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The performance implication of corporate social responsibility in matched
Chinese small and medium-sized buyers and suppliers

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Abstract:

Corporate social responsibility (CSR) is a popular and important strategy for businesses to improve ethical behaviours in order to achieve economic sustainable development. Indeed, many social or environmental incidents that occur in one supply chain member could bring huge risks or disruptions for the entire supply chain. Yet the existent CSR studies rarely take buyers and suppliers into consideration in the examination. On the other hand, the existent literature of CSR is primarily concerned with larger organizations and pays very limited attention to small and medium-sized enterprises (SMEs). Thus, this study, viewed from transaction cost economics theory (TCE) and stakeholder theory, examines how buyers' CSR adoption influences suppliers' CSR adoption (i.e. with or without buyers' proactive efforts) and whether CSR adoption in matched buyers and suppliers can achieve a win-win outcome for both firms in terms of enhancement in financial performance. The posited hypotheses are tested by 154 matched small and medium-sized buyers and suppliers from the Chinese manufacturing sectors. The majority of the hypotheses are supported by our analysis results. This study fills the gap that there is a lack of exploration in the actual value of CSR for firms in a buyer-supplier relationship. Our findings enrich the literature of CSR and operations management by offering empirical insights from a buyer-supplier and SME perspective, and provide managerial guidelines for enterprises, governments and NGOs to promote CSR or related practices to buyers and suppliers in supply chains.

Key words: Corporate social responsibility (CSR), Sustainable development, Small and medium-sized enterprises (SMEs), Buyer-supplier relationships, Firm performance, Chinese manufacturers

1 Introduction

Sustainable development has long been an important national strategy for many countries to achieve coordinated efforts and balanced results in economic, social and environmental performance (Volkery, 2006). Corporate social responsibility (CSR), as a managerial approach that integrates environmental and social practices in businesses, is widely considered highly relevant and effective for businesses to contribute to sustainable development (Williamson et al., 2006). Some authors have asserted that studies on the management of CSR should pay attention to large and influential firms, as they should have more significant impact on environmental issues and should implement more CSR related behaviors than small and medium-sized enterprises (SMEs) (Lynch-Wood and Williamson, 2007). However, SMEs often account for a large percentage of enterprises in different economies and are the largest employers all around the world. For example, in developed economies such as EU, 98% of the enterprises are SMEs and 67% of its employees are employed in SMEs (Graafland, 2017); and around 90% of US businesses are small and medium-sized family businesses (Panjwani et al., 2008). Similarly, in developing economies, the SMEs of India account for a majority portion of the national output and value creation. In China, the contribution of SMEs for GDP and for employment is over 60% and 80%, respectively (The State Council of China, 2018). Such a large number of SMEs may be collectively influential for many social and environmental issues, though their CSR implementation often receives little attention from researchers and government policy makers. Indeed, some studies estimate that some 70% of industrial pollution is caused by SMEs (e.g. Hillary, 2000). Thus, a study of CSR implementation in SMEs is very important in order to offer insights to practitioners, researchers, and policy makers to enhance sustainable development in the worldwide environment.

The literature on CSR is mainly concerned with its driving forces (e.g. cultures, leadership), outcomes (e.g. various forms of organizational performance) and its deployments (e.g. adoption through relevant certification systems), and such relevant studies are primarily examined from a firm-level perspective (Zhu and Zhang, 2015; Martinez-Conesa et al., 2017; Russo-Spena et al., 2018). In regards to small and medium-sized enterprises, the relevant studies indicate that CSR generally has a strong relationship with stakeholders such as suppliers, buyers and customers, and that such stakeholder relationships are used to cope with market uncertainty (Vitell et al., 2000; Lahdesmaki, 2005). Further, more and more social and environmental issues (e.g. child labor, pollution) that occur in one individual supply chain partner could bring huge and disruptive risks to the whole supply chain (Thun et al., 2011). Indeed, the studies on CSR in the supply chain management context often appeal more research to quantitatively and empirically examine the real value of CSR practices in the supply chain and to offer insights on the integration CSR into supply chains by helping buyers and suppliers collaboratively implement CSR practices (Welford and Frost, 2006; Carbone et al, 2012; Lee et al., 2017). Thus, in addition to focusing on SMEs, this study takes a supply chain perspective to investigate CSR implementation in matched buyers and suppliers.

The literature of supply chain management indicates that buyers' strategic actions influence the practices of suppliers naturally through their daily communication and interaction (Krause et al., 2007). Also, many buyers offer training and/or development effort to improve suppliers' competence in practices such as quality management and ERP system implementation (Doorey, 2011; Carter and Easton, 2011). However, such knowledge is mainly concerned with operations management practices (e.g., quality practices, ISO 9000, etc.), which are primarily concerned with operational effectiveness or buyer-supplier collaborative activities. CSR is not an operational practice to guide production activities nor

focuses on insights to aid buyer-supplier collaboration. Viewed from the transaction cost economics theory (Williamson, 1996, 2008), in supply chain cooperation process, suppliers' willingness for meeting the buyers' requirements or following their behaviors depends on their cost and benefits from such business transaction activities. Thus, whether buyers' CSR adoption behavior influences the buyers' CSR adoption as well and whether such influence is natural or proactive are lack of obviously assertion. Also, considering the implementation CSR in supply chain, it is useful to understand whether buyers can become influential partners to influence their suppliers' behavior, thereby spreading CSR implementation to the entire supply chain, especially in SMEs with close interdependent supply chain relationship, which is consistent with the literature on CSR adoption that the large driving force of CSR is herding behavior from market followers imitating market leader (Cordeiro and Tewari, 2015).

In addition, performance implications have become a key consideration in CSR implementation in supply chains, because many organizations recognize the value creation of the relevant practices (Beverland, 2012). Thus, this study intends to explore the performance implications of CSR implementation in the supply chains of SMEs. Much literature indicates that CSR adoption in general is effective in helping firms to improve their "internal" performance by enhancing their brand reputation (Tang et al., 2012), but very limited literature has attempted to explore "external" performance dimensions such as the performance of their partnering supply chain members. The literature of supply chain management widely suggests that buyers and suppliers are highly dependent on each other (Lahdesmaki, 2005), therefore, we infer that the performance implication of a firm's CSR is not only internal but also externally-relating to a firm's buyers or suppliers. If so, considering the competition today is among supply chains, the importance of CSR is likely higher than our existing understanding because it can help enhance the performance an entire supply chain. Consequently, whether buyers' CSR adoption can improve the performance of its

suppliers and whether suppliers' CSR adoption can improve the performance of its buyers are crucial issues which warrants an investigation for both the literature and practitioners of supply chain management.

This research mainly focuses on two problems: 1) within the context of supply chains of SEMs, is the influence of buyers' CSR adoption on suppliers' CSR adoption natural (i.e. no buyers' related socially responsible supplier development efforts) or proactive (i.e. the presence of such efforts), or both? 2) Does CSR adoption in a buyer and in a supplier impacts the performance of each other, leading to win-win outcomes for both of them? Based on the data from 154 paired dyads of buyers and suppliers (both are Chinese small and medium-sized manufacturers), we tested the posited hypotheses. Our findings indicate that the impact of buyers' CSR adoption on the supplier CSR adoption is natural. Even if some buyers have CSR-related supplier development activities in place, such activities seem to have limited role in suppliers' CSR adoption. In addition, the findings regarding the win-win propositions are positive in that we find a buyer's (a supplier's) CSR adoption impacts not only its own performance but also the performance of its supplier (buyer). These findings enrich the literature on CSR in supply chains composed of SMEs, and offer managerial guidelines for CSR management in such a context.

