

## ANALYSIS

# Euro area money markets undergoing huge changes

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Regulation, risk awareness following the financial crisis, and an accommodative monetary policy have in recent years brought changes to the euro area money markets. Trading has changed from uncollateralised to collateralised lending, and the differences in interest rates between different instruments have grown. Changes in monetary policy interest rates affect market interest rates via the money markets, and therefore the central banks in the Eurosystem closely follow the developments of the money markets.



The term 'money markets' refers to the wholesale trading of debt instruments with a maturity of less than 1 year, which are traded particularly by banks and other financial institutions. This is a market for very short-term trading with maturities of one day to one week. The instruments traded are relatively secure and liquid, such as uncollateralised and collateralised deposits,

repurchase agreements (repos)<sup>1</sup>, and short-term debt instruments issued by central governments and corporations. Money market activities affect the funding and cash management of individual financial institutions. Possible disruptions in the money markets are also more widely reflected on the financial markets and in financial intermediation.

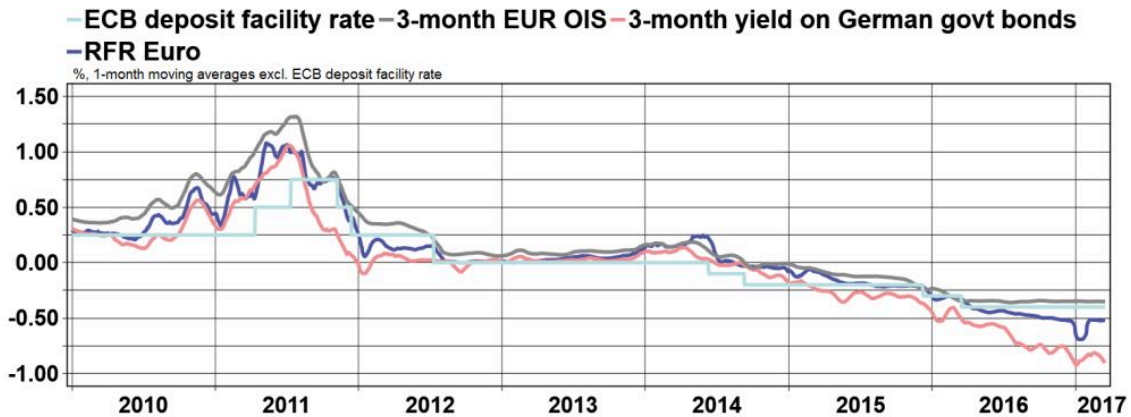
The euro area money markets stabilised after the financial and debt crisis, and trading has been buoyant in recent years. The volume of money market deals by the nearly 100 'panel banks' alone amounted to more than EUR 1,000 billion a day according to a 2015 survey.<sup>2</sup> However, the structure of the money markets has changed significantly compared with the period before the financial crisis, as trading on the uncollateralised money markets has decreased, while correspondingly trading on the collateralised money markets has strongly increased. These developments are due to, among other things, regulatory changes that do not encourage banks to engage in short-term, particularly uncollateralised, funding.<sup>3</sup> At the same time market participants' risk awareness has grown and government credit ratings have declined. These factors have, in turn, brought about a fragmentation of the money markets into core and peripheral economies.<sup>4</sup>

Traditionally the differences between Euribor and OIS (overnight index swap)<sup>5</sup> interest rates have been used as risk indicators for the uncollateralised money market, and after the euro area debt crisis the indicators have remained stable since 2013 (Chart 1). However, right now the change in market situation is reflected in differences between other short-term interest rates.

If monetary policy transmission is effective, short-term market interest rates react to short-term monetary policy expectations. With its policy interest rates, the central bank steers the shortest market rates – for the last two years the overnight interest rate Eonia, for example, has been very close to the ECB deposit facility rate, which now is -0.40%. Correspondingly, the OIS interest rates are the best indicator of the expectations of the interest rate policy of the central bank, and as a rule they also efficiently steer euro area money market interest rates and the most short-term lending rates of the euro countries (Chart 2). These interest rates have typically diverged from each other only in crisis situations.

Chart 1.

