

Corporate Social Responsibility Antecedents and Practices as a path to enhance organizational performance: The case of Small and Medium sized Enterprises in an emerging economy country

Journal:	Corporate Social Responsibility and Environmental Management
Manuscript ID	CSR-20-0323.R1
Wiley - Manuscript type:	Research Article
Keywords:	corporate social responsibility, antecedents, stakeholders' pressures, business uncertainty, organizational performance, SMEs

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Corporate Social Responsibility Antecedents and Practices as a path to enhance organizational performance: The case of Small and Medium sized Enterprises in an emerging economy country

Abstract

The impact of stakeholders' pressure and business uncertainties on the correlation between corporate social responsibility (CSR) and organizational performance within small and medium sized enterprises (SMEs) is under researched. This study aims to derive the correlation of CSR antecedents, CSR practices, stakeholders' pressures, business uncertainties, and organizational performance of SMEs in the UAE. The data was collected through a survey from 117 SMEs in the UAE, and analyzed using structural equation modeling. The study reveals that the level of importance SMEs attach to CSR antecedents influences positively the extent of SMEs involvement with CSR practices; and these, in turn, translate into significant performance outcomes for SMEs. Business uncertainties are proved to moderate both relationships (CSR antecedents-CSR practices; and CSR practices-SMEs performance); while stakeholders' pressure is found to have no moderating effect on CSR antecedent-CSR practices relationship. The proposed framework could be adopted in any economy for enhancing performance through CSR.

Keywords: corporate social responsibility, antecedents, stakeholders' pressures, business uncertainty, organizational performance, SMEs

1. Introduction

The contribution of small and medium-sized enterprises (SMEs) to Gross Domestic Product (GDP) is well known, but their cumulative negative contributions to the environment and the welfare of society are of concern to policy makers across the world. Extant literature reveals that SMEs are little engaged with corporate social responsibility (CSR) practices, owing to focusing

on other priorities such as intense competition, increasingly demanding customers, and challenging supplier management (Lawrence et al., 2006; Lee et al., 2015; Dey et al., 2018). Unlike larger firms, SMEs are rarely involved in CSR activities due to their lower visibility and weak financial resources (Jenkins, 2004; Lee et al., 2015). SMEs' approach to CSR is rather informal and lacks a systematic strategy (Lee et al., 2015) and many SMEs have neither a budget nor a department dedicated to CSR (Pastrana and Sriramesh, 2013; Lee et al., 2015). SMEs' managers often perceive that CSR practices are cost intensive and have no direct positive impact on their organizational performance (Dey et al. 2020a). Therefore, most SMEs' managers and owners believe that they should adopt CSR practices only under pressure from regulatory bodies or customers (Gadenne et al., 2009; Tang and Tang, 2012). The present study challenges these beliefs by positing and demonstrating that CSR practices might translate into CSR outcomes for SMEs and asserts that the relationship between CSR practices and firms' performance is not straightforward (Gond et al, 2018). Indeed, there are multiple underlying approaches and factors that need to be clarified for an in-depth understanding of the relationship (Lai et al., 2010; Farooq et al., 2017).

Extant literature on the business factors influencing the association between CSR and SME performance has showed the relevance of examining the moderating roles of several organizational variables (Torugsa et al., 2012; Arend, 2014) and institutional factors (Jamali and Neville, 2011; Yin and Zhang, 2012; Grimstad et al., 2020). While extant literature has pointed out that such an association cannot be straightforward, it remains that it is characterized by (1) divergent and highly aggregated findings with regard to the role played by stakeholders' pressures and (2) omission of the role played by another critical factor, that is, business uncertainty. The latter is particularly essential for understanding the entire decision context in which CSR is practiced. It is argued that "potentially false perceptions managers have about uncertainty" affect their organization's decisions and actions (Schmid and Kotulla, 2011; Helm and Gritsch, 2014), because the business environment is hard to comprehend and evaluate. Given that uncertainty conveys doubt, it is likely to affect managerial actions as well as the outcomes of such actions (McMullen and Shepherd, 2006; Helm and Gritsch, 2014). One can posit that managers' perceptions of uncertainty are likely to influence both the CSR practices and their consequences in terms of organizational performance.

To the best of our knowledge, there has been no study on the relationships of "CSR antecedents— CSR practices-SME performance" in light of the effects of both business uncertainty and stakeholders' pressures as moderators. Moreover, the majority of studies on CSR was often dedicated to either the relationship between CSR and its antecedents (e.g. Banerjee et al., 2003; Grimstad et al., 2020) or the relationship between CSR and 'aspects' of a firm's performance (e.g. Luo and Bhattacharya, 2006; Lai et al., 2010; Perrini and Russo, 2011). Furthermore, the limited number of studies that looked simultaneously at both the relationships has shortcomings. These studies have one or several of the following four limitations: (1) they considered the drivers as antecedents to CSR practices and omitted the impediments (e.g. Torugsa et al., 2012; Tang et al., 2012; Arend, 2014; Govindan et al., 2021); (2) they were restricted to only a part of the organizational context (i.e., the supply chain setting only) (e.g. Jean et al., 2016; Govindan et al., 2021) they were limited to one performance dimension or only a few, instead of all the performance dimensions (Tang et al., 2012; Torugsa et al., 2012; Jean et al., 2016; Govindan et al., 2021); (4) they focused on large firms to the detriment of SMEs (e.g. Tang et al., 2012; Jean et al., 2016; Govindan et al., 2021). In addition, these studies omitted the key role of such moderating variables as business uncertainty.

To bridge the gap, the present study contributes a realistic and holistic framework to support the view that pro-CSR attitudes and beliefs might translate to responsible conscious behaviour, and, in turn, CSR practices may well translate to performance outcomes for SMEs. The study is even more relevant as the extent research on CSR practices mainly focused on developed countries (Zhang and Zhu, 2015; Worthington et al., 2006). Although CSR was initiated and fostered by Western businesses, its understanding and practices are contingent on the institutional environment of countries all over the world (Fifka and Pobizhan, 2014). For the commentators, the limited CSR studies that have been set in emerging economies countries highlight that country differences (e.g. geographic, political, and economic settings) trigger variations in the understanding of CSR practices and their assessment (Griesse, 2007; Zhu et al., 2016). Accordingly, this study investigates whether: 1) the extent of importance SMEs place on CSR antecedents influences their involvement with CSR practices? (Study Objective One); 2) SMEs involvement with CSR practices influences their organizational performance? (Study Objective Two); and 3) the relationships of tryptic of 'CSR antecedents-CSR practices-SME

performance' could be moderated by stakeholders' pressure and /or business uncertainty (Study Objective Three).

The present study contribution to CSR literature is fourfold. First, it concurrently investigates the underlying mechanisms by which CSR antecedents translate to CSR behaviors, and those by which these behaviors in turn translate to performance outcomes; which helps in preventing from implementing a partial perspective of CSR implementation in SMEs. Indeed, a few researchers cautioned against the drawbacks of studies considering only the effects of CSR practices on performance without including CSR drivers and impediments. These studies are limited by the fact that they would result in an incomplete picture of the phenomena and even inconsistent findings (Jean et al., 2016).

Second, this study contributes to contingency research by considering the impact of business uncertainty, which is an omitted factor in CSR research. More interestingly, this study examines this factor in conjunction with stakeholders' pressures. The latter has been considered in a number of CSR studies but never in conjunction with business uncertainty. Therefore, this study aims to show that CSR research adopting stakeholders' theory may gain from combining their theoretical approach with a contingency perspective.

Third, this study responds to suggestions by several authors to deploying a multidimensional construct for capturing organizational performance. Extant studies on CSR have seldom rarely considered the effects of CSR on the overall performance. Instead, researchers often voluntarily or because of methodological issues - have focused on specific aspects of performance and neglected others. Therefore, by deploying a multidimensional construct of performance, the present study captures the potential outcomes of CSR practices in terms of broader dimensions of organizational performance. This research is also distinguished by integrating CSR management control tools with CSR initiatives to measure the construct of CSR practices.

Fourth, the study is expected to contribute to the discussion on the investigation of SMEs' practices in emerging countries such as the UAE. This is even more opportune, because no study has so far dealt with any questions related to CSR in UAE. UAE offers an interesting national context for study because its CSR practices are shaped by not only its specific regulatory and normative settings but also the diverse cultures and backgrounds of employees within the same organization and the rapid growth of the SMEs sector (Al Hadhrami, 2013).

The study is presented in five sections. Section 2 presents the literature review and development of hypotheses, followed by methodology in section 3. Section 4 presents the findings and section 5 discusses the results. Section 6 presents conclusions, including implications for theory and practice, the limitations of the study, and suggestions for further research.

2. Literature Review and Hypotheses

2.1. Background

There has been a drive, in Western developed countries, for governments to engage with SMEs on the topics of CSR and the environment (Castka et al., 2004). The justification is that the SMEs combined have a major impact on the environment and society and are often well placed to engage with communities (Castka et al., 2004). Literature report findings of several studies investigate CSR practices in European SMEs (Gelbmann, 2010); however, these are criticized to be neither conclusive nor convergent (Lee et al., 2015).

On the other hand, the United Nations Industrial Development Organization (UNIDO) explored CSR among SMEs in emerging economies countries, and noted that this is shifting toward Western-style CSR through the companies' measurement and management of their environmental and social impact (Raynard and Forstater, 2002). Ciliberti et al. (2008) investigated the obstacles to integrating CSR in SMEs in developing countries and found several issues, such as lack of knowledge on legislation and laws, cultural differences, little interest from companies, poor communication, and corruption.

Regardless of the national setting, some SMEs have been quick to adopt environmental measures because of market opportunities to increase profits (Masurel, 2007; Pastrana and Sriramesh, 2013), while others do so because of legislation requirements (Gadenne et al., 2009; Lee et al., 2015). Researchers are increasingly concluding that the greatest motivational factor for CSR practices is external pressure (Lawrence et al., 2006; Tang and Tang, 2012, Pastranaa and Sriramesh, 2014). Not only SMEs may not have an environmental policy or socially aware annual reports (Williamson and Lynch-Wood, 2001), but also they are often portrayed as being unaware of the benefits of CSR practices in terms of performance enhancement (Ciliberti et al., 2008; Gadenne et al., 2009). SMEs, unlike large corporations, also often practice CSR informally (Murillo and Lozano, 2006; Gelbmann, 2010).

