

ADVANCES IN PACIFIC BASIN BUSINESS, ECONOMICS AND FINANCE

Series Editors:

Dr. Cheng-Few Lee and Dr. Min-Teh Yu

ADVANCES IN PACIFIC BASIN
BUSINESS, ECONOMICS AND FINANCE

VOLUME 10, 2022

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United Kingdom – North America – Japan
India – Malaysia – China

Emerald Publishing Limited
Howard House, Wagon Lane, Bingley BD16 1WA, UK

First edition 2022

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British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

ISBN: 978-1-80117-313-1 (Print)
ISBN: 978-1-80117-312-4 (Online)
ISBN: 978-1-80117-314-8 (Epub)

ISSN: 2514-4650 (Series)

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ISO 14001:2004.

Certificate Number 1985
ISO 14001



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MARKET COMPETITION, MANAGERIAL OVERCONFIDENCE, AND CORPORATE SOCIAL RESPONSIBILITY

James Juichia Lin,^a Edward M. Werner,^b
and Ya-Chi Huang^a

ABSTRACT

This chapter investigates how market competition relates to firm corporate social responsibility (CSR) investment strategy. Using separate measures to capture different dimensions of competition, we find that firms are likely to invest more (less) in socially responsible initiatives when competition from existing rivals (potential entrants) is high. We also find that industry leaders are more likely to engage in more CSR when higher levels of competition exist, while followers primarily choose to strengthen other aspects of their competitiveness instead. Finally, analyzing the impact of CEO overconfidence on CSR engagement, our study finds novel evidence suggesting that firms with overconfident CEOs tend to underestimate the intensity of competition and are less sensitive to the impact of market competition on CSR engagement, relative to rational CEOs.

Keywords: Market competition; corporate social responsibility; managerial overconfidence; existing rivals; potential entrants; principal component analysis

JEL classification: L1; M3; M14; G30

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1. INTRODUCTION

Prior literature documents that the relationship between market competition and firm corporate social responsibility (CSR) is mixed. Taking a cost-effective view of CSR, CSR can be useful as a product differentiator. For instance, Rode, Hogarth, and Le Menestrel (2008) show that consumers prefer products with CSR characteristics, which implies that product evaluations and purchasing decisions are based on such characteristics and is consistent with firms employing CSR to differentiate their products (Elfenbein, Fisman, & McManus, 2012; Siegel & Vitaliano, 2007). Furthermore, several studies support the notion that firms are more likely to engage in CSR as a differentiation tactic when the market competition is intense (e.g., Fernández-Kranz & Santaló, 2010). Taking another view of CSR, Bagnoli and Watts (2003) argue that firms are motivated to focus on the development of production technology and product upgrades to generate and maintain competitive advantages in the short term, forgoing the long-term benefits of CSR engagement when the market is more competitive. Consistent with this idea, Shleifer (2004) examines whether competition impacts firms' ethical behavior negatively and notes that firms undertake irresponsible activities (e.g., hire child labor) to reduce costs and maintain current profit levels when market competition is intense.

This chapter reinvestigates how market competition affects firm CSR investment strategy. We argue that the mixed results found in earlier studies regarding the effects of competition on CSR could be attributed to using different measures for competition. For instance, Fisman, Heal, and Nair (2006) and Fernández-Kranz and Santaló (2010) use the Herfindahl-Hirschman Index (HHI), which attempts to account for the competition from existing rivals and potential new entrants. However, Karuna (2007) argues that market share does not completely explain market competition, that product substitutability and entry costs are other important determinants, and that measuring competition from only one dimension, which likely is interrelated with other dimensions, may bias the results. In this chapter, we consider various dimensions to more accurately measure product market competition. More specifically, we extend prior studies by forming a segment-level proxy for competition (Li, 2010), and we use principal component analysis to divide nine competition proxies into three basic dimensions: competition from existing rivals, competition from potential entrants, and competition from industry profitability.

