Intraday Information Diffusion on Asymmetric Trading

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Abstract
I develop a theoretical model of information flow to investigate the pre-opening futures predictive power on the spot index returns. This model allows for market to firm information diffusion and incorporates fundamental and myopic traders with categorized information focus. Consequently, the return spillover dynamic is the integration of momentum, reversals, and market uncertainty. This model leads to a theoretical proposition that overnight returns on the futures market will predict next day spot price movements. Meanwhile, high market uncertainty may temporarily cause negative spillover between smaller adjacent periods as reversals outweigh momentum. I validate this finding by analyzing the S&P 500 intraday returns with a modified vector autoregressive model. My results suggest a trading strategy that outperforms the index benchmark.

Keywords: asymmetric trading timeframe, information diffusion, futures predictive power, futures-to-spot return spillover, S&P 500

JEL Codes: G10, G11, G14, G17