#### **ORIGINAL PAPER**



# Reexamining Corporate Social Responsibility and Shareholder Value: The Inverted-U-Shaped Relationship and the Moderation of Marketing Capability

Wenbin Sun<sup>1</sup> · Shanji Yao<sup>2</sup> · Rahul Govind<sup>3</sup>

Received: 29 June 2017 / Accepted: 13 March 2018 / Published online: 26 March 2018 © Springer Science+Business Media B.V., part of Springer Nature 2018

#### **Abstract**

In the literature, CSR's roles on firm performance are found to be positive, negative, or neutral. This inconclusive pattern suggests there may be a more complicated mechanism at work than the traditional focus on simple linear associations. We propose and test an inverted-U-shaped relationship between CSR and shareholder value, the fundamental measure of firm performance. Further, we incorporate a critical firm attribute, marketing capability, to moderate the nonlinear link between CSR and shareholder value, thereby exploring a previous understudied area involving the interplay between CSR and market-side competency. The results show that an initial increase in CSR engagement positively drives firm shareholder value, but the effect turns negative when a firm pursues excessive CSR engagement. Notably, however, this negative association does not apply to firms that have a high marketing capability. Our research generates meaningful implications for a stakeholder view of CSR, strategic management, firm valuation, resource-based theories, and business practices.

**Keywords** CSR · U-shaped relationship · Shareholder value · Marketing capability · Moderating effects

Long viewed as an important corporate endeavor, corporate social responsibility (CSR) helps firms contribute to general social welfare while also realizing financial benefits (McGuire et al. 1988; McWilliams and Siegel 2001). Research from the fields of management, marketing, finance, and other business fields has examined the effects and intensity of CSR-created special functions on firms' business effectiveness, which is found to affect different dimensions of the firm (Orlitzky et al. 2003). Although research interest on the effects of CSR on firm performance continues to be high, there is no a consensus on the direction of this

relationship. While some researchers have found CSR to significantly improve firm performance (e.g., Sen et al. 2006), others have concluded that CSR actually harms a firm's well-being (e.g., Wright and Ferris 1997). Others, such as Teoh et al. (1999), assert that there are in fact *no* observable relationships between CSR and firm outcomes.

The inconsistent and even contradictory effect of CSR on firm performance is not surprising. Firms operate in very different industries and environments. In addition, they are heterogeneous in nature because of the varying structural and managerial endowments (Aguinis and Glavas 2012). However, a careful examination of the literature shows that the majority of extant studies in this stream assume that the relationship between CSR and firm performance is linear. That is, at all intensity levels, CSR is assumed to have the same strength and direction in influencing firms' performance. Is the assumption correct? Do the changes always follow the same directional trend—i.e., always result in an increase or decrease in performance? These questions are largely unanswered. CSR is a special firm activity that incurs significant financial costs and consumes valuable corporate resources, although the implicit assumption is that the firm benefits from the process (Brammer and Millington 2008). CSR's benefits and costs at different CSR intensity levels

Wenbin Sun wenbin.sun@rockhurst.edu

Shanji Yao yaoshanji@126.com

Rahul Govind r.govind@unsw.edu.au

- Helzberg School of Management, Rockhurst University, 1100 Rockhurst Road, Kansas City, MO, USA
- Nanjing Tech University, Nanjing, Jiangsu, China
- <sup>3</sup> School of Marketing, University of New South Wales, Sydney, Australia



might yield constantly changing overall influences on the firm; thus, a simple linear relationship will not sufficiently capture the precise pattern (e.g., Salzmann et al. 2005). We argue that an inverted-U-shaped relationship will more meaningfully explain CSR's impact on firm performance. Research evidence supports the idea that an increase in CSR can raise problems such as resource depletion and skeptical attitudes from key stakeholders (Brammer and Millington 2008; Vlachos et al. 2010), thus resulting in diminishing marginal returns and hence adverse results. Therefore, it becomes more meaningful when researchers go beyond the traditional views that primarily focus on either positive or negative influences of CSR and explore its dynamic performance impact resulting from the changing combination of the benefits and costs of CSR that occur simultaneously in practice. We propose that CSR is a positive performance driver at its low to moderate levels but negatively influences performance at high levels due to a series of hindrances when a firm's CSR engagement escalates. Similar propositions indicating nonlinear relationships between firm factors and performance are found in various business research fields (e.g., Haans et al. 2016; Shinkle and Kriauciunas 2010).

Along with this relatively understudied impact of CSR, additional areas involving performance outcomes can be detected in the literature. Previous research examining the effects of CSR has tended to focus on firms' direct past performance measures, such as ROA, profit margin, operations efficiency, and market performance measures (such as market share). Surprisingly, forward-looking performance indicators have been less investigated. Although CSR's effects are well reflected by these backward-looking performance indicators, forward-looking outcomes may more precisely represent the strategic intentions of management teams for engaging in CSR activities that are deployed to create a benevolent environment for firms' future growth. Furthermore, forward-looking performance indicators, such as firm shareholder value, represent a more comprehensive evaluation on the firm's aggregated performance across multiple aspects rather than a unidimensional one. Thus, they are critical to include in assessments of the effects of CSR on firm performance. Although several attempts have been made to address this lack of a long-term perspective (e.g., Becchetti et al. 2012; Godfrey et al. 2009), the literature has not considered a nonlinear relationship between CSR and a long-term measure of performance.

Further, although CSR effects have been studied as a function of multiple firm factors, the effect of firm capability on performance has received little attention. Dynamic capability is a pivotal element in driving firm development, according to the resource-based view (RBV) and dynamic capability theories (DCT) (Barney 1991; Krasnikov and Jayachandran 2008; Newbert 2007). In particular, marketing

capability, one of the most critical types of firm capability, has been confirmed to significantly help firms achieve sustained competitive advantages in various business settings (Nath et al. 2010; Vorhies et al. 2009). It also has been found to strongly moderate the relationships of other firm strategies with firm performance (Dutta et al. 1999; Sun and Price 2016). This indicates that it would be valuable to consider both CSR and marketing capability simultaneously and examine their combined effect on firm performance. Specifically, we aim to investigate whether they complement or hinder each other when a forward-looking performance metric such as firm shareholder value is considered.

Given that CSR activities are deployed to create interest among the social stakeholders of the firm, they serve as the bridge that links the firm to external entities. By comparison, marketing capability signifies the firm's inherent ability that is intended to boost marketing performance and generate business returns. Combining CSR and marketing capability will create a unique realm spanning two important functional areas of the firm—that is, public relations and marketing—and demonstrate how a firm may better manage these assets to improve performance.

To this end, we formulate CSR's nonlinear impact on firm shareholder value when moderated by marketing capability. Based on findings from the existing literature, we hypothesize the nonlinear relation to be an inverted-U-shaped curve. This pattern combines the widely accepted notion of CSR that both (a) the firm situation and (b) the varying strengths of CSR at its different levels should be considered when checking performance implications (Brammer and Millington 2008). We use two robust estimation methods and collect a large dataset of firms to empirically test the model.

This paper contributes to the management and marketing literatures in several important ways. First, this paper aims to reconcile the traditional contradictory findings of CSR's effects on firm outcomes by introducing a unique view. In particular, this paper contributes to the stakeholder theory by furthering the understanding of the CSR's role from the shareholder's perspective. We not only show that CSR nonlinearly affects shareholders' evaluation of the firm, but also how the nonlinear relationship varies under different firm capability levels. By incorporating marketing-side competence, our findings advance the boundaries of the stakeholder view of CSR. Second, this paper extends current understanding of RBV and DCT, given that firm capabilities should have a broader effect on both firm performance and other strategic assets/actions of the firm. Previous research on marketing capability has largely focused on the power that it yields on the customer metric and marketing effectiveness. It has given much less attention to its combined effect with other functional departments, such as R&D and operations, and scant attention to the remaining sectors of a firm, such as CSR engagement. In this sense, our paper



is designed to broaden the influence of firm capability and yield useful implications for understanding how it may affect the strength of CSR. Third, the theoretical development of nonlinear moderation is of particular importance when firm strategies, assets, and activities are considered. For firm strategic activities such as CSR, a more in-depth analysis is needed because its special nature intertwines both benefits and costs. Finally, the paper also yields a set of important implications for managers regarding the optimal level of CSR, the proper needs for marketing capability, and maximizing shareholder value under varying situations.

We next present the theoretical foundations of CSR and marketing capability and then generate a set of hypotheses based on these theoretical foundations. This is followed by a discussion of the data, the measures of the variables, and the empirical estimation methods used. We present and discuss the results of the analyses. Based on the results, we generate the implications of our research for existing theory and managerial practice. We conclude with the limitations and future directions of our research.

# **Theories and Hypotheses**

## CSR, Stakeholder View, and Shareholder Value

CSR is conceptualized as the set of activities that a firm engages into fulfill its obligations to society and thus create and enhance its societal relationships (Sen et al. 2006). While most studies investigating CSR focus on benefits to society and the general public, recent business research has been directed to studying its effects on business performance. The popular motto "doing well by doing good" describes the perceived positive potential of CSR. In addition, the motto extends the importance of CSR, and thus its boundaries, to the strategic management and marketing areas, where a firm's CSR activities turn into visible outcomes of firm performance (Eichholtz et al. 2010; Karnani 2007).

