

## Basic Knowledge about the Insurance Industry

We have prepared this section as reference material to help readers gain a better understanding of the insurance industry and the Company's business operations and business strategies. We are striving to provide accurate and fair information, but we cannot guarantee the content of this section.

### ► Non-Life Insurance Industry

#### ■ Market Overview

##### About ¥8.8 Trillion

The Japanese non-life insurance industry's market scale in terms of net premiums written was ¥8,806.3 billion in FY2021 (based on member companies of the General Insurance Association of Japan).

##### Automobile-Related Insurance Accounts for 60%

Together, voluntary automobile insurance (48.0%) and compulsory automobile liability (8.8%) account for about 60% of the market.

##### Market Share of the MS&AD Insurance Group

As of July 2022, there were 55 companies engaged in the non-life insurance business in the Japanese domestic market (including 22 overseas non-life insurance companies). In terms of net premiums written, the MS&AD Insurance Group held a market share of approximately 33%.

#### ■ Types of Insurance and Related Trends

##### Covering Diverse Risks

We face diverse risks in our daily lives. Non-life insurance products can compensate for economic damages and human losses (e.g., the cost of treating injuries) caused by natural disasters and accidents.

##### Changing with the Times

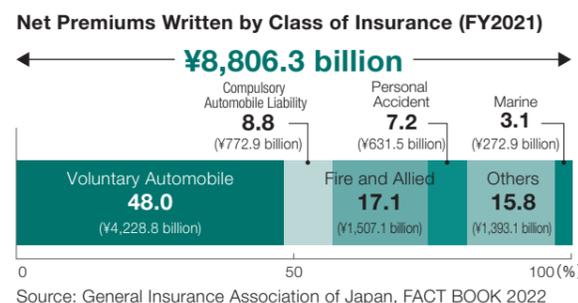
Until the 1960s, the non-life insurance market was centered on fire and marine insurance products. With the subsequent rise in the number of automobiles in use, such automobile-related products as Voluntary Automobile Insurance and Compulsory Automobile Liability Insurance have become the main products in the market. In recent years, "others" insurance, such as Liability Insurance, has been growing strongly.

##### Trend of Increase in Earthquake Insurance

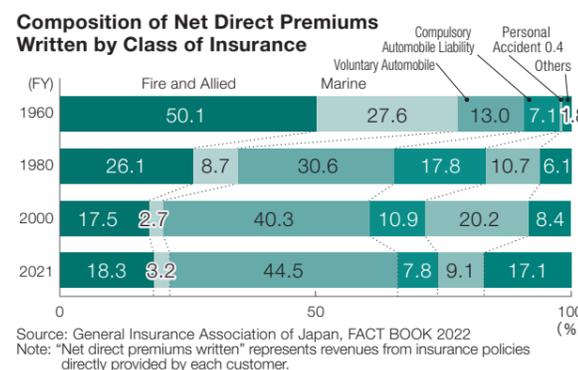
Residential earthquake insurance was developed in 1966, in response to the major earthquake that struck Niigata in Japan in 1964. The number of people obtaining residential earthquake insurance has been trending upward, and the penetration ratio of earthquake insurance in residential fire insurance policies rose to 69.0% (at the end of FY2021).

##### Residential Earthquake Insurance Operated in Collaboration with Government

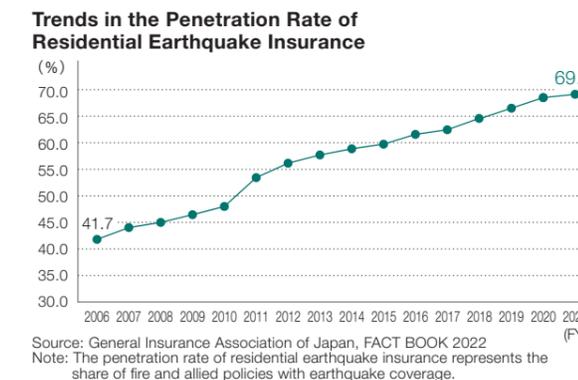
It is difficult to forecast the damage that will occur in the event of an earthquake, so fire insurance alone does not cover building fires and damage caused by earthquakes. To provide coverage for earthquake damage, the government and insurance companies collaborate to operate residential earthquake insurance, and there are no variations among insurance companies with respect to coverage of compensation and insurance premiums.



Source: General Insurance Association of Japan, FACT BOOK 2022



Source: General Insurance Association of Japan, FACT BOOK 2022  
Note: "Net direct premiums written" represents revenues from insurance policies directly provided by each customer.



Source: General Insurance Association of Japan, FACT BOOK 2022  
Note: The penetration rate of residential earthquake insurance represents the share of fire and allied policies with earthquake coverage.

### ► Life Insurance Industry

#### ■ Market Scale

##### Approximately ¥32 Trillion

The scale of the Japanese life insurance industry's market in terms of life insurance premiums and others in total is approximately ¥32 trillion, making it the world's third largest market.

##### Scale of Japan's Life Insurance Market (Trends in Life Insurance Premiums)



Sources: Prepared by MS&AD Holdings based on materials from the Life Insurance Association of Japan, "Life Insurance Trends (2022 edition)," and Japan Cooperative Insurance Association Incorporated, "COOPERATIVE INSURANCE IN JAPAN FACT BOOK 2022."

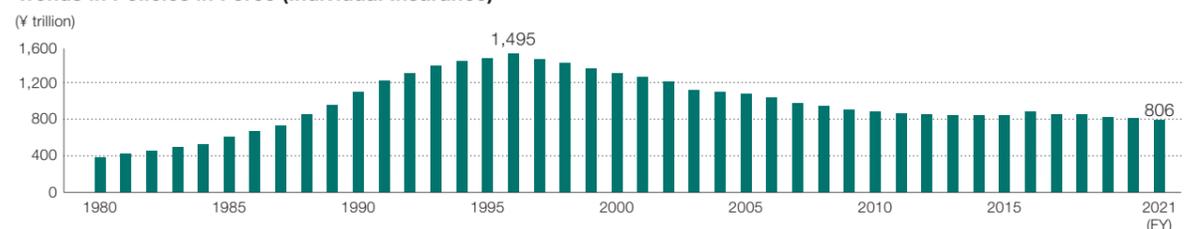
\*1 Private-sector companies: Each corporate member of the Life Insurance Association of Japan. Figures represent premiums and others.  
\*2 Mutual aid organizations: Each organization member of the Japan Cooperative Insurance Association Incorporated. Figures represent premiums and other insurance income received (total for life insurance and annuity insurance).