In addition, prior study shows a growing interest in the effect of managerial overconfidence on a firm's corporate policy, such as acquisition, investment, financing, innovation, financial reporting, risk-taking, and tax avoidance (Ahmed & Duellman, 2012; Chyz, Gaertner, Kausar, & Watson, 2019; Hirshleifer, Low, & Teoh, 2012; Malmendier & Tate, 2005; Schrand & Zechman, 2012). Extending this optimism to management decisions, we argue that firms with overconfident CEOs tend to underestimate the intensity of competition. Therefore, we conjecture that overconfident CEOs are less sensitive to the impact of market competition on CSR engagement, relative to rational CEOs.

Using a sample of 28,099 US firm-year observations for the period 1995–2015, we analyze the effect of market competition on CSR engagement. Our empirical results indicate that market concentration, the common measure for the competition from existing rivals, is positively associated with CSR engagement. That is, firms are more likely to differentiate themselves from competitors through strategic CSR when competition from existing rivals is high. When viewing competition considering potential entrants, higher competition suggests lower entry barriers, and we find that incumbent firms tend to allocate their resources to product upgrades to differentiate themselves when competition is high along this dimension. In addition, when competition from industry profitability is high, we find that firms tend to conduct more responsible activities, which implies that firms use CSR as a sustainable investment strategy to improve consumers' perceptions of their product quality and enhance their reputation. Furthermore, we investigate the idea that firms with overconfident CEOs might be less concerned about the level of competition when engaging in CSR. We provide evidence showing that firms with overconfident CEOs tend to underestimate the intensity of competition and are less sensitive to the impact of market competition on CSR engagement, relative to rational CEOs.

Our results continue to hold when we include the following additional tests in our analysis. First, we divide CSR scores into total strength scores (as a proxy for social responsibility) and total concern scores (as a proxy for social irresponsibility) and investigate the effect of market competition on CSR (irresponsibility), respectively. We find that the results correlate with our main findings. Using this analysis, we validate our finding that a high level of competition along the potential entrants' dimension reduces the net effect of CSR, but not every component of CSR decreases. Second, we explore the notion that firms within the same industry, facing varying degrees of industry competitive pressure, may initiate different CSR strategies. Our results indicate that industry leaders are more likely to engage in more CSR when higher levels of competition exist, while followers primarily choose to strengthen other aspects of their competitiveness instead. Our third additional analysis confirms that firms contained in Domini 400 Social Index (social-responsible firms) are more sensitive to engagement in CSR than firms not included in the index, particularly when concerned about the intensity of competition.

Our findings contribute to the literature in several ways. First, considering the various measures of competition used in previous research, we take a broad view of conceptualizing market competition, and then we disaggregate the measure along three important dimensions. Our approach considers the best practices in this regard from previous research, and the relevant decomposition of the measure allows us to more meaningfully explore the relationship between competition and CSR based on several significant aspects. Second, by investigating the variation in CSR strategy in response to the different aspects of competition, our findings also contribute to strategic management research. That is, we show that firms facing various competitive pressures strategically employ CSR differently. Third, we also expand on the notion that CEO characteristics can lead to distortions in corporate investment policies by exploring how CEO overconfidence

moderates the relationship between market competition and strategic investment in CSR.

The remainder of this chapter is organized as follows. [Section 2](#) discusses related literature and develops our hypotheses. [Section 3](#) develops our research method. [Sections 4](#) and [5](#) present our empirical results and robustness checks, respectively. Finally, [Section 6](#) concludes.

2. RELATED LITERATURE AND DEVELOPMENT OF HYPOTHESES

Prior literature shows that CSR is a strategic action that is related to the internally motivated needs of the firm, but it provides little evidence on the relation between CSR and the industry environment. The purpose of this study is to investigate whether CSR engagement is related to different aspects of market competition. Therefore, we focus on examining CSR strategy as a response to industry environmental cues. We discuss the literature that is related to developing our hypotheses below.