The strategic view of CSR is closely connected to the stakeholder theory of firms. This research stream studies the magnitude and direction of relationships between firms and their various stakeholders (Jamali 2008; Sen et al. 2006). It views an individual firm as a part of a group of entities within which the firm builds connections. Thus, the firm can affect and be affected by external parties (Bhattacharya et al. 2009; Russo and Perrini 2010). The firm needs to tailor its functioning to the needs of its stakeholders to optimize its external conditions and facilitate its internal operations (Berman et al. 1999). In particular, the instrumental stakeholder theory serves as a solid foundation for analyzing CSR's role in firms (Jamali 2008). This approach focuses on strategic orientation—that is, managers' deployment of resources to

improve performance by managing the relationships with firm stakeholders, such as shareholders, consumers, the general public, and employees (Berman et al. 1999). Among these entities, shareholders and customers have received the most attention under the instrumental stakeholder theoretical framework.

Shareholders' ability and willingness to support the firm largely and immediately influence the firm's survival and growth because the firm's innovation, production, and operations are highly dependent upon financial resource abundance (Hillman and Keim 2001; Sen et al. 2006). Shareholders continuously evaluate a firm's current market, management, and financial conditions. In addition, they estimate future returns and consider the firm's forward-looking performance measures. The manner in which shareholders value a firm has long been an area of interest in academia as well as in business practice. In the marketing and management literatures, shareholder value is treated as the ultimate performance indicator that a firm is entitled to maximize. In general, this performance measure is a composite of multiple firm performance measures, such as market effectiveness, operations performance, cost control, and management efficiency (Gruca and Rego 2005; Srivastava et al. 1998). Shareholder value thus reflects the degree to which investors confidently believe the firm's strength is sustainable, based on their comprehensive assessments (Oxelheim and Randøy 2003). Therefore, drawing on instrumental stakeholder theory, we posit that a firm's CSR strategies, intensity, and outputs will be included in shareholders' valuation systems and become an important factor in influencing shareholders' decisions (Becchetti et al. 2012; Godfrey et al. 2009). As an example, CSR has been described as an "insurance-like" asset that has the ability to reassure investors (Godfrey 2005; Minor and Morgan 2011).

# Resource-based View, Dynamic Capability Theory, and Marketing Capability

The RBV treats the firm as a bundle of key elements, such as assets, endowments, attributes, and knowledge, which jointly determine the firm's ability to meet its objectives (Barney 1991). In this framework, competitive advantage is defined as a superior position relative to the competition as a result of the possession of key resources. While RBV incorporates firm capability as one of these resources, the DCT furthers the conceptualization of capability by systematically analyzing its nature and functions in pursuing competitive advantage. In addition to the VRIN (valuable, rare, inimitable, and non-substitutable) nature of firm capabilities, DCT describes capability as the ability of a firm to organize its resources, including human, financial, and management assets. Thus, it represents a special driver of firm competitive advantage (Teece et al. 1997). DCT theorists suggest that if a firm's



key resources are important, then the ability to effectively and efficiently deploy them becomes even more meaningful in helping the firm achieve the conditions necessary for success. Makadok (2001) proposes that capability is highly firm-specific and deeply embedded in the firm's management process; thus, it naturally creates non-imitable benefits supporting the firm. Further, the strength of a firm's capability also comes from its ability to detect and absorb new strategic resources and incorporate them into its current resource system, thus building a continuously and dynamic updating mechanism (Zott 2003).

The DCT recognizes that firm capability has different aspects within a firm's functional areas, such as marketing, R&D, and operations. In these areas, marketing capability represents the ability of a firm to organize and deploy its marketing resources, including advertising, sales teams, and intangible brand assets, and thus is one of the most prominent firm performance drivers. In a meta-analysis of three types of capabilities, namely marketing, R&D, and operations, Krasnikov and Jayachandran (2008) found that marketing capability has the strongest power to boost firm performance. This is because marketing serves as the link between the firm and customers, its most important stakeholders. Therefore, marketing capability creates a high level of operations and social complexity that is difficult for competitors to imitate. Hence, marketing capability directly and strongly enables the firm to differentiate its offerings and hedge its loyal customer, leading to satisfactory financial benefits (Vorhies and Morgan 2005).

Further, under the DCT framework, marketing capability captures the form of firm competencies that is essential to integrate firm functional resources toward market-oriented business practices (Grewal and Tansuhaj 2001; Morgan et al. 2009). Thus, marketing capability is one of the major strengths of a firm that allows it to optimize internal endowments to match the needs of external parties or cope with threats (Morgan et al. 2009; Vorhies and Morgan 2005). More importantly, marketing capability is dynamic in nature and is crucial in allowing the firm to handle fast-changing environments, such as market condition shifts; therefore, it protects the firm's business volume as well as its stability (Krasnikov and Jayachandran 2008; Srivastava et al. 1998). In this sense, marketing capability more precisely pinpoints the essential nature of firm resources under the RBV framework regarding competitive advantages (Nath et al. 2010) and thus makes it desirable to examine how it moderates the effects of CSR functions for the firm.

# The Inverted-U-shaped Relationship between CSR and Shareholder Value

It has been well documented that CSR will increase firm financial performance, thus satisfying investors' value expectation. However, linear relationship cannot realistically describe the performance implication. Instead, considering nonlinearity may be a desirable option when firm investments or expenditures are linked to outcomes (Berchicci 2013; Haans et al. 2016). When a firm continues engaging in CSR, performance gains will not proportionally increase as compared to initial levels because a diminishing return is inevitable (Marom 2006). From a firm resource angle, CSR activities consume considerable corporate resources, such as employee assignments, financial expenses, and managerial investments. The allocation of these resources to CSR becomes increasingly demanding because of the increased competition between CSR activities and other core business units (Brammer and Millington 2008). Thus, the cost of managing CSR becomes extraordinarily high and thus reduces returns to the firm. In addition, stakeholders' perceptions of CSR activities have been shown to have a diminishing marginal utility function (Brammer and Millington 2008; Marom 2006). Stakeholders believe that the firm distracts itself from the core business through over-involvement in CSR activities (Vlachos et al. 2010). The instrumental stakeholder theory supports the notion that firms are resource dependent on stakeholders and that the control of resources becomes more stringent when the firm's demand for the resources increases because stakeholders perceive less value addition (Barcos et al. 2013). Therefore, when CSR engagement increases, it will first raise shareholder value and then decrease it after the optimal point. Consequently, there is an optimal level for shareholders' value on firm strategies; neither too little nor much engagement is highly rewarded by stakeholders.

In addition to the resource-based rationales, the nonlinear relationship is also supported by market-based responses. Customers, as the primary stakeholder from which the firm seeks revenue, may display an inverted-U-shaped reaction on CSR engagement based on the supporting evidence in the literature (e.g., Brammer and Millington 2008; Sénéchal et al. 2014). Although it is widely acknowledged that CSR helps the firm generate positive financial income flows from its consumer markets (e.g., McWilliams and Siegel 2001; Van Beurden and Gössling 2008), the positive stimulus cannot endlessly stimulate consumer reaction/demand. Rather, there again exists an optimal point and any position beyond or below the optimal point will have a lower consumer acceptance and thus lower favorability (Steenkamp and Baumgartner 1992). Further, CSR becomes less attractive when consumers perceive too much exposure. A negative impact from CSR occurs when consumers start believing that the high costs associated with CSR add to the price they pay for the firm's product offerings (Bhattacharya and Sen 2004; Brammer and Millington 2008). These negative impacts on the customer market will soon be captured by the financial markets because shareholders use these characteristics to



value a firm (Madden et al. 2006). The undermined customer market performance not only directly reduces the financial attractiveness for shareholders and thus lowers the assessed current value, but also raises significant concerns for future incoming cash flows due to the observed improper resource configuration by the firm (Fang et al. 2008; Srivastava et al. 1998); therefore, CSR become less appealing to shareholders at high levels.

Given this theoretical evidence, we hypothesize that:

**H1** Increased CSR activities will display an inverted-U-shaped relationship with shareholder value.

# **Marketing Capability and Shareholder Value**

According to the valuation model, investors' estimates of firm value rest on current and future cash flows and the corresponding discounted net present value (Hillman and Keim 2001). In this valuation system, investors assess both the magnitude of cash flow and the underlying mechanism leading to strong cash flow, both of which are reliable indicators of the promise of future cash flow (Srivastava et al. 1998).

Marketing capability represents the main form of firm competences achieving satisfactory customer value, which will translate to incoming cash flow (Vorhies et al. 2009). A firm with superior marketing capability is likely to detect new market opportunities by pinpointing new customer needs and locating proper competitive opportunities. Newly acquired customer groups generate additional cash flow and enhance shareholder value. For existing customers, marketing capability is equally important in maintaining and raising cash flow. This is true because customer loyalty requires a firm to be capable of continuously tailoring its products, services, and strategies to evolving customer needs. A firm with high marketing capability can organize its marketing assets, such as salespeople, advertising, and sales promotions, into an "organic bundle," to improve customer satisfaction (Dutta et al. 1999; Vorhies and Morgan 2005). While enhancing cash flow and thus adding shareholder value is a salient characteristic of marketing capability, it also has a strong impact on reducing a firm's cost in realizing the cash flow; hence, it can further improve the net present value that shareholders expect.

