



eioipa

European Insurance and
Occupational Pensions Authority

F A Q

2021 INSURANCE STRESS TEST

FREQUENTLY ASKED QUESTIONS

GOAL

What is a stress test?

A stress test is an important risk management and supervisory tool. It is used by financial institutions, micro-prudential and macro-prudential supervisors to explore vulnerabilities and assess the resilience of financial institutions (e.g. banks, insurers) and whole systems (e.g. the banking sector, the insurance sector) to severe but plausible external shocks (e.g. beyond the 99,5% Value at Risk (VaR) of the Solvency II framework). Stress tests assess adverse outcomes under a variety of risks. They provide an indication of the impact and potential losses upon the materialization of these risks, and help to indicate areas where further supervisory actions are needed.

Is the EIOPA stress test a pass-fail exercise?

The EIOPA stress test exercises have never been characterised by a pass-fail nature and this also holds for the 2021 stress test. No potential weakness in the post-stress position of the participants shall automatically trigger actions aimed at strengthening the financial position of the insurers. Information collected and produced under the stress test process is used in an aggregated way to issue recommendations to the National Competent Authorities (NCAs). Individual results are only used as a basis for follow-up dialogues between EIOPA and supervisors and between the supervisor and the participant.

What are the objectives of the exercise?

While maintaining its non pass-fail nature, the 2021 exercise has the primarily microprudential objective of assessing the capability of the participants to sustain the adverse conditions depicted in the stress test scenario. The post-stress individual positions are eventually aggregated to infer the overall resilience of the insurance industry.

The 2021 insurance stress test enhances the macroprudential dimension of the exercise by complementing the standard fixed balance sheet approach with a constrained balance sheet approach where participants are allowed to apply reactive management actions in the calculation of their post-stress position. The results of these actions are used to identify potential spill-over effects on other markets.

Vulnerabilities of individual positions allow supervisors to engage with the participants to address the identified vulnerabilities and, if needed, discuss remedial action to be taken by undertakings to improve their resilience.

The aggregated outcome of this microprudential stress test exercise were used to assess market-wide risks. By aggregating the impact for individual entities, market-wide developments can be inferred; hence, this assessment is used for evaluating potential vulnerabilities in the insurance sector.

The macroprudential dimension enabled by the aggregation of the impacts of reactive management actions, allows for the assessment of potential spill-overs to other markets generated by the insurance sector against the prescribed scenario.

The 2021 stress test is EIOPA's first exercise that complements the assessment of the pre- and post-stress capital positions with the assessment of the pre- and post-stress liquidity positions of the participants over a 90-day time-horizon.

How and when will EIOPA issue potential recommendations?

Public recommendations will be issued, if needed, in accordance with EIOPA Regulation in order to address issues identified in the stress test and will be addressed to the relevant NCAs in the EU and EEA. Individual findings will be used during the regular dialogue between EIOPA and NCAs.

This allows EIOPA to publish the results of the exercise at the earliest stage possible while ensuring that sufficient time is made available for a thorough consideration and discussion of the results within the European supervisory community.

SCOPE

Why does this test focus mainly on insurance groups and not on solo undertakings?

The selection of the participants in 2021 was primarily based on size, EU-wide market coverage (from a financial stability perspective), business lines (life and non-life business) and the involvement of a sufficient number of local jurisdictions. The local market coverage was taken into account in a second stage.

Given the micro- and macroprudential layers in the 2021 exercise, groups were better placed to infer both the vulnerability of the insurance sector and the potential spill-overs to other markets.

Additionally, groups, despite their complexity, are better structured to perform complex calculations such as the assessment of their solvency position under severe but plausible scenarios.

Who selected the participants for EIOPA's stress tests?

The selection was a joint EIOPA and NCAs process. EIOPA, in line with its mandate, defined the criteria for the selection and proposed an initial list of entities to NCAs. Each NCA could propose amendments to the list based on well-grounded motivations (e.g. risk exposure, business line coverage, risk exposure and overall relevance in terms of financial stability). Finally, the Board of Supervisors of EIOPA approved the list of entities to be included in the stress test.

What is the market coverage of the exercise?

The target sample defined by EIOPA (in cooperation with the NCAs) encompassed 44 undertakings, 43 groups and one solo undertaking, registered in 20 European jurisdictions and with cross-border operations. The selected sample covered 75% of the EU-wide market based on total assets in the Solvency II.

The liquidity component targeted 117 solo EEA undertakings within the perimeter of the groups. The selected solo undertakings covered a relevant part of the total assets of insurance EEA solo undertakings belonging to each group (approximately 80%).

DISCLOSURES

Which results of the stress test are disclosed?

The results that are published are based on consolidated data that contain aggregate results of the capital and liquidity assessment. The aggregation of the data and their presentation ensures the anonymity of the information in such a way that the position of individual participants cannot be discerned.