Studies on CSR practices of SMEs in emerging countries are limited. Hitherto, no studies appear to have examined simultaneously the multiple facets of CSR (antecedents, practices, and outcomes) in light of SMEs' responses to business uncertainty and stakeholders' pressures. Knowledge on this topic is particularly important because the extended value chains of several firms in Western countries are now integrated with SMEs in emerging economies countries. The rapid progress in technology and infrastructure in emerging countries such as the UAE also present an opportunity to implement best societal and environmental performance practices to sustain the organizational performance of SMEs. Furthermore, recent internationally legally binding societal and environmental targets, such as enhancing employees' well-being and reducing GHG, have increased the importance of CSR agendas in tandem with economic performance for SMEs.

2.2. Hypotheses Development

CSR antecedents and CSR practices

There is lack of empirical evidence to support the assumption that pro-social and environmental attitudes and beliefs may translate into socially and environmentally conscious behaviour. This is in part because only few studies have focused simultaneously on the drivers and outcomes of CSR initiatives (Jean et al., 2016). Scholars contend that CSR practices are conditioned by both motives for and impediments to CSR (Muller and Kolk, 2010; Zhu and Zhang, 2015; Zhu et al., 2016). Antecedents of CSR may or may not persuade companies to implement CSR practices (Balzarova and Castka, 2012; Surroca et al., 2013; Madueno et al., 2016).

The review of literature shows three main philosophical approaches to antecedents of CSR. First, CSR may be connected to a purely altruistic aspiration of the firm to be a good citizen (moral philosophy or the normative perspective of CSR) (Jenkin, 2004; Lee, 2008; Perry and Towers, 2009; Aguinis and Glavas, 2012). Second, CSR may be linked to an economic profit-maximization approach (the business case or utilitarim philosophy) (Jenkin, 2004; Perry and Towers, 2009; Aguinis and Glavas, 2012). Third, there has been recently a shift to reconciling strategic management goals (e.g. stakeholder management and legitimacy) with moral considerations (Lee, 2008; Perry and Towers, 2009). This shift has been qualified as the "enlightened self-interest" perspective (for an extensive review, see Lee, 2008).

On one hand, the extant literature points out several impediments to CSR within SMEs. It is increasingly admitted that SMEs are barely keen to get involved in CSR activities because of the lower visibility of such activities and smaller financial and human resources in comparison to large firms (Jenkins, 2004; Lee et al., 2015; Pastrana and Sriramesh, 2013). In addition, recent literature has revealed that SMEs often do not have a systematic strategy (Jenkins, 2004; Lee et al., 2015) nor even integrate CSR into their master budget (Pastrana and Sriramesh, 2013; Lee et al., 2015). In developing countries, it is reported that SMEs mainly deploy CSR practices for philanthropic reasons. Amongst the most frequently encountered barriers for implementing CSR within SMEs, authors highlight the lack of knowledge on legislation and laws, lack of awareness about the benefits of CSR, and the struggle of firms to consider CSR as a business priority (Ciliberti et al., 2008; Gadenne et al., 2009; Gelbmann, 2010; Tang and Tang, 2012).

Scholars have emphasized several CSR drivers, in particular top management leadership and values (Waldman et al., 2006; Duarte, 2010; Lee et al., 2016). Such drivers are increasingly recognized as motivating CSR practices by large firms (Waldman et al., 2006; Duarte, 2010) and non-large firms (Jenkins, 2004; Lee et al., 2016). Researchers concluded that intrinsic drivers are more powerful than extrinsic ones in shaping SMEs' CSR practices (Lee et al., 2015; Grimstad et al., 2020). It is suggested that a key driving factor for SMEs to engage in CSR is directors' motivation to "do the right thing or to put something back into the society" (Jenkins, 2004, p. 6). The perceptions of the top management/owners about reputation outcomes expected from deploying CSR activities are likely to influence the extent and type of such activities (Hemingway and Maclagan, 2004; Pastranaa and Sriramesh, 2013; Lee et al., 2015). It is argued that when It comes to adoption of CSR practices and reports, decision makers are motivated by improving a company's image (Bhatia, 2012; Pastranaa and Sriramesh, 2013).

On the basis of the above, hypothesis 1 can be proposed:

H1. CSR antecedents contribute positively to the extent of CSR Practices in the surveyed SMEs.

CSR practices and organizational performance

This study responds to call from several authors to adopt a multidimensional framework for the characterization of organizational performance (Kirby, 2005; Neely, 2007; Richard et al, 2009). The latter is defined as a set of both financial and non-financial, internal and external indicators

capable of measuring the extent to which organizational goals have been accomplished (Kaplan and Norton, 1992; Singh et al., 2016). As such, the research on CSR needs to tap on the multifacets of CSR outcomes (Marín et al., 2012; Reverte et al., 2016).

A key question for researchers and practitioners in CSR remains "does it pay to behave responsibly?" (Ambec and Lanoie, 2008). Past literature concurs that companies can improve competitiveness and financial performance through their CSR efforts (Tang et al., 2012; Madueno et al., 2016). Empirical evidence suggests that the implementation of CSR practices is positively associated with firm performance among enterprises in both developed and developing countries (Li et al., 2013; Rodgers et al., 2013; Hou, 2019, Kim et al., 2018, Crifo et al., 2016). For instance, Jean et al. (2016) concluded that CSR in the supply chain positively influences customer satisfaction in both Chinese and Taiwanese institutional contexts and, thus, suggested that in all institutional contexts CSR matters in improving customer satisfaction. Interestingly, the results portrayed in empirical studies seem to converge with the findings of a number of review papers. For example, Aguinis and Glavas (2012) asserts that sustainable development has fairly positive nonfinancial consequences at the institutional, organizational, and individual level. In the same vein, Perrini and Russo (2011) review 250 contributions using stakeholder-based approaches and show that CSR activities may impact revenue and cost related performance outcomes through.

The literature review in the present study reveals four conclusions. First, while some academics affirm the existence of a positive association of CSR especially with financial performance (Flammer, 2015), several authors call for caution in accepting this assertion. Some critics highlighted that the CSR-performance relationship is either partial (Prado-Lorenzo et al., 2008) or curvilinear (Barnett and Salomon, 2006); while some others denounced the failure to agree on measures of a firm's performance, the divergences in defining CSR, and the existence of measurement errors in empirical studies (Linnenluecke and Griffiths, 2010; Lueg and Radlach, 2016). Interestingly, a small number of authors emphasized that the size of the positive relationship between CSR and financial performance has diminished over the past few years (Margolis et al., 2009). According to these authors, this could be either an objective observation or a consequence of deploying more appropriate research methods.

Second, while several studies have highlighted that it does pay to be green (Zhu and Sarkis, 2007; Albertini, 2013) and socially responsible (Li et al., 2013; Reverte et al., 2016), others contend that in creating corporate performance the type of initiative (Vachon and Klassen, 2008) does matter. For instance, for Colombian managers, the most important initiatives are the development and adoption of charities and not-for profit causes, the employee welfare and training; and the least important is corporate volunteering (Pastranaa and Sriramesh, 2014). Interestingly, although these managers engage in some activities much more than others, they believe that the most activities engaged in are not necessarily the most beneficial ones (Vachon and Klassen, 2008; Pastranaa and Sriramesh, 2014).

Third, our literature review shows that academics often examined the effects of CSR practices on only one or a few dimensions of SMEs' organizational performance. Some dimensions also attracted wider interest than others. In particular, past literature has focused on financial performance (Cegarra-Navarro et al., 2016), customer satisfaction (Jean et al., 2016), and corporate reputation and image (Kucukusta et al., 2013; Zhu et al, 2016). In our study, we argue that the definition of organizational performance is a 'surprisingly open question', with few studies using consistent measures (Kirby, 2005; Richard, 2009). Therefore, we build on seminal studies in management control (Kaplan & Norton, 1996) and in management sciences (Richard et al., 2009) and adopt rather a multidimensional construct to measure organizational performance. The multidimensional construct we adopt aims to allow for assessing the effect of CSR on the overall performance of a firm.

Fourth, the expected positive association between CSR practices and organizational performance has not been fully established in the context of small firms (Morsing and Perrini, 2009; Fassin, 2008). In the field of SMEs, the few existing studies have shown tenuous positive relationships, in particular, between CSR and innovation, CSR and competitiveness (Battaglia et al., 2014; Madueno et. al, 2016; Martinez-Conesa et al., 2017), and CSR and growth (Stoian and Gilman, 2017).

With reference to the aforementioned, the study poses the following research hypothesis:

H2: CSR Practices influence positively the organizational performance of the surveyed SMEs.

Moderating role of stakeholders' pressures

Stakeholders¹ pressures implicate the interest and impact of various groups (Henriques and Sadorsky 1999). It is argued that firms' decisions are affected by these groups, and since these groups have different interests, it is important that firms identify their stakeholders and appropriately respond to their demands (Russo and Perrini, 2010, 2010; Abdel-Maksoud et al., 2020). CSR is said to help firms integrate social and environmental concerns in interacting with their stakeholders (CEC, 2006).

There has been a growing pressure on firms to improve environmental and social communications with stakeholders (Simons 2000; Russo and Perrini, 2010; Rodrigue et al. 2013). The contingency literature, for instance, contends that social and environmental actions are considered by managers in response to stakeholders' pressures (see, Henri and Journeault 2010). Moreover, the legitimacy theory argues that managers tend to implement managerial changes, and communicate them, to satisfy powerful stakeholders through various methods².

Such pressure is said to have motivated the implementation of environmental and social practices (Schaltegger and Burritt 2000, Pondeville et al. 2013; Abdel-Maksoud et al., 2020). This can be explained as a result of managers' tendency to implement managerial changes, and communicate them, to satisfy influential stakeholders (Deegan et al. 2002, Islam and Deegan 2010). For instance, Islam and Deegan (2010) claimed that organizations tend to distance themselves from suppliers who are proved to be violators of community social and environmental expectations. Interestingly, the same view is supported in environmental disclosure literature (see, for instance, Moneva and Llena, 2000).

