FUNDING PLANS REPORT

EUROPEAN
BANKING
AUTHORITY

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List of abbreviations

ABS	Asset-backed securities
AT1	Additional Tier 1
BRRD	Bank Recovery and Resolution Directive
EBA	European Banking Authority
ECB	European Central Bank
EEA	European Economic Area
EU	European Union
FINREP	Financial Reporting Standards
G-SIIs	Global systemically important institution
LTRO	Longer term refinancing operations
MREL	Minimum requirement for own funds and eligible liabilities
NFC	Non-financial corporate/non-financial corporation
OSIIs	Other systemically important institution
RAQ	Risk Assessment Questionnaire
T2	Tier 2
TLAC	Total loss-absorbing capital
TLTRO	Targeted LTRO

Country code	Name of country
AT	Austria
BE	Belgium
BG	Bulgaria
CY	Cyprus
CZ	Czech Republic
DE	Germany
DK	Denmark
EE	Estonia
ES	Spain
FI	Finland
FR	France
GR	Greece
HR	Croatia
HU	Hungary
IE	Ireland
IS	Iceland
IT	Italy
LT	Lithuania
LU	Luxembourg
LV	Latvia
MT	Malta
NL	Netherlands
NO	Norway
PL	Poland
PT	Portugal
RO	Romania
SE	Sweden
SI	Slovenia
SK	Slovakia

Executive summary

The objective	This report summarises the funding plans submitted by EU banks based on projections as of December 2022 and includes assessments of the projections made.
Loan portfolios continue to grow	Banks' total assets increased by 1.3% in 2022 (3% in 2021). TLTRO repayments drove a decline in cash balances, which is set to accelerate in 2023. Loans to households and NFCs and investments in debt securities increased by 2.6% in 2022. Banks expect the loan growth rate to increase to 4.3% in 2023.
Deposits growth expected to slow down	Deposits grew by 4.4% in 2022 and by the end of the year represented 75% of banks' total funding sources. In 2023, deposit growth is expected to slow down to 2.8% for deposits from households and NFCs.
Issuance volume expected to increase significantly in 2023	Banks plan to issue more debt instruments in the coming years, reflecting a high volume of maturing bonds and to make up for an expected decline in central bank funding, but equally to comply with MREL requirements. In 2023, banks plan to increase market-based funding by 5.5%, with a focus on senior unsecured instruments and covered bonds. The issuance volume of senior unsecured and covered bonds is forecast to substantially exceed the volume of maturing bonds in each year of the forecast period.
TLTRO replacement will impact some banks' liquidity and funding positions	Banks' reliance on public sector sources of funding is set to fall in 2023, due to TLTRO funds reaching maturity. Most banks have cash and cash balances at central banks that exceed the maturing TLTRO amounts. A limited number of banks that hold significant amounts of outstanding TLTRO funds may need to find alternative sources of funding, such as covered bonds.
Interest rate spread increased in 2022	The spread between interest rates for loans to clients (households and NFCs) and client deposits has increased significantly in 2022 and stood at 2.26% compared to 2.03% one year earlier. For the year 2023, most banks expect spreads to increase further.
Rising funding costs	In 2022, banks reported an increase in their funding costs. The average cost of long-term funding was reported as 1.97%, 71 bps higher compared to 2021. In 2023, most banks expect funding costs to increase further.

Introduction

The objective of this report is to analyse and assess the feasibility of submitted funding plans for the EU banking system. Back-testing of past funding plans supports the assessment of the reliability of the trends in assets, liabilities and pricing projected by banks. To assess the feasibility of the asset growth forecast by banks on an aggregated level, as well as corresponding forecasts on deposit and market-based funding, the report also compares submitted data with market and statistical information, such as historical issuance volumes. While most of the assessment is carried out at the EU level, country level comparisons are also provided.

The analysis is based on funding plan data reported in accordance with the EBA Guidelines.[1] These guidelines have changed in 2020 with the aim of providing additional details on market-based funding, align concepts to those used in FINREP and ease the reporting burden for small and non-complex credit institutions. Because of this change, some data series are available from 2020 but not before. The EBA collects data from a sample of banks, as defined in EBA Decision DC/2020/404[2], on reporting by competent authorities to the EBA. The sample covers the largest institutions in each Member State and, in terms of total assets, covers more than 80% of the EU banking sector. The list of 159 reporting banks (including subsidiaries) from all EU jurisdictions is provided in Annex 2.[3]

The EU aggregate figures and charts in this report are based on the data reported at the highest level of consolidation and include banks from EEA countries. Country-level data, in contrast, also include subsidiaries. The dataset includes information on public sector sources of funding, deposit funding, market-based funding, and information on pricing of selected asset and liabilities positions. The analysis uses data reported in the last three years, and covers actual figures for 2020, 2021 and 2022 as well as forecasts for the subsequent three years (2023 to 2025). Aggregate figures and charts in this report based on data reported in non-EUR currencies may be affected by exchange rate developments in the reporting period. In the case of analyses that make use of data from multiple reference dates, such as back-testing exercises, only banks that submitted data for the complete reference period are included. The cut-off date for funding plan data used in this report was 3 May 2023.

[1] EBA Guidelines: https://www.eba.europa.eu/regulation-and-policy/supervisory-reporting/updated-guidelines-on-harmonised-definitions-and-templates-for-funding-plans-of-credit-institutions.

[2] EBA Decision: https://www.eba.europa.eu/sites/default/documents/files/document_library/1018305/EBA%20DC%20404%20Supervisory%20reporting%20by%20competent%20authorities%20to%20the%20EBA.pdf.

[3] Throughout the report, country-specific data are not disclosed if fewer than three banks for the country in question have submitted data for a given figure.

Recent developments in liquidity and funding conditions

Market funding for European banks in 2022 and until the third quarter was characterised by a strong repricing and spread widening, with improving spreads again in the fourth quarter of 2022 and the beginning of 2023. Issuance volume of debt and capital instruments was nevertheless high and funding market conditions were overall supportive for new issuances. In 2022 and in Q1 2023, banks issued higher volumes of unsecured instruments, including subordinated instruments, compared to 2021 and Q1 2022, respectively. Volatility[4] was at considerably lower levels in the second half of 2022 and early 2023 than at the beginning of the Russian aggression against Ukraine in February 2022. Yet temporary spikes of volatility continued amid a challenging economic backdrop and an environment of rising inflation and interest rates.

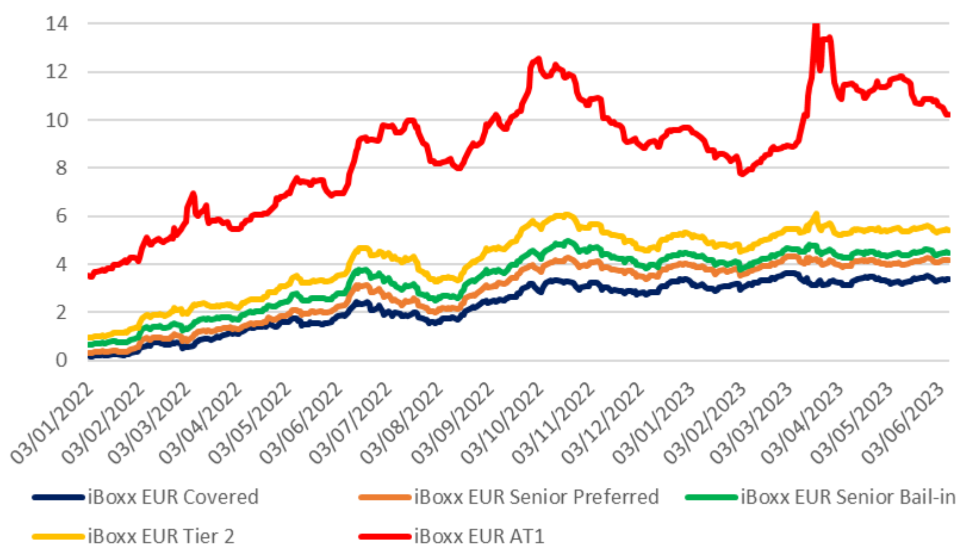
In response to inflation, central banks in Europe have entered into a cycle of monetary tightening. In the Euro area, the ECB on 9 June 2022 announced a normalisation of its monetary policy. The ECB decided to end negative policy rates and started raising interest rates on 11 July 2022[5]. It has raised interest rates eight times since then[6] while inflation increased to higher levels and appears more prolonged than previously expected. Rising interest rates led to strongly increasing yields of secured and unsecured instruments across durations, in the Euro area and beyond, albeit from very low levels. Figure 1 shows strongly increased pricing in absolute yields for banks' EUR debt and capital instruments for most of 2022 and during the banking market turmoil in spring 2023.

[4] European volatility index VSTOXX.

[5] ECB monetary policy decisions, 21 July 2022.

[6] Until 21 June 2023

Figure 1: Absolute yields (iBoxx, in %) of EUR bank debt and capital instruments, January 2022 to June 2023



Source: IHS Markit

Following a pattern observed already in 2021, issuance activity in 2022 was rather unevenly distributed across the year, with very high issuance activity in times of temporarily less volatility and contracting spreads, and low issuance activity in periods of volatile interest rates and wider spreads, and while banks reported their quarterly results. After recovering from high levels at the beginning of the Russian aggression, spreads of bank instruments gradually increased again in spring 2022, as shown in Figure 2. After a temporarily contraction over the summer, they peaked in October 2022 amid an uncertain macroeconomic backdrop with high inflation, high energy- and commodity prices, and uncertainty over the further course of monetary policy.

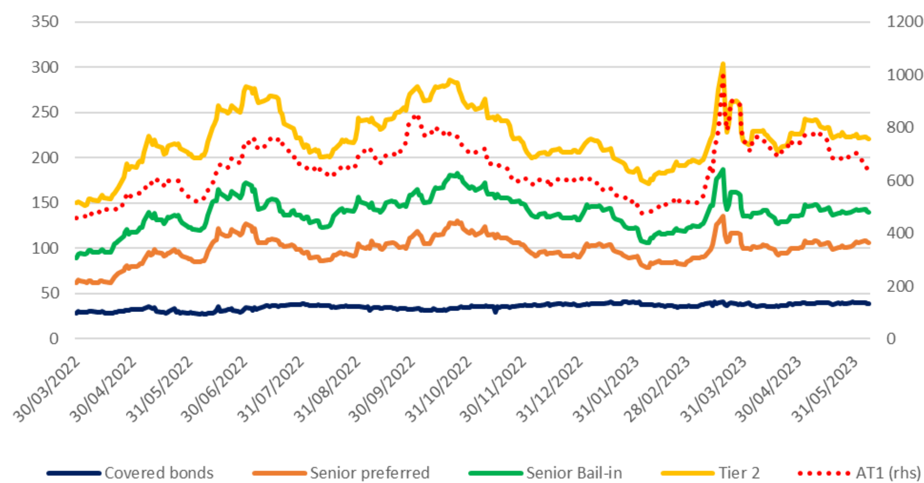
Generally, large and medium-sized banks have been able to issue instruments across the capital stack in 2022, in spite of more challenging market condition, although at substantially increasing pricing. Ample investor liquidity positions coupled with continued search for yields supported high instruments issuance volumes. Some challenges to issue instruments that are lowest ranked in the capital stack, such as AT1 bonds, at reasonable pricing were nevertheless observed since Q3 2022. Yields for these instruments increased particularly. Funding conditions deteriorated at that time amid higher-than-expected inflation, and uncertainty about the future course of monetary policy and interest rates. Smaller banks and banks with heightened risk perceptions have also been able to issue unsecured debt in 2022, mainly in periods of temporarily spread tightening, and in spite of challenges an uncertain economic environment and rising inflation posed. Yet these banks faced some challenges to issue subordinated and loss absorbing instruments at reasonable costs, and amid concerns about investor reception.

Covered bond issuance volume increased in 2022 and was higher in both the first and the second half compared to the same time periods in 2021. Opportunities to attain funding at relatively low costs, after extraordinary long-term central bank funding could no longer be attained, and at lower costs

than unsecured funding, in particular while market conditions were more volatile, all supported higher issuance volumes of covered bonds. Covered bonds moreover benefitted from inherent higher security for investors.

In 2023, unsecured and secured bank debt issuance activity was particularly high at the start of the year. Banks made use of a temporarily period of decreasing spreads at that time to issue high volumes of debt instruments in pre-funding activities for the remainder of 2023. Bank funding market conditions temporarily deteriorated materially with the failures of few mid-sized banks in the US and Switzerland, which impacted EU banks. Market volatility spiked and spreads for bank instruments widened substantially to levels higher than in October 2022. Bank funding markets were temporarily closed, and primary secured and unsecured issuance activity came to a halt. Meaningful issuance activity of unsecured instruments commenced after ca. two weeks. Yet by April volatility returned to rather low levels as observed at the beginning of the year. Bank funding conditions mostly normalised again until May 2023, although spreads for bank instruments remain at higher levels than before the March episode of banking market turmoil. But some challenges to issue subordinated instruments, in particular AT1, continued until May. Figure 2 shows spread developments for banks' EUR debt- and capital instruments.

Figure 2: AWS spreads (iBoxx, in bps) of EUR debt- and capital instruments (AT1 rhs)

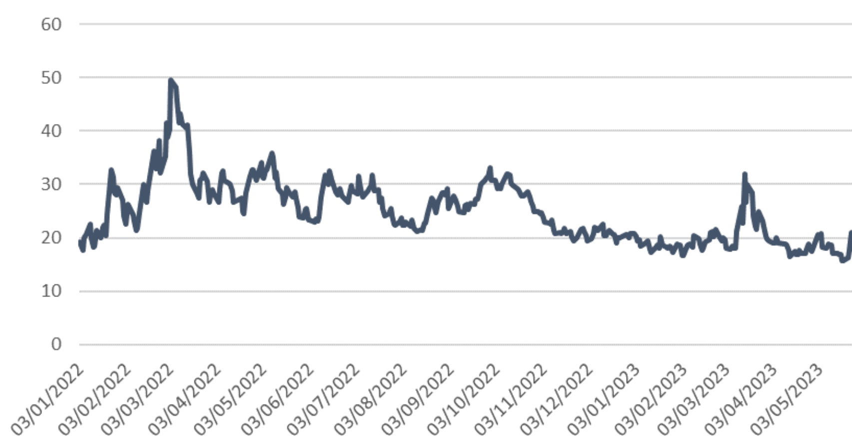


Source: IHS Markit

The strong fundamentals of banks as a whole, such as sound capital positions, strong liquidity positions, low non-performing loan ratios and improved average profitability, have additionally supported the generally positive sentiment on bank funding markets. Sound fundamentals also contributed to quickly recovering primary funding markets after the banking market turmoil in March 2023. Moreover, the end of additional medium- and long-term bank funding programmes that the ECB and other central banks had in place until 2021 is an important driver of increased issuance volumes since 2022.

Periods of uncertainty about more volatile liquidity and funding conditions in 2022 and 2023 are reflected in the volatility index. This indicator is used by analysts and investors to measure market risk or the risk of a sudden repricing before they take investment or financing decisions. Figure 3 shows that volatility has slightly decreased since the start of the Russian aggression, with frequently recurring bouts of elevated volatility as during the banking sector turmoil in March.

Figure 3: Implied volatility (VSTOXX), January 2022 to May 2023



Source: Bloomberg

High instruments issuance volumes and a further growing deposit base in 2022 allowed banks to maintain comfortable liquidity positions. Yet after a long time of increasing liquidity positions, the LCR decreased from a high of 174.7% at end 2021 to 163.7% in Q1 2023. Repayments of extraordinary central bank funding contributed to a decreasing LCR. Deposits were largely stable during the banking market turmoil in March 2023. After years of growing total deposit volume, deposit growth was levelling in Q1 2023, and deposit volumes of non-term deposits and deposits from non-financial corporates have decreased slightly.

Asset trends

Changes in banks' asset composition

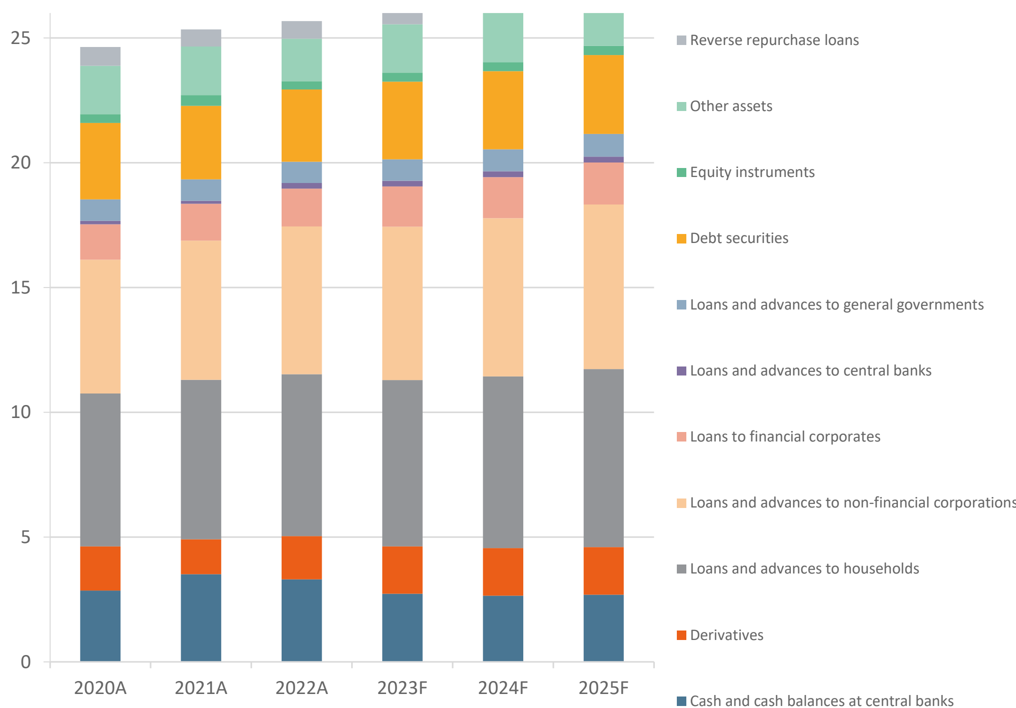
European banks' total assets increased by 1.3% in 2022, at a slower pace compared to previous years (3% in 2021). Driven by repayments of TLTRO funds, cash balances at central banks decreased by -6% in 2022 but still represented 13% of total assets as of December 2022 (14% in 2021). Derivatives increased by more than 20%, bringing the share of derivatives over total assets back to the long-term average of around 7%. The two biggest asset segments, loans to households and loans to NFCs, increased by 1.5% and 6.1% respectively in the last year.

