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Going private transactions, bondholder returns, and wealth transfer effects

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ABSTRACT

We examine how buyout activity and deal characteristics drive bondholder returns and the wealth transfer effects between bondholders and stockholders in going private transactions from 1981 to 2006. We find that various deal characteristics are major determinants of the cross-sectional variation in bondholder returns. In particular, a single private equity acquirer mitigates bondholder losses. On the other hand, bondholders have larger losses when a reputable buyout firm is involved in the deal. Bondholders experience losses in the 1980s and 2000s, but enjoy gains in the 1990s. Our findings remain robust to consideration of deal financing, relative cost of credit, and level of market overheating. We find a negative and significant relationship between stockholder and bondholder wealth effects, which supports the wealth transfer hypothesis.

1. Introduction

Despite the recent slowdown in buyout activity due to the credit crunch, going private transactions in the 2000s steadily increased in both the number and size of buyouts from a relatively calm buyout market in the 1990s. This crest of activity marks the second wave of buyout activity in recent decades, with the other occurring in the late 1980s. These buyouts, often by private equity funds, act as a significant force in restructuring the corporate landscape. Much of the previous academic research focuses on the wealth effects to pre-buyout stockholders and finds positive abnormal returns. Substantially less research documents the abnormal returns to pre-buyout bondholders. Exceptions are Marias et al. (1989), Asquith and Wizman (1990), Cook et al. (1992), Warga and Welch (1993) and Billett et al. (2010). Aside from Marias et al. (1989), who find insignificant abnormal returns in a two-day announcement window, the remaining studies find significant losses to bondholders surrounding going private transactions and relate the magnitude of these returns to bond characteristics, such as maturity and covenant protection.

Interestingly, buyout periods and deal characteristics such as the type of acquirer, deal financing, and target firm characteristics have not yet to be explored in terms of their links to bondholder wealth effects. In terms of buyout periods, extant literature highlights differences between periods of high and low activity in the buyout market that may influence bondholder returns. First, Kaplan and Strömberg (2009), Axelson et al. (2009a,b) and Ljungqvist et al. (2007) show that buyout activity increases in periods of relatively cheap credit. The presence of relatively inexpensive credit generally encourages higher leverage that can have a damaging effect on target bondholder returns. Second, several researchers (Kaplan and Strömberg, 2009; Engel et al., 2007; Oxman and Yildirim, 2007) point to differences in the buyout wave of the 1980s and that of the 2000s. Deal financing, including the amount, seniority, and covenant protection of additional debt undertaken by target firms, impacts pre-buyout bondholders. In the 1980s banks held the senior and secured portion of deal financing; whereas in the current buyout wave, institutional investors often buy collateralized loan obligations (CLOs) comprised of these collateralized loans (Kaplan and Strömberg, 2009). If banks serve a monitoring role that is lacking from CLO investors, bondholders lose this level of protection, indicating greater bondholder losses in the recent buyout wave.[1] Demiroglu and James (2009) report increasing use of covenant-lite loans (beginning in 2006) and loans funded by institutional investors rather than traditional commercial banks in the buyout wave in the 2000s. On the other hand, Kaplan and Strömberg (2009) report that the typical equity portion of deal financing rose from between10 and 15% in the 1980s buyout wave to around 30% in the current surge, and that interest coverage ratios have also risen. This motivation should protect bondholders because becoming private would be cheaper for the firm. Finally, Oxman and Yildirim

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[1] We thank an anonymous referee for suggesting this point.

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(2007) suggest that there is less "overheating" in the most recent decade compared to the leveraged buyout (LBO) wave in the 1980s. These findings suggest that buyout activity and deal financing are important determinants of bondholder wealth effects.

As discussed above, deal characteristics, such as the identity of acquirers and deal financing, vary across time and certainly differ among deals. Prior literature has not examined these deal characteristics to explain bondholder wealth effects in buyouts. We argue and show that bonds returns should vary based on the identity of the acquirer. Deal financing, which affects the risk of the target firm, should have a significant impact on bondholder returns.

Prior literature on wealth transfer effects during buyouts focuses on the first buyout wave in the 1980s. Warga and Welch (1993), Asquith and Wizman (1990) and Marias et al. (1989) state that bondholder losses are too small to account for stockholder gains in going private transactions and thus there is little wealth transfer. However, as Adams and Mansi (2009) and Elliott et al. (2009) point out, a negative correlation between bondholder and shareholder wealth effects supports the wealth transfer hypothesis, without requiring equivalent magnitudes of the wealth effects. Thus, examining the stockholder and bondholder wealth changes and providing univariate and multivariate tests for the wealth transfer effects help sheds more light to the sources of stockholder gains at buyouts.