However, prior literature is scarce on studies addressing the stakeholders' pressures influence on managers decision to implement CSR practices, with few past empirical studies reported a significant positive association between stakeholders' pressures and the adoption of

¹ Stakeholders refer to "any group or individual who can affect or is affected by the achievement of the organisation's objectives" (Freeman,1984,p.46)

² Three methods for managers to legitimate their organisations are identified in the literature (de Villiers and Van Staden 2006, p.765): "adapt outputs, goals, methods; communicate in order to change societal expectations, and/or communicate in order to identify with symbols, values or institutions with legitimacy". Notably, the last two methods refer to disclosure of environmental/social information to stakeholders, while the first method implies implementation of managerial practices.

environmental and social responsibility practices (see, Doran and Ryan 2012, Pondeville et al., 2013). This is consistent with the findings reported in past studies, indicating an increasing tendency by stakeholders to access organizational environmental and social information to exert some influence on SMEs' decision to adopt CSR practices (Fassin, 2009; Zhu et al., 2012).). In particular, suppliers and customers as stakeholders play significant roles in the sustainability of an enterprise For example, buyers increasingly focus on the CSR practices of SMEs (Baden et al., 2009). Similar to large firms, SMEs appear to be pressurized often by customers and suppliers and thus direct their CSR responses to these stakeholders. However, unlike large firms, SMEs appear to largely heed to the government (Pastranaa and Sriramesh, 2013) and pay less attention to shareholders and employees. This is consistent with Lee et al. (2016), who suggested in their literature review that, compared with large corporations, SMEs perceive themselves as mainly responsible to a few and/or different stakeholders rather than several of them and to the local community rather than the overall society.

Interestingly, CSR literature is said to be scarce on empirical studies investigating how stakeholders' pressures could influence the relationship between CSR antecedents and CSR practices in SMEs (Helmig et al., 2016; Adebanjo et al., 2016). Previous empirical studies, in CSR literature, have focused on a stakeholder approach in examining CSR in SMEs across the world³. However, these studies are said to have fallen within the scope of descriptive stakeholder theory⁴, which called for more empirical studies to consider investigating how stakeholders pressures could influence management's tendency to implement relevant environmental and social managerial practices (Guenther et al., 2016; Abdel-Maksoud et al., 2020). Accordingly, in our study, we address this gap in literature and investigate whether stakeholders' pressures could moderate the relationship between CSR antecedents and CSR practices in SMEs. By testing for moderation, we investigate whether the hypothesized direct positive relationship between level of importance SMEs place on CSR antecedents and the extent of their involvement in CSR practices (i.e. H1) changes as a function of stakeholders' pressures. The third hypothesis posed is:

³ For more details, the reader can refer to: Longo et al. (2005) in Italy; Abreu et al., (2005) in Portugal; Uhlaner et al., (2004) in Spain; and Jamali (2008) in Lebanon and Syria.

⁴ Descriptive stakeholder theory 'seeks to outline participants' views of what the business organization is doing visa-vis its stakeholders, as well as the mechanisms through which different views come into being (Brickson, 2007)' (Jamali, 2008, p. 219).

H3: Stakeholders pressures moderates the relationship between CSR antecedents and CSR practices within SMEs.

Moderating role of business uncertainty

An important factor for the performance of SMEs is the role of perceived business uncertainty (Sturdy et al., 2013; Lee and Klassen, 2015; Kim and Chai, 2016). The latter is defined as the perceived risk of the general business environment (Lee and Klassen, 2015) or the effects of imprecise predictions about environmental change on normal operational efficiency of the organization (Martin-Tapia et al., 2008, p. 60).

Several past studies have suggested that perceived business uncertainty attributes impact both the adoption of environmental practices and firm's performance (Lo, 2013; Cormier & Magnan, 2015; Vachon and Hajmohammad, 2016). The present study contends that perceived business uncertainty constitutes a variable that could be used as a confounding factor in the hypothesized modelling framework, which could absorb a significant part of the variation in the relationships between CSR antecedents and practices and organizational performance. The majority of the studies that explored perceived business uncertainty concluded that it hinders a firm's performance, regardless of whether the firm is large or an SME. However, a few recent studies have suggested that such a conclusion may be less straightforward (Lee and Klassen, 2015).

An evidence might be found in the literature of a direct and positive association between business uncertainty (i.e., technological) and strategic performance in the specific context of green supply chains (Wu, 2013). For instance, a high level of perceived business uncertainty is characterized by the rapid technological progress, the rise of many new products, and the increasing technical complexity of product development within an industry (Land et al., 2012). Meanwhile, business uncertainty, in terms of demand, is said to attenuate the positive effect of supply chain integration on delivery performance (Boon-itt and Wong, 2011; Wu, 2013) and also favor particular types of environmental initiatives (Lo, 2013; Vachon and Hajmohammad, 2016) and environmental information disclosure (Cormier & Magnan, 2015). Similarly, industry-related uncertainty reduces the effectiveness of operations management practices (i.e., reverse supply chain) (Kocabasoglu et al., 2007), while technological uncertainty has a bearing on customer delivery performance (Boon-itt and Wong, 2010; Vachon and Klassen, 2002). More

closely to CSR, Wu (2013) shows that demand uncertainty positively moderates the association between green supply chain and green innovation. However, no significant moderating effect was found for technological uncertainty. In the same vein, Roper and Tapinos (2016) emphasize the importance of business uncertainty in shaping firms' willingness to undertake green innovation.

Curiously, to the best of our knowledge, no previous literature has investigated whether the relationship between CSR practices and organizational performance is affected by perceived business uncertainty. The present study proposes that the outcomes generated by adopting CSR practices in SMEs may be more pertinent when business uncertainty increases. For instance, firms that proactively engage in environmental activities may be more rewarded in unstable business environment rather than in a context of stability (Martin-Tapia et al., 2008; Wu, 2013; Roper and Tapinos, 2016).

Accordingly, the following two research hypotheses are posited on the moderating role of business uncertainty on relationships between CSR antecedents and CSR practices (H4); and the CSR practices and organizational performance (H5).

H4: Perceived business uncertainty moderates the relationship between CSR antecedents and CSR practices within SMEs.

H5: Perceived business uncertainty moderates the relationship between CSR practices and organizational performance within SMEs.

Figure 1 illustrates the conceptual model.

Insert Figure 1 here

- 3. Methodology and Analysis
- 3.1. The survey

This research follows several studies on CSR in SMEs literature (Madueno et al., 2016; Lopez-Perez et al., 2017; Martinez-Conesa, 2017, Dev et al. 2018, Dev et al. 2020b) in deploying a questionnaire to offer a broad overview of the extent of CSR practices, their antecedents, and their performance outcomes. This study responds to the call by a number of scholars to examine SMEs and explore different national contexts (e.g., Jamali and Neville, 2011). Hence, investigating SMEs initiatives in the UAE extends the scope of current research to new micro and macro contexts⁵. Although CSR was initiated and fostered by Western businesses, the understanding and behaviors toward CSR depend on the institutional environment of countries across the world (Fifka and Pobizhan, 2014). For researchers, the limited CSR studies focusing on emerging countries strengthened the view that differences in geographic, political, and economic settings lead to variations in the understanding of CSR initiatives and their measurement (Griesse, 2007; Jamali and Neville, 2011; Zhu et al., 2016). The Emirate of Abu Dhabi offers an interesting context for testing our model because of its generous governmental policy that support the deployment of CSR initiatives, an increasing unpredictability in terms of market prospects, a difficult credit market conditions for SMEs, the coexistence of Western and Arabic cultures cohabiting at the micro and macro levels, and, overall, a rapid growth of the SMEs sector (Al Hadhrami, 2013; OECD 2016).

Following a literature review on CSR practices of SMEs across the world to identify the issues and challenges they face, the policies adopted, the strategies deployed, and the frameworks used to ensure superior performance, a questionnaire was designed to study the ethics, environmental and social practices, and performance of SMEs (the survey questionnaire can be found at the supplement). This study posits that environmental management can be considered as a separate dimension of CSR practices (Zhu and Zhang, 2015), and thus treats it as a distinct construct.

To ensure data relevance, the sample consisted of SME owners or managers. It was verified that they all had sufficient information about the deployment of MCS and CSR initiatives. Data were collected through a web-based questionnaire administered to a target sample of SMEs operating in various industries during June–September 2017. The sample consisted of the firms listed in the directory of the "Economic Development Authority" of Abu Dhabi.

⁵ For more details on SMEs in UAE, the reader can refer to the Supplementary Materials.

We have adopted a nonrandom purposive sampling. This technique is adequate with the newness of the study topic in the region (CSR antecedents and practices in the UAE) as well as the study purpose (i.e. assessing the diffusion of business practices and contingent factors). Overall, the final target sample consisted of 501 SMEs. The respondents were SME's owner/manager. Concretely, the introduction section of the survey indicated that respondents could tick a box if they wished to receive a summary of the results. The survey was administered through online questionnaire. To guarantee the completion of the questionnaire, respondents needed to answer every question/row in order to be able to submit their completed questionnaire.

Knowing that in the middle-east, direct contact is a preferred means of communication (Al Hadhrami, 2013), we have not only followed up by email and phone but also met respondents on site. This active strategy for collecting data led to the collection of 113 responses (22.5%). This rate is similar to relevant empirical studies in the CSR-management literature (Madueno et al., 2016; Lopez-Perez et al., 2017; Martinez-Conesa, 2017).

3.2. Variables measurement

The study variables were measured using indices consisting of multiple survey items derived from the literature review. Each item was measured using a five-point Likert scale. The items were also pretested with a few performance measurement experts and CSR professionals.

CSR antecedents

A series of items depicting CSR antecedents, such as CSR motives, CSR beliefs, and impediments to CSR were used (Banerjee et al., 2003; Williamson et al., 2006; Muller and Kolk, 2010; Lo, 2013; Zhu and Zhang, 2015; Jean et al., 2016; Dey et al., 2018). Further, antecedents of environmental practices and those of the other CSR practices (social, ethical, and charity) were distinguished. Respondents were asked to assess the importance of CSR motives, CSR beliefs, and impediments to CSR in their organization. Their response was expressed on a Likert scale ranging from 1: "very low" to 5: "very high".

