

Box 4

The ECB's monetary policy and bank profitability

Banks' ability to generate adequate profits is relevant for the sustainability of the banking system and, as such, for its ability to provide adequate funding to the economy. Profitable banks are able to attract capital from market investors and to generate capital through retained earnings. Since the financial crisis, euro area banks' profitability has been low. This has reflected many factors, including the recognition of losses in the wake of the crisis, restructuring efforts with the aim of improving resilience, as well as an environment of low economic growth and low interest rates. The ECB has mitigated risks to euro area price stability stemming from the crisis by lowering policy rates and adopting a wide range of non-conventional monetary policy measures, in particular the negative deposit facility rate, the expanded asset purchase programme and the targeted longer-term refinancing operations (TLTROs). Since the transmission of these measures hinges on the banking system, they have the potential to affect bank profitability.

In addition to its aggregate impacts, monetary policy action specifically affects bank profitability through several different channels – with an unclear ex ante cumulative impact. On the one hand, monetary policy can lead to lower net interest income amid a flattening of the yield curve. Indeed, the latter is likely to translate into lower unit interest margins, since liabilities tend to have shorter maturities and to respond less to decreasing interest rates, in particular at very low levels. Furthermore, negative deposit facility rates impose a direct cost on banks' holdings of excess liquidity. On the other hand, the package of monetary policy measures in place ensures that bank funding conditions are meaningfully eased, e.g. by allowing banks to obtain long-term funding at negative rates through the TLTROs. More importantly, the adverse effects on net interest margins are at least partly offset by the positive impact of policy measures on macroeconomic conditions, which leads to increased intermediation activity and credit quality. At the same time, asset

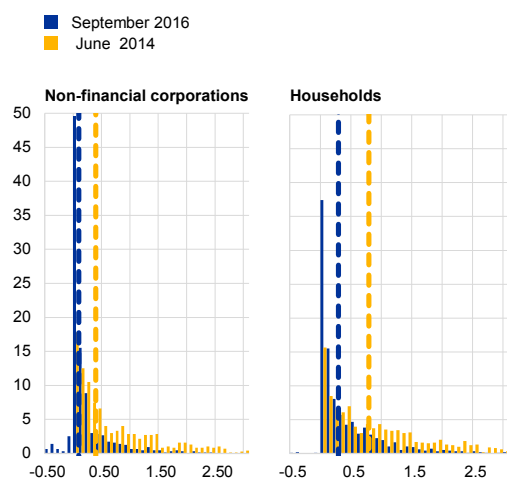
purchases and other measures contributing to lower interest rates increase the value of the securities held by banks, with a positive impact on profits.²³

Chart A

Deposit rates have been stacking up against the zero line

Distribution of interest rates on deposits held by households and NFCs across individual MFIs

(percentage per annum)



Source: ECB.

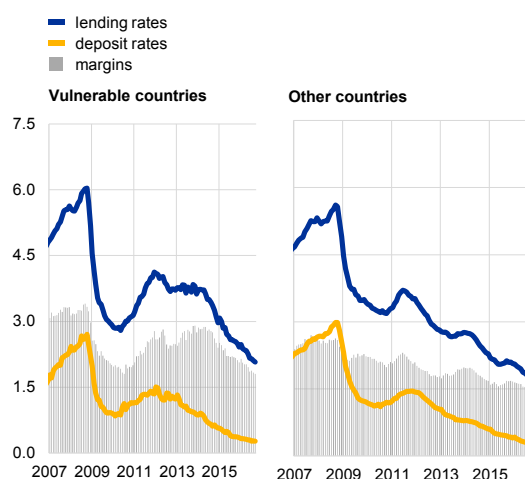
Notes: Deposit rates on new business as reported by individual banks for each of the available product categories. The dashed lines show the weighted average deposit rates in June 2014 and July 2016.

Chart B

Loan-deposit margins have been narrowing since the introduction of the credit easing package in June 2014

Loan and deposit interest rates and margins on new business

(percentage per annum)



Sources: ECB and ECB calculations.

Notes: Loan and deposit composite rates are calculated using the corresponding outstanding amount volumes as weights. Latest observation: September 2016.

Starting with the effect on net interest income, a deterioration can occur if interest rates pertinent for the assets side of bank balance sheets decline by more than those on the liabilities side. Such an asymmetric effect is more pronounced when policy and short-term market rates are negative. An important reason for this is that banks may be unable or unwilling to lower the rates they pay on retail deposits below zero, given competitive pressures in the deposit market or the fact that at some stage banknotes could become a more attractive store of value for these depositors. Evidence for the euro area points to some downward rigidity in the pricing of deposits, as the distribution of individual deposit rates has been increasingly stacking up against the zero line (Chart A). At the same time, in the case of households only 37% of new deposits were, as of September 2016, yielding a 0% return (compared with 50% in the case of non-financial corporations (NFCs)), indicating that in this segment the scope for repricing may not have been fully exhausted yet. This notwithstanding, downward rigidity of deposit rates as lending rates continue to fall translates into a narrowing of loan-deposit margins earned by banks, as indeed has been observed since the introduction of the ECB's credit easing package in June 2014 (Chart B). The narrowing of margins has been more pronounced in the case of banks in euro area countries most affected by the financial crisis than in other euro area countries, where the margins are, however, lower on

²³ The extent to which increases in the value of securities held is reflected in higher bank profits depends on the valuation method used (i.e. whether holdings are marked to market), which in turn depends on the accounting portfolio the securities are held in.

average. At the same time, lending rates in vulnerable countries likely embed a higher credit risk component, which – to some extent – is reflected in the margin.

