

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 Trillion

The Japanese non-life insurance industry's market scale in terms of net premiums written was ¥8,243.9 billion in fiscal 2016. (Total for 26 corporate members of the General Insurance Association of Japan)

Automobile-Related Insurance Accounts for More than 60%

Together, voluntary automobile insurance (49.3%) and compulsory automobile liability (12.4%) account for more than 60% of the market.

Three Largest Non-Life Insurers Have Almost 90% Market Share Combined

In Japan, there were 52 companies engaged in the non-life insurance business as of July 2017, including 22 foreign non-life insurers. The three largest non-life insurance groups—the MS&AD Insurance Group, the Tokio Marine Group and the Sompo Japan Nipponkoa Group (currently Sompo Group) — have an 88% combined share of the market.

Net Premiums Written by Class of Insurance (FY2016)



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 (the cost of treating injuries, etc.) 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 became 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

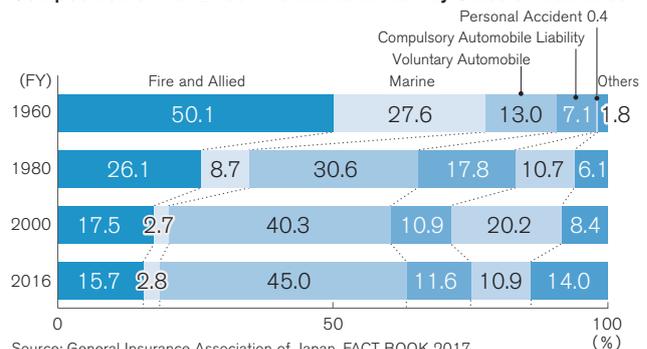
Residential earthquake insurance was developed in 1966, in response to the major earthquake that struck Niigata in Japan in 1964. The number of people obtaining residential earthquake insurance has been trending upward, and the penetration ratio of Earthquake Insurance in residential fire insurance policies has risen to 62.1% (at the end of FY2016).

Residential Earthquake Insurance Operated in Collaboration with Government

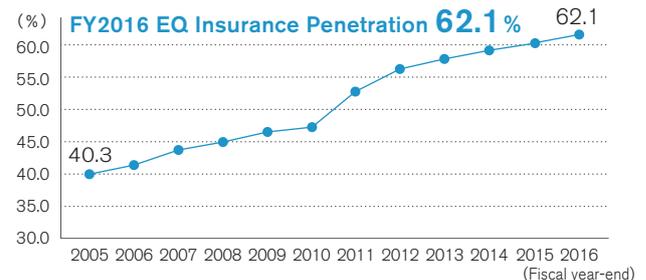
It is difficult to forecast the damage that will occur in the event of an earthquake, so fire insurance by itself does not cover building fires and damage caused by earthquakes.

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.

Composition of Net Direct Premiums Written by Class of Insurance



Trends in the Penetration Rate of Residential Earthquake Insurance



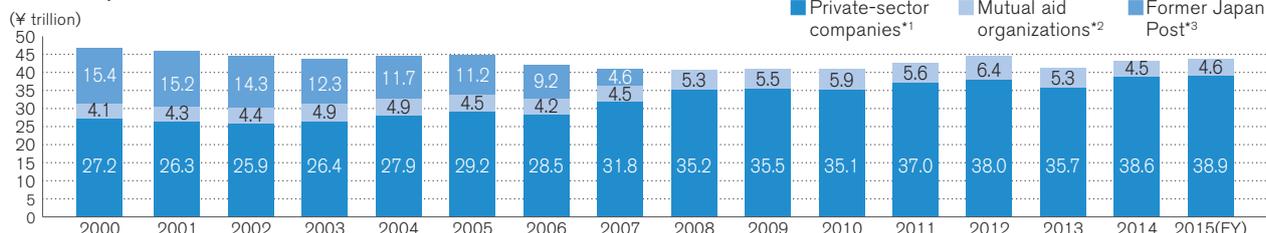
▶ Life Insurance Industry

Market Scale

Approximately ¥43 Trillion

The scale of Japanese life insurance industry's market in terms of life insurance premiums and others in total is approximately ¥43 trillion, making it the world's second largest market, after that of the United States.