For the year 2023, banks expect their total assets to grow by 2.4%. Debt securities are predicted to rise by almost 8% and derivatives by nearly 10%. Banks predict loans to households to grow by 2.7% and loans to NFCs by 3.7%. The growth in loans and other assets is compensated by a decline in cash balances at central banks, which are expected to decrease by almost -20% in 2023 to represent 10.4% of total assets by the end of the year.

In 2024, total assets are expected to grow by 1.8%. Banks predict loans to households to grow at 3.4% and loans to NFCs at 3.2%. The reduction of cash balances at central banks is set to be less severe at -2.9%. At the end of the forecast period (December 2025), cash balances are expected to represent 9.8% of banks' total assets, still somewhat elevated compared to pre-pandemic levels (7.6% in 2019).

Figure 4 shows the actual asset composition for the years 2020 to 2022 and the planned asset composition for the years 2023-2025.

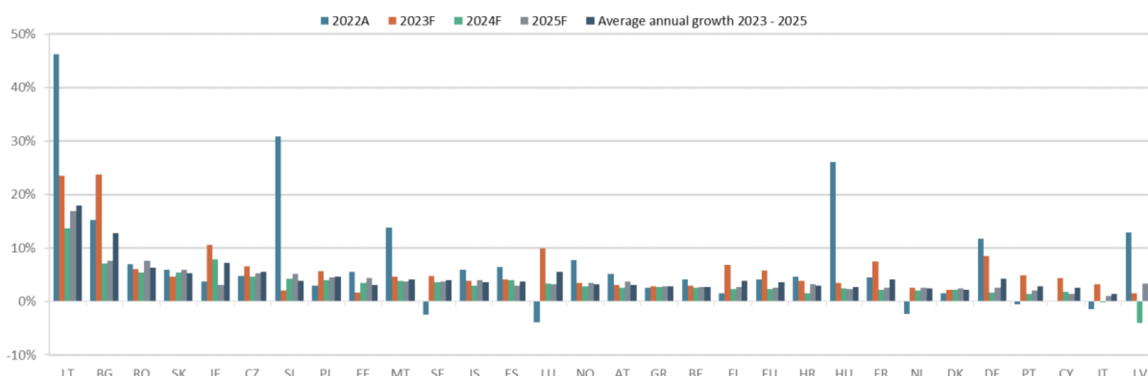
Figure 4: Actual and planned asset composition



Source: EBA

To get a better sense of real economic developments behind banks' balance sheets, Figure 5 shows the growth rate of assets excluding cash balances at central banks. On average, banks reported a growth rate of 4% for 2022. The actual asset growth in 2022 was quite diverse across banks and countries, with growth rates ranging from above 40% for banks in Lithuania to -4% for banks in Luxembourg. Banks in all countries expect assets to grow over the three-year forecast period (2023 - 2025) with an average annual growth rate expected at 4%. While some dispersion across countries persists, it is not as wide as for actual growth rates observed in 2022. Banks in Lithuania and Bulgaria expect their assets to grow by more than 10% per annum in the next three years, while banks in other European countries report much smaller growth rates.

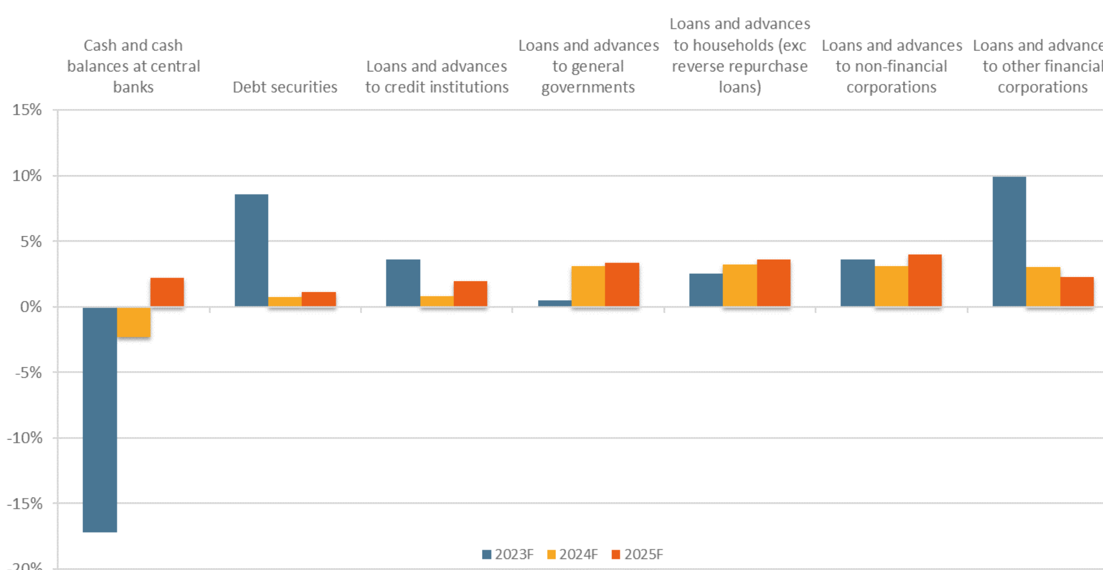
Figure 5: Actual and planned asset growth by country (total assets excluding cash and cash balances at central banks)



Source: EBA

Loans to NFCs and households, which represent the largest asset classes and combined account for almost half of total assets, are expected to increase by 10.7% (NFC) and 9.5% (households) over the forecast period (Figure 6). Loans to financial corporates are expected to increase at a rate of 15.2% over the same period. The trend of growing client business can be identified at an aggregated EU level and across countries. Both loans to households and to NFCs are projected to grow in nearly all countries and across the three-year projection period (see Annex 1 for more details on country-specific figures).

Figure 6: Growth expectations for selected asset classes



Source: EBA

Assessment of planned asset growth

To gauge the reliability of banks' asset growth forecasts, two approaches are applied: back-testing based on data reported by participating banks, and a comparison with market analysts' expectations. In the first approach, banks' estimates for 2022, as reported in December 2021 and 2020, were compared with the actual figures for 2022[7]. In the second approach, banks' planned asset growth figures for 2023 were compared with the expectations expressed by banks in their responses to the EBA spring 2023 risk assessment questionnaire (RAQ) and with loan growth trends observed in Q1 2023.

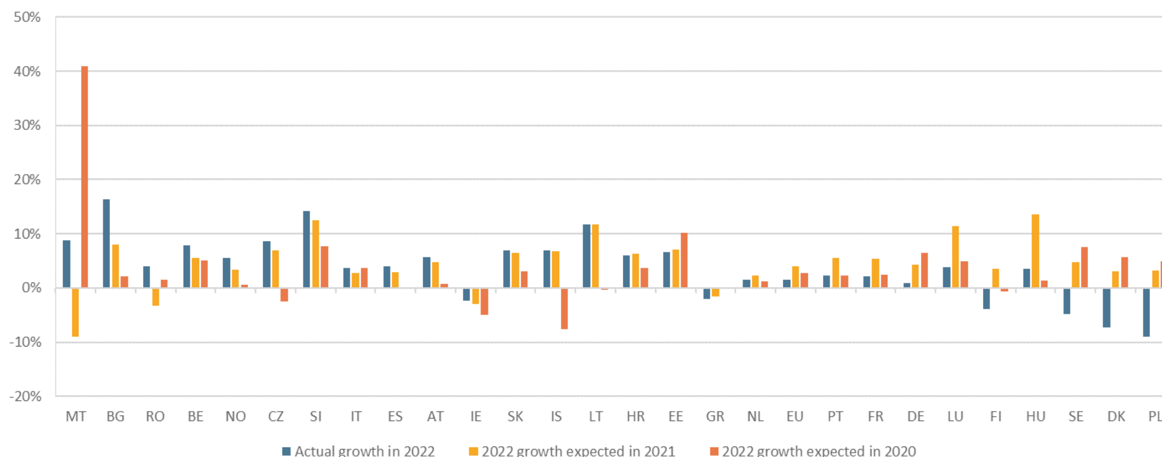
Back-testing asset growth estimations

Loan growth in the household sector turned out to be lower in 2022 than estimated in the two previous years (Figure 7). At the European level, loans to households grew by 1.5% in 2022, significantly less than expected one year earlier (3.9%). The average gap between planned and real loan growth rates

[7] The sample for the back-testing analysis includes only those banks that provided data for all reference dates.

(the 'forecasting error') varied significantly across banks and countries, with banks in Malta exceeding their 2022 target set in 2021 by more than 16 percentage points and banks in Poland missing their target by more than 13 percentage points. In 2020, banks' forecasts for 2022 were closer to the actual grow rate with an expected loan growth of 2.7%.

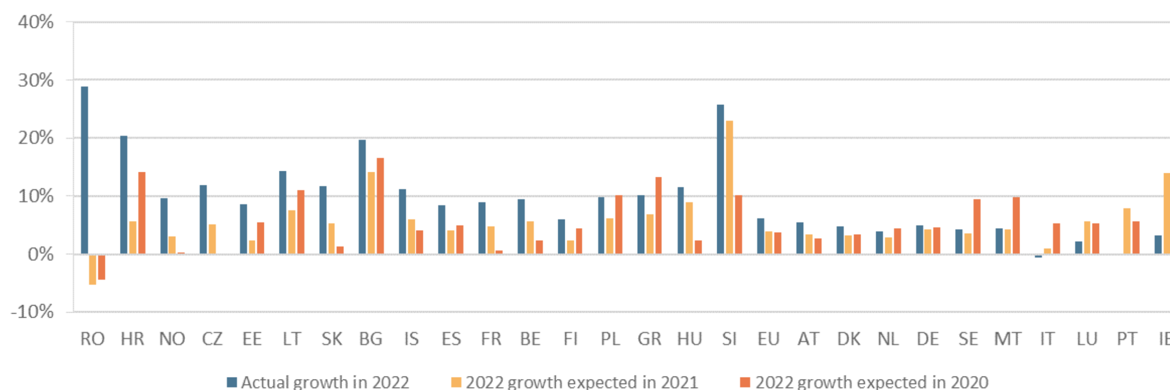
Figure 7: Back-testing loan growth to households by country



Source: EBA

In the NFC sector, loan growth turned out to be higher than expected in the two previous years (Figure 8). The actual NFC loan growth of 6.1% (EU average) in 2022 compares to 3.9% expected as of year-end 2021 and to 3.7% expected as of year-end 2020. The forecasting error for plans made in 2021 and dispersion across banks and countries were somewhat smaller than for household loans with banks in Romania exceeding their 2022 target by 26 percentage points and banks in Ireland missing their target by more than 10 percentage points.

Figure 8: Back-testing loan growth to NFC by country

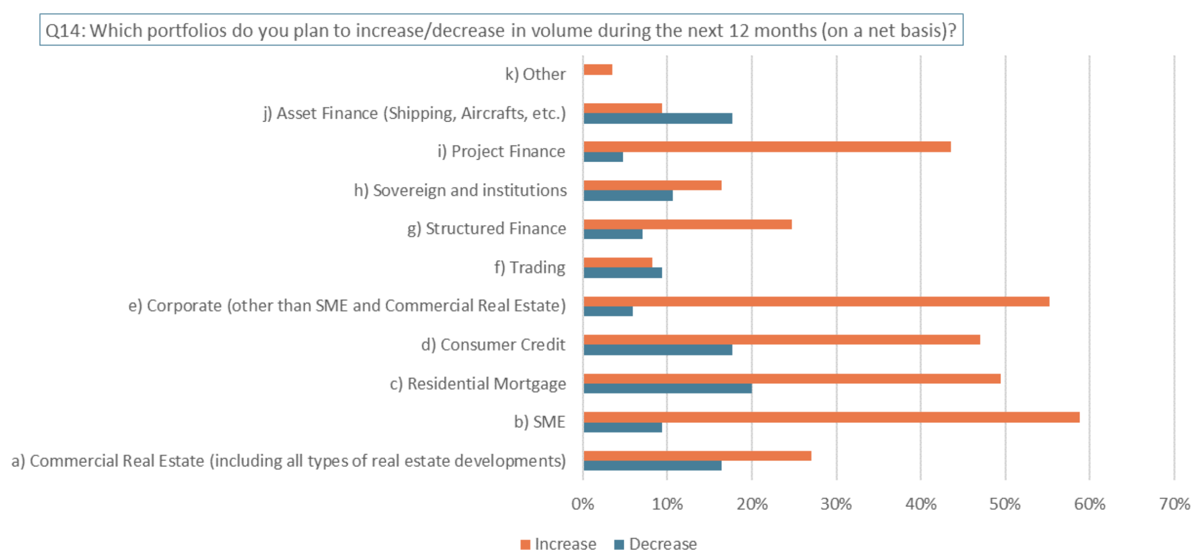


Source: EBA

Comparison with RAQ results

As part of the EBA's RAQ, participating banks identified which portfolios they expect banks to increase or decrease in the next 12 months. Figure 9 provides a summary of the views banks expressed in their responses to the RAQ in spring 2023. Most banks plan to increase lending volumes in SME (59%) and corporate (55%) portfolios. Slightly less than 50% of banks expect the residential mortgage and consumer credit loan segments to increase. The share of banks expecting these portfolios to decrease is ranging from 6% (corporate) to 20% (residential mortgage), far below the share of banks that plan for increases. Hence, banks' expectations for volume increases as put forward via the RAQ are broadly in line with data on banks' funding plans, both of which point to growing lending to households and NFCs. RAQ responses submitted in spring 2023 point towards reduced expectations for portfolio increases, when compared with responses in 2022. This might reflect the changed macroeconomic conditions and outlook for 2023, as described in section 1. Driven by higher-than-expected inflation, central banks around the world have raised interest rates and are unwinding asset purchase programmes. While banks are generally benefiting from higher rates to increase net interest margins, rate hikes might also impact the demand for loans.

Figure 9: Banks' expectations for portfolio changes in 2023



Source: EBA RAQ

Comparison with banks' Q1 results

The impact of reduced loan demand can be observed in banks' Q1 2023 results. Macroeconomic uncertainty caused by subdued economic growth, sticky inflation and increasing interest rates have impaired consumer and business confidence while at the same time pushing banks' risk appetite lower and credit standards tighter[8]. In the Q1 2023 results, banks reported outstanding loans towards

[8] ECB bank lending survey (https://www.ecb.europa.eu/stats/ecb_surveys/bank_lending_survey/html/index.en.html)

households growing at a reduced rate of 0.7% in the first quarter of 2023. For NFCs, banks reported a net reduction of 0.1% in outstanding loans compared to December 2022 volumes[9].

Interest earning assets and core funding sources

Zooming in on banks' main interest-earning assets (private loans and debt securities) and comparing those with developments in client deposits and debt securities issued, highlights the real economy developments driving the banks' balance sheets composition. In 2022, private loans (to households and companies) and investments in debt securities grew by 2.6%. During the same period, private deposits and debt securities issued increased by 3.2%, mostly driven by an increase of 6.4% in debt securities issued. In 2023, banks expect the growth in loans and debt securities (4.3%) to outpace the growth in deposits and debt securities issued (3.5%).

