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EURO AREA

FINANCIAL SECTOR ASSESSMENT PROGRAM

July 3, 2025

TECHNICAL NOTE

SYSTEMIC LIQUIDITY

Prepared By
Monetary and Capital Markets
Department

This Technical Note was prepared by IMF staff in the context of the Financial Sector Assessment Program in the euro area. It contains technical analysis and detailed information underpinning the FSAP's findings and recommendations. Further information on the FSAP can be found at http://www.imf.org/external/np/fsap/fssa.aspx

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Glossary

ACC Additional Credit Claims
APP Asset Purchase Program

BoE Bank of England

CCP Central Clearing Counterparty

DFR Deposit Facility Rate

DGMO Directorate General Market Operations

DRM Directorate Risk Management

EA Euro Area

ECB European Central Bank

ELA Emergency Liquidity Assistance
ESCB European System of Central Banks
ESRB European Systemic Risk Board

EUR Euro

EU European Union

FSAP Financial Sector Assessment Program

FX Foreign Exchange

G-SIB Global Systemically Important Bank

HQLA High Quality Liquid Assets
IMF International Monetary Fund
LCR Liquidity Coverage Ratio
LSIS Less Significant Institutions

LTRO Long-term Refinancing Operation
MOU Memorandum of Understanding
NCA National Competent Authority

NCB National Central Bank
NSFR Net Stable Funding Ratio
OIS Overnight Index Swaps

PSPP Public Sector Purchase Program

SIS Significant Institutions
SRB Single Resolution Board
SRF Single Resolution Fund

SRO Standard Refinancing Operation
SSM Single Supervisory Mechanism

TFEU Treaty on the Functioning of the European Union
TLTRO Targeted Longer-term Refinancing Operations

TPI Transmission Protection Instrument

USD U.S. Dollar

€STR Euro short-term

EXECUTIVE SUMMARY¹

Progress has been made in several areas highlighted in the 2018 FSAP (Appendix I). Most notably the European Central Bank (ECB) strengthened its liquidity monitoring framework and modified the central clearing counterparty (CCP) credit facility. A key recommendation of the 2018 FSAP to centralize emergency liquidity assistance (ELA) has not progressed.

Core funding markets have functioned well in the context of balance sheet reduction and policy rate increases. After peaking at €8.8 trillion in 2022, the ECB took several steps to shrink its balance sheet, including limiting and then halting reinvestments, and incentivizing repayment of targeted longer-term refinancing operations (TLTROs). These measures were taken on the backdrop of the deposit facility (DF) rate, which is the main policy rate, increasing from -0.50 percent to 4 percent in little more than a year to September 2023. After peaking at €4.7 trillion, excess liquidity has fallen to just below €3 trillion at the end of 2024 and is expected to continue to decline at around €40 billion per month. The size of the "steady state" balance sheet is dependent on banks' demand for reserves. Some estimate this at between €1.0 and €1.5 trillion, which implies a run-down for a further three years or more. The core securities markets—sovereign, corporate and covered bonds—have functioned well, supported by the diversified investor base and the ECB's well-telegraphed normalization strategy. This has enabled dealer banks to maintain sufficient balance sheet space to support intermediation.

The ECB's operational framework was modified with two main changes. These were to: i) narrow the interest rate spread between the rate on the main refinancing operation (MRO) and the rate on the DF from 50 to 15 basis points; and ii) confirm the move to demand-driven operations whereby the ECB commits to meet all demand through its standard refinancing operations (SROs), namely the weekly MROs and 3-month LTROs. The narrowing of the spread may reduce banks' incentives to actively manage liquidity which has not materialized so far but merits close monitoring. The ECB also announced its intention to conduct—at a later stage, once the Eurosystem balance sheet begins to grow durably again—longer-term refinancing operations and to build a structural portfolio of securities. Activity across a broad range of money market segments trended higher. While functioning of the secured market was somewhat impaired through mid-2022, it improved as collateral was released from the ECB balance sheet and with significant net issuance. Period-end volatility in secured rates has been pronounced, with the regulatory drivers being well-known and being addressed. The ECB's collateral framework is justifiably broad given the heterogeneity of counterparties and the financial assets they hold as well as the related risks of fragmentation of funding across the euro area. An estimated €4.7 trillion of eligible collateral was held by ECB counterparties in Q4 2024 of which €1.5 trillion was mobilized. This included an estimated €1.7 trillion of credit claims, of which around €500 billion was mobilized. Credit extended by the ECB peaked during COVID-19 at €2.2 trillion and has since fallen close to zero. Demand for

¹ This technical note was written by Darryl King.

ECB liquidity through its instruments should remain very low over the next three years or so, as the balance sheet approaches steady state.

The ECB recognizes the importance of liquidity monitoring and has taken material steps to establish a horizon scanning framework (2018 FSAP recommendation). The demand-driven operational framework combined with broad collateral eligibility heightens the need for close monitoring of counterparties' liquidity conditions. Information is shared between relevant ECB business areas and the respective national central banks (NCBs) regarding any negative developments of an eligible counterparty's financial soundness or liquidity situation. An enhanced information sharing agreement is also in place between the ECB monetary policy and ECB banking supervision functions in relation to all eligible monetary policy counterparties, irrespective of whether they are directly supervised by the ECB or not, i.e., both significant institutions (SIs) and less significant institutions (LSIs), covering bank-specific information. In addition, NCBs also have their own counterparty monitoring systems and information exchange arrangements with their respective national competent authority (NCA). The ECB/SSM recently conducted various activities to strengthen the asset and liability management of banks, with a strong focus on liquidity aspects.

There has been limited further harmonization of the provision of ELA. The 2024 updated ELA agreement—which is a public document and outlines the allocation of responsibilities, costs and risks as regards the provision of ELA across the Eurosystem—has two changes: i) solvency criteria were strengthened to include the leverage ratio requirement; and 2) an explicit reference to the principle that NCBs must ensure that collateral provides sufficient protection against the risks of the ELA operation. Centralizing ELA remains a key FSAP recommendation as it would: facilitate consistency on conditionality; support the move to a banking union and financial integration more generally; help with cross-border cases; and reduce the sovereign-bank nexus.

While there is now an effective euro liquidity backstop available to eligible euro area CCPs, preparations for the provision of ELA to other systemically important non-bank financial institutions (NBFIs) should be advanced. The ECB will soon implement changes to the CCP Credit facility (recommended in the 2018 FSAP). This facility—which is within the TARGET framework and thus outside of the monetary policy implementation framework of the Eurosystem—is intended to provide a crisis-related euro liquidity backstop for eligible euro area CCPs. The changes, once implemented, will allow eligible euro area CCPs to access this euro liquidity backstop automatically (i.e., without the need for prior approval from the Governing Council), priced at the marginal lending facility (MLF) rate against the ECB's standard eligible collateral. In light of this change, safeguards regarding financial soundness and sound liquidity risk management will be introduced as access requirements. With CCPs holding almost exclusively ECB eligible collateral, and with minimal foreign exchange exposures, the modification of this facility addresses the potential need for liquidity by euro area CCPs under crisis scenarios. The Eurosystem central banks monitor foreign exchange (FX) exposures of euro area CCPs regularly. Building on this, and in the context of capital market integration and deepening, consideration should also be given to providing ELA to other systemically important NBFIs. In this regard, some NCBs have legal, regulatory, or internal procedural constraints on such provision. The NBFI sector is, however, not homogenous in its size,

(systemic) relevance and composition across the euro area. Thus, any such support must be accompanied by robust oversight and monitoring, supervisory intrusion, and there must be clear communication to contain moral hazard.

While the ECB's framework for market-wide support is comprehensive, consideration should be given to under what conditions it could be expanded to a broader set of counterparties.

Past programs effectively addressed liquidity stress through direct dealing with banks, and with purchases of marketable securities perceived as key to monetary policy transmission. The ECB should also, however, have the flexibility to adjust its counterparty framework quickly in crisis times. Lending to banks or purchasing securities may not always be effective, particularly as financial intermediation grows outside the banking system. Any change in the set of eligible counterparties should require a monetary policy transmission justification. It should also be subject to other conditions including e.g., that activation should only occur in a crisis situation, only to segments deemed relevant for monetary policy transmission, and whose institutions are adequately regulated and supervised. On communication, care would be needed to mitigate the risk that the ECB is perceived as prepared to underwrite financial risks taken by the private sector (i.e., moral hazard). There should be no precommitment, and the threshold for intervention should be set very high.

The functioning of euro funding markets outside the euro area is relevant to the transmission of ECB monetary policy. During COVID-19 the Eurosystem reactivated existing FX swap lines with several central banks and set up new ones. The Governing Council also established the Eurosystem repo facility for central banks that provides euro to a broad range of non-euro area central banks against high quality euro area-denominated debt. The Eurosystem's backstops to mitigate stress in international euro funding markets are well-designed and have been effective. The pricing of these facilities is important for effectiveness, and it is set at levels which are more expensive than normal funding, which makes access attractive only when conditions deteriorate, while incentivizing repayment as conditions improve. The ECB also supports U.S. dollar funding markets with a weekly operation which it can step up to counter severe dislocation. A permanent network of swap lines with five other major central banks affords confidence in the ECB's supply of FX liquidity.

	Table 1. Euro Area: Main Recommendations				
#	Recommendation	Responsibility	Priority*	Timeline**	
1	Ensure remaining incentives for regulatory arbitrage are eliminated to reduce period-end volatility in secured markets	European Commission, ECB Banking Supervision	М	Medium-term	
2	Further harmonize, before ultimately centralizing, ELA arrangements	European Commission, ECB Central Banking, NCBs	H/M	Short-term / Medium-term	
3	Coordinate and perform ELA testing across the Eurosystem to enhance operational readiness	ECB Central Banking, NCBs	Н	Short-term	
4	Monitor collateral composition of euro area CCPs to ensure the ongoing adequacy of the Eurosystem CCP credit facility as a liquidity backstop	ECB Central Banking, NCBs	М	Long-term	
5	Address legal and regulatory barriers to providing ELA to NBFIs and ensure preparedness with regards to relevant sectors, assessments of solvency, enhanced monitoring, and supervisory intrusion	ECB Central Banking, NCBs, Relevant supervisory authorities	М	Medium-term	
6	Unwind remaining collateral easing measures	ECB Central Banking	М	Medium-term	
7	Consider the conditions for a possible expansion of the monetary policy counterparty framework to deal with liquidity stress that may not be effectively contained through lending to banks or asset purchases	ECB Central Banking	М	Medium-term	

Priority* relative importance with priorities noted as M (medium) and H (high).

