

# ECB Research

## Early findings of ECB's tiering system, €STR and excess liquidity

- With the ECB introducing a tiering system from the start of the seventh maintenance period (starting 30 October), the short end of the curve has had to find its footing after a shake-up that coincided with €STR taking effect just weeks earlier. We present the early findings of tiering, €STR and its implications for euro area excess liquidity.
- We argue that excess liquidity is set to rise only marginally over the next year, mainly because of PSPP purchases, and that it will not drive the front of the curve. In our view, the redistribution of liquidity in the euro area that has taken place on the back of the tiering system is positive for the Italian banking sector. We also acknowledge the asymmetric (upside) risk in the €STR fixings. Despite high uncertainty regarding the take-up, we look for an overall envelope of TLTRO net liquidity injection of up to EUR75bn for the remaining six operations, taken mainly from periphery countries.
- We find the current ECB pricing to be fair but for choice would pay EONIA forwards.

### Excess liquidity and tiering in brief

At the September meeting, the ECB announced a new system for reserve remuneration on top of its QE restart and rate cut. The tiering system allows credit institutions to park six times their reserve requirements at an upper tier on its current account, currently set at 0%, while excess funds are subject to the deposit facility rate of -50bp. For full description and explanation of the system, see *ECB Research – Understanding ECB's tiering system*, 13 September.

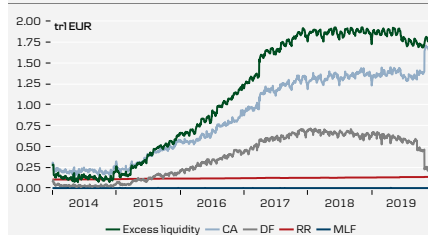
With the introduction of a tiering system, it is important to highlight that excess liquidity does not decline but is simply remunerated at a higher rate than the prevailing deposit rate. We estimate that of the EUR1.75trn of excess liquidity c.EUR780bn (or 45% of the total) is remunerated at 0%, while the rest is remunerated at -50bp. However, interestingly, due to the design of the tiering system, we observe that banks have transferred their funds to the current account (held at the national central banks) rather than at the deposit facility (held at the ECB). Recall that from introduction of the negative interest rate policy (NIRP) in 2014 until the implementation of tiering, there was no difference between the current account and deposit facilities besides the reserve requirement rules.

### Most holdings in core countries

As it is widely known and clearly illustrated by the much-debated Target2 balances (which is purely an accounting term), euro area liquidity is located mainly in the core euro area countries. The current account and deposit facility holdings from Germany, France and Netherlands made up c.60% of total excess liquidity as at end-September (most recent data point for all countries).

However, the Italian, Finnish and Belgian central banks have already published the October figures for banks' deposit and current account holdings, which include the new tiering system. The data is particularly notable for Italy, as Italian banks have observed a surge in current account holdings and broadly unchanged deposit facility holdings, which clearly indicates that Italian banks have filled the exemption threshold as much as possible.

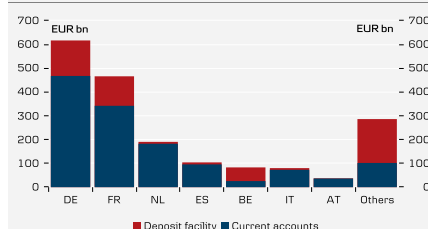
### Excess liquidity has declined marginally in recent period



Note: Excess liquidity is defined as (current account-reserve requirements) + (recourse to the deposit facility - marginal lending facility)

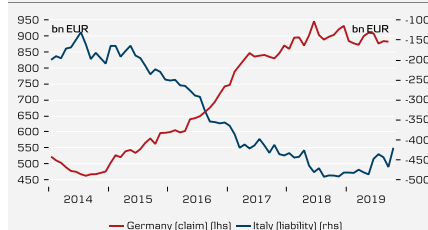
Source: ECB, Danske Bank

### Current account and deposit facility holdings by country



Source: ECB, Macrobond Financial, Danske Bank

### Target2 balances in Italy show repatriation of funds



Source: ECB, Bloomberg, Macrobond Financial, Danske Bank

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*Benoît Cœuré's* speech last week, where he revealed that the exemption thresholds are almost fully utilised, confirmed this finding. What is slightly surprising to us is that this chart also indicates that Germany and the 'rest of euro area group' still have some available space, likely in the magnitude of EUR40bn.

