Market Microstructure of Japanese ETF Market and Investors Behavior

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Abstract

Japanese ETF market differs from U.S. and European ETF markets in that indicative NAVs, market makers with the affirmative obligation to provide liquidity, and ETF derivatives are not available. This paper investigates the market liquidity and price formation in Japanese ETF market with special attention to its unique market microstructure. We also examine the changing strategies of both large and small traders over the trading day. Our empirical analyses show that many ETFs have low market liquidity and demonstrate large intraday deviation from net asset value, which suggests that the arbitrage mechanisms through in-kind transactions and/or other related markets do not work efficiently. Intraday trading patterns in the ETF market are similar to those in Japanese equity market but it shows a peculiar pattern during 9:00am to 9:30am; during the period, (1) large sell orders and market orders are frequently used, and (2) deviations from net asset value tend to be large. We also find that the trading pattern of large orders differs from that of small orders. Small orders are less sensitive to deviations that reflect arbitrage opportunities than large orders, which is consistent with the view that there is information asymmetry about price and order flow between large and small investors.

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