Figure 3.14. Debt Pricing under Depositor Preference and Asset Encumbrance
(Spread over risk-free rate; basis points)

Asset Volatility = 10 Percent; Ratio of Subordinated Debt to Total Assets = 2 Percent

1. Equity/Total Assets = 5 Percent

2. Equity/Total Assets = 10 Percent

3. Equity/Total Assets = 15 Percent

4. Equity/Total Assets = 5 Percent, European Banks

5. Equity/Total Assets = 10 Percent

6. Equity/Total Assets = 15 Percent

Source: IMF staff estimates.
Notes: “Preferred creditors” may include secured debt, preferred deposits, or both. The lines for “senior unsecured” show yield for holders of senior unsecured debt when they have lower priority than “preferred creditors.” The lines for “senior unsecured, pari passu” show yields for senior unsecured debt (and for preferred creditors) when it is ranked the same as for preferred creditors.
Assumptions: Equity-to-total-asset ratio for European banks is about 5 percent (Figure 3.1), and the subordinated debt ratio is about 2 to 3 percent. A 10 percent equity-to-asset ratio roughly corresponds to the Basel III CET1 requirement, with maximum possible buffers and 70 percent risk-weighted-assets-to-total-asset ratio (e.g., U.S. and emerging market bank levels). The 15 percent corresponds to the proposal by Admati and Hellwig (2013). The asset volatility assumption is based on the estimate by Moody’s KMV for global systemically important banks (January 2005—June 2013), with 10 (4) percent as the highest (median) across time and banks. The average for May 2013 is 4.2 percent. For large European banks, secured debt (assessing repos on a net basis) and deposits average 17 percent and 48 percent of the assets, respectively, and 24 to 70 percent of the deposits are insured (Table 3.5).