

## SUSTAINABILITY RISKS IN THE INSURANCE SECTOR



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### Supervisory approach in the light of sustainability risks

Sustainability related events and risks of a disorderly green transition produce potential adverse impacts on both liabilities and assets of insurers. At the same time, the transition to a more sustainable world calls for the insurance industry to be a catalyst in its dual role as risk taker and institutional investor.

From the point of view of supervisors, it is increasingly difficult to separate these two perspectives. A failure to provide a visible and reliable contribution to sustainable factors could affect the value of the company, given its reputational consequences. Strategic risks are more and more affected by the way the company characterizes its sustainability objectives and operations. Also, the correct implementation of the increasingly complex sustainability regulation implies compliance risks that cannot be disregarded.

In this context, the supervisors' traditional objective of consumer protection assumes a broader and more evolved scope. Today, consumer protection must also be seen from the point of view of satisfaction of the protection needs of individuals and of the achievement of sustainability objectives.

How can these goals be pursued in the practical supervisory approach?

First, it is certainly important for supervisors to have deep knowledge of the relevant phenomena and be able to appreciate their risks and opportunities. A prerequisite for any regulatory or supervisory action must be qualitative and quantitative evidence of the phenomena. Today, this appears to be the main challenge.

In 2022 Ivass carried out a survey among the supervised entities, aimed at collecting granular data on the sustainability of the companies' investments and on their underwriting activity in covering natural perils. The companies have given the supervisor highly granular data on a variety of topics, such as the degree of alignment of their investments to the European Taxonomy, the carbon footprint of their portfolio, the premiums collected and the claims paid in the business of providing coverage for natural perils, the role adaptation or preventative measures in the underwriting and pricing of this lines of business.

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supervisors too.**

This data collection effort has been very challenging for insurers and has even obliged them to use proxies and estimates. This means that there is still a lot to improve for companies in collecting and using data to measure risks, but also for regulators in clarifying the legal framework, introducing widely recognized metrics and facilitating data collection.

But that is not enough. We need that knowledge of these phenomena, and of the potential transmission of the resulting risks and benefits, becomes part of the store of knowledge of those operating at all levels of the Authority. As was the

case with the introduction of Solvency II, the new scenario requires an evolution of the supervisory culture. This is often forgotten, yet it is essential but difficult to achieve in practice.

Supervisors, then, must foster awareness of the phenomena by those to whom the insurance service is directed. Insurance education is a fundamental part of supervisory activity, and it is especially so in the current context.

But aside from knowing and ensuring others have knowledge, what are the approaches required from supervisors in the current scenario?

The on-going EU and national regulatory work is intense. New tools and requirements are being developed in the whole regulatory framework: financial requirements, risk management disclosure and market conduct.

In the presence of such new and complex phenomena, supervisors can first of all play an essential role in collecting data and contributing to defining risk metrics and indicators. National authorities and international fora should contribute to the quantitative definition of phenomena and to the identification of ways to measure their risks, even before suggesting how to mitigate them. A lot of work is being done at both EIOPA and IAIS in this area, for example in the development and application of scenarios for climate change stress tests.

Just as for businesses, which are working to integrate ESG measurements into decision-making processes, metrics and indicators related to sustainability risks and opportunities will then need to be incorporated into supervisory processes in order to calibrate their intensity and determine when to intervene on the basis of risk considerations.

The need for a simpler relationship between the Authorities and supervised entities should also be recognised. A simplification of supervisory processes, which are often the unintended result of jumbled and complex regulatory interventions at both the national and European level, would help supervisors and companies to face new challenges without unnecessary burdens.

Overall, the path towards sustainability is long and difficult for supervisors too. It needs to be approached with commitment and perseverance but also with common sense and balance.



## ÅSA LARSON

Executive Director Insurance -  
Swedish Financial Supervisory  
Authority (Finansinspektionen)

### Sustainability risks in the Swedish insurance sector

Sustainability risks for the insurance sector, and the financial system, stems from both an unsustainable development and the transition to a sustainable economy. These risks clearly threaten financial stability and are thus integrated into the Swedish FSA's (FI) overarching risk identification and our ongoing supervision of insurers and pension providers.

FI is, for example, following how insurers manage sustainability-related risks in their own risk and solvency assessments. In 2022 we conducted an in-depth analysis with a specific focus on physical risks for non-life insurers. We have also initiated a thematic review to get a better understanding of how undertakings integrate sustainability into their corporate governance. For example, we collect data on risks they identify as material and how they measure those risks. The results form a basis for supervisory dialogue and qualitative assessment of the companies' sustainability risk. In 2022 we and four Swedish IORPs participated in Eiopas climate stress test for the occupational pensions sector.

