European Banks: Potential Interest Rate Volatility Calls For Caution

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S&P Global Ratings

This report does not constitute a rating action

Key Takeaways

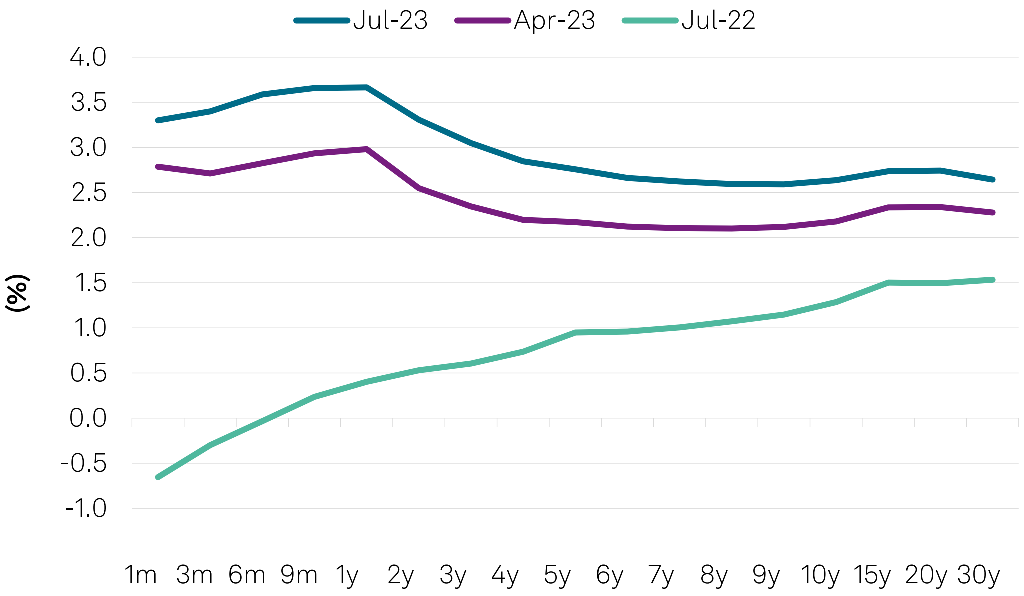
- European banks have benefited from the change in the interest rate (IR) paradigm, which is marked by a higher but inverted yield curve. Their diversified and deposit-rich funding franchises are a natural hedge when rates rise, and they had economic and regulatory incentives to reduce their exposure to IR risks.
- There are significant differences across systems and banks, however. Our analysis of regulatory disclosures from about 90 large European banks also highlights different sensitivities to potential IR shocks (to download the full data set, please click here).
- Our economists expect that a new change in the IR environment will occur in the next 12-18 months, marked by a steepening of the yield curve. This transition, largely driven by policy rate cuts and quantitative tightening, could lead to increased IR volatility.
- Overall exposure to IR shocks has increased for European banks in 2022, compared with 2021. From a net interest income (NII) perspective, some systems such as Ireland and, to a lesser extent, the U.K. and Malta seem relatively more exposed to a decline in interest rates. In particular, 21 surveyed banks project a large decline in NII under a parallel down scenario, which may trigger supervisory reaction in line with the European Banking Authority's (EBA) most recent regulatory technical standards.
- Ultimately, banks' appetite for IR risk and the quality of their IR risk management can be a key source of differentiation in their broader risk profile.

European Banks Have Benefited From The Rise In Interest Rates So Far

Yet, a persistently inverted yield curve would present significant challenges as funding costs catch up.

Higher (Though Inverted) Yield Curves In Europe...

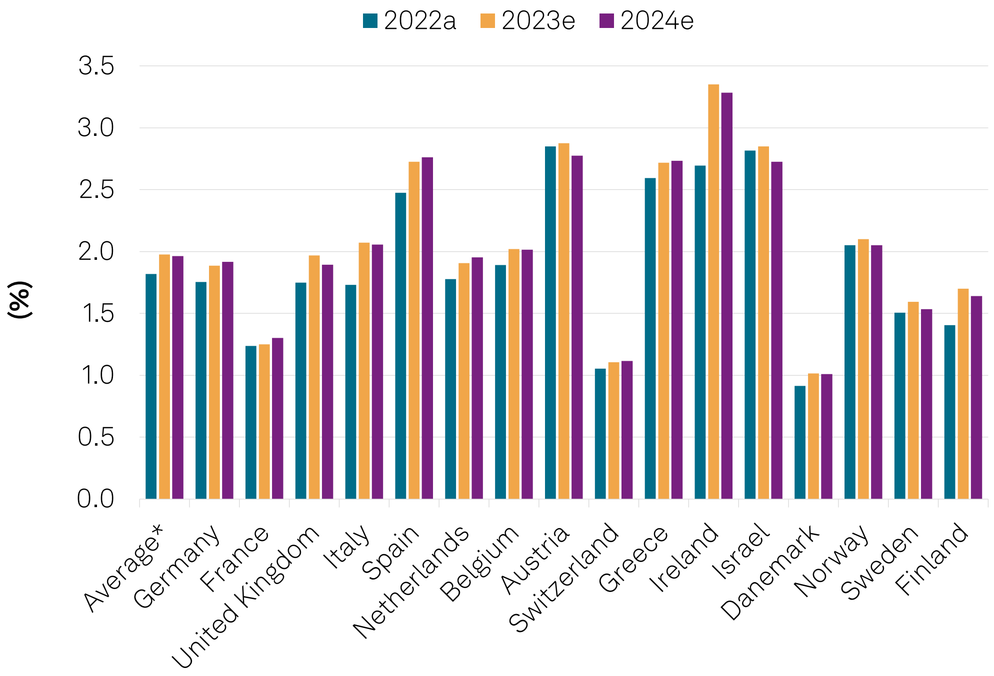
Evolution of eurozone government bond yields
Eurozone bond yield curve



Source: Capital IQ Pro.

