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Easy come, easy go

The impact of quantitative tightening on money, credit and market plumbing in the Eurozone

Executive Summary

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Since 2014, asset purchases and targeted longer-term refinancing operations (TLTROs) have been the two main planks of quantitative easing (QE) in the Eurozone. The ECB's asset purchases led to a significant compression of term spreads, easing financing conditions in the effort to lift inflation to the price stability target. TLTROs complemented asset purchases by providing cheap liquidity to the banking sector, and, thus, strengthening the lending channel of monetary policy, especially during the Covid-19 crisis. But TLTROs have taken a secondary role behind the market-moving asset purchase programmes (APP and PEPP).

Now, the gradual reduction of asset holding under the ECB's quantitative tightening (QT) strategy will shift the focus to unwinding TLTRO funding, which will remove most of the system-wide excess liquidity. We expect that the repayment and redemptions of TLTROs will contribute about three-quarters of the ECB's balance sheet reduction until mid-2024 amid a relatively slow run-off of asset purchases.

The unwinding of TLTRO funding will significantly impact both bank lending and capital markets. On one hand, the drawdown of excess liquidity will boost market liquidity through the release of collateral; this will help tighten asset swap spreads, a measure of collateral scarcity, which facilitates market-making in quote-driven markets, such as government and corporate bonds. On the other hand, we estimate that removing TLTRO as a cheap funding source for banks will amplify the current decline of credit growth (y/y) by about 1.4pp each month on average. For capital markets we expect a non-negligible impact on corporate credit-risk pricing, with both investment grade and high yield segments widening by +10-15bps and +40-50bps, respectively.[1]

If inflation remains higher for longer, the ECB could be forced to tighten monetary policy further, including by reducing its asset holdings above the amortization rate; this could intensify the effects. However, while the ECB is expected to increase the rate of passive asset run-off, a proactive balance-sheet reduction seems unlikely due to its significantly disruptive effect on market dynamics; for instance, the release of collateral by more vulnerable Eurozone governments and corporates could spur spread widening and raise the risk of fragmentation during a time of further monetary tightening.

[1] See "Quantitative tightening and debt repayment costs in the Eurozone" for a detailed analysis of the impact of QT on the term premium.


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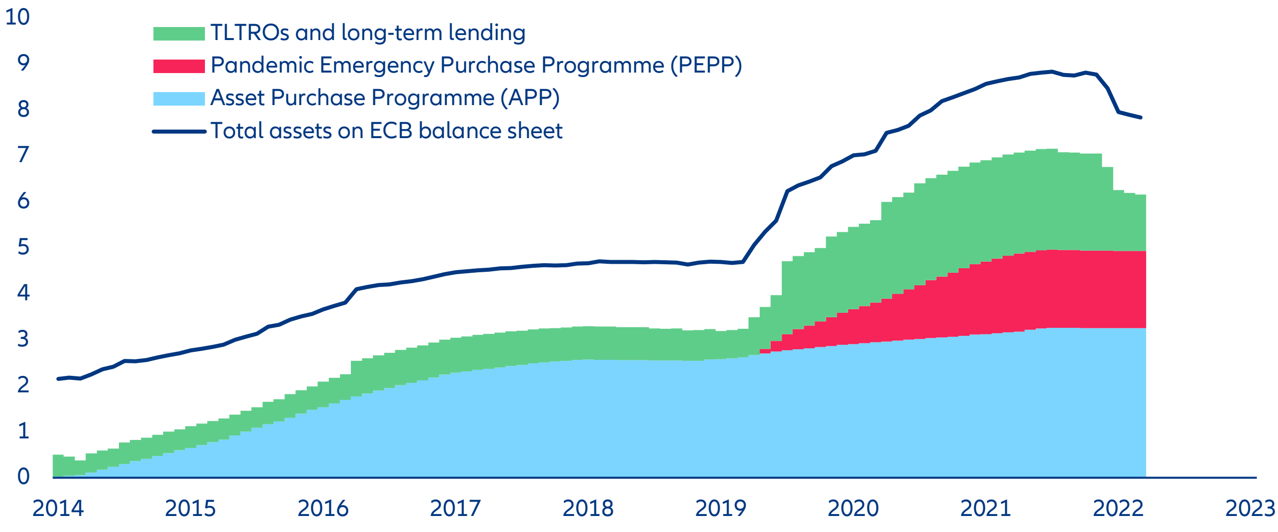
TLTROs: The untold story of QE

Since 2014, both asset purchases and targeted longer-term refinancing operations (TLTROs) have been the pillars of quantitative easing (QE) in the Eurozone. At its peak in 2021, the ECB's balance sheet reached almost EUR9trn, with the asset purchases programme (APP) and the pandemic emergency purchase programme (PEPP) accounting for more than half (EUR5trn). The ECB's asset purchases led to a significant compression of term spreads, easing financing conditions in the effort to lift inflation to the ECB's price-stability target. However, a quarter of the balance-sheet expansion was due to a less prominent market operation: TLTRO auctions, which offered banks long-term funding (up to three years) at favorable rates on the condition that they maintain lending to the real economy via corporate loans and consumer credit. To access this funding, banks had to pledge collateral to the ECB in the form of eligible securities and use the funding for lending to non-financial corporates. The first series was announced in June 2014, followed by TLTRO-II in March 2016 and TLTRO-III in March 2019. TLTRO-III ended in Q2 2021 and will be fully repaid until mid-2024.

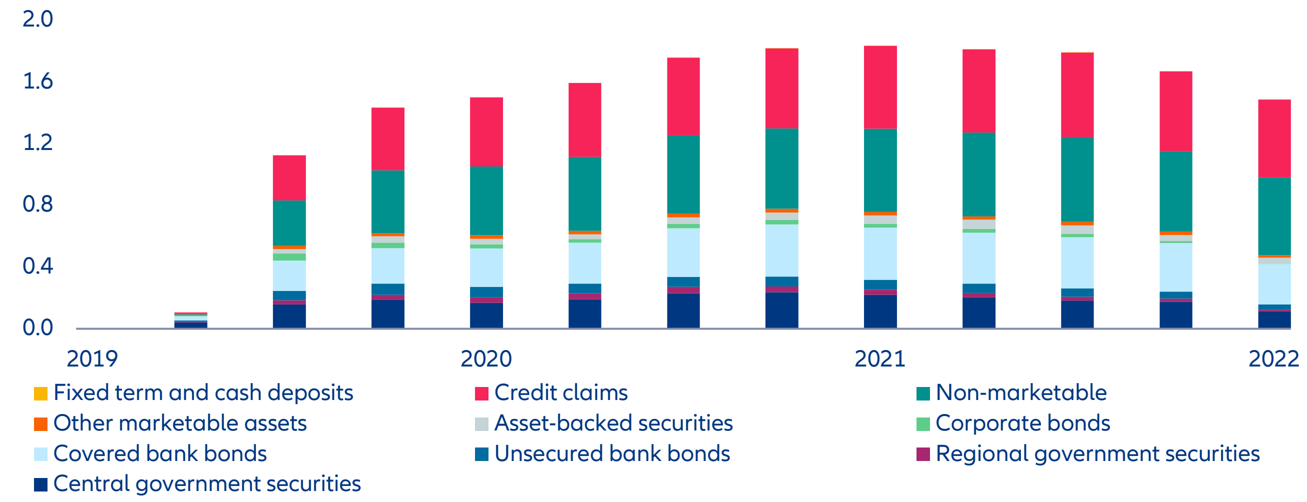
During the Covid-19 pandemic, a new series of TLTROs played a key role in providing cheap liquidity to the banking sector, helping to raise lending to non-financial corporates by 1.2pp (almost three times as much compared to previous operations). The ECB's recalibration of TLTRO conditions at the onset of the pandemic, together with the enlarged set of eligible assets that could be pledged for collateral, significantly boosted the TLTRO take-up. As a result, the outstanding volume of TLTROs reached almost EUR2.2trn (1% percent of total banking assets and 20% of the total liquidity of the Euro system) by mid-2021. This extended access to cheap central bank money helped prevent an unwanted credit crunch that could have led to a severe protracted recession. Based on the use of collateral for accessing TLTRO funding, around 30% to 40% of the TLTRO-based funding was directly linked to lending activity (with banks "recycling" new loans by pledging them as collateral to secure funding) (Figures 1, 2 and 3).