Therefore, we hypothesize that:

**H2** Marketing capability will be positively related to shareholder value.

# The Moderating Effect of Marketing Capability on CSR and Shareholder Value

Marketing capability's function is not just limited to its direct impact on firm performance. It is equally evident that

it plays an important role in helping other firm strategies, assets, and activities realize their intended objectives. For example, Dutta et al. (1999) conclude that marketing capability strongly moderates the relationships between R&D capability, operations capability, and financial performance. Kotabe et al. (2002) find that marketing capability supports the effect of multi-nationality on firm business outcomes. In our paper, we postulate that marketing capability will moderate the link between CSR and shareholder value for several reasons that are evident in the literature.

First, the RBV points out that a firm's sustainable competitive advantages must rely on non-imitable key resources (Newbert 2007). Any key assets that are easily copied or acquired by competitors are not able to continuously benefit the firm. CSR has been demonstrated to positively impact the firm if handled properly. However, this advantage may not be sustainable, as CSR projects are highly visible in terms of their targets, objectives, processes, and proposed outcomes (Udayasankar 2008). Therefore, the positive outcome generated by CSR is easily analyzable, and competitors can launch similar strategies with little difficulty. Conversely, marketing capability is an inherent firm ability built through complex operations, social interactions, and corporate learning processes. Thus, it is one of the key firm endowments and is less susceptible to imitation due to its complexity and the low visibility of its underlying building mechanism (Krasnikov and Jayachandran 2008). If CSR is complemented by strong marketing capability, a firm has a chance to blend two key resources together. This further builds a process that is complex and therefore creates a competition barrier toward the non-imitability of CSR functions and returns. As an example, CSR activities can further utilize an efficient marketing channel system to reach target customers, be embedded in a firm's well-designed advertising and promotion campaigns, and be integrated into the firm's customer service packages. This inclusion enables CSR and marketing to support each other and builds an extended network to create more value for the firm and therefore assure shareholders.

Second, from the stakeholder view, firm stakeholders expect a consistent image of the firm rather than incongruence on any dimension. For example, a firm with high CSR involvement but low ability to manage its operations is likely to give customers conflicting perceptions and therefore lower their loyalty to the firm (Luo and Bhattacharya 2006). In a similar vein, if a firm appears to be a charitable entity that cares about the public, but also demonstrates a poor commitment to its customers, the discrepancy will make stakeholders question the CSR claims and therefore result in fallout because of identification effects. The same logic can be extended to buzz management theory, which posits that word of mouth will be transferred from stakeholders to stakeholders—for example, from consumers to the general public, from channel members to consumers, or from



analysts to shareholders (Frooman 1999). While CSR has been viewed as an "insurance-like" asset that assures stakeholders, marketing capability is the additional insurance on the "insurance-like" assets in that it helps *detect*, *transfer*, and *reinforce* messages among the network of stakeholders. In this sense, marketing capability paves a pathway that safeguards CSR's smooth launch and operations, and facilitates the realization of its strategic objectives.

Third, from a risk management perspective, shareholders value low uncertainty in a firm's performance (Srivastava et al. 1998). While CSR's risk implication is mainly limited to assuring stakeholders through imagery and goodwill generation, marketing capability protects the firm from undesirable turbulence by efficiently organizing marketing assets into a bundle that creates and enhances an extended network, shares information, coordinates actions, and integrates processes. These traits of marketing capability reduce the risk from a functional basis that will complement the imagery-based CSR effects and create a comprehensive mechanism stabilizing firm performance, and hence add value to shareholders. Therefore, we hypothesize that:

**H3** Marketing capability will moderate the relationship between CSR and shareholder value. The inverted-U-shaped effect of CSR on shareholder value will be stronger for low-marketing-capability firms than for high-marketing-capability firms.

# Data, Measures, and Analysis Methods

We test our hypotheses by collecting a combined dataset from multiple sources, including KLD Research and Analytics (KLD henceforth), Compustat, and firm annual reports. This data approach is widely adopted in CSR, marketing, management, and other business research streams. In addition, it has been supported by business researchers as being less biased and achieving broader coverage across industries, thus yielding sufficient credibility for research models and results (Harrison and Freeman 1999).

We obtain and measure the data on firm marketing capability, firm characteristics, and shareholder value using objective indicators. The final merged non-missing data comprises of 1490 observations from 468 firms. Table 1 presents the descriptive statistics and correlations. The sample includes firms that are publicly traded on US securities exchanges. These firms represent main industry sectors such as transportation, manufacturing, retail trade, wholesale, and services. In addition, these sample firms are widely diverse on characteristics such as firm size, age, and market diversification. This approach achieves an authentic representation of real-world configurations and thus ensures the external validity of our research findings. The panel structure of the

•														
		M	SD V1	V1	V2	V3	V4	V5	V6	V7	N8	60	V10	V11
Shareholder value	V1	2.13	1.80											
CSR	V2	-0.11	0.39	0.16***										
MK cap.	V3	0.65	0.22	0.26***	0.00									
Firm size	44	7.74	1.57	-0.33***	0.00	0.04								
Firm Age	V5	2.16	0.69	- 0.03	***80.0	0.02	0.12***							
Munificence	9/	0.05	0.08	0.03	-0.03	***80.0	0.02	- 0.03						
Turbulence	77	0.15	0.10	0.05*	- 0.08***	0.05**		0.01	0.28***					
Competition	8	0.79	0.16	0.13***	0.01	0.00	- 0.05**	-0.13***	0.07***	- 0.11***				
Asset growth	60	0.16	0.46	0.22***	0.02	***60.0		- 0.13***		0.08	0.02			
Slack resource	V10	0.00	0.17	0.45	0.13***	0.41***	0.01*	0.00	0.01	- 0.04	0.10***	- 0.04*		
Perf. Volatility	V11	1.31	1.23	0.02	- 0.08***	-0.15***	- 0.20***	- 0.01	- 0.06**	0.03	- 0.03	0.11	- 0.18**	
Diversification	V12	0.78	0.51	- 0.10***	- 0.02	0.02	0.27**	0.10***	**90.0	0.07	- 0.07***	- 0.04	0.03	- 0.07**

 Table 1
 Descriptive statistics and correlations

p < 0.10, \*\*p < 0.05, \*\*\*p < 0



data, which spans 2000–2010, gives additional strength to our empirical study (discussed in the model section).

#### **Shareholder Value**

Business researchers agree that shareholder value should represent the expectations and confidence that investors hold for the firm's future performance. Thus, shareholder value should be characterized as a forward-looking indicator that goes beyond the book asset value shown on the balance sheet. For this reason, Tobin's q becomes the ideal choice to measure shareholder value because the conceptualizations of the two match seamlessly. The same choice can be found in numerous business studies (e.g., Huselid et al. 1997; Luo and Bhattacharya 2006).

Chung and Pruitt (1994) propose a widely adopted operational formula for calculating Tobin's q. Its formulation is specified as

$$Tobin's q = \frac{MV + PS + DEBT}{TA}.$$

MV stands for the market value at the end of fiscal year, PS is the liquidation value of a firm's outstanding preferred stock, and DEBT denotes the discrepancy between shortterm liabilities and assets plus the firm's long-term debt, as well as the book value of inventories. TA denotes the book value of the total assets value of the firm. This method of measurement pinpoints the essence of Tobin's q as the degree to which investors favor holding the firm's shares due to the assessment results on the intangible value beyond the book value from their factor-to-factor judgment of the firm's conditions. This intangible focused value measure also indicates that Tobin's q is a salient, forward-looking expectation of firm shareholders (Bharadwaj et al. 1999; Demsetz and Villalonga 2001) and thus becomes a preferred outcome to examine the profound influences of CSR and marketing capability.

#### **CSR**

We collect CSR data from KLD, which is a data source that gathers information on a full list of CSR strengths and weaknesses for a large number of corporations. This data source has been popularly used by studies involving CSR variables (e.g., Minor and Morgan 2011; Mishra and Modi 2013). KLD constitutes CSR measures from 13 categories, such as community, diversity, employment, environment, human rights, and so on. These categories comprehensively reflect how a firm performs on superior or inferior social responsibility tasks. For each of the categories, KLD collects data on the strengths and concerns of individual items. For example, in the *community* category, there are a maximum seven possible strengths and four concerns in the year 2005.

To measure CSR, we use total number of strengths—total number of concerns. This method comprehensively indicates the overall CSR efforts (Attig et al. 2013; Harjoto et al. 2015; Ruf et al. 2001). In particular, this measure approach has two traits that we believe are of high importance. First, it fully considers the multi-faceted nature of a firm's CSR activities and produces an unbiased representation of its different functional areas. Second, it addresses an important question that is often neglected by researchers: namely, common thinking often focuses on certain aspects (strengths) of a firm's investment in CSR and ignores the fact that it may concurrently cut costs on other important CSR activities, such as environmental protection procedures, and thus unethically treat communities (concerns). In this regard, this approach comprehensively incorporates both the positive and negative aspects of a firm's CSR engagement and meaningfully depicts the overall status of a firm's CSR. The CSR scores range from -11 to 14, with a mean of -0.59and median of -1. However, the number of individual items changes slightly over time, the maximum possible strengths and concerns may differ across years (Attig et al. 2013; Harjoto et al. 2015). Therefore, it is unreasonable to lump CSR data across different time periods. As a result, we conduct a transformation to scale a firm's CSR strength and concern scores against the maximum possible scores in each year (Jo and Harjoto 2012; Jo and Na 2012). This transformation makes comparisons across years possible.

