



Shocking Language: Understanding the macroeconomic effects of central bank communication

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On December 16 2015, the US Federal Reserve's Federal Open Market Committee (FOMC) raised interest rates for the first time in nearly 10 years. Markets spent the days and weeks before the FOMC meeting in anticipation of the outcome. But the decision to raise key policy interest rates by 25 basis points was not a surprise and it was not that decision that generated the weeks of anticipation. Instead, it was the statement that the FOMC would release. The signal as to how they, the 19 members of the FOMC, saw the state of the economy and the guidance that they would give on likely future interest rate changes.

While the study of monetary policy has typically focused on the effect of interest rate changes on the economy, since the FOMC first accompanied their decision with a statement in February 1994 central bank communication has emerged as a key tool for central banks in their attempts to influence the economy. In this paper, we acknowledge this multidimensionality of monetary policy and try to examine the effect on markets and the real economy of both changes in the stance of policy as well as the effect of communication. But we also take the multidimensionality a step further. We distinguish between communication about the current state of the economy and communication about the likely path of future interest rates which we call broadly forward guidance.

The major challenge in measuring the effects of communication is that most communication is words which do not, necessarily, lend themselves to quantitative analysis so readily. We overcome this challenge by using novel techniques from computational linguistics to quantify the different dimensions of FOMC communication about monetary policy.

The other challenge, and one that is standard in macroeconomics, is to realize that communication might both affect, and be affected by, the behavior of the economy. This inter-relatedness makes disentangling the effects of communication hard. To overcome this, we use a factor-augmented VAR which takes account of the two-way causation between the variables of interest.



We find that forward guidance seems to have bigger effects than the FOMC's view of the current economic situation, especially on market yields. However, the main effects of monetary policy still come from changes in the stance. As is typically found, most variables about macroeconomic activity are not, over the medium term, driven by any of the dimensions of monetary policy.