#### ■ Trends in Types of Insurance

##### Decline in Big-Ticket Death Benefit Needs

The amount of policies in force for individual insurance has been trending downward since peaking in FY1996. Behind this trend is a decline in big-ticket death benefit needs and a shift to third-sector products (medical and cancer insurance) needs.

##### Trends in Policies in Force (Individual Insurance)



Source: The Life Insurance Association of Japan, "Life Insurance Trends (2021 edition)"

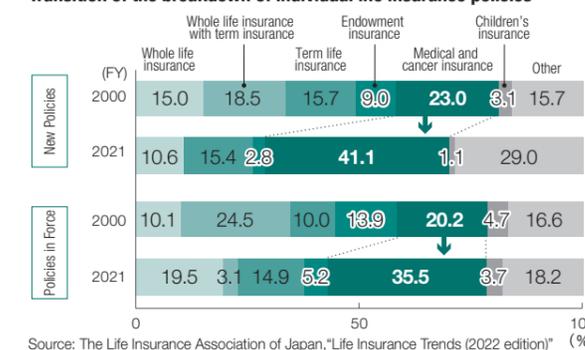
Note: Figures for 2007 and previous years exclude Japan Post Insurance and the former postal life insurance.

##### Online sales have become common due to COVID-19

As of the end of FY2021, the number of individual insurance policies in force was 193.01 million, up for the 14th consecutive years. Due to the impact of COVID-19, sales activities combining digital services such as e-mail and online interviews became common in addition to face-to-face sales, and both the number of new individual insurance policies and the volume of new policies increased.

The number of individual annuity insurance policies in force decreased for the fifth consecutive year to 20.39 million (down 1.9% year on year). Regarding the number of policies in force by insurance type, the percentage of variable annuities, which had been declining, increased from 9.1% in FY2020 to 9.5% in FY2021.

##### Transition of the breakdown of individual life insurance policies



Source: The Life Insurance Association of Japan, "Life Insurance Trends (2022 edition)" (%)

##### Trends in Policies in Force for Individual Annuity Insurance by Type



Source: The Life Insurance Association of Japan, "Life Insurance Trends (2022 edition)"  
Note: Figures in parentheses represent the composition ratio.

## ► The Insurance Industry Trends and Changes in Japan

### ■ Environment of the Insurance Industry in Japan

#### Changes in the Macro Environment

The environment surrounding the insurance industry is changing dramatically. The largest such changes are “the falling birthrate and aging population,” “progress in digital technologies such as autonomous driving,” and “an increase in natural disasters.”

#### Response to climate change

The intensification of natural disasters in recent years has greatly affected the non-life insurance industry. Because climate change is a serious risk that threatens not only the non-life insurance industry but also people’s lives, livelihoods, and the economy, a global public-private response is required.

### ■ The Insurance Industry Following Financial Regulatory Liberalization

#### Regulatory Liberalization of the Non-Life Insurance Industry

The 1996 revision of the Insurance Business Act brought a shift away from the “convoy system” within the industry and toward liberalization offering the scope for new initiatives. In addition, in response to changes taking place in the insurance industry’s operating environment (insurance product diversification, solicitation channel diversification, and increasing number of agents), the Insurance Business Act revision, which went into full effect in May 2016, included as its main points “the establishment of basic rules for insurance soliciting” and “the introduction of an obligation to put in place a system with respect to insurance solicitors (agents).”

#### Birth of the Three Mega Insurance Groups

Following the regulatory liberalization of 1996, a progression of mergers and business integrations among non-life insurance companies led to the emergence of the so-called three mega insurance groups: the MS&AD Insurance Group, the Tokio Marine Group, and the Sampo Japan Nipponkoa Group (currently the Sampo Group).

#### Major Events Following Regulatory Liberalization

Year	Month	Event
1996	April	Revision of the Insurance Business Act <ul style="list-style-type: none"> <li>■ Mutual entry into the life and non-life insurance business</li> <li>■ Reform of the rating organization system</li> <li>■ Introduction of products and the premium rates notification system, etc.</li> </ul>
	October	Mutual entry into the life and non-life insurance business by subsidiaries
1997	September	Approval of risk-subdivision-type automobile insurance
1998	July	Abolition of the obligation for members to use the premium rates calculated by the rating organization
2001	April	Ban on insurance sales by banks partially lifted
2007	September	Implementation of Financial Instruments and Exchange Act
	December	Insurance sales by banks fully liberalized
2010	April	Implementation of the Insurance Act
2014	May	Passing of the law revising the Insurance Business Act
2016	May	Full implementation of the Insurance Business Act revision (implementation of a comparison-recommendation rule and an obligation to grasp customer intentions)

### ► The Insurance Industry Going Forward

### ■ Initiatives Regarding Overseas Insurance Markets

#### Accelerating Overseas Expansion

Major domestic insurance companies are expanding their international business bases given the maturing of the domestic insurance market. In recent years, we have seen many M&A deals in the U.S. market, which is the largest non-life insurance market in the world.

#### Potential of Emerging Markets

Emerging regions such as Asia, Latin America, the Middle East, and Africa have the potential for significant growth as overseas insurance markets. Among developed countries, the insurance penetration rate (total insurance premiums as a percentage of GDP) averages 9.7%. On the other hand, the insurance penetration rates of emerging markets are relatively low, at 3.0% on average, so those markets can be considered to have growth potential.

