Cliff in excess liquidity related to TLTRO should be avoided

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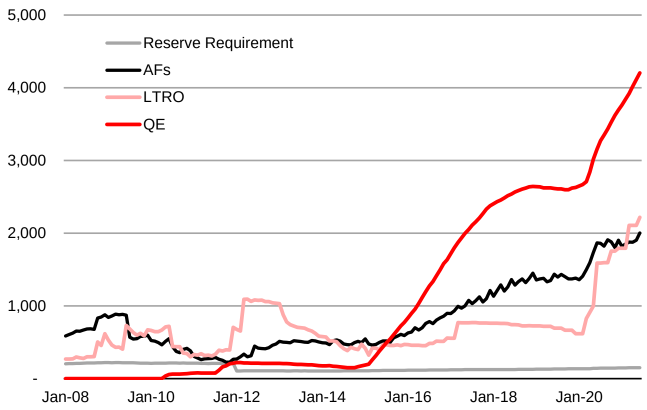
- Excess liquidity in the euro area has increased to more than EUR 4tn as a result of QE and TLTROs. While we expect that QE will lead to a further increase in excess liquidity in the coming quarters, this is unlikely to be the case for TLTROs. If anything, the question is how fast banks will pay back these funds.
- The TLTRO III.4 allotted in June 2020 has a very large amount outstanding (EUR 1.3tn). We discuss what the ECB could do to reduce the likelihood of a liquidity cliff.
- Very high excess liquidity has pushed the Euribor curve up to the 6M tenor below the ECB deposit rate and the 3M Euribor/Eonia basis below zero. We do not expect to see a reversal of these trends in the foreseeable future.

CHART 1:
DEMAND AND SUPPLY OF LIQUIDITY IN THE EURO AREA



Source: ECB, Bloomberg, UniCredit Research

Excess liquidity is at an all-time high: the key drivers

Excess liquidity is the difference between liquidity supplied by the ECB and banks' liquidity needs. It was virtually zero until mid-2008, when, in response to the global financial crisis, the ECB introduced full allotment in its refinancing operations. This pushed excess liquidity into positive territory.

Supply of liquidity from the ECB has mostly come in recent years via two channels: liquidity operations (LTROs and TLTROs) and QE.

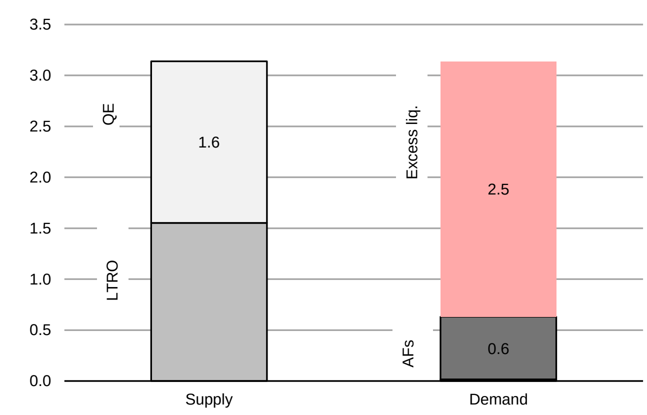
LTROs with full allotment were introduced in 2008 and have become an important monetary-policy tool for the ECB, contributing to the creation of excess liquidity. As outlined in the ECB's strategy review, LTROs are likely to remain an important policy tool going forward. The amount outstanding of such operation is EUR 2.2tn.

QE, started in 2015, has also been a key driver of excess liquidity. The overall amount of assets purchased by the ECB under QE is currently EUR 4.2tn.

Demand for liquidity is the sum of required reserves, (around EUR 150bn for euro-area banks in aggregate) and a number of other components called autonomous factors (AFs), which currently amount to around EUR 2tn. Among the main drivers of AFs are banknotes in circulation (EUR 1.5tn) and government deposits (around EUR 550bn). AFs rose steadily from 2015 to 2018 and again in the first half of 2020, contributing to offsetting part of the effect of QE and TLTROs on excess liquidity.

When the pandemic hit in 2020, the ECB responded with bold policy actions aimed at supporting the economy and reducing financial-market volatility. Excess liquidity more than doubled as a result. Chart 2 shows the change in excess liquidity that has occurred since the beginning of 2020. The increase has been driven almost equally by QE and TLTROs.

