

Automobile Insurance in Korea

Fact Book 2024



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Forewords



Twenty-one years have passed since the Fact Book was first published in 2003. The Korea Insurance Development Institute (KIDI) believes that the Fact Book has successfully introduced trends and changes in the Korean automobile insurance industry to the readers across the globe. I am deeply honored to announce the publication of this year's Fact Book, in the hope that it will continue to shed light on the Korean automobile insurance market.

In Korea, automobile insurance is considered one of the core business lines in the non-life (general) insurance sector, accounting for 16.8% of the entire non-life market.

In 2023, the number of cars insured with automobile insurance per year was 25.1 million, and the written insurance premiums totaled 19.9 trillion KRW (15.1 billion USD), showing an average annual growth rate of 2.0% and 3.7%, respectively, over the past five years.

Meanwhile, the loss ratio of automobile insurance was 81.2% in 2023, a decrease of 0.8 percentage points compared to 2022. This is mainly due to the increase in the number of cars covered by automobile insurance and increased premium income, but the accident rate remained stable.

Fact Book 2024 contains various statistics that show the current situation of the Korean automobile insurance industry. We are confident that the Fact Book will provide a comprehensive understanding of the Korean automobile insurance market.

KIDI strives to provide specialized and professional services to insurers, customers, and supervisory authorities in Korea. We also want to become a responsible member of the global insurance industry.

Heo, Chang Eon
Chairman & CEO
Korea Insurance Development Institute

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Chapter 1 : The Korean Insurance Industry

In 2023, the Korean insurance industry reported an 8.1% decrease in written premiums while GDP increased by 1.4%. Life insurance decreased by 15.3% and non-life insurance showed a 0.1% decrease in written premiums compared to 2022.

GDP and Insurance Industry Growth Rate

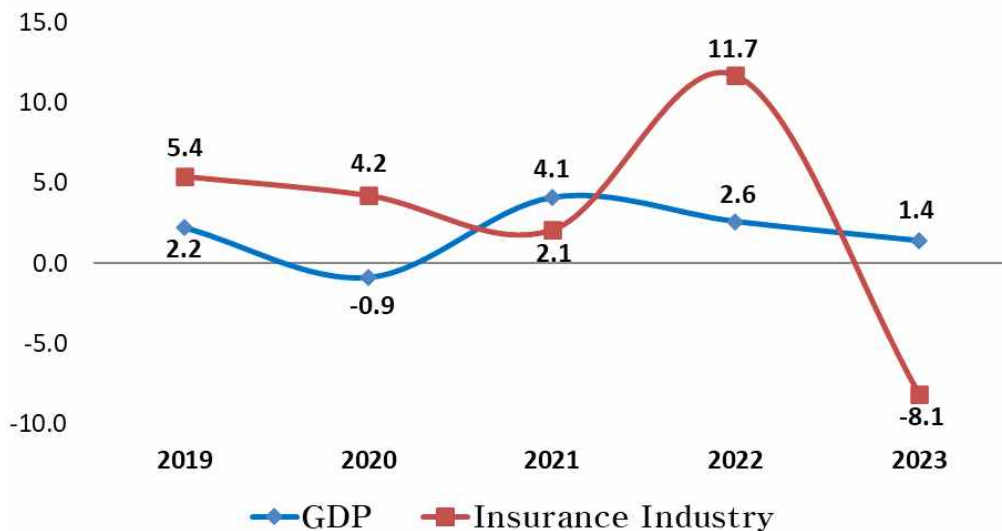
	2019	2020	2021	2022	2023
GDP	2.2	-0.9	4.1	2.6	1.4
Life ₁	5.8	2.0	-0.6	11.6	-15.3
Non-Life ₂	4.9	7.0	5.3	11.7	-0.1
Insurance	5.4	4.2	2.1	11.7	-8.1

Note: ₁Written premiums in life Insurance, ₂Written premiums in non-life insurance

Source: KIDI, Monthly Insurance Statistics

Bank of Korea, Economic Statistics Yearbook

GDP and Insurance Industry Growth Rate, 2019~2023



The life insurance premiums to GDP ratio in 2023 was 5.0%, whereas the non-life insurance premiums to GDP ratio reached 5.3% in 2023.

Premiums as a percentage of GDP

	2019	2020	2021	2022	2023
Life	6.1	6.2	5.7	6.1	5.0
Non-Life	4.9	5.2	5.1	5.5	5.3
Total	11.0	11.4	10.8	11.6	10.3

Source: KIDI, Monthly Insurance Statistics

Bank of Korea - Main Annual Indicators (reference year 2015, 2000~)

In 2023, premiums per capita (insurance density) were 4,467 thousand won, a decrease of 8.3% from the previous year. In 2022, both Life insurance and Non-Life insurance increased, but in 2023, both decreased from 2,570 to 2,174, and from 2,300 to 2,293, respectively. The total amount of premiums per capita has been on an increase until 2022, but in 2023, the total amount of premiums per capita decreased, in particular, there has been a significant decline in life insurance.