2. Literature review

2.1 Stakeholder theory and CSR dimensions

Stakeholder theory, which is widely used to examine CSR, refers to the relationship between corporations and their stakeholders (Fernando and Lawrence, 2014). The achievement of firm's goals influences or is influenced by stakeholders in groups or of individuals (Freeman, 1984), including the shareholders, employees, and customers (Preston and Sapienza, 1990). Stakeholder theory asserts that firms are obliged to perform their responsibility beyond simple financial performance and need to extend the scope to ethics

discipline, society and the environment (Smith, 2008). Also, more and more literature propose that stakeholder network take collective role in business operations and value creation (Haslam et al., 2015; Freudenreich et al., 2019). Expanded by stakeholder theory, CSR can be understood as the responsibilities to various stakeholders that influence or are influenced by corporates' activities (European Commission, 2011; Lu et al., 2012; Theodoulidis et al., 2017). The studies on CSR have demonstrated that the concepts of CSR should be multi-dimensional concerning multiple stakeholders and they offer insights relating to various stakeholders, including investor relationships, employee rights, consumer rights, supplier management, community management and the environmental management (Lindgreen et al., 2009; Xu and Yang, 2010; Upward and Jones, 2016; Theodoulidis et al., 2017; Kim et al., 2017; Freudenreich et al., 2019). Specifically, investor relationships refers the extent to which companies provide the information financial stakes and interests to shareholders. Employee rights involve the specific rights owned in workplace, e.g. employee salaries, training opportunities, social benefits and holiday. Consumer rights refers to provide the products and service to meet consumers' requirements and develop some novel services and products. Supplier management involve that organizations offer some assistance and opportunities to facilitate their suppliers to create more business value. Community management involve participating the charitable activities and providing assistance for the community's life. Environmental management refers that companies adopt a series of green practices to reduce the resource waste and pollution emission. Thus, in this study, we use responsible practices to six stakeholders, namely, investors, employees, suppliers, customers, community and environment, to comprehensively measure the extent of CSR adoption in our sample firms (i.e. matched buyers and suppliers).

2.2 CSR in supply chain of SMEs

The existent studies on CSR primarily consider CSR as a firm-level managerial approach, which can influence corporations' reputation, ethical behavior, employee commitment, customer satisfaction (e.g. Maignan and Ferrell, 2004; Lu et al., 2012; Crifo et al., 2016; Zhu et al., 2016). Yet some studies suggest that the notion of CSR should extend to the entire supply chain, because it offers ways for coping with risks (e.g. opportunism behavior of supply chain partners) through the implementation of CSR initiatives along the supply chain (Lim and Philips, 2008; Hsueh, 2014; Raza, 2018). However, very scant studies have examined the real value of implementing CSR in a supply chain in terms of profit or performance. Also, independent SMEs generally are in a weak position to lead other supply chain members to implement CSR practices, due to limited resources and influential power (e.g. reputation) (Park and Ghauri, 2015). Indeed, Baumann-Pauly et al. (2013) and Reyes-Rodriguez et al. (2016) indicate that studies involving active participation by SMEs is an effective way to promote CSR practices in SMEs. Thus, this study examines the actual value of CSR adoption in the context of supply chains by empirically examining how a buyer influences (i.e. naturally, proactively, or both) its supplier to implement CSR and whether or not CSR adoption in buyers and suppliers can lead to a win-win outcome for both firms.

2.2 Transaction cost economics theory

Transaction cost economics theory maintains that any economic activities can generate transaction costs and cooperation problems between business groups, due to uncertainty and opportunistic behaviors of business partners (Williamson, 1991, 1996). Its central idea is the trade-off between market cost and coordination types of business group (Williamson, 1996; Valentinov, 2013). The theory proposes that transaction costs generally comprise three categories of costs, i.e. the cost of searching the cooperators, the cost of negotiating contracts, the cost of monitoring and enforcing compliance with contracts (Tate et al., 2011). The concepts of transaction cost economics theory has been widely applied to information

technology outsourcing, supplier governance and supply chain cooperation (e.g. Williamson, 2008; Han, 2014; Schermann et al., 2016). Also, some literature began to use it examine green/sustainable and CSR practices in supply chain and suggests that suppliers' willingness to meeting buyers' requirements and maintaining steady relationships with buyers depends on their profitability of the business transaction (Williamson, 2008; Schermann et al., 2016; Acquier et al., 2017). The literature of this theory also demonstrates that CSR turns out to be a functionally vertical integration of business operations and the willingness of suppliers' CSR adoption is affected by whether buyers support them to engage in related practices because the support from buyers helps reduce the related investments and resources (Lee and Klassen, 2008; Valentinov, 2013). Thus, this study adopts transaction cost economics theory to analyze how suppliers' CSR adoption is affected by buyers' CSR adoption behaviors by considering costs resulted from the transaction process between buyers and suppliers.

3. Hypotheses development

3.1 The influence of buyers' CSR adoption on suppliers' CSR adoption

When a buyer begins to implement CSR practices in a buyer-supplier context, it should have more knowledge on such practices than its supplier, causing a circumstance with information asymmetry between the buyer and supplier (Lee and Klassen, 2008). Such a circumstance increases the level of transaction uncertainty. Viewed from transaction cost economics theory, the increased uncertainty of transaction causes the supplier to bear increased costs in the transaction process, including searching information cost, bargaining cost with contract and monitoring cost (Dyer, 1997). Specifically, first, extra searching information cost is induced because the supplier needs to seek information on the supplier evaluation requirements which are related to CSR practices. Second, the supplier needs to invest more time and effort in negotiating and developing the contract with the buyer because of the lack of information on CSR-terms in contracts, thereby increasing bargaining cost.

Third, the supplier needs to establish its own CSR-performance evaluation systems in order to make sure it performs up to the buyer's expectations regarding their CSR or related performance (e.g., environmental performance), thereby increasing the monitoring cost. Thus, considering the increases of the transaction cost after the buyer begins to implement CSR, the supplier has a very high likelihood to follow suit. On the other hand, for supply chains composed of SMEs, the partners have a close interdependent and credible relationship (Lahdesmaki, 2005), therefore, suppliers have a large likelihood of receiving some practices beneficial to buyers to maintain ongoing buyer-supplier relationships that overcome market uncertainty and bring future business opportunities (Tate et al., 2011). As a result, considering the increases in the various forms of transaction cost and the needs to maintain ongoing cooperative relationships, when buyers implement CSR, their suppliers are more likely to implement CSR without direct pressure from buyers. Consequently, we propose:

H1: Buyers' CSR adoption influences the suppliers' CSR adoption naturally.

