

# Talking Less and Moving the Market More: Is this the Recipe for Monetary Policy Effectiveness? Evidence from the ECB and the Fed\*

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## Abstract

This paper examines the impact of monetary policy decisions and central banks' announcements on the full spectrum of the American and European yield curve over the sample period January 1999 to June 2006. We find that on monetary policy committee meeting days both the ECB and the Fed can move market rates using either monetary policy or news shocks. However, the Fed is able to move the long-end of the term structure more effectively than the ECB. Moreover, in the period under examination the Fed has been more able to move the European interest rates of all maturities than the ECB to move American rates.

**Keywords:** European Central Bank, US Federal Reserve, central bank communication, monetary policy and news shocks, term structure of interest rates.

**JEL classification:** E52, E58.

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“Demands for absolute, unlimited transparency are met with instinctive approval, and any doubts raised about it are met with emotional resistance. We must therefore explain very carefully why the requirement for absolute, unlimited transparency carries with it insurmountable limits in both theory and practice.”

Issing (2005)

“I do not think that we are mirroring the Fed”.

Duisenberg, Introductory Statement to the press conference – Q&A (8 June 2000)

“I do not comment on the decisions made by other central banks. Now, as far as this central bank is concerned, I do want to emphasise, or rather re-emphasise, that we base our monetary policy decisions on an analysis of both monetary and other economic developments inside and outside the euro area. (...) In other words: we make our own decisions.”

Duisenberg, Introductory Statement to the press conference – Q&A (1 February 2001)

## **Introduction**

What is more effective in the USA and in Europe between central bank's words and deeds in moving asset prices? Is communication by the European Central Bank (henceforth ECB) or the US Federal Reserve (henceforth Fed) more credible? What is the effect of a hawkish ECB announcement on American interest rates? Alternatively, what is the impact of an unexpected Fed policy rate cut on European money market rates? Have these relationships been stable over time? This paper attempts to answer these questions.

The shares of the US and EU economy together represent more than 34 percent (respectively 20% and 14%) of world GDP based on purchasing power parity. So it is entirely clear that the conduct of monetary policy in these two countries may be quantitatively very important to explain asset price movements around the globe, and needs to be closely monitored. The purpose of this paper is to investigate the effect of monetary policy decisions and central banks' announcements on the full spectrum of the American and European yield curve during monetary policy committee meeting days over the sample period January 1999 to June 2006.

The value added of this study to the empirical literature on the effectiveness of central bank communication is three-fold. First, we analyze the importance of the Fed's words as opposed to its monetary policy deeds. Second, we do a comparative study by directly comparing the ability of the ECB and the Fed in affecting the level of their domestic term structure through their press statements released on monetary policy meeting days, after controlling for the monetary policy shock. Third, we investigate the cross-effects,

i.e. the Fed's ability to move European interest rates of all maturities and the corresponding ECB's capacity to move American rates.

Our main findings can be summarized as follows. First, we find several differences between the ECB and the Fed decision-making process in both the frequency of their Board meetings, and number and magnitude of policy rate changes. On the one hand, the ECB Governing Council has met much more often than the Federal Open Market Committee (FOMC). On the other, the Fed has changed its policy rate, the Fed funds rate, more frequently and by relatively larger magnitudes compared to the ECB. Furthermore, we find that the communication policy of the ECB and the Fed is substantially different. The Fed's statements contain fewer words, ranging from one fifth to one twentieth, than the ECB's announcements. However, despite the low number of words, the tone of the Fed's monetary policy stance is fairly unambiguous. This finding suggests that clarity may not be directly related to the length of the announcement, and the details provided therein.

Second, we provide a glossary to interpret the FOMC balance of risks statements, i.e. its announcements regarding the likelihood of a future increase or decrease in the target rate. Moreover, we pin down the surprise component of this announcement, specifically the difference between what the Fed announces with respect to what the market expects the Fed to announce.

Third, we show that the unexpected component of the Fed's words and deeds systematically drives asset prices. In fact, the surprise part of the Fed's monetary policy decisions and statements can explain at least 80% of American money market interest rate dynamics, and around 10% of long-term interest rate changes.

Fourth, in the period under examination the Fed has been more able to move the European interest rates of all maturities than has the ECB to move American rates. This finding could be the result of two competing hypotheses: either financial market participants think that the ECB mimics the Fed or it is simply a consequence of arbitrage, i.e. an effect of the uncovered interest rate parity. We find strong econometric support for the latter possibility.