#### Marketing Capability

We adopt the input—output measure of capability that is widely used in the management and marketing literatures (e.g., Dutta et al. 1999). This approach is based on the notion proposed by RBV and DCT that capability represents how efficiently a firm can organize and deploy its resources to achieve intended outcomes (Barney 1991; Teece et al. 1997). We constitute the inputs by collecting and adapting data items such as selling, general and administrative (SG&A), receivables, intangible assets, current install base, and slack resources, all collected from Compustat. We then use these input measures to gauge firms' inefficiency levels to achieve market performance, as measured by sales and profitability through the Stochastic Frontier Model. The resulting score becomes the measure of marketing capability (Dutta et al. 1999; Nath et al. 2010).

#### **Control Variables**

Because firm shareholder value may be affected by other factors, we include a set of firm characteristics, competition factors, industry variables, and time effects to serve as control variables. We include *firm size* because large firms, on average, have a lower growth rate, while small firms may give



savvy investors higher returns (Fang et al. 2008). We measure firm size as the log-transformation of the volume of total assets, data collected from Compustat. Firm age is another factor that investors consider, as firms' duration of existence naturally signifies their strengths. We measure firm age as the log-transformation of the number of years a firm is listed public (Anderson and Reeb 2003). Firm's asset growth rate is another focal indicator for shareholders, as it represents the potential of the investment. Thus, we control for asset growth by calculating the percentage increase in asset volume from the previous year. We also control for firm income level because it gives investors confidence about a firm's strength and likelihood of implementing strategies as needed because of the resource abundance. Cash flow is also included in our analyses as an indicator of performance level. Because CSR and marketing capability likely influence cash flow, we regress cash flow against CSR and marketing capability to parcel out the portion of variance associated with them from cash flow. Performance volatility is another important concern for shareholders. We control for this effect by incorporating cash flow volatility over the past 5 years (Minton and Schrand 1999). We also control for firm diversification because it is perceived as a market risk reduction that investors may consider. We measure diversification by calculating the number of business segments of each firm (Hough 2006). In addition to firmlevel data, we also incorporate three environmental factors: munificence, turbulence, and competition. Munificence and turbulence are measured by following the model suggested by Keats and Hitt (1988). Competition is measured by the 1- Herfindahl-Hirschman Index (Fang et al. 2008; Lee and Grewal 2004). Along with the industry factors, we include time dummy variables to control for possible heterogeneity induced by time.

#### **Analysis Methods**

The model we use for analysis uses shareholder value as the dependent variable. To address the concern of reverse causality, we use lagged shareholder value (at t+1) as the dependent variable. The main effects include CSR and marketing capability. To capture the inverted-U-shaped pattern, we include the quadric term in the representation of CSR. Further, we add the terms of CSR×marketing capability, CSR<sup>2</sup>×marketing capability to capture the moderating effects of marketing capability. The final model is specified as follows:

Shareholder value<sub>it+1</sub>

- =  $\beta_0 + \beta_1 \times CSR_{it} + \beta_2 \times Marketing capability_{it}$
- $+ \beta_3 \times CSR_{it} \times CSR_{it}$
- +  $\beta_4 \times CSR_{it} \times Marketing capability_{it}$
- +  $\beta_5 \times CSR_{it} \times CSR_{it} \times Marketing capability_{it}$
- +  $\beta_6 \times \text{Firm size}_{it} + \beta_7 \times \text{Firm age}_{it}$
- +  $\beta_8$  × Envionmental munificence<sub>ir</sub>
- +  $\beta_9 \times$  Envionmental turbulence<sub>it</sub>
- +  $\beta_{10}$  × Competition intensity<sub>ir</sub>
- +  $\beta_{11}$  × Asset growth<sub>it</sub>
- +  $\beta_{12}$  × Slack resource<sub>i</sub>
- +  $\beta_{13}$  × Performance volatility<sub>it</sub>
- +  $\beta_{14}$  × Diversification<sub>i</sub>,
- + Time dummies +  $\varepsilon_{it}$

where i represents individual firms, j denotes industries associated with each firm, and t denotes time periods (year). Given the situational variation, CSR's power on firm performance displays a salient difference.

Before estimating the main effects and interactions, some concerns need to be addressed. First, our data consist of firms that are different on various factors, such as size and age. These concerns are addressed by incorporating the corresponding control variables, firm size, and firm age. Second, in addition to the nature of the firms, each firm also has other distinctive resource abundance and strengths. These concerns are removed by incorporating firm factors such as asset growth, diversification, performance level, and volatility. Third, we recognize that there may be systematic heterogeneity between firms because they are operating in different industries. This concern is addressed by introducing the set of environmental characteristic variables, munificence, turbulence, and competition. Fourth, time may play an important role in systematically affecting firms' relationship patterns. The inclusion of the year dummy variable addresses this concern. Fifth, our data are collected in panel structure, implying that a firm has data available across multiple years. Panel data have its advantages, such as improving the efficiency of econometric estimates, reducing the impact of omitted variables (Wooldridge 2010), and generating more accurate results (Hsiao 2005). However, special caution should be used with panel data due to the probability of autocorrelation. We apply a Wooldridge autocorrelation test,



which confirms that autocorrelation exists in the panel dataset. Further, heteroscedasticity must be considered when a large number of firm data are included because the variance of dependent variable may be disproportionally explained by certain groups of firms. Thus, the selection of analysis methods must consider both heteroskedasticity as well as autocorrelation. For this reason, we choose White Cluster robust regression to estimate our model. This robust regression reports the White standard error, which is heteroscedasticity consistent. It allows for clustering observations of each firm over multiple years to account for the within-firm correlations (Thompson 2011). To ensure the robustness, we then run the same model

by using Newey–West robust regression, which reports Newey–West heteroscedasticity and autocorrelation-consistent standard errors (Morgan and Rego 2009).

# Analysis, Results, and Discussion

To estimate the empirical model, we run stepwise robust regressions by first adding a control variable, the main effects, and lastly the interactions. Between these regressions, no significant incongruence is found in terms of relationship signs (direction of the relationships) and relationship strength. For each step, we also check the

**Table 2** Analysis results: shareholder value

	Control mo	del	Main effect	s	White Clus estimation	ter robust	Newey–We robust estin	
	Coeff. (t)	Sig.	Coeff. (t)	Sig.	Coeff. (t)	Sig.	Coeff. (t)	Sig.
CSR		'	0.09	***	0.09	***	0.09	***
			(2.59)		(3.29)		(4.00)	
MK capability			0.09	***	0.10	***	0.10	***
			(3.42)		(3.39)		(3.76)	
CSR <sup>2</sup>					-0.03	**	- 0.03	*
					(-2.04)		(-1.92)	
CSR×MC					0.08	***	0.08	***
					(3.24)		(3.75)	
$CSR^2 \times MC$					0.04	*	0.04	*
					(1.69)		(1.87)	
Firm size	- 0.29	***	- 0.29	***	-0.29	***	- 0.29	***
	(-7.03)		(-7.35)		(-7.58)		(-9.60)	
Firm age	0.05		0.04		0.04		0.04	
	(1.41)		(1.05)		(1.02)		(1.35)	
Munificence	0.02		0.02		0.02		0.02	
	(0.79)		(0.59)		(0.63)		(0.72)	
Turbulence	0.05	*	0.05	*	0.05	*	0.05	**
	(1.74)		(1.82)		(1.78)		(2.28)	
Competition	0.07	**	0.07	**	0.07	**	0.07	***
	(2.16)		(2.41)		(2.47)		(3.43)	
Asset growth	0.18	***	0.16	***	0.17	***	0.17	***
	(4.67)		(4.28)		(4.31)		(4.44)	
Slack resource	0.46	***	0.42	***	0.41	***	0.41	***
	(9.62)		(7.86)		(7.76)		(10.28)	
Perf. volatility	0.03		0.04		0.04		0.04	
	(0.97)		(1.45)		(1.48)		(1.60)	
Diversification	-0.03		-0.03		-0.03		-0.03	
	(-1.02)		(-0.95)		(-1.02)		(-1.43)	
Time dummies	Yes		Yes		Yes		Yes	
Adj. $R^2$	0.369		0.383		0.391		0.391	

All VIFs are lower than 10

All the incremental additions of variables are significant

DV, shareholder value

\*p < 0.10, \*\*p < 0.05, \*\*\*p < 0.01





incremental contribution of the added variables. From a control-only model (column "Control Model" in Table 2) to the model with main effects plus control variables (column "Main Effects" in Table 2), the partial F test shows the addition is significant (F = 13.53, p < 0.01). This implies that the addition of main effects significantly contributes to the model's explanatory power. From the main effects + control model to the full model (the last two models in Table 2 are full models), the incremental contribution is also significant (F = 5.84, p < 0.01). Among all control variables, firm size has the strongest impact on shareholder value ( $\beta = -0.29$ , p < 0.01). This is in line with previous research exploring the relationship (Fang et al. 2008; Maury and Pajuste 2005). Interestingly, the results of turbulence show that shareholders opt to support firms in more dynamic markets than firms in stable markets ( $\beta = 0.05$ , p < 0.1). Sirmon et al. (2007) found that firms in turbulent environments are likely to build competence in dealing with uncertainty and thus be viewed positively by investors. In turbulent markets, experienced investors often find more chances to yield high returns if they can properly identify opportunities. Our results also show that companies are more favored by shareholders when they are in competitive markets ( $\beta = 0.07$ , p < 0.01). This effect is salient because competitive intensity often reflects the attractiveness of the market, which likely appeals to investors. Our model also shows that shareholders place strong emphasis on asset growth and the current performance level when they aim for future returns. This is in line with previous research (e.g., Cooper et al. 2008) in that the valuation process is largely oriented toward financial performance.