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, the Japan Cooperative Insurance Association Incorporated, and Japan Post Holdings Co., Ltd., and based on materials in the Japan Institute of Life Insurance's "Fiscal 2015 National Survey on Life Insurance"

*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)

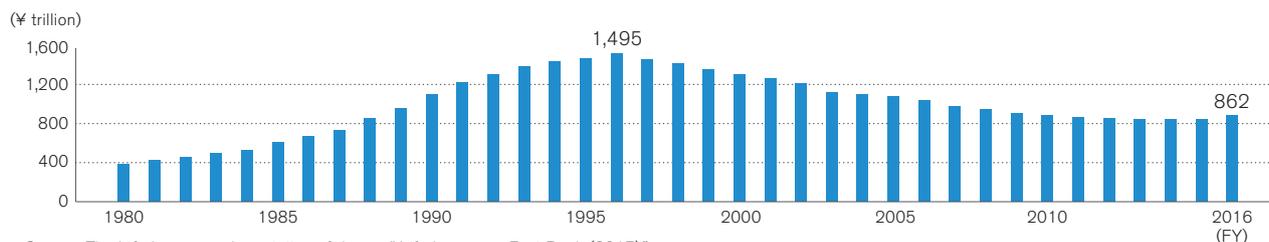
*3 Former Japan Post: Premium income (postal life insurance) during the period through September 2007. Japan Post Insurance is included on and after privatization, from October 2007, in the private-sector companies' figures.

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 fiscal 1996. 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 Fact Book (2017)"

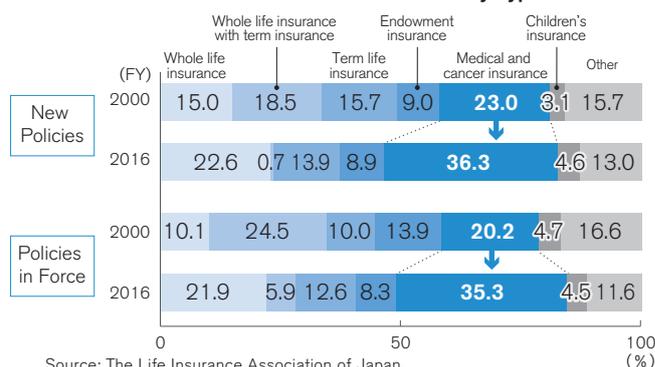
Note: Figures for 2007 and previous years exclude Japan Post Insurance and the former postal life insurance.

Third-Sector Products Become the Major Products

The share of medical and cancer insurance policies (third-sector policies) among the total number of new policies written for individuals has risen – from 23.0% in FY2000 to 36.3% in FY2016 – and become the major life insurance product. In particular, the advent of a full-blown aging society in Japan will be accompanied by a rise in needs for nursing care insurance. In recent years, each life insurance company has been launching new nursing care insurance products which supplements the public nursing care insurance system, which is not able to completely cover the expenses entailed by nursing care. Sales of individual annuity insurance began in earnest following the October 2002 lifting of the ban on marketing such products via banks. Growth in individual annuity insurance policies in force is now robust. Most recently, the number of policies written for "Tontine-type annuity" as insurance for longevity risk is also increasing.

*See the "Glossary of Insurance Terminology" section P. 96

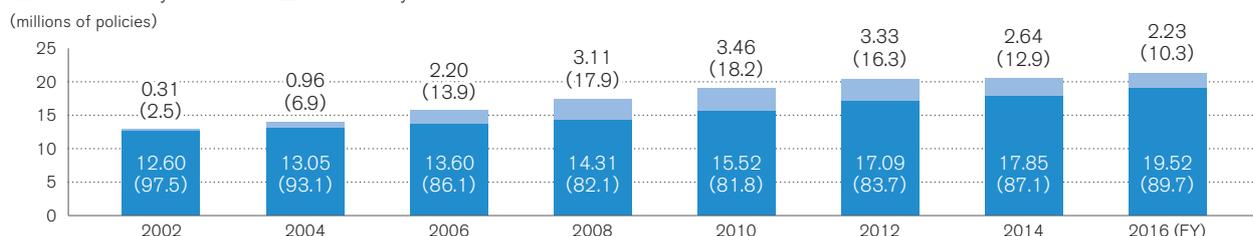
The Main Products of Life Insurance Market, Third-Sector – Trends in Individual Insurance Premiums by Type



Source: The Life Insurance Association of Japan, "Life Insurance Trends (2017 edition)"

Trends in Policies in Force Individual Annuity Insurance by Type

■ Variable Annuity Insurance ■ Fixed Annuity Insurance



Source: The Life Insurance Association of Japan, "Life Insurance Fact Book (2017)"

Note: Figures in parentheses represent percent shares.