Timeline** Short-term (1-2 years); Medium-term (3-5 years), Long-term (greater than 5 years).

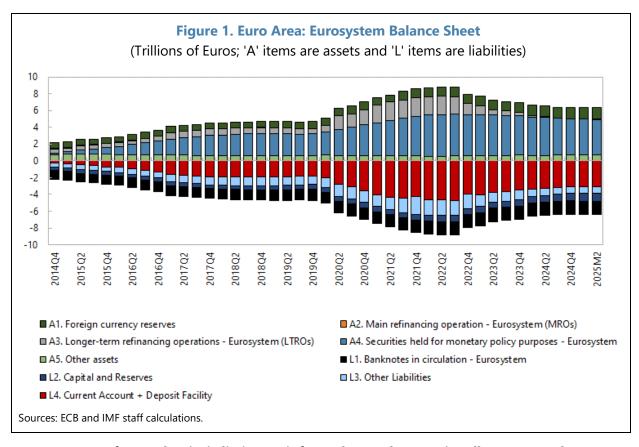
INTRODUCTION

- 1. Progress has been made in several areas highlighted in the 2018 FSAP. The institutional environment is complex given that the ECB has only a contributory role in financial stability pursuant to the Treaty on the Functioning of the European Union (TFEU),² with responsibility for the provision of ELA resting with NCBs who also rely on National Competent Authorities (NCAs) on issues of financial soundness and regulatory compliance. Good progress has been made on coordination and information sharing within ECB directorates, and with NCBs and NCAs to better anticipate institutional liquidity stresses, including with the development of a set of early warning indicators. The Eurosystem CCP credit facility within TARGET is being modified to ensure prompt operationalization of provision of overnight euro liquidity to eligible euro area CCPs in the event of crisis situations. The recommendation of the 2018 FSAP to centralize ELA has not progressed.
- 2. Since the last FSAP the ECB has been confronted by another crisis (COVID-19), a surge in inflation, and most recently, elevated geopolitical risks. A focus during the 2018 FSAP was carefully managing the transition out of the crisis settings, including normalization of the ECB's balance sheet, and modification of the monetary policy operational framework. The COVID-19 crisis required the ECB to again expand its balance sheet for both monetary and financial stability reasons, while the emergence of inflationary pressures from 2021 brought into sharp focus the need to normalize both the balance sheet and interest rates. The context for assessment in this FSAP is policy normalization and the changes to operational framework. This technical note is structured as follows: firstly, the context of balance sheet normalization and the changes to the operational framework are laid out, with subsequent discussion of core funding markets, ELA, the collateral framework, the liquidity monitoring framework, and finally, system-wide measures to support functioning in both domestic and foreign currency funding markets.
- 3. An important theme is recognition of the authorities' desire to diversify the financial sector, and with it, potential financial stability implications. With banks holding about half of financial sector assets, liquidity backstops to banks through the standard monetary policy operations and ELA have been sufficient to address past periods of liquidity stress. The recently reiterated objective to develop deep and liquid euro area capital markets has the potential to change the nature of the systemic risk. There is a need therefore to consider how liquidity support—both idiosyncratic and system-wide—could be adapted, to mitigate the risks of contagion that if not effectively addressed, could spread and morph into solvency concerns. Addressing the risks of moral hazard is always a concern when considering any such change to financial safety nets.

² See Art. 127(5) TFEU. The conferral of specific macroprudential tasks and tools in 2013 on the basis of Art. 127(6) TFEU, with the establishment of the SSM, reinforces the ECB contributory role in financial stability.

ECB BALANCE SHEET NORMALIZATION AND THE OPERATIONAL FRAMEWORK

4. The ECB balance sheet peaked at €8.8 trillion (in 2022Q3) with excess liquidity at €4.7 trillion (Figure 1), which was equivalent to 14 percent of total bank assets.³ Banks repaying TLTROs and the phasing out of reinvestment of bonds has seen excess liquidity subsequently fall to around €3 trillion (end 2024). From January 2025 the ECB halted all reinvestments of its monetary policy bond holdings leading to a run-off of around €40 billion per month to date in 2025. Balance sheet normalization has proceeded smoothly so far, with the supply of reserves remaining significantly larger than banks' precautionary demand. The impact on bond markets has been muted, explained in part by the gradual and transparent approach of quantitative tightening, compared with sharp moves experienced when quantitative easing was announced.



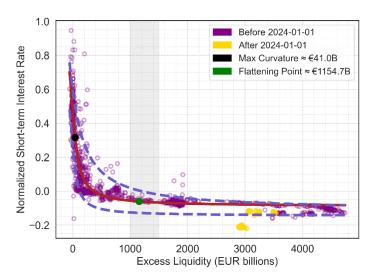
5. Lessons from other jurisdictions reinforce the need to continually re-assess the demand for central bank reserves. As progress is made in normalization, more can be learnt about the demand for reserves in the euro area. Ongoing re-assessment is required since the demand curve is highly uncertain and will likely move over time with, for example, payments innovation (e.g.,

³ Excess liquidity is defined as balances held in current accounts plus the deposit facility, less minimum reserves requirements and the MLF.

cetral bank digital currency) or regulatory changes.⁴ This is an area in which the ECB accordingly is investing resources, applying econometric and survey-based approaches.



The chart shows the sensitivity of interest rates to changes in the volume of excess liquidity, with a 95 percent confidence interval (dotted lines). The most relevant conclusion for implementation is the point at which interest rates start to react to changes in the volume of excess liquidity—such a point can be considered the steady state. For the observations prior to the 2024, this point is estimated to be around €1.15 trillion. The period since the beginning of 2024 also includes the operational reform undertaken in October of that year. More



observations post-reform will be needed to determine how the demand curve may have changed because of the reforms. The methodology employed uses a combination of parametric and non-parametric modelling techniques. The approach begins with the formulation of a reserve demand curve. A systematic model selection process is employed, utilizing k-fold cross-validation to identify the most appropriate functional form and regressors for the reserve demand curve. This process ensures that the selected model is well-suited to the data while minimizing overfitting. The Y axis is the normalized rate calculated using the formula (€STR- DF rate) / (MLF rate-DF rate). For rates prior to October 2019, a proxy is used where €STR = Euro overnight index average minus a fixed spread of 8.5 basis points. In addition to model selection, the methodology features the use of asymmetric quantile regression to obtain quantile estimates of reserve demand. This allows for a more nuanced understanding of the distribution of reserve demand under various conditions.

6. The demand-driven nature of the operational framework reduces the need for an accurate estimate of the liquidity demand, but interest rates should be closely monitored.

Estimates of liquidity demand indicate the possible size of the balance sheet in steady state, and therefore also the future need for structural operations. While subject to significant uncertainty, FSAP estimates of the demand for reserves (Box 1) are between €1.0 trillion to €1.5 trillion, while one other estimate puts it between €1.3 trillion and €2.0 trillion.⁵ Given the short period since the operational framework was amended, there is additional uncertainty on how the demand curve for reserves may have changed in response to recent changes.

¹ This analysis was provided by Luyao Lui (MCM, IMF) using the methodology of Chen, Z., Kourentzes, N., & Veyrune, R. (2023). Modelling Reserve Demand: Methodologies and Applications. International Monetary Fund.

⁴ https://www.ecb.europa.eu/press/key/date/2024/html/ecb.sp241107~7d53987569.en.html

⁵ G. Gotti, Papadia F, The European Central Bank's Operational Framework and What it is Missing, Bruegel Working Paper 17/2024.

- 7. The ECB undertook a review of its operational framework and implemented changes in late 2024.⁶ A key feature is the move away from the de facto supply-driven framework in place since the asset purchases and TLTROs from 2015. The new framework is demand driven in that it allows banks to access marginal liquidity at a fixed price. The instrument for this purpose is the MRO offered weekly at a fixed rate with full allotment against a broad set of collateral. The DF rate (DFR) is the key policy rate, with the Governing Council explaining that it will tolerate deviations from it in both directions, provided such movements do not blur signaling of the monetary policy stance.
- 8. The ECB also narrowed the corridor between the rate on the MRO and the rate on the DF, from 50 basis points to 15 basis points. The ECB is of the view that narrowing the spread will be helpful during balance sheet normalization and will not undermine the incentive for banks to seek market-based funding, while recognizing the need for continued monitoring. Also, access to overnight liquidity through the MLF continues to be available, priced at 25 basis points above the MRO. This thereby provides a full interest rate corridor of 40 basis points, compared with 75 basis points before the changes. Structural longer-term refinancing operations will be undertaken, and a new structural portfolio of securities established as the balance sheet shrinks further and approaches steady state. The details on these aspects of the new operational framework are yet to be announced.
- 9. These policy changes, in conjunction with ongoing balance sheet normalization, will allow greater control over short-term rates. The euro short-term rate (€STR) may eventually move closer to the DFR (currently it is trading around 10 basis points below) and should be capped at the MRO rate during periods of volatility. The consequence of this tighter control may however be that the use of ECB instruments increases (usage of MRO and the deposit facility) with a commensurate fall in market activity. If this were to occur, then it may undermine an objective for the ECB to operate with the smallest possible balance sheet and the width of the corridor may then need to be revisited.⁷

⁶ Speech by Isabel Schnabel, The ECB's balance sheet reduction: an interim assessment, November 7, 2024.

⁷ See https://www.europarl.europa.eu/RegData/etudes/BRIE/2024/762313/EPRS_BRI(2024)762313_EN.pdf

THE FUNCTIONING OF CORE FUNDING MARKETS

A. Money Markets

- 10. Since the 2018 FSAP a new reference for short-term interest rates was successfully introduced.8 The €STR rate complies with the International Organization of Securities Commissions Principles for Financial Benchmarks.9 It reflects the wholesale euro unsecured borrowing costs of euro area banks in contrast to the previous benchmark rate (EONIA) which reflected only interbank transactions. €STR is computed entirely based on transactions in euro with financial counterparties as reported under the Money Market Statistical Reporting Regulations and is the basis for pricing overnight indexed swaps (OIS) contracts. Euribor which has term rates (one week, one, three, six and twelve months) has also been revamped to fully reflect market transactions without expert judgment. The Euribor contributor panel has been increased with a new methodology, allowing for less costly panel participation given smaller litigation costs.
- 11. Activity across a broad range of money market products has trended higher over the last five years (Figure 2). This growth continued, albeit at a slower pace, during COVID-19, a time during which excess liquidity expanded significantly peaking at €4.7 trillion in 2022Q3. Low levels of unsecured transactions (13 percent) reduce systemic risk given the corresponding lower level of counterparty risk.¹⁰ The bulk of the daily transactions are secured either with domestic securities (56 percent) or in the form of FX swaps (15 percent), where the currency sold provides security. However, FX swaps volumes outstanding are dominant, accounting for around 57 percent of the total outstanding money market transactions as against 29 percent of secured transactions. 11 The strong growth in OIS from 2022 was driven by expectations about a lift-off from the zero-lower bound. Basel III liquidity regulation (leverage, liquidity coverage and net stable funding ratios) have increased the costs of unsecured and term transactions and hence the resulting concentration of activity in very short maturities (Figure 2).
- Granular data on financial institutions' activity highlights the predominance of NBFIs although there are some data limitations given the extent of clearing in certain products (Figure 2). Seventy percent of secured transactions are centrally cleared, as is 95 percent of OIS activity. Bilateral secured volumes between euro area financial institutions increased by 10 percent from 2019 to 2024, primarily driven by intra-euro area, cross-border transactions. NBFIs, including

⁸ €STR was first published on October 2, 2019.

