

What An Acceleration of Quantitative Tightening Could Mean For Eurozone Banks*



By Nicolas Charnay, Pierre Hollegien (Rating Analysts) and Sylvain Broyer, Aude Guez (Economists)
S&P Global Ratings

JEL codes: E5, G12, G21.

Keywords: Monetary Policy, Central Banking and the Supply of Money and Credit, Bond Interest Rates, Banks.

At her latest hearing in the European Parliament, ECB President Christine Lagarde stated that the ECB was conducting a comprehensive review of the operational framework for steering short-term interest rates, and aimed to conclude it by spring 2024. We believe that such a review of the ECB's operational framework could potentially lead to a significant reduction in banks' excess reserves over time, and the current passive form of quantitative tightening (QT) to give way to a more active form, which would involve the ECB starting to sell bonds on the market. For eurozone banks, a hypothetical acceleration of QT would not have a major direct impact on their capital adequacy or liquidity and funding ratios. However, it would fuel the normalization of funding costs and net interest margins already under way. Besides this, the acceleration of QT could lead to unpredictable secondary effects on banks and the financial system at large. We see eurozone banks as well placed to manage the transition. That said, we remain mindful that the full effects of monetary policy normalization will only become apparent over time.

In the remainder of this note, we answer frequently asked questions on the ECB's QT program and what it could mean for eurozone banks' financial positions and regulatory metrics, by simulating different scenarios in the eventuality of an active QT.

*This policy note does not constitute a rating action. S&P Global's opinions, quotes, and credit-related and other analyses are statements of opinion as of the date they are expressed and not statements of fact or recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.

Frequently Asked Questions

What is QT and what has the ECB already done in this regard?

From a pure accounting perspective, QT is the reverse operation of quantitative easing (QE). Under its QE policy, the ECB--alongside many other major central banks--purchased securities directly from the market, financing these purchases by creating reserves and injecting them into the financial system. Under QT, the ECB extinguishes these reserves, either by letting the bonds that it holds lapse on maturity, or by selling them outright in the market. The former approach is passive QT, as the ECB simply waits for the bonds' maturity, and the latter is active QT.

As of August 2023, the ECB still holds close to €5 trillion of bonds, mostly of it under its APP (€3.3 trillion) and the rest under its pandemic emergency purchase program (PEPP; €1.7 trillion). The ECB started to purchase securities under the APP in October 2014, to support the monetary policy transmission mechanism and provide the amount of policy accommodation necessary to ensure price stability amid very low inflation. In March 2020, the ECB launched another temporary QE program, the PEPP, to counter the serious risks that the COVID-19 outbreak posed to the monetary policy transmission mechanism and the economic outlook for the eurozone.

Since March 2023, the ECB has gradually implemented the passive form of QT, first by reinvesting only partially maturing bonds under its APP, and then from July 2023, by fully ending such reinvestments. Between March and the end of August, the ECB reduced its stock of bond holdings by €100 billion. It is still fully reinvesting securities under the PEPP.

What are the ECB's main considerations with regard to the pace and form of QT?

We believe that the ECB largely follows a data-driven approach in defining its monetary policy strategy. This includes setting its main policy rates, but also deciding on the pace of QT and the size and modalities of its refinancing operations for banks. The evolution of medium-term core inflation expectations is a key consideration for the ECB.

Alongside core inflation expectations, the ECB is likely to factor in several uncertainties as it implements its QT program, starting with the financing needs in the real economy, particularly governments'. As QT amounts to the withdrawal of a key source of demand for government bonds, a sharp increase in bond supply could lead to upward pressure on yields. Between March 2015 and March 2017 alone, the public sector purchase program had an estimated -20% impact on eurozone banks' holdings of government securities compared to pre-program levels.

A second source of uncertainty is the financial system's capacity and readiness to absorb these refinancing needs. It will therefore be crucial for the ECB to estimate banks' actual needs for excess reserves, as this will determine how far QT can go without putting pressure on banks' liquidity.

