

Overview of Standard Full Rates for Compulsory Automobile Liability Insurance

General Insurance Rating Organization of Japan (GIROJ)

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General Insurance Rating Organization of Japan

Introduction

Automobile insurance is designed to pay insurance claims for the damage caused by automobile accidents. In Japan, automobile insurance is classified into two major types: Compulsory Automobile Liability Insurance (CALI), which every automobile is required by law to hold, and voluntary automobile insurance, which primarily car owners can purchase at their own discretion.

CALI covers the liability for compensating the damage caused if the insured vehicle kills or injures a person in an automobile accident. It is intended to protect victims of automobile accidents, and all automobiles have obligation to be insured by CALI by law. Premium rates for CALI do not include any profit for insurance companies, and a system has been established that covers personal damage within the range of limits prescribed by law through low premium rates. (Compulsory Automobile Liability Mutual Aid operated by cooperatives serves a similar function to CALI, but it should be noted that this leaflet's explanations focus on CALI.)

In today's car-dominated society, CALI is indispensable to our daily life from the viewpoint of protecting victims of automobile accidents and ensuring that those who cause an automobile accident have sufficient financial resources for compensation. In addition, it is vital that premium rates for CALI are appropriate and that insurance claims are paid fairly.

In order to carry out our social mandate, we at the General Insurance Rating Organization of Japan (GIROJ) calculate standard full rates for CALI and file the calculated rates with the Commissioner of the Financial Services Agency (FSA). In calculating Standard Full Rates, we also utilize the data obtained through the CALI claim surveys, which we carry out from a fair and neutral standpoint.

This leaflet is designed to give an overview of Standard Full Rates for CALI. We very much hope that it aids your better understanding of them.

General Insurance Rating Organization of Japan (GIROJ)

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What is the General Insurance Rating Organization of Japan (GIROJ)?

GIROJ is a general insurance rating organization (private non-profit corporation) established in accordance with the Act on Non-Life Insurance Rating Organizations, and its main operations are as follows:

1. Calculation and provision of Reference Loss Cost Rates and Standard Full Rates

GIROJ calculates Reference Loss Cost Rates for voluntary automobile insurance, fire insurance, personal accident insurance, etc. and Standard Full Rates for CALI and earthquake insurance. GIROJ provides the calculated rates to its member insurance companies.

2. Claim surveys for CALI

GIROJ has set up CALI Claim Surveys Offices in major cities. At the request of insurance companies, it conducts surveys for CALI claims. The results of these surveys are utilized as important underlying data to calculate Standard Full Rates for CALI.

3. Databank functions

GIROJ collects, analyzes, and researches various insurance data. It provides the results of analysis and study to member insurance companies and consumers.

■ Act on Non-Life Insurance Rating Organizations

The Act on Non-Life Insurance Rating Organizations was established to facilitate the sound development of the general insurance business and protect the interests of policyholders by ensuring the appropriate management of operations of rating organizations.

I. Compulsory Automobile Liability Insurance (CALI)

1. Characteristics of CALI

In 1955, the Automobile Liability Security Act was established mainly to protect victims of automobile accidents, and compulsory automobile liability insurance (CALI) was developed in accordance with the act.

If an insured vehicle kills or injures a person in an automobile accident and is liable for compensation for damage under law, CALI indemnifies injury or death, including compensation for treatment expenses for victims of the accident and consolation money. The characteristics of CALI are:

Compulsory insurance

In order to operate an automobile (with the exception of some exempted vehicles but including vehicles such as motorcycles), every operator of a vehicle is required to carry a CALI policy. If a person operates an automobile without CALI, he or she will be criminally punished with imprisonment of up to one year or a fine of up to ¥500,000 and administratively punished with the suspension of his or her driver's license.

Setting an upper limit to the amount of insurance claims by law

The upper limit to the amount of insurance claims paid by insurance companies is set by law (see page 6).

Principle of no loss and no profit

Since CALI is compulsory insurance whose objective is to protect victims of automobile accidents, Article 25 of the Automobile Liability Security Act stipulates that Standard Full Rates for CALI (see page 8) shall be as low as possible within the range such reasonable costs of an insurance business under the efficient management can be compensated, and the Standard Full Rates are calculated so that there is no profit or loss. In general, this is called the "principle of no loss and no profit."

