International diversification and corporate social responsibility: an empirical study of Chinese contractors

1. Introduction

International diversification, as an important aspect of international business strategy, has recently attracted increasing attention (Chen et al., 2014; Hitt et al., 2006; Jackson and Deeg, 2008; Lu and Beamish, 2004). International diversification is defined as "a strategy through which a firm expands the sales of its goods or services across the borders of global regions and countries into different geographic locations or markets" (Gomes and Ramaswamy, 1999; Hitt et al., 2007), and an understanding of it has been further extended and developed in studies of its scale and scope management (Geringer et al., 1989; Hitt et al., 2006). Previous studies have explored the relationship between international diversification and firm performance, particularly in regard to financial outcome (Capar and Kotabe, 2003; Errunza and Senbet, 1984; Grant, 1987). However, little attention has been given to the management of international diversification and corporate social responsibility

(CSR) (Husted and Allen, 2006), especially for firms from emerging economies (Meyer, 2004; Nachum, 2004). In this study, we focus on Chinese international contractors and address the following question: How do international diversification strategies influence CSR?

To answer this question, we adopt institutional and stakeholders' views of CSR, which hold that a firm behaves in socially responsible ways in order to both meet the standards of its institutional environment and maintain positive relationships with its stakeholders (Campbell, 2006). Particularly for internationalized firms from emerging economies, institutional frameworks (both formal and informal) and national culture within which they operate (in both home and host countries), greatly influence their strategic choices (Hoskisson et al., 2005; Peng et al., 2008). Thus, their subsidiaries would prefer to adapt to local practices to legitimize themselves with unfamiliar

institutional environments and demanding stakeholders. Furthermore, they would also be likely to adapt to CSR practices in order to avoid spillover effects if their parent firms suffer major legitimacy problems at home or abroad (Yang and Rivers, 2009).

As the internationalized process moves forward, the pressure faced by firms in regard to social, ethical, governance, and legal practice grows significantly (Kang, 2013). There are also at least three reasons for firms' international business strategy effectively influencing CSR engagement. First, according to Campbell (2006), institutional conditions, including strong state regulations, collective industrial self-regulation, other organizations' supervision (for example, NGOs), and normative institutional environments, affect the probability of firms acting in socially responsible ways. As business becomes more internationalized and diversified, institutional foundations in different countries are becoming highly dynamic and can shift rapidly (Hitt et al., 1997); the institutional conditions become more complex and it becomes more important for firms to facilitate CSR (Campbell, 2006; 2007). Some authors propose national business systems (NBS) to explain CSR issues in global markets (Aguilera et al., 2007; Maignan, 2001; Matten and Moon, 2008). Embedded in different NBS, internationalized firms experience divergent degrees of internal and external pressure to engage in social responsibility initiatives and activities (Aguilera and Jackson, 2003). Empirically, Ioannou and Serfaeim (2012) find, with a sample from 42 countries, that national-level institutions play a profound role in explaining CSR variation.

Second, multinational firms have large and varied stakeholders (Clarkson, 1995), and the formulation of social responsiveness to these stakeholders is complex within the internationalized process (Brammer et al., 2006). Stakeholders can be defined as "a person or group that can affect or is affected by the achievement of the organization's objectives" (Freeman, 1984), and can include shareholders, employees, suppliers, competitors, governments, local communities, and the general republic. Other than those that are non-international or less internationalized, firms competing in global markets face greater pressure from both local and foreign stakeholders to participate in social

engagement, which involves power, legitimacy, urgency, and management characteristics (Smith et al., 2005). Significant heterogeneity in stakeholders is found across countries, concerning not only the differences in the roles of various stakeholders generated by different institutional environments (Jackson and Apostolakou, 2010; Matten and Moon, 2008), but also the diversification of stakeholders' needs, expectations, and interests (Brammer et al., 2006). When the accumulated heterogeneity of stakeholders combines with the process of internationalization, the incremental force from external stakeholders and the motivation from internal ones will encourage firms to deliver on commitments to principles and processes of CSR (Wood, 2010).

Third, firms in oversea markets pursue competitive advantage through organizational learning (which includes technical, market, and social aspects) from the institutional environment and its stakeholders (Barkema and Vermeulen, 1998; Pennings et al., 1994). Firms from emerging economies, compared with firms from developed markets that have already engaged in strict CSR supervision in their home country and have therefore been focused on global expansion for a long time, are lacking in sufficient knowledge and experiences to be able to compete with foreign rivals. Issues of social responsibility also often become the firms' weaknesses in regard to sustainable development in oversea markets. They have to adopt a continuous social learning process in contingent institutional environments in order to pursue sustained dialogue with stakeholders. CSR reporting in particular could be considered as a learning tool within organizational dynamic changes that foster organizational performance, and the improvement of corporate social performance could be viewed as the outcome of the social learning process (Gond and Herrbach, 2006). Yeoh (2004) empirically proves that international diversity is positively related to social learning for newly international firms. In his study, the social network (stakeholders) plays a significant role in internationalization, and interactions with stakeholders allow firms to better respond to the requirements of social responsibilities, which brings about incremental changes in practical learning about firms' strategies on CSR (Argyris and Schon, 1996).

This paper focuses on Chinese international contractors, who not only play an essential part in infrastructural and urban development (Low and Jiang, 2003), but have also achieved dramatic development in terms of their business share in global markets since 2000 (Shen et al., 2006; Zhao et al., 2009). They are doing a large amount of business all over the world,[1] and adopting various measures to enable them to pursue sustainable development in intensive international competition, such as implementing international certification standards, following regulations in foreign countries, learning industry norms, and engaging with local community issues. However, they are also facing special and complex challenges related to CSR (Zeng et al., 2015). For example, a lack of good faith in contracts and a neglect of ecological conservation led China Overseas Engineering Group to suffer in the A2 highway project in Poland in 2011. What is more, according to the investigation of the Ethics Institute of South Africa (EISA), Chinese contractors in Africa have a negative reputation of offering relatively low product quality; they also lack social responsibility, offer low salaries, and fail to respect African employees (EISA, 2014). Therefore, it is worthwhile exploring the relationship between the strategies of international diversification and CSR for Chinese contractors.

The main contribution made by this study is to enrich the stream of research on international diversification by highlighting CSR issues in international business. We provide a better understanding of how different strategies of international diversification influence CSR, while most previous research on international business merely focuses on financial outcomes; few studies pay sufficient attention to social impact. Accordingly, we draw comprehensively on institutional, stakeholder, and social learning perspectives in order to reveal the mechanism related to CSR issues during internationalization. By examining direct and moderating effects of both the scale and scope

---

[1] Among the Top 250 international contractors in 2014 published by *Engineering News Record* (ENR), 62 Chinese contractors are listed, and their total revenue share in the global market has reached 14.5%. However, the statistics for 2013 show that most of the business of the Chinese international contractors in ENR list is operated in Africa (38.4%), Australia and Asia (32.1%), and the Middle East (17.4%), and only 4.5% in Canada, Europe, and the US.

of international diversification on CSR scores, we seek to obtain results offering empirical evidence that international diversification strategy (including degree of internationalization, geographic diversification, and project diversification) plays a significant role in influencing CSR. Moreover, using data relating to Chinese international contractors, we analyze the international business strategies of firms from emerging economies, in order to broaden the scope of research on both international diversification and CSR.

2. Theoretical background and research hypotheses

2.1. International diversification and firm performance

A broad range of theoretical perspectives are introduced to explain the impact of international diversification on firm performance. There is a consensus that international diversification brings both benefits and costs (Qian et al., 2008). By expanding abroad, firms can acquire plenty of global resources and exploit foreign market opportunities in order to gain competitive advantage (Bartlett and Ghoshal, 1989). International diversification can also promote firms' social learning and knowledge development, thereby improving competencies (Belderbos et al., 2011). However, firms that diversify internationally also have to deal with unknown cultures, unfamiliar competitors, and strange and complex institutional environments characterized by different sets of economic, political, and legal factors (Sambharya, 1996). The complex institutional environment and pressure from multiple stakeholders in foreign markets can also incur higher transaction costs than operating in domestic markets (Meyer, 2001). The costs result not only from high aggravated information processing demands (such as communication, coordination, and motivation problems) but also financial risks and political uncertainty (such as exchange rate fluctuations, inflation, and boycotts) (Ruigrok and Wagner, 2003). Generally, firms can enhance organizational value during internationalization if the expected gains are greater than the cost of operating foreign subsidiaries (Strike et al., 2006).