#### Development of Principal Insurance Markets (2021 Total Life and Non-Life Insurance Premiums by Region)

Market or Region	Total Insurance Premiums		Market Share	Insurance Penetration Rate	Per Capita Premiums (¥)
	(¥ billion)	YoY change			
<b>Americas</b>	335,892.3	3.3%	44.2%	10.0%	327,303
United States/Canada	319,102.8	3.3%	42%	11.4%	862,246
Latin America/the Caribbean	16,789.6	3.7%	2.2%	3.0%	25,595
<b>Europe/Middle East/Africa (EMEA)</b>	220,722.4	6.4%	29%	5.4%	72,242
Developed countries in EMEA	196,430.6	6.6%	25.8%	8.0%	409,295
Central and Eastern Europe/Turkey/Central Asia	9,233.5	4.5%	1.2%	1.1%	18,614
Middle East/Africa	15,058.3	5.0%	2%	2.1%	7,978
<b>Asia Pacific</b>	203,539.5	0.7%	26.8%	5.3%	47,755
Developed countries in Asia Pacific	100,993.2	0.9%	13.3%	9.0%	389,130
China	77,131.0	-1.7%	10.1%	3.9%	53,406
Emerging Asia Pacific except China	25,415.3	7.1%	3.3%	3.3%	9,972
<b>World</b>	<b>760,154.3</b>	<b>3.4%</b>	<b>100%</b>	<b>7.0%</b>	<b>96,839</b>
(Developed countries)	616,526.5	3.9%	81.1%	9.7%	562,088
(Emerging markets)	143,627.7	1.5%	18.9%	3.0%	21,163

Source: Prepared based on data in “sigma No. 4/2022” of Swiss Re. Figures are real figures adjusted for inflation insurance penetration rate = insurance premiums as a share of GDP. Figures were converted into Japanese yen at the average exchange rate for 2021 (US\$1=¥110.80).

### ■ Increasing Diversity of Insurance Companies and Sales Channels

Sales channels such as mail-order sales, marketing of insurance products via banks (OTC bank sales), and insurance storefronts have diversified, and the presence of insurance companies specializing in online sales has expanded. In addition, the number of non-life insurance agents has halved in the past 20 years due to the aging and increasing size of agents.

### ■ Expanding the Breadth of Products and Services

#### “Longevity Risk”

Economic risks related to longevity, such as securing living expenses and spending on medical expenses, are increasing.

#### New Products and Services Related to Medical and Long-Term Nursing Care

The importance of people’s self-help efforts is expected to continue increasing, and the associated role of private-sector insurance companies is becoming large.

### ► Japan’s Insurance Market Viewed from a Global Perspective

### ■ Non-Life Insurance

#### Japan Has the World’s Sixth Largest Market Scale

According to the “sigma” newsletter of Swiss Re, the scale of the non-life insurance market in 147 countries and regions around the world was approximately ¥428 trillion in 2021. The largest market is that of the United States (approximately ¥234 trillion), and Japan’s market is the sixth largest (approximately ¥12 trillion).

#### Japanese Market Smaller as a Share of GDP

Japan’s insurance premiums as a share of GDP are only 2.2% compared to the global average of 3.9%.

#### Non-life Insurance Premiums Top 20 Countries (2021)

Ranking	Country/Region	Premium Income			Per Capita Premiums (¥)	As a Share of GDP
		(¥ billion)	YoY change	Market Share		
1	United States	233,683.5	8.3%	54.6%	704,245	9.1%
2	China	36,638.5	7.2%	8.6%	25,373	1.9%
3	Germany	18,372.6	7.9%	4.3%	220,714	3.9%
4	United Kingdom	12,726.3	11.5%	3.0%	115,121	2.2%
5	France	12,291.6	9.3%	2.9%	164,649	3.4%
6	Japan	11,937.7	-5.3%	2.8%	94,734	2.2%
7	Canada	10,678.0	16.2%	2.5%	279,216	4.8%
8	South Korea	10,098.5	4.7%	2.4%	195,451	5.2%
9	Netherlands	8,739.0	6.5%	2.0%	498,268	7.7%
10	Australia	6,264.6	17.2%	1.5%	243,206	3.5%
11	Italy	5,150.0	7.2%	1.2%	86,978	2.2%
12	Spain	5,046.6	7.7%	1.2%	106,368	3.2%
13	Switzerland	3,627.3	6.1%	0.8%	414,835	4.0%
14	India	3,356.8	11.3%	0.8%	2,438	1.0%
15	Brazil	3,086.3	8.4%	0.7%	14,404	1.7%
16	Belgium	2,724.4	7.5%	0.6%	156,006	2.7%
17	Taiwan	2,699.5	10.0%	0.6%	114,346	3.2%
18	Iran	2,635.3	43.7%	0.6%	31,024	2.0%
19	Mexico	1,898.4	14.8%	0.4%	14,515	1.3%
20	Russia	1,791.5	5.3%	0.4%	12,299	0.9%
-	Other countries (regions)	34,577.1	10.4%	8.1%	-	-
	<b>Total/Average</b>	<b>428,023.6</b>	<b>8.4%</b>	<b>100.0%</b>	<b>54,514</b>	<b>3.9%</b>

Source: Prepared based on data in “sigma No. 4/2022” of Swiss Re.

Notes: 1. The “Total/Average” figures are totals of figures for the 147 countries and regions within the scope of the survey in 2021.  
2. Exchange rates are the same as those used in the “Development of Principal Insurance Markets” table above.

### ■ Life Insurance

#### Japan Has the World’s Third Largest Market Scale

According to Swiss Re’s “sigma No. 4/2022,” global life insurance premium income amounted to approximately ¥330 trillion in 2021. The figure for Japan was approximately ¥33 trillion, corresponding to 9.9% of the global figure.

