Journal of Banking & Finance 48 (2014) 374–385

Contents lists available at ScienceDirect

Journal of Banking & Finance

journal homepage: www.elsevier.com/locate/jbf

Corporate governance and the dynamics of capital structure: New evidence

Ya-Kai Chang [a], Robin K. Chou [b,*], Tai-Hsin Huang [a]

[a] Department of Money and Banking, College of Commerce, National Chengchi University, Taiwan
[b] Department of Finance and Risk and Insurance Research Center, College of Commerce, National Chengchi University, Taiwan

ARTICLE INFO

Article history:
Received 31 October 2012
Accepted 27 April 2014
Available online 6 May 2014

JEL classification:
G32
G34

Keywords:
Corporate governance
Dynamic capital structure
Speed of capital structure adjustment

ABSTRACT

The effects of corporate governance on optimal capital structure choices have been well documented, though without offering empirical evidence about the impact of corporate governance quality on the adjustment speed toward an optimal capital structure. This study simultaneously considers two effects of debt originating from agency theory—the takeover defense and the disciplinary effects of debt—on the speed of adjustment to the optimal capital structure. Corporate governance has a distinct effect on the speed of capital structure adjustment: weak governance firms that are underlevered tend to adjust slowly to the optimal capital structure, because the costs of the disciplinary role of debt outweigh the benefits of using debt as a takeover defense tool. Although overlevered weak governance firms also adjust slowly, they do so because they are reluctant to decrease their leverage toward the target level to deter potential raiders, especially if they face a serious takeover threat. Therefore, this study finds that both overlevered and underlevered firms with weak governance adjust slowly toward their target debt levels, though with different motivations.

1. Introduction

Researchers have extensively debated the question of whether firms have a target leverage ratio.[1] Because a deviation of the actual leverage away from the target leverage reduces a firm's value, firms are incentivized to adjust their leverage to the optimal level. However, this adjustment process takes time, particularly when firms face adjustment costs.[2] As Myers (1984) points out, if adjustment costs are large, firms take extended excursions away from their target, and therefore more attention should focus on identifying the adjustment costs, why they are so important, and how rational managers respond to them, rather than just refining static trade-off theories.

We examine the impact of the agency conflicts between managers and shareholders on the speed of capital structure adjustment by considering the effect of corporate governance quality (i.e., strength of shareholder rights).[3,4] Although researchers have widely discussed the effect of corporate governance on capital structure choices, little attention has centered on the effect of corporate governance quality on the adjustment speed of firms' capital structure.

* Corresponding author. Address: Department of Finance, College of Commerce, National Chengchi University, 64 Zhinan Road Sec. 2, Taipei, Taiwan. Tel.: +886 2 29393091; fax: +886 2 29393394.

E-mail address: rchou@nccu.edu.tw (R.K. Chou).

[1] This debate actually represents a shift from prior literature, which focuses on the existence of leverage targets, to emphasizing the need to quantify the importance of the targets. (See Rajan and Zingales, 1995; Hovakimian et al., 2001, 2004; Fama and French, 2002; Flannery and Rangan, 2006; Kayhan and Titman, 2007; Lemmon et al., 2008).

[2] In a perfect world with zero adjustment costs, a firm offsets any deviation to maintain its optimal target leverage immediately. In contrast, with infinite transaction costs, it makes no movement toward its target leverage. Researchers who study the effects of adjustment costs on the speed of adjustment to target leverage include Hovakimian et al. (2001), Leary and Roberts (2005), Flannery and Rangan (2006), Strebulaev (2007), Faulkender et al. (2008), and Huang and Ritter (2009).

[3] An increasing body of literature examines the influences of agency problems between shareholders and debtholders, such as underinvestment (e.g., Ju and Ou-Yang, 2006; Titman and Tsyplakov, 2007; Sundaresan and Wang, 2007; Hackbarth, 2008; Pawlina, 2010; Dang, 2011; Hackbarth and Mauer, 2012) and asset substitution (e.g., Leland, 1998; Ju and Ou-Yang, 2006; Sundaresan and Wang, 2007; Dangl and Zechner, 2007), on debt restructuring. However, to the best of our knowledge, theoretical and empirical evidence regarding the effect of manager–shareholder conflicts on the adjustment speed toward an optimal capital structure remains rare.

[4] As a robustness check, we perform additional analyses to investigate the impact of agency conflicts between shareholders and debtholders on the adjustment speed of firms' capital structure, using credit rating data (S&P Domestic Long-Term Issuer Credit Rating) as a proxy for corporate governance quality. These additional results are consistent with our initial results, focused on agency problems between managers and shareholders.

http://dx.doi.org/10.1016/j.jbankfin.2014.04.026
0378-4266/

Adjustment costs are directly related to the severity of conflicts between managers and shareholders, and researchers have proposed various explanations for adjustment costs that rely on the influence of self-interested managers.

For example, the takeover defense effect of debt explanation indicates that managers use debt as a defense against corporate raiders (Berger et al., 1997). When their job security comes under threat, they use more leverage, even beyond the optimal point (firm value-maximizing levels), to defend themselves against ever-present raiders and prevent a takeover. That is, when self-interested managers maximize their personal benefits, they tend to increase their debt use, regardless of its effect on shareholder wealth. Berger et al. (1997) show that for underlevered firms, unsuccessful tender offers prompt firms to add leverage and increase the adjustment speed toward their target leverage. In contrast, for overlevered firms, takeover threats still cause them to increase their leverage, so firms slow their adjustment speed of leverage toward the target levels.

