2023 EU-wide stress test: Frequently Asked Questions

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Key features of the 2023 EU-wide stress test

FAQ 1 - What is the objective of the EU-wide stress test?

The EU-wide stress test is part of the supervisory toolkit used by Competent Authorities (CAs) to assess the resilience of EU banks to severe shocks, identify residual areas of uncertainties, as well as feed into the supervisory decision-making process to determine appropriate mitigation actions. The stress test also allows CAs to assess if the capital banks have accumulated in recent years, is sufficient to cover losses and support the economy in stressed times. Moreover, the stress test fosters market discipline through the publication of consistent and granular data on a bank-by-bank level, as it shows how banks are affected by common shocks.

FAQ 2 - How does the stress test work in practice?

The EU-wide stress test is mainly a bottom-up stress test. The EBA has developed a common methodology, which is applied by all banks using their internal models. The common methodology allows CAs to undertake a rigorous assessment of banks' resilience under stress. Methodological constraints in several areas limit banks' degree of freedom and ensure a level playing field via the comparability of outcomes across banks. Banks' results are checked, and quality assured by CAs.

FAQ 3 - What is the role of the EBA?

The EU-wide stress test is initiated and coordinated by the EBA and undertaken in cooperation with CAs (including the Single Supervisory Mechanism (SSM) for the euro area banks), the European Central Bank (ECB) and the European Systemic Risk Board (ESRB). The EBA is responsible for coordinating the stress test and for developing a common methodology. The EBA supports the quality assurance process by providing common quality assurance guidelines and EU-wide descriptive statistics on the main risk parameters to enable CAs to perform consistency checks and to undertake a rigorous assessment of banks' results. In addition, the EBA acts as a data hub for the final dissemination of the outcome of the stress test, thus ensuring transparent and comparable disclosure of banks' results. Finally, the EBA plays a key role in ensuring effective communication and coordination between home and host authorities in the framework of colleges of supervisors.

FAQ 4 - What are the roles of the ECB, the ESRB, the national CAs and the SSM?

The ESRB, in close cooperation with the ECB, CAs, the EBA and national central banks, is responsible for designing both the baseline and adverse macroeconomic scenarios. The baseline for EU countries is based on the December 2022 projections from the national central banks,[1] while the adverse scenario is developed by the ESRB's Task Force on Stress Testing in close collaboration with the ECB and is approved by the ESRB General Board.

CAs, including the SSM, are responsible for ensuring that banks correctly apply the common methodology developed by the EBA. This includes responsibility for assessing and ensuring the reliability and robustness of banks' assumptions, data, estimates and results. Finally, CAs are solely responsible for determining any supervisory actions resulting from the stress test.

FAQ 5 - Which banks are involved in the stress test?

The 2023 stress test covers a sample of 70 banks - 57 from the Eurozone - representing about 75% of EU banks' total assets. Compared with previous stress tests, the 2023 EU-wide stress test covers 20 more banks than the 2021 stress test, which is an increase of 40% in terms of covered banks. The stress test is conducted at the highest level of consolidation (group level).

Key methodological features

FAQ 6 - How are risks assessed in the 2023 EU-wide stress test? Which risks are covered?

The EBA's EU-wide stress test is a constrained bottom-up stress test with some elements prescribed by centralised top-down models. For the bottom-up parts of the stress test banks provide the data and implement the EBA's methodology in the baseline and an adverse macro-economic scenario, project the results, under the assumption of a static balance sheet[2] and taking into account the definitions, constraints, caps and floors defined in the methodology. This is necessary to ensure a minimum degree of conservatism, consistency and comparability of the projections and a level playing field. In addition, CAs (with support from the EBA) carry out an extensive quality assurance process to ensure the reliability and robustness of the results. As a complement to this approach, some elements of the stress test rely on top-down centralised models, meaning that some parameters are directly prescribed to banks based on these models run by the authorities. This is the case for projections of net fees and commission income (NFCI).

The analysis covers the impact on the banks' CET1 capital ratios of credit risk, market risk and operational risk[3] losses over the three years of the scenario. Additional drivers examined are net interest income and non-interest income and expenses items (e.g., net fees and commission

[1] For non-EU countries, the baseline macro-financial scenario is based mainly on the projections from the October 2022 International Monetary Fund (IMF) World Economic Outlook and data from the Organisation for Economic Co-operation and Development (OECD).

