



# **Frequently Asked Questions & Answers**

## **EIOPA Occupational Pensions Stress Test 2019**

### **1. What is a stress test?**

A stress test is an important risk assessment tool. It is used by financial institutions as well as micro- and macro-prudential supervisors to explore vulnerabilities and assess the resilience of financial institutions (e.g. Institutions for Occupational Retirement Provision - IORPs) and the implications for the wider financial system and economy to severe but plausible shocks. Stress tests assess the impact of adverse scenarios, exploring a variety of risks. They provide an indication of the capacity to absorb losses on materialisation of these risks, and help to indicate areas where further supervisory actions are needed.

### **2. What is the reference date for the stress test results?**

The reference date for the application of the shocks and the valuation of the balance sheets is 31 December 2018.

### **3. What are the benefits of the exercise?**

The exercise provides up-to-date information on the risks and vulnerabilities of the European occupational pensions' sector and the assessment of the potential transfer of shocks from occupational pension funds to the real economy through sponsor support and benefit adjustments with implications for the real economy and financial stability.

### **4. Is this a pass-or-fail exercise?**

No, it is not a pass-or-fail exercise for occupational pension funds. The aim is to reveal risks and vulnerabilities and potential implications for the real economy and financial stability.

## **5. What was the stress scenario and what are the main conclusions of this stress test?**

In its 2019 exercise, EIOPA applied an adverse market scenario, characterised by a sudden reassessment of risk premia and shocks to interest rates on short maturities, resulting in increased yields and widening of credit spreads. The adverse market scenario would have led to substantial aggregate shortfalls of EUR 180 billion according to national methodologies and EUR 216 billion following the stress test's common methodology. Under the assumptions of the common methodology, the shortfalls in the adverse scenario would have triggered aggregate benefit reductions of EUR 173 billion and sponsoring undertakings to provide financial support of EUR 49 billion.

The liabilities of the defined benefit (DB) IORPs in the sample decreased by 7% in the common methodology as a consequence of the adverse market scenario, which is a slightly higher decrease than the 3% observed for the national methodologies. The European Economic Area (EEA) aggregate figure is highly influenced by the IORP sector in the Netherlands, where pension liabilities are valued using a risk-free rate term structure, similar to the one applied in the common methodology. However, the prudential regimes in many other EEA countries build on fixed discount rates of up to 4%. The adverse scenario resulted in an aggregate shortfall between total assets and total liabilities of EUR -180 billion under national frameworks and EUR -216 billion according to the common methodology. Under the assumptions of the common methodology, the shortfall would result in expected sponsor support (EUR 49 billion in the adverse scenario) and benefit reductions (EUR 173 billion in the adverse scenario) in the common balance sheet.<sup>1</sup>

The newly introduced, extended cash flow analysis helped to understand better the timing of the cash flows: it was observed that in case the adverse market scenario would materialise, IORPs' financial situation would be heavily affected in the short term, leading to substantial strains on sponsoring undertakings within a

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<sup>1</sup> The values of sponsor support and benefit reductions do not exactly add up to the shortfall on the common balance sheet, excluding sponsor support and benefit reductions, as the aggregate excess of assets over liabilities, including sponsor support and benefit reductions, is slightly positive (EUR 6bn).

few years after the shock and resulting in long-term effects on the retirement income of members and beneficiaries over decades.

Assessing the potential conjoint investment behaviours of IORPs after the stress event, EIOPA observed an expected tendency to re-balance to pre-stress investment allocations within 12 months after the shock. That may indicate counter-cyclical aspects of the expected investment behaviour, yet would also come at a risk. The majority of IORPs in the sample indicated to have taken appropriate steps to identify sustainability factors and environmental, social and governance (ESG) risks for their investment decisions, which is important for an effective implementation of the IORP II Directive.

## **6. How did you assess the ESG exposures in the sample? What is the IORPs' carbon footprint?**

EIOPA analysed in a qualitative manner how far IORPs contribute to mitigating ESG risks in society and how far IORPs reduce their own exposure to ESG risks. Further, a quantitative analysis based on IORPs' allocation of investment assets by economic activity provided for a rough indication of the exposure of IORPs to 'brown' assets and the overall carbon footprint, measured by reference to greenhouse gas emissions, of their investment portfolios. This quantitative part can be viewed as a first step towards a stress test analyses, assessing the impact of transition scenarios towards a low-carbon economy.

