Consequently, more
28
29 meetings may put more pressure on managers to engage in CSR practices. The implication of
30
31 this finding supports the idea that the frequency of board meetings is necessarily beneficial and is
32
33 a sign of an active and dedicated board in managing and addressing organisational, social and
34
35 environmental disclosure. Empirically, this finding contradicts the insignificant influence of board
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37 meetings on the extent of CSR practices by Haji (2013), however it provides support for the
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39 findings of Jizi et al. (2014).
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44 The findings on the CSR committee suggest that companies with CSR committees have
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46 statistically no influence on the extent of CSR. This fails to support hypothesis six. This is less
47
48 surprising (empirically) given the small number of CSR committees within corporate boards
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50 sampled that are currently operating within the oil and gas industry. Theoretically, although
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52 complying with good corporate governance rules in the form of coercive pressures to increase
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3 CSRD or increase loyalty to duplicate (mimetic/normative pressures) or implement good CSRD
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5 practice could improve firms' effectiveness, the study finding implies that the presence of a CSR
6
7 committee may not be an effective monitoring device for improving CSRD in Libya. The
8
9 implication of this finding suggests that the presence of a CSR committee may not be associated
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11 with the decision to disclose CSR information within the Libyan institutional environment.
12
13 Consequently, the theoretical recommendation that firms should have a CSR committee to disclose
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15 more CSR information may not necessarily be applicable to companies functioning in the Libyan
16
17 oil and gas sector. Empirically, our finding is consistent with that of Rankin et al. (2011), however
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19 it contradicts the evidence of positive influence by Ntim and Soobaroyen (2013), and Faisal and
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21 Achmad (2014).
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26 ***4.2 Robustness analyses***

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28 To check the robustness or sensitivity of the relationship between CSRD determinants and extent
29
30 of CSRD, another regression test was conducted using the lagged effect model. The main model
31
32 of CSRD is re-estimated with a one-year lag between the dependent variable and the explanatory
33
34 independent variables (Ntim et al., 2012). This is because the dependent variable might be
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36 impacted by the prior years' corporate attributes (the explanatory variables). For example,
37
38 establishing a CSR committee within a firm may not influence the CSRD practice in the same
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40 year, rather, the following year. Consequently, this sample excluded 2010 as the first year, thereby
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42 reducing the total company-year observations from 106 to 78.
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49 INSERT TABLE 6 ABOUT HERE
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3 In line with earlier results, government ownership, foreign ownership, parent company are all
4 statistically and positively related to CSRD, while the presence of CSR committee is positively
5 but still statistically insignificant. However, the coefficients on joint venture ownership and board
6 meeting which were statistically significant are no longer statistically significant. In contrast, the
7 coefficient on board size which was negative and statistically insignificant in the main model is
8 now statistically significant to a lagged structure. With reference to these perceived sensitivities in
9 few of the determinants of CSRD, it might be because of “misspecifications” within the operational
10 equation, such as possible omitted variables bias, or it might be elucidated by the variances in the
11 number of company-year observations. Generally, and on a comparative basis, it provides extra
12 support empirically to the earlier conclusion in the main model that there is either a statistically
13 strong or insignificant association between most of the seven individual CSRD determinants and
14 the extent of CSRD practices.
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31 Furthermore, we repeated the analyses in Tables 5 using a Tobit model to account for its
32 censored nature. The findings, which are reported in Table 6, are very similar to those reported
33 above.
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39 **5. Conclusion**