Figure 1: ECB balance sheet assets (2014-22, in EUR trn)



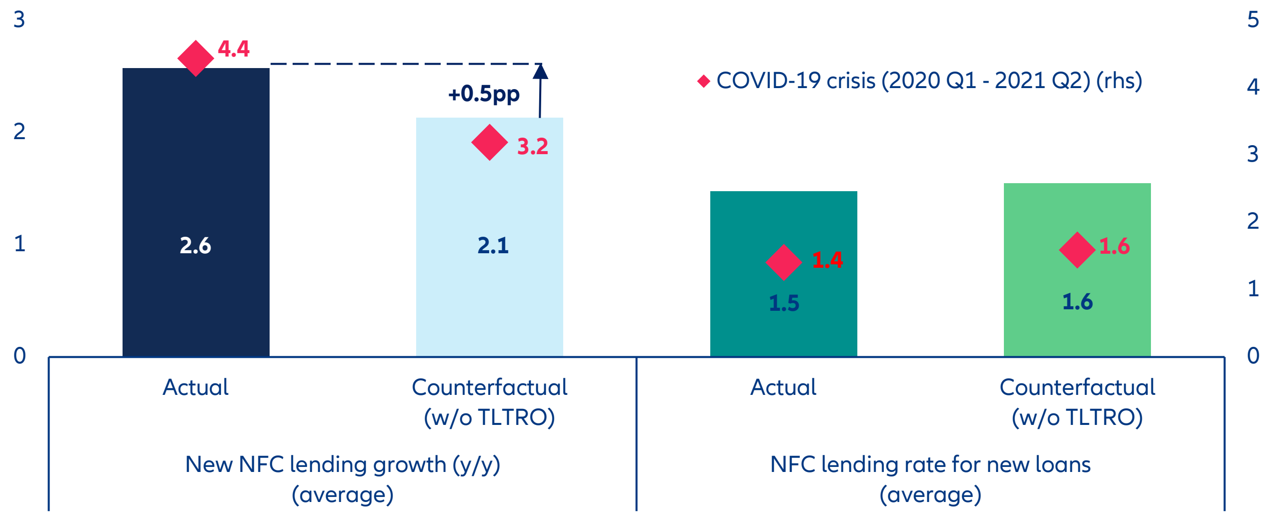
Sources: ECB, Refinitiv Datastream, Allianz Research
Note: ECB asset holdings under the Marginal Lending Facility (MLF) and Main Refinancing Operations (MRO) are not included their relatively small share of the ECB's balance sheet.

Figure 2: Use of collateral at the ECB (EUR trn) (change since Dec. 2019)



Sources: ECB, Allianz Research

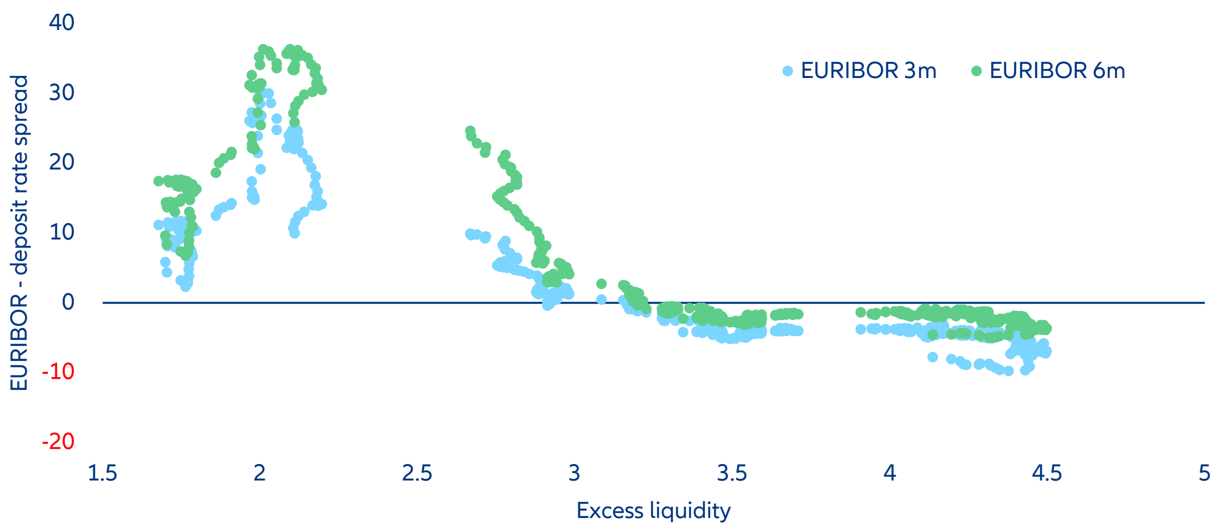
Figure 3: Impact of TLTRO borrowing (Q1 2016 - Q2 2021; %)



Sources: ECB, Refinitiv Datastream, Allianz Research

Despite having a marginally low impact on lending rates, the extra TLTRO funding acted as a lifeline for unsecured money market rates. More favorable TLTRO terms during the so-called "special interest period" helped keep unsecured money market rates (e.g. EURIBOR rates) at bay; this was important not only for market liquidity (as benchmark rates in swap and futures markets) but also financial stability (as a benchmark for banks' lending rates to businesses and households). At the same time, and by offering funding below the deposit facility rate, the ECB provided a very effective incentive for banks to participate in TLTRO auctions. All in all, the large injection of fresh liquidity contributed to a decrease and anchoring of unsecured money market rates, which played a vital role in keeping funding accessible for the broader economy (Figure 4).

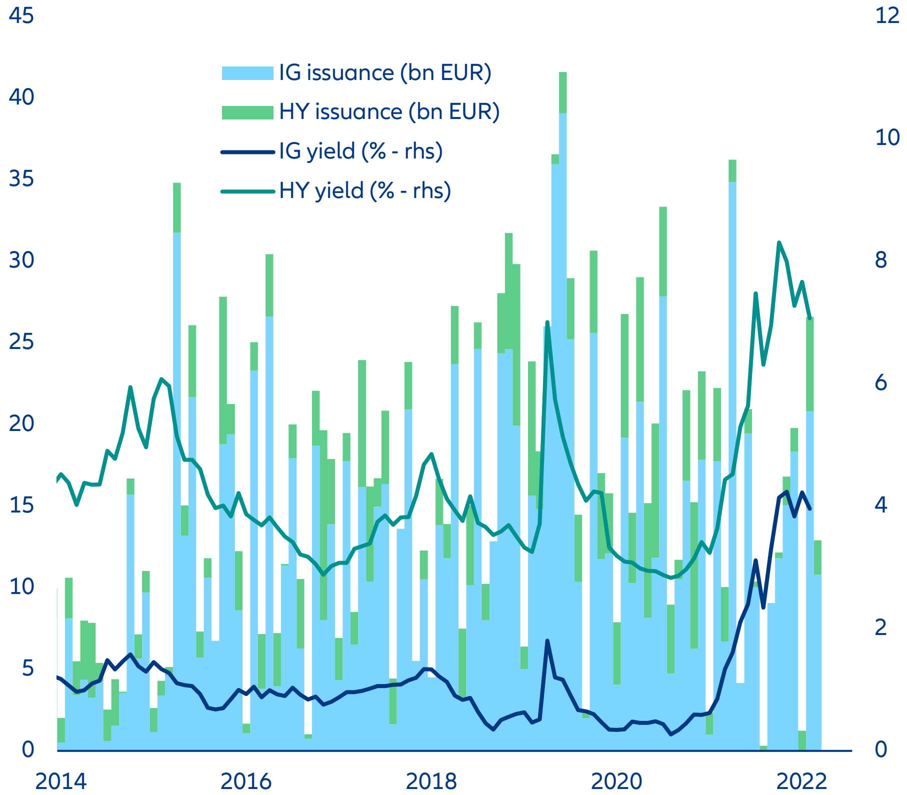
Figure 4: Excess liquidity (EUR trn) vs unsecured term rates (bps) (Jan. 2020 – Dec. 2021)



