## Central Bank Density Forecasts and Asset Prices: Do Revisions to Higher-order Moments Matter?\*

Ryan Rholes  $^1$  and Tatevik Sekhposyan  $^2$ 

<sup>1</sup>Texas A&M University<sup>†</sup>
<sup>2</sup>Texas A&M University<sup>‡</sup>

November 18, 2020

## Abstract

This paper considers the Bank of England's density forecasts and its revisions to quantify the effects of information flow on the financial markets. Central banks have increasingly relied on published forecasts to communicate its economic outlook to market participants. Point forecasts and their revisions have been shown to move financial markets. The effects of the higher-order moments, however, have not been investigated thoroughly, and this is primarily due to data limitations. The Bank of England, on the other hand, has been publishing information on its density forecasts since the late 1990s, making it useful for our analysis. Using daily information on the financial markets, we find that the updates of higher moments are at least as important in moving financial markets as are revisions to the first central moment of the density forecasts, making them relevant for the effectiveness of the monetary policy. Information about output matters more than information about inflation, and the effect of information is generally stronger in expansions than contractions. Finally, we see that the consensus forecast, and level of forecast disagreement, among professional forecaster is strongly correlated with updates in higher-order forecast moments.

**Keywords:** density forecasts, forecast revisions, information channel, asset prices, uncertainty, communication, monetary policy

**JEL** codes: C13, C32, C53.

<sup>\*</sup>Acknowledgements: We thank Luba Petersen and Barbara Rossi, as well as seminar and conference participants at the Federal Reserve Bank of San Francisco and 21st IWH-CIREQ-GW Macroeconometric Workshop: "Forecasting and Uncertainty" for valuable comments and discussions.

<sup>&</sup>lt;sup>†</sup>Address: 4228 TAMU, College Station, TX 77843, USA. Email:rar145@tamu.edu.

<sup>&</sup>lt;sup>‡</sup>Address: 4228 TAMU, College Station, TX 77843, USA. Email:tsekhposyan@tamu.edu.