

Abstract

The main focus of the thesis is on jumps and co-jumps and their influence on the term structure of the U.S. Treasury bond futures contracts. Using high frequency data I am able to quantify to which extent co-jumps affect the correlation between bond futures pairs with different maturities which is not common in the literature. In order to separate the price process into continuous and discontinuous components represented by jumps and to precisely localize significant co-jumps a new wavelet-based estimator is used for the analyses. Furthermore, I am studying the co-jump behavior in response to scheduled macroeconomic news announcements. Empirical findings reveal strong influence of co-jumps to the correlation structure of bond futures across all maturity pairs as well as a significant link between Federal Open Market Committee news announcements and higher probability of co-jump occurrence.