## Monetary Policy Roundtable

On 11 December, the Bank of England and the Centre for Economic Policy Research hosted the ninth Monetary Policy Roundtable. These events provide a forum for economists to discuss key issues relevant to monetary policy in the United Kingdom.<sup>(1)</sup> As with previous Roundtable discussions, participants included a range of economists from private sector financial institutions, academia, public sector bodies and industry associations. There were two discussion topics:

- prospects for the UK housing market, and how important a role it can play in the recovery; and
- companies' pricing behaviours and the persistence of inflation.

This note summarises the main points made by participants.<sup>(2)</sup> The Roundtables are conducted under 'Chatham House Rule' so opinions expressed at the meeting are not attributed to individuals. This summary does not represent the views of the Bank of England, the Monetary Policy Committee (MPC) or the Centre for Economic Policy Research.

## What are the prospects for the UK housing market, and how important a role can it play in the recovery?

House prices in the United Kingdom fell sharply during the financial crisis, although by much less than in some other countries such as the United States and Ireland. The relevance of changes in house prices for consumer spending and the real economy has been keenly debated by central banks and academics. But there remains a lack of consensus on the importance of house prices for the macroeconomy. Moreover, it is unclear at the current juncture whether UK house prices are over or undervalued.

The 'life-cycle' theory of consumption suggests that the direct effect on consumer spending from housing wealth should be small. This theory maintains that consumer spending is determined by households' wealth over their lifetime. House price changes redistribute wealth across households but should not affect the aggregate level of wealth in the economy in any substantive way. But as one speaker highlighted, once the role housing collateral can play in relaxing credit constraints is taken into account, the influence of house prices on the macroeconomy may become significantly more important. For example, higher house prices allow homeowners to borrow more against the value of their property, relaxing credit constraints. Empirical results presented by one of the speakers that tried to capture these types of credit channels in a traditional life-cycle model suggested that the sensitivity of consumption to housing wealth was significant and time varying. These results also suggested that a fall in the house price to income ratio may have amplified the effect of the recent financial crisis through a tightening of credit conditions.

Another speaker emphasised the link between house prices and wider economic stability. Housing equity withdrawal, whereby households borrow money against the value of their home but do not invest the proceeds in the housing stock, had increased substantially in the decade prior to the financial crisis. Based on household-level data, the speaker noted that during this period, housing equity withdrawal had increasingly acted as a financial buffer for households to meet short-term demands on their finances. The speaker suggested that this had increased the credit risk among households least well-placed to bear it. In aggregate, this led to increased risk in the financial system as a whole. The speaker emphasised the need for greater innovation in how house purchases are financed to tackle these problems.

The Roundtable participants also discussed whether UK house prices were currently over or undervalued, reflecting on various factors that might influence the supply of and demand for housing. While there was no consensus, most participants considered house prices likely to be a little overvalued. One speaker pointed to the rise in the house price to earnings ratio as evidence that UK house prices were currently overvalued, while recognising that an alternative interpretation was that the equilibrium level of the house price to earnings ratio may have increased over time. This speaker also pointed to the decline in the level of owner-occupation among younger cohorts and the lack of affordable housing for first-time buyers, numbers of which had been declining since 2000, as evidence that the current level of house prices is not sustainable over the medium term.

This report was prepared by Katie Farrant, Alice Pugh and Sophie Stone of the Monetary Analysis area of the Bank. Roundtables are held twice a year. The next Roundtable is scheduled for Summer 2013.

<sup>(2)</sup> For both this and previous summaries, see www.bankofengland.co.uk/publications/ Pages/other/monetary/roundtable/default.aspx.

Forbearance by lenders during the recent financial crisis might also be preventing UK house prices adjusting to a lower equilibrium level. But some other speakers suggested that house prices might be undervalued given the current low level of interest rates and a view that constraints relating to the supply of housing were unlikely to ease. For example, participants generally thought that there was unlikely to be a substantive increase in housing supply in the near term.

In discussing housing transactions, participants noted that housing demand had been held back by constraints on the availability of credit. For example, mortgage providers were limiting the volume of mortgages available, particularly to first-time buyers, by reducing loan to value ratios. Speakers agreed that high levels of stamp duty and council tax were also affecting demand, especially from lower-income households. In certain regions such as London and the South East, one participant believed house prices may have been inflated by safe-haven capital flows in response to the euro-area crisis. One speaker noted that a rise in nominal interest rates as the economy recovers would increase the cost of mortgage borrowing, so that transactions volumes may rise only slowly.

The Funding for Lending Scheme (FLS) attempts to help ease credit conditions, by allowing lenders to access cheaper funding and incentivising them to increase their lending volumes.<sup>(1)</sup> There were mixed views on how effective this Scheme would be in supporting mortgage lending, although the preliminary evidence on the number of banks and building societies that had signed up to the Scheme was promising and there had been a decline in banks' wholesale funding costs.

One speaker asked whether the Bank could intervene directly in the housing market — for example, in a similar way to the Federal Reserve, which purchases mortgage-backed securities (MBS) as part of its asset purchase programme. In general, speakers considered there to be less scope for such a policy to be effective in the United Kingdom given the small size of the MBS market in the United Kingdom and therefore its potential to influence mortgage rates. And it was unclear why such a policy was needed in addition to the FLS, which was already designed to reduce borrowing rates for households.

In conclusion, most participants agreed that house prices do have a role to play in influencing the real economy. While most participants thought house prices likely to be a little overvalued at the time of the meeting, they did not expect any substantive downward adjustment in house prices in the near term given that the supply of housing was constrained and demand was expected to pick up. But there was considerable uncertainty over how house prices would evolve.

