

Box 5

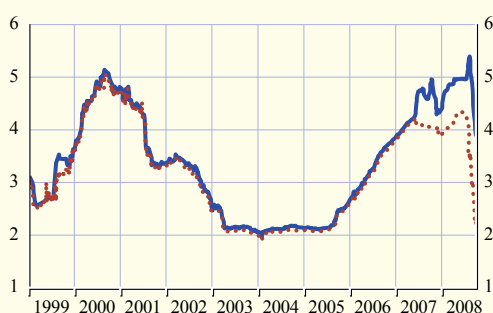
**THE IMPLICATIONS OF THE MONEY MARKET TENSIONS FOR THE PASS-THROUGH
OF MFI INTEREST RATES**

In facing the challenges posed by the ongoing financial crisis, a key question is how tensions in the interbank money market currently influence the financing conditions faced by non-financial corporations and households. Addressing this question is central to understanding how the transmission of monetary policy to the economy as a whole has been affected by the financial turmoil. Against this background, this box examines the extent to which the pass-through of

Chart A Three-month EURIBOR and three-month EONIA swap rate

(percentages per annum; daily data)

— 3-month EURIBOR
 3-month EONIA swap rate

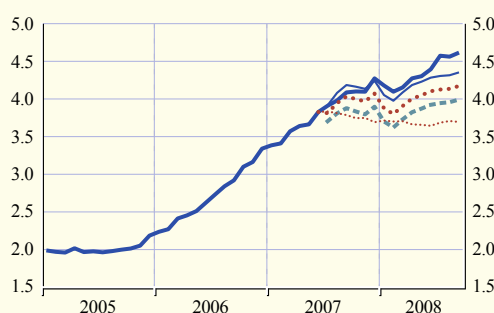


Sources: Reuters and ECB.
 Note: Last observation is 27 November 2008.

Chart B N-step ahead forecast of the short-term time deposit rate

(percentages per annum; monthly data)

— short-term time deposit rate (realised)
 short-term time deposit rate (forecast based on the 3-month EURIBOR)
 - - - - lower bound (forecast based on the 3-month EURIBOR)
 — upper bound (forecast based on the 3-month EURIBOR)
 short-term time deposit rate (forecast based on the EONIA)



Sources: ECB and ECB calculations.
 Note: Last observation is September 2008.

policy rates to short-term MFI interest rates has been affected by the money market tensions observed in 2007 and 2008.

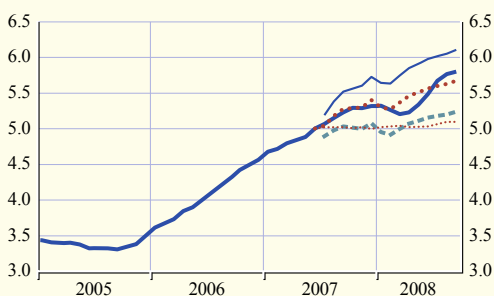
In normal times, the money market plays a central role in the transmission of monetary policy in the euro area. Given the bank-centred structure of the euro area financial system, the marginal cost of funding bank loans (represented by unsecured interbank money market interest rates) is a key determinant of short-term bank loan and deposit rates, and thus of financing conditions. By steering very short-term money market interest rates using its regular monetary policy operations, the ECB is able to influence the term money market rates that in turn determine short-term bank interest rates. However, since the credit market turmoil erupted in mid-2007, the normally close relationship between overnight money market rates – over which monetary policy has some control – and term money market rates has broken down (see Chart A).

These developments thus raise the question as to the extent to which the monetary policy transmission has been affected. Short-term retail bank interest rates are usually priced in relation to the EURIBOR, and mortgage rates are often even indexed to these rates. Hence, given that the relationship between policy rates and term money market rates since the beginning of the financial market tensions has not been the same as in the past, it may be expected that at least retail bank interest rates on existing loan and deposit contracts have mirrored the continuation of the upward trend in term money market rates observed between mid-2007 and September 2008, rather than the stabilisation of the EONIA observed over the same period. As concerns new contracts, it is possible that competitive forces will induce banks over time to index their rates to the EONIA rather than the EURIBOR, thus re-establishing the close link between monetary policy rates and short-term retail interest rates. In a forward-looking perspective, it should also be noted that markets currently expect the spreads between the EURIBOR and the EONIA to narrow somewhat, as indicated by forward EONIA rates and EURIBOR futures.

