

# The decision to first enter the public bond market: The role of firm reputation, funding choices, and bank relationships <sup>☆</sup>

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## Abstract

This paper uses survival analysis to investigate the timing of a firm's decision to issue for the first time in the public bond market. We find that firms that are more creditworthy and have higher demand for external funds issue their first public bond earlier. We also find that issuing private bonds or taking out syndicated loans is associated with a faster entry to the public bond market. According to our results, the relationships that firms develop with investment banks in connection with their private bond issues and syndicated loans further speed up their entry to the public bond market. Finally, we find that a firm's reputation has a "U-shaped" effect on the timing of a firm's bond IPO. Consistent with Diamond's reputational theory, firms that establish a track record of high creditworthiness as well as those that establish a track record of low creditworthiness enter the public bond market earlier than firms with intermediate reputation. Published by Elsevier B.V.

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## 1. Introduction

There appears to exist a "life cycle" effect in firms' funding choices: they borrow initially from banks and only later they choose to issue debt directly in the market. Further, some firms undertake their bond IPO at an early stage of their life, others wait a long period of time before they issue their first public bond, and others yet never issue public bonds. In this paper, we investigate what determines the timing of a firm's decision to undertake its bond IPO.

The early theoretical literature on financial intermediation, including Diamond (1984) and Boyd and Prescott (1986), shows that bank loans can be the firm's optimal choice of funding. Subsequently, researchers expanded this literature to explain the coexistence of bank and bond financing.<sup>1</sup> However, they paid little attention to the firm's decision to first access the bond market. An exception is Diamond (1991), who presents a theory which shows that firms, by borrowing repeatedly from banks, can build their reputation and use it to access the bond market under favorable terms.

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<sup>1</sup> See Diamond (1991), Rajan (1992), Besanko and Kanatas (1993), Chemmanur and Fulghieri (1994), Yosha (1995), Bhattacharya and Chiesa (1995), Boot and Thakor (1997), Holmstrom and Tirole (1997), Repullo and Suarez (1998, 2000) and Bolton and Freixas (2000).

The empirical literature on firms' choices of external funding sources has also devoted little attention to the timing of firms' decision to enter the public bond market. A strand of this literature investigates firms' use of bank and bond financing using cross-sections of firm data and, therefore, does not consider firms' decision to enter the bond market.<sup>2</sup> Studies of firms' marginal financing choices, on the other hand, do not take into account firms' bond issuance history and, consequently, do not investigate their decision to enter the public bond market for the first time.<sup>3</sup>

In this paper, we add to this literature by investigating the determinants of the timing of firms' bond IPOs using data on US non-financial firms.<sup>4</sup> This is an important decision in a firm's life because it will transform the firm. Entering public bond market changes the firm's capital structure and marks the beginning of coverage by bond analysts and credit rating agencies.<sup>5</sup>

Following Diamond's (1991) reputational theory, we study the role of a firm's reputation on the timing of its bond IPO. According to Diamond's theory early in their life firms borrow from banks, but as they develop a reputation, high and low credit quality firms start to issue bonds.

We also investigate the insights of the corporate finance literature that are likely to affect the timing of a firm's bond IPO. For example, Berlin and Loyes (1988), Chemmanur and Fulghieri (1994) and Cantillo and Wright (2000) show that firms with a greater likelihood of financial distress prefer bank funding over market funding because of banks' special monitoring and reorganizational skills. This suggests that firms with higher credit risk are more likely to delay their entry to the public bond market. Rajan's (1992) result that hold up costs increase with the credit risk of the firm, on the other hand, suggests that firms with the highest credit risk have the highest incentive to enter the public bond market. Following these results, we investigate how the credit risk of the firm affects the timing of its bond IPO.

The literature that links firms' relative use of public bond financing to the flotation costs of public bonds is also potentially relevant for a firm's decision to enter the public

bond market. Blackwell and Kidwell (1988), Krishnaswami et al. (1999) and Easterwood and Kadapakkam (1991), for example, argue that high flotation costs of public placements make public bond financing unattractive for firms with small needs for external funding. Since these costs are not proportional to the size of the issue, this suggests that larger firms are more likely to enter the public bond market earlier. Following this literature, we investigate the importance of firm size and its demand for external funds in the timing of its bond IPO.

The literature on equity IPOs shows that firms time their equity IPOs to take advantage of favorable market conditions, suggesting that firms may also take into account the conditions in the bond market when making their decision to enter the public bond market.<sup>6</sup> We, therefore, investigate whether the activity in the bond market or the state of the economy affect the timing of bond IPOs.

Finally, we investigate whether firms' prior funding choices and their relationships with banks play a role on the timing of their bond IPOs. In addition to straight bank loans and public bonds, US firms can also use private bond placements and syndicated loans to raise external debt financing. These instruments have some similarities with public bonds. For example, they introduce some competition for the provision of funding to the firm and spread the firm's funding among many investors. This suggests that firms which use private bond placements or the syndicated loan market to raise funding may delay their decision to enter the public bond market.

It is possible, though, that firms access to these markets accelerate their entry to the public bond market. Firms may, for instance, use the private bond market to advertise themselves to investors in order to facilitate first public bond placement. They may also use privately placed bonds and the syndicated loan market to establish relationships with investment banks. These relationships will make it easier for firms to enter the public bond market because they will facilitate the certification role that underwriters need to play in the public bond placement.<sup>7</sup> Investment banks, in turn, may use their contact with firms to "motivate" them to enter the public bond market in order for them to benefit from the associated underwriting business.<sup>8</sup>

We find that, everything else equal, firms that are more creditworthy, larger, have more investment opportunities,

<sup>2</sup> See Blackwell and Kidwell (1988), Easterwood and Kadapakkam (1991), Carey et al. (1993), Houston and James (1996), Johnson (1997) and Krishnaswami et al. (1999).

<sup>3</sup> See Helwege and Liang (1996), Cantillo and Wright (2000), Denis and Mihov (2003) and Hadlock and James (2002).

<sup>4</sup> Due to the absence of accounting data on US firms prior to their equity IPOs, we drop from our sample those firms that enter the public bond market before they undertake their equity IPOs. This condition does not appear to be very restrictive because during our sample period (1972–2002) while 1427 firms issued their first public bond after their equity IPO, only 76 firms did both IPOs in reverse order.

<sup>5</sup> Cai et al.'s (2007) finding that bond IPOs suffer more from underpricing than seasoned public debt offerings supports the idea that bond IPOs are unique. Datta et al.'s (2000) finding that the stock market responds negatively to a firm's announcement of its bond IPO is also consistent with that idea since Eckbo (1986), James (1987) and Shyam-Sunder (1991) find that the stock market does not react to firms' announcement of seasoned bond offers.

<sup>6</sup> Studies of firms' decisions to undertake their equity IPOs include Lee et al. (1991), Lerner (1994), Loughran et al. (1994), Rydqvist and Högholm (1995), Ljungqvist (1995), Rajan and Servaes (1997, 2003), Pagano et al. (1998), Lowry and Schwert (2002) and Lowry (2003).

<sup>7</sup> Yasuda (2005), for example, finds that firms which have relationships with their bond underwriters pay lower underwriting fees, and Schenone (2004) finds that firms which have relationships with their IPO underwriters pay a lower price to access the equity market.

<sup>8</sup> Banks may, for example, "tie" their acquisition of a private placement or participation in a loan syndicate to winning the mandate to underwrite a future public bond issue. See Drucker and Puri (2005) for an analysis of investment banks' tying practices between lending and underwriting of seasoned equity offerings.

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