⁹ https://www.ecb.europa.eu/stats/financial markets and interest rates/euro shortterm_rate/shared/pdf/ECB_€STR_IOSCO_Independent_Assurance_Report_2020.pdf

¹⁰ Although they can engender a risk of collateral calls which can exacerbate liquidity shocks: see the Technical Note on Systemic Risk Analysis—NBFI.

¹¹ Euro Money Market Study 2022.

hedge funds, investment funds, money market funds, and public institutions, played significant roles, with public institutions showing notable growth in the secured segment in 2024.

- 13. The €STR rate trades below the DFR as it also captures non-bank lending to banks. Except for some CCPs with a banking license, non-banks do not have access to the DFR. The spread between €STR and the DFR widened through 2020/21 from around 5 basis points to 10 basis points as the ECB expanded its balance sheet. With the balance sheet now shrinking, the spread has started to decline albeit, marginally. The narrowing of the ECB policy rate spread (effective October 2024) so far, has had no discernible impact on the €STR and the DFR spread.
- **14. Secured markets have been volatile (Figure 2).** Over the last five years secured spreads to €STR have ranged from +7 to more than -80 basis points with collateral availability and regulatory arbitrage driving the movements. Non-general collateral (non-GC) accounts for 83 percent of all secured trades and therefore drive the reported rates, which are a weighted average of GC and non-GC trades. Non-GC rates are predominantly determined by the availability/scarcity of specific collateral. While there are challenges in delineating between the motivations for entering a trade (liquidity or collateral), a time-series based on GC transactions should be constructed to help better assess underlying liquidity conditions and resilience in this key market.¹²
- 15. Repo market functioning was somewhat impaired through mid-2022 but improved as collateral was released from the ECB balance sheet. The ECB increased the cost of its TLTRO III operations in October 2022 thereby incentivizing banks to repay early.¹³ This resulted in €2 trillion of TLTRO repayments with €1.2 trillion of collateral being released from the ECB balance sheet between November 2022 and May 2024. Halting reinvestments correlated with further narrowing of secured spreads to €STR, and the spread was largely eliminated by late 2023. The secured rate continued to move higher, and for a period was materially above €STR presenting potential arbitrage opportunities, although these were not fully exploited due to regulatory treatment and balance sheet constraints.
- **16.** While the drivers of period-end volatility in secured rates are well-known, and some already addressed, further measures are required. Secured rates have spiked lower at quarterend by up to 80 basis points as banks seek to window dress their balance sheets for regulatory purposes. As well as masking generally higher levels of leverage, there is a concern that if a liquidity shock were to be experienced at quarter-end, as participants were pulling back from the market, a more severe and prolonged dislocation could result and spill over to other markets. Two regulatory measures are contributing to the volatility—the leverage ratio and the annual G-SIB assessment. For the leverage ratio, large banks are now required to report quarterly averages and daily amounts of securities financing transactions. Leverage ratio add-ons have also been imposed on banks that

¹² See Ballensiefen. B, A. Ranaldo, H. Winterburg, Money Market Disconnect (2023), The Review of Financial Studies.

¹³ The third tranche of TLTROs was announced in March 2019 with interest rates as low as 50 basis points below (dependent on the volume of loans made) the average DFR between June 2020 and June 2022.

¹⁴ https://www.ecb.europa.eu/press/blog/date/2024/html/ecb.blog240502~aae1564b3d.en.html

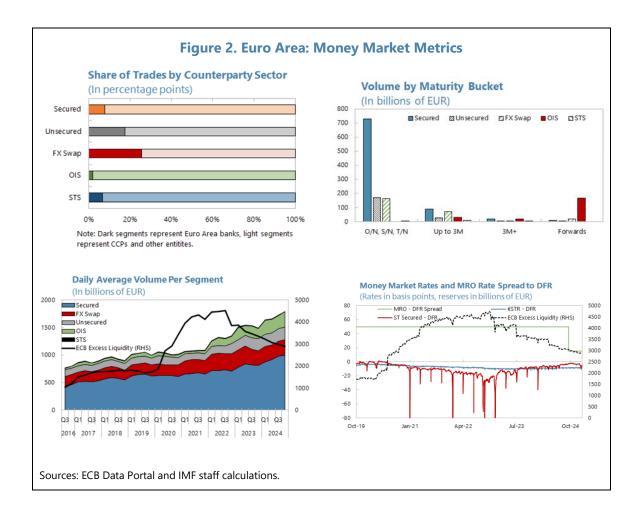
have variability around reporting dates. The Basel Committee has consulted on the G-SIB issue with the main proposal being that banks should report high frequency averages for the most important balance sheet items that are relevant for the G-SIB assessment. Once implemented, the incentives for window dressing will be largely eliminated along with end-period volatility. This key market will become more resilient as there will no longer be periodic withdrawals of dealing capacity.

- **17. Regulatory efforts are ongoing to mitigate the risk of margin calls in repo transactions.** The increasing use of collateralized transactions, while mitigating credit risk, brings a spotlight onto other risks e.g., arising from margin calls, that could amplify market stresses. Centrally cleared repo transactions through LCH SA, EuroNext Clearing and EUREX Clearing account for 70 percent of total repo volume. Regulatory measures impact whether and how participants conduct secured transactions. The leverage, net stable funding and liquidity coverage ratios discourage activity in the non-cleared markets as the use of CCPs, at least partially, alleviates the constraints through the netting of repos and reverse repos with the same counterparty. The European Systemic Risk Board (ESRB) made several recommendations aimed to manage liquidity risks from margin calls. Although not legally binding, they are subject to an "act or explain" mechanism under ESRB regulation (17). Most (but not all) focused on CCPs, and the ESRB Summary Compliance Report (February 2023) reported a significant degree of compliance and no major systemic concerns. However, ESMA's 2023 report revealed significant variability regarding the implementation of anti-procyclicality tools across EU CCPs.
- **18. Network analysis highlights that secured markets have become more, and unsecured markets less, interlinked.** The ECB reported that the network density metric for secured markets, defined as the ratio between the actual number of banks' network links and all possible links, increased by 100 percent from 2022 to 2023. A further result was that connections across country increased while those within country decreased. The opposite was true for unsecured markets with the network density metric declining while network connections within country increased. The ECB noted that as the final TLTROs matured in December 2024, there was no pickup in use of its other facilities, highlighting that banks were able to source replacement financing in the market. While weaker banks had to pay higher premiums, these were diminishing in line with credit upgrades.

¹⁵ Recommendations of the ESRB on liquidity risks arising from margin calls, May 2020.

¹⁶ This is based on an analysis of data from 64 banks from the Euro Money Market Study 2022.

¹⁷ There was some temporary stress around the Silicon Valley Bank and Credit Suisse episodes, but they did not fundamentally alter trends in improving resilience.

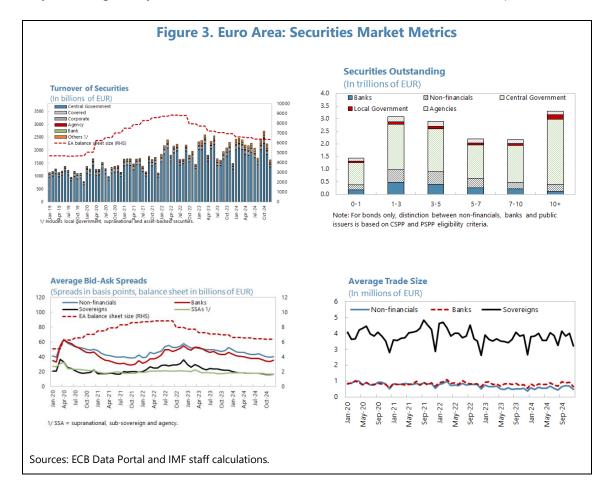


B. Securities Markets

19. The core securities markets—sovereign, corporate and covered bonds—have functioned well with bid-offer spreads now back to pre-COVID-19 levels (Figure 3). The market is heavily dominated by central and local government debt and agencies which account for 79 percent of daily turnover and 85 percent of the outstandings. In contrast, turnover in covered bank bonds accounts for less than 1 percent of total market turnover. In addition to bid-offer spreads, the ECB also monitors volumes, time-to-quote, and yield curve model fit errors to assess market functioning. The Bund 10-year term premia after having been compressed to around -0.6 percent during the height of the pandemic, rebounded to around 1.2 percent, following a similar path to that of the US 10-year Treasury bond, while always being materially above the US equivalent. Several factors have supported market functioning, including the diversified investor base, and the ECB's well-telegraphed and gradual normalization strategy. This enabled participants to more easily plan and adapt—bond issuers reacted by shortening maturities, and dealer banks maintained sufficient balance sheet space to support intermediation. The dominance of dealer

¹⁸ Bid-offer spreads are monthly averages while daily observations may provide more information on functioning. Daily spreads were not available.

banks could however become a vulnerability in the event their balance sheets become impaired, or they reach regulatory limits. This however, has not been an issue in the recent past.