The quantitative survey focussed on greenhouse gas emissions, in particular carbon dioxide, linked to climate change. For that, asset information from IORPs was matched with Eurostat data on greenhouse gas emission intensities by economic activities.

IORPs were requested to provide a breakdown of their investments in three major asset classes by ten economic activities based on the NACE section classification.<sup>2</sup> To simplify the application, IORPs could allocate their assets using the Global Industry Classification Standard (GICS).<sup>3</sup>

Acknowledging the limitations of such a high-level analysis of IORPs' investments by Eurostat's *Nomenclature statistique des activités économiques dans la Communauté européenne*. (NACE) section codes, the breakdown allows for a

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<sup>2</sup> See Eurostat: NACE Rev. 2 - Statistical classification of economic activities in the European Community, Methodologies and Working papers, 2008: <https://ec.europa.eu/eurostat/documents/3859598/5902521/KS-RA-07-015-EN.PDF/dd5443f5-b886-40e4-920d-9df03590ff91?version=1.0>

<sup>3</sup> See <https://www.msci.com/gics>

rough identification of investments in economic activities that are prone to being exposed to risks related to a transition to a low-carbon environment and may provide insights in the overall greenhouse gas emission intensity or carbon footprint of IORPs' investment assets.

## **7. Was there any follow-up work from the previous stress tests in 2015 and 2017? How is the 2019 stress test different to previous ones?**

The 2019 IORP stress test results are to a large extent determined by the potentially severe effects of an adverse market scenario to the investments of EEA IORPs and with that on the future retirement income of their members and beneficiaries. This emphasises – resulting from the changing pension landscape in Europe – the common effects of the stress on defined benefit (DB) and defined contribution (DC) IORPs, compared to previous exercises: the 2015 and 2017 occupational pension stress tests showed areas of risks and vulnerabilities concerning particularly the DB/hybrid IORP sector, which experienced in aggregate substantial pre- and post-stress shortfalls, both on the national and the common balance sheet. Such shortfalls would have to be covered by future sponsor support, which includes increased contributions by the sponsor or the member, and/or benefit reductions.

The 2017 IORP stress test indicated that more than a quarter of IORPs providing DB/hybrid pension schemes were backed by a sponsor that may not be able to (fully) support the pension promise following the adverse scenario. Moreover, pension obligations may exert substantial pressure on the solvency and future profitability of companies with a potential spill-over to the real economy. For 25% of participating IORPs, the value of sponsor support on the common balance sheet exceeded 42% of the sponsors' market value under the pre-stress and 66% under the adverse scenario.

IORPs in financial difficulties are usually subject to recovery plans, acknowledging their long-term obligations and payment horizons, which often rely on uncertain future asset performance. Such prudential tools dampen the effects on the IORP, the sponsoring entities, members and beneficiaries and, hence, the real economy. The downside is that the necessary adjustments to resolve shortfalls may fall disproportionately on future, younger generations, especially if investment returns fall short of expectations.

One of the deliverables stemming from the conclusions of the 2017 exercise was to continue assessing potential shortfalls between investment assets and technical

provisions, using market-sensitive methodologies, and so to assess the capabilities of sponsors to provide support and the effects of benefit reduction mechanisms. This has been implemented in the 2019 stress test by enhancing the cash flow analysis in order to gain further insights into the expected timing of the effects.

The 2019 stress test also addressed the conclusion of the 2017 exercise to assess the implications of IORPs' specific activities and common behaviours regarding potential systemic risk drivers, such as search for yield, flight to quality or herding behaviour to explore potential indirect impacts on financial stability.

For the first time a European stress test assesses IORPs' potentially generated externalities to the rest of the EEA financial system and the real economy by considering the environmental, social and governance (ESG) aspects of the IORPs' investments, including its sustainability relating to climate change and greenhouse gas emissions.

## **8. What are the next steps? When is the next IORP stress test?**

EIOPA will follow-up on the findings and analyse more in depth the investment behaviour of IORPs, in particular in the persistently ultra-low and negative interest rate environment. For that, EIOPA will make use of the significantly improved pension reporting from 2020.

Going forward, EIOPA wants to further improve its analytical tool set for stress testing IORPs, extending the horizontal approach and with that assessing the common exposures and vulnerabilities of the DB and DC sectors together.

To allow for sufficient time to carry out the necessary work to further develop the methodological toolset, the next IORP stress test can be expected for 2022.