► The Insurance Industry Trends and Changes in Japan

Environment of the Insurance Industry in Japan

Changes in the Macro Environment

As is the case with respect to other industries in Japan, the biggest change in the insurance industry's operating environment is the advent of aging and population decline in Japanese society.

Natural Disasters

While natural disasters are a major risk factor in insurance business, the existence of such disasters is also a factor that increases demand for insurance.

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 a 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 agent size), 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, Tokio Marine Group, and Sompo Japan Nipponkoa Group (currently Sompo Group).

Major Events Following Regulatory Liberalization

1996	April	Revision of the Insurance Business Act ■ Mutual entry into life and non-life insurance business ■ Reform of the rating organization system ■ Introduction of products and premium rates notification system, etc.
	October	Mutual entry into 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 law revising the Insurance Business Act
2016	May	Full implementation of 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

In light of the maturation of Japan's insurance market, major Japanese insurance companies have been working to expand their business base overseas.

Potentials of Asia Region Markets and BRICs' Markets

The emerging country markets of Asia region countries and BRICs have the potential for large growth. The insurance penetration rates (ratio of insurance premiums against GDP) of the United States and European countries are roughly as high as Japan's – about 7%-12%. On the other hand, the insurance penetration rate of emerging markets of the Asian region and BRICs is relatively low – in the 1%-4% range – so, those markets can be considered to have considerable growth potential.

Development of Principal Insurance Markets in 2016

(US\$ billion)

Market/Country	Ranking by Insurance Premiums	Life Insurance Premiums		Non-Life Insurance Premiums		Total Insurance Premiums		Insurance Density*1 (US\$) 2016	Insurance Penetration Rate*2 2016
		2016	Change from 2015	2016	Change from 2015	2016	Change from 2015		
Developed markets		2,111	0.3%	1,688	2.8%	3,799	1.4%	3,505	8.0%
United States	1	559	0.7%	794	3.9%	1,352	2.6%	4,174	7.3%
Japan	2	354	3.9%	117	8.8%	471	5.1%	3,732	9.5%
United Kingdom	4	199	(8.7)%	105	(5.1)%	304	(7.5)%	4,064	10.2%
France	5	153	(0.9)%	85	1.2%	238	(0.2)%	3,395	9.2%
Germany	6	95	(1.8)%	120	1.9%	215	0.2%	2,548	6.1%
South Korea	7	104	2.8%	67	4.8%	171	3.6%	3,362	12.1%
Italy	8	122	(4.0)%	40	(0.6)%	162	(3.2)%	2,499	8.2%
Emerging markets		506	14.2%	427	4.7%	934	9.6%	149	3.2%
Latin America and the Caribbean		69	4.1%	79	(16.0)%	149	(7.7)%	257	3.2%
Brazil	14	41	10.5%	32	(1.1)%	73	5.2%	346	4.0%
Mexico	25	11	(2.4)%	13	(4.0)%	24	(3.3)%	189	2.3%
Europe		859	(2.8)%	611	0.6%	1,470	(1.4)%	1,620	6.7%
Russia	31	3	51.1%	14	(1.9)%	18	4.8%	123	1.4%
Asia and Middle East		1,000	10.6%	493	10.3%	1,494	10.5%	343	5.6%
China	3	263	24.6%	204	15.8%	466	20.6%	337	4.2%
India	13	62	10.3%	17	15.3%	79	11.3%	60	3.5%
United Arab Emirates	39	2	4.2%	8	4.1%	10	4.2%	1,102	2.9%
Africa		41	(5.6)%	20	(3.9)%	61	(5.1)%	51	2.8%
Oceania		40	(13.0)%	53	2.9%	93	(4.6)%	2,343	6.3%
World		2,617	2.8%	2,115	3.1%	4,732	2.9%	638	6.3%

Source: Compiled by Swiss Re's economic research and consulting unit based on confirmed and provisional figures announced by each country's regulatory authorities and insurance industry associations (sigma No. 3/2017)

Note: Figures are real figures adjusted for inflation *1 Insurance density = per capita insurance premiums *2 Insurance penetration rate = insurance premiums as a share of GDP

Increasing Diversity of Insurance Companies and Sales Channels

There are increasingly diverse sales channels – such as direct sales channels, OTC sales by banks, and customer-visit-based insurance shops – and some insurance companies are now specializing in sales via the Internet. Even in conventional sales channels, there is an increasing incidence of cross-selling (see the “Glossary of Insurance Terminology” section P.92) and other new approaches.