EMERGENCY LIQUIDITY ASSISTANCE

20. There has been some further harmonization of ELA across the Eurosystem with the updated agreement on ELA.^{19,20} The agreement sets out the allocation of responsibilities, costs and risks and contains a provision on information sharing. It highlights that responsibility for ELA remains with the euro area NCBs, as relevant, and further emphasis is placed on the need to ensure that the provision of ELA does not undermine the ECB's monetary policy stance. The agreement defines ELA as provision by an NCB of "central bank money and/or any other assistance that may lead to an increase in central bank money, to a financial institution or a group of financial institutions facing liquidity problems, where, in either case, such operation is not part of the single

¹⁹ See the Technical Note on Financial Sector Safety Nets for the discussion on resolution funding.

https://www.ecb.europa.eu/pub/pdf/other/ecb.agreementemergencyliquidityassistance202410~b8b78cd4f5.en.pdf

monetary policy." The ELA agreement was updated (in 2020 and 2024) in three areas since the last FSAP:²¹

- Additional information is to be provided within two business days for any ELA operation—the
 prudential supervisor's assessment of the liquidity and solvency of the recipient (2020 ELA
 agreement amendment).
- The solvency criterion was strengthened (s4.1a) with the addition of a leverage ratio requirement (3 percent) to the harmonized minimum regulatory own funds levels which are either met, or where there is a credible prospect of recapitalization for them to be met within 24 weeks. The regulatory levels are common equity tier 1 (4.5 percent), tier 1 capital (6 percent) and total capital (8 percent) (2024 ELA agreement amendment).
- A new section (s8) now explicitly states that collateral should sufficiently protect the NCB against the risks of the ELA operation, without the risks being specified or the degree to which they should be covered (2024 ELA agreement amendment).
- **21. The 2018 FSAP recommendation to centralize ELA is restated.** While there may be some disadvantages such as ECB's less familiarity with domestic law, and perhaps a slower decision-making process if the Governing Council were to be responsible for the full ELA assessment, several factors support centralization:
- Where ELA interferes with the single monetary policy of the Eurosystem, the Governing Council
 is the ultimate decision-maker in any large case due to its right of veto on the respective ELA
 provision. Full centralization would make decision making simpler, and arguably more
 transparent and accountable, and further deal with situations where NCBs should act but were
 reluctant to do so.
- The ECB already has a major role, since as supervisor for all SIs it provides the assessment on solvency in individual cases, and it will craft the conditionality attached to the liquidity provision (e.g., constraints on further lending, prohibitions on bonuses and dividends).
- It is consistent with the move to a banking union, and financial integration more generally.
- Cross-border cases may more easily be addressed with centralization helping coordination of information sharing and with operational issues (e.g., collateral).
- Sovereign-bank nexus risks are material across the euro area which would be reduced with centralization, if risks were shared rather than contained at the NCB level.

²¹There are no material differences in scope of the allocation of responsibilities, conditions for the prohibition of ELA, or its duration and pricing.

- Centralization would formalize risk-sharing since the Eurosystem in effect, is called upon to underwrite large amounts from smaller NCBs as evidenced for example in the Greek crisis.²²
- There will be a lower likelihood of interference with other Eurosystem tasks undertaken.
- 22. Only the Court of Justice of the European Union can authoritatively decide on the Eurosystem's powers to provide ELA in the absence of a Treaty revision clarifying those powers. The Court of Justice of the European Union has not yet taken a position on whether the powers conferred on the Eurosystem include the provision of ELA. However, the ESCB Legal Committee has assessed that the provision of ELA is a national responsibility. In 1999, the Governing Council also favored the provision of ELA at a national level and despite some subsequent discussions, has not changed its position. As such, the current sole centralized responsibility of the Governing Council is to assess, in accordance with Article 14.4 of the ESCB Statute, whether ELA provision interferes with the single monetary policy of the Eurosystem. In addition to a clarification on the scope of the Eurosystem's powers, several other issues would need addressing. These include clarification of the ECB's financial stability mandate, governance arrangements including profit and loss and allocation, and the standardization of the collateral framework across member countries (while retaining sufficient flexibility for different financial products in member states). There would also need to be agreement on eligibility, since for example, a systemic test is not applied evenly across the euro area, and other key design aspects such as the need for funding plans and other conditionality (e.g., constraints on dividends, staff bonuses and further lending).
- 23. A tiered approach to governance in the Eurosystem is adopted in line with the size of ELA provision by NCBs.²³ The ECB must be informed within two days of any ELA granted by an NCB. For amounts over €500 million, the NCB must advise the Executive Board of the ECB at the earliest possible time prior to the extension of the assistance outlining the nature of the problem. For amounts over €2 billion, the Executive Board, and potentially the Governing Council must perform a case-by-case assessment. The Executive Board assesses whether there could be interference with the single monetary policy of the Eurosystem. If it concludes that there is a risk of such interference, it may then refer to the Governing Council for a final decision. Unless the Governing Council expressly prohibits the ELA within 24 hours, the NCB can conduct its ELA operations. The Governing Council may also set volume and time limits on ELA provision. Governing Council decisions prohibiting or constraining ELA require a two thirds majority of the votes cast. NCBs can however undertake an overnight operation to avoid systemic implications where Governing Council decisions are pending. This sets up a potentially untenable situation where an NCB conducts overnight operations pending a Governing Council approval, which if not granted then requires the NCB to be repaid by an institution that would likely have no other source of funding, which could be destabilizing.

²² See F. Papadia, Cadamura L., Bruegel Blog post May 2021.

²³ See Agreement on Emergency Liquidity Assistance 2024; s3.2 and 3.3.

- **24.** The ECB and NCBs should further coordinate and perform ELA testing to enhance operational readiness. Adequate preparation is critical in being able to respond in a timely manner to address liquidity stress. While ELA is an NCB responsibility, the approaches and levels of preparedness likely differ across the euro area—something which would be addressed through centralization.
- 25. The ECB will soon implement changes to the Eurosystem CCP Credit facility within TARGET (Table 2). The 2018 FSAP recommended that access to the facility should come with additional safeguards. Accordingly, access requirements for financial soundness and liquidity risk management and their ongoing assessment are to be introduced for eligible euro area CCPs. The assessment will be based on information exchanges and cooperation with CCP supervisors and the respective eligible CCPs, and will be conducted regularly on a forward-looking basis, with ad hoc assessments undertaken if deemed necessary. This will provide eligible euro area CCPs with a non-discretionary euro backstop priced at the MLF rate against the ECB's standard collateral. Although CCPs almost exclusively hold high quality collateral, financial stability risks could arise if the markets in that collateral were to freeze. Access to short-term funding against ECB eligible collateral is available now through the Eurosystem CCP credit facility on a discretionary basis but is expected to become automatic later in 2025, pending final Governing Council approval. Although the facility is overnight, borrowings will be able to be rolled over subject to adequate collateralization and without any specified limit, thereby providing a window for the liquidation of the underlying collateral if needed. Currently, two CCPs have banking licenses and therefore have access to the MLF and other ECB monetary policy operations (the CCP Credit facility is within TARGET, and outside the scope of the Eurosystem monetary policy implementation framework). These changes to the facility, while enhancing financial stability, will also level the playing field for euro area CCPs.
- 26. There should be close monitoring of the collateral composition of euro area CCPs to ensure the ongoing adequacy of the Eurosystem CCP Credit facility as a liquidity backstop. Most CCP collateral is cash and sovereign bonds, with only a small proportion of total collateral estimated as ineligible for ECB operations. On foreign exchange exposures, the Eurosystem central banks conduct regular monitoring exercises, with the outcome of the most recent exercise finding only moderate and non-material exposures. Therefore, at this stage there would seem no strong case to establish any further liquidity backstop (i.e., via procedures for the provision of ELA) beyond the CCP credit facility. Only if business practices changed resulting for example, in CCPs holding much less ECB-eligible collateral (e.g., equities) or if foreign currency exposures increased, could there be a case to explore means other than the CCP Credit facility.
- **27. Preparations for the provision of ELA to NBFIs should be advanced.** Of renewed focus, is the objective to develop deeper and more liquid euro area capital markets.²⁴ While pension and insurance sectors are already sizeable, the further growth of financial intermediation outside of the

²⁴ European Commission, A Competitive Compass for the EU, Brussels, January 2025.

banking sector will lead to other NBFIs gaining in prominence to the point of systemic importance. Such institutions may run into liquidity problems. There are significant constraints on providing ELA to the non-bank sector, not least that some NCBs have legal, regulatory, or internal procedural constraints on such provision. Efforts to remove these constraints should start quickly since they may take time, as legislative amendments would be required in some cases.²⁵ The ECB should consider coordinating with NCBs to develop an ELA framework for NBFIs applicable across euroarea. The framework would apply the general ELA principles of lending only to solvent institutions, at a penal rate, against sufficient collateral, and with more intrusive oversight.²⁶

	TARGET CCP credit (current)	Marginal Lending Facility	TARGET CCP credit (late 2025)
Eligible CCPs	Authorized / supervised euro area CCPs with access to TARGET intraday credit	Euro area CCPs licensed as credit institutions	Authorized / supervised euro area CCPs with access to TARGET intraday credit
Nature	Discretionary (subject to activation by the GovC)	Automatic (standing)	Automatic (i.e., no discretionary activation from the Governing Council), but subject to the safeguards on financial soundness and sound liquidity risk management
Interest rate	MLF rate (baseline but the Governing Council may deviate)	MLF rate	MLF rate
Collateralization	Eurosystem eligible collateral	Eurosystem eligible collateral	Eurosystem eligible collateral
Duration	Overnight	Overnight	Overnight
Other Limitations	Governing Council can take a discretionary decision on various limitations	Access can be limited, suspended or excluded on grounds of prudence	Automatic access can be limited, suspended or excluded on the grounds of prudence

28. The NBFI sector is not homogenous, and support must be accompanied by robust oversight, enhanced monitoring and transparency, and clear communication to contain moral hazard.²⁷ Support could give rise to moral hazard if the belief were to take hold that the authorities were more prepared to underwrite risk-taking across the financial sector. Clear communication

²⁵ Many NCB's currently can provide ELA to NBFIs and so the issue is one of ensuring that all NCBs are in similar positions, legally and operationally.

²⁶ See IMF Global Financial Stability Report Spring 2023 Chapter 2.

²⁷ See the Technical Note on Investment Funds Regulation, Supervision and Systemic Risk Monitoring for a discussion on the macroprudential framework for non-bank financial intermediation.

stating the rationale for ELA generally, and to NBFIs specifically, would be required. The emphasis would be on maintaining financial stability (for the purposes of conducting monetary policy), and on the temporary liquidity support to solvent entities, which appropriate costs to the recipient.

29. There are challenges in transposing the solvency criteria to different NBFI segments and in assessing whether minimum criteria are met. One option is to limit ELA only to institutions that the central bank has sufficient information on and the capacity/expertise to assess the associated risks, including those it does not supervise. Another option is for ex-ante systemic designation coupled with more regulatory oversight in coordination with the relevant supervisor. With elevated uncertainty about solvency, the risks of providing ELA to NBFIs is likely higher, necessitating larger haircuts on collateral, or loss-sharing agreements with the government. An extension of the liquidity monitoring framework to NBFIs will also need to be considered.

