

SUSTAINABILITY AND CLIMATE CHANGE: MAIN POSITIONS OF THE AAE

BY **FRANK SCHILLER**

In recent decades we have seen increased insurance losses due to natural catastrophes. A wide range of commentators, including leading reinsurers and modelling firms, report clear upward trends in risks that can be directly connected to climate change. These trends have been observed, modelled and explained by scientists. Leading experts in this field have been honoured by Nobel prizes for their research. The AAE is deeply concerned about the effects of the climate crisis endangering mankind and the unprecedented risks it introduces for all economic sectors and in particular for insurance, reinsurance and rest of the financial sector

The current Assessment Report 6 of the IPCC is quite clear: *'Emissions of greenhouse gases from human activities are responsible for approximately 1.1°C of warming since 1850-1900'* and *'many of the changes observed in the climate are unprecedented in thousands [...] of years'*. Warming beyond 1.5°C will increase physical consequences significantly. At approximately 2°C irreversible tipping points in the climate system could be reached.

Consequently, almost all countries committed in the 2015 Paris Agreement to a 1.5°C warming target and this target has been confirmed at the COP26 summit

in Glasgow 2021. Measures to achieve this target will now be made more transparent and more closely monitored by most countries. However, this target is far from easy to reach. All current national pledges taken together do not suffice to limit global warming below 3°C. This climate action gap is very material and relevant. Closing it will require an unprecedented level of global action in the 2020s as well as later. It is not only **physical risks** that have to be managed adequately¹ i.e. risks that arise from the physical effects of climate change including risks like:

- Particular weather-related events, storms, floods, fires >

¹ For a more detailed overview and discussion refer to EIOPA's *'Opinion on the supervision of the use of climate change risk scenarios in ORSA'*, EIOPA-BoS-21-127, 19 April 2021.

or heatwaves that may damage production facilities and disrupt value chains, and

- Longer-term changes in the climate, such as temperature changes, rising sea levels, reduced water availability, biodiversity loss and changes in land and soil productivity.

In addition we as actuaries should be identifying and managing **transition risks** that are related to the climate change, i.e. risks that result from the transition to a low-carbon and climate resilient economy.

They include:

- Policy risks, for example as a result of energy efficiency requirements, carbon pricing mechanisms which increase the price of fossil fuels, or policies to encourage sustainable land use.
- Legal risks, for example the risk of litigation for failing to avoid or minimise adverse impacts on the climate, or failing to adapt to climate change.
- Technology risks, for example if a technology with a less damaging impact on the climate replaces a technology that is more damaging to the climate.
- Market sentiment risks, for example if the choices of consumers and business customers shift towards products and services that are less damaging to the climate.
- Reputational risks, for example the difficulty of attracting and retaining customers, employees, business partners and investors if a company has a reputation for damaging the climate.

These physical and transition risks originating from ongoing climate change and from the potential climate change action gap together form what is called the **climate crisis**.

The European Commission sees insurance and pensions as playing a prominent role in supporting Europe achieve the required climate targets and in enabling society and business to manage the transition². Investment processes as well as the provision of insurance and reinsurance can play a key role in the transition towards a sustainable economy. Sustainability principles already form a pivotal ingredient in how insurance and pensions protect against severe events for both individuals and organisations and in how they ensure financial security in old age. Hence actuaries can play a key role in analysing Environmental, Social and Governance (ESG) risks and in supporting adequate risk assessment for the underwriting of and the capital allocation for such risks. We need to ensure that the pensions and insurance industry stay true to these sustainability principles by addressing the following questions:

1. How can we effectively manage the risks posed to insurance and pension systems from short and long-term policy impacts of climate change and other environmental or social trends? – *social and financial sustainability*
2. How can insurance and pensions contribute to the needed transition through investment policy and transition project insurance as well as via pay-outs linked to >

² Communication from the Commission to the European parliament and the Council on the review of the EU prudential framework for insurers and reinsurers in the context of the EU's post pandemic recovery, COM(2021) 580 final, 22.9.2021, page 2

climate related physical risks which are insurable? – *climate sustainability*

3. For climate risks borne by society which are not currently insurable (or may become uninsurable as market conditions evolve), how can public policy work with insurance and pension systems to ensure that society is covered in these areas? – *climate protection gap*

SOCIAL AND FINANCIAL SUSTAINABILITY

The European Commission published its proposals for an amendment of the Solvency II Directive on 22 September 2021. We highlight a basic principle of the Solvency II framework we think is still key: **'same risk – same capital'**. If so-called 'green supporting' or 'brown penalising' factors are introduced into Solvency II capital requirements to provide more guidance on the assessment of climate risks for investments, they should be scientifically based and reflect the quality of the investments and their inherent risks. Obviously, we must acknowledge that the integration of an emerging risk like climate change cannot rely solely on historical statistics but needs to factor in forward-looking considerations. If such factors are also introduced on the underwriting side, e.g. for insurance products which encourage the mitigation of sustainability risks, they should be similarly justified on scientific

grounds based on the nature of the risks inherent in the covered exposures.

