3. STRESS TESTS

The Central Bank of Malta conducts solvency and liquidity stress tests to assess banks' resilience to severe but plausible adverse scenarios. These frameworks are regularly updated to reflect emerging risks and regulatory developments.

This chapter reviews the results of the stress-testing exercises presented in the FSR 2025 and assesses how these have evolved in light of developments during the first half of 2026. Given that the Macro Stress Test is run at annual frequency, this chapter examines the liquidity and the IRRBB frameworks exclusively.

The chapter also presents the results of the newly introduced cyber stress-testing framework in a dedicated Special Feature A. Given the increasing digitalisation and interconnectedness of the financial sector, cyber incidents can have implications beyond operational disruptions, potentially affecting liquidity conditions and financial stability. The cyber stress-testing framework applies transaction-level T2 data to examine how payment disruptions affect banks' liquidity and propagate through the banking system.

3.1 Liquidity stress test

The liquidity stress test results continue to indicate the banking sector's strong capacity to withstand short- and longer-term liquidity shocks. The assessment is based on three liquidity frameworks: the Persistent Deposit Withdrawals (PDW), LCR and the NSFR. The PDW framework assesses banks' capacity to withstand a four-week deposit run scenario, the LCR framework captures short-term resilience over 30 days, and the NSFR framework assesses the stability of banks' funding structures over one year. The scenarios are hypothetical and are intended to identify potential vulnerabilities at the individual-bank and system-wide levels rather than to forecast liquidity levels.

Table 3.1 compares the results of the above-mentioned tests as at June 2026 with those reported in the FSR 2025, which were based on December 2025 data. The table provides a snapshot of the key outcomes and underlying drivers while further details and developments are discussed in the sections that follow. For each bank category, the table presents the results under the baseline scenario and the hypothetical adverse scenario that generates the largest impact within each framework, for the individual bank categories.[1] The coloured circles indicate whether the banking category, on aggregate, breaches the relevant threshold considered. The arrows illustrate whether the overall assessment improved, deteriorated, or remained broadly unchanged relative to the previous vintage. A brief description highlights the main driver of the observed outcome.

As illustrated in Table 3.1, the results point to a generally favourable aggregate liquidity position across all three bank categories. The PDW framework suggests that banks are able to absorb significant outflows through existing counterbalancing capacity (CBC), thereby meeting liquidity needs under the extreme but plausible conditions considered in the test.

Similarly, the LCR results indicate that credit institutions, at the aggregate level, maintain sufficient HQLAs to withstand the severe short-term funding shocks considered, although individual bank results vary.

The NSFR framework indicates resilience in banks' aggregate longer-term funding structures, although international banks exhibit relatively greater sensitivity under the most severe stress assumptions, as reflected by the yellow grading. Nonetheless, the aggregate stressed NSFR remains within the 110%–119% range, comfortably above the regulatory minimum requirement of 100%. Consequently, the deterioration observed under a stress scenario does not signal a funding vulnerability, but rather a relative reduction in available stable buffers, reflecting a sensitivity to the assumed shocks.

[1] The baseline for the LCR and NSFR frameworks reflects the regulatory assumptions and haircuts prescribed in the applicable regulations. In contrast, the PDW framework uses internally calibrated assumptions and haircuts as a complementary short-term liquidity assessment. Further details on the baseline and adverse scenarios are available in FSR 2023, FSR 2021 and FSR 2018, together with a more concise description of the assumptions underlying each scenario presented throughout the current report.

Table 3.1
SUMMARY OF LIQUIDITY STRESS TESTING RESULTS

Framework	Core domestic banks	Non-core domestic banks	International banks	Change[1]	Main driver
PDW	●	●	●	↔	Retail deposits are more prominent among core domestic banks, while non-core domestic and international banks exhibit a more balanced distribution of deposits across retail, corporate, and other customer sectors.
	●	●	●	↔	The CBC is primarily driven by debt securities in core domestic banks, while overnight deposits are the main contributor for non-core domestic and international banks.
LCR:					
Baseline	●	●	●	↓ ↑	Negligible changes for core domestic banks Reduction in net liquidity outflows for non-core domestic and international banks
Adv. Scenarios (largest impact)	●	●	●	↑	Adv. Scenarios (largest impact) Committed facilities for core domestic banks (AS3)
NSFR:					
Baseline	●	●	●	↔ ↑	Negligible variations for core domestic and international banks Strong available stable funding (ASF) for non-core domestic banks
Adv. Scenarios (largest impact)	●	●	●	↓ ↓	Higher run-off for retail and wholesale deposits, the deterioration of some loans into non-performing exposures, and market pressures for non-core domestic and international banks (AS2). Committed facilities for core domestic banks (AS4)

[1] Change refers to the overall assessment relative to the previous stress-testing exercise: ↑ improving; ↔ broadly unchanged; ↓ deteriorating.

