Consequences of Regulatory Intervention in the Public Debt Market: Evidence from a Natural Experiment

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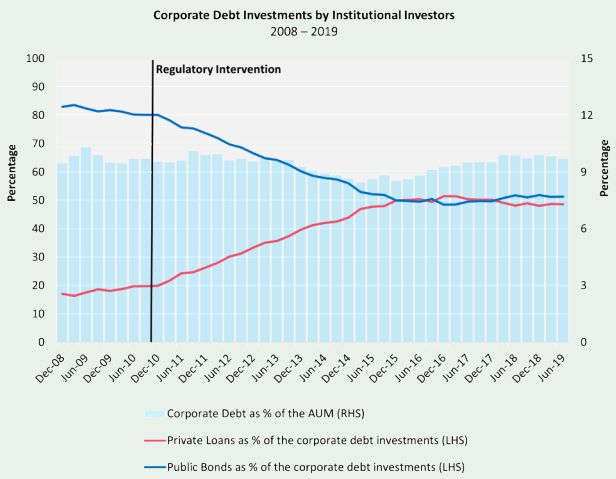
Introduction

In this paper, we examine whether a regulator can force an institutional investor to perform monitoring when there is no incentive to do so. Specifically, we study the effects of a regulation that obligated the institutional investors (pension funds, provident funds, and life insurance) in Israel to perform monitoring when investing in public corporate bonds.

This regulation applies to this type of investor only, while other investors do not have to perform any monitoring acts when investing in the public corporate bonds market. In addition, the regulation only applies to one type of debt instrument: public corporate bonds. In contrast, there is no obligation to perform monitoring when investing in private loans.



From Theory to Practice

Regulatory Intervention
Imposing monitoring costs on the investors in their investments in public debt

Literature Review
Investors have limited incentive to monitor decentralized debt

Data
We analyze investments in both private loans and public bonds

1. The Regulatory Intervention

In September 2010, the final guidelines of the regulatory committe were published. The Committee was established following the growth of the non-government bond market and the Global Financial Crisis (GFC), which turned the spotlight on significant weaknesses in the corporate bond investment process followed by institutional investors.
The Committee discussed the need for setting professional standards and tools to be used by institutional investors in reviewing the quality of public debt market borrowers, and suggest two main guidelines:

- Oblige the institutional investors to perform an analysis when investing in bonds.
- Oblige investments only in bonds that include conditions and contractual obligations

The guidelines only apply to public corporate bonds (and not to private loans).

2. Literature Review

The academic literature contains a great deal of evidence showing that the concentration of debt investor composition increases their incentives to monitor that debt (Diamond 1984; Fama 1985; R. G. Rajan 1992; Focarelli, Pozzolo, and Casolaro 2008).

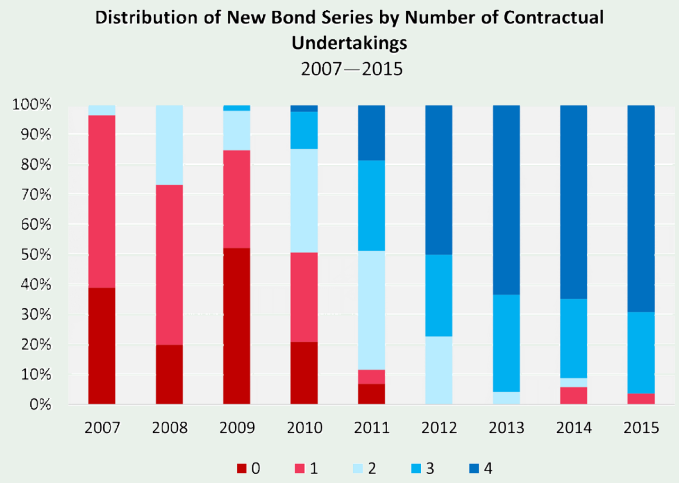
3. Data

This study focuses on data from two types of debt instruments: (1) private loans; and (2) public corporate bonds. Due to the addition of financial covenants and contractual undertakings to deeds of trust, public bonds were directly affected. Loans, on the other hand, were probably indirectly affected by the shift in demand shown by institutional investors after the regulation implementation.
we analyze data from 547 loans that were placed by Israeli institutional investors in the period 2008–2013, and 476 bond series issued on the Tel Aviv Stock Exchange.

The Effect of the Intervention on the Bond Market

Following the implementation of the Committee's guidelines, the new bond series included a large number of contractual undertakings and covenants compared with bond series that were issued prior to the implementation of the guidelines.

The new bond series incorporate numerous contractual undertakings and financial covenants that must be closely monitored at the time of the initial investment as well as continuously throughout the period of holding the bonds, which involves significant monitoring costs.



These contractual undertakings include four aspects: cross-insolvency, change in activity / merger, control change, and rating change/discontinuation.