Therefore, the chart may also mask that banks have an 'artificially' low unused exemption in maintenance period six, as they could have transferred their money from the deposit facility to their current accounts, which the Belgian and Finnish data, in particular, also suggests.

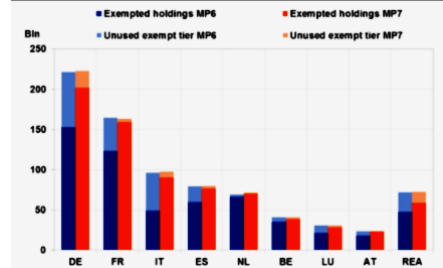
### The Italian case

With the introduction of the tiering system, the implications were relatively straightforward for the core European countries on how they should act given the high amount of liquidity located there. However, there was some excitement surrounding the case of Italy, which at a banking sector level did not fully utilise its thresholds.

We have noted a significant shift in its current account by EUR42bn (see below), while at the same time Target2 liabilities fell EUR49bn (see previous page). Combining this with not seeing a spike in €STR volume on the back of tiering (we have no reliable data for Euribor flows) may suggest that it is subsidiaries of Italian banks that have transferred funds from core countries, most likely Germany. With the caveat of not having reliable data on Euribor flows, we argue that it is not interbank transfers due to the credit/counterparty lines of the (generally) troubled Italian banks.

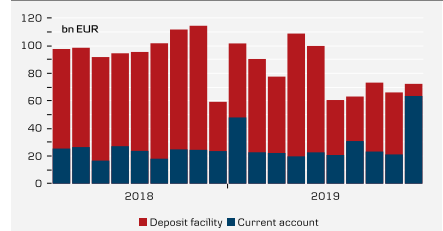
Furthermore, following a short spike in the Italian repo market, we note that it has declined to levels not far from the levels prior to the introduction of tiering. On top of the transfer from core countries to Italy, it may also suggest that banks have used the repo market to acquire sufficient funds. Banks with excess quotas that have collateral can borrow in the repo market and banks without collateral may use the unsecured market via term or overnight borrowings. Generally, we have recorded a small spike in the repos for periphery and no impact on the core repo rates.

### Exempt tier is almost fully used



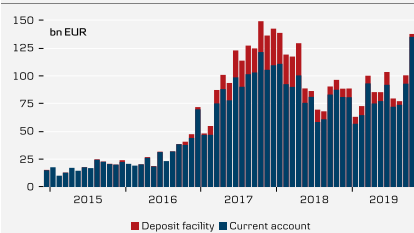
Note: REA = rest of euro area, MP = maintenance period  
Source: ECB (Cœuré speech on 12 November 2019)

### Shift in Belgian current account and deposit facility holdings



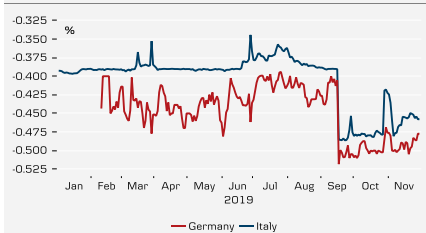
Source: Belgian central bank, Macrobond Financial, Danske Bank

