A Note on Jumps and Price Discovery in the US Treasury Market

Abstract:

We detect and estimate jumps in the US Treasury 2-, 5-, 10- and 30-year bonds both on a daily basis, by using the standard Barndorff-Nielsen and Shephard (2006) procedure, as well as the Lee and Mykland (2008) test, corrected for periodicity in the local volatility estimates. We find that bonds jump and co-jump mostly as a result of macroeconomic news announcements, which is in line with other empirical literature. We examine the price discovery process around jump times. We find that orderflow information preceding jumps is informative on the future jump. Moreover, we show that some jumps are caused by illiquidity on sell side.