

ECB: Mitigating side effects – gauging the tiering premium

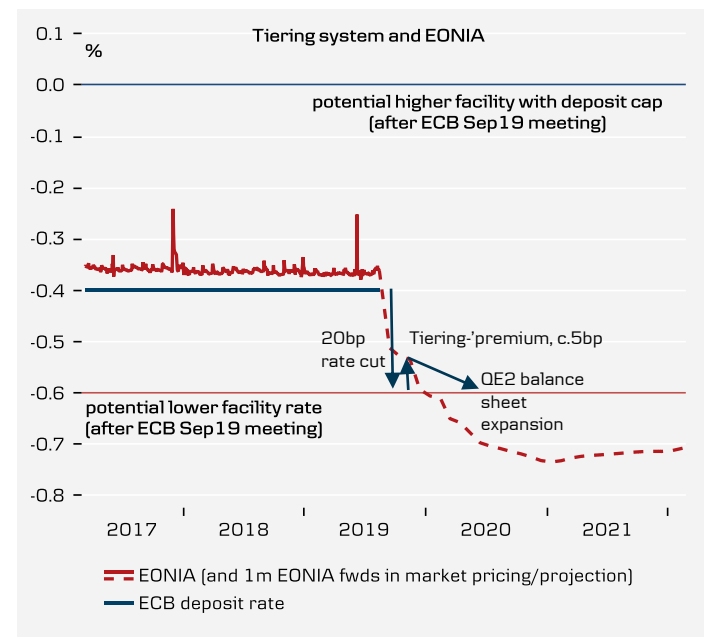
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Summary

- An ECB tiering system is widely expected to be announced at the ECB September meeting. However, the exact design and ultimately the market impact are difficult to assess. In this document, we lay out our views on how a tiering system could be constructed.
- Our preferred tiering proposal would result in a less than 1:1 effect on EONIA from the expected deposit rate cut. We argue that a 'tiering premium' may be a result of a political decision and may be worth around a quarter of the rate cut. We believe that the proposal would address what we consider to be the four key features of a tiering system. However, we acknowledge that point 4 ('worth the trouble') is debatable (see overleaf).
 - The preferred tiering proposal consists of the following.
 - **Static part:** an exemption threshold set at a pre-specified historical (to announcement) date. We argue for an individual bank's threshold to be set at 25% of net deposits on 31 August 2019. We do not expect a calibration period.
 - **Dynamic part:** all further deposits remunerated at the lower rate. This would ensure that the deposit rate continues to be the most important and with a restart of QE and rise in excess liquidity EONIA would gradually decline.
- We find the current ECB pricing of a 17bp rate cut in September to be almost a 'corner solution' of what we see the ECB can deliver. With a 'tiering premium' of around 5bp, it may even be on the slightly aggressive side.
- Finally, we highlight that the ECB has been very creative on previous occasions, so there is considerable uncertainty about the exact nature of the tiering system. There were discussions on a tiering system in 2016 and Q2 19 and the ECB concluded not to implement it due to its potential complexities.



Note: Past performance is not a reliable indicator of current or future results

Source: ECB, Macrobond Financial, Danske Bank

Why tiering? Key features of an optimal tiering system

- In connection with the expected rate cut by the ECB at the upcoming 12 September meeting, we believe it is likely to announce a tiering system. Indeed, Mario Draghi said at the July meeting that *'if we are to lower interest rates, that will come with mitigating measures'*. Our call is for a 20bp depo rate cut (and unchanged MRO and MLF) with language that is open to more cutting ('at present or lower').
- The reason for introducing mitigating measures in connection with a rate cut must be found in a low for a long period of time policy rate outlook as a negative interest rate policy (NIRP) penalises banks for holding deposits.
- We estimate that the euro area banking sector pays an 'indirect' annual fee of EUR7.6bn in negative rates to the ECB (at most, depending on your assumptions). Furthermore, the result of flat yield curves and negative rates is that individual banks have difficulties placing liquidity in paper at a rate higher than the deposit rate (for example, the DBR42 23Y bond is the first bond to trade above the ECB's deposit rate).
- That said, we also acknowledge that the ECB, as a prudent central bank, has to do something to counter the low realised and projected inflation and introducing tiering is part of its package (QE, rate cut, etc.) to stimulate the economy.
- The design and market implications of an introduced tiering system is very difficult to assess with almost unlimited combinations, which would lead to different market implications. However, in the following we sketch out our two proposals, highlight key features of a tiering system and argue for a net deposit based system.