Accordingly, international diversification strategies can have multiple objectives, such as obtaining new resources, transferring business to new markets (Grant, 1987), and spreading operating risks (Husted, 2005). Existing literature has theoretically proposed and empirically tested the relationship between international diversification and firm performance, though most scholars focus on the effects of financial outcome, and the findings are mixed (Capar and Kotabe, 2003; Lu and Beamish, 2004; Wiersema and Bowen, 2011). Various financial performance indicators are involved, such as returns on assets (ROA) (Gomes and Ramaswamy, 1999), returns on equity (ROE) (Han et al., 1998), leverage (Low and Chen, 2004), debt ratio (Chen et al., 1997), operating costs (Ruigrok and Wagner, 2003), profitability (Qian et al., 2008), and market value (Ramirez-Aleson and

Espitia-Escuer, 2001). Previous studies mostly focus on manufacturing firms (Ruigrok and Wagner, 2003; Thomas and Eden, 2004) and service firms (Contractor et al., 2003), mainly from developed countries like the US (Denis et al., 2002; Wiersema and Bowen, 2011), Germany (Capar and Kotabe, 2003; Pennings et al., 1994), and Japan (Lu and Beamish, 2004). However, firms' social performance has not yet been fully discussed and little attention so far has been paid to firms from emerging economies (Nachum, 2004).

Scale and scope are two important characteristics of international diversification (Hitt et al., 2006; Qian et al., 2008) that have helped researchers to explore the impact of different kinds of international business activities from various angles. On the one hand, the greater the scale of a firm's international diversification, the more it can exploit and leverage intangible assets into international markets (Teece, 1982). The scale of international diversification is usually indicated by the ratio of foreign assets to total assets (FATA), foreign sales to total sales (FSTS), or foreign employees to total employees (FETE) (Errunza and Senbet, 1984; Grant, 1987). Degree of internationalization (DOI) often reflects whether a firm is more "regional" or "global." Scholars analyze the benefit and cost brought about by the increase of DOI, mainly from resource-based and

transaction cost views (Husted and Allen, 2006; Thomas and Eden 2004). "Global" firms obtain competitive advantage by their inimitable and non-substitutable foreign resources and opportunities, while "regional" firms do not (Goerzen and Beamish, 2003). However, higher transaction costs, increased trade barriers, and the liability of foreignness caused by the complex institutional environment can also affect "global" firms more than "regional" ones (Peng et al., 2009; Zhang et al., 2010). On the other hand, the scope of international diversification reflects the geographic distribution of business across different countries (Nachum, 2004; Tallman and Li, 1996) and dispersion across different products or industries (Hitt et al., 1997; Peng and Su, 2014). These distributions are introduced by the proxy of the number of operating foreign countries (NNS), entropy measurement, or the Herfindahl Index in recent empirical studies (Hitt et al., 2006; Zhang et al., 2010). Some scholars have adopted an organizational learning perspective and found that multinational firms can gain more tacit benefits with accumulated learning from diversified new markets (Pennings et al., 1994; Qian et al., 2010). Positive impacts are also found in product or industrial diversification during internationalization, from the perspective of market imperfection interpretation (Nachum, 2004) and risk reduction (Hitt et al., 1997).

To put it briefly, previous studies have analyzed the impact of international diversification from multiple theoretical perspectives, and most scholars have focused on the relationship between internationalization and financial performance. The discussion regarding international diversification and CSR needs to be enriched.

2.2. International diversification and CSR

Why would firms implement socially responsible behavior when operating internationally? In terms of the external focus, the variance of culture and institutions in global markets can bring environmental uncertainty to firms' internationalization (Peng, 2012). Firms also have to respond to pressure from salient external stakeholders to integrate responsive CSR, so as to alleviate related

risks of operation (Bartlett and Ghoshal, 1989). In internal terms, CSR is not only about satisfying moral appeal and building a positive reputation, but also pursuing license operation and meeting requirements of sustainability (Porter and Kramer, 2006). Firms from emerging economies whose, international business is still in its early stages (Gao, 2009; Nachum, 2004), have to engage in social learning or adaptation in regard to social performance in foreign markets (Gond and Herrbach, 2006) in order to acquire a foothold or competitive advantage (Porter and Kramer, 2006). Based on this analysis, we develop hypotheses to test the social impacts of international diversification, and try to explore how different international diversification strategies influence CSR.

When increasing the scale of international diversification (degree of internationalization), firms from emerging economies gain numerous advantages along with great managerial risks, such as liability of foreignness and initial learning costs (Chen et al., 2014). These risks usually result from unfamiliar institutions and complex stakeholders in host countries, and for more strategic importance to be placed on social and environmental issues to alleviate the related problems[2] (Attig et al., 2014; Husted and Allen, 2006; Seerafeim, 2012). A survey of 569 Chinese firms indicates that firms' internationalization management experience needs to be enhanced in response to the potential challenges risks pose in oversea markets (Zeng et al., 2009). As firms from emerging economies suffer from weak institutions in their home countries (Wang et al., 2012), they involve more intensive societal and regulatory requirements when entering foreign markets. These requirements for institutional isomorphism to reduce uncertainty in the market and lead to legitimacy (Moura-Leite et al., 2012), most of which are related to social issues (such as environmental protection, labor rights, and local culture), drive firms to consider dynamic interaction and strategic choices regarding CSR (Peng et al., 2009).

---

[2] Practically, Chinese international contractors have adopted many measures relating CSR to potential operational risks in global markets, such as enhanced supply chain management, natural resource conservation, environmental risk control, English-version CSR reporting, and embracing globalization. See http://csr.mofcom.gov.cn/article/csrnews/

Furthermore, the stakeholders' concerns in the construction industry are multidimensional and relate to such issues as improving international reputation, maintaining construction sustainability, and enhancing infrastructural facilities in society (Mok et al., 2015). When the level of internationalization rises, firms face increasingly strong social pressure from a large range of new stakeholders, such as the host government, global competitors, foreign customers and communities, NGOs, and the international media (Christmann, 2004; Kang, 2013). This pressure encourages firms to participate in social issues so as to maintain a favorable operation environment in order to, in turn, gain a competitive advantage. Unlike firms from developed markets, who might reduce the intensity of CSR issues when operating in other undeveloped areas, firms from emerging economies faces higher level requirements of social behaviors in host countries. Moreover, since most of those firms have not operated their global business for a relatively long time and lack the necessary knowledge and experience, organizational learning theory suggests that their demand and ability regarding social learning would quickly rise by continuously entering new foreign markets (Belderbos et al., 2011; Contractor et al., 2003), which would lead to a continuous social and ethical decision-making process to improve CSR (Swanson, 1999). Hence, we argue that:

H1. For international contractors from emerging economies, there is a positive relationship between degree of internationalization (DOI) and CSR score.

The scope of a firm's international diversification often covers geographic/regional diversification (Nachum, 2004; Strike et al., 2006) and product/industry diversification (Hitt et al., 1997). In this study, we replace product/industry with project diversification base on the sample of international contractors. It is important to note that the projects discussed in this paper are all operated in oversea areas other than the domestic market, and that is why project diversification here could be seen as a scope of international diversification.

 The first aspect of scope, geographic diversification (GD), is based on the business distribution of global areas, and the countries in the specific area that have similar cultures, customers, standards,

and levels of economic development (Qian et al., 2008). The areas discussed in this paper are classified into eight categories, which will be described in detail in the next section. The level of diversification is positively related to the range of stakeholder demands and social issues, to which firms with high GD have to respond (Kang, 2013). In the language of NBS, CSR issues differ across different areas because of heterogeneous political systems, financial systems, education and labor systems, and cultural systems (Matten and Moon, 2008). Different foreign areas have substantially different external institutional environments (Qian et al., 2008) and, with the increase in the number and diversity of stakeholders, firms have to cope with greater and more complex pressure from stakeholders caused by social, cultural, legal, regulatory, and economic variation between those areas (Sharfman et al., 2004). Thus, for firms with high GD, the pressure from stakeholders accumulates and forces firms to implement CSR activities by coercive isomorphism, mimetic processes, and normative pressure (Matten and Moon, 2008). Additionally, firms from emerging economies lack experience of social issue implementation, because the regulation and the atmosphere of social responsibility in their home countries are not as complete and mature as in developed markets. That is, knowledge-based resources related to CSR accumulate in different foreign areas through diversified internationalization. Geographically diversified firms have a greater opportunity of organizational learning, as they could acquire new and different ideas from a more diverse context (Hitt et al., 2006). By learning and using these ideas and resources, firms can communicate effectively with different communities about their expectations, manage complex regulations in different countries, and negotiate with governments to influence regulations, to improve CSR in turn (Strike et al., 2006). Therefore, we propose that:

H2. For international contractors from emerging economies, there is a positive relationship between geographic diversification (GD) and CSR score.

