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Corporate social responsibility and firm performance: The mediating role of marketing competence and the moderating role of market environment

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Abstract The influence of corporate social responsibility (CSR) on firm performance in developed economies has been studied extensively. However, extant studies provide mixed findings on the relationship between CSR and firm performance in emerging economies. Drawing on stakeholder theory and institutional theory, we look at CSR in China, taking a multi-dimensional view of CSR and introducing marketing competence as an important intermediate between CSR and firm performance. We also use a contingent perspective to examine the role of market environments in moderating the impact of CSR on marketing competence. The findings of an empirical study conducted in China show that marketing competence fully mediates the effects of all CSR activities on firm performance. Competitive intensity weakens the positive impact of CSR toward employees on marketing competence, while it strengthens the positive effect of CSR toward society on marketing competence. The positive relationship between CSR toward customers and marketing competence is enhanced by market turbulence. The results of this study highlight the importance of CSR to marketing competence and firm performance in China.

Keywords Corporate social responsibility · Marketing competence · Market turbulence · Competitive intensity · Firm performance

Many organizations consider corporate social responsibility (CSR) to be a strategic imperative in today's competitive market environment. According to the CECP Giving in Numbers 2013 report, the largest 100 companies in the Fortune 500 donated US$60.95 million (.09 % of total revenue) in 2012. For example, Wal-Mart donated

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4.5 % of its 2011 pre-tax profits to help support about 50,000 charities (Smith, 2013). While studies of CSR posit that firms benefit society in ways that go far beyond financial contributions (Carroll, 1979; Kok, van der Wiele, McKenna, & Brown, 2001), conventional views focus on firms' responsibility to maximize profits (Friedman, 1970), and profit-seeking activities would seem to be in conflict with initiatives to contribute to the greater social good (Graafland, 2002). This tension leads to the question of whether CSR is associated with improved financial performance. In general, studies conducted in developed countries indicate a positive relationship (e.g., Hansen, Dunford, Boss, Boss, & Angermeier, 2011; Ruf, Muralidhar, Brown, Janney, & Paul, 2001; Waddock & Graves, 1997). The business practices in Western economies also show that firms benefit from CSR activities. For example, Toyota, in response to public concerns about auto emissions, engaged in CSR activities toward society and developed the hybrid Prius, which not only significantly reduces pollutants and protects the natural environment, but also gives Toyota a lead position in hybrid technology (Porter, Kramer, & Zadek, 2007).

A close look at existing literature reveals institutional differences in the CSR–performance link. Though successful CSR practices and positive performance links can be seen in Western developed economies, the strategic value of CSR is still unclear in emerging economies such as China. On one hand, emerging economies do not have efficient communication channels for disseminating CSR information (Rettab, Brik, & Mellahi, 2009) and effective legal systems to guard against unethical corporate behaviors (Ben Brik, Rettab, & Mellahi, 2011). China, as the largest emerging economy, is suffering from the shortcomings of all emerging markets (Zhou & Poppo, 2010) such as imperfect policies to reward firms for CSR efforts and ineffective legal systems to punish unethical practices. Consequently, regulative institutions exert limited pressure on organizations to initiate CSR, and organizations benefit little from conforming to regulative institutions. On the other hand, normative pressure to engage in CSR is high in China. The increasingly exposed unethical corporate behaviors in China pose challenges for the entire business society and make CSR increasingly important in such an environment. For example, the 2008 Sanlu milk scandal in China and other food safety issues have caused consumers to distrust the entire dairy and food industry. A recent study found that Chinese customers have high expectations regarding CSR and are likely to respond to CSR activities by showing increased cooperation and support (Ramasamy & Yeung, 2009; Wang & Qian, 2011). An example is the reaction of JiaDuoBao (JDB)'s (a small privately owned company in China) stakeholders toward its donation after the earthquake in Sichuan province in 2008. JDB boosted its brand image and public legitimacy after it announced that it would donate CNY 100 million to help victims of the earthquake. Its sales increased from CNY 5 billion in 2007 to CNY 12 billion in 2008.

Thus, although there are not intensive regulative pressures for CSR in China, firms face strong normative pressure to engage in CSR activities. However, studies show the results are mixed. While some studies find positive CSR–performance links (e.g., Lai, Chiu, Yang, & Pai, 2011; Wang & Qian, 2011), others report a negative relationship (e.g., Zhou & Huang, 2012; Wan & Liu, 2013). The unique institutional environment and inconsistent empirical evidence leads business practitioners and academic researchers to ask two important questions. First, does CSR have a positive effect on firm performance in China? Second, if so, what competitive advantages does CSR provide?

Regarding the first question, we suspect that the inconsistent findings on the impact of CSR on firm performance can be explained, at least partially, by differentiating CSR activities based on different stakeholders and by considering the contingent role of the market environment. First, extant research on different stakeholders' perspectives recognizes that stakeholders have varying expectations and objectives vis-à-vis organizations (Maignan, Ferrell, & Ferrell, 2005). Yet few studies explicitly differentiate the effects of CSR on different stakeholders, and previous studies tend to conceptualize CSR as a uni-dimensional construct (Mishra & Suar, 2010). This conceptualization limits the ability of CSR to explain firm performance. A firm's CSR may be weighted toward activities that are important to specific stakeholders (Mishra & Suar, 2010). Thus combining different aspects of CSR activities cannot capture variations in firm performance that can be explained by the multi-dimensional approach.

Second, according to the "fit" concept, outcomes of organizational strategies are partially contingent on the market environment, and a firm is more likely to achieve superior performance when its strategic choices fit the environment (Venkatraman & Prescott, 1990). Along this line of thinking, the effectiveness of strategies like CSR toward different stakeholders may depend on the market environment. For example, when competition is intense, integrating socially responsible attributes into a corporate brand to achieve differentiation is a desirable choice (Homburg, Stierl, & Bornemann, 2013).

The second question concerns the missing link between CSR and firm performance in China. With a few exceptions (e.g., Lai et al., 2011), academic research falls short in explaining the link between CSR and firm performance (Mackey, Mackey, & Barney, 2007; Mishra & Suar, 2010). We propose that CSR is a source of competitive advantage that can enhance firms' marketing competences, which in turn leads to superior performance. An increasing number of corporations have adopted CSR as a business strategy to enhance competitiveness and as a key means to achieve sustainable business development. Extant studies in the marketing literature have identified the positive impacts of CSR on improving consumer satisfaction (Lev, Petrovits, & Radhakrishnan, 2010; Luo & Bhattacharya, 2006), providing customer-company identification (Lichtenstein, Drumwright, & Braig, 2004), and establishing brand equity (Lai et al., 2011), which are integral components of marketing competence (Clark, 1999; Conant, Mokwa, & Varadarajan, 1990). As a firm's competitive advantage stems from its unique assets and distinctive capabilities (Barney, 1991), an organization's marketing competence may serve as an intermediate in the CSR–performance link. However, it is still unclear whether marketing competence can mediate the effect of CSR toward different stakeholders on firm performance.