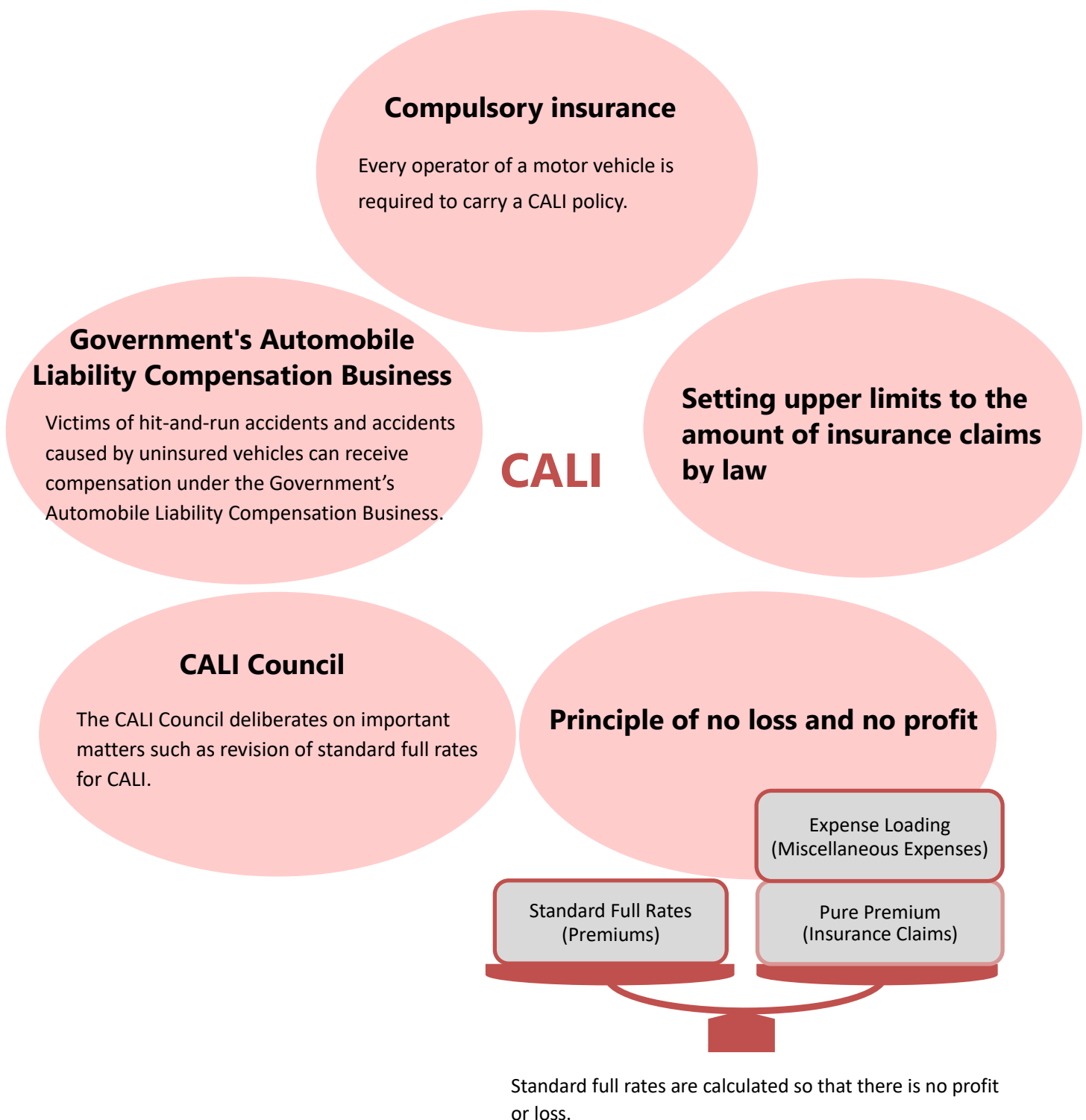
Compulsory Automobile Liability Insurance Council (CALI Council)

Important matters such as revision of the Standard Full Rates for CALI are discussed at the Compulsory Automobile Liability Insurance Council (CALI Council) set up in the FSA.

Government's Automobile Liability Compensation Business

The Government's Automobile Liability Compensation Business indemnifies victims suffering bodily injury from hit-and-run accidents, which are not covered by CALI, or from accidents caused by vehicles that are operated without CALI. The upper limit to such compensation is the same as for CALI.

Characteristics of CALI



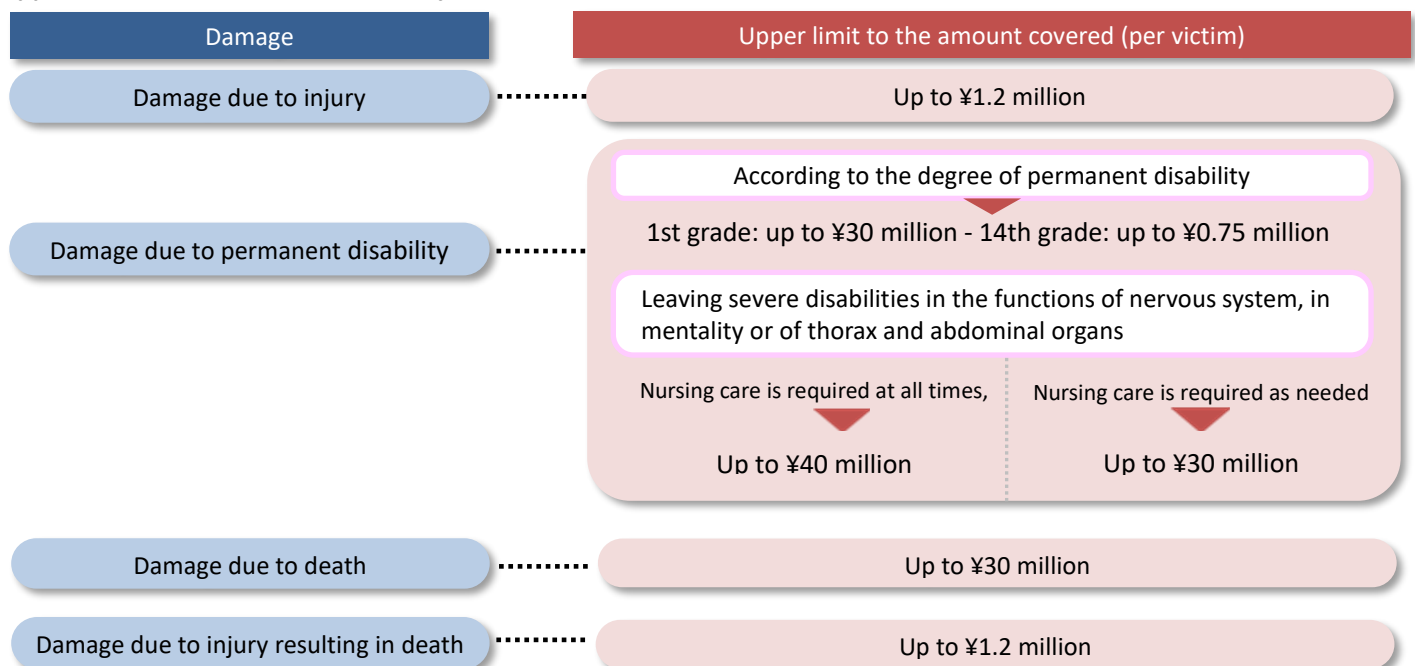
2. Relationships between CALI and Voluntary Automobile Insurance

There are two types of insurance to compensate for damage if a vehicle kills or injures a person in an automobile accident: CALI and bodily injury liability coverage of voluntary automobile insurance.