Sources: Refinitiv Datastream, Allianz Research. Note: Data from January 2020 to December 2021

Traded corporate credit also massively benefited from the excess liquidity environment. By keeping market credit risk at acceptable levels, struggling companies could access financing at a lower average cost, prompting a front-running of future financing needs and extending the average maturity of traded and non-traded debt profiles (Figure 5).

Figure 5: EUR corporate credit issuance

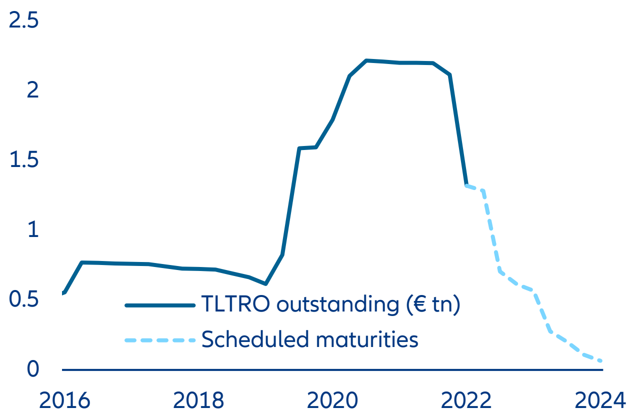


Sources: FINIM, Refinitiv Eikon, Allianz Research

Watch out for swift TLTRO repayments

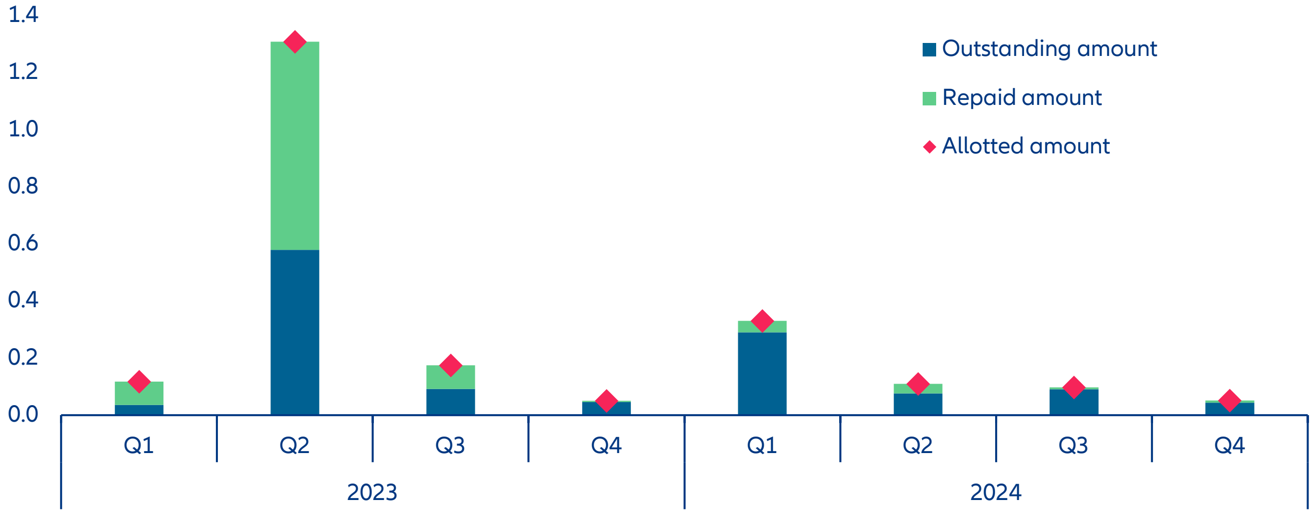
The return of inflation accelerated the unwinding of TLTRO. In November 2022, the ECB changed the TLTRO lending terms and reserve remuneration, making it less profitable to borrow through TLTRO. The narrowing difference between the rate at which banks borrowed funds did not match and the rate at which they placed it back at the ECB, eliminated the carry-trade opportunity of holding TLTRO funds. A direct consequence was an immediate increase in TLTRO early repayments and a shift from banks' credit accounts to the ECB deposit facility (which at that time was already at 1.5%) (Figures 6 to 8).

Figure 6: TLTRO and scheduled maturities (EUR trn)



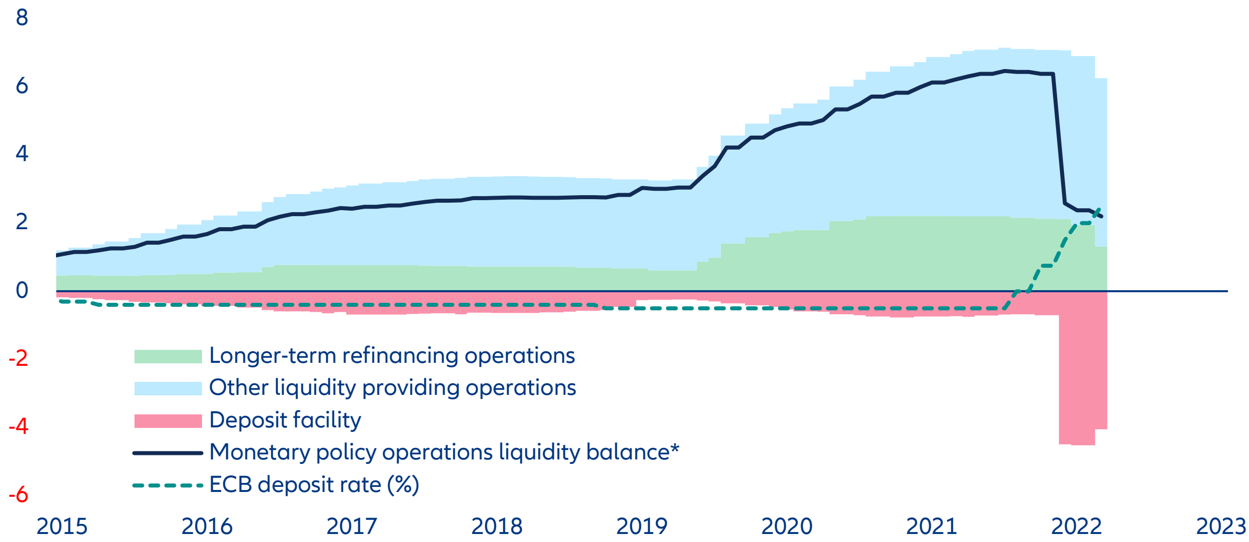
Sources: Refinitiv Datastream, Allianz Research.
Note: The scheduled maturities path assumes no further early repayments