In brief, this study contributes to the understanding of the CSR–performance link in three significant ways. First, previous studies were mainly conducted in developed economies and tended to regard CSR as an umbrella concept. This research draws on stakeholder theory and treats CSR as a multi-dimensional construct to examine the CSR–performance link in China, one of the largest emerging markets. Our study thus offers a more refined approach to empirically examining how each dimension of CSR exerts influence on firm performance in China. Second, building on the concept of strategy–environment fit, we depict the interplay between CSR toward different stakeholders and the market environments, and advance a contingent view of CSR. Third, we propose and empirically test the intermediate role of marketing competence on CSR and firm performance relationship. The results of this study are not only important to

Chinese firms, but also to Western businesses that make investments in the Chinese market. We present our conceptual framework in Fig. 1 and develop our hypotheses in light of the framework.

Theoretical background

A stakeholder perspective of CSR

CSR is generally defined as activities that extend beyond firms' pure economic interests to include actions intended to yield social benefits (Freeman & Hasnaoui, 2011; McWilliams & Siegel, 2001; Swanson, 1999). This definition primarily focuses on CSR activities toward society which highlights the broader notion of sustainability (Homburg et al., 2013). However CSR can be targeted to specific business groups or individual consumers (Carroll, 1991). In this study, we consider CSR from different stakeholders' perspective and define CSR as "a firm's voluntary consideration of stakeholder concerns both within and outside its business operations" (Homburg et al., 2013: 54). Therefore, CSR defined in our study refers to firms' voluntary behaviors that go beyond purely economic interests (Turker, 2009).

Stakeholders are individuals or groups that are capable of exerting influence on corporate activities and whose interests have implications for corporate management (Freeman, 1999; Ramchander, Schwebach, & Staking, 2012). A company's stakeholders include various parties such as employees, customers, stockholders, suppliers, and so on, each of whom has legitimate interests in corporate activities (Donaldson & Preston, 1995). Stakeholder theory has distinguished between primary and secondary stakeholders (Freeman, 1984). Primary stakeholders are those who participate directly and frequently in the focal firm's operations and the firm's survival largely depends upon their involvement. Customers and employees are considered to be the most important primary stakeholders because these two groups contribute most to a firm's performance (Maignan et al., 2005), whereas secondary stakeholders, such as community members or non-profit organizations, do not directly engage in transactions with the focal firm, but influence the firm in indirect ways (Clarkson, 1995). For example, society falls into the secondary stakeholder group since it has indirect resource implications on a firm and a firm's activities exert influence on the society in which it exists (McCarthy, Puffer, Dunlap, & Jaeger, 2012).

In this study, we focus on CSR toward three stakeholder groups: employees, customers, and society. Employees and customers are the two most important primary stakeholders, but we also consider society because CSR toward society is one of the key elements of the CSR concept (Carroll & Shabana, 2010). Although primary stakeholders (e.g., customers and employees) contribute most to a firm's performance (Homburg et al., 2013), the active responses of Chinese stakeholders toward corporate philanthropic activities make society as important as the primary stakeholders. Finally, these three groups contribute most to a firms' market achievement (Maignan, Ferrell, & Hult, 1999). Therefore, CSR toward stakeholders is defined as firms' voluntary behaviors which go beyond pure economic interest and aim to affect different stakeholders positively (Turker, 2009). Specifically, *CSR toward society* refers to firms' voluntary consideration of societal needs focusing on a broader notion of sustainability (Homburg et al., 2013; Turker, 2009); *CSR toward employees* is defined as firms' voluntary consideration which addresses employees' concerns and interests (Mishra & Suar, 2010); *CSR toward customers* refers to firms' voluntary consideration of customer concerns both within and outside of business operations (Turker, 2009).

Previous studies on the CSR–performance link

Existing findings on the relationship between CSR and firm performance are inconclusive (Margolis & Walsh, 2003). In general, a positive relationship between CSR and organizational outcomes has been identified in developed economies (e.g., Ruf et al., 2001; Waddock & Graves, 1997). Corporate reputation and brand image as well as customer and employee satisfaction bolstered by CSR are valuable resources that enhance performance (Hansen et al., 2011; Luo & Bhattacharya, 2006). However, studies in emerging markets such as China found mixed results of CSR on firm performance. For example, Wang and Qian (2011) found that corporate philanthropy enhances a firm's financial performance in China; Lai et al. (2011) found that CSR has a positive impact on brand performance based on a sample of 179 firms in China. However Wan and Liu (2013) studied 382 listed companies in China and found that the stock value of those firms was negatively correlated with their environmental expenditures. Zhou and Huang (2012) found that CSR had a negative impact on the performance of family businesses in China. Julian and Ofori-Dankwa (2013) studied a firm in a sub-Saharan African emerging economy and found that the firm's return on sales, return on equity, and net profitability were negatively related to CSR expenditures.

A close examination of these empirical studies reveals that measurement issues may be one explanation for the inconsistent findings in China (Orlitzky, Schmidt, & Rynes, 2003). Despite the recognition that CSR is a multi-dimensional construct, studies tend to aggregate CSR activities, and these studies may not recognize that CSR toward different stakeholders could account for significant variances in firm performance. In this study, we conceptualize CSR as a multi-dimensional construct that consists of CSR toward society, employees, and customers.

The unclear CSR–performance link may also be partially attributable to some "missing element" such as an underlying processes or contingency condition that explains the observed relationship (Sen & Bhattacharya, 2001). Extant studies have demonstrated a positive relationship between marketing competence and firm performance (e.g., Dutta, Zbaracki, & Bergen, 2003; Morgan, Vorhies, & Mason, 2009). We build on these findings and propose that the relationship between CSR and firm performance is better understood by the mediating role of marketing competence. Furthermore, we draw on the literature of strategy environment fit (Venkatraman & Prescott, 1990) and posit that market environments (market turbulence and competitive intensity) moderate the relationship between CSR and marketing competence.

Hypothesis development

The legitimacy (Oliver, 1991) and capabilities (Miles & Covin, 2000; Varadarajan & Menon, 1988) derived from CSR activities is a valuable resource, which is difficult for competitors to imitate or replicate. We propose that CSR enhances marketing competence and further contributes to firm performance. Marketing competence is a firm capability that is rare, valuable, non-substitutable and inimitable. Empirical studies have concluded that marketing competence provides superior competitive advantages (Dutta et al., 2003; Morgan et al., 2009; Nath, Nachiappan, & Ramanathan, 2010). Conant et al. (1990) focused on functional-level marketing competencies and developed a 20-item competency scale, including competence in accumulating market knowledge, awareness of organizational strengths and weaknesses, marketing planning and implementation ability, and so on. This measure focused on marketing activities from the perspective of marketing process. We, however, consider marketing competence from the perspective of marketing output which emphasizes the outcomes of functional level activities for the purpose of model parsimony. Thus, drawing on the work done by Clark (1999) and Conant et al. (1990), we define marketing competence as a firm's ability to achieve superior marketing outputs in comparison to its competitors in terms of creating customer benefits, improving customer satisfaction, and building brand image. We consider only these three facets because they are recognized as important marketing outputs and have received extensive research attention (Clark, 1999).