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41 This study examined the extent to which corporate governance structures and ownership types
42 were associated with the level of Corporate Social Responsibility Disclosures (CSRD) in a
43 developing country. Using a large sample from Libyan oil and gas companies from 2009 to 2013,
44 our results are three-fold. First, our results suggest that although the level of CSRD in Libya is low
45 in comparison to its western counterparts, ownership factors have a significant positive influence
46 on CSRD. Second, we find board meetings to have a positive impact on CSRD. However, we
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3 failed to find any significant effect of board size and presence of CSR committees on CSRD.
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5 Overall, our results support prior theoretical evidence that pressures exerted by the government
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7 and external stakeholders have a considerable influence in promoting firm-level CSRD activities,
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9 specifically as a legitimising mechanism in fragile states.
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12 Contrary to expectations, we find that determinants of CSRD such as government ownership,
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14 joint venture ownership, and foreign ownership to have a positive influence on the extent of CSRD.
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16 This means that, notwithstanding the absence of legal requirements regarding CSRD in Libya,
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18 government owned companies in Libya still provide CSR information in their reports. Also, a
19
20 major theoretical implication of the statistically significant and positive relationship between joint
21
22 venture ownership and CSRD is that such firms are institutionalized by the reporting culture of
23
24 their foreign associates. This implies that there is some kind of coercive and/or mimetic pressure
25
26 for domestic companies to adopt CSRD from their business partners (Amran & Haniffa, 2011).
27
28 Likewise, the lack of influence of a CSR committee perhaps implies that the theoretical
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30 recommendations of firms, that they should have a CSR committee to increase their social and
31
32 environmental disclosure, may not necessarily be applicable to firms operating in the Libyan oil
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34 and gas industry. As such, the results might have important implications in the present situation of
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36 Libya, as regulators are trying to undertake additional reforms in corporate governance; especially
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38 in the light of the country political and institutional changes. This further suggests that Libyan
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40 legislators may need to exert more pressures on Libyan firms to disclose CSR practises. Hence our
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42 results shed new insights on the importance of corporate governance mechanisms in improving
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44 disclosure and accountability.
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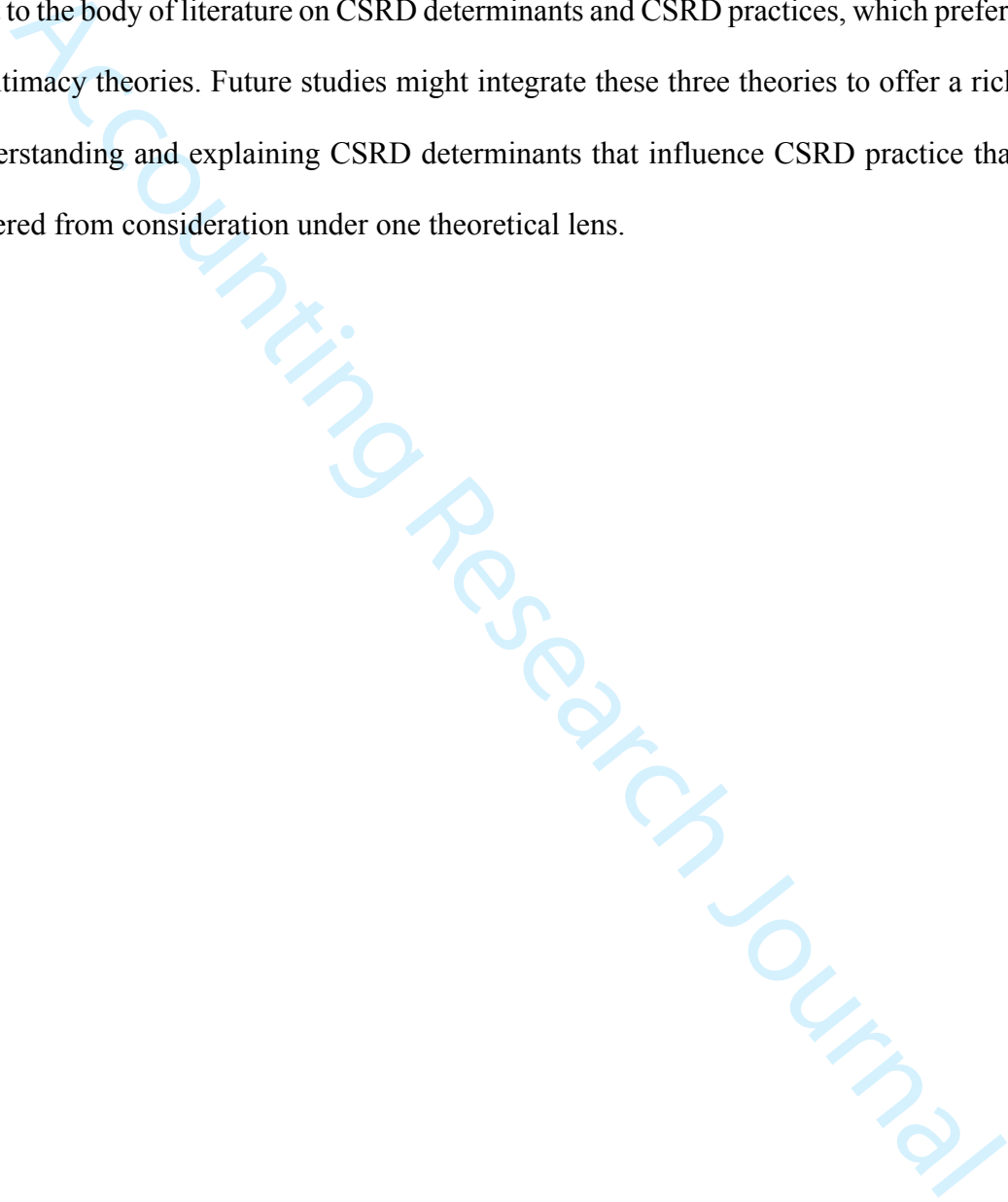
51 Our research contributes to the literature by providing additional evidence for existing studies
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53 (Jizi et al., 2014; Khan et al., 2013; Ntim & Soobaroyen, 2013) which suggest that on average
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3 better governed companies are more liable to follow a more socially responsible agenda than
4 poorly governed companies. By examining the determinants of CSRD in a developing country
5 context, our research offers evidence that government ownership, joint venture ownership, foreign
6 ownership, frequency of board meeting, and parent company factor have a positive influence on
7 CSRD practices, however the presence of a CSR committee and board size show a positive but
8 statistically insignificant influence on CSRD. These results contribute towards the literature
9 expanding our knowledge of CSRD practices' *implementation* by empirically explaining how
10 specific determinants contribute to or impede the development of CSRD practices. Meanwhile our
11 study also overcomes a major weakness in existing Libyan studies, which have mainly used
12 descriptive data. Consequently, this study extends empirical data (Haniffa & Cooke, 2005; Khan
13 et al., 2013; Nazli & Ghazali, 2007; Ntim & Soobaroyen, 2013) regarding CSRD practices in a
14 developing country context.