● (>120%): Threshold comfortably exceeded.

● (110%-119%): Vulnerabilities identified, but adequate buffer remains.

PDW classification: ● indicates banks can withstand the full four-week withdrawal horizon;
● indicates failure to withstand the full horizon.

Abbreviations: AS1 = Adverse Scenario 1; AS2 = Adverse Scenario 2; AS3 = Adverse Scenario 3; AS4 = Adverse Scenario 4.

Overall, the three liquidity frameworks indicate aggregate resilience to the shocks considered, with existing liquidity buffers remaining sufficient to absorb the losses generated under stressed conditions. Taken all together, the predominance of green indicators highlights the banking sector's capacity to withstand severe, but plausible liquidity shocks, thereby preserving financial stability.

3.1.1 Persistent deposit withdrawals

The PDW framework tests banks' ability to withstand PDW, over a four-week horizon, by comparing the assumed 100% run-off of outflows with each bank category's CBC. The CBC is determined according to the predefined hierarchy of liquid assets, ranging from cash, central bank placements, and eligible securi-

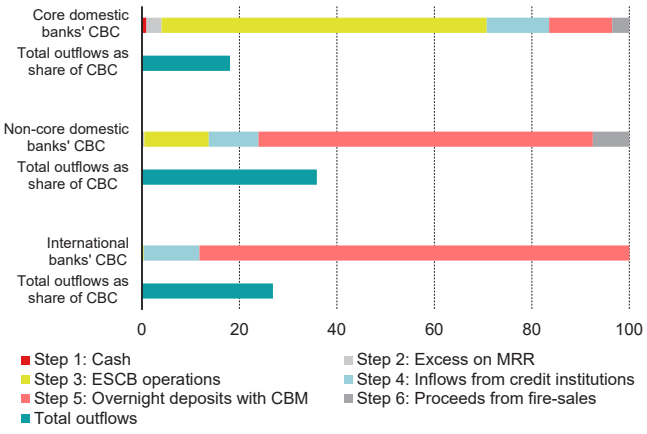
Figure 3.1
ASSUMED HIERARCHY FOR CBC



Source: Central Bank of Malta.

ties that may be used as a source of additional liquidity in a fire sale scenario (see Figure 3.1).[2,3]

Chart 3.1
COMPOSITION OF CBC AND TOTAL OUTFLOWS AS SHARE OF CBC
(per cent)



Source: Central Bank of Malta calculations.

In the first half of 2026, the CBC for core and non-core domestic banks remained broadly unchanged, with core domestic banks' CBC composition heavily concentrated in instruments eligible for Standard Monetary Policy Operations. This share, however, contrasts with non-core domestic and international banks, which relied more on Central Bank of Malta placements, particularly overnight deposits. Compared with December 2025, the most notable changes were among international banks, whose share of total CBC held in overnight deposits rose by 19 percentage points to 88%, accompanied by a reduction in cash and MMR holdings.

The assumed high deposit withdrawals under the adverse scenario would absorb 27%, 37% and 18% of the available CBC for core, non-core and international banks, respectively. This would result in still ample liquidity buffers and is a comparable outcome with the preceding vintage (see Chart 3.1).

At the individual bank level, most banks would manage to sustain the assumed deposit outflows over the four-week horizon. Some institutions would also need to draw on overnight deposits held with the Central Bank of Malta within the defined CBC hierarchy. Nevertheless, the majority of banks would continue to meet the assumed liquidity outflows over the four-week horizon, retaining, on average, an excess of CBC of at least 14% to absorb further withdrawals beyond the tested horizon.

3.1.2 Liquidity coverage ratio

The LCR stress test assesses banks' capacity to absorb short-term liquidity outflows over a 30-day period. The baseline follows the regulatory assumptions applicable to the LCR, while the three adverse scenarios

[2] For more details on the framework's methodology and the setting of the assumed hierarchy for the CBC, refer to Section 3.2.1 of the FSR 2023.