CHART 2: CHANGE IN EXCESS LIQUIDITY SINCE 2020



Source: ECB, Bloomberg, UniCredit Research

The path of excess liquidity going forward

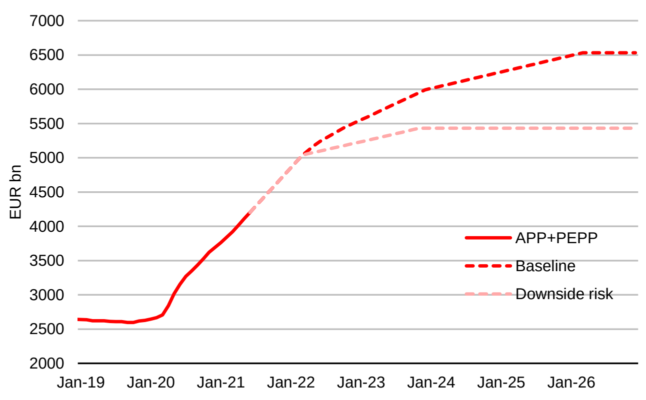
With excess liquidity at a record high, key questions are what can be expected for the future? Will it rise even more? What is a reasonable level for excess liquidity in the medium term?

The path of excess liquidity going forward will depend crucially on ECB decisions on QE and the TLTROs. In the following, we take a look at these two issues.

With respect to QE, our baseline is that the ECB will hardly be in a position to reduce net asset purchases significantly in the coming years, given that its own inflation forecasts largely undershoot its goal. We hence expect net asset purchases to remain positive in the coming few years, around EUR 1,100bn in 2021, EUR 800bn in 2022 and EUR 200-300bn per year through 2025. As a hawkish risk scenario, we consider that the ECB stops net purchases at the end of 2023. In both cases, asset purchases will continue to put upward pressure on excess liquidity at least in the next few years.

Furthermore, the ECB will reinvest redemptions in its PEPP portfolio until at least the end of 2023. Our baseline is that reinvestments will continue even beyond so that an appropriate monetary-policy stance can be maintained. It will also reinvest APP redemptions until well after the first rate hike, which we expect will happen several years down the road. Hence, even under conservative assumptions on net asset purchases, the stock of the ECB's QE portfolio is likely to stabilize around EUR 5.5tn in late 2023. Depending on the level of AFs, this should contribute to EUR 3-3.5tn in excess liquidity.

CHART 3: PROJECTED QE PORTFOLIO SIZE



Source: ECB, UniCredit Research

Unlike for QE, we do not expect TLTROs to make a further significant incremental contribution to excess liquidity. Euro-area banks are already extremely long in terms of liquidity, and while they still have EUR 1tn of TLTRO funding available, they are unlikely to use it unless there is a clear economic incentive. Indeed, we expect a low net take up at the remaining two TLTROs.

If anything, the question is, how fast will banks pay back these funds? Once residual maturity falls below 12 months, the contribution of TLTRO funding to the net stable funding ration (NSFR) diminishes, creating an incentive for banks to repay.

TABLE 1: TLTRO-III

	Gross amt.	Net amt.	No. of bidders	Settl. date	Maturity	Date when residual mat. is below 1Y
1	3	-29	28	25-Sep-19	29-Sep-22	29-Sep-21
2	98	-48	122	18-Dec-19	22-Dec-22	22-Dec-21
3	115	253	114	25-Mar-20	30-Mar-23	30-Mar-22
4	1308	592	742	24-Jun-20	29-Jun-23	29-Jun-22
5	174	157	388	30-Sep-20	28-Sep-23	28-Sep-22
6	50	37	156	16-Dec-20	21-Dec-23	21-Dec-22
7	331	-16	425	24-Mar-21	29-Mar-24	29-Mar-23
8	109	110	224	17-Jun-21	26-Jun-24	26-Jun-23
9				29-Sep-21	25-Sep-24	25-Sep-23
10				22-Dec-21	18-Dec-24	18-Dec-23