...Led To An Increase In Net Interest Margins, Which Will Peak This Year

Evolution of the top 50 European rated banks' net interest margins



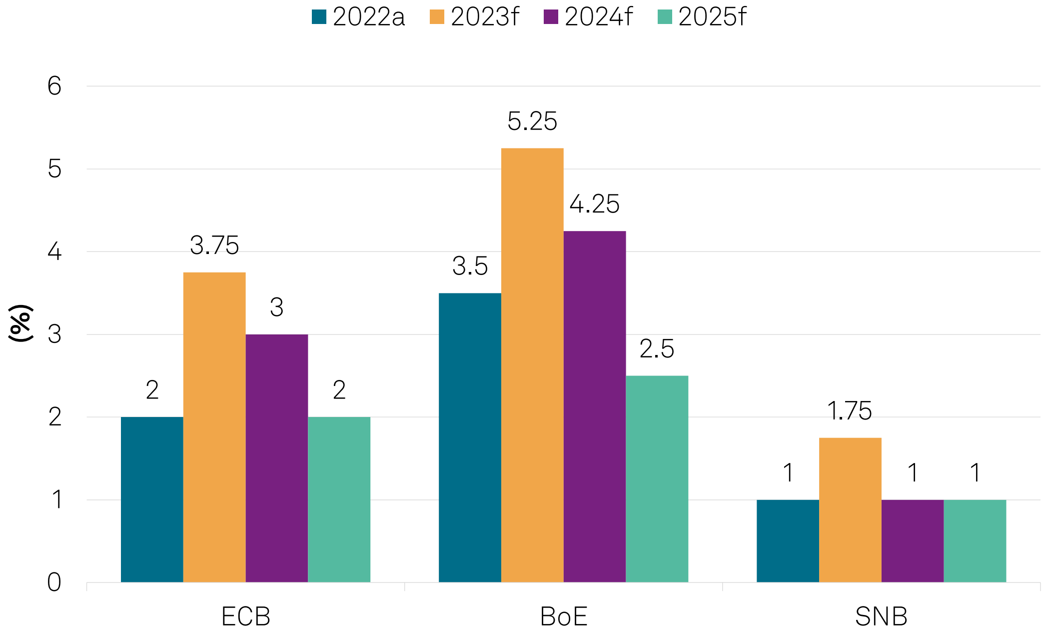
a--Actual. e--Estimate. Country names refer to the aggregation of rated banks with headquarters in the given country, but data are at a consolidated level for the rated banks. Source: S&P Global Ratings.

Our Economists Expect A Steeper Yield Curve In 2024 And 2025

Disinflation and heightened recession risks should lead to lower short-term policy rates, while quantitative tightening should keep long-term yields high or even higher. A higher and steeper yield curve would support bank margins in the long run.

Policy/Short-Term Rates Should Gradually Decrease From Mid-2024...

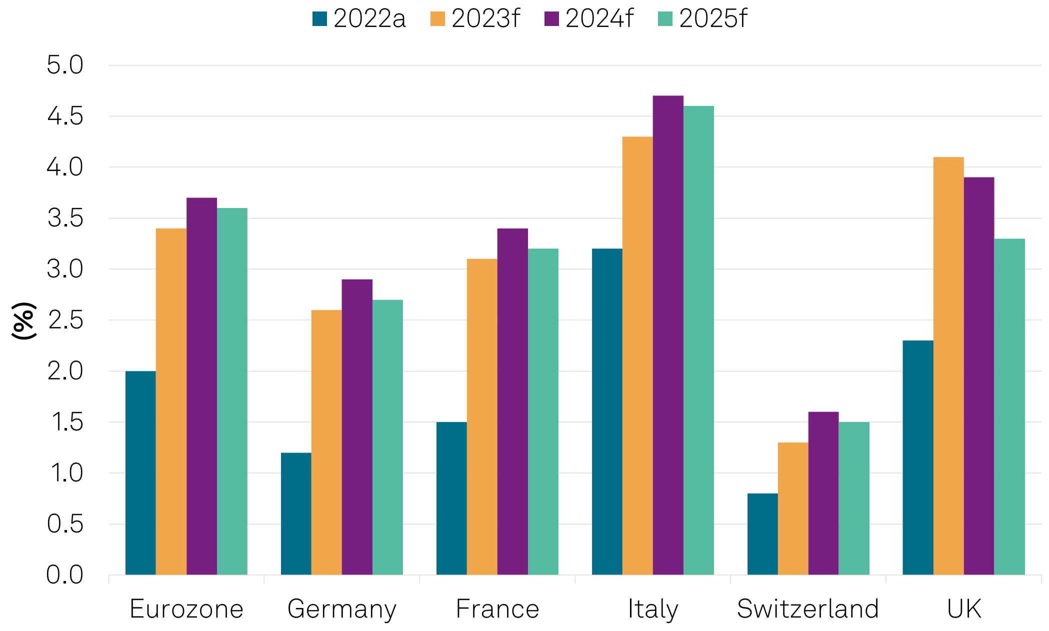
Key central bank policy rates (end of year)



a--Actual. f--Forecast. Source: S&P Global Ratings.

...While Long-Term Yields Should Remain High

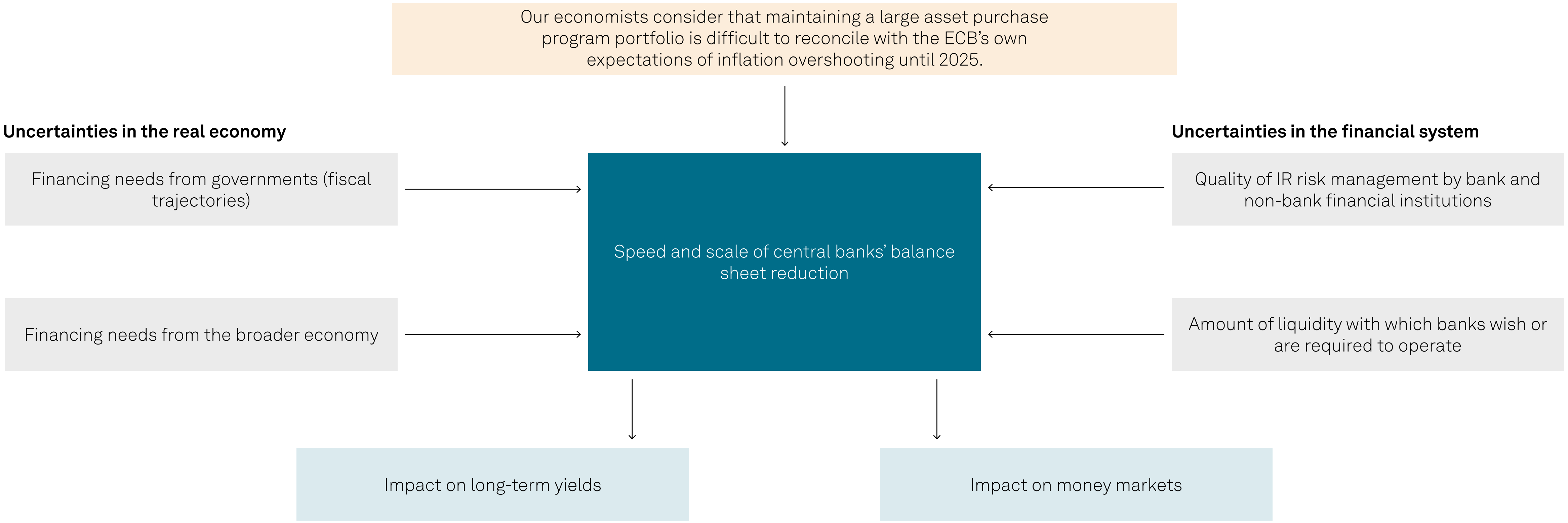
10-year government bond yields (yearly average)



a--Actual. f--Forecast. Source: S&P Global Ratings.

The Transition To A Steeper Yield Curve Could Be Bumpy

Quantitative tightening will require careful communication as central banks face multiple uncertainties when withdrawing excess liquidity from the system.