COLLATERAL

- **30.** The ECB's collateral framework is justifiably broad given the heterogeneity of counterparties across the euro area and the type of financial assets they hold. The published framework covers collateral that is eligible for standard monetary policy operations and crisis-related instruments but does not cover eligibility for ELA. In nominal terms, an estimated €4.7 trillion of eligible collateral is held by ECB counterparts of which €1.5 trillion is currently mobilized.^{28,29} Credit claims make up an estimated €1.7 trillion of the eligible collateral of which €500 billion is mobilized, with marketable securities accounting for €3 trillion of which €1 trillion is mobilized. The breadth of the framework can be assessed by comparing eligibility against several metrics, including peak ECB lending and coverage of different categories of banks' deposits.
- **31.** Credit extended by the ECB peaked during COVID-19 at €2.2 trillion and has since fallen close to zero (Figure 4). The demand for ECB liquidity should remain very low over the next three years or so, as the balance sheet approaches steady state. Nevertheless, the demand-driven nature of the ECB's new operational framework will require banks to participate in Eurosystem refinancing operations, which is explicitly acknowledged by prudential supervisors, who expect that banks should consider these operations as an integral part of their day-to-day liquidity management.³⁰ The €4.7 trillion of eligible collateral (€1.5 trillion mobilized), at more than twice the peak COVID-19 credit demand, easily covers almost all scenarios although pressures on collateral may be more pronounced in some jurisdictions than others given the heterogeneity of the collateral markets across the euro area and the related risk of fragmentation of funding.

²⁸ This is an estimate based on available but incomplete information.

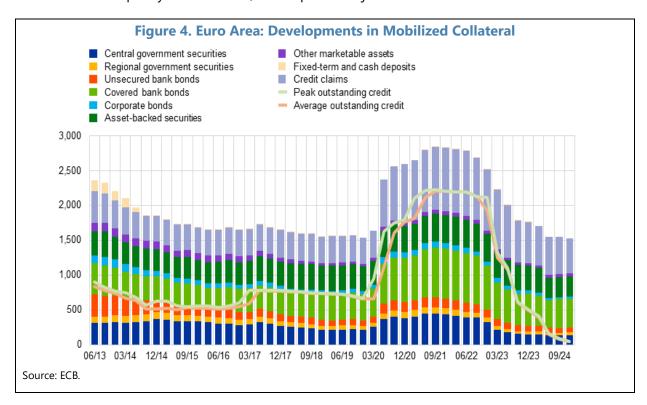
²⁹ Moblized collateral is collateral that a counterparty has moved to a collateral pool account with the relevant NCB. This provides the ECB/NCB with control over the collateral, to be exercised for example in the event of non-repayment of credit.

³⁰ Claudia Buch and Isabel Schnabel (2025), <u>Managing liquidity in a changing environment</u>, ECB Blog, March 2025.

32. The breadth of the collateral framework can also be assessed against bank deposits.

The estimated amount of eligible collateral held by ECB counterparties (€4.7 trillion) covers 25 percent of total bank deposits (€18.4 trillion), and

147 percent of the net liquidity outflow (€3.2 trillion) as used in the Liquidity Coverage Ratio (LCR). On the basis of mobilized collateral, 47 percent of the LCR outflow is covered while it is estimated that there a significant volume (€2.0 trillion) of marketable securities that can quickly be mobilized. This is useful to consider as it provides a high insurance against deposit runs, an issue covered by a G30 report which recommended that all runnable deposits be covered with mandatory prepositioning of collateral.³¹ There is no such requirement in the euro area, and only around one third of the estimated eligible collateral is mobilized. Standard collateral frameworks are often calibrated to primarily meet monetary policy operational objectives ensuring risks to the central bank are mitigated with minimal distortion to financial market pricing. The ECB's collateral framework is very broad incorporating a large buffer that can accommodate a significant increase in the demand for liquidity across the EA, or in a particular jurisdiction.



33. The ECB has a sophisticated risk management approach that defines risk tolerance at the corporate level, which is then mapped into its operations. Valuations of all (marketable) eligible collateral are computed daily (and can be derived by counterparties posting collateral), and the schedule of haircuts ranges between 0.5 percent (highest credit quality collateral of less than one year) to 64.5 percent (lowest acceptable credit claims). Haircuts are recalibrated every two to

³¹ The Group of Thirty (G30) report on the 2023 banking crisis, Bank Failures and Contagion: Lender of Last Resort, Liquidity, and Risk Management.

three years. In addition to haircuts, concentration limits are applied to uncovered bank bonds. As regards own-used covered bonds, higher haircuts are now applied and they must have an asset rating by an external credit assessment institution and be compliant with the EU Covered Bond Directive.³² Collateral availability is closely monitored on an aggregate level and across the jurisdictions to anticipate emerging pressures.

- **34.** The ECB implemented collateral easing measures during the pandemic which were estimated to have added around €285 billion to the mobilized collateral.³³ There were several measures including: i) expansion of Additional Credit Claims (ACC) frameworks;³⁴ ii) increasing (from 2.5 percent to 10 percent) the maximum share of unsecured debt instruments issued by any single other banking group in an institution's credit pool; iii) grandfathering marketable securities in the event of credit ratings downgrades (subject to a minimum rating); iv) applying a waiver to allow for Greek marketable securities; and v) temporarily reducing haircuts by a fixed factor of 20 percent. The easing measures were aimed at three objectives (below) with the reduction in haircuts and extensions to the Additional Credit Claims (ACC) frameworks accounting for 90 percent of the increase in collateral value after haircuts:
- Pre-empting shortages of eligible collateral, to meet increased liquidity demand;
- Adding flexibility for NCBs through ACC frameworks to accept loans not fully compliant with the general framework, to address collateral needs of domestic banks; and
- Countering adverse procyclical feedback effects by adjusting minimum credit quality standards and temporarily reducing haircuts.
- **35.** Credit easing measures were progressively wound back from mid-2022 as liquidity pressures abated. A significant rollback of the measures was announced in March 2022, which included the restoration of haircuts, reversing the grandfathering of securities whose credit rating had fallen below the minimum, restoration of the 2.5 percent maximum of unsecured bank debt in an institution's collateral pool, and phasing out of some of the technical requirements for eligibility under the ACC frameworks. Subsequent announcements further rolled back the measures leaving only pools of non-financial corporate credit claims and partial public sector guarantees of the ACC frameworks in place, which remain in the temporary framework until at the end-2026, while NCBs can terminate their use earlier. Preparatory work was launched on the integration of pools of non-financial corporate credit claims into the general collateral framework.

³² https://www.ecb.europa.eu/press/pr/date/2019/html/ecb.pr190513~3bda226e63.en.html

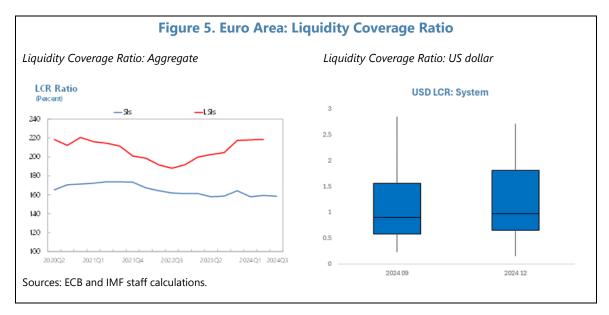
³³ ECB Economic Bulletin Issue 3.

³⁴ ACCs are credit claims that do not fulfil all criteria under the general framework and may be of lower credit quality or denominated in currencies other that the euro. Each NCB is free to set up a country specific ACC framework which must be approved by the Governing Council based on a common minimum eligibility and risk control framework.

LIQUIDITY MONITORING

- **36.** The demand-driven operational framework combined with broad collateral eligibility heightens the need for close monitoring of liquidity conditions. Prior to the Global Financial Crisis and subsequent shocks, central banks generally calibrated liquidity precisely, aimed only at meeting monetary policy implementation objectives. Central bank balance sheets were lean with a clear demarcation between liquidity provision for monetary policy purposes, and that for financial stability (i.e., ELA). The demarcation between standard operations and ELA in the euro area is somewhat less clear. Although liquidity problems usually precede solvency, showing up in market pricing (i.e., interbank rates and access), if there is broad access to central bank liquidity, market pricing may not quickly imbed all relevant information, and solvency problems could be masked given no clear sign of liquidity stress. For this reason, an effective liquidity monitoring framework is even more vital in the euro area than in central banks with narrower liquidity supply and collateral frameworks.
- 37. The ECB recognizes the importance of enhanced liquidity monitoring and has taken material steps to establish a horizon scanning framework (2018 FSAP recommendation).35 At the micro-prudential level, all banks comfortably meet their LCRs in aggregate, while there is no requirement for compliance by currency and some banks are materially below 100 percent coverage in USD LCR (Figure 5). Information is shared between ECB Directorate General Market Operations (DGM) and Directorate Risk Management (DRM), and the respective NCB colleagues regarding any negative developments of an eligible counterparty's financial soundness or liquidity situation. Furthermore, an enhanced information sharing agreement is also in place between the ECB monetary policy function and ECB Banking Supervision in relation to eligible monetary policy counterparties, irrespective of whether they are directly supervised by the ECB or not (i.e., SIs and LSIs) to exchange confidential, bank-specific information. For example, if an eligible counterparty is placed on a higher level of supervision by the supervisory colleagues (so-called "Emergency Action Plan"), or if other predefined risk-triggers are hit, enhanced interaction occurs between the respective ECB business areas, and liquidity and collateral developments are continuously exchanged and monitored.

³⁵ Horizon scanning is a formalized framework of information sharing and analysis to provide early warnings of potential liquidity stress in institutions.



- **38.** In addition, NCBs also have their own counterparty monitoring systems and information exchange arrangements with their relevant NCA. These may differ across NCB due to different structures of national banking systems and number of counterparties. In view of this, the Eurosystem and the SSM are about to implement a set of minimum standards for the exchange of confidential, bank-specific information between NCBs and NCAs, as well as supporting amendments to the relevant Eurosystem's legal acts. The proposal covers the exchange of information for both SIs and LSIs and is compiled based on the minimum information needed to effectively implement the Eurosystem's counterparty framework, and the minimum information needed to effectively perform funding and liquidity risk supervisory assessments for eligible Eurosystem counterparties, especially in times of crisis.
- **39.** The ECB/SSM recently conducted various activities to strengthen asset and liability management, including with a strong focus on liquidity aspects.³⁶ The targeted reviews covered: i) funding and contingency plans; ii) collateral mobilization capabilities; and iii) asset and liability management governance and strategy. It assessed institutions' ability to access ECB facilities including the underlying collateral identification and management process, issues also central to the effective provision of ELA. It found there was room for improvement, including in some cases, that banks were not able to determine the eligibility of a material share of their assets. The ECB emphasized that it will continuously monitor progress and communicate expectations with regard to operational preparedness.