Today, excess reserves stand at around €3.7 trillion, while we estimate that banks' actual demand for such reserves could effectively be as low as €1.7 trillion. This means that the ECB could withdraw over €2 trillion of excess reserves from the system (see "Estimating Eurozone Banks' Demands For ECB Reserves" below), bearing in mind that €600 billion of this sum is already earmarked to disappear by end-2024 in the form of TLTRO repayments.

The final uncertainty for the ECB will be the impact of QT on yields and the capacity of financial and nonfinancial actors to manage the ECB's withdrawal from the bond markets. We do not expect the impact of QT on yields to mirror that of QE decisions, which were taken in times of acute crisis. For instance, we do not expect a return to the yields and spreads just before the ECB made its QE decisions. That said, QT's actual impact on yields remains particularly hard to predict.

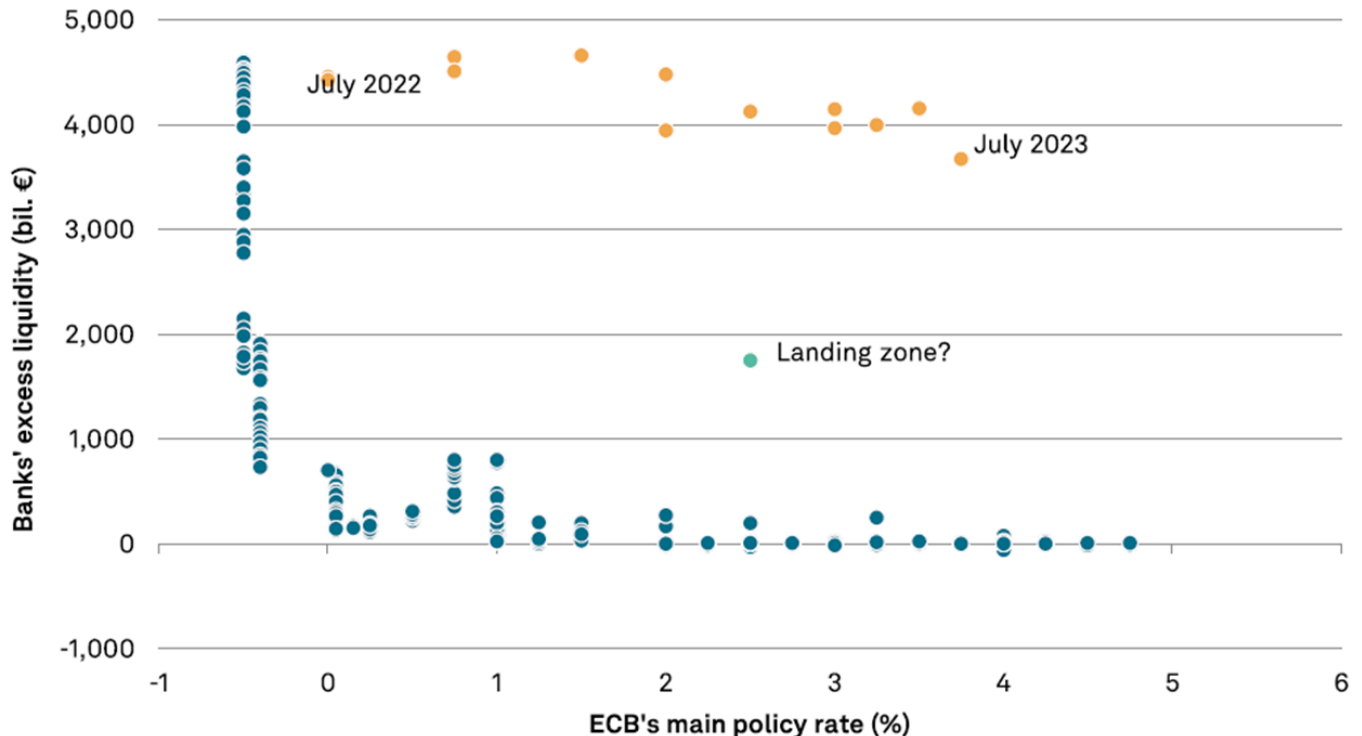
Estimating Eurozone Banks' Demands For ECB Reserves

As the ECB proceeds with QT and reduces excess reserves, it will need to decide on the pace and the endpoint of this process. A crucial consideration will be the scale of banks' demands for excess reserves. But the answer is not straightforward. The optimal level of excess reserves in a post-QE world remains largely uncertain (see "Complete Fed balance-Sheet Normalization Is Still Years Away," published Aug. 16, 2023). We understand that some central bankers may find benefits in returning to the pre-financial crisis world of scarce reserves and lean balance sheets (see "Getting up from the floor," by Claudio Borio of the Bank for International Settlements, published as SUERF policy note no. 311 in May 2023).

