

### Box 3

#### A COMPARISON OF RECENT DEVELOPMENTS IN EURO AREA AND US BANK INTEREST RATES

This box compares recent developments in the cost of lending from banks in the euro area and the United States. The analysis focuses on the levels of bank interest rates as well as on their spreads with respect to market rates, both for non-financial corporations and households.<sup>1</sup> In order to enable monetary policy transmission to work effectively, it is important that changes in policy rates influence lending rates charged by banks to households and corporations. This is the so-called interest rate pass-through mechanism. Overall, the empirical evidence suggests that interest rate decisions taken during the recent episode of financial turmoil have been reflected in bank interest rates charged to non-financial corporations both in the euro area and the United States and, albeit to a lesser extent, in those charged to households. Indeed, a weaker pass-through to the household sector has generally been a common feature of the economy.

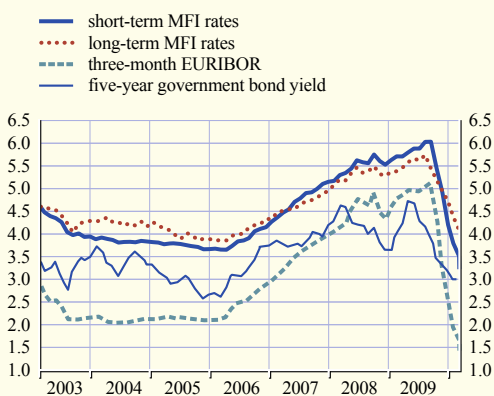
All the charts below depict movements in bank interest rates and market interest rates. Developments in banks' short-term lending rates are generally affected by movements in the three-month EURIBOR in the case of the euro area and the three-month LIBOR in the case of the United States, while banks' long-term lending rates normally reflect movements in government bond yields. Market interest rates since June 2007 have displayed partly different patterns in these economic areas. Between June 2007 and April 2009 (the most recent month for which data on bank interest rates are available), short-term money market rates in the euro area as reflected by the three-month EURIBOR decreased by around 270 basis points, while five-year government bond yields declined by around 160 basis points. The declines observed since October 2008, however, account for most of the overall decrease. In the United States, the three-month LIBOR and the two-year government bond yield declined by approximately 400 basis points (compared with a reduction of 500 basis points in the federal funds rate) since June 2007.

Turning to the components of the cost of bank financing in nominal terms and starting with the euro area, short-term MFI interest rates on loans to non-financial corporations with a floating rate and an initial rate fixation period of up to one year decreased by around 210 basis points between June 2007 and April 2009 (see Chart A). In the same period long-term MFI interest rates on loans to non-financial corporations with an initial rate fixation period of over five years declined

<sup>1</sup> When interpreting the differences in bank interest rates between the euro area and the United States, it is important to keep in mind that the comparison of such data is constrained not only by the differences in the statistical methodology used (such as sampling, definitions and data coverage), but also by the pronounced differences in the financing behaviour of non-financial corporations and households on the two sides of the Atlantic. The euro area has a largely bank-based financial system, with loans to the private sector amounting to 145% of GDP in 2007, while in the United States bank lending to the private sector amounted to 63% of GDP in the same year.

**Chart A MFI interest rates on new loans to non-financial corporations in the euro area and market interest rates**

(percentages per annum; monthly data)

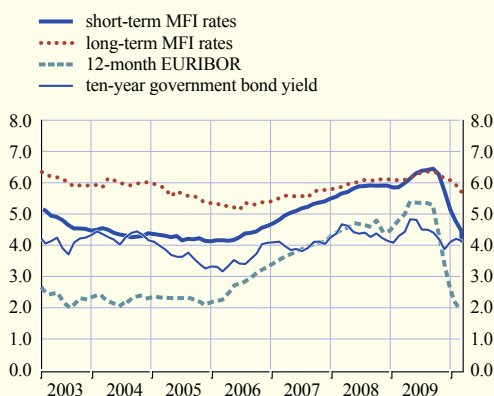


Sources: ECB and Reuters.