We have proposed that GD can promote strategic choices regarding CSR by increasing the pressure exerted by multiple stakeholders' influence and social learning motivations. We further argue that

the positive relationship between DOI and CSR will be stronger when GD is greater. There are two reasons for this positive moderation effect. First, according to the evolutionary path of internationalization proposed by Johanson and Vahlne (1977), firms from emerging economies start global businesses in markets that are geographically and culturally closer to their own, expanding into cognitively and physically more distant ones. Then, when geographical, cultural, and institutional distances increase and GD becomes high, firms' organizational cost and complexity increase significantly. This kind of expansion with incremental GD leads to higher thresholds of internationalization and institutional pressure (Jackson and Apostolakou, 2010). Such high national level institutional heterogeneity leads to great uncertainty for a firm operating within different countries; therefore, firms with high GD have to deal with the multilateral requirement for CSR implementation in order to reduce the increasing potential risks caused by the internationalization process.

Second, compared with operating in limited countries, firms with higher GD usually have broader global resources and market opportunities, which help them to engage in more socially responsible behaviors through the social learning process. Managerial experience within complex environments and geographic diversity provides firms with indispensable knowledge for corporate social performances in higher DOI (Ruigrok and Wagner, 2003). The experience gained from international environmental and labor standards, and the efficiencies obtained from implementing standardized practices in diversified national contexts creates significant interdependencies between corporate socially responsible behavior in disparate geographical areas and an imperative for firms to behave similarly in all locations (Dowell et al., 2000). Therefore, we propose:

H3. For international contractors from emerging economies, geographic diversification (GD) positively moderates the relationship between degree of internationalization (DOI) and CSR score.

Project diversification (PD), the other aspect of the scope, has a similar impact on CSR for contractors in international business. As mentioned above, scholars have explored the impact of product/industrial diversification on firm performance. Most studies are concerned with mixed production/industrial diversification in all markets (both domestic and foreign) rather than just the global market (Hitt et al., 1997). The projects discussed in this paper are all construction projects implemented in oversea markets, which could be mainly classified into nine different categories (see the Appendix). Here, PD is a kind of related diversification, which could help firms to benefit from internationalization by facilitating the exploitation of business unit interdependencies (Hitt et al., 2006). PD can be interpreted as the distribution across different market segments in the construction industry across the world.

In the construction industry, different projects have different norms and regulations regarding CSR. For example, general building construction puts more emphasis on the use of green materials and community benefits, whereas a water dam project constructed in a foreign country might involve more issues relating to environmental and ecological impacts on the local area. International contractors would pursue legitimacy and competitive advantage by observing these norms, regulations, and standards, which cover many dimensions of CSR. Although all these projects belong to construction projects, the stakeholders, especially the external stakeholders in different market segments, are diversified and heterogeneous (Mok et al., 2015). A contractor who only constructs general building work might take various measures to satisfy the community's social and environmental requirements, whereas, if the contractor decides to contract a public infrastructure project (like a cross-state railway), they also have to deal with many social affairs with other broader stakeholders, such as the local government and department of transportation (Zeng et al., 2015). Furthermore, a type of construction project could be seen as a market segment, and the stakeholders may identify a group of firms in such a segment that may greatly consume the same natural resource and distribute the responsibility for any damage among its members. Thus, shared project

characteristics, such as public visibility, media attention, scrutiny from government, culture and configurations of stakeholders, lead to a convergence of CSR among firms in the same project and differences across projects (Moura-Leite et al., 2012). Firms building a great variety of project types therefore need to meet stricter requirements or cope with a broader range of acts, codes, regulations, and pressure from stakeholders (Oliver, 1997). Likewise, firms benefit from organizational learning from various project standards regarding CSR. This social learning is a social process in stakeholder engagement, where firms learn about internal and external stakeholders' values and reflect their own values in construction projects (Mathur et al., 2008). Firms would therefore take actions accordingly to pursue CSR. Thus, we also expect:

H4. For international contractors from emerging economies, there is a positive relationship between project diversification (PD) and CSR score.

The moderating effect of products on internationalization-performance relationships is commonly explored (Hitt et al., 2006). Similarly, we propose an interactive effect of PD and DOI on CSR scores. As DOI increases, we expect contractors to increase their business network and ability to improve relationships with stakeholders in international contexts. As mentioned above, compared with international contractors with low PD, high project diversified contractors will face more stakeholders, which requires them to communicate and negotiate with, for example, the host country's government, local communities, and local competitors for social issues. (Strike et al., 2006). Previous scholars use learning perspective to explain the interaction of internationalization and project diversification and its effect on firm performance (Hitt et al., 1997; Geringer et al., 2000; Sambharya, 1996). Since all projects here are construction engineering, PD is a kind of related diversification and the social learning process is more effective. Also, wider related project diversity is proximate and usually provides more opportunities to internalize dispersed project-based, knowledge-related assets (Oh and Contractor, 2012). Likewise, product diversification and these assets and resources resulting from PD will enable firms to improve their social learning capability,

creating new knowledge during internationalization (Luo, 2001). Social learning from PD would help firms to face international norms and regulations, and better enable them to implement CSR and expansion in a global context. Hence, we predict:

H5. For international contractors from emerging economies, project diversification (PD) positively moderates the relationship between degree of internationalization (DOI) and CSR score.

3. Data and methodology

3.1. Data and sampling

In this study, we focus on construction firms from China, one of the most important emerging economies in the world (Peng et al., 2008). The time interval is set at 2010-2014, because the contractors in our sample all set up their websites after 2010, from which we can derive information disclosure about CSR, and because Chinese government developed its own reporting standard for CSR in 2009 (Marquis and Qian, 2010). Our data are collected from three sources.

First, the starting point is *Engineering News Record* (ENR), a weekly international magazine that provides authoritative news, analysis, data, and opinions on the construction industry worldwide.

ENR annually ranks the 225 largest international contractors (the number has increased to 250 since 2013). We chose Chinese contractors listed in the ENR 225/250 from 2010 to 2014. There were 54, 51, 52, 55, and 62 contractors registered in mainland China in the ENR TOP 225/250 in 2010, 2011, 2012, 2013, and 2014, respectively. 8 observations are deleted in the regression model because their data are not complete in the reports. The final sample therefore comprises of 266 observations. The ENR reports consist of information on firms' international activities and performance. Second, because about 67% of the 266 firms are not listed on the stock market, we add other important financial data obtained from the State Administration for Industry & Commerce of China (SAIC).

Third, to measure CSR, we derive CSR-related content (annual reports and CSR related activities, etc.) from contractors' official websites and their CSR or sustainable development reports. The details of the CSR measurement will be set out in the next subsection.

3.2. Measurements

3.2.1 Dependent variable: CSR score

As CSR covers multidimensional issues (Carroll 1991), a large number of relevant dimensions have been studied in the literature. Many scholars use third-party assessments, such as KLD Research & Analytics Inc.'s evaluation, to measure US firms' corporate social performance in international business (Strike et al., 2006). Social performance data for UK firms are taken from the Ethical Investment Research Services (EIRIS) (Brammer et al., 2006). In China, the indicators of firm CSR in the literature are also essentially from third parties: CSR ranking by Fortune China, CSR scores by Southern Weekend (Wang et al., 2011), CSR index by Chinese Academy of Social Sciences (CASS) standards, and CSR index by the Shanghai National Accounting Institute (SNAI) system (Li and

Zhang, 2010). However, all these rankings and indexes cover publicly listed firms only, while only 33% of the firms in our sample are publicly listed in the mainland or overseas. Thus, a specific measurement for our sample is needed in this study.

We start the assessment based on Wood's (2010) structural model of corporate social performance, which covers principles of social responsibility, processes of social responsiveness, and outcomes and impacts of performance. We also integrate Gao's (2009) method of indicating firms' CSR by content analysis of firms' self-reporting, which collects information from firms' CSR-related reports and CSR-related website columns to measure the corporate social performance of large Chinese listed and unlisted companies. Although there is still controversy over whether a firm's "talk" actually matches its practical "walk" in terms of CSR (Dhanani and Connolly, 2015; Maas

and Liket, 2011; Marquis and Qian, 2010), many scholars believe that self-information disclosure about CSR largely reflects firms' social performance (Dawkins and Fraas, 2008; Gao, 2009; Kolk, 2008; Vurro and Perrini, 2011), and most third parties (e.g. KLD, CASS, SNAI, etc.) also consider firms' self-reports to be important evidence of corporate social performance. Information reported on firms' websites to represent CSR has appeared frequently in recent academic research, especially in multinational company studies (Chapple and Moon, 2005; Fukukawa and Moon, 2004; Maignan and Ralston, 2002; Williams and Pei, 1999).

