## Q1 General Comments on Issues Paper on Implementation of TCFD Recommendations

The ERM/ORSA Committee of the American Academy of Actuaries applauds the attention given to the emerging issue of climate risk and risk disclosure by the IAIS. The Academy has actively been involved in several initiatives to provide its members and U.S. regulators and the American public with information around climate and extreme events associated with it and to encourage insurers both to assess their own vulnerability to climate risk and to effectively disclose those assessments.

## Q2 Comment on Section 1 Introduction

Answer

## Q3 Comment on Section 1.1 Context

Answer

## Q4 Comment on Paragraph 1

Answer

## Q5 Comment on Paragraph 2

Answer

## Q6 Comment on Paragraph 3

Answer

## Q7 Comment on Section 1.2 SIF/IAIS action on climate risk

Answer

## Q8 Comment on Paragraph 4

Answer

## Q9 Comment on Paragraph 5

Answer
To support the US National Association of Insurance Commissioners (NAIC) in analysing and improving disclosures within the US, the ERM/ORSA Committee of the American Academy of Actuaries is undertaking a research project lasting approximately 12 months and in two stages: in the first stage, we are working with the NAIC to analyse the responses provided to the most recent NAIC Climate Risk Disclosure Survey; in the second stage, based in part on the results of the first stage, we will be assessing information which is not being provided by most companies in response to the current NAIC survey, but which would be provided if the Financial Stability Board’s TCFD guidelines were being followed. We believe the work we’re doing to support the NAIC will also help the IAIS in the development of additional material.
The American Academy of Actuaries has produced two indices which add to our understanding of changes in climate risk and the losses associated with those changes. The Actuaries Climate Index (http://www.actuariesclimateindex.org), the result of collaboration with three other North American actuarial associations, documents in an objective, retrospective method changes in the frequency of extreme events in the U.S. and Canada—both for the countries as a whole and for 12 regions within the two countries. The index combines six different indicators and shows a clear increase in extreme weather and hydrologic activity since 1990. In Actuaries Climate Risk Index: Preliminary Findings (https://www.actuary.org/sites/default/files/2020-01/ACRI.pdf), just published by the Academy, extreme weather is correlated with property losses. Based on these correlations, excess losses are defined that estimate the losses due to changes in climate risk, controlling for changes in risk exposure. While version 1.0 is only estimated for the U.S., and reflects substantial uncertainty, version 2.0 is expected to include Canada, reduce uncertainty, provide more granular, robust results, and extend the analysis to lives lost, injuries, and crop losses as well. The current best estimate of approximately $1 billion (US) per year in losses due to changes in extreme weather are the first of their kind, and broadly consistent with the Intergovernmental Panel on Climate Change (IPCC) estimation that most of the increase in weather-related losses are due to increases in risk exposure.

Q22 Comment on Section 2.1.1 Recent developments in climate science

Answer

Q23 Comment on Paragraph 12

Answer

Q24 Comment on Paragraph 13

Answer

Q25 Comment on Section 2.1.2 Industry responses

Answer

Q26 Comment on Paragraph 14

Answer

Q27 Comment on Paragraph 15

Answer

Climate-driven events may have contributed to difficulties, including insolvencies, for some insurers, but not all of the associated financial losses are attributable to changes in climate risk. As emphasized in Actuaries Climate Risk Index: Preliminary Findings, as well as in the recent American Academy of Actuaries paper on wildfires, Wildfire: An Issue Paper (https://www.actuary.org/sites/default/files/2019-06/Wildfire.IssuePaper_0.pdf), increasing losses due to climate-related events may be due at least as much if not more to increasing population and development in areas subject to extreme events compared to that which is due to increases in the frequency or severity of extreme weather events.

Q28 Comment on Section 2.2 Recent supervisory developments

Answer

Q29 Comment on Paragraph 16

Answer

Q30 Comment on Paragraph 17

Answer
The American Academy of Actuaries' research may prove useful to supervisors in assessing how best to use TCFD guidelines. The research and analysis of the current National Association of Insurance Commissioners (NAIC) Disclosure Survey will consider whether many companies are already addressing all of the major issues (not including the scenario analysis) in the TCFD guidelines in their narrative responses to the broad questions currently asked. Depending on the answer to this question, the Academy may propose additional questions or instructions addressing the TCFD topics not currently being addressed.
Given survey respondents' concerns reported in this IAIS white paper both with accessibility of risk transfer mechanisms such as reinsurance and catastrophe bonds, and with the general stability of the insurance sector (in which transfer mechanisms play an important role during extreme events), the American Academy of Actuaries will be examining the extent to which regulators should pay closer attention to reinsurers' disclosures around its risk appetites, tolerances, and limits for extreme events in its analysis of the NAIC Climate Risk Disclosures survey responses.

