

Japan's Insurance Market 2025

To Our Clients	
Masaaki Matsunaga	
President and Chief Executive	
The Toa Reinsurance Company, Limited	1
1. Introduction to Japan's Household Earthquake Insurance System	
A Pioneering example of a Public-Private Partnership Launched 60 Years Ago	
Keisuke Otsuka	
CEO, Japan Earthquake Reinsurance Co., Ltd.	2
2. Moody's Industry Watchlist:	
Semiconductor Risk and Catastrophic Risks to Human Populations	
Chesley Williams	
Senior Director, Model Product Management, Moody's	
Manabu Masuda	
Senior Director, Model Development, Moody's	11
3. Trends in Japan's Non-Life Insurance Industry	
Non-Life Underwriting & Planning Department 1	
Non-Life Underwriting & Planning Department 2	
The Toa Reinsurance Company, Limited	26
4. Trends in Japan's Life Insurance Industry	
Life Planning Department	
The Toa Reinsurance Company, Limited	35
Company Overview	42

To Our Clients

It gives me great pleasure to have the opportunity to welcome you to our publication, 'Japan's Insurance Market 2025.' It is encouraging to know that over the years our publications have been well received even beyond our own industry's boundaries as a source of useful, up-to-date information about Japan's insurance market, as well as contributing to a wider interest in and understanding of our domestic market.

Uncertainty in the business environment surrounding the insurance and reinsurance industries is mounting as the risks facing society and business activity become more diverse and complex. The uncertainty stems from a range of factors, including the impact of intensifying severity of natural disasters, heightening geopolitical risks internationally, the advancement and spread of digital technologies, the advent of a full-fledged aging society with a declining birthrate, and growing uncertainty in the financial markets.

Amid this increasingly uncertain business environment, this year, the Toa Re Group entered the second year of our medium-term management plan, "KIZUNA 2026," which began in fiscal 2024. Under "KIZUNA 2026," we have been working toward Group-wide portfolio reform, centered on a fundamental review of our underwriting portfolio, so that we may steadily fulfill, well into the future, our purpose of providing long-term stable reinsurance capacity to the insurance companies and co-operative insurers that are our clients.

The Toa Reinsurance Company Limited, the core company of the Toa Re Group, commemorates its 85th anniversary this year. Throughout those years, we have strived to fulfill our mission as a reinsurance company of providing peace of mind to society through the reinsurance business, as articulated in the Toa Re Mission Statement. Under this mission, all officers and employees of the Toa Re Group will remain united in their efforts to respond swiftly and accurately to various challenges, with the goal of sustainable growth and enhancement of corporate value.

We decided to issue this year's publication exclusively in electronic form, in recognition of the role that we all have in considering the environment and sustainability. I hope that our publication continues to provide a greater insight into the Japanese insurance market, and I would like to express my gratitude to all who kindly contributed so much time and effort towards its making.

Masaaki Matsunaga

President and Chief Executive The Toa Reinsurance Company, Limited

M. Mate



Introduction to Japan's Household Earthquake Insurance System

A Pioneering example of a Public-Private Partnership Launched 60 Years Ago

Keisuke Otsuka

CEO, Japan Earthquake Reinsurance Co., Ltd.

Introduction

I would like to express my deepest condolences to the loved ones of those who lost their lives due to natural disasters around the world, including the Turkey-Syria Earthquake in February 2023 and the Myanmar Earthquake in March 2025, and I extend my heartfelt sympathies to all those affected.

Japan is one of the countries most exposed to earthquake risk due to its geographical location. Providing earthquake insurance to the public was therefore a subject of research for many years as the modern era began. However, it took a long time for Japan to achieve the challenging goal of establishing a public earthquake insurance system because of the unique characteristics of earthquake risk, including the difficulty in predicting the occurrence of earthquakes and their potential to cause severe damage.

Following the Niigata Earthquake in 1964, however, public opinion quickly shifted toward the need for an earthquake insurance system. As a result, Japan launched a public system in 1966. This system incorporated a mechanism for the government and the private sector to cooperate in helping people rebuild their lives, making it a pioneering example of a Public-Private Partnership (PPP).

This article provides an overview of earthquake risk and the Household Earthquake Insurance System in Japan, including the roles of each participant in the system. I hope this report will assist in the research and the consideration of earthquake insurance systems in other countries.

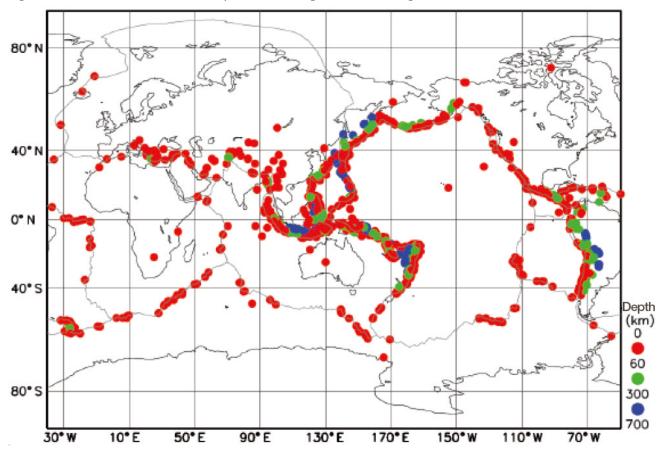
In 2026, Japan will celebrate the 60th anniversary of the founding of its Household Earthquake Insurance Scheme. It will also mark the 60th anniversary of the establishment of Japan Earthquake Reinsurance Co., Ltd. (JER), a key participant in the scheme. Moreover, the Japanese government will establish the Disaster Management Agency in 2026, which will serve as the control center for the government response to disasters.

As we approach these important milestones, we are committed to working together with both the public and private sectors to further expand the popularization of the earthquake insurance system, which serves as a valuable self-help measure to mitigate the effects of earthquake disasters, and to enhance the system's resilience and convenience.



 Earthquake Risk in Japan and Difficulty in Insuring Against It The Earth's surface features approximately a dozen large tectonic plates, each moving in different direction at a speed of up to a few centimeters per year. These plate movements apply immense force to the rock beneath the boundaries, leading to the build-up of enormous energy as strain over many years. Earthquakes occur when this strain causes the rock to collapse. Consequently, earthquakes occur near plate boundaries, and the red bands in Figure 1 precisely coincide with the plate boundaries.

Figure 1: Global Distribution of Earthquakes with Magnitude 6.0 or Higher and Plate Boundaries



Note: Earthquakes occurrences from 2014 to 2023

Source: Created by the Japan Meteorological Agency based on epicenter data sourced from the United States Geological Survey

Japan experiences many earthquakes because it is located at the boundaries of four of these tectonic plates, as shown in Figure 2. Although Japan's land area is only about 0.25% of the Earth's surface land area, it is said that approximately 10% to 20% of the world's earthquakes with a magnitude of 6.0 or higher occur in Japan and its surrounding areas.

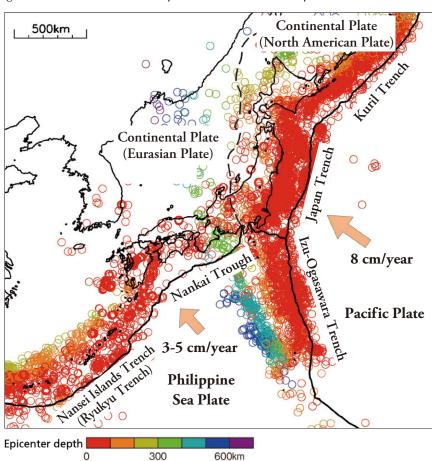


Figure 2: Tectonic Plates near Japan and Historical Earthquake Events in the Area

Epicenter data (2012-2021, Magnitude 4 or higher) are from the Japan Meteorological Agency.

The arrows indicate the relative direction and speed of the Pacific Plate and Philippine Sea Plate in relation to the Eurasian Plate. Thick solid lines indicate plate boundaries, dashed lines indicate unclear plate boundaries.

Source: Headquarters for Earthquake Research Promotion

Earthquake risk poses a problem because it is difficult to apply the Law of Large Numbers, making it challenging to insure. This is due to the difficulty in accurately predicting the timing and scale of earthquakes and their potential to cause enormous damage once they it occurs.

During modern times, the Japanese government has led a wide range of research efforts aimed at providing the public with earthquake insurance, but it took a significant amount of time for the system to become a reality due to Japan's geographic position and the unique characteristics of earthquake risk.



2. Overcoming the Difficulties of Insurability through Government Involvement

Following the Niigata Earthquake in 1964, public opinion quickly shifted toward the need for an earthquake insurance system, ultimately leading to its establishment in 1966. This was only made possible through government financial involvement.

Japan's earthquake risk is significantly higher than that of other regions. Even with the geographic diversification on a global scale provided by international reinsurance markets, the current capacity is still insufficient to absorb Japan's enormous exposure to earthquake risk.

The Japanese government, therefore, underwrites reinsurance using its creditworthiness and financial strength to disperse earthquake risk over time. Balancing income and expenditure over the super long term has enabled the provision of stable earthquake insurance to the public at reasonable premiums.

The Japanese government established the Special Account for Earthquake Reinsurance to achieve this balance between income and expenditures over the super long term. The government segregates the reinsurance premiums it receives from its general account and sets them aside in this special account as liability reserves, from which it pays reinsurance claims. Earthquake insurance premiums are designed to balance income and expenditures over the super long term, so reinsurance claims could significantly exceed the accumulated reserves in the special account should a major earthquake occur.

Therefore, the Japanese government is able to transfer funds from the general account if the reserve fund in the special account is insufficient to pay reinsurance claims. The government also has a clear obligation to subsequently repay these funds to the general account. The repayments should come from future reinsurance premium income.

3. Overview of the Household Earthquake Insurance System in Japan

Table 1 presents an overview of Japan's current Household Earthquake Insurance System.

Providing 100% compensation for earthquake damage is difficult, even with the government's creditworthiness and financial strength. Therefore, the purpose of this system is to help stabilize the livelihoods of those affected after a disaster, rather than providing compensation for the complete reconstruction of damaged houses. To fulfill its purpose, the system imposes limits on the amount of insurance per policy as well as the total payment per earthquake.

The government has exempted this system from Japan's Antimonopoly Act, ensuring that the coverage and insurance premiums of earthquake insurance are the same across all non-life insurance companies in Japan.