Chart C N-step ahead forecast of the short-term rate on loans to households for house purchase

(percentages per annum; monthly data)

— short-term rate on loans for house purchase (realised)
 short-term rate on loans for house purchase (forecast based on the 3-month EURIBOR)
 - - - - lower bound (forecast based on the 3-month EURIBOR)
 — upper bound (forecast based on the 3-month EURIBOR)
 short-term rate on loans for house purchase (forecast based on EONIA)

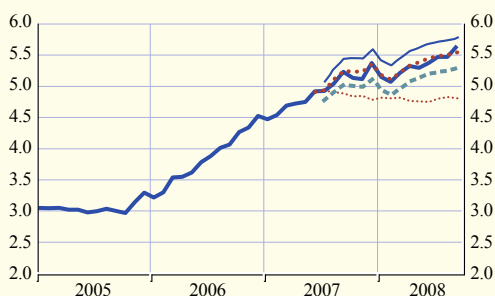


Sources: ECB and ECB calculations.
 Note: Last observation is September 2008.

Chart D N-step ahead forecast of the short-term rate on large-sized loans to non-financial corporations

(percentages per annum; monthly data)

— short-term rate on large-sized corporate loans (realised)
 short-term rate on large-sized corporate loans (forecast based on the 3-month EURIBOR)
 - - - - lower bound (forecast based on the 3-month EURIBOR)
 — upper bound (forecast based on the 3-month EURIBOR)
 short-term rate on large-sized corporate loans (forecast based on the EONIA)



Sources: ECB and ECB calculations.
 Note: Last observation is September 2008.

Whether short-term retail interest rates in the euro area over the past year have followed the EONIA or the EURIBOR more closely can be analysed using a standard vector error-correction model of the bank interest rate pass-through where short-term retail bank lending and deposit rates are regressed against either the EONIA or a term money market rate.¹ Banks are typically found to adjust their retail interest rates more or less fully to changes in corresponding market rates, although the complete pass-through is often not immediate but only gradual and can, depending on the type of product, take from a few months to over a year. Based on an out-of-sample forecast for the period from July 2007 to September 2008, the realised movements in retail bank interest rates are compared with forecasts based on the EONIA and the relevant EURIBOR.²

Looking first at the pass-through of money market rates to short-term time deposit rates, Chart B shows the developments in realised and forecast deposit rates (based on the EONIA and the three-month EURIBOR respectively) since July 2007. It seems clear from the chart that since mid-2007 short-term time deposit rates have tended to follow the term money market rates more closely than the EONIA. It is also worth noting that banks have raised their rates on short-term time deposits by even more than expected on the basis of movements in the three-month EURIBOR, which probably reflects strong competition for deposits over this period as banks scrambled for liquidity.

Turning next to lending rates, Charts C and D illustrate that both short-term mortgage rates and short-term non-financial corporate loan rates have very closely mirrored developments in the three-month EURIBOR since July 2007.

1 The modelling framework and recent results for the euro area are described in G. de Bondt, "Interest rate pass-through: Empirical results for the euro area", *German Economic Review*, Vol. 6 (1), February 2005; and C. Kok Sørensen and T. Werner, "Bank interest rate pass-through in the euro area: A cross-country comparison", ECB Working Paper No 580, 2006.

2 As of the cut-off date, MFI interest rate statistics covered only the period up to September 2008. Hence, the impact of the recent reduction in key ECB interest rates is not reflected in the sample.

Overall, the above evidence suggests that despite the tensions in the unsecured money market and the resulting widening of the EURIBOR-EONIA spread up to end-September 2008, euro area banks so far seem to be continuing to adjust their short-term retail rates to changes in the term money market rates.