IFoA Member event
Chair John Taylor, President-elect
Agenda

18:00 – 18:10: Welcome by John Taylor, President-elect, IFoA
18:10 – 18:25: Monetary Authority of Singapore (MAS) The Regulatory Perspective
    Jesper Pan, Deputy Director, Insurance Department
18:25 – 19:20: Panel session: The world is changing – are we ready?
    Professor Chris Gee, Senior Research Fellow, Institute of Policy Studies, National University Singapore
    Tomasz Kurczyk, Head of Digital AXA Singapore
19:50 – 20:00: Closing remarks
20:00 – 21:00: Networking and buffet dinner
The world is changing

- **Societal** – ageing population, millennials

- **Technological** – digitalisation, data science, cyber risk

- **Economic** – low interest rates, financial stability

- **Environmental** – climate change, resource constraints

- **Political** – increased regulation, political instability
Question time!

Which of these you think poses the most significant challenge to the actuarial profession over the next 5 years?

- Societal: 3%
- Technological: 60%
- Environmental: 3%
- Economic: 23%
- Political: 13%

Which of these you think poses the most significant challenge to the actuarial profession over the next 50 years?

- Societal: 45%
- Technological: 17%
- Environmental: 31%
- Economic: 2%
- Political: 5%
Sustainable Insurance

Jesper Pan
Deputy Director
Insurance Department, MAS
Focus on “Environment” aspect within ESG

Relate to the quality and functioning of the **natural environment** and **natural systems**
E.g. Climate change, renewable energy, greenhouse gas emissions, haze diagnostics etc.

Relate to **governance of companies** and other investee entities.
E.g. Business ethics, shareholder rights, bribery and corruption, disclosure etc.

Relate to **rights, well-being and interests of people** and communities
E.g. activities in conflict zones, child labour, slavery, controversial weapons, etc.
Increasing Cost of Natural Catastrophes

- According to Swiss RE, the cost of natural catastrophes has increased significantly over the years:
  - In the 1980s, USD 30 billion per year
  - In the 1990s, USD 104 billion per year
  - In the 2000s, USD 182 billion per year
Most Natural Catastrophes losses in Southeast Asia are uninsured

- Natural catastrophe losses in Southeast Asia have mostly been borne by individuals, firms and governments.

Note: Graph based on events where economic losses were known and for which total losses were larger than USD 500 million (2014 prices).
Environmental risk impact on financial institutions warrant closer monitoring

.. With not only prudential risk impacts...

- Climate-linked natural disaster
  - Insured
    - Increased uncertainty for investors/loss of market confidence
    - Direct damage to banking and payment service facilities
  - Uninsured
    - Limited financing available for reconstruction from physical damage

- Losses for insurers
  - Reduction in insurance in affected areas

- Losses for banks
  - Asset fire sales causing falls in asset prices
  - Weakening of household & corporate balance sheets
  - Fall in collateral values
  - Fall in output in affected areas

- Reduction in lending in affected areas
  - Reduction in lending in unaffected areas
Where Singapore Stands

**Government**
- Commitment under Paris Agreement to **reduce emission intensity by 36% (below 2005 levels) by 2030**
- **Carbon tax** on large direct emitters of greenhouse gases from 2019 & increased tariffs on water and electricity

**Corporates**
- Mandatory for all listed companies to report according to **Sustainability Reporting Guidelines** on a “comply or explain” basis – SGX
- From Jan 2018, all listed companies will **produce annual sustainability reports**

**Banking**
- In response to ABS’ 2015 Guideline on Responsible Financing, banks have started integrating **ESG criteria in their lending and risk assessments**, and **develop in-house capacity** through training

**Insurance**
- Industry associations, such as LIA and GIA, have **pledged support for global standards** (e.g. UN Principles for Sustainable Insurance) and conducted **masterclasses on sustainable insurance** for their members.
Active international engagement by MAS...

**Sustainable Insurance Forum (SIF)**
- SIF, convened by the UN Environment Program held its inaugural meeting in Dec 2016. It is a global network of insurance supervisors and regulators working together to address sustainability challenges facing the insurance sector.
- In July 2018, SIF and the International Association of Insurance Supervisors (IAIS) released a joint Issues Paper on Climate Change Risk to the Insurance Sector.
- SIF currently consists of 21 members and supporting institutions.