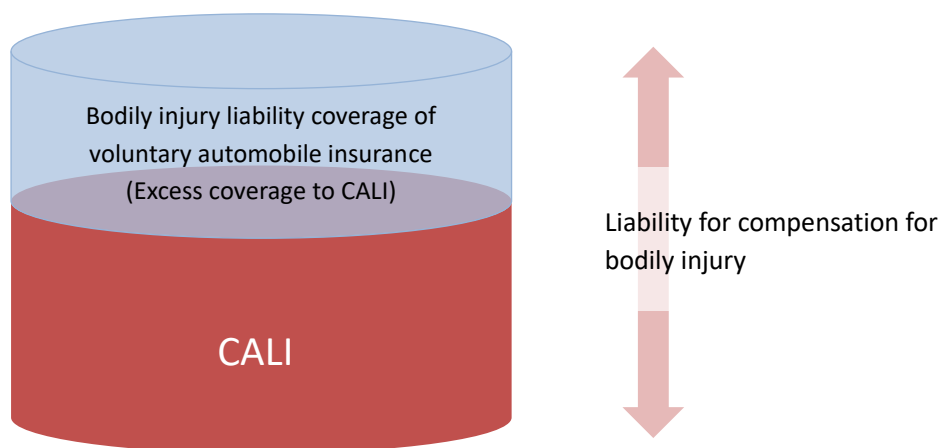
Bodily injury liability coverage of voluntary automobile insurance is designed to cover the portion of compensation for damage that exceeds the amount covered by CALI. It acts as excess cover to CALI.

In addition to bodily injury liability coverage, voluntary automobile insurance provides property damage liability coverage and damage to own vehicle coverage. Automobile operators can choose any of these types of coverage according to their needs. On the other hand, CALI does not cover property damage liability or damage to one's own vehicle.

Upper limit to the amounts covered by CALI (applicable to accidents that occurred on April 1, 2002 or thereafter)



Relationship between CALI and bodily injury liability coverage of voluntary automobile insurance



II. Standard Full Rates

1. Price of General Insurance (Premium)

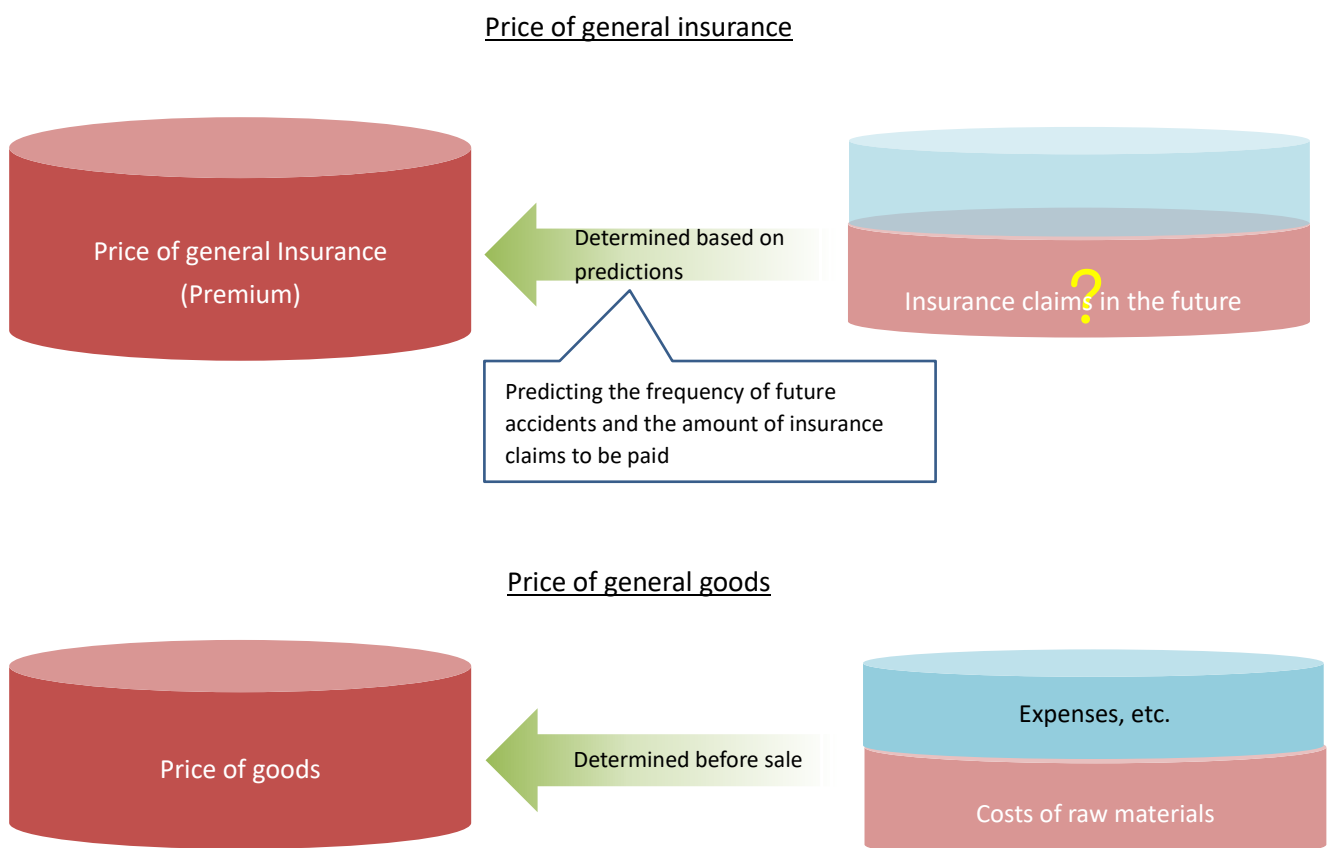
In general, the price of goods is determined by raw materials, personnel, and other miscellaneous costs. Therefore, usually, the price of the products is definitely determined before they are sold.

