Discussion

1.   Stefan Palmqvist

The paper by Ellis Connolly and Marion Kohler is one of the first to analyse and evaluate what types of news drive interest rate futures in a panel of countries, and I credit them for putting together a very interesting data set. Regarding the relative importance of the different driving forces, their main findings can be summarised as:

- domestic and foreign news are the most important driving forces;

- policy surprises play a small role; and

- central bank communication explains almost nothing, and this is true, in particular, for speeches.

While I find the paper interesting, the results provide somewhat of a puzzle. If central bank communication does not affect the predictability of interest rates, why do central banks talk so much? As an example, since 1999 the six members of the Executive Board of Sveriges Riksbank (the central bank of Sweden) gave in combination an average of about 35 speeches per year. On top of that, some speeches are published as press releases, and since 1999 the Riksbank has published about 80 press releases per year on average. Taken together, the speeches and press releases amount to more than two pieces of central bank communication every week of the year. In other words, in reality central banks communicate quite frequently, which seems puzzling in light of the findings by Ellis and Marion. In my discussion I will focus on some methodological issues that may at least partly explain this.

What horizon should we look at?

Ellis and Marion use interest rate futures of different maturities as the dependent variable in their analysis. The benchmark result in the paper is for the interest rate futures four quarters ahead. They note that the results are robust to different contracts, where the longest contract is two years and the shortest contract is one quarter. However, market participants are typically most interested in the very next monetary policy decision. As most countries have monetary policy meetings about 10 times a year, the next decision is typically only 2–4 weeks ahead. If a central bank communicates its views about the next decision, some 2–4 weeks ahead, a one quarter contract may not adequately pick up the effects of the communication.

For central bank communication to be effective, a speech should, of course, also affect interest rate futures with longer maturities than 2–4 weeks. On the other hand, communication may not have any effects at all on the very long horizon, say five years ahead. This is because the best five-year forecast probably is that the economy is back at its steady state. I would, therefore, expect a speech to have a greater impact on interest rate futures with a shorter maturity than on interest rate

futures with longer maturities. Thus, to evaluate the importance of a speech it may be necessary to look at an even shorter horizon than one quarter.

While speeches predominantly are concerned with the very next policy decision, other pieces of central bank communication may regard a somewhat longer period. As an example, inflation reports typically lay out the central bank's view about the outlook for the next 1–2 years. Therefore, an inflation report may affect interest rate futures with longer maturities. However, this is only partially confirmed by the results presented in Figure 5. Monetary policy reports in the US and New Zealand have a greater impact on the longer horizon futures, whereas the effects are more evenly distributed across different horizons in Australia, and in the other three economies the effects decrease with the horizon. There are some institutional differences between the economies that could help explain why monetary policy reports have different effects in the economies studied, and I think it is unfortunate that these institutional differences are not discussed in the paper (more on this below).

When it comes to the speeches, the effects of speeches are only shown for Australia and the panel consisting of all six economies. Thus, further study of the horizon at which different pieces of central bank communication affect the market should be an important area for future research.

Endogeneity

Another methodological issue is the potential endogeneity of central bank communication, especially with regards to speeches. In Sweden, the Executive Board members are constantly informed about what the market expects them to do with the policy rate at the next monetary policy meeting. If their own views differ from what the market expects, they can schedule a speech and 'correct' the market. I am aware of a few instances where this has happened in Sweden, and I suspect that the central banks that Ellis and Marion study follow similar procedures regarding the scheduling of speeches. In other words, the number of speeches may respond to developments in the interest rate futures markets, which can cause problems in the estimations that are conducted in the paper.

Identification

Much of a central bank's communication is about the economic outlook, including what the central bank expects the next CPI or GDP figure to be. Hence, the question is whether the effects of speeches and macroeconomic news can be identified separately. Suppose that a central bank was a 'black box' that did not communicate anything. If nobody knew the objectives of monetary policy or the central bank's framework for setting interest rates, interest rates would be completely unpredictable and no macroeconomic news would enter significantly in Ellis and Marion's estimations. I would argue that it is because central banks are transparent about their objectives, their framework for setting interest rates, and the outlook that the market can interpret what the outcome of a particular CPI or GDP figure implies for future interest rates.

This suggests that it may not be possible to separate the effects of macroeconomic news from the effects of central bank communication.

As all economies studied in the paper have central banks that, to some extent, can be thought of as targeting inflation, it would also be interesting to include some other countries that are not as transparent about their objectives. Does macroeconomic news affect interest futures in a country where the central bank does not communicate its outlook, or is it the combination of communication and macroeconomic news that alter the markets' expectations? I would encourage the use of a broader set of countries to shed some light on this issue.

Measurement errors

In the empirical implementation, the authors incorporate speeches as an explanatory variable measured as a dummy variable. However, as the authors mention, not all speeches are designed to affect market expectations. In other words, speeches that are designed to affect market expectations are measured with errors.