### Interest rates on repos and German government bonds have diverged from ECB deposit facility rate and expected level of Eonia rate

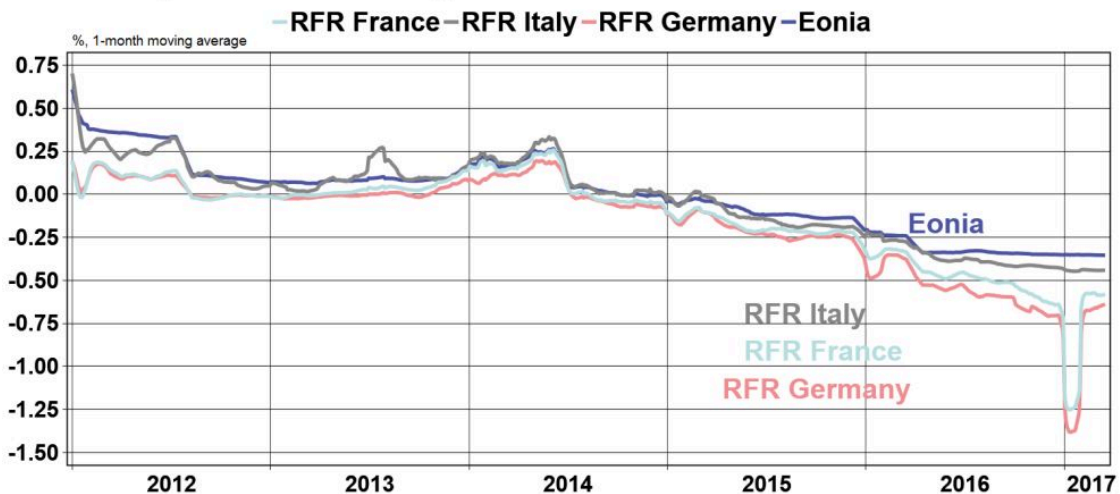


The OIS rate shows expected average overnight rate (Eonia) over a given period.  
 The euro area repo funds interest rate (RepoFunds Rate: euro area, RFR Euro) shows average interest rate in repo trading with euro area government bonds on selected trading platforms.  
 Sources: Macrobond and Bloomberg.

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Chart 2.

### Repo rates have diverged both from Eonia and from each other



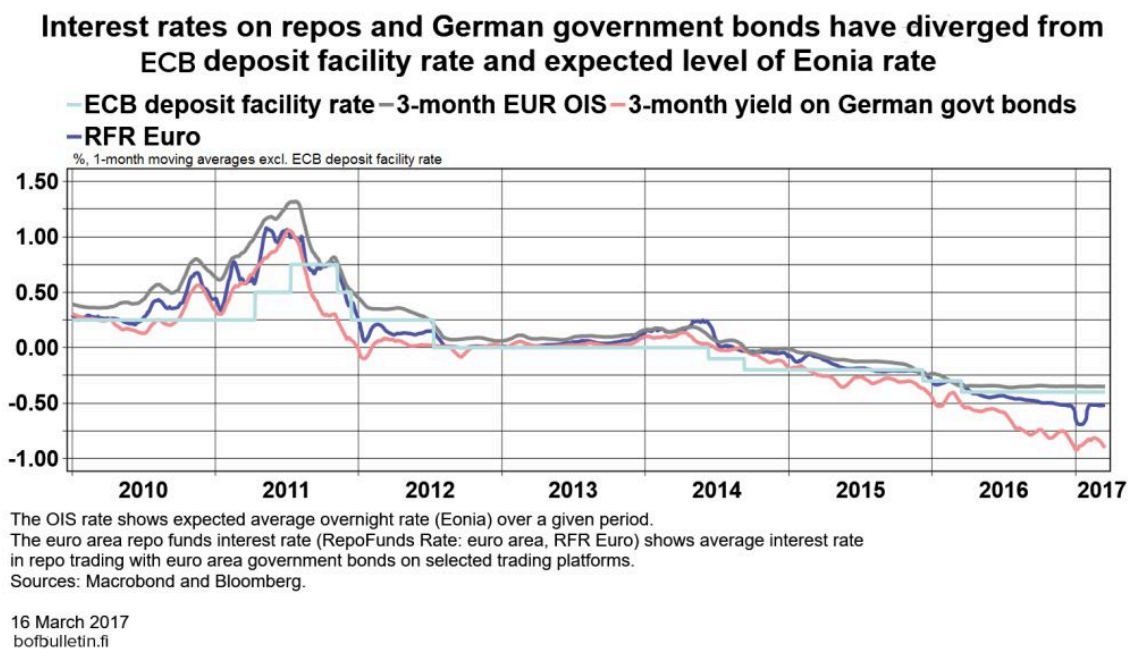
Repo funds interest rates by country show interest rate levels for repo trading with specified government bonds as collateral.  
 Source: Bloomberg.