CSR practices

The literature identifies numerous types of CSR practices as important in SMEs. Measurement items were chosen based on a careful literature review (Martinez-Coneza et al., 2017; Dey et al., 2018; Crifo et al., 2014). We followed Dey et al. (2018) and classified CSR practices into two

categories: nonenvironmental CSR and environmental CSR. The select items have the merit of summarizing the long list of CSR initiatives described in the extant literature while reflecting the range of SMEs' initiatives in reality. Interestingly, this study is distinguished by considering both 'initiatives' (actions) and 'management control tools' to measure overall CSR practices. It is admitted in the management control literature that the assessment of organizational practices should cover the use of "management control tools', without which organizational initiatives can hardly be activated (Kaplan and Norton, 1996). Overall, we used 2 categories and 17 items to measure 'nonenvironmental CSR practices' (9 items for 'nonenvironmental CSR initiatives', and 8 items for 'nonenvironmental CSR practices' (7 items for 'environmental initiatives/usage', and 8 items for 'environmental management control tools').

Respondents were asked to assess how far their organizations were involved with CSR practices; their response was expressed on a Likert scale ranging from 1: "very low involvement" to 5: "very high involvement."

Organizational performance

For experts on performance measurement (e.g., Kirby, 2005; Neely, 2007; Richard et al, 2009), the construct of *organizational performance* is neither being accurately defined nor did the studies use consistent measures (Neely, 2007). Therefore, seminal studies in management control (Kaplan & Norton, 1996), operation management (Neely, 2007), and management sciences (Kirby, 2005) were followed in the study and a multidimensional construct was used to measure the SMEs' organizational performance. The construct included 16 items classified into five categories: financial, operational, market, learning, and network performance. The aim was to represent SMEs' performance without neglecting dimensions that might be affected by CSR initiatives. Respondents were asked to assess their organization's performance on these 16 items. A Likert scale was used (ranging from 1: "very poor" to 5: "very high"). Although the selected items are derived from extant literature (Aragón-Correa et al., 2008; Gelbmann, 2010; Tang and Tang, 2012; Lee et al., 2015; Singh et al., 2016), the present study underlines that perhaps this is the most comprehensive list of items used to measure performance in the field of CSR. The breakdown of performance into the five categories is also a first in the current literature.

Moderators

Business Uncertainty

Following several authors (Parnell et al., 2000; Wu, 2013; Roper and Tapinos, 2016), a set of questions was used to measure strategic uncertainties; respondents were asked about their perceptions on five areas of uncertainty: suppliers, customers, workforce, technology, and the financing. The present study posits that organizational strategies and actions are mainly a response to key perceived uncertainties about strategic factors (Parnell et al., 2000; McMullen and Shepherd, 2006; Wu, 2013).

Stakeholders' pressures

Respondents were asked to indicate whether pressures to consider CSR originate from literature-based classes of stakeholders. Consistent with the extant literature, nine classes of stakeholders were retained (Doran and Ryan 2012, Balzarova and Castka, 2012; Pondeville et al., 2013; Dey et al., 2018). Respondents were asked to rate the importance of these stakeholders on a scale of 1 "very low" to 5 "very high."

Exploratory factor analysis (EFA) has been adopted to reduce the dimensionality of the data to a few representative subfactors, and therefore summarize the multivariate information in a simpler form for subsequent submission to structural equation modelling (SEM) analysis. All EFA analyses were conducted using statistical package SPSS 21.0 (IBM Corp. Released, 2012).

A detailed description of all the observed items that build constructs and subconstructs used in the research analysis is provided in the Appendix, along with corresponding descriptive statistics. We also include the percentage of variance explained by the corresponding subconstructs as given by EFA as well as the Cronbach's alpha values, for evaluating the validity and reliability of the questionnaire.

Details of items included in each construct are provided in Table A in the Appendix.

3.2 Descriptive Statistics for Control variables and testing for non-response bias

The sample for the current survey consisted of 117 small-and-medium sized enterprises located in the UAE. Four main controls were – based on existing literature – included: industry type, size

of workforce, annual sales growth and values, organization type (e.g. Pondeville et al., 2013; Madueno et al., 2016; Reverte et al., 2016).

Descriptive statistics for the collected sample of SMEs as regards their basic characteristics is presented in Table 1. The sample covers firms from various industries and of different sizes.

Insert Table 1 here

The results from the Mann-Whitney U test for non-response bias on the basic control variables described in Section 3.1 are presented in Table 2. They indicate the absence of non-response bias in the collected data, since the p-value for the four selected items does not reject the null hypothesis that the distributions of the latter items are similar for the first 24% and the last 24% of the sample of SMEs, at the 5% significance level (p-value>0.05).

Insert Table 2 here

3.3 SEM modeling

This study adopts a SEM modelling (Bollen, 1989) to investigate the hypotheses posed in subsection 2.2 and the validity of the corresponding conceptual model (see Figure 1). Such a methodology allows for explanations of the possible causal relationships derived from the conceptual model and simultaneous analysis of the relationships of different proxies on the dependent measure(s). In contrast to a typical regression modeling approach, the distinctive feature of the SEM is that the dependent and independent variable(s) can be either observed or latent and that complex interrelations between the independent variables can be also imposed.

The fitted SEM model using the data of the SMEs in the UAE was estimated through AMOS software program (Arbuckle, 2006). Generalized least squares method was suitable for the nature of the collected data, which is dichotomous and derived from Likert-scale answers. The collected data were fitted via the SEM model, as described in Figure 1. To indicate the relative strength of the statistical associations between the latent and observed items of the hypothesized SEM

model, the standardized path coefficients that are constrained to the [-1, 1] interval are presented, with values close to 1, indicating a high positive causal effect and values close to -1, indicating a high negative causal effect.

Finally, we examine the validity of moderation hypotheses H3–H5, by testing the significant effects of the interaction between the moderator and the independent variable (see Baron and Kenny, 1986). Moderation tests have been performed with the AMOS software using the latter to compute separate confidence intervals for each moderating effect of interest.

4. Results

The SEM is fitted to the data to examine the validity of research hypotheses. The validity of the fitted SEM model was initially examined through the inspection of the goodness-of-fit statistics. As presented in Table 3, the results show that the fit of the SEM model is adequate.

Insert Table 3 here

Figure 2 presents the estimates of the standardized path regression coefficients measuring the significance and magnitude of the hypothesized associations between the latent constructs of interest. Dashed lines in the diagram indicate that the specific connection is not statistically significant.

Insert Figure 2 here

Figure 2 shows that SMEs' CSR antecedents factor is highly positively associated with CSR practices (beta coefficient = 0.851, p-value < 0.001), thus verifying H1. Similarly, it is also evident that the latent factor of CSR practices positively influences the organizational performance (beta coefficient = 0.983, p-value < 0.001), hence H2 is also fully verified. With regard to the remaining associations of the fitted structure to the data, it is seen that Business Uncertainty affects negatively the organizational performance of SMEs (beta coefficient = -0.246, p-value < 0.1) at the 10% level of statistical significance, whereas Stakeholders

Pressures and Business Uncertainty moderately positively affect the CSR antecedents factor (beta coefficient = 0.166 and 0.123, respectively). No associations were observed between Stakeholders Pressures and Business Uncertainty with CSR Practices.

Table 4 provides the results of the fitted model. In particular, Table 4 shows the standardized path coefficients for all constructs and related subconstructs included in the fitted model.

Insert Table 4 here

According to these results, the highest contribution to the latent construct of organizational performance is through its corresponding subconstructs, Learning and Operational performance (beta coefficient = 0.887 and 0.883, respectively), whereas less contribution is because of the observed item of "Financial performance" (beta coefficient = 0.572). As regards Business uncertainty, the item of "Uncertainty of access to financing" is seen as the least important item for the construction of the factor of Business uncertainty (beta coefficient = 0.358). Finally, the item of "Management control tools" is the least contributing item on the "Non-Environmental CSR practices" factor.

Next, the moderating effects of stakeholders' pressures and business uncertainty were analyzed and calculated through the moderation testing (Baron and Kenny, 1986). Table 5 presents the corresponding results. Essentially, the three moderation effects in the SEM model are tested by the introduction of the additional association of interaction between each pair of independent and moderator items and the dependent item, being evaluated as significant or non-significant depending on the statistical significance of the corresponding standardized estimated coefficient (see Table 5).

Insert Table 5 here

The obtained moderation test results indicate that hypothesis for the moderation of stakeholders pressures on the relation between CSR antecedents and CSR practices (H3) is not verified (β =

0.005; p-value > 0.1). However, there is evidence for a significant positive moderation effect of Business Uncertainty on the association between CSR antecedents and CSR practices in SMEs ($\beta = 0.512$; p-value < 0.05), verifying the research hypothesis H4, while a partial verification holds for the H5 hypothesis regarding the moderation effect of Business Uncertainty on the association between CSR practices and organizational performance ($\beta = 0.28$; p-value < 0.1).

5. Discussion

In the present study, two relations were empirically analyzed between CSR antecedents and CSR practices, and between the CSR practices and SMEs' performance. In addition, the confounding roles of stakeholders' pressures and business uncertainty in the previous associations were investigated. Data collected from 117 SMEs in the Emirate of Abu Dhabi, UAE, were used for the purpose of analysis. Based on the results of the SEM empirical model presented earlier, the study aimed at testing if the research hypotheses H1–H5 of section 2.2 are verified by the analysis results of the collected SMEs' data.

To start with, the results fully verified research hypothesis H1 that poses the positive effect of CSR antecedents on SME CSR practices (H1: β = 0.851). The positive and statistically significant associations of CSR practices with the antecedents, which have been observed in the present study, are adding to some previous works and verify their findings (e.g., Muller and Kolk, 2010; Zhu et al., 2016). In particular, the study results showed that for the case of the SEM fitted model (Table 4), CSR Motives and Beliefs translate indeed to CSR practices in SMEs. Moreover, the impediments are negligible as contributors of the antecedents' factors, which implies that there is no other cause that could reduce or stop CSR practices from being implemented in SMEs in UAE than the specific factors examined in this study. Our findings are partly in agreement with some studies on SMEs , highlighting the need to consider the extensive role of personal values and ethics of SMEs' managers and owners in the diffusion of CSR practices (see, e.g., Lee et al., 2015; Grimstad et al., 2020).