1. Introduction to Japan's Household Earthquake Insurance System

A Pioneering example of a Public-Private Partnership Launched 60 Years Ago

Table 1: Overview of the Household Earthquake Insurance System in Japan

Table 1: Overview	or tile i i	ousenc	JIU Lait	пчиакс	Tisurance System	
Insurance coverage	(1) Buildings for residential use (dwellings) and (2) household contents in dwellings					
Covered losses	Damage caused by fire, destruction, burial on land, or washing away resulting from an earthquake, volcanic eruption, or a tsunami following either of these events. (Fire insurance does not cover any damage related to earthquakes. It not only excludes damage from collapse due to earthquakes, but also does not indemnify against damage resulting from an earthquake or fire that spreads because of an earthquake, regardless of the cause of the fire.)					
Application method	Underw	Underwritten as an attachment to fire insurance (main policy) for dwelling risks				
Sum insured			_			nain policy sum insured under the fire insurance policy, the 10 million yen for household contents
				-		s is classified into four categories based on the extent of the unt paid for each category.
	Degree of damage				Insurance payout	t
Damage categories	Total loss		s	100% of the insured amount		nount
for claims payment	Large half loss		60% of the insured amount		nount	
	Small half loss		30% of the insured amount		nount	
	Partial loss		5% of the insured amount		ount	
	Insurano	Insurance premiums are set according to two categories: area (prefecture) and type of construction.				
	Non-		Wooden	Wooden	"S	
	1		0.7	73 ‰	1.12 ‰	
	2 1		1.1	6 ‰	1.95 ‰	
Insurance		a	2.3	30 ‰		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
premium rate	3	Ь	2.6	65 ‰	4.11 ‰	
		С	2.7	75 ‰		
	Discounts ranging from 10% to 50% are applied to the base premium rates mentioned above, depending on the earthquake-resistant performance of each dwelling.					
Total payment limit	Discrete insurance claim payments may be reduced if the total amount of insurance claims to be paid for a single earthquake exceeds the total claim payment limit. (Currently, this limit is set at 12 trillion yen. However, this limit has been set to ensure that there is no disruption to insurance payouts, even if an earthquake causes damage comparable to the Great Kanto Earthquake of 1923.)					

Source: Compiled by JER

4. Key Players in the System and Their Roles

Japan's Household Earthquake Insurance System is a sophisticated and highly public system operated jointly by the government and private non-life insurance companies. The government maintains a super long-term balance of income and expenditures by leveraging its creditworthiness and financial strength to underwrite reinsurance. This approach makes earthquake insurance available to the public at reasonable premiums, serving as a valuable self-help measure for people as a part of the government's disaster prevention and mitigation policy.

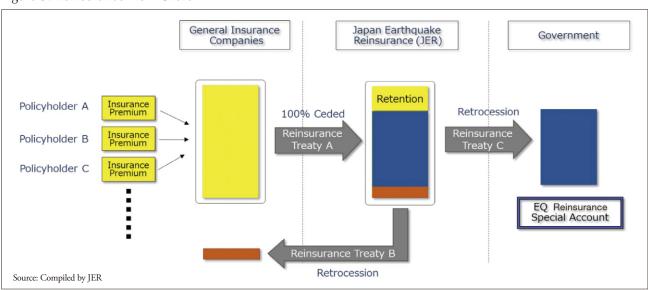
The Ministry of Finance is the government agency with jurisdiction over this system. It is responsible for its operation and supervision in accordance with the Act on Earthquake Insurance and provides financial backing by underwriting reinsurance. The government's liability limit for a single earthquake becomes effective only after approval by the National Diet. The Financial Services Agency (FSA) is responsible for supervising the insurance business itself. In accordance with the Insurance Business Act, the FSA supervises insurance companies to ensure their soundness and protect policyholders by reviewing business licenses, premiums, and compensation details. Through this process, the FSA also supervises the household earthquake insurance system.

Private non-life insurance companies are working to popularize and expand earthquake insurance by selling and underwriting earthquake insurance policies through their nationwide networks. In addition, once an earthquake occurs, they have the mission of investigating damage and paying insurance claims to affected policyholders as quickly as possible.

Established with investments from non-life insurance companies, JER specializes in the reinsurance business involving both the public and private sectors. JER plans and operates the public-private reinsurance scheme, underwrites the major percentage of earthquake reinsurance for the private sector, and collectively invests and manages the private sector's liability reserve assets for earthquake insurance. In the event of a major earthquake, JER works with the Ministry of Finance to swiftly supply non-life insurance companies with the funds needed to pay earthquake insurance claims.

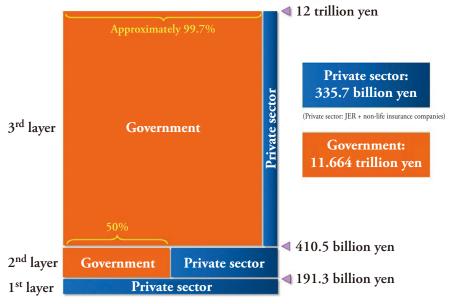
The Public-Private Reinsurance Scheme As shown in Figure 3, non-life insurance companies must cede 100% of the earthquake insurance policies they have underwritten from policyholders to JER, and JER must accept all of these policies without objection. By doing so, JER aggregates all the earthquake insurance liabilities it has underwritten and equalizes the risks. Excluding the portion of liability that JER retains, JER then retrocedes some liability to non-life insurance companies and the majority to the government.

Figure 3: Reinsurance Flow Chart



An excess of loss reinsurance cover is used for reinsurance to the government, and a reinsurance scheme consisting of three layers is structured as shown in Figure 4. The first layer, up to the point where cumulative insurance payouts for a single earthquake reach 191.3 billion yen, is 100% underwritten by the private sector. The second layer, up to the point where the cumulative insurance payouts for a single earthquake reach 410.5 billion yen, is 50% underwritten by the government and 50% by the private sector. Beyond that point, the government is mainly responsible for the third layer, underwriting approximately 99.7%. Thus, the government's financial liability increases with the scale of loss from the earthquake.

Figure 4: Public-Private Reinsurance Scheme applied since April 2, 2025



Source: Compiled by JER



6. Household
Earthquake
Insurance
Penetration and
Historical Claim
Payment

Two indicators highlight the penetration of earthquake insurance. One is the household penetration rate, which is the ratio of earthquake insurance policies to the total number of households in Japan. The other is the earthquake insurance attachment rate, which is the proportion of household fire insurance policies that include earthquake insurance compared to all household fire insurance policies.

Earthquake insurance did not immediately gain traction after the system was established in 1966, partly because there were few relatively large earthquakes. However, after the Great Hanshin-Awaji Earthquake in 1995, which caused extensive damage with over 6,000 people killed or missing and more than 100,000 houses completely destroyed, public awareness of earthquake risk increased, and earthquake insurance gained traction rapidly. Subsequently, Japan experienced the devastating damage of the Great East Japan Earthquake in 2011, which was the first earthquake with a recorded magnitude of 9.0 in Japan's history. Although earthquake insurance gained further traction after that, the current earthquake insurance attachment rate is still only 69.7%, and the household penetration rate is 35.1%, which we think there is still room for further traction.

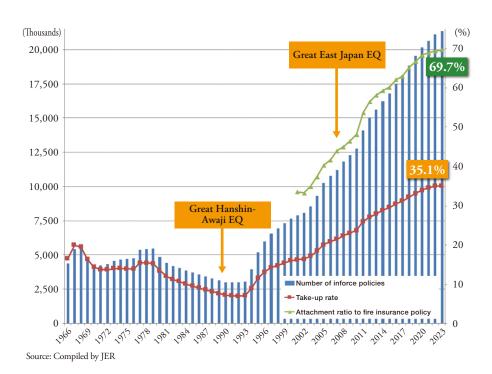


Figure 5: Earthquake Insurance Penetration

The top 20 earthquakes by insurance payouts since the establishment of the earthquake insurance system are shown in Table 2.

Earthquake insurance has helped to quickly stabilize the lives of affected policyholders through prompt payment of insurance claims, including in the Great Hanshin-Awaji Earthquake in 1995, the Great East Japan Earthquake in 2011, earthquakes with epicenters off the coast of Fukushima Prefecture in 2021 and 2022, and the Noto Peninsula Earthquake in 2024.

1. Introduction to Japan's Household Earthquake Insurance System

A Pioneering example of a Public-Private Partnership Launched 60 Years Ago

Table 2: Top 20 Earthquakes by Insurance Claims (As of March 31, 2025)

				Reinsurance Claims	
	Earthquake	Date of occurrence	Magnitude	Number of Policies (cases)	Claims Paid (Millions of Yen)
1	2011 Tohoku Pacific Ocean Earthquake ¹	March 11, 2011	9.0	826,474	1,289,681
2	2016 Kumamoto Earthquake	April 14, 2016	7.3	215,883	391,345
3	Earthquake with epicenter off the coast of Fukushima Prefecture	March 16, 2022	7.4	339,169	278,274
4	Earthquake with epicenter off the coast of Fukushima Prefecture	February 13, 2021	7.3	246,788	251,424
5	Earthquake with epicenter in northern Osaka Prefecture	June 18, 2018	6.1	159,968	125,161
6	2024 Noto Peninsula Earthquake	January 1, 2024	7.6	113,575	104,208
7	1995 Southern Hyogo Prefecture Earthquake ²	January 17, 1995	7.3	65,427	78,346
8	2018 Hokkaido Eastern Iburi Earthquake	September 6, 2018	6.7	74,372	53,866
9	Earthquake with epicenter off the coast of Miyagi Prefecture	April 7, 2011	7.2	31,019	32,415
10	Earthquake with epicenter off the coast of Miyagi Prefecture	March 20, 2021	6.9	23,600	18,975
11	Earthquake with epicenter off the west coast of Fukuoka Prefecture	March 20, 2005	7.0	22,066	16,973
12	2001 Geiyo Earthquake	March 24, 2001	6.7	24,453	16,942
13	2004 Niigata Chuetsu Earthquake	October 23, 2004	6.8	12,610	14,898
14	Earthquake with epicenter in Hyuga-Nada Sea	January 22, 2022	6.6	22,517	13,378
15	Earthquake with epicenter in northwestern Chiba Prefecture	October 7, 2021	5.9	18,981	12,615
16	Earthquake with epicenter off the coast of Miyagi Prefecture	May 1, 2021	6.8	11,377	8,312
17	2007 Niigata Chuetsu Offshore Earthquake	July 16, 2007	6.8	7,873	8,251
18	Earthquake with epicenter off the west coast of Fukuoka Prefecture	April 20, 2005	5.8	11,338	6,430
19	2003 Tokachi Offshore Earthquake	September 26, 2003	8.0	10,553	5,990
20	Earthquake with epicenter in central Tottori Prefecture	October 21, 2016	6.6	7,280	5,626

Great East Japan Earthquake
 Great Hanshin-Awaji Earthquake
 Source: Compiled by JER



Moody's Industry Watchlist: Semiconductor Risk and Catastrophic Risks to Human Populations

Chesley Williams

Senior Director, Model Product Management, Moody's

Manabu Masuda

Senior Director, Model Development, Moody's

1. Moody's Industry Watchlist

a. Emerging Risks

With a look ahead for the insurance market, Moody's recently published a report on Insuring tomorrow: 10 emerging risks transforming the industry, outlining key threats on the horizon as new risks appear and old ones transform. The insurance market is at this leading edge of risk transformation and must adapt, learn, and respond. These issues will impact communities and businesses around the world, pointing to the increased interconnected global economy.

Climate change: Whether the impacts are rising sea levels or intensifying weather events, the insurance industry is at the forefront of needing to be able to understand how climate changes will impact exposures in the near term and to prepare for long-term impacts. Around the world, most communities are examining how to mitigate the impending impacts. There are clearly exposures at a significantly elevating level of risk that at some point will not be insurable. How this plays out will depend on how governments step in and how the insurance industry is able to manage these exposures (e.g., higher deductibles, higher premiums, etc.).

Supply chain fragility: Interconnected global supply chains provide for risks at failure points that can cause widescale business disruptions. A number of recent impacts have highlighted the fragility of supply chains including the COVID-19 pandemic and global conflicts as well as a number of significant natural catastrophes. Managing and mitigating risks to supply chains is a very complicated process as suppliers are often in flux and too poorly documented to be able to construct a reliable understanding of the interconnected pieces necessary for mitigation planning. Better understanding of the resilience of the key components in the supply chains is the first step to managing this significant risk for business interruption losses. There are key occupancies that include extensive exposures at risk to supply chains; for example, semiconductor microchips are utilized as parts across a wide range of manufacturing businesses.