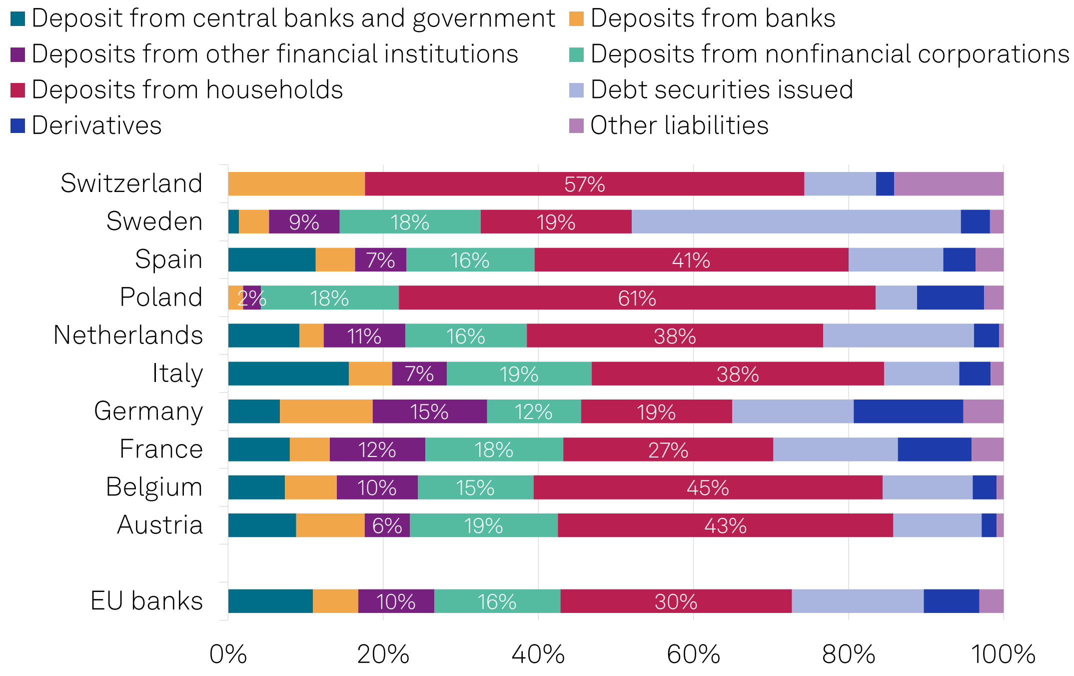
Banks need to manage IR risks and, since non-banks also face risks from IR and market volatility, counterparty credit risks to navigate the transition successfully.

Large Deposit Franchises Are Still A Natural Hedge When Rates Rise

Deposit franchises have so far continued to deliver stability and competitive benefits when rates go up.

Customer Deposits Are The Main Source of Funding...

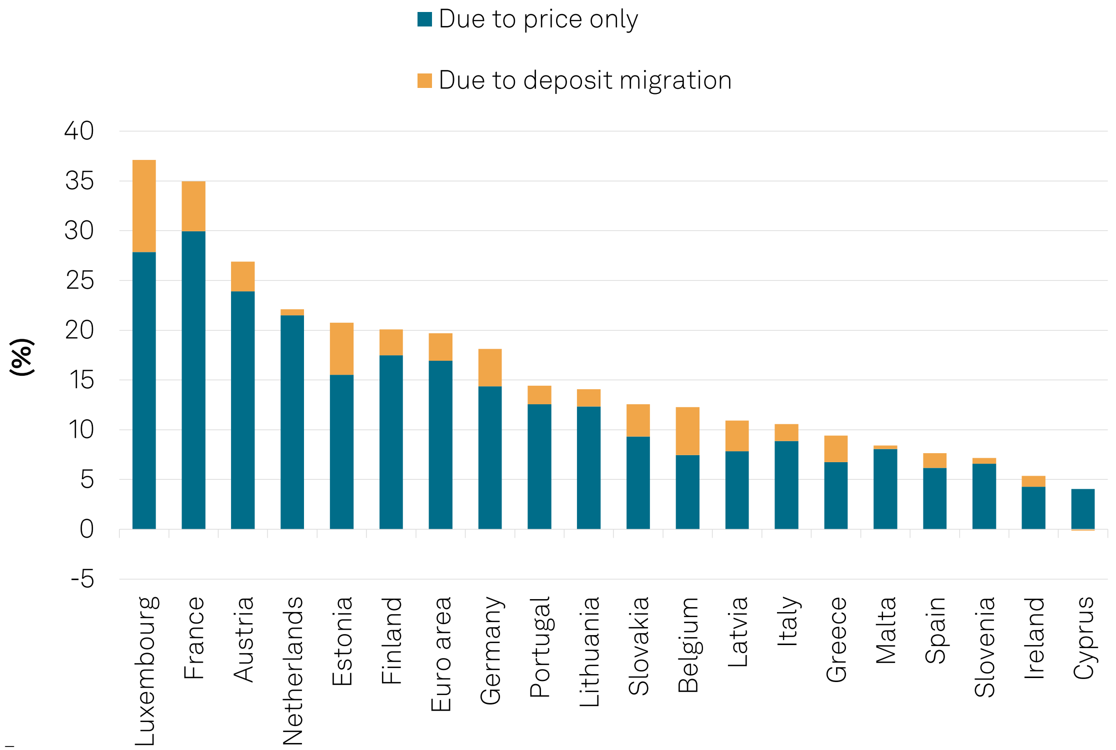
Composition of liability base of large EU banks, as of December 2022



Values were assigned based on the following mapping: deposits from households = customer deposits, deposits from banks = bank deposits, debt securities issues = bond issues and central mortgage institution loans, derivatives = negative replacement values of derivative financial instruments, other liabilities = sum of the remaining categories in the Swiss National Bank classification. Sources: EBA, S&P Global Ratings. Different source for Switzerland, which does not match with the EBA's categorization.

....And Have Repriced Only Modestly, Though With Differences

Deposit betas between June 2022 and April 2023 for large eurozone banks



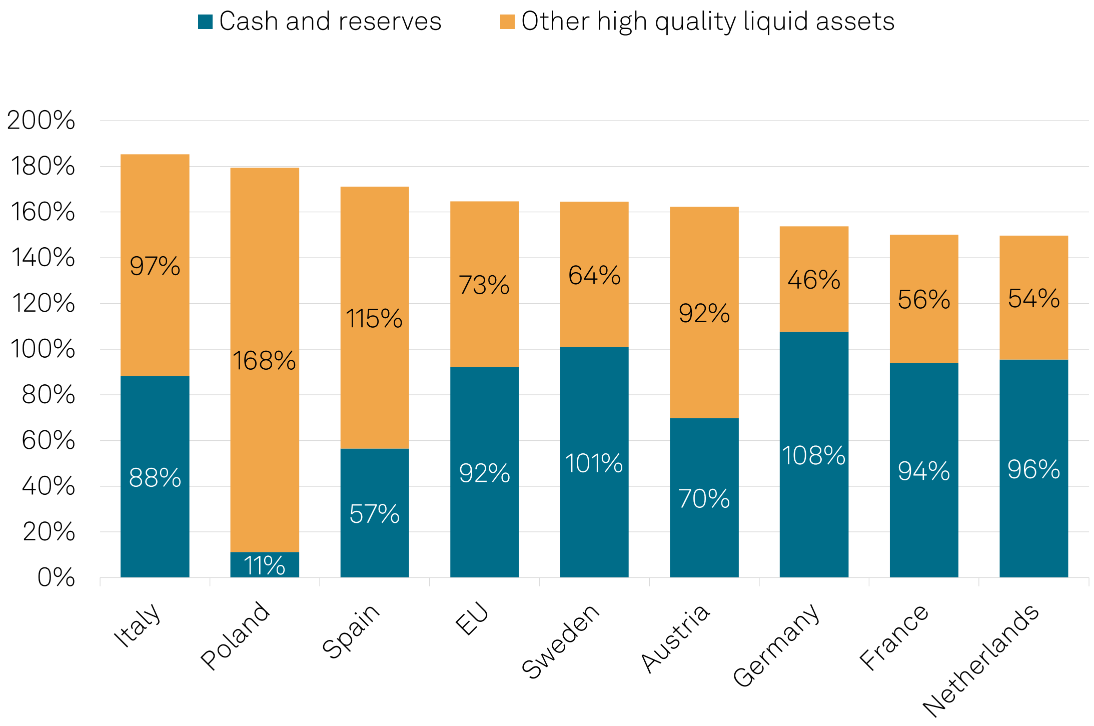
NB: Deposit betas are calculated here as the share of the increase in policy rates, which banks have passed through to customer deposits, on average. Sources: EBA, S&P Global Ratings.