## Companies' pricing behaviours and the persistence of inflation

At the time of the Roundtable discussion, consumer price inflation had fallen significantly from its peak of 5.2% in September 2011. But it had been above the MPC's 2% target since late 2009, averaging 3.3% over the past five years. In the November 2012 *Inflation Report*, the MPC judged that inflation was likely to remain a little above target during 2013, before falling back to around target. But if productivity growth remained exceptionally weak and companies did not respond by adjusting nominal wages commensurately then company cost pressures could intensify. Companies might then respond by pushing through price rises, particularly if expectations of future inflation became less well anchored.

Much of the Roundtable discussion focused on what we can learn from observing companies' price-setting behaviours. One speaker discussed time-dependent models, such as the Calvo (1983) model,<sup>(2)</sup> that try to account for the apparent infrequency with which companies adjust prices, and examined whether the models match data from a Bank of England survey of how companies set prices, conducted between December 2007 and February 2008. The speaker concluded that these models were consistent with the survey result that companies adjust their prices relatively infrequently (around 1-2 times per year). One participant suggested that this may partly reflect 'rational inattention': reviewing prices may be costly for companies and so it was rational for them to be inattentive to relatively modest changes in their circumstances. Nonetheless, it was observed that companies review prices more frequently than they adjust them: the median company in the Bank of England survey reviewed prices twice per year, but only adjusted them once per year.

The micro-level survey data also indicated that the frequency at which companies adjust prices can vary greatly from sector to sector. For example, companies selling goods appear to adjust prices more frequently than companies providing services. It was suggested that this might reflect the greater labour intensity of services, the intuition being that persistence in wage growth may be a factor behind sluggish price adjustment. Empirical evidence was presented that suggested that it takes around two years on average for changes in unit labour costs (ULCs) to filter through to services inflation. And since 2007, the lag between changes in ULCs and services inflation appears to have lengthened further (although the correlation between these series has weakened). By contrast, there was evidence of a speedy pass-through from wholesale to retail food prices, and from Brent oil prices to retail petrol

<sup>(1)</sup> See Churm, R, Leake, J, Radia, A, Srinivasan, S and Whisker, R (2012), 'The Funding for Lending Scheme', Bank of England Quarterly Bulletin, Vol. 52, No. 4, pages 306–20.

<sup>(2)</sup> Calvo, G A (1983), 'Staggered prices in a utility-maximizing framework', Journal of Monetary Economics, Vol. 12(3), pages 383–98.

prices. But the overall implications for inflation persistence of this heterogeneity among sectors' responses to shocks were not clear.

Another speaker examined price-setting behaviour in the retail sector in more depth and argued that companies' responses to cost shocks again varied markedly even within the retail sector. For example, relative to some companies in the sector, the pricing decision-making process for petrol retailers was more straightforward because they focused on pricing just one product — petrol. So changes in wholesale costs were likely to lead to changes in the price of petrol at the pump, usually in a matter of weeks. By contrast, supermarkets, which stock and price thousands of products, may find it more difficult to measure the profitability of any one individual product. So changes in costs may not be passed on as quickly: supermarkets may adopt pricing strategies for particular categories of products, which then interact with an overarching pricing strategy, making a direct mapping between cost changes and prices harder to identify.

Evidence of price-setting heterogeneity between sectors led to a discussion of how changes in the consumer basket may affect CPI inflation. In particular, services now account for a greater share of the CPI basket than they have in the past. If the prices of services are adjusted less frequently than goods prices, then a higher weight on services could increase the persistence of measured CPI inflation. And the degree of inflation persistence could be increased further if companies that set prices infrequently are more likely to be forward looking and take inflation expectations into account when making their pricing decisions.

Participants also discussed whether there was heterogeneity in companies' methods of price discounting. One speaker presented evidence of aggressive price discounting in the retail sector. Another speaker argued that retailers are increasingly relying on promotions to generate sales. Following this observation, some participants expressed concern that methods of discounting that have become popular in particular sectors, such as 'multi-buy' discounts and the use of coupons in the retail sector, may not be captured in the CPI. One participant also commented that a shift in consumer preferences towards lower-quality brands may also not be captured adequately in the CPI. One speaker considered whether the level of spare capacity in the economy — and specifically an estimate of the output gap - may be having less effect on inflation than had been the case in the past. A couple of factors were identified as contributing to this change. First, the increased openness of the UK economy, which meant that the level of spare capacity in the rest of the world was more important in determining UK inflation than in the past. And second, well-anchored inflation expectations, which meant that a larger change in spare capacity was needed to influence inflation. Empirical evidence presented for the United States, euro area and Japan that compared the experience of the 2000s to the 1990s suggested that the *level* of the output gap had become less important in influencing inflation, consistent with (but not sufficient for) the first factor, but that the change in the output gap had become more important.<sup>(1)</sup> It was recognised, however, that output gaps are difficult to measure.

Finally, there was a general discussion on recent movements in inflation expectations. A couple of participants expressed concern that outturns of CPI inflation persistently above the MPC's target may have resulted in inflation expectations becoming less well anchored by monetary policy than in the past. One speaker pointed to Consensus forecasts for CPI inflation in 6–10 years' time, which he noted were almost 3%, and suggested that this raised questions about the MPC's credibility. However, many were unsure whether these expectations of professional forecasters were sufficient to imply that inflation expectations of companies and consumers were necessarily less well anchored than in the past. One speaker argued that higher inflation expectations could also have a beneficial impact on the economy in the short run because they lower the real interest rate, although others noted that this would not be desirable if there were also a more permanent upward shift in inflation expectations.

In conclusion, most participants considered that there was not enough evidence from companies' pricing behaviours to suggest inflation had become inherently more persistent. But the nature of the data meant that it was difficult to assess such risks.

<sup>(1)</sup> The exact periods referred to were 1991 Q1-2000 Q4 and 2001 Q4-2010 Q4.