[3] Following the adoption by the Governing council of the ECB of Decision (EU) 2026/812 under which excess reserves by eligible counterparties that meet the relevant access conditions will be remunerated at the deposit facility rate (DFR) as from 17 June 2026, the CBC hierarchy will be updated accordingly as from the next vintage.

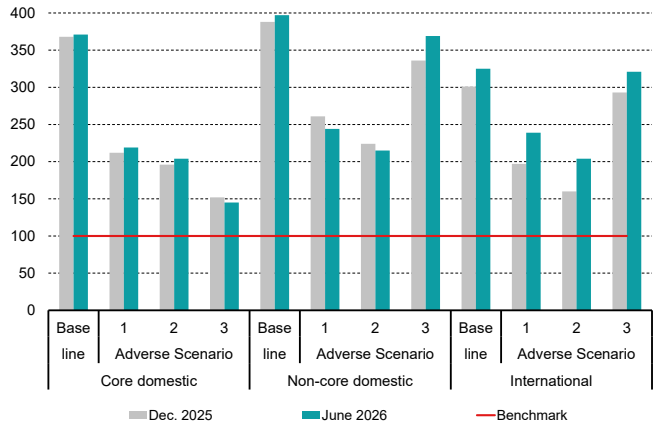
Table 3.2
DESCRIPTION OF LCR FRAMEWORK'S BASELINE AND ADVERSE SCENARIOS

Scenario	Description
Baseline	Haircuts and outflow/inflow rates set out in the (EU) 2015/61
Adverse:	
Scenario 1	Higher outflows compared to the LCR Delegated Regulation
Scenario 2	Scenario 1 with additional withdrawals from both resident and non-resident time deposits
Scenario 3	Baseline scenario with full withdrawal of committed facilities to NFCs and households

Source: Central Bank of Malta.

progressively test higher deposit outflows, withdrawals from resident and non-resident term deposits, and full withdrawal of committed facilities (see Table 3.2).

Chart 3.2
STRESS TEST RESULTS – LCR RESULTS FOR ALL BANKS
(per cent)



Source: Central Bank of Malta calculations.

Under the baseline, the aggregate LCR stood at 370%, 397% and 325% for core domestic, non-core domestic and international banks, respectively. Compared with December 2025, the ratios increased by 2.6, 9.4 and 24.6 percentage points, respectively. For non-core domestic and international banks, the increases mainly reflected lower net liquidity outflows, while HQLA holdings remained broadly stable. In contrast, both the numerator and denominator increased marginally for core domestic banks (see Chart 3.2).

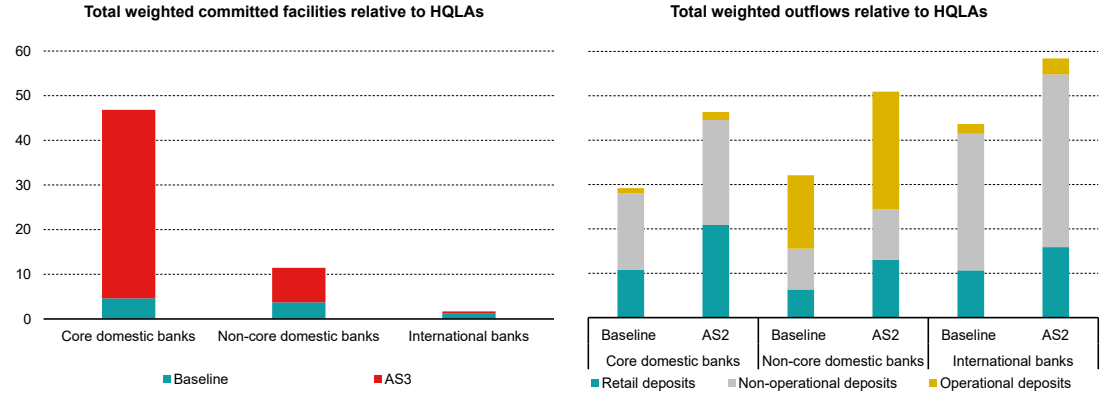
Core domestic banks were most affected by adverse scenario 3, with the LCR falling to 144%, primarily reflecting their sensitivity to the assumed full drawdown of committed facilities. Non-core domestic and international banks recorded their lowest ratios under scenario 2 (214% and 204%, respectively), consistent with their higher reliance on non-resident deposits. These results are similar to those observed at end-2025, continuing to show a greater sensitivity to this scenario.

