

Research Report

Corporate Cost of Borrowing: TRACE on Syndicated Loans

TRADITIONALLY, THE COST OF DEBT IS SOLELY SEEN DEPENDENT ON FIRM OR DEBT CHARACTERISTICS. HOWEVER, INCREASED PRICE TRANSPARENCY AS CAN BE FOUND IN THE U.S. CORPORATE BOND MARKET HAS REDUCED CORPORATE BOND YIELDS. THE OBJECTIVE OF THIS WORK IS TO MEASURE THE SPILL-OVER EFFECT OF INCREASED PRICE TRANSPARENCY IN CORPORATE BONDS ON THE COST OF CORPORATE BORROWING OF SYNDICATED LOANS BY MAKING USE OF A NATURAL EXPERIMENT, I.E., THE INTRODUCTION OF THE TRACE SYSTEM FOR BONDS.

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Introduction

Does an increase in price transparency in one corporate financing source (i.e., public bonds) have an impact on the cost of corporate borrowing of another financing source (i.e., syndicated loans)? This is an important question as corporate bonds and syndicated loans are seen as close substitutes and an issuer's cost of capital is affected by an asset's liquidity. A reduction in information asymmetry by increasing transparency in the U.S. corporate bond market has improved liquidity and thereby decreased corporate bond yields (Edwards et al., 2007; Goldstein et al., 2007), which could also influence the cost of borrowing in the syndicated loan market, suggesting a kind of market efficient spill-over effect from bonds to syndicated loans. In order to examine this potential effect on syndicated loan spreads, we make use of a natural experiment with the implementation of the TRACE

system for bonds in July 2002 and by looking at a potential spill-over effect to loans of public non-financial U.S. borrowers between 1987 and 2008. TRACE (Trade Reporting and Compliance Engine) led to mandatory reporting of all over-the-counter trades in the secondary market for corporate bonds. A graphical overview of the introduction of TRACE is given in Figure 1.

Motivation

According to the life cycle theory, a growing firm emerges over its life cycle from borrowing from a single lender (bilateral bank loan) to using multiple lenders (syndicated loans), and afterwards often taps the public bond market (corporate bonds). However, Sufi (2007) finds that the majority (47%) of the syndicated loans in his sample is taken by publicly listed borrowers with a credit rating and therefore most probably with bonds outstanding.

Related to this, Hale and Santos (2008) and Altunbas et al. (2010) argue that the syndicated loan market is the most powerful substitute to the corporate bond market. Even though many studies research the effect of TRACE on corporate bonds, surprisingly no study has so far looked at a possible effect of TRACE on syndicated loans.

Firms might possibly use either public debt or syndicated loans even if they are in the "most transparent" borrower group. However, Faulkender and Petersen (2006) argue that the exist-

tence of a senior unsecured debt rating is almost always associated with public debt outstanding. This suggests that the same firms use syndicated loans as well as public debt.

Data and Methodology

We construct a data set consisting of a longterm syndicated loan database (LPC) covering the period from 1987 to 2008 (see Figure 2) and combine it with information obtained from Bloomberg and the TRACE system. The data set allows distinguishing between firms having syndicated loans and firms with syndicated loans and bonds outstanding. Since the data set offers the issuance date of both loans and bonds, we are able to separate the financing activities of the firms according to the three different implementation stages of the TRACE: i) before dissemination (before July 2002), ii) firststage dissemination (July 2002 to September 2004) and iii) complete dissemination (since October 2004).

The effect of the introduction of TRACE on loans is estimated using the conventional Difference-