The mediating role of marketing competence

Typically, CSR toward society focuses on areas such as environmental protection, sustainable growth, and contribution to the overall society (Turker, 2009). A firm's CSR toward society helps build marketing competence, which in turn improves business performance. Normative institutions in China exert strong pressure on organizations to initiate CSR toward society (Wang & Qian, 2011), because customers perceive CSR toward society as a legitimate corporate behavior that aligns with socially acceptable norms and beliefs (Margolis & Walsh, 2003). When customers perceive that the voluntary actions of an organization are desirable, proper, or appropriate, it is easier for those firms to position products and services in the minds of those customers (Boehe & Barin Cruz, 2010). As a result, a firm's marketing competence is enhanced when the firm engages in CSR activities toward society.

Socially responsible behaviors enhance a firm's ability to differentiate its brand from those of competitors. CSR toward society helps firms build positive brand awareness by creating a favorable and distinctive brand image (Hoeffler & Keller, 2002; Keller, 1993). Brand image reflects the public's opinion of the firm, and this opinion stems from the firm's success in meeting the public's expectations (Surroca, Tribo, & Waddock, 2010). Activities aimed at improving social well-being and protecting the environment attach socially responsible attributes to a brand or a firm's image (Lai et al., 2011). For example, Haier, a state-owned enterprise in China, improved its brand image by emphasizing its commitment to protecting the natural environment, and eventually gained stakeholder recognition and competitive advantage over its competitors (He, Tian, & Chen, 2007). Taken together, we propose that:

Hypothesis 1 Marketing competence mediates the relationship between CSR toward society and firm performance.

CSR toward employees focuses on firms' voluntary consideration of providing employees with further education and career development, as well as ensuring a balance between employees' work and family life (Turker, 2009). Normative pressure to engage in CSR toward employees is increasing in China, as the public is becoming more aware of labor issues and ethics. Firms can gain legitimacy and customer acceptance by engaging in CSR toward employees, which further enhances their competitive advantage (Zimmerman & Zeitz, 2002).

CSR toward employees helps a firm build a positive image as an employer and create a favorable reputation for the firm. Firms voluntarily engaging in CSR activities toward employees provide good working conditions and offer career development opportunities, and therefore they are able to recruit and retain a high quality workforce (Turban & Greening, 1997), that will eventually enhance the firm's marketing competence and performance.

What's more, a firm's voluntary consideration of improving employee working conditions and welfare can increase employee satisfaction and commitment (Hansen et al., 2011), which motivates employees to work hard and deliver better products or services, thus increasing consumers' perceived benefits. In other words, when employees are motivated by CSR activities, their productivity is higher and they generate more consumer benefits, thereby contributing to firm performance (McWilliams & Siegel, 2011; Reynolds & Beatty, 1999). Overall, we propose that:

Hypothesis 2 Marketing competence mediates the relationship between CSR toward employees and firm performance.

CSR toward customers focuses on a firm's voluntary consideration of customer concerns which goes beyond purely profit-seeking behaviors. It enhances a firm's marketing competence by providing customers with benefits and the perception of quality, and further helps a firm achieve superior performance. Customer benefits are defined as the sum of positive outcomes perceived by the customer in the exchange relationship. It is determined by a customer's perception of product quality and psychological gains (Homburg, Kuester, Beutin, & Menon, 2005; Zeithaml, 1988).

CSR toward customers strengthens consumers' positive attitudes toward a firm's offerings and promotes a favorable benefit perception (Brown & Dacin, 1997; Luo & Bhattacharya, 2006). First, a firm which respects customer rights and provides customers with accurate information shows its goodwill and gains trust over time. The trusting relationship further enhances communication and reinforces customers' psychological gains. For example, Lenovo, a local Chinese firm, adheres to high ethical standards in dealing with customers and it subsequently gains value from such behaviors.

Second, CSR toward customers provides a firm with market-sensing capability and market responsiveness (Hult & Ketchen, 2001). Practices aimed at improving customer satisfaction help a firm anticipate customer needs and offer products or services that satisfy those needs promptly (Sen & Bhattacharya, 2001; Slater & Narver, 1994b). For example, in the food industry, firms that demonstrate concern about customers' health and adhere to high safety standard reap the reward of favorable brand image. By contrast, a food scandal that exposed to the public can greatly damage a firm's brand image, such as the 2008 Sanlu milk scandal. Taken together, we propose that:

Hypothesis 3 Marketing competence mediates the relationship between CSR toward customers and firm performance.

The moderating effect of competitive intensity

The "fit" concept proposes that organizations make strategic decisions that match the external environment (Venkatraman & Prescott, 1990). For example, the effectiveness of any strategic orientation depends on market dynamics (Jaworski & Kohli, 1993; Zhou & Li, 2010). In this respect, we argue that the effectiveness of CSR toward different stakeholders also depends on the market environment. We consider two environmental factors, competitive intensity and market turbulence, for the following reasons. First, competitive intensity and market turbulence are the most fundamental variables among the many dimensions of a market environment (Zhou & Li, 2010). Second, China has experienced complex and massive market structure changes during its economic transition (Hoskisson, Eden, Lau, & Wright, 2000); thus the market and industry structures in China are highly uncertain. Third, competition has intensified in China as the number of private enterprises drastically increases due to the transition from a centrally planned economy to a market economy.

Competitive intensity refers to the degree of competition that an organization faces within its industry. Escalating competitive intensity is marked by internecine rivalry with fierce price wars, heavy advertising and diverse product alternatives (Porter, 1985). In such an environment, firms have two options for achieving competitive advantage: provide similar products at a lower price because of pressure caused by price wars; or differentiate their products from those offered by competitors (Gebauer, 2008; Porter, 1985; Zhou, Yim, & Tse, 2005).

The positive impact of CSR toward society on marketing competence is strengthened when competition is intense. When a market is highly competitive, customers have many alternatives (Jaworski & Kohli, 1993), and perceived quality similarity among available brands is high. Firms can effectively differentiate their brand from rivals by attaching socially responsible attributes to their corporate brand (Lai et al., 2011). For example, when facing fierce competition, Nongfu Spring, a bottled water company in China, announced that the company would donate one cent from every bottle of Nongfu Spring water sold to help children living in poverty. This "one cent" program differentiates Nongfu's brand from its competitors and greatly increases customer satisfaction as well as brand image (Xue & Zhang, 2004).