Prior literature on CSR indicates that small and medium-sized suppliers need to get support from buyers to implement their environmental or CSR related practices (Lee and Klassen, 2008; Zhu and Lai, 2019). Viewed from TCE theory, in a circumstance with increasing uncertainty, buyers are more likely to conduct more-consuming bargaining and rebargaining (Knez and Simester, 2000) process with suppliers for achieving agreements and develop various monitoring systems and performance measures to assure suppliers' performance. When buyers implement CSR, the information asymmetry of CSR could increase buyers' costs associated with bargaining for cooperation agreement with suppliers and monitoring suppliers' performance. Thus, buyers are more likely to provide support for helping their suppliers' CSR development. Based on the relevant literature (e.g. Lu et al., 2012), such buyers' implementation of practices to proactively enhance suppliers' capabilities and commitment to CSR adoptions is conceptualized as socially responsible supplier

development (SRSD), which includes three dimensions, i.e. socially responsible information sharing, socially responsible supplier evaluation, socially responsible supplier development activities. Lu et al. (2012) indicate that suppliers can learn more CSR knowledge and skills by buyers' information sharing activities and get the feedback and reward from buyers' CSR-related evaluation, which can effectively facilitate suppliers to implement CSR. Regarding the third dimension of SRSD, namely, supplier development, they refer to buyers' direct participation to help suppliers identify problems of CSR implementation and make efforts to rectify the problems (Lu et al., 2012). Thus, SRSD can enhance the likelihood of suppliers' CSR implementation. Consequently, we propose:

H2: Buyers' CSR adoption influences the suppliers' CSR adoption through socially responsible supplier development (SRSD).

3.2 The influence of buyers' CSR on the both performance of buyers and suppliers

While most CSR studies indicate that there should be a positive relation between CSR adoption and firms' performance, such findings are often considered inconclusive by many scholars (e.g. Margolis and Walsh, 2003; Mishra and Suar, 2010). Actually, viewed from stakeholder theory (e.g. Fernando and Lawrence, 2014), whether CSR practices can create value depends on the importance of the strengthened stakeholder relationships. Compared with large companies, SEMs tend to have more linkages with local community in order to acquire recourse and business opportunities, and to have greater difficulty to transfer their operational activities to other geographical locations (Jenkins, 2009; Doshi et al., 2013). If buyers implement CSR practices concerning community relationship development and environmental management, it helps develop a responsible image for acquiring resources (e.g. new labor) and business opportunities (e.g. new customers) more effectively. The resultant expanded business operations generally need the joint efforts from buyers and suppliers of the supply chain, which promotes the business development of the whole supply chain, thereby enhancing the performance for all members of supply chain. Also, buyers' CSR practices on

developing a good relationship with employees and customers can encourage such important stakeholders to actively participate in the buyers' innovation and problems-solving activities (Mishra and Suar, 2010), which can help improve buyers' cost performance and prompt suppliers to innovate their own operations and products. Buyers' CSR adoption related investor practices require buyers to maximize their market value and shareholder interest by identifying market preference and modifying the production lines of products (Mackey et al., 2007), which provides important market information and opportunities for suppliers' development. In addition, buyers' CSR related supplier management not only help them assure the quality and reasonable price of raw materials and products, but also improve suppliers' operational process by buyers' various development activities. Thus, buyers' CSR adoption can achieve win-win performance outcomes for both buyers and suppliers. Consequently, we propose:

H3-H4: Buyers' CSR adoption positively influences both buyers' performance and suppliers' performance.

3.3 The influence of suppliers' CSR on the both performance of buyers and suppliers

There has been evidence indicating that the knowledge of suppliers has significant influence on the innovation and operational processes of buyers. For example, Ettl and Rubenstein (1981) find the positive linkage between suppliers' innovation in raw materials and buyers' innovation in finished product. Geffen and Rothenberg (2000) demonstrate that many automotive firms integrate their suppliers' innovation knowledge into their own operations. Cousins et al. (2011) indicate that activities in supplier knowledge exchange impact on buyers' product development and help buyers enhance their financial performance. Luo and Bhattacharya (2009) suggest that a supplier's adoption of CSR can generate more moral capital for stakeholders including buyers to strengthen their trustworthiness to the supplier, which facilitates the communication and knowledge exchanging behaviors between the supplier and the related firms. Hoppner and Griffith (2011) and Liu et al. (2012) suggest that suppliers with CSR in place are motivated to conduct more proactive behaviors (e.g.

considering stakeholders' interests in their decision), which is beneficial for conflict reduction and trust development for both buyers and suppliers. Therefore, the above literature suggest that suppliers' adoption of CSR helps achieve better communication, knowledge sharing, problem-solving behaviors with their buyers, thereby achieving closer relationships with reciprocal benefits for buyers and suppliers in dyadic relationships. Thus, we propose:

H5-H6: Suppliers' CSR adoption positively influences both buyers' performance and suppliers' performance.

4. Research methodology

4.1 Sample and data collection

Our sample was collected from manufacturing industries of China. China is one of major global outsourcing sites with over 50% of its total output value exported to the global market (Zhao et al., 2007; Liu et al., 2009). There are more than 93 million small and medium-sized enterprises (SMEs) in China, and their contribution to GDP and to employment is over 60% and 80%, respectively (The State Council of China, 2018). China has undertaken many environmental control and protection policies or regulations to achieve sustainable development since 1980 (Zhang and Wen, 2008). Thus, Chinese SMEs are a suitable context for this research.

Four major manufacturing industries of China, namely, food and beverage, pharmaceutical, automotive and electronic, and textile industries, were selected as the target sample pool. These four industries of China are so large that their total gross outputs were around 52,167.5 billion *yuan* in 2015 (China Statistical Year Book, 2018). According to the latest China statistical year book (2018), small and medium-sized manufacturing enterprises (SMMEs) are defined as the manufacturers which the employee number is below 1,000 and the operating income is below 400 million *yuan*. With these SMME requirements, we developed a database of manufacturers of our four target industries by combining information

from several authorized sources (Zhao, 2007) including State Administration for Industry and Commerce of the People's Republic of China (SAIC), State Food and Drug Administration (SFDA), China National Food Industry Association (CFIN) and China Association of Automobile Manufacturers (CAAM). Finally, we randomly selected 1,000 SMMEs from this database to form the sampling frame of this research, and these potential sample firms are the buyers in our data-set.

To improve the response rate of the survey, we adopted Dillman's Total Design Method (Dillman, 2007). Before the distribution of the survey questionnaire, we contacted the potential respondents by phone or face-to-face meetings to explain the background of our study and the importance of their participation. At this stage, the potential respondents were asked their experience concerning CSR activities and supply chain management in order to assure their suitability to participate in this research. We also emphasized that the data would be kept strictly confidential for academic use and the participation in our survey was voluntary. The respondents were entitled to obtain an executive summary report of this study and a gift. Finally, upon obtaining the consent from the potential respondents, we mailed the buyer surveys to them. When filling in the surveys, these respondents were asked to offer information on one of their most important suppliers. With the supplier information provided by the buyer respondents, we conducted the supplier survey by using the same data collection approach as the buyer survey and by paying extra attention to make sure every supplier responded to one survey only.

To reduce the potential impact of social desirability bias in our data, we first gave clear instructions in both the buyer and supplier surveys to indicate that the respondents should focus on rating the actual CSR activities in their firms rather than their personal behaviours or beliefs. Second, we inserted a clear note in the supplier surveys to emphasize that the suppliers' responses would be kept strictly confidential and not be disclosed to their

buyers. At the end of the buyer survey, 312 completed surveys were returned with a response rate of 31.2% (312/1000). Among these 312 buyers, 280 provided valid supplier information. Based on such supplier information, we conducted the supplier survey with 200 questionnaires received, resulting in a response rate of 71.4% (200/280). Finally, we examined the completeness of the data in the responses and whether the suppliers met the requirements of SMME. After removing the surveys with incomplete data and those from suppliers which were not SMMEs, we developed the data-set of this research, which comprises 154 paired buyers and suppliers from four major industries of China. Table 1 shows the profiles of our sample firms.

