Who Makes On-the-Run Treasuries Special?

AFA 2006 Boston Meetings Paper

Posted: 22 Mar 2005

Jeremy Graveline (https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=1227490)
University of Minnesota - Carlson School of Management

Matthew R. McBrady (https://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=388892)
University of Virginia - Darden School of Business

Date Written: February 10, 2005

Abstract

In this paper, we identify and empirically evaluate an alternative explanation for the liquidity premiums observed for on-the-run Treasuries. Existing theoretical and empirical analyses argue these premiums are driven by buy-and-hold investors who directly value the additional liquidity that these extremely liquid securities provide. We contrast this cash market explanation with a somewhat counter-intuitive alternative, rooted in the repo markets. According to the alternative explanation we propose, short-sellers rather than buy-and-hold investors value the superior liquidity of on-the-run Treasuries. In constructing their positions, they drive up repo market specials and indirectly generate the cash market premiums we observe.

To evaluate these alternative hypotheses, we run a series of regressions with the overnight repo special for on-the-run Treasuries as the dependent variable. For demand from buy-and-hold investors to own liquid securities, we include two basic proxies in our panel regressions: the CP/Tbill spread that Krishnamurthy (2002) investigates and the REFCORP/Treasury examined by Longstaff (2004). We also include two proxies to capture intermediaries' need to hedge the interest rate risk of their inventories of securities. We assume hedging activity increases with their issuance of underwritten fixed-rate debt, and with overall interest rate volatility.

We find strong and consistent evidence that these proxies for hedging activity are both economically and statistically significant determinants of overnight repo specials. However, we find much weaker evidence that that our proxies for investors' demand to own liquid securities explains the observed premiums. These results cast into doubt previous assertions that simple investor-driven liquidity premiums explain the higher repo specials and lower yields observed for on-the-run Treasuries. The yield spread between on-the-run and off-the-run Treasuries is often believed to reflect investors' demand to own these liquid securities. However, our results suggest that one must exercise caution when interpeting changes in the on-/off-the-run yield spread since we find that they are often driven by an increase in demand to short-sell the on-the-run Treasury, rather than demand to own it.

Download This Paper (Delivery.cfm/SSRN_ID687495_code348862.pdf?abstractid=687495&mirid=1)

Open PDF in Browser (Delivery.cfm/SSRN_ID687495_code348862.pdf?abstractid=687495&mirid=1&type=2)