Figure 7: TLTRO expiry by maturity (in EUR trn)



Sources: ECB, Refinitiv Datastream, Allianz Research
Note: TLTRO are assumed to expire at the defined expiry date (no early repayments)

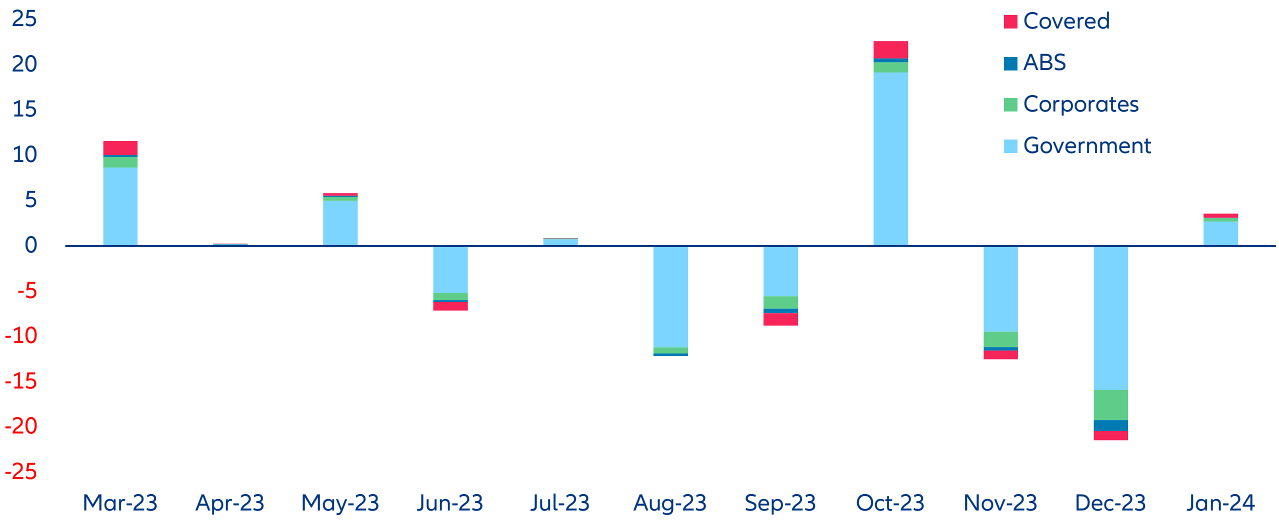
Figure 8: Monetary policy operations of the Eurosystem – liquidity (EUR trn)



Sources: Refinitiv Datastream, Allianz Research
*Balance between liquidity providing and liquidity absorbing monetary policy operations
Note: MRO, MLF and other liquidity absorbing operations are omitted in the chart due to its low volumes.

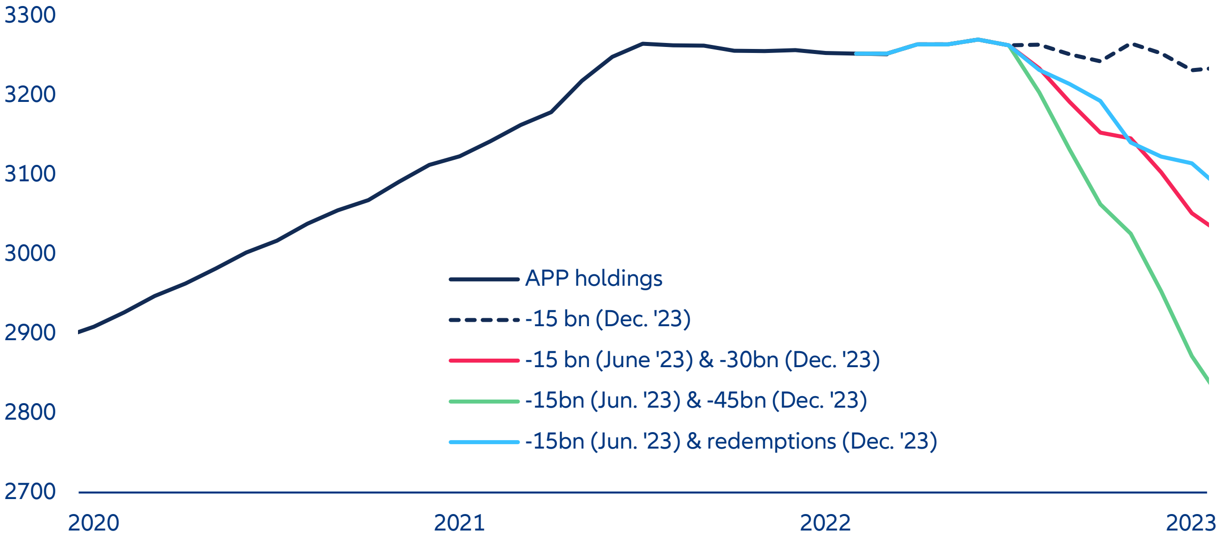
In 2023, early repayments and maturing TLTROs will contribute to most of the reduction in the ECB's balance sheet, which will help reduce money supply and excess liquidity. However, it will do a bit less in tackling the collateral scarcity left behind by the ECB's programs. On top of the unwinding of TLTROs, the ECB's quantitative tightening (QT) approach via APP run-off (capped at EUR15bn monthly) will put a lid on the full-fledged replenishment of market liquidity over the near term. Reinvestments due to maturing assets will most likely compensate and even surpass the maximum net monthly shrinkage of EUR15bn, leading to a net liquidity-absorbing effect. To increase liquidity supply, the ECB would need to substantially speed up the shrinkage of the APP balance sheet and even stop reinvesting the maturing assets (Figures 9, 10 and 11).

Figure 9: APP redemption and reinvestment assuming (-15bn / monthly) in EUR bn



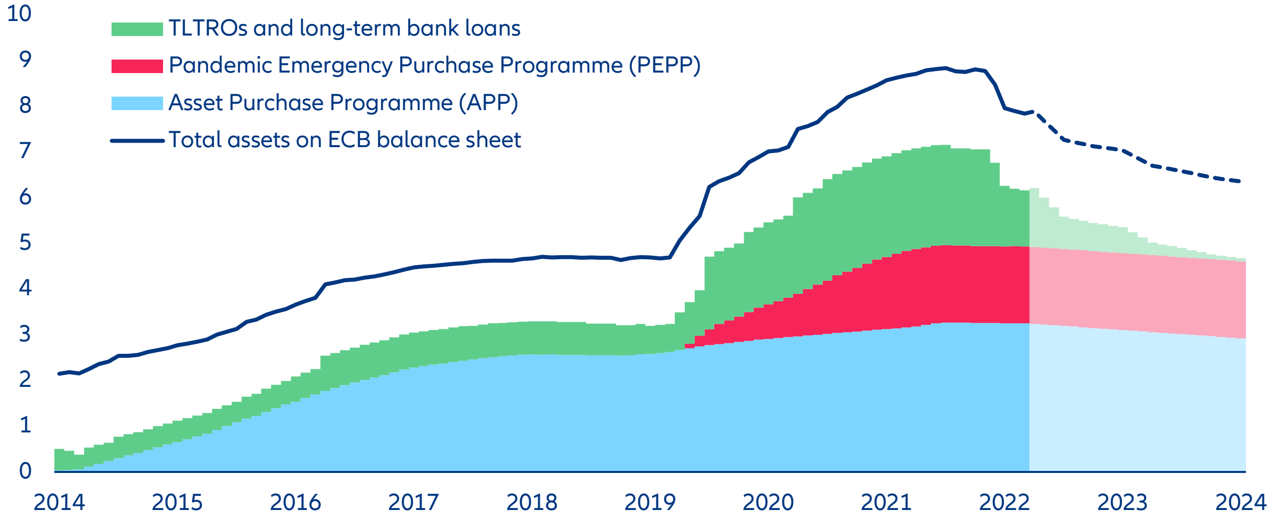
Sources: Refinitiv Datastream, Allianz Research

