Performane Measurement, Firm Risk and Corporate Social Responsibility

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Abstract:

Several studies argue that how firms perform in terms of corporate social responsibility is relevant information for senior executives and financial markets. This view is typically supported with reference to the relationship between corporate social responsibility and corporate financial performance. However, little attention has been given to understanding the impact of corporate social responsibility on the firm's performance in the market for debt. As the debt market is the principal source of finance for many firms, the relationship between corporate social responsibility and the firm's debt or bond market performance is a critical issue. Accordingly, this study develops and tests, hypotheses on the relationship between corporate social responsibility and bond ratings (a measure of the quality and safety of a bond, based on the rating agency's assessment of the financial condition of the issuing firm). Using a sample of publicly traded firms and corporate social responsibility data from the Kinder, Lydenberg and Domini (KLD) database, this study demonstrates that corporate social responsibility is associated with higher bond rating. Our results extend to the literature on the importance of corporate social responsibility measures for the financial market by demonstrating that corporate social responsibility reduces the cost of capital. We discuss the implications of ours study for both theory and practice.

Key words:

Corporate Social Responsibility, Bond Rating

Does Corporate Social Responsibility Influence Bond Ratings?

Introduction

The extensive literature on the relationship between corporate social responsibility and corporate financial performance has done much to establish the business relevance of corporate social responsibility. However there remains a need for theoretical and empirical research on the link between corporate social responsibility and the interests of other economic stakeholders – such as creditors. For example, as Ruf et al. (2001) argue, bond holders may be sensitive various social issues and their relationship with measures such as default risk. Yet, to date, little attention has been paid to the impact of corporate social responsibility on firm risk and or the firm's performance in the bond market. With the onset of the global financial crisis, political, academic and practitioner interest in risk management has increased. In the context of these developments, the objective of our paper is to explore the association between corporate social responsibility and bond ratings.

Building on the corporate social responsibility literature we form the expectation that high levels of corporate social responsibility should reduce the risk associated with future firm performance. Therefore, corporate social responsibility data should provide useful information to bondholders. Accordingly, corporate social responsibility performance should be negatively associated with debt financing costs / positively associated with bond ratings.

In a study, the results of which will be presented at the conference, we show a strong positive and significant association between our the KLD measure of CSR strengths and corporate bond ratings from the Compustat database. This is the first evidence, of which we are aware, that corporate social responsibility influence bond ratings. This finding represents an important extension to research on business relevance of corporate social responsibility. While prior work has explored aspects of the risk-corporate social responsibility nexus (Goss and Roberts, 2011; Lee and Faff, 2009) no study has directly tested the corporate social responsibility-bond rating association.

We organise our study as follows. We begin by reviewing the relevant literature and developing our hypothesis. Next, we present our empirical model, measures and data. We anlyse our results. We conclude by discussing the theoretical and managerial implications of our study and avenues for future research.

Relevant Literature and Hypothesis Development

Corporate social responsibility is defined as ‘‘a business obligation to pursue policies, make decisions, and take actions that benefit society’’ (Williams, 2010, p. 71). Extensive research has examined whether measures of corporate social responsibility provide useful information in explaining firm performance. Within this research stream most research has focused on stock market indicators (Galema, Plantinga and Scholtens, 2008; Godfrey, Merrill and Hansen, 2009) and financial ratios (Waddock and Graves, 1997; Harjoto and Jo, 2008). Researchers have employed a wide variety of measures and methods to investigate these relationships (see Orlitzky et al., for a review). In the midst of an array of sometimes conflicting conclusions, there appears to be broad empirical support for a positive association between corporate financial performance and corporate social responsibility. While the relationship between corporate social responsibility and financial performance retains a high degree of salience for researchers, managers and financial market participants, given the volume of work already published on the topic, Wood (2010, p.76) calls for a "temporary ceasefire" on this strand of research.