Our first hypothesis posits that CSR should have an inverted-U-shaped relationship with shareholder value. In our empirical estimation, CSR's main effect is positive ( $\beta = 0.09$ , p < 0.001), but its quadric term is negative  $(\beta = -0.03, p < 0.01)$ , confirming our hypothesis. The positive effect echoes the common findings of previous researchers in that "doing well by doing good" applies in our sample, which ranges across the main industries and includes firms of different types. This finding provides initial support to the fact that CSR's effect is positively linear when only the main effects are considered. However, the inclusion of the quadric term reveals further insights into the relationship in that the positive relationship pattern shows diminishing returns to scale and eventually turns negative when CSR increases past a certain high level. This means that the negative impact of CSR does not occur until its investment reaches a high level.

This finding essentially reconciles the conflicting viewpoints and findings of researchers that support either a positive, negative, or neutral relationship between CSR activities and firm performance. We conclude that CSR mostly produces desirable benefits to firms, as long as they are not operating at a high level. Our research results also show that the diminishing return of CSR is not negligible, as the negative quadric term keeps mitigating the power of CSR before it starts having a negative effect on performance. This diminishing return is often not included in the consideration of researchers who consider only linear relationships, but is critical for managers who are looking for the best investment across multiple strategic spending areas. In this sense, this diminishing return needs to be considered alongside the resource availability and abundance within an individual firm to determine the best point at which engagement in CSR activities enhances performance to the maximum. Note that shareholder value is measured by Tobin's q, which reflects investors' projection of firm future market value against the firm assets. In other words, it pinpoints how shareholders believe the firm can translate its assets into future returns. When shareholders observe that over-spending on CSR simply increases the firm input but achieves diminishing gains, their assessed value decreases accordingly. Our results show that, in general, shareholders value CSR, and this support does not change easily. This support from shareholders reinforces the theory of instrumental stakeholders, in that investors seem to allocate sizable emphasis on CSR and tolerate its increase until it gets to a very high level.

Our second hypothesis predicts that marketing capability, as an important inherent firm endowment, should positively drive shareholder value. Although marketing theorists have long called for linking this ability aspect of the firm to shareholders (e.g., Srivastava et al. 1998), few researchers have explicitly captured how marketing capability plays its role in this direction. In our empirical results, marketing capability positively influences shareholder value ( $\beta$ =0.10, p<0.01). Thus, our second hypothesis is supported. This finding is not surprising because RBV and DCT have explicitly described the nature and beneficial functions of firm capabilities.

We extend firm capability into the marketing area and illustrate a dynamic capability from the angle of this functional specific area. We also test the marketing capability's quadric term in the model and find it is not significant; therefore, we drop it from the final model. In contrast to CSR's diminishing return function, marketing capability does not seem to display a similar effect. This is an interesting comparison because CSR and marketing capability represent two different forms of firm competences. CSR is closely associated with the magnitude of firm expenses and management commitment. Therefore, continuously increasing it incurs more pressure from the changing scale of benefits and costs, leading to lower attractiveness. Further, CSR activities do not have enough protection because of their visibility and thus imitability by competitors. This fact, compounded by the increased concern about costs, creates a twofold drawback that reduces CSR's appeal to shareholders.



Conversely, marketing capability represents an inherent characteristic that is built through a more complicated process over an extended period of time. The cost of building marketing capability is not visibly salient; it comes into being naturally from the firm's interactions and not necessarily through a direct investment. Thus, unlike CSR, it does not have the cost concerns associated with it. Further, the outcome of possessing superior marketing capability is concrete and visible to shareholders. Therefore, marketing capability is found not to display a pattern of diminishing returns. This also indicates that marketing capability functions well in attracting shareholders by implying better financial performance, along with its ability to set competitive barriers. For example, avoiding imitation is likely to help the firm sustain better performance for a longer time. These characteristics explain the essential roles of marketing capabilities in terms of realizing shareholder value.

The third hypothesis focuses on the moderation between CSR and marketing capability. The results reveal that marketing capability positively interacts not only with CSR, but also with its quadric term ( $\beta$ =0.04, p<0.1). This finding confirms our theoretical reasoning regarding marketing capability's beneficial role in affecting the power manifested by other assets and strategies. To better illustrate this role, we graph the results in Fig. 1.

It is interesting that when marketing capability is low, CSR's impact on shareholders shows a salient inverted-U-shape. Hypothesis 1 already indicated CSR's nonlinear effect. However, its negative effect only occurs when CSR activities reach excessively high levels. The result of the moderation illustrates more in-depth knowledge about the

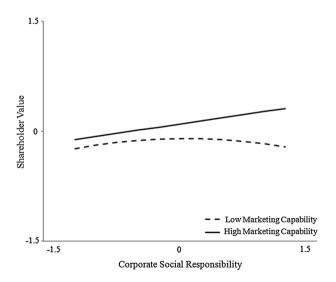


Fig. 1 Moderation of marketing capability on CSR and shareholder value. Notes:  $\bf a$  A value of zero on the axes represents the mean level of the variables.  $\bf b$  The values on the axes represent deviations from the mean value of the variables ranging between  $\pm 1.5$ 

pattern, in that firms that have a weak ability to manage their marketing resources will start displaying higher decreasing returns at an earlier stage. For these firms, increasing CSR will soon become a concern for shareholders. Figure 1 also shows that, in contrast with firms with low marketing capability, those with high marketing capability do not display an inverted-U-shaped pattern and hence do not display any diminishing returns to scale with respect to shareholder value. This partially explains why, in previous CSR studies, researchers have found variances in the relationship between CSR and firm performance. Moderators matter in categorizing firms into different groups, within which CSR yields obviously distinct results. With the help of marketing capability, CSR gains sufficient strength to function as a performance driver and is immune from diminishing returns. This finding is in line with research (e.g., Minor and Morgan 2011; Godfrey et al. 2009) suggesting that CSR can be one of the most powerful tools for winning in the competitive marketplace and protecting firms from a downturn or crisis, given that it is handled in a well-organized manner.

In our analyses, we also incorporate a series of additional tests and data to ensure the robustness of our results. To explore the effects of marketing capability, we not only use SFE model with half-half normal assumption, but also test its measure with half-exponential and half-truncated model assumptions. All the results remain consistent under the different measuring approaches. For firm size, we test asset size and the number of employees. For diversification control, in addition to testing industries based on the four-digit SIC, we also use the three-digit SIC. For environment variables, we also test the different industry categorizations based on SIC. All the proposed relationships retain the previously observed patterns. For the estimation methods, in addition to the White Cluster robust regression, a Newey-West robust regression is also estimated, and the results found to be consistent.

### **Additional Study: CSR and Firm Cash Flow**

In addition to using shareholder value as a measure of forward-looking performance, we conduct a study using cash flow as the dependent variable to examine how CSR, CSR's quadric term, marketing capability, and the interactions affect another measure of firm performance. This additional study serves several important goals. First, as financial performance is a major consideration factor for shareholders, checking the similar set of an individual variable set's impact on direct financial performance will reinforce the robustness of our primary model. We choose cash flow because it has been treated as the preferred measure of financial performance due to multiple advantages, such as a low influence of accounting rules of specific firms and comprehensive representativeness of a firm's true gains from the markets (Gruca