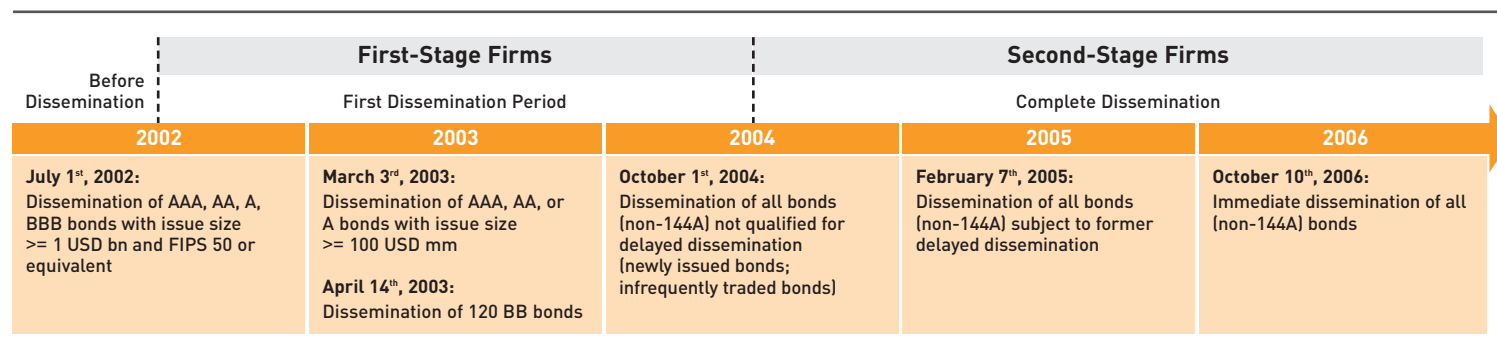


Figure 1: Introduction of TRACE: Timeline

in-Difference (DD) methodology which enables to study the spill-over effect in an analysis that measures the cost of borrowing

- i) for firms with bonds outstanding compared to firms without bonds and
- ii) for bond issuing firms whose bonds are captured by TRACE at two different point of times.

Results: Bond Access

Our results indicate that the implementation of TRACE reduces the loan spreads for firms with bonds outstanding (with a credit rating of either 'A' or 'BBB') but has no effect for firms with no bonds outstanding.

The DD estimate suggests that the implementation of TRACE relatively reduces the loan spread for 'A' rated firms by 8 basis points (bps) compared to firms with no bonds outstanding but with similar Altman Z-Scores. For 'BBB' rated firms, we obtain a DD estimate of -15 bps. Both DD estimates are significant to the 1% level. In a multivariate regression setting the DD estimates of TRACE are also negative (between -12 and -25 bps, dependent on the set-up specification) and significant to the 1% level.

Overall, our findings indicate that TRACE helps firms with bonds outstanding to reduce their corporate cost of borrowing in the syndicated loan market.

Results: TRACE Dissemination

Since TRACE was implemented in two stages, it is an interesting question to study whether the corporate cost of borrowing in the syndicated loan market is different for those firms

	Rated Firm	Not-Rated Firm	All
Before Dissemination Period	8,250	11,891	20,141
First Dissemination Period	2,397	2,395	4,792
Complete Dissemination Period	3,654	3,693	7,347
Total	14,301	17,979	32,280

Figure 2: Syndicated Loan Issuances over the Dissemination Periods

whose bonds were included in the first-stage than for 'second-stage firms'.

For firms rated 'A' or above, we find that the average spreads of syndicated loans to first-stage firms and second-stage firms show no significant difference prior to the implementation of TRACE. For loans issued since October 2004 (complete dissemination) the spreads are also close to each other for the two groups (30 bps to 28 bps). However, a significant difference (to the 5% level) for the first-dissemination period which spans from July 2002 to September 2004 exists. First-stage firms pay lower spreads for syndicated loans (36 bps) than second-stage firms (44 bps). The results for the average loan spreads for the other two rating categories, namely 'BBB' and non-investment grade rating ('BB' and below), support the findings for 'A' or above rated firms. The multivariate set-up confirms the bivariate findings that firms whose bonds are captured by TRACE from the beginning pay lower spreads compared to firms with bonds not first applicable to TRACE. But after the full implementation of TRACE (since October 2004) this

effect vanishes suggesting that increased transparency in one source of corporate financing beneficially influences the cost of borrowing of another corporate financing alternative.

Conclusion

We can conclude that a positive spill-over effect of TRACE is not only present for firms with bonds compared to firms without bonds, but has also been visible among firms with bonds outstanding. Specifically, the paper contributes to the literature in three important ways.

First, by focusing on the two major corporate financing alternatives, we find evidence that corporate bonds and syndicated loans are not only close substitutes but also impact each other.

Second, our findings provide evidence for market efficiency because since the complete introduction of TRACE in 2004, the difference in loan spreads vanishes as all bond issuers are covered by the TRACE system.

Third, our findings might also offer some implications that are of particular relevance in the

context of the current debate about increasing transparency in the European bond market.

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