This is a central issue as the bond market – or the market for debt – is an important source of finance for firms (ECB, 2007, Menz 2010). Indeed for most publicly traded firms, bonds are a much larger source of finance than equity. Therefore it is important to establish whether corporate social responsibility matters to bondholders – whether it influences the firm's performance in the bond market.

Theory suggests that corporate social responsibility activities have the capacity to reduce corporate risk (e.g., Godfrey, 2006). Kytle and Ruggie (2005) offer a range of examples of how improved corporate social responsibility can lead to enhanced risk management. They conclude (2005, p.15) that: "risk management by global companies should be adapted to include corporate social responsibility programs. Corporate social responsibility provides the framework and principles for stakeholder engagement, supplies a wealth of intelligence on emerging and current social issues/groups to support the corporate research agenda, and ultimately serves as a counter-measure for social risk". Consistent with this argument, and drawing on prior literature, we form the expectation that corporate social responsibility does matter to bond holders.

Specifically, we expect that corporate social responsibility has a positive influence on bond ratings. We form this expectation based on the following rational. First, socially responsible firms face a lower risk of incurring negative financial conseqneuneces (fines, legal damages) associated with socially irrisponsible activities (Soppe 2004). Thus, firms that are socially responsible are less risky and less volatile (Menz, Di Giulio et al. 2007; Orlitzky and Benjamin 2001, Spicer 1978).

Second, the pursuite of corporate social responsibility policies is positively associated with good working relationships with public institutions. Thus, even if a firm does experience a negative event, corporate social responsibility can deminish the negative conseqneces. In essence, corporate social responsibility sends a signal that the firms is, at least in part, willing to act alturistically -that the firm is not completely self-interested Gidfrey Merrill and Hansen (2009). When external stakeholders accept these alturistic signals and see these activities as being socially desirable, firms recieve positive attributions (Simon, 1995).This "moral capital" (Godfrey 2005) can provide an insurance-like effect on firm value (Godfrey, Merrill and Hansen 2009; Neiheisel 1995). Theorists (e.g., Fombrun, Gardberg and Barnett 2000; Godfrey 2005) argue that, when a firms actions have a negative impact, corporate social responsibility credentials can act as a means of mitigating the punishment that stakeholder seek to apply to a firm. As Godgrey, Merrill and Hansen (2009, p 428) argue, corporate social responsibility can encourage sakeholders to "attribute the negative event to managerial maladroitness rather than malevolence, and temper their reactions accordingly."

Third, corporate social responsibility can enhance a firm's supply and demand side relationships through, for example stronger employee commitment and loyalty (Turban and Greening 1997. Also,corporate social responsibility can also enhance customer ties (Brown and Dacin 1977; Bhattacharya and Sen 2004). Corporate Social responsibility can, for examples affect consumer product responses (Brown 1998), customer–company identification (Sen and Bhattacharya 2001), and customers' product attitude (Berens, Van Riel, and Van Bruggen 2005). Consistent with these findings Luo and Bhattacharya (2006) demonstrate that corporate social responsibility activity positivley influnces customer satisfaction and firm value. Extensive studies (e.g., Lev, Petrovits and Radhakrishnan 2010) provide indirect corrobarining evidence by demostrating a positive relationship between corporate social responsibility and future revenue growth.

This discussion leads us to the following hypothesis:

H_1. *Corporate social responsibility has a positive influence on bond ratings.*

Empirical Model

Our basic empirical framework is as follows:

Risk = *f* (corporate social responsibility, Controls)

Given the explicit and implicit arguments in prior theoretical work, we expect to observe a negative association between Risk and corporate social responsibility i.e., better corporate social responsibility is associated with lower risk.

Measures and data

Measures

We use the following measures:

Corporate social responsibility

We measure corporate social responsibility using the KLD database. KLD data has become widely accepted as a means of measuring corporate social responsibilty within the academic literature.. Serveral attributes of the database have contributed to its adoption in academic research. First, KLD data covers multiple aspects of corporate social responsibility. Second, the database includes a larger sample of firms over a longer time period that can be accessed through outer sources. Third the ratings are generated through ratings by external professionals and aggregated through a robust methodology that is constant across time. The KLD scales have been validated in prior research (Sharfman 1996), and used extensively in testing the corporate social responsibility - financial performance relationship (e.g., Waddock and Graves1997).