³⁶ Managing liquidity in a changing environment

SYSTEM-WIDE MEASURES

A. Domestic Programs

40. Since the start of the global financial crisis 2007, the ECB has used various programs to meet its monetary policy mandate, spanning several market segments (Table 3). Several of the programs (TLTROs and those shaded in the table) are non-conventional monetary policy instruments used when interest rates reached the effective lower bound. Without a specific financial stability mandate, the ECB's other programs were justified from the perspective of ensuring the transmission of policy was not impaired.

Program	Objective	Market Segment	Activation Criteria	Outstanding Feb 7, 2025 (€Billion) ¹
Targeted Long-term Refinancing Operations (TLTROs)	Monetary accommodation	Bank lending	Monetary policy decision based on inflation outlook	zero
Public Sector Purchase Program (PSPP)	Monetary accommodation	Public sector securities (except Greece)	Monetary policy decision based on inflation outlook	2,105
Asset-backed Securities Purchase Program (ABSPP)	Monetary accommodation	Asset-backed securities	Monetary policy decision based on inflation outlook	5.8
Covered Bond Purchase Program (CBPP3)	Monetary accommodation	Covered bonds	Monetary policy decision based on inflation outlook	246.0
Corporate Sector Purchase Program (CSPP)	Monetary accommodation	Corporate sector bonds	Monetary policy decision based on inflation outlook	284.1
Outright Monetary Transactions (OMT)	Monetary transmission	Government bonds 1 – 3 years	Structural adjustment program under EFSF / ESM	Not activated
Transmission Protection Instrument (TPI)	Monetary transmission	Government / regional government bonds 1 – 10 years	Assessment that rates are misaligned for countries with sound fundamentals	Not activated
Pandemic Emergency Purchase Program (PEPP) – shaded programs 1 Asset purchase programs	Monetary accommodation and transmission	All securities as eligible in the purchase programs, plus Greek bonds	Assessment that monetary policy transmission is impaired	1,592.6

41. The ECB's Transmission Protection Instrument (TPI) provides a new framework for the system-wide interventions. Eligibility is focused on central and regional government securities as well agencies with a maturity of between one and ten years, and private securities can also be considered. The TPI (which is yet to be used) allows for 'secondary market purchases of securities

issued in jurisdictions experiencing a deterioration in financing conditions not warranted by country specific fundamentals.³⁷ To be eligible jurisdictions must meet several criteria including, being compliant with the EU fiscal framework, not having severe macroeconomic imbalances, and having public debt on a sustainable trajectory. The decision to activate the TPI rests with the Governing Council based on a comprehensive set of market and transmission indicators. Several activation criteria are set out including assessments of effectiveness, efficiency, proportionality, and side effects which take into account moral hazard and risks to the ECB balance sheet.

- **42. The ECB's framework and decision process for market-wide support is comprehensive covering key aspects.** These include: supporting only financial markets/institutions that are core to financial stability; designing programs to address the diagnosed market failure, lending only to well-regulated and solvent institutions; developing an ongoing capacity to price securities accepted as collateral in a lending operation or purchased outright; offering pricing that is unattractive in normal times to reduce moral hazard; and once market liquidity has been restored, exiting quickly and in a manner that minimises the impact on market prices; and ensuring appropriate transparency and seeing risk-sharing arrangements where central bank balance sheets may be stretched. ^{38,39} One challenging aspect of market-wide support programs arises in the context of a monetary policy tightening cycle, since there is potential for there to be mixed policy signals. In such circumstances, there should be clear communication detailing the instruments used to meet different objectives.
- 43. The ECB should be prepared to deal with a broader range of counterparties to address segment-specific liquidity stress. Past programs addressed liquidity stress through dealing directly with banks, and purchasing marketable securities assessed as key to monetary transmission. Being able to respond quickly, and in a flexible and targeted manner is essential to containing liquidity stress. Each of the recent crises has been different and when combined with the move to a more diversified financial sector, the ECB must ensure that it can deal with pockets of illiquidity in systemically important financial segments which may otherwise not be able to be reached, either because banks cannot intermediate, or there is unwillingness, or legal constraint on outright purchases of the securities held by the segment.
- 44. The ECB should consider the conditions for a possible adjustment of its counterparty framework in a crisis, while ensuring moral hazard is contained.⁴⁰ Having banks intermediate liquidity to stressed segments may not always be possible or effective given regulatory constraints

³⁷ ECB Press Release July 21, 2025, The Transmission Protection Instrument.

³⁸ Buiter B., S. Cecchetti, K. Dominguez, A. Sánchez Serrano Reports of the Advisory Scientific Committee No 13 / January 2023 Stabilising financial markets: lending and market making as a last resort.

³⁹ King, D., Brandao Marques, L., Eckhold, K., Lindner, P. and Murphy, D. (2017), "Central Bank Emergency Support to Securities Markets", *IMF Working Paper*, No 2017/152, July.

⁴⁰ The Bank of England introduced the Contingent NBFI Repo Facility which effectively expanded its counterparty framework to participating insurance companies, pension funds and liability-driven investment funds to allow it respond to dysfunction in the gilt market. Participants must meet an appropriate standard of current and prospective financial health, which is further prescribed by institutional type. See: https://www.bankofengland.co.uk/markets/bank-of-england-market-operations-guide/cnrf

or asymmetric information, while some segments are currently prohibited from borrowing (e.g., money market mutual funds). The system-wide stress test conducted by the FSAP highlighted how a redemption shock could propagate through the financial system and illustrated the mitigating impact on core funding markets under the counterfactual when funds could access repo funding to avoid selling into a downward market. This supports the case for flexibility in the ECB's counterparty framework.⁴¹

45. Should an expansion of the counterparty framework be considered, it should include several safeguards, including that activation should only occur in a crisis, only to segments that are deemed relevant for monetary policy transmission, and whose institutions are adequately regulated and supervised. Further, given a crisis and increased uncertainty of dealing with NBFIs (as against banks), additional risk mitigation measures are likely needed, including possibly higher haircuts and possible risk sharing arrangements with the government. Similarly, as with the communication challenges of ELA to NBFIs, care is needed to avoid the view that the ECB is prepared to underwrite financial risks taken in the private sector (i.e., moral hazard). Communicating that the ECB is increasing crisis preparedness in response to a more diversified financial sector should be viewed positively if it is noted that the objective is to safeguard transmission (i.e., financial intermediation), that there is no precommitment, and that the threshold for intervention is very high.

B. Other Support Programs

International Use of the Euro

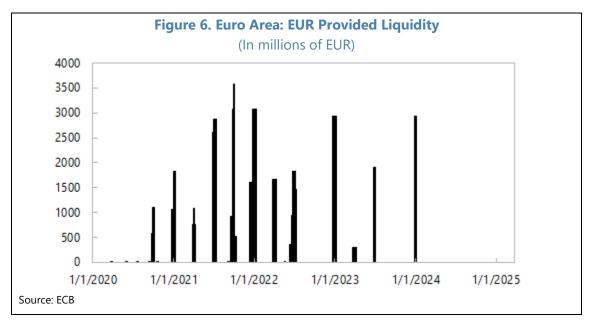
- **46. Given the use of the EURO in international markets, the functioning of these markets is relevant to the transmission of the ECB's monetary policy.** ⁴² Global tensions, or regional funding shocks can adversely impact domestic funding markets. During such times, actions may be needed to prevent Euro shortages from setting off forced asset sales (i.e., by non-euro central banks) or having liquidity stress spill over and amplify financial stability risks that may otherwise have led to an unwarranted tightening in financial conditions. The ECB has an interest in functioning of euro funding markets internationally, given the relevance for the transmission of its monetary policy while it also seeks to strengthen the international role of the euro.
- 47. The ECB has FX swap lines and repo lines with several counterparties. During COVID-19 the Eurosystem reactivated existing FX swap lines and set up new ones. The ECB can count upon being able to provide US dollar funding as it is a party to the swap line network of standing bilateral arrangements with five other major central banks, Bank of Canada, Bank of Japan, Swiss National Bank, Bank of England, and the Federal Reserve System. The Governing Council also established the Eurosystem repo facility for central banks that provides euro to a broad range of non-euro area central banks against high quality euro area-denominated debt. Following a review by the Governing Council, this is now part of the permanent toolkit, which expands access to the liquidity

⁴¹ See Systemic Risk Analysis Technical Note.

⁴² https://www.ecb.europa.eu/press/blog/date/2020/html/ecb.blog200819~0d1d04504a.en.html

facility to a broader set of countries in times of crisis, or when there is a heightened risk of crisis. While both operations provide liquidity backstops FX swap lines are likely more attractive for the borrower since they usually provide cash collateral in the foreign currency.

48. The Eurosystem's backstops to mitigate stress in international euro funding markets are well-designed and have been effective. The pricing of these facilities is important for effectiveness, and it is set at levels which are more expensive than normal funding, which makes access attractive only when conditions deteriorate, while incentivizing repayment as conditions improve. Over the last five years the combined activity in both facilities peaked around €3 billion with notable activity around quarter-end, while there has been no usage since the beginning of 2024 (Figure 6). The ECB's clarity about these operations and their objectives, provides a strong signal that severe market dislocation will be contained, thereby lessening the need for action in all but extreme circumstances.