In addition, CSR toward society promotes customer-company identification and strengthens a firm's ability to increase customer value (Du, Bhattacharya, & Sen, 2007). Customer-company identification drives customers to make certain brand-specific purchasing decisions when facing alternatives in a competitive market. Therefore, a firm's marketing competence is enhanced by exercising CSR toward society in a highly competitive environment. By contrast, in a situation where there is little competition, the effect of CSR toward society may not be salient because customers do not have many product alternatives. CSR toward society is likely to be a cost burden rather than an important differentiation strategy in an industry with little competition. We propose that:

Hypothesis 4a The greater the competitive intensity, the stronger the positive effect of CSR toward society on a firm's marketing competence.

In a highly competitive market, marketing competence is achieved by providing superior products more economically (Porter, 1985; Zhou et al., 2005). Increased competition requires firms to increase efficiency and productivity (Gebauer, 2008). Although CSR toward employees helps firms enhance “an employer’s brand image” (Turban & Greening, 1997) and with increased employee satisfaction (Hansen et al., 2011), firms are likely to re-direct their focus to employee efficiency instead of employee development when competitive intensity is high. In addition, CSR toward employees adds to costs and leads to higher product prices. Higher product pricing makes it difficult to attract new and retain current customers, and therefore weakens firms’ marketing competence when customers are highly price-sensitive in a market with many similar product offerings.

Second, while CSR toward employees motivates employees to work hard and commit to their employers, competition creates uncertainty about the level of commitment. When competition is intense, a large number of competitors are in the market and they are looking for the best talent. In this situation, employees, especially those with high-level skills and knowledge, have many job options and may be lured by better offers from rival firms. Thus turnover may be a problem (Griffeth, Hom, & Gaertner, 2000; Maertz & Griffeth, 2004). Employees may be less committed to delivering customer benefits despite employers’ CSR efforts when market competition is intense. Taken together, we propose that:

Hypothesis 4b The greater the competitive intensity, the weaker the positive effect of CSR toward employees on a firm’s marketing competence.

In an intensely competitive market, customers have many options (Jaworski & Kohli, 1993), and firms must closely monitor and respond to customers’ needs to ensure that they stay relevant (Porter, 1985). Researchers argue that as competition increases, the value generated by a strategy that emphasizes customers becomes even more important (Slater & Narver, 1994a). First, CSR toward customers represents an effective way to satisfy customers’ needs and wants. For example, in the food industry, customers are increasingly concerned about product quality, especially the safety and ingredients of the product. Addressing customers’ concerns becomes more critical to firms in a highly competitive environment because customers can demand both high quality products and superior service levels (Homburg, Müller, & Klarmann, 2011). Second, the greater the competition in an industry, the more a firm needs to embrace technological developments and customer needs. CSR toward customers helps firms collect customer feedback and identify trends and changes early. In a competitive market, such emphasis on customers may enhance a firm’s ability to respond to and preempt competitive threats in a timely manner (Kumar, Jones, Venkatesan, & Leone, 2011), further strengthening competitive advantage. Therefore, we propose that:

Hypothesis 4c The greater the competitive intensity, the stronger the positive effect of CSR toward customers on a firm’s marketing competence.

The moderating effect of market turbulence

Market turbulence refers to the extent to which an industry environment is dynamic, complex, and rapidly changing (Jaworski & Kohli, 1993). Relatively underdeveloped governmental, market, and financial institutions in China often make for highly turbulent markets (Peng & Heath, 1996). In stable markets, participants can understand and predict customer needs and wants by studying industry reports (Fang, Palmatier, & Steenkamp, 2008). However, it is challenging for a firm to accurately anticipate customer demand or predict response to marketing strategies in a highly uncertain market (Klein, Frazier, & Roth, 1990). Enhanced communication with customers and market responsiveness generated by CSR toward customers are likely to become more important in highly uncertain markets (Jaworski & Kohli, 1993).

Market turbulence also increases the importance of customer trust generated by CSR toward customers in building marketing competence. Customers in uncertain markets perceive a high degree of risk (i.e., evaluation and performance risk), so their product choices are based to a large extent on whether they trust the focal firm (Fang et al., 2008). Therefore, customer trust in the focal firm generated by CSR toward customers is more critical in uncertain markets than in stable markets.

However, the interplay between market turbulence and CSR toward society or employees may be insignificant. On one hand, in highly turbulent markets, customer response to a firm's CSR toward society and employees is difficult to predict because these two activities do not provide direct value to customers. It is possible that customers will not respond to a firm's societal or employee welfare efforts in a turbulent environment since customers' demands change frequently. On the other hand, although CSR toward society and CSR toward employees help firms differentiate their brand and motivate employees, they may not help firms predict customers' current and future demands, which is critical in highly turbulent markets. Taken together, there are no strong theoretical justifications for the moderating effects of market turbulence on the effect of CSR toward society and the marketing competence link as well as on CSR toward employees and the marketing competence link. We propose that:

Hypothesis 5 The greater the market turbulence, the stronger the effect of CSR toward customers on a firm's marketing competence.

Methods

Sampling and data collection

We collected data from Chinese manufacturing firms located in the three economic zones of China (Bohai Bay Economic Rim, Pearl River Delta, and Yangzi River Delta). As the largest emerging economy, China is experiencing rapid economic growth. At the same time, more and more firms in China are engaged in socially responsible activities. The unique institutional environment, which is characterized by an ineffective regulatory system (Sheng, Zhou, & Li, 2011) and immense stakeholder response toward CSR, makes China a rich research setting to study the effects of CSR on firm performance. More importantly, CSR in China has not been extensively studied, as previous studies of CSR have been conducted mainly in developed countries (Hansen et al., 2011; McWilliams & Siegel, 2000).

We selected a random sample of 800 firms with four-digit Chinese Industrial Classification (CIC) codes 1311–4290. These firms represent a variety of industries, such as electronic components, computer equipment, chemical engineering, transportation equipment, apparel, medical equipment, and plastics. We commissioned a reputable market research firm to collect relevant data through face-to-face interviews.

These 800 companies were first contacted via telephone by trained interviewers from the market research firm to solicit their cooperation, verify their location, and identify key informants for this study. We chose senior managers (e.g., president, vice president, owner, general manager, etc.) as key informants because our pilot study showed that senior managers are familiar with firms' social activities. Through initial telephone contacts, we received oral agreements from 327 senior managers to participate, and the trained research assistants successfully interviewed 306 of them onsite, resulting in an effective response rate of 38.2 %. After eliminating responses with extensive missing values, we obtained 295 usable questionnaires. To obtain valid and reliable information and to avoid social desirability, we employed several measures: (1) we assured all respondents about the confidentiality of their responses and the academic purpose of the project; (2) we promised respondents a summary report of the survey; and (3) we made it clear to respondents that there was no right or wrong answers. On average, the respondents had been working for 7.68 years in the industry and 7.18 years with their company.