The KLD daabase provides measures of both strengths and concerns across five relevant corporate social responsibility dimensions: (i) Community (ii) Environment (iii) Diversity (iv) Employee Relations and (v) Human Rights. In our primary analysis we aggregate the scores for both strengths and concerns across these five dimensions. Our key measures of corporate social responsibility then are: *Corporate Social responsibility_Strengths* and *Corporate Social Responsibility_Concerns*.

Our decision to seperate strenghts and concerns is motivated by the findings of Mattingly and Berman (2006). The observe that strengths and concerns - as assessed by KLD are conceptually distinct and empirically distinct constructs and that they should not be combined.

Bond ratings

We have drawn Entity Bond ratings from the Compustat database.

Controls

We draw on the extensive lieteratures on corporate social responsibility and on the risk lierature to introduce the following controls.

Size: We control for for firm size as size infleunces corporate social reponsibility (Pava and Krausz 1996) and the corporporate social responsibility-firm performance relationship (Waddock and Graves 1997). Also, larger firms are better able to withstand external shocks and are thus less likely to default (Goss and Roberts 2011).

Return on Assets: Extensive prior research has established that bond ratings are linked to firm performance (e.g., Ahmed, Billinmg, Morton, & Stanford-Harris, 2002; Campbell & Taksler, 2003). Following common practice, use Return on Assets as a performance control.

Stock Returns: We control for market performance by including contempraneus and lagged stock returns.

Market to Book: We incldue market to book as extensive research demonstates the relationship with risk (e.g., Fama and French 1993). More specifically, firms with high market to book ratios may be perceived as having superior growth opportunities and lenders may rate these firms better than other firms (Sengupta and Wang 2010). Also, firms with high social responsibility ratings are generally found to have higher market-to-book ratios (Goss and Roberts 2011) and.

Dividend Policy: Prior research in Accounting (e.g., Amhed et al. 2002) establishes the impact of conflicts over dividend policy can have on bondholder-sharehoder conflicts.Reflecting this we control for the potential infleunce of dividen policy on bond ratings.

Leverage: We control for levearge as a risk is expected to be positively related to leverage (Botosan and Plumlee, 2005; Lee, Ng, and Swaminathan, 2009).

Liquidity, We control for liquidity as a firms risk is negatively related to its stock lequidity (Bouslah and Kryzanowski 2011).

We include industry dummies for industry fixed effects, which may influence risk (Gebhardt et al., 2001; Gode and Mohanram, 2003) or the relationship between risk and coroprate social responsibility ratings (Goss and Roberts 2011). We also include year dummies control for changing economic conditions or macro market influences on firm risk.

Sample and Results

We will present our detailed results at the conference.

Conclusions

Extensive research has established the positive relationship between corporate social responsibility and both firm value and performance. The relationship between corporate social responsibility and firm risk is less clearly understood. In this study we provide the first investigation of whether corporate social responsibility, as measured using the KLD database provides information to bond holders, as measured by bond ratings. Integrating prior research in corporate social responsibility and finance we develop test and find support for the positive impact that corporate social responsibility has on bond ratings of firms in our sample.

Our study makes the following contributions. First, we contribute to the literature on the business case for corporate social responsibility (e.g., Galema, Plantinga, and Scholtens 2008). The main focus of prior work has been on an exploration of aspects of the corporate social responsibility- equity market nexus (Gross and Roberts 2011; Lee and Faff 2009) While much progress has been made within this research stream, we provide important new information on the importance of corporate social responsibility information to the bond market. In doing so, we contribute to the emerging literature on the relationship between corporate social responsibility and firm risk (e.g, Sharfman and Fernando, 2008; Lee and Faff, 2009) by shedding light on the the impact that corporate social responsibility has on bond ratings.

