VIX AMBIGUITY

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Abstract

I propose a new measure of market-based ambiguity about volatility, VIX ambiguity, and show that it conveys information about the price of variance risk. I find that VIX ambiguity is different to VIX volatility, as it is only weakly correlated with the VVIX but embeds superior priced information and predicts the excess returns of S&P 500 straddles, synthetic S&P 500 variance swaps and VIX futures. VIX ambiguity has incremental information after controlling for known indicators inside and outside the VIX term structure, is economically significant, and is inconsistent with standard asset pricing models. A managed S&P 500 short straddle portfolio that changes the exposure to variance risk based on signals from VIX ambiguity generates a significant annualized variance-risk-adjusted alpha of 9%. Robustness checks alleviate concerns that my findings are driven by e.g. the crisis period, extreme observations or option market conditions.

Keywords: VIX, Ambiguity, Variance Risk Premium, Variance Assets, VVIX.
JEL-Classification: G11, G12, G14.

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