2.1 CSR-Related Literature

[McWilliams and Siegel \(2001\)](#) define CSR as “actions that appear to further some social good, beyond the interests of the firm and that which is required by law.” Research in the CSR area predominantly focuses on how CSR activities affect corporate financial performance. Further, there is no consensus among the research in this area, leaving much ambiguity in terms of the relationship (as well as the causality in the relationship) between CSR and financial performance. Many studies argue that the relationship is positive ([Berman, Wicks, Kotha, & Jones, 1999](#); [Brammer & Pavelin, 2006](#); [Carmeli, Gilat, & Waldman, 2007](#); [Ho, Liang, & Tumurbaatar, 2019](#); [Orlitzky, Schmidt, & Rynes, 2003](#)), neutral ([Aupperle, Carroll, & Hatfield, 1985](#); [Teoh, Welch, & Wazzan, 1999](#)), and negative ([Wright & Ferris, 1997](#)). Given the varied theoretical groundwork and the widely mixed results in this area, more academic researchers have conceptualized CSR as a strategic endeavor in recent years.

In general, CSR has several strategic implications. First, it can be useful as a product differentiator. Assuming asymmetric information, CSR-related products can signal quality ([Elfenbein et al. 2012](#); [Siegel & Vitaliano, 2007](#)) and enhance firm image or reputation ([Fombrun & Shanley, 1990](#); [Nan & Heo, 2007](#); [Polonsky & Speed, 2001](#)). Further, [Rode et al. \(2008\)](#) find that consumers prefer products with CSR characteristics, which implies that product evaluations and purchasing decisions are based on such characteristics and is consistent with firms employing CSR to differentiate their products. Second, CSR can also insure firms against losing their reputation with consumers when confronted with adverse events. That is, consumers tend to have a higher regard for the credibility of firms with high CSR ratings, particularly during crisis periods ([Klein & Dawar, 2004](#)). [Lins, Servaes, and Tamayo \(2017\)](#) indicate that firms with high CSR intensity

have higher profitability, growth, and sales per employee during the 2008–2009 financial crisis. Additionally, they find that high-CSR firms have stock returns that are four to seven percentage points higher than low-CSR firms. This evidence implies that consumer trust, created by investments in CSR, has an insurance (hedging) effect for high-CSR firms when the market experiences a negative shock.

The third strategic implication relates to the association between CSR and good governance. Advocates of social responsibility argue that socially responsible firms are also well governed. That is, well-governed firms make an effort to balance the economic goal of efficiently maximizing shareholder wealth with the social goal of contributing to the community (Edmans, 2011). Finally, CSR can be useful in cost-effectively creating goodwill among firm stakeholder groups such as employees, consumers, suppliers, and communities (Creyer, 1997; Hillman & Keim, 2001; Sen & Bhattacharya, 2001). For instance, better employee relations can produce lower turnover rates and reduce employee training costs. Additionally, businesses can switch to energy-efficient equipment, reducing pollution, developing sustainable techniques and facilities, and ultimately reducing energy costs. Therefore, firms can use investments in CSR to gain cost efficiencies while concurrently improving relations with important stakeholders (Hart & Ahuja, 1996; Jenkins, 2006).

In summary, there are positive and negative strategic implications for CSR activities. From a benefits standpoint, CSR initiatives can be a cost-effective differentiation strategy that positively affects firm value. On the other hand, CSR can be a resource-wasting policy that exacerbates agency concerns. We discuss the cost and benefit view of strategic CSR in more detail below. Taking a cost-effective view of CSR, Kimeldorf, Meyer, Prasad, and Robinson (2006) suggest that consumers are willing to pay more for products from firms with “good working conditions.” Consistent with this view, Rode et al. (2008) imply that consumers prefer to pay a price premium for products that are differentiated using ethical characteristics such as better working environments or not employing child labor. This evidence suggests that products with ethical attributes can better gain attention and recognition from consumers, likely due to the perception that firms with such high moral character will not sacrifice product quality. This perception allows for a beneficial price premium that outweighs the higher cost of CSR differentiation.