Scenario 3 has the largest impact for core domestic banks as facilities amount to 42% of their HQLA amplifying the deterioration in their liquidity position. By contrast, these facilities amount to only 7.75% and 0.38% for non-core domestic and international banks, respectively, such that the assumption of a 100% drawdown of committed facilities has a limited impact (see Chart 3.3 on the left). A larger impact is not necessarily driven by higher exposure alone but may reflect differences in the portfolio composition and the relative size of HQLA buffers.[4]

The greater sensitivity for non-core and international banks to scenario 2 reflects their deposit funding composition, with operational and non-operational deposits accounting for the largest share of total outflows, respectively. After applying the stressed outflow rates, combined outflows from retail, operational,

[4] Due to data limitations, it is not possible to have a distinction between revokable and non-revokable committed facilities. Therefore, a conservative approach is adopted assuming that all commitments are withdrawn.

Chart 3.3
IMPACT OF BANKS UNDER EXTREME LIQUIDITY CONDITIONS RELATIVE TO HQLA HOLDINGS – 2026 Q2
(per cent)



Source: Central Bank of Malta.
Note: Adverse scenario 2 (AS2) included higher outflows and additional withdrawals from both resident and non-residents. Adverse scenario 3 (AS3) included full withdrawal of committed facilities.

and non-operational deposits rise to 46%, 51%, and 58% for core domestic, non-core domestic, and international banks, respectively (see Chart 3.3 on the right).[5]

Despite these declines, aggregate LCRs remained comfortably above the 100% regulatory requirement across all bank categories. At the individual bank level, however, a few banks would record stressed LCRs below this benchmark under the hypothetical adverse scenarios. This mainly reflects their lower starting LCRs, which leave less headroom to absorb the assumed liquidity shocks. These modelled outcomes should be distinguished from banks' reported baseline positions.

3.1.3 Net stable funding ratio

The NSFR framework complements the short-term liquidity assessment by examining whether banks maintain sufficient stable funding to support their assets and off-balance sheet exposures over a longer-term horizon. Similar to the LCR framework, the baseline follows the regulatory assumptions applicable to the NSFR, with four adverse scenarios assessing higher run-off rates for retail and wholesale deposits, the migration of some loans to non-performing status, market pressures, and the full withdrawal of committed facilities (see Table 3.3).

As at June 2026, NSFR changes were negligible for core domestic and international banks, rising by less than 0.3 percentage points to 188.7% and 136.9%, respectively. However, non-core domestic banks experienced a more pronounced and positive increase of 13 percentage points to reach 202.8% compared to December 2025. The improvement for non-core domestic banks was mainly attributable to higher ASF, particularly from other non-financial customers and operational deposits, which increased by 15% and 19%, respectively, compared with December 2025.

The NSFR of non-core domestic banks reflects differences in their funding profile, alongside a 5% decrease in loans relative to ASF.

In a stress context, the largest estimated decline in the NSFR was observed under adverse scenario 4 for core domestic banks and adverse scenario 3 for non-core domestic banks and international banks. Under these scenarios, the NSFR declined by 61, 51, and 22 percentage points to reach 128%, 152% and 115%, respectively. These results mainly reflect greater reliance on committed facilities and the assumed full drawdown of those facilities for core domestic banks. Non-core domestic banks and international banks showed more sensitivity to the combined effects of higher run-off rates for retail and wholesale deposits, some loans

[5] Retail deposits are deposits from individual consumers generally considered more stable funding sources. Meanwhile, operational and non-operational deposits are deposits placed to support day-to-day business operations and investment purposes by non-financial customers, corporates or financial institutions, which generally are more prone to withdrawals under stress.