While climate change risk is often said to be an emerging risk and an untraditional risk, this was in many

ways a traditional stress test. The participating IORPs from Sweden were more affected in terms of how the funding ratio decreased post-shock than those from any other participating country. However, the decreases in funding ratio were not due to Swedish IORPs having a particularly large exposure to carbon intensive economic sectors, but rather due to their unusually risky asset allocation – they overall had a much larger portion of their assets invested in equity than IORPs from other participating countries. In this sense, the results of the stress test reflected overall asset management strategy more than sensitivity to transition risk.

It should also be noted that the IORPs were not put under any particularly heavy pressure in terms of solvency. In fact, the funding ratios of Swedish IORPs were on average higher post-shock than they were pre-shock in any other country. In this sense too, the results of the stress test were not as informative as we might have hoped: the scenario was not sufficiently severe to actually stress the Swedish IORPs.

Last year we also did an analysis of how the floods in Gävleborg, largest flooding for many years, in 2021 impacted general insurers, costing insurers two billion SEK.

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**Access to relevant,  
comparable and reliable  
data and resilience  
in the financial system  
are crucial.**

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In our analysis we used the floods as a real-life stress test of the resilience of Swedish general insurers to physical climate change risk. From a solvency perspective none of the companies were seriously threatened. All of them could have handled significantly larger disasters. For the large general insurers, with their extensive geographic diversification – no problem! For smaller local insurers gross claims were in some cases huge in relation to written premiums and they heavily depended on reinsurance to meet their obligations.

While reinsurance is and will remain a crucial risk management tool for general insurers, the reliance on reinsurance is also a risk in a forward-looking analysis. Climate change is affecting and will continue to affect the reinsurance market on a global scale. If

reinsurance prices increase or capacity diminishes it would have implications for direct insurers.

Such dependencies, and also the management actions insurers and other actors might undertake to respond to climate change, ranging from exclusion to adaptation, are also difficult to understand within the confines of traditional micro-prudential stress testing.

Methodologically, Eiopa's IORP stress test was certainly a step forward. The forward-looking methods and models used by Eiopa, ESRB and ECB to derive stresses from the scenario were sophisticated. Here Eiopa's role as leaders in developing stress test methodology is crucial. We appreciate that EIOPA have signaled that future climate stress tests will focus more on systemic aspects and less on micro-prudential requirements.

FI's roadmap for sustainable finance contains three goals –

1. good access to relevant, comparable and reliable sustainability related information,
2. high levels of trust in sustainable finance,
3. resilience to sustainability risks in the financial system – and will thus guide our priorities. In my last Eurofi panel I spoke about the importance of data, in order to measure, compare and understand the risks related to sustainability and climate changes.

My contribution to this panel, will be more about the latter and how we supervisors need to increase the understanding for and knowledge of sustainability-related risks faced by the insurance and pensions sector, in order to assess the resilience and whether those risks are properly managed.



## FAUSTO PARENTE

Executive Director -  
European Insurance and  
Occupational Pensions  
Authority (EIOPA)

### Sustainable insurance to protect society in the long term

Economic and insured losses, caused by weather related events, have been on an upward trajectory in the last decades. Looking at the consequences of a number of major European natural catastrophes, historically, insurers have been well placed, handling the resulting claims. Looking ahead, insurance capacity is of concern to the European Insurance and Occupational Pensions Authority (EIOPA). The insurance industry's capacity relies to a great extent on reinsurance. An increase in extreme weather events, but also a change in accumulations, is leading to greater demand for reinsurance and higher reinsurance prices, changes in reinsurance conditions and affordability and availability issues. This reduces risk mitigation possibilities for insurers in the near future.

Furthermore, only around a quarter of the total economic losses caused by extreme weather and climate related events across Europe are insured today. If unmitigated, the further widening of this insurance protection gap will have potentially broader

macroeconomic implications and expose insurers to reputational and wider operational risks.

In this context, insurers and supervisors play an important role to ensure sustainable insurance activity protects society for the long term.

The insurance sector's ability to continue to offer financial protection against the consequences of climate-related events relies on its ability to understand the likely impact of climate change and adapt their business strategies. EIOPA's analysis on ORSA showed that climate change risk, if assessed at all, was often treated in qualitative manner, as a reputational risk mainly. EIOPA's physical risk analysis shows that many undertakings are not undertaking climate change analyses yet. The integration of longer-term scenarios in enterprise risk management remains a challenge. EIOPA's pilot exercise on impact underwriting concludes that the European insurance market is at an early stage in terms of standardising the implementation of climate-related adaptation measures in insurance contracts.

EIOPA expects the insurance business to evolve to better adapt to climate change risks and opportunities. Insurers will need to explore innovative product design to keep insurance available and affordable. By including and promoting adaptation measures in insurance products (e.g. investments in property-level resilience to perils such as windstorm or flood), insurers could reduce their exposure to physical risk and potential future insured losses, while policyholders would pay a reduced premium thanks to the reduced risk. Through information sharing, both on risk assessment (modelling, pricing) and possible adaptation measures (e.g. construction standards), insurers could also play a role in raising public awareness to risks posed by climate change and possible ways to address them.

