MILLIMAN BRIEFING NOTE

Taskforce on Climate-Related Financial Disclosures – how can actuaries help?

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Introduction

The Taskforce on Climate-Related Financial Disclosures ("**TCFD**") was established by the Financial Stability Board to develop recommendations for more effective climate-related disclosures. The goal is to better inform stakeholders on the concentration of carbon-related assets in the financial sector and their exposures to climate-related risks.

This briefing note summaries some of the key recommendations surrounding disclosures, and their relevance to the insurance industry.

The CBI sent a letter to CEOs of all Financial Regulated Entities (a 'Dear CEO letter')[1] on 3 November 2021 regarding its expectations of firms in relation to climate and ESG issues. This letter referred to disclosures, stating the importance of transparent disclosures to consumers and investors. It also mentions firms should not engage in greenwashing[2]. The CBI stated that disclosures should be clear, fair, and not misleading. There is no direct mention of the TCFD recommendations, but the CBI expectations are based on international best practice and many other insurance regulators have aligned their expectations to the TCFD recommendations.

TCFD Overview

In 2017, the TCFD released climate-related financial disclosure recommendations[3] designed to help companies provide better information on climate-related risks, to support informed capital allocation. There are two main types of climate-related risks: physical risks and transition risks. Physical risks are what might initially spring to mind, the risks resulting from the direct impact of climate change e.g. natural disasters and the financial cost associated with these physical risks. Transition risks are associated with the transition to a low carbon, greener economy e.g., assets losing their value due to association with negative climate impact. The TCFD identifies a third, less defined, risk called litigation risk. This is the risk of litigation connected climate change and the breach of underlying legal frameworks. The disclosures deal with all of these risks. For insurers, physical risk and transition risks are the main risk exposures.

Demand for climate-related disclosures has increased significantly since the release of the TCFD recommendations in 2017 as regulators and investors have become increasingly vocal about climate-related risks. There are currently 2,700 supporters within 89 jurisdictions that have publicly declared their support for TCFD recommendations. In Ireland there are currently 31 companies declaring support for these disclosures. At a worldwide level, 86 (re)insurance companies have signed up to support, including some of Europe's largest insurance groups such as AXA, Aviva, Allianz and Zurich, and reinsurers such as SCOR and Swiss Re. Disclosures by the insurance industry have increased by 11 percentage points from 2019 to 2020, with the insurance industry representing the industry with the third highest level of disclosures, behind the 'energy' and 'materials and building' industries.

The TCFD recommendations are not yet a legal requirement. They are currently voluntary, but have been widely adopted by many organisations and are becoming mandatory in some countries. For example, in the UK climate-related reporting requirements will be mandatory from April 2022 and these disclosures are aligned with the TCFD recommendations. It is expected that in future more jurisdictions will move towards mandatory disclosures.

TCFD Recommendations

The TCFD recommendations are split into 4 categories: Governance, Strategy, Risk Management, Metrics and Targets.

The specific recommendations are detailed below:

Governance:

- Describe the board's oversight of climate-related risks and opportunities.
- Describe management's role in assessing and managing climate-related risks and opportunities.

Strategy:

- Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long-term.
- Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.
- Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

[1] https://www.centralbank.ie/docs/default-source/news-and-media/press-releases/governor-letter-climate-expectations-november-2021

[2] Greenwashing is the process of conveying a false impression or providing misleading information about how a company's products are more environmentally sound.

[3] https://assets.bbhub.io/company/sites/60/2020/10/FINAL-2017-TCFD-Report-11052018.pdf

Risk Management:

- Describe the organisation's processes for identifying and assessing climate-related risks.
- Describe the organisation's processes for managing climate-related risks.
- Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.

Metrics and Targets:

- Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process
- Disclose Scope 1[4], Scope 2[5], and, if appropriate, Scope 3[6] greenhouse gas (GHG) emissions, and the related risks
- Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets

The TCFD released a guide[7] in October 2021 on how to implement these guidelines with supplemental advice by company sector. For (re)insurers, this guide indicates that stakeholders of insurance disclosures will be most interested in how companies are evaluating and managing climate-related risks and opportunities and how (re)insurance companies are incorporating climate-related risk into their strategy, risk management, underwriting process, and investment decisions.

How can actuaries help?

Actuaries have specific skills that can be used within the insurance industry to help assess the potential impact of climate-related risks on (re)insurers' balance sheets. This will be a key step in the risk management process before a (re)insurer is able to prepare and develop appropriate climate-related disclosures.