#### Life Insurance Premiums Top 10 Countries (2021)

Ranking	Country/Region	Premium Income		Market Share
		(¥ billion)	YoY change	
1	<b>United States</b>	67,548.3	7.5%	20.3%
2	<b>China</b>	40,492.5	5.2%	12.2%
3	<b>Japan</b>	32,780.2	-1.6%	9.9%
4	<b>United Kingdom</b>	31,498.7	19.0%	9.5%
5	<b>France</b>	20,547.3	34.9%	6.2%
6	<b>Italy</b>	16,176.9	12.9%	4.9%
7	<b>Germany</b>	12,183.7	3.0%	3.7%
8	<b>South Korea</b>	11,286.8	-1.2%	3.4%
9	<b>India</b>	10,712.0	14.2%	3.2%
10	<b>Taiwan</b>	9,867.7	-2.3%	3.0%
-	<b>Other countries/regions</b>	79,036.5	15.0%	23.8%
-	<b>Total/Average</b>	<b>332,130.6</b>	<b>9.9%</b>	<b>100.0%</b>

Source: Prepared based on data in “sigma No. 4/2022” of Swiss Re.

Notes: 1. The “Total/Average” figures are totals of figures for the 147 countries and regions within the scope of the survey in 2021.  
2. Exchange rates are the same as those used in the “Development of Principal Insurance Markets” table above.

## ► Glossary of Insurance Terminology

### A

#### Alternative Risk Transfer (ART) Business

A general term referring to the use of techniques other than traditional insurance policies to transfer risks, meaning to provide risk-bearing entities with coverage or protection. ART entails the use of financial technologies and capital markets to provide risk solutions. ART products include derivatives and securitized products, and the typical products include “weather derivatives” and “earthquake derivatives.”

#### Annualized Premiums

The insurance premium payment method differs depending on the insurance contract. An annualized premium is calculated by adjusting for these differences in payment methods and computing the yearly average paid in premiums. It indicates how much income an insurance company makes from insurance premiums in one year.

#### Asset Liability Management (ALM)

A general term for the comprehensive management of risks related to assets and liabilities. The value of most of the assets held by insurance companies and other financial institutions is affected by market prices (or market interest rates); in other words, they are at risk. A proper evaluation of risks and returns cannot focus on assets or liabilities alone—the ALM business management methodology seeks to maximize profit, while managing it in a way that pays comprehensive attention to the risk and return of both assets and liabilities.

#### Assumed Interest Rate

Insurance companies anticipate a certain level of profits from asset management and offer discounts on insurance premiums based on this. This discount rate is called the assumed interest rate.

### C

#### CAPM (Capital Asset Pricing Model)

The capital asset pricing model is used to calculate the rate of return expected by shareholders in the capital market. The correlation of the target company's stock with the market is determined by the  $\beta$  value (more precisely, the slope estimated by the linear regression equation that explains the fluctuations in the stock prices of the target companies in terms of market price fluctuations). The estimated cost of capital is calculated by adding the risk-free interest rate to the individual equity risk premium, which is the  $\beta$  value multiplied by the equity market risk premium (market return – risk-free interest rate).

#### Catastrophe Reserves

Most non-life insurance premium rates are set using the “law of large numbers,” but, in a given fiscal year, it is always possible that there will be a major typhoon or other large disaster causing damages on a scale that cannot be absorbed using premium income for that year alone. The catastrophe reserve is provided to prepare to respond to the temporary surge in claims associated with such disasters. For more details, see page 112.

#### CAT Bond (Catastrophe Bond)

Securities sold by non-life insurance companies to investors to enable the insurance companies to avoid major losses owing to claims paid in connection with major disasters. If there is no occurrence of a disaster on a scale surpassing previously stipulated criterion, then the CAT bonds' interest and principal will be paid to the investors, but, in the case of such a disaster, the principal will be partially or entirely reduced.

#### Combined Ratio

An indicator that is the sum of the net loss ratio and the net expense ratio; subtracting this ratio from one gives the

underwriting balance ratio. Although the indicator is not adjusted to reflect outstanding claims and underwriting reserve, it reflects profitability for the fiscal period. Used only in the insurance industry, its concept is similar to that of the ratio of operating profit to sales of ordinary companies.

#### Commissions and Collection Expenses

The total of agent commissions, insurance broker commissions, sales expense, collection expense, reinsurance commissions, and ceded premium commissions. (Note that ceded premium commissions, which are commission incomes pertaining to ceded reinsurance and retrocession premiums, are deductions.)

#### Compulsory Automobile Liability Insurance (CALI)

To provide relief to victims of traffic accidents, this is compulsory insurance that all motor vehicles must be enrolled in under law. Motorized bicycles are also subject to this requirement. Compulsory automobile liability insurance provides compensation in cases where other persons are killed or injured in traffic accidents, etc. Insurance claims are paid for loss compensation of the other persons.

#### Core Profit (Fundamental Profit)

Ordinary profit after adjustments for capital profits/(losses) and extraordinary income and losses, which represent profits and losses not stemming from the principal business of life insurance companies; so, Core Profit is an indicator of the profitability of the Company's principal business operations during a fiscal year. The concept of Core Profit is close to that of ordinary companies' “operating income” and banks' “business income.”

#### Cross-Selling

Concurrent selling of life insurance and non-life insurance products, such as in the case of a non-life insurance agent that sells life insurance products.

### D

#### Direct Insurance

A term used in contrast to reinsurance. When an insurance contract is reinsured, the original insurance that has been reinsured is called direct insurance. It can also be used to refer to all the insurance contracts directly entered into with policyholders by the insurance company.

### E

#### Earned-Incurred Loss Ratio (EI Loss Ratio)

After adjusting for provisions and reversals of loss reserves and ordinary policy liability reserves, the EI loss ratio is an indicator of the loss ratio on a current-period-occurrence basis. It is calculated as follows.

→ Net Loss Ratio

- EI loss ratio = claims incurred ÷ premiums earned
- Claims incurred = period-end net claims paid + (period-end loss reserve – previous period-end loss reserve)
- Premiums earned = previous period-end unearned premiums + net premiums written for the period – period-end unearned premiums

#### EEV

See “Embedded Value” below.