Figure 10: APP quantitative tightening scenarios (EUR bn)



Sources: Refinitiv Datastream, Allianz Research

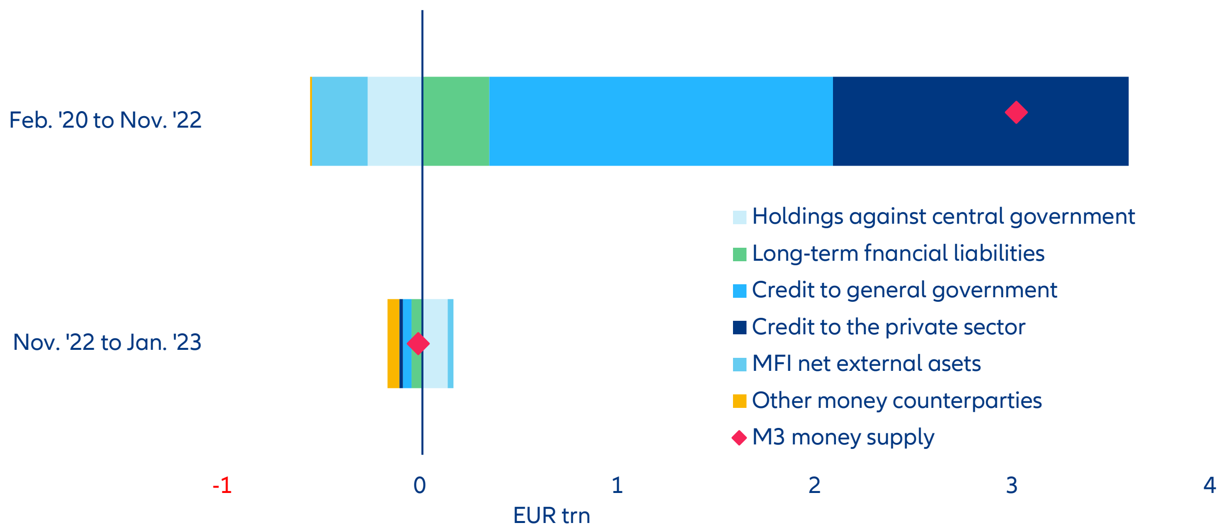
Figure 11: ECB balance sheet scenario (in EUR trn)



Sources: ECB, Refinitiv Datastream, Allianz Research
Note: APP is assumed to run off at a -15bn/monthly pace, TLTRO are assumed to expire (no early repayments) and PEPP is assumed to be reinvested throughout the forecasting horizon.

The early unwinding of TLTRO has already accentuated the contraction of money supply. In January 2023, base money (M1) contracted for the first time ever on a year-on-year basis, which was accompanied by continued decline in credit growth since the end of last year, resulting in a deceleration of monetary aggregates. Credit to the private sector contracted by more than EUR50bn in December, albeit from a high level (after having grown by EUR1.5trn since February 2020 (Figure 12)). The transaction velocity of money (based on M1) returned to pre-Covid levels only in 2022. However, as inflation rates begin to converge to the price-stability target, money velocity is likely to decline again as structural drivers retake the lead.

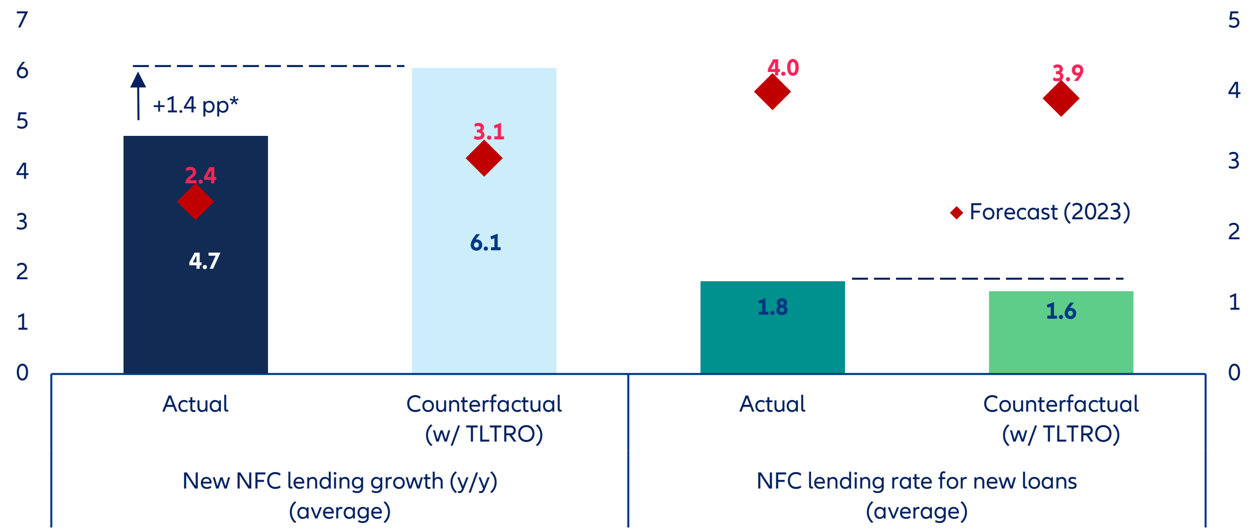
Figure 12: Eurozone: changes of money supply (M3)



Sources: Refinitiv Datastream, Allianz Research

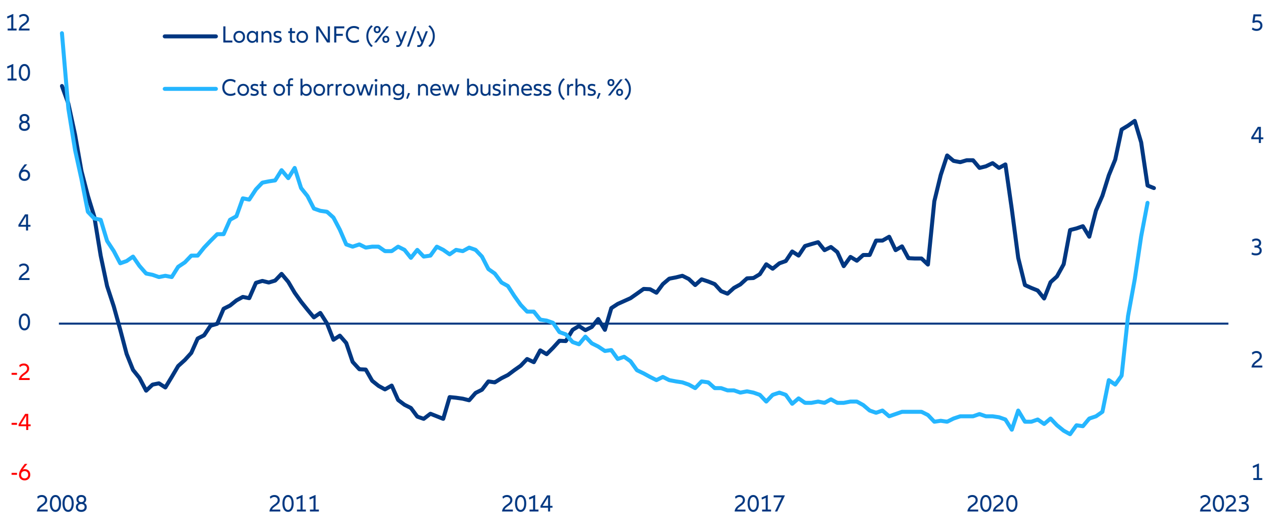
The recursive repayment of the TLTRO funding will also lead to higher funding costs, which will further tighten credit conditions. Some banks will be able to partially offset the negative effects of the end of TLTRO, thanks to higher net interest income, especially in countries where the interest rate pass-through is higher. However, higher rates will also weigh on credit demand, which is likely to result in a net negative impact on lending margins for banks amid deteriorating default risk. We find that the current (and expected) pace of the TLTRO run-off reduces potential credit growth by about a quarter (Figure 13) but has a marginal impact on lending rates. Economic risk remains the main driver of banks' tightening of credit standards as funding-cost constraints become more binding (Figures 14 and 15). Soft data coming from the latest ECB Bank Lending Survey (link) confirm fears of a further tightening of credit standards for firms. Moreover, Eurozone banks expect a deterioration in access to all funding sources. Given the gloomy outlook, we expect these headwinds to prevail, at least in 2023.

