Accepted Manuscript

Volatility in equity markets and monetary policy uncertainty

Iryna Kaminska, Matt Roberts-Sklar

Please cite this article as: Kaminska I., Roberts-Sklar M., Volatility in equity markets and monetary policy uncertainty. *Journal of Empirical Finance* (2017), https://doi.org/10.1016/j.jempfin.2017.09.008

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Volatility in Equity Markets and Monetary Policy Uncertainty[*]

Iryna Kaminska[†]

Bank of England

Matt Roberts-Sklar[‡]

Bank of England

August 2017

Abstract

Asset pricing models assume the risk-free rate to be a key factor for equity prices. Hence, there should be a strong link between monetary policy rate uncertainty and equity return volatility, both in theory and data. This paper uses regression-based projections for realized variance to examine the relationship between short horizon forecasts of equity variance and proxies for monetary policy uncertainty. By assessing various projection models for UK, US and euro area equity indices, we show that the proxies for monetary policy uncertainty have a significant and positive predictive power for the equity return variance. Adding monetary policy rate uncertainty variables can significantly improve forecasting models for equity variance and volatility at weekly, monthly and even quarterly horizons. The findings imply that market views of short-term interest rate developments may indeed be imbedded in equity prices and their variations.

Keywords: equity indices; monetary policy rate uncertainty; option implied volatility; realized volatility; risk-free interest rates; volatility forecasting

JEL Classification: C22, C52, G12, E52