Fifth, we explicitly test the identification restriction proposed by Gurkaynak et al. (2005), and later used among others by Wongswan (2006) and Brand et al. (2006), that monetary policy and news shocks are orthogonal to each other. We show that both for the ECB and the Fed this assumption is not rejected by the data: the surprise component of the monetary policy decision has been so far uncorrelated to the surprise component of the announcement.

Finally, we carry out a detailed sensitivity analysis of the above results. We find that the regression estimations are robust with respect to the choice of the econometric method used (generated regressor issue), and fairly stable over time. Furthermore, we show that it is really the news shock that explains the change in asset price returns, rather than the face value of the tone of the central banker's announcement.

The rest of the paper is organized as follows. In the next Section, we discuss the measurement of the tone of central bank announcements, and describe the dataset. In Section 3, we estimate the impact of ECB and Fed monetary policy shocks on European and American interest rates of all maturities. Moreover, we measure what the market expects the central bank to announce immediately before the press release. In Section 4, we look at the effects of the news shock, the surprise component of central bank statements, on asset prices. In Section 5, we perform important robustness checks and sensitivity analysis of our econometric results. In Section 6, we discuss the contributions of this study to the empirical literature related to central bank communication and its effects on financial markets. In Section 7, we suggest some important issues left for future research and conclude.

## **Summary and conclusions**

The interpretation of central bankers' statements and actions is of considerable importance to monetary policymakers, financial market participants, and more generally the overall public.

In this paper we examine the different communication policies of the ECB and the Fed, and their impact on financial markets. In particular, we compare the impact of monetary policy decisions and central bank announcements on the full spectrum of the American and European yield curve over the sample period May 1999 – June 2006 and January 1999 – June 2006.

We find that the Fed's announcements about the future path of its policy rate are on average more straightforward to interpret than corresponding ECB declarations. Moreover, they are much shorter and made less frequently.

There is no clear priority among the different objectives that the Fed has to pursue, i.e. price stability, maximum employment and moderate long-term interest rates, and thus it is fairly ambiguous compared to the ECB's mandate where strict priority is assigned to price stability. Moreover, in North America the targets are not quantitatively specified. Despite all this, or alternatively because of this, it turns out that the Fed is more effective than the ECB in moving interest rates of all maturities. Hence, clarity seems not to be a question of the number of words used. On the contrary, conciseness together with a transparent balance-of-risk statement appear to be important tools in enhancing the understanding of central bank declarations.

We show that on monetary policy committee meeting days both the ECB and the Fed can systematically and significantly move market rates by using either the monetary policy or the news shock, i.e. the difference between what the central bank does (or announces) with respect to what the market expects the central bank to do (or announce). For example, the Fed's surprises about its monetary policy

decisions and statements can explain at least 80% of American money market interest rate dynamics, and around 10% of long-term interest rate changes.

The US Fed is able to move the long-end of the term structure more effectively than the ECB. Moreover, the surprise components of Fed's words and deeds drive European interest rates of all maturities, whereas we do not find any effect of ECB's actions and announcements on American interest rates. This ability of the American central bank seems to reside on the larger size of the American financial market compared to the European market, especially in the first years of the EMU, rather than in the ECB's attempt to mimic the Fed's monetary policy, as argued by some commentators (see initial quotations).

We carry out a detailed sensitivity analysis of the above results. We find that the regression estimations are robust with respect to the choice of the econometric method used (generated regressor issue), and fairly stable over time. Furthermore, we show that it is really the news shock that explains the change in asset price returns, rather than the face value of the tone of the central banker's announcement.

Of course, several important issues are not considered in this paper and deserve further study.

In this study as a first step in a broader research agenda we analyse only the effect of the ECB press conference and the release of the Fed statement on market interest rates. However, both central banks use many different communication channels. Among them, it would also be interesting to analyse the impact of the release of the Fed minutes that, similar to the Bank of England communication strategy, are substantially more comprehensive than its monetary policy statement. However, they are usually published with a three week delay: are these releases affecting asset prices too?

The methodological approach applied in this work could be easily applied to study the effectiveness of other central banks' communication policy, such as the Bank of Japan or the Bank of England. Moreover, it would be interesting to analyse the impact of the quantitative announcements of the Reserve Bank of New Zealand<sup>19</sup> on the future level of its future policy rate: are numbers more effective than words?

In this paper we use ECB and Fed statements to explain the change in euro area and American interest rates. What is the impact of central bank announcements on other asset prices, such as global equity indexes and exchange rates?