DID THE ETF ENHANCE ARBITRAGE BETWEEN CASH AND FUTURES OF THE NIKKEI 225?

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〈SUMMARY〉

This paper examines how the informational efficiency of the Japanese stock markets changed with the introduction of ETFs (Exchange-Traded Funds) by looking at the arbitrage relationships between cash and futures of the Nikkei225. This paper is unique in that it uses tick data, which enables me to measure the degree of arbitrage by four indexes: 1) the frequency and 2) the size of the deviations from non-arbitrage condition, which reflects the magnitude of arbitrage opportunities, 3) the frequency of arbitrage transactions as a measure of the intensity of arbitrage activities and 4) the time during a deviation from non-arbitrage condition for an indicator of the achieved informational efficiency. I found that the frequency and the size of the deviations as well as the frequency of arbitrage transactions increased significantly. However, the deviation time did not change. These results suggest that while arbitrage opportunities increased, the intensified arbitrage activities balanced out it, resulting in the invariant time of deviation.

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