[2] The static balance sheet assumption requires that assets and liabilities that mature within the time horizon of the stress test are replaced with similar financial instruments as at the start of the stress test; no capital measures or managerial decisions completed after 31 December 2022 are considered.

[3] Operational risk losses include conduct risk losses and other operational losses.

income, dividend income, share of the profit or loss of investments in subsidiaries, joint ventures and associates).

FAQ 7 - What are the specificities and key features of the 2023 EU-wide stress test?

The methodology has undergone important enhancements compared to past stress tests. These enhancements include the incorporation of lessons learnt from the previous stress test, the introduction of top-down elements for net fees and commission income (NFCI), more detailed sectoral analysis, and an increased sample with larger coverage. The changes are part of the medium-term plan of enhancing the stress test framework.

For credit risk, banks had to provide, for the first time, a breakdown of their exposures towards companies and the related impairment by sector of economic activity. In order to do so, they should to the extent possible rely on sectoral models or apply sectoral sensitivities to portfolio-level projections. In parallel, the scenario has been enriched with the growth rate of the gross value added for each sector, which is differently affected by the economic developments considered in the scenario.

As part of the enlargement of the sample, the EBA has introduced additional proportionality elements. These elements can be applied by banks that enter the sample after broadly 70% coverage of the banking sector is reached. The proportionality elements allow a more simplified approach in assessing risks with lower reporting requirements and, therefore, foster efficiency gains to banks that apply them.

Furthermore, the reference rate pass-through on sight deposits from households and non-financial corporations has been recalibrated to increase the realism of the stress test.

FAQ 8 - Why has a sectoral breakdown been introduced for credit risk and what we have learnt?

The main purpose of the breakdown by sector is to ensure that the results of the stress test reflect banks' exposures towards different sectors, thereby increasing the credibility and realism of the stress test. Banks should reflect the breakdown of the scenario by industry sectors in their stress test projections. The motivation for introducing the sectoral dimension in the stress test is in part the desire for increased supervisory scrutiny of banks' exposures to certain economic sectors against the background of more frequent supply chain disruptions following the pandemic and the higher vulnerability of energy-intensive sectors after the surge in energy prices following the war in Ukraine. Events like the Covid-19 pandemic or recent geopolitical developments have proved that the impact across economic sectors can vary significantly.

The inclusion of the sectoral break down of corporate and SME exposures delivered valuable insights during the stress test. The results confirm that the impact of the scenario can be heterogeneous on otherwise similar borrowers that operate in different sectors of economic activity. The granular information assisted with the quality assurance of banks' submissions as it provided information on exposure concentrations and sources of losses and risks. Finally, the addition of sectoral information has given valuable insights into banks' data processing and modelling capabilities.

FAQ 9 - How the methodology for projecting net fees and commission income differs from previous stress tests?

This projection follows a top-down approach. Banks were required to make use of prescribed growth rate parameters when projecting their net fees and commission income. The parameters were produced with a supervisory model and were provided to banks by the EBA via banks' Competent Authorities. The initial model was developed by the ECB and has been validated by the EBA and National Competent Authorities to ensure its suitability for the purposes of the EU-wide stress test. To reduce model risk, the raw model projections are subject to a model overlay. The overlay takes the form of a "corridor" with a maximum and minimum permissible decrease of cumulative NFCI (cap and floor). The introduction of top-down elements for the projections of net fees and commission income is part of the EBA work on the future changes to the EU-wide stress test. This methodological change aims at reducing costs for both banks and supervisors and to gain in consistency and comparability of the projections and a level playing field.

FAQ 10 - How will the EBA ensure consistency between both Eurozone and non-Eurozone countries in the conduct of the stress test?

The stress test is conducted across EU banks. Therefore, its consistency relies on the common methodology, same scenario, and a rigorous assessment of the granular transparency of results and underlying data. In addition, the EBA conducts at the end of the stress test a comparative analysis of the quality assurance process run by CAs. The bank results will also be discussed in the framework of colleges of supervisors involving home and host authorities, as well as the EBA.

FAQ 11 - Is the accounting standard change from IFRS 4 to IFRS 17 reflected in the stress test results?