Potential for future pandemics: Following on the COVID-19 pandemic, it is clear that pandemics have the potential for global impacts on businesses and economies. There are a number of emerging viruses that are being monitored globally. If any of these develop efficient human-to-human transmission and are particularly virulent, it would become a concern very quickly. Heightened pandemic awareness with the general public may help but effective mitigation requires a commitment to effectual surveillance and monitoring.

Wildfire risk expansion: While wildfires are a natural process for many ecosystems, with climate changes many places are seeing hotter and drier conditions, which results in expanded wildfire risk. Around the world, fire seasons are extending, and new exposures are at risk for the first time as fires spread into urban areas. As fire risk encroaches on urban areas, cities need to rethink firefighting beyond what has been experienced and previously resourced. Hot spots for fire risk are a moving target as climate impacts vary from place to place and from year to year making for an

exceptionally dynamic risk landscape. At the individual exposure level, there are a number of steps that can be taken to mitigate fire risk, but the overall risk impact may be influenced by adjacent unmitigated properties. Effective mitigation requires widespread, community-level steps and planning.

Rebuilding natural defenses: There are a number of examples of how nature could be used to mitigate risk. Investing in natural defenses can provide dividends by providing sustainable solutions to expanding risk due to degradation of these systems. Mangroves and sand dune redevelopment can protect coastal communities from flooding risk. Planting trees and landscaping green roofs in urban environments can lower extreme temperatures and improve air quality.

Intense rain frequency increase: With climate changes, episodes of extreme rain are becoming more frequent and intense. These types of events put extreme strains on drainage and water management systems resulting in an elevated risk of catastrophic failure of these systems. Many of these events occur in very arid environments that do not have the infrastructure to handle extreme rain events, resulting in extensive flash flooding and significant inundations. As these impacts expand, communities are working towards mitigation but in many cases these projects will require large budgets and will take many years to implement.

Cyber outages: In July 2024, the world experienced a global outage due to a malfunctioning software update from the cyber firm CrowdStrike. This event highlighted the vulnerability and interconnectivity of the cyber world and the enormous risk from both accidents and malicious cyber-attacks. This event resulted in business interruptions around the world. Interest in insurance solutions offering a wide range of cyber impact coverage is likely to keep expanding as the risk becomes better perceived across global business markets.

Building collapse concerns: As global populations flock to urban areas, the construction of high-rise structures has expanded significantly. Unfortunately, there appears to be an increase in risky building practices as several structural failures, high-rise fires and building collapses have indicated. Design requirements are only as good as the oversight and enforcement. Additionally, a building's performance can be significantly undermined due to a lack of needed maintenance and remediation as a structure ages. Insurers have a role to play incentivizing resilient building practices particularly in regions where natural catastrophes can elevate the risk to taller structures (e.g., distant, large earthquakes).

Forever chemical impacts: It is becoming clear that our world is filled with "forever chemicals," in particular polyfluoroalkyl substances (PFAS), which are known for their resilient properties. These can be found in our food, water, soil and even in the air. Regulatory standards are being elevated and litigation with regards to exposure is on



the rise. Insurance losses may be mitigated with exclusions but in many cases the damage may already be done as researchers investigate the impacts of these chemicals on the human body. This is a complex risk to navigate as this research moves forward.

Microplastic contamination: Like forever chemicals, microplastics are everywhere. The understanding of the impacts on human exposures coming to light shows that microplastics exposure can result in a range of injuries including hormonal, brain Function and developmental impacts. Additionally, microplastics can carry toxins including bisphenols, phthalates, and PFAS such as polyvinyl fluoride and polytetrafluorethylene. It is possible that the liability accumulation will likely be similar to tobacco.

b. A Watchlist for the Japan Insurance Market

The global threats to the insurance market summarized in the previous section are also applicable to Japan. As the Japan insurance market has been experiencing good growth, there are a number of Japan-specific issues to keep in mind as we move forward in the 21st century. These issues fall into three broad categories: expanding exposures and opportunities, expanding sources of catastrophe risk, and transforming risks. All of these need to be considered in light of the new solvency requirements to be implemented in March 2026. It is important to note that in the Japan market, customers prefer comprehensive coverage across natural disasters as well as damage due to fire and theft.

In the Japan market, there are a number of expanding exposures and opportunities. Here we highlight renewable and semiconductor exposures as well as the potential for further expansion of the life sector in workers' compensation.

Renewal energy exposures: The ambitious target for greenhouse gas emissions neutrality for Japan by 2050 has been paralleled with significant investment in renewable energy initiatives. There are five areas that have seen significant investment in research and development: onshore and offshore wind energy, biomass, solar energy, hydrogen and lithium-ion storage batteries. The expansion of these exposures provides opportunities for the Japan insurance market to provide coverage for these unique exposures.

Semiconductor manufacturing: As with renewables, there has been very significant investment in the semiconductor industry in Japan of over ten trillion yen through 2030. The goal is to expand the semiconductor supply chain and produce the next generation of more efficient micro-chips needed for artificial intelligence and machine learning. As a result of this investment in research and development, a number of new semiconductor manufacturing facilities have come online or will be coming online in the next few years. These facilities have unique risk profiles and are extremely high value. A later section in this report focuses on this unique exposure to provide more background on these facilities and their performance in natural disasters.

2. Moody's Industry Watchlist: Semiconductor Risk and Catastrophic Risks to Human Populations

Workers' compensation: In Japan, workers' compensation insurance covers employees who suffer injury, disability, illness or death related to their work. This is a government insurance program. Premiums vary by occupancy to account for job-related risk of work-related accidents. These policies include a number of benefits: medical compensation, lost wages, illness/injury compensation, disability pension, bereaved family compensation, nursing care compensation and funeral expenses. A later section, examines workers' compensation in more detail.

With climate change, there are number of expanding sources of risk in Japan. The most notable one is the increase in damage from severe convective storms and hail events.

Severe convective storms and hail: The insurance market in Japan has only seen a few significant losses to these perils in the last decade. In April 2024, there was a very significant hail event that struck Hyogo, Okayama, and Shiga Prefectures and resulted in estimated insured losses in the order of 150 billion yen. Notably, this event impacted almost 200,000 vehicles These types of events generally result in damage to roofs, cladding, windows, vehicles, and crops. Hail in particular seems to be emerging as a new risk in Japan that has the potential to cause significant insured losses.

The last area of concern is with the transformation of risks in Japan. It is important to understand that most natural disasters are relatively infrequent, so that with each event the peril is better understood, the performance of structures can be reassessed, and future construction design requirements can be improved. This means that there are consistent enhancements in the understanding of the peril, resulting in transformations in the understanding of the risk.

Earthquake and tsunami risk: Following the Great East Japan Earthquake in 2011, there was significant investment made in research on the major earthquake sources in Japan and on the risk posed by the tsunami waves potentially generated by those events. This research continues and in recent years has been particularly focused on the Nankai Trough, which has not generated a large earthquake since 1946. New assessments of future potential events are not just constrained by historical events but also examine the physical characteristics of the subduction zone interface along the Nankai Trough. Each new research study provides enhancements and transformations in our understanding of the earthquake risk in Japan.



Volcanic risk: More than a billion people live within 100 km of a volcano that has been active in the last 12,000 years. In Japan, Mount Fuji, the tallest peak in Japan, sits just west of Tokyo with approximately three million people living within 100 km of the peak. The last major eruption started in 1707 and ended in 1708. Worst case scenarios for a future eruption can see up to 30 cm of ash deposited across Tokyo. Even just a small amount of ash will have significant impacts on infrastructure damage due to the weight of the ash particularly with associated rain. Transportation will be heavily impacted due to hazardous road conditions and poor visibility as well as vehicle engine damage due to ash infiltration. Health concerns associated with ash fall are typically associated with inhalation of ash. Even a small eruption from Mount Fuji could have significant, long-lasting impacts in the region.

Transitioning typhoons: As typhoons cross Japan, they can transition from typhoons to extratropical storms. During this process, there are a number of changes to the wind field that can be important to understand in terms of the unique risk posed by the events that make this transition. A number of wind field shapes have been observed with these types of storms including:

- A storm with stronger winds on the right-hand side (e.g., Typhoon Halong)
- Comma-shaped storms with maximum winds to the right of the track (e.g., Typhoon Songda)
- Comma-shaped storms with maximum winds at the left (e.g., Typhoon Rammasun)

Understanding this transitioning process has led to better quantification of the typhoon risk in Japan.

2. Semiconductor Risk

a. A Wake-Up Call to Insurers Writing Semiconductor Operations

Exposure value in the industrial sector has increased rapidly over the past few decades, specifically in the high technology industry driven by rapid evolution in artificial intelligence/machine learning, electric/hybrid/self-driving automobiles, cloud computing, renewal energy, and mobile/social network sectors. This creates a strong incentive for the global insurance and re-insurance markets to understand this sector's unique risk profile. More specifically, the recent earthquakes in 2024 and 2025 in Taiwan have highlighted vulnerabilities in semiconductor manufacturing which has significant impact on the global supply chain. TSMC reported losses of U.S.161 million dollars and U.S.92 million dollars due to those events, which were primarily caused by sprinkler leakage without significant structural damage.

In this section, the uniqueness of semiconductor facilities and general coding practices will be discussed using Moody's Industry Facility Model (IFM model). Figure 1 lists major semiconductor facilities and their functions/products in Japan, highlighting recent aggressive investments in this sector. Given the updated government view of the Nankai Trough published in 2025, interest in the comprehensive risk quantification for those facilities have been increasing.



Figure 1: Semiconductor Facility in Japan (New: 2024-2025 Construction)

 $Source: https://www.tel.co.jp/museum/magazine/report/202311_01/?cl=hl01\§ion=201211201.$

Uniqueness of Semiconductor Facilities and Risk Assessment Practices

The uniqueness of semiconductor facilities is primarily due to the complex process line mechanics, the functionalities of each facility, the varying vulnerability of components, and the costs associated with mechanical components, including raw materials, intermediate products, and final products on site.

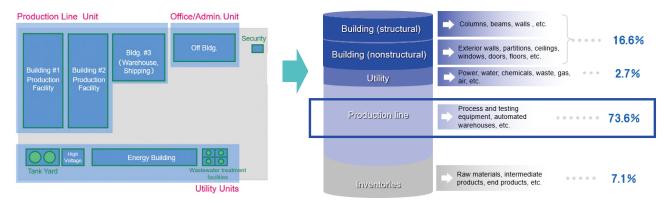
The uniqueness can be summarized into different risk categories:

- Vulnerability
 - · Process lines are very costly. As shown in Figure 2, the typical cost contribution of the process line is 70% or higher.
 - · Those process lines are highly sensitive to ground shaking, water intrusion and dust, specifically in clean rooms.



- · Numerous structural and mechanical sub-constructions (over 10k sub-constructions even in a mid-size facility).
- · Frequent modifications in order to accommodate dynamic market demand even immediately after the construction completion.
- · Long multi-year construction with many phases.
- Loss profile
 - · Minor property damage can result in very long business interruption.
 - · High dependency on energy and infrastructure.
 - · Significant impacts on supply chains.