#### Embedded Value (EV)

The current value of net assets plus the current value of future profit expected from policies in force (policies in force value). Under current statutory accounting practices, the recognition of costs is concentrated at the time of sales, while the related profits are recognized in subsequent years; so, using those accounting practices to accurately evaluate corporate performance is difficult in some ways. As EV encompasses an

evaluation of the current value of future profit expected from policies in force, it is a useful indicator that can be used to supplement statutory accounting practices for the purpose of evaluating companies' performance and enterprise value.

While the Company has disclosed its EV for some time, since FY2011, it has disclosed its EV calculated based on the European Embedded Value principles (EEV principles\*), and this type of EV is referred to as EEV. In addition, the Company's calculations of EEV employ a market-consistent approach to evaluating liability- and asset-related cash flows that is consistent with the financial products traded in markets.

\*The EEV principles were instituted by a CFO Forum (composed of the chief financial officers (CFOs) of major European insurance companies) in May 2004 with the goal of promoting a consistent EV calculation and disclosure method and thereby promoting an increase in transparency.

#### Enterprise Risk Management (ERM)

A process for determining and evaluating the risks associated with the execution of business operations by an enterprise in an integrated, comprehensive, and strategic manner. It is an integrated risk management method used for maximizing enterprise value.

#### Equity Ratio

The proportion of equity divided by total assets. Owing to the application of accounting standards concerning financial products and the inclusion of unrealized gains on securities within the balance sheet figures, the equity ratio is also stated based on market value.

#### ESG

Three concepts of environmental, social, and governance (ESG). In ESG investing, the investor does not focus exclusively on the profit that can be earned from an investment but goes on to consider the impact of the investment on the environment as well as on shareholders, customers, employees, local communities, and other stakeholders. ESG investing essentially entails carrying out CSR when making investment decisions.

#### Expected Mortality

Based on past statistics, gender-wise and age-wise mortality (or the number of those alive) is predicted, and this information is used for calculating the required amount of insurance premium for future insurance payments. The mortality rate used in these calculations is called the expected mortality.

#### Expected Operating Expense Ratio

Life insurance companies anticipate all the expenses required for business operation such as concluding contracts, receiving premiums, maintaining and managing policies, and so on in advance. This is called the expected operating expense ratio.

### F

#### Foreign Currency–Denominated Life Insurance

Foreign currency–denominated life insurance calls for the use of a foreign currency (e.g., U.S. dollars, Euros, Australian dollars) to pay insurance premiums and the use of a foreign currency to pay insurance benefits and reimbursements upon policy cancellations. A portion of such life insurance products as whole life insurance, endowment insurance, and fixed/variable individual annuities is sold as foreign currency–denominated products. When the foreign currency benefits from such products are converted into yen, they will be affected by foreign exchange rate fluctuations; so, there is a possibility that the yen-denominated benefits could end up being lower than the yen-denominated value of the premiums paid. The impact of foreign exchange rate fluctuations is referred to as “foreign exchange risk (foreign exchange rate fluctuation risk),” and policyholders and beneficiaries of foreign currency–denominated policies are exposed to those risks.

#### Full-Time Agents

Agents specializing in the sale of insurance. In the field of non-life insurance, in addition to specialized agents (full-time agents), there are sideline agents that sell insurance alongside their main line of business, such as automobile sales dealers, automobile repair shops, real estate agents, and travel agents.

### G

#### General Insurance Rating Organization of Japan

An insurance rating organization formed by the merger in July 2002 of the Property and Casualty Insurance Rating Organization of Japan (established 1948) and the Automobile Insurance Rating Organization of Japan (established 1964), which were established in accordance with the Act of Non-Life Insurance Rating Organizations. It collects data from member insurance companies and calculates the Reference Loss Cost Rates for automobile insurance, fire insurance, personal accident insurance, and nursing care expense insurance, as well as Standard Rates for compulsory automobile liability insurance and earthquake insurance. It also handles loss adjustment work for compulsory automobile liability, collects insurance data, and conducts research and analysis.

#### Gross Written Premiums

Premiums written that were received from direct insurance contracts and reinsurance contracts during one fiscal year; they are the premiums written prior to the deduction of reinsurance premiums ceded via reinsurance contracts.

#### Group Adjusted Profit

Group Adjusted Profit, which is a numerical management target within the “Vision 2021” Medium-Term Management Plan and Medium-Term Management Plan (2022–25), is calculated as follows.

Group Adjusted Profit = Consolidated net income + provision for catastrophe reserve and others – other incidental factors (e.g., amortization of goodwill and other intangible fixed assets) + equity in earnings of the non-consolidated group companies

#### Group Adjusted ROE

Group Adjusted ROE, which is a numerical management target within the “Vision 2021” Medium-Term Management Plan and the Medium-Term Management Plan (2022–25), is calculated as follows.

Group Adjusted ROE = Group Adjusted Profit ÷ average of beginning and ending amounts on B/S of adjusted net assets (consolidated net assets + catastrophe reserve and others – goodwill and other intangible fixed assets)

#### Group Core Profit

Group Core Profit, which is a numerical management target within the Next Challenge 2017 Medium-Term Management Plan, is calculated as follows.

Group Core Profit = Consolidated net income – net capital gains/losses on stock portfolio (gains/losses on sales, etc.) – net evaluation gains/losses on credit derivatives – other incidental factors + equity in earnings of the non-consolidated Group companies

#### Group Return on Equity (Group ROE)

Group ROE, which is a numerical management target within the Next Challenge 2017 Medium-Term Management Plan, is calculated as follows.

Group ROE = Group Core Profit ÷ consolidated total net assets excluding non-controlling interests (average of beginning and ending amounts of B/S)

**I****Income Guarantee Insurance**

A type of insurance under which a pension can be claimed after the policyholder's death for the full term of the insurance as decided at the time of entering the contract. The number of times a pension can be claimed depends on the time of death of the policyholder. The minimum number of times a pension can be claimed is guaranteed. If the number of times the pension has been claimed before maturity is less than the guaranteed minimum, the remaining number of times can be claimed.

