Sustainability risks in the insurance sector

1. Lessons drawn from recent stress tests and supervisors' analysis on the insurance and pension fund industries' climate related risk

1.1 Moderate though material transition risk is observed in the EU

An official noted that there are many dimensions to the potential impact of climate risk to insurers, including the asset side, the liability side, transition risk and physical risk. Climate risk drives most of the risk that insurers are exposed to. Globally, exposure to climate-relevant assets is around 33% to 40% of global insurers' general accounts, which is very significant.

A regulator stated that the stress test on occupational pension funds suggested that the impact of a transition risk[1] can be material. The stress test showed a drop in the asset evaluation of around 12%, although this should be considered in the long term. The European Insurance and Occupational Pensions Authority (EIOPA) carried out some sensitivity analysis in 2020 and 2022 on the physical[2] and transition risk. The insurance sector has historically coped well with the physical risk, but its frequency and intensity will increase. The impact of the transition risk was moderate.

A regulator stated that four pension funds from Sweden had participated in the EIOPA exercise. The impact on the undertakings was material but not critical. The funding ratio before and after simulated shocks were compared. There was an effect, but, when compared with the funding ratios in other countries, insurance undertakings in Sweden were still more solid. The observed impact on the Swedish undertakings was mainly due to their investment strategies. However, given that they are well capitalised, they could have held even riskier assets.

1.2 Progress is needed regarding risk measurement, stress scenario definition and possible systemic impacts

An official commented that, from a national point of view, there is a lot of work to do, both in building scenarios and in measurement.

A regulator added that methods for measuring physical risks in a more forward-looking way need to be identified and developed.

An official reported that the results from the global monitoring exercise (GME) suggest that it is very important to have a forward-looking perspective. The pilot exercise in 2021 aimed to consider how exposure can translate to solvency shocks. There is quite a range of possible scenarios, particularly for measuring exposure to transition risk, from an orderly transition to a disorderly 'too little too late' transition. A scenario that would create a major solvency issue for insurers has not been identified, but a 'too little too late' scenario would have a material impact on the asset side in terms of the solvency ratio.

2. Increasing sustainability risk of insurance liabilities

An industry representative commented that sustainability risks impact all the traditional broad risk categories. Sustainability risks are factors underlying investments and liabilities and are themselves drivers of the market and underwriting risks.

Sustainability risks are so intertwined with all other risks that it is difficult to identify them on a standalone basis while avoiding double counting. One should avoid over theoretical and complex approaches and bear in mind that assumptions & approaches chosen will heavily influence the results.

2.1 Identifying the effective sustainability risk factors is complex and challenging

An industry representative introduced that a pure life insurer conducted an analysis that aimed to estimate the impacts of climate change on the life insurance business. The results were that an increasing number of deaths and corresponding death insurance claim payments will lead to an increase of around 0.2% in the 2050s and 0.8% in the 2090s, compared with actual numbers between 2010 and 2019. The emergence of new risks in the future must also be considered through a process of trial and error[3]. The policy risks and opportunities and physical risk were analysed using MSCI's climate value-at-risk methodology.

An industry representative noted that, with respect to the non-life business with the climate hazards and physical risks, models will need to be updated, defining the appropriate frequencies, intensities, geolocation, and other characteristics. There are differences between

1. Transition risks are business-related risks that follow societal and economic shifts toward a low-carbon and more climate-friendly future. These risks can include policy and regulatory risks, technological risks, market risks, reputational risks, and legal risks. https://www.gresb.com/nl-en/products/transition-risk-tool/#:~:text=What%20is%20transition%20risk%3F,reputational%20risks%2C%20and%20legal%20risks
2. Risks related to the physical impacts of climate change.
3. Trial and error is a fundamental method of problem-solving characterized by repeated, varied attempts which are continued until success, or until the practiser stops trying.

modelled results and experience. The help of academics as well as regulators is welcome, provided that they avoid too strong a bias towards short-term observations. Their firm needs to enhance the geocoding of its exposures. Studies on transition financial risk suggest that, while some sectors may be doomed in the long term, they still have good performance and behave better than so-called green assets. Environmental, social and governance (ESG) ratings remain questionable. Transition risk can sometimes be regarded as more a question of reputational and regulatory risk. Political decisions are instrumental in this area.