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**Sustainable insurance protects society in the long term.**

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EIOPA supports these efforts through its sustainable finance strategy. EIOPA will continue its analytical work on physical risks as well as transition risks with an overall aim of supporting further forward-looking views and analysis of risks in light of climate

change. Jointly with EBA, ESMA, the ECB and the ESRB, EIOPA will conduct a one-off scenario analysis to assess the resilience of the financial sector in line with the European Commission's Fit-for-55 package.

At micro-level, EIOPA is conducting supervisory oversight of sustainability risks, including through discussions on the inclusion of climate change in colleges of supervisors. EIOPA supports the transparency, and open access to data and development of scenarios and modelling to allow forward-looking risk assessment of nature-related risks. Efforts to improve the usability of taxonomy and sustainability reporting will play an important role, too.

EIOPA will continue identifying underlying causes of the protection gaps, as well as assessing the macro-economic consequences of a lack of insurance. At the nexus of public and private initiatives, EIOPA is engaging in the EU Commission's Climate Resilience Dialogue and the IAIS Protection Gap Task Force to ascertain the role of supervisors and assess measures to improve insurability of climate risks.

Finally, looking ahead, EIOPA will also seek to engage further on nature-related as well as on social risks, in an effort to improve awareness on the risks and impacts and to allow addressing these risks in a convergent and proportionate manner.

Sources:

*Letter from John Berrigan One off exercise (europa.eu).*

*Impact Underwriting (europa.eu).*

*European insurers' exposure to physical climate change risk (europa.eu).*

*Dashboard on insurance protection gap for natural catastrophes (europa.eu).*

*Sustainable finance (europa.eu).*



## HIDEHIKO SOGANO

Managing Executive Officer,  
Chief Sustainability Officer -  
Dai-ichi Life Holdings, Inc.

### The necessary framework of sustainability risk management

Japanese life insurance companies are strengthening their ESG investment and stewardship activities by signing the PRI and accepting the Stewardship Code. Since fiscal 2017, the Life Insurance Association of Japan has been working on “collaborative engagement,” in which multiple life insurance companies cooperate to send letters and engage in dialogue with investee companies. According to Association’s survey, regarding the appropriateness of corporates’ ESG-related activities, there is still a big gap between the self-complacency of corporates and the expectation of investors, which leads us to beef up our engagement. From fiscal 2020, we will expand the scope of target companies, targeting all top 50 greenhouse gas emitting companies in Japan. Such engagement consists of the formulation and disclosure of a roadmap for reducing greenhouse gas emissions toward net zero.

Dai-ichi Life is a member of the Net Zero Asset Owners Alliance and is committed to achieving net zero greenhouse gas emissions in its asset management portfolio. In particular, in September

2022, we established the “Policy on Transition Finance” and stated that it will select investment activities that prioritize the realization of long-term carbon neutrality for society as a whole. When making investment decisions, in addition to complying with major domestic and international guidelines regarding transition finance, we will independently examine the appropriateness and feasibility of a company’s transition strategy from the perspective of securing investment income.

In addition, we will continuously review the judgment criteria used in the scrutiny, taking into account the external environment surrounding the transition and the state of technological innovation. We would like to encourage companies to improve their transition strategies and improve the effectiveness of their initiatives through engagement, based on the knowledge we have gained through these specific considerations.

While the above describes our efforts as an institutional investor, and as a life insurance provider, it is important to understand the “long-term” risks and opportunities posed by climate change. Dai-ichi Life estimated the relationship between the maximum temperature nationwide and the occurrence of deaths using its own death insurance payment record. According to the RCP8.5 scenario (4°C rise at the end of the 21st century), the incidence of death will increase by 1.0%, which is equivalent to an increase of about 4 billion yen.

#### Select investment activities for the long-term carbon neutrality for society as a whole.

The Dai-ichi Group recognizes that responding to climate change is an important management issue that can have a significant impact on the lives and health of customers, corporate activities, and the sustainability of society. We must steadily strengthen our risk management and governance systems.

Specifically, the “Group ERM Committee” discusses how to assess and respond to physical risks and transition risks. We formulate policies and strategies related to sustainability in the newly established “Group Sustainability Promotion Committee” and monitor the implementation status of

initiatives. These details are disclosed in our annual integrated report to increase the transparency of information.

In addition, in fiscal 2022, we will introduce multiple sustainability indicators, including an indicator related to progress in reducing CO2 emissions, as part of our executive remuneration evaluation indicators. As one of the results of strengthening our efforts and expanding our information disclosure, we were selected as an “A-List,” company, the highest-rated company in a survey on climate change by the CDP (international environmental NGO). The Group will continue to strive for further sophistication of sustainability governance.