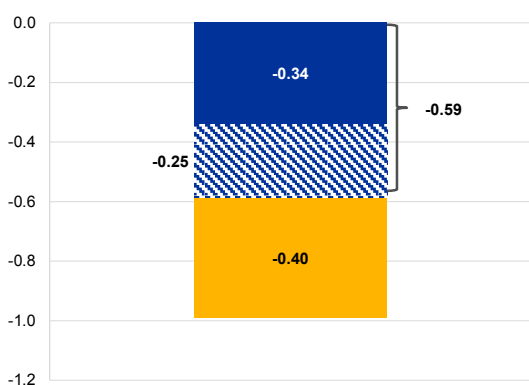
Chart C

A quarter of the reduction in loan-deposit margins can be attributed to negative rates

Model-based decomposition of the change in median loan-deposit margin between June 2014 and September 2016

(percentage per annum)

- overall impact of monetary policy measures since June 2014
- ▨ of which: pure negative rate effect
- other effects



Sources: ECB and ECB estimates.
Note: Loan-deposit margin refers to new business.

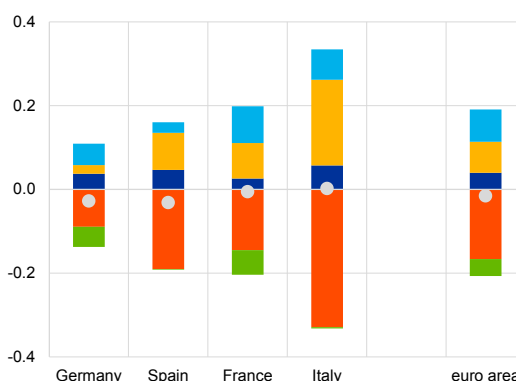
Chart D

The overall impact of non-standard monetary policy measures on bank profitability is expected to be modest

Estimated effect of monetary policy on bank profitability over the period 2014-17

(percentage point contribution to return on assets)

- quantity effect on NII
- credit quality
- NII exc. EL charge and quantity effect
- EL charge
- capital gains
- net effect



Sources: European Banking Authority, ECB and ECB estimates.
Notes: Capital gains based on data on a consolidated basis for 68 euro area banking groups included in the list of significant institutions under direct ECB supervision and in the 2014 EU-wide stress test. Euro area figures calculated as the weighted average for the countries included in the sample using the ECB's CBD data for the weight of each country's banking system in the euro area aggregate. NII stands for net interest income and EL for excess liquidity.

Only a part of the narrowing of loan-deposit margins can be directly attributed to negative rates.

An illustrative model-based analysis can be used to decompose the overall reduction in loan-deposit margins into effects that are specific to the negative rate environment and other factors. Individual bank loan-deposit margins are modelled on the basis of the level of the short-term interest rate (three-month EURIBOR), the charge on excess central bank reserves (i.e. the negative deposit facility rate), the slope of the yield curve (spread between ten- and two-year government bond yields), individual bank characteristics (size of excess liquidity holdings, reliance on core deposits and size of the loan portfolio) and the unemployment rate, to capture the state of the macroeconomy as a proxy for credit risk.²⁴ In this model, the impact of negative rates on bank margins is captured via an interaction term between the level of the short-term rate and the charge on excess liquidity. According to this analysis, a quarter of the 99 basis point reduction in the median loan-deposit margin over the June 2014-September 2016 period can be attributed to this impact (Chart C). A further third of the narrowing of margins is associated with the overall impact of the measures decided since June 2014, via their effect on market rates.

²⁴ The model also includes a constant, a lag of the dependent variable and bank fixed effects.

The ECB's non-standard monetary policy measures have a positive impact on credit quality and capital gains that tends to offset the decline in net interest income.

An encompassing assessment including all the channels described above is made by comparing actual developments and baseline projections for the period between 2014 and 2017 with a counterfactual scenario which excludes the effect of the monetary policy measures decided since June 2014.²⁵ In line with the general perception, also reported in many market commentaries, the reduction in interest rates on a large set of financial assets at different maturities is reflected in lower bank net interest income. Savings in funding costs do not fully offset lower interest income in the context of a flatter yield curve, as banks tend to fund longer-term assets with shorter-term liabilities, thereby engaging in maturity transformation. This is compounded by the fact that, as discussed above, deposit rates tend to be particularly sticky at very low levels of interest rates. At the same time, increases in the market value of sovereign bonds held by banks generate capital gains. In addition, the estimated positive effects of the recent monetary policy measures on the economic outlook contribute to increasing intermediation volumes and to improving credit quality.

On balance, the impact of current monetary policy does not appear to be particularly strong compared with the multiple other factors challenging bank profitability – some structural, some cyclical. The overall impact of recent monetary policy measures on bank profitability would be expected to be broadly neutral as the effects on different components of bank profitability tend to largely offset each other (Chart D). Indeed, weak macroeconomic prospects are currently at the heart of cyclical challenges facing banks. Therefore, by supporting macroeconomic recovery and price stability, accommodative monetary policy can make an important contribution to strengthening the operating environment for banks.

²⁵ The impact of the APP on bond yields and the respective effect on lending rates and volumes is consistent with the Eurosystem macroeconomic projections. The decrease in interest rates brought about by the APP is reflected in new business volumes and in the outstanding amount of variable rate instruments. For debt securities held and issued by banks, detailed information on maturity and the type of interest rate is retrieved from the Securities Holdings Statistics (SHS) database. For loans and deposits, this information is proxied based on MFI balance sheet data. Due to the low level of interest rates, it is assumed that banks only benefit from lower interest rates on long-term deposits. The assessment of capital gains takes into account detailed data on the maturity, counterparty country and accounting portfolio of securities held by banks, as published by the EBA.