After the fieldwork, one of the authors randomly called 30 respondents to confirm that the interviews had been conducted and found no cheating in the fieldwork. We checked for the possibility of non-response bias by comparing responding and non-responding firms in terms of key characteristics such as the number of employees, sales volume, firm ownership, and industry. The MANOVA results showed no statistically significant differences between responding and non-responding firms.

Measures

We operationalized the key constructs in this study using both formative and reflective measures. A formative measure was used to operationalize marketing competence because the indicators capture different facets of marketing competence and they may not be highly correlated (Jarvis, Mackenzie, Podsakoff, Mick, & Bearden, 2003). Reflective indicators are used to measure corporate social responsibility, market turbulence, competitive intensity and firm performance.

We developed a three-item measure of marketing competence on the basis of work done by Conant et al. (1990) and Clark (1999). The first item assesses the firm's ability to create customer benefits. The second item gauges firms' capability to improve customer satisfaction. And the last item appraises marketing competence in terms of a firm's ability to build a favorable brand image. We ask respondents to evaluate how well their firms perform in these three perspectives as compared to their competitors. We adapted Turker's (2009) scale to measure corporate social responsibility toward three primary stakeholders: employees, customers, and society (Maignan et al., 1999).

For the moderators, we used items adapted from Jaworski and Kohli (1993) to measure market turbulence and competitive intensity. The four items used to measure market turbulence capture the difficulty of predicting market trends, customer demand, sales and industry volumes. The items for competitive intensity appraise the extent to which firms engage in promotional wars, price wars, and competitive imitation. To measure firm performance, this study uses three items adapted from Zhou et al. (2005) to gauge firms' growth rates, returns on investment, and overall profitability. We list the detailed measurement items in the Appendix.

Construct validity

Conventional internal consistency analyses are inappropriate to assess composite constructs with formative indicators (Jarvis et al., 2003). Therefore, we conducted indicator collinearity tests and external validity tests to ensure successful index construction (Diamantopoulos & Winklhofer, 2001). First, to assess the suitability of the formative scales, we checked for multicollinearity among the indictors (Diamantopoulos & Winklhofer, 2001). The maximum variance inflation factor is 1.556, far below the threshold of 10.0, showing that multicollinearity is not a concern. Second, for the external validity, we examined the theoretical relationship of the formative construct to other constructs in the nomological network. Prior literature suggests a positive relationship between marketing competence and firm performance, which is also confirmed in our study (r = .652, p < .001). Meanwhile, each individual indicator of marketing competence was significantly correlated with firm performance (r = .479 −.520, p < .001), which collectively suggest the external validity of their indicators.

We followed a three-step approach to assess the reliability and validity of the reflective constructs. First, we conducted an exploratory factor analysis, which generated six factors. We checked Cronbach's coefficient to assess the reliability and the results are presented in the Appendix. Five coefficients are above the good level of internal consistency (α > .7) and two variables have acceptable coefficients (α > .6) (Gliem & Gliem, 2003).

Second, we performed confirmatory factor analyses to assess the convergent validity of the measures with latent variable structural equation modeling. The measurement model fits the data satisfactorily ($\chi^2(174) = 313.084$, p < .001; Goodness of fit index [GFI] = .907; Comparative fit index [CFI] = .944; Incremental fit index [IFI] = .945; Root mean square error of approximation [RMSEA] = .052). Third, we assessed the discriminant validity of all latent constructs with chi-square difference tests. The test was performed for one pair of factors at a time. For example, for the pair of CSR toward society and CSR toward employees, we compared the fit of the restricted model (correlation fixed to 1) with that of a freely estimated model (correlation estimated freely). The chi-square difference is highly significant ($\Delta\chi^2(1) = 88.663$, p < .001), in support of discriminant validity. The chi-square difference is 95.459 (p < .001) for the pair of CSR toward society and CSR toward customers and 88.602 (p < .001) for the pair of CSR toward employees and CSR toward customers. All the chi-square differences are highly significant, indicating satisfactory discriminant validity (Gerbing & Anderson, 1988). In Table 1 we present the basic descriptive statistics and the correlations of the constructs.

Control variables

To account for the effects of extraneous variables, we included firm size, firm age, and firm ownership as control variables. We measured firm size as the logarithm of the

Table 1 Basic descriptive statistics and correlations

Construct	1	2	3	4	5	6	7	8	9	10
1. Ownership		−.050	−.028	−.040	−.094	−.078	.088	−.056	−.031	.145*
2. Firm size	−.048		−.329**	.000	−.018	.065	−.054	−.016	.066	.179**
3. Firm age	−.026	−.326**		.021	−.007	−.031	−.195**	.068	−.010	−.056
4. CSR toward customers	−.038	.002	−.019		.507**	.480**	.050	.313**	.429**	.360**
5. CSR toward employees	−.092	−.016	−.005	.508**		.652**	−.020	.237**	.515**	−.413**
6. CSR toward society	−.076	.067	−.029	.481**	.653**		−.042	.221**	.515**	.435**
7. Market turbulence	.090	−.052	−.193**	.052	−.018	−.040		.173**	−.021	.034
8. Competitive intensity	−.054	−.014	.070	.315**	.239**	.223**	.175**		.382**	.385**
9. Marketing competence	−.029	.068	−.008	.430**	.516**	.516**	−.019	.383**		.651**
10. Firm performance	.147*	.181**	−.054	.361**	.414**	.436**	.036	.387**	.652**	
11. Marker variable	.006	.061	.191*	.048	.002	.059	.404**	−.030	.100	.126*
Mean	.780	5.039	2.302	5.757	5.624	5.625	4.654	5.286	5.590	5.533
S.D.	.415	1.063	.584	.738	.706	.659	1.123	.871	.662	.726

All significance tests are two-tailed. * $p < .05$, ** $p < .01$, $n = 295$

Notes: Zero-order correlations are below the diagonal; adjusted correlations for potential common method variance are above the diagonal number of employees. We create a dummy variable to measure firm ownership (domestic firms = coded 1; foreign firms = 0). We measured firm age as the number of years the firm has been in operation.

Common method bias

To address the issue of common method bias, we first adapted the procedure remedies which focus on reducing item ambiguity and protecting respondent confidentiality. Second, we performed statistical analysis to assess the severity of common method bias. We conducted Harmon's one factor test. The result shows that the first factor accounts for about 29 % of the total variance, less than 50 %. Therefore, common method bias does not appear to be a significant concern here. Then, we applied the "MV" method and chose a scale theoretically unrelated to at least one scale in our study as the MV marker, which offered a proxy for common method variance (CMV) (Lindell & Whitney, 2001). We used a nine-item scale that measured the focal firm's trust in its suppliers (Cronbach's $\alpha = .89$) and selected the lowest positive correlation ($r = .002$) between the MV marker and other variables to adjust the correlations and statistical significance (Lindell & Whitney, 2001). All our significant correlations remained significant after the partial correlation adjustment (see Table 1), suggesting that common method bias was not a concern in our study.