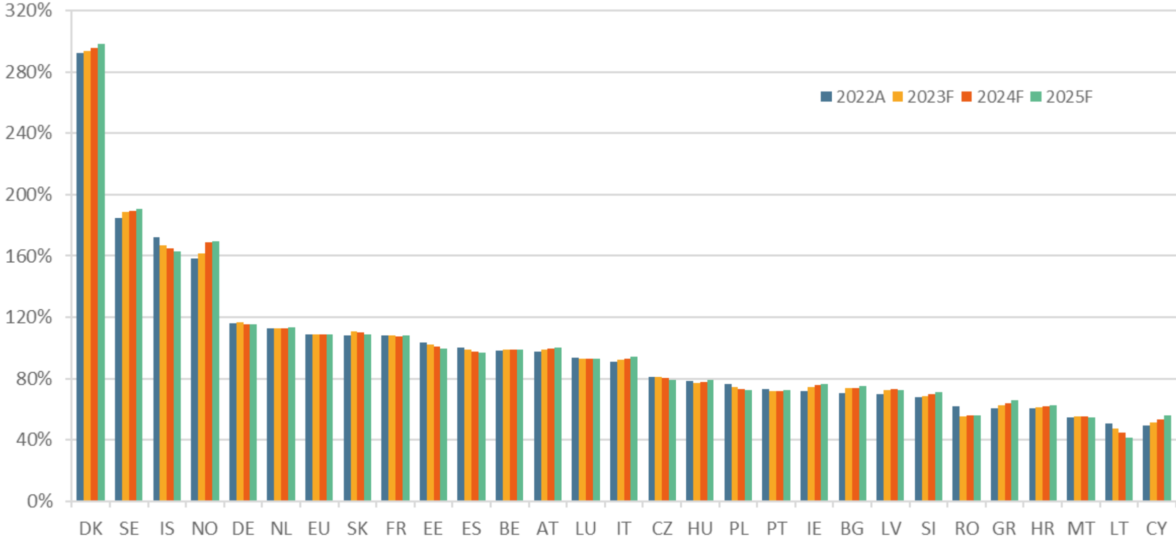
Figure 10: Private sector loans and debt securities versus private sector deposits and debt securities issued

Source: EBA

The rise in private deposits also drove the decline in the loan-to-deposit ratio in 2022. As of December 2022, the EU aggregate ratio stood at 108%, down from 111% one year earlier (see Figure 11). Over the next three years, the average ratio is expected to stay at this level. In some countries, however, the ratio is expected to increase, with more pronounced increases planned by banks in Norway, Cyprus, Sweden, Denmark and Greece. On the other side, banks in Lithuania, Iceland and Romania are expecting a further drop in their loan-to-deposit ratios.

[9] EBA risk dashboard (https://www.eba.europa.eu/risk-analysis-and-data/risk-dashboard)

Figure 11: Loan-to-deposit ratio by country and for the EU



Source: EBA

Liability trends

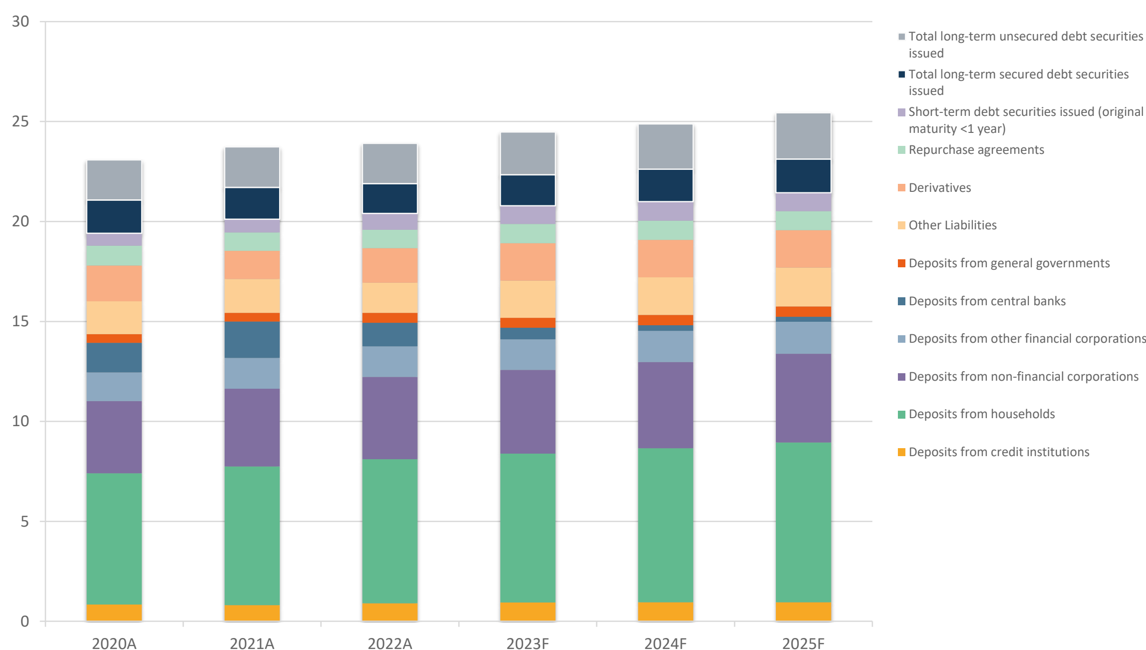
Changes in banks' funding composition

Total liabilities of the EU banking sector further increased in 2022, after a strong increase in 2021. In 2022, banks reported a further increase in client deposits and in deposits from financial institutions. Both deposits from households and non-financial corporates as well as deposits from financial institutions each increased by 4.4% in banks' funding composition, respectively. Total debt securities issued also increased, mainly driven by strongly increased volume of short-term debt securities. Short-term debt securities increased strongly by 24% and recorded the strongest increase in absolute volume of any liability class in 2022, while long-term debt securities issued decreased by 3%.

The expiry of extraordinary central bank support measures and repayments of long-term central bank funding led to a strong contraction by 35% of central banks deposits in 2022. In the previous year, central bank deposits increased, before extraordinary central bank support expired at year-end. Tightening monetary policy with more expensive central bank funding and the expiry of extraordinary central bank support measures contributed to a substitution of central bank funding by market-based funding with debt securities. The environment of rising interest rates in 2022 and uncertainly about the future path of monetary policy at that time coupled with interest rate volatility may explain a preference for short-term rather than long-term debt securities.

Holdings of derivatives strongly increased by 22% in 2022, reversing a decrease in 2021, whereas repurchase agreements broadly remained at the same level in 2022. Increased derivatives holdings may point to banks' hedging strategies in a volatile market and interest rate environment in 2022.

Figure 12: Actual and planned liabilities composition



Source: EBA

As regards banks' plans for 2023 to 2025, the trend observed in previous years is set to continue with debt securities being targeted as key sources of funding. Banks are expected to increase long-term debt securities by 14.2% over the forecast period, whereas short-term debt securities are expected to increase by 12.6% over the forecast period.

Banks are expected to increase their overall deposits by 2.1% over three years. This increase is driven by further increasing deposits from households and non-financial corporates, which are partly offset by decreasing deposits from central banks. Deposits from households, the largest type of deposits, increased by 3.7% in 2022. Growth of household deposits slowed down compared to strong 6% growth in 2021. Household deposit growth is expected to continue in the next three years, with an expected 3.5% growth in 2023, followed by 3.6% in 2024 and 3.8% in 2025.

The trend in client deposits contrasts with strongly decreasing deposits from central banks, reflecting the phasing-out of extraordinary central bank support measures. Deposits from central banks are forecast to decrease by 51% in 2023, by 52% in 2024, and by 10.7% in 2025, reflecting repayments of large amounts of long-term central bank funding. Strongly declining central bank deposit moderate total deposit growth.

Market-based funding is forecasted to grow strongly over the next three years (see Figure 13). In particular, the volume of long-term unsecured debt securities issued as biggest source of market-based funding in the past years is expected to grow by 15.4% over the forecast period, with the strong growth expected in both 2023 and 2024. The volume of short-term debt securities is expected to grow as well, with an expected growth of over 12.6% over the forecast period.

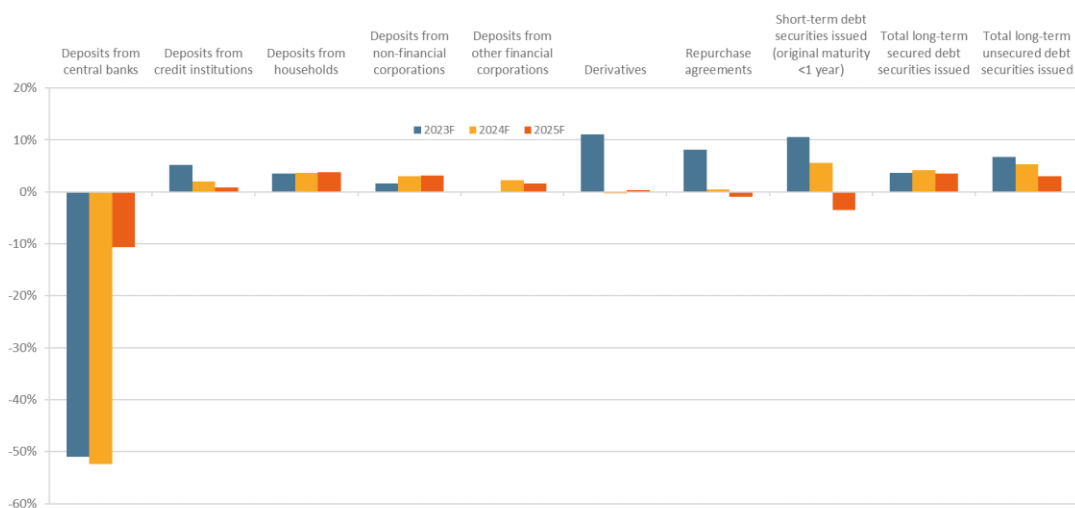
The volume of secured funding is expected to grow again in 2023 and the following years, after secured funding declined from 2020 – 2022. In the first forecast year 2023, long-term secured funding is forecast to increase by 3.6%, followed by 4.2% and 3.5% in the following two years. The planned growth of secured funding may partly be driven by strategies to replace maturing extraordinary long-term central bank funding with secured funding.

With the reduction of central bank funding as extraordinary long-term central bank funding matures, it is assumed that banks will mainly rely on short-term and long-term debt securities instead. This may particularly be the case in 2023 when high amounts of central bank funding will mature, and when short-term debt securities are expected to grow strongly by 10.5%, while long-term debt securities are forecast to grow by 5.5%. Funding by repurchase agreements banks enter into may also be of relevance in banks' strategies in 2023 to substitute extraordinary central bank funding, and they are expected to grow by 8.1% in 2023. The growth of repurchase agreements is expected to slow down in the two years thereafter.

Looking into 2024 and 2025, deposits from households and from non-financial corporates, next to short-term and long-term debt securities, appear to gain relevance in banks' funding strategies and in plans to replace central bank funding. After extraordinary long-term central bank funding will have matured by 2024, deposits from central banks are forecast to remain substantially higher than during the pandemic in 2020. This may indicate plans to make use of regular central bank facilities (e.g. MRO and LTRO) at higher levels than in past years before and during the pandemic.

After a planned strong increase in the preceding two years, short-term debt securities are expected to decrease by 3.5% in 2025. In contrast, long-term secured and unsecured debt securities are expected to increase that year. This may point to intentions to extend maturity profiles of market-based funding in the longer term. Holdings of derivatives are expected to increase further by 11% in 2023, after their strong increase in 2022, but are expected to remain broadly unchanged in the following two years.

Figure 13: Growth expectations for selected liability classes



Source: EBA

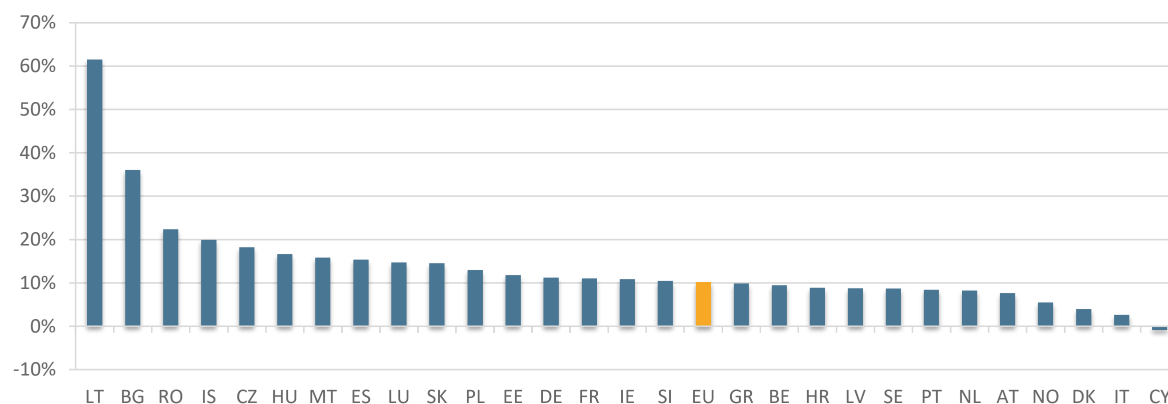
Trends in client deposits

Client deposits are expected to increase throughout the forecast period, driven by further increasing deposits from households and non-financial corporates, and following a 4.4% growth registered in 2022. Driven by strongly declining deposits from central banks, the share of deposits in total funding nevertheless declined to 74.6% in 2022, after a strong increase from 68.4% in 2019 to 74.8% in 2021. It is expected to gradually decrease to 72.8% until 2025, but to stay above pre-pandemic levels in the next three years.

A breakdown of total deposits into segments shows that all types of deposits other than from central banks are expected to increase in the forecast period. Deposits from central governments are expected to increase by 4.8%, whereas deposit from financial institutions are expected to increase by 1.9%. Deposits from households and NFCs are forecast to grow substantially, with an expected growth of 9.9% over the three-year forecast until 2025. At 10.9%, household deposits are expected to grow at a faster rate over the forecast period than NFC deposits (8%). Strongest growth for both segments expected in 2025. This increase would bring the share of household and NFC deposits in total funding to 57.5% by 2025, substantially higher than in 2022 (54.7%), and above levels in the pandemic (51.8% in 2020).

An analysis by country of incorporation of the bank reveals that most banks are planning for an increase in deposits from households and from NFCs (see Figure 14). Strong deposit growth of above 10% in the forecast period is planned in 16 countries. Significant deviations at county level can be observed, with a negative growth rate in Cyprus, and a growth rate above 20% in Bulgaria, Lithuania and Romania.

Figure 14: Growth expectations for deposits from households and NFCs by country and for the EU (2023-2025)



Source: EBA

Trends in market-based funding

EU banks plan to rely more on long-term market-based funding, and to steadily increase both secured and unsecured in the coming years, as they expand their balance sheets and decrease the share of deposits from central banks in their funding mixes.

Over the three-year forecast period, they plan to increase their total long-term funding by 14%, reaching over EUR 4 trillion in 2025. The total volume of long-term unsecured debt securities issued is expected to increase strongly by 15.7%, while the total volume of long term secured funding is forecast to grow by 11.8%% by 2025. Unsecured debt issuance is expected to continue on an increasing trend, as already observed between 2020 and 2022, whereas plans indicate that a trend of decreasing secured funding as observed between 2020 and 2022 will reverse.

Within secured funding, covered bonds remains most important instrument, with the share of secured funding forecast to increase to 89% by 2025 (88% in 2022). The share of ABS is also forecast to increase from 6.8% in 2022 to 8.1% in 2025.

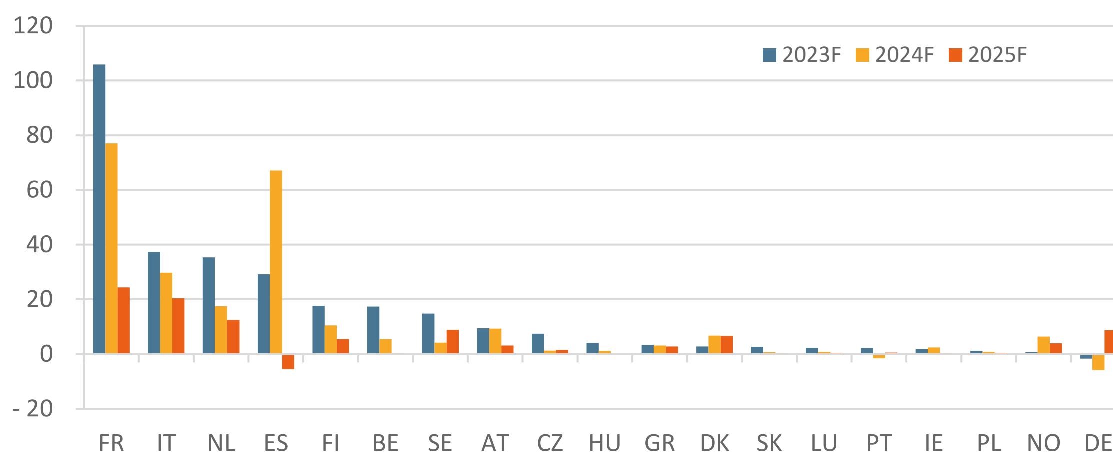
Figure 15: Long-term secured and unsecured funding (EUR billion, left axis) and mix of secured funding (%, right axis)

Source: EBA

Analysing the annual forecasts of the volumes of debt securities highlights the extent to which market-based funding is expected to grow on a net basis. Figure 16 shows the difference between the outstanding volume of short- and long-term debt securities at the beginning and the end of each forecast year, the net issuance volume, by country. A positive difference means that gross issuances are larger than redemptions for that year. Where the volume of debt securities issued exceeds rollovers, banks have to find investors additional to those that might replace their current maturing investment positions, or new investors to those that might not replace their current maturing position. If the gross issuance volume is smaller than redemptions, the assumed net issuance volume is negative and the outstanding volume decreases during the year.