**Incurred but Not Reported Loss (IBNR)**

The portion of underwriting reserves corresponding to claims that have been incurred but had not been reported to the company at the end of the period. The IBNR is estimated using statistical methods.

→ Ordinary Outstanding Claims Reserve

**Individual Annuity Insurance**

Annuity insurance is a financial product used to save premiums and thereby fund the payment of future annuities, and individual annuity insurance is an annuity insurance product provided by private-sector life insurance companies. The annuities are received after the beneficiary reaches an age specified in the policy contract. There are several kinds of individual annuity insurance products defined based on the annuity receipt period, such as whole life annuity with a guarantee period, annuity certain, fixed-term annuity with a guarantee period, and a husband-and-wife annuity.

**Insurance Business Act**

A law that was enacted to promote the protection of policyholders through ensuring sound and appropriate business operations of insurance companies and fair solicitation of insurance policies. The act lays down organizational and operational rules for insurance businesses, as well as defining the criteria for the administration and supervision of insurance companies and determining the supervision standards and authorities of government units overseeing insurance business operations.

**Insurance Claim (Benefit)**

In the case of non-life insurance, the sum of money paid by an insurance company to the insured based on the amount of damage incurred due to an insured event. (In the case of life insurance) the sum of money decided beforehand in the insurance contract paid by the insurance company upon the maturity of the contract to the designated beneficiary, in the event of illness or death of the insured person.

**L****Law of Large Numbers**

If you roll a die (one dice), a "one" might appear by chance, but if you continue to increase the number of times the die is rolled, the ratio of times that "one" appears will approach one time out of six. As in this case, when the number of trials is increased, the law of large numbers indicates that the results will approach a fixed value. When calculating the probability of accident occurrence, the probability can be forecast by analyzing large volumes of accident data rather than just looking at the accident percentages of a few cases.

**Life Insurance Professional**

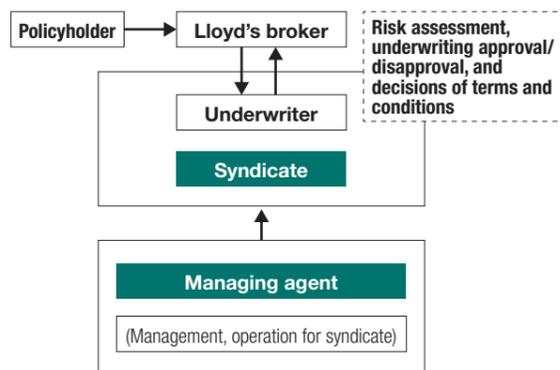
An agent specializing in life insurance or selling life insurance as its main business.

**Lloyd's (Insurance Market)**

The generic name for an insurance market established in London in the 17th century, having more than a 300-year history. On a day-to-day basis, huge and complex risks are brought to Lloyd's, where that risk is assessed, premiums decided, and insurance underwritten by underwriters that have a high level of

specialized expertise and that belong to individual syndicates (the risk underwriting bodies at Lloyd's). Lloyd's is supervised by the British authorities and has a strong management and supervisory system unique to Lloyd's. It is not easy to become a Lloyd's member (syndicate fund contributor) or establish a syndicate as many strict requirements must be satisfied.

As of the end of December 2022, it was underwritten by 77 Lloyd's syndicates, and the gross written premiums in FY2022 for the whole of the Lloyd's market amounted to approximately £46.7 billion.

**Long-Term Care Insurance (Nursing Care Insurance)**

A kind of insurance that can provide benefits for the purpose of providing long-term nursing care. In Japan, there exists both public long-term care insurance and private long-term care insurance products. Among the latter type of products, there are products that will provide a lump-sum benefit and/or annuities in cases where the beneficiary requires nursing due to being bedridden or suffering dementia for a specified period. There are also products that will provide a lump-sum benefit and/or annuities based on the public long-term care insurance system's primary nursing care requirement authorization.

**Loss Adjustment Expense**

Personnel expenses and non-personnel expenses (including depreciation costs) as well as various taxes related to the loss adjustment and insurance claim payment operations.

**M****Medical Insurance**

Medical insurance provides benefits to policyholders when they are hospitalized due to illness or injury or undergo specified types of surgical operations. Some medical insurance policies also provide death benefits on the decease of the beneficiary, but the amount of such benefits is generally small.

**Motor Channel Agent**

Sideline agents that sell insurance as a side business but are mainly automobile repair shops, used car sales dealers, or automobile-related service providers or motorbike shops. Automobile dealerships that also sell insurance are excluded from this category.

**N****Net Claims Paid**

Net claims paid is obtained by totaling (adding or subtracting as indicated) items ① to ④ listed below, and plainly shows the amount of insurance claims paid. The payment of insurance claims is the main expenditure involved in the non-life insurance business.

- ① Direct claims paid
- ) ② Reinsurance claims ceded
- + ) ③ Reinsurance claims paid
- ) ④ Retrocession claims ceded
- ⑤ Net claims paid (Income statement item)

**Net Expense Ratio**

The net expense ratio is obtained by adding the commissions and collection expense to operating expenses and general administrative expenses incurred in the insurance underwriting business and dividing this by net premiums written. It is an indicator of the operational efficiency of an insurance company. The net expense ratio can also be called simply the "expense ratio."

**Net Loss Ratio**

The net loss ratio is obtained by adding net claims paid and loss adjustment expenses, and dividing this by net premiums written, and it indicates the company's insurance underwriting business performance. It can also be called the "published loss ratio" or the "loss ratio." The net loss ratio is what is called a "written paid basis" indicator, as it can be calculated based simply on written premium and paid claims during the accounting period in question.

→ Earned-Incurred Loss Ratio (EI Loss Ratio)

**Net Premiums Written**

Net premiums written is obtained by totaling (adding or subtracting as indicated) items ① to ④ listed to the right, and plainly shows the income earned from the non-life insurance business (excluding deposit premiums from policyholders).