We therefore use firms' self-disclosure information from CSR or sustainability reports and official websites to assess CSR score in this paper. As in Gao's (2009) method, we gather the information in three parts. First, if a contractor issues a social responsibility report or sustainable development report in a specific year, it is assigned a score of 1, otherwise 0. The annual report reflects a contractor's general principles, attitudes, and managerial discretion regarding social responsibility at a strategic level. Second, if a contractor proposes a CSR-related column (such as "mission statement," "core value," or "corporate culture") and posts a CSR-related yearly plan in this column on its official website in a specific year, it is assigned a score of 1, otherwise 0. The website CSR-related column and CSR plan can present a contractor's routine process of social issue management at an operational level. Third, if a contractor issues details of CSR activities on its official website in a specific year, it is assigned a score of 1, otherwise 0. This information shows the social effects on stakeholders, to some extent, at a practical level. Finally, the accumulative score of the three parts is measured as the contractor's corporate social performance in a specific year[3].

---

[3] Two trained coders (who are both PhD students of management) analyzed and coded the data independently after receiving intensive training. Their judgments were then compared and any disagreements resolved through discussion with the authors. Inter-coder reliability is over 97% of all items, which is acceptable.

3.2.2 Independent variables

Degree of Internationalization (DOI) Based on Qian et al. (2008), we measure the DOI by a contractor's revenue outside China as a percentage of its total revenue (FRTR).

$$= \quad /$$

Geographic Diversification (GD) Based on the dataset, the countries where contractors might have projects are classified into eight areas around the world (North America, Latin America, the Caribbean Islands, Europe, the Middle East, Asia/Australia, North Africa, and Central and South Africa). We follow previous studies (Bowen and Wiersema, 2005; Hitt et al., 1997; Zhang et al., 2010) and calculate the Inverse Herfindahl Index (IHI) to indicate a contractor's GD.

$$= -$$

where G_i is the number of countries in the area i as a percentage of the total number of countries in which a firm contracts projects in the year. As a lower value for the Herfindahl Index indicates a higher level of diversity, we use the inverse measure (*1/H − 1*) (Bowen and Wiersema, 2005), so that a higher value indicates greater geographic diversity. The Inverse Herfindahl Index converges to 0 if the contractor only contracts projects in one geographic area and rises when it does business in different areas. This variable is calculated for each contractor in the sample and is updated yearly.

Project Diversification (PD) In ENR dataset, projects that contractors might implement are classified into nine categories in the construction market: general building, manufacturing, power, water supply, sewerage/solid waste, industrial process/petroleum, transportation, hazardous waste, and telecommunications. We calculate IHI to indicate a contractor's PD.

$$= -$$

where P_i is the number of projects in the category i as a percentage of the total number of projects contracted in the year.

3.2.3 Control variables

Firm age In our model, because a contractor's experience might be related to their

internationalization strategy (Strike et al., 2006) and social behavior (Cochran and Wood, 1984), we use firm age as a control variable, measuring the number of years the contractor has been listed in the State Administration for Industry & Commerce of China (SAIC).

Return on asset (ROA) Financial performance generally relates positively to firms' social performance (Waddock and Grave, 1997), so we control contractors' total revenue to assets, as more profitable firms usually bear greater pressure from stakeholders and also have more resources with which to improve CSR activities (Zeng et al., 2010).

Contracts We also control the new project contracts as the firms in our sample are all contractors. This variable indicates a contractor's ability to implement projects, measured by the logarithm of the amount of new contracts in the year.

Number of nations (NNS) The number of foreign nations where a firm does business reflects the internationalization level (Gomes and Ramaswamy, 1999; Tallman and Li, 1996). In our model, we control the number of foreign nations where a contractor has contracted projects in the year.

Ownership CSR control ownership can be divided into state-owned and non-state-owned ownership, according to the type of controlling shareholders (e.g., Meng et al., 2013). Stated-owned firms benefit from more concern and support from governments because of the current national system. Therefore, we set a binary nominal variable for ownership. If a contractor is controlled by state-owned shares, it is assigned a value of 1, otherwise 0.

Listed Listed firms experience greater pressure from stakeholders than unlisted firms, and the regulations and requirements regarding CSR are more coercive for listed firms; for example, the Shanghai Stock Exchange issued a regulation in 2008 requiring all Chinese listed companies to disclose information related to environmental protection. Thus, another binary nominal variable is used for listing, which is assigned a value of 1 if a contractor is listed on the Chinese stock market, otherwise 0.

Geographic Dummies   There are eight categories of geographic area in the sample: North

America, Latin America, the Caribbean islands, Europe, the Middle East, Asia/Australia, North Africa, and Central and South Africa. If a contractor contracts projects in a specific area during the year, this variable is assigned a value of 1, otherwise 0.

Project Dummies There are nine categories of project implemented in the global market in the sample: general building, manufacturing, power, water supply, sewerage/solid waste, industrial process/petroleum, transportation, hazardous waste, and telecommunications. If a contractor contracts a specific project during the year, this variable is assigned a value of 1, and 0 otherwise.

3.3. Model specification

Our sample consists of an unbalanced panel of Chinese contractors over 5 years (2010–2014). Based upon Wooldridge (2002), the pooled ordinary least squares (OLS) approach is more appropriate than the panel data method when the data has both cross-section and time-series features but no within-groups autocorrelation. We use the White test and the Breusch-Pagan Lagrange multiplier (BPLM) test for the approach choice, and results of the tests suggest that the OLS approach is feasible for our sample.[4] Thus, to analyze the hypotheses proposed above, we run a series of variations of the following regression model, in accordance with previous literature on international diversification and CSR (Kang, 2013; Strike et al., 2006):

$$
\begin{aligned}
&= {}_!+ \cdot \qquad\qquad + \cdot + {}_\$\cdot\%\times'+ {}_(\cdot + {}_) \\
&\quad \cdot\%\times'+ {}^*\cdot + \qquad {}_{„}+ {}^*\cdot \qquad {}_{\text{-}\cdot} \qquad {}_{„}+ {}^*{}_\$ \\
&\quad \cdot / \qquad {}_{„}+ {}^*{}_(\cdot \qquad +0
\end{aligned}
$$

---

[4] Both the White test and the BPLM test indicate that the null hypothesis (variances of individuals' unobserved effects are zero) cannot be rejected, which means that the pooled OLS approach is more appropriate for our data. Meanwhile, following the helpful suggestion of an anonymous reviewer, we also conduct the ordered logit model and the GLS model on our data, whose results are consistent with Table 3.

4. Results analysis

4.1. Descriptive statistics and correlation analysis

Table 1 shows the descriptive statistics of all variables for the 208 firm-year observations in our sample. The average CSR score is 1.357, with an SD of 1.042. The scale of internationalization has a mean of 0.476, with an SD of 0.377; the maximum value is 1, and the minimum 0.022. The distribution of GD is almost symmetrical, with a mean of 1.981, with an SD of 1.206, a maximum value of 5.388, and a minimum value of 0. While PD changes asymmetrically, the mean is 0.750, with an SD of 1.096, a maximum value of 8.337, and a minimum of 0. The variance inflation factors (VIFs) are also shown in the table of descriptive statistics, all of which are lower than 10. Table 2 reports the Pearson's correlation coefficients; none is larger than 0.620. Thus, the multicollinearity is limited in the OLS regression analysis.

[Insert Table 1 here]

[Insert Table 2 here]

4.2. Regression analysis

Table 3 shows the results of the OLS regression analyses conducted to test the hypotheses. Model 1 includes all the control variables. The results of model 2 suggest that the scale of internationalization has a positive effect on contractors' CSR score ($=!.)(2,-<!.!$). Hypothesis 1 is thus supported, and the coefficients are also significantly positive through models 3 to 7. Thus, higher DOI leads to better CSR score for international contractors from emerging economies. Model 3 adds the main effect of GD. Unfortunately, this effect is not significant, as we proposed in Hypothesis 2; in other words, GD is not related to contractors' CSR scores. However, in model 4, the moderating effect of GD is statistically significant ($-<!.!$)), but the coefficient is negative ($=-!.\$ 2). The positive relationship between the DOI and CSR score is weaker when the GD is large than

when it is small, which is the opposite of the effect expected in Hypothesis 3. More explanations

for this contradictory effect are discussed in Section 5. Moreover, as hypothesized, the influence of

PD is positive and significant (=!. 5,-<!.!)) in model 5 of Table 3, which means that Hypothesis 4

is empirically supported. The estimated coefficient of PD in model 6 is also significant. Model 6

adds the interaction effect of PD and DOI on CSR score, and the coefficient is positive but not

significant. Briefly, different strategies on the scale (DOI) and the scope (GD and PD) of

international diversification perform different impacts on CSR score of Chinese contractors.