Figure 2: Typical Key Units and Component Value Contributions



Source: Engineering and Risk Services Corporation, Tokyo, Japan

To incorporate the unique nature of semiconductor facilities, an advanced component-level performance-based approach was used to derive IFM building, contents and BI vulnerability functions based on accurate component cost breakdown, industry loss data and analytical models. In order to achieve minimum uncertainty in loss assessments, enhanced coding is highly recommended by including additional information for the site such as:

- Precise longitude/latitude location coding by building units.
- Detailed value evaluation (current market value) including building structure vs. process line breakdown.
- Use of campus functionality to incorporate loss correlation at the site.
- Soil information based on geotechnical reports.
- Seismic design specifications and/or requirements.
- Secondary characteristics such as construction quality, equipment anchoring, BI preparedness, and more.

c. Case Study: Supply Chain-Linked Global Industry Loss Estimates

Moody's performed extended cases studies and consulting services for semiconductor facilities in different aspects such as site selection, cost-benefit analyses for different performance based-design options, builder's risk and supply chain for multiple perils and regions in the past. The case below demonstrates a compelling loss assessment focusing on the global supply chain considering links among semiconductor suppliers, manufacturers and sales network. Moody's supply chain model solutions offer standard insurance risk metrics after impacts from the supply chain based on real supply chain structure including dependency and redundancy within a network, on-site material/product stock, revenue stream having multiple perils (earthquake/typhoon/flood/climate change) and regions (North America/Europe/Asia Pacific/Latin America, etc.).

In this case study, the client is a group company that has five major auto factories located in Japan, Germany, and the United States. Each of these factories is not only reliant on the Tainan supplier but also has dealer networks that could face disruptions. Figure 3 visually illustrates the supply chain structures, which highlights the geographical spread from Tainan to key locations like Munich, Aichi, Kanagawa, San Francisco, and Chicago. This context underscores the interconnectedness of global supply chains and the potential ripple effects of localized shortages, emphasizing the need for strategic planning and risk management in supply chain operations.

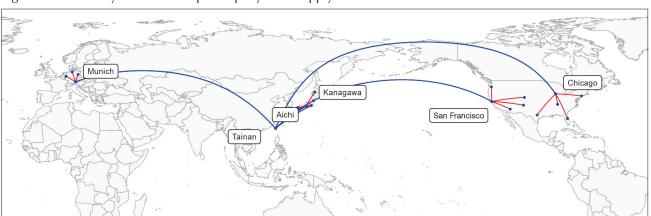


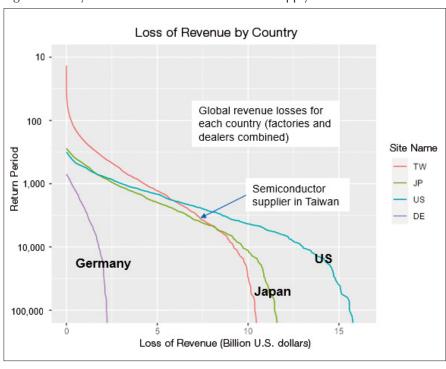
Figure 3: Case Study: Global Group Company with Supply Chains

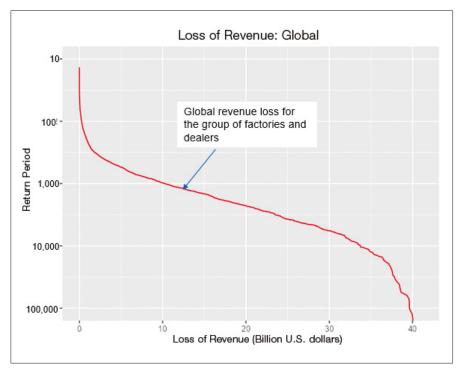
Figure 4 shows analysis results, return period – revenue loss curves, which highlight the risk profile of the global group company in terms of revenue losses due to the high dependency on the semiconductor provider in Tainan because of having a supply chain without redundancy of semiconductors. The top chart in Figure 4 breaks down the losses of the group company by country, having the revenue loss of the semiconductor supplier in Tainan, (solid red line). The bottom chart in Figure 4



aggregates global revenue losses, reinforcing the trend observed in the chart on the above. Understanding these risks is crucial for business decisions including site selection, risk mitigation, strategizing recovery and resilience for companies' global business networks.

Figure 4: Analysis Results: Return Period Loss for Supply Chain-Linked Revenue





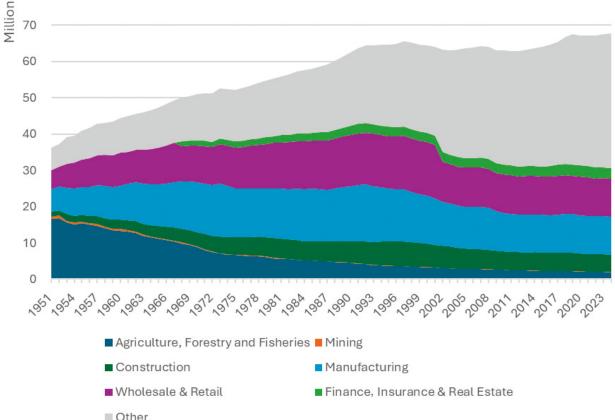
3. Integration of the Workers' Compensation Module into the Japan Earthquake and Tsunami High-Definition Model

a. Market Summary

Despite a slight population decrease over the last two decades, and although we see significant shifts among industry sectors (moving towards tier 1 and 2), the total of Japan's employment numbers has been stable or increasing since 2000 (Figure 5). The working population is projected to reach 67.8 million in 2024. Correspondingly, the workers' compensation market has shown stable or slightly rising premiums and claims, with 2023 figures at 914 billion yen and 719 billion yen, respectively (Table 1). Assuming those trends reasonably represent the catastrophic event-driven workers' compensation market, Moody's maintains a stable outlook for this sector due to the substantial size of major players and the insurance scheme defined by the Ministry of Health, Labor and Welfare. Moody's is planning to integrate a workers' compensation module within the RMS Japan Earthquake and Tsunami High-Definition Model within the existing earthquake and tsunami framework for the workers' compensation market within the second quarter of 2026.

80 Millions 70

Figure 5: Changes in the Number of Employees by Industry 1951-2024



Source: Japan Institute for Labor Policy and Training

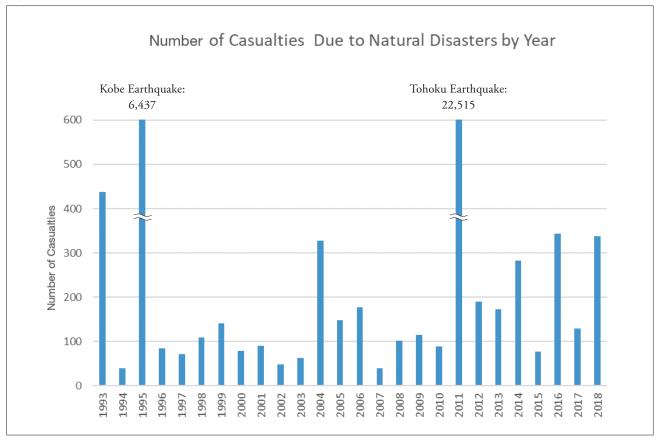


Table 1: Overall Workers' Compensation Premium and Claims Paid in 2023 including catastrophic event driven payments

(in JPY millions)

Industry	Premiums	Claims Paid
Forestry	5,856	10,297
Fishery	1,957	1,800
Mining	2,465	18,344
Construction	205,435	196,386
Manufacturing	161,602	161,721
Transportation	75,033	79,299
Energy, Gas, Water	2,236	1,595
Others	445,719	246,411
Shipowner	13,807	3,152
Total	914,110	719,003

Figure 6: Number of Casualties Due to Natural Disasters



Source: Ministry of Land, Infrastructure, Transport and Tourism

Unfortunately, there have been many natural catastrophes in Japan as shown in Figure 6. Notably, the elderly are often significantly affected because of the aging society. During the Great East Japan Earthquake, many elderly individuals were unable to escape the tsunami inundation zone promptly, which resulted in approximately 70% fatality ratio just for the 60 and above age group. The July 2018 heavy rainfall event showed a very similar trend in the severely affected prefectures. It seems that there is no obvious trend in the number of casualties through time, but a slight-moderate increase can be observed driven by multiple climate events in the most recent two decades. Although these trends and observations above are not directly linked to the working population and despite significant improvements in evacuation measures over the years, overall the catastrophic event-driven workers' compensation market is considered to be stable.

b. Moody's Workers' Compensation Model: Key Highlights

As workplace risks evolve, so must the tools used to assess and manage them. Moody's Workers' Compensation (WC) model offers a comprehensive, data-driven solution for evaluating claims, forecasting losses, and preparing for catastrophic events. The model provides a robust foundation for financial planning, compliance, and strategic decision-making designed for insurers, regulators, and employers:

- Geographical and peril coverage
 Moody's workers' compensation model offers probabilistic terrorism modeling
 worldwide and earthquake modeling for selected regions. The earthquake workers'
 compensation model covers Japan, China, Taiwan, and the United States, and
 terrorism workers' compensation coverage spans Belgium, Canada, Denmark,
 France, Ireland, Italy, Turkey, the United Kingdom, and the United States.
- Casualty rate assumptions
 Casualty rates are compiled using an event tree methodology, as shown in Figure 7. These rates represent the mean percentage of individuals that fall into a specific injury state given a particular level of ground shaking. The vulnerability module allows this relationship to vary for different construction

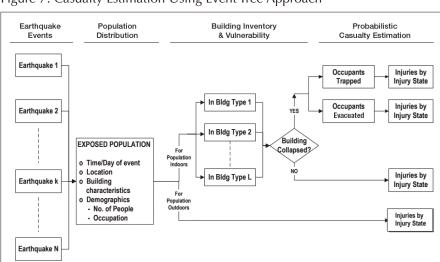


Figure 7: Casualty Estimation Using Event Tree Approach



classes, occupancy, heights, and other factors. A new development will also include a tsunami component, in addition to the existing shake module.

A wide range of fatal and non-fatal injuries may occur as a result of earthquakes or tsunami waves. From a modeling perspective, there is insufficient historical data available to derive exact injury rate functions by different injury levels. As such, individuals are assessed based on the injury state they fall into, which can range from no injuries requiring treatment to minor and major crush injuries requiring substantial follow-up as summarized in Table 2.

Table 2: Injury States used in Moody's casualty models

Injury State	Description		
Uninjured	No injuries or health impacts requiring treatment		
Medical Only	Abrasions, lacerations, strains, sprains, contusions: can be treated and released		
Temporary Total	Simple broken bone, loss of consciousness, serious strains and sprains: requires follow-up and several weeks or months to heal, but will heal completely		
Permanent Partial – Minor	Complicated fracture, serious joint injury, concussion, minor crush injury: requires substantial follow-up and some minor disability will result		
Permanent Partial – Major	Massive organ injury, heart laceration, loss of limb, crushed extremities: hospitalization, substantial temporary disability and moderate long-term disability		
Permanent Total	Spinal cord syndrome, crush syndrome with kidney failure, massive head injury: extended hospitalization, significant long-term disability		
Fatal	Death or fatal injuries resulting in death within a period of months		

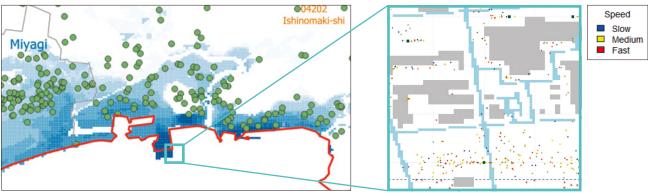
c. Simulation-Based Approach for the Tsunami Casualty Modeling Considering the Tsunami Alert System in Japan

While we have data on the number of casualties by administrative boundary from the Tohoku tsunami event, there is limited information on evacuation behaviors and how people moved from their original locations to the points where they encountered the tsunami wave. To estimate the number of casualties more accurately, we are taking into account the lead time using an analytical approach. Lead times depend highly on the size and type of the earthquake, the distance from the coastline, topography within the tsunami footprint, time of occurrence, inundation speed, how fast people can move, and the location of shelters. Figures 8 and 9 show schematic images or simulations with real locations of shelters, buildings, and roads around Ishinomaki City.

