

Abstract

In this paper, we test the hypothesis that the introduction of Taiwan Top 50 Tracker Fund (TTT) would impact the market liquidity of its underlying stocks. We address this issue by adopting several volume-based and price-based liquidity measures to present the multi-dimension of liquidity. Our empirical results show that after the introduction of TTT, the standardized trading volume decreases and the market becomes more volatile for the underlying stocks. Both the quoted spread and the effective spread widen in the post-introduction period. These findings suggest deterioration of market liquidity for the underlying stocks. We then further follow Lin et al. (1995) to decompose the effective spread to examine the changes in spread components. We find a significant increase in the adverse selection component in contrast to a slight decline in the order processing cost. Overall, we find evidence that the liquidity of the underlying stocks tends to deteriorate after the introduction of TTT primarily because there is an increase in the cost of informed trading. Our finding is consistent with the prediction of Subrahmanyam (1991) where the migration of liquidity traders to the basket securities raises the portion of informed traders in the market of underlying stocks and tends to increase the adverse selection risk and reduce the market liquidity of the underlying stocks.