European Banks Have Incentives To Limit And Manage IR Risks

A negative or limited risk-adjusted spread between central bank deposit rates and high-quality liquid assets bond yields reduces the opportunity cost of holding cash as liquidity reserve. The fair valuation of most debt securities, which affects regulatory capital, also incentivizes active IR hedging.

Cash Is Prominent Among (High) Liquidity Buffers...

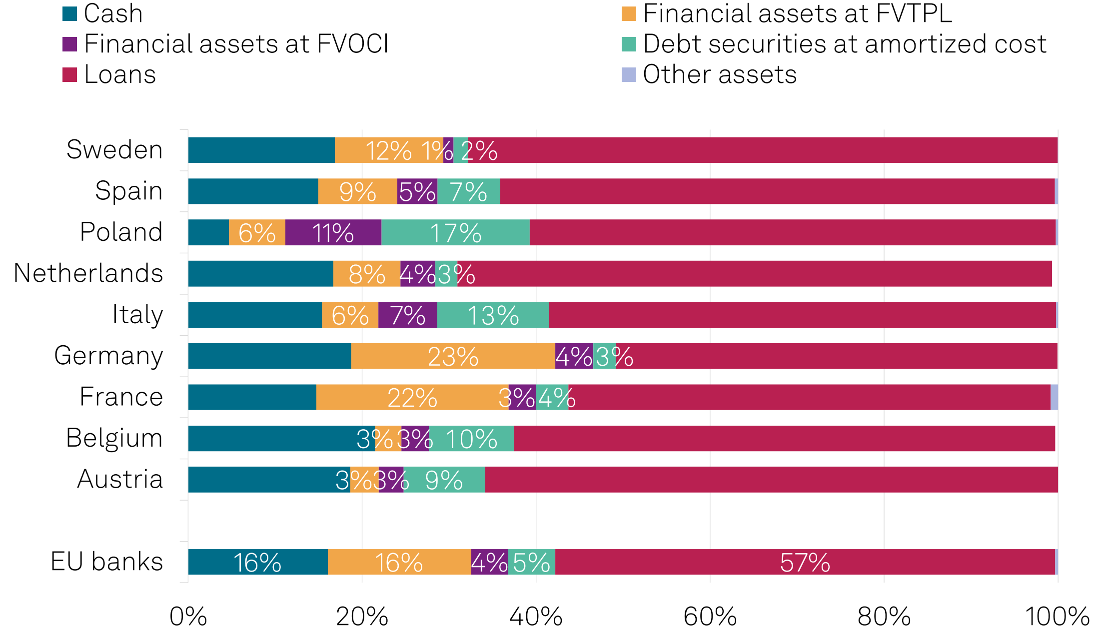
Large EU banks' liquidity buffers



Sources: EBA, S&P Global Ratings.

...And Most Non-Cash Liquid Assets Are Held At Fair Value

Large EU banks' asset base composition as of December 2022



FVOCI--Fair value through other comprehensive income. FVTPL--Fair value through profit or loss. Sources: EBA, S&P Global Ratings.

Regulatory Framework Further Strengthens Banks' IR Management

Model risks remain a key issue, but constraints in assumptions and multi-faceted approaches under Pillar 2 capital requirements provide flexibility in managing rising interest rates.

Trading book – subject to Pillar 1 capital requirements

Fully defined in the capital requirements regulation

- IR risks are one of the risk factors under market risk-weighted assets
- Capital requirements are calculated with either the standardized approach or banks' internal models
- Changes expected in 2025, with binding requirements based on the Fundamental Review of the Trading Book (for example, expected shortfall measure replacing value at risk)

Banking book – subject to Pillar 2 capital requirements

(High-level) definition in the capital requirements directive, specified in EBA guidelines and standards (governance, modelling risks, etc.)

Internal Management System (IMS)

- Banks should manage exposures to changes in the economic value of equity (EVE) and in NII, based on own assumptions/models but with some constraints (overall cap of five-year assumed maturity for all deposits)
- IMS should also cover credit spread risks

Standardized Approach (SA)

- Applied if supervisors judge IMS as unsatisfactory
- More constraints on slotting of cash flows and behavioral assumptions than under IMS (for example, maturity restrictions for specific deposit products)

Simplified Standardized Approach (SSA)

- Reserved for small and non-complex banks, unless supervisor requires SA
- Methodology "at least as conservative" as SA (fixed slotting and assumptions)

Supervisory Outlier Test (SOTs)

- Reported by banks in their Pillar 3 report
- Results are discussed as part of the supervisory review. Regulation specifies triggers for potential supervisory intervention: EVE decline > 15% of Tier 1 capital or NII decline > 5% of Tier 1 capital in any of the standardized scenarios