Figure 8: Designated Evacuation Shelters by Local Government in Ishinomaki

Figure 9: Evacuation Behavior Simulation
After Tsunami Alerts

Speed



d. Historical Benchmark Events

Japan constitutes only 3 percent of the world's land area. However, Japan experiences approximately 10 percent of the world's earthquakes. Japan lies in one of the most seismically active areas of the world, at the junction of the Eurasian, Pacific, and Philippine Sea plates. The historical record of damaging earthquakes in Japan extends over 1,300 years. Table 3 lists the casualties from key historical earthquakes in Japan.

The model calibration will have higher weights for recent events given better data sets with higher granularity and number of casualties of old events are trended by populations and building inventories at the time of events.

Table 3: Casualties from Key Historical Earthquakes in Japan

Location	Magnitude	Date	Deaths
Kanto	7.9	Sep. 1, 1923	143,000
Tango	7.6	Mar. 7, 1927	3,020
Sanriku	8.4	Mar. 2, 1933	2,990
Tottori	7.4	Sep. 10, 1943	1,190
Tonankai	8.1	Dec. 7, 1944	1,000
Mikawa	7.1	Jan. 12, 1945	1,900
Nankai	8.1	Dec. 20, 1946	1,330
Fukui	7.3	Jun. 28, 1948	3,780
Kobe	6.9	Jan. 16, 1995	5,502
Niigata	7.2	Oct. 23, 2004	39
Tohoku	9.1	Mar. 11, 2011	15,900
Kumamoto	7.0	Apr. 16, 2016	41
Hokkaido	6.6	Sep. 6, 2018	41



e. Solutions/Model Output

Modeled outputs include total workers' compensation loss and total number of injuries, grouped by the six injury classifications defined by the National Council on Compensation Insurance (NCCI): medical only, temporary total, permanent partial minor, permanent partial major, permanent total, and fatal.

Moody's Cost Severities are frequently updated and represent medical and indemnity costs, based on expected impacts from earthquakes and conventional terror attacks in the US model. For the Japan EQ/TS model, Moody's is not planning to develop its own view on Japan cost severities, but rather allow clients to define their own using domain data which enables clients to run the loss analyses using their own cost severity assumptions.

The model is also capable of assessing impacts to human exposures more broadly than just workers' compensation. For example, it allows for analysis of life, accident, and health insurance portfolios as well as of the general population in Japan.

f. Japan EQ Integration Development

The Moody's Japan Workers' Compensation model is being integrated into Moody's broader Japan Earthquake and Tsunami Model framework, with general availability targeted for the second quarter of 2026.

4. Final Remarks

Moody's sees the insurance industry entering a new era defined by compounding risks, technological transformation, and the need for more agile, data-driven decision-making. Moody's has been carefully watching rapid cost increases and concentration of the exposure, the risk associated with climate change, and cyber, casualty, terrorism, supply chain risks. Also, Moody's is working on underwriting tool development to manage interconnected risks including the integration of artificial intelligence.

Versus the global market, the Japan insurance market seems to show slightly different trends as the Japan market has stable fundamentals with relatively strong capital buffers for both the non-life and life insurance sectors. Accordingly, in addition to the agenda for the global markets and the recent updated view on risks such as the Nankai Trough published by the cabinet office, Moody's is weighing more on specialty risks such as high-tech manufacturing, renewable energy, the supply and workers' compensation.



Trends in Japan's Non-Life Insurance Industry

Non-Life Underwriting & Planning Department 1 Non-Life Underwriting & Planning Department 2

The Toa Reinsurance Company, Limited

 Overview of the Non-Life Insurance Industry

(1) Status of Non-Life Insurance Companies, Cooperatives and SASTI

As of April 30, 2025, a total of 57 general insurance companies were operating in Japan. A total of 35 companies were licensed as domestic insurers, including foreign capital domestic insurers, while 22 companies were licensed as branch offices of foreign insurers.¹

Japan began liberalizing its insurance industry with the financial big bang in 1996. Its non-life insurance companies have increased operating efficiency since then while conducting mergers and business integrations in stages. As a result, the non-life insurance market has become an oligopoly comprising the three largest non-life insurance groups (in alphabetical order: MS&AD Insurance Group Holdings, Inc., Sompo Holdings, Inc. and Tokio Marine Holdings, Inc.). In March this year, meanwhile, MS&AD Insurance Group Holdings, Inc. announced that it was decided to proceed with specific discussions and preparations for the merger of two core non-life insurance companies within the group, Mitsui Sumitomo Insurance Co., Ltd. and Aioi Nissay Dowa Insurance Co., Ltd. and the target date for this merger was set for April 2027.²

The market also includes cooperative and mutual insurance companies (referred to as "Kyosai Organizations"), which offer fire, life, personal accident, automobile and annuity products. Kyosai is a mutual aid system where the members share their premium to establish mutual assets, and the funds are paid out at times of unexpected contingencies to compensate for the financial deficit and stabilize the lives of the members and their families. The main Kyosai Organizations that make up the Japan Cooperative Insurance Association Incorporated had premium income of about 2.1 trillion yen in fiscal 2023 in total of fire, personal accident and automobile kyosai products (excluding life and annuity kyosai products) according to our calculation.³

In another development, the Small Amount and Short Term Insurance (SASTI) business was introduced in Japan following an amendment to the Insurance Business Act in April 2006. SASTI companies, which are limited to selling insurance products in small amounts with limited terms, provide non-life and/or life insurance products. In fact, regulations make it much easier for SASTI companies to enter the insurance business than is the case of establishing a new insurance company. For example, SASTI companies need only to register and need not be licensed by the Financial Services Agency to operate. The minimum capital required is 10 million yen, compared to 1 billion yen for an insurance company, and they may sell both life and non-life insurance products. The number of member companies of The Small Amount and Short Term Insurance Association of Japan continues to grow and the scale of the market continues to expand. Non-life insurance products sold in this market are mainly renters insurance, including fire insurance for the home contents of renters and rental housing liability insurance sold through the real estate agent channel, recent strong-seller pet insurance, and pecuniary insurance. Some SASTI companies have grown to the extent that they may choose to get a license to operate as an insurance company, while some existing non-life insurance companies have newly established SASTI companies.



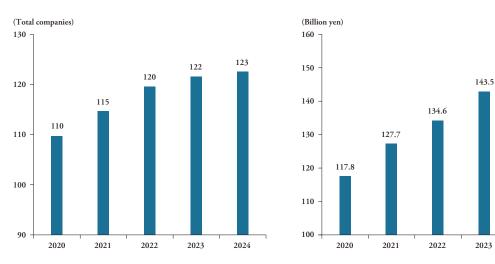
153.6

2024

The Small Amount and Short Term Insurance Market Data⁴

Figure 1: Member Companies

Figure 2: Premium Income



Source: The Small Amount and Short Term Insurance Association of Japan

(2) Trends in Business Results of Non-Life Insurance Companies for Fiscal 2024⁵

The following is a summary of the main financial results (total) of the 31 members of the General Insurance Association of Japan (GIAJ) in fiscal 2024.

Net premium income in all lines of business increased by 447 billion yen from the previous fiscal year to 9,578 billion yen, mainly due to fire and automobile classes with revisions of insurance products and insurance premium rates.

Net claims paid increased by 241 billion yen to 5,571 billion yen because of increases in earthquake claims for the Noto Peninsula Earthquake occurred in January, 2024 and increases in automobile claims due to inflation, in spite of decreases in fire claims for natural disasters like typhoons. As a result, the loss ratio decreased by 0.2 percentage points to 64.1%.

Expenses increased by 80 billion yen to 3,059 billion yen, while the net expense ratio reduced by 0.7 percentage points to 31.9% owing to the increase in net premium income.

Underwriting profit decreased by 51 billion yen to 126 billion yen.

Ordinary profit, calculated as the sum of underwriting profit and investment profit, increased by 1,203 billion yen to 2,250 billion yen. After deducting tax expense, net income also increased by 922 billion yen to 1,817 billion yen.

(3) Overseas Business Developments of the Three Largest Non-Life Insurance Groups

The three largest non-life insurance groups have all positioned overseas business as a growth driver, and have aggressively implemented initiatives such as forming business alliances with foreign insurance companies and engaging in M&A.

The three groups' global business developments and/or restructuring in the non-life insurance segment in recent years are as follows:

Mitsui Sumitomo Insurance Company, Limited, a subsidiary of MS&AD Insurance Group Holdings, Inc., acquired Transverse Insurance Group, LLC in 2023 seeking to expand its business in the U.S. In addition, they announced in 2023 that its subsidiary MSIG Insurance (Lao) Co., Ltd. and Sokxay Insurance Sole Company Limited, a subsidiary non-life insurance company of Sokxay Group, were merged to establish MSIG Sokxay Insurance Co., Ltd. In March 2025, Mitsui Sumitomo Insurance Company, Limited announced that it invested in Coalition, Inc., a U.S.-based cyber Insurtech company and a leading provider of cyber insurance with advanced cyber risk assessment technologies, to expand its global cyber insurance business with preventive measures and optimal protections. MS&AD Insurance Group Holdings, Inc. further announced in March 2025 that Mitsui Sumitomo Insurance Company, Limited was entering into 'Investment and Voting Agreements' with the founding family of W. R. Berkley Corporation, a Fortune 500 Company and a leader in specialty insurance lines in the commercial and select parts of the specialty consumer space.^{6,7,8,9}

Sompo Holdings, Inc. announced in 2021 that its wholly owned subsidiary Sompo International Holdings Ltd. would acquire Italian crop insurance company ARA 1857 S.p.A. In addition, they announced in 2023 that Sompo Seguros S.A., its Brazilian subsidiary, completed the transfer of all assets and liabilities related to the consumer business to Sompo Consumer Seguradora S.A., a new insurance subsidiary of Sompo Seguros.^{10, 11}

In 2021, Tokio Marine Holdings, Inc.'s subsidiary in Brazil, Tokio Marine Seguradora S.A. and Caixa Seguridade Participações S.A., an insurance holding subsidiary of Caixa Econômica Federal, a Brazilian state-owned bank, established a joint venture to underwrite mortgage and homeowners insurance. In addition, Tokio Marine Holdings, Inc. announced in 2024 that it had completed the sale of Tokio Marine Pacific Insurance Limited, its subsidiary in Guam, the U.S. and the sale of all of its shares in Arabian Shield Cooperative Insurance Company, a life and non-life insurance company in Saudi Arabia. ^{12, 13, 14}

With a focus on life and non-life insurance, on the other hand, the three groups are expanding and strengthening an array of various areas based on synergies with insurance products and promotion of insurtech, including financial services, risk solutions and services, nursing and senior care, healthcare, and digital. They are enhancing alliances and investments in a variety of overseas companies including artificial intelligence startups and insurtech companies.