Second, we contribute to the theoretical literature on corporate social responsibility by integrating insights from strategy, finance and marketing to developing and testing the theoretical relationship between corporate social responsibility and bond market. Thus, our study complements prior literature that investigates the chain of effects between corporate social responsibility, intermediate outcomes and bond market performance.

Third, we present empirical analyses that takes into account concerns related to size, return on assets, stock returns, dividend policy, leverage, and liquidity. We also introduce industry fixed effects and time. Our results are robust to the concerns highlighted in prior research and indicate that corporate social responsibility provides valuable information to bondholders, which complements the information contained in accounting measures.

Fourth, our research extends understandings of the business case for corporate social responsibility and on how the debt market assesses firm performance and prospects. Given the central role of the debt market for contemporary organisations, our findings should be of interest to investors, senior managers and providers of debt. In particular, for senior executives, our findings indicate that in addition to the positively impacting the firms performance in equity markets also influences the firm's performance in the market fir debt.

By establishing that corporate social responsibility information provides information to bondholders / is useful in explaining bond ratings, our study helps to elevate attention to corporate social responsibility amongst investors, senior executives and financial market participants. Our findings, which provide initial evidence on the relationship between corporate social responsibility and bond market ratings should motivate further research. In particular, further consideration of firm and industry level factors that may influence the relationship would be welcome. Future research might also usefully consider how other measures of debt market performance are impacted by corporate social responsibility. In addition, we rely on one measure of corporate social responsibility. While KLD data is used widely in studies of corporate social responsibility other approaches to measuring the construct may provide useful additional insights.

Literature

Ahmed, A., Billinmg, B., Morton, R., & Stanford-Harris, M. (2002). The role of accounting conservatism in mitigating bondholder-shareholder conflicts over dividend policy and in reducing cost of debts. *The Accounting Review*, 77: 867-890.

Berens, G., van Riel, C. B. M., & van Bruggen, G. H. (2005). Corporate associations and consumer product responses: The Moderating Role of Corporate Brand Dominance. *Journal of Marketing*, 69(July): 35-18.

Bhattacharya, C. B. & Sen, S. (2004). Doing better at doing good. *California Management Review*, 47(1): 9-24.

Botosan, C. A. & Plumlee, M. A. (2005). Assessing alternative proxies for the expected risk premium. *The Accounting Review*, 80: 21-53.

Bouslah, K. & Lawrence, K. (2011). Firm risk and social performance. working paper: University of Qubec Montreal.

Brown, T. J. & Dacin, P. A. (1997). The company and the product: corporate associations and consumer product responses. *Journal of Marketing* 61(1): 68-84.

Brown , T. J. (1998). Corporate associations in marketing: antecedents and consequences. *Corporate Reputation Review*, 1(3): 215-233.

Campbell, J. & Taksler, G. (2003). Equity volatility and corporate bond yields. *Journal of Finance*, 58: 2321-2349.

Di Giulio, A., Migliavacca, P. O., & Tencati, A. (2007). What relationship between corporate social performance and the cost of capital. working paper: Bocconi University.

Fama, E. F. & French, K. R. 1993. Common Risk Factors in the Returns on Stocks and Bonds. Journal of Financial Economics, 33: 3-56.

Fombrun, C., Gardberg, N. A., & M.L., B. (2000). Opportunity platforms and safety nets: corporate citizenship and reputational risk. *Business and Society Review*, 105(1): 85-106.

Galema, R., Plantinga, A., & Scholtens, B. (2008). The stocks at stake: Return and risk in socially responsible investment. *Journal of Banking & Finance*, 32: 2646-2654.

Gebhardt, W., Lee, C., & Swaminathan, B. (2001). Toward an implied cost of capital. *Journal of Accounting Research*, 39(135-176).

Gode, D. & Mohanram, P. (2003). Inferring the cost of capital using the Ohlson- Juettner model. *Review of Accounting Studies*, 8: 399-431.