- ① Direct premiums written
- ) ② Reinsurance premiums ceded
- + ) ③ Reinsurance premiums written
- ) ④ Retrocession premiums ceded
- ⑤ Net premiums written (Income statement item)

**Non-Fleet Grade System (Automobile Insurance)**

A system of insurance premium discounts and surcharges based on the accident history applied to non-fleet contracts. The term non-fleet contracts refers to contracts where the total number of contract automobiles owned and used by the policyholder (the number of contracts with other insurance companies included) is nine or less. (Cases where the number of automobiles is 10 or more are referred to as "fleet contracts.") The grades are divided into 20 levels (Grade 1 to Grade 20), and the grade is maintained even if the insurance company changes. For more details, see page 112.

**O****Ordinary Outstanding Claims Reserve**

A type of outstanding claims reserve set aside based on an estimation of future liability of individual claims that have occurred and been reported but not yet settled.

→ Incurred but Not Reported Loss (IBNR)

**Ordinary Underwriting Reserves**

The amount of unearned premiums (premium reserve) or the initial year balance, whichever is greater, is set aside as a liability reserve and called the "ordinary underwriting reserve."

- Unearned premiums (premium reserve): Insurance premiums corresponding to the time remaining on an insurance policy, collected beforehand.
- Initial year balance: Premiums received during the fiscal year less claims paid, reserves for outstanding claims, and other expenses incurred under those contracts.

**Outstanding Claims**

A reserve fund to fund the claim payment for unpaid insurance payment when an accident has occurred before the balance sheet date.

**P****Policies in Force**

The outstanding amount of valid insurance policies owned by an insurance company at the end of the fiscal year. It is an indication of the grand total amount (e.g., of insurance) guaranteed to policyholders.

**Policy Clauses**

The policy clauses define the details of the insurance contract, including the policyholder's obligation to pay the insurance premium and duty of disclosure, as well as the payment amount and terms and conditions of payment by the insurance company. There are two kinds of policy clauses: common policy clauses, which are common to all insurance contracts of the same type, and special policy clauses (clauses containing special policy conditions), which are customized for individual contracts by adding to or changing/limiting some of the provisions in the common policy clauses.

**Policyholder**

The party applying to an insurance company for an insurance contract is called the policyholder. The policyholder is obliged to pay the insurance premium once the contract is concluded.

**Policy Reserve**

The reserve set aside by the insurance company at the period-end closing of accounts so that it can fulfill its obligation to pay insurance claims based on insurance contracts. It includes outstanding claims and underwriting reserves, and policyholder dividend reserves.

**R****Reinsurance**

Reinsurance is a form of insurance that an insurance company purchases to share the risks of its insurance policies with another insurance company.

→ Direct Insurance

**Reinsurance Premium**

An insurance premium received from another insurance company via a reinsurance contract in return for underwriting a part of the risk.

**Reinsurance Premium Ceded**

An insurance premium paid to another insurance company via a reinsurance contract in return for covering a part of the risk of the original insurance contract, for purposes such as risk diversification.

**Reorganization by Function**

An unprecedented business model made possible by the 2013 revision of Japan's Insurance Business Act. Reorganization by Function calls for making the most of the strengths of each group insurance company while undertaking business reorganization. While enabling the bypassing of the negative aspects of simple corporate mergers-including temporary costs and the business impediments, time losses, and various other problematic factors that often arise at the time of mergers-Reorganization by Function is designed to realize smooth business integration without slowing the speed of business growth, and it concurrently enables the leveraging of individual companies' strengths and the realization of efficiency in the pursuit of business scale and profitability.

**Reserve for Price Fluctuation**

In accordance with the Insurance Business Act revised in 1996, this reserve is provided to cover losses incurred from future decreases in prices of assets such as stocks and bonds for which the value is likely to fluctuate.

**Retrocession Premium**

When a reinsurance company reinsures a certain portion of the accepted reinsurance risks to other reinsurers, a reinsurance company pays a retrocession premium to other reinsurers based on the retrocession contracts.

**S**

**Solvency Margin Ratio**

The solvency margin of an insurance company, including its capital and reserves, seen as a percentage of a risk amount greater than what can be ordinarily expected, which might include catastrophic disasters or a massive drop in the price of owned assets. It is an indicator of the soundness of the company's management.

Solvency margin ratio = solvency margin ÷ half of total risk amount greater than what can be ordinarily expected

**Strategic Equity**

Investments in stocks with the intention of holding the stock over a long period to maintain and strengthen general business relationships with the issuer, while also securing a stable stream of investment income and improving asset value over the long run.

**T**

**Telematics**

A combination of "telecommunication" and "informatics," telematics refers to information services provided by equipping automobiles and other mobile objects with communications systems. Telematics automobile insurance refers to automobile insurance with the premium rates calculated based on the collected data that relate to the driver's driving tendency such as miles driven and the driver's use of accelerator and brake functions.

**Term Insurance**

A type of insurance where the term of the insurance is fixed and the insurance benefits can be claimed only if the policyholder dies during the term. There are no maturity proceeds. This is ordinarily a fixed-amount insurance, where the insurance amount is fixed and remains unchanged throughout the term of insurance, but it could also be a decreasing term insurance, where the insurance premium is fixed and the insurance amount progressively decreases over the insurance term, and increasing term insurance, where the insurance amount increases over the duration of the insurance term.

→ [Whole Life Insurance](#)

**Third Sector**

The third "sector" of insurance, positioned somewhere between the first sector (life insurance) and second sector (non-life insurance), includes many different types of insurance, such as medical insurance, cancer insurance, nursing care insurance, and accident insurance.

**Three Surplus Factors (Life Insurance)**

The "three surplus factors" refer to three margins: the "administrative expense margin," which is the difference between the planned administrative expense based on the planned expense ratio and the actual administrative expenses; the "risk margin (mortality margin)," which is the difference between the planned payment amounts from insurance, benefits, etc., based on the planned mortality rate and the actual payment amounts from insurance, benefits, etc.; and the "investment yield margin," which is the difference between the planned investment income based on the planned interest rate and the actual investment income. (If the investment yield margin is negative, it will be in a "negative spread" state.) The three surplus factors are a breakdown of "core profit," which is an indicator of the periodic profit and loss situation of a life insurance company.