(4) Claim Payment for Natural Disasters

Japan is exposed to natural disasters such as typhoons and earthquakes, and in various ways non-life insurance products and their related services support those who suffer losses from natural disasters.

Largest Claims Paid for Typhoons and Windstorms in Japan (Updated on March 2025 by GIAJ) 15

	Name of Disaster	Date	Total amount of claim payments (in billions of yen)
1	Typhoon No. 21 (Typhoon Jebi)	Sep. 3-5, 2018	1,067.8
2	Typhoon No. 19 (Typhoon Hagibis)	Oct. 6-13, 2019	582.6
3	Typhoon No. 19 (Typhoon Mireille)	Sep. 26-28, 1991	568.0
4	Typhoon No. 15 (Typhoon Faxai)	Sep. 5-10, 2019	465.6
5	Typhoon No. 18 (Typhoon Songda)	Sep. 4-8, 2004	387.4

Largest Claims Paid for Earthquake Insurance on Dwelling Risks (As of March 31, 2024) 16

	Earthquake (Region name)	Date of occurrence	Reinsurance claims paid (in billions of yen)
1	The 2011 off the Pacific coast of Tohoku	Mar. 11, 2011	1,289.4
2	The 2016 Kumamoto	Apr. 14, 2016	391.3
3	Fukushima-ken-oki	Mar. 16, 2022	274.2
4	Fukushima-ken-oki	Feb. 13, 2021	251.3
5	The 2018 Northern Osaka	Jun. 18, 2018	125.1

2. Topics of the Non-Life Insurance Market

(1) Trends in the Fire Insurance Market

Due to the fact that fire insurance business results in Japan have deteriorated by major natural disasters and so on, the Reference Loss Cost Rates (advisory pure premium rates) for fire insurance, as calculated by General Insurance Rating Organization of Japan (GIROJ)**, has been raised four times since 2018. Non-life primary insurance companies have revised their premium rates in response to the Reference Loss Cost Rates revisions, and have also consistently phased in tighter terms and conditions (besides those related to premium rates) such as shortening the maximum policy period for fire insurance to five years from ten years, increasing deductibles, and setting limits of liability, in order to improve fire insurance results.

** Under the Act on Non-Life Insurance Rating Organizations, GIROJ calculates Reference Loss Cost Rates (for voluntary automobile insurance, fire insurance, personal accident insurance, and so on), which are pure premium rates, and Standard Full Rates (for compulsory automobile liability insurance and earthquake insurance), which consists of pure premium rates and expense loading, based on insurance statistics from the data reported by its member insurance companies. GIROJ provides them to its member insurance companies as advisory rates.¹⁷

Outline of Announcements by GIROJ ***				
July 2018 ¹⁸	Reference Loss Cost Rates for Homeowners' Comprehensive Insurance increase by 5.5% on average. Background of revision: Increase in claims related to natural disasters and water damage from plumbing			
December 2019 ¹⁹	Reference Loss Cost Rates of Homeowners' Comprehensive Insurance increase by an average of 4.9% with discounts for relatively new dwellings. Background of revision: Increase in claims related to natural disasters and reflection of risk differentials by building age			
July 2021 ²⁰	Reference Loss Cost Rates of Homeowners' Comprehensive Insurance increase by an average of 10.9 %. Key background factors for revision: Increase in natural hazard risk and reflection of risk trend			
September 2023 ²¹	Reference Loss Cost Rates for Homeowners' Comprehensive Insurance are to increase by an average of 13.0 % with segmentalization of Premium Rates for water disasters into 5 categories according to the regional risks. Key background factors for revision: • Increase in the amount of claims by natural disasters and significant change of the risk environment • To ensure the fairness among policyholders in terms of the burden of water disaster premium rates			

^{***} In case where each insurance company chooses to reflect the revision of the Reference Loss Cost Rates in their fire insurance products, it may take 1 year or more from the date of the GIROJ announcement.



Most reinsurance contracts of domestic non-life insurance companies, including cooperatives and SASTI companies, are renewed at the start of their fiscal year, generally April 1.

While the impact of the wildfires in California was a focal point of reinsurer concern, there was a general further softening of the global reinsurance market since the January renewals, and the cedants generally enjoyed improved terms and conditions, such as reduction in reinsurance premiums for non-proportional treaties and a raising of commission rates for pro-rata treaties at the April Reinsurance renewals in Japan.

This is also because continuous efforts by the Japanese direct insurers to enhance profitability of fire insurances and to decrease the overseas exposure in liability insurances, were favorably considered by the reinsurers. Additionally, limited insurance losses in 2024 from natural disasters such as typhoons, and significant shift in the supply-demand balance to expand the reinsurance capacity provided by the reinsurers, encouraged with the strong performances, affected the renewal negotiations.

(3) Acceleration of Digital Transformation

Major insurers and others have rapidly accelerated digital transformation using various digital technologies premised on 'zero contact.' The following are examples:

- The introduction of various mechanisms and tools that enable remote and paperless customer interactions including insurance consultations, contract application and loss reporting, along with insurance premium and claims settlement.
- The application of AI techniques for customer communications, risk assessment, claim surveying, disaster prediction and mitigation, as well as for various new products and services.

(4) Trends in Regulation by Regulatory Agencies

In order to respond to uncertainties surrounding domestic and international economic and financial markets and structural changes in the economy and society, the Financial Services Agency (FSA) has been conducting in-depth monitoring to maintain financial soundness and operational appropriateness of individual financial institutions.

As for insurance companies, the FSA has stated that toward restoring confidence and ensuring sound development of the insurance market, they would proceed with revision of the supervisory guidelines and formulation and revision of the industry guidelines, etc. for improvement in the effectiveness of the guidance given by non-life insurance companies to large-scale agents and for ensuring appropriate claim payment management systems by insurance companies.

With regard to responses to natural disasters, premium rates are on an uptrend due to an increase in insurance claim payments resulting from the increased frequency and severity of natural disasters in recent years. Given this situation, the FSA encourages non-life insurance companies to enhance their enterprise risk

management (ERM), take measures to support disaster prevention and mitigation, and address climate-related risks, so that they can fulfil their function as a preparedness infrastructure against natural disasters more appropriately.²²

Based on the studies for these years to introduce the new economic value-based solvency regulatory framework in FY2025, pertaining to the introduction of the Insurance Capital Standard (ICS) adopted in December 2024 by the International Association of Insurance Supervisors (IAIS), the FSA promulgated the new regulations and the amendments to the existing regulations for the insurance business in July 2025. The economic value-based solvency regulatory framework adopts the three pillars, Pillar 1. Solvency Regulations, Pillar 2. Internal Controls and Supervisory Reviews, and Pillar 3. Disclosure, with the objectives of policyholder protection, enhancement of risk management at insurance companies, and information disclosure to consumers and market participants.^{23, 24}

(5) ESG and SDGs Initiatives

Japan is among the countries promoting ESG and SDGs. Led by major insurers, various companies are proceeding with implementation of a broad array of studies and initiatives in areas including asset management, personnel systems, corporate governance, compliance and social contribution, in addition to improving insurance products and services.

The three largest non-life insurance groups have established sustainability committees, and have officially incorporated the ESG framework into the decision-making process for insurance operations and investment. They regularly publish the sustainability reports. In addition, they are addressing the greater frequency and intensity of natural disasters as a result of climate change by cooperating more closely with other industries, local governments and other organizations in disaster mitigation initiatives ranging from disaster prevention to repair cost reduction. The three groups are also enhancing insurance products that facilitate and support renewable energy development.



References

- The Financial Services Agency,
 "List of non-life insurance companies (domestic companies) (as of April 30, 2025)"
 "List of foreign non-life insurance companies (Branch Offices) (as of April 30, 2025)"
 https://www.fsa.go.jp/en/regulated/licensed/ins_nonlife.pdf
- MS&AD Insurance Group Holdings, Inc., "Regarding the Merger of Mitsui Sumitomo Insurance Co., Ltd. and Aioi Nissay Dowa Insurance Co., Ltd." https://www.ms-ad-hd.com/en/news/irnews/auto_20250328503463/pdfFile.pdf
- Japan Cooperative Insurance Association Incorporated, "Kyosai in Japan Fact Book 2024" https://www.jcia.or.jp/publication/pdf/KYOSAI%20IN%20JAPAN%20 FACTBOOK%202024.pdf
- 4. The Small Amount & Short Term Insurance Association of Japan, "Overview of Fiscal 2024 Financial Results for the Small Amount and Short Term Insurance Industry" (Japanese) https://www.shougakutanki.jp/general/info/2025/news20250704.pdf
- The General Insurance Association of Japan website, "Overview of Fiscal 2024
 Financial Results for the Member Companies" (Japanese)
 https://www.sonpo.or.jp/member/gaikyou/kessan/g34l0i00000054u6-att/
 R703_0.pdf
- Mitsui Sumitomo Insurance Company, Limited, "Notice Regarding Completion of Transverse Insurance Group Acquisition" https://www.ms-ins.com/english/news/FY2022/pdf/0104_1.pdf
- Mitsui Sumitomo Insurance Company, Limited, "Changes in business operation in Lao People's Democratic Republic" https://www.ms-ins.com/english/news/FY2023/pdf/0616_1.pdf
- 8. Mitsui Sumitomo Insurance Company, Limited, "Investment in Coalition, Inc., a U.S. Cyber Insurtech Company: MSI Expands Global Cyber Insurance Business" https://www.ms-ins.com/english/news/fy2024/pdf/0304_1.pdf
- MS&AD Insurance Group Holdings, Inc., "Our Investment and Voting Agreements with the founding family of W. R. Berkley Corporation" https://www.ms-ad-hd.com/en/news/irnews/auto_20250328503231/pdfFile.pdf
- 10. Sompo Holdings, Inc., "Sompo International to Acquire Crop Insurance Company in Italy" https://www.sompo-hd.com/-/media/hd/en/files/news/2021/e_20210921_2. pdf?la=ja-JP
- 11. Sompo Holdings, Inc., "(Additional Disclosure) Closing of the Sale of the Consumer Business of Sompo Seguros S.A."

 https://www.sompo-hd.com/-/media/hd/en/files/news/2023/e_20230825_1.
 pdf?la=ja-JP
- 12. Tokio Marine Holdings, Inc., "Progress Regarding Establishment of Insurance Joint Venture in Brazil" https://www.tokiomarinehd.com/en/release_topics/release/k82ffv0000009663att/20210105_e.pdf