Analysis and results

Mediating test

Our first set of hypotheses proposes that marketing competence mediates the relationship between CSR and firm performance. The three different dimensions of CSR, that is, CSR toward customers, employees, and society, influence firm performance through marketing competence. We applied Baron and Kenney's (1986) three statistical regression steps to test the mediating effects, and the results are presented in Table 2. First, we regressed firm performance on the three dimensions of CSR (Table 2, Model 2) and we found that all CSR activities are positively and significantly related to firm performance ($\beta = .224$, $p < .001$ for CSR toward society; $\beta = .182$, $p < .01$ for CSR toward employees; $\beta = .156$, $p < .01$ for CSR toward customers).

We then regressed marketing competence on all CSR dimensions in the second step (Table 2, Model 5). Finally, we regressed firm performance on all CSR dimensions as well as marketing competence in the third step (Table 2, Model 3). The results in Table 2, Model 5 show that all CSR dimensions are positively and significantly related to marketing competence ($\beta = .258$, $p < .001$ for CSR toward society; $\beta = .263$, $p < .001$ for CSR toward employees; $\beta = .173$, $p < .01$ for CSR toward customers). When marketing competence (the mediator) is included in the full model with firm performance as the dependent variable (Table 2, Model 3), the effects of all CSR activities on firm performance become insignificant and the effect of marketing competence on firm performance is highly significant ($\beta = .553$, $p < .001$). These results collectively suggest that marketing competence fully mediated the effects of CSR activities on firm performance.

Table 2 Regression analyses for mediating effects

	Model 1 Firm performance	Model 2 Firm performance	Model 3 Firm performance	Model 4 Marketing competence	Model 5 Marketing competence
Controls					
Firm size	$.176^{**}$	$.160^{**}$	$.127^{**}$	.078	.060
Firm age	−.007	.010	.018	−.034	−.015
Ownership	$-.138^{*}$	$-.099^{*}$	$-.112^{*}$	−.026	.024
CSR					
CSR toward customers		$.156^{**}$	.061		$.173^{**}$
CSR toward employees		$.182^{**}$	.037		$.263^{***}$
CSR toward society		$.224^{***}$	.081		$.258^{***}$
Mediator					
Marketing competence			$.553^{***}$		
R^2	.052	.274	.474	.006	.346
ΔR^2		.222	.200		.340
F-test for ΔR^2		29.309^{***}	109.149^{***}		49.972^{***}

Standardized regression coefficients are shown in the table

* p <.05; ** p < .01; *** p < .001 (two-tailed test) n = 295

Moderating effect test

Hypotheses 4 and 5 propose the moderating effect of two environmental variables, i.e., competitive intensity and market turbulence, on the relationships between the three CSR dimensions and marketing competence. Hierarchical linear regression was used to test the moderating effects. Table 3 presents the regression results with four models. Model 1 includes only the control variables. Model 2 adds the main effect of the three dimensions of CSR, and the moderators into the regression. Model 3 adds the interaction terms between the three CSR dimensions and competitive intensity. Model 4 adds the interaction terms between the three CSR dimensions and market turbulence. We checked the variance inflation factors (VIF) associated with each regression coefficient and found that the largest VIF was 2.81, suggesting that multi-collinearity is not a concern in the analysis.

As Table 3, Model 1 shows, the control variables account for only .6 % of the variance in marketing competence. Adding focal independent variables and the moderators in Model 2 increases the R-square by .393 (p < 0.001). The addition of the interaction terms between CSR and competitive intensity in Model 3 increases the R-square value significantly compared with Model 2 ($\Delta R^2 = .037, p < .001$). Moreover, the addition of the interaction terms between CSR and market turbulence in Model 4 also increases the R-square value significantly compared with Model 3 ($\Delta R^2 = .016, p < .05$), in support of significant moderating effects of market environments.

To facilitate interpretation, we plotted the effects of CSR on marketing competence for the low and high levels of each significant moderating factor. The low/high levels of the moderating variables are set as one standard deviation below/above their means (Aiken & West, 1991). Hypothesis 4 suggests that competitive intensity positively

Table 3 Regression analyses for moderating effects[a]

Variables	Marketing competence			
	Model 1	Model 2	Model 3	Model 4
Controls				
Firm size	.078	.052	.041	.035
Firm age	−.034	.015	−.001	−.002
Ownership	−.026	.038	.043	.042
Main effects				
CSR toward society		.244***	.257***	.256***
CSR toward employees		.242***	.192**	.206**
CSR toward customers		.116*	.114*	.111*
Competitive Intensity (CI)		.248***	.300***	.313***
Market turbulence (MT)		−.058	−.073	−.110*
Moderating				
CSR society × CI			.168*	.179*
CSR employees × CI			−.315***	−.346***
CSR customers × CI			.059	.033
CSR society × MT				−.001
CSR employees × MT				.014
CSR customers × MT				.132*
R^2	.006	.399	.436	.452
ΔR^2		.393	.037	.016
F-test for ΔR^2		37.381***	6.226***	2.741*

[a] Standardized regression coefficients are shown in the table

* $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed test), $n = 295$

moderates the effects of both CSR toward society and customers on marketing competence but negatively moderates the effect of CSR toward employees on marketing competence. As Table 3, Model 3 shows, competitive intensity positively moderates the effect of CSR toward society on marketing competence ($\beta = .168$, $p < .05$), in support of H4a. Figure 2 further shows that the effect of CSR toward society on marketing competence is stronger when competitive intensity is high ($\beta = .403$, $p < .001$) and the effect is less when competitive intensity is low ($\beta = .111$, $p < .1$).