Expanding Breadth of Products and Services

“Longevity Risk”

Lengthy lifespans entail growth in living, medical, and other expenses. The insurance industry has been seeking to help cover such economic “risks” associated with lengthy lifespans.

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

The World’s Fourth 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 ¥229 trillion in 2016. The largest market is that of the United States (approximately ¥86 trillion), and Japan’s market is the fourth largest (approximately ¥12.7 trillion).

Japanese Market Smaller in a Share of GDP

Japan’s insurance premiums as a share of GDP are only 2.37% (the 23rd highest), compared to the global average of 2.81%.

Comparison of Non-Life Insurance Premium Income in Principal Countries (2016)

Country/Region	Direct Premiums Written			As a Share of GDP		Per Capital Premiums	
	(¥ million)	Ranking	Share (%)	(%)	Ranking	(¥)	Ranking
United States	86,075,067	1	37.5	4.29	6	265,643	4
China	22,075,272	2	9.6	1.81	45	15,945	55
Germany	13,055,449	3	5.7	3.33	12	151,533	11
Japan	12,717,348	4	5.5	2.37	23	100,660	21
United Kingdom	11,371,886	5	5.0	2.58	21	111,833	18
France	9,201,076	6	4.0	3.17	13	126,693	16
South Korea	7,234,298	7	3.2	4.72	4	142,313	13
Canada	7,001,413	8	3.1	4.22	7	193,294	8
Netherlands	6,914,529	9	3.0	8.27	2	406,979	2
Australia	4,823,335	10	2.1	3.53	10	199,476	6
Italy	4,332,834	11	1.9	2.01	32	66,058	30
Spain	3,703,166	12	1.6	2.77	17	79,942	27
Brazil	3,432,099	13	1.5	1.76	48	16,379	54
Switzerland	2,952,445	14	1.3	4.12	8	350,684	3
India	1,897,466	15	0.8	0.77	76	1,410	83
Taiwan	1,838,783	16	0.8	3.34	11	78,315	28
Belgium	1,808,412	17	0.8	2.64	19	117,690	17
Russia	1,560,883	18	0.7	1.13	70	10,847	62
Mexico	1,433,323	19	0.6	1.27	64	11,172	60
Austria	1,309,884	20	0.6	3.12	14	151,424	12
Other countries (regions)	24,693,738	–	10.8	–	–	–	–
Total/Average	229,432,707	–	100.00	2.81	–	30,946	–

Source: Prepared based on data in “sigma No. 3/2017” of Swiss Re.

Note 1: The “Total (average)” figures are totals of figures for 147 countries and regions within the scope of the survey in 2016.

Note 2: Premium figures are direct premiums written by domestic- and foreign-based companies in each country and region (including cross-border transaction premiums), and the figures for each country and region do not include direct premiums written by foreign bases of domestic companies.

Note 3: Figures were converted into Japanese yen at the average exchange rate for 2016 (US\$1=¥108.47).

Life Insurance

Japanese Market Accounts for Approximately 13.5% of the Global Market

According to “sigma No. 3/2017” newsletter of Swiss Re “International Life Insurance Statistics” of the Life Insurance Association of Japan, global life insurance premium income amounted to approximately US\$2,620 billion in 2016. The figure for Japan was approximately US\$354 billion (¥38 trillion), corresponding to 13.5% of the global figure.

Source: Prepared based on data in “sigma No. 3/2017” of Swiss Re.

Note: Figures represent premiums directly written in each country irrespective of the geographical base of the underwriting company.

*1 Life insurance premiums figures include estimates of premiums from group pension policies (except in certain regions).

*2 Figures are for the fiscal year from April 1, 2016, through March 31, 2017.

Life Insurance Premium Income/Rankings/Market Share by Country (Top 10 Countries)

Country	Life Insurance Premiums (2016)		
	Ranking	Premium Income (US\$ million)	Share (%)
United States*1	1	558,847	21.4
Japan*2	2	354,053	13.5
China	3	262,616	10.0
United Kingdom	4	199,369	7.6
France	5	152,817	5.8
Italy	6	122,438	4.7
South Korea*2	7	104,169	4.0
Germany	8	94,661	3.6
Taiwan	9	84,493	3.2
India*2	10	61,817	2.4

▶ 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 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

Cancer Insurance

Cancer insurance policies provide hospitalization benefits and surgery benefits when beneficiaries are hospitalized or undergo surgery to treat cancer. There are products that provide “cancer outpatient benefits” to beneficiaries after they have been discharged from a hospital after having been hospitalized for a specified period of time, and there are products that provide “cancer hospital discharge benefits” or “cancer home care benefits” after they have been discharged from a hospital after having been hospitalized for a specified period of time.