- 13. Tokio Marine Holdings, Inc., "Completion of the Sale of Tokio Marine Pacific Insurance"
 - https://www.tokiomarinehd.com/en/release_topics/release/2023/k82ffv000000h2jh-att/20240104_TMPI_e.pdf
- 14. Tokio Marine Holdings, Inc., "Completion of the Sale of Stake in Arabian Shield Cooperative Insurance Company" https://www.tokiomarinehd.com/en/release_topics/release/2023/k82ffv000000he7t-att/20240206_Arabian_Shield_e.pdf
- 15. The General Insurance Association of Japan, "Claims Payment for Natural Disasters" https://www.sonpo.or.jp/en/statistics/ue089i0000000f17-att/ten_largest_claims_paid_for_typhoons_and_windstorms.pdf
- 16. The Japan Earthquake Reinsurance Co., Ltd., "2024 Annual Report" https://www.nihonjishin.co.jp/pdf/disclosure/english/2024/en_disclosure.pdf
- 17. General Insurance Rating Organization of Japan, "Main Operations" https://www.giroj.or.jp/english/main_2.html
- General Insurance Rating Organization of Japan, "Announcement on Revision of Reference Loss Cost Rates for Fire Insurance" https://www.giroj.or.jp/english/press_2018/20180718f.pdf
- General Insurance Rating Organization of Japan, "Announcement on Revision of Reference Loss Cost Rates for Fire Insurance" https://www.giroj.or.jp/english/press_2019/20191203.pdf
- General Insurance Rating Organization of Japan, "Announcement on Revision of Reference Loss Cost Rates of Fire Insurance" https://www.giroj.or.jp/english/press_2021/20210730.pdf
- General Insurance Rating Organization of Japan, "Announcement on Revision of Reference Loss Cost Rates for Fire Insurance" https://www.giroj.or.jp/english/press_2023/20230915_1.pdf
- The Financial Services Agency, "FSA Strategic Priorities July 2024 June 2025" https://www.fsa.go.jp/en/news/2024/20240913/strategicpriorities_jul24-jun25.pdf
- 23. The Financial Services Agency, "FSA Weekly Review No. 647 July 28, 2025" https://www.fsa.go.jp/en/newsletter/weekly2025/647.html
- The Financial Services Agency, "Summary of the economic value-based solvency regulation" (Japanese)
 https://www.fsa.go.jp/policy/economic_value-based_solvency/10.pdf



4

Trends in Japan's Life Insurance Industry

Life Planning Department

The Toa Reinsurance Company, Limited

1. Trends in Japan's Life Insurance Industry During the fiscal year ended March 31, 2025 (fiscal 2024), premium income and other revenues of Japan's 41 life insurance companies increased slightly by 0.1% year on year to 43.0 trillion yen, due to a continued rise of yen-denominated single premium life insurance sales, contrary to decrease of foreign-currency-denominated single premium life insurance sales.

Despite an increase in benefits paid, net investment income increased due to higher dividends from stock holdings and higher interest rates, resulting in an 11.7% year-on-year increase in basic profit to 4.3 trillion yen.

In fiscal 2024, the environment for life insurance companies remained favorable, with a weak yen and rising interest rates. However, the outlook for the global economy is now becoming increasingly uncertain, creating an even greater need for companies to enhance their ability to respond to market fluctuations and manage risk.

2. International
Expansion among
Japan's Life
Insurance
Companies

Insurance in Japan had been considered an industry driven by domestic demand, but in recent years, Japan's life insurance companies have been accelerating international expansion. As a driving force behind this trend, the domestic market has been contracting due to the falling birthrate, aging population, and declining working population. Resolving these structural issues will be a long-term undertaking, so Japan's life insurers are increasingly seeking growth opportunities in markets outside Japan.

The first foray outside Japan by a domestic life insurance company was in 1976, when Meiji Yasuda Life Insurance Company acquired Pacific Guardian Life of the United States. However, no large-scale expansion outside Japan followed for some time after that. Since the early 2000s, Japanese life insurers have been investing and acquiring more aggressively, mainly in the Asia-Pacific region, and since the 2010s, expansion into the North American market has accelerated. In particular, five Japanese life insurance companies were operating in the United States in 2013, but that number had tripled to 15 in 2023 (Table 1). In addition, Nippon Life Insurance Company announced plans to acquire Resolution Life of the United States for approximately 8.2 billion U.S. dollars (approximately 1.2 trillion yen) in December 2024, which is expected to be the largest acquisition outside Japan in the history of the Japanese life insurance industry.

Currently, major life insurance companies such as Nippon Life Insurance Company, The Dai-ichi Life Insurance Company, Limited, Sumitomo Life Insurance Co., and Meiji Yasuda Life Insurance Company are expanding market share and diversifying their product lines through acquisitions and alliances with in-market life insurance companies in the United States and Australia. In some cases, there is a particular feature, multi-stage M&A in which acquired companies then acquire other companies, strengthening their Japanese parent company's global business base (Table 2).

Japanese life insurance companies excel in providing high-quality services and meticulous customer care, and they expect to improve their competitiveness and

establish brand value by utilizing the Japanese approach to peace of mind to penetrate markets outside Japan. In addition, the diversification and stabilization of revenue structures through global expansion will also benefit customers in Japan. For example, the domestic introduction of advanced insurance technologies and digital systems developed outside Japan will enable more convenient services for Japanese customers. Furthermore, the use of international risk management knowledge will empower flexible and diverse product design that better meets customer needs. Traditionally, U.S. and European insurance companies have led global expansion. For Japanese life insurance companies, the key to sustainable growth going forward will be the extent to which they can enhance their presence and generate synergies by global expansion, and how they can return the benefits to domestic customers and investors.

Table 1: Life Insurers in the United States

	2013	2018	2023
U.S. life insurers	850	773	719
Foreign-owned U.S. life insurers	95	105	101
Japanese-owned U.S. life insurers	5	16	15

Source: Life Insurance Fact Book, American Council of Life Insurers

Table 2: Acquisitions by the Dai-ichi Life Group (U.S. and Australia Only)

Company name	Acquisition of closed blocks		Closing date	Туре	Transaction value
Dai-Ichi Life	Australia	TAL	2011	Acquisition	Approx. 103.5 billion yen
Dai-Ichi Life	United States	Protective Life	2015	Acquisition	Approx. 582.2 billion yen
Dai-Ichi Life & Protective	United States	Genworth	2016	Acquisition of closed blocks	Approx. 79.3 billion yen
Dai-Ichi Life & Protective	United States	USWC	2016	Acquisition	N/A
Dai-Ichi Life & Protective	United States	Liberty Life	2018	Acquisition of closed blocks	Approx. 140 billion yen
Dai-Ichi Life & Protective	United States	Great-West	2019	Acquisition of closed blocks	Approx. 130 billion yen
Dai-Ichi Life & Protective	United States	Shelter Point	2024	Acquisition	N/A
Dai-Ichi Life & TAL	Australia	Challenger	2025 (Planned)	Investment	Approx. 103 billion yen

Source: The Dai-ichi Life press release



3. Insurance
Products with
Wellness
Programs and
Related Services
for Policyholders

Insurance products with wellness programs are a type of insurance product that gives policyholders incentives to be healthier, such as premium discounts, cash back, and services from affiliated companies that include discounts at fitness clubs and complimentary health foods. It is a framework that benefits both parties, as it motivates policyholders to improve their health and also leads to reduced insurance claims for life insurance companies.

This type of insurance has the potential to help curb social security costs. Furthermore, it is also socially significant for reasons of the expectation that it will reduce nursing care costs by extending healthy life expectancy. Use of such products in group insurance sector is proliferating, as corporate health management programs are increasingly employing this type of insurance.

Also, the content of insurance products with wellness programs varies depending on each life insurance company. For example, Sumitomo Life's Vitality product uses a wearable device to record the number of steps and amount of exercise each day, and employs a system in which the insurance premium changes according to such health activities. This product is designed based on the principle of loss aversion in behavioral economics. Applying a discount from the commencement of the policy encourages healthy behavior that maintains premium discount. In addition, this product features a long-term program since the effect of temporary health promotion is limited. Such long-term program is thought to support higher policy continuity rates. While on the contrary, Dai-ichi Life Group's Health Checkup Discount Rider discounts the insurance premium based on the results of the medical checkup at the start of the policy, and the discount remains in place regardless of the policyholder's health condition thereafter.

Health promotion measures often include recording the number of steps taken, the amount of exercise, and smoking cessation, which are effective in raising the health awareness of policyholders themselves. These initiatives employ digital tools such as smartphone apps and wearable devices, and serve to encourage policyholders' changes in daily behavior. Furthermore, these initiatives go beyond simply providing insurance coverage; they also encourage a change in the marketing awareness of sales personnel to a focus on delivering health to customers.

Furthermore, in addition to direct health promotion program, services specializing in preventive medicine are also proliferating. For example, second opinion referral services have become available since the early stage, and advice on treatment plans is available through networks of specialists affiliated with insurance companies. In recent years, the role of insurance has also broadened through advanced preventive medical services such as in-home cancer screenings.

4. Underwriting for Advanced Medical Care

Advanced medical care is one of the healthcare services specified by the Ministry of Health, Labour and Welfare for assessment. It refers to advanced medical technology that may be covered by public health insurance in the future. In general, however, these technologies are not currently covered by public health insurance, so patients themselves are responsible for paying all costs related to the technology. There are two types of advanced medical care: Advanced Medical Care A, which is for medical technology that does not use unapproved or off-label drugs or medical devices and whose safety and effectiveness have been confirmed to a certain extent; and Advanced Medical Care B, which is for medical technology that uses unapproved or off-label drugs or medical devices, or medical technology that requires particularly intensive observation and evaluation.

These medical technologies are reviewed every two years in conjunction with the revision of medical fees from public health insurance, with a decision made on whether or not they can be covered under public health insurance pursuant to deliberation by the Advanced Medical Care Council, the Advanced Medical Care Technology Evaluation Subcommittee, the Central Social Insurance Medical Council (Chuikyo), and other organizations. Advanced medical care for malignant neoplasms has attracted significant attention. Among particle beam therapies, proton beam therapy was introduced in July 2001 and heavy ion radiotherapy was introduced as a Highly Advanced Medical Treatment in November 2003. Since October 2012, of these treatments have been classified as Advanced Medical Care A. The revision of medical fees in 2016 approved insurance coverage for the use of these treatments for pediatric tumors and unresectable bone and soft tissue tumors. The Advanced Medical Care Conference meeting in preparation for the revision of medical fees in 2024 discussed the effectiveness of particle beam therapy compared to X-ray therapy and concluded that scientific evidence regarding early-stage lung cancer was sufficient. Ultimately, however, it did not become covered by public health insurance pursuant to deliberation by Chuikyo.

At the same time, infertility treatment recently became covered as advanced medical care. It features a relatively low cost per case, so life insurance companies' payouts are limited compared with expensive medical care such as particle beam therapy. A sharp increase in adoption was observed during fiscal 2022 and fiscal 2023 (Table 3), but it is predicted that the rate of increase will slow in national data for fiscal 2024.

However, new infertility treatment techniques that incur high costs per case may be added to the category of advanced medical care in the future, so life insurance companies must continue to monitor the trend of deliberation by the Advanced Medical Care Council closely for underwriting insurance.

Table 3: Infertility Treatment

	2022	2023	Year-on-Year Change
Cases	21,407	139,778	653.0%
Cost (millions of yen)	733	5,934	809.6%

Source: Compiled by Toa Re from Ministry of Health, Labor and Welfare data



5. Trends in Asset-Intensive Reinsurance In recent years, a type of reinsurance transaction called "asset-intensive reinsurance" (AIR) has been attracting attention in the Japanese life insurance industry. AIR is a mechanism for transferring all or a large part of insurance risk, including investment risk, to a reinsurance company by ceding policy reserves related to life insurance policies and the corresponding assets.