### Italian banks shift deposits to the current account



Source: ECB, Bloomberg, Macrobond Financial, Danske Bank

### Italy GC repo spiked as tiering took effect



Source: ECB, Bloomberg, Macrobond Financial, Danske Bank

### €STR – asymmetric (upside) risk

The introduction of the €STR has been relatively smooth in markets. The volume has been fairly constant around EUR30-35bn per day with an occasional spike. At the same time, fixings have generally grinded higher. Since the €STR took effect on 2 October, €STR has risen almost 2bp, now standing at -53.1bp. However, on Wednesday 21 November in particular, the fixing recorded a marked spike of 3.1bp with a 7.5bn higher volume, which reversed the next day. While the drivers of the spike are still uncertain, we note there is a seasonal pattern of a spike every quarter this year on the Wednesday of the week of the 21 of February, May, August and November (we do not believe the spike is due to tiering, as it also happened before tiering was even a discussion). The jump is likely to have been due to a relatively large bank, as both the volume overall and the share among the top 5% jumped. Most recently, this week, it is particularly notable that the median €STR fixing has continued to increase, while the top 25% and 75% have stayed unchanged. While the tiering/€STR is still something markets have to get used to, we identify an asymmetric upside risk to the fixings, as it shows some ‘vulnerability’, due to both the seasonal pattern and the generally rising €STR.

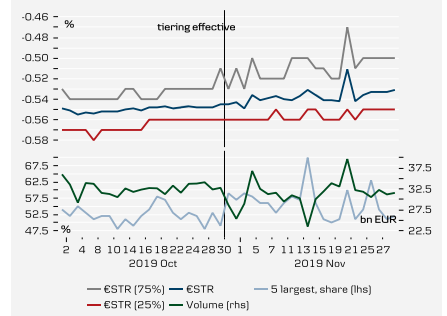
### TLTROs – to avoid a cliff effect and not to do carry trades

The ECB has recently preferred to allocate liquidity through targeted longer term liquidity operations (TLTROs), rather than through regular longer term liquidity operations (as its longest is only 3M currently). That said, the relatively high level of excess liquidity also shows that euro area banks are not in need of the additional liquidity.

Therefore, we do not expect the remaining six quarterly operations of TLTRO3 to change the excess liquidity levels in any significant way. Indeed, we project the net liquidity take-up will be fairly limited and up to EUR75bn in total over the life of the operations for several reasons. The TLTRO terms are not as flexible as banks could have hoped for, as banks can repay the funds only in the final year of the operation (each of which has a three-year maturity). Consequently, this also means the funds taken at the initial operations cannot be rolled over into the last operation in March 2021 (allowing funds to be available until 2024). Further, the take-up per operation is limited to a maximum 10% of total eligible loan stock per operation – a clear design feature from the ECB to avoid the cliff effect, as banks will have to have a smoother maturity profile but nothing that incentivises big net liquidity take-up. We stress that the numeric projection of the overall take-up is not high conviction.

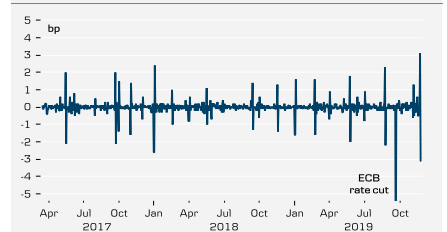
The first TLTRO3 operation, which was conducted in September (TLTRO3.1), saw only EUR3.4bn taken but, despite this, we still view the TLTRO as an important part of the ECB’s toolbox, as it secures relatively cheap funding for banks (in our view, it is likely the low take-up was driven by uncertainty about tiering and €STR at that stage). Further, we believe the opportunity to roll over funds is more important than the potential additional take-up, as banks in the countries that use the operations most are already close to the maximum. Country-level data indicate that TLTRO3 funds are located primarily in peripheral economies (Italy EUR238bn and Spain EUR149bn). Germany and France have only EUR85bn and EUR110bn, respectively. For a full table, see *ECB Research - TLTRO - low take up, but ECB should not be concerned*, 19 September. We also estimate that the maximum potential new take-up given the current limit set at 30% of eligible lending is EUR1trn, although, in our view, it is very unlikely to be anywhere near this level, as it would require sizeable take-up from Germany and France. Spain and Italy can take an additional EUR44bn and EUR43bn, respectively, of new funds.