In our view, a tiering system for the euro area should optimally reflect the following.

1. Full transmission of monetary policy, i.e. be neutral to current money-market transmission.
 2. Incorporate flexibility for further adjustments in the monetary policy stance.
 3. Keep the deposit facility rate as the key ECB rate.
 4. Be worth the trouble, i.e. meaningful relief for banks. If the ECB is concerned about bank profitability, banks' weighted average deposit rate should not be significantly less than the current rate (just shy of -40bp). However, a rate cut to stimulate the economy is the overarching aim of this exercise.
- However, the ECB may also be influenced by political considerations regarding insulating the parts of the euro area banking sector that pay the highest cost of NIRP (such as in Germany and France, which have the highest deposits).

Background: lessons from other central banks

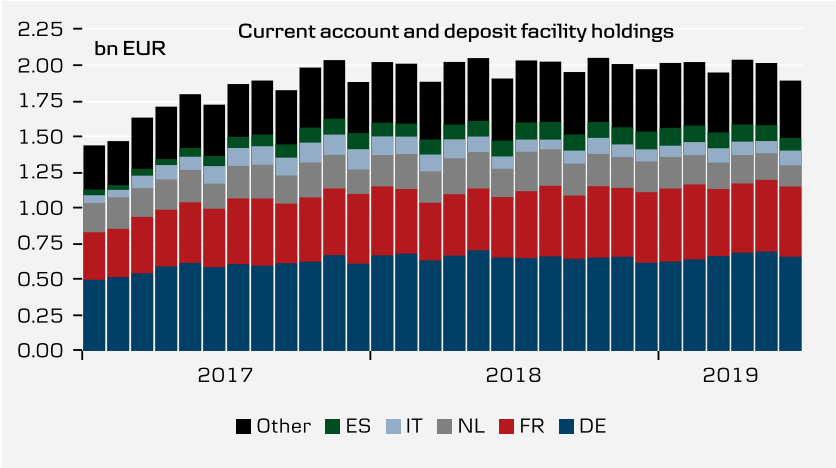
	Main policy rate	Tiering	Comment
Denmark	Certificate of deposit at current -65bp (was -75bp until Jan 2016)	Two tier: <ul style="list-style-type: none"> Banks can deposit in total DKK31.4bn on the overnight current account at 0.00%. Banks purchase 1W certificates of deposit for the remaining excess liquidity – currently DKK226bn. 	<ul style="list-style-type: none"> The Danish framework was in place before negative interest rates were introduced. The total current account is set to accommodate weekly fluctuations in liquidity due to net government payments. Individual limits are set at 3% of deposits up to DKK2bn and 1.7% of deposits above DKK2bn. The limit on current account deposits has been temporarily increased during periods of extraordinarily high excess liquidity.
Sweden	1W repo rate at current -25bp. (was -50bp until December 2018)	Two tier: <ul style="list-style-type: none"> Repo rate. Repo rate – 10bp. 	<ul style="list-style-type: none"> Banks have the option once a week to buy weekly Riksbank certificates at the Riksbank repo rate flat. Total allocation is capped at the total amount of excess liquidity in the system. Any remaining excess liquidity will have to be deposited at the Riksbank overnight at the repo rate – 1bp.
Japan	Current account rate currently -10bp	Multi-tier system of: <ul style="list-style-type: none"> Tier 1 (basic balance @ +10bp), Tier 2 (macro add-on balance @ 0bp), Tier 3 (policy-rate balance @ -10bp). 	<ul style="list-style-type: none"> Tier 1: average current account deposits from January to December 2015 (net of RR). Tier 2: amount of RR plus credit through the Loan Support Program. Tier 3: The rest
Switzerland	Sight deposits currently at -75bp	Two tier: <ul style="list-style-type: none"> Exemption threshold at 0%. At least CHF 10m. 20x RR between 20 October 2014 and 19 November 2014 +- change in cash holding. 	<ul style="list-style-type: none"> Static component: 20x RR between 20 October 2014 and 19 November 2014. Dynamic component: change in cash holding. Banks with sight deposits above the threshold can trade between each other with exemption allowance.