Table 1 Demographic characteristics of the sample firms

4.1.1 Key informant

Our data indicate that the main respondents consisted of senior managers, vice presidents or directors responsible for supply chain management and/or CSR practices. They were instructed to focus on filling in the CSR measures and ask a financial manager to fill in the financial performance measures. Our data also offer insights to indicate the knowledge of our respondents. First, our data on job tenure indicates that respondents averaged 4.96 (buyer-data) and 4.96 (supplier-data) years of employment with their firms. Second, we assessed their knowledge on the supplier-buyer relationship by a three-item construct on a seven-point scale (1 = not very knowledgeable, 7 = very knowledgeable) (Jap and Anderson, 2003). Specifically, the respondents were asked to rate 1) how similar the goals between the buyer and the supplier are; 2) the nature of unique investments, assets, capabilities, etc. that are used in the relationship; and 3) the degree to which they have earned strategic advantages through the relationship over their competitors. The average scores of this construct were 4.80 (buyer-data) and 4.87 (supplier-data), and a t-test showed no significant difference between the two scores (t -value = 0.52, p -value < 0.1). Finally, the buyer data indicate that

the length of the supplier relationship was 3.63 years on average. Overall, such results evidently indicate that the respondents were adequately knowledgeable to provide accurate responses in the surveys of this study.

4.2 Measure development

The measures of each construct were adapted from previous literature and then refined through a panel discussion and a pilot testing. Seven-point scale was used (1=strongly disagree; 7=strongly agree). According to stakeholder theory and operations management literature (Lindgreen et al., 2009), this study measured CSR as a multidimensional construct that respondents were asked to rate whether their firms actually practices certain CSR activities. These items are concerned with the extent to which a firm works with their multiple stakeholders (i.e. customer, supplier, employee, investor and the community), and manages their environmental issues. The concepts of SRSD were relatively newly developed that it refers to the buyer's activities helping the suppliers to develop the supplier's CSR implementation capabilities. Following prior supplier development research (Krause et al., 2007), the measures of SRSD were empirically developed and tested in three dimensions, including information sharing between buyers and suppliers, supplier evaluation and supplier development relevant to supplier's CSR activities (Lu et al., 2012). Financial performance of buyers and suppliers was measured by a four-item construct that was adapted from existing literature (Vickery et al., 2003; McGuire et al., 1988) and modified based on the results of our pilot studies.

We included four control variables in our analysis, namely types of industry (dummy coded), types of ownership, company sizes of the buyer (in terms of annual sales), and the buyer's market turbulence. Since we used data from four different industries, we need to control the possible industrial effects in our analyses. The type of ownership may affect the ethical value of a company in China (Chun, 2009). This variable was simplified and classified

into state-owned/shared enterprises=1 and non-state-owned/shared enterprises=2. We intended to control the effect of company sizes of buyers as the related economies of scale could affect financial performance, which is a key variable of interest in our hypotheses (Devaraj et al., 2004). Market turbulence was measured by the four-item scales adapted from existing literature (Jaworski and Kohli, 1993). In this study, we expect that the market turbulence of the buyer will also a key factor for the supplier development due to the close relationship between them and both of them are identified under the same sampled industry structure.

4.2.1 Pilot studies

The initial measurement adopted from literature was confirmed by multiple in-depth interviews with a panel of experts in China, including two senior purchasing managers, one university professor, two government officials and one operation management journal editor. The panel discussion results indicate that Chinese organizations increasingly consider business ethics and the implementation of CSR practices as critical issues due to the government's strong emphasis on ethics and heightened expectations of overseas customers. All the CSR dimensions and scales proposed were deemed appropriate to reflect CSR adoption in the SMME of China. Based on their feedback, a draft questionnaire that included measurement items judged to have high face validity was resulted. We translated the questionnaire from English to Chinese following the approach of Zhao at al. (2007). A pilot test was then conducted by distributing the questionnaire to 40 managers in 20 paired buyer-supplier firms in the sampled industries. Respondents were asked to comment on the clarity and appropriateness of the items in the questionnaire. The Appendix shows the revised measurement items.

4.2.2 Non-response bias and common method variance

To detect the non-response bias, the tests of early and late respondents were

conducted (Armstrong and Overton, 1977). The two datasets, one from supplier and one from customer, were tested individually. The t-test results showed no statistical significance between the two groups, in each case at p-value less than 0.05. Additionally, 50 cases from the buyer-data were randomly identified and we compared them with 50 non-respondent data in terms of the buyer's type of industry and annual sales by t-test. Such non-respondent data were identified by public information and our own data-set. The result shows that there is no statistically significant difference at p-value more than 0.05. This indicates that the non-response bias is unlikely a significant problem in this study.

Common method variance was controlled in two stages (Podsakoff et al., 2003). In the procedural stage, the cover letter focused on explaining the background and importance of this study that the respondents were not informed about what would be measured to reduce the respondent bias. The measurements of the research constructs were located in different parts of the questionnaire to achieve psychological and methodological separations. The respondents were pre-qualified and allowed to be anonymous to prevent the respondents' evaluation apprehension. This study adopted existing measurement items from literature and conducted interviews and a pilot test to carefully verify the scale items to reduce item ambiguity and keep them precise. More importantly, we obtained measures of dependent and independent variables from different respondents from buyers and suppliers, which could effectively contain the common method bias (Podsakoff et al., 2012).

In the statistical stage, common method variance was tested using the Harman one-factor test (Podsakoff and Organ, 1986). In this test, the buyer-data revealed seven factors with eigenvalue above one explaining 71.01% of the total variance, and the first factor explained 39% of the variance. The supplier-data identified six factors explaining 80.18% of the total variance, and the first factor explained 45% of the variance. This result implies that no single factor dominated the variance in the data. In addition, two latent variable models

were tested, a measurement model with just the traits and a measurement model including a method factor with the traits (Paulraj et al., 2008; Podsakoff et al., 2003). The results show that, for the buyer-data, the traits-only-model has model fits (i.e. $\chi^2/df = 1.85$, CFI = 0.90, IFI = 0.90 and RMESA = 0.075) similar to the method-factor-model (i.e. $\chi^2/df = 1.66$, CFI=0.92, IFI=0.92 and RMESA= 0.07). For the supplier-data, the traits-only-model has model fits (i.e. $\chi^2/df = 1.74$, CFI=0.94, IFI=0.94 and RMESA= 0.07) similar to the method-factor-model (i.e. $\chi^2/df = 1.45$, CFI=0.97, IFI=0.97 and RMESA= 0.06). These results offer evidence that significant common method bias is unlikely existing in the data.