We support already proposed initiatives that contribute to an appropriate **integration of climate risk in the Solvency II framework**, e.g., climate scenarios in the ORSA and regular reviews of

the Nat Cat model of the standard formula. In addition, we also see great benefits in including **climate change scenarios in the stress testing exercises** for the insurance and pensions industry. Actuaries with their profound expertise in assessing risks can provide a valuable contribution to the extension and updating of existing frameworks and will >



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be able to support well informed decision-making by the insurance and pension industry based on qualitative and quantitative analysis.

For savings products in pensions and insurance, it is important for policyholders to be well informed about the investment strategy and the sectors in which their money will be invested. Here, the insurance and pension industry can provide clarity for the public on how to invest in the future for society using sustainable products. Hence, we support a transparent **classification of savings, pensions and investment products by ESG criteria** and a clear and **informative sales process** to support policyholders' decisions.

Insurance (life & health) and pensions also directly contribute to ensuring **financial security in old age** and **contribute to protecting against loss of ability to work or financing medical treatment and care**. Ideally, existing solutions should be extended to broaden their attractiveness and their effectiveness as solutions against old age poverty, especially for 'gig economy' workers with minimal employment benefits and socially disadvantaged persons. This would further the impact these products might have on social sustainability.

All in all, actuaries have a key role in providing transparency and establishing a sound framework on how and what gets measured in a business context to drive the behaviour of firms. Where current accounting and valuation standards inappropriately externalise (i.e., exclude for the firms themselves) costs of non-green activities, we should ensure that accounting standards are modified to provide stronger incentives to close the climate action gap.

CLIMATE SUSTAINABILITY

As long-term investors, pension funds and insurers can also play a relevant role in financing the desired societal transition to a more sustainable future with a reduced carbon footprint. It should be noted that, due to the long-term investment strategies in place and the duty insurers have to service existing guarantees in long-term products, some investments held by insurers may not be practically capable of being resold immediately. In addition, we may expect that indirect incentives, like **green supporting or brown penalising factors under Solvency II, might be justified but might not necessarily have the full envisaged effect just by themselves**, as risk capital sometimes plays only a secondary role in investment decisions. However, some assets may become stranded assets and we as actuaries should provide adequate transparency and encourage pension funds and insurers to

anticipate these asset transition risks.

A more effective instrument for the finance industry might be the direct facilitation and development of investments such as specially structured **green bonds relating to debts or loans for transition projects**. To provide attractive solutions for mid-sized and small insurers and pensions funds, governments and Central Banks may need to provide guarantees on such bonds and the credit risk levels of different tranches within such structures will need to be clear. Such structures could make direct support of transition projects more attractive for insurers and pension funds because of their long-term horizon, stable guarantees, attractive interest rate expectations and transaction sizes that may be accessible to smaller undertakings.

Non-life insurance can play a major role **during the transition in protecting companies** against physical losses and by providing supporting services. Here, we believe that underwriting approaches that include ESG criteria in the assessment of risk exposures are important for developing sustainable solutions that price climate change risks appropriately and provide reliable cover for these risks. Companies can use such approaches to judge effectively which climate risks they are willing to take and which >

future effects of climate change they should take into account when pricing or agreeing to insure such risks, as well as the economic capital they need to face these risks.

To address the current lack of sustainability data, i.e., data about whether investments (on the asset side of the balance sheet) or insured exposures (on the liability side) are sustainable or not, and to reach a common understanding regarding which economic activities and which financial products are sustainable or not, we support the development and the use of a science-based taxonomy such as the one initiated by the EU Commission, as well as the establishment of Green Bond standards. Such level-playing rulebooks will also serve the purpose of fighting greenwashing.

CLIMATE PROTECTION GAP

Insurance protection gaps, by definition, are areas in which societal risks are not covered by the insurance industry, either because of lack of penetration, or because the risks are uninsurable in profit-oriented markets. While the former might eventually be covered by normal market forces, the latter can only be covered by public policy encouragement. While we expect non-life insurance to continue to play a major role in protecting individuals and companies against losses arising from natural catastrophes, insurers adopting **well-informed underwriting processes that**

include ESG-criteria may need to decline some coverages. According to a study from EIOPA, only 35% of the risks stemming from natural catastrophes are currently covered by insurance³, partly due to limited attractiveness or accessibility, but also due to the lack of awareness of these risks by individuals or companies.

As climate change risk becomes even more difficult to insure due to climate change trends, some risks may cease to be practically insurable by the private sector alone. In the future it will become even more important for protection against some risks to be provided by the government or through state-supported vehicles. We as actuaries support the early identification of **potential protection gaps** arising from climate change and the development of joint solutions between the insurance industry and public protection facilities where appropriate.

CONCLUSION

Climate change is not just a European issue. Solving the climate crisis will need action not only from European actuaries or European insurance and pensions undertakings. We also need a global view. Ideally, there should be no worldwide inconsistencies or local European regulatory loopholes that can be exploited to manoeuvre around risk-based and scientifically evaluated assessments of any of

the topics mentioned above. We as the AAE stand ready to support development of comprehensive, proper carbon and pollution accounting, valuation approaches and risk assessments to make any such loopholes more transparent. <

³ The pilot dashboard on insurance protection gap for natural catastrophes, 04.12.2020, https://www.eiopa.europa.eu/document-library/feedback-request/pilot-dashboard-insurance-protection-gap-natural-catastrophes_en