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 P. 97.

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, and subtracting this ratio from 1 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 on sales of ordinary companies.

Commissions and Collection Expense

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)

In order to provide relief to victims of automobile 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 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 those of ordinary companies’ “operating income” and banks’ “business income.”

Corporate Governance Code

Corporate governance principles that the Tokyo Stock Exchange is requiring its listed companies to comply with. (For more details, please consult the Tokyo Stock Exchange website.)

[URL](https://www.jpix.co.jp/english/equities/listing/cg/03.html) <https://www.jpix.co.jp/english/equities/listing/cg/03.html>

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 with 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. → [Reinsurance](#)

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

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. Since 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 values.

While the Company has disclosed its EV for some time, since fiscal 2011, it has disclosed its EV calculated on the basis of 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 (comprised 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. For more details, see PP. 38 and 70.

Equity Ratio

The proportion of equity divided by total assets. Owing to the application of accounting standards concerning financial products and inclusion of unrealized gains on securities within 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 the 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. The sum of these expenses is divided by expected premium income to calculate the expected operating expense ratio.

F

Foreign Currency-Denominated Life Insurance

Foreign currency-denominated life insurance calls for the use of foreign currency (U.S. dollars, Euros, Australian dollars, etc.) to pay insurance premiums and the use of 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 are sold as foreign currency-denominated products. When the foreign-currency benefits from such products are converted into yen, they will be impacted by foreign exchange rate fluctuations; so, there is a possibility that the yen-denominated benefits may 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 (professional agents), there are also automobile sales dealers, automobile repair shops, real estate agents, travel agents, and other sideline agents that sell insurance alongside their main line of business.

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 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)

Group Adjusted Profit

Group Adjusted Profit, which is a numerical management target within the Vision 2021 medium-term management plan, is calculated as follows.

Group Adjusted Profit = Consolidated net income + provision for catastrophe loss reserve and others – other incidental factors (amortization of goodwill and other intangible fixed assets, etc.) + 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, 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 loss reserve and others – goodwill and other intangible fixed assets)

I

Income Guarantee Insurance

A type of insurance under which 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 pension can be claimed depends on the time of death of the policyholder. The minimum number of times pension can be claimed is guaranteed. If the number of times 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 incurred but had not been reported to the company at the end of the period. 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 as a result of 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.

J

Japanese Version of the Stewardship Code

A set of principles released by the Financial Services Agency directed at institutional investors who own shares in companies. (For details, please see the Financial Services Agency website.)

[URL](https://www.fsa.go.jp/en/refer/councils/stewardship/) <https://www.fsa.go.jp/en/refer/councils/stewardship/>

L

Law of Large Numbers

If you roll a die (1 dice), a “one” may 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

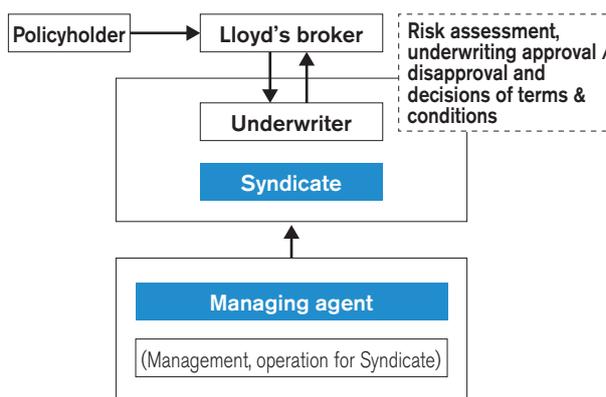
An agent specializing in life insurance or selling life insurance as its main business.

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 who have a high level of specialized expertise and who belong to individual syndicates (the risk underwriting bodies at Lloyd's).

Lloyd's is under the supervision of the British regulatory authorities as well as the rigorous management and supervisory system of Lloyd's itself, and 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 2017, Lloyd's had 95 syndicates and 56 managing agents registered. The fiscal 2017 gross written premiums of the Lloyd's market as a whole were approximately 33.5 billion British pounds.