Forecast data indicate significant planned growth in net short- and long-term debt securities issuance volume in several countries, with banks in France, Italy and Spain reporting the highest planned net issuance volume over the three-year forecast period. For most countries, 2023 is the standout year with particularly high planned net issuance volumes, a year in which large amounts of TLTRO 3 funding, and larger amounts than in 2024, are maturing. In only a few countries banks plan net negative issuance volumes over the forecast period, such as banks in Germany in 2023, in Portugal in 2024, and in Spain in 2025.

Figure 16: Net issuance volume by country and year (short- and long-term debt securities, EUR billion)



Source: EBA

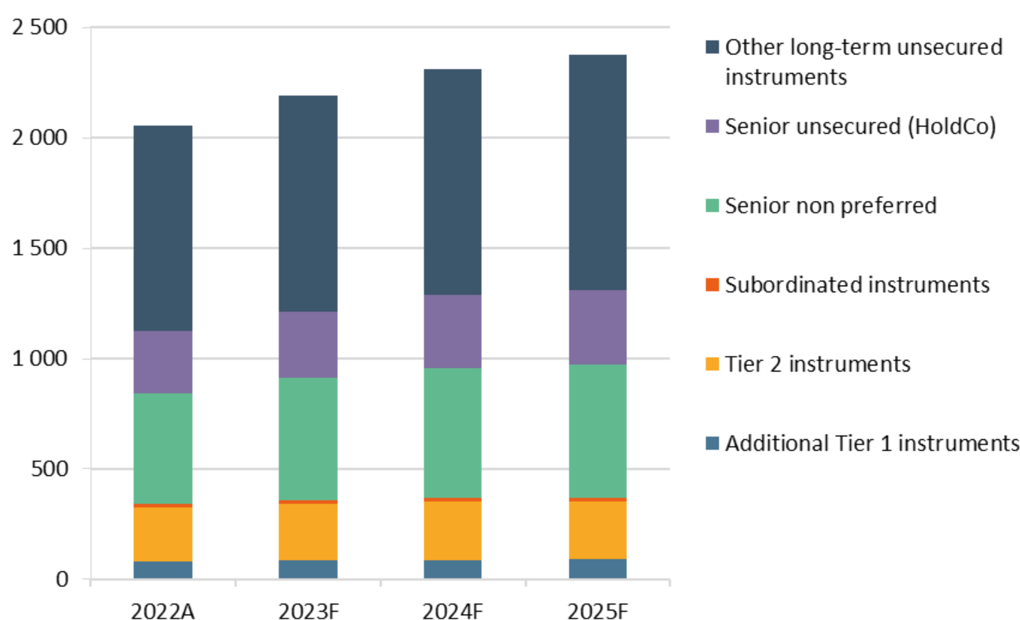
Banks plan substantially higher issuance volumes of unsecured instrument and capital instruments over the forecast period compared to 2022. The stock of unsecured debt instruments volumes is expected to increase by 15.7% over the forecast period. (Figure 17), to ca. EUR 2.38 trillion in 2025 compared to EUR 2.05 trillion in 2022. In 2022, overall gross issuance volume was EUR 312 billion, which compared to EUR 251 billion maturing, resulting a substantial positive net issuance volume for the year. For each year of the forecast period, banks plan to issue more unsecured debt than will mature.

An analysis of issuance volume by type of unsecured debt instruments and capital instruments shows a continued focus of banks to increase volumes of MREL-eligible instruments over the three-year forecast period (see Figure 18). A focus on MREL-eligible instruments is not least driven by the target date of 1 January 2024 by which MREL target and subordination requirements have to be met (transition periods can impact the final date). By 2025, net issuances are expected to increase by 21% for senior non-preferred instruments compared to 2022 issuance volumes, by 18% for senior unsecured issued from banks' holding companies, by 16% for Additional Tier 1 (AT1) instruments, by 15% for other long-term unsecured instruments, and by 6% for Tier 2 instruments. Net issuance volumes of subordinated debt are expected to contract by 25% by 2025 compared to 2022 issuance volumes.

The strongest increase in expected gross issuance volume can be seen in senior non-preferred (SNP) instruments, which are expected to increase to EUR 114 billion in 2023 (EUR 68 billion in 2022), with another EUR 103 billion planned to issue in 2024. Their eligibility for MREL, while offering price advantages for issuing banks compared to some other MREL eligible instruments, could explain the strong planned volume growth of SNP instruments. Eligibility for MREL while offering price advantages might also explain expected high issuance volumes unsecured instruments issued from banks' holding companies with EUR 76 billion in 2022, EUR 64 billion in 2023 and EUR 66 billion in 2024. As regards

subordinated debt[10] other than instrument types above, banks have issued EUR 17 billion in 2022, substantially less than the EUR 52 billion of maturing debt. The trend is expected to continue in 2023, with EUR 21 billion planned issuance compared to EUR 46 billion maturing subordinated debt. Opportunities to issue debt instruments eligible for MREL at lower costs than subordinated debt, in particular senior non-preferred instruments and senior unsecured issued from banks' holding companies, might explain plans of decreasing subordinated instruments' issuance volumes.

Figure 17: Stock volume of unsecured debt instruments (EUR billion)



Source: EBA

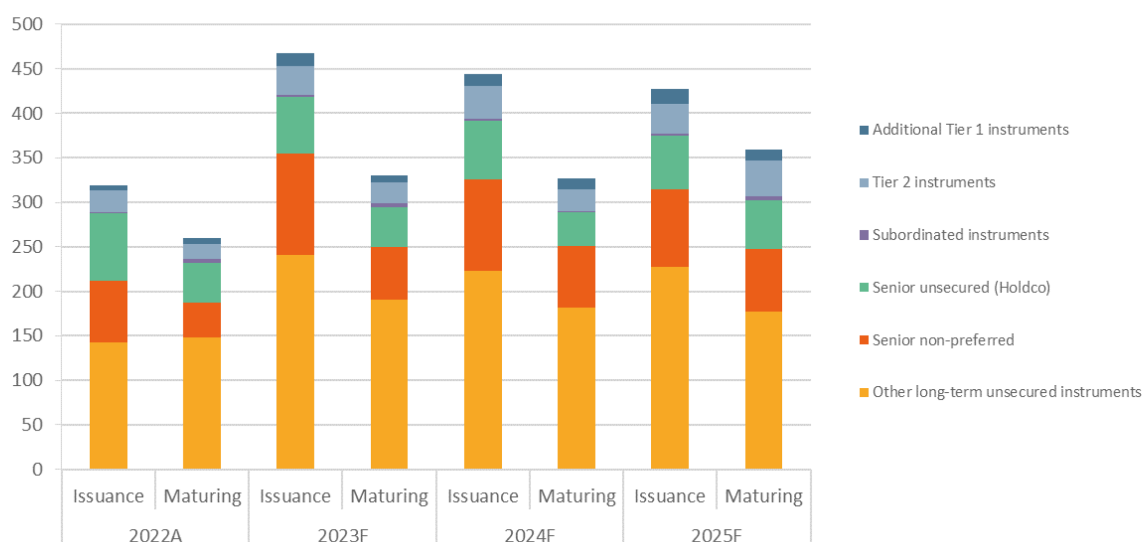
Banks also plan to increase gross issuance volumes of capital instruments. In 2022, banks issued EUR 6 billion of AT1 and EUR 24 billion of Tier 2 instruments. In 2023, banks plan to issue EUR 14 billion of AT1 and EUR 32 billion of Tier 2 instruments, with another EUR 13 billion of AT1 and EUR 38 billion of Tier 2 instruments planned for 2024. The planned growth volume of AT1 and Tier 2 instruments, might be explained by rather low issuance volumes in 2022 and before. Plans to optimise the capital structure of those banks that have not yet attained their required minimum amounts of AT1 capital and Tier 2 capital could drive the increase in issuance volume in the forecast period. As overall yields and pricing for these instruments have increased strongly since Q1 2023, the planned volume growth of these instruments might be challenging to attain at adequate pricing.

As regards senior preferred debt, banks have issued EUR 143 billion in 2022, slightly less than the EUR 148 billion of maturing debt. In 2023, the expected issuance volume of EUR 241 billion is significantly higher than in 2022 and exceed the EUR 190 billion of maturing senior unsecured debt in this year.

[10] Liabilities that qualify in principle as own funds, but are not included in own funds due to phase-out provisions such as Article 64 of Regulation (EU) No 575/2013 (remaining maturity) or Part 10 of Regulation (EU) No 575/2013 (grandfathering impact).

Increasing and net positive unsecured issuance volumes might be explained by plans to partly replace high amounts of maturing central bank funding. For the years 2024 and 2025, banks' planned issuance volumes of EUR 223 billion and EUR 227 billion exceed the respective maturing volumes. Increased issuance volumes are driven by large volumes of senior debt reaching maturity.

Figure 18: Unsecured debt instruments - issuance volume and maturing volume by instrument type and year (EUR billion)



Source: EBA

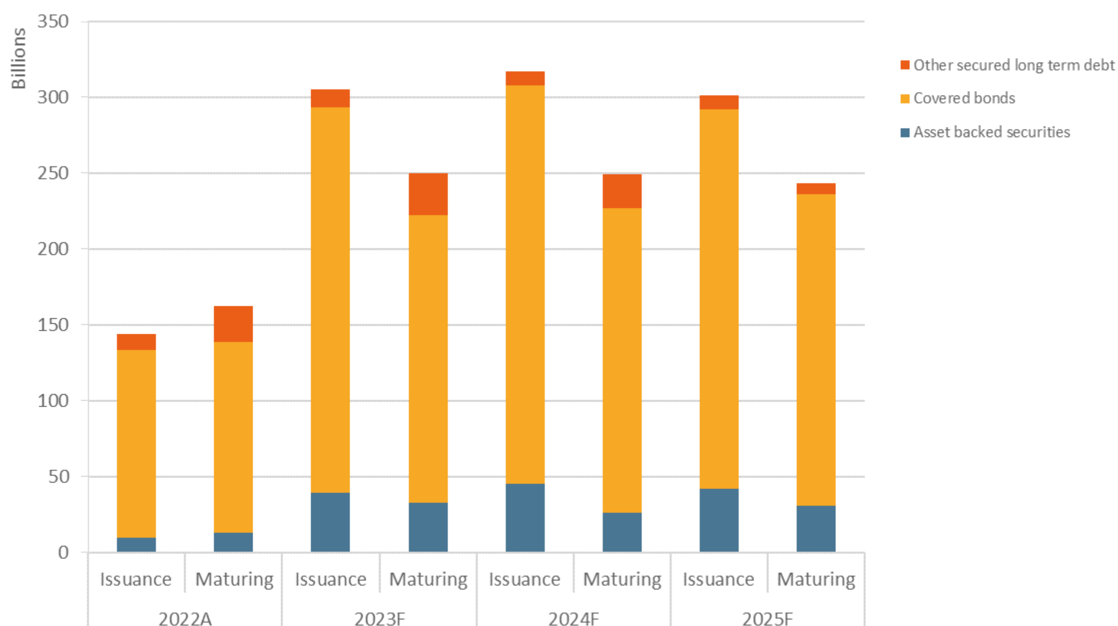
After a low and net negative issuance volume of secured funding in 2021, banks plan to strongly increase secured funding issuances in 2023 and keep them at a high level in 2024 and 2025. Compared to 2022, the total issuance volume of long-term secured debt is expected to more than double to about EUR 302 billion in 2023. Total issuance volume is expected to stay at about EUR 300 billion in the following two years.

The issuance volume of covered bonds of about EUR 123 billion in 2022 increased compared to an issuance volume of about EUR 98 billion in 2021. It is expected to reach EUR 254 billion in 2023 and EUR 263 billion in 2024, followed by EUR 250 billion in the year thereafter. The strong increase in covered bond issuance in the forecast period will partly be driven by a high volume of maturing covered bonds in this period, and substantially higher than the volume of maturing covered bonds in 2023. Yet the issuance volume of covered bonds is forecast to substantially exceed the volume of maturing covered bonds in each year of the forecast period, representing a total net issuance volume of EUR 171 billion from 2023 to 2025. This may indicate plans of banks to replace high volumes of maturing central bank funding in the forecast period with covered bonds, and to issue covered bonds as a substitute to no longer available TLTRO funding. Such plans would also reflect observations that covered bonds issuance can offer a cheaper source of funding than unsecured funding.

Banks also expect a very strong increase in issuances of ABS, to EUR 39.5 billion in 2023 and EUR 45.3 billion in 2024, from about EUR 10 billion in 2022. The growing importance of securitisations meeting

ESG criteria and regulatory- and policy initiatives to facilitate and promote securitisations could contribute to plans for strongly increased ABS issuance. Issuance volumes of other secured long-term debt is also expected to increase to EUR 11.9 billion in 2023, compared to EUR 10.6 billion in 2022, from about 14 billion in 2023, but is forecast to contract to less than EUR 9 billion in both 2024 and 2025.

Figure 19: Secured debt issuance volume and maturing volume by instrument type and year



Source: EBA

Banks made progress in reducing MREL shortfalls.

In the EU, based on MREL decisions reported to EBA as of 1 May 2023, there are 292 banks with a resolution strategy other than liquidation representing about 80% of total bank sector assets. A resolution strategy entails an MREL above minimum capital requirements and may result in potential funding needs. Requirements to build loss absorbing capacity can be a driver for increased issuance volumes of unsecured debt instruments and of capital instruments reported in funding plan data.

As of end December 2022, banks have continued to make good progress in closing their shortfalls. GSIIs are already complying with their MREL and CBR, while most OSIIs are meeting their MREL requirement. Yet, data suggest that 60 resolution groups out of a sample of 229 reported an external MREL shortfall of EUR 29.1bn billion (or 0.4% of RWAs) against their end-state MREL targets. The shortfall represents a significant improvement made in the last quarter of 2022 (As of end September 2022, the shortfall was EUR 41.6bn). Overall, the shortfall is marginal but remains

significant in certain Member States. Resolution authorities are carefully monitoring the situation, making use of their powers under BRRD, including granting longer transition periods.

The shortfall is driven by top tier banks and banks other than GSIIs and OSIIs with assets below 100bn. Shortfalls for top tier banks are essentially driven by subordination needs.

The EBA and EU Resolution authorities are closely monitoring the situation of individual banks in the run-up to their deadline for meeting MREL. Among the banks in shortfall, 24 have been granted a transition period beyond 1 January 2024.

To increase transparency, the EBA publishes a quarterly MREL dashboard with detailed information about MREL levels and shortfalls[11].

Trends in public sector sources of funding

Public sector sources of funding include repo funding programmes, credit guarantee programmes and credit supply incentive schemes. Public sector funding programmes apply in all cases to many institutions, i.e. programmes that individually support one bank or a restricted number of banks are excluded. Neither direct funding from public sources, such as deposits from state sovereign entities, nor emergency liquidity assistance measures provided by central banks are part of these programmes.

- Repo funding programmes: programmes that capture wholesale term-secured funding via repo transactions, such as the ECB's MRO, LTRO and TLTRO programmes.

- Credit guarantee funding programmes: programmes that capture wholesale unsecured term debt issuance support through backstop guarantees from a national and/or supra-national authority in the event of a bank's failure on its obligations.

- Credit supply incentive scheme to the real economy: programmes that capture funding support to banks via pricing or quantum incentives from a national and/or supra-national authority.

As of December 2022, total public sector funding in the EU amounted to EUR 1.2 trillion representing 5.7% of banks' total funding, down from 1.7 trillion or 9% of total funding in December 2021. Among the different types of programmes, repo funding programmes (which include the ECB's TLTRO programme) represented the biggest share with about 68% of the total public sector funding.

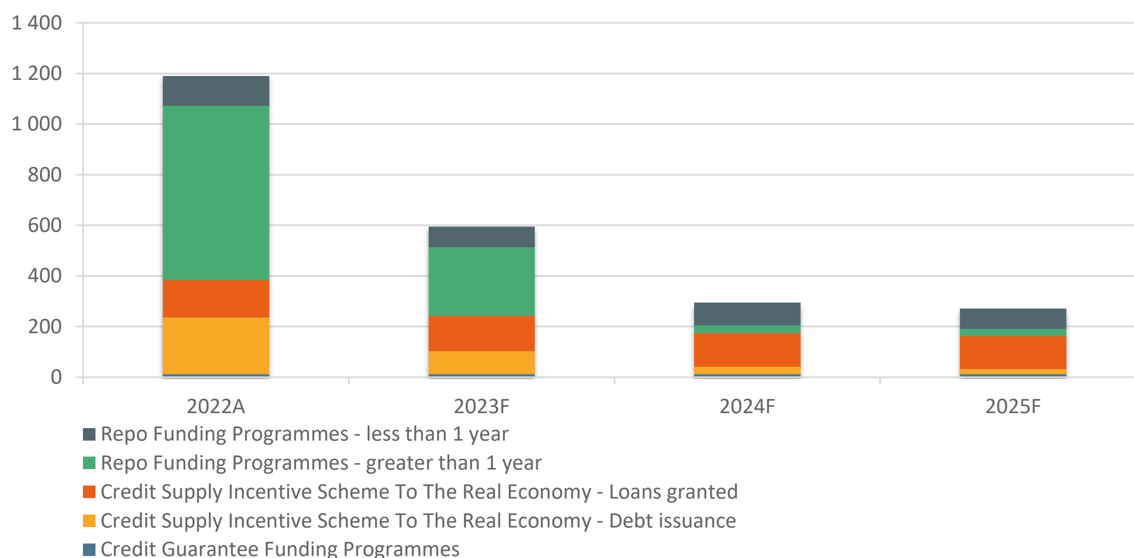
According to banks' plans, both the volume and composition of public sector funding are going to change substantially over the next three years. In 2023 alone, repos of more than one year and funding associated with credit supply incentive schemes through debt issuance are expected to decrease significantly, by 61% and 59% respectively. Repos of less than one year and other sources of public funding are set to decline, albeit at a slower pace. Overall, this would imply a 50% decrease in public

[11] Risk dashboards are published on https://www.eba.europa.eu/risk-analysis-and-data/risk-dashboard

sector funding in 2023. In 2024, public sector funding is expected to decrease by another 50% with almost all categories expected to register a fall, most notable the repos of more than one year. The only source of public sector funding that is expected to increase in 2024 are repos of less than one year, which cover central bank funding instruments like LTRO and MRO.