Among the control variables in Model 7 (and similarly in the other models), we find a positive

impact on CSR score from *ROA* (*= .2 !,-<!. !) and annual new *Contracts* (*=

!.$ 6,-<!.!). Financial performance is clearly and positively related to CSR. The coefficient of *NNS*

(*=!.!),-<!.!) is also positive and significant, which could also support Hypothesis 1, as NNS can

to some extent serve as a proxy for the scale of international diversification. Moreover,

the effect of *Ownership* (*=− . $,-<!.!) is negative and of *Listed* is positive (*= !.2)6,-<!.!). These

results indicate that state-owned contractors are less likely to implement social responsibility, and

publicly listed contractors are more likely to make CSR efforts. [Insert Table 3 here]

4.3. Robustness checks

The regression models incorporate seven key control variables, as well as dummy variables for eight

geographic areas and nine project types, so as to reduce potential endogeneity. A full model (Model

7 in Table 3) including all variables and interaction terms has been estimated to support the findings

reported in Model 1-6.

Besides, we have performed several robustness tests with alternative measures, control

variables, and regression models to reconfirm our main findings. First, we examine sensitivity using

the alternative definition of GD and PD, which are calculated using entropy measurement[5] (Zhang et al., 2010). The effect of DOI remains positive and significant; the interactive effect of GD remains negative and significant; the effect of PD remains positive and significant; and the other two effects remain insignificant. Second, we test another alternative variable *annual revenue* instead of *Contracts* to control the contractor's competitiveness in global construction market. The results are consistent with the original findings. Third, following Strike et al. (2006), and considering our unbalanced panel data, we additionally apply the general least-square (GLS) analysis to accommodate the presence of heteroskedasticity, autocorrelation, and cross-sectional correlation within our unbalanced panel data. Meanwhile, as our dependent variable (CSR score) is ordered by discrete accumulation, we conduct the ordered logit regression on our data. No different effects emerged from the results of either of these regressions.

5. Discussion and conclusion

This study has addressed the question of how different international diversification strategies influence CSR. The empirical regression analysis reported above, based on a new assessment of CSR score, shows the different impacts of the different scales and scopes of international diversification on CSR. The findings have several implications worthy of discussion. First, the positive linkage found between DOI and social performance could be attributed to incremental pressure from the complex institutional environment and multiple stakeholders in the process of internationalization. When the range of stakeholder demands and social issues increases, firms are more likely to apply social learning in response (Kang, 2013).

 Second, and surprisingly, we find that GD has a significant but negative moderating effect in our model. In other words, the positive relationship between DOI and CSR appears to be weaker when

---

[5] The entropy measurements are $-7 = \sum \% / '$ and $-7 = \sum \% / '$, where a greater value of entropy indicates a higher degree of diversification.

the contractor pursues a strategy of higher GD, which is the converse of what we have hypothesized. We believe that this could be explained by the risk diffusion effect of CSR when branching into global operations. Given that firms from emerging economies lack enough experience on risk management in global markets, their perceptions of institutional variation in the host countries will be much higher than those of firms from developed countries (Peng, 2012). As discussed earlier, some scholars have proposed that firms can engage in more socially responsible activities in order to mitigate the risks from societal and regulatory requirements in global markets (Attig et al., 2014; Kang, 2013). From a long-term strategic perspective, CSR tends to help firms to anticipate and reduce potential sources of risks, such as governmental regulation, labor unrest, or environmental damage (Orlitzky and Benjamin, 2001), thereby providing a way of reducing these business risks. It is therefore an essential element in their risk management strategy (Husted, 2005). However, diversified expansion across different geographic markets not only brings more global resources, institutional restraints, and stakeholder pressure, but is also supposed to effectively decrease the managerial and operational risks from variation in political stability, investment profiles, control of corruption, and so forth.

Accordingly, high GD during internationalization could reduce the social learning incentive for CSR implementation. It could be inferred from this that international contractors from emerging economies with higher GD give less consideration to their CSR strategies because they are trying to "put their eggs in different baskets" and operate geographically expanded global business in order to moderate overall risk.

Third, it is interesting to note that GD and PD have different effects on CSR in our regression results. GD has a negative interactive effect on the relationship between DOI and CSR score, but no significant direct impact; while PD is positively related to CSR score but has no significant moderating effect. This could be interpreted in two ways. On the one hand, compared with PD, GD has national and cultural attributes (e.g. language, religion, custom, etc.) and involves the historical

path of internationalization, which makes its effects on CSR more complicated and interactive. For Chinese contractors, the same GD might not always imply the same CSR requirements since political, financial, and cultural systems differ significantly between host countries and the home country (Matten and Moon, 2008; Qian et al., 2008). For example, Chinese contractors whose international business focuses on East Asia might experience less pressure arising from cultural constraints than those who have mainly expanded into European market, even though they have the same level of GD. Thus, firms in the former category might have less need to implement corporate responsibility efforts in the process of internationalization. Furthermore, as the range and intensity of CSR regulation in the emerging economies might be higher than those in some areas (e.g. in Africa and the Middle East, where most Chinese contractors start their global business), and lower than others (e.g. in North America), contractors from emerging economies with the same GD might perform worse in some areas and better in others. However, these complex impacts are not seen in PD. On the other hand, the heterogeneity of projects is much smaller, especially within the construction industry. Although the norms and regulations of construction might differ greatly across global areas, the international standards and requirements for CSR issues or sustainable development are convergent (Zhao et al., 2012). In our study, PD is a kind of related diversification, while GD is mixed with related and unrelated ones, so the social learning process caused by PD is likely to be more effective. Thus, high

PD leads to the accumulation of pressure and regulation, which in turn drives firms to improve their CSR activities.

To summarize, our results reveal that DOI, as the scale of international diversification, is significantly beneficial to CSR, and the two scopes of diversification, GD and PD, have different impacts on CSR. GD negatively moderates the positive relationship between DOI and CSR, while PD positively affects CSR without any interactive effect. Firms from emerging economies still face various challenges related to social responsibility issues during the rapid steps of

internationalization, and these issues are not only influenced by foreign institutional environments and complex multiple stakeholders, but are also driven by firms' social learning requirements and motivations. Such firms need to implement reasonable and targeted international business strategies to improve their corporate social performance in global markets.

This study makes a number of theoretical and practical contributions. First of all, we explore how international diversification influence to CSR, which has been underemphasized in previous studies. Although various approaches have been used to interpret firms' international business or CSR issues separately, a comprehensive perspective where CSR is integrated with the institutional, stakeholder, and social learning perspectives helps us to understand the framework more systematically. Our study shows that contractors' international business strategies, such as focusing on the scale and scope of international diversification, may have different effects on their corporate social performance. In addition, we provide a measurement of CSR based on information disclosure by integrating Wood's

(2010) model of "principle-process-outcome" with Gao's (2009) method. This measurement could be generally applied as a proxy for corporate social performance for firms not listed in the CSR ratings databases. Also, while the existing literature focuses mainly on the international strategies of firms from developed countries, we have extended this coverage to the emerging economies. With the rapid steps towards internationalization being taken by firms from emerging economies such as China, the managerial challenges regarding CSR in global markets are greater and more complex than for firms from developed markets. Based on the results reported here, as well as improving their DOI, firms should try expanding the range of their international business in ways other than diversifying geographic markets in order to implement CSR, enhance their international reputation, and gain competitive advantage.

Despite these important insights, this study has certain limitations, which offer opportunities for future research on the social impact of international diversification. First, other potential factors,

such as the motivation behind risk reduction, the path and mode of internationalization, specific

cultural and national attributes, and top manager team characteristics, could be considered in future

research in order to improve the understanding of this important topic. Second, it would be a great

challenge to develop a more detailed and comprehensive measurement of CSR, based on our score

assessment method, using further content analysis of information disclosure for CSR study. Third,

since our results may only apply to firms from emerging markets, a comparison between the

emerging and developed economies could be an interesting and important stream of future research.

Acknowledgments

References

Aguilera, R.V., & Jackson, G. 2003. The cross-national diversity of corporate governance: Dimensions and determinants. *Academy of Management Review*, 28(3): 447-465.

Aguilera, R.V., Rupp, D.E., Williams, C. A., & Ganapathi, J. 2007. Putting the S back in corporate social responsibility: A multilevel theory of social change in organizations. *Academy of Management Review*, 32(3): 836-863.

Argyris, C.S., & Schon, D. 1996. *Organizational Learning II: Theory, Method and Practice*. Addison Wesley.

Attig, N., Boubakri, N., El Ghoul, S., & Guedhami, O. 2014. Firm internationalization and corporate social responsibility. *Journal of Business Ethics*. doi: 10.1007/s10551-014-2410-6

Barkema, H.G., & Vermeulen, F. 1998. International expansion through start-up or acquisition: A learning perspective. *Academy of Management Journal*, 41(1): 7-26.

Bartlett, C.A., & Ghoshal, S. 1989. *Managing Across Borders: The Multinational Solution*. Harvard Business School Press: London.