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However, in the last few years the interest rates on repos and German government bonds have even dropped below the ECB deposit facility rate and the Eonia rate. Categorising the interest

rates according to the collateral used shows that the repo rates have also diverged from each other (Chart 3). In order to receive a German government bond as collateral for a short-term deposit, an investor must make the deposit at an interest rate of around -0.70%. With French and particularly Italian government bonds as collateral, interest rates are higher, i.e. less negative. As banks were optimising their balance sheets at the turn of the year, high-quality collateral securities were in particularly high demand and the repo rates of the core euro area countries were temporarily as low as -5%. In earlier years, the view was that deposits were sold against collateral on the repo market, but now collateral is bought against deposits.

Chart 3.



The interest rate development described above is at least due to investors' wish to protect themselves against political risks in the euro area and a general shortage of high-quality collateral material.<sup>6</sup> In addition to the above-mentioned regulatory reforms and risk awareness, the expanded asset purchase programme (EAPP) of the Eurosystem also contributes to the shortage of collateral. The programme not only adds excess liquidity to the market, it also removes from the market high-quality securities eligible as collateral. In order to facilitate the functioning of the repo market, the Eurosystem in early 2017 introduced lending of its security holdings also against cash collateral.

Since the nature of at least some of the drivers of change in the repo markets is structural, the change in the money markets will scarcely be only temporary. Despite the shortage of collateral,

the repo market still functions fairly well and prices are flexible – the trading volumes, for example, have remained almost unchanged or even grown. However, repo rates are exceptionally low, and market participants are only just growing accustomed to the new environment, so the situation will be closely followed in the Eurosystem going forward.<sup>7</sup>

## Sources:

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## Notes

1. In the repo market, counterparty A sells a security (for example a government bond) to counterparty B for the price of e.g. 99 and promises to buy it back after, for example, three days for the price of e.g. 100. The price gap determines the interest rate of the deal. In practice, repos are thus collateralised deposits and one of the safest ways of investing excessive cash funds. Typically the sales price of the security is a little lower than its real market value, i.e. a haircut is applied to the value of the security. ↑
2. Nearly about half of the amount comprises collateralised deals, while a few percentages represent uncollateralised deals. The rest consists of interest rate and exchange rate derivatives. See the European Central Bank (2015). ↑
3. Of the regulatory reforms aiming at stability of the banking system in the next few years, the liquidity coverage ratio (LCR), net stable funding ratio (NSFR), leverage ratio (LR) and capital ratio have at least in theory preventive effects on money market trading. However, all of these are not yet in force. See Doran et al. (2014). ↑
4. See Heijmans et al. (2016). ↑

5. An OIS is a derivative contract according to which one contracting party pays the fixed interest rate and the other pays the average overnight interest rate for the maturity of the contract. Thus, based on the prices of the euro-denominated OIS contracts, we can conclude the level of the Eonia rate, over the contract maturity, expected by the market.  
↑
6. Collateral is needed to, for example, acquire funding and cover derivative positions. Long 'chains' are typical in the use of collateral, and according to Baranova et. al (2016) a high-quality collateral security circulates via about four intermediaries before it ends up at its final destination. Singh (2016), for example, emphasises the significance of collateral for the functioning of the whole financial system and for ensuring financial growth. ↑
7. See Mersch (2017). ↑

## Key words

liquidity, money markets, repo markets