By the end of the forecast period in 2025, public sector funding volume is expected to decline to EUR 272 billion or 1.3% of banks' total funding. Credit supply incentive schemes would amount to almost half of all public sector funding and repos of less than one year are expected to represent 30%.

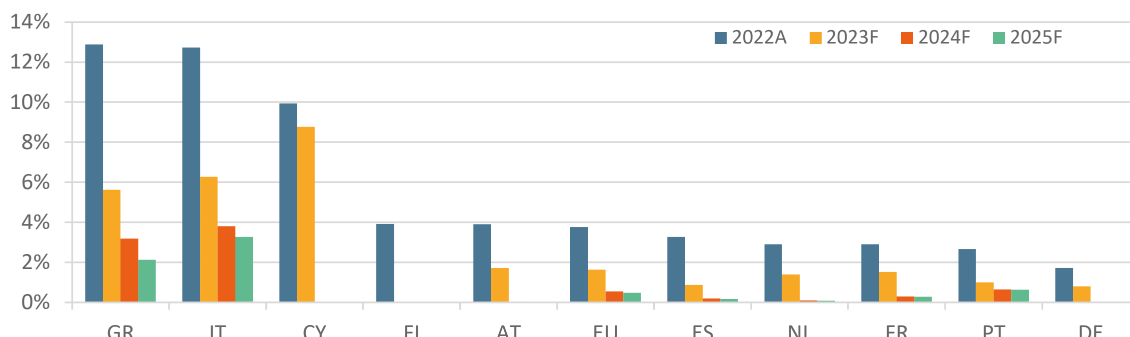
Figure 20: Public sector sources of funding (outstanding volume, EUR billion)



Source: EBA

As regards repo-based funding, all banks expect this type of funding to decrease significantly by 2023. While repo-based funding represented 3.9% of total funding in December 2022, banks expect this share to drop to 1.7% in 2023. Greek and Italian banks have reported the largest share as a proportion of total funding and are most affected by the changes to public sector funding programmes over the forecast period. As of December 2022, Greek and Italian banks covered 13% of their total funding needs with repo-based public funding. For the next two years, this share is expected to drop by about 50%. Some banks plan to replace public funding with covered bonds and other sources of funding (more details in the box on the impact of maturing TLTRO), which are expected to increase significantly in 2023 and 2024 (covered in section "Trends in market-based funding").

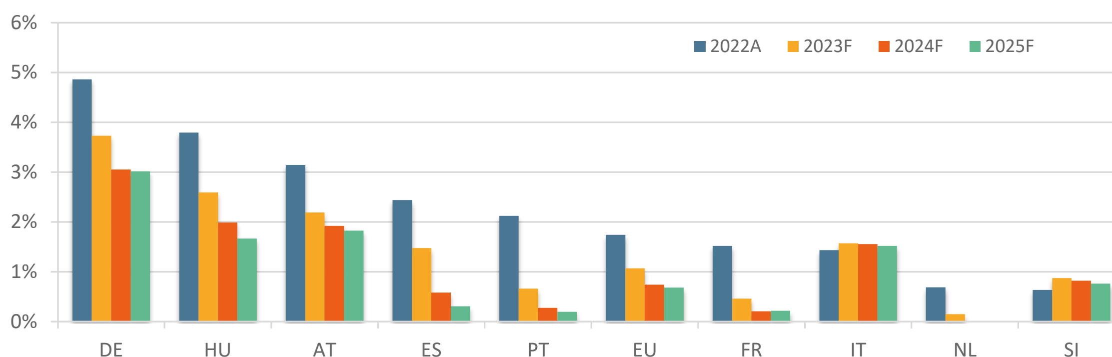
Figure 21: Public sector funding (repo-based funding) as a proportion of total funding by country and for the EU



Source: EBA

Credit supply incentive schemes represented 1.7% of banks' total funding in December 2022. Banks in Germany (5%), Hungary (4%) and Austria (3%) reported the highest share in terms of total funding. The trend over the forecast period is comparable to that of repo-based funding. While most countries expect a significant decrease of this type of funding, especially in 2023, Italian and Slovenian banks expect credit supply incentive schemes to remain almost unchanged over the next three years.

Figure 22: Public sector funding (credit supply incentive schemes) as a proportion of total funding by country and for the EU



Source: EBA

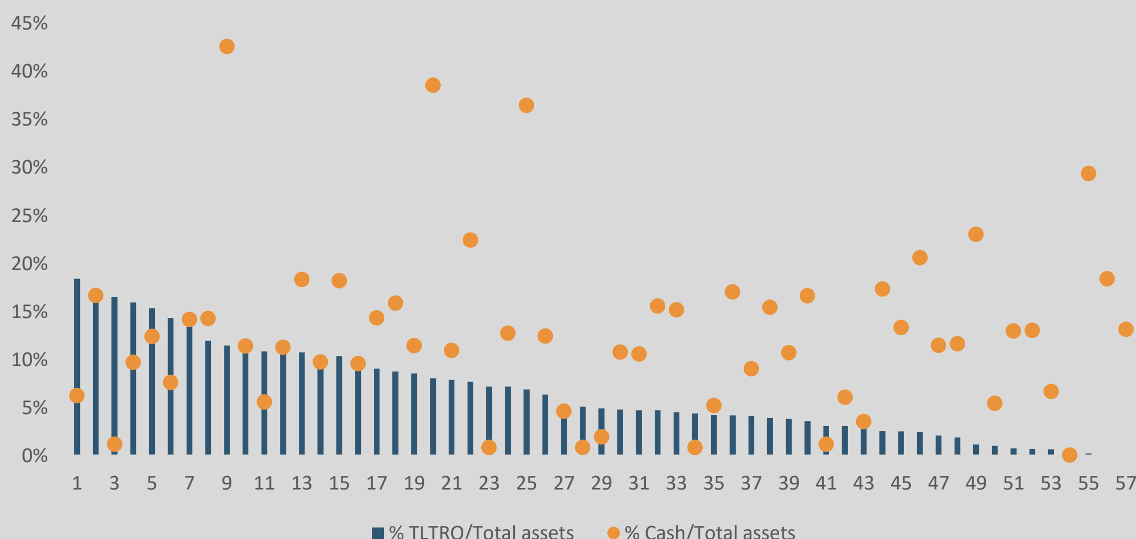
The impact of maturing TLTRO on the funding and liquidity profile of EU banks.

As of December 2022, 57 banks representing 56% of EU banking sector assets reported outstanding amounts of TLTRO funding via the funding plans data collection (TLTRO banks). The outstanding TLTRO amounts were EUR 814bn as of December 2022, EUR 336bn as of December 2023, EUR 121bn as of December 2024 and EUR 107bn as of December 2025.

On average for these 57 banks, TLTRO funding represents 5% of their total balance sheet, with 26% of the sample (15 banks) reporting TLTRO amounts above 10% of their balance sheet.

In general, TLTRO repayments seem manageable due to the strong liquidity and funding profile of EU banks. Cash and cash balances at central banks represent 12.6% for TLTRO banks. For most of these banks, the cash and cash balances at central banks are above the remaining TLTRO amounts (Figure 23), with the exception of 14 out of 57 banks for which the cash balances do not fully cover the remaining amount. Out of these 14 banks, 7 have outstanding TLTRO amounts above 10% of their balance sheet.

Figure 23: TLTRO and cash balances at central banks, percentage of total assets

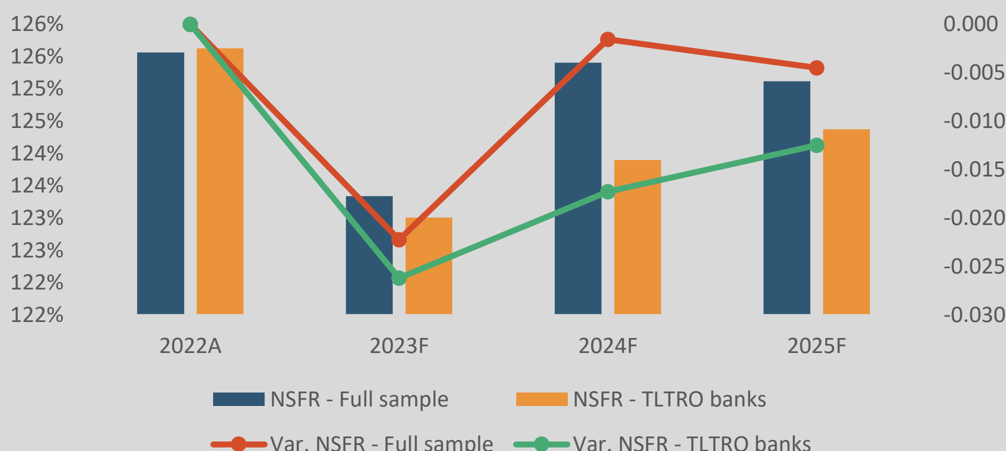


Source: EBA

TLTRO banks were well above the NSFR and LCR requirements in December 2022 and expect to maintain liquidity buffers across the funding plans horizon (**Figure 24** and **Figure 25**), even after considering TLTRO repayments. However, banks with high TLTRO volumes, and depending on strategies used to replace or amortise TLTRO funding, plan for higher declines in their NSFR and LCR ratios. TLTRO banks plan to build back some of the NSFR buffer by the end of 2025 but remain below the NSFR level of banks that have no outstanding TLTRO amounts[12].

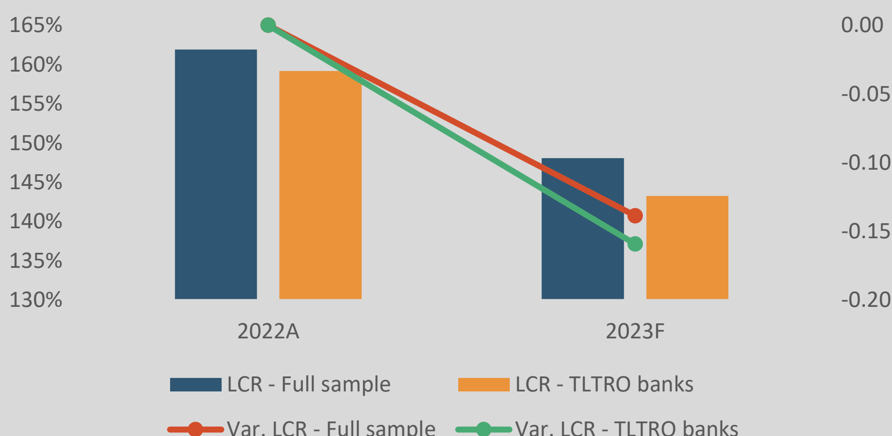
[12] Based on funding plan data and not reconciled with EBA liquidity reporting data

Figure 24: NSFR for the total sample and TLTRO banks (lhs), year-on-year variation of the two samples (rhs)



Source: EBA

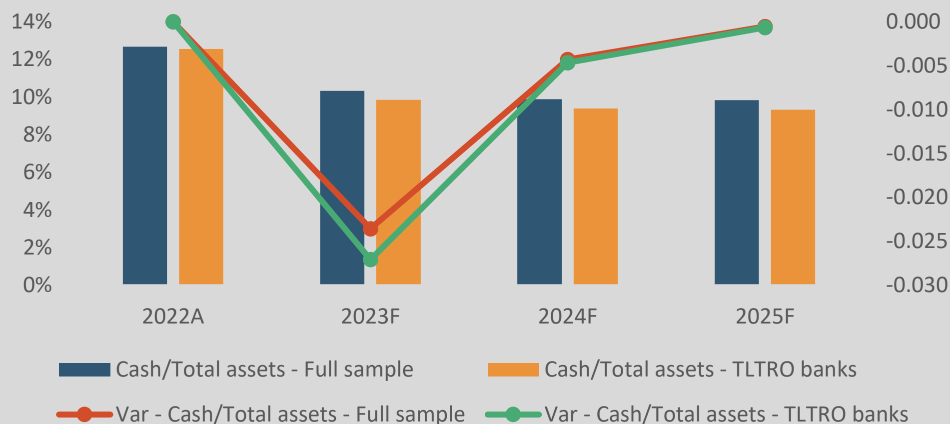
Figure 25: LCR for the total sample and TLTRO banks (lhs), year-on-year variation of the two samples (rhs)



Source: EBA

From the perspective of liquid assets, the level of cash and cash balances at central banks is strong for TLTRO banks and above 9% of total assets in all the years of the funding plans horizon, even after the main repayment of June 2023. As of December 2022, TLTRO banks had similar levels of cash and cash balances at central banks (12.6% of total assets) compared to non-TLTRO banks (12.7%). In 2023, TLTRO banks expect higher declines in their cash levels after the repayment of the June 2023 TLTRO tranche. However, both groups of banks expect to maintain a strong liquidity position throughout the forecast period.

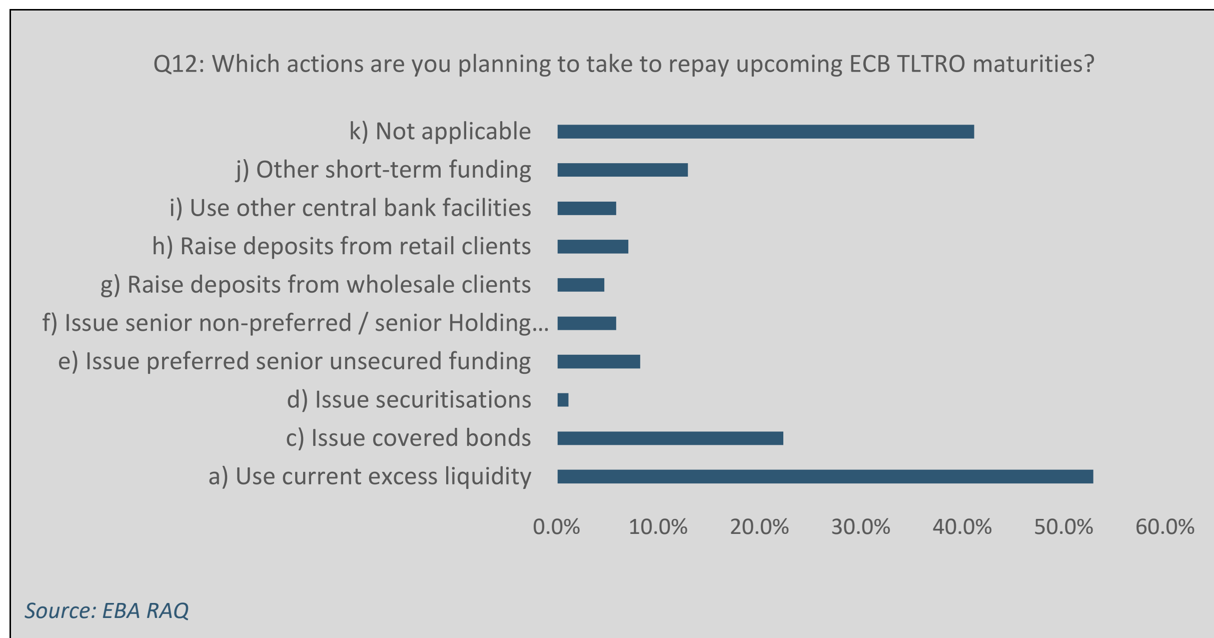
Figure 26: Cash and cash balances at central banks for the total sample and TLTRO banks (lhs), year-on-year variation of the two samples (rhs)



Source: EBA

Most EU banks demonstrate a strong funding and liquidity profile and plans to maintain liquidity buffers despite TLTRO repayments. Given the high amount of cash and cash balances at central banks, many banks are able to use their cash reserves without damaging their liquidity profile or replacing TLTRO with other alternative sources of funding, while keeping the NSFR at sufficient levels. However, some banks that rely heavily on TLTRO funds do not have enough cash to cover the TLTRO amounts and may need to find alternative sources of funding. According to the latest RAQ, banks plan to cover TLTRO repayments mainly with excess liquidity (more than 50% of respondents). Banks suggest also to issue covered bonds (22% of respondents) and senior unsecured debt (8%), or use other short-term funding (13%). The high issuance volume observed in the first 5 months of 2023 (see Figure 31), can be seen as an indication that market conditions are supportive of banks' plans to issue bonds to close the TLTRO gap.

