By influencing market expectations of future interest rates, central bank communications have become a key tool of monetary policy-making. Research by **Carlo Rosa** finds that announcements by the US Federal Reserve move market interest rates significantly more than comparable announcements from the European Central Bank.

Words that work:
comparing the effectiveness of central bank communications

Over the past few years, financial market participants – especially those active in the bond markets – have benefited from increased transparency from central banks about how they set monetary policy. Alongside their interest rate decisions, central banks increasingly publish detailed explanatory documents, such as the Bank of England's quarterly *Inflation Report*.

Central banks have tried to become more transparent about their future monetary policy intentions in part because expectations of future interest rate decisions are priced into today's money markets – and so, in theory at least, communication can be a tool to tighten or loosen policy, as much as actually altering the key policy rate.

Of particular note are central banks' 'balance-of-risk' statements – announcements about the likelihood of a future increase or decrease in the target rate. These are used by market participants to predict the future direction of interest rates.

The fundamental question for central bankers is whether (and to what extent) financial markets react to their announcements over and above any change in the interest rate itself. For example, the statement following the Federal Open Market Committee (FOMC) meeting on 28 January 2004 led to one of the largest reactions in the bond market in the past 15 years: no less than a 25 basis point increase (one quarter of one percentage point) in the five-year Treasury bond rate in the half-hour surrounding the announcement.

Contrary to conventional wisdom, this reaction was spurred by the Fed's words rather than its deeds. As market participants expected, the FOMC did not change its target interest rate. Instead, it was the decision to replace the phrase 'policy accommodation can be maintained for a considerable period' in its accompanying statement with 'the Committee believes it can be patient in removing its policy accommodation' that led market participants to revise upwards their expectations of future interest rates.

Are the words of central bankers always heeded in this way? And are the words of some central banks more effective than others? To answer these questions, my research looks at the communication strategies of the European Central Bank (ECB) and the Fed. I also directly compare the ability of the ECB and the Fed to affect market rates using deeds (changes in the present target rate) or words (balance-of-risk statements).

Figure 1:
The effects of central banks' decisions and announcements on interest rates, 1999-2006

Note: This figure plots the average total effect of the surprise components of central banks' words and deeds on interest rates for the period 1999-2006. The horizontal axis is maturity of interest rates – from three months to 10 years. The vertical axis is interest rates in basis points.

The Fed's words have a much greater effect on market interest rates than those of the ECB

I find that the Fed is much more effective than the ECB at steering market interest rates on bonds of all maturities. Figure 1 provides a graphical comparison of the *average* total effects of central bank words and deeds on interest rates both in Europe and the United States. It is striking to note that overall the Fed is able to move market rates twice as much as the ECB.

I also find that long-term US interest rates react much more strongly to new information from the Fed than the equivalent reaction of European long-term yields to new information in ECB announcements. This discrepancy can be explained in two ways.

One possibility is that the Fed's long-term inflation objective is less explicit than the ECB's objective: the Fed's mandate is to pursue stability of both prices and economic activity while the ECB's mandate assigns overriding importance to price stability. Hence, long-term inflation expectations (and hence interest rates) in the United States may be more sensitive to Fed statements than are those in the euro area. In other words, Fed statements may contain information not only about its future policy intentions but also about its opaque inflation target, which may vary over time.

An alternative explanation might be that Fed statements are more informative than ECB statements, and as a result the former move interest rates in the money markets more than the latter.

My analysis suggests that the greater sensitivity of US long-term yields to central bank communication is intimately related

Figure 2:
Testing central bank transparency: the predictive ability of central bank actions using statements

Note: This figure plots the predictive ability of future policy rates using central bank statements about its future intentions. The horizontal axis is maturity of interest rates – from three months to two years. The vertical axis is the adjusted R2 of the regression.

to the higher informational content of Fed statements compared with those of the ECB rather than to any difference in their institutional mandate. Figure 2 shows that the Fed's announcements predict its future actions more precisely than the corresponding announcements from the ECB.

Both the ECB and the Fed are consistent (they match words with deeds) but there remain some differences in their communication policies. The ECB is fully transparent in the very short run – what it will do in the next month. For example, when the keyword 'strong vigilance' is used, the market understands that the ECB will increase rates at its following Governing Council meeting. The Fed is more transparent in the short and medium run – beyond the next meeting – and this is clear in Figure 2.

There are also notable differences in the word length of communications: the Fed's balance-of-risk statement contains about 220 words on average while the ECB's statement contains 1,163 words (or 4,533 if the 'Questions and Answers' section is also considered). But transparency is not a matter of the number of words. Indeed, the ECB needs to explain the content of its statement during the Questions and Answers. For example, at the press conference on 5 June 2008, the ECB's president Jean-Claude Trichet explained the meaning of the expression 'heightened alertness' (http://www.ecb.int/press/pressconf/2008/html/is080605.en.html).

If central bank words can move domestic market interest rates, then it is likely that these words may affect interest rates in bonds denominated in other currencies as well. I find that since 1999, the Fed has been more able to move European interest rates of all maturities than the ECB to move US rates.

What drives this asymmetric relationship? During the early years of the euro, the ECB's likely conduct of monetary policy was not well known, and financial market participants seemed to use information from the Fed to forecast future ECB behaviour on the assumption that ECB monetary policy would be influenced by Fed policy. Moreover, euro-denominated money and bond markets were much smaller than dollar-denominated fixed income assets. It is not surprising, therefore, that the causal effect comes from the United States to Europe, and not vice versa.

But it is not clear whether the effect of the Fed's behaviour on European interest rates is a simple consequence of global financial integration, or whether financial intermediaries think that the ECB really is going to mimic the Fed's behaviour. My results indicate that the ability of the Fed to move euro- as well as dollar-denominated debt seems to be tied to the predominance of dollar-denominated fixed income assets rather than to an attempt by the ECB to follow the Fed's monetary policy.

It is clear that central banks' words are powerful tools – but some are more powerful than others. My research suggests that the Fed's words are treated as a more accurate guide to future monetary policy than those of the ECB – and so a change in tone by the Fed is more likely to move markets. What's more, the prevalence of dollar-denominated debt means that Fed words even have the capacity to move European interest rates.

> The size of the dollar-denominated debt market means that Fed words can even affect European interest rates

So why does the Fed move the market more than the ECB? The Fed differs from the ECB in at least two respects. The Fed has not only been much more active than the ECB, which could mean that the market understands better what it says and does – a transparency effect. But the Fed also has a different institutional mandate compared to the ECB – the Fed is not 'inflation targeting'.

Theoretical research has shown that under the Fed's mandate, it is optimal to communicate more information to the public than under an inflation targeting regime. But I find empirically that the reason why the market responds more to the Fed's announcements compared with ECB statements is not due to its mandate; rather, it is a pure transparency effect.

This article summarises 'Talking Less and Moving the Market More: Is this the Recipe for Monetary Policy Effectiveness? Evidence from the ECB and the Fed' by Carlo Rosa, CEP Discussion Paper No. 855 (http://cep.lse.ac.uk/pubs/download/dp0855.pdf).

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