Figure 13: Impact of TLTRO run-off (Q3 2021 – Q4 2022/2023; %)



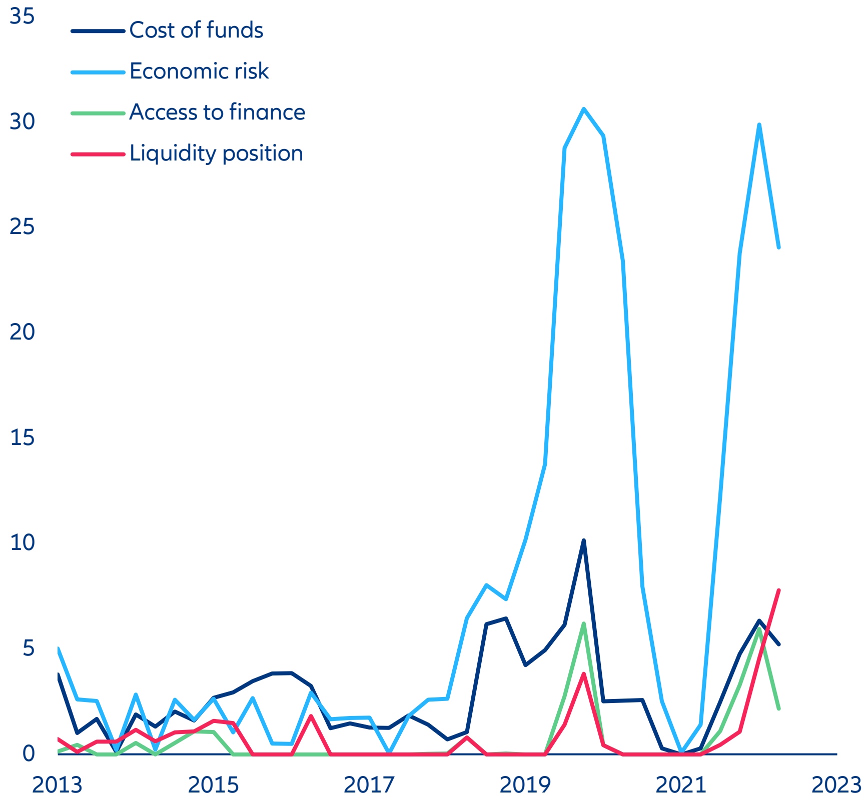
Sources: ECB, Refinitiv Datastream, Allianz Research

Figure 14: Eurozone: annual growth of loans to non-financial corporations vs. cost of borrowing (new business)



Sources: ECB, Refinitiv Datastream, Allianz Research

Figure 15: Share of surveyed that report at least some tightening of credit standards for loans to non-financial corporates (by cause)