**Table 3** Additional analysis results: cash flow

	Control model		Main effect	s	White Clus estimation	White Cluster robust estimation		st nation
	Coeff. (t)	Sig.	Coeff. (t)	Sig.	Coeff. (t)	Sig.	Coeff. (t)	Sig.
CSR			0.09	***	0.08	***	0.08	***
			(3.36)		(3.40)		(3.97)	
MK capability			0.43	***	0.45	***	0.45	***
			(19.65)		(16.77)		(19.63)	
$CSR^2$					-0.08	**	-0.08	**
					(-2.07)		(-2.33)	
$CSR \times MC$					0.07	***	0.07	***
					(2.80)		(3.12)	
$CSR^2 \times MC$					0.06	*	0.06	**
					(1.76)		(1.99)	
Firm size	0.12	***	0.08	***	0.10	***	0.10	***
	(3.09)		(2.72)		(3.27)		(4.24)	
Firm age	0.00		0.00		-0.01		-0.01	
	(-0.10)		(-0.20)		(-0.26)		(-0.34)	
Munificence	0.07	***	0.02		0.03		0.03	
	(2.62)		(1.06)		(1.31)		(1.37)	
Turbulence	0.04		0.03		0.03		0.03	
	(1.49)		(1.39)		(1.37)		(1.54)	
Competition	0.04		0.01		0.01		0.01	
	(1.15)		(0.21)		(0.25)		(0.32)	
Market share	-0.03		-0.05	**	-0.05	*	-0.05	**
	(-1.07)		(-2.21)		(-1.89)		(-2.39)	
SG&A <sup>a</sup>	0.21	***	0.27	***	0.27	***	0.27	***
	(6.31)		(9.89)		(10.29)		(13.41)	
Diversification	-0.04		-0.01		-0.04		-0.04	**
	(-1.13)		(-0.59)		(-1.58)		(-2.02)	
Time dummies	Yes		Yes		Yes		Yes	
Adj. $R^2$	0.055		0.230		0.258		0.258	

All VIFs are lower than 10

All the incremental additions of variables are significant

DV, cash flow

p < 0.10, p < 0.05, p < 0.01

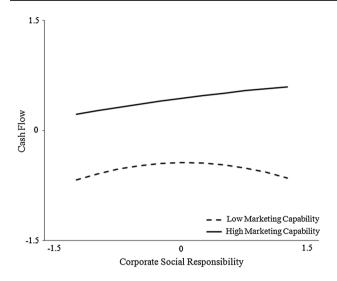
<sup>a</sup>SG&A: Selling, General, and Administrative

and Rego 2005). Second, cash flow is directly impacted by firm factors such as CSR and marketing capability, and thus directly illustrates the relationships we propose in this paper. It provides strong support to further extend the implications toward maximizing shareholder value, the ultimate goal of the firm. Third, the nature of cash flow fits several aspects of our theoretical framework. For example, the diminishing returns are well associated with a firm's incoming cash; also, market effectiveness is largely reflected in the measure of cash flow. But most importantly, cash flow reflects the joint effort of a comprehensive set of firm attributes and therefore is a single comprehensive indicator representing the interplay of these attributes.

The results of the analysis with cash flow as the focal variable are reported in Table 3. Similar to our main shareholder value model, CSR's inverted-U-shaped influence is found to be replicated. The interaction between CSR and marketing also retains the pattern, in that high-marketing-capability firms enjoy a linear increase in returns from CSR activities, whereas low-marketing-capability firms soon lose the strength of CSR with continued investment in it (see Fig. 2).

An additional finding is evident when comparing the gaps between the low- and high-marketing-capability lines across Figs. 1 and 2. The gap between the solid and the dotted lines in Fig. 2 (cash flow model) is substantially larger than that in Fig. 1 (shareholder value model). This is an interesting





**Fig. 2** Moderation of marketing capability on CSR and cash flow. Notes: **a** A value of zero on the axes represents the mean level of the variables. **b** The values on the axes represent deviations from the mean value of the variables ranging between  $\pm 1.5$ 

contrast that has not been established in the literature. Cash flow is the direct result of marketing capability; thus, it is saliently differentiated by the high versus low level of marketing capability. However, shareholders assess the firm from a comprehensive set of firm factors, of which marketing capability is just one component. Therefore, while marketing capability strongly affects cash flow, its effect on shareholders is relatively smaller. Nevertheless, a high level of consistency between the shareholder value model and cash flow model provides additional evidence of the robustness of our proposed framework.

#### **Theoretical Implications**

The instrumental stakeholder view describes the firm as an entity that develops strategies and launches business activities to meet the interests and the requirements of its stakeholders, including employees, customers, shareholders, and the general public. Previous research investigating CSR and stakeholders under the instrumental stakeholder realm primarily focused on linear relationships. Thus, positive, negative, and neutral impacts of CSR are all found in the literature. Our paper analyzes the nonlinear effect of CSR on performance to understand the reasoning behind these contradictory findings. Our findings yield several theoretical implications for the instrumental stakeholder view.

First, while it has been widely acknowledged that CSR's relationship with firm outcomes may display many variations due to situational variables, the notion that it varies in strength at different intensity levels has been largely overlooked. This consideration can be extended to studies focusing on other firm assets and strategies that require significant

corporate resources and involvement. The nonsignificant linear relationship does not necessarily imply the lack of a relationship. Rather, it might signify that a more meaningful relationship is being masked by an aggregated formulation. Second, although the importance of stakeholders is highly emphasized in the literature when CSR is involved, very few research studies discuss the heterogeneity of the relationship patterns between CSR and different stakeholders. The positive, negative, neutral, U-shaped, or inverted-U-shaped function of CSR may be due not only to aggregation of its different levels, but also indicate that different stakeholders evaluate CSR in different ways. Our findings help decode the complexity of the instrumental stakeholder view by providing a specific set of results and showing its effect on shareholders. Third, under the stakeholder theoretical frame, CSR is largely treated as an independent factor that drives various firm performance indicators. Situational variables have been introduced, but firm capability from the marketing side is neglected. By building a more comprehensive outlook, our research marks a first attempt to examine how the interaction of CSR and marketing capability affects shareholder value and thus complements the instrumental stakeholder view.

The research also provides useful implications for the strategic firm perspective. "Doing well by doing good" has a solid foundation in the beneficial role of CSR on its environment. However, our research calls for caution on how to consider CSR's contribution to firm performance. The extent to which CSR can be effective at achieving intended firm performance depends not only on its nature but also on the absolute amount invested. More importantly, its role is heavily influenced by other firm factors, i.e., marketing competency. Therefore, formulating CSR into the strategic view of the firm requires researchers to understand the underlying mechanisms of these factors. A traditional approach is often centered on one narrow or broad functional area. This approach is helpful for garnering in-depth knowledge of specific firm functional assets, but it risks omitting interrelationships across business areas. Researchers thus need to consider the optimal balance between focusing on in-depth insight in one area and incorporating more cross-functional variables, given the actionable model complexity.

Recall that the CSR measure is the composite of two sides, namely strengths and concerns. While strengths imply a firm's active investment in social contributions, concerns signify that the firm may cut necessary costs or engage in self-interest activities to reap unethical benefits. Thus, the inverted-U-shaped relationship occurs with a firm's positive engagement toward CSR. This further strengthens our proposition, in that without the support of marketing capability, firms' active CSR engagement is not sustainable when shareholder's value assessment is considered. This is a special trait that distinguishes CSR from other firm strategies and assets.



Our research also generates important implications for RBV and DCT. Traditionally, studies of marketing capability have found that it is limited in driving intermediate financial performance, as compared to ultimate firm goals, such as shareholder value maximization. In particular, the literature has not investigated the interaction between marketing capability and CSR in meeting those goals. Given the importance of both CSR and marketing to firms, combining them produces added insight into understanding the essential drivers of firm value. CSR represents endeavors that link a firm with its external environment, and marketing capability denotes the intrinsic ability of a firm to organize its resources to achieve beneficial outcomes. Thus, the joint effect of these two types of firm attributes indicates a new vision of firm activities and capability, such that capability affects activities in a way that maximizes utility.

Specifically, the support of marketing capability toward CSR reveals four important new aspects and thus provides new insights to RBV and DCT. First, DCT embraces the notion of dynamic capability, as theorists believe that capability is built to help the firm cope with a changing environment. Extending marketing capability's influence on CSR, our research reveals that the dynamic nature of capability has an even broader reach in influencing external stakeholders (such as shareholders) not only through direct links, but also indirectly by helping other firm assets such CSR. Second, DCT, as well as RBV, support the claim that a firm's advantage depends not only on the superiority of individual firm assets and resources but also on the composition and coordination of the whole bundle of resources and capabilities. In this sense, our research provides strong support for this theoretical reasoning by illustrating the interaction between CSR and marketing capability. Third, the significant moderating effect in our model also implies that CSR has a closer connection with marketing than previously thought. Researchers such as McWilliams and Siegel (2001) and Branco and Rodrigues (2006) called for further research on CSR, arguing that CSR should be treated not only as a firm expenditure, but also as a firm resource because of its special protective mechanism for a firm's competitive advantages. Our research echoes such a proposition and further suggests that this type of firm resource needs support from marketing-side advantages because the latter can ensure the proper process of acquiring, building, and using the former. Fourth, our research raises caution about the practice of obtaining firm advantages by building critical resources. In traditional RBV, the positive role of resources has received continued focus. However, the cost of achieving those critical resources is often underestimated and could ultimately hurt the firm performance. Thus, high engagement of CSR may not be strategically useful. However, aided by its marketing capability, the firm has a higher possibility of maximizing the output and while minimizing the associated cost.

#### **Managerial Implications**

Nowadays, managers are eager to consider CSR projects, which they increasingly recognize can be a strategic tool that brings their firms competitive advantages along with an increase in social welfare. This perceived win—win strategy stimulates managers to keep investing in CSR projects. However, the practice may carry notable risks. First, CSR activities are inevitably consume firm resources, such as financial allocations, human resources, and managerial inputs. Continual investing in CSR leads to more intensified resource competition between different functional departments. Therefore, managers should realize that there will be a turning point in investments toward CSR, beyond which the overall performance could be downward. Our inverted-U-shaped relationship illustrates the concern that managers will encounter when their CSR is too high.