As part of the stress test banks are asked for projections based on the accounting regime applicable as of 31 December 2022. The results therefore do not reflect changes in the accounting that come into effect after this date. This is notably the case of IFRS 4 that was replaced by IFRS 17 – which establishes accounting principles for the recognition and measurement of insurance contracts – as of 1st January 2023. Therefore, in the stress test banks' projections are based on IFRS 4. Nevertheless, to ensure sufficient transparency and have information on the impact of IFRS 17, banks were asked to provide their fully loaded CET1 capital ratio as of 1st January 2023 applying IFRS 17. Banks with a material impact of IFRS 17 could also provide projections of the CET1 capital ratio over the three-year horizon under IFRS 17. This information is provided as a memorandum item in the transparency templates published for all banks. It should facilitate comparisons between the stress test outcome and the CET1 capital ratios according to IFRS 17.

Key features of the stress test scenarios

FAQ 12 - How different is this year's scenario compared to the previous stress tests?

Similar to previous stress tests, the narrative of the adverse scenario for the EU-wide banking stress test reflects the main risks for EU banks that have been identified by the EBA and the ESRB. The assumed materialisation of these risks triggers a significant deterioration in macroeconomic conditions over the horizon and sizeable adjustments in financial and real estate prices. In contrast to previous stress tests, the adverse scenario implies the persistence of high inflation over the horizon and, as a result, much stronger market interest rates. As usual, the adverse scenario is hypothetical and is based on a set of assumptions meant to generate adequate stress, to ensure a significant level of severity across all EU countries.

Considering the high uncertainty surrounding the macroeconomic outlook, the adverse scenario remains relevant and severe for testing the resilience of the EU banking sector in the current macroeconomic environment. Over the first half of 2023, the banking sector turbulence in the United States and Switzerland has increased uncertainty and altered market perceptions of banks.[4] During the same time, the real estate cycle has reached a turning point and economic activity has weakened. Inflation has been coming down, but it remains at high levels.

FAQ 13 - What are the key features of the adverse macro-financial scenario?

While the adverse macro-financial scenario is unlikely to unfold it is based on the important premise that although hypothetical it should be severe, plausible and in line with the risk and vulnerabilities that might threaten the EU banking sector. It reflects the high degree of uncertainty in the current economic and geopolitical environment.
The key features of the adverse macro-financial scenario are:

- inflation well above baseline over the whole horizon, by 3 ppts in 2023, 1.9 ppts in 2024 and 1.5 ppts in 2025.
- a market increase of EU long-term interest rates, by 183 bps between the starting point at the end of 2022 and end-2025.
- a severe loss of real GDP for the EU, reaching 6% from the starting point in 2022 to 2025.
- a significant increase in EU unemployment rate, of 6.1 percentage points from the starting point in 2022 to 2025.
- a strongly negative deviation of EU stock prices from the starting point, by 55% in 2023 and by 43% in 2025.
- a substantial drop in EU for residential and commercial real estate price from the starting point over the three-year horizon, by some 21% and 29% respectively.

FAQ 14 - Which additional elements are derived from the main macro-financial scenario?

Two elements are derived from the macro-financial scenario: the first one is the market risk scenario, which provides instantaneous shocks for risk factors covering interest rates, FX, equities,

[4] See press release of the ESRB General Board meeting of 29 June 2023 (here).

commodities, sovereign and corporate credit spreads, volatilities, liquidity reserves and global inflation expectations. The definition of shocks in the market risk scenario is consistent with the narrative of the stress test, although market risk shocks have a different time horizon compared to the macro-financial scenario. Macro-financial adverse shocks have been frontloaded in the market risk scenario, to further enhance the consistency between the two scenarios and enhance the degree of conservativeness of the market risk scenario. The market risk scenario is used by participant banks to stress positions under the scope of the market risk methodology.

The second element is the sectoral decomposition of the adverse macro-financial scenario. The EBA 2023 stress test includes a sectoral breakdown of the macroeconomic scenario for 16 sectors, corresponding broadly to the first level of the Eurostat NACE2 decomposition. To that end, the aggregate real GDP scenario has been broken down into consistent sectoral real Gross Value Added (GVA), reflecting shock- and country-specific vulnerabilities.

FAQ 15 - How severe is the adverse scenario, compared to the previous stress tests?