Almost the same idea applies to general insurance, but one major difference is that the principal part of the price of general insurance is determined by the insurance claims that will be paid by insurance companies when accidents occur in the future. Furthermore, this portion is not yet definite at the time when insurance is sold.

For this reason, the amount of insurance claims to be paid for future accidents is estimated by predicting the frequency of accidents in the future and the amount that will be paid for each insurance claim using past insurance and other data. Here lies the difficulty in calculating the price of general insurance, or premium, and this is where GIROJ fulfils its roles as a rating organization.

The price thus determined, or the amount paid by policyholders for the insurance claim that may be paid to them by the insurance company, is called the "premium."

Price of general insurance and that of general goods



2. Standard Full Rates for CALI

The Standard Full Rates for CALI represent the premium rates for CALI calculated by GIROJ, and the member insurance companies of GIROJ can use them as their own premium rates.

What are the premium rates?

In general, the premium rates refer to the proportion of premium to insured amount (the maximum claim that could be paid or the amount covered) in general insurance, and this rate provides the basis for calculation of premiums.

3. Structure of the Standard Full Rates for CALI

The Standard Full Rates for CALI consist of the pure premium rates and expense loading.

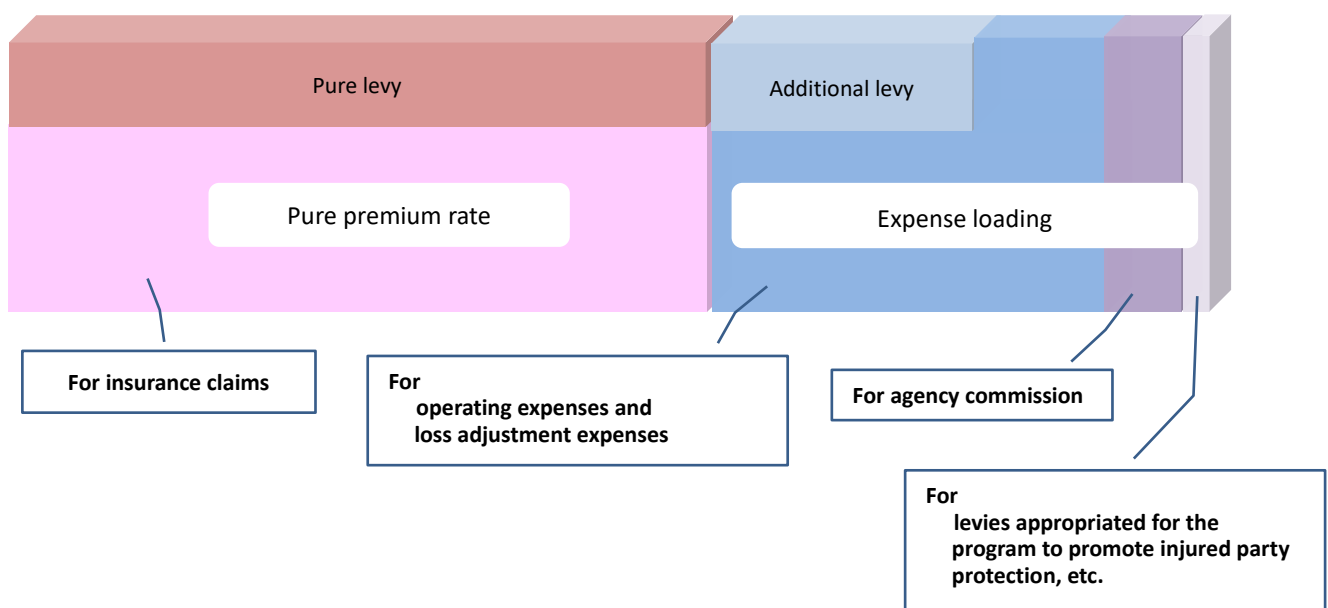
The pure premium rates are used for covering insurance claims paid by the insurance company when an accident occurs.

The pure premiums include the pure levies, which is used for compensation money paid through the Government's Compensation Business.

Expense loading consists of three elements that are; operating expenses defrayed for claims surveys, administrative work for contracts, etc.; agency commissions paid by insurance companies to agencies that provide the service of contracting insurance policies on behalf of insurance companies; and levies appropriated for the program to promote injured party protection, etc.

Operating expenses include additional levies, which are used to cover operating and other expenses at insurance companies which the Government's Program Guaranteeing Compensation for Automobile Accidents is outsourced.

Structure of the Standard Full Rates for CALI



4. Classification of Standard Full Rates for CALI

Region

Divided into four regions: Four largest islands of Japan, Remote islands not belonging to Okinawa Prefecture, Okinawa island, Remote islands belonging to Okinawa Prefecture.