### €STR has gradually increased since tiering was introduced



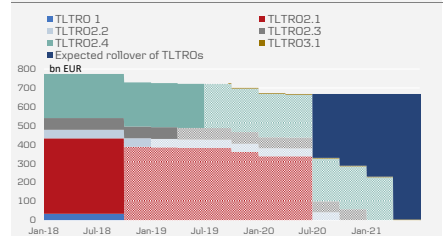
Source: ECB, Bloomberg, Danske Bank

### Daily changes in pre-ester and ester



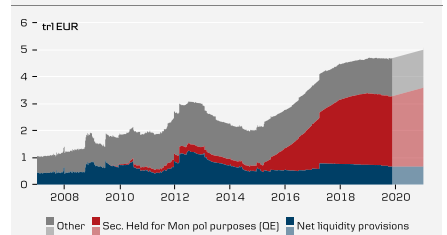
Source: ECB, Bloomberg, Danske Bank

### Expected TLTRO maturity profile



Note: Chart does not include the up to EUR75bn due to high uncertainty about the specific operation  
Source: ECB, Danske Bank

### Liquidity operations not expected to drive excess liquidity



Source: ECB, Macrobond Financial, Danske Bank

We see a relatively small risk of banks using the TLTROs as carry trade via the tiering system. While in theory banks may be able to do this as the lending rate would be below the deposit rate, we see the likelihood as relatively limited, as limits are almost fully utilised (see Cœuré’s chart above) and remind us that for a bank to get the TLTROs at the deposit rate, they need to lend out to the real economy – otherwise they get them at only 0%. In conclusion, the important element of TLTRO3s is to smooth the maturity profile and avoid cliff effects when operations mature and not to be a liquidity boosting element.

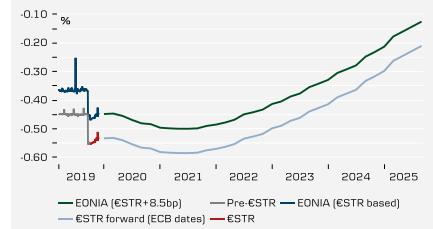
### €STR, excess liquidity and market pricing

Current market pricing suggests a trough of around a 5bp cut in 2020, while 2021 points to a small potential for a hike. Given the ‘flat’ EONIA forward curve, with only EONIA/€STR being 10bp higher than now in four years and the increased awareness about the negative side effects being mentioned by the ECB governing council members, we believe the pricing is fair and does not warrant strong position taking. As we do not expect excess liquidity to rise (or fall) markedly, we do not expect it to affect front-end pricing.

For choice, we see the risk/reward being in favour of payer positions, as we do not expect the ECB to cut rates from here, unless it is part of a big package, which is an unlikely event given the package just launched and the inflation/growth outlook stabilising. However, we acknowledge the continued high correlation between, for example, the 1Y1Y EONIA and 10Y bunds outright and given the risk of sentiment changes related to Brexit/the trade war, etc., payer positions may have a hard time in the near term. In other words, it is difficult to see steep ECB pricing and flat/lower long-end yields at the same time.

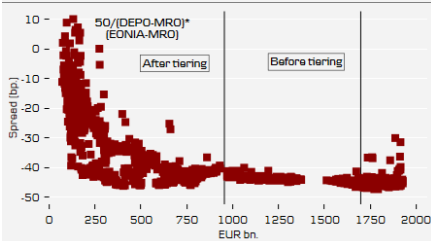
To illustrate further the (in our view) fair market pricing, we note, for example, that the 1Y1Y EONIA is trading close to the EONIA spot level.

### Market pricing does not point to a change in policy rates



Source: Macrobond Financial, Danske Bank

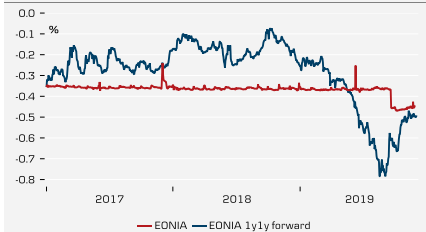
### A change in excess liquidity is not expected to change EONIA’s position in the corridor



Note: Since 2013, (x-axis: excess liquidity, Y-axis: EONIA’s position in the ECB’s interest rate corridor)

Source: ECB, Bloomberg, Macrobond Financial, Danske Bank

### 1Y1Y EONIA is now trading close to the level of EONIA spot



Source: Bloomberg, Macrobond Financial, Danske Bank

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None.

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