Regarding the research hypothesis H2, the findings point toward the high positive effect of CSR practices on organizational performance (comprising the aspects of financial, operational, market, learning, and network performance; hypothesis H2: $\beta = 0.983$). The results are in

accordance with a growing body of research, which suggests that SMEs may improve their organizational performance through CSR practices (e.g., Tang and Tang, 2012; Madueno et al., 2016). Interestingly, the present study reveals a more significant positive effect than demonstrated by the extant research conducted in developing countries. The underlying reasons could be attributed to legislation requirements or other external pressures (Lawrence et al., 2006; Lee et al., 2015) or voluntary efforts by SMEs to increase their market opportunities (e.g., Masurel, 2007).

However, this finding is contradicting those of several studies on SME which find that managers do not perceive CSR practices as positively influencing their performance (Tang and Tang, 2012; Gadenne et al., 2009). In addition, this study suggests that this strong positive association may be also attributed to specific country characteristics, such as the emerging UAE infrastructure or the recently adopted international social and environmental targets on standards that UAE SMEs should conform to.

The most important subconstruct for nonenvironmental CSR practices is 'Actions and initiatives' in comparison to 'Management control tool' highlighting that SMEs emphasize more on the implementation of CSR initiatives and on infrastructure than on control. On the other hand, UAE SMEs give equal weight to both subconstructs of environmental CSR practices, that is, 'Management control tools' and 'Usage' (See Table 4). Finally, observing the subconstructs of the SMEs organizational performance factor, it is obvious that most emphasis is given on the aspects of 'operational' and 'learning' performance. This indicates that SMEs in UAE should focus on improving these aspects of organizational performance to enhance their overall performance.

The model testing also revealed a negative direct effect of Business Uncertainty on Organizational Performance, since the outcome of our analysis showed a negative coefficient (beta coefficient = -0.246). This finding of a negative effect of business uncertainty on SME performance is consistent with a few research findings (e.g., Schmid and Kotulla, 2011; Helm and Gritsch, 2014). With regard to the subconstructs of uncertainty and their effects on the overall Uncertainty factor, the fitted model showed that the uncertainty regarding access to finance is the less important factor for UAE SMEs, which is unsurprising because of the good and steady progress of UAE key banking indicators and lending market (refer to Table 4). On the

other hand, uncertainties associated with business technology and workforce recruiting appeared to have a higher impact on SMEs. This reflects empirical observations that hiring employees is a key HR challenge in the UAE due to the unclear role played by recruitment agencies and a high turnover rate (Hays' 2017 Report, "The DNA of an HR Leader").

Next, considering hypothesis H3, the study results tend to reject the hypothesis of the effect of stakeholders' pressures (considered as a moderator) on the positive association between CSR antecedents and CSR practices of SMEs. Indeed, the results based on the moderation test showed nonsignificant effects (Table 5). In other words, the direct positive association between CSR antecedents and CSR practices, verified in H1 above, is not influenced by stakeholders' pressure. We recall here that only a few empirical studies investigated how stakeholders' pressures could influence the relationship between CSR antecedents and CSR practices in SMEs (Helmig et al., 2016; Adebanjo et al., 2016). Our finding regarding H3 differs from those studies in showing a non-significant effect played by stakeholders pressures. This finding could implicate the need for further emphasis - by policy makers in Abu Dhabi - on implementation of CSR practices in SMEs operating in the Emirate. Further empirical studies will definitely help in recognising various ways stakeholders' pressure could influence SMEs management's tendency to implement such practices - for instance imposing more voluntary or compulsory regulations.

Regarding H4, a positive statistical significant effect of the moderator of business uncertainty on the relation between CSR antecedents and CSR practices was derived from the moderation test for indirect effects (H4: β = 0.512; p-value < 0.05). These results confirm and extend the findings of Lo (2013) and Vachon and Hajmohammad (2016), who have found that business uncertainty positively affects particular types of environmental practices. We extend those findings to nonenvironmental (social and ethical) CSR practices as well.

Finally, the research hypothesis H5 cannot be rejected because business uncertainty was found to be a statistically significant moderator of the association between CSR practices and organizational performance in UAE SMEs (H5: $\beta = 0.28$; p-value < 0.1). Interestingly, even in the context of an uncertain environment, CSR practices by SMEs can provide performance outcomes. We argue that in an uncertain environment, socially and environmentally proactive firms may have a better chance of detecting and mitigating problems,

that would have been either hidden or less relevant in a stable business environment (Martin-Tapia et al., 2008).

6. Conclusion

The research investigates empirically the concurrent effect of CSR antecedents on CSR practices and that of CSR practices on organizational performance of SMEs in an emerging economy, the Emirate of Abu Dhabi. The study contributes further and investigates the influence that two key variables, namely stakeholders' pressures and business uncertainties, could excerpt, as moderators, on such relationships.

The findings provide empirical evidence on positive relationships between CSR antecedents and CSR practices, on the one hand, and CSR practices and SMEs performance, on the other. Interestingly, business uncertainty is proved to positively moderate both the relationship between CSR practices and SMEs' performance in UAE and the relationship between CSR antecedents and CSR practices. At the opposite, stakeholders' pressures do not affect the association between CSR antecedents and CSR practices.

The study findings contribute significantly to both literature and practice. The contributions made by the study to literature are fivefold: first, the simultaneous investigation of the relationship between CSR and its antecedents (Banerjee et al., 2003) and the relationship between CSR and firm's performance (Lai et al., 2010) has allowed an integrative analysis not considered hitherto in the literature. The study findings provide conclusive empirical evidence that CSR attitudes and beliefs (i.e., antecedents) translate to responsible behaviours (CSR practices) (Grimstad et al., 2020) which in turn, translate to multiple positive performance outcomes.

Second, the study provides empirical evidence of the influence that business uncertainty exerts, as a moderator, on the relationship between CSR practices and SMEs performance. The relationships of the tryptic of "CSR antecedents-CSR practices-organizational performance" were found to be contingent on the extent of Business Uncertainty faced by the SMEs.

Third, the study is distinguished by developing a valid and reliable scale for measuring each of CSR practices and organizational performance; in that: (1) the construct of CSR practices integrates both CSR initiatives and CSR management control tools, and (2) the construct of

organizational performance is multidimensional encompassing financial, operational, market, learning, and network facets. By considering all the multiple facets of performance, this study has clarified how CSR practices contribute to alleviate the overall performance of a firm.

Fourth, this paper has shown that the study of CSR practices in nontraditional contexts such as in SMEs in emerging economies, (e.g., UAE), may call for reconsidering the conclusions of the extant literature with less certainty. In Abu Dhabi, a rich oil and gas Emirate, the study shows that SMEs succeed in deriving substantial performance outcomes from deploying CSR practices. It is known that SMEs in the UAE have much higher gross margin than in many developed countries. This is due to adopting high selling prices while incurring cheap labor costs and almost no taxes. Therefore, the investments costs in CSR appear to be absorbed by the high premiums of products and services. This high premium charged by SMEs can also explain why even under high business uncertainty, SMEs continue to get benefit from investing in CSR. Another characteristic of the Emirate of Abu Dhabi is that the ownership and top management of SMEs is frequently reserved to local Emirati investors. Emirati investors are often guided by Islamic values that cherish charity, morality and environment preservation (Williams and Zinkin, 2010). This could explain the importance of the motives for CSR compared to the impediments to CSR.

Fifth, this study contributes to both contingency research and stakeholders theory. By considering the roles played by business uncertainty in conjunction with stakeholders' pressures, this study showed that CSR research adopting stakeholders theory may gain from combining their theoretical approach with a contingency perspective. No previous study has concurrently examined their effects in the CSR literature.

The study findings also provide practical implications, which are expected to enhance the awareness among SMEs' managers and government officials regarding the importance of considering business uncertainty in shaping CSR practices and organizational performance. This finding shall also contribute to the practice, particularly in emphasizing the paths through which CSR beliefs and motives as well as CSR initiatives and management control translate to performance improvements. Moreover, studying CSR antecedents (motives and impediments) is essential for policymakers should they aim to foster the diffusion of CSR

practices (Grimstad et al., 2020). If motives for CSR dominate its impediments, then policymakers should implement institutional reforms that focus on further improving the positive perceptions of leaders towards CSR rather than addressing barriers to CSR. At the opposite, if leaders perceive that impediments to CSR bypass its motives, then policymakers should be cautious in providing further economic support and instead focus on addressing operational difficulties encountered by SMEs.

Although the findings of the study are relevant for SMEs in the UAE only, the method for studying correlation among CSR antecedents, CSR practices, business uncertainties, external pressures, and organizational performances are applicable for any region and country. Therefore, this could be adopted anywhere across the globe to adopt CSR practices and objectively determining its impact in order to enhance organizational performance.

This study has its limitations. First, it was conducted on SMEs; hence, any generalization to large organizations should be made with caution. Second, the study findings are limited by the research design (variables and sample); hence, it is suggested that further research should adopt a disparate research design, with the inclusion of other stakeholders' perspectives in data collection. This could also entail the use of objective secondary data to capture firms' performance. Future studies could consider how stakeholders' pressures in UAE could exert an influence on firms' tendency to evolve CSR practices. This could have practical implications in the UAE context, given the ongoing changing global geopolitical settings. Further, investigating reciprocal associations between UAE SMEs' performance and the influence of salient stakeholders' pressures is another area for future research; which implies behavioural consequences (Abdel-Maksoud et al., 2020). Another relevant area is to investigate how CSR disclosure in annual reports could contribute to attenuating the effect of business uncertainty. This is expected to enrich both practice and literature in UAE. Furthermore, this study can provide a basis for comparative research in other Gulf countries, given the UAE's leading role as a multicultural, regional SMEs' hub.

References

Abdel-Maksoud, A., Jabbour, M. and Abdel-Kader, M. (2020). Stakeholder pressure, eco-control systems, and firms' performance: empirical evidence from UK manufacturers, Accounting Forum, Available online 7th October.

Abreu, R., F. David and D. Crowther (2005). 'Corporate Social Responsibility in Portugal Empirical Evidence of Corporate Behavior', Corporate Governance 5(5), 3–18.