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31 Although the research concentrates on Libya, its findings have implications for other Arab
32 countries facing similar challenges in implementing CSRD, since they have similarity in their
33 socio-cultural environment and share an identical language, culture, religion, and economic
34 system. Finally, our results should be of interest to regulators, policy makers, practitioners, and
35 companies in developing a more focussed agenda of CSRD activity when considering regulations
36 for disclosure. The findings of our study, nevertheless, have several limitations. First, our research
37 is based on annual report and it did not examine any other reports or other mass communication
38 mechanisms that companies' management may use to disclose CSR information. However the
39 decision to disregard any other type of reports was made based on evidence from prior published
40 studies (Mashat, 2005) within developing countries, which implies the annual reports as being the
41 key and fundamental channel (or mechanism) for the dissemination of information by companies

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for both non-financial and financial data to a wider group of users (Jizi et al., 2014; Unerman, 2000). Thus, future studies might consider disclosures in other channels, if any, such as internet, CSR reports etc. Additionally, this research adopts the neo-institutional theory perspective, in contrast to the body of literature on CSRD determinants and CSRD practices, which prefers agency and legitimacy theories. Future studies might integrate these three theories to offer a richer basis for understanding and explaining CSRD determinants that influence CSRD practice than would be gathered from consideration under one theoretical lens.