2.2 Data availability is essential to make progress on assessing the sustainability risk of insurance undertakings liabilities

An official stated that the liability side must also be considered, although there is the challenge of data availability. International Association of Insurance Supervisors (IAIS) members currently identify the main impact of climate change as losses in relation to natural disasters. Going forward, members expect possible material impact in risk management, product design and pricing, and a risk around the creation of protection gaps. The IAIS will issue a statement shortly on the approach to this.

2.3 As well as estimating the systemic dimension of sustainability risks, the double materiality approach adds to the complexity of the tools required

An industry representative noted that introducing double materiality may introduce double counting and will lead to trying to achieve too many targets. Insurers should assess not only the financial losses for their business activities, but also the externalities of their business for the wider society. Those externalities may be subject to bias and even contradictory objectives. Trying to make explicit the link between practical experience, vision, observation, and the broader sustainability goals set by wider society is difficult.

3. Operationalising ESG objectives represents an additional challenge for insurance undertakings

3.1 Perceptible progress has been made by the insurance companies in addressing sustainability risk

A regulator stated that insurance companies were good at addressing sustainability risk compared to a couple of years ago. There has been development in insurance companies' own risk and solvency assessments (ORSAs). An increasing number of companies use stress tests and scenario analysis to compare climate risks. Life insurance companies are taking the transition risk into consideration. National and global supervisors must deepen their knowledge.

3.2 Defining credible long-term objectives and combining them with those imposed by the various insurance companies' stakeholders is essential and challenging

An industry representative noted that there are a number of contradictions around ESG. Despite the E target, but the emergent situation in global energy has created a temporary increase in the demand for coal. Prior to the war, financing weapon production was penalised as part of achieving the S target, but this is no longer insisted upon. In the energy-producing country there is a clear critical divide on ESG investment. Around the globe there are increasing shareholders' proposals targeting ESG issues. An absolute reduction target, aligned with the science-based net zero emissions pathway, is critical for the company to achieve its net zero commitment and more fully address its climate risk. There are more complex situations in the nature positive context. Placing solar panels in less-populated mountainous areas will cause deforestation and devastate the ecosystem. Life insurers, as long-term institutional investors, must focus on the long-term horizon.

3.3 Incentivising the adaptation of policyholders requires accurate risk assessment techniques and development of a combination of dedicated standards, products, pricings and incentives, which requires the involvement of the public sector, insurance regulators and insurance companies

3.3.1 Insurance companies have a role to play in fostering the adaptation of economies

An official commented that an insurance company could contribute to the adaptation to climate risk through underwriting activity. EIOPA has developed an impact underwriting concept and carried out a pilot study.

A regulator confirmed that the pilot had been carried out recently. The underwriting policy aims to encourage citizens to consider adaptation measures. If people implement adaptation measures the

insurance sector should be able to incentivise this through standardisation of terms and conditions and possibly also premium discounts to reflect reduced risk. EIOPA will continue working on measures to incentivise consumer awareness and to improve the offer of products targeted at risk-based climate adaptation.

An official commented that a similar approach has been taken in Italy. Designing standardised products with adaptation measures can be problematic. Also, measuring the effect of those adaptation measures in terms of risks can be difficult. The insurance sector could contribute to this more.

3.3.2 Incentivising policyholders' adaptation should be undertaken in parallel to risk limitation by insurance companies

An industry representative noted that their firm is a non-life insurer, but also a reinsurer, so the physical risks around climate are very relevant. Proper pricing should take into account the climate change impact. All major insurance companies have teams of cat modellers and meteorologists who build models of climate risks that enable the estimation of pure technical premiums in the short-term and improve the knowledge of frequency intensity for the longer term. The historical data series is too short. Limiting the overall exposure to climate risk, especially in the high risk zones, is

challenging. Mutual insurance companies s are attempting to retain their market shares in those high-risk zones, whereas some insurers are avoiding the high-risk zones. There is an issue of fairness for citizens. A mutualisation of the risks of the higher zones must be achieved if those risks are to remain insured. The help of the public authorities will be needed to avoid building in these zones or work on prevention measures.

3.3.3 One challenge to address is the cost of adapting to increasing physical risk

An industry representative stated that prevention measures can be costly. For instance, flood shutters are around €6,000 for a regular house; prevention measures against the effects of subsidence on a regular house cost between 15.000€ and 20000€. If insurance companies can encourage their clients to install such measures and can even help them to get in touch with companies providing prevention measures, or help with the administrative work in order to obtain subsidies provided by the government, those costs are very high and cannot be paid for by the insurance companies. Giving a price reduction on the insurance premium won't help the client since insurance prices are too low. Although investing in prevention measures is very important, it won't contribute in an important way to limit future climate claims.