Actuaries, like other risk experts, have expertise in identifying, assessing, and quantifying risks, particularly within the insurance industry. The risk management process for climate-related risk is the same as any other risk that an (re)insurance company is exposed to. Life insurance actuaries in particular have specific expertise in assessing risk over a long-term time horizon, due to the nature and term of many life insurance products and annuities. This is consistent with the long-term nature of some climate-related risk exposures.

Before risk can be monitored it must first be identified; this process will likely take place alongside the risk management framework. Actuaries will be able to transfer risk management knowledge and apply these skills to assessing and measuring climate-related risk. In some instances, it might be easy to identify the risk e.g., value of assets declines due to climate-related activities, but the quantification, of how much the asset value could fall by and when this could happen, is more difficult. This is where an actuarial skillset can really add value. We published a briefing note entitled "Risk metrics for climate change[8]" in May 2020 which provides more detail on the potential metrics that could be used to quantify and monitor climate-related risk.

Scenario analysis is another actuarial skillset that is important in assessing the potential future impact of climate-related risks on a (re)insurer's balance sheet. When developing risk scenarios, it is important to understand where risks can arise and the metrics against which they should be measured. A key difference for climate-related risk is that historical data is less relevant, and forward-looking metrics should be the focus. These forward-looking requirements are an area actuaries can help with, using their expert judgement to develop new techniques. Non-life actuaries have the specialist skills needed to model catastrophe risk that can be used to understand physical risk exposures and life actuaries have skills used to project forward the balance sheets and model transition risks. Both of these skills are needed for climate-related scenario analysis. Climate-related risk is a long-term risk so many of the scenarios will focus on this time frame, but it is important to also consider the short and medium-term impacts.

The output from the risk management process and scenario analysis will be a key input into the Risk Management and Metrics and Targets disclosures.

Actuaries also have a role to play in the Governance and Strategy requirements. To be able to manage climate-related risks the Board and Senior Management must first understand the risks. Actuaries have the ability to communicate complex information in a more digestible manner. They are used to taking complex subject matter and explaining it to both technical and non-technical audiences. This will be a key process in ensuring the Board and other stakeholders understand the potential consequences associated with climate-related risk.

Strategy disclosures are geared towards the actual and potential impacts on the business strategy and financial planning. Actuaries are skilled in identifying risks and assessing their potential upside and downside impacts. The TCFD recommendation relating to risks and opportunities is the highest reported disclosure within the insurance industry. Companies should employ scenario analysis to assess the impact of these risks and opportunities on their business plans. Actuaries are

[4] Scope 1 refers to all direct GHG emissions
[5] Scope 2 refers to indirect GHG emissions from consumption of purchased electricity, heat, or steam
[6] Scope 3 refers to other indirect emissions not covered in Scope 2 that occur in the value chain of the reporting company, including both upstream and downstream emissions. For (re)insurers, this includes emissions associated with investment portfolios.
[7] https://assets.bbhub.io/company/sites/60/2021/07/2021-TCFD-Implementing_Guidance.pdf
[8] https://ie.milliman.com/-/media/milliman/pdfs/articles/climate-change-metrics.ashx

experienced users of scenario analysis; their expertise can be used to ensure that the scenarios are plausible. This will help to identify key risk drivers that need to be monitored. The Strategy requirements are heavily linked to the Risk Management and Metric and Targets requirements in this regard.

Examples of Disclosures in the Insurance Industry

In January 2021 the UN Environmental Program Finance Initiative (UNEPFI) published a report[9] based on 22 leading (re)insurers experience of disclosures relating to the climate change impact on their business. This group was trying to pilot the recommendations made by the TCFD. The project assessed the insurance industry's ability to make disclosures based on climate-related physical, transition and litigation risks, it was observed that these risks should be considered on an integrated basis.

The report noted that the insurance industry is most familiar with physical risks and is therefore comfortable modelling them and analysing the data. The models that are currently in use can easily be adapted to relate to climate-related risks. The report identified that the challenge will be getting the required data in a granular enough format to accurately assess the risks. This is a challenge for all climate-related risks, not just the physical risks. There are examples of published climate reports below and each of the reports mentions data availability as a restriction to an insurer's ability to assess climate-related risk.

The UNEPFI report noted that (re)insurers are less familiar with transition and litigation risks than physical risks and they have less experience quantitatively assessing the impact of these future risks. To improve climate-related risk assessment these risks need to be given more focus and consideration must be given to how they can be incorporated into the existing risk management structure. Companies have the potential to take models that are already in place and modify them to consider transition risks. Litigation risks may need to use hypothetical models until more data becomes available.