Chart 2

Banks' demand for ECB reserves in excess of mandatory requirements and main policy rate (1999-2023)

Banks' excess liquidity (holdings on current account and deposit facility minus required reserves at the ECB) in relation to the main policy rate (repo rate until the zero low bound is reached in March 2016, deposit rate thereafter)



Sources: European Central Bank, S&P Global Ratings.
 Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.

According to a recent working paper by David Lopez-Salido and Annette Vissing-Jorgensen presented at the ECB forum on central banking in Sintra, Portugal, banks' demand for reserves largely depends on a trade-off between the costs of holding reserves (the money market rate) and their remuneration (the DFR, plus a convenience yield), as well as the level of deposits (see "Reserve Demand, Interest Rate Control and Quantitative Tightening," published by the Federal Reserve Board on Feb. 27, 2023). By our estimates, the demand function proposed in the paper for European banks fits well with the actual reserves they held at the ECB over time. We therefore use this function to estimate the amount of reserves that banks would likely want to hold given their current level of deposits and under normal liquidity conditions. Under such conditions, the spread between the money market rate (the ESTR) and the rate of remuneration on reserves is close to its long-term average of 5 basis points (bps). These parameters are the same as those in a blogpost published by the Bank of England titled "What do we know about the demand for Bank of England Reserves?," published on Feb. 22, 2023). Under these parameters, we estimate that European banks would probably be willing to hold reserves of around €1.7 trillion, almost half as much as at present (see chart 2). This estimate should be seen as a landing zone to be reached gradually rather than an immediate target.

What are S&P Global Ratings' expectations for the ECB's QT program and monetary policy normalization?

As the ECB shares the broad consensus that inflation will remain above target for another two years, we expect the normalization of its monetary policy to continue once rates have peaked.

In this context, switching from a passive to an active form of QT appears to be a possible next step, although the timing and pace of such a switch remain highly uncertain. We believe that QT will first continue to focus solely on the reduction of the APP, which was set up to combat the risk of deflation. Meanwhile, the PEPP, which was set up in response to the COVID-19 pandemic, will likely remain untouched until end-2024, although this is certainly not the only possibility. The ECB could end reinvestments under the PEPP program before end 2024 as an intermediate step before selling bonds from the APP portfolio.

The key question is therefore how far and how fast the ECB will conduct QT. Today's market expectations are for the APP to still amount to €2.2 trillion at the end of 2026, compared with €3.3 trillion today, and for the PEPP to be €1.4 trillion the same date (€1.7 trillion today). This corresponds to a total reduction of €1.4 trillion, which is in line with our estimate of the reduction in excess reserves net of TLTRO repayments. But this is a reduction over three and a half years, which could be achieved via a purely passive form of QT given the duration of the existing portfolios. However, if the ECB feels it needs to reduce these amounts sooner than the end of 2026, it will likely decide to actively sell bonds. The form of reduction (active or passive QT) that the ECB chooses will largely depend on inflation trends.

Another area of policy normalization that the ECB could combine with QT is the operational framework, that is, the way in which the ECB provides liquidity to banks and remunerates reserves.

The ECB could decide to lower the remuneration of banks' reserves in parallel with an acceleration of QT, thereby further incentivizing banks to refinance maturing bonds. This would limit the ECB's own financial losses, which are bound to be significant in the case of active QT. In July 2023, the ECB took a step in this direction by lowering the remuneration of banks' minimum reserves from the DFR to 0%. A potential further step in that direction would be to reintroduce a form of deposit tiering, whereby the ECB would remunerate only a portion of excess reserves at the DFR.

