The Impact of the Federal Reserve's Interest Rate Target Announcement on Stock Prices: A Closer Look at How the Market Impounds New Information

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ABSTRACT

The Federal Reserve announces its new interest rate target while the stock market is open, at precisely 2:15 P.M. eight times a year. In the Efficient Markets model, an information shock is impounded in prices immediately and accurately as soon as it becomes public knowledge, and only the unanticipated portion moves prices. Responding accurately to news requires investors to judge how much other investors have been surprised and how their investment decisions will be affected, so how the market responds to the news generates additional information to be digested and acted upon. This suggests that the full process of returning to equilibrium after an information event can not be instantaneous. In this paper, we explore the "informational microstructure" of the stock market around Fed funds target announcements by examining the market's risk neutral probability density for future stock prices, that we extract from real-time option prices using a non-model dependent procedure. Our results show that the market's adjustment to the news continues well beyond the initial information release.

Keywords: risk neutral density, Fed funds target announcement, efficient markets

JEL Classification: G14, G13, D84