Additionally, participants were requested to disclose a limited subset of individual balance sheet. The decision to publish the individual results lays with each participant due to the fact that insurers are not required by law to disclose them. Therefore, EIOPA has only published the results where participants provided their consent before to do so.

Which results are the participating groups asked to disclose individually?

The individual disclosure is limited to a set of Solvency II balance sheet based indicators up to the Excess of Assets over Liabilities under both fixed and constrained balance sheet approaches. No disclosure of the solvency capital requirement is requested. Also, no disclosure of the pre- and post-stress liquidity positions is requested.

Is the disclosure of the stress test results at individual participant level compulsory?

EIOPA is convinced about the benefits of a transparent exercise, however it does not have the powers to unilaterally disclose the results of the stress test at individual level. Therefore, participating groups have been explicitly asked to consent to the individual disclosure during the first submission of the results and to confirm such consent ex-post after the data quality assurance process at national and EIOPA central level.

Why does EIOPA think that the disclosure of individual result should become compulsory?

EIOPA believes that the individual disclosure is beneficial for all the involved parties. Supervisors share the opinion that the European insurance industry is sufficiently robust and its regulatory framework is mature enough to bring this level of transparency at the same level that is already in place in other industries.

EIOPA will continue the dialogue with the industry, however, and despite EIOPA's improvements to the stress test methodology, little progress has been made so far. Therefore, EIOPA believes that is the right time to make steps to have the individual disclosures of stress test results required by law.

DESIGN OF THE EXERCISE

What was the role of the European Systemic Risk Board (ESRB) in EIOPA's Insurance Stress Test 2021?

EIOPA designed the narrative, scenario and market shocks in cooperation with the ESRB. The narrative was commonly designed for the banking and the insurance stress test exercises that took place in 2021, while shocks were specifically identified and calibrated to reflect the specificity of the insurance business.

What's the probability of the market scenarios?

The EIOPA stress test assessed the resilience of the insurance industry against severe but plausible scenario. The design of the scenario encompasses events that:

- Fall in the tail of the distribution (e.g. beyond the 99.5% probability over 1 year time horizon implied by Solvency II)
- Are not too extreme to be considered "impossible" in their materialisation.

The overall scenario is the outcome of different simulations having different triggers with specific correlations conducted based on different samples.

The approach taken makes it extremely difficult, if not impossible, to calculate exactly the overall probability of the scenario without making strong and limiting assumptions. Still, the overall probability of the materialisation of the market risk shocks is in line with the severity level of 99.5% stipulated by Solvency II. The market risk scenario has been calibrated based on three main simulations for equity prices, bond yields and swap rates. The "triggering probabilities" for these three classes have been set at 1%, 2.25% and 35% respectively. Shocks to swap rates have a higher probability and thus consist of less extreme moves. This is due to interest rates being at a very low level at the reference date and to the ESRB's assessment that a further steep and abrupt decline is unlikely at this point in time.

Under some technical assumptions, the ESRB has estimated that full set of market risks included in the EIOPA scenario has a probability of materialisation between 0.1% - 0.6%.

Why does the EIOPA exercise test a scenario based on a downward yield curve that was also tested in previous exercises?

The 2021 stress test exercise is based on a double-hit scenario, which implies a drop in the risk free rate and an increase in the risk premia.

The scenario is defined, in cooperation with the ESRB/ECB, on the potential adverse evolution of the market and the economy estimated during the design phase of the exercise. The prolonged low-yield environment is still a major concern for the European insurance sector with current rates being below zero for tenors up to 6 years.

This kind of scenario was indeed also tested in previous exercises. The low-yield environment is viewed as one of the major threats to the insurance industry and it should be part of a stress test as low-yields constrain the profitability of some insurance companies and their ability to deliver a certain level of guaranteed rates.

How are the reactions of the participants treated in the stress test?

The EIOPA stress test exercise was based on instantaneous and permanent shocks. As in the previous exercises, EIOPA asked participants to calculate their post stress position under a fixed balance sheet assumption which implies that only so-called embedded management actions (e.g. automatic movements in assets and liabilities fully incorporated in the models and algorithm used to run the company under normal periods) were allowed.

One of the enhancements introduced in the 2021 exercise also upon the feedback received from the industry following the 2018 exercise was to allow participants to include in the calculation of the post-stress position reactive management actions. The aim was to obtain a more realistic picture of their post-stress situation and to infer potential macroprudential implications. Under the constrained balance sheet assumption, participants were allowed to apply actions that shall be appropriate and plausible and their assessment should form a central component of the pre-validation and validation process.

How many participants used reactive management actions?

In the capital component of the exercise 19 groups implemented reactive management actions. In the liquidity component 15 solo undertakings belonging to 6 participating groups implemented reactive management actions.

What is the reference date for the 2021 stress test?

The baseline of the exercise is the position at 31 December 2020.

CONSISTENCY WITH SOLVENCY II

Does the stress test fully reproduce the Solvency II framework?

