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Relative default rates on corporate loans and bonds ☆

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Abstract

We use two alternative matched-set methodologies to examine for differences in loan and bond default rates among US non-financial corporate issuers. Under both methodologies, the data indicate that loan default rates are roughly 20% lower than the bond default rates due to issuers that default on their bonds but avoid bankruptcy and avoid defaulting on their loans. For a small number of European issuers, the data suggest a similar reduction in loan default rates relative to bond default rates. However, the European results differ qualitatively from the US results, due likely to differences in US and European bankruptcy regimes, as well as the larger role of bank debt on most European issuers' balance sheets. These results have important implications for investors, bank supervisors, and rating agencies that assess the relative expected credit losses on loans versus bonds.

JEL classification: G21; G33; G3
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1. Introduction

From an investor's perspective, an attractive feature of bank loans is their high expected recovery rates relative to the recovery rates for public bonds, which are usually more junior in the capital structure and oftentimes unsecured. Differences between bond and loan recoveries have been well documented in previous studies.[3]

In contrast to the significant attention paid to recovery rates, however, little attention has been paid to the probability of default for bank loans, either in defining what constitutes default or in measuring its magnitude relative to bond default rates. Any evidence of differentials in loan and bond default rates has important implications for bank regulators, investors, and rating agencies assessing expected credit losses on loans versus bonds.

Implicit in the lack of attention paid to default rates on loans is the view that an issuer defaults on all of its debt when it defaults, which is generally true for default due to bankruptcy. However, issuers often selectively default on their debt without filing for bankruptcy.[4] If non-bankruptcy defaulters default on their bonds at significantly higher rates than they default on their loans, then the overall default rate for loans will be lower than the overall default rate for bonds. Indeed, if there is a divergence between loan and bond default rates, it arises due to differential default rates among non-bankruptcy defaulters.[5]

Altman and Suggitt (2000) is the only other study we are aware of that examines loan default rates relative to bond default rates. They use a mortality rate framework stratified by credit grade over the 1991–1996 period, finding evidence that, by credit grade, loan default rates are higher than bond default rates. In this study, we use two alternative methodologies to examine for differences in loan and bond default rates. First, we examine Moody's data to calculate trailing 12-month and cumulative loan and bond default rates for speculative grade issuers with both rated loans and bonds outstanding, as well as for a sample of all speculative grade issuers. Second, we use a case study approach to examine relative default rates on loans and bonds of the same issuer for non-financial corporate issuers defaulting on bonds but not filing for bankruptcy. This case study approach differs from Altman and Suggitt (2000) in that it entails a matched-issuer sample whereby we examine bond defaulters that also had loans outstanding at the time of the bond default. In the case-study approach, we focus exclusively on bond defaulters because issuers with both bonds and loans outstanding almost never default on their loans without eventually defaulting on their bonds. An important difference between the samples used in our two approaches is that the case study sample includes both rated and unrated loans, while

[3] See Emery (2004) and Gupton (2000).

[4] Non-bankrupt defaulters account for approximately 25% and 23% of total US non-financial corporate bond defaults in Moody's default database since 1970 and 1995, respectively. See Altman and Bana (2003) for a discussion of the lags from time of default to bankruptcy for defaulters that *do* enter bankruptcy.

[5] However, bankruptcy courts will occasionally allow outstanding well-secured loans to be serviced during bankruptcy.