Adebanjo, D., Teh, P. L., & Ahmed, P. K. (2016). The impact of external pressure and sustainable management practices on manufacturing performance and environmental outcomes. *International Journal of Operations & Production Management*.

Aguinis, H., & Glavas, A. (2012). What we know and don't know about corporate social responsibility: A review and research agenda. *Journal of management*, 38(4), 932-968.

Albertini, E. (2013). Does environmental management improve financial performance? A meta-analysis review. Organization and Environment, 26(4), 431–457. doi:10.1177/1086026613510301.

Alhadhrami, A. Z. M. B. (2013). *UAE work environment examining the influences of culture, gender and sector on managerial leadership competencies, job satisfaction and organizational commitment* (Doctoral dissertation, Curtin University).

Ambec, S and Lanoie P, (2008). Does it pay to be green? A systematic overview. *Academy of Management Perspectives*, 22(4), 45-62.

Aragón-Correa, J. A., Hurtado-Torres, N., Sharma, S., & García-Morales, V. J. (2008). Environmental strategy and performance in small firms: A resource-based perspective. Journal of Environmental Management, 86(1), 88–103. doi:10.1016/j.jenvman.2006.11.022.

Arbuckle, J. (2006). Amos 7.0 user's guide. Marketing Division, SPSS Incorporated.

Arend, R. J. (2014). Social and environmental performance at SMEs: Considering motivations, capabilities, and instrumentalism. Journal of Business Ethics, 125(4), 541–561. doi:10.1007/s10551-013-1934-5.

Baden, D. A., Harwood, I. A., & Woodward, D. G. (2009). The effect of buyer pressure on suppliers in SMEs to demonstrate CSR practices: An added incentive or counter-productive? European Management Journal, 27(6), 429–441. doi:10.1016/j.emj.2008.10.004.

Balzarova, M. A., & Castka, P. (2012). Stakeholders' influence and contribution to social standards development: The case of multiple stakeholder approach to ISO 26000 Development ISO 26000. Journal of Business Ethics, 111(2), 265–279. doi:10.1007/s10551-012-1206-9.

Banerjee, S. B., Iyer, E. S., & Kashyap, R. K. (2003). Corporate environmentalism: Antecedents and influence of industry type. Journal of Marketing, 67(2), 106–122. doi:10.1509/jmkg.67.2.106.18604.

Barnett, M. L., & Salomon, R. M. (2006). Beyond dichotomy: The curvilinear relationship between social responsibility and financial performance. *Strategic management journal*, *27*(11), 1101-1122.

Baron, R.M. & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations." Journal of personality and social psychology, 51(6), 1173.

Battaglia, M., Testa, F., Bianchi, L., Iraldo, F., & Frey, M. (2014). Corporate social responsibility and competitiveness within SMEs of the fashion industry: Evidence from Italy and France. *Sustainability*, 6(2), 872-893.

Bhatia, A. (2012). The corporate social responsibility report: The hybridization of a "confused" genre (2007–2011). IEEE Transactions on Professional Communication, 55(3), 221–238. doi:10.1109/TPC.2012.2205732.

Biondi, V., Iraldo, F., & Meredith, S. (2002). Achieving sustainability through environmental innovation: the role of SMEs. *International Journal of Technology Management*, 24(5-6), 612-626.

Bollen, K. A. (1989). A new incremental fit index for general structural equation models. *Sociological Methods & Research*, 17(3), 303-316.

Boon-itt, S., & Wong, C. Y. (2011). The moderating effects of technological and demand uncertainties on the relationship between supply chain integration and customer delivery performance. International Journal of Physical Distribution & Logistics Management, 41(3), 253–276.

Brickson, S. (2007). Organizational Identity Orientation: The Genesis of the Role of the Firm and Distinct Forms of Social Value. Academy of Management Review 32(3), 864–888.

Castka, P., Balzarova, M. A., Bamber, C. J., & Sharp, J. M. (2004). How can SMEs effectively implement the CSR agenda? A UK case study perspective. *Corporate Social Responsibility and Environmental Management*, 11(3), 140-149.

CEC (2006). Implementing the Partnership for Growth and Jobs: Making Europe a Pole of Excellence on CSR (Commission of the European Communities, Brussels, Belgium).

Cegarra-Navarro, J. G., Reverte, C., Gómez-Melero, E., & Wensley, A. K. P. (2016). Linking social and economic responsibilities with financial performance: The role of innovation. European Management Journal, 34(5), 530–539. doi:10.1016/j.emj.2016.02.006.

- Ciliberti, F., Pontrandolfo, P., & Scozzi, B. (2008). Investigating corporate social responsibility in supply chains: a SME perspective. *Journal of cleaner production*, *16*(15), 1579-1588.
- Crifo, P., Diaye, M. A., & Pekovic, S. (2016). CSR related management practices and firm performance: An empirical analysis of the quantity–quality trade-off on French data. *International Journal of Production Economics*, 171, 405-416.
- de Villiers, C., & van Staden, C. (2010). Shareholders' requirements for corporate environmental disclosures: A cross country comparison. The British Accounting Review, 42(4), 227–240.
- Deegan, C., Rankin, M., & Tobin, J. (2002). An examination of the corporate social and environmental disclosures of BHP from 1983-1997: A test of legitimacy theory. Accounting, Auditing & Accountability Journal, 15(3), 312–343
- Dey, P. K., Petridis, N. E., Petridis, K., Malesios, C., Nixon, J. D., & Ghosh, S. K. (2018). Environmental management and corporate social responsibility practices of small and medium-sized enterprises. *Journal of cleaner production*, 195, 687-702.
- Dey, P. K., Malesios, C., Abdelaziz, F. B, Chowdhury, S., De, D., (2020a). The impact of lean management practices and sustainable oriented innovation on sustainability performance of small and medium sized enterprises: Empirical evidence from the UK, *British Journal Management*, Vol 31, 141 161.
- Dey, P. K., Malesios, C., De, D., Budhwar, P. S. Chowdhury, S., Cheffi, W., (2020b). Circular economy in small and medium sized enterprises: An empirical study in the UK, Business Strategy and the Environment, https://doi.org/10.1002/bse.2492
- Doran, J., & Ryan, G. (2012). Regulation and firm perception, eco-innovation and firm performance. European Journal of Innovation Management, 15(4), 421–441. doi:10.1108/14601061211272367.
- Duarte, F. (2010). Working with corporate social responsibility in Brazilian companies: The role of managers' values in the maintenance of CSR cultures. *Journal of Business ethics*, 96(3), 355-368.
- Farooq, O., Rupp, D. E., & Farooq, M. (2017). The multiple pathways through which internal and external corporate social responsibility influence organizational identification and multifoci outcomes: The moderating role of cultural and social orientations. Academy of Management Journal, 60(3), 954–985. doi:10.5465/amj.2014.0849.
- Fassin, Y. (2008). SMEs and the fallacy of formalising CSR. Business Ethics: a European Review, 17(4), 364–378. doi:10.1111/j.1467-8608.2008.00540.x.
- Fassin, Y. (2009). The stakeholder model refined. Journal of Business Ethics, 84(1), 113–135. doi:10.1007/s10551-008-9677-4.

Fifka, M. S., & Pobizhan, M. (2014). An institutional approach to corporate social responsibility in Russia. Journal of Cleaner Production, 82, 192–201. doi:10.1016/j.jclepro.2014.06.091.

Flammer, C. (2015). Does corporate social responsibility lead to superior financial performance? A regression discontinuity approach. *Management Science*, 61(11), 2549-2568.

Gadenne, D. L., Kennedy, J., & McKeiver, C. (2009). An empirical study of environmental awareness and practices in SMEs. *Journal of Business Ethics*, 84(1), 45-63.

Gelbmann, U. (2010). Establishing strategic CSR in SMEs: An Austrian CSR quality seal to substantiate the strategic CSR performance. *Sustainable Development*, 18(2), 90-98.

Gelderman, C. J., Semeijn, J., & Mertschuweit, P. P. (2016). The impact of social capital and technological uncertainty on strategic performance: The supplier perspective. Journal of Purchasing and Supply Management, 22(3), 225–234. doi:10.1016/j.pursup.2016.05.004.

Gond, J. P., El Akremi, A., Swaen, V., & Babu, N. (2017). The psychological microfoundations of corporate social responsibility: A person-centric systematic review. Journal of Organizational Behavior, 38(2), 225–246. doi:10.1002/job.2170.

Govindan, K., Kilic, M., Uyar, A., & Karaman, A. S. (2021). Drivers and value-relevance of CSR performance in the logistics sector: A cross-country firm-level investigation. *International Journal of Production Economics*, 231, 107835.

Graafland, J., Van de Ven, B., & Stoffele, N. (2003). Strategies and instruments for organising CSR by small and large businesses in the Netherlands. *Journal of Business Ethics*, 47(1), 45-60.

Griesse, M. A. (2007). The geographic, political, and economic context for corporate social responsibility in Brazil. Journal of Business Ethics, 73(1), 21–37. doi:10.1007/s10551-006-9194-2.

Guenther, E., Endrikat, J., and Guenther, T.W. (2016). Environmental management control systems: A conceptualization and review of empirical evidence. Journal of Cleaner Production, 136, 147–171.

Helm, R., & Gritsch, S. (2014). Examining the influence of uncertainty on marketing mix strategy elements in emerging business to business export-markets. International Business Review, 23(2), 418–428. doi:10.1016/j.ibusrev.2013.06.007.

Helmig, B., Spraul, K., & Ingenhoff, D. (2016). Under positive pressure: How stakeholder pressure affects corporate social responsibility implementation. Business and Society, 55(2), 151–187. doi:10.1177/0007650313477841.

Hemingway, C. A., & Maclagan, P. W. (2004). Managers' personal values as drivers of corporate social responsibility. *Journal of business ethics*, 50(1), 33-44.

Henri, J., & Journeault, M. (2010). Eco-Control: The influence of management control systems on environmental and economic performance. Accounting, Organizations and Society, 35(1), 63–80. doi:10.1016/j.aos.2009.02.001.

Henriques, I., & Sadorsky, P. (1996). The determinants of an environmentally responsive firm: An empirical approach. Journal of Environmental Economics and StoManagement, 30(3), 381–395

Hou, T. C. T. (2019). The relationship between corporate social responsibility and sustainable financial performance: Firm-level evidence from Taiwan. *Corporate Social Responsibility and Environmental Management*, 26(1), 19-28.