Another notable effect of debt is its disciplinary role. Because debt limits managers' flexibility to use free cash flows (Jensen, 1986), self-interested managers maximize their personal benefits by decreasing their debt use, again regardless of its effect on shareholder wealth. Morellec et al. (2012) thus argue that corporate governance quality is an important influence on the speed with which firms adjust their capital structure toward target leverages. With their theoretical dynamic trade-off model, they examine the effects of corporate governance quality on capital structure dynamics. The results of their model show that when making financing decisions, managers consider the costs of refinancing, especially the disciplinary effect of debt, which produces the majority of the total adjustment costs. Morellec et al. (2012) further suggest that the disciplinary cost of debt causes firms with weak corporate governance to adjust more slowly toward the optimal capital structure than it does firms with strong corporate governance.

However, Berger et al. (1997) do not consider the effect of different corporate governance quality on the adjustment speed toward an optimal capital structure. Managers of firms with weak versus strong governance may have different incentives to adjust their capital structures and thus adopt different adjustment speeds. In contrast, Morellec et al.'s (2012) do not consider the impact of takeover threats from outsiders or deviations from the target leverage levels when examining the relationship between the adjustment speed of capital structure and corporate governance quality.

To address this gap, we jointly test for the effects of the disciplinary and takeover defense roles of debt on capital structure adjustments on overlevered and underlevered firms. We predict that for underlevered (overlevered) firms, if the takeover defense benefits of debt outweigh its disciplinary costs, firms with weak governance, compared to those with strong governance, tend to adjust more quickly (slowly) toward the target leverage. However, if the disciplinary cost of debt is a more important consideration, underlevered (overlevered) firms with weak governance tend to adjust more slowly (quickly) toward the target leverage than do their strong governance counterparts.

We use dynamic partial adjustment capital structure models to examine the influence of corporate governance quality on the adjustment speed of capital structure, in which corporate governance quality is represented by the G-index (Gompers et al., 2003; hereafter, GIM), which reflects the strength of shareholder rights. We first test the effect of corporate governance on the speed of the leverage adjustment, without differentiating firms' deviations from their target leverages. We find that weak governance firms typically adjust more slowly to their target leverage ratios, consistent with Morellec et al.'s (2012) theoretical model, which stresses the disciplinary role of debt. However, because Morellec et al. (2012) ignore the potential takeover defense role of debt, they cannot differentiate disciplinary from takeover defense roles of debt.

To investigate the possibility of debt as a takeover defense tool, we next separately examine the relation between corporate governance and the speed of capital structure adjustment for underlevered and for overlevered firms. For underlevered firms, the speeds of adjustment toward the target capital structure are slower for those with weak governance than for their strong governance counterparts. This finding conflicts with the argument of using debt as a takeover defense: if weak governance firms tend to use debt as a takeover defense, they are likely to adjust their leverage upward more quickly than strong governance firms. Thus, we conclude that managers of underlevered weak governance firms consider the disciplinary costs of debt greater than the benefits of the takeover defense of debt. However, for overlevered firms, weak governance firms adjust more slowly toward the target leverage than strong governance firms, indicating that managers of overlevered weak governance firms are reluctant to adjust leverage downward because the benefits of debt as a takeover defense are greater than the disciplinary costs of debt.

To further test the above assertions, we examine the behavior of both underlevered and overlevered firms surrounding merger and acquisition (M&A) announcements, such that we seek evidence of a direct link between M&A events and the speed of capital structure adjustment. The results show that after the M&A announcement, the debt of overlevered firms with weak governance increases markedly more than their strong governance counterparts; that is, self-interested managers are willing to increase their debt to drive away raiders, even if this behavior results in large disciplinary costs. Therefore, our hypotheses are further supported. Furthermore, we also consider the impacts of product market competition and the omitted variable problems on capital structure adjustment speeds and find that our conclusions remain unchanged.

We contribute to the extant literature by providing empirical evidence of the joint impact of current deviations from optimal leverage levels and corporate governance quality on the adjustment speed of capital structure, in accordance with the takeover defense and disciplinary roles of debt. Our results complement those of Berger et al. (1997), who do not explicitly consider the disciplinary role of debt or corporate governance quality on debt adjustments. Our results also complement theoretical findings from Morellec et al. (2012), whose theoretical model does not specifically consider the takeover defense role of debt or the effect of deviations from optimal leverage levels. Our empirical results further indicate that both the disciplinary and takeover defense roles of debt offer important motivations for managers to adjust firm leverage. Moreover, these two effects depend on firms' corporate governance quality and deviations from target leverage levels. We provide a broader, clearer picture of managers' motivations to adjust leverage levels and how the adjustment process depends on the firm's current deviations from its optimal leverage and its corporate governance quality.

The remainder of this article is organized as follows: Section 2 briefly reviews prior literature. Section 3 introduces the dynamic partial adjustment capital structure model before we describe the data and variable definitions in Section 4. Section 5 contains the empirical results, and Section 6 concludes.

2. Literature review

The notion of agency conflicts within a firm offers an important determinant of capital structure (Jensen and Meckling, 1976). The presence of significant agency problems usually distorts corporate policy choices and weakens corporate performance. We link agency costs to capital structure by examining how corporate