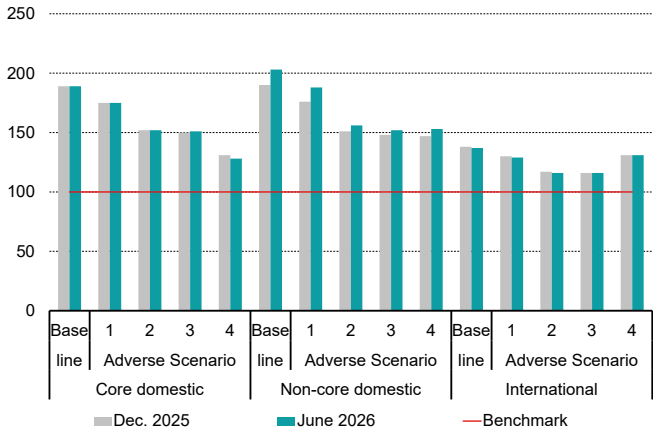
Table 3.3
DESCRIPTION OF NSFR FRAMEWORK'S BASELINE AND ADVERSE SCENARIOS

Scenario	Description
Baseline	ASF and RSF factors as prescribed by the Regulation (EU) 2019/876
Adverse:	
Scenario 1	A higher run-off for retail and wholesale deposits impacting the availability of stable funding
Scenario 2	Adverse scenario 1 with some loans becoming non-performing requiring more stable funding to support them impacting the RSF
Scenario 3	Adverse scenario 2 with pressure in the market reducing the value of bonds and equities (level 1, 2A and 2B HQLA and other securities) implying the need for further stable funding
Scenario 4	Baseline with full withdrawal of committed facilities to NFCs and households (similar to LCR adverse scenario 3).

Source: Central Bank of Malta.

becoming non-performing exposures, and market pressures (see Chart 3.4).

Chart 3.4
STRESS TEST RESULTS – NSFR RESULTS FOR ALL BANKS
(per cent)



Source: Central Bank of Malta calculations.

At the individual bank level, all banks' baseline NSFR remained above the 100% minimum requirement. However, a few banks recorded stressed NSFRs slightly below 100% under adverse scenarios 2, 3 and 4. Shortfalls across most scenarios were concentrated in one small institution, mainly reflecting a significant decline in its starting NSFR compared with December 2025. Overall, the three liquidity frameworks indicate that the banking sector continues to maintain substantial aggregate liquidity and stable funding buffers, although some banks exhibit vulnerabilities under the hypothetical adverse scenarios. The results reflect both the severity of the assumed shocks and differences in banks' starting buffers and business model structures rather than a broad-based deterioration in liquidity conditions.

3.2 Interest rate risk in the banking book

The IRRBB framework assesses banks' exposure to changes in interest rates arising from shifts in the slope and shape of the yield curve. The assessment captures the immediate impact of such movements on banks' profitability through their NII, as well as the impact of the revaluation of instruments held at fair value (FV).

The analysis is conducted under the six interest rate shock scenarios set out in Annex 2 of the 2016 Basel Committee on Banking Supervision standards.[6] These capture a parallel upward and downward shift, an increase and decrease in the short rate end of the curve, and two composite shifts in short and long-term rates represented by the steepener and flattener scenarios. All six scenarios affect the term structure of the yield curve, with the shocks differing by currency denomination of the instruments. The analysis focuses on EUR, GBP and USD, which represent the material currencies in the banking book, with GBP and USD remaining the most relevant non-EUR currencies across all three banking categories as of June 2026.

[6] https://www.bis.org/publications/201604-standards-interest-rate-risk-banking-book.pdf

Table 3.4 presents the resulting impact of changes in NII and bond revaluations on the Tier 1 capital ratios of the three banking categories under the different scenarios.

Instruments held by banks measured at FV remained broadly unchanged when compared to December 2025, except for non-core domestic banks. For core domestic banks, these instruments accounted for 21% of their total bond holdings, while for non-core domestic banks the share increased by 24 percentage points to 41%. By contrast, the investment portfolios of international banks are accounted for at AMC. This reflects the banks' preference to insulate these holdings from market movements and to retain these instruments until maturity.

Consistent with previous test vintages, the three scenarios featuring an increase in interest rates show positive results for all three bank categories, given a predominantly loan-based asset portfolio and an investment portfolio that is largely accounted for at AMC. The most adverse impact is observed for core domestic and international banks under the short-rate down scenario. In this scenario, and under the assumption that both interest-sensitive assets and liabilities re-price immediately, the decline in interest income from loans is the main driver for the overall negative impact, reflecting the differences in the composition of these banks' balance sheets. Overall, revaluation gains offset only a limited portion of the decline in interest income.