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5 **Tables**
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8 **Table 1: Descriptive Statistics on the Dependent Variables of CSRD**
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<i>Extent of CSRD</i>	<i>Pre-revolution</i>		<i>Post-revolution</i>		
Years	2009	2010	2012	2013	Total
Minimum	1	3	4	50	1
Maximum	501	479	512	453	512
Mean	226.16	200.64	252.46	229.48	227.15
Std. Deviation	118.37	116.86	131.10	119.34	121.44
Skewness	0.682	0.577	0.253	0.388	0.456
Kurtosis	0.696	0.611	-0.682	-0.841	-0.288

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Table 2: Descriptive Statistics of CSRD on an individual category basis

Description	CSRD	Human resources	Environment	Energy	Community involvement	Consumer services
Maximum	512	322	301	182	67	4
Minimum	1.00	0.00	0.00	0.00	0.00	0.00
Mean	227.15	113.78	88.52	12.99	11.89	0.06
Median	210.50	113.00	77.00	4.00	8.00	0.00
Std. Deviation	121.44	65.878	67.63	29.86	11.78	0.41

Table 3: Descriptive Statistics of Independent Variables

Variables	Mean	Median	Std. Dev.
GOVOWN	0.31	0.00	0.465
JVOWN	0.27	0.00	0.420
FOROWN	0.42	0.00	0.497
FBM	7.88	7.00	1.829
BSIZE	5.05	5.00	1.305
CSRC	0.15	0.00	0.360
PARCOM	0.38	0.00	0.487
FSIZE	1612.52	459	1980.77
FAGE	25.74	26.50	18.45
ROA	-1.38	-1.36	0.473

Variables are defined as follows: Government ownership (*GOVOWN*), Foreign ownership (*FOROWN*), Joint venture ownership (*JVOWN*), Frequency of board meetings (*FBM*), Board size (*BSIZE*), CSR committee (*CSRC*), Parent company (*PACOM*), Firm size (*FSIZE*), Firm age (*FAGE*), Return on assets (*ROA*).

Table 4: Correlation Matrix

Variables	SIZE	AGE	GOWN	JVOWN	FOWN	FBM	BSIZE	CSRC	PCOM	CSRD	ROA
SIZE	1										
AGE	0.255**	1									
GOVOWN	0.534**	0.016	1								
JVOWN	0.186	0.018	-0.364**	1							
FOROWN	-0.664**	-0.117	-0.577**	-0.465**	1						
FBM	0.040	0.112	0.180	-0.100	-0.215*	1					
BSIZE	0.001	-0.062	0.195*	-0.228*	0.013	0.122	1				
CSRC	-0.306**	0.368**	-0.283**	-0.228*	0.331**	0.390**	-0.137	1			
PARCOM	-0.327**	-0.023	-0.523**	0.137	0.316**	0.127	-0.253*	0.542**	1		
CSRD	0.251**	0.119	0.111	-0.104	0.005	0.319**	0.096***	0.243*	0.172	1	
ROA	-0.123	-0.148	0.173	0.065	-0.208*	-0.039	-0.335**	-0.018	0.056	-0.416**	1

Notes: **, * and *** indicate significance at 1%, 5% and 10% levels, respectively. Variables are defined as follows: Corporate Social Responsibility Disclosure (CSR D), Government ownership (GOWN), Foreign ownership (FOWN), Joint venture ownership (JVOWN), Frequency of board meetings (FBM), Board size (BSIZE), CSR committee (CSRC), Parent company (PCOM), Firm size (SIZE), Firm age (AGE), Return on assets (ROA).

