ASHK Actuarial Innovation Conference

"Actuaries of the Future: Navigating Disruption with Innovation"
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Good morning. It is my honour to be here today to deliver a keynote speech at the Actuarial Innovation Conference. After hosting virtual meetings and conferences in the last few years, all of us in Hong Kong look forward to reconnecting with our friends and colleagues from around the world in person.

The world has changed in the last 3 years, characterised by the occurrence of a series of what would previously be considered "rare and extreme events" including the COVID-19 outbreak and natural disasters that no longer seem so rare and extreme, when you think of how frequent these devastating events (such as the earthquake in Turkey and Syria, the wildfires in Canada and Hawaii, the severe thunderstorms in the US and the torrential rain in mainland China) make our headlines in 2023. Closer to home, it would be difficult for us in Hong Kong to forget the typhoon, the "once-in-a-century" rainstorm, the heavy downpours causing severe flooding and landslides could all take place consecutively earlier this month. While statistically a 500-year flood that occurs this year is just as likely to occur the following year, the COVID-19 pandemic has accelerated structural changes in the global economy and has changed the way we live and work, and how we spend our time and money.

I am sure you would agree that current digitalisation trends and some of the behavioral changes post-COVID are here to stay. Prompted by the changes in customer needs and behavior, industries worldwide have taken advantage of the broader digital revolution in transforming how businesses operate and how companies interact with their target customers. The insurance industry has been quick to adapt, accelerating the use of financial technology and digital platforms to enhance agent productivity and in transforming the customer interface for a simpler and faster user experience throughout the product lifecycle. Virtual insurers have benefited from better market penetration, and some have collaborated with overseas insurers and reinsurers to develop niche insurance products such as cyber insurance cover for digital assets.

Recent technological breakthroughs have seen generative AI interfaces such as ChatGPT taking center stage and impact how we approach content creation and problem solving. The "disruptive innovation" brought about by the rapid uptake of generative AI tools has become a focal point of discussion among key stakeholders and financial regulators. According to a paper published by the OECD this month (September 7) for the 2023 G7 Japanese Presidency and the G7 Digital and Tech Working Group, ensuring the responsible use of generative AI, addressing disinformation, safeguarding intellectual property rights, and governing generative AI are among the top priorities of G7 policymakers¹. While generative AI has the potential to help achieve national and regional goals such as productivity gains and promote innovation and entrepreneurship, several G7 countries have also expressed

¹ https://read.oecd-ilibrary.org/science-and-technology/g7-hiroshima-process-on-generative-artificial-intelligence-ai bf3c0c60-en#page3

concerns that generative AI and its rapid technical developments present challenges to existing laws and policies which may cause high uncertainty and unpredictability for society; and effective tools are necessary to manage and mitigate the associated risks².

The International Association of Insurance Supervisors (IAIS) has also identified Financial Technology as one of its strategic themes in the IAIS Strategic Plan for 2020-2024 having regard to the far-reaching effects of technological and digital innovation on the insurance sector³. According to the IAIS, Fintech presents significant opportunities for financial inclusion and policy holder value but also poses potential market conduct and operational issues. In particular, the rapid expansion in alternative data sources and advanced data analytics have been highlighted as having the potential to disrupt the insurance market or impact the trust of consumers in the insurance sector⁴.

In other words, policymakers recognise the rapid pace of technological developments present both opportunities and challenges, and that there is a need to find a balance between minimising the risks for the protection of consumers and allowing room for innovation for the sustainable growth of industries and economies.

Role of the IA

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² https://read.oecd-ilibrary.org/science-and-technology/g7-hiroshima-process-on-generative-artificial-intelligenceai bf3c0c60-en#page22

³ https://www.iaisweb.org/activities-topics/digital-innovation/

⁴ https://www.iaisweb.org/uploads/2022/12/IAIS-Report-on-FinTech-developments-in-the-insurance-sector.pdf

Next, I would like to talk about the work of the IA in promoting Insurtech and regulatory measures to manage and mitigate the associated risks to safeguard policy holders.

The IA has been facilitating the development of Insurtech to bring positive disruption to the industry, narrow protection gaps, promote financial inclusion, and enhance financial connectivity.

Since 2017, the Fast Track launched by the IA has seen 4 virtual insurers owning and operating solely digital distribution channels, of which two carry on life insurance business and two carry on non-life insurance business. As of March 2023, the two running long term business had over 62,000 in-force policies, with total premium exceeding HK\$235 million. While the other two operating general business had over 36,100 in-force policies, with total gross premium reaching HK\$41 million. Meanwhile, the Insurtech Sandbox provides a platform to test innovative Insurtech initiatives in a controlled environment and demonstrate broad compliance, expediting the launch of new technology products, reducing the development cost, and enhancing customers' experience.

This week the IA has published the Open API Framework for the insurance sector in Hong Kong, with a view to driving open insurance development by fostering closer collaboration between insurers and third-party service providers through the establishment of a barrier-free Open API ecosystem. The framework is expected to foster partnerships and enable greater collaboration among stakeholders to bring innovation and improve services, thereby adding value to policy holders. It

would also help enable connectivity, improve efficiency, and reduce costs. The IA is in collaboration with the Hong Kong Science and Technology Parks Corporation ("HKSTP") to establish an Open API Central Register for the insurance industry. The Register will serve as a database to provide convenience and ease of access to API data for market stakeholders, which would further enhance connectivity and openness in the market.

In response to the escalating digital threats, the IA is in the process of enhancing an existing guideline on cybersecurity (GL20). Drawing insights and experience from the banking sector, the IA is incorporating a Cyber Resilience Assessment Framework, which would provide insurers with a self-assessment matrix to measure their cyber risk exposures by assessing various business and operational aspects, followed by an evaluation on maturity control, leading to a risk-resilience matrix with visible gaps and a remediation roadmap to address identified weaknesses.

Without compromising the IA's principal function to promote the general stability of the insurance industry for the protection of policy holders, the IA will continue to closely monitor the development and application of technology in the insurance industry and proactively assist market participants to tackle Insurtech-related regulatory issues.

Closing remarks

Ladies and gentlemen, in closing, the insurance industry is at the crossroads of a step change and the industry as we know it today could be reshaped. The theme for today's conference suggests "innovation" for navigating the uncertainty and unpredictability brought about by the disruption to the insurance industry. As the differentiation of risk and its management is at the core of the insurance business model, innovation would be key to transform new and emerging risks into opportunities. However, this will need to be built upon a foundation of trust whereby consumers are confident that their rights and interests are protected by a well-balanced regulatory system, whereby key actors in the insurance industry would seek to discharge their duties and responsibilities with due care and professionalism. I believe the actuarial profession in Hong Kong is well placed in navigating through the disruption with an innovative mindset to serve the public Interest.

I hope you all enjoy today's conference. Thank you.