The American Academy of Actuaries' ERM/ORSA Committee believes guidance around disclosures should endeavour to avoid duplicative disclosures, or at least allow insurers to refer to a single document, where possible.

The issue of how to increase the availability of consistent disclosures of climate risk is an important one, which the American Academy of Actuaries may be better able to address in the US at the conclusion of the first phase of the upcoming research project. Two of the most salient known relevant facts are: 1) While only six states require participation in the NAIC Climate Disclosure Survey, the participating companies account for more than 70% of the market (in terms of premiums received). 2) While approximately 80% of the market in Property and Casualty insurance and Life insurance is included in the responses, less than 40% of Health insurance is included. Even before knowing how much of the information...
required by the TCFD Guidelines is absent from the current NAIC Survey responses, there are several options for increasing the consistency of reporting, only one of which would be to press for adoption of the TCFD guidelines as the basis for disclosures. Another possibility would be to focus on expanding the number of states which require participation, likely expanding the reach of the disclosures to more, smaller insurers. Still another possibility would be to focus on health insurer participation specifically. Which of these should be the highest priority may be a finding associated with the results from the research project.

Q56 Comment on Paragraph 38

Answer

Q57 Comment on Paragraph 39

Answer

Q58 Comment on Paragraph 40

Answer

Q59 Comment on Paragraph 41

Answer

The differences between larger and smaller insurers will be one of the focal points of the American Academy of Actuaries’ current research project. While larger insurers may account for most of the losses covered, attention to smaller insurers may be required if a healthy market for insurance is to be sustained. Finding ways to increase effective climate risk disclosure for both large and small insurers may be one of the issues addressed in the reports from the current project.

Q60 Comment on Paragraph 42

Answer

The reported perception that climate risk may seem less relevant for insurers writing certain product types might suggest the need for different questions for different lines of business. For those in short duration lines of business, the possibility of increasing losses and of increasingly large extreme losses might be the primary focus. For those in long duration lines of business, the focus might be on the assets held. The results of the American Academy of Actuaries’ analysis may help shed light on the impact of targeting different questions to different lines of business.

Q61 Comment on Section 3.2 Identifying good practices

Answer

Q62 Comment on Paragraph 43

Answer

Q63 Comment on Paragraph 44

Answer

Q64 Comment on Section 3.3 Findings of the TCFD secretariat report

Answer

Q65 Comment on Paragraph 45

Answer

Q66 Comment on Section 4 The role of supervisors
The American Academy of Actuaries notes in its initial view of the NAIC framework that participation by states in the Climate Risk Disclosure Survey is voluntary but participation by insurers in participating states is mandatory if their premiums exceed the established threshold. This combination of voluntary and mandatory elements has produced substantial if not complete participation.

The American Academy of Actuaries ERM/ORSA Committee observes that own risk and solvency assessment (ORSA) as an existing tool for US regulators is limited by its short time horizon for considering capital adequacy and thus factoring the full extent of climate risk issues. In the U.S., all insurers with direct written and unaffiliated assumed premiums greater than $500 million ($1 billion for an insurance group) are required to conduct an ORSA at least annually. This annual ORSA should include all material risks, as mentioned in this paragraph. The NAIC requires that an insurer’s capital assessment process should be closely tied to business planning. The prospective capital adequacy assessment should demonstrate that the insurer has financial resources to execute its multi-year business plan in accordance with its risk appetite in both normal and stressed environments. Most insurers’ planning cycle time horizon for capital assessment is likely to be relatively short—1 to 3 years—and hence may not adequately capture the impact of the evolving climate risk, especially in short-term "normal" scenarios. This suggests a potential limitation in the use of existing tools, e.g. ORSA, to assess climate risk unless those tools are adapted to longer time horizons.
The American Academy of Actuaries ERM/ORSA Committee, through its research project related to current disclosures, is working with the Washington state and California Insurance Departments, through the NAIC, to help assess the importance of and best pathways for bringing the NAIC’s current disclosures survey to recognize the TCFD considerations.

The regulatory goal of moving to mandatory climate risk reporting in a phased approach may take some lessons from the current NAIC system and potential recommendations that will surface from the American Academy of Actuaries ERM/ORSA Committee’s research. The current NAIC system includes both voluntary and mandatory elements by encouraging disclosure through the annual survey and through ORSA considerations. As the Academy examines the information already available through responses to the current survey, the resulting findings might encourage other states to voluntarily participate, increasing the number of insurers mandated to disclose.
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