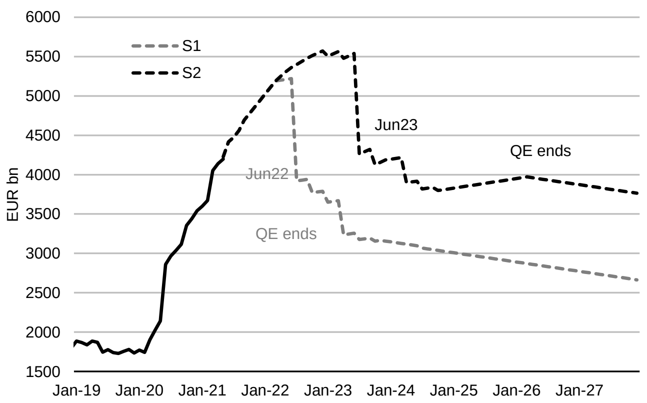
Source: ECB, Bloomberg, UniCredit Research

Banks may still prefer to keep TLTRO funding because this is an important way to mitigate the cost of excess liquidity. However, for this to happen, two conditions must be satisfied: **1.** Banks must be confident they are able to beat benchmark lending requirements. **2.** The cost of TLTRO funds must remain lower than the ECB's deposit rate beyond June 2022.

With these considerations in mind, we considered two scenarios for TLTROs: **1.** Banks repay the entire amount as soon as residual maturity falls below 12 months. **2.** Banks keep the funds until maturity.

Combining the two cases for asset purchases and TLTROs, we obtain a best and a worst case for excess-liquidity development. The actual path will most likely fall in between

CHART 4: PROJECTED EXCESS LIQUIDTY



S1:TLTROs are repaid at maturity, and QE runs through 2025.

S2: TLTROs are paid as soon as residual maturity is below 12M, the PEPP ends after March 2022 and the APP runs at EUR 20bn/month until end-2023.

In both scenarios, redemptions are reinvested through the horizon, and AFs are assumed to grow at half the average rate in the period Jan15-Dec19.

Source: ECB, UniCredit Research

The main findings worth highlighting are as follows:

First, excess liquidity is projected to rise further, above the EUR 5tn threshold, in the coming quarters.

Second, the TLTRO-III.4, allotted in June 2020, is the most important factor that could create a cliff in excess liquidity.

Third, even under the assumption that net asset purchases will maintain a robust pace for a protracted period, their contribution to excess liquidity will not be enough to offset the effect of the June 2020 TLTRO redemption.

Fourth, excess liquidity in both scenarios will remain comfortably higher than before the pandemic and likely above EUR 3tn until mid-2024.

What the ECB could do to avoid a liquidity cliff

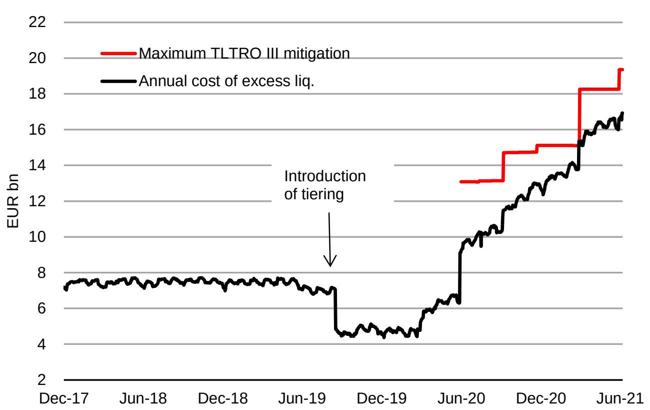
Our analysis shows that a liquidity cliff related to the June 2020 TLTRO is likely to occur, and while excess liquidity will likely remain very high, there are a number of reasons why the ECB should avoid this cliff.

First, with its own inflation forecasts still largely undershooting its goal, the ECB should not permit any tightening in financing conditions.

Second, (and related) keeping liquidity abundant for long is a precautionary measure that minimizes risks to the economic recovery.

Third, it is always difficult to predict how markets react to large shocks, and it would be advisable to avoid creating one, given that there are already enough sources of uncertainty for investors.

CHART 5: BANKS AND NEGATIVE RATES: TLTRO FUNDS COME TO THE RESCUE



Source: ECB, UniCredit Research

Finally, TLTROs have significantly mitigated the costs associated with negative interest rates that the banking sector has had to face, and it is important that this situation is maintained. Should the ECB accept a strong decline in TLTRO funding, it would be important to increase the tiering multiplier to avoid that an extra burden be placed on banks. The tiering mechanism allows banks to deposit a certain multiple (currently six times) of their reserve requirements at 0% rather than at the deposit rate.