4.3 Measurement reliability and validity

This study assessed the construct validity of our measures following the guidelines of Anderson and Gerbing (1988). First, to assess the uni-dimensionality of each construct through principal components factor analysis with an orthogonal rotation, the result show, for each variable, only one single factor emerges with all factor loadings above 0.70, indicating that the instruments were uni-dimensional (Tu et al., 2004). Second, we tested the construct reliability by Cronbach's Alpha (α) (see Table 2). The Alpha-value of every factor was greater than 0.7 across buyer and supplier data, indicating acceptable internal consistency of the constructs. The values of composite reliability (CR) and average variance explained (AVE) were also larger than 0.7 and 0.5, respectively, indicating that the constructs were reliable and uni-dimensional. Finally, confirmatory factor analysis (CFA) was conducted to assess the convergent validity and discriminant validity. The CFA results suggested that the model provided an acceptable fit for the buyer-data ($\chi^2/df = 1.85$, CFI = 0.90, IFI = 0.90 and RMESA = 0.075) and for the supplier-data ($\chi^2/df = 1.74$, CFI=0.94, IFI=0.94 and RMESA= 0.07). All standardized factor loadings were over 0.5 and highly significant at p-value<0.01, which indicates good convergent validity is present in the constructs analyzed (Bagozzi and Yi, 1988; Byrne, 2010). Discriminant validity was assessed by making a constrained CFA

model for every possible pair of latent constructs and the correlations between the paired constructs were fixed to 1.0. The least χ^2 difference of dual datasets with p-value less than 0.001 demonstrated discriminant validity (Bagozzi et al., 1991; Flynn et al., 2010). In addition, the square root of the AVE of each construct is greater than all corresponding correlations, providing further evidence of discriminant validity (Fornell and Larcker, 1981).

Table 2 Summary statistics

To validate the second-order constructs of supplier and buyer CSR and SRSD, target (T) coefficient calculated as the ratio of χ^2 of the first-order model to the χ^2 of the second-order model was used (Marsh and Hocevar, 1985). A T coefficient of higher than 0.80 shows that there could be a second-order construct (Cao and Zhange, 2011). Table 3 shows the T coefficient between first-order model and the second-order model for each construct that the second-order models could be accepted as a more parsimonious explanation of the observed variance. The results supported the second-order constructs of the constructs.

Table 3 Fit indexes for the first and second-order models

5.1 Overall model testing

The structural model in Figure 1 was tested using AMOS 19. Maximum likelihood estimation and standardized factor loadings were used. Figure 2 shows the overall results of the analysis. The model fits the samples well ($\chi^2/df = 1.73$, CFI = 0.94, IFI = 0.94 and RMESA = 0.07). The empirical results demonstrate that Buyers' CSR adoption was correlated with suppliers' CSR adoption significantly ($r = 0.58$, $p\text{-value} < 0.01$), supporting H1. Buyers' CSR adoption has significant relationship with socially responsible supplier development (SRSD) ($r = 0.72$, $p\text{-value} < 0.01$), but SRSD has no relationship with supplier's CSR adoption, partially support H2. Buyer's CSR adoption ($r = 0.60$, $p\text{-value} < 0.01$) and supplier's CSR adoption ($r = 0.18$, $p\text{-value} < 0.1$) were significantly correlated with buyer's financial performance. Buyer's CSR adoption ($r = 0.25$, $p\text{-value} < 0.05$) and supplier's CSR

adoption ($r = 0.37$, $p\text{-value} < 0.01$) were also correlated with supplier's financial performance, supporting H3-6.

Figure 2 Structural equation modelling of the hypothesized research model

5.2 Robustness test

We adopt the cross-validation test to evaluate the robustness of the model (Schoenherr and Swink, 2012). Firstly, based on the sample size 154, the dataset is split into two groups randomly to examine whether conceptual model can be supported. In the first group with sample size 74, the statistical results show that buyers' CSR adoption influence the suppliers' CSR adoption positively ($r = 0.60$, $p\text{-value} < 0.01$), and buyers' CSR adoption influence the suppliers' CSR development ($r = 0.59$, $p\text{-value} < 0.01$). Also, the statistical results show that the win-win performance effect, buyers' CSR adoption influence both the buyer and supplier performance positively ($r = 0.69$, $p\text{-value} < 0.01$ and $r = 0.53$, $p\text{-value} < 0.01$) and suppliers' CSR adoption influence both the buyer and supplier performance positively (i.e. $r = 0.48$, $p\text{-value} < 0.01$ and $r = 0.52$, $p\text{-value} < 0.01$). In the second group with sample size 80, the statistical results indicate that that buyers' CSR adoption influence the suppliers' CSR adoption positively ($r = 0.69$, $p\text{-value} < 0.01$), and buyers' CSR adoption influence the suppliers' CSR development ($r = 0.58$, $p\text{-value} < 0.01$). Also, the statistical results show that the win-win performance effect, buyers' CSR adoption influence both the buyer and supplier performance positively ($r = 0.69$, $p\text{-value} < 0.01$ and $r = 0.35$ $p\text{-value} < 0.01$) and suppliers' CSR adoption influence both the buyer and supplier performance positively (i.e. $r = 0.61$, $p\text{-value} < 0.01$ and $r = 0.48$, $p\text{-value} < 0.01$). Overall, the above analysis results can demonstrate the robustness of our findings.

6 Discussion and Conclusions

6.1 Discussion

Current studies on CSR in SMEs mainly focus on the driving forces of CSR related practices (e.g. commercial factors, profitable factors and regulation motivations) (Williamson et al., 2006; Laudal, 2011), the outcomes of CSR practices (e.g. corporations' reputation, ethical behavior, employee commitment, customer satisfaction) (Maignan and Ferrell, 2004 and Lu et al., 2012). Also, in SMEs, some studies emphasize that supply chain partners have a very close interdependent relationship to cope with market uncertainty (Lahdesmaki, 2005) and appeal that the notion of CSR adoption should extend to the whole supply chain, not just for independent firms (Pedersen and Andersen, 2006). However, few study takes buyer and suppliers into account to consider the CSR implementation in the supply chain composed of SMEs. In the literature on supply chain, buyers' strategic OM actions influence the practices of suppliers naturally through the daily communication and interaction and buyer firms also offer some supports and development for facilitating such practices implemented in supplier firms (Krause et al., 2007; Doorey, 2011). Thus, this study attempts to examine whether buyers' CSR adoption behaviors can influence the suppliers' CSR adoption naturally, or socially responsibly supplier development or both. In addition, performance effects become key elements of the willingness of organizational implementing practices (Beverland, 2012). The studies on the actual value of CSR related practices are inconclusive (Mishra and Suar, 2010) and there is lack of exploration in external performance of firm implementing CSR, therefore, whether CSR implemented in supply chain composed of SMEs can achieve win-win performance is also need further examined.

The results indicate that buyers' CSR adoption can influence the suppliers' CSR adoption naturally, supporting H1. When buyer firms implement CSR related practices, supplier can naturally learn CSR related knowledge and conduct related activities to avoid bargaining cost and performance evaluation cost caused by the information asymmetry on

CSR. Thus, buyers' implementing CSR related practices can influence CSR behaviour in supplier firms naturally.

These results demonstrate that buyers' CSR adoption impels buyers to provide the SRSD activities for suppliers. CSR related practices involve the supplier management, which requires buyers to integrate their suppliers' interests into our business decisions. Also, buyers expect that such activities can reduce their bargaining cost and monitoring cost in their transaction process with suppliers. Thus, CSR adoption increases buyers' motivation to provide the socially responsible development for suppliers. However, the results show that SRSD have no obvious role in the supplier implementing CSR. The plausible reason could be that in SMEs, supplier firms implementing practices depend more on the value creation (i.e. cost and revenue) generated by such these practices than some enforced activities from buyer firms. SRSD activities involve some requirements and training for suppliers. When suppliers are more dependent on buyers to form power distance, buyers' SRSD are more likely to impel suppliers to conduct such training or requirements. Whereas, in SMEs with equally dependent relationships between suppliers and buyers, there is no obvious power distance between suppliers and buyers in our samples, thus, such quasi-institutional activities (i.e. SRSD) from buyer activities could have no obvious pressure on suppliers' decision on the CSR adoption, thus suppliers implementing CSR activities are incline to be affected by buyers' behaviour naturally.