The report also noted that the non-life sector is more sophisticated in its approach. More insight is needed on the life and health business and the impact of climate change.

Below are some examples of what industry leaders are currently doing within this space.

Aviva

Aviva was one of the contributors to the "Insuring the climate transition" paper that is referred to above. Aviva includes high level disclosures in its annual report and accounts. Aviva has prepared public disclosures on climate change in the Annual Report[10] since 2004. Aviva also produces a more detailed climate-related financial disclosures report and climate dashboard annually. These reports generally follow the structure of the TCFD recommendations. Within the risk management section Aviva has defined what it considers to be its physical and transition risk exposures. As Aviva is a UK based insurance Group, it will be subject to mandatory disclosures from 2022.

AXA

AXA was also one of the contributors to the "Insuring the climate transition" paper. AXA has also supported the TCFD approach since inception. It has been publishing climate-related disclosures and reports[11] for many years and in June 2021 it published its 6th Climate report. This report highlights AXAs use of the warming potential methodology[12] to show the impact of the Group's investments on global warming. Currently it stands at 2.7°, with the aim to be 1.5° by 2050. The disclosures contained within this report cover the mandatory requirement for ESG issues, and the voluntary TCFD recommendations. The report generally follows the TCFD structure and reports on all recommended sections. AXA highlights the lack of comparable, quality data as a challenge in the process of reporting on ESG issues.

Legal & General

Legal & General ("**L&G**") signed up to support the TCFD recommendations in April 2019. The third annual climate report[13] was released in March 2021. The report is completed in line with TCFD recommendations and there is a one-page summary at the start outlining the disclosures under each heading. This report is for the L&G Group and therefore has more emphasis on the assets and investment impact of climate change rather than the insurance liabilities. L&G highlights its commitments to be net zero by 2050 and limit global warming to 1.5°. L&Gs method to do this will involve its asset portfolio and investments, its influence using its large asset portfolio, and its operations. There is little mention of how its liabilities will be influenced by climate-related risk.

Other Climate-Related Reporting Requirements

Aside from the TCFD disclosure recommendations there are other climate-related reporting requirements which exist. These include:

- EU taxonomy – a classification system used to determine a list of environmentally sustainable investment and financial activities.
- EU Sustainable finance disclosure regulation – a set of rules which aim to make the sustainability of financial

[9] https://www.unepfi.org/news/industries/insurance/first-guidance-enabling-insurers-to-identify-and-disclose-risks-from-climate-change-launches/
[10] https://www.aviva.com/sustainability/reporting/climate-related-financial-disclosure/
[11] https://www-axa-com.cdn.axa-contento-118412.eu/www-axa-com/db5d9f4b-4bb9-4029-ad51-b9e0e20301fb_2021_Climate_Report.pdf
[12] This methodology computes the contribution of a company's activities towards climate change. It declares a temperature value this shows which warming scenario a company's activities are currently aligned with.
[13] https://group.legalandgeneral.com/media/0i2agi1s/fy2020-lg-tcfd-report.pdf

market participants and their products more comparable.

- Partnership for Carbon Accounting Financials – an industry partnership that work together to create methodologies for calculating GHG emissions associated with loans and investments.

Conclusion

Going forward we expect more regulators to require (re)insurers and financial services firms to prepare mandatory climate-related disclosures. Many companies are already aligning to the TCFD recommendations as these seem to be at the forefront of international best practices. From a practical perspective, it will be impossible for a (re)insurer to prepare climate-related disclosures without first identifying, assessing, and measuring climate-related exposures – this is part of the normal risk management process and actuaries are well placed to assist (re)insurers on this.

How Milliman Can Help

Our consultants have been involved in advising our clients on climate-related risks for (re)insurers. We have undertaken a range of work, from identifying, assessing and measuring climate-related risk exposure to scenario analysis.

We recently published a series of papers on climate-related risk management for life insurers and climate-related risk solutions.

Milliman can also assist you with other aspects of your climate-related risk management, including advice on:

- Gap analysis
- Board and senior management training
- Incorporating climate-related risk into your risk management system
- Climate-related risk reporting and KRI's
- Incorporating climate-related risk into your ORSA
- Advising and developing climate-related stress and scenario tests
- Best practice in relation to climate-related risk financial disclosures
- Climate-related risk modelling

For further information, please contact your usual Milliman consultant or those below.

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