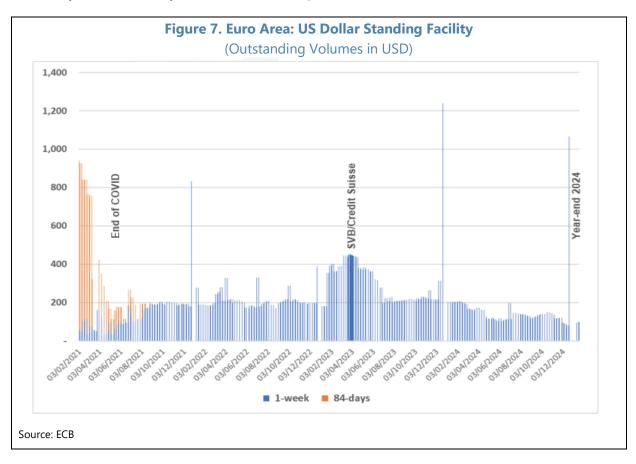
US Dollar Funding Markets

49. EA banks are active in foreign currency funding markets accounting for 23 percent of their funding.⁴³ US dollars account for 17 percent of this funding which is sourced mainly from short-term wholesale markets (commercial paper and repo markets). The dominant business model is for US affiliates (bank subsidiaries, broker-dealer subsidiaries and branches) to intermediate in repo markets, while also undertaking some traditional deposit taking and lending business. Repo activity picked up significantly since interest rates started to rise in 2022 (almost doubling to €1.6 trillion in November 2024), with euro area banks intermediating between their US affiliates and non-banks, which are mainly offshore investment funds. Noted earlier (Figure 5), is the wide range of liquidity coverage in foreign currency across banks, with no currency-specific liquidity

⁴³ ECB FSR 2024 November

requirement. Given the activity in short-term USD funding markets, euro area banks may be vulnerable to disruptions in these markets, as seen in past crises.

50. Against this backdrop, the ECB provides USD through a weekly standing facility against standard collateral. Take-up is normally low (Figure 7), and more recently has fallen below €100 million with few banks participating. Demand increases during times of stress as seen through the Silicon Valley Bank/Credit Suisse episodes, and at quarter and year-ends. The pricing is set at a margin above US OIS rates which can be adjusted in response to liquidity stress while the duration can also be extended, as was the case during COVID-19 when 84-day funding was provided. During that period, outstandings peaked close to €1 billion and then fell as the stress subsided with the pricing of ECB funding becoming unattractive compared to that available in the market. US dollar availability is buttressed by the central bank swap lines mentioned above.



Appendix I. Status of Implementation of Recommendations from 2018 FSAP

#	System-wide Liquidity	Responsibility	Status
1	Articulate clearly the ECB/Eurosystem's financial stability mandate, so that it can have confidence when planning and conducting operations for financial stability purposes	ECB Central Banking, ECB Legal	Not implemented. The ECB/Eurosystem already has a financial stability mandate under the EU Treaties, insofar as Article 127(5) TFEU already provides that: "The ESCB shall contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system." See also Article 25 of the ESCB Statute.
			The primary objective of the ECB is to maintain price stability. Following the latest Strategy Review, the ECB has taken decisive steps to integrate the financial stability analysis into the monetary policy-making process. Current arrangements ensure preserving the focus on the primary objective to maintain price stability while duly taking into account any spillovers or interactions with financial stability matters.
2	Develop the future operational framework, including balance sheet size, to reflect regulatory developments and support capital markets union	ECB Central Banking	Implemented. In March 2024, the Governing Council of ECB decided on changes to the operational framework for implementing monetary policy. These changes will affect how central bank liquidity will be provided as excess liquidity in the banking system, while remaining significant over the coming years, gradually declines. In this context, the Eurosystem intends to provide central bank reserves through a broad mix of instruments in order to offer an effective, flexible and stable source of liquidity to the banking system, thereby also supporting financial stability.
			Following the conclusion of the ECB's operational framework review, new structural longer-term refinancing operations and a structural portfolio of securities will be introduced at a later stage, once the Eurosystem balance sheet begins to grow durably again. For these operations, however, an in-depth analysis of the design of such new longer-term refinancing operations and the new structural portfolio will still be conducted.

#	System-wide Liquidity	Responsibility	Status
3	Assess the introduction of mechanisms (e.g., interest rate add-ons) to address the incentives for supplying illiquid collateral for ECB/Eurosystem repurchase operations, to encourage the build-up of HQLA in private markets	ECB Central Banking	Not implemented. In March 2024, the Governing Council of ECB decided on changes to the operational framework for implementing monetary policy. In this context, the Governing Council decided to maintain a broad collateral framework to facilitate the use of the Eurosystem credit operations by counterparties – an integral part of smooth monetary policy implementation.
			In November 2024, the Governing Council decided to discontinue many temporary collateral measures introduced throughout the years, to support bank lending and money market activity. The discontinuation of these temporary collateral measures relates to the phasing-out of (i) additional credit claims backed by real estate assets provided to private individuals (i.e. mortgages); (ii) individual additional credit claims with a credit quality below CQS 3 on the Eurosystem harmonised rating scale; (iii) credit assessment approaches developed by NCBs to estimate probabilities of default and loss-given default of additional credit claims; and (iv) foreign currency-denominated loans in US dollars (USD), pounds sterling (GBP) and Japanese yen (JPY).
			With the repayment of the TLTRO III operations, the share of reserves in banks HQLA decreased and banks have largely resorted to market funding sources to generate HQLA. In particular, euro area banks were able to compensate for the decline in reserves by holding more highly liquid government bonds or non-retained covered bonds, as well as borrowing HQLA in the term repo market, against non-HQLA.
4	Harmonize NCB securities lending arrangements to support financial market integration	ECB Central Banking, NCBs	Partially implemented. There is quite some degree of harmonization in place as regards the Eurosystem's securities lending approach. For example, in terms of pricing, the Eurosystem follows a harmonized minimum pricing principle and there is also a coordinated approach to adjusting the overall volume, as needed, in connection to market developments and needs.
			The remaining variations in securities lending practices within the Eurosystem are explained by the fact that this activity is not associated with shared risks or profits, which implies that achieving

#	System-wide Liquidity	Responsibility	Status
			such harmonization may not be feasible. Although harmonizing these practices could benefit financial market integration, the potential benefits should not be over-emphasised either.
5	Clarify the boundaries in terms of currently available derogations around monetary policy operations to minimize the potential for their use as surrogate emergency liquidity assistance	ECB Central Banking	Not implemented. The Eurosystem discontinued the acceptance of government guaranteed bank bonds (GGBBs) already back in 2015. The derogation clause, however, has been maintained but has not been used in recent years and any request for use would first have to be assessed by the Governing Council.
6	Manage the transition from crisis related policy settings with appropriate signalling to minimize possible market disruption. For example, develop and announce normalization principles to anchor market expectations, and establish solutions to avoid a TLTRO "cliff-edge"	ECB Central Banking	Implemented. The reabsorption of excess liquidity through TLTRO maturities and QT has not created any vulnerabilities in the euro area banking system. Banks have had good market access, which allowed them to replace maturing TLTRO funds along with reduced overall excess liquidity. The smooth process of reabsorption of excess liquidity resulted in decreasing needs for collateral, and thus the Eurosystem decided to roll-back measures taken in the past in the collateral framework, such as (i) the phasing out of the pandemic collateral easing measures in two steps (implemented in July 2022 and June 2023); and (ii) the announcement in November 2024 on the phasing out of the temporary collateral framework and integration of some of its features in the general framework. Going forward, and as communicated in the context of the operational framework review in March 2024, liquidity will be provided through a broad mix of instruments, ensuring an effective, flexible and stable source of liquidity to the banking system, thereby also supporting financial stability. It is intended that standard refinancing operations, i.e. MROs and 3-month LTROs, play a central role in meeting banks' liquidity needs and continue to be conducted through fixed-rate tenders with full allotment against broad collateral; at a later date, liquidity will also be provided via structural operations, i.e. structural longer-term refinancing operations and a structural portfolio.
7	Formalize tools and overall framework for dealing with potential dysfunction in systemically important securities markets	ECB Central Banking	Implemented. ECB introduced the Transmission Protection Instrument in 2022 to deal with cases where monetary policy transmission may be disrupted by self-reinforcing market dynamics. While the focus is on purchases of public sector securities,

#	System-wide Liquidity	Responsibility	Status
			purchases of other securities are in principle also possible. TPI is designed not to interfere with the monetary policy stance. TPI complements the existing instrument of Outright Monetary Transactions (OMT) which has different activation criteria.
8	Revisit the USD swap facility to ensure that it remains an effective market backstop whilst preventing opportunities for arbitrage in normal times, and assess structural demand for USD going forward	ECB Central Banking	Implemented. The ECB is part of a swap line network of standing bilateral arrangements with five other major central banks, including the Federal Reserve System. The swap agreement between the ECB and the Federal Reserve System is a standing agreement with no end date, although either party may terminate it at any time. Changes in the modalities of the operations (pricing, tenor, frequency) were repeatedly made in a timely manner in a coordinated manner across the swap network partners during stress episodes, including during the March 2023 US-centred banking stress. The USD swap facility has continued to remain a market backstop preventing funding stress (e.g. during the pandemic and also during the SVB/Credit Suisse crisis). Its limited use as well as the fact that outside stress periods and quarter -and year-ends the pricing is more expensive than market pricing shows that it acts as a backstop facility and is not used for arbitrage in normal
9	Introduce averaging as opposed to end-period reporting for measures such as leverage ratios, SRF contributions etc., to help minimize market volatility	ECB Banking Supervision/SRF	Partially implemented. Action to minimize volatility around reporting dates has already been taken on the leverage ratio framework. EU legislators enhanced leverage ratio reporting and disclosure requirements in response to recommendations by the Basel Committee. Large banks must report and disclose both quarterly averages and daily amounts of securities financing transactions, which include repos. In December 2023 ECB Banking Supervision imposed leverage ratio capital add-ons for several banks, partly because they reported strong variability in the leverage ratio around reporting dates. Action is now being taken on the G-SIB framework as well. In March 2024 the Basel Committee started a public consultation to enhance reporting requirements for banks. The main proposal is that,

#	System-wide Liquidity	Responsibility	Status
			at year-end, banks should report high-frequency (i.e. daily) averages for the most important balance sheet items that are relevant for the G-SIB assessment.
10	Assess the merits of introducing measures, such as ECB/Eurosystem deposit facility remuneration limits, for CCPs to minimize escalation of liquidity strains in a crisis	ECB Central Banking	Implemented. The issue in relation to the remuneration of overnight cash balances held in TARGET by the EEA central counterparties (CCPs) has been explored by the ECB/Eurosystem. The work has been finalised within the dossier of the remuneration on non-monetary policy deposits (NMPDs) (see relevant press release and legal act). As a result, the remuneration framework was revised, focusing on the applicable rates instead of remuneration limits.
			CCPs that are authorised as credit institutions under Regulation (EU) No 575/2013 (i.e. bank-CCPs) are subject to the relevant remuneration rules applicable to Eurosystem monetary policy operations.
11	Further harmonize, before ultimately centralizing, ELA arrangements	ECB Central Banking, NCBs	Partially implemented. The ECB together with the NCBs regularly reviews the rules and procedures surrounding the provision of ELA, as laid down in the ELA agreement (driven by transparency considerations, the ELA agreement was first published in June 2017; the last ELA review was finalized in Q3 2024). The ELA framework has evolved and expanded over the last years with more elements being covered by the ELA agreement to ensure that the provision of ELA by NCBs does not interfere with the ESCB's tasks and objectives.
			In particular, and with a view towards a consistent approach within the euro area, topics such as communication and disclosure, solvency definition are being looked at in the context of regular ELA reviews. For example, at the occasion of the last review, a principle that ELA should be sufficiently collateralised was included in the ELA Agreement. Whether centralization of ELA should be the ultimate goal needs to be carefully assessed in view of the legal competences of the Eurosystem, as well as financial structure and the regulatory environment in the respective euro area jurisdictions. The Eurosystem could only provide ELA, if that power was conferred on it by the member states in the Treaties (principle of