Also, the results show that buyer implementing CSR can enhance both buyer and supplier performance simultaneously. When buyer firms adopt CSR related practices, they can strengthen their stakeholder relations. The good relationships with communities and investors can increase business opportunities, which are beneficial to every partner of supply chain. Also, buyer firms implementing employee rights and consumer rights can encourage employees and customers to participate organizational innovation of buyer firms, and such

innovation influences operations improvement of supplier firms, thereby enhancing both performance of buyer and supplier simultaneously. In addition, supplier management can reduce the risk and uncertainty caused by supplier firms and help supplier firms improve their operational deviance by training activities. Thus, buyers' CSR adoption can achieve win-win outcomes between suppliers and buyers.

In addition, the analysis results show that the suppliers' CSR adoption can influence the buyers' performance and suppliers' performance simultaneously. Indeed, when suppliers adopt CSR-related practices, it can generate moral capital for buyers to develop their trust for suppliers, thereby facilitating them to exchange their knowledge and share information between them. Also, suppliers adopt CSR related practices, they have more willingness to implement the proactive activities to help buyers solve raw materials related problems and propose innovation orientation. In addition, when suppliers implement CSR related practices, they take buyers' interests into their decision-making and firm development, thus, suppliers' CSR adoption is not only beneficial to internal firm performance, but also external partners' performance (i.e. buyers' performance).

6.2 Theoretical implication

The first theoretical implication is to extend the perspective from the firm-level CSR adoption to the CSR adoption in supply chain composed of SMEs. Most studies focus on the CSR adoption in the large companies (Maignan and Ferrell, 2004; Lu et al., 2012), because it is highly relevant with the reputation and public image. Actually, SMEs often account for a large percentage of enterprises in different economies, provide a large part of employments and cause many environmental issues. Thus, considering CSR related practices in SMEs is very important. In SMEs, supply chain relationships of these enterprises are closely interdependent, which help them to cope with dynamic market. Also, the studies on CSR demonstrate that CSR need be extended to supply chain, because supply chain is higher level

of industrial development (Lee, 2008). Above all, this study has filled the gap to empirically examine the CSR adoption in the supply chain of SMEs, which complement the literature on the CSR in the SMEs and enrich the literature on CSR implementation in the supply chain.

The second theoretical implication is to apply the transaction cost economics theory (TCT) to analyze how buyers' implementing CSR behaviour influences the suppliers' CSR behaviour, which enriches the application of social context. The findings indicate that in supply chain composed of SMEs, buyers' CSR adoption influences their suppliers' CSR adoption naturally rather than via socially responsible development. Such findings further demonstrate that suppliers' adopting CSR mainly depend on the internal value created by CSR (the analysis of cost and benefits) rather than external pressure from buyers. The findings indicate that transaction cost take an important and key role in small-medium suppliers' decision on CSR adoption behaviour.

The third theoretical implication is to identify that CSR related to practices in the supply chain can achieve win-win situations, i.e. buyers' CSR adoption influences the suppliers' performance and buyers' performance and suppliers' CSR adoption influences the buyers' and suppliers' performance. Current studies on the outcomes of CSR related practices mainly focus on firm-level performance, e.g. firm reputation and customer satisfaction (Tang et al., 2012). Whereas, these findings offer the insights that supply chain partners implementing CSR practices can not only improve their own performance, but also improve their co-operators' performance, thereby enhancing the supply chain performance.

6.3 Practical implication

There are some practical implications. First, in supply chain of SMEs, buyers' CSR adoption influences suppliers' CSR adoption naturally. To impel the CSR implementation in supply chain, some institutions (e.g. governments or NGOs) should put the priority on buyers' CSR development by providing some relevant policies (e.g. special carbon policies

for small-medium enterprise) and investing capital to encourage small-medium buyer firms to implement CSR. When large scale buyers have implemented CSR activities, suppliers' CSR adoption can be impacted by buyers' CSR behaviour, thereby achieving the CSR development in the entire supply chain.

Second, any partners in supply chain implementing CSR related practices can not only improve their own performance, but also improve other partners' performance, achieving win-win situations. Thus, in supply chains of SMEs with very limited capital and resources, supply chain partners can cooperate together to afford cost in developing the CSR in one partner's company, which not only influences such firm's performance, but also impel co-operators' performance.

In addition, in the supply chain, buyer firms need aware that socially responsible supplier development has limited role in prompting buyers' CSR implementation. Such pressure from buyer firms is not important elements for small-medium suppliers considering the CSR adoption. Thus, the SRSD decision-making in supply chain should dependent on buyers and suppliers' sizes and their power distance.

6.4 Limitation and future study

This study also has some limitations. First, our samples are collected from China manufacturing. Firms in China often have close relationships, due to culture (e.g. guanxi), which influences buyers' and suppliers' behaviours. Thus, firms' CSR behaviours in the supply chains of SMMEs could be different in different countries. Future work could re-examine our posited relationships in contexts which the buyer-supplier relationships are relatively less close (e.g., U.S.A.). Second, this study examines the direct associations between buyers' and suppliers' CSR adoption and their direct impact on financial performance. Yet such direct associations can be moderated by some relevant factors. Thus,

future work could identify relevant moderating factors (e.g., organizational slack) and examine their moderating impact on our posited direct associations.