Figure 27: TLTRO repayment plans - RAQ



Source: EBA RAQ

Assessment of planned liability growth

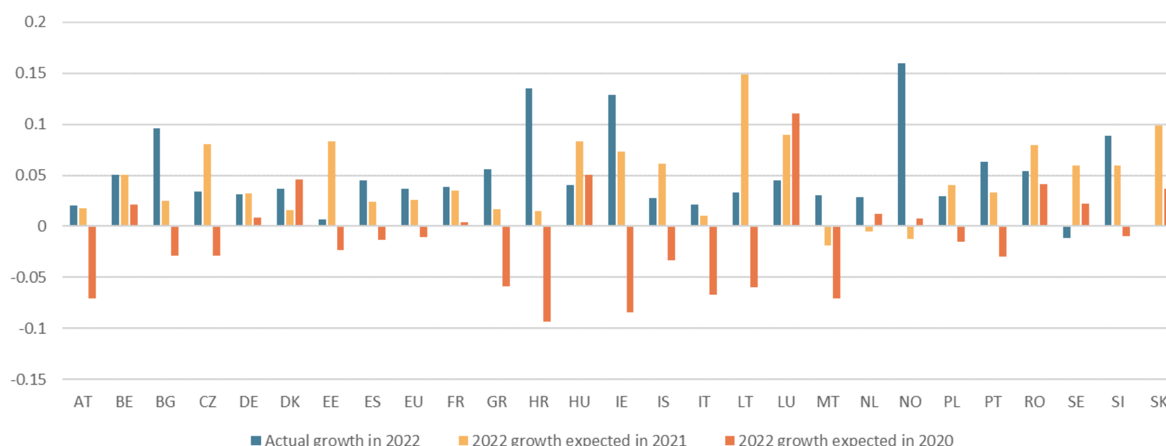
Similar to the asset side, to obtain an indication of the reliability of banks' forecasts, two approaches were applied: back-testing based on data reported by participating banks and a comparison with market analysts' expectations. Banks' estimates for 2022, as reported in December 2020 and 2021, were compared with the figures for 2022 as reported in December 2022.

Back-testing analysis of deposits

The back-testing run on the different types of deposits shows similar results for each of the deposit categories.

For the deposits from households, the back-testing shows that most banks exceeded their targets, as the actual growth in deposits largely surpassed the planned growth. This may partly be explained by lock-down measures related to the pandemic still in place in many countries in the first half of 2022, which impacted household expenditure. In contrast to the general trend, some banks failed to achieve the target household deposit levels they had set themselves for 2022. As can be seen in Figure 28, dispersion among banks and countries was significant. The average forecasting error for 2022 growth expectations made in 2021 was 1.1 percentage point.

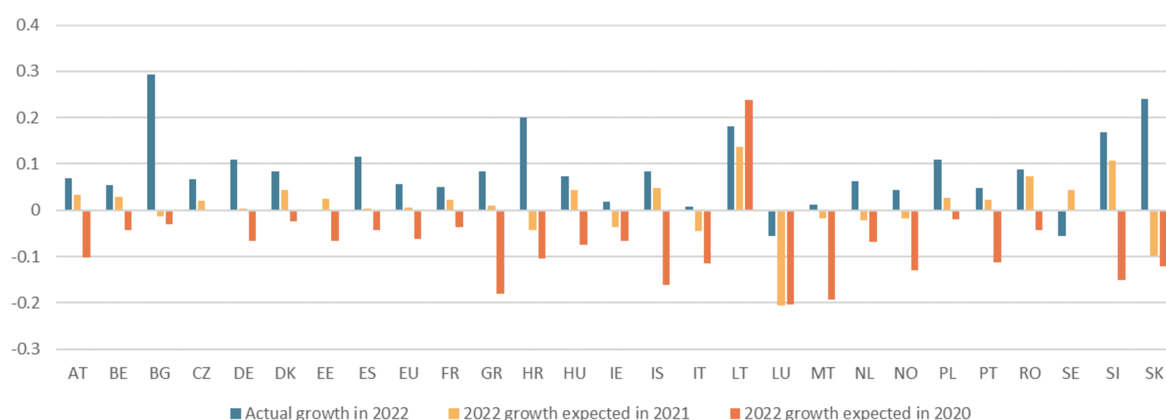
Figure 28: Back-testing deposits from households for 2022, by country



Source: EBA

For deposits from NFCs, banks exceeded their growth targets to a larger extent than for deposits from households. Most banks significantly underestimated the growth in deposits they would be able to obtain in 2022(Figure 29). High uncertainties since the beginning of the Russian aggression against Ukraine in February 2022, with energy supply challenges and supply chain bottlenecks, may have led to higher deposit holdings of NFCs than expected. At EU aggregate level, the 1-year forecasting error for deposits from NFCs was at 4.8 percentage points, higher than the forecasting error for deposits from households.

Figure 29: Back-testing deposits from NFCs for 2022, by country



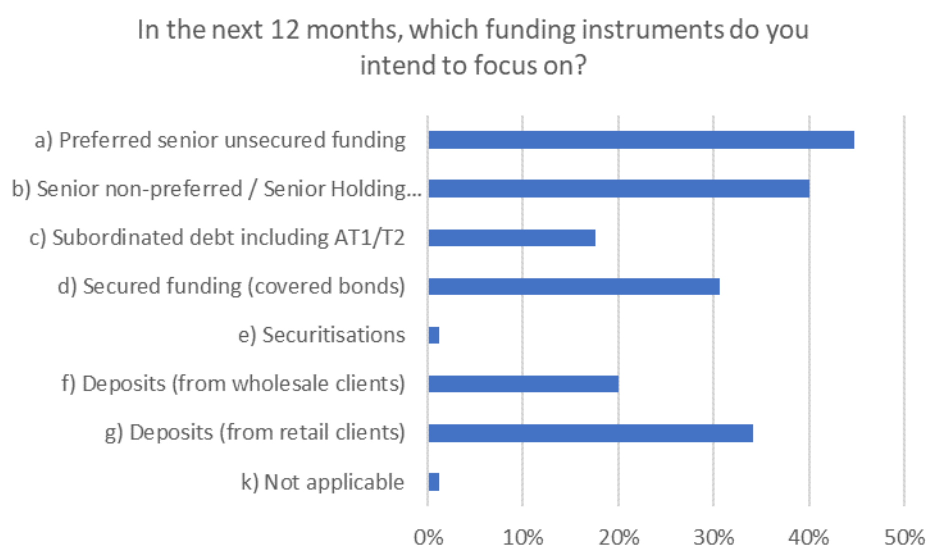
Source: EBA

Comparison with RAQ results

The funding plan data can be compared with expectations expressed via the EBA's RAQ. Responses to the 2023 spring questionnaire were used for this comparison. The results of the RAQ confirm the predominance of long-term unsecured funding and deposits in EU banks' funding strategies for the coming years.

Figure 30 shows banks' responses to the RAQ as regards the main sources of funding they intend to focus on in 2023. In line with data from banks' funding plans, long-term unsecured funding constitutes a clear priority for EU banks. 45% of respondents expressed their intention of focusing on senior unsecured funding. 40% of respondents intend to focus on more MREL-eligible funding by issuing senior non-preferred and senior unsecured instruments from holding companies. A high share of over 31% of respondents indicating to focus on covered bond issuance is also reflected in funding plan data with expectations of high net positive issuance volumes of covered bonds in the forecast period. Optimism about continued deposit growth, particularly from the household sector, is also visible in RAQ responses of plans to further focus on attracting retail deposits. Securitisations are not a major focus of funding to respondents to the RAQ, in contrast to funding plan forecasts of strongly growing volumes of asset backed securities.

Figure 30: Funding focus for the next 12 months - RAQ for banks



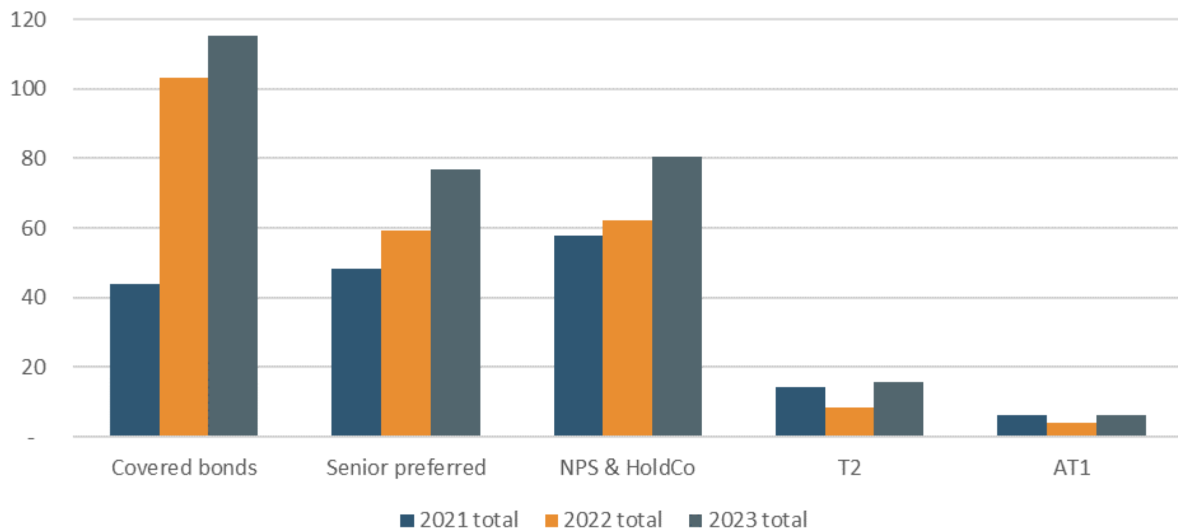
Source: EBA RAQ

Comparison with bond issuances observed in first 5 months of 2023

Banks' planned issuance volume for 2023 can be compared with actual bond issuances recorded in the first five months of 2023. While the coverage of banks and issuances differs for both data sets, trends in actual bond issuances can be used to validate the feasibility of banks' funding plans. Figure 31 shows data from Dealogic covering benchmark issuances from 1 January until 31 May 2023. Despite market turbulences in March that lead to a temporary closure of bond markets (see also chapter "Recent developments in liquidity and funding conditions"), banks placed a high volume of bonds across all bond segments. Compared with issuance volumes in 2022, banks placed 30% more senior bonds (both senior preferred and non-preferred) in the first five months of 2023 and about 80% more Tier 2 and AT1 bonds. As regards covered bonds, issuance volumes were 12% higher than in the same period of 2022. The high issuance volumes seen in the first months of this year are a cause for optimism regarding the feasibility of banks' issuance plans, which are pointing towards big increases compared

to 2022 (more details on this in section "Trends in market-based funding"). If full-year 2023 plans are to be met, bond markets will need to remain very active for the remainder of the year.

Figure 31: Benchmark issuances in 2023, 2022 and 2021 (until 31 May, in EUR bn)



Source: Dealogic

Trends in pricing for assets and liabilities

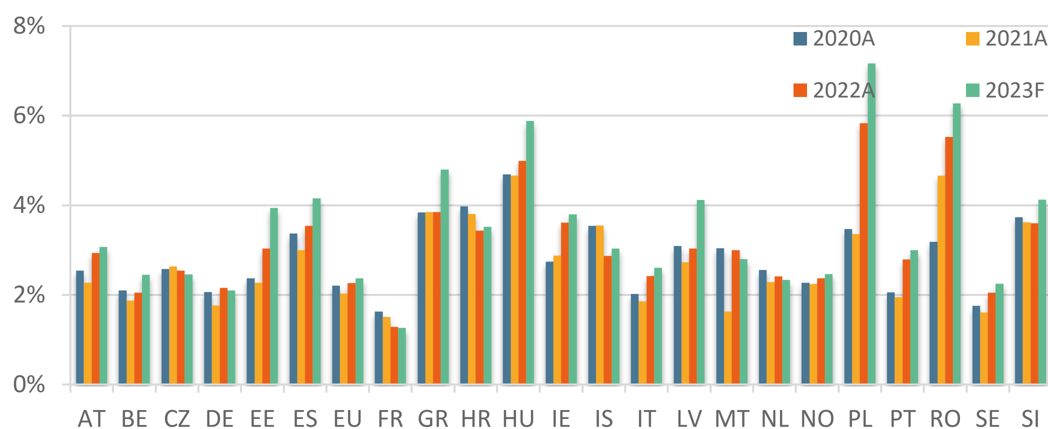
Banks' pricing for loans and deposits

As part of funding plan data submissions, banks also provide pricing information for loans as well as deposits and debt securities.

The long-term decline of the spread between interest rates for loans to clients and for client deposits has reversed. As of December 2022, the average client spread was 2.26%, 23 bps above the spread observed one year earlier (2.03%). The biggest yearly increase was reported by banks in Poland (+ 247 bps), Malta (+137 bps) and Romania (+87 bps). In a number of countries, led by Iceland (-68 bps), Croatia (-37 bps) and France (-22 bps), the client spread decreased in the last year.

For the year 2023, most banks expect client spreads to increase further (by +11 bps on average). Most notably, this is the case for banks in Poland (+134 bps), Latvia (+109 bps) and Greece (+95 bps).

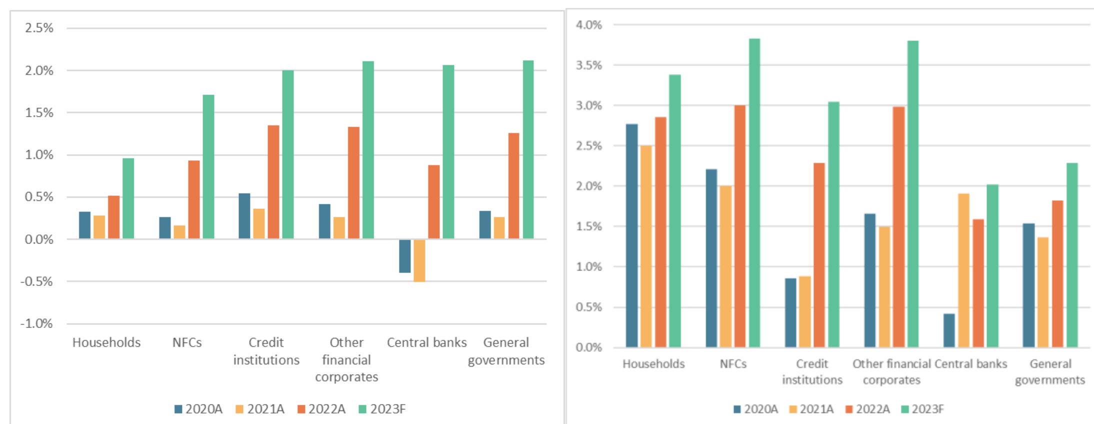
Figure 32: Actual and planned spread between client loans and client deposits (households and NFCs), in percentage points



Source: EBA

The main reason for increasing spreads in 2022 was the increase in interest rates on loans, which significantly outpaced the rise in interest rates on deposits. The average rate on household loans increased by 35 bps in 2022, and on loans to NFCs by 100 bps. Interest rates banks pay on deposits, on the other hand, increased by only 23 bps for households and by 76 bps for NFCs. For 2023, banks forecast interest rates to increase further. On average, interest rates for loans to households are expected to increase by 52 bps and by 82 bps for NFCs. Rates on deposits are forecast to grow at a somewhat slower pace (44 bps for households and 78 bps for NFCs).

Figure 33: Interest rates on deposits (left) and loans (right)



Source: EBA

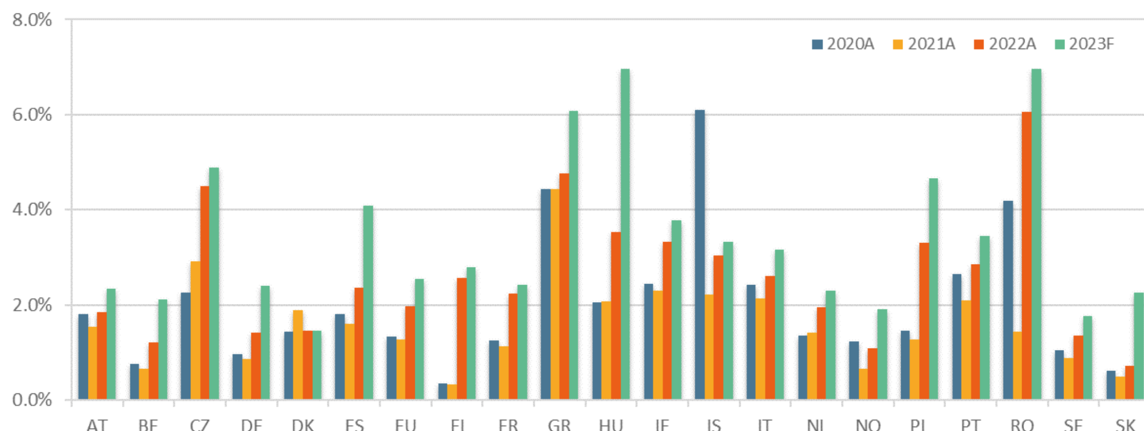
Banks' pricing for debt securities

The cost of market-based funding increased in 2022, ending a long-term trend of decreasing funding costs, which could be observed since 2017. The actual cost of long-term funding in 2022, on average, was reported at 1.97%, 71 bps higher compared to the average of 1.26% in 2021. The increase in funding costs is evident most banks in the sample. Only banks in Denmark reported a decline of 43 bps in 2022.