2.2 Competition-Related Literature

Numerous definitions for competition exist in practice and the literature. Measuring different aspects of competition can help firms more efficiently allocate resources toward improved competitiveness. In academic research, prior studies primarily use market concentration to proxy for market competition. The Herfindahl-Hirschman Index and the big four-firm concentration ratio are the simplest and most widely used measures in this respect. However, Karuna (2007) argues that market competition is not entirely represented by the market share and that product substitutability and entry costs are other important

determinants. Extending this argument, [Li \(2010\)](#) develops the concept into three specific dimensions of market competition: competition from potential entrants, competition from existing rivals, and industry profitability.

Competition from potential entrants and existing rivals can motivate firms to adopt strategies to differentiate themselves from competitors. Further, competition generally should encourage firms to seek opportunities to reduce costs and operate more efficiently. [Nickell \(1996\)](#) finds that increased competition will stimulate firms' engagement in productivity growth and innovation. On the other hand, [Kamien and Schwartz \(1982\)](#) indicate that firms with monopolistic power face less market uncertainty and easily obtain feedback from R&D activities. As such, they suggest that the motivation to further innovate can decline when competition is intensive, and monopolistic firms become more conservative. To clarify the ambiguous relationship between competition and innovation, [Tang \(2006\)](#) develops new measures of competition based on firms' perceptions of their competitive environments, which should inform innovation efforts. The chapter indicates that the relationship between competition and innovation can be positive or negative depending on the perceived competitive environment as well as the type of innovation activity. Further, [Kranton \(2003\)](#) contend that firms are likely to produce higher-quality products when competing for market share. This notion suggests that firms prefer to establish a reputation based on product quality to attract new consumer groups rather than forsaking quality and cutting costs for short-term profits.

Profitable markets tend to attract more competitors, which results in more intense competition. When market competition intensifies, firms generally face a quandary of concurrent demands for increased incentive compensation for managers to compete for market share and overall cost reductions as firms seek efficiencies ([Karuna, 2007](#)). [Raith \(2003\)](#) indicates that increased market competition impacts managerial incentives in two ways, a business-stealing effect and a scale effect. Particularly, the scale effect suggests that when increased competition causes rivals to decrease their prices such that a firm loses market share, the firm also loses some degree of cost reduction as a competitive tool. Consistent with this view, [Hart \(1983\)](#) concludes that market competition is an external governance mechanism that can discipline managers. Therefore, firms may provide weak incentives for managers who are struggling to maintain market share. In contrast, the business-stealing effect suggests that firms with lower costs can increase their market share, as stronger competition increases firms' marginal benefits of reducing their costs. Further, [Scharfstein \(1988\)](#) shows that strong competition can increase managerial slack. For instance, a high-productivity manager can easily reach target profit when productivity requirements to meet demands from the increased competition are low. That is, when competition is strong, and productivity is low, firms must provide additional incentives to compensate for inefficiencies related to managerial slack.

Other competition-related studies focus on the relation between competition and corporate performance and the relation between competition and corporate governance. For example, [Nickell \(1996\)](#) suggests that the relation between competition and performance is not significant. [Giroud and Mueller \(2011\)](#)

explore the relationship between competition and corporate governance. They find that good governance provides higher benefits in a noncompetitive environment than in competitive industries. This implies that the reduced survival threat mechanism in the noncompetitive environment results in some dependence upon the corporate governance mechanism to motivate better performance, higher equity returns, and higher valuation.