4. Regulatory and supervisory priorities to address sustainability risk in the insurance sector in the global context

4.1 Globally, the targets are to improve data and the measurement of how climate risk develops over time, and to address possible gaps in climate related regulation and supervision of insurers

An official explained that IAIS has three pillars of work with regard to climate risk. The first is monitoring. There is an expectation from the public that the insurance sector will provide evidence of how climate risk develops over time. There are a lot of data gaps, but progress is being made. Members are being helped to do their own monitoring, possibly using developments at the global level as a benchmark.

The second aspect is policy work. The insurance core principles (ICPs) were developed to be able to capture all risks, so no major changes are expected to be necessary. IAIS has been conducting a gap analysis to investigate whether any areas of climate risk development have been missed. Consultation with stakeholders on potential changes to the ICPs has begun. How supervision interacts with the standards is also important. We [IAIS] intends to publish application papers to help members use its standards to assess and mitigate climate risk.

The last element is capacity building and supervisory cooperation. Members carrying out climate stress testing have been helped. More than 200 supervisors have taken part in workshops. Capacity building for supervisors is also a very active area of work. The IAIS can provide a platform for dialogue and cooperation between supervisors. There has been a lot of dialogue with the industry.

4.2 In the EU, in addition to guidance on how to include sustainability in the ORSA, the revision of the Solvency II regulation provides an opportunity to introduce some specific prudential treatment of ESG related risk. The next target is an effective implementation

A regulator stated that there will be a lot of work around Solvency II, although there is some delay related to the negotiation.

The Commission gave EIOPA until June 2023 to deliver a report on the prudential treatment of assets and activities which are associated substantially with environmental or social objectives, but the negotiation is still to come. The plan is to publish a paper further in the current year, depending on progress on the Solvency II negotiation. The present time may be a good moment to consolidate regulation and make it usable.

4.3 Less burdensome and more adequate stress tests are in development

Regarding cross-sectoral stress tests, a regulator explained that the European Supervisory Authorities (EBA, ESMA and EIOPA) and the European Systemic Risk Board (ESRB) received a mandate from the Commission to carry out an exercise to understand the real risks from and to a transition to climate-neutrality. The outcome of the cross-border exercise is expected towards the end of 2024 or early 2025. The aim is to use the data obtained already to lessen the burden on the insurance industry.

4.4 Better identifying and addressing customers' investment sustainability and return preferences is also a priority

A regulator commented that the sector is possibly not sophisticated enough. The new legislation aims to ensure that consumers can invest and save sustainably. Insurance intermediaries and insurance providers need to recommend products to meet sustainability preferences. However, the sustainability preference and what is expected is not clearly defined. Also, the disclosure requirement does not define exactly what a sustainable investment is. Sustainability and returns should be discussed at the same time in respect of saving and saving products. What sustainability will cost and whether consumers are ready to take on this cost must be considered. The level of detail that has to be disclosed may be too great.

4.4 Preserving the risk sensitiveness of insurance prudential frameworks is vital, although sustainability must be incentivised

An industry representative commented that the regulators were doing their best to try to remain balanced. The message from industry to the regulators was to remain risk based and to avoid deploying unsuitable standards that could interfere dramatically with strategic decisions. Pro-cyclical behaviours should be avoided. A long-term approach is crucial. An overly

standardised approach overstates the science proof basis. Science is not formed on a consensus but on non-rebuttable evidence.

An official noted that there has been a very intense development of regulations. Sometimes the regulation goes too far compared to the practices and sometimes it is the other way round.

An industry representative commented that European regulators are always well advanced, especially in climate related matters. There is an attempt to incorporate climate elements into the Solvency framework, such as capital regulations to accelerate green investments or repress the brown investments. However, unless evidence suggests that the green investments have lower and the brown investment have higher credit risks, it may not always result in a desirable outcome.

4.5 Regulators should support promoting the transition of economies, not simply divesting, of the insurance sector

An industry representative stated that government is expected to play a role in supporting private insurance companies, which provide funds for transition to the corporate sector. The Financial Services Agency of Japan (JFSA) has been actively working on various measures to promote the private sector's activities, such as the establishment of a sustainability finance expert panel.