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Governance mechanisms and downside risk

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ABSTRACT

This study uses data for Taiwanese firms from 2002 to 2012 to investigate the relation between corporate governance and downside risk. Our results show that good corporate governance reduces downside risk while increasing firm value. That is, firms with high managerial ownership, market power, and independent boards appear to have lower downside risk, likely because their decision-making is more transparent than that of firms without these characteristics.

1. Introduction

Research on corporate governance focuses primarily on the corporate mechanisms stakeholders use to exercise better control over corporate insiders and management in order to secure higher returns on their investments (John and Senbet, 1998). Most corporate governance studies find that good corporate governance enhances firms' financial performance (Agrawal and Knoeber, 1996; Bai et al., 2004; Cheng, 2008; Erkens et al., 2012) and shareholders' wealth (e.g., Ammann et al., 2011; Cremers and Nair, 2005; Drobetz et al., 2004; Gompers et al., 2003), or reduces the cost of capital (Ashbaugh et al., 2006; Ge et al., 2012). The main rationale behind these findings is that good corporate governance ameliorates agency cost problems (e.g., Henry, 2010) and consequently improves the operational efficiency of firms.

As risk management in corporate finance becomes increasingly important (Laeven and Levine, 2009), many studies have investigated the relationship between firm risk and corporate governance as they relate to ownership structure. For example, Gadhoum and Ayadi (2003) find that the ownership structure of firms is negatively related to firms' total risk, and Nguyen (2011) shows that higher ownership concentration will result in higher idiosyncratic risk. Wright et al. (1996) find that institutional investors exert positive influence on firms' risk taking. It seems clear that firms face different kinds of risks that merit research.

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As good corporate governance is expected to diminish agency cost problems by forcing management to focus more on firm value, firms with good governance are expected to perform better because they have fewer negative shocks, lower cost of capital, and lower default risk. As such, better-governed firms should have a lower probability of price crash risk or downside risk. In this study, we investigate how corporate governance affects the downside risk of the firm (i.e., the left tail of the return distribution) to examine whether shareholders are protected from undesirable downward swings in stock prices.

This study extends the literature in several ways. First, we incorporate the independent board of directors and the market for corporate control (related to the product market) simultaneously into the analysis along with other ownership variables to analyze how corporate governance affects the firm's downside risk. Most prior studies focus on how the ownership structure affects the risk-taking behavior of a firm.[1] This study focuses on the downside risks that are important to management and shareholders. Tian and Twite (2011) argue that strict external market conditions can substitute for corporate governance mechanisms. Ammann et al. (2013) even find that good corporate governance increases firm value only in noncompetitive industries. We use the product market concentration in Taiwanese firms for our analysis. Taiwan relies heavily on international trade, and its firms face keen competition. This study provides an illustration of how the external competitive market condition and the governance mechanisms affect downside risk.

Second, our analyses using Taiwanese firms are interesting because the results have implications for other emerging markets that are poorly governed. Claessens et al. (2000) indicate that more than two-thirds of firms are controlled by a single stockholder in Asian markets, which display issues of wealth expropriation issues for the minority stockholders. In the wake of the Asian financial turmoil in 1997, the Taiwan Securities and Futures Bureau (SFB) implemented policies to improve corporate governance within firms. To protect minority shareholders, the SFB requires that firms, before going public, have at least two independent directors on the board. However, firms that are listed on the exchange are exempt from this requirement. By comparing the different practices between independent boards of directors in Taiwan with those in the developed markets, we can examine whether having independent directors is a good corporate governance mechanism.

Third, this study is one of the first to relate corporate governance to downside risk. The Basel Committee (Basel Committee on Banking Supervision, 1996) has adopted the value-at-risk (VaR) metric to measure downside risk (Liao, 2013).[2] Using VaR is appealing because it represents financial risk with a single number (Inui and Kijima, 2005; Yamai and Yoshiba, 2005). However, Artzner et al. (1997, 1999) criticize VaR because it measures only the percentiles of profit-loss distribution. It disregards any loss beyond the VaR level. Artzner et al. (1999) and Tasche (2002) suggest that expected shortfall (ES) is a more feasible and sound alternative to VaR in measuring downside risk. In this study, we use both VaR and ES to estimate the downside risk of firms.

Finally, we are able to show the channels by which good corporate governance mechanisms affect firm risk and value. We demonstrate that good corporate governance is related to the conservatism and transparency of the firm, characteristics that lead to better decisions and lower downside risk. The rationale is that better-governed firms have a more transparent process that reduces the chance of undertaking futile projects or waste. Our study complements prior studies on the impacts of diverse corporate governance on downside risk by providing a mechanism that shows how corporate governance affects downside risk. We show that good corporate governance not only enhances firm valuation but also can reduce downside risk.

The rest of the paper is organized as follows. In Section 2, we present the literature and develop our hypotheses. Section 3 presents the sample, the variables, and the methodology to investigate the relationship between corporate governance and downside risk. Section 4 presents our results. Section 5 is the conclusion.

2. Hypothesis development

Better corporate governance is expected to promote good firm performance because of anticipated reduction in agency cost. Ammann et al. (2011) document that investors expect better-governed firms to have more profit and less cash flow that would otherwise be siphoned off by self-interested managers. They also have lower costs of monitoring, auditing, and capital. Better-governed firms are more open and run their business efficiently with less artifice.

Among corporate governance mechanisms, ownership structure has a direct impact on the management and is expected to affect firms' risk-taking behavior. Wright et al. (1996) examine the influence of corporate insiders, block shareholders (blockholders), and institutional ownership structure on corporate risk taking, while Gadhoum and Ayadi (2003) study the relationship between ownership structure and changes in corporate risk behavior among Canadian firms. These studies find an inconsistent relationship between risk-taking behavior and corporate governance mechanisms. The inconsistency is likely due to the firm-risk measure that relates to investment and financial decisions.

Firm risk can be studied in different ways. For example, in studying the impact of corporate governance on risk at banks, Iannotta et al. (2013) divided risk into operational and default risks. An unshirkable duty of firms is to take operational risks in order to maximize shareholders' wealth. On the other hand, firms should also minimize their default risks in order to protect shareholders' wealth. In this study, we focus on default risk (downside risk) rather than operational risk or total risk. Since good corporate governance is expected to diminish agency cost problems and protect shareholders' wealth, we argue that the managers in better-governed firms are better at managing downside risk. That is, managers in better-governed firms manage risk in ways that enhance firm value and shareholders' wealth. As a result, this study argues that good corporate governance can reduce default risk, implying a lower downside risk. Our idea is similar to the asymmetric return distribution issue in finance. Bae et al. (2006) use country-level corporate governance

[1] We introduce the relevant literature in the next section.

[2] VaR is defined as a certain level quantile (e.g., 99%) of the portfolio loss distribution, presenting the expected maximum loss of financial assets over a target horizon (e.g., 1 day).