Table 5: Multiple Regression Results using CSRD as the Dependent Variable

<i>Model</i>	<i>Expected sign</i>	<i>(1)</i>	<i>(2)</i>	<i>Hypothesis status</i>
Constant		.239	.005***	
<i>R</i> square		.194	.499	
Adjusted <i>R</i> ²		.137	.421	
Durbin-Watson		2.285	2.313	
<i>F</i> - value		3.379 (.003) ***	6.424(.000) ***	
No. of observations		106	106	
<i>Explanatory variables</i>				
Government ownership	+	.658 (.011) **	.684 (.002) ***	Accepted
Joint venture ownership	+	.440 (.066) *	.476 (.020) **	Accepted
Foreign ownership	+	.528 (.046) **	.647 (.006) ***	Accepted
Board size	+	.101 (.307)	-.052 (.582)	Rejected
Frequency of board meeting	+	.257 (.025) **	.284 (.007) ***	Accepted
CSR committee	+	.163 (.220)	.219 (.104)	Rejected
Parent company	+	.194 (.121)	.264 (.024) **	Accepted
<i>Control variables</i>				
Firm size	+	Excluded	.350 (.008) ***	Accepted
Firm age	+	Excluded	-.086 (.383)	Rejected
Firm profitability	+/-	Excluded	-.416 (.000) ***	Accepted
Year 2009		Excluded	.022 (.814)	
Year 2012		Excluded	.097(.323)	
Year 2013		Excluded	.005(.958)	

Notes: Coefficients are placed before parentheses. ***, ** and * denote p-value is significant at the 1%, 5% and 10% levels, respectively. To avoid the dummy variable trap, 2010 is excluded from regression analysis, while 2009, 2012, and 2013 are included.

Table 6: Results of Sensitivity Testing on CSRD Model Based on a Lagged CSRD

	<i>Expected sign</i>	<i>(1) Lagged</i>	<i>(2) Tobit</i>		
Constant		.876	.115	-105.930	-273.727
R square		.188	.526	0.017	0.053
Adjusted R ²		.106	.430	-	-
Durbin-Watson		2.381	2.342	-	-
F-value		2.309 (.035) **	5.466(.000) ***	22.36 (.002) ***	64.21 (.000) ***
No. of Observations		78	78	106	106
<i>Explanatory variables</i>					
Government ownership	+	.858 (.010) **	.801(.010) **	149.826(.024) **	164.392(.004) ***
Joint venture ownership	+	.466(.128)	.430(.111)	92.298(.176)	103.678(.064) *
Foreign ownership	+	.589(.080) *	.637(.028) **	117.474(.065) *	156.764(.004) ***
Board size	+	.040(.729)	-.213(.051) *	6.126(.501)	-9.423(.277)
Frequency of board meeting	+	-.020(.891)	.198(.161)	20.330(.009) ***	25.030(.000) ***
CSR committee	+	.358(.034) **	.223(.196)	12.344(.803)	13.253(.752)
Parent company	+	.191(.196)	.277(.043) **	73.246(.014) **	90.154(.000) ***
<i>Control variables</i>					
Firm size	+	Excluded	.141(.368)	Excluded	0.019(.009) ***
Firm age	+	Excluded	-.001(.996)	Excluded	-0.174(.747)
Firm profitability	+/-	Excluded	-.544(.000) ***	Excluded	-107.776(.000) ***
Year 2009		Excluded	.151(.162)	Excluded	5.151(.162)
Year 2012		Excluded	.190(.092) *	Excluded	11.190(.042) **
Year 2013		Excluded	-	Excluded	-

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3 **Appendix**
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6 **CSRD Categories**

7 **I Environment**
8 1 Environmental policy
9 2 Environmental audit
10 3 Environmental – product and process-related
11 4 Environmental financially-related data
12 5 Sustainability
13 6 Environmental other
14 **II Energy**
15 7 Energy saving and conservation
16 8 Use/development/exploration of new sources
17 9 Other energy related disclosure
18 **III Consumer & product**
19 10 Product and customer safety
20 11 Consumer complaints
21 12 Specific consumer relations
22 13 Provision for disabled, aged, etc. customers
23 14 Provision for difficult-to-reach customers
24 **IV Community involvement**
25 15 Any reference to community and/or social involvement
26 16 Employee involvement with above if company support is
27 apparent
28 17 Donations
29 18 Schools, arts, sport, sponsorship
30 19 YTS (or equivalent), business-in-the-community, secondment
31 of staff
32 **V Human resources**
33 20 Employee data
34 21 Pension data
35 22 Consultation with employees
36 23 Employment of disabled
37 24 Value added statement
38 25 Health and safety
39 26 Share ownership
40 27 Employee training
41 28 Employee other
42 29 General other

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