Note: RR = reserve requirements

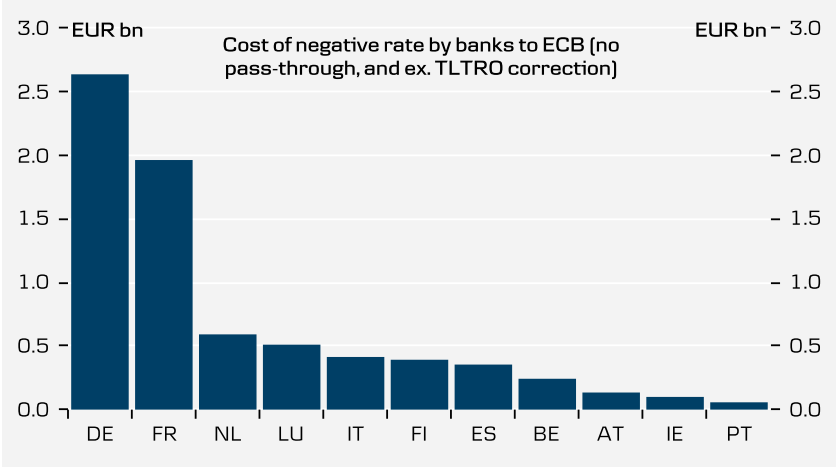
Source: National central banks, Danske Bank

Background: NIRP side-effects – to help the core/ semi-core

- Quid-pro-quo, we see the introduction of the mitigating measures as a clear advantage for the French and German banking sector, while peripheral banks are the main beneficiaries of TLTROs.
- The chart on the right shows current account holdings and usage of the deposit facility is located mostly in Germany, France and the Netherlands and to some degree also Luxembourg, Spain and Italy are low in this regard (with even Luxembourg higher than both Italy and Spain). In other words, where TLTRO is primarily used in the periphery, the advantage to tiering is to help the banks in the core/semi-core.
- At a banking sector level, around 69% of the total current account and deposit facility holdings is in Germany, France and the Netherlands (EUR659bn, EUR490bn and EUR148bn, respectively). Ultimately, the banks in these countries are also the ones that mainly face the -40bp rate on deposits.
- The overall size of the combined deposit facility and current account holdings is around EUR1.9trn. Reserve requirements are 1% of certain deposits, MM, etc. (currently EUR128bn).
- Consequently, if all banks do not pass on the negative rates, the maximum fee euro area banks pay to the ECB is around EUR7.6bn per year. However, this is an overstatement, as we already know that some customers are facing negative rates as well as this does not include TLTRO adjustments. However, while the direct cost of up to EUR7.6bn is relatively small, the repercussions from the low for longer/flatter curves for longer on banks' profitability is larger than this.
- According to an *ECB paper*, 5% of total deposits face negative rates (around 20% of corporate deposits). In Germany, 50% of corporate deposits face negative interest rates.