However, our results also demonstrate that marketing capability may change the downward trend of CSR's effect. A firm with high marketing capability is supposed to systematically overcome the negative side of high investment on CSR. For example, managers should realize that a CSR with strong support from marketing may help CSR projects turn in a better direction to appeal to stakeholders. This type of support is necessary because a firm has limited resources allocated to CSR and needs to efficiently use them to generate maximum social welfare. In business practice, managers are sufficiently aware that CSR assists operations and marketing in order to build strong networks and market presence by creating favorable corporate and brand images. Few managers realize that marketing may significantly assist CSR by providing necessary functional supports. For example, market intelligence enables managers to wisely integrate its distribution channels, key customers, and salespeople into the CSR process, thus improving CSR dispersion. Meanwhile, managers can use the positive image gained from CSR into its marketing process, leading to better market performance. Thus, managers need to carefully scrutinize their CSR orientation and bring marketing in at the early stage in order to absorb key market information and thus calibrate the early design of CSR activities.

Our research also extends public relations into a more meaningful scope that includes shareholder value as the gauge. Although in academia, strong support for the beneficial role of CSR is often proposed and confirmed, in the actual business world, managers may often wonder whether they need to spare their valuable resources to CSR activities. Managers face special dilemmas regarding strategies and outcomes. Although they would prefer to invest in CSR activities out of a sense of goodwill and responsibility for improving society, they will in the process take a notable risk for doing so because these activities consume resources but do not allow for immediate business results. This concern is



legitimate, as managers tend to favor more visible outcomes when strategies are being chosen.

Our research thus provides managers with both courage as well as caution in that CSR will generate positive results, but will hurt at higher levels in the absence of support. Managers have two options when facing this scenario. One is to find the optimal point beyond which no more CSR is implemented if steady performance is a requirement. The second is that they emphasize marketing-side resources, assets, and conditions, and build sufficient capability in deploying these elements toward better knowledge acquisition, dissemination, absorption, and utilization. The latter choice enables managers to better understand the environment of CSR projects and better direct CSR in a manner that not only enhances social wellbeing but also serves in gaining business outcomes. The benefits of adopting this type of interplay are clearly demonstrated by the results of our paper, where cash flow and shareholder value are considered. While cash flow stands for the immediate and visible measure of performance, shareholder value is an extended final goal whose drivers are often obscure. Our research confirms the interplay between CSR and marketing not only under the cash flow scenario, but also toward shareholder value. Therefore, managers should actively seek to build a mechanism that provides the firm immediate as well as ultimate performance enhancement.

#### **Limitations and Future Research Directions**

The current research is based on a secondary data approach. Although this carries desirable features for serving the goals of this paper, it has limitations, such as data availability. Primary data collection allows researchers to conceive a broader version of firm variables and examine other aspects associated with CSR. For example, how CSR affects employee attitudes is of extreme importance but is not a relationship that has been studied. The secondary data approach does not include such variables and thus is limited in further exploring attitude- or opinion-based dependent variables. Another limitation is that the model in our paper only addresses the cross-sectional portion of the relationships between CSR and shareholder value. However, a full understanding of CSR's function on firm performance needs information on its long-term effects. This indicates that longitudinal analysis would be helpful for checking how the effect of CSR travels longitudinally through time. This additional research area will be interesting to observe since CSR theories embrace the notion that CSR activities should have a long-lasting impact on a firm performance due to its close links with firm corporate reputation, environment friendliness, social acceptance, and customer trust.

In the current paper, we only examine CSR's nonlinear relationship with shareholder value. However, the

stakeholder theory has a broader version of external entities that affect and are affected by the firm. Future research can apply the current formulation to scenarios involving consumers, key channel members, general public, and debt holders. Further, it should be meaningful to compare and contrast both relationship strengths as well as relationship patterns across these outcome variables. In this manner, a more comprehensive picture of CSR activities in the entire firm and its external network can be drawn and therefore yield strong implications for academics and business practitioners.

More importantly, CSR's power is highly dependent on other firm variables, such as marketing capability. Future research can explore other firm attributes' moderation on CSR toward multiple stakeholders. In addition, CSR's influence on stakeholders can also be moderated by external factors such as competitive intensity, environmental turbulence, and industry growth. Also, even more complex moderation models, such as three-way interactions that incorporate CSR, internal firm attributes, and external environment factors, can be considered. Adding these findings to our understanding of CSR should help managers precisely analyze their positions and pinpoint their strategic directions.

# **Concluding Remarks**

Understanding the effect of CSR on a firm's goals is not an easy task, as firm differences and external factors make the relationship difficult to analyze. Our research attempts to contribute to this understanding by exploring the relationship from the shareholder's perspective. We not only find that CSR links to shareholder value through an inverted-U-shaped pattern, but also find that high marketing capability virtually removes the downward trend of CSR. The support of marketing-side competence on CSR reinforces the classic theory of RBV and DCT regarding the strength of dynamic capability in assisting the effectiveness of firm strategies and activities. It also illustrates the dynamism and potential that firm managers can achieve by actively allocating and integrating different firm functional areas into a system, thus leading to desirable firm outcomes.

**Ethical Approval** This article does not contain any studies with human participants or animals performed by any of the authors.

#### References

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



Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: evidence from the S&P 500. *The Journal of Finance*, 58(3), 1301–1328.

- Attig, N., El Ghoul, S., Guedhami, O., & Suh, J. (2013). Corporate social responsibility and credit ratings. *Journal of Business Ethics*, 117(4), 679–694.
- Barcos, L., Barroso, A., Surroca, J., & Tribó, J. A. (2013). Corporate social responsibility and inventory policy. *International Journal* of Production Economics, 143(2), 580–588.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Becchetti, L., Ciciretti, R., Hasan, I., & Kobeissi, N. (2012). Corporate social responsibility and shareholder's value. *Journal of Business Research*, 65(11), 1628–1635.
- Berchicci, L. (2013). Towards an open R&D system: Internal R&D investment, external knowledge acquisition and innovative performance. *Research Policy*, 42(1), 117–127.
- Berman, S. L., Wicks, A. C., Kotha, S., & Jones, T. M. (1999). Does stakeholder orientation matter? The relationship between stakeholder management models and firm financial performance. Academy of Management Journal, 42(5), 488–506.
- Bharadwaj, A. S., Bharadwaj, S. G., & Konsynski, B. R. (1999). Information technology effects on firm performance as measured by Tobin's q. *Management Science*, 45(7), 1008–1024.
- Bhattacharya, C. B., Korschun, D., & Sen, S. (2009). Strengthening stakeholder–company relationships through mutually beneficial corporate social responsibility initiatives. *Journal of Business Ethics*, 85(2), 257–272.
- Bhattacharya, C. B., & Sen, S. (2004). Doing better at doing good: When, why, and how consumers respond to corporate social initiatives. *California Management Review*, 47(1), 9–24.
- Brammer, S., & Millington, A. (2008). Does it pay to be different? An analysis of the relationship between corporate social and financial performance. *Strategic Management Journal*, 29(12), 1325–1343.
- Branco, M. C., & Rodrigues, L. L. (2006). Corporate social responsibility and resource-based perspectives. *Journal of Business Ethics*, 69(2), 111–132.
- Chung, K. H., & Pruitt, S. W. (1994). A simple approximation of Tobin's q. Financial Management, 23(3), 70–74.
- Cooper, M. J., Gulen, H., & Schill, M. J. (2008). Asset growth and the cross-section of stock returns. *The Journal of Finance*, 63(4), 1609–1651.
- Demsetz, H., & Villalonga, B. (2001). Ownership structure and corporate performance. *Journal of Corporate Finance*, 7(3), 209–233.
- Dutta, S., Narasimhan, O., & Rajiv, S. (1999). Success in high-technology markets: Is marketing capability critical? *Marketing Science*, 18(4), 547–568.
- Eichholtz, P., Kok, N., & Quigley, J. M. (2010). Doing well by doing good? Green office buildings. *American Economic Review*, 100(5), 2492–2509.
- Fang, E., Palmatier, R. W., & Steenkamp, J. B. E. (2008). Effect of service transition strategies on firm value. *Journal of Marketing*, 72(5), 1–14.
- Frooman, J. (1999). Stakeholder influence strategies. Academy of Management Review, 24(2), 191–205.
- Godfrey, P. C. (2005). The relationship between corporate philanthropy and shareholder wealth: A risk management perspective. Academy of Management Review, 30(4), 777–798.
- Godfrey, P. C., Merrill, C. B., & Hansen, J. M. (2009). The relationship between corporate social responsibility and shareholder value: An empirical test of the risk management hypothesis. *Strategic Management Journal*, 30(4), 425–445.
- Grewal, R., & Tansuhaj, P. (2001). Building organizational capabilities for managing economic crisis: The role of market orientation and strategic flexibility. *Journal of Marketing*, 65(2), 67–80.

Gruca, T. S., & Rego, L. L. (2005). Customer satisfaction, cash flow, and shareholder value. *Journal of Marketing*, 69(3), 1–130.