Belderbos, R., Olffen, W.V., & Zou, J. 2011. Generic and specific social learning mechanisms in foreign entry location choice. *Strategic Management Journal*, 32(12): 1309-1330.

Bowen, H.P., & Wiersema, M.F. 2005. Foreign-based competition and corporate diversification strategy. *Strategic Management Journal*, 26(12): 1153-1171.

Brammer, S., Brooks, C., & Pavelin, S. 2006. Corporate social performance and stock returns: UK evidence from disaggregate measures. *Financial Management*, 35(3): 97-116.

Campbell, J.L. 2006. Institutional analysis and the paradox of corporate social responsibility. *American Behavioral Scientist*, 49(7): 925-938.

Campbell, J.L. 2007. Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review*, 32(3): 946-967.

Capar, N., & Kotabe, M. 2003. The relationship between international diversification and performance in service firms. *Journal of International Business Studies*, 34(4): 345-355.

Carroll, A. B. 1991. The pyramid of corporate social responsibility: toward the moral management of organizational stakeholders. *Business Horizons*, 34(4): 39-48.

Chapple, W., & Moon, J. 2005. Corporate social responsibility in Asia: A seven-country study of CSR website reporting. *Business & Society*, 44(4): 415-441.

Chen, C.J., Cheng, C.A., He, J., & Kim, J. 1997. An investigation of the relationship between international activities and capital structure. *Journal of International Business Studies*, 28(3): 563-577.

Chen, Y., Jiang, Y., Wang, C., & Chung Hsu, W. 2014. How do resources and diversification strategy explain the performance consequences of internationalization? *Management Decision*, 52(5): 897-915.

Christmann, P. 2004. Multinational companies and the natural environment: Determinants of global environmental policy. *Academy of Management Journal*, 47(5): 747-760.

Clarkson, M.E. 1995. A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review*, 20(1): 92-117.

Cochran, P.L., & Wood, R.A. 1984. Corporate social responsibility and financial performance. *Academy of Management Journal*, 27(1): 42-56.

Contractor, F.J., Kundu, S.K., & Hsu, C.C. 2003. A three-stage theory of international expansion: The link between multinationality and performance in the service sector. *Journal of International Business Studies*, 34(1): 5-18.

Dawkins, C.E., & Fraas, J.W. 2008. An exploratory analysis of corporate social responsibility and disclosure in annual reports. *Business & Society*, 52(2): 245-281.

Dhanani, A., & Connolly, C. 2015. Non-governmental organizational accountability: Talking the talk and walking the walk? *Journal of Business Ethics*. 129(3): 613-637.

Dowell, G., Hart, S., & Yeung, B. 2000. Do corporate global environmental standards create or destroy market value? *Management Science*, 46(8): 1059-1074.

EISA. 2014. *African's Perception of Chinese Business in Africa: A Survey*. ISBN: 9780620598736.

Errunza, V.R., & Senbet, L.W. 1984. International corporate diversification, market valuation, and size-adjusted evidence. *The Journal of Finance*, 39(3): 727-743.

Freeman, R.E., 1984. *Strategic Management: A Stakeholder Approach*. Pitman, Boston, MA.

Fukukawa, K., & Moon, J. 2004. A Japanese model of corporate social responsibility. *Journal of Corporate Citizenship*, 2004(16): 45-59.

Gao, Y. 2009. Corporate social performance in China: Evidence from large companies. *Journal of Business Ethics*, 89(1): 23-35.

Geringer, J.M., Beamish, P.W., & DaCosta, R.C. 1989. Diversification strategy and internationalization: Implications for MNE performance. *Strategic Management Journal*, 10(2): 109-119.

Goerzen, A., & Beamish, P.W. 2003. Geographic scope and multinational enterprise performance. *Strategic Management Journal*, 24(13): 1289-1306.

Gomes, L., & Ramaswamy, K. 1999. An empirical examination of the form of the relationship between multinationality and performance. *Journal of International Business Studies*, 30(1): 173-187.

Gond, J.P., & Herrbach, O. 2006. Social reporting as an organizational learning tool? A theoretical framework. *Journal of Business Ethics*, 65(4): 359-371.

Grant, R.M. 1987. Multinationality and performance among British manufacturing companies. *Journal of International Business Studies*, 18(3): 79-89.

Han, K.C., Lee, S.H., & Suk, D.Y. 1998. Multinationality and firm performance. *Multinational Business Review*, 6(2): 63-70.

Hitt, M.A., Hoskisson, R.E., & Kim, H. 1997. International diversification: Effects on innovation and firm performance in product-diversified firms. *Academy of Management Journal*, 40(4): 767-798.

Hitt, M.A., Ireland, R.D., & Hoskisson, R. E. 2007. *Strategic Management: Competitiveness and Globalization* (7th ed.). Southwestern: Mason, OH.

Hitt, M.A., Tihanyi, L., Miller, T., & Connelly, B. 2006. International diversification: Antecedents, outcomes, and moderators. *Journal of Management*, 32(6): 831-867.

Hoskisson, R.E., Johnson, R.A., Tihanyi, L., & White, R.E. 2005. Diversified business groups and corporate refocusing in emerging economies. *Journal of Management*, 31(6): 941-965.

Husted, B.W. 2005. Risk management, real options, corporate social responsibility. *Journal of Business Ethics*, 60(2): 175-183.

Husted, B.W., & Allen, D.B. 2006. Corporate social responsibility in the multinational enterprise: Strategic and institutional approaches. *Journal of International Business Studies*, 37(6): 838-849.

Ioannou, I., & Serafeim, G. 2012. What drives corporate social performance? The role of nation-level institutions. *Journal of International Business Studies*, 43(9): 834-864.

Jackson, G., & Apostolakou, A. 2010. Corporate social responsibility in Western Europe: An institutional mirror or substitute? *Journal of Business Ethics*, 94(3): 371-394.

Jackson, G., & Deeg, R. 2008. Comparing capitalisms: Understanding institutional diversity and its implications for international business. *Journal of International Business Studies*, 39(4): 540-561.

Johanson, J., & Vahlne, J.E. 1977. The internationalization process of the firm: A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8(1): 23-32.

Kang, J. 2013. The relationship between corporate diversification and corporate social performance. *Strategic Management Journal*, 34(1): 94-109.

Kolk, A. 2008. Sustainability, accountability and corporate governance: exploring multinationals' reporting practices. *Business Strategy and the Environment*, 17(1): 1-15.

Li, W., & Zhang, R. 2010. Corporate social responsibility, ownership structure, and political interference: Evidence from China. *Journal of Business Ethics*, 96(4): 631-645.

Low, P.Y., & Chen, K.H. 2004. Diversification and capital structure: some international evidence. *Review of Quantitative Finance and Accounting*, 23(1): 55-71.

Low, S.P., & Jiang, H.B. 2003. Internationalization of Chinese construction enterprises. *Journal of Construction Engineering and Management*, 129(6): 589-598.

Lu, J.W., & Beamish, P.W. 2004. International diversification and firm performance: The S-curve hypothesis. *Academy of Management Journal*, 47(4): 598-609.

Luo, Y. 2001. Dynamic capabilities in international expansion. *Journal of World Business*, 35(4): 355-378.

Maas, K., & Liket, K. 2011. Talk the walk: Measuring the impact of strategic philanthropy. *Journal of Business Ethics*, 100(3): 445-464.

Maignan, I. 2001. Consumers' perceptions of corporate social responsibilities: A cross-cultural comparison. *Journal of Business Ethics*, 30(1): 57-72.

Maignan, I., & Ralston, D.A. 2002. Corporate social responsibility in Europe and the US: insights from businesses' self-presentations. *Journal of International Business Studies*, 33(3): 497-514.

Marquis, C., & Qian, C. 2013. Corporate social responsibility reporting in China: Symbol or substance? *Organization Science*, 25(1): 127-148.

Mathur, V.N., Price, A.D., & Austin, S. 2008. Conceptualizing stakeholder engagement in the context of sustainability and its assessment. *Construction Management and Economics*, 26(6): 601-609.

Matten, D., & Moon, J. 2008. "Implicit" and "explicit" CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*, 33(2): 404-424.

Meng, X.H., Zeng, S.X., Tam, C.M., & Xu, X.D. 2013. Whether top executives' turnover influences environmental responsibility: From the perspective of environmental information disclosure. *Journal of Business Ethics*, 114(2): 341-353.

Meyer, K.E. 2001. Institutions, transaction costs, and entry mode choice in Eastern Europe. *Journal of International Business Studies*, 32(2): 357-367.

Meyer, K.E. 2004. Perspectives on multinational enterprises in emerging economies. *Journal of International Business Studies*, 35(4): 259-276.