Vehicle type

Vehicles are classified according to the usage and types of automobiles as well as to whether they are used for private or business.

Usage of automobiles	passengers, freight, shared use, etc.
Types of automobiles	standard-size, small-size, light automobiles, etc.
Purpose of use	private use, commercial use

Period of insurance

The Automobile Liability Security Act stipulates that the period of CALI must cover the term of validity of the vehicle inspection certificate.

The period of insurance is divided as specified below according to the term of validity of the vehicle inspection certificate.

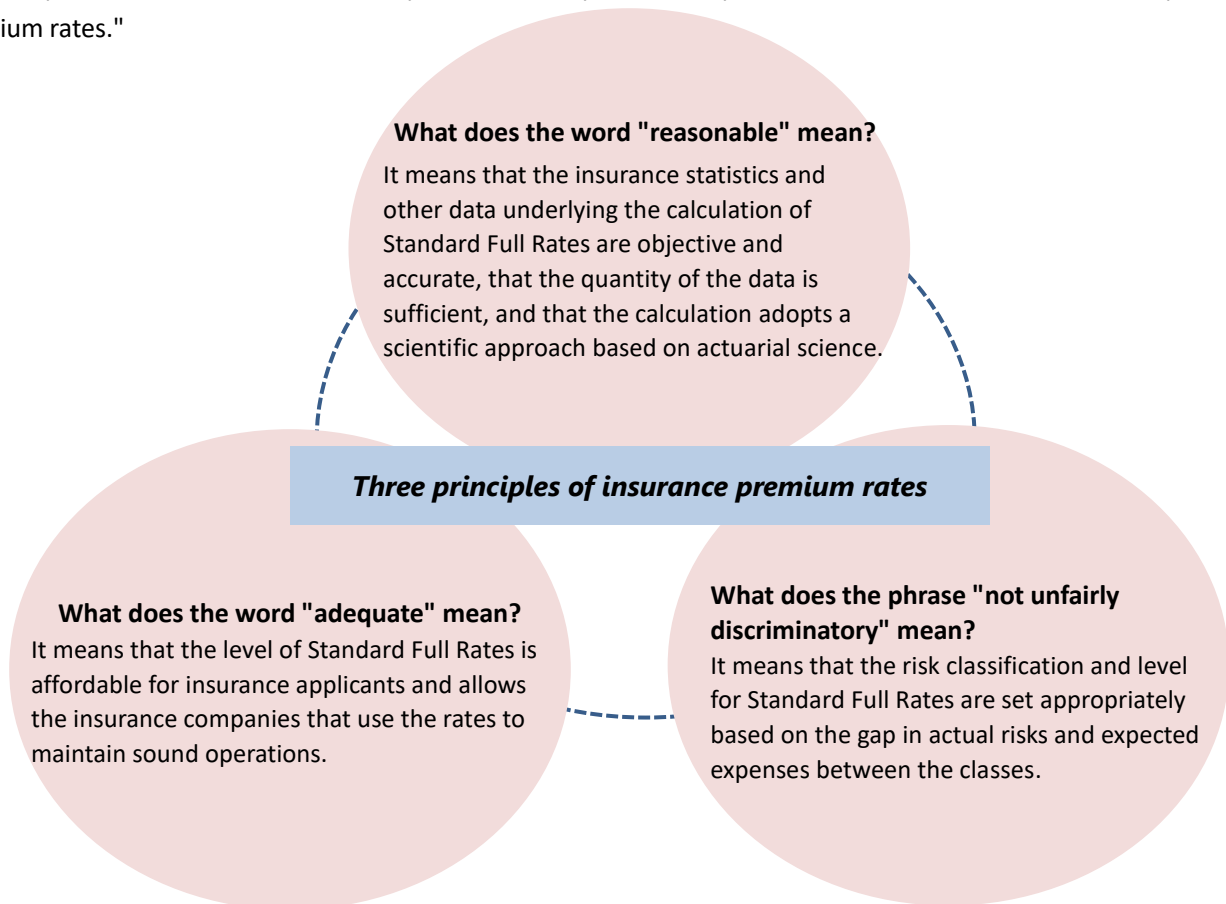
Automobiles whose vehicle inspection certificate is valid for 1 year ➡13 categories from 1 month to 13 months
Automobiles whose vehicle inspection certificate is valid for 2 years ➡25 categories from 1 month to 25 months
Automobiles whose vehicle inspection certificate is valid for three 3 years ➡37 categories from 1 month to 37 months

For motorcycles, which do not require vehicle inspection, the period of insurance is divided into 5 categories: 12, 24, 36, 48, and 60 months.

III. Calculation and Filing of Standard Full Rates

1. Principles of Standard Full Rates for CALI

Article 8 of the Act on Non-Life Insurance Rating Organizations stipulates that Standard Full Rates shall be reasonable and adequate, and shall not be unfairly discriminatory. These requirements are known as the "three principles of premium rates."



In addition, as described earlier, the Automobile Liability Security Act stipulates that Standard Full Rates shall be as low as possible within the range of compensating reasonable costs of insurance business under the efficient management ("principle of no loss and no profit").

In accordance with these principles, GIROJ calculates the Standard Full Rates based on the law of large numbers.

What is the law of large numbers?

For example, if one increases the number of times one rolls a dice, say, to thousands or tens of thousands of times, the probability of getting one of the six numbers approaches $1/6$. As mentioned above, by collecting large amounts of data, one finds that even apparently chance happenings are taking place according to a certain patterns. This is called the "law of large numbers." In order to ensure that the law of large numbers functions well, GIROJ collects large amounts of highly accurate data from insurance companies and other organizations. In calculating Standard Full Rates, GIROJ makes predictions such as the probability of accidents occurring based on this law.