- Haans, R. F., Pieters, C., & He, Z. L. (2016). Thinking about U: Theorizing and testing U-and inverted U-shaped relationships in strategy research. Strategic Management Journal, 37(7), 1177–1195.
- Harjoto, M., Laksmana, I., & Lee, R. (2015). Board diversity and corporate social responsibility. *Journal of Business Ethics*, 132(4), 641–660.
- Harrison, J. S., & Freeman, R. E. (1999). Stakeholders, social responsibility, and performance: Empirical evidence and theoretical perspectives. Academy of Management Journal, 42(5), 479–485.
- Hillman, A. J., & Keim, G. D. (2001). Shareholder value, stakeholder management, and social issues: what's the bottom line? *Strategic Management Journal*, 22(2), 125–139.
- Hough, J. R. (2006). Business segment performance redux: a multilevel approach. *Strategic Management Journal*, 27(1), 45–61.
- Hsiao, C. (2005). Why panel data? The Singapore Economic Review, 50(02), 143–154.
- Huselid, M. A., Jackson, S. E., & Schuler, R. S. (1997). Technical and strategic human resources management effectiveness as determinants of firm performance. *Academy of Management Journal*, 40(1), 171–188.
- Jamali, D. (2008). A stakeholder approach to corporate social responsibility: A fresh perspective into theory and practice. *Journal of Business Ethics*, 82(1), 213–231.
- Jo, H., & Harjoto, M. A. (2012). The causal effect of corporate governance on corporate social responsibility. *Journal of Business Ethics*, 106(1), 53–72.
- Jo, H., & Na, H. (2012). Does CSR reduce firm risk? Evidence from controversial industry sectors. *Journal of Business Ethics*, 110(4), 441–456.
- Karnani, A. (2007). Doing well by doing good—Case study: 'Fair & Lovely' whitening cream. Strategic Management Journal, 28(13), 1351–1357.
- Keats, B. W., & Hitt, M. A. (1988). A causal model of linkages among environmental dimensions, macro organizational characteristics, and performance. Academy of Management Journal, 31(3), 570–598
- Kotabe, M., Srinivasan, S. S., & Aulakh, P. S. (2002). Multinationality and firm performance: The moderating role of R&D and marketing capabilities. *Journal of International Business Studies*, 33(1), 79–97
- Krasnikov, A., & Jayachandran, S. (2008). The relative impact of marketing, research-and-development, and operations capabilities on firm performance. *Journal of Marketing*, 72(4), 1–11.
- Lee, R. P., & Grewal, R. (2004). Strategic responses to new technologies and their impact on firm performance. *Journal of Marketing*, 68(4), 157–171.
- Luo, X., & Bhattacharya, C. B. (2006). Corporate social responsibility, customer satisfaction, and market value. *Journal of Marketing*, 70(4), 1–18.
- Madden, T. J., Fehle, F., & Fournier, S. (2006). Brands matter: An empirical demonstration of the creation of shareholder value through branding. *Journal of the Academy of Marketing Science*, 34(2), 224–235.
- Makadok, R. (2001). Toward a synthesis of the resource-based and dynamic-capability views of rent creation. *Strategic Management Journal*, 22(5), 387–401.
- Marom, I. Y. (2006). Toward a unified theory of the CSP-CFP link. *Journal of Business Ethics*, 67(2), 191–200.
- Maury, B., & Pajuste, A. (2005). Multiple large shareholders and firm value. *Journal of Banking & Finance*, 29(7), 1813–1834.
- McGuire, J. B., Sundgren, A., & Schneeweis, T. (1988). Corporate social responsibility and firm financial performance. *Academy of Management Journal*, 31(4), 854–872.



- McWilliams, A., & Siegel, D. (2001). Corporate social responsibility: A theory of the firm perspective. *Academy of Management Review*, 26(1), 117–127.
- Minor, D., & Morgan, J. (2011). CSR as reputation insurance: Primum non nocere. *California Management Review*, 53(3), 40–59.
- Minton, B. A., & Schrand, C. (1999). The impact of cash flow volatility on discretionary investment and the costs of debt and equity financing. *Journal of Financial Economics*, 54(3), 423–460.
- Mishra, S., & Modi, S. B. (2013). Positive and negative corporate social responsibility, financial leverage, and idiosyncratic risk. *Journal of Business Ethics*, 117(2), 431–448.
- Morgan, N. A., & Rego, L. L. (2009). Brand portfolio strategy and firm performance. *Journal of Marketing*, 73(1), 59–74.
- Morgan, N. A., Vorhies, D. W., & Mason, C. H. (2009). Market orientation, marketing capabilities, and firm performance. *Strategic Management Journal*, 30(8), 909–920.
- Nath, P., Nachiappan, S., & Ramanathan, R. (2010). The impact of marketing capability, operations capability and diversification strategy on performance: A resource-based view. *Industrial Marketing Management*, 39(2), 317–329.
- Newbert, S. L. (2007). Empirical research on the resource-based view of the firm: an assessment and suggestions for future research. *Strategic Management Journal*, 28(2), 121–146.
- Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization Stud*ies, 24(3), 403–441.
- Oxelheim, L., & Randøy, T. (2003). The impact of foreign board membership on firm value. *Journal of Banking & Finance*, 27(12), 2369–2392.
- Ruf, B. M., Muralidhar, K., Brown, R. M., Janney, J. J., & Paul, K. (2001). An empirical investigation of the relationship between change in corporate social performance and financial performance: A stakeholder theory perspective. *Journal of Business Ethics*, 32(2), 143–156.
- Russo, A., & Perrini, F. (2010). Investigating stakeholder theory and social capital: CSR in large firms and SMEs. *Journal of Business Ethics*, 91(2), 207–221.
- Salzmann, O., Ionescu-Somers, A., & Steger, U. (2005). The business case for corporate sustainability: Literature review and research options. *European Management Journal*, 23(1), 27–36.
- Sen, S., Bhattacharya, C. B., & Korschun, D. (2006). The role of corporate social responsibility in strengthening multiple stakeholder relationships: A field experiment. *Journal of the Academy of Marketing Science*, 34(2), 158–166.
- Sénéchal, S., Georges, L., & Pernin, J. L. (2014). Alliances between corporate and fair trade brands: Examining the antecedents of overall evaluation of the co-branded product. *Journal of Business Ethics*, 124(3), 365–381.
- Shinkle, G. A., & Kriauciunas, A. P. (2010). Institutions, size and age in transition economies: Implications for export growth. *Journal* of *International Business Studies*, 41(2), 267–286.

- Sirmon, D. G., Hitt, M. A., & Ireland, R. D. (2007). Managing firm resources in dynamic environments to create value: Looking inside the black box. Academy of Management Review, 32(1), 273-292.
- Srivastava, R. K., Shervani, T. A., & Fahey, L. (1998). Market-based assets and shareholder value: A framework for analysis. *The Jour*nal of Marketing, 62(1), 2–18.
- Steenkamp, J. B. E., & Baumgartner, H. (1992). The role of optimum stimulation level in exploratory consumer behavior. *Journal of Consumer Research*, 19(3), 434–448.
- Sun, W., & Price, J. M. (2016). The impact of environmental uncertainty on increasing customer satisfaction through corporate social responsibility. *European Journal of Marketing*, 50(7/8), 1209–1238.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. Strategic Management Journal, 18(7), 509–533.
- Teoh, S. H., Welch, I., & Wazzan, C. P. (1999). The effect of socially activist investment policies on the financial markets: Evidence from the South African boycott. *The Journal of Business*, 72(1), 35–89.
- Thompson, S. B. (2011). Simple formulas for standard errors that cluster by both firm and time. *Journal of Financial Economics*, 99(1), 1–10.
- Udayasankar, K. (2008). Corporate social responsibility and firm size. *Journal of Business Ethics*, 83(2), 167–175.
- Van Beurden, P., & Gössling, T. (2008). The worth of values–a literature review on the relation between corporate social and financial performance. *Journal of Business Ethics*, 82(2), 407–424.
- Vlachos, P. A., Theotokis, A., & Panagopoulos, N. G. (2010). Sales force reactions to corporate social responsibility: Attributions, outcomes, and the mediating role of organizational trust. *Industrial Marketing Management*, 39(7), 1207–1218.
- Vorhies, D. W., & Morgan, N. A. (2005). Benchmarking marketing capabilities for sustainable competitive advantage. *Journal of Marketing*, 69(1), 80–94.
- Vorhies, D. W., Morgan, R. E., & Autry, C. W. (2009). Product-market strategy and the marketing capabilities of the firm: Impact on market effectiveness and cash flow performance. Strategic Management Journal, 30(12), 1310–1334.
- Wooldridge, J. M. (2010). Econometric analysis of cross section and panel data. Cambridge: MIT press.
- Wright, P., & Ferris, S. P. (1997). Agency conflict and corporate strategy: The effect of divestment on corporate value. *Strategic Management Journal*, 18(1), 77–83.
- Zott, C. (2003). Dynamic capabilities and the emergence of intra-industry differential firm performance: insights from a simulation study. *Strategic Management Journal*, 24(2), 97–125.



Reproduced with permission of copyright owner. Further reproduction prohibited without permission.