Furthermore, the interaction effect between CSR toward employees and competitive intensity is also significant ($\beta = -.315$, $p < .001$). Figure 3 shows that CSR toward employees has a significant positive effect on marketing competence when competitive intensity is low ($\beta = .466$, $p < .001$), but the effect becomes negative when competitive intensity is high ($\beta = -.082$, $p < .1$). Thus H4b, which suggests that marketing competence reduces the positive effect of CSR toward employees on marketing competence, receives support. However the moderating effect of competitive intensity on the CSR toward customers and marketing competence relationship is not statistically significant ($\beta = .059$, $p > .1$), failing to support H4c. The reason may lie in the fact that the increased value perceived by customers from a firm's CSR activities toward

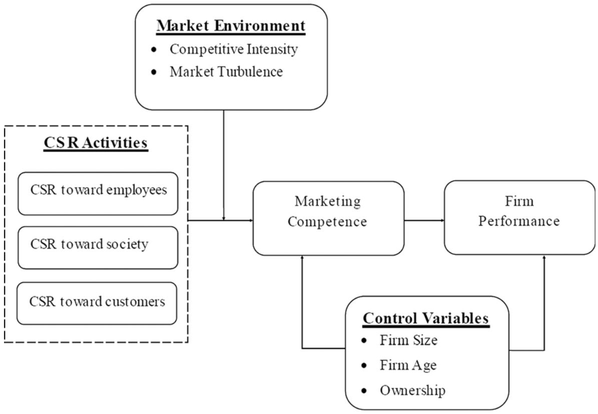


Fig. 1 The conceptual model

customers is not strong enough to persuade customers to choose the firm's product from product alternatives. In a highly competitive market, the effective ways to enhance marketing competence are to provide high quality products at the lowest cost and differentiate the brand from those of competitors (Lai et al., 2011; Zhou et al., 2005). Activities relating to customers' rights and providing accurate product information neither improve product quality nor provide brand differentiation. Thus the effect on marketing competence is limited when competition is intense.

Hypothesis 5 predicts the moderating effect of market turbulence on the relationship between CSR toward customers and marketing competence. The results in Table 3, Model 4, show that market turbulence positively moderates the relationship between CSR toward customers and marketing competence ($\beta = .132$, $p < .05$), in support of H5. The results also support our view that market turbulence does not have a moderating effect on the relationships of the other two dimensions of CSR and marketing competence ($\beta = .014$, $p > .1$ for CSR toward employees and $\beta = -.001$, $p > .1$ for CSR toward society). Figure 4 shows that CSR toward customers has a significant positive effect on marketing competence when market turbulence is high ($\beta = .259$, $p < .001$) but a non-significant effect when market turbulence is low ($\beta = -.037$, $p > .1$).

Post-hoc analysis

Although CSR toward different stakeholders has positive and significant influences on marketing competence, relative effectiveness may differ. We ran an additional *t*-test of

Fig. 2 The moderating effect of competitive intensity on the effect of CSR toward society on marketing competence

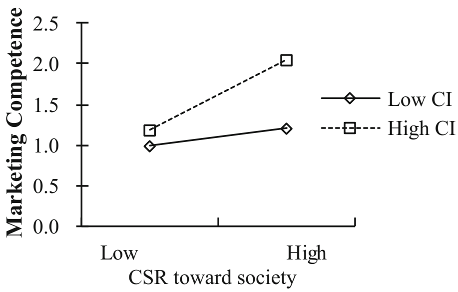
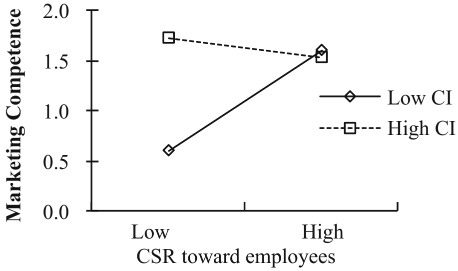


Fig. 3 The moderating effect of competititve intensity on the effect of CSR toward employees and marketing competence



equality to compare the coefficients of CSR toward society and CSR toward employees with the coefficient of CSR toward customers. The *t*-test for the coefficient difference between CSR toward society and CSR toward customers is marginally significant ($t = 1.763$, $p < .1$), and that between CSR toward employees and CSR toward customers is not significant ($t = 1.577$, $p > .1$). Even though we cannot claim that CSR toward society is the most efficient strategy for boosting marketing competence, it has a stronger positive effect on firms' marketing competence than CSR toward customers.

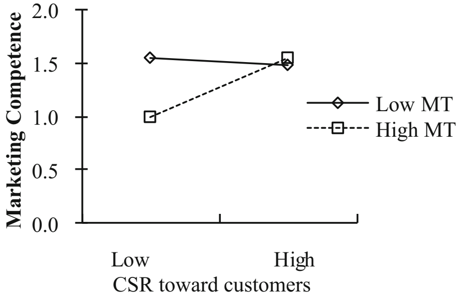
In order to take a holistic picture of our proposed model, we verified our results using path analysis to test the mediation of marketing competence following Preacher and Hayes' (2008) method. We included all the variables in the path model and performed bootstrapping to test the indirect effect of the three CSR dimensions on firm performance based on the 95 % two-tailed confidence interval. The results of all the direct effects and indirect effects are consistent with our regression model. In particular, the indirect effects of CSR toward employees ($\beta = .142$, $p < .05$), CSR toward customers ($\beta = .087$, $p < .05$) and CSR toward society ($\beta = .203$, $p < .01$) on firm performance via marketing competence are significant. Therefore, the results further confirm that marketing competence fully mediated the effects of CSR on firm performance.

Discussion

Theoretical contributions

Drawing on stakeholder theory and institutional theory, this paper investigates the relationship between CSR and firm performance in China. We conceptualize CSR as

Fig. 4 The moderating effect of market turbulence on the effect of CSR toward customers and marketing competence



a multi-dimensional construct and investigate the influence of different CSR dimensions on firm performance. In addition, based on the perspective of strategy–environment fit, our findings reveal that the effect of CSR activities toward different stakeholders is contingent on the market environment. Overall, this study adds new insights into the role of CSR by resolving the inconsistent findings regarding the CSR–performance link in China and contributes to the CSR literature in the following ways.

First, the conventional view assumes that CSR is a financial burden for firms operating in China due to the underdeveloped institutional infrastructures that exist compared to developed economies. For example, China may lack of effective legal systems to guard against unethical corporate behavior (Ben Brik et al., 2011). We offer a more refined examination of the CSR–performance link. Previous studies tended to treat CSR as a uni-dimensional construct (Mishra & Suar, 2010), limiting its power to explain the roles of different stakeholders on firm performance. We distinguish three important stakeholder groups, that is, employees, customers, and society, and find that CSR toward these three different stakeholder groups has positive effects on firm performance. In particular, we find that CSR toward society has a stronger positive effect on marketing competence than CSR toward customers. The findings challenge the conventional view that CSR initiatives often conflict with firms' profit-seeking activities by showing the positive impact of CSR on firm performance in China. Our results also suggest that firms in China comply with normative institutional pressures to engage in CSR activities in hopes of shoring up their legitimacy.

Second, besides the direct link between CSR and firm performance, we contribute to the CSR literature by identifying the underlying mechanism through which CSR activities influence firm performance. We extend CSR literature by theoretically proposing and empirically showing that the effects of CSR on firm performance are mediated by a firm's marketing competence. We find that marketing competence fully mediates the CSR–performance link. Therefore, this study responds to calls to examine the underlying mechanisms of CSR (Aguinis & Glavas, 2012; Margolis & Walsh, 2003) and fills an important research gap.