In 2023, most banks expect costs for long-term market-based funding to increase further. On average, banks expect the increase to be 57 bps, reflecting further rate hikes and the trend seen in yields and spreads for market-based funding instruments (see Figure 1 and Figure 2).

Figure 34 shows the actual interest rates of long-term debt securities for 2020, 2021 and 2022 as well as the planned rates for 2023 by country of incorporation of the bank.

Figure 34: Actual and forecast interest rates of long-term debt securities



Source: EBA

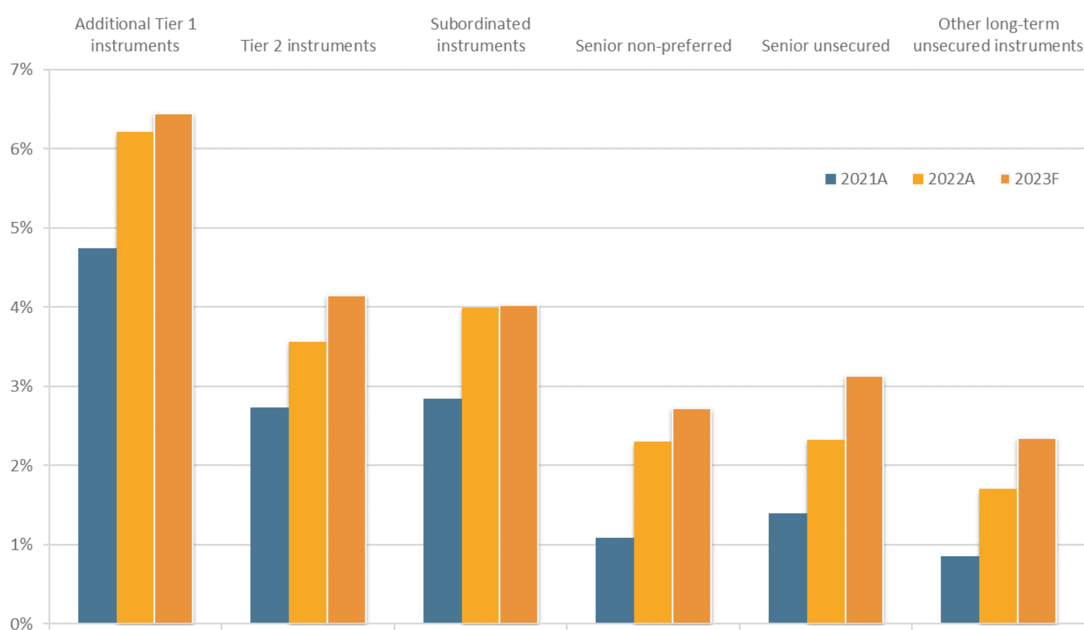
As regards secured debt instruments, on average, banks reported an increase in funding costs of 77 bps in 2022. Funding costs for covered bonds rose by 65 bps and stood at 1.33% in December 2022, while costs for asses backed securities increased by 103 bps to reach 1.22% in December 2022. In 2023, banks expect costs to increase further. The costs for covered bonds, which make up most secured debt instruments, are expected to increase by another 33 bps, and banks plan for a 118bps rise for asset backed securities.

Figure 35: Actual and forecast interest rates of secured debt instruments

Source: EBA

As regards unsecured debt instruments, funding costs went up by an average of 99 bps in 2022. The increase was notable across all unsecured funding instruments. The rise was strongest for AT1 instruments (147 bps), followed by senior non-preferred (121 bps) and subordinated instruments (115 bps). In 2023, banks expect funding costs to increase further across all unsecured funding segments. The expected increase is strongest for senior unsecured (81 bps) and Tier 2 instruments (59 bps).

Figure 36: Actual and forecast interest rates of unsecured debt instruments



Source: EBA

Assessment of banks' pricing assumptions

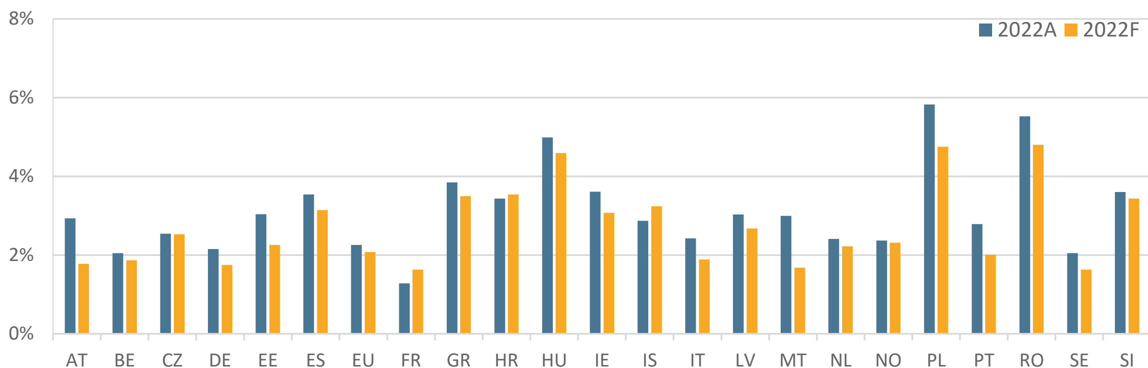
In line with previous sections of this report, a back-testing approach based on data reported by participating banks has been applied to test the accuracy of banks' forecasts. In addition, banks' pricing assumptions for 2023 have been compared with developments in market indicators observed in the first months of the year.

Back-testing banks' pricing assumptions for loans and deposits

Banks' planned spreads between client loans and client deposits for 2022 as reported in December 2021 were compared with the actual spreads reported in December 2022.

As represented in Figure 37, on average, banks exceeded the client spread target for 2022. The average client spread for the year of 2.26% was 10 bps short of the target spread figure of 2.08% set by the banks themselves one year earlier. Back-testing results revealed that banks in most countries exceeded their targets significantly. For example, banks in Malta, Austria and Poland exceeded their 2022 targets by more than 100 bps. On the other hand, only banks in Iceland, France and Croatia missed their 2022 targets.

Figure 37: Back-testing client spreads



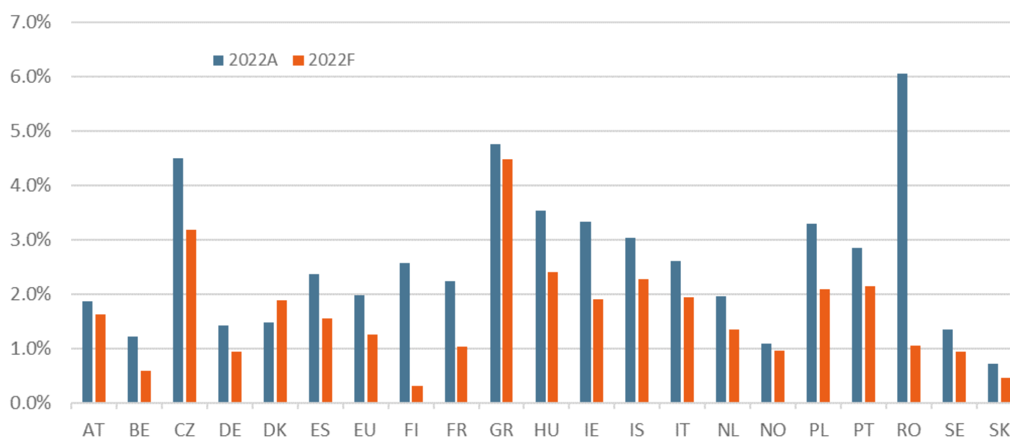
Source: EBA

Back-testing banks' pricing assumptions for debt securities

Banks' planned costs of long-term market-based funding for 2022 as reported in December 2021 were compared with the actual costs as reported in December 2022. Figure 38 shows that banks faced much higher costs for market-based funding in 2022 than they had planned for one year earlier. With the average cost of funding reported in 2022 at 1.97%, on an EU aggregate basis banks missed their targets by 73 bps. Higher-than-expected pricing of debt securities were the result of rate rises that were introduced by central banks across the continent and beyond, which in turn were driven by high and sticky inflation.

While most banks faced higher funding costs in 2022 compared to what they planned for one year earlier, banks in Denmark managed to achieve lower costs than expected. Data show significant dispersion among banks and countries. Banks that significantly missed their 2022 funding cost targets include those from Romania (500bps higher than expected), Finland (225 bps higher) and Ireland (143 bps higher).

Figure 38: Back-testing market-based funding costs



Source: EBA

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Comparison with market expectations

Banks' assumptions for market-based funding costs in 2023 (see Figure 34, Figure 35 and Figure 36) can be compared with the trend in yields observed in 2023. As shown in Figure 1, yields of secured and unsecured instruments have been on an upwards trend in 2022, which continued in the first 5 months of 2023. Despite some tightening since the market turbulence in March this year, yields as of end May are significantly higher than in December 2022 across all debt instrument classes. This is in line with banks' overall plans for market-based funding costs, which point towards an average increase of 57 bps for long-term funding instruments in 2023. The expected increase is strongest for senior unsecured and Tier 2 instruments, which are also the two segments with the strongest yield widening observed in 2023 so far (excluding AT1 instruments).

Conclusions

In 2022, banks' balance sheets and funding conditions were impacted by the change in monetary policy, including higher interest rates and the gradual removal of extraordinary central bank support measures. The resulting decline of cash and balances at central banks – used for repayments of TLTRO funds – caused total assets to increase by a modest 2.5% in 2022. The average loan book continued to grow at a rate of around 4% during 2022, with particularly strong growth in the NFC sector. For the years 2023 to 2025, banks expect loans to keep growing at a similar rate. Macroeconomic uncertainty caused by subdued economic growth, persistent and high inflation and increasing interest rates have an impact on loan demand and on banks' credit standards. Banks' results from the first quarter 2023 suggest a more muted loan growth in 2023 than banks indicated in their funding plans. Deposits continued to be the main source of funding for most banks and represented 75% of total funding in December 2022. In 2023 to 2025, banks plan for deposit growth to slow down. As extraordinary long-term central bank funding matures, banks plan to shift to short-term and long-term debt securities instead. This changing funding composition is particularly relevant in 2023 and 2024 when high amounts of central bank funding mature and MREL targets become applicable. Banks have made good progress in closing their MREL shortfalls in 2022 and net positive issuance volumes in 2023 to 2025 may reflect banks' plans to further build loss absorbing capacity.

Given the high amount of cash and cash balances at central banks, many banks can use their cash reserves to repay TLTRO funds without damaging their liquidity profile, while keeping the NSFR and LCR at sufficient levels. However, some banks that rely heavily on TLTRO funds do not have enough cash to cover the maturing TLTRO amounts and may need to find alternative sources of funding. These sources could include short-term debt securities, which are expected to grow by 10.5% in 2023, as well as long-term debt securities (6.7%).

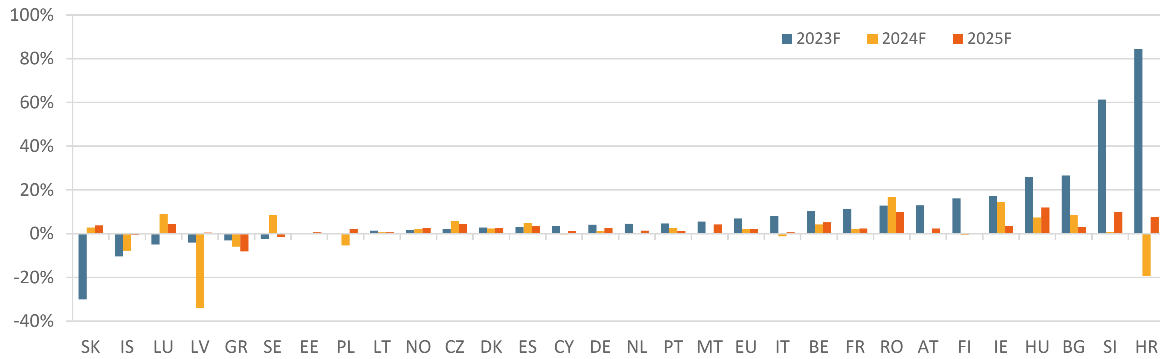
As regards market-based funding, most banks reported a sizable increase in the cost of market-based funding. The actual cost of long-term funding in 2022, on average, was reported at 1.97%, 71 bps higher compared to the average of 1.26% in 2021. In 2023, driven by further rate hikes and the trend seen in yields and spreads for market-based funding instruments, most banks expect costs for market-based funding to increase further.

After years of tightening interest rate spreads, and driven by higher central bank rates, banks reported a significant spread increase in 2022. As of December, the average interest rate spread was 2.26%, 23 bps above the spread reported one year earlier. With interest rates for loans rising faster than for deposits, the spread is expected to increase by another 11 bps in 2023. While higher interest margins are positive for banks' interest income, higher funding costs will partly offset the positive impact on profitability going forward.

Annex 1

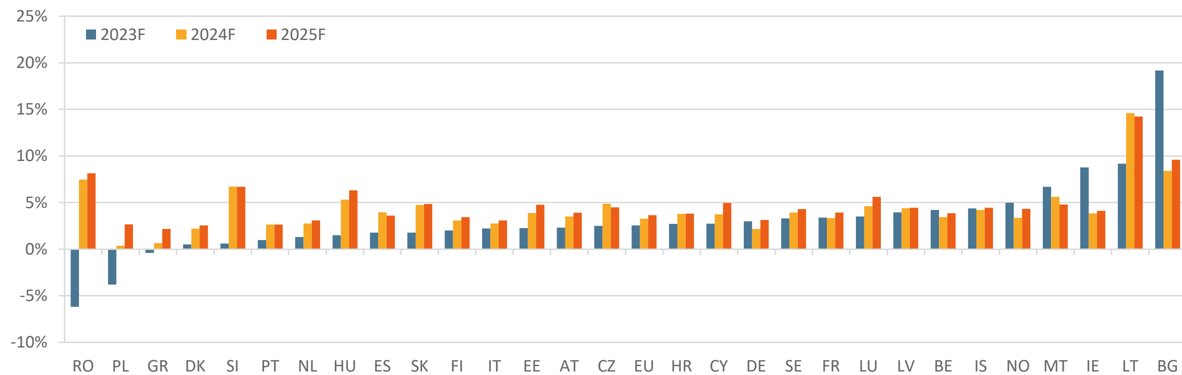
Funding plans: additional charts including country data

Figure 39: Growth in loans to financial corporates by country and for the EU, per year



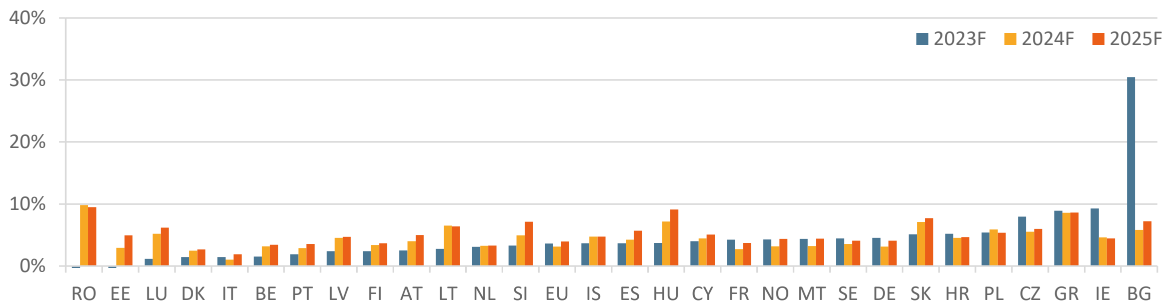
Source: EBA

Figure 40: Growth in loans to households by country and for the EU, per year



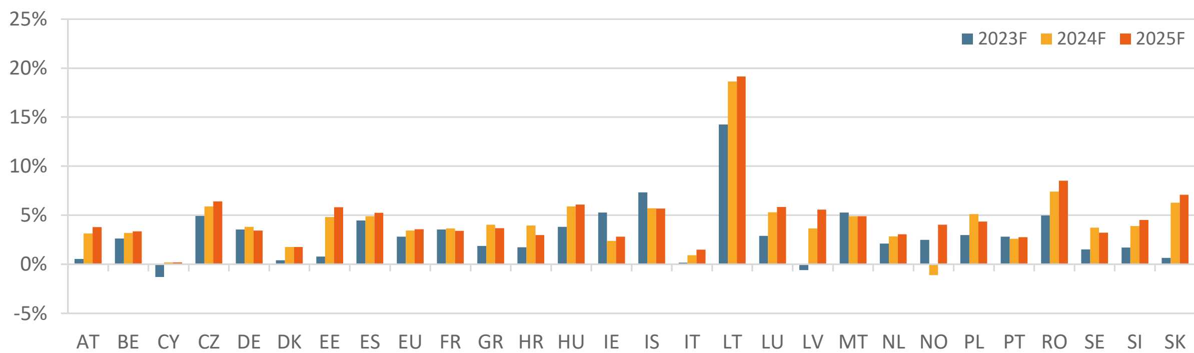
Source: EBA

Figure 41: Growth in loans to NFCs by country and for the EU, per year



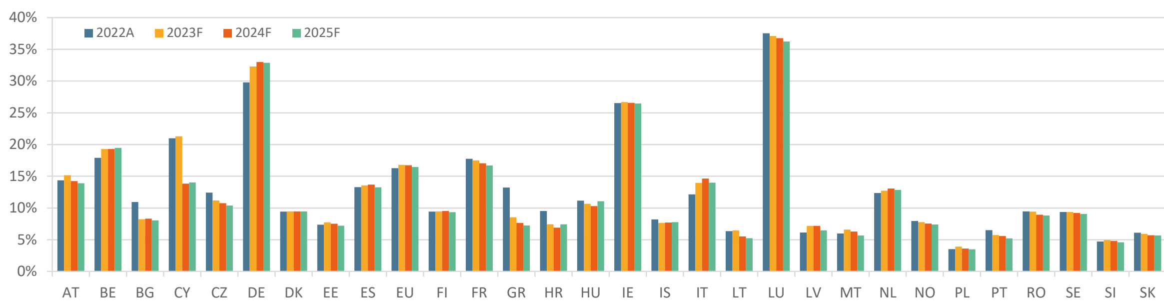
Source: EBA

Figure 42: Growth in deposits from households and NFCs by country and for the EU



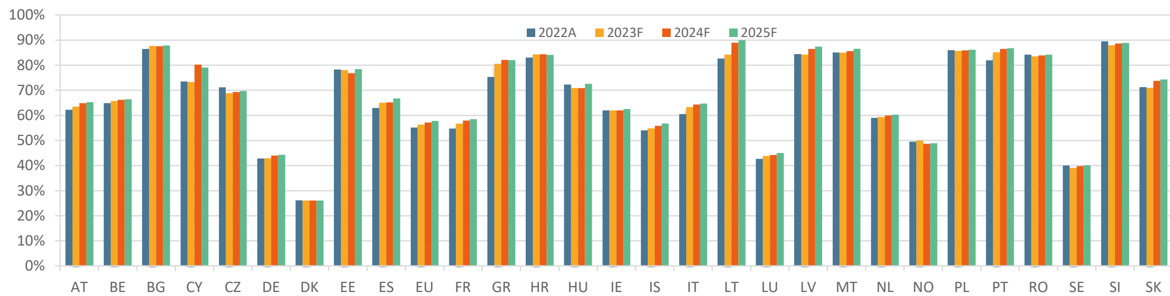
Source: EBA

Figure 43: Share of repos and deposits from financial corporations in total funding by country