2. Concept for Calculating Standard Full Rates for CALI

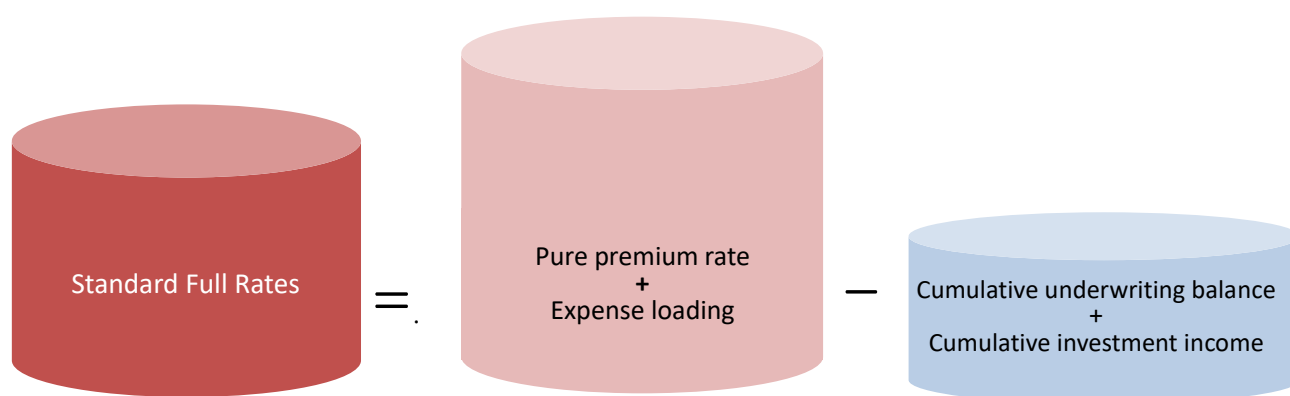
Standard Full Rates for CALI are calculated according to the "principle of no loss and no profit."

In calculating Standard Full Rates, therefore, GIROJ makes it a rule to include only pure premium rates, which correspond to insurance claims paid by insurance companies, and expense loading, which corresponds to necessary miscellaneous expenses.

GIROJ also takes into consideration the cumulative underwriting balance, which represents the cumulative balance between income and expenditure in past insurance contracts, and the cumulative investment income, which denotes the cumulative interest earned during the period from the initial receipt of insurance premiums to the payment of insurance claims.

Thus, GIROJ calculates Standard Full Rates so that there is no profit or loss.

Concept for Calculating Standard Full Rates for CALI



Calculation of pure premium rates

Data on premiums paid by policyholders and data on insurance claims paid by insurance companies is submitted by insurance companies to GIROJ.

Based on this contract data and payment data as well as data on claim surveys collected by CALI Claim Surveys Offices, GIROJ predicts the frequency of accidents and the average amount of damage per accident in the future in order to calculate pure premium rates

In calculating pure premium rates, GIROJ also refers to statistics on traffic accidents, wages, prices, and so forth.

Frequency of accidents	=	$\frac{\text{Number of accidents that occurred}}{\text{Number of insured automobiles}}$
Average amount of damage per accident	=	$\frac{\text{Total amount of claims}}{\text{Number of accidents that occurred}}$
Pure premium rates	=	Frequency of accidents × Average amount of damage per accident

