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The Impact of Maturity Financing Choices Made by Primary Bond Dealers on Repo Market Rates

Abstract

Testing of the expectation hypothesis (EH) for very short interest rates has provided mixed results. My paper seeks to reconcile conflicting evidence on the EH for the US repo market by exploiting the fact that repo rates are affected by the demand/supply of bonds provided as collateral against repo agreements. My empirical investigation is organized around a theoretical model formulated by Duffie (1996) and Krishnamurthy (2002) on the relative "specialness" of bonds. This model demonstrates how variation in bond prices is related to variation in repo rates on collateralized loans against bonds. I hypothesize that this mechanism also works across different maturities of repo contracts and can explain variation in term repo rates relative to overnight rates. Using NY Fed data, I construct a factor measuring primary dealers' net financing in the overnight repo segment relative to their financing in the term repo segment and demonstrate that this variable was a significant forecaster of the repo market excess returns in the 2001-2008 period. The finding is robust to the inclusion of a Cochrane-Piazzesi factor, change in fed funds futures prices and a measure of dealers' overbidding at Fed's repo auctions.