

Abstract

This master thesis concentrates on the influence of liquidity measures on the prediction of volatility and given the magic triangle phenomena subsequently on the expected return. Liquidity measures Amihud Illiquidity, Amivest Liquidity and Roll adjusted for high frequency data have been utilized. Dataset used for the modeling was consisting of 98 shares that were traded on S&P 100. The time range was from 1st January 2013 to 31st December 2014. We have found out that the liquidity truly enters into the return-volatility relationship and influences these variables - the magic triangle interacts. However, contrary to our hypothesis, the model shows up that lower liquidity signifies lower realized risk. This inference has been suggested by all three models (3SLS, 2SLS and OLS). Furthermore, we have used the realized variance and bi-power variation to separate the jump. Our second hypothesis that lower liquidity signifies higher frequency of jumps was confirmed only for one of two liquidity proxies (Roll) included in the resulting logit FE model.

Keywords liquidity, risk, volatility, expected return, magic triangle, price jumps, realized variance, bi-power variation, three-stage least squares model, logit, high-frequency data, S&P 100

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