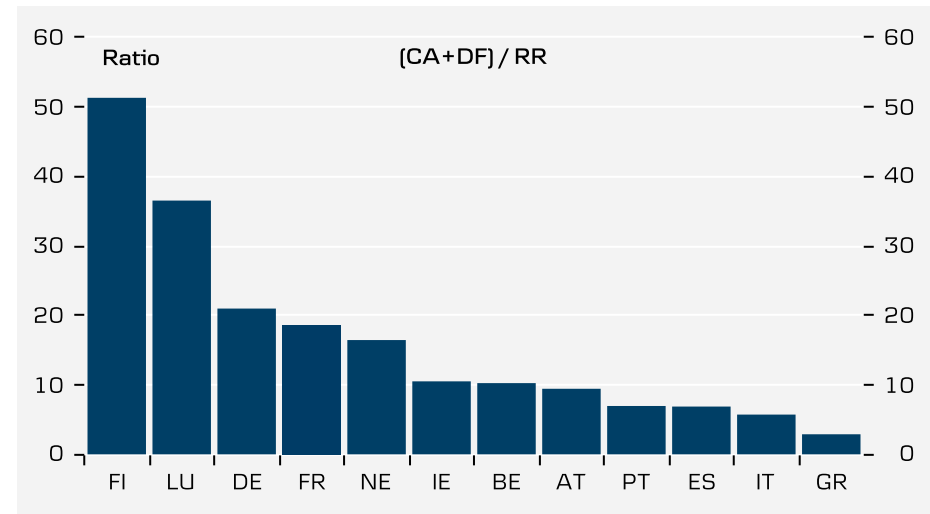
Source: ECB, Macrobond Financial, Danske Bank



Source: ECB, Macrobond Financial, Danske Bank

Using reserve requirements: creating an unintended interbank market

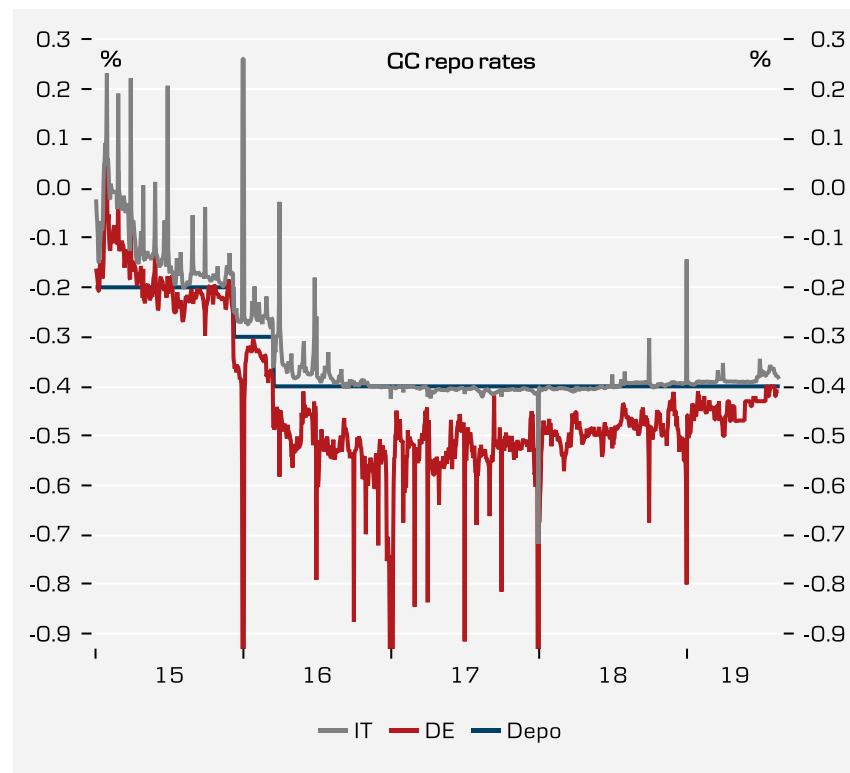
- Using the RR as a base for computing the exemption threshold would be a clean way, as the ECB and banks already compute this number.
- At the current juncture, RR is remunerated at 0%. Computing an upper tier limit threshold using a factor X times the RR would be relatively straightforward. However, there are two important side effects of this;
 - If banks on an individual basis do not all exceed the factor X (at a country level, the lowest of the bigger countries is 5.7 for Italy), an interbank market of trading allotments for the ECB's higher tiered rate would be created, which would have negative side effects for the money market.
 - By increasing the limit on RR, the repo market, particularly in, for example, Italy would be affected, leading to upward pressure on outright yields (see overleaf).
- Italy, Spain and Portugal are the countries with the smallest CA+DF to RR ratio, while Finland, Luxembourg and Germany are among the highest.