Compared with previous stress tests, the 2023 EBA adverse scenario for GDP growth is more severe with a cumulative decline of EU GDP from the starting point of 6% over the three-year horizon. For previous stress tests, the maximum cumulative decline was 3.6% in 2021 and 2.7% in 2018. In this respect, a major difference compared to the previous scenario are the assumptions for both interest rates and inflation. The 2021 adverse scenario was characterised by a "lower for longer" interest rate environment – along with very low inflation. Instead, the adverse scenario now exhibits high and persistent inflation, which triggers a prompt and strong increase in market interest rates and risk premia, moreover, sustained over the horizon. This configuration contributes to the severity of the assumed macroeconomic picture, by dampening demand via real income and financing cost adverse effects. It also increases the risks of corporate and household defaults for banks, against the background of elevated debt levels already at the beginning of the stress test horizon.

FAQ 16 - Is climate change risk considered in the scenario?

Climate risk is not explicitly considered in the scenario of the 2023 EU-wide stress test. However, the EBA is working in parallel to address its new mandates on climate risk stress testing[5] focusing on the One-off Fit-for-55 climate risk scenario analysis[6], which will be performed by EBA jointly with the other European Supervisory Authorities (ESAs), the European Central Bank (ECB), and the European Systemic Risk Board (ESRB). A new element in this climate-risk analysis is its cross-sectoral and system-wide nature, as opposed to standard solvency banking stress test which focus only on the banking sector. The primary aim will be to assess the resilience of the financial sector in line with the Fit-for-55 package, while gaining insights into the capacity of the financial system to support the transition to a lower carbon economy even under conditions of stress. Moreover, the scenario analysis will investigate how stress propagates through the financial system and how

[5] Please see the Strategy for Financing the Transition to a Sustainable Economy.

[6] On 8th March 2023, the EBA received, in the scope of the Renewed Sustainable Finance Strategy of the European Commission the final mandate of the One-off Fit-for-55 climate risk scenario analysis. This can be found at this link.

financial institutions' reactions might amply it. The Fit-for-55 scenario analysis will be launched by the end of 2023, with results expected by Q1 2025.

For the purpose of the one-off Fit-for-55 climate risk scenario analysis, on the 20th July 2023 the EBA has launched a public consultation on draft templates to collect climate-related and financial information on credit risk, market and real estate risks as of December 2022. The consultation runs until 11 October 2023.

Results

FAQ 17 - How do the 2023 stress test results compare to those released in previous stress tests?

Given the differences in scenarios and methodology, in the sample of banks, starting capital ratios and balance sheet structure, comparing the results of stress tests conducted at different points in time is difficult and may be misleading.

Under the baseline scenario, capital increases by 136 bps over the three years of the horizon, which compares positively with the 2021 stress test for which the capital rise was 78 bps. The aggregate capital depletion under the adverse scenario (459 bps on a fully loaded basis) is slightly lower than in 2021 (485 bps), but higher than in 2018 (395 bps). The impact of credit risk losses - the main driver of the results - is somewhat lower than in the 2021 stress test as banks begin the test with improved asset quality. The net interest income (NII) contribution is notably higher than in the 2021 stress test. The increase of interest rates in the scenario contributes to the higher contribution of NII as loans reprice. The impact of market risk has increased compared to the previous stress test, while the impact of operational risk has decreased. The impact of net fees and commission income projections, which are for the first time derived from a centralized top-down model, is higher than in 2021.

FAQ 18 - How are commercial real estate exposures considered in the stress test?

The adverse scenario assumes a sizeable adjustment in real estate prices which puts pressure on banks exposures secured by real estate. EU commercial and residential estate prices decline cumulatively -29.3% and -21.1% over the scenario horizon. On aggregate, the scenario has a large impact on commercial real estate exposures. Over the three years of the adverse scenario, losses on commercial real estate exposures amount to 7.8% of total credit losses. The share and the geographical composition of commercial real estate exposures varies across banks and thus, the scenario has heterogeneous effects on banks' credit loss projections. The shares of stage 2 and stage 3 exposures increase materially over the scenario. The increase is much higher than for other exposures secured by real estate.

FAQ 19 - How the increase of interest rates impacts banks' net interest income in the stress test?

There are two main sources of impact on net interest income (NII) due to higher interest rates. Banks have experienced a positive contribution on their NII during 2022 ahead of the start of the stress test. The higher NII at the starting point (end of 2022) compared to previous stress tests explains the higher cumulative contribution of NII over the stress test horizon. In addition, the scenario is based on an assumption of increases in the interest rates. This contributes positively to NII as loans reprice during the scenario. Banks with a higher share of variable loans are more likely to have higher NII. Conversely, the assumed conservative pass-through of interest rates to deposit rates reduces NII, particularly in the case of term deposits.