## **9. Why is there a problem for IORPs in a low interest rate environment?**

IORPs invest in and manage assets to fund their members' and beneficiaries' future retirement income. In order to mitigate market risks and in line with legal and contractual constraints on the investment allocation, IORPs have developed strategic investment allocations. Those investment allocations are characterised – on aggregate – by allocating the majority of the funds to bonds and sovereign bonds, which currently show low, ultra-low and even negative yields.

Due to the long durations of the pension obligations, IORPs can sustain short-term pressure on yields, yet also expose them to re-investment risks and, in the long-

term, lead to insufficient returns to fund the IORPs' pension obligations and can result in lower future retirement income for members and beneficiaries.

#### **10. Which countries and pension funds participated? Is this a representative sample of European pension funds?**

The exercise covers all the EEA countries with a material IORP sector, which is over EUR 500 million in assets. 19 countries participated in the exercise, covering more than 60% of the national DB and 50% of the national DC sectors in terms of assets – in most countries. The participating countries were: Austria, Belgium, Cyprus, Germany, Denmark, Finland, France, Greece, Ireland, Italy, Liechtenstein, Luxembourg, the Netherlands, Norway, Portugal, Slovakia, Slovenia, Spain and Sweden.

The sample of IORPs has been chosen to be representative at national level. In total 176 IORPs participated, thereof 99 DB IORPs and 77 DC IORPs. Compared to the 2015 and 2017 exercises, the overall sample of participating IORPs is significantly different, with French IORPs participating for the first time and British IORPs not participating.

#### **11. Why are there no results from the UK? Why have so few Irish IORPs participated?**

The British national competent authority (NCA), The Pensions Regulator (TPR), wrote to IORPs in May 2019 to alert them to the stress test exercise and provided them with details on how to take part. However, no UK schemes chose to participate in the stress test and as a result no UK data has been submitted.

Due to the delayed transposition of the IORP II Directive in Ireland, the Irish NCA was not empowered to enforce the mandatory participation in the European stress test, so that the Irish participating IORPs took part on a strictly voluntary basis.

#### **12. Why are you publishing the names of the participating IORPs?**

EIOPA's stress tests aim at full transparency of the exercise carried out. As with the approach taken for the previous EIOPA stress tests, the 2019 IORP stress test report only refers to aggregate results. The report does not provide any individual IORP results, and reflects the resilience of financial institutions only at the level of the corresponding country (or at a higher level). Therefore, it is of utmost importance for the credibility of the results that the reader of the report can

understand the sample of the financial institutions that were subject to the stress test. This transparency is needed to assess the representativeness of the results in relation to the representativeness of the national sample of participating IORPs. In line with the approach taken for the 2014, 2016 and 2018 insurance stress tests, the transparency to the public and the credibility of the aggregate results necessitate the identification of the IORPs in the sample by their names.

### **13. Why do IORPs providing DB/hybrid schemes have to apply the adverse scenario to the common balance sheet?**

DB/hybrid IORPs have to apply the adverse market scenario to the national balance sheet and the common balance sheet, corresponding to the common framework's balance sheet which EIOPA advised in its [Opinion on a Common Framework for Risk Assessment and Transparency of IORPs](#).

The national balance sheet is relevant for assessing IORPs' compliance with funding requirements, but is characterised by a high degree of heterogeneity among countries. Valuation methods for the national balance sheet are country specific, being based for assets either on market or book values and for liabilities on discount rates varying between risk-free rates and expected returns on assets. Also different national funding requirements coexist as well as different prudential mechanisms are in place to deal with the funding deficits.

In order to ensure comparability of the stress test results, the adverse market scenario should also be applied to the common balance sheet based on market-consistent valuations. This is particularly relevant for liabilities as the common balance sheet uses realistic assumptions and market risk-free rate for discounting.

The common balance sheet captures future developments by including different security and benefit adjustment mechanisms. Therefore, the common balance sheet will make transparent to what extent shortfalls revealed under the baseline and adverse market scenario need to be covered by sponsor support, pension protection schemes and/or benefit reductions.

### **14. Which institutions supported EIOPA in conducting the exercise?**

The stress test is coordinated by EIOPA. It is a cooperative effort involving IORPs, NCAs as well as the ESRB and ECB.

The adverse market scenario for the stress test has been developed in close cooperation with the ESRB and ECB.

The NCAs identified and contacted participants in the test. IORPs performed the calculations. The results were validated by the NCAs and submitted to EIOPA for a central validation.