Source: ECB, Macrobond Financial, Danske Bank

Implications for the repo - and why Italy would suffer under an RR-based system

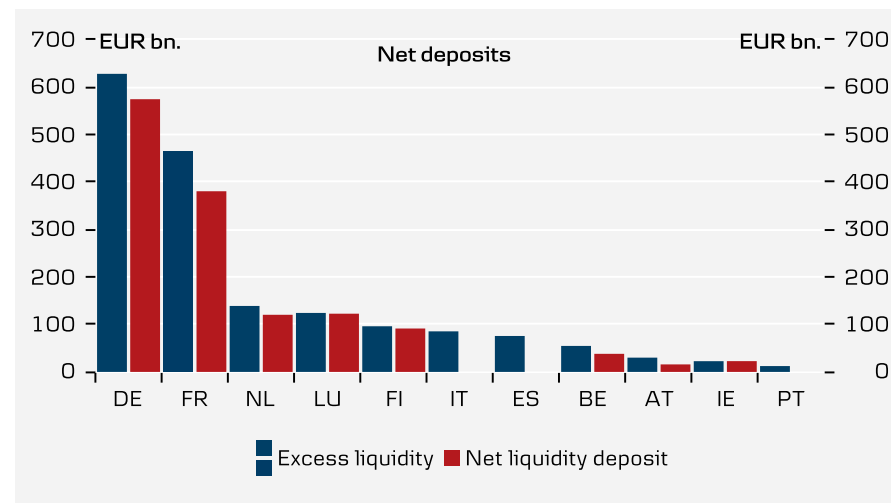
- The repo system in the periphery may be adversely affected in the case of a tiering system.
- The reason for the low deposit and current account holdings from Italy and Spain is that the Italian and Spanish banks park only part of their cash in the national central bank if the domestic GC repo rates are equal or better than the depo rate.
- This also explains why the GC repo rate in Spain and Italy has been around the deposit rate since late 2015, while it has been somewhat lower in Germany, due to the non-domestic investor base and scarcity of collateral.
- Consequently, should peripheral banks be able to deposit at the ECB at a higher rate than depo (the higher facility rate), they would naturally shift from repo to deposits, which in turn would lower the demand for GC repo, which would ultimately lead to an increase in the GC repo for peripheral banks (close to the higher facility rate).
- We also stress that core banks do not face the same situation as the GC repo rate is already less attractive than the deposit rate. However, we cannot exclude a potential impact on core/semi-core repo markets.



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 Source: Macrobond Financial, Danske Bank

Proposal: net deposits (CA+DF-liquidity take up)

- A potential setup of a tiering system could be envisaged as using the net deposit at the ECB. The net deposit should be defined as the current account + deposit facility minus liquidity take-up at ECB operations/ facilities (LTRO, TLTROs, MLF, MRO usage), which should be adjusted for the RR.
- In this example, the net deposit declines by around EUR50bn in Germany and EUR84bn in France compared with the normal excess liquidity computation (chart of right). A bank could therefore be allowed an upper-tier allocation at a factor Z times the net deposit if positive, zero if net deposits are negative.
 - Spain and Italy would not see a fee reduction in negative rates, while Germany, France and the Netherlands would see a reduction.
- The factor, Z, could be calibrated to achieve different outcomes.
 - Z should be around 25% if the cost to German banks should be kept broadly unchanged (adjusting for TLTRO discount). However, a 25% share would also mean that excess liquidity at the lower tier would be likely to fall by around EUR350bn (18% of current excess liquidity).
 - Z should be around 10% if you want a relatively small reduction in excess liquidity (around EUR140bn, which is around 7% of current excess liquidity).