The ECB could also decide to modify the spread between its key rates, known as the rate corridor. The wider the spread between the DFR and the MRO rate, the further money market rates could deviate from the DFR, making it less attractive for banks to hold reserves. At the moment, the corridor is asymmetrical. The spread between the DFR and the MRO rate of 50 bps is larger than the spread between the MRO rate and the marginal lending facility at 25 bps. Historically, the corridor was symmetrical.

Apart from rates, the ECB could consider changing the terms of its refinancing operations for banks, and in particular its full allotment procedure. Under this procedure, the banks determine the level of excess reserves since the ECB provides them with as much reserves as they request. The ECB might, over time, see benefits in returning to more normal refinancing operations, offering a set amount of liquidity to regain control over the volume of excess reserves in the system. However, we consider that this would remove an important safety mechanism for eurozone banks' funding, and that it is likely to only come up for consideration at a later stage in the monetary policy normalization process.

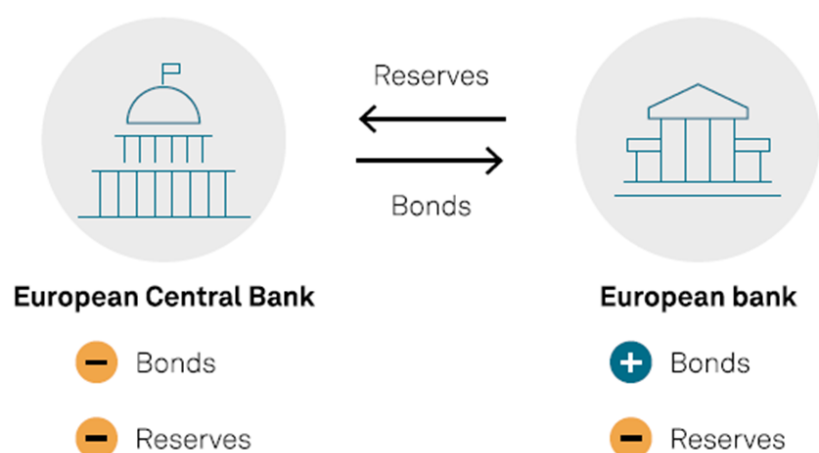
Finally, the ECB could increase its reserve coefficients, that is, the minimum ratio of deposits that banks must hold as required reserves. Currently, the reserve coefficient is set at 1% of banks' overnight deposits and deposits or bonds maturing in under two years, but historically it had been 2%, until 2012.

How would active QT affects eurozone banks' financial positions and regulatory metrics?

To determine how active QT would affect banks, we looked at the following two scenarios, which are not mutually exclusive.

Scenario 1: The ECB sells its bonds to a eurozone bank. The bank's balance sheet size remains the same following the transaction, as the bank would simply swap its holding of reserves for bonds that the ECB previously held.

Chart 3



Source: S&P Global Ratings.
Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.

Overall, we see the direct impact on banks' balance sheets as limited except on incremental interest rate risks and potential downward pressures on profitability.

The incremental increase in credit risk would have a limited bearing on banks' capital adequacy ratios.

We use our S&P Global risk-adjusted capital (RAC) which--contrary to the regulatory capital ratios--captures the credit risk associated with holding government bonds, i.e. the bulk of ECB holdings.

We found that the average impact on the RAC ratio would be limited and lie between 1 bps and 5 bps in our base-case scenario, where we assume that the ECB would sell off €1.0 trillion-€1.5 trillion of APP bonds, and that the take-up rate among eurozone banks would range from 20% to 40%. That said, the impact could be more significant for some banks purchasing bonds from their domestic countries -such as Italy, Spain or Portugal where sovereign ratings are lower than in other EU countries, for instance.

