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## Insurance being reconstructed by weather-related natural disasters

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In 2025, from January 1, all companies in Italy became required to buy insurance to cover their assets in the event of natural disasters. Additionally, on January 7, a wildfire broke out in Southern California and is estimated to have caused \$50 billion or more in losses. When large-scale economic losses occur as a result of weather-related natural disasters, there is a risk they will destabilize the financial system.

According to Munich Re, from 2010 the amount of losses (nominal price) arising from natural disasters worldwide reached peaks in 2011 (\$380 billion) and 2017 (\$330 billion), and over the 2020-2024 period, the amount of losses (\$210 billion to \$320 billion per year) successively exceeded the average over the last 30-year period (\$181 billion). Of the losses suffered in 2011, \$210 billion are attributable to the Great East Japan Earthquake, while the 2017 figure includes the losses caused by hurricanes Harvey (\$85 billion), Irma (\$67 billion) and Maria (\$63 billion). Large-scale weather-related disasters continued from 2010 to 2024, including the hurricanes Ian (\$100 billion) in 2022, Ida (\$65 billion) in 2021, Helene (\$56 billion) in 2024, and the European floods in 2021 (\$54 billion).

Even in 2018 and 2019, when the sizes of losses were comparatively small, Japan in 2018 suffered torrential rain (known as the "Heavy rain of July, Heisei 30") that triggered \$10 billion in losses, along with Typhoon Jebi (Typhoon No. 21), which caused damage centered on the Kinki region and triggered \$13 billion in losses, and then in 2019 it suffered the Boso Peninsula Typhoon (Typhoon No. 15; \$9 billion) and East Japan Typhoon (Typhoon No.19; \$17 billion).

In Italy, from January 1, 2025, it became mandatory under new legislation for companies to purchase insurance (there are no penalties for non-compliance, however) and for insurance companies to draw up policies. This regulation will be underpinned by a EUR5 billion reinsurance fund set up by a government-controlled financial institution. Under this legislation, Italian insurance companies must accept all customers, and as a result, the insurance industry is grappling with the problem of how to go about setting prices for insurance premiums. Additionally, there is the concern that if a major calamity occurs, the losses could potentially end up exceeding the value of this reinsurance fund.

On December 18, 2024, the European Central Bank and the European Insurance and Occupational

Pensions Authority (EIOPA) released a joint paper in which they proposed a solution for mitigating the economic impact of natural disasters. The joint paper's EU-level solution comprises two pillars. One is an "EU public-private reinsurance scheme" that would pool private-sector risks across the EU with the goal of broadening the coverage of insurance for natural disasters. The other is an "EU fund for public disaster financing" that would receive funding through contributions from EU Member States and help rebuild public infrastructure following natural disasters.

On January 30, 2025, EIOPA proposed recalibrating the risk factors in a standard formula used to calculate insurance companies' capital requirements with regard to floods, windstorms, hails and other risks while also expanding the number of countries covered. Additionally, EIOPA is also analyzing whether natural disasters such as wildfires, coastal floods and droughts be included in standard formula calibrations. EIOPA has submitted this proposal to the European Commission.

In the US, homeowner insurance premiums are climbing substantially in states where there is a high risk of flooding and other disasters driven by weather events. Additionally, it is also giving rise to a situation where insurers end up leaving from high-risk regions.

The cat bond (catastrophe bond) market has also been growing in recent years. Cat bonds were developed as an alternative solution to reinsurance for large-scale natural disasters, and are issued by insurance companies. Investors are able to obtain substantial interest if large-scale hurricanes, for example, do not occur, but once natural disasters meet specified trigger conditions, the bonds' principal is not repaid, and the insurance companies use the money obtained to cover their insurance payouts.

In Japan also, companies in the energy and other sectors are beginning to face hikes in insurance premiums, reductions in payout caps, contractions in coverage and other changes that were triggered by the torrential rains and typhoons of 2018 and 2019. The EU is attempting to respond to losses arising from natural disasters by strengthening regulations and systems, while the US, where the scale of losses is larger, is seeking to respond through the market. When it comes to which approach Japan should take, it will be important to grasp unique characteristics, such as the scale and frequency of the impact that Japan's natural disasters have on companies and then consider responses appropriate to them. In order to insure themselves efficiently and effectively, companies, too, will need to enhance their capacity to assess vulnerabilities in their supply chains, as well as pursue measures to increase their resilience.

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