IBM Corp. Released 2012. IBM SPSS Statistics for Windows, Version 21.0. Armonk, NY: IBM Corp.

Islam, M. A., & Deegan, C. (2010). Media pressures and corporate disclosure of social responsibility performance information: A study of two global clothing and sports retail companies. Accounting and Business Research, 40(2), 131–148. doi:10.1080/00014788.2010.9663388.

Jamali, D. (2008). A Stakeholder Approach to Corporate Social Responsibility: A Fresh Perspective into Theory and Practice, Journal of Business Ethics (2008) 82:213–231

Jamali, D., & Neville, B. (2011). Convergence versus divergence of CSR in developing countries: An embedded multi-layered institutional lens. Journal of Business Ethics, 102(4), 599–621. doi:10.1007/s10551-011-0830-0.

Jean, R. J. B., Wang, Z., Zhao, X., & Sinkovics, R. R. (2016). Drivers and customer satisfaction outcomes of CSR in supply chains in different institutional contexts: A comparison between China and Taiwan. International Marketing Review, 33(4), 514–529. doi:10.1108/IMR-04-2014-0115.

Jenkins, H. (2004). A critique of conventional CSR theory: An SME perspective. *Journal of general Management*, 29(4), 37-57.

Kaplan, R. S., & Norton, D. P. (1996). Using the balanced scorecard as a strategic management system.

Kirby, J. (2005). Toward a theory of high performance. *Harvard business review*, 83(7), 30-9.

Kocabasoglu, C., Prahinski, C., & Klassen, R. D. (2007). Linking forward and reverse supply chain investments: The role of business uncertainty. Journal of Operations Management, 25(6), 1141–1160. doi:10.1016/j.jom.2007.01.015.

Kucukusta, D., Mak, A., & Chan, X. (2013). Corporate social responsibility practices in four and five-star hotels: Perspectives from Hong Kong visitors. International Journal of Hospitality Management, 34, 19–30. doi:10.1016/j.ijhm.2013.01.010.

Lai, C.-S., Chiu, C.-J., Yang, C.-F., & Pai, D.-C. (2010). The effects of corporate social responsibility on brand performance: The mediating effect of industrial brand equity and corporate reputation. Journal of Business Ethics, 95(3), 457–469. doi:10.1007/s10551-010-0433-1.

Land, S., Engelen, A., & Brettel, M. (2012). Top management's social capital and learning in new product development and its interaction with external uncertainties. *Industrial Marketing Management*, 41(3), 521-530.

Lawrence, S. R., Collins, E., Pavlovich, K., & Arunachalam, M. (2006). Sustainability practices of SMEs: the case of NZ. *Business strategy and the environment*, 15(4), 242-257.

Lee, K. H., Herold, D. M., & Yu, A. L. (2015). Small and medium enterprises and corporate social responsibility practice: A Swedish perspective. Corporate Social Responsibility and Environmental Management, 23(2), 88–99. doi:10.1002/csr.1366.

Lee, M. D. P. (2008). A review of the theories of corporate social responsibility: Its evolutionary path and the road ahead. International journal of management reviews, 10(1), 53-73.

Li, Q., Luo, W., Wang, Y., & Wu, L. (2013). Firm performance, corporate ownership, and corporate social responsibility disclosure in China. Business Ethics: A European Review, 22(2), 159–173. doi:10.1111/beer.12013.

Linnenluecke, M. K., & Griffiths, A. (2013). Firms and sustainability: Mapping the intellectual origins and structure of the corporate sustainability field. *Global Environmental Change*, 23(1), 382-391.

Lo, S. M. (2013). Effects of supply chain position on the motivation and practices of firms going green. International Journal of Operations and Production Management, 34(1), 93–114. doi:10.1108/IJOPM-04-2012-0133.

Longo, M., Mura, M., & Bonoli, A. (2005). Corporate social responsibility and corporate performance: the case of Italian SMEs. *Corporate Governance: The international journal of business in society*.

López-Pérez, M. E., Melero, I., & Javier Sese, F. (2017). Management for sustainable development and its impact on firm value in the SME context: Does size matter? Business Strategy and the Environment, 26(7), 985–999. doi:10.1002/bse.1961.

Lueg, R., & Radlach, R. (2016). Managing sustainable development with management control systems: A literature review. *European Management Journal*, 34(2), 158-171.

Luo, X., & Bhattacharya, C. B. (2006). Corporate social responsibility, customer satisfaction, and market value. Journal of Marketing, 70(4), 1–18.

Madueño, J. H., Jorge, M. L., Conesa, I. M., & Martínez-Martínez, D., (2016). Relationship between corporate social responsibility and competitive performance in Spanish SMEs: Empirical evidence from a stakeholders' perspective. BRQ Business Research Quarterly, 19(1), 55–72. doi:10.1016/j.brq.2015.06.002.

Martinez-Conesa, I., Soto-Acosta, P., & Palacios-Manzano, M. (2017). Corporate social responsibility and its effect on innovation and firm performance: An empirical research in SMEs. Journal of Cleaner Production, 142, 2374–2383. doi:10.1016/j.jclepro.2016.11.038.

Martin-Tapia, I., Aragon-Correa, J. A., & Senise-Barrio, M. E. (2008). Being green and export intensity of SMEs: The moderating influence of perceived uncertainty. Ecological Economics, 68(1–2), 56–67. doi:10.1016/j.ecolecon.2008.01.032.

Masurel, E. (2007). Why SMEs invest in environmental measures: sustainability evidence from small and medium-sized printing firms. *Business Strategy and the Environment*, 16(3), 190-201.

McMullen, J. S., & Shepherd, D. A. (2006). Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. Academy of Management Review, 31(1), 132–152. doi:10.5465/amr.2006.19379628.

Moneva, J. M., & Llena, F. (2000). Environmental disclosures in the annual reports of large companies in Spain. European Accounting Review, 9(1), 7–29. doi:10.1080/096381800407923.

Muller, A., & Kolk, A. (2010). Extrinsic and intrinsic drivers of corporate social performance: Evidence from foreign and domestic firms in Mexico. Journal of Management Studies, 47(1), 1–26. doi:10.1111/j.1467-6486.2009.00855.x.

Murillo, D., & Lozano, J. M. (2006). SMEs and CSR: An approach to CSR in their own words. *Journal of business ethics*, 67(3), 227-240.

Neely, A. (Ed.). (2007). Business performance measurement: Unifying theory and integrating practice. Cambridge: Cambridge University Press.

Parnell, J. A., Lester, D. L., & Menefee, M. L. (2000). Strategy as a response to organizational uncertainty: An alternative perspective on the strategy-performance relationship. Management Decision, 38(8), 520–530. doi:10.1108/00251740010352811.

Pastrana, N. A., & Sriramesh, K. (2014). Corporate social responsibility: Perceptions and practices among SMEs in Colombia. Public Relations Review, 40(1), 14–24. doi:10.1016/j.pubrev.2013.10.002.

Perry, P., & Towers, N. (2009). Determining the antecedents for a strategy of corporate social responsibility by small-and medium-sized enterprises in the UK fashion apparel industry. *Journal of Retailing and Consumer Services*, 16(5), 377-385.

Pondeville, S., Swaen, V., & De Rongé, Y. (2013). Environmental management control systems: The role of contextual and strategic factors. Management Accounting Research, 24(4), 317–332. doi:10.1016/j.mar.2013.06.007.

Prado-Lorenzo, J. M., Gallego-Álvarez, I., García-Sánchez, I. M., & Rodríguez-Domínguez, L. (2008). Social responsibility in Spain: Practices and motivations in firms. *Management Decision*, 46(8), 1247-1271.

Raynard, P., & Forstater, M. (2002). Corporate social responsibility: Implications for small and medium enterprises in developing countries.

Revell, A., & Blackburn, R. (2007). The business case for sustainability? An examination of small firms in the UK's construction and restaurant sectors. *Business strategy and the environment*, 16(6), 404-420.

Reverte, C., Gómez-Melero, E., & Cegarra-Navarro, J. G. (2016). The influence of corporate social responsibility practices on organizational performance: Evidence from eco-responsible Spanish firms. Journal of Cleaner Production, 112, 2870–2884. doi:10.1016/j.jclepro.2015.09.128.

Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of management*, *35*(3), 718-804.

Rodgers, W., Choy, H. L., & Guiral, A. (2013). Do investors value a firm's commitment to social activities?. *Journal of business ethics*, 114(4), 607-623.

Rodrigue, M., Magnan, M., & Boulianne, E. (2013). Stakeholders' influence on environmental strategy and performance indicators: A managerial perspective. Management Accounting Research, 24(4), 301–316

Russo, A. & Perrini, F. (2010), Investigating Stakeholder Theory and Social Capital: CSR in Large Firms and SMEs, Journal of Business Ethics, 91:207–221.Vogel, D. (2005). The market for virtue. The potential and limits of corporate social responsibility. Brookings Institution Pres

Schaltegger, S., & Burritt, R. (2000). Contemporary environmental accounting. Greenleaf Publishing.

Schmid, S., & Kotulla, T. (2011). 50 years of research on international standardization and adaptation—From a systematic literature analysis to a theoretical framework. International Business Review, 20(5), 491–507. doi:10.1016/j.ibusrev.2010.09.003.

Simons, R. (2000). Performance measurement and control systems for implementing strategy. Prentice Hall.

Singh, S., Darwish, T. K., & Potočnik, K. (2016). Measuring organizational performance: A case for subjective measures. *British Journal of Management*, 27(1), 214-224.

Stefan, A., & Paul, L. (2008). Does it pay to be green? A systematic overview. Academy of Management Perspectives, 22(4), 45–62. doi:10.5465/amp.2008.35590353.

Stoian, C. and Gilman, M. (2017). Corporate social responsibility that "pays": A strategic approach to CSR for SMEs. Journal of Small Business Management, 55(1), pp.5-31.

Sturdy, A., Wylie, N., & Wright, C. (2013). Management consultancy and organizational uncertainty: The case of internal consultancy. International Studies of Management and Organization, 43(3), 58–73. doi:10.2753/IMO0020-8825430304.