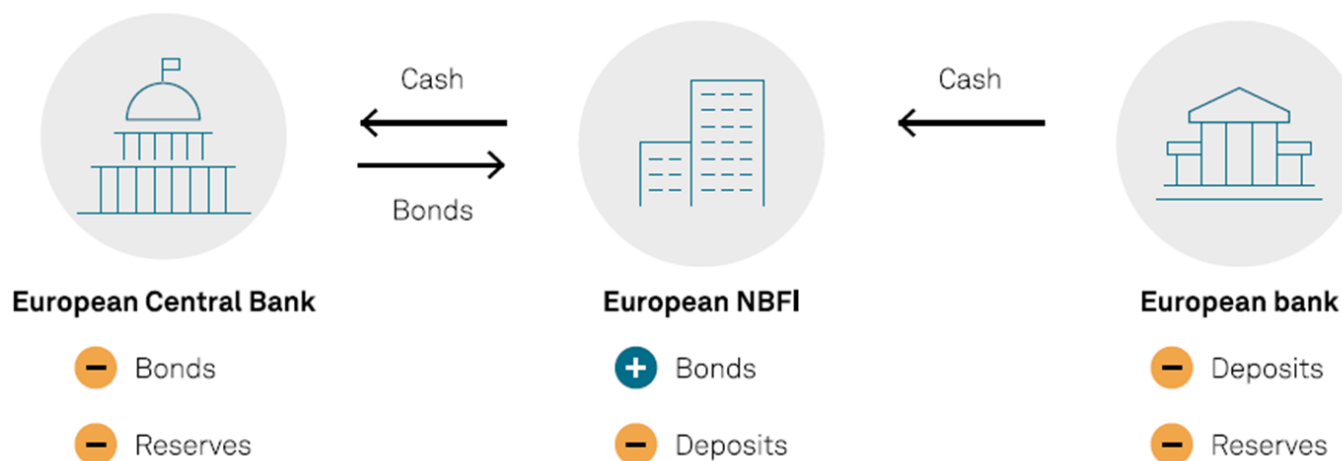
The impact on the funding and liquidity regulatory ratios would also be limited, as most of the bonds that the ECB holds are level 1 high-quality liquid assets (HQLAs).

Looking at the composition of the APP, we estimate that most bonds would qualify as level 1 HQLAs, while only less than 5% would be classified as level 3 assets, therefore providing no liquidity or funding benefits for regulatory ratios.

As a result, we estimate that the impact on the liquidity coverage ratio (LCR) and the Net Stable Funding Ratios (NSFR) would be limited, all else being equal.

Scenario 2: The ECB sells its bonds to a eurozone nonbank financial institution (NBFI; for example investment funds, insurance corporations, or pension funds). Because the NBFI has no reserves with the ECB, it will use cash in the banking system, typically deposits in a eurozone bank.

Chart 4



NBFI--Nonbank financial institution. Source: S&P Global Ratings. Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.

In this situation, banks would not directly assume the incremental credit or market risk from bonds. The main impact would be via the reduction in deposits held by NBFIs, the purchasers of ECB bonds.

For example, if we assume that nonbanks in the eurozone acquire 40% of the ECB's €1.5 trillion of bonds for sale, the banking system could see outflows of around €600 billion, corresponding to about 3% of total eurozone deposits at end-2022. All else being equal, this would lead the loan-to-deposit ratio to increase by about 280 bps to 92.5%.

The effect of such deposit outflows on the LCR and the NSFR is rather uncertain and will depend on the nature of the deposits that are withdrawn. In the longer run, there could be negative repercussions for the LCR and NSFR if the nonbanks decide to rebalance their deposit mixes, especially by reducing their long-term deposits to mitigate the outflows of short-term ones.

How would active QT impact eurozone bank profits?

