Market Returns Dormant in Option Panels

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Abstract:

This study uncovers the relationship between extensive option panels and market returns through a functional predictive regression. Employing our approach on the realized returns of the S&P 500, we achieve remarkable performance in predicting S&P 500 monthly returns, yielding an R^2 of more than four percent for both in-sample and out-of-sample prediction. Additionally, our method proves highly effective in predicting the realized variance of the S&P 500 index and its risk premia. The predictive accuracy of our model surpasses that of established predictors. We find that utilizing the risk-neutral density as a predictor and employing the functional regression approach are indispensable for achieving this level of outperformance.