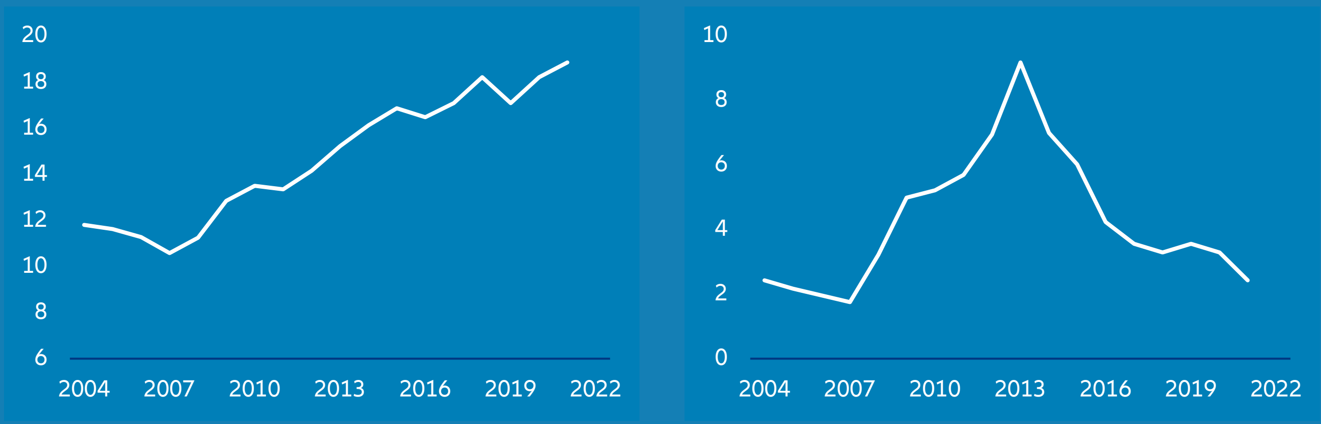


Sources: ECB Bank Lending Survey, Refinitiv Datastream, Allianz Research

Box 1. Financial stability implications of unwinding TLTROs

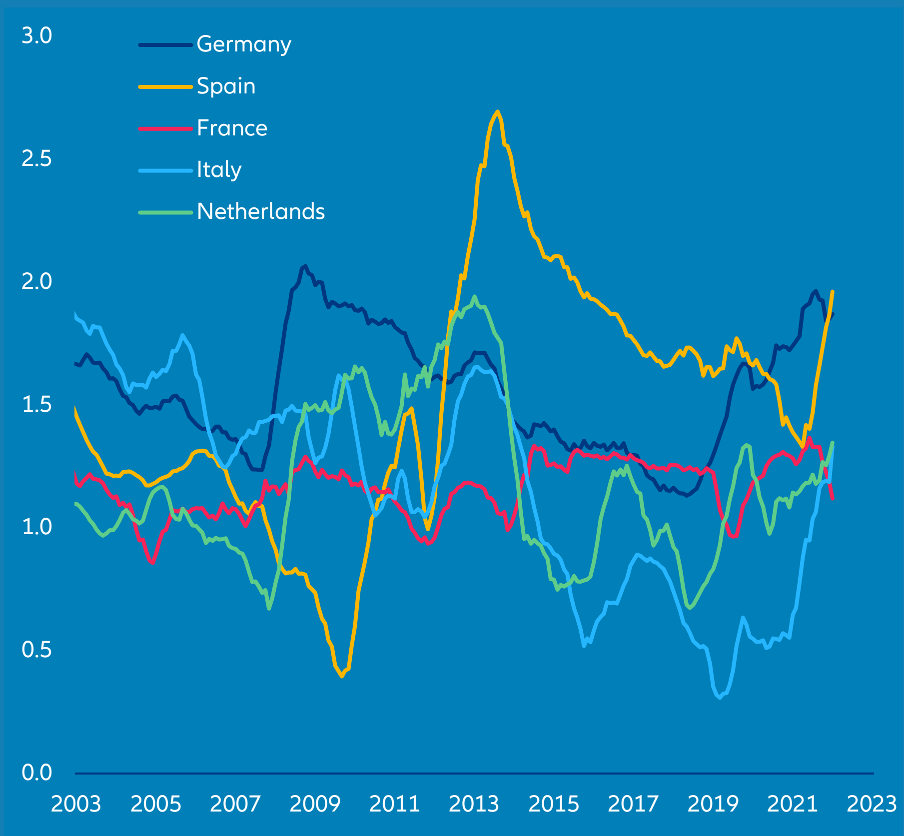
So far, QT has had a limited effect on financial stability, leaving room for downside surprises. Even though the primary goal of TLTRO funding was the easing of financing conditions through more effective monetary transmission, it also helped stabilize margin compression in the banking sector, which came under increasing pressure during the great moderation in the wake of the Eurozone sovereign debt crisis. By making lending conditions more attractive for banks, TLTRO funding cushioned banks' returns in a low-rate environment without pushing them into excessive risk-taking. While European banks seem healthier now in terms of capitalization, liquidity and profitability (Figures 16a/b and 17), their asset quality remains to be tested at a time when slowing economic growth is likely to increase impairments over the near term. Despite the downward skewed outlook, we do not expect any relevant financial stability issues to arise in the near future.

Figure 16: Eurozone banking sector—capital adequacy ratio (%) (lhs) and non-performing loan ratio (%) (rhs)



Sources: Refinitiv Datastream, Allianz Research.
The components of the Euro Stoxx Bank subindex at the end of each year have been used for the computation, thus eliminating survivor bias. Total assets in EUR is the variable used to weight the reported figures from each bank.

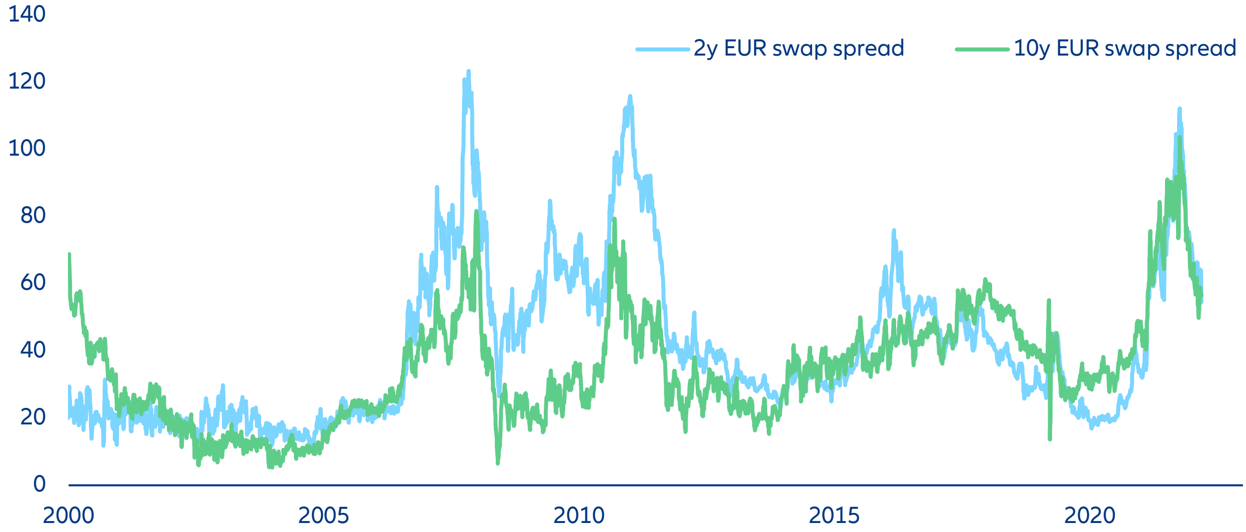
Figure 17: Eurozone—MFIs lending margins on loans to NFCs



Sources: ECB, Refinitiv Datastream, Allianz Research

The gradual drawdown of excess liquidity will boost market liquidity through the release of collateral. However, the scale and pace of the TLTRO repayments and the specific repayment schedule of single bank names will continue to determine the amount of high quality (government debt) collateral being released as it is not a necessary prerequisite for the banks holding the biggest share of high-quality collateral to be the ones repaying their loans early. However, at a minimum, the unwinding of TLTRO should continue to help tighten swap spreads, a measure of collateral scarcity, while also leading to less excess liquidity chasing the same high-quality collateral (Figure 18).

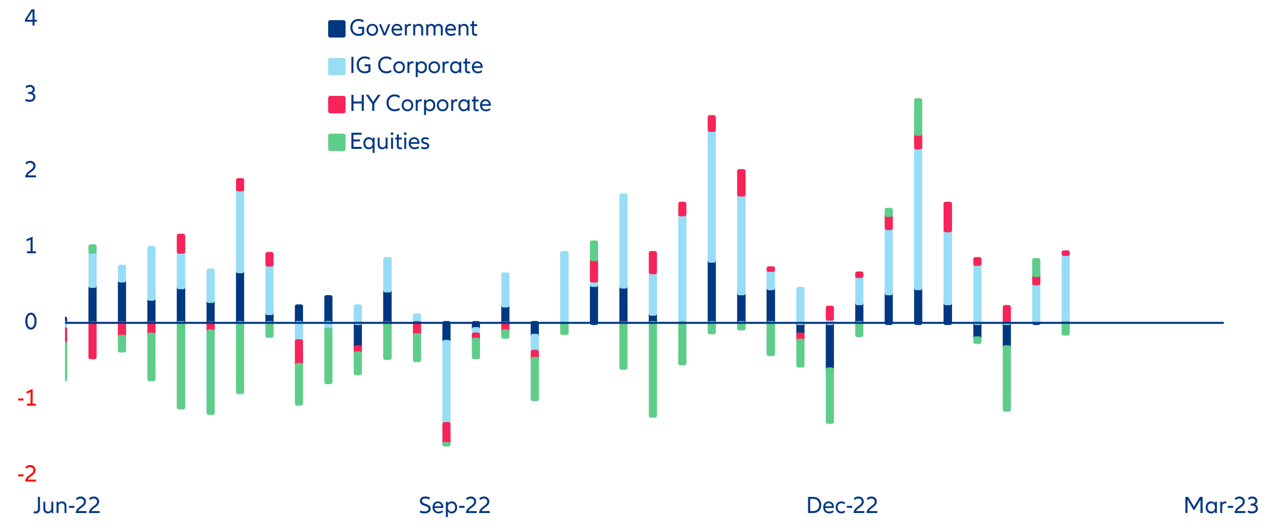
Figure 18: Germany – EUR swap spreads (in %)



Sources: ECB, Refinitiv Datastream, Allianz Research

At the same time, we expect a small but non-negligible impact on corporate credit-risk pricing. We expect the implicit risk repricing to be limited as scarcity prevails in EUR corporate credit markets, especially in the investment grade segment. This is especially true since fund flows suggest that market participants have been more than willing to absorb the extra corporate liquidity provided by the APP-related QT operations in 2023 and the additional liquidity provided by the unwinding of corporate bond collateral parked at the ECB. To it put into numbers, at a -15bn broad QT pace, the expected 2023 yearly shrinking of the ECB's corporate balance sheet will be close to ~ 5bn while the inflows into EUR IG corporate funds are already +6bn in the first two months of 2023. This means that, as of today, market participants are more than willing to take on the extra liquidity provided by the ECB stepping back. In this high-demand environment, the decent issuance volumes experienced during the first two months of the year (~EUR30bn) are helping. Nonetheless, and from a market-pricing perspective, the year-to-date spread compression and the high demand suggest that the current supply of investment grade corporate bonds may not be sufficient to fulfill market demand for quality credit in 2023, most probably leading to an accumulation of price dislocations and a relative misrepresentation of "real" corporate credit risk (Figure 19, next page).

