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Preferred stock: Some insights into capital structure

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ABSTRACT

This study analyzes the reactions of equity holders and bondholders to the announcement of 427 preferred stock issues. We document an average equity announcement effect of −0.65%. This reaction is positively influenced by a number of measures of firm creditworthiness and transparency and is higher for bank issuers. The equity market reaction is negatively influenced by convertibility (and the moneyness of the embedded option) and by the firm's accounting treatment of the issue (specifically if the issue is classified as equity). We find that average credit default swap spreads decrease by 50 basis points after the issue announcement. This decrease is also larger for more creditworthy and transparent firms. Convertibility and the moneyness of the embedded option further decrease the CDS spread. In aggregate, the decrease in equity value is much smaller than the increase in the value of the issuer's debt.

1. Introduction

A key part of the TARP capital purchase program in Fall 2008 was the purchase of $250 billion of senior preferred shares from qualifying U.S.-controlled financial services companies. While this infusion of capital did much to avoid a market failure, shareholders of these financial institutions were not universally in favor of the decision because of the high dividend rates and the warrants granted to the government. Veronesi and Zingales (2010) document that the “winners” were bondholders of the largest investment banks and the major “losers” were J. P. Morgan equity investors and (naturally) U.S. taxpayers.

On November 17, 2010, as part of its IPO, General Motors issued 87 million shares of mandatory convertible, junior preferred stock, raising a total of $4.35 billion. Earlier, on August 18, 2010, Bloomberg News noted that: *The preferred shares were added to attract hedge funds and other new investors because the shares have attributes of both debt and equity, the people familiar with the plans said.*[1] This differing influence of preferred stock issuance on equity and debt investors is the focus of this study.

This paper thus addresses one of the most important areas of corporate finance: capital structure. The academic research ranges from the seminal work of Modigliani and Miller (1958), to the theoretical development of Hart (1995) and many others, to a huge volume of empirical studies. Almost all of this research has focused on the debt versus equity decision, leaving aside the issue of preferred stock. This is an important omission since preferred stock is an essential source of capital for many U.S. corporations. For example, over the 1999 to 2005 period studied in this paper, U.S. firms filed to issue over $868 billion in straight and convertible preferred stock. In comparison, U.S. firms filed to raise $374 billion through IPOs and $590 billion through SEOs[2] over this period.[3]

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[1] Bloomberg News, August 18, 2010.
[2] Source: Securities Data Company (SDC).
[3] In contrast, Bajaj et al. (2002) document that during the 1985–1999 period, capital raised through SEOs was almost twice the dollar volume raised through straight and convertible preferred stock combined.

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As noted above, preferred stock played a central role in mitigating the recent financial crisis. A prominent pair of examples occurred in October, 2008, with Warren Buffett's infusion of $3 billion into GE and $5 billion into Goldman Sachs, both investments in the form of perpetual preferred stock with warrants. This was the harbinger of many bank preferred issues during and following the financial crisis. These issues were often perceived as a financing of last resort. The bank securities often took the form of trust preferred, a recent innovation using a special purpose vehicle, which has spurred the recent growth in preferred stock issuance by both banks and corporations.[4]

The hybrid nature of preferred stock is an important issue; it is neither equity nor debt, which creates ambiguity about its impact on firm value and the potential reactions of various firm stakeholders. Evidence of its hybrid nature can be seen from the differences between a firm's preferred stock ratings and the ratings on its subordinated debt issues, which are most significant for lower credit quality firms.[5] Furthermore, firms vary in their accounting treatment of a preferred issue; some firms considering it as equity, some as debt and others as hybrids.