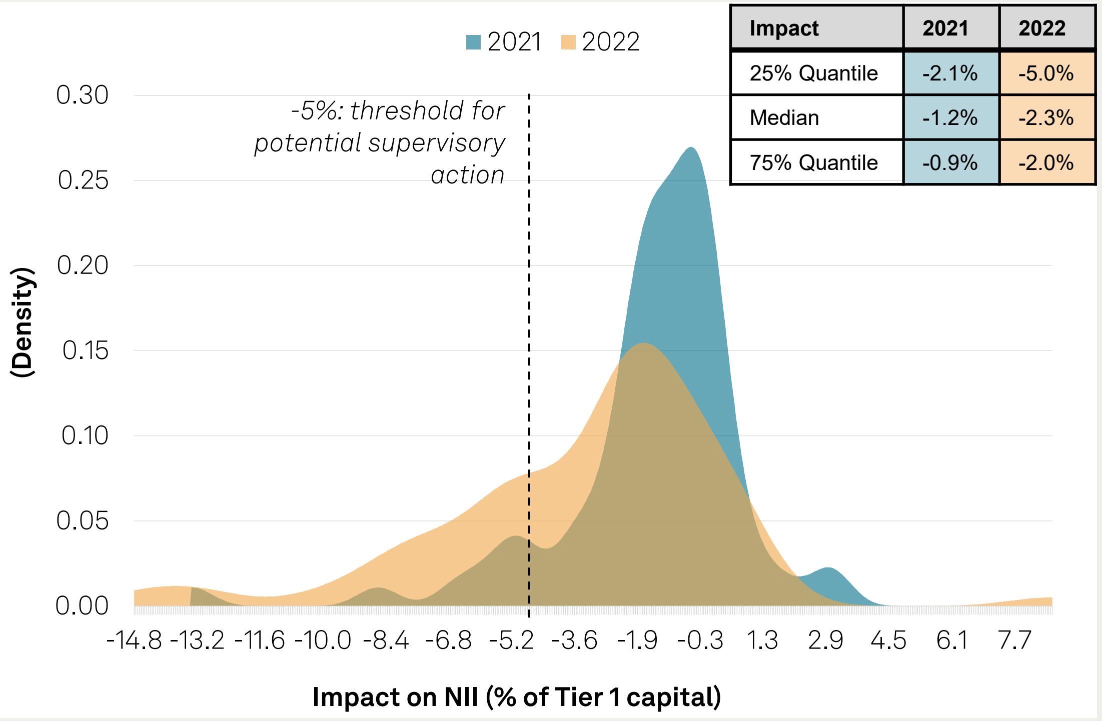
Supervisory Outlier Tests Are Among The IR Risk Exposure Measures

- We assess banks' exposure to IR risks based on several quantitative and qualitative elements, as detailed in our criteria for financial institutions.
- In that context, we view supervisory outlier test (SOT) results as one of several measures of banks' exposure to IR risks. SOT results are now regularly disclosed by banks and are prepared under regulatory guidance, which ensures approaches are somewhat aligned.
- That said, we do not consider SOT results as fully comparable across banks and jurisdictions. This is because SOT results depend on the envisaged scenarios and modelling choices as well as banks' behavioral assumptions, which will likely vary greatly. More specifically:
  - The envisaged standardized IR shocks differ across currencies--for example, 200 basis points (bps) for parallel EUR shocks versus 250 bps for parallel GBP shocks--and some banks may have floored the interest rate post parallel-down shock at a given level.
  - All capital instruments are excluded from the calculation of change in EVE. This is despite the fact that banks may hedge the IR risk from their capital. The resulting hedges, but not the underlying hedged position, are taken into account in the calculation.
  - To calculate changes in EVE, banks can choose to include or exclude commercial margins from calculations.
  - Regulation does not constrain banks' behavioral assumptions used in SOTs, including the assumed duration of non-maturing deposits.
- The following slides show the results of our review of about 90 large European banks' SOT disclosures (the full list of surveyed banks is in the Appendix) and should be considered with these caveats in mind.

SOT Results At Year-End 2022 | Aggregated Results

Negative Exposure Of NII (To Lower Rates) Has Increased Year-On-Year...

Impact of a **parallel down shock** in interest rates on NII

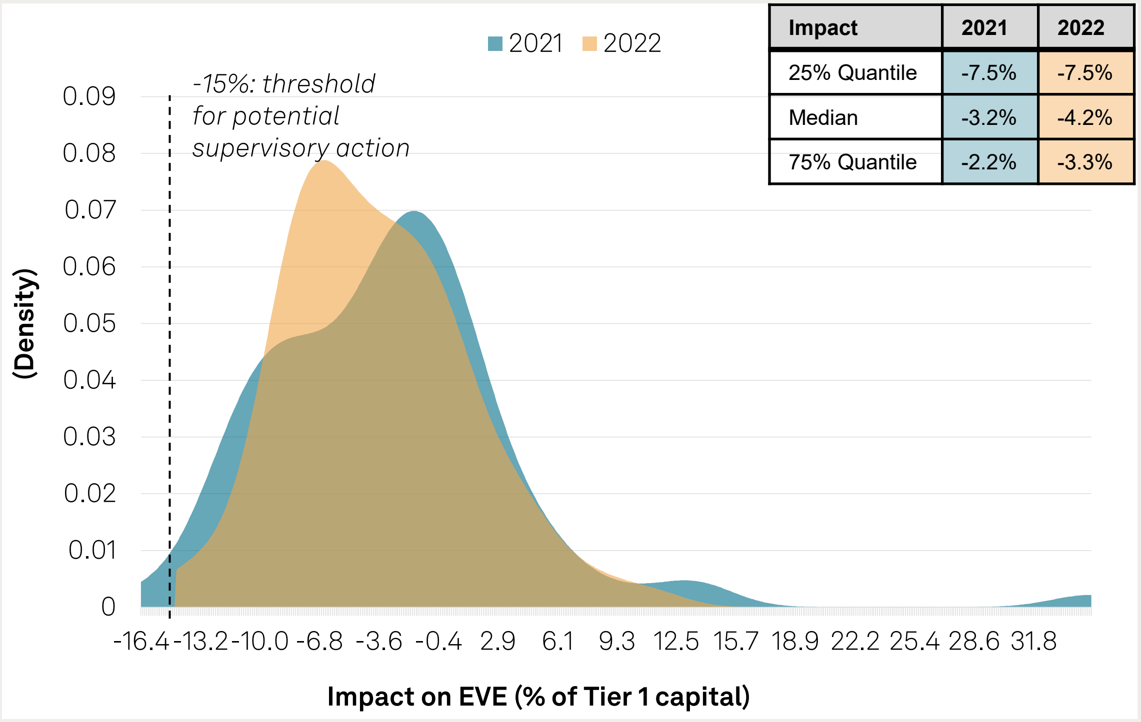


Impact	2021	2022
25% Quantile	-2.1%	-5.0%
Median	-1.2%	-2.3%
75% Quantile	-0.9%	-2.0%

Sources: Bank disclosures, S&P Global Ratings. Swiss banks are excluded from this chart due to special modeling assumptions.

...And So Has The Negative Exposure Of EVE (To Higher Rates)