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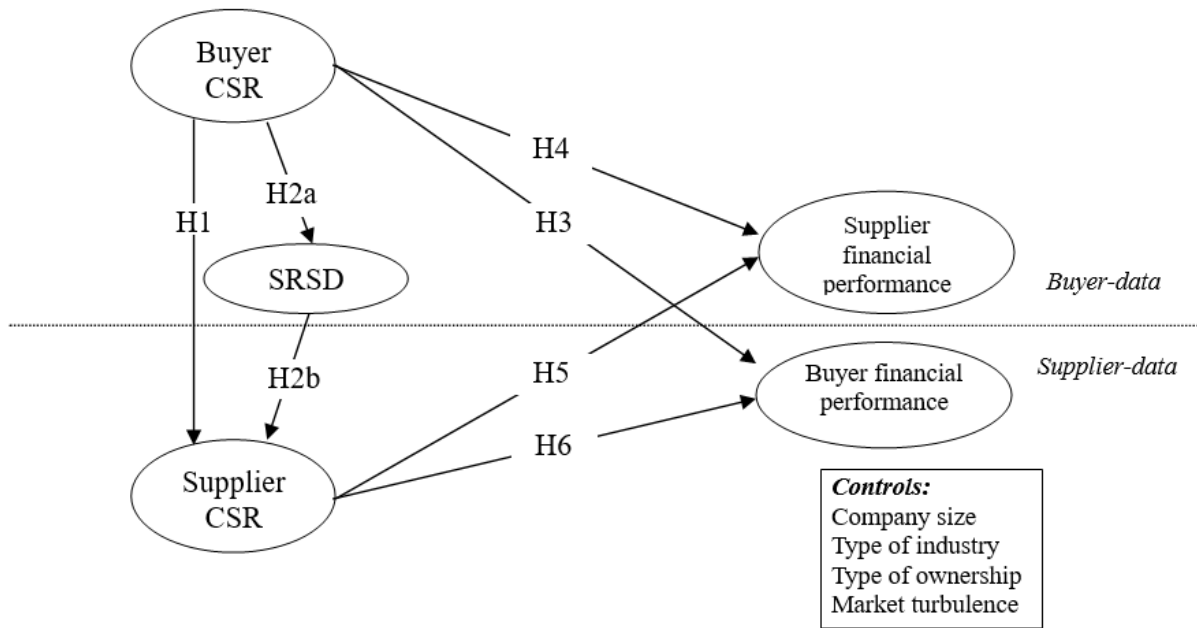
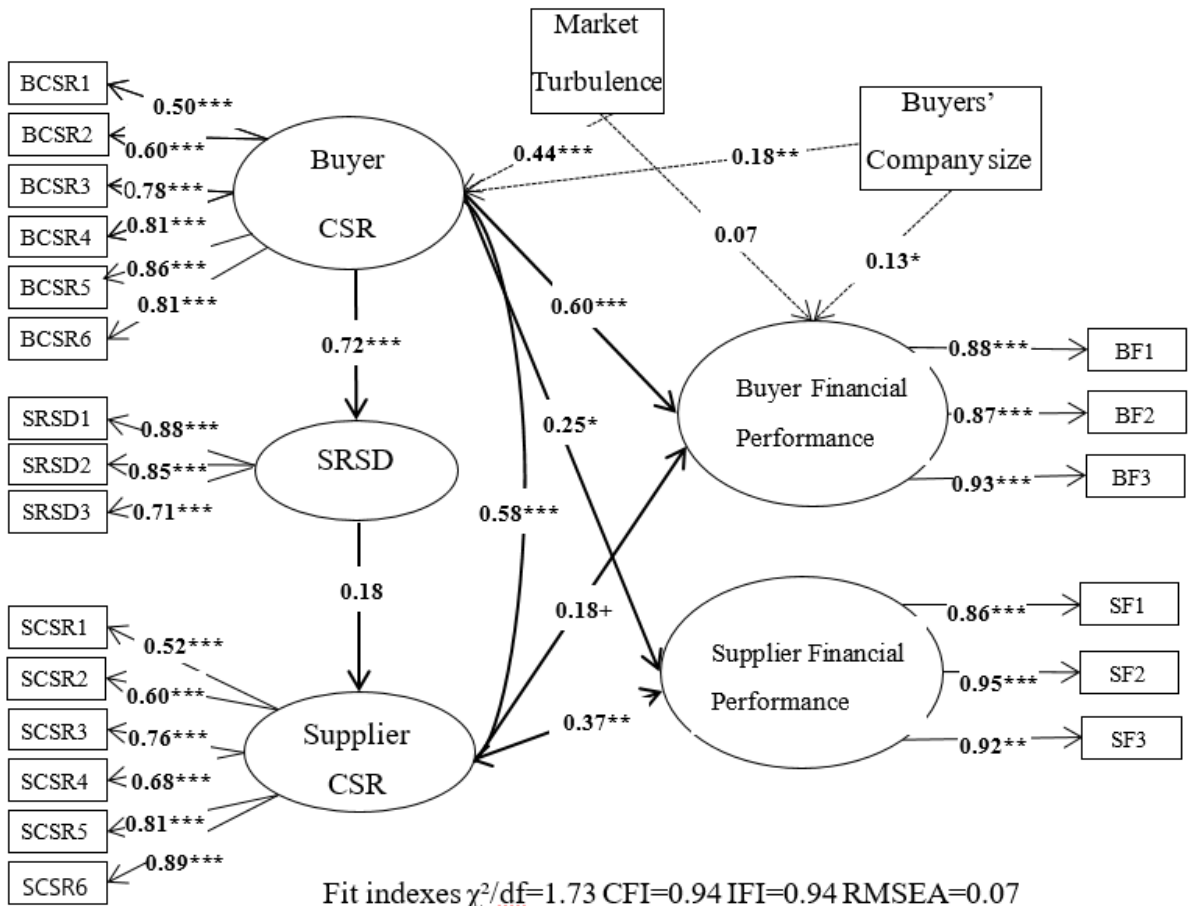


Figure 1 The hypothesized research model



Note: please refer to appendix for the definition of the abbreviations

Figure 2 Structural equation modelling of the hypothesized research model

Table 1. Demographic characteristics of organizations

	N	Percentage (%)
Types of industry		
Food and Beverage	33	21.4
Automotive and Electronic	30	19.5
Textile	56	36.4
Pharmaceutics	35	22.7
Buyer's annual turnover (<i>Yuan</i>)		
5-7 million	12	7.8
10-30 million	8	5.2
30-50 million	54	35.1
50-100 million	15	9.7
100 - 400 million	65	42.2
Supplier's annual turnover (<i>Yuan</i>)		
5-7 million	53	34.4
10-30 million	32	20.8
30-50 million	13	8.4
50-100 million	11	7.1
100 - 400 million	45	29.2
Types of buyer's ownership		
State-owned enterprise	10	6.5
State-share-owned enterprise	19	12.3
Wholly foreign-owned enterprise	23	14.9
Privately owned enterprise	99	64.3
State and privately owned enterprise	3	1.9

Table 2 Summary statistics

Buyer-data

Construct	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	AVE	CR	Alpha
1. CSR-Environmental management	5.39	0.99												0.70	0.85	0.87
2. CSR-Shareholder relationship	5.24	1.06	0.44**											0.59	0.91	0.93
3. CSR-Employee rights	5.93	1.03	0.26**	0.39**										0.67	0.93	0.92
4. CSR-Consumer rights	5.66	0.95	0.32**	0.56**	0.67**									0.70	0.90	0.87
5. CSR-Supplier management	5.28	1.08	0.39**	0.48**	0.70**	0.71**								0.61	0.87	0.82
6. CSR-Community relationship management	5.02	1.01	0.47**	0.52**	0.58**	0.62**	0.65**							0.63	0.86	0.80
7. SRSD-Information sharing	4.69	0.92	0.47**	0.41**	0.54**	0.44**	0.64**	0.63**						0.61	0.87	0.78
8. SRSD-Supplier evaluation	4.68	0.96	0.33**	0.24**	0.42**	0.30**	0.50**	0.46**	0.75**					0.66	0.86	0.81
9. SRSD-Supplier development	4.35	1.30	0.20*	0.17*	0.41**	0.25**	0.42**	0.49**	0.61**	0.65**				0.65	0.89	0.88
10. Market turbulence	4.56	1.53	-0.15	0.09	0.40**	0.28**	0.40**	0.31**	0.31**	0.30**	0.26**			0.64	0.86	0.87
11. Financial performance	4.82	1.00	0.18*	0.34**	0.30**	0.32**	0.43**	0.32**	0.32**	0.34**	0.31**	0.35*		0.75	0.92	0.92

Note: All of the correlations are significant at the p-value < 0.01 level (2-tailed), except the relationships between market turbulence and CSR-environmental management as well as between market turbulence and CSR-shareholder relationship.