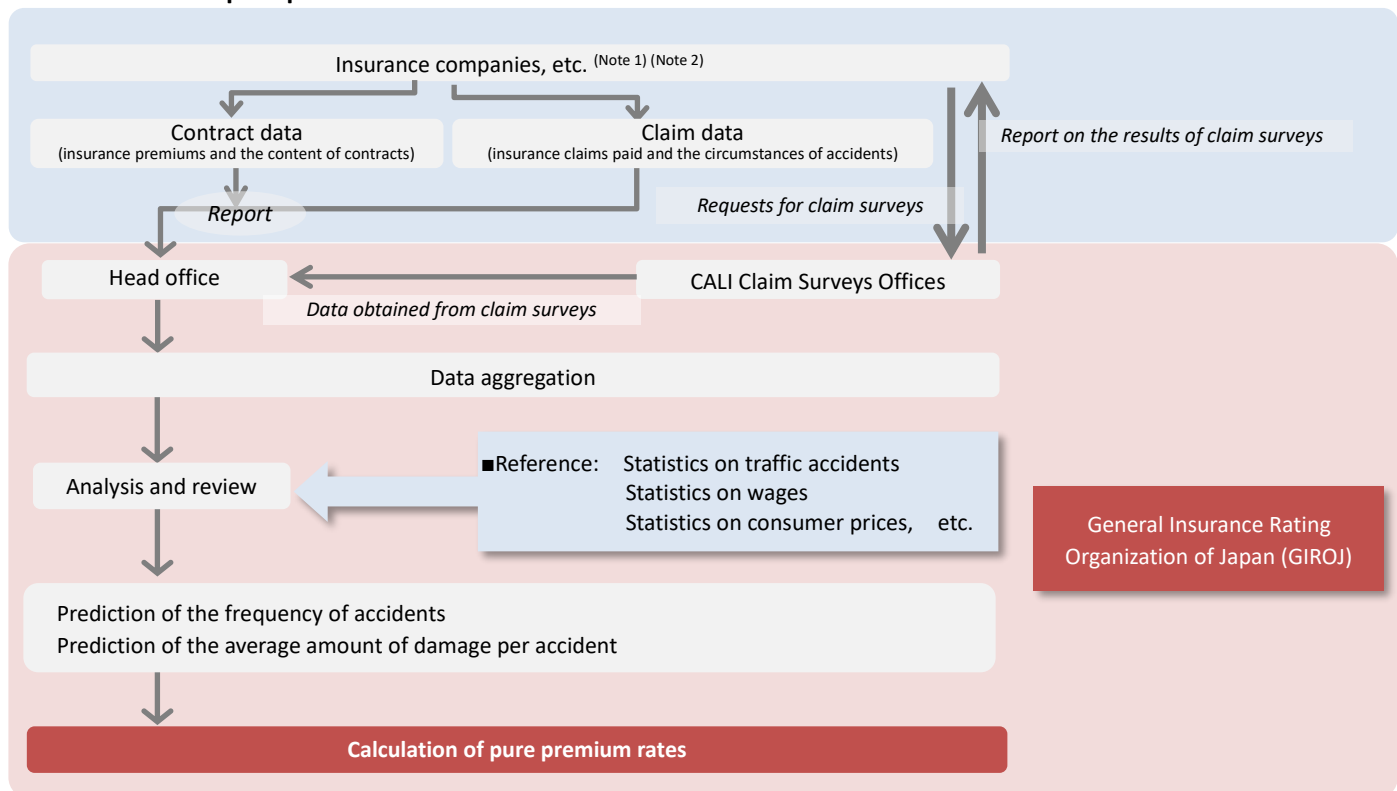
Calculation of expense loading

Based on the principle of no loss and no profit, GIROJ calculates expense loading referring to the financial statements insurance companies, statistics of wages and consumer prices, and other data.

Calculation of levies

GIROJ calculates the amount of pure levies and additional levies applied to funds for the Government's Program Guaranteeing Compensation for Automobile Accidents, and levies appropriated for the program to promote injured party protection, etc. using the formula stipulated by a government ordinance that prescribes the amount of levies for the Government's Automotive Safety & Victims' Aid Business, etc.

How to calculate pure premium rates for CALI



(Note 1) Contract and claim data are submitted by all underwriters of CALI policies.

(Note 2) Zenrosai (national federation of workers' insurance cooperatives), Zenjikyo (National Federation of Motor Insurance Cooperatives) and its member cooperatives, Kokyoren (National Mutual Insurance Federation of Truck Transport Co-operatives) and its member cooperatives, and Zenkyoren (National Mutual Insurance Federation of Agricultural Cooperatives) also request to conduct claim surveys and to submit the results of such surveys.

3. Filing of Standard Full Rates for CALI

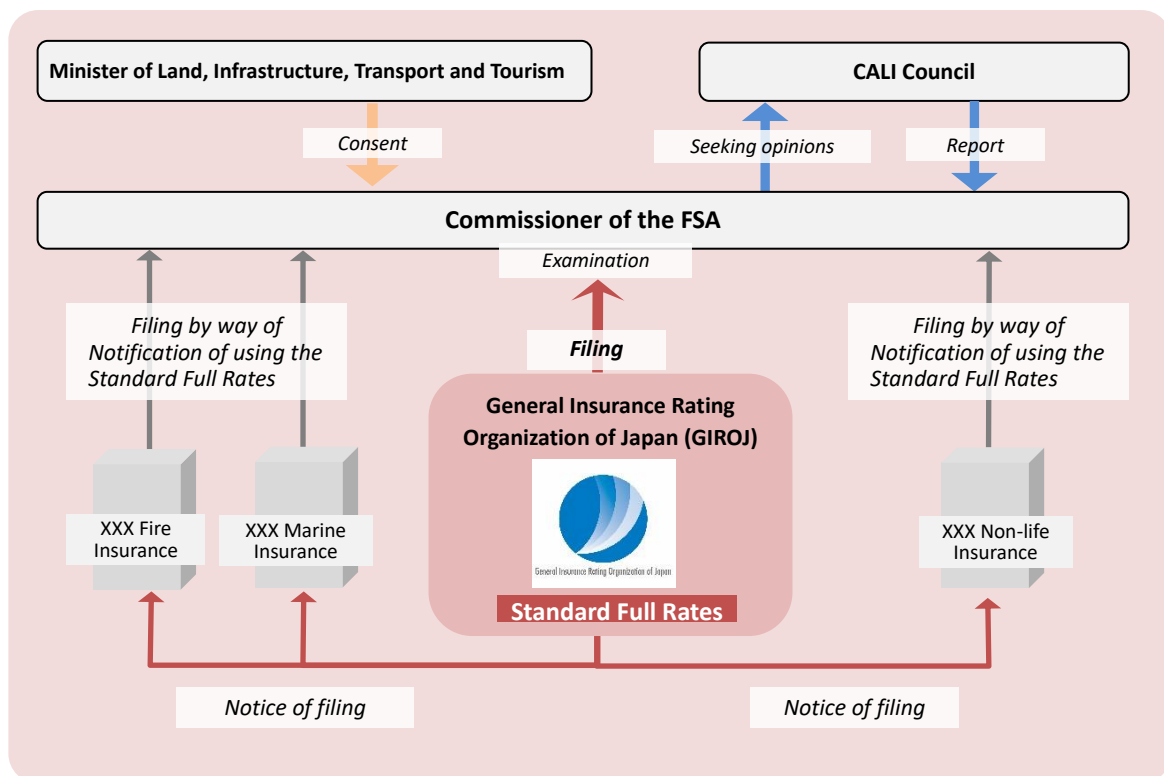
GIROJ files the Standard Full Rates for CALI to the Commissioner of the FSA.

The Commissioner of the FSA examines the Standard Full Rates filed by GIROJ to determine whether they conform to the three principles of insurance premium rates and the principle of no loss and no profit (see page 10).