Note: The five-year government bond yield is more appropriate for the euro area long-term lending rates.

**Chart B MFI interest rates on new loans to households in the euro area and market interest rates**

(percentages per annum; monthly data)



Sources: ECB and Reuters.

less by 105 basis points. It should be noted, however, that most of this decline was recorded after October 2008 when bank interest rates in the euro area reached their highest level since January 2003. Thus, interest rates on loans declined almost in parallel to the key ECB interest rates.

Most bank interest rates on loans to households for house purchase and consumer credit have also declined albeit to a lesser extent than rates on loans to non-financial corporations. Short-term MFI interest rates on loans to households with a floating rate and an initial rate fixation period of up to one year declined by almost 150 basis points between June 2007 and April 2009 (see Chart B). In the same period long-term MFI interest rates on loans to households with an initial rate fixation period of over five years declined only marginally by 15 basis points.

In the United States, average bank lending rates have declined since the Federal Open Market Committee started reducing its policy rate in September 2007. Since mid-2007 interest rates on commercial and industrial loans have declined by more than 460 basis points for short-term loans<sup>2</sup> and 420 basis points for long-term loans, to stand at around 2% and 3.6% respectively in the first quarter of 2009 (see Chart C).

With regard to mortgage rates in the United States, while the fixed rate on long-term conventional mortgages has declined substantially, interest rates on “jumbo” mortgages (larger loans which are ineligible for a Fannie Mae or Freddie Mac guarantee) have remained at higher levels as investors have retreated from this mortgage market segment since the start of the financial turmoil (see Chart D). Only recently have some declines in jumbo mortgage rates been observed.

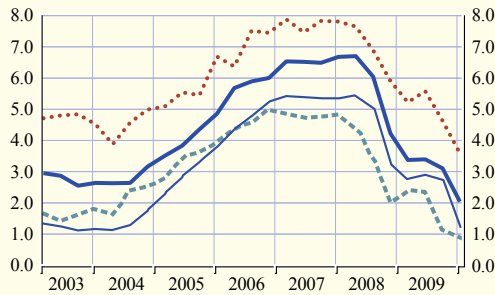
Recent developments in euro area and US bank lending rates and the relative spreads against market rates provide useful evidence on the functioning of the interest rate pass-through mechanism in an environment of low interest rates. The evidence for both economic areas shows a somewhat weaker pass-through for interest rates on loans to households than for those on loans

<sup>2</sup> Short-term interest rates are calculated as the weighted average rate between the following categories: daily, 2 to 30 days, 31 to 365 days.

**Chart C Interest rates on commercial and industrial loans in the United States and market interest rates**

(percentages per annum; quarterly data)

- short-term bank rates
- ..... long-term bank rates
- - - two-year government bond yield
- three-month LIBOR

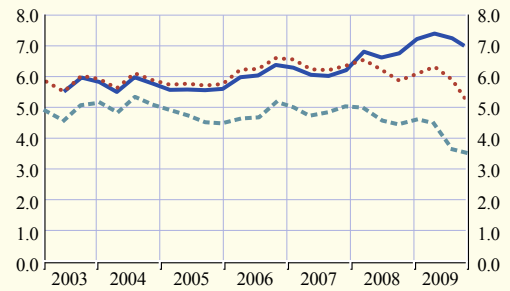


Sources: Federal Reserve Survey of Terms of Business Lending, Haver Analytics and Reuters.  
Notes: Interest rates on commercial and industrial loans made by commercial banks. For the United States, the two-year government bond yield matches better the duration of the loans.