Impact of a **parallel up shock** in interest rates on EVE



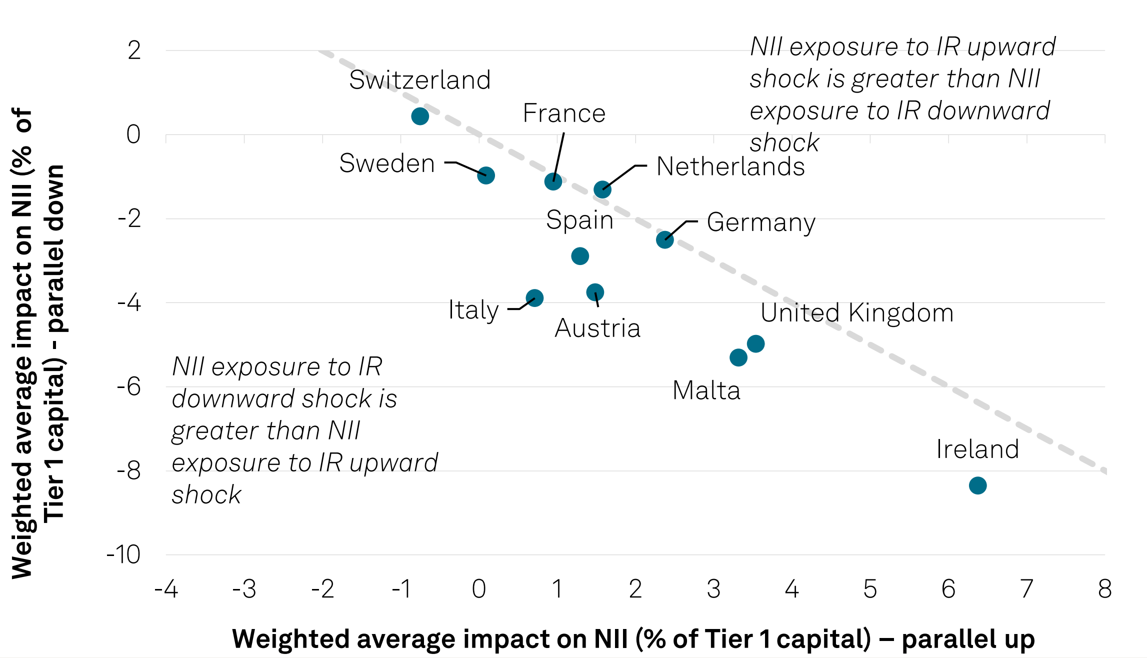
Impact	2021	2022
25% Quantile	-7.5%	-7.5%
Median	-3.2%	-4.2%
75% Quantile	-2.2%	-3.3%

Sources: Bank disclosures, S&P Global Ratings.

SOT Results At Year-End 2022 | System-Level Comparisons

Net Interest Income Sensitivity Seems Relatively Higher In Ireland, The U.K., And Malta...

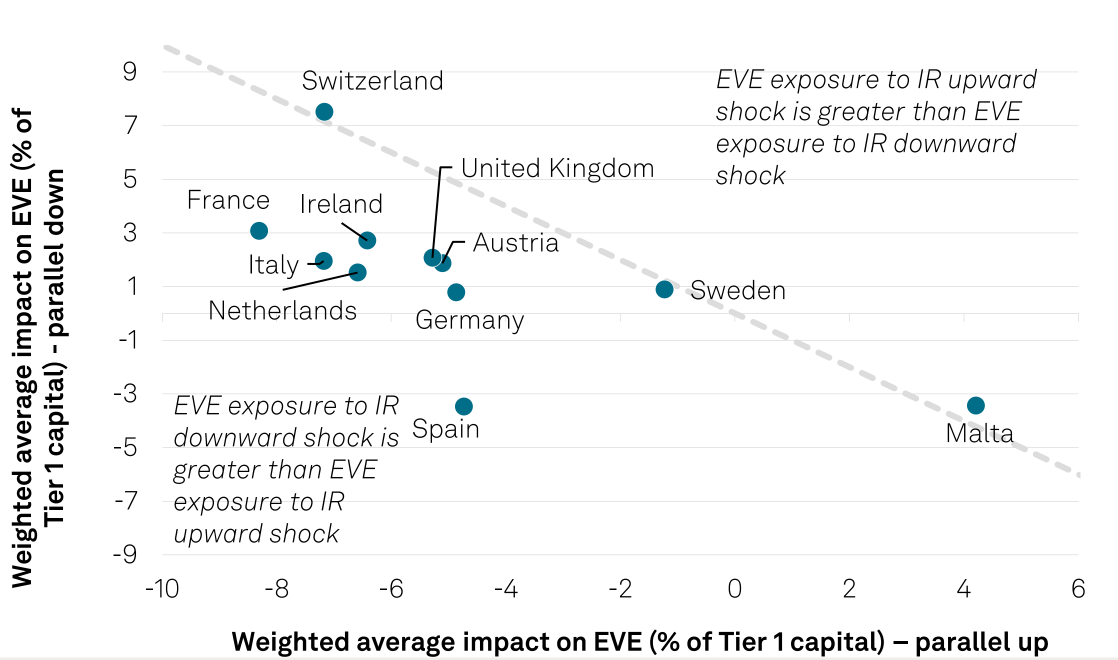
Impact of a parallel down/up shock in interest rates on NII
Weighted average



Country names refer to the aggregation of banks with headquarters in the given country, but data are at a consolidated level for each bank. Countries with at least three banks are shown. Sources: Bank disclosures, S&P Global Ratings. Impact on NII (% of Tier 1 Capital) is missing for a number of Spanish banks, thus the country weighted average is only made up of three banks and not all the banks that are listed in the appendix table.

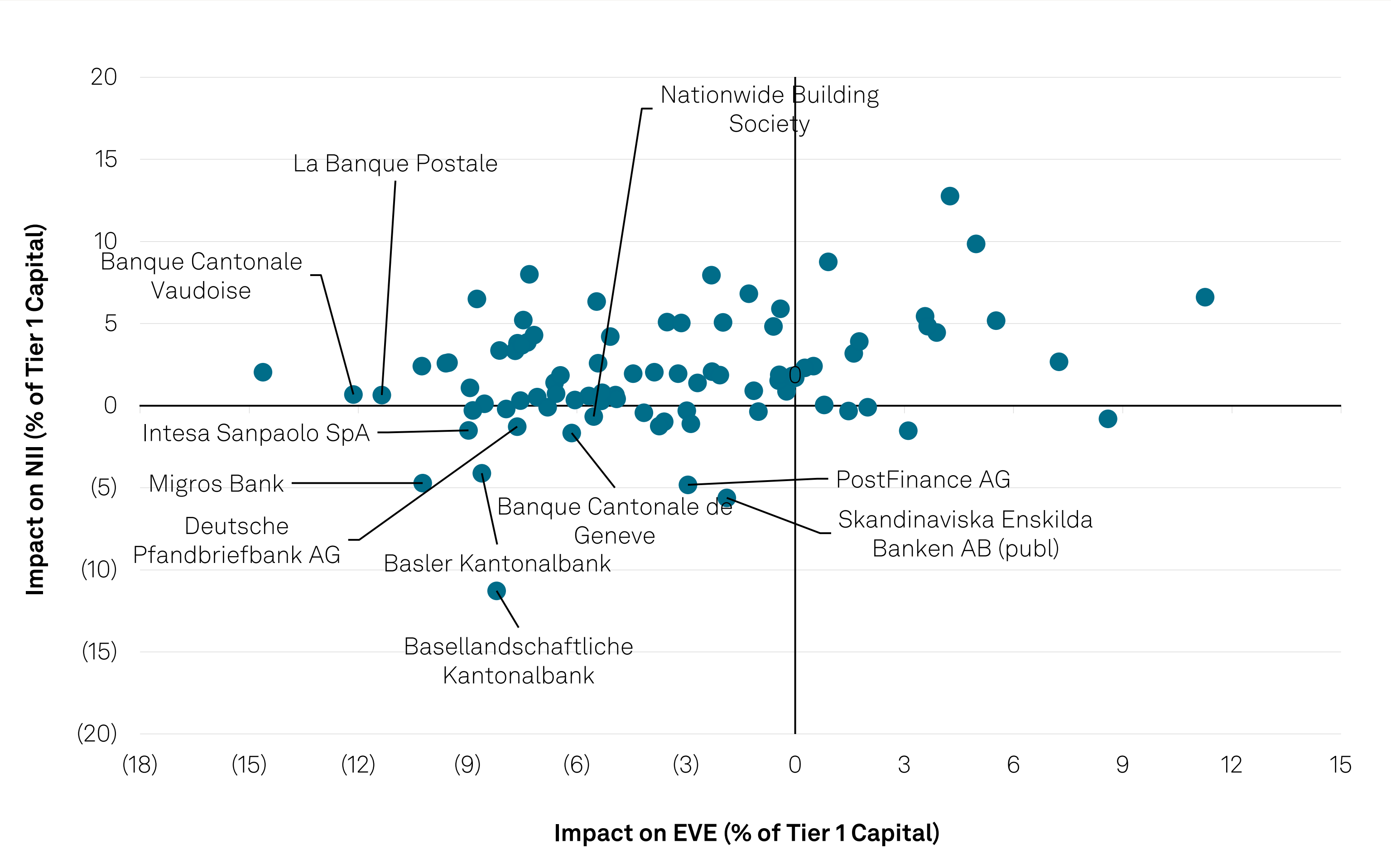
...While EVE Sensitivity Seems Higher In France And Italy