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 of time. 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 to the right, 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 “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 “published loss ratio” or “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 P. 97.

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 “ordinary underwriting reserve.”

- Unearned premiums (premium reserve): Insurance premiums corresponding to the time period 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

When an accident has occurred prior to the balance sheet date and the related claim has not been paid, provisions are made to the outstanding claims to fund the claim payment.

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 (of insurance, etc.) 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

When an insurance company seeking to disperse risk which an insurance company underwrote the responsibility for insurance policies it has written to another insurance company, that is called reinsurance. → [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 whose 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 may 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.

Sustainable Development Goals (SDGs)

URL <http://www.undp.org/content/undp/en/home/sustainable-development-goals.html>

- Goal 1: No poverty
- Goal 2: Zero hunger
- Goal 3: Good health and well-being
- Goal 4: Quality education
- Goal 5: Gender equality
- Goal 6: Clean water and sanitation
- Goal 7: Affordable and clean energy
- Goal 8: Decent work and economic growth
- Goal 9: Industry, innovation and infrastructure
- Goal 10: Reduced inequalities
- Goal 11: Sustainable cities and communities
- Goal 12: Responsible consumption and production
- Goal 13: Climate action
- Goal 14: Life below water
- Goal 15: Life on land
- Goal 16: Peace, justice and strong institutions
- Goal 17: Partnerships for the goals

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 the automobile insurance with the premium rates calculated based on the collected data which is relating to the driver's driving tendency such as miles driven, drivers' 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), and 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 factor" refers 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 breakdown of "core profit," which is an indicator of the periodical profit and loss situation of a life insurance company.

Tontine-Type Annuity

Defined as "a plan whereby the guarantee of someone who has died is controlled and their share in an annuity devolved to the pension of someone living," the tontine-type annuity product offers the benefit of the longer people live, the more pension is received. Its name is derived from an insurance system devised by the Italian Lorenzo de 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 http://www.sonpo.or.jp/archive/publish/sonpo/pdf/0004/book_kantanguide.pdf

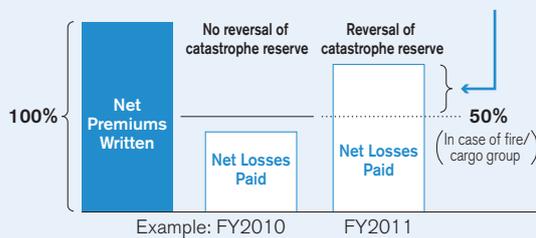
*2 http://www.seiho.or.jp/data/publication/tora/pdf/tora_yougo.pdf

Catastrophe Reserves

- These are reserves that insurance companies set aside to prepare for major disasters (typhoons, earthquakes, etc.) 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.

Amount of reversal of catastrophe reserve (income)

If the net loss ratio exceeds the reversal threshold determined for each insurance line (group), the amount exceeding the threshold is reversed out of the reserve.

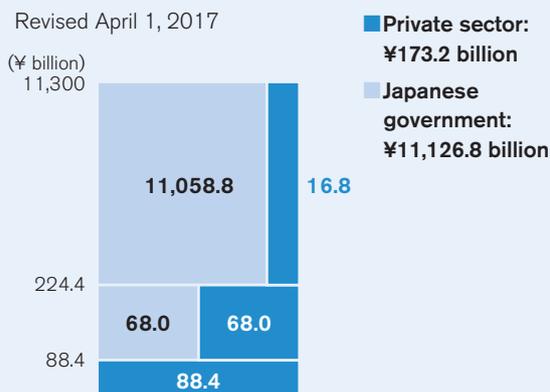


About Residential Earthquake Insurance

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.

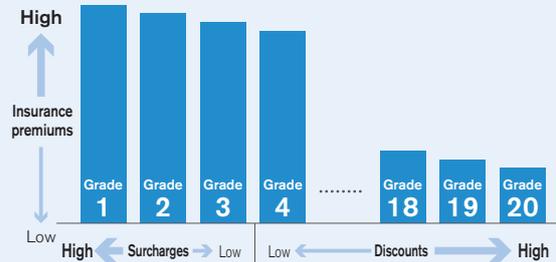
Government and Private-Sector Burdens

Revised April 1, 2017



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, at renewal time, the grade, in principle, drops by three-grade increments per accident*.

* 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.

Principle 3 grades down for 1 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.”