**Network for Greening the Financial System (NGFS)**
- MAS is one of the founding members, and the network currently consists of 16 members representing central banks and supervisors.
- NGFS held its inaugural meeting in Jan 2018, and aims to:
  - strengthen the global response required to meet the goals of the Paris Agreement;
  - enhance the role of the financial system to manage risks; and
  - mobilise capital for green investments in the context of environmentally sustainable development.
Published an information paper in June 2017 on insurers’ Own Risk and Solvency Assessments (ORSA), which emphasised that insurers should give greater attention to emerging risks such as environmental risks.

Introduced a climate variability scenario for insurers writing general business in the upcoming industry-wide stress testing exercise. For the stress testing exercise, the focus is on physical risks. In future stress testing exercises, MAS may consider broadening the scenario to consider other risk transmission channels.

Encourage insurers to enhance climate-related risk disclosures to support informed investment, insurance underwriting decisions and improve understanding and analysis of climate-related risks and opportunities.
Role of Actuaries

Risk Management
- Gathering and analysing of credible data to measure and manage climate-related risk
  - Knowledge gaps and uncertainties in catastrophe models
  - Major catastrophic event not being appropriately considered in rate setting and reserving
  - Potential impacts of climate change on mortality in relation to insurance, annuity and pension programmes
- Research, development and validation of models for financial projections for economic capital and stress testing purposes

Product Design, Development and Pricing
- ‘Green’ insurance products
- ‘Green’ pricing for ‘Green’ features
- ‘Green’ Terms and Conditions for Insurance Contracts
Thank You
Ageing populations – are we ready?

Christopher Gee, Senior Research Fellow, Institute of Policy Studies, National University Singapore
Digitalisation – are we ready?
Tomasz Kurczyk, Head of Digital, AXA Singapore
Future of insurance in the ecosystem economy

Tomasz Kurczyk
September 2018 Singapore
Intro

Tomasz Kurczyk
Digital Transformation Director
AXA Insurance
@tkurczyk /in/tkurczyk

- Geek at heart that started career as entrepreneur to be turned along the way into corporate challenger focused on growth and business impact
85% of Insurance CEOs see the speed of technological change as a threat*
New reality for insurance

Digital technology: Technology enables delivery of products and services with flexibility at scale while driving efficiencies.

Insurance products: Product Innovation and new type of risks enabled by and shaped by technology.

Business models: Business model innovation is driving adoption and commercial success, leveraging ecosystem models.
Ecosystems will account for 30% of global revenues by 2025*
Ecosystems and platform economy

Technology platforms + Interconnected business models = Ecosystem

01 Ecosystems are foundation for new **value creation** blurring boundaries between traditional industries

02 Create value externally through **digital partners and communities of users**

03 Open entirely **new paths to growth** at scale

04 **Disrupt** existing competitive strategies and business models for everyone… including Insurance

Ecosystem world | Tomasz Kurczyk
“What’s dangerous is not to evolve.”
and not take advantage of new opportunities
- Jeff Bezos
New set of strategies for the ecosystem economy

Open Insurance strategies:
• Create value through connecting partners along value chain
• Growth opportunities through collaboration with adjacent and new industries e.g. PropTech, WealthTech, HealthTech etc.
• Opening up data and leveraging external data
• Insurers as potential orchestrators

Platform strategies:
• Open API's and Open Architecture
• Deep integration into the platforms vs product provider
• Development of Internal capabilities and becoming Tech lead
• Digital enablement for all channels not only direct
Platform strategy is about enabling end-to-end value chain

Technology Platform & API’s

Business Model

Insurance Product and Services

Distribution Model

UX and CX

Ecosystem world | Tomasz Kurczyk
Thank you
The world is changing – are we ready?
John Taylor, President-elect, IFoA
Sustainability: Climate Change

Video can be found at https://www.youtube.com/watch?v=EYWWfTgxJ58
Risk Alert

RISK ALERT
Climate Change

KEY MESSAGE
Actuaries should ensure that they understand, and are clear in communicating, the extent to which they have taken account of climate change implications in any relevant decisions, calculations or advice.

What are Risk Alerts?
A series of email alerts drawing members’ attention to specific issues where the IFoA asks members to think carefully about the consequences of actions they are taking.

The information in the Risk Alert is non-mandatory guidance which we publish to protect the public interest.
Ageing population
Technology

- Target consumers
- Design products to meet their need
- Deliver more accurate risk assessment, underwriting and pricing
- Change policyholder behaviour
- Improving claims management
Panel discussion: The world is changing – are we ready?

Slido link: www.slido.com #Y174
New Qualifiers Ceremony

Congratulations!
Volunteer Recognition Ceremony

Thank you!
Contacts:
Rebecca Deegan – rebecca.deegan@actuaries.org.uk +65 8711 5091
Marie Lee – marie.lee@actuaries.org.uk +65 8778 1784