Impact of a parallel down/up shock in interest rates on EVE
Weighted average



Country names refer to the aggregation of banks with headquarters in the given country, but data are at a consolidated level for each bank. Countries with at least three banks are shown. Sources: Bank disclosures, S&P Global Ratings.

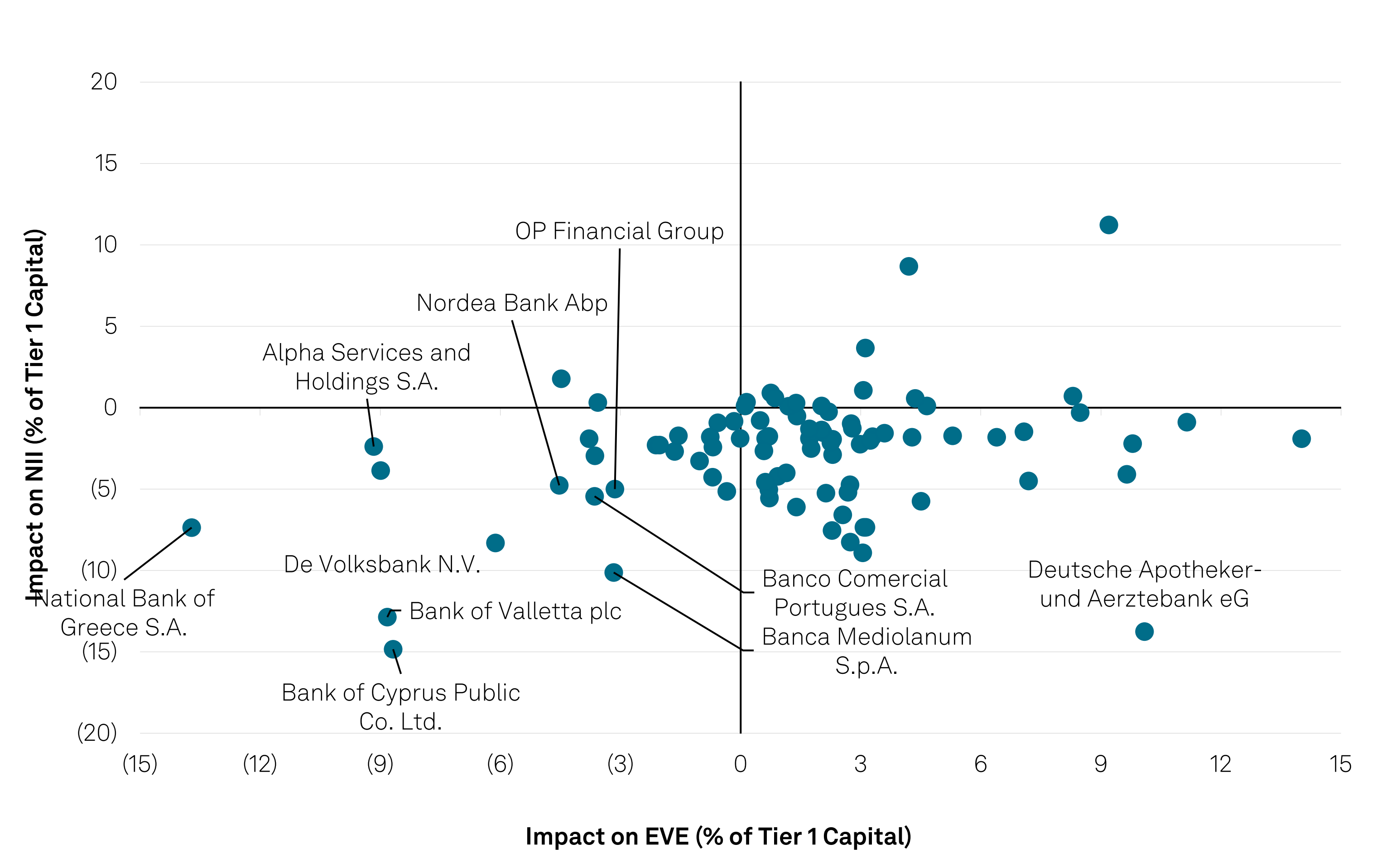
SOT Results At Year-End 2022 | Bank-Level Comparisons For A Parallel Up Scenario



- Under a parallel up shock, about 80% of surveyed banks project a negative EVE impact.
- The impact on NII is positive for about 75% of surveyed banks.
- Banks with a negative impact on NII are mainly Swiss banks. This is largely due to a supervisory constraint whereby no increased remuneration of central bank reserves can be assumed under the parallel up scenario.

Sources: Bank disclosures, S&P Global Ratings. Only rated banks are highlighted. Some Spanish and Slovenian banks are missing because the impact on NII (%of Tier 1 Capital) is not available.

SOT Results At Year-End 2022 | Bank-Level Comparisons For A Parallel Down Scenario



- Under a parallel down scenario, about 80% of surveyed banks project a negative impact on NII.
- 21 surveyed banks project large NII declines above the 5% supervisory threshold. These banks will likely be subject to scrutinity and will need to reduce their exposure to IR risks.
- On the contrary, the parallel down scenario will likely have a positive impact on EVE for about 70% of surveyed banks.

Sources: Bank disclosures, S&P Global Ratings. Only rated banks are highlighted. Some Spanish and Slovenian banks are missing because the impact on NII (% of Tier 1 Capital) is not available.