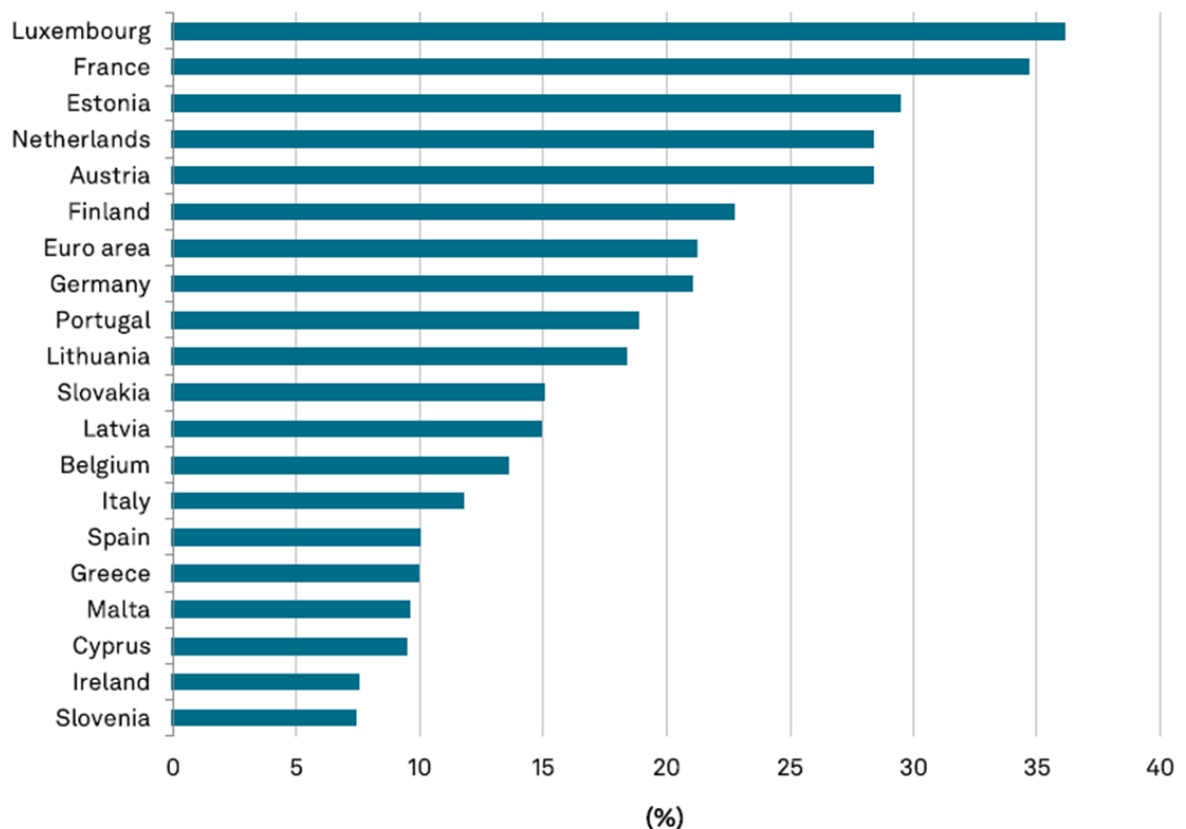
Overall, we believe that active QT would be a drag for eurozone bank profits.

So far, Eurozone banks have kept their deposit costs relatively low, passing on average about 20% of the ECB's increases in policy rates to their deposit rates (see chart 6). We believe that their access to abundant deposits and liquidity is a key driver of that. As mentioned above, active QT would lead to some deposit erosion and would likely encourage the deposit competition and the increase in funding costs. As such, banks' ability to raise low-cost funding via deposits or in the markets will again become a key competitive advantage.

Chart 6

Deposit beta for eurozone banks - June 2022 to June 2023

Deposit beta is the share of the ECB's policy rate increases that banks have passed on to rates on new deposits. Includes all types of deposits.



Sources: European Central Bank, S&P Global Ratings.