Our study explores how buyout activity and deal characteristics drive differences in bondholder returns and wealth transfer effects between bondholders and stockholders. In particular, we examine bondholder, stockholder, and total firm wealth effects in going private transactions from 1981 to 2006. Based on a sample of 363 bonds associated with 220 bids on 182 target firms, we conduct univariate and multivariate analysis on bondholder and stockholder returns by various deal and bond characteristics. We find that bondholders suffer greater losses when the acquirer is a reputable buyout firm. On the other hand, deals with a single private equity acquirer or divestitures have higher bondholder returns. Bondholders in the 1990s accrue large gains whereas bondholders in the 1980s and 2000s suffer significant losses. As to bond characteristics, we find holders of bonds with a change of control covenant selling at a discount enjoy significant gains, whereas bond size has a significant and negative impact on bondholder returns. On the other hand, target firm size, unlevered stock volatility, firm leverage, and total amount of bonds outstanding affect stockholder returns. Our findings remain robust when general credit market conditions and market overheating are considered. Furthermore, we include deal financing information in the regressions and find similar results. Finally, we find significantly negative correlations between bondholder and stockholder dollar gains and losses in the 1980s and 2000s, indicating a wealth transfer effect. Using multivariate regressions, we provide further evidence for the wealth transfer hypothesis by showing a significant and negative relation between stockholder and bondholder wealth changes.

This study contributes to the existing literature on bondholder reactions to going private events in three important ways. First, our sample period extends over a sample period that includes two buyout waves and a period of relative inactivity. As discussed above, an extended period allows us to incorporate deal characteristics and market conditions across different buyout activities. In particular, we control for the interest rate environment, deal financing trends, and premium paid to pre-buyout shareholders. Second, our study extends previous literature by using a comprehensive set of deal and bond characteristics to explain the large cross-sectional variation in bondholder wealth effects at going private announcements. In particular, we include acquirer characteristics not previously examined to explain bondholder returns. In light of a wealth of recent literature pertaining to deal financing, we also link deal financing to bondholder returns. In addition, we confirm prior results on bond attributes that can explain this variation, such as covenant protection, maturity, seniority, and bond risk. Finally, we provide a deeper focus compared to prior literature on wealth transfer effects from bondholders to stockholders during going private transactions. We find strong evidence supporting wealth expropriation and show that bondholder losses account for a portion of stockholder gains during buyouts. This finding adds to the understanding of the sources of gains to stockholders during going private events. The recent paper by Billett et al. (2010) explores the role of bondholder wealth expropriation in LBOs. Similar to our findings, they use bond pricing data from the 2000s and find significantly negative bondholder returns for bonds without a change of control covenant and positive returns for bonds with such covenant. While both studies investigate bondholder returns during the recent buyout wave, our study differs from Billett et al. (2010). We examine the effects of acquirer and deal characteristics on bondholder wealth effects and the wealth transfer hypothesis, whereas they concentrate on the role of the change of control covenant (after controlling for target firm characteristics on bondholder wealth) and likelihood for a firm to be a LBO target.

The remainder of the paper is organized as follows. Section 2 presents the literature review and develops hypotheses about bondholder wealth effects in going private transactions. Section 3 discusses sample data. In Section 4, we discuss the empirical findings of bondholder returns and wealth transfer effects around going private events. Section 5 concludes.

2. Literature review and hypotheses about bondholder wealth effects

The literature on going private and LBO events extends back to the surge in buyout activity in the mid 1980s and covers various aspects of the buyouts. Numerous studies examine gains to pre-buyout stakeholders and investigate the sources of these gains. Holmstrom and Kaplan (2001) provide an overview of these sources of stockholder gains. The literature most relevant to our study explores the wealth effects to pre-buyout bondholders. While researchers agree on the positive wealth effects to stockholders, the difficulty in obtaining bond pricing data limits the extent of research in this area. Marias et al. (1989) use the buyout bids from 1975 to 1984 to study the wealth effects to senior non-convertible debt. They find no abnormal returns to bondholders in the 33 deals in their sample. Other studies show negative abnormal returns to pre-buyout bondholders. In particular, Asquith and Wizman (1990) find an overall loss of −2.2% in the 4-month announcement window and attribute cross-sectional differences in bondholder returns to covenants. Warga and Welch (1993) report significant risk-adjusted losses to bondholders. Using Lehman Brothers monthly trader quotes for 36 bonds and 13 companies, they report an abnormal return of −7.33% over a 4-month announcement window.[2] Billett et al. (2010) examine the role of the change of control covenant in the probability of becoming a buyout target. Using the bond prices in the 2000s collected from the Moody's/Mergent's Bond Record and TRACE, for a sample of 18 LBO deals and 49 bonds they document positive returns to bondholders with the change of control covenant protection and losses to bondholders without this protection. They examine the determinants of the likelihood of a firm becoming a buyout target. They find

[2] The benchmark returns used by the previous two studies are different. Asquith and Wizman (1990) employ index returns matched on the time to maturity, whereas Warga and Welch's (1993) benchmark returns match the bond characteristics by rating and maturity. Maturity-based indices capture differences in maturity risk but cannot account for differences in credit risk. In this study, we follow Warga and Welch (1993) to calculate abnormal returns. The −7.33% loss to bondholders is based on a sample that includes the RJR Nabisco deal.