Appendix

Related Research

- European Banks: Protecting Liquidity Will Come At An Increasing Cost, June 29, 2023
- Economic Outlook Eurozone Q3 2023: Short-Term Pain, Medium-Term Gain, June 26, 2023
- Economic Outlook U.K. Q3 2023: Higher Rates Start To Bite, June 26, 2023
- Credit Conditions Europe Q2 2023 : Costs Rising To Cure Inflation, March 28, 2023
- European Banks Can Weather The Market Turmoil, March 21, 2023
- European Banks: Protecting Liquidity Will Come At An Increasing Cost, Jan. 29, 2023
- European Banks: Resilient And Divergent As The Economic Reset Kicks In, Jan. 23, 2023
- Will Unrealized Losses On Financial Assets Affect Ratings On European Banks?, Jan. 19, 2023

SOT | Detailed Results At Year-End 2022 | Impact On NII (% Of Tier 1 Capital)

IR shock	Year	Minimum	25% quantile	Median	75% quantile	Maximum	Average	Weighted average
Parallel up	2021	-4.4	1.2	2.6	2.8	10.4	3.1	2.6
Parallel up	2022	-5.6	0.4	2.0	2.4	12.8	2.5	1.9
Parallel down	2021	-13.3	-2.1	-1.2	-0.9	3.0	-1.6	-1.9
Parallel down	2022	-14.8	-5.0	-2.3	-2.0	8.7	-3.3	-2.7

SOT | Detailed Results At Year-End 2022 | Impact On EVE (% Of Tier 1 Capital)

IR shock	Year	Minimum	25% quantile	Median	75% quantile	Maximum	Average	Weighted average
Parallel up	2021	-16.4	-7.5	-3.2	-2.2	34.9	-3.0	-5.0
Parallel up	2022	-14.6	-7.5	-4.2	-3.3	11.3	-3.7	-5.6
Parallel down	2021	-23.2	-0.5	1.2	1.3	34.4	1.8	0.2
Parallel down	2022	-13.7	-0.7	1.4	2.0	14.0	1.1	1.5
Steepener	2021	-10.0	-0.7	0.1	0.2	13.9	-0.0	-0.0
Steepener	2022	-10.3	-0.8	0.0	0.3	11.6	0.1	0.1
Flattener	2021	-31.0	-2.3	-0.6	-0.5	16.8	-0.6	-1.4
Flattener	2022	-10.0	-2.5	-0.9	-0.8	11.2	-0.9	-1.5
Short up	2021	-6.7	-2.9	-1.6	-1.5	14.6	-1.0	-1.7
Short up	2022	-13.9	-4.2	-2.4	-1.9	10.4	-2.1	-3.2
Short down	2021	-13.8	0.0	0.9	0.9	8.3	0.6	0.5
Short down	2022	-9.3	-0.0	1.2	1.4	12.8	0.9	1.6

Sources: Bank disclosures, S&P Global Ratings. Swiss banks are excluded from table on NII impact due to special modeling assumptions.

SOT | Sample Of Banks 2022

Bank	Country
Addiko Bank AG	Austria
BAWAG Group AG	Austria
Erste Group Bank AG	Austria
Raiffeisen Bank International AG	Austria
Argenta Spaarbank N.V.	Belgium
KBC Group N.V.	Belgium
Bank of Cyprus Public Co. Ltd.	Cyprus
Danske Bank A/S	Denmark
Jyske Bank A/S	Denmark
Nykredit Realkredit A/S	Denmark
Luminor Holding AS	Estonia
Nordea Bank Abp	Finland
OP Financial Group	Finland
BNP Paribas	France
BPCE	France
Bpifrance	France
Groupe Credit Agricole	France
La Banque Postale	France
RCI Banque	France
Societe Generale	France
Aareal Bank AG	Germany
Bayerische Landesbank	Germany
Commerzbank AG	Germany
DekaBank Deutsche Girozentrale	Germany

Bank	Country
Deutsche Apotheker- und Aerztebank eG	Germany
Deutsche Bank AG	Germany
Deutsche Pfandbriefbank AG	Germany
DZ BANK AG Deutsche Zentral-Genossenschaftsbank	Germany
Hamburg Commercial Bank AG	Germany
J.P. Morgan SE	Germany
Landesbank Baden-Wuerttemberg	Germany
Landesbank Hessen-Thueringen Girozentrale	Germany
Norddeutsche Landesbank -Girozentrale-	Germany
Volkswagen Bank GmbH	Germany
Alpha Services and Holdings S.A.	Greece
National Bank of Greece S.A.	Greece
OTP Bank PLC	Hungary
Landsbankinn hf.	Iceland
AIB Group PLC	Ireland
Bank of Ireland Group plc	Ireland
Permanent TSB Group Holdings PLC	Ireland
Bank Hapoalim B.M.	Israel
Banca Mediolanum S.p.A.	Italy
BANCA MONTE DEI PASCHI DI SIENA S.p.A	Italy
Banco BPM S.p.A.	Italy
Credito Emiliano Holding S.p.A	Italy
Iccrea Banca SpA	Italy
Intesa Sanpaolo SpA	Italy

Perimeter for Banque et Caisse d’Épargne de l'Etat, Luxembourg, is solo and not consolidated. Sources: Bank disclosures, S&P Global Ratings. Table includes banks where the impact on EVE or the impact on NII is available.

SOT | Sample Of Banks 2022

Bank	Country
Mediobanca SpA	Italy
UniCredit SpA	Italy
Banque et Caisse d'Epargne de l'Etat, Luxembourg	Luxembourg
Banque Internationale a Luxembourg	Luxembourg
Bank of Valletta plc	Malta
HSBC Bank Malta p.l.c.	Malta
MDB Group Limited	Malta
ABN AMRO Bank N.V.	Netherlands
Cooperatieve Rabobank U.A.	Netherlands
De Volksbank N.V.	Netherlands
ING Groep N.V.	Netherlands
DNB ASA	Norway
Alior Bank S.A.	Poland
Bank Polska Kasa Opieki S.A.	Poland
Banco Comercial Portugues S.A.	Portugal
Nova Ljubljanska Banka D.D.	Slovenia
Banco Bilbao Vizcaya Argentaria S.A.	Spain
Banco de Sabadell S.A.	Spain
Banco Santander S.A.	Spain
Bankinter S.A.	Spain
CaixaBank S.A.	Spain
Ibercaja Banco S.A.	Spain
Kutxabank S.A.	Spain
SBAB Bank AB (publ)	Sweden

Bank	Country
Skandinaviska Enskilda Banken AB (publ)	Sweden
Svenska Handelsbanken AB	Sweden
Swedbank AB	Sweden
Aargauische Kantonalbank	Switzerland
Banque Cantonale de Geneve	Switzerland
Banque Cantonale Vaudoise	Switzerland
Basellandschaftliche Kantonalbank	Switzerland
Basler Kantonalbank	Switzerland
J. Safra Sarasin Holding Ltd.	Switzerland
Luzerner Kantonalbank	Switzerland
Migros Bank	Switzerland
PostFinance AG	Switzerland
Schwyzer Kantonalbank	Switzerland
UBS Group AG	Switzerland
Zuercher Kantonalbank	Switzerland
Barclays PLC	United Kingdom
HSBC Holdings PLC	United Kingdom
Lloyds Banking Group PLC	United Kingdom
Nationwide Building Society	United Kingdom
NatWest Group plc	United Kingdom
Standard Chartered PLC	United Kingdom
Virgin Money UK PLC	United Kingdom

Sources: Bank disclosures, S&P Global Ratings.