Godfrey, P. C. (2005). The Relationship Between Corporate Philantropy and Shareholder Wealth: A Risk Management Perspective. Academy of Management Review, 30: 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.

Goss, A. & Roberts, G. S. (2011). The impact of corporate social responsibility of the cost of bank loans. *Journal of Banking and Finance*, 35(7).

Harjoto, M. A. & Jo, H. (2008). Corporate social responsibility and operating performance. *Journal of the Academy of Business and Economics*, 8(1).

Kytle, B. & Ruggie, J. G. (2005). Corporate social responsibility as risk management, Working paper, Corporate Social Responsibility Initiative: John F. Kennedy School of Government, Harvard University.

Lee, C., Ng, D. & Swaminathan, B. (2009). Testing international asset pricing models using implied costs of capital. *Journal of Financial and Quantitative Analysis*, 44: 307-334.

Lee, D. & Faff, R. 2009. Corporate sustainability performance and ideosyncratic risk: A global persepective. *Financial Review*, 44(44): 213-237.

Lev, B., Petrovits, C., & Radhakrishnan, S. (2010). Is doing good good for you? How corporate charitable contributions enhance revenue growth. *Strategic Management Journal*, 31: 182-200.

Mattingly, J. E., & Berman, S. L. (2006). Measurement of corporate social action: Discovering taxonomy in the Kinder Lydenberg Domini Ratings Data. *Business & Society*, 45, 20 46.

McGuire,Menz, K.-M. (2010). Corporate social responsibility: Is it rewarded b the corporate bond market? A critical note. *Journal of Business Ethics*, 96(1): 117-134.

Neiheisel, S. R. (1995). *Corporate strategy and the politics of goodwill: A political analysis of corporate philanthropy in America*. New York: Peter Lang.

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

Orlitzky, M., Schmidt, F. L., & Rynes, S. (2003). Corporate social and financial performance: a meta-analysis. Organization Studies, 24(3).

Pava, M. L. & Krausz, J. (1996). The association between corporate social responsibility and financial performance: The paradox of social cost. *Journal of Business Ethics*, 15(3): 321-357.

Ruf, B., M., Muralidhar, K., Brown, R. M., Janney, J. J., & Paul, K. (2001). An empirical investigation of the relationship between change in corporporate social performance and financial performance: a stakeholder theory perspective. *Journal of Business Ethics*, 32.

Sen, S. & Bhattacharya, C. B. (2001). Does doing good always lead to doing better? Consumer reactions to corporte social responsibility. *Journal of Marketing Research*, 38: 225-243.

Sengupta, P. & Wang, Z. (2010). Pricing of off-balance sheet debt: how do bond market participants use the footnote disclosures on operating leases and postretirement benefit plans? *Accounting and Finance*, 51(3): 787-808.

Sharfman, M. (1996). The construct validity of the Kinder, Lydenberg & Domini social performance rating data. *Journal of Business Ethics*, 15(3): 287-296.

Sharfman, M. P., Fernando, C. S. (2008). Environmental risk management and the cost of capital. *Strategic Management Journal*, 29, 569-592.

Simon, F. (1995). Global corporate philanthropy: a strategic framework. *International Marketing Review*, 12(4): 20-37.

Soppe, A. (2004). Sustainable corporate finance. *Journal of Busienss Ethics*, 53: 213-224.

Spicer, B. H. (1978). Investors, corporate social performance and information disclosure: an empirical study. *Accounting Review*, 53.

Turban, d. B. & Greening, D. W. 1996. Corporate social performance and organizational attractiveness to prosective employees. *Academy of Management Journal*, 40: 658-672.

Waddock, S. A. & Graves, S. B. 1997. The corporate social performance-financial performance link. *Strategic Management Journal*, 18: 303-319.

Williams, C. 2010. *MGMT 2009-2010 Edition*. Mason, OH: South-Western Cengage Learning.