Japan is the second largest economy in Asia and one of the world's leading life insurance markets, with a population of approximately 124 million. According to statistics from the Life Insurance Association of Japan, the total amount of individual life insurance and annuity policies in force as of the end of fiscal 2023 totaled approximately 893 trillion yen. However, only about 1% of these amount is ceded to reinsurers, indicating significant opportunities for the use of reinsurance. Japanese life insurance companies are currently confronting several structural challenges. First, their markets are shrinking as Japan's population decreases due to the declining birthrate and aging population. Second, with the life insurance participation rate already exceeding 80%, sales of life insurance have become a challenge, and competition to get existing policyholders to switch companies is intensifying. Third, the introduction of new economic value-based capital regulations such as the Japan Insurance Capital Standard (J-ICS) will necessitate more sophisticated capital management. Against this background, AIR has attracted attention as a means of improving capital efficiency and transferring risk.

Given this situation, investors such as U.S. private-equity funds are targeting the acquisition of long-term assets backed by Japanese life insurance policies. Life insurance policies are considered a stable source of funds since they are rarely cancelled by policyholders before maturity due to providing long-term protection. As a result, these assets are suitable for illiquid and high return investments, making them attractive investment targets for private-equity funds. The volume of reinsurance transaction in Japan's AIR market could potentially reach 460 trillion yen, equivalent to about 50% of the amount of total policies in force, according to one estimate.

AIR is divided into two main types. The first is block reinsurance, which involves in-force policies. The main purpose of block reinsurance is to improve capital efficiency and reduce interest rate risk for long-term guaranteed products such as whole life insurance and products that were previously sold with high guaranteed interest rates. The other is flow reinsurance, which involves new policies. Its purpose is to increase price competitiveness and reduce investment risk, especially for savings-type products such as annuities sold at bank channels.

The United States has been the largest AIR market, and AIR has also gained traction in the United Kingdom, the European Union and Japan over the past several years. Demand is expected to increase in Asian countries. AIR has been expanded in many regions because the introduction of ICS, J-ICS and other economic value-based capital regulations is encouraging insurance companies to make greater use of AIR as a means to improve capital efficiency.

Yet the introduction and use of AIR requires careful design and management with a thorough understanding of issues including national regulatory regimes, product characteristics, and policyholder behavior in each country. Upgraded risk management and governance systems are also essential because reinsurance contracts have long-term effects on (re)insurance companies.

Table 4: AIR Transactions in Japan

Transaction type	Announcement Date	Reinsurer	Cedent	Type of Business	Transaction value
	March 2023	Fortitude Re	Undisclosed	Whole Life	N/A
	April 2023	Fortitude Re RGA	Daido Life	Whole Life	N/A Approx. 153 billion yen
	November 2023	Athene Re	FWD	Whole Life	N/A
Block	December 2023	Global Atlantic Re	Manulife Japan	Whole Life	Approx. 574 billion yen
2.00.1	March 2024	RGA	Japan Post	Payout Annuities	Approx. 650 billion yen
	May 2024	Pacific Life Re RGA	Anshin Life	Whole Life	N/A Approx. 100 billion yen
	March 2025	Fortitude Re	Taiyo Life	Whole Life	Approx. 657 billion yen
	February 2023	Kuvare Re	Undisclosed	Annuities	N/A
Flow	February 2023	Kuvare Re	Undisclosed	Annuities	N/A
	February 2024	Resolution Re	Undisclosed	Annuities	N/A
	July 2024	Talcott Re	Dai-ichi Frontier	Annuities	N/A

Source: Society of Actuaries, Asset-Intensive Reinsurance in Japan: Current Trends and Future Outlook

6. Underwriting Considerations

Underwriting in acceptance is an extremely important process that determines the subsequent profitability of the insurance business because changing the premium rate after the policy is in force is extremely difficult. Japan was quite a bit slower than Europe and North America to establish the occupation of professional life insurance underwriter.

In recent years, a variety of data sources that support underwriting decisions have become available from outside the insurance industry. For example, the Hisayama Town Study, begun in 1961 in Hisayama Town, Fukuoka Prefecture, is a representative cohort study in the field of public health. This study tracks factors in the onset of lifestyle-related diseases and dementia over the long term, and targets a

sample population that reflects the standard living environment of the Japanese population. Cohort studies require long-term tracking of the target population, so results take time to obtain. However, the Hisayama Town Study and cohort studies in other regions (Table 5) have generated extensive results that represent useful knowledge for the insurance industry.

In addition, some companies have started providing databases that integrate the health checkup data of health insurance associations with medical information obtained from insurance medical treatment systems. Insurance companies are using this big data for underwriting decisions and, further, new product development.

The essence of underwriting is predicting risk to determine appropriate underwriting conditions. The shift to paperless systems in the early 2000s led to the digitalization of operations, and many life insurance companies now have automated underwriting decision systems. This includes standardizing information through a drill-down underwriting questionnaire and automating the process using rule engines. However, these systems are only in an initial phase in their transition to automation, and issues that include optimized question design and error analysis remain. So, automated underwriting decision system is still in transition period. In addition, the analysis of risk factors using artificial intelligence is also moving forward. Automation has progressed further for claims payment decisions than for underwriting decisions.

Table 5: Overview of Significant Cohort Studies

Cohort name	Study duration	Inception year	Region and scale
Multi-Purpose Cohort Study Cohort I	National Cancer Center	1990	15 wards, cities, towns, and villages Approx. 62,000 people
Multi-Purpose Cohort Study Cohort II	National Cancer Center	1993	15 wards, cities, towns, and villages Approx. 79,000 people
JACC Study	Ministry of Education, Culture, Sports, Science and Technology	1988	45 regions Approx. 110,000 people
Nippon Data	Shiga University of Medical Science	1980	300 health centers Approx. 21,000 people
Hokkaido Study	Hokkaido University	2001	38 obstetric medical institutions Approx. 21,000 people
Japan Multi-Center Cohort Study	Nagoya University	2005	14 regions Approx. 100,000 people

Source: Japan Epidemiological Association, Large-Scale Cohort Studies in Japan



Company Overview

Profile

The Toa Reinsurance Company, Limited (Toa Re), was established in 1940. With the reinsurance market evolving and clients' needs expanding, we have recognized the importance of being able to provide a diverse line of life and non-life reinsurance products to lead the market as Japan's primary professional reinsurer. Toa Re is based in Tokyo with subsidiaries in New Jersey (U.S.A.) and Zürich (Switzerland). Increasing demand for reinsurance products in Asian countries prompted us to expand our operations in those regions and establish branch offices in Singapore, Kuala Lumpur and Hong Kong.

In acknowledgment of Toa Re's outstanding financial profile, credit rating agencies, Standard & Poor's Financial Services LLC, A.M. Best Company, Inc. and Japan Credit Rating Agency, Ltd., have assigned Toa Re ratings of A, A and AA+, respectively. As of March 31, 2025, the Toa Re Group boasted total assets of 1,098.9 billion yen. Net premiums written during the fiscal year ended 31st March 2025, totaled 275.8 billion yen.

Mission Statement



ToaRe Mission Statement

Providing Peace of Mind

Toa Re aims to realize its mission by

working with society and applying the principles of fairness and integrity to all aspects of our business

offering long-term, solid support to our clients by supplying reinsurance products and services that enable them to maintain stable operations

striving to enhance our corporate value for the interests of our shareholders through open and transparent corporate management

respecting the creativity of our group employees and valuing their contributions

conserving the environment and contributing to a sustainable society

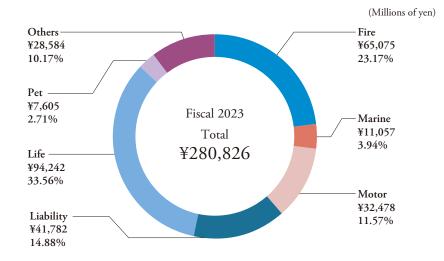


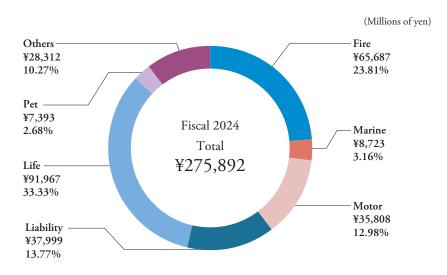
Consolidated Financial Highlights

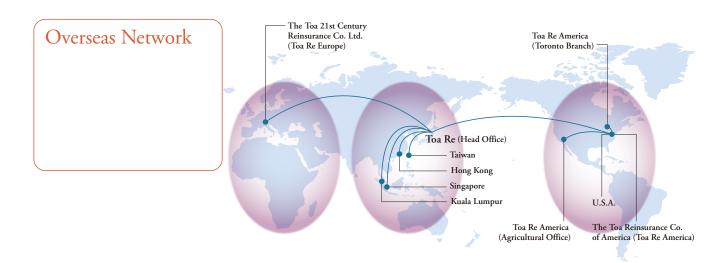
	Millions of yen				Thousands of U.S. dollars	
	2025	2024	2023	2022	2021	2025
For the year ended March 31						
Ordinary income	¥342,443	¥329,071	¥349,337	¥329,804	¥312,101	\$2,290,282
Net premiums written	275,892	280,826	320,822	302,024	287,547	1,845,184
Ordinary profit (loss)	37,813	21,197	3,238	827	2,164	252,895
Net income (loss) attributable to owners of the parent	28,475	15,556	2,450	(1,248)	2,745	190,442
As of March 31						
Total net assets	339,995	289,658	196,303	201,307	182,257	2,273,909
Total assets	1,098,952	1,021,441	905,749	860,421	772,108	7,349,866

(Rate: ¥149.52 = US\$1)

Net Premiums Written by Class (Consolidated Basis)







Locations

Branches

Singapore	50 Raffles Place #26-01, Singapore Land Tower, Singapore 048623 Telephone: +65-6220-0123
Kuala Lumpur	28th Floor, UBN Tower, 10 Jalan P. Ramlee, 50250 Kuala Lumpur, Malaysia Telephone: +60-3-2732-5911
Hong Kong	Room 801, 8th Floor, Tower 1, Admiralty Centre, 18 Harcourt Road, Hong Kong Telephone: +852-2865-7581

Subsidiaries

U.S.A.	The Toa Reinsurance Co. of America 177 Madison Avenue, Morristown, NJ 07960, U.S.A. Telephone: +1-973-898-9480
0.021	The Toa Reinsurance Co. of America (Agricultural Office) 18301 Von Karman Avenue, Suite 400, Irvine, CA 92612, U.S.A. Telephone: +1-949-474-1420
Canada	The Toa Reinsurance Co. of America (Toronto Branch) 55 University Avenue, Suite 1103, Toronto, Ontario, M5J 2H7, Canada Telephone: +1-416-366-5888
Switzerland	The Toa 21st Century Reinsurance Co. Ltd. (Toa Re Europe) Kreuzplatz 16, 8008 Zürich, Zürich, Schweiz

Representative Offices

U.S.A.	177 Madison Avenue, Morristown, NJ 07960, U.S.A. Telephone: +1-973-898-9816
Taiwan	4F-2, No. 128, Section 3, Min Sheng East Road, Taipei 10596, Taiwan, R.O.C. Telephone: +886-2-2715-1015

The Toa Reinsurance Company, Limited

6, Kanda-Surugadai 3-chome, Chiyoda-ku, Tokyo 101-8703, Japan

https://www.toare.co.jp/english/