2.3 Hypothesis Development

Corporate social responsibility (CSR) refers to a firm's initiatives to take responsibility for its impact on social and environmental welfare such that the firm balances economic growth with the well-being of society and the environment. In the academic literature, most studies investigate CSR from ethical, managerial, and incentive perspectives. In this study, we argue that CSR is a dynamic strategy, the use of which depends greatly on market competition considering both a firm's current level of competitiveness as well as the potential moves of rivals. Nickell (1996) indicates that competition and firms' operating strategies are dependent in the long run. That is, the intensity of market competition influences a firm's strategic choices, which suggests that competition has a significant impact on how firms vary in differentiating themselves from rivals to gain market share and in focusing on the core business to maintain their competitiveness. Among strategic investment tools, many perceive CSR as costly with benefits that pay off in the long run through improved financial performance and enhanced reputation (Pirch, Gupta, & Grau, 2007). Therefore, given the long-run value realization expectation of CSR investments, firms with intense market competition and strict goals of profitability in the short term are most concerned about the cost-effectiveness of CSR. However, CSR engagement is also an important tool for interacting with company stakeholders, which suggests that firms operating in an environment with intense market competition might find that the benefits of investing in CSR outweigh its costs.

In this chapter, we investigate the relationship between market competition and CSR investment. As market competition has been well documented in the academic literature, we next discuss three distinct dimensions of market competition (competition from existing rivals, competition from potential entrants, and competition from industrial profitability) as they relate to the development of our hypotheses.

Previous scholars define the measure for the competition from existing rivals as the concentration, or intensity, of the market. For example, Fernández-Kranz and Santaló (2010) note that firms are likely to engage more actively in CSR when strong competition exists from many firms in the same industry, which suggests a positive relationship between market concentration and CSR. This finding is consistent with the notion that firms tend to act in a socially responsible manner to differentiate themselves when competition intensity is higher. Fisman et al. (2006) also find that firms engage in more CSR when the environment is more competitive. According to their study, firms view CSR as a differentiation strategy to impact consumer impressions about socially responsible trustworthiness for brand

image and product quality. Therefore, evidence indicates that firms are more likely to engage in CSR when competition from existing rivals is more intense. Following this line of thought, we state our hypothesis as:

H1: When the intensity of competition from existing rivals increases, a firm's engagement in CSR activities will increase.

Karuna (2007) states that an entry barrier is the required preproduction investment for new competitors entering the market. The entry costs defined by Karuna include the physical capital, the domain technique, and the regulation. Lower entry barriers allow potential rival firms to enter the market more easily, which is a larger competitive threat to firms currently in the market. Because CSR is a strategic investment that realizes its value over a longer time period, firms might prefer to engage in such activities when facing less competition due to higher barriers to entry. That is, when market competition is stronger, firms may prefer to focus on their core business and maintain their market share to maximize short-term profitability instead of engaging in CSR activities. For instance, Bhattacharya, Chen, and Li (2018) find that a firm increases capital investment in response to external product market threats. When entry barriers are higher, the lower level of competition is less threatening to firms currently in the market, and the environment is more favorable for strategic CSR adoption. Hence, the possibility for firms to enhance their sustainable, long-term profitability through strategic CSR investments could be a strong motivator in such a low-competition environment. Therefore, the relation between competition from potential entrants and engagement in CSR activities appears to be negatively correlated. Our second hypothesis follows:

H2: When the intensity of competition from potential entrants increases, a firm's engagement in CSR activities will decrease.

Firms can use CSR strategically to differentiate their products and image from rivals. For example, Fisman et al. (2006) consider that product differentiation along an ethical dimension engenders the product with perceived credibility in terms of quality and that consumers, as a result, prefer to purchase such products. The notion is that consumers believe that CSR-differentiated firms would not sacrifice unobserved product quality. Further, engagement in CSR activities can enhance a firm's image (Nan & Heo, 2007). In this way, a consumer preference for CSR-engaged firms positively impacts firm valuation. Therefore, theoretically, CSR is a sustainable investment from a profitability perspective. That is, currently profitable firms could have excess capital to seek other investment opportunities for profit outside of their core business activities. For instance, firms that invest in CSR activities may incur a lower cost of capital that outweighs the CSR investment cost, which improves profitability. Additionally, Hillman and Keim (2001) suggest that CSR-engaged firms benefit from better stakeholder relationships, which provides a public relations advantage. Therefore, better consumer and stakeholder relations, due to investments in CSR activities, can be a valuable promotional tool. Hence, the intuition suggests that profitability and CSR are positively correlated. Our third hypothesis follows: