Upcoming Posts

Resolution of Failed Banks

Mixing and Matching Collateral in Dealer Banks

Measuring Global Bank Complexity

Evolution in Bank Complexity

The Growth of Murky Finance

Useful Links

Data release dates

Return to Liberty Street Economics Home Page

March 26, 2014

Evidence from the Bond Market on Banks' "Too-Big-to-Fail" Subsidy

João A. C. Santos

This post is the third in a series of twelve Liberty Street Economics *posts on Large and Complex Banks.*

Yesterday's post presented evidence on a possible upside of very large banks, namely, lower costs. In today's post, we focus on a possible downside, that is, whether investors in the primary bond market "discount" risk when they invest in bonds of the too-big-to-fail banks.

The idea that some firms are too big to fail seems to have first appeared in connection with the financial difficulties that Lockheed Corporation ran into in 1975. However, it was the demise of the Continental Illinois Bank in 1984 that provided solid supporting evidence for that idea. Continental Illinois, which was the seventh-largest bank by deposits, experienced deposit runs following news that it had incurred significant losses in its loan portfolio. Concerns that a failure of Continental Illinois would have significant adverse effects on other banks that had deposits with it led regulators to take the unprecedented move of assuring all of Continental's depositors—large and small—that their money was fully protected. Subsequently, during the Congressional hearings on Continental Illinois, the Comptroller of the Currency indicated that the eleven largest banks in the United States were too big to fail.

The possibility that some banks are too big to fail has far-reaching implications. If investors believe certain banks are too big to fail, they'll discount risk when providing them with funding, therefore encouraging these banks to take greater risks. Additionally, lower financing costs will induce large banks to behave more aggressively, decreasing charter values for competing banks and pushing them toward higher risk taking.

That possibility has triggered a large body of research. Researchers have attempted to detect evidence that market participants believe large banks are too big to fail by studying such things as bond spreads, deposit interest rates, credit-default-swap spreads, rating agencies' support ratings, and bank merger premiums. Several studies in this literature find evidence supporting the idea that large banks are too big to fail and receive a funding subsidy as a result.

In my investigation, I focus on the primary bond market, but I take a different approach to the existing studies that have looked for evidence of a too-big-to-fail subsidy in bond spreads. I test whether investors perceive the largest banks to be too big to fail by investigating whether these banks benefit from a larger cost advantage (relative to their smaller peers) when compared to the similar cost advantage that the largest firms in other sectors of activity may also enjoy when they raise funding in the bond market.

I use data on domestic bond issues over the 1985-2009 period and drop bonds with unique features (floating-rate bonds, callable bonds, and convertible bonds), as these may affect their pricing, and focus on spreads computed over a Treasury with the same maturity of the bond. I find that the top five banks by assets pay on average 406 basis points below

[FRED (Federal Reserve Economic Data)]

[Economics Round Table]

[Macro Blog]

[Glossary of Economics Terms]

[OECD Insights]

[World Bank/All about Finance]

the smaller banks' bond spreads, after controlling for bond characteristics, including the credit rating, maturity and amount of issue, and the overall conditions in the economy at the time of issue.

When I compare the largest banks' discount with the discount that the largest nonbank financial institutions and the largest nonfinancial corporations enjoy in the bond market, I find that the largest banks benefit from a significantly larger discount. The largest banks that issue bonds rated double-A and single-A benefit from a discount (relative to their smaller peers) that is larger by 92 and 16 basis points, respectively, than the discount that the largest nonbank financials that issue bonds with those same ratings enjoy (relative to their smaller peers), though the difference is only statistically significant in the former case. When compared to the largest nonfinancial corporations, the largest banks that issue bonds rated double-A and single-A benefit from an additional discount of 53 and 50 basis points, respectively, though only the latter difference is statistically significant.

The evidence that the largest banks benefit from a larger funding advantage than do the largest nonbank financial institutions as well as the largest nonfinancial corporations suggests that investors view the largest banks as being more likely to be rescued if they get into financial difficulties. These insights appear to be robust. However, since the sample ends in 2009, my findings don't reflect any changes in bond investors' expectations resulting from some of the interventions that occurred during the financial crisis or from the passage of the Dodd-Frank Act in 2010.

Disclaimer
The views expressed in this post are those of the authors and do not necessarily reflect the position of the Federal Reserve Bank of New York or the Federal Reserve System. Any errors or omissions are the responsibility of the authors.