**Tontine-Type Annuity**

A tontine-type annuity is a pension arrangement whereby payments to deceased members are terminated and their portion redistributed to surviving members, thus paying more to those who live longer. It originates in a pension system devised by the Italian Lorenzo Tonti.

**U**

**Underwriting Profit (Loss)**

Claims payment and loss adjustment expenses, maturity refunds and other underwriting expenses, and operating expenses and other general administrative expenses required for insurance underwriting are subtracted from net premiums written and other underwriting profit, and this is then adjusted to reflect other income and expenditure (such as expenses associated with compulsory automobile liability insurance, etc., corresponding to corporate taxes) to calculate underwriting profit (loss).

As for non-life insurance companies, the principal revenue sources are underwriting income and investment income, and underwriting profit indicates the profitability level of underwriting operations.

**Underwriting Reserves**

The general term for reserve funds set aside by insurance companies based on the legal requirement, for use toward insurance claims payments and other insurance-related obligations that could arise in the future. Underwriting reserves are broadly classified into five types:

- ① ordinary underwriting reserves,
- ② catastrophe reserves,
- ③ contingency reserves,
- ④ refund reserves, and
- ⑤ policyholder dividend reserves.

**V**

**Variable Insurance**

An insurance product where the premium is invested in stocks, bonds, and other assets, and the insurance payment or payout upon cancellation varies depending on the performance of the investment. The investment risk (the risk fluctuation in pension or cancellation payout) is borne by the individual policyholder. When the policyholder dies, the beneficiary can claim the basic insurance + variable insurance. The basic insurance is a minimum amount guaranteed to the policyholder irrespective of the investment fund's performance. Even when the variable insurance is negative, the basic insurance can be claimed.

**W**

**Whole Life Insurance**

Of the types of insurance providing for the receipt of death benefits on death, this is a type that is not for a fixed period but continues for a lifetime and does not have benefits on maturity.

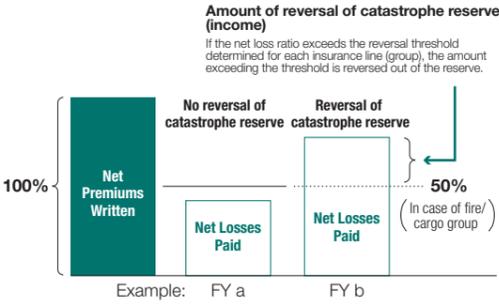
→ [Term Insurance](#)

**Accounting Line-Item Terminology**  
Please refer to the Guide Book for the Understanding of Disclosure Materials of Non-Life Insurance Companies 1 (prepared by the General Insurance Association of Japan) and the Life Insurance Company Disclosure Notes Glossary 2 (prepared by the Life Insurance Association of Japan) for details of accounting line items and other pertinent information.

1. <https://www.sonpo.or.jp/report/publish/accounting/0004.html> (Japanese only)
2. <https://www.seiho.or.jp/data/publication/tora/> (Japanese only)

**Catastrophe Reserves**

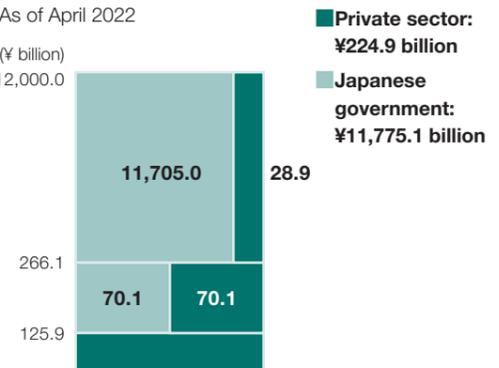
- These are reserves that insurance companies set aside to prepare for major disasters (e.g., typhoons, earthquakes) for which the "law of large numbers" does not function.
- The funds are accumulated as reserves (expense posted) at a certain percentage of each fiscal year's net premiums written.
- If a fiscal year's loss ratio (ratio of net losses paid to net premiums written) exceeds a certain threshold, reserves are reversed and posted as income.
- This is one of the mechanisms used to mitigate the impact on an insurance company's fiscal year profit and to guarantee it has a suitable capacity to pay insurance claims.



**About Residential Earthquake Insurance**

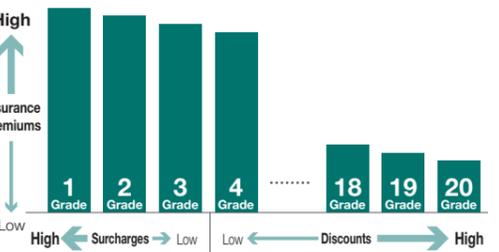
Based on Japan's Law Concerning Earthquake Insurance (the Earthquake Insurance Act), residential earthquake insurance is operated jointly by the government and non-life insurance companies. Reflecting the significant impact that earthquakes can have on society, residential earthquake insurance is a prerequisite for and incidental to fire insurance. Recognizing the substantial damage that is likely to occur in the event of a large-scale earthquake, residential earthquake insurance involves a government reinsurance underwriting mechanism in preparation for the payment of massive insurance amounts. For their part, non-life insurance companies forego the accumulation of profits in similar fashion to compulsory automobile liability insurance. Premiums are set aside as a reserve to cover insurance payments in the event of an earthquake in the future.

**Government and Private-Sector Burdens**



**Non-Fleet Grade System (Automobile Insurance)**

- This system applies discount percentages to grades defined from Grade 1 to Grade 20.



- When the contract is first concluded, the customer starts at Grade 6 (or Grade 7) and then rises by a one-grade increment if there are no accidents.
- If there is an accident, the grade drops by three-grade increments and moves to an accident-existence rate table.

\*Depending on the accident type and the type of claim received, there are cases where the grade drops by only a one-grade increment and cases where the matter is not counted as an accident.



- Even at the same grade, discount percentages differ, depending on whether there have been accidents in the past. When "accidents exist," insurance premiums are set higher than when "no accidents exist."