In examining the rates, the Commissioner obtains the consent of the Minister of Land, Infrastructure, Transport and Tourism, seeks opinions from the CALI Council, and receives a report from the CALI Council after its deliberation.

If, after the Standard Full Rates filed by GIROJ are examined, member insurance companies of GIROJ file the Commissioner notifying that they will use the rates, they can use the rates as their own premium rates.

Filing of Standard Full Rates for CALI



4. Ensuring the Transparency of Standard Full Rates for CALI

The transparency of Standard Full Rates for CALI is ensured as described below.

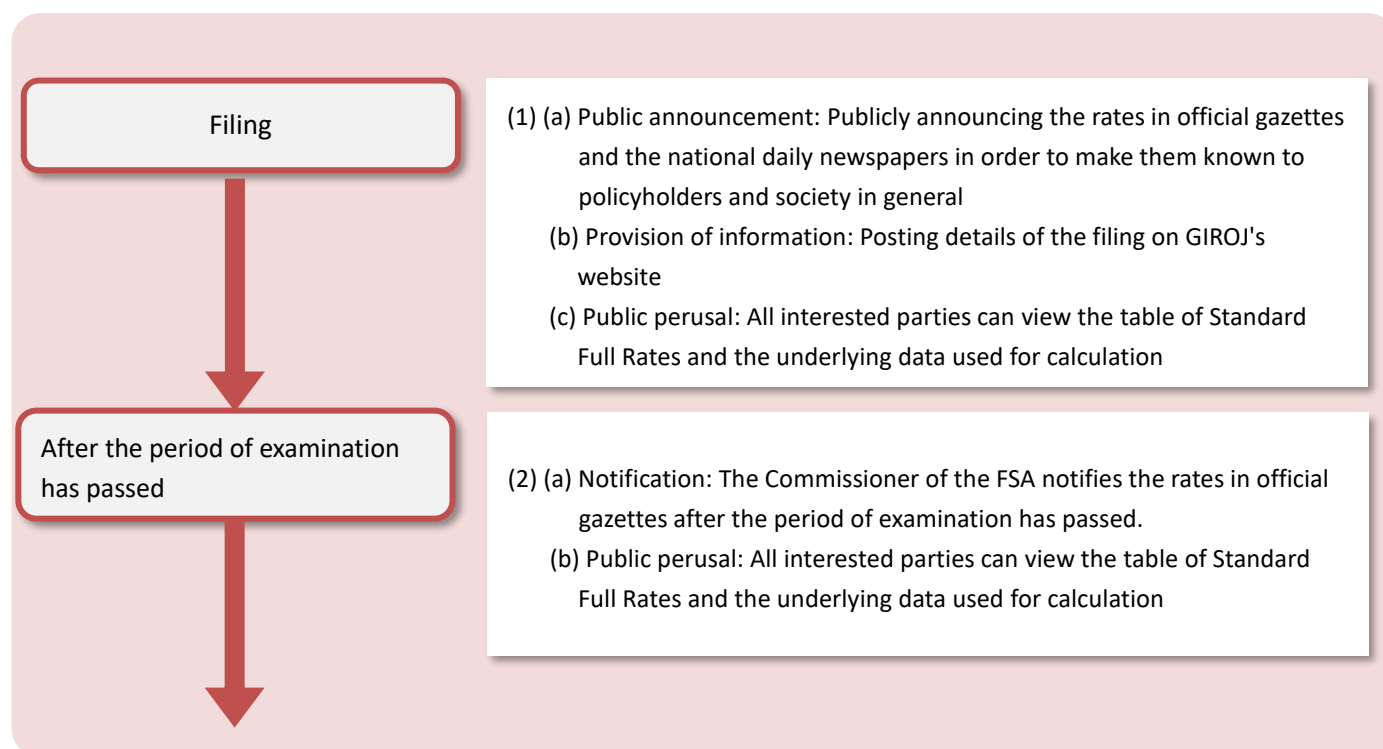
(1) Filing

- When GIROJ files the Standard Full Rates with the Commissioner of the FSA, it makes them known to policyholders and society in general by publicly announcing them in official gazettes and national daily newspapers.
- GIROJ posts details of the filing on its website.
- GIROJ keeps the table of Standard Full Rates and the underlying data for calculation and makes them available at its head office for perusal, and all interested parties can view details of them.

(2) After the period of examination has passed

- After the period of examination has passed, the Commissioner of the FSA notifies the public of the Standard Full Rates filed by GIROJ in official gazettes.
- Even after the period of examination has passed, GIROJ keeps the table of Standard Full Rates and the underlying data used for calculation and makes them available at its head office for perusal, and all interested parties can view details of them.

Ensuring the transparency of Standard Full Rates for CALI



5. Verification and revision of Standard Full Rates for CALI

Verification of the Standard Full Rates for CALI

As explained earlier, since Standard Full Rates for CALI are calculated by predicting the frequency of accidents and the average amount of damage per accident in the future, there may be excessive or insufficient underwriting income or expenditure depending on factors such as the incidence of traffic accidents and changes in economic conditions.

Therefore, it is necessary to periodically check whether the Standard Full Rates are maintained at reasonable levels.

GIROJ verifies the adequacy of the Standard Full Rates each year and reports the results of the verification to the Commissioner of the FSA.

The Commissioner reports the results of the verification submitted by GIROJ to the CALI Council.

Revision of the Standard Full Rates for CALI

If, as a result of verification, it determines that the Standard Full Rates for CALI are not adequate (need revision), GIROJ immediately calculates new Standard Full Rates and files them with the Commissioner of the FSA.

Verification and revision of Standard Full Rates for CALI