Surroca, J., Tribó, J. A., & Zahra, S. A. (2013). Stakeholder pressure on MNEs and the transfer of socially irresponsible practices to subsidiaries. Academy of Management Journal, 56(2), 549–572. doi:10.5465/amj.2010.0962.

Tang, Z., & Tang, J. (2012). Stakeholder–firm power difference, stakeholders' CSR orientation, and SMEs' environmental performance in China. Journal of Business Venturing, 27(4), 436–455. doi:10.1016/j.jbusvent.2011.11.007.

Tang, Z., Hull, C. E., & Rothenberg, S. (2012). How corporate social responsibility engagement strategy moderates the CSR-financial performance relationship. Journal of Management Studies, 49(7), 1274–1303. doi:10.1111/j.1467-6486.2012.01068.x.

Torugsa, N. A., O'Donohue, W., & Hecker, R. (2012). Capabilities, proactive CSR and financial performance in SMEs: Empirical evidence from an Australian manufacturing industry sector. Journal of Business Ethics, 109(4), 483–500. doi:10.1007/s10551-011-1141-1.

Uhlaner, L., A. van Goor-Balk and E. Masurel (2004). Family Business and Corporate Social Responsibility in a Sample of Dutch Firms. Journal of Small Business and Enterprise Development 11(2), 186–194.

Vachon, S., & Hajmohammad, S. (2016). Supply chain uncertainty and environmental management. Asian Journal of Sustainability and Social Responsibility, 1(1), 77–89, open access, https://doi.org/10.1186/s41180-016-0005-0.

Vachon, S., & Klassen, R. D. (2002). An exploratory investigation of the effects of supply chain complexity on delivery performance. IEEE Transactions on Engineering Management, 49(3), 218–230. doi:10.1109/TEM.2002.803387.

- Vachon, S., & Klassen, R. D. (2008). Environmental management and manufacturing performance: The role of collaboration in the supply chain. International Journal of Production Economics, 111(2), 299–315. doi:10.1016/j.ijpe.2006.11.030.
- Waldman, D. A., Siegel, D. S., & Javidan, M. (2006). Components of CEO transformational leadership and corporate social responsibility. Journal of Management Studies, 43(8), 1703–1725. doi:10.1111/j.1467-6486.2006.00642.x.
- Williams, G., & Zinkin, J. (2010). Islam and CSR: A study of the compatibility between the tenets of Islam and the UN Global Compact. *Journal of Business Ethics*, 91(4), 519-533.
- Williamson, D., & Lynch-Wood, G. (2001). A new paradigm for SME environmental practice. The TQM Magazine, 13(6), 424–433. doi:10.1108/EUM000000006179.
- Williamson, D., Lynch-Wood, G., & Ramsay, J. (2006). Drivers of environmental behaviour in manufacturing SMEs and the implications for CSR. Journal of Business Ethics, 67(3), 317–330. doi:10.1007/s10551-006-9187-1.
- Worthington, I., Ram, M., & Jones, T. (2006). Exploring corporate social responsibility in the UK Asian small business community. Journal of Business Ethics, 201–217.
- Yin, J., & Zhang, Y. (2012). Institutional dynamics and corporate social responsibility (CSR) in an emerging country context: Evidence from China. *Journal of business ethics*, 111(2), 301-316.
- Zhu, Q., & Sarkis, J. (2004). Relationships between operational practices and performance among early adopters of green supply chain management practices in Chinese manufacturing enterprises. Journal of Operations Management, 22(3), 265–289. doi:10.1016/j.jom.2004.01.005.
- Zhu, Q., & Sarkis, J. (2007). The moderating effects of institutional pressures on emergent green supply chain practices and performance. International Journal of Production Research, 45(18–19), 4333–4355. doi:10.1080/00207540701440345.
- Zhu, Q., & Zhang, Q. (2015). Evaluating practices and drivers of corporate social responsibility: The Chinese context. Journal of Cleaner Production, 100, 315–324. doi:10.1016/j.jclepro.2015.03.053.
- Zhu, Q., Liu, J., & Lai, K.-H. (2016). Corporate social responsibility practices and performance improvement among Chinese national state-owned enterprises. International Journal of Production Economics, 171(3), 417–426. doi:10.1016/j.ijpe.2015.08.005.

Figures

Figure 1: The conceptual model and the related hypotheses

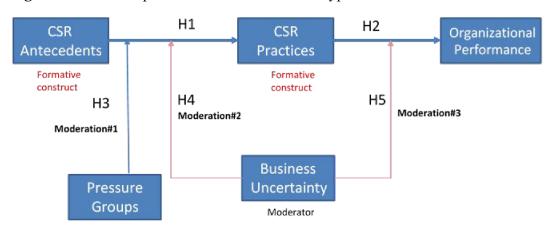
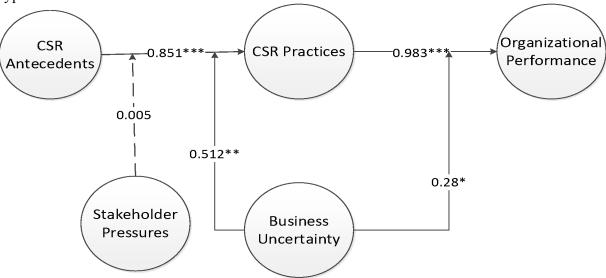


Figure 2: Results of SEM parameter estimation for testing the conceptual model and related hypotheses.



^{*}parameter is significant at a 10% level of significance

^{**}parameter is significant at a 5% level of significance

^{***}parameter is significant at a 1% level of significance

⁻⁻⁻⁻ nonsignificant (n.s.)

Tables

Туј	oe of industry	
	Frequency	Percent
Manufacturing	24	20.5
Constructions	6	5.1
Energy and	7	6.0
environment	,	0.0
Services	42	35.9
Trading	27	23.1
Health	11	9.4
Total	117	100
Numb	er of employees	
	Frequency	Percent
+250	33	28.2
0 - 5	20	17.1
10 - 50	23	19.7
5 - 10	14	12.0
50 - 250	27	23.1
Total	117	100
S	ales growth	
	Frequency	Percent
0% - 10%	38	32.5
10% - 30%	43	36.8
30% - 50%	25	21.4
above 50%	11	9.4
Total	117	100
Sales (ir	millions of AED)
1250	Frequency	Percent
+250	18	15.4
0 - 10	39	33.3
10 – 50	23	19.7
100–250	15	12.8
50 – 100	22	18.8
Total	117	100

	Frequency	Percent
Govermental	26	22.2
Private	79	67.5
Semi-governmental	12	10.3
Total	117	100

Table 2. Mann-Whitney U statistic along with corresponding significance (p-value) of the test

				Sales (in
	Industry	Number of	Sales	millions of
	type	employees	growth	AED)
Mann-Whitney U	296.0	330.5	369.0	346.5
p-value	0.105	0.299	0.692	0.444

Table 3. Goodness-of-fit statistics for the fitted SEM model

RMR	GFI	AGFI	PGFI
0.12	0.847	0.805	0.816

*RMR: Root Mean Square Residual; GFI: Goodness-of-fit index; AGFI: Adjusted goodness-of-fit index; PGFI: Parsimony goodness-of-fit index

Table 4. (Standardized) regression coefficients for the associations between constructs and subconstructs in the fitted SEM model.

Associations b	etween co	onstructs of the model	Parameter estimate (β)	<i>p</i> -value	Hypothe sis	Outcome
Stakeholder Pressures	<	Stakeholder Pressures (Environmental)	0.55	**		
Stakeholder Pressures	<	Stakeholder Pressures (Nonenvironmental)	-0.022	n.s.		
CSR antecedents	<	CSR antecedents (Environmental)	0.117	*		
CSR antecedents	<	CSR antecedents (Nonenvironmental)	0.954	***		
CSR antecedents (Environmental)	<	Motives	0.881	***		
CSR antecedents (Environmental)	<	Impediment	0.073	n.s.		
CSR antecedents (Nonenvironment al)		Motives	0.562	**		
CSR antecedents (Nonenvironment al)		Impediment	0.181	*		
CSR antecedents	<	Business Uncertainty	0.123	*		
CSR antecedents	<	Stakeholder Pressures	0.166	*		
CSR Practices	<	CSR Practices (Nonenvironmental)	0.49	**		
CSR Practices	<	CSR Practices (Environmental)	0.005	n.s.		
CSR Practices	<	CSR antecedents	0.851	***	H1	VALIDATED
CSR Practices	<	Business Uncertainty	0.011	n.s.		
CSR Practices	<	Stakeholder Pressures	0.081	n.s.		
Organizational performance	<	Business Uncertainty	-0.246	*		
Organizational performance	<	CSR Practices	0.983	***	Н2	VALIDATED
Financial Performance	<	Organizational Performance	0.572	***		
Operational Performance	<	Organizational Performance	0.883	***		
Market Performance	<	Organizational Performance	0.795	***		
Learning Performance	<	Organizational Performance	0.887	***		
Network Performance	<	Organizational Performance	0.862	***		
Uncertainty of	<	Business Uncertainty	0.628	***		

Customers					
demand					
Uncertainty of Supply side	<	Business Uncertainty	0.68	***	
Uncertainty of Business technology	<	Business Uncertainty	0.884	***	
Uncertainty of workforce recruitment	<	Business Uncertainty	0.734	***	
Uncertainty of access to financing	<	Business Uncertainty	0.358	**	
Management Control	<	CSR Practices (Nonenvironmental)	0.522	**	
Actions and Initiatives	<	CSR Practices (Nonenvironmental)	0.989	***	
Usage	<	CSR Practices (Environmental)	0.899	***	
Management Control tools	<	CSR Practices (Environmental)	0.857	***	

n.s.: nonsignificant; *: significant at the 10% significance level; **: significant at the 5% significance level; ***: significant at the 1% significance level

Table 5. Results of moderation test of research hypotheses H3–H5

Hypotheses	Parameter estimate (β)	<i>p</i> -value	Outcome
НЗ	0.005	n.s.	NOT VALIDATED
H4	0.512	**	VALIDATED
Н5	0.28	*	PARTLY VALIDATED

n.s.: nonsignificant; **: significant at the 5% significance level; *: significant at the 10% significance level