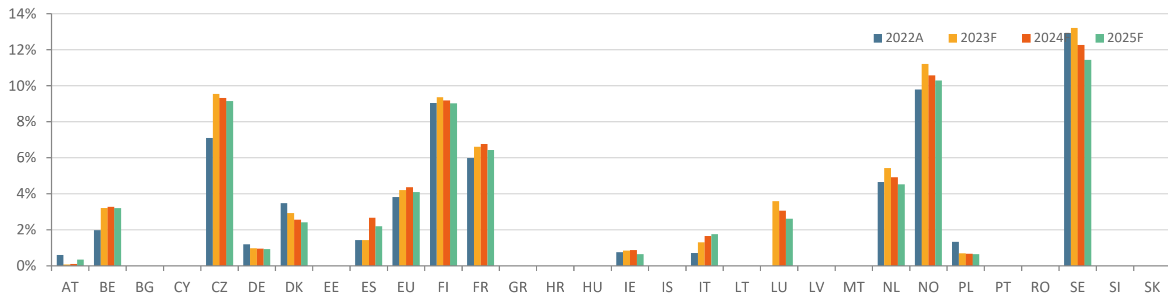
Source: EBA

Figure 44: Share of client deposits (households and NFCs) in total funding by country



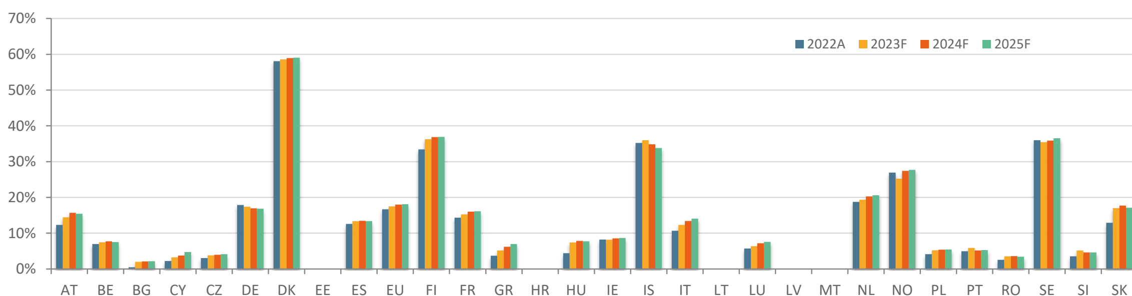
Source: EBA

Figure 45: Share of short-term debt instruments in total funding by country



Source: EBA

Figure 46: Share of long-term debt instruments (secured and unsecured) in total funding by country



Source: EBA

Annex 2

List of participating banks

Country	Entity name	Asset/Liability analysis (for 2022)	Asset/Liability analysis (for 2022, 2021 and 2020)	Interest spread analysis (for 2022, 2021 and 2020)	Debt rate analysis (for 2022
AT	BAWAG Group AG	Yes	Yes	No	No
AT	Raiffeisen Bank International AG	Yes	Yes	Yes	No
AT	Raiffeisenbankengruppe OÖ Verbund eGen	Yes	Yes	Yes	Yes
AT	UniCredit Bank Austria AG	Yes	Yes	Yes	Yes
AT	Volksbanken Verbund	Yes	Yes	Yes	Yes
AT	Erste Group Bank AG	Yes	Yes	Yes	Yes
BE	Belfius Banque SA	Yes	Yes	Yes	Yes
BE	KBC Group NV	Yes	Yes	Yes	Yes
BE	Investeringsmaatschappij Argenta NV	Yes	Yes	No	Yes
BE	BNP Paribas Fortis SA	Yes	Yes	Yes	Yes
BE	ING Belgium	Yes	Yes	Yes	Yes
BE	Bank of New York Mellon	Yes	Yes	No	Yes
BG	DSK Bank Bulgaria	Yes	Yes	No	Yes
BG	United Bulgarian Bank- UBB	Yes	Yes	Yes	Yes
BG	UniCredit Bulbank Bulgaria	Yes	Yes	No	Yes
CY	Eurobank Cyprus Ltd	Yes	No	No	No
CY	Bank of Cyprus Holdings Public Limited Company	Yes	Yes	Yes	Yes
CY	RCB Bank Ltd	No	No	No	No
CY	Hellenic Bank Public Company Ltd	Yes	Yes	Yes	No
CZ	Československá obchodní banka, a.s.	Yes	Yes	Yes	Yes
CZ	Komerční banka, a.s.	Yes	Yes	Yes	Yes
CZ	Česká spořitelna, a.s.	Yes	Yes	Yes	Yes
DE	Commerzbank AG	Yes	Yes	Yes	Yes
DE	J.P. Morgan AG, Frankfurt am Main	No	No	Yes	Yes
DE	HASPA Finanzholding AG	Yes	Yes	Yes	Yes
DE	Goldman Sachs Bank Europe SE	Yes	No	No	No
DE	Volkswagen Bank Gesellschaft mit beschränkter Haftung	Yes	Yes	Yes	Yes
DE	Morgan Stanley Europe Holding SE	Yes	No	No	No
DE	Münchener Hypothekenbank eG	Yes	Yes	No	Yes
DE	Aareal Bank AG	Yes	Yes	Yes	Yes
DE	Landesbank Baden-Württemberg	Yes	Yes	No	Yes

DE	Norddeutsche Landesbank Girozentrale	Yes	Yes	Yes	Yes
DE	Deutsche Bank AG	Yes	Yes	Yes	Yes
DE	DekaBank Deutsche Girozentrale	Yes	Yes	Yes	Yes
DE	Deutsche Apotheker- und Ärztebank eG	Yes	Yes	Yes	No
DE	Deutsche Zentral-Genossenschaftsbank AG	No	No	No	No
DE	State Street Europe Holdings	Yes	Yes	Yes	Yes
DE	Landesbank Hessen-Thüringen Girozentrale	Yes	Yes	Yes	Yes
DE	Erwerbsgesellschaft der S-Finanzgruppe mbH & Co. KG	Yes	Yes	Yes	Yes
DE	UBS Europe SE, Ffm	Yes	Yes	Yes	Yes
DE	Deutsche Pfandbriefbank AG	Yes	Yes	Yes	Yes
DE	Bayerische Landesbank	Yes	Yes	Yes	Yes
DE	Hamburg Commercial Bank AG	Yes	Yes	Yes	Yes
DK	Nykredit Realkredit A/S	Yes	Yes	No	Yes
DK	Jyske Bank A/S	Yes	Yes	Yes	Yes
DK	Danske Bank A/S	Yes	Yes	Yes	Yes
EE	SEB Pank AS	Yes	Yes	Yes	Yes
EE	Luminor Holding AS	Yes	Yes	Yes	Yes
EE	Swedbank AS	Yes	Yes	Yes	Yes
ES	Banco Bilbao Vizcaya Argentaria, S.A.	Yes	Yes	Yes	Yes
ES	Ibercaja Banco, S.A.	Yes	Yes	Yes	Yes
ES	Banco de Crédito Social Cooperativo, S.A.	Yes	Yes	Yes	Yes
ES	Bankinter, S.A.	Yes	Yes	Yes	Yes
ES	Banco Santander, S.A.	Yes	Yes	Yes	Yes
ES	CaixaBank S.A.	Yes	No	Yes	Yes
ES	Kutxabank, S.A.	Yes	Yes	Yes	Yes
ES	Banco de Sabadell, S.A.	Yes	Yes	Yes	Yes
ES	Unicaja Banco, S.A.	Yes	No	Yes	Yes
ES	Abanca Corporación Bancaria	Yes	Yes	Yes	Yes
ES	Liberbank, S.A.	No	No	No	No
FI	OP Osuuskunta	Yes	Yes	Yes	Yes
FI	Kuntarahoitus Oyj	Yes	Yes	Yes	Yes
FI	Nordea Bank Abp	Yes	Yes	Yes	Yes
FR	Groupe Crédit Agricole	Yes	Yes	Yes	Yes
FR	Société Générale SA	Yes	Yes	Yes	Yes
FR	SFIL (Société de Financement Local)	Yes	Yes	Yes	Yes
FR	RCI banque (Renault Crédit Industriel)	Yes	Yes	Yes	Yes
FR	HSBC Continental Europe	Yes	Yes	Yes	Yes
FR	Groupe BPCE	Yes	Yes	Yes	Yes
FR	Crédit Mutuel Group	Yes	Yes	Yes	Yes
FR	Bpifrance	Yes	Yes	No	Yes
FR	BNP Paribas SA	Yes	Yes	Yes	Yes
FR	La Banque Postale	Yes	Yes	Yes	Yes

GR	National Bank of Greece SA	Yes	Yes	Yes	Yes
GR	ALPHA SERVICES AND HOLDINGS S.A.	Yes	Yes	Yes	Yes
GR	Eurobank Ergasias Services and Holdings S.A	Yes	Yes	Yes	Yes
GR	Piraeus Financial Holdings S.A.	Yes	Yes	Yes	Yes
HR	Privredna Banka Zagreb d.d.	Yes	Yes	Yes	Yes
HR	Erste & Steiermärkische Bank d.d.	Yes	Yes	Yes	Yes
HR	Zagrebacka Banka d.d.	Yes	Yes	Yes	Yes
HU	UniCredit Bank Hungary Zrt.	Yes	Yes	Yes	Yes
HU	Kereskedelmi és Hitelbank Zrt.	Yes	Yes	Yes	Yes
HU	OTP Bank Nyrt.	Yes	Yes	Yes	Yes
HU	MKB bankcsoport	Yes	No	No	No
IE	Barclays Bank Ireland Plc	Yes	Yes	No	Yes
IE	Bank of America Europe Designated Activity Company	Yes	Yes	No	Yes
IE	Citibank Holdings Ireland Limited	No	No	Yes	Yes
IE	Bank of Ireland Group plc	Yes	Yes	Yes	Yes
IE	AIB Group plc	Yes	Yes	Yes	Yes
IE	Ulster Bank Ireland Limited	No	No	Yes	Yes
IS	Landsbankinn hf	Yes	Yes	Yes	Yes
IS	Íslandsbanki hf	Yes	Yes	Yes	Yes
IS	Arion banki hf	Yes	Yes	Yes	Yes
IT	UniCredit SpA	Yes	Yes	Yes	Yes
IT	Mediobanca - Banca di Credito Finanziario SpA	Yes	Yes	Yes	Yes
IT	Banco BPM SpA	Yes	Yes	Yes	Yes
IT	Gruppo Bancario Mediolanum	Yes	No	No	No
IT	Intesa Sanpaolo SpA	Yes	Yes	Yes	Yes
IT	Credito Emiliano Holding SpA	Yes	Yes	Yes	Yes
IT	Banca Popolare di Sondrio SCpA	Yes	Yes	Yes	No
IT	Banca popolare dell'Emilia Romagna SC	Yes	Yes	Yes	Yes
IT	Iccrea Banca Spa Istituto Centrale del Credito Cooperativo	Yes	Yes	Yes	Yes
IT	Banca Monte dei Paschi di Siena SpA	Yes	Yes	Yes	Yes
IT	Cassa Centrale Banca - Credito Cooperativo Italiano S.p.A	Yes	Yes	Yes	Yes
LT	AB SEB bankas	Yes	Yes	No	Yes
LT	Swedbank AB	Yes	Yes	Yes	Yes
LT	Revolut Holdings Europe UAB	Yes	No	No	No
LT	Akcinė bendrovė Šiaulių bankas	Yes	Yes	Yes	Yes
LU	RBC Investor Services Bank S.A.	Yes	Yes	Yes	Yes
LU	Banque Internationale à Luxembourg	Yes	Yes	No	No
LU	Quintet Private Bank (Europe) S.A.[2]	Yes	Yes	Yes	Yes
LU	Banque et Caisse d'Epargne de l'Etat, Luxembourg	Yes	Yes	No	No
LV	Swedbank Baltics AS[1]	Yes	No	Yes	Yes
LV	AS SEB banka	Yes	Yes	Yes	Yes

LV	AS Citadele banka	Yes	Yes	Yes	Yes
MT	MDB Group Limited	Yes	Yes	Yes	Yes
MT	HSBC Bank Malta Plc	Yes	Yes	Yes	Yes
MT	Bank of Valletta Plc	Yes	Yes	Yes	Yes
NL	Nederlandse Waterschapsbank N.V.	Yes	Yes	No	Yes
NL	Coöperatieve Rabobank U.A.	Yes	Yes	Yes	Yes
NL	ABN AMRO Bank N.V.	Yes	Yes	No	Yes
NL	LP Group B.V.	Yes	No	No	No
NL	ING Groep N.V.	Yes	Yes	Yes	Yes
NL	de Volksbank N.V.	Yes	Yes	Yes	Yes
NL	BNG Bank N.V.	Yes	Yes	Yes	Yes
NO	SPAREBANK 1 SMN	Yes	Yes	Yes	Yes
NO	SPAREBANK 1 SR-BANK ASA	Yes	Yes	Yes	Yes
NO	DNB BANK ASA	Yes	Yes	Yes	Yes
PL	Powszechna Kasa Oszczędności Bank Polski SA	Yes	Yes	Yes	Yes
PL	Santander Bank Polska SA	Yes	Yes	Yes	Yes
PL	Bank Polska Kasa Opieki SA	Yes	Yes	Yes	Yes
PT	Santander Totta – SGPS SA	Yes	Yes	Yes	Yes
PT	LSF Nani Investments S.à.r.l.	Yes	Yes	Yes	Yes
PT	Caixa Geral de Depósitos SA	Yes	Yes	Yes	Yes
PT	Banco Comercial Português SA	Yes	Yes	Yes	Yes
RO	BRD-Groupe Société Générale SA	Yes	Yes	Yes	Yes
RO	Banca Transilvania	Yes	Yes	Yes	Yes
RO	Banca Comerciala Romana SA	Yes	Yes	Yes	Yes
SE	Länsförsäkringar Bank AB - group	Yes	Yes	Yes	Yes
SE	AB Svensk Exportkredit	Yes	Yes	Yes	Yes
SE	Swedbank - group	Yes	Yes	Yes	Yes
SE	Svenska Handelsbanken - group	Yes	Yes	Yes	Yes
SE	Skandinaviska Enskilda Banken - group	Yes	Yes	Yes	Yes
SE	SBAB Bank AB - group	Yes	Yes	Yes	Yes
SE	Kommuninvest - group	Yes	Yes	Yes	Yes
SI	Nova Ljubljanska Banka d.d. Ljubljana	Yes	Yes	Yes	Yes
SI	Biser Topco S.à.r.l.	Yes	Yes	Yes	Yes
SI	AGRI Europe Cyprus Limited	Yes	No	No	No
SI	SKB banka	Yes	Yes	Yes	Yes
SK	Všeobecná úverová banka, a.s.	Yes	Yes	No	Yes
SK	Tatra banka, a.s.	Yes	Yes	Yes	Yes
SK	Slovenská sporiteľňa, a.s.	Yes	Yes	Yes	Yes

[1] Swedbank Baltics AS took over Swedbank AS in Q32021. It was decided to link the time series for the two entities.
[2] Due to a group restructuring, Quintet succeeded to Precision Capital as head of group. It was decided to link the time series for the two entities.

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