Third, this study explains the CSR–performance link by considering the impact of the market environment on the effectiveness of CSR strategy. The effectiveness of CSR toward different stakeholders is determined not only by institutional context but also by the turbulence and competitive intensity embedded in the surrounding environment (Venkatraman & Prescott, 1990). We find that as market turbulence increases, the impact of CSR toward customers on marketing competence is strengthened. We infer enhanced communication and market responsiveness generated by CSR toward customers is more critical in highly uncertain markets. Meanwhile our findings show that competitive intensity weakens the positive impact of CSR toward employees, while it strengthens the positive effect of CSR toward society on marketing competence. The increased competition makes philanthropy attributed activities (CSR toward society) more salient, which further strengthens the positive effect of CSR toward society on marketing competence. However the cost incurred to undertake CSR toward employees is greater and the motivation effect implied by CSR toward employees is reduced when competition is intense. Therefore increased competition weakens the positive effect of CSR toward employees on marketing competence. These findings offer nuanced insights to resolve the inconsistent findings in previous studies regarding the role of CSR. For example, when competitive intensity is high (low), CSR toward employees has negative (positive) impacts on marketing competence. Similarly, when market turbulence is low, the effect of CSR toward customers on marketing competence is insignificant.

Managerial implications

Being influenced by the traditional view that the sole purpose of business is profit maximization, many marketing practitioners in China are skeptical about expenditures on corporate social activities (Brown & Dacin, 1997). However our findings suggest that CSR enhances firm performance through marketing competence in China. Marketing managers should bear in mind that performing CSR activities is not merely a cost burden but a viable strategy for creating competitive advantage. In fact, many CSR activities have emerged recently in China. In 2012, 1,722 Chinese companies filed CSR reports to share information about their CSR initiatives with the public, and CSR has become an important part of these companies' strategies (*Bloomberg BusinessWeek*, 2013). In addition, our results suggest that corporate practitioners should not limit their CSR activities to primary stakeholders' (customers and employees) and should take into consideration the secondary stakeholder's (society) interests, as the three dimensions of CSR activities all contribute positively to firm performance.

Second, marketing managers should adapt their CSR activities to the market environment. Since costs incurred to undertake CSR can be high, managers should make good use of CSR investments. When a market is highly uncertain, investment in CSR toward customers is a wiser choice compared to investment in CSR toward employees and society. For instance, the telecommunications industry is characterized by rapid technological changes and consumer demand shifts. As a response to market turbulence, China Telecom, the Chinese telecom giant, has been engaging in a series of CSR activities toward its customers by pursuing the mutual growth of corporate value and customer value. China Telecom was ranked 14th in "Fortune China CSR Ranking 2013" by *Fortune China* magazine. Meanwhile, when competition increases, managers are advised to invest more in CSR toward society. And managers should bear in mind that the positive effect of CSR toward employees is weakened when competition is intense. Thus it is wise to invest in CSR toward employees only when competitive intensity is low.

Limitations and future research

Our study is subject to several limitations. First, the unique setting of CSR in China challenges the generalizability of our findings to other emerging economies. CSR activities are favorably embraced by the public in China, and Chinese stakeholders are more likely to respond to CSR by showing greater cooperation and support (Wang & Qian, 2011). As a result, the positive effects of CSR may be more pronounced in China. However, normative pressure to engage in socially responsible behavior may not be as strong in other emerging economies as it is in China. Thus, the impact of CSR activities on firm performance may show different patterns in other emerging economies. Meanwhile, prior literature has suggested that institutional context and culture play a critical role in determining the CSR practices a company chooses to focus on (Arya & Zhang, 2009; Baughn, Bodie, & McIntosh, 2007). Stakeholders' responses to CSR may also be influenced by context-specific factors (Wang & Qian, 2011).

Therefore, the effect of CSR toward different stakeholder groups on firm performance and the multi-dimension conceptualization of CSR may function differently in emerging economies and developed economies. Future empirical work is encouraged to test the differences of the effects of the three dimensions of CSR in emerging economies and developed economies.

Second, we only examine the effectiveness of CSR toward three stakeholder groups. CSR toward other stakeholders, such as suppliers, government and community, remains unclear. Since employees, customers and society contribute most to market performance (Maignan et al., 1999), marketing competence becomes a major mediator between CSR activities toward these three groups and performance. However the underlying mechanisms through which CSR toward other stakeholder groups affects corporate performance may be different. Therefore, a second avenue for further research is to examine how CSR toward other stakeholder groups influences firm performance and find the boundary conditions of other CSR dimensions. In addition, the multi-dimensional CSR framework can be applied to other contexts. In fact, some previous CSR studies conducted in developed countries recognize that CSR is a multi-dimensional construct, but they tend to aggregate these CSR activities for the consideration of model parsimony. Therefore it could be a promising avenue to apply this multi-dimensional framework to other contexts, including developed economies.

Third, the measurement of performance and CSR activities in our study are perceptual in nature. Although subjective financial performance is highly correlated with objective performance, future research can use both perceptual and objective measures of performance to validate our findings. Objective measures of CSR activities based on archival data can also validate our findings.

Appendix

Table 4 Measurement items

CSR toward society (Cronbach's α = .809)	SFL
Our company implements special programs to minimize its negative impact on the natural environment	.727
Our company participates in activities which aim to protect and improve the quality of the natural environment	.794
Our company targets sustainable growth which considers future generations	.645
Our company emphasizes the importance of its social responsibilities to the society	.704
CSR toward customers (Cronbach's α = .666)	
Our company provides full and accurate information to our customers	.629
Our company respects consumer rights beyond the legal requirements	.623
Customer satisfaction is highly important for our company	.659
CSR toward employees (Cronbach's α = .781)	
Our company supports employees who want to acquire additional education	.651
Our company policies encourage the employees to develop their skills and careers	.722

Table 4 (continued)

Our company implements flexible policies to provide a good work & life balance for its employees	.735
The management of our company is primarily concerned with employees' needs and wants	.642
Market turbulence (Cronbach's α = .899)	
Difficult to predict market trends	.805
Industry volume change dramatically	.839
Difficult to predict sales volumes	.863
Market demand's unpredictability is high	.816
Competitive intensity (Cronbach's α = .750)	
There are many "promotion wars" in our industry	.611
Anything that one competitor can offer, others can match readily	.826
Price competition is a hallmark of our industry	.718
Marketing competence (Formative scale) (Cronbach's α = .653)	
Relative to your competitors, how has your company performed over the past three business years with respect to:	
Improving customer satisfaction	
Providing customer benefit	
Building a strong brand image	
Firm performance (Cronbach's α = .772)	
Your company's performance within recent 3years	
Growth rate	.734
Return on investment	.795
Overall profitability	.664

SFL Standardized factor loading

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