Mok, K.Y., Shen, Q.P., & Yang, J. 2015. Stakeholder management studies in mega construction projects: A review and future directions. *International Journal of Project Management*. 33(2): 446-457.

Moura-Leite, R.C., Padgett, R.C., & Galan, J.I. 2012. Is social responsibility driven by industry or firm-specific factors? *Management Decision*, 50(7): 1200-1221.

Nachum, L. 2004. Geographic and industrial diversification of developing country firms. *Journal of Management Studies*, 41(2): 273-294.

Oh, C.H., & Contractor, F.J. 2012. The role of territorial coverage and product diversification in the multinationality-performance relationship. *Global Strategy Journal*, 2(2): 122-136.

Oliver, C., 1997. The influence of institutional and task environment relationships on organizational performance: The Canadian construction industry. *Journal of Management Studies*, 34(1): 99-124.

Orlitzky, M., & Benjamin, J.D. 2001. Corporate social performance and firm risk: A meta-analytic review. *Business & Society*, 40(4): 369-396.

Peng, M.W. 2012. The global strategy of emerging multinationals from China. *Global Strategy Journal*, 2(2): 97-107.

Peng, M.W., & Su, W. 2014. Cross-listing and the scope of the firm. *Journal of World Business*, 49(1): 42-50.

Peng, M.W., Sun S.L., Pinkham, B., & Chen, H. 2009. The institution-based view as a third leg for a strategy tripod. *Academy of Management Perspectives,* 23(4): 63-81.

Peng, M.W., Wang, D.Y., & Jiang, Y. 2008. An institution-based view of international business strategy: A focus on emerging economies. *Journal of International Business Studies*, 39(5): 920-936.

Pennings, J. M., Barkema, H., & Douma, S. 1994. Organizational learning and diversification. *Academy of Management Journal*, 37(3): 608-640.

Porter, M.E., & Kramer, M.R. 2006. The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, 84(12): 78-92.

Qian, G., Khoury, T.A., Peng, M.W., & Qian, Z. 2010. The performance implications of intra- and inter- regional geographic diversification. *Strategic Management Journal*, 31(9): 1018-1030.

Qian, G., Li, L., Li, J., & Qian, Z. 2008. Regional diversification and firm performance. *Journal of International Business Studies*, 39(2): 197-214.

Ramírez-Aleson, M., & Antonio Espitia-Escuer, M. 2001. The effect of international diversification strategy on the performance of Spanish-based firms during the period 1991-1995. *Management International Review*, 41(3): 291-315.

Ruigrok, W., & Wagner, H. 2003. Internationalization and performance: An organizational learning perspective. *Management International Review*, 43(1): 63-83.

Sambharya, R.B. 1996. Foreign experience of top management teams and international diversification strategies of US multinational corporations. *Strategic Management Journal*, 17(9): 739-746.

Sharfman, M.P., Shaft, T.M., & Tihanyi, L. 2004. A model of the global and institutional antecedents of high-level corporate environmental performance. *Business & Society*, 43(1): 6-36.

Shen, L.Y., Lu, W.S., & Yam, M.C. 2006. Contractor key competitiveness indicators: A China study. *Journal of Construction Engineering and Management*, 132(4): 416-424.

Smith, J.V., Adhikari, A., & Tondkar, R.H. 2005. Exploring differences in social disclosures internationally: A stakeholder perspective. *Journal of Accounting and Public Policy*, 24(2): 123-151.

Strike, V.M., Gao, J., & Bansal, P. 2006. Being good while being bad: Social responsibility and the international diversification of US firms. *Journal of International Business Studies*, 37(6): 850-862.

Swanson, D.L. 1999. Toward an integrative theory of business and society: A research strategy for corporate social performance. *Academy of Management Review*, 24(3): 506-521.

Tallman, S., & Li, J. 1996. Effects of international diversity and product diversity on the performance of multinational firms. *Academy of Management Journal*, 39(1): 179-196.

Teece, D.J. 1982. Towards an economic theory of the multiproduct firm. *Journal of Economic Behavior & Organization*, 3(1): 39-63.

Thomas, D.E., & Eden, L. 2004. What is the shape of the multinationality-performance relationship? *Multinational Business Review*, 12(1): 89-110.

Vurro, C., & Perrini, F. 2011. Making the most of corporate social responsibility reporting: Disclosure structure and its impact on performance. *Corporate Governance*, 11(4): 459-474.

Waddock, S.A., & Graves, S.B. 1997. The corporate social performance. *Strategic Management Journal*, 8(4): 303-319.

Wang, C., Hong, J., Kafouros, M. and Wright, M. 2012, Exploring the role of government involvement in outward direct investment from emerging economies. *Journal of International Business Studies*, 43(7): 655-676.

Wang, M., Qiu, C., & Kong, D. 2011. Corporate social responsibility, investor behaviors, and stock market returns: Evidence from a natural experiment in China. *Journal of Business Ethics*, 101(1): 127-141.

Williams, S.M., & Pei, C.A.H.W. 1999. Corporate social disclosures by listed companies on their web sites: An international comparison. *The International Journal of Accounting*, 34(3): 389-419.

Wood, D.J. 2010. Measuring corporate social performance: A review. *International Journal of Management Reviews*, 12(1): 50-84.

Wooldridge J.M. 2002. *Econometric Analysis of Cross Section and Panel Data*. MIT Press: Cambridge, MA.

Yang, X., & Rivers, C. 2009. Antecedents of CSR practices in MNCs' subsidiaries: A stakeholder and institutional perspective. *Journal of Business Ethics*, 86(2): 155-169.

Yeoh, P.L. 2004. International learning: antecedents and performance implications among newly internationalizing companies in an exporting context. *International Marketing Review*, 21(4/5): 511-535.

Zeng, S.X., Ma, H.Y., Lin, H., Zeng, R.C., & Tam, V.W. 2015. Social responsibility of major infrastructure projects in China. *International Journal of Project Management*. 33(3): 537-548.

Zeng, S.X., Xie, X.M., Tam, C.M., & Wan, T.W. 2009. Relationships between business factors and performance in internationalization: An empirical study in China. *Management Decision*, 47(2): 308-329.

Zeng, S.X., Xu, X.D., Dong, Z.Y., & Tam, V.W. 2010. Towards corporate environmental information disclosure: An empirical study in China. *Journal of Cleaner Production*, 18(12): 1142–1148.

Zhang, Y., Li, H., Li, Y., & Zhou, L.A. 2010. FDI spillovers in an emerging market: the role of foreign firms' country origin diversity and domestic firms' absorptive capacity. *Strategic Management Journal*, 31(9): 969-989.

Zhao, Z.Y., Shen, L.Y., & Zuo, J. 2009. Performance and strategy of Chinese contractors in the international market. *Journal of Construction Engineering and Management*, 135(2): 108-118.

Zhao, Z.Y., Zhao, X.J., Davidson, K., & Zuo, J. 2012. A corporate social responsibility indicator system for construction enterprises. *Journal of Cleaner Production*, 29-30: 277-289.

Table 1. Descriptive Statistics

Variables	Obs.	Max	Min	Mean	Std. Dev.	VIF
CSR score	266	3	0	1.357	1.042	
Firm age	266	50	1	19.612	8.691	1.276
Return on asset (ROA)	266	0.503	0.000	0.037	0.062	1.504
Contract	266	5.175	1.013	3.163	0.750	2.431
Number of nations (NNS)	266	85	1	14.524	15.122	3.666
Ownership	266	1	0	0.850	0.358	1.874
Listed	266	1	0	0.320	0.467	2.068
Degree of internationalization (DOI)	266	1.000	0.022	0.476	0.377	1.626
Geographic diversification (GD)	266	5.388	0.000	1.981	1.206	8.217
Project diversification (PD)	266	8.337	0.000	0.750	1.096	2.073
G1: North America	266	1	0	0.183	0.388	1.894
G2: Latin America	266	1	0	0.275	0.447	2.125
G3: Caribbean Islands	266	1	0	0.139	0.347	1.983
G4: Europe	266	1	0	0.337	0.474	2.041
G5: Middle East	266	1	0	0.725	0.447	2.444
G6: Asia/Australia	266	1	0	0.850	0.358	1.831
G7: North Africa	266	1	0	0.700	0.459	1.979
G8: Central & South Africa	266	1	0	0.740	0.439	2.416
P1: General building	266	1	0	0.678	0.468	2.900
P2: Manufacturing	266	1	0	0.125	0.331	1.356
P3: Power	266	1	0	0.432	0.496	1.873
P4: Water supply	266	1	0	0.385	0.487	2.032
P5: Sewerage/Solid waste	266	1	0	0.209	0.407	1.431
P6: Industrial process/Petroleum	266	1	0	0.429	0.496	1.423
P7: Transportation	266	1	0	0.608	0.489	2.096
P8: Hazardous waste	266	1	0	0.040	0.197	1.267
P9: Telecommunications	266	1	0	0.070	0.255	1.231