Supplier-data

Construct	Mean	SD	1	2	3	4	5	6	7	AVE	CR	Alpha
1. CSR-Environmental management	4.96	1.16								0.65	0.85	0.92
2. CSR-Shareholder relationship	5.44	0.97	0.51							0.69	0.92	0.88
3. CSR-Employee rights	5.11	1.21	0.44	0.34						0.71	0.92	0.95
4. CSR-Consumer rights	5.90	0.94	0.54	0.22	0.51					0.74	0.90	0.93
5. CSR-Supplier management	5.79	0.93	0.47	0.19	0.48	0.66				0.59	0.85	0.89
6. CSR-Community relationship management	5.05	1.13	0.54	0.44	0.40	0.59	0.53			0.66	0.86	0.91
7. Financial performance	5.03	1.16	0.53	0.25	0.42	0.52	0.34	0.41		0.82	0.92	0.94

Note: All of the correlations are significant at the p-value < 0.01 level (2-tailed).

Table 3 Fit indexes for the first and second-order models

Construct	Model	χ^2/df	CFI	IFI	RMSEA	T coefficient
Buyer CSR	1 st order	1.96	0.93	0.93	0.08	1.05
	2 nd order	2.39	0.94	0.92	0.08	
Supplier CSR	1 st order	1.70	0.95	0.94	0.07	1.01
	2 nd order	1.67	0.95	0.95	0.07	
SRSD	1 st order	2.42	0.96	0.97	0.09	1.00
	2 nd order	2.42	0.96	0.97	0.09	

APPENDIX

Result of confirmatory factor analysis using buyer-data (N =154)

Measurement items	Standardized factor loadings
Buyer CSR	
<i>Environmental management (BCSR1)</i>	
Incorporate environmental performance objectives in our organizational plans	0.897
Incorporate environmental concerns in our business decisions	0.884
Measure our organization's environmental performance	0.720
<i>Shareholder relationship (BCSR2)</i>	
Seek the input of our major investors regarding strategic decisions	0.857
Provide investors with a competitive return on investment	0.845
Inform our investors of changes in corporate policy	0.892
Incorporate the interests of our investors in business decisions	0.867
Provide our investors with full and accurate financial information about the organization	0.840
<i>Employee rights (BCSR3)</i>	
Safeguard the legitimate rights and interests of employees	0.872
Provide our employees with salaries that properly and fairly reward them for their work	0.931
Provide procedures that help to ensure the health and safety of our employees	0.839
Treat our employees fairly and respectfully, regardless of gender or ethnic background	0.838
<i>Consumer rights (BCSR4)</i>	
Adapt products or services to enhance the level of customer satisfaction	0.838
Provide customers with the information needed to make sound purchasing decisions	0.812
Satisfy the complaints of our customers about products or services	0.834
<i>Supplier management (BCSR5)</i>	
Treat suppliers, regardless of their size and location, fairly and respectfully	0.731
Incorporate the interests of our suppliers in our business decisions	0.839
Inform our suppliers about organizational changes affecting our purchasing decisions	0.789
<i>Community relationship management (BCSR6)</i>	

Understand the needs of the communities where we operate by communication.	0.802
Financially support education (e.g., school building, scholarship, etc.) and cultural (e.g., arts, sports, etc.) activities in the communities where we operate.	0.603
Incorporate the interests of the communities, where we operate, in our business decisions	0.822
Socially Responsible Supplier Development (SRSD)	
Please focus on the supplier that is the most crucial to your performance when responding the following items (i.e. SRSD1 through SRSD3).	
Information sharing (SRSD1)	
Our communication on issues concerning CSR implementation occurs at different levels of management and cross-functional areas.	0.797
It is expected that we communicate the ethical behavior requirements clearly and accurately to the supplier.	0.785
It is expected that we keep each other informed about our CSR practices or changes that may affect this supplier.	0.638
Supplier evaluation (SRSD2)	
We maintain or increase order quantity according to the evaluation results to encourage suppliers who actively perform socially responsible duties.	0.812
We provide suppliers with feedback about the results of such an evaluations	0.908
We assess suppliers' ethical performance through a formal evaluation, using established guidelines and procedures.	0.603
Supplier development (SRSD3)	
We have a dedicated supplier development team focusing on the improvement of the supplier's business ethics.	0.799
We provide suppliers with training/education about CSR practices and the required skills in implementation.	0.870
We regularly visit the supplier to help them improve ethical performance.	0.874
Market turbulence (MT)	
In our kind of business, customers' product preferences change quite a bit over time	0.880
Our customers tend to look for new products all the time	0.899

New customers have product needs that are different from our existing customers	0.751
Buyer financial performance (BFP)	
Relative to our most relevant competitors, over the past 3 years:	
Our total assets have been substantially better (<i>BF1</i>)	0.864
Our sales growth has been substantially better (<i>BF2</i>)	0.935
Our operating income growth has been substantially better (<i>BF3</i>)	0.890
Fit indexes: $\chi^2/df = 1.85$, CFI = 0.90, IFI = 0.90 and RMESA = 0.075	

All standardized regression weights are significant at p-value<0.01, with t-value >1.96 or < -1.96 (Byrne, 2001)

Result of confirmatory factor analysis using supplier-data (N =154)

Measurement items	Standardized factor loadings [#] (t-value)
Supplier CSR	
<i>Environmental management (SCSR1)</i>	
Measure our organization's environmental performance.	0.782
Incorporate environmental concerns in our business decisions	0.846
Incorporate environmental performance objectives in our organizational plans	0.883
<i>Shareholder relationship (SCSR2)</i>	
Provide our investors with full and accurate financial information about the organization.	0.890
Incorporate the interests of our investors in business decisions.	0.910
Inform our investors of changes in corporate policy	0.915
Provide all investors with a competitive return on investment	0.913
Seek the input of our major investors regarding strategic decisions	0.839
<i>Employee rights (SCSR3)</i>	
Care the private and professional lives of employees	0.835
Treat our employees fairly and respectfully, regardless of gender or ethnic background.	0.796
Provide procedures that help to ensure the health and safety of our employees.	0.793
Provide our employees with salaries that properly and fairly reward them for their work	0.896

Safeguard the legitimate rights and interests of employees	0.923
Consumer rights (SCSR4)	
Satisfy the complaints of our customers about products or services.	0.826
Provide all customers with the information needed to make sound purchasing decisions	0.908
Adapt products or services to enhance the level of customer satisfaction	0.815
Supplier management (SCSR5)	
Be concerned about how suppliers manage the ethical performance of their own suppliers	0.724
Incorporate the requirements of ethics and environment into the purchasing contract	0.857
Inform our suppliers about organizational changes affecting our purchasing decisions	0.828
Incorporate the interests of our suppliers in our business decisions	0.818
Community relationship management (SCSR6)	
Incorporate the interests of the communities, where we operate, in our business decisions	0.905
Help improve the quality of life in the communities where we operate	0.902
Understand the needs of the communities where we operate by communication	0.826
Supplier financial performance (SFP)	
Relative to our most relevant competitors, over the past 3 years:	
Our total assets have been substantially better (SF1)	0.856
Our sales growth has been substantially better (SF2)	0.945
Our operating income growth has been substantially better. (SF3)	0.929
Fit indexes: $\chi^2/df = 1.74$, CFI=0.94, IFI=0.94 and RMESA= 0.07	

All standardized regression weights are significant at p-value<0.01, with t-value >1.96 or < -1.96 (Byrne, 2001)