In Japan, three ministries (Ministry of Economy, Trade and Industry, Ministry of the Environment, and Financial Services Agency) are working together on transition finance. With the involvement of the METI, we are able to build a system to tackle sustainability risk not only for the financial industry but also for the Japanese business community as a whole.

Regarding an attempt to incorporate climate elements into solvency frameworks such as capital regulations to ensure the soundness of financial institutions, we have a view that it may not always result in a desirable outcome since the original objectives are different and it is too premature to do so in the midst of too much uncertainty. Rather, the government is expected to play a role in supporting the movement of private insurance companies which provide funds for transition to the corporate sector, to advance engagement rather than divestment. In this regard, Japan’s FSA has been actively working on various measures to promote the private sector’s activities such as the establishment of the Sustainable Finance Expert Panel in 2020 which has emphasized sustainable finance as “the infrastructure that supports a sustainable economic and social system.”



## MIREILLE AUBRY

Director of Prudential Regulation Standards & Foresight - Covéa

### Sustainability issues and risks in need of sustainable governance and oversight

In its February 2022 report on Climate change risk governance in the insurance sector, ACPR identified 5 areas of scrutiny.

The very first is Strategy. Here, identification of components of climate change risk is viewed as an essential prerequisite for the development of an appropriate strategy including the long-term dimension. The second area is Risk Management where the various dimensions of climate risks are to be integrated into risk mapping with their interactions with other risks. The third area concerns Internal Organization with actions aiming at mobilizing and informing management bodies. A clear definition of internal responsibilities is key for implementing the measures related to the risk of climate change with the involvement of the business lines. The fourth area is looking at the role of insurers as experts in helping raising awareness among stakeholders. Actions aimed at involving employees have multiplied and raising awareness among stakeholders have stepped up.

The fifth and last area is Communication. Organizations emphasize the importance of clear communication on their strategy and commitments in terms of climate change. Reporting obligations and the development of appropriate communication require the development of associated skills.

In its 2020 climate pilot exercise ACPR has subjected the French Market to a first assessment of the financial risks due to climate change. The exercise was totally new and comprehensive, with a 30-year horizon including 3 transition scenarios and 1 physical risk scenario. Results have demonstrated a moderate exposure to transition risk while natural disasters would lead to a 2 to 5 fold increase in the number of natural disaster losses in the most affected departments.

ACPR is preparing for the next climate exercise and has consulted the industry to gather return on experience and identify way forward to refine the exercise. The schedule is still indicative with provisional assumptions delivered in April 2023 and a launch of the exercise in July 2023. Participants' submissions would be expected by end of year 2023 and results would be published end of April/beginning of May 2024. The new exercise will bring the opportunity to include new risks such as hail and granularity could be refined. A short term scenario will be added to the exercise (5-10 years) that could include combining several perils and specifying geo-localisation to enable a quantification of the cost of insured goods as well as possible effects on property prices. A unique feature of the ACPR exercise is the inclusion of health risks in the scenarios also with the progressive availability of Covid 19 experience data.

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The modelling allows factoring the possible link between life and non-life contracts via the use of individual address. With regards asset value shocks assumptions are made according to geographical breakdown (FR/EU/US/RoW), sectors (55), bonds spreads per bond category (0.5% of bonds in the most exposed sectors) and EIOPA risk free rate curve. ACPR adopts the hypothesis of marked sectoral shocks ("stranded assets") with contagion mechanisms. In terms of granularity

transition risk sensitive sectors (e.g. energy, transport, etc.) would be analysed in greater detail and real estate shocks could possibly be included. The calibration of the shocks will be based on short-term and long-term scenarios with input from NGFS and Banque de France/ACPR. In the latest generation of NGFS scenarios, published in July 2022 macroeconomic variables (inflation, growth) take into account chronic and acute physical risk.

Taking a broad look at sustainability risks we find physical and transition risks in a much different maturity stage. On the climate side, we note that physical risks are a topic of science and experience where insurers and regulators can build on the insurance strong expertise and therefore be particularly well prepared to identify, measure, manage, monitor and report the risks arising. On transition risks the situation is different. Transition risks are not directly connected with climate but rather with energy volumes fuelling the economy and the result of human actions and choices. Transition is occurring everyday irrelevant of the actual understanding of the underlying drivers. It may very well be that prices are not helpful in assessing transition risks. Transition risks very much rely on the paths towards transformation and on the understanding of the interconnections between sectors and technologies.

Today the unique criteria for transition risk evaluation seems to be the volume of GHG emissions and yet data may not be reliable and still underestimate the emissions on the entire value chain of the transition choices pushed forward. Other key risks involved in transition choices such as metal rarefaction and soil and/or water pollution as well as social issues linked to mining are overlooked (eg. for renewable energy & electric cars).