

## Is All That Talk Just Noise?

nnouncements by the Federal Reserve regarding its target value for the federal funds rate garner substantial attention from the media and participants in financial markets. Indeed, there is evidence that the "news" in these announcements, or the deviation of the targeted funds rate from market expectations, affects the price of assets traded in various financial markets, most notably those for equities and bonds.

In recent years, however, communication from the Federal Reserve has increasingly included not just policy decisions on where to set the federal funds rate, but also many forms of non-quantitative communication: that is, the written statement released following meetings of the Federal Open Market Committee; testimony by Federal Reserve officials, particularly the Chairman, before Congress; and speeches made by Federal Reserve governors and regional Reserve Bank presidents. I discuss here some evidence regarding whether this large amount of written and verbal communication is also deemed important by market participants for valuing financial assets. This would be the case if buyers and sellers believed that Federal Reserve talk was informative about the direction of future policy, conveying information that should influence market expectations. In addition, market participants may value Federal Reserve talk if they believe it conveys some new information about the state of the economy.

A difficulty in evaluating the market effects of Federal Reserve talk is obtaining a quantitative measure of the content of qualitative communication. One approach is to construct such a measure through a subjective reading of the text. However, this approach may be contaminated by the biases of the researcher and is cumbersome when there is a large amount of text to analyze. In a recent study, Michelle Bligh and Gregory Hess of The Claremont Colleges take a different approach based on "content analysis." Content analysis assesses the prevalence of words in a text that match those in predetermined word lists created by linguists. For example, lists that contain

words that express "optimism" or "pessimism" can be used to characterize the optimistic or pessimistic tone of any piece of text.

Using this approach, Bligh and Hess study the effects of a variety of written and verbal communications by Alan Greenspan, the former Federal Reserve Chairman, over the period 1999-2004. They find that the language used by Chairman Greenspan had significant predictive power for a number of financial variables. In particular, this language was a significant predictor of equity prices as well as short-and long-term interest rates in the days immediately following the communication, with the most sustained effects occurring in Treasury bond yields. Interestingly, all the forms of non-quantitative communication they analyzed, including statements, testimony, and speeches, had some amount of predictive power.

The fact that Federal Reserve talk influences the behavior of financial markets has at least two important and related implications. The first is that written and verbal communication by Chairman Greenspan was taken seriously by the markets over this period. This is no small achievement given that such communication is by its very nature unverifiable and open to interpretation. Second, it suggests that written and verbal communication is an effective tool that the Federal Reserve has at its disposal to convey information to financial markets. The extent of non-quantitative communication and the language used in these communications are likely to be important choices made by Federal Reserve policymakers in the future. Indeed, there is already a widely held perception that the language used in the policy statement released following FOMC meetings under Chairman Ben Bernanke has differed from that used under Chairman Greenspan.

—Jeremy M. Piger

Bligh, Michelle and Hess, Gregory D. "A Quantitative Assessment of the Qualitative Aspects of Chairman Greenspan's Communications." Unpublished manuscript, Claremont McKenna College, 2005.