Table 2.Pearson Correlations (two-tailed test)

	CSR score	DOI	GD	PD	Firm age	ROA	Contract	NNS	Owner ship	Listed	P1	P2	P3
CSR score	1												
DOI	-0.05	1											
GD	0.29**	-0.12*	1										
PD	0.18**	0.07	0.13*	1									
Firm age	-0.01	0.20**	0.01	0.11	1								
ROA	0.12*	0.13*	0.00	0.17**	0.06	1							
Contract	0.42**	-0.72**	0.43**	0.05	-0.22**	-0.02	1						
NNS	0.50**	-0.16**	0.62**	0.33**	-0.02	0.00	0.55**	1					
Ownership	0.04	0.18**	0.16**	0.21**	0.10	0.08	0.05	0.22**	1				
Listed	0.53**	-0.26**	0.41**	0.20**	-0.07	-0.06	0.51**	0.53**	0.11	1			
P1	-0.02	-0.10	0.25**	0.34**	-0.05	0.19**	0.14*	0.31**	-0.27**	0.08	1		
P2	0.18**	-0.11	0.14*	0.33**	-0.09	0.02	0.26**	0.24**	0.13*	0.29**	0.12	1	
P3	0.27**	0.18**	0.29**	0.34**	0.11	0.10	0.15*	0.38**	0.37**	0.33**	-0.05	0.14*	1
P4	0.05	0.16**	0.06	0.33**	0.04	0.27**	-0.02	0.33**	0.10	-0.01	0.42**	0.09	0.16**
P5	0.11	-0.03	0.11	0.25**	0.01	0.03	0.11	0.30**	0.12	0.11	0.28**	0.16**	0.19**
P6	0.05	-0.03	0.12*	0.14*	0.16**	0.00	-0.03	0.10	0.12	0.03	-0.21**	-0.01	-0.05
P7	0.21**	0.07	0.23**	0.38**	-0.01	0.15*	0.13*	0.39**	0.25**	0.24**	0.47**	0.26**	0.14*
P8	-0.03	0.07	-0.01	0.21**	-0.01	-0.06	-0.08	0.09	0.09	0.06	-0.06	0.26**	0.12*
P9	0.04	0.09	0.07	0.13*	0.09	0.02	-0.06	0.09	0.12	-0.06	0.00	-0.02	-0.01
G1	0.27**	-0.14*	0.54**	0.16**	0.14*	-0.02	0.36**	0.55**	0.12*	0.26**	0.21**	0.05	0.22**
G2	0.29**	-0.10	0.53**	0.21**	-0.08	-0.05	0.32**	0.46**	0.14*	0.39**	0.07	0.14*	0.24**
G3	0.21**	-0.13*	0.49**	0.13*	-0.08	-0.03	0.33**	0.51**	0.17**	0.27**	0.25**	0.10	0.29**
G4	0.29**	-0.14*	0.57**	0.09	0.03	-0.03	0.34**	0.44**	0.04	0.48**	0.19**	0.11	0.16**
G5	0.16**	-0.16**	0.56**	0.07	0.11	-0.14*	0.34**	0.33**	0.18**	0.31**	-0.13*	0.11	0.27**
G6	0.22**	-0.14*	0.46**	0.08	-0.09	0.06	0.31**	0.29**	0.34**	0.20**	-0.07	0.07	0.24**
G7	0.10	-0.03	0.46**	0.21**	0.07	0.09	0.21**	0.35**	-0.01	0.05	0.23**	0.20**	0.14*
G8	0.12	0.09	0.42**	0.33**	-0.02	0.16*	0.06	0.37**	-0.02	0.17**	0.54**	0.20**	0.05

	P4	P5	P6	P7	P8	P9	G1	G2	G3	G4	G5	G6	G7	G8
P4	1													
P5	0.39**	1												
P6	-0.12*	-0.08	1											
P7	0.48**	0.32**	-0.11	1										
P8	0.07	0.22**	-0.06	0.13*	1									
P9	0.14*	-0.07	0.20**	-0.02	-0.06	1								
G1	0.11	0.18**	0.11	0.17**	-0.05	0.09	1							
G2	-0.05	-0.01	0.20**	0.19**	-0.04	0.03	0.30**	1						
G3	0.07	0.11	0.08	0.28**	-0.03	0.18**	0.44**	0.27**	1					
G4	-0.07	0.00	0.15*	0.14*	-0.07	0.05	0.36**	0.39**	0.34**	1				
G5	-0.17**	0.03	0.10	-0.04	0.08	-0.03	0.27**	0.29**	0.15*	0.27**	1			
G6	0.04	0.04	0.03	0.15*	0.09	-0.05	0.20**	0.17**	0.14*	0.13*	0.29**	1		
G7	0.24**	0.18**	0.05	0.16**	0.09	0.05	0.17**	0.05	0.15*	0.04	0.12	0.26**	1	
G8	0.38**	0.28**	-0.11	0.43**	0.12*	0.13*	0.22**	0.08	0.21**	0.19**	-0.05	0.08	0.30**	1

Significance levels: ** $p < 0.01$, * $p < 0.05$.

Table 3. Regression Results

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Controls							
Intercept	1.433***	0.972**	0.922**	0.717*	1.098***	1.105***	0.905**
	(0.366)	(0.384)	(0.393)	(0.397)	(0.386)	(0.387)	(0.410)
Firm age	0.004	0.002	0.002	0.006	0.002	0.001	0.005
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
ROA	2.650***	2.159**	2.15**	1.614*	2.119**	2.168**	1.620*
	(0.925)	(0.917)	(0.918)	(0.933)	(0.910)	(0.920)	(0.943)
Contract	0.153	0.279**	0.280***	0.325***	0.286***	0.282***	0.327***
	(0.102)	(0.107)	(0.107)	(0.107)	(0.106)	(0.107)	(0.108)
NNS	0.027***	0.026***	0.026***	0.025***	0.026***	0.026***	0.025***
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
Ownership	-0.914***	-0.998***	-0.998***	-1.082***	-1.054***	-1.055***	-1.131***
	(0.176)	(0.174)	(0.174)	(0.176)	(0.175)	(0.175)	(0.177)
Listed	0.657***	0.729***	0.730***	0.668***	0.717***	0.712***	0.657***
	(0.144)	(0.143)	(0.143)	(0.144)	(0.142)	(0.143)	(0.144)
Year Dummies	Included	Included	Included	Included	Included	Included	Included
Geographic Dummies	Included	Included	Included	Included	Included	Included	Included
Project Dummies	Included	Included	Included	Included	Included	Included	Included
Predictors							
DOI		**0.546***	**0.555***	**0.576***	**0.559***	**0.560***	**0.577***
		(0.162)	**(0.163)**	**(0.161)**	**(0.161)**	**(0.161)**	**(0.161)**
GD			**-0.063**	**-0.018**			**0.051**
			(0.105)	**(0.105)**			**(0.111)**
DOI×GD				**-0.326****			**-0.311****
				(0.130)			**(0.131)**
PD					**0.119****	**0.114***	**0.112***
					(0.057)	**(0.059)**	**(0.061)**
DOI×PD						**-0.049**	**-0.009**
						(0.123)	**(0.123)**
Indices							
N	266	266	266	266	266	266	266
F	9.24***	9.71***	9.36 ***	9.46***	9.65***	9.30***	9.03***
Adjusted R^2	0.456	0.479	0.478	0.489	0.486	0.485	0.492

Significance levels: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Appendix: Introduction to Project Classification (From: enr.com)

General Building includes commercial buildings, offices, stores, educational facilities, government buildings, hospitals, medical facilities, hotels, apartments, housing, etc.

Manufacturing comprises auto, electronic assembly, textile plants, etc.

Power comprises thermal and hydroelectric power plants, waste-to-energy plants, transmission lines, substations, cogeneration plants, etc.

Water Supply includes dams, reservoirs, transmission pipelines, distribution mains, irrigation canals, desalination and drinking water treatment plants, pumping stations, etc.

Sewerage/Solid Waste includes sanitary and storm sewers, treatment plants, pumping plants, incinerators, industrial waste facilities, etc.

Industrial Process/Petroleum comprises pulp and paper mills, steel mills nonferrous metal refineries, pharmaceutical plants, chemical plants, food and other processing plants, etc. It includes refineries, petrochemical plants, offshore facilities, pipelines, etc.

Transportation includes airports, bridges, roads, canals, locks, dredging, marine facilities, piers, railroads, tunnels, etc.

Hazardous Waste includes chemical, nuclear waste treatment, asbestos/lead abatement, etc.

Telecommunications comprises transmission lines, cabling, towers/antennae, data centers, etc.