#	System-wide Liquidity	Responsibility	Status
			conferral). As the Eurosystem may only act within the limits of the powers conferred on it by the member states in the Treaties, it is not within the discretion of the Governing Council to "centralise" ELA.
12	Expand the liquidity "horizon scanning" framework, by means of further active and formalized engagement between supervisory and monetary policy implementation and risk management areas, to facilitate the better detection of emerging liquidity strains, by: • greater (and harmonized) operational and supervisory information exchange and engagement requirements to fully exploit working synergies; requiring funding plans sooner (¶53) • developing a central/shared watch list for banks and CCPs with emerging liquidity issues and applying scenario analysis (¶53) developing and harmonizing collateral "prepositioning" or verification arrangements, in particular for ELA	ECB Central Banking, ECB Banking Supervision, NCBs, NCAs	Partially Implemented. The ECB took note of the recommendation regarding the 'horizon scanning' arrangements to better detect emerging liquidity strains. With respect to credit institutions, the ECB/SSM and ECB/Eurosystem have developed a holistic approach to horizon scanning: • ECB Banking Supervision and ECB Monetary policy side have an agreement in place (since 2014, set up on the basis of Article 6 of Decision ECB/2014/39), that allows for the exchange of information on the liquidity situation of supervised banks (quantitative data and context explanations), both in normal and in stressed circumstances. Since 2018, this framework has been revised regularly to take into account lessons learned and allow for a more timely and complete coverage of relevant cases, including the proactive signalling of new cases by supervisors. • Following the example and success of the abovementioned information exchange agreement, the Eurosystem and the SSM are about to introduce common minimum standards for similar information exchange arrangements between NCAs and NCBs, in order to further facilitate the horizon scanning benefits for all Eurosystem counterparties (including less significant institutions not directly supervised by the ECB). • The ECB's risk management has in place a monitoring framework that, in addition to information received from supervisors, aims at scanning the horizon for counterparties with potential financial stress. This framework includes early warning indicators based on market and own data, news monitoring, liquidity and collateral monitoring, and the maintenance of a list of higher risk entities for which additional close monitoring is performed.

#	System-wide Liquidity	Responsibility	Status
T .	System-wide Liquidity	Responsibility	 Prudential data is received as part of the information exchange arrangements with supervisors, and it is also used to observe trends, patterns and identify possible buildups of pockets of risk. In 2024, the ECB/SSM conducted various off-site supervisory activities with respect to asset and liability management (ALM) frameworks. More specifically, it completed targeted reviews of (i) funding and contingency plans, (ii) collateral mobilisation capabilities, and (iii) ALM governance and strategy. In the context of those initiatives, the ECB/SSM assessed, among others, the ability of credit institutions to access central bank liquidity facilities, including the underlying collateral identification and management process in credit institutions. Furthermore, the ECB/SSM reviewed the consistency of the calculation of the LCR with a particular focus on the marketability, accessibility, intra-group transferability and monetisation of high-quality liquid assets. In addition to the outcome of institution-specific supervisory activities (including on-site investigations) in the area of ALM, the conclusions from the above-mentioned initiatives, will feed into a broader communication with credit institutions to ensure that their ability to respond to macro-financial shocks will be strengthened. With respect to euro area central counterparties (CCPs), the Eurosystem work to change access modalities of the Eurosystem CCP credit facility within TARGET is nearing finalization. As a result of this work, safeguards on financial soundness and sound liquidity risk management will be introduced for eligible CCPs, and related cooperation/information-exchanges (with relevant
			CCP supervisors and eligible CCPs) will be enhanced.
13	Formalize central bank cooperation agreements	ECB Central Banking, NCBs	Partially implemented. Article 3.4 of the ELA agreement provides the expectation that NCBs, in the case ELA operations concern a banking group with branches and subsidiaries in several member states of the euro area, to establish communication networks. The aim of these

#	System-wide Liquidity	Responsibility	Status
			networks is to facilitate prompt communication between NCBs.
			However, there is no specific guidance formalized in terms of the nature of this communication under the ELA Agreement.
			NCB communication and interaction is also facilitated via the regular ELA Taskforce, which is established to revise the ELA Agreement on a periodic basis with the latest review of the Agreement occurring by the Taskforce in 2024.
			Meanwhile, Article 3.5 formalizes the requirement for an NCB to notify the Governing Council, via the Executive Board, of any situation whereby it enters into a liquidity arrangement with a non-Eurosystem national central bank or monetary authority with the purpose of facilitating the provision of emergency euro or foreign currency liquidity.
14	Perform ELA testing to enhance operational readiness	ECB Central Banking, NCBs	Partially implemented. Operational preparedness and coordination are key and entails testing, updated and maintained internal procedures, systems, the use of early warning indicators, information on counterparties' unencumbered assets, legal processes and personal contacts to other institutions that would be involved in an ELA event. Significant level of internal preparedness (including ELA testing, internal manual and monitoring) is already employed by several euro area NCBs on a regular basis.
			As part of the 2024 review of the ELA Agreement, the ELA Taskforce held an information sharing workshop whereby NCBs provided experience of their ELA preparedness and procedures.
			As the provision of ELA is a national task, testing, early warning systems, assessment of systemic importance as well as general preparedness procedures may differ across each jurisdiction and are tailor made to fit local specificities including governance within NCBs.

#	System-wide Liquidity	Responsibility	Status
15	dere back procedures for pplication of state aid rules to demnities given by covernments to NCBs for ELA perations (at least in esolution)	EC	Not implemented. EU State aid rules have remained unchanged since 2013. Given the objective nature of the notion of aid, a complete exemption of such guarantees from State aid control is not possible. If a measure is aid, it falls under State aid control.
			An ex-ante clearance could be considered in principle, as block exemptions already exist for some forms of State aid.
			However, even though the current legal framework does not provide for a block exemption for aid to central banks, a State aid decision on such matters can be taken very expeditiously if circumstances call for it, in close cooperation with the member states. We are committed to ensuring immediate adoption in such cases, similarly to State aid decisions taken when a resolution fund is used.
16	Complement resolution arrangements by: • establishing an MOU with the authorities clarifying the availability of central bank liquidity for resolution cases adding a forward-looking solvency and viability test to the assessment	ECB Central Banking, SRB	Partially implemented. The Eurosystem has recently decided on a number of changes to its counterparty framework which will allow to reestablish the access of a resolved bank to monetary policy operations on the day following the adoption of the resolution scheme. The access will be re-established based on provisional capital ratios which assume a full implementation and execution of the resolution scheme. These changes will start to apply towards the end of 2025 and can then be operationalized in exchanges with supervisory and resolution authorities. While discussions between the ECB, the SRB
			and other EU institutions are continuing a key finding of the current FSAP is that arrangements for banks' access to liquidity in resolution remain inadequate in the EA and their augmentation is a key recommendation of the 2018 FSAP.
			As regards ELA, the ELA Agreement includes a forward-looking perspective since the solvency criterion cater for a credible prospect of recapitalization within 24 weeks. The solvency criteria were also strengthened with the addition of a leverage ratio requirement (minimum 3 percent).

#	Emergency Liquidity Assistance (ELA)	Responsibility	Status
17	Refine the approach to emergency liquidity support to euro area CCPs in euro and FX, apply ELA safeguards to TARGET2 emergency euro facility to CCPs, and improve information gathering regarding CCPs for "horizon scanning" purposes	ECB Central Banking	Implemented. With respect to euro area central counterparties (CCPs): The Eurosystem conducts a periodic monitoring exercise to understand foreign currency (FX) exposures of euro area CCPs. The 2023 monitoring exercise found moderate and non-material FX exposures. Overall, euro area CCPs continue engaging primarily in euro-denominated business. The monitoring exercise is repeated regularly by the Eurosystem. In sum, at this stage FX liquidity provision under ELA would not be of relevance. With respect to the euro liquidity provision, on the basis of the 2019 IMF FSAP recommendations, the Eurosystem work to change access modalities of the Eurosystem CCP credit facility within TARGET is nearing finalization. The Eurosystem's CCP credit facility within TARGET is a crisis facility in euro, subject to standard / harmonized conditions, incl. collateralization. As a result of this work, safeguards on financial soundness and sound liquidity risk management will be introduced for eligible CCPs. The Eurosystem's assessment framework in relation to those safeguards will be based on enhanced information exchanges and cooperation with CCP supervisors and, as relevant, with eligible CCPs. The assessments will be conducted with a forward-looking perspective on a regular, and if needed, on an ad hoc basis to ensure ongoing compliance with safeguards. With respect to non-euro area CCPs: The internationally agreed "No Technical Obstacle" principles are considered to provide sufficient basis for possible establishment of arrangements between the ECB and non-euro area central banks, if needed.
18	Ensure ELA is not prematurely disclosed through routine ECB/Eurosystem balance sheet publications	ECB Central Banking / Banking Supervision	Partially implemented. It needs to be ensured that ELA cannot be prematurely derived through routine ECB, Eurosystem or NCB balance sheet publications. Euro-denominated ELA provision is, according to the ECB Accounting Guidelines (2016/2249), reported in balance sheet item A.6 (Other claims on euro area credit institutions denominated in euro). This is a rather broad asset class category, including also several other items, and the reporting was harmonized into this asset class back in 2012. Meanwhile, FX ELA will be included under A3 (Claims on euro area residents denominated in foreign currency), a similarly broad item meaning the exact liquidity provision cannot be directly inferred. As regards publishing historical ELA data, the Eurosystem is currently working on a harmonized transparency regime, aiming for an increased transparency level but duly acknowledge financial stability concerns as well as the commercial interest of the past ELA recipient.