What could the ECB do to ensure that the path of excess liquidity is as smooth as possible?

First, favorable funding conditions should be extended beyond June 2022, maintaining a negative spread of the minimum rate with the depo (the current one is -50bp).

Second, the ECB should lengthen the maturity of TLTROs so they continues to satisfy the NSFR requirement.

Under current rules, switching funds from the Jun 2020 TLTRO into one of the remaining two (TLTRO-III.9 in September 2021 or TLTRO-III.10 in December 2021) is penalized, as banks lose the lowest rate for a period of three to six months.

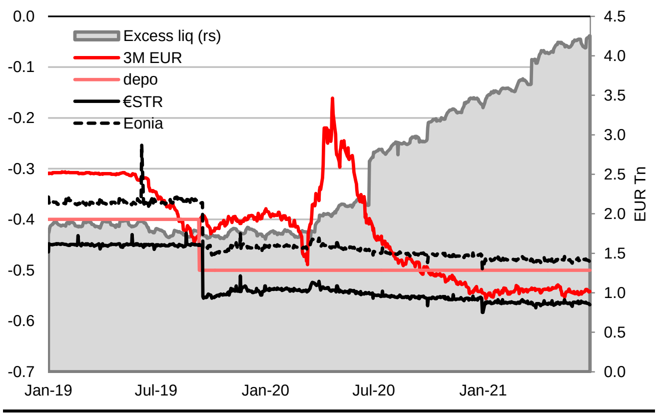
The ECB could either remove such a penalty or launch a new series of TLTROs, matching the dates when the residual maturity of current ones falls below 12 months and give banks the opportunity to extend their liquidity. The ECB could set a cap on how much funding can be switched into each new operation to avoid excessive concentration on a single operation. As shown in Chart 4, this would remove the cliff and could create a smoother path for excess liquidity. As usual, it would be up to banks to choose if they want to extend TLTRO funding.

These new TLTROs should be announced with enough notice so that banks have good visibility and are able to participate.

Implications for MM rates

Excess liquidity is an important driver of MM rates. The combination of high excess liquidity and minimum TLTRO rate at depo-50bp (-1%) has contributed to push Euribor rates below the deposit rate. Following the Jun 2020 TLTRO, Euribor rates dropped significantly and are currently below the deposit rate up to 6M.

CHART 6: EXCESS LIQUIDTY IS KEEPING EURIBOR LOW



Source: ECB, UniCredit Research

In our simulations, excess liquidity will remain higher than EUR 3tn until the end of 2024, and in any case, it is very unlikely to return to levels prevailing before the June 2020 TLTRO in the foreseeable future. This creates the conditions for Euribor rates to remain lower than the deposit rate for a protracted period. The closest date for possible upward pressure on Euribor rates is June 2022, but as we have discussed, it is likely that the ECB will create conditions to avoid a cliff on excess liquidity. The likelihood of a significant drop in excess liquidity in 2023 (the other possible cliff date in our simulation) should also be moderate. We hence see little scope for Euribor rates to increase in the coming years.

The 3M Euribor-Eonia spread turned negative about one year ago. In the past, the spread 3M Euribor-Eonia usually went negative during periods marked by rate-cut expectations. However, the situation has been very different in the last year, and the reason for a negative spread is liquidity. Indeed, the spread turned negative when excess liquidity approached the EUR 3tn level.

A key point is that banks are flooded with liquidity and are willing to accept even more from financial institutions with no access to the ECB deposit facility only at a rate lower than the depo. This has pushed €str and Euribor below the deposit rate.

Due to abundant liquidity, spreads between lending and borrowing have probably tightened in recent quarters. This has not been possible for the €str-Eonia spread, which is fixed by construction at 8.5bp and explains the negative Euribor/Eonia basis. As long as excess liquidity remains high and above the EUR 2.8-3tn range, we do not see a reversal to positive territory as likely.

In our simulation, excess liquidity drops below EUR 3tn in 2025 in the most adverse case. This is the horizon where we expect the 3M Euribor-Eonia basis to revert to positive.

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This report was completed and first published on 19 July 2021 at 09:50.

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