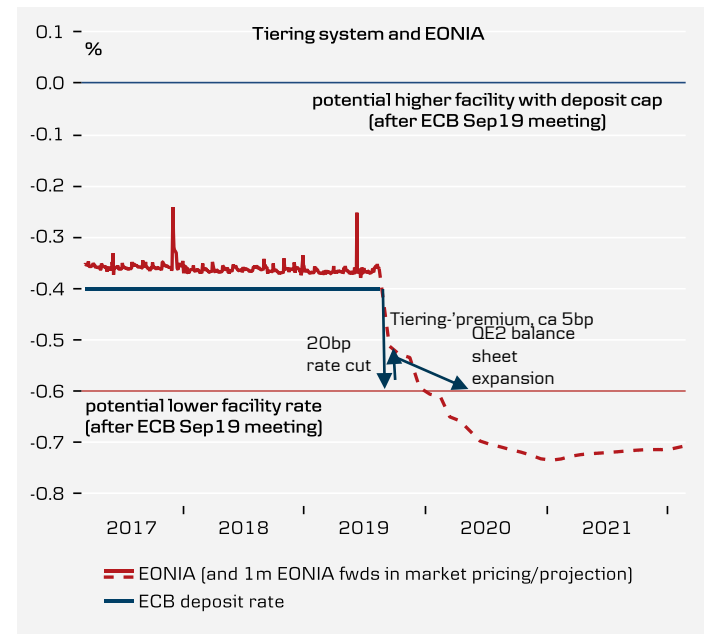


Source: ECB, Danske Bank

- We favour this idea, as it would not create unintended side effects of tiering, in particular in the repo markets where countries have negative net deposits.
- We also note that despite this scheme not favouring a country such as Italy, the favourable TLTROs are widely used in such jurisdictions.

Will EONIA (€str) be trading on the marginal or average deposit rate?

- In the current setup in the euro money market, the weighted-average deposit rate and marginal rate is virtually the same and as the extra EUR are placed as reference to -40bp, EONIA trades at the marginal rate. However, the ECB's goal should be to mitigate the side-effects of a cut, i.e. the weighted deposit rate should not decline as much as the marginal. Where ultimately EONIA (and €str) will trade depends on the framework. However, we expect the ECB to be more focused on easing monetary policy rather than supporting banks at this stage.
- We argue that the calibration of the parameters will depend on the size of the cut and the share at the tiers. Politically however, we could see the ECB wanted to aim for a 'tiering-effect' of up to 0.25 of the rate cut. Therefore, a 'tiering premium' of c.5bp with a 20bp cut and less with a 10bp cut (c.2bp).
- *Implementation will be important for markets*
 - To ensure that the deposit rate (lower tier) continues to be the key ECB interest rate (point 3 on our list of items), the ECB could make a combination of a static and dynamic allotment.
 - **Static:** a cut-off of prior to announcement, for example the individual bank's threshold set at 25% of net deposits on 31 August 2019.
 - **Dynamic:** all further deposits remunerated at the lower rate. This would ensure that the deposit rate continues to be the most important.
 - Such implementation would not lead to a 1:1 rate cut transmission to EONIA right after the ECB meeting but following the balance sheet expansion as a result of new QE purchases, the CA and DF would rise, which would ultimately lead EONIA to converge gradually to the deposit rate. In the extreme example of QE infinity, the rate on the marginal euro would be converging to the deposit rate.
 - Its difficult to assess the transmission from an ECB cut to EONIA without the exact parameters. However, in the example of a 25% share at the higher tier, the 'excess liquidity' would fall around EUR350bn, which compares with the current excess liquidity of around EUR1.9bn. Historically, the deposit rate has been more important for EONIA as excess liquidity rose past EUR300bn.



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Source: ECB, Macrobond Financial, Danske Bank

Other options

- Lessons from Riksbank and Denmark on certificates of deposit include the following.
 - Both Danmarks Nationalbank and Riksbank offer these facilities. Despite similar instruments already being in the ECB's framework (used in SMP), we do not expect the ECB to use CDs to sterilise the rate cut. The ECB ultimately wants to send an easing signal, while CD would create the opposite illusion.
 - We also note that issuance of CD would create a market for CD, affecting the market functioning in both periphery and core/semi-core markets.
- We discussed the approach with the RR earlier but stress again that given the fragmented European banking sector, an interbank market for 'ECB pots' would be created, which would disturb the money-market transmission.

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This research report has been prepared by Danske Research, a division of Danske Bank A/S ('Danske Bank'). The authors of this research report are Piet P.H. Christiansen, Senior ECB / Euro Area Analyst and Aila Mihr, Analyst.

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None.

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