

# Information-Driven Volatility

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**Abstract:** Modern asset pricing theory predicts an unambiguously positive relation between volatility and expected returns. Empirically, however, realized volatility often predicts expected returns with a negative sign, as exemplified by the volatility-managed portfolios of Moreira and Muir (2017). We show that information-driven volatility induces negatively correlation between past realized volatility and future volatility and future expected returns. We develop a simple asset pricing model based on this intuition and demonstrate that our model can account for several volatility-related asset pricing puzzles such as the return on volatility managed portfolios, the “variance risk premium” return predictability (Bollerslev, Tauchen, and Zhou (2009)), and the predictability of returns by implied volatility reduction on macroeconomic announcement days.

**Keywords:** Volatility Managed Portfolios, Variance Risk Premium, Macroeconomic Announcements, Generalized Risk Sensitivity

**JEL Code:** D83, D84, G11, G12, G14

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