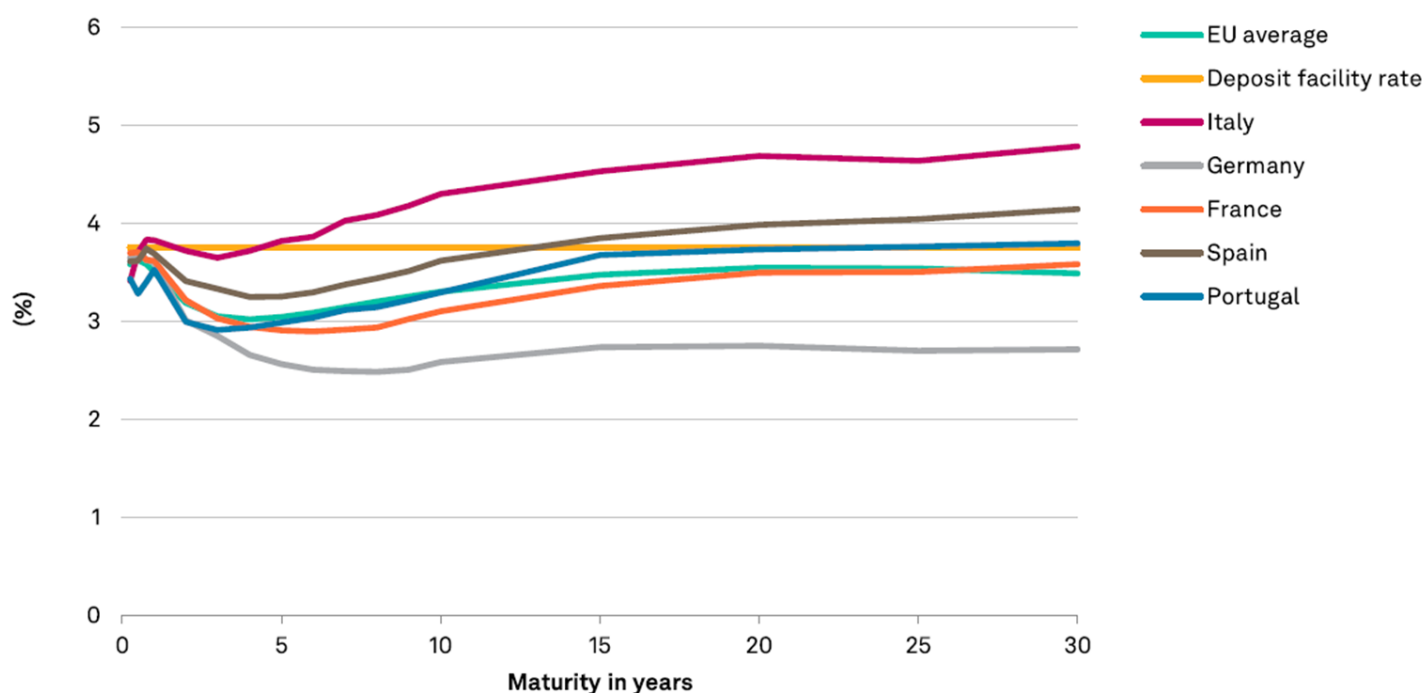
Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.

Also, eurozone banks' profits would be further hit in case the ECB decides to lower the remuneration of banks' reserves, in parallel to an active QT program. Today, eurozone banks hold c. EUR 3.7 trillion of excess reserves under the ECB deposit facility, remunerated at 4%. A decrease of 100bps in this remuneration would therefore lead to EUR 37 billion of lost interest income for eurozone, about 13% of their 2022 net interest income. Banks would likely reposition their portfolios, but government bonds yields have remained low, especially when compared with the rate on the ECB deposit facility (DFR) (see chart 5).

Chart 5

Negative spread between the DFR and most government bonds across most maturities

Yield curve as of Sept. 5, 2023



Sources: World Government Bonds, S&P Global Ratings.
 Copyright © 2023 by Standard & Poor's Financial Services LLC. All rights reserved.

Are there potential secondary effects and risks of monetary policy normalization for financial institutions in the eurozone?

Yes. We see two main channels of transmission through which monetary policy normalization could have more profound implications for banks' business models and financial profiles.

Higher real interest rates could further dampen lending growth and raise credit and counterparty risks for banks.

QT's actual impact on yields remains particularly hard to predict. Should real interest rates rise further as a result of QT, borrowers would face tighter lending conditions. Positive real interest rates are typically associated with lower investment, lower GDP growth, and can ultimately cloud prospects for banks' asset quality.

For banks, we see three pockets of risk. First, cost-of-living pressures mean that weaker households could face difficulties in repaying unsecured consumer loans. Second, declining customer demand could hit small-to-midsize enterprises with weak balance sheets or poor pricing power--we see smaller, owner-managed enterprises as particularly vulnerable. Third, commercial real estate loan books are typically more sensitive to tightening funding conditions, as they both heighten refinancing risks and lower the value of the underlying properties.