Disclosure

FAQ 20 - How are data and results published?

The credibility of the EBA's EU-wide stress test rests on transparency. A key aspect of this stress test is therefore the disclosure of a large amount of comparable and consistent data across the EU. The EBA released individual results for banks participating in the stress test along with detailed balance sheets and actual exposure data as of end of 2022. In addition, the EBA has made available interactive tools as well as data files for further analytical use by market participants and has published an aggregate report of the results. The transparency provided through such disclosure will help market participants obtain insights into potential vulnerabilities.

FAQ 21 - Which information on sovereign exposures is disclosed?

The 2023 EU-wide stress test report includes a dedicated box, in section 4.4, which shows some figures on the impact, stemming from sovereign credit spreads shocks, on sovereign debt positions covered by the market risk methodology (i.e., positions held at fair value). The box also explains how sovereign positions are treated. In addition, the EBA publishes at the end of the year an EU-wide transparency exercise which provides detail information on bank-by-bank sovereign exposures.

FAQ 22 - Will there be any disclosure of actual data for banks not included in the EU-wide stress test?

The publication of stress test results for banks not in the EBA sample is a decision for CAs. The ECB-SSM will disclose, end of July, further information on other 41 SSM Significant Institutions (SSM banks) that were not included in the EU-wide stress test sample.

On a similar note, the EBA will be conducting a transparency exercise in December 2023 on a wider sample of more than 120 EU banks. The exercise provides the wider public with a consistent tool to access actual data on the EU banking system and is an important component of the EBA's responsibility to monitor risks and vulnerabilities and foster market discipline. As in the previous exercises, the data will cover capital positions, risk exposure amounts, profitability, detailed sovereign exposures, and asset quality. The data will be published for four reference dates, September 2022, December 2022, March 2023 and June 2023. The publication of the 2023 EU-wide transparency exercise will also be accompanied with the release of the annual EBA Risk Assessment Report.

Next steps

FAQ 23 - How will the stress test results feed into the Supervisory Review and Evaluation Process (SREP) process and how will supervisors use these results?

The results of the stress test will allow CAs to assess banks' ability to meet applicable minimum and additional own funds requirements under the common downturn scenarios and assumptions. Furthermore, the results will form a solid ground for a discussion with supervisors and individual banks, to understand relevant management actions, such as how their capital planning, including dividend distribution, may be affected by the stress and, therefore, ensure that banks will remain above the applicable capital requirements, while continuing to finance the economy.

FAQ 24 - What is the connection between the 2023 EU-wide stress test and the work on the future changes to the EU-wide stress test?

In parallel to the 2023 EU-wide stress test, the EBA will continue working to improve the current framework and maximise the information value of the results. In addition, and considering the experience gained during the 2023 EU-wide stress test on top-down models (i.e., net fees and commission income), the EBA will investigate further the role of top-down elements in the EU-wide stress test.[7]

Key features of the ad-hoc analysis of unrealised losses

FAQ 25 - Why has the EBA conducted an ad-hoc analysis of EU bank bond holdings?

The ad-hoc analysis of bank bond holdings and the assessment of unrealised losses on these bond holdings is a targeted risk assessment conducted by the EBA in collaboration with CAs separately from the 2023 EU-wide stress test for the same sample of banks.

The analysis is complemented with individual bank disclosure of the carrying amount and the fair value of banks' bond holdings held at amortised cost. It aims at understanding the potential evolution of these unrealised losses for EU banks. It is part of ongoing efforts to assess the downside risks faced by EU banks in the current environment of rising rates. The quantification of these losses is conducted under both current and adverse conditions. This latter should be viewed as part of the supervisory effort to better understand the size of unrealised losses even under severe market conditions, shedding also light on hedging dynamics and the source of risk being hedged by direct hedging derivatives.

The results of this ad-hoc analysis should not be linked to the results of the 2023 EU-wide stress test as they are based on different assumptions. Furthermore, the hypothetical gains and losses calculated as part of the analysis should be assessed taking into account the scope of the exercise described in the dedicated note.

[7] Jose Manuel Campa speech at Handelsblatt Conference Banking Regulation.pdf (europa.eu)