Methodology

The period 2008–2013 can be divided into two sub-periods: the sub-period prior to the Committee's guidelines (the Pre period, 2008–2010), and the sub-period after publication (the Post period, 2010 – 2013). we can utilize this setup in order to use the Difference-in-Differences (DID) methodology, in order to assess the variations in private loan yield spreads in comparison to tradeable bond yield spreads before and after the Committee's guidelineswere implemented.

We attribute changes in the yield spreads of private loans in comparison to tradeable bonds to institutional investors' changes in demand for private loans as their demand for tradeable bonds declined.

The main estimation issue is the fact that the regulation affected both the public bonds and the private loans. When trying to address this problem it is important to mention that the guidelines did not apply to the expansion of existing series but only to new bond series.

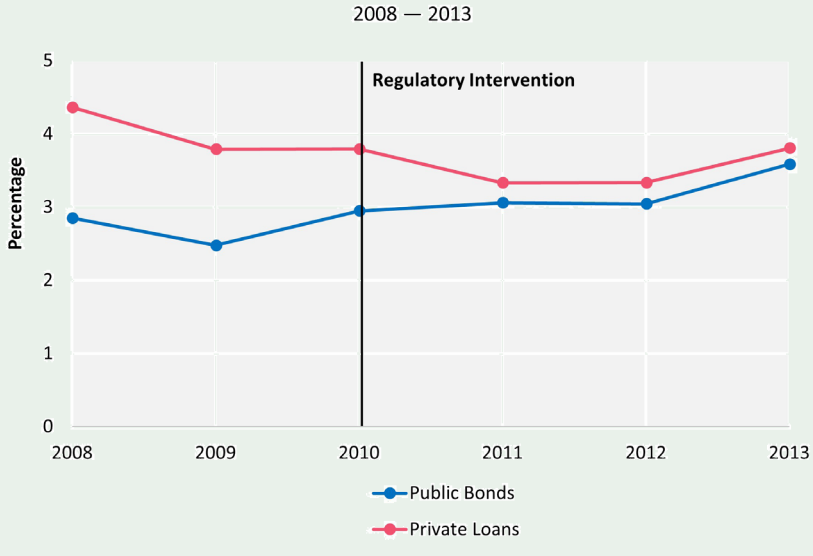
Results

We estimate the yield spreads of private loans and public bonds using a DID methodology. We control for the sector, rating, and time (the quarter in which the loan was provided/the bond was issued), which are supposed to control the risk and time factors. Additionally, we control the characteristics of the loan or bond series issued, which include the amount (volume), time to maturity in years, and a dummy variable for indexation. We also include a dummy variable which takes the value of one for the Post-commitee period and zero for the Pre-commitee period, a dummy variable which take the value of one for loans and zero for bonds, and the interaction between these variables.

The DID estimated equation is:

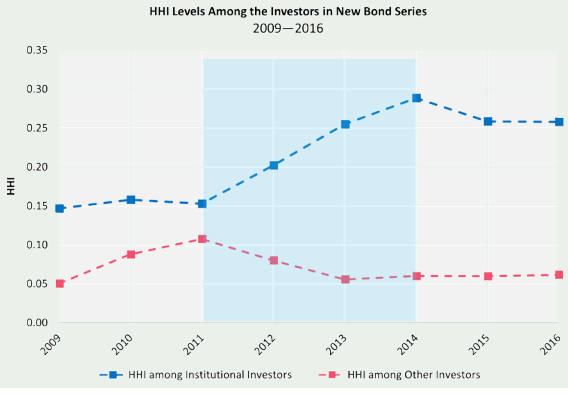
$$Y_{i,t} = \beta_0 + \beta_1 Loan + \beta_2 Post + \beta_3 Loan \times Post + \beta_4 Sector + \beta_5 Time + \beta_6 Rating + \beta_7 Volume + \beta_8 Index + \beta_9 Maturity + \epsilon_{i,t}$$

There is a decrease of about 25 percent in loan yield spread following the implementation of the Committee's guidelines:



Further Analysis

Another phenomenon that underscores the effect of the considerable monitoring costs following the commitee is the increase in new bond issuance concentration (almost doubled) among institutional investors. It could be another evidence for the effect of the regulatory intervention on the institional investors preferences.



Conclusion

Our key finding is that implementation of the commitee guidlines brought about a statistically and economically significant decrease in the yield spread differences between the two types of corporate debt instruments. We attribute the decrease in yield spread differences to institutional investors' growing demand for private loans as their demands for public bonds declined.

The fact that the Committee's guidelines caused institutional investors to incur significant monitoring costs in a decentralized debt market led them to redirect investments to the much more concentrated loan market, in which the institutional investor is generally the single lender.

We conclude that guidelines supposed to improve the bond market quality caused unintended consequences in the corporate debt and, crucially, in the institutional investors' preferences, since monitoring cannot be forced when there is no economic incentive to direct efforts in such a manner.

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