In addition, the QT program could cause bouts of market volatility as the bond markets try to anticipate the ECB's next move. Such episodes of market volatility typically expose financial and nonfinancial actors transacting in derivatives. These derivatives are often helpful for risk-management purposes but can face massive margin calls. Unlike banks, the ECB has fewer options to support nonbanks directly, and would likely need to halt its QT program in a case of systemic stress.

Over time, QT could revive the sovereign-bank nexus in the eurozone.

With active QT, eurozone banks could gradually increase their exposure to eurozone government bonds, most likely with a strong and persistent domestic bias. As of July 2023, exposures to the domestic sovereign represented about 5% of eurozone banks' total assets, ranging from 18% in Croatia (highest) to 0.2% in Luxembourg (lowest). Although such exposures declined during QE, as the ECB was buying large amounts of government bonds, we expect this trend to gradually reverse as a result of QT.

The so-called sovereign-bank nexus, that is, the interdependencies between banks and their domestic sovereign, was a major catalyst of eurozone banking and sovereign crises in the last decade. Banks' management of this risk, its treatment in EU bank regulation (with very high regulatory value irrespective of the sovereign credit rating), as well as market participants' perception of it, could therefore return to the top of the agenda over time. ■

About the authors

Nicolas Charnay is a Senior Director in S&P Global Ratings' Financial Services Ratings team. Based in Frankfurt, he is a Sector Lead for European FIs and regularly publishes analytical commentaries on key sectoral trends and topics. He also chairs rating committees on major European banks. Before joining S&P Global Ratings in January 2022, Nicolas was an Adviser in banking supervision at the ECB. He holds a M.Sc. in Management from HEC Paris and an M.Sc. in Public Law from Sorbonne University.

Pierre Hollegien is an Associate Director in S&P Global Ratings' Financial Services Ratings team. Based in Paris, he covers a portfolio of banks in Southern Europe and in the Middle East along with some multilateral institutions in Europe. Pierre also contributes to research projects on the topic of European bank funding. Before joining S&P Global Ratings in 2016, he worked on Economic History for the research department of SciencesPo and University Paris Dauphine. He holds an M.Sc. in Economics from the London School of Economics.

Sylvain Broyer joined S&P Global Ratings in September 2018 as Chief EMEA Economist, based in Frankfurt. Before that, Sylvain was Head of Economics at the French investment bank Natixis and a member of the General Management of its German Branch. Sylvain has been a member of the "ECB shadow Council", a panel of leading European economists formed by German economic daily Handelsblatt since November 2012, and is a member of different public sector advisory groups (European Investment Bank, European Security Markets Authority, French Markets regulation authority). He holds doctorate degrees in Economics from the Universities of Frankfurt and of Lyon as well as a certification from the International Securities Market Association (ISMA). He teaches at the Paris Dauphine University for the Master in Banking & Finance.

Aude Guez is an economist at S&P Global Ratings, based in Frankfurt. She is part of the EMEA Economics team. She holds a Master's degree in Economics from a joint program between ENSAE (French National School for Statistics) and Ecole Polytechnique, France. She also graduated from HEC Paris with a Master's degree.

SUERF Publications

Find more **SUERF Policy Notes** and **Policy Briefs** at www.suerf.org/policynotes

SUERF

The European Money
and Finance Forum

SUERF is a network association of central bankers and regulators, academics, and practitioners in the financial sector. The focus of the association is on the analysis, discussion and understanding of financial markets and institutions, the monetary economy, the conduct of regulation, supervision and monetary policy. SUERF's events and publications provide a unique European network for the analysis and discussion of these and related issues.

SUERF Policy Notes focus on current financial, monetary or economic issues, designed for policy makers and financial practitioners, authored by renowned experts.

The views expressed are those of the author(s) and not necessarily those of the institution(s) the author(s) is/are affiliated with.

All rights reserved.

Editorial Board:

Ernest Gnan
Frank Lierman
David T. Llewellyn
Donato Masciandaro
Natacha Valla

SUERF Secretariat
c/o OeNB
Otto-Wagner-Platz 3
A-1090 Vienna, Austria
Phone: +43-1-40420-7206
www.suerf.org • suerf@oenb.at