Yes, it does. Participants were required to calculate their balance sheet and solvency position under the Solvency II regime. The exercise in its capital component fully adhered to the Solvency II framework and participants were invited to compute their post stress position relying on the models used for the regular annual Solvency II reporting. Simplifications and approximations were allowed upon agreement with the national supervisors and EIOPA.

The Solvency II framework does not contain specific reporting or metrics to assess the liquidity position of insurance undertakings, hence the 2021 exercise proposed a specific approach based on the model developed over the last years also through consultation with the industry and stakeholders ([Methodological principles of insurance stress testing - liquidity component | Eioipa \(europa.eu\)](#)).

Is the Ultimate Forward Rate (UFR) kept unchanged?

Participants were asked to estimate their post stress liabilities using the same UFR they are using in 2021 for their regular reporting (i.e. 3.60%). All the reporting from EIOPA is based on this information.

Some NCAs required their groups to compute their post-stress position against a further reduced UFR. While EIOPA provided the specific discount curves, it didn't collect the post-stress calculation based on these curves, which remained at NCA level and is as such not included in the results published.

Why did the stress test require information on the impact of long-term guarantee (LTG) and transitional measures from participants?

The stress test methodology is fully consistent with Solvency II framework; hence, it includes the LTG and transitional package. The LTG and transitional measures were introduced in the Solvency II framework for different purposes: first to absorb the unintended effects of a mark to market valuation of assets and liabilities on a long term insurance business. The purpose of these measures was to smooth the transition from Solvency I to Solvency II.

The information on LTG and transitional measures was important in this stress test exercises as it allowed EIOPA to assess how the LTG package reacts under extreme but plausible conditions. It also helped to assess its capability to absorb part of the impact to the insurers stemming from the market shocks. Additionally, given the temporary nature of the transitional measures, the contribution of transitional to the post-stress position of participants provides valuable information about the vulnerability of one segment of the industry that is still relying on them.

To what extent is the stress test based on the Solvency II harmonised reporting requirements?

The stress test templates for capital reproduced (to the extent possible) the Solvency II regular templates used for the supervisory reporting purposes. The stress test templates and specifications explicitly identified where the information diverges from the standard templates with specific reference to: i) additional data not contained in the regular reporting but required for analysis and validation in the context of the stress test; ii) Information regularly collected by EIOPA in the standard reporting but not requested or requested in a simplified way in the context of the stress test.

The liquidity component of the exercise required the design of new templates as the Solvency II framework takes into account only capital-related aspects.

CONSULTATION WITH STAKEHOLDERS

Did EIOPA consult stakeholders in the process of designing the 2021 insurance stress test? To what extent were any suggestions taken into account?

Relevant stakeholders, representing the stress test participants and the actuarial profession, have been consulted during the preparation of the stress test package. EIOPA engaged with the stakeholders at an early stage, with special focus on key elements on the individual disclosure of results and the post stress calculation of the capital position.

Ahead of the launching of the exercise, EIOPA engaged in discussions with the stakeholders on the main components of the exercise to ensure its feasibility and usefulness. In particular, EIOPA considered many stakeholders' points on the potential approaches for the calculation of the balance sheet figures as well as the capital position post-stress, the indicators and stress test results to be publicly disclosed, the complexity of the stress scenarios, the granularity of the data requested, the timeline and the technical specification. The overview of the consultation process from the preparatory phase is available here: [Insurance stress test 2021 | Eioipa \(europa.eu\)](#).

How did EIOPA enhance its methodological framework?

In the last three years, EIOPA enhanced its stress test framework by issuing for public consultation two discussion papers on this topic:

- Discussion Paper on Methodological Principles of Insurance Stress Testing with the focus on the fundamentals of a bottom-up stress test exercise (consulted from 22 July 2019 to 18 October 2019, available [here](#))
- Second Discussion Paper on Methodological Principles of Insurance Stress Testing focused on three specific topics: the climate stress test, the liquidity stress test and the multi-period stress test (consulted from 24 June 2020 to 24 October 2020, available [here](#))

Both discussion papers went through a public consultation and benefitted from stakeholders views, including insurance associations and undertakings that were reflected in the final version of the papers:

- Methodological principles of insurance stress testing (available [here](#)) published on 4 December 2019
- Methodological principles of insurance stress testing - liquidity component (available [here](#)) published on 21 January 2021

In 2022, EIOPA also plans to launch a discussion paper on methodological principles with the focus on the climate component.

LEARN MORE



Visit the dedicated webpage:
https://www.eiopa.europa.eu/insurance-stress-test-2021_en

CONTACT US

Westhafenplatz 1,
60327 Frankfurt am Main Germany
<https://www.eiopa.europa.eu/>

© EIOPA, 2021

Reproduction is authorised provided the source is acknowledged. For any use or reproduction of photos or other material that is not under the copyright of EIOPA, permission must be sought directly from the copyright holders.

Neither the European Insurance and Occupational Pensions Authority (EIOPA) nor any person acting on behalf of the EIOPA is responsible for the use that might be made of the information herein.