This paper empirically analyzes 427 preferred stock issues. Its goal is to determine the short-term reaction of equity holders and of bondholders. It is reasonable to believe that, because of their different relative positions with respect to preferred stock in the event of bankruptcy, bondholders and equity holders would have varying responses to the announcement of a preferred issue. We measure the reaction of equity holders using event study methodology. If equity holders viewed preferred as equity, one would expect that the announcement effect would be negative.[6] Conversely, if equity holders perceive preferred as straight debt, we would expect to see an insignificant reaction, as is observed for public debt issues.[7]

The response of bondholders is evaluated using changes in the credit default swap (CDS) spreads.[8] This approach has been shown to be superior to an analysis of bond yields, since the latter contain many confounding effects. Furthermore, CDS spreads have been shown to anticipate bond rating changes.[9] After the announcement, one could expect CDS spreads to narrow because of the decrease in leverage. Conversely, bondholders could perceive the increased commitment to pay preferred dividends as an additional constraint on the firm's ability to service its debt. Furthermore, the choice of preferred rather than debt could be interpreted as a signal of financial distress, as was clear during the financial crisis.

Based on the studies outlined briefly in the following section, the two major hypotheses analyzed in this study are the following, although it is important to note that these hypotheses are, in general, extrapolated from theoretical and empirical research that focuses on the debt-equity decision, rather than research that directly addresses preferred stock.

Bondholder hypothesis: When a firm announces an issue of preferred stock its bondholders react favorably. The issue decreases both the firm's leverage and its financial distress risk. If the firm has higher earnings potential, bondholders will react more positively, since this makes the financing of last resort motive less credible.

Stockholder hypothesis: When a firm announces an issue of straight preferred stock, its equity holders have an insignificant reaction. The issue creates no dilution and it reduces the potential adverse selection problems between managers and shareholders. However, for distressed firms, shareholders could react negatively because of the possible wealth transfer from shareholders to bondholders.[10] Since convertible issues potentially create dilution, shareholders should react negatively to these issues; this reaction would depend on the moneyness of the embedded option.

The remainder of this study is organized as follows: Section 2 provides a very brief review of the relevant literature. Section 3 describes the data and the sample selection process. Section 4 presents the estimation and interpretation of our results. Section 5 concludes the paper.

2. Literature review

There is significant theoretical and empirical support for the positive impact of preferred stock issuance. The theoretical model of Heinkel and Zechner (1990) shows that preferred stock increases the debt capacity of a firm given that a firm can delay preferred dividends. Similarly, Nance et al. (1993) argue that preferred stock reduces the probability of financial distress.[11] Pinegar and Lease (1986) examine the impact of preferred-for-common exchange offers and find a systematic increase in the value of the firm. Conversely, Irvine and Rosenfeld (2000) find that firms that use preferred stock to retire bank debt experience a negative shock to their stock prices.

The issue of information asymmetry has been an important component of this strand of the academic literature. Chandy et al. (1993) find that firms with higher information asymmetry between managers and shareholders experience a relatively larger negative stockholder reaction when its preferred stock is downgraded. Chemmanur and Liu (2006) construct a theoretical model of security issuance based on heterogeneous beliefs between the insiders (existing equity holders) and outsiders (new investors).

[4] The recent trends in domestic preferred stock issuance have been quite dramatic. In 2008, $77.9 billion was issued, the highest amount ever, but this figure fell to $9.6 billion in 2009, the lowest amount issued since 1990. In 2011 the total issuance of preferred stock was $13.3 billion. These data are from sifma.org.

[5] Moody's Investors Services (1998).

[6] See Masulis and Korwar (1986) for the announcement effect of seasoned equity issues.

[7] See Eckbo (1986). However, more recently, Cai and Zhang (2011) find increases in leverage, especially for highly leveraged firms, lead to lower stock returns.

[8] The role of CDS spreads as early indicators of financial distress is discussed in Longstaff (2009).

[9] See Hull et al. (2004) and Ericsson et al. (2009).

[10] A behavioral viewpoint on bondholder-shareholder conflicts, leverage and stock prices is presented in Hackbarth (2009).

[11] See Blau and Fuller (2008) for a development of the link between financial flexibility and dividend payments.