Figure 19: EUR fund flows (in EUR bn)

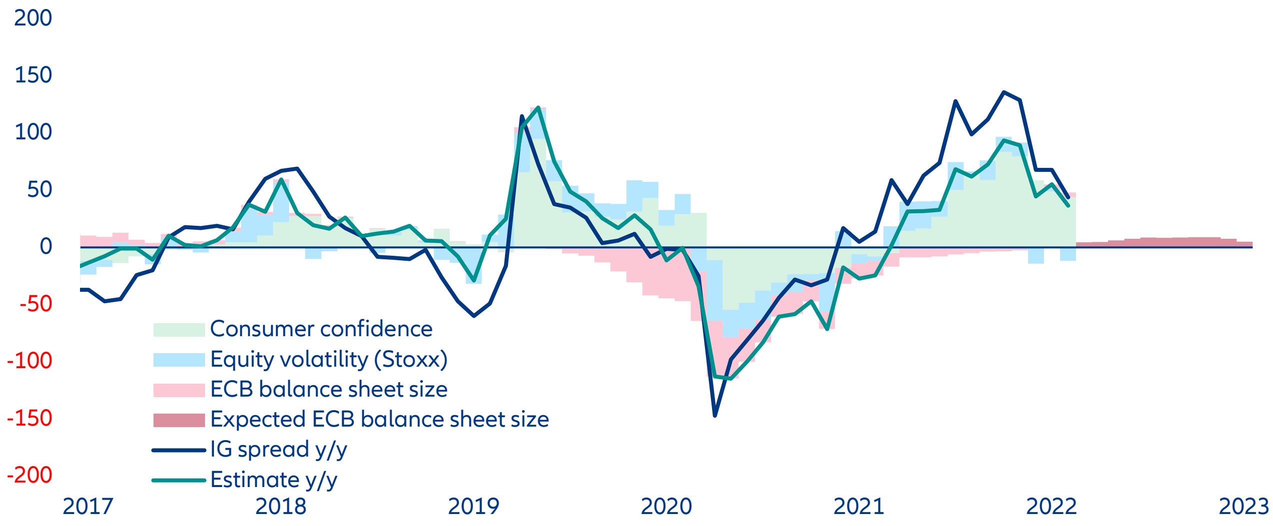


Sources: Refinitiv Datastream, Allianz Research

Consequently, corporate credit risk is bound to reprice over the near term as volatility remains elevated and corporate balance sheets are put to the test. We expect EUR investment grade corporate spreads to widen from the current 140–150bps range to 170bps by the end of 2023. The case for high-yield is more pessimistic as higher default rates and rising financing costs could trigger a repricing of about 100bps vis-a-vis current levels (~420bps). Within this forecast, and isolating the TLTRO and QT effect from other variables affecting credit risk, we estimate that the shrinkage of the ECB's balance sheet will be responsible for +10-15bps of the investment-grade widening and +30-40bps for that of high yield (Figure 20).

Taking everything into account, it seems that the ECB is likely to accelerate its quantitative tightening plans in its effort to combat inflation. The rapid withdrawal of excess liquidity that will most likely create some market and economic disruption. Despite that, we do not expect the volatility waves to turn structural nor long-lasting; instead, they will help the ECB attain its desired price stability through tighter financial conditions.

Figure 20: EUR investment grade corporate credit spread decomposition (y/y - bps)

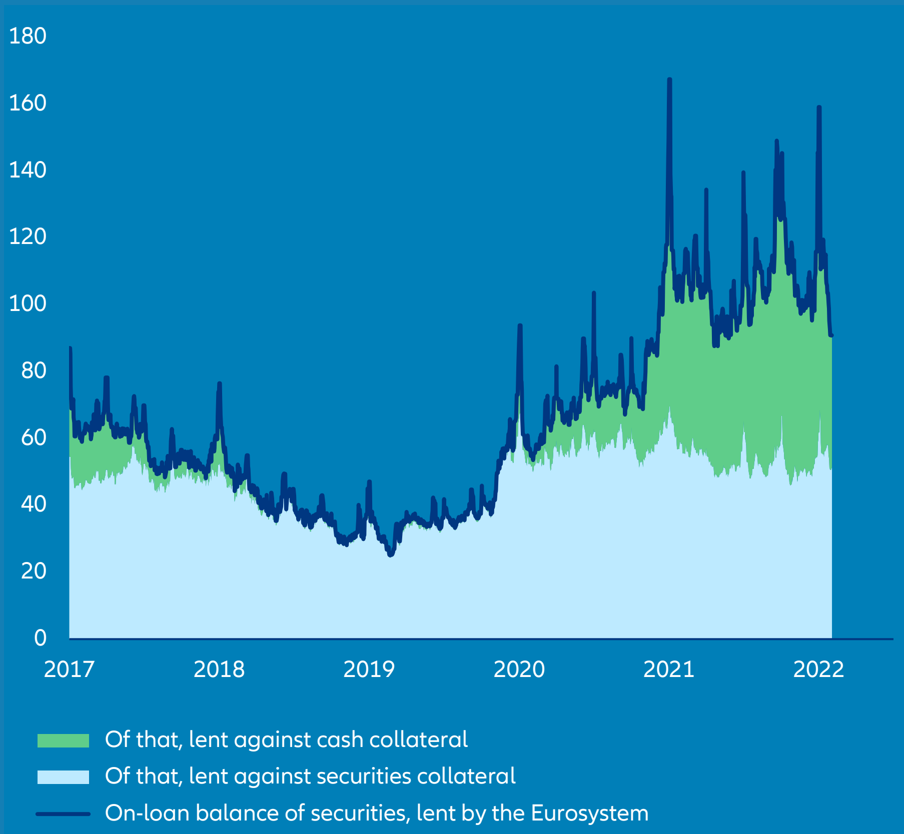


Sources: Refinitiv Eikon, Allianz Research

Box 2. Impact of QT on securities lending

Since March 2020, the ECB's purchasing programs and TLTROs have reduced the level of collateral available in the market. For market operations to be able to continue (e.g. bonds and repo market), the ECB partially resolved collateral scarcity via its securities-lending facility, which has substantially increased over time (Figure 21).

Figure 21: ECB securities lending facility (EUR bn)



Sources: ECB, Refinitiv Datastream, Allianz Research

Given that accessing the ECB's securities-lending facility is expensive, institutional long-term investors have jumped into the fray and intensified their own securities lending to generate extra income. As assets for lending have increased, fee income has decreased. Securities lending remains an attractive mechanism to enhance operating income as risk mitigation has improved, in part due to the availability of higher quality collateral.

Going forward, collateral demand for fixed-income instruments (sovereign and investment grade credit) is set to decline gradually. However, rising rates mean that securities lending will continue to provide extra income at low risk. The unwinding of TLTROs will make more collateral available and thus enhance overall collateral availability within the Eurozone.

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About Allianz Research

Allianz Research comprises Allianz Group Economic Research and the Economic Research department of Allianz Trade.