Given the importance of the investment portfolio structures in shaping these results, an examination of their sectoral composition and the associated accounting treatment provides further insight into the interpretation of the results. As of June 2026, the aggregate banks' bond portfolios maintain significant exposures to sovereign debt securities, followed by financial corporations, and NFCs, representing 72.2%, 25.2% and 2.6% of total bond holdings, respectively. Sovereign securities represented the largest asset class across all three bank categories, accounting for 80.8%, 66.5%, and 100% of total bond holdings for core domestic,

Table 3.4
STRESS TEST RESULTS – IRRBB FRAMEWORK – RELATIVE IMPACT OF CHANGES IN INTEREST RATES ON THE TIER 1 CAPITAL RATIO
Per cent

		Core domestic banks	Non-core domestic banks	International banks
Initial Tier 1 capital ratio		20.77	19.94	33.01
Parallel up	*NII*	*2.08*	*1.66*	*0.70*
	Revaluations	*-0.80*	*-1.33*	*0.00*
	Post-shock Tier 1 capital ratio	22.04	20.27	33.71
Parallel down	*NII*	*-1.65*	*-1.56*	*-0.59*
	Revaluations	*1.04*	*3.11*	*0.00*
	Post-shock Tier 1 capital ratio	20.16	21.49	32.42
Flattener	*NII*	*1.97*	*1.46*	*0.66*
	Revaluations	*-0.13*	*0.25*	*0.00*
	Post-shock Tier 1 capital ratio	22.61	21.65	33.67
Steepener	*NII*	*-1.25*	*-1.12*	*-0.45*
	Revaluations	*0.01*	*-0.35*	*0.00*
	Post-shock Tier 1 capital ratio	19.53	18.47	32.56
Short rate up	*NII*	*2.47*	*1.83*	*0.83*
	Revaluations	*-0.39*	*-0.32*	*0.00*
	Post-shock Tier 1 capital ratio	22.85	21.46	33.84
Short rate down	*NII*	*-1.95*	*-1.73*	*-0.70*
	Revaluations	*0.41*	*0.33*	*0.00*
	Post-shock Tier 1 capital ratio	19.23	18.54	32.31

Source: Central Bank of Malta calculations.

non-core domestic, and international banks, respectively. These exposures were concentrated in a relatively limited number of sovereign issuers, with particularly high concentrations in the banks' countries of operation. Maltese sovereign bonds accounted for 30.4% and 32.1% of total bond holdings of core and non-core domestic banks, respectively, while international banks' sovereign bond holdings were entirely concentrated in Maltese government securities.

The significance of sovereign exposures makes their accounting classification and geographical distribution particularly relevant to the assessment of potential market shocks. As of June 2026, sovereign bonds measured at AMC accounted for 78.6% of the total sovereign bond portfolio, while the remaining 21.4% were classified at FV. In terms of geographical distribution, Malta represented the largest sovereign exposure, accounting for 29.6% of the total bond portfolio, followed by France (8.1%), Belgium (4.9%), Italy (2.9%) and Austria (2.4%). Together, these five geographical exposures amount to 47.9% of the total bond portfolio, while a further 28.9% was invested across 27 other European countries. The remaining 3.4% exposure to sovereigns is spread across nine non-European countries, with the United Kingdom and the United States accounting for 0.22% and 0.23%, respectively. Lastly, most of the sovereign exposures are EUR-denominated (98.9%), with USD and GBP representing, respectively, 0.4% and 0.5% of the total sovereign portfolio.

This information is relevant in the context of fiscal debt sustainability concerns and sovereign bond-market conditions across a number of European jurisdictions, including some of the countries to which banks have material exposures.[7] Adverse developments in sovereign and non-sovereign bond markets could affect banks through both solvency and liquidity channels. From an accounting perspective, the predominance of AMC-classified securities limits the immediate recognition of unrealized FV changes. However, from a liquidity perspective, European System of Central Banks eligible collateral holdings in sovereign (and non-sovereign) bonds could adversely affect the availability of liquidity under open market operations when the increase in sovereign bond yields transmits into lower bond prices. The extent of the impact would also depend on other factors such as the applicable valuation haircuts. Consequently, in addition to the accounting treatment that influences banks' solvency position as tested above, another important dimension to consider when assuming rising yields is their impact on banks' liquidity stance.

[7] Financial Stability Review, May 2026; EBA Risk Assessment Report - June 2026.