**Chart D Mortgage rates in the United States and market interest rates**

(percentages per annum; quarterly data)

- 30-year jumbo mortgage rates
- ..... 30-year fixed conventional mortgage rates
- - - 30-year Treasury bond yield



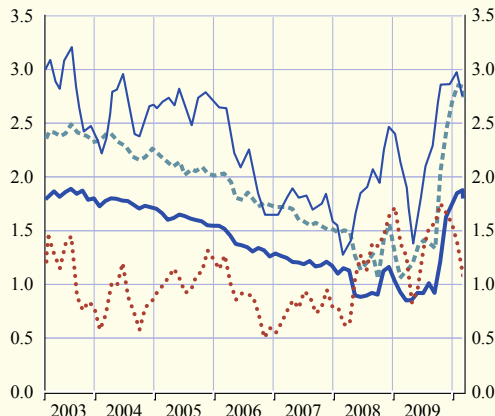
Sources: Primary Mortgage Market Survey, Bankrate.com and Bloomberg.

to non-financial corporations. For example, in the euro area, short-term interest rate spreads for non-financial corporations have increased by around 65 basis points since June 2007, while interest rate spreads for households have increased for both short and long-term lending rates by 125 and 140 basis points respectively (see Chart E).

**Chart E MFI interest rate spreads in the euro area**

(percentages per annum; monthly data)

- short-term, non-financial corporations
- ..... long-term, non-financial corporations
- - - short-term, households
- long-term, households

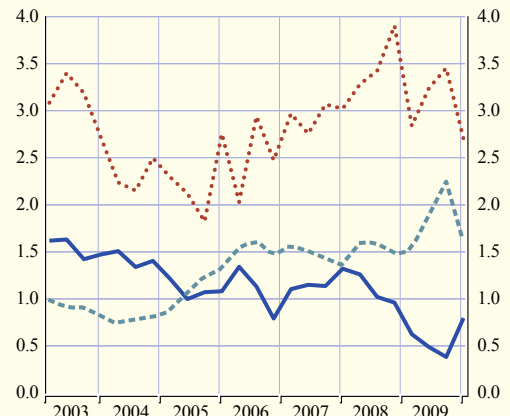


Sources: ECB and Reuters.  
Notes: Short-term spreads are calculated as the difference between bank lending rates and the three-month EURIBOR. Long-term spreads are calculated using the five-year government bond yield.

**Chart F Mortgage and C&I loan interest rate spreads in the United States**

(percentages per annum; quarterly data)

- short-term C&I loans vs. three-month LIBOR
- ..... long-term C&I loans vs. two-year government bond yield
- - - 30-year fixed mortgage rate vs. 30-year government bond yield



Sources: Primary Mortgage Market Survey, Federal Reserve and Bloomberg.  
Note: "C&I" stands for "commercial and industrial".

In the United States, spreads between US short-term commercial and industrial loans and the three-month LIBOR have tightened by 50 basis points since June 2007. Long-term interest rate spreads for non-financial corporations have tightened slightly less, by 30 basis points, relative to two-year government bond yields (see Chart F). As regards mortgage lending, the decline in the fixed rate on US conventional mortgages has been evident only since the announcement of the Federal Reserve's purchases of mortgage-related assets in November 2008, while the pass-through to mortgage interest rates was very limited during the early phases of the policy rate reductions (from September 2007 to November 2008). In a market-based financial system, such as the one in the United States, the collapse of securitisation activity has put additional strains on the interest rate pass-through by reducing the availability and raising the cost of financing for loan originators. The degree of pass-through to mortgage rates has also been affected by developments pertaining to the government-sponsored enterprises, which play a crucial role in the US secondary mortgage market.

Overall, it appears that the transmission of policy interest rate changes to bank lending rates has continued to operate during the financial turmoil, both in the euro area and the United States. Vulnerabilities in the banking sector, compounded by aggravated tensions in the money and interbank markets, led to a widening of the spreads between bank lending rates and market rates. In the euro area, most spreads, which had increased more markedly for bank lending rates to households, have fallen back to the levels observed in 2004. A strengthening of banks' balance sheets and an adequate functioning of money markets are necessary conditions for the effective transmission of the monetary policy stance to households' and corporations' financing costs.