How big of a problem is this? In a standard OLS framework, measurement errors in the explanatory variable do not pose a big problem, as they basically only add more noise to the equation. However, there are reasons to expect that they pose a greater problem in the EGARCH-framework that the authors use. Not only do the measurement errors add variance to the variance equation – the only equation where central bank communication enters – there is also reason to believe that these measurement errors could be serially correlated. As an example, while the total number of speeches by the Riksbank's Executive Board members decreased during 2001–03, the number of speeches on the topic of EMU/euro increased. That EMU/euro became a more frequent topic of speeches was a natural consequence of the Swedish referendum on whether Sweden should join the EMU and adopt the Euro that was held in September 2003. Given the outcome of the referendum, where a strong majority of the Swedish population voted against joining the EMU, there were almost no speeches held on the topic of EMU/euro after the referendum. In this particular example, any speech on the topic of the EMU/euro during this period is an example of a measurement error in the dummy variable for speeches and the gradual increase and sudden stop of speeches on this topic is a clear example of serial correlation.

While the example above refers to the case of Sweden, I suspect that similar examples can be found in the economies studied in the paper. Serially-correlated measurement errors may harm the results in the EGARCH model. One way of fixing the problem is of course to read all speeches and determine which ones have monetary policy content. As the number of speeches in the data set is quite large, reading all speeches to determine which ones have monetary policy content may not be feasible. A simpler way to check the robustness of the results is, therefore, to let a search engine look for certain phrases that may indicate whether the speech is intended to affect market expectations and only use those speeches in the estimations.

In summary, all these methodological issues could very well explain why Ellis and Marion find that central bank communication does not have a significant effect on the markets' expectation of future policy. I think these issues must be addressed before we can conclude that central bank communication does not add to transparency, as measured by the predictability of interest rates. That said, I would also strongly recommend that the authors pursue this line of research and explore further the interplay between the institutional framework and the effectiveness of different channels of communication. As an example, the forecasts in the inflation reports of the different countries are based on different conditioning assumptions. Some are based on a constant interest rate, some are based on the markets' expectations and some are measures of 'optimal policy'. A casual inspection of Table 7 seems to indicate that reports with unconditional forecasts have a greater impact on the longer-horizon futures than reports with constant interest rate forecasts. Another institutional difference is the size of the monetary policy committee. Do speeches have a greater effect if they are given by the single decision-maker than if a speech is given by one of the many members of a committee? These types of institutional differences deserve further exploration in the future.

2.   General Discussion

A common theme in the discussion was how the results of the paper should be interpreted, with a number of participants questioning whether a finding of significance implied that central bank communication had been successful or unsuccessful. The authors responded that the framework used in the paper implied that the results could not distinguish between a central bank that communicates with perfect clarity and a central bank whose communication provides no useful information. Presumably, the strategy and thinking of the former is so well understood that their communication regarding economic developments will have no measurable effect on financial markets; the same would be true, however, of a central bank that says a lot without providing any real sense of its policy framework or how it interprets economic developments. The authors added that the central banks examined in the paper were all construed as having 'best-practice' communication strategies and, as such, if communication had an effect on financial markets, this was likely to be the deliberate intention of the central bank.

There was some discussion of how financial markets perceive central bank communication. One participant suggested that markets generally understand that central banks faced an output and inflation trade-off and, like the markets, have difficulties forecasting inflation and output. The nuances in central bank communication thus become quite important, as market participants might ascertain new insights as to the likely direction of policy. Another participant suggested that one reason why central bank communication seems to have a limited impact could be that markets have developed a good understanding of the central bank's policy reaction function. Hence, when macroeconomic data are released, the interest rate

outlook is evident and there is not much additional information that a central bank, on most occasions, can convey about that outlook.

The role of central bank speeches was also discussed. A number of participants suggested that it was not surprising that speeches had such a limited effect on interest rate volatility. A possible reason for this, stressed by the authors, was that all speeches were contained in the data set, not only speeches that focused on monetary policy considerations. One participant suggested that many speeches were not intended to convey new information to financial markets or to foreshadow the decisions that will be taken by the policy committee. Instead, speeches are often made to reinforce the overall logic or framework of policy to the public and to address their concerns. In a similar vein, another participant suggested that because central banks' speeches were designed to help clarify the monetary policy framework, much of the effect of clear communication will be captured by the response of the markets to macroeconomic news. Another participant suggested that there were difficulties comparing the impact of speeches across countries because of differences in the content and length of speeches and their relationship to other forms of communication. This consideration was also clearly relevant for other forms of central bank communication.

Some participants queried the results for particular countries. One participant noted that markets pay relatively limited attention to the Federal Reserve's report to Congress, given that Chairman Alan Greenspan's testimony to Congress is held on the same day. It was also suggested that there was a case for splitting the speeches by US Federal Reserve officials into speeches by Greenspan and speeches by others, given that Greenspan was the dominant decision-maker. The authors suggested that distinguishing speeches according to their likely importance is a subjective exercise and, in any case, can amount to 'picking the winner', thus making a statistically significant result for speeches not very meaningful. A number of participants questioned the results for New Zealand in Figures 4 and 5, which show the increase in interest rate volatility following parliamentary hearings and the release of monetary policy reports. The authors responded that these results needed to be treated cautiously, as liquidity in NZ markets was relatively low at longer horizons, and there were estimation difficulties as different forms of communication often occur on the same day. The comparatively smaller impact of euro area macroeconomic news on financial markets might reflect the relatively long lag for the release of data and the apparent leaking of official data. Finally, one participant suggested that there was a marked change in the formation of market expectations in Canada following the adoption of fixed action dates for monetary policy decisions in December 2000. The finding that the largest sensitivity is to US news and domestic monetary policy action may thus be affected by the period when interest rate moves were basically unscheduled.