Premiums Per Capita

	2019	2020	2021	2022	2023
Life	2,268	2,309	2,297	2,570	2,174
Non-Life	1,825	1,950	2,055	2,300	2,293
Total	4,093	4,260	4,352	4,870	4,467

Note: Estimated population by Korea National Statistical Office

Source: KIDI, Monthly Insurance Statistics

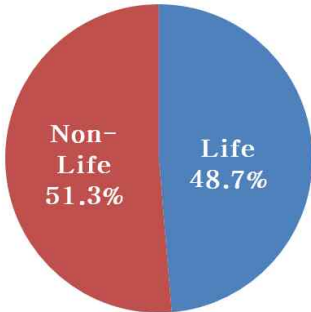
In 2023, written premiums for life insurance decreased by 15.3% and that for non-life insurance decreased by 0.1%.

Written premiums

	2019	2020	2021	2022	2023
Life	117,262	119,587	118,849	132,684	112,408
Non-Life	94,386	100,995	106,337	118,769	118,597
Total	211,648	220,582	225,186	251,453	231,005

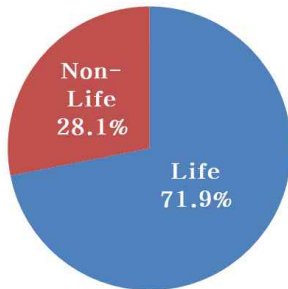
Source: KIDI, Monthly Insurance Statistics

**Written premiums of Life
& Non-Life Insurance**



- In 2023, the share of written premiums for life insurance was 48.7% and the share of written premiums for non-life insurance was 51.3%.

**Total Asset of Life &
Non-Life Insurance**



- In 2023, the share of the total asset size of life insurance was 71.9% and the share of the total asset size of non-life insurance was 28.1%.

In 2023, the insurance asset size was 1,225 trillion won, of which Life and Non-life insurance accounted for 881 trillion won and 344 trillion won, respectively. Non-life insurance decreased by 7.5% and Life insurance decreased by 6.1%.

	<u>Total Asset</u>					Trillion won, %
	2019	2020	2021	2022	2023	
Life	918 7.1	977 6.4	992 1.5	938 -5.4	881 -6.1	
Non-Life	321 7.7	344 7.2	366 6.4	372 1.6	344 -7.5	
Total	1,239 7.3	1,321 6.6	1,358 2.8	1,310 -3.5	1,225 -6.5	

Note: Figures in the parentheses indicate annual growth rates

Source: General Insurance Association Of Korea, Monthly Insurance Statistics

Life Insurance Association Of Korea, Monthly Insurance Statistics

There are 22 life insurance companies and 31 non-life insurance companies in Korea. Of the 31 non-life insurance companies, 19 were not involved in the automobile insurance business (the majority of them are reinsurers).

Number of Insurance Companies

Life Insurance	Non-Life Insurance	Auto	Non-Auto
Hanwha Life Insurance Co., Ltd.	Meritz Fire & Marine Insurance Co., Ltd.	○	○
Samsung Life Insurance Co., Ltd.	Hanwha Non-life Insurance Co., Ltd.	○	○
Heungkuk Life Insurance Co., Ltd.	Lotte Non-life Insurance Co., Ltd.	○	○
Kyobo Life Insurance Co., Ltd.	MG Non-life Insurance Co., Ltd.	○	○
Shinhan Life Insurance Co., Ltd.	Heungkuk Fire & Marine Insurance Co., Ltd.	○	○
DGB Life Insurance Co., Ltd.	Samsung Fire & Marine Insurance Co., Ltd.	○	○
KDB Life Insurance Ltd.	Hyundai Marine & Fire Insurance Co., Ltd.	○	○
Mirae Asset Life Insurance Co., Ltd.	KB Insurance Co., Ltd.	○	○
KB Life Insurance Ltd.	DB Insurance Co., Ltd.	○	○
DB Life Insurance Co., Ltd.	Seoul Guarantee Insurance Company	×	○
Dongyang Life Insurance Co., Ltd.	Korean Re Insurance Company	×	○
BNP PARIBAS CARDIF Life Insurance Co., Ltd.	American Insurance Group, Inc.	×	○
Hana Life Insurance Co., Ltd.	ACE American Fire & Marine Insurance Company Korea	×	○
Fubon Hyundai Life Insurance Co., Ltd.	First American Title Company Korea Branch	×	○
ABL Life Insurance Co., Ltd.	Mitsui Sumitomo Insurance Co., Ltd.	×	○
MetLife Insurance Company of	AXA Genral Incurance Co., Ltd.	○	○
Chubb Life Insurance Korea Co., Ltd.	HANA Non-life Insurance Co., Ltd.	○	○
LINA Life Insurance Co., Ltd.	CARROT Non-life Insurance Co., Ltd.	○	○
American International Assurance	KAKAOPAY Non-life Insurance Co., Ltd.	×	○

Life Insurance	Non-Life Insurance	Auto	Non-Auto
IBK Pension Insurance	Shinhan EZ General Insurance Co., Ltd.	×	○
NongHyup Life Insurance Co., Ltd	General Re Insurance Company Korea	×	○
Kyobo Lifeplanet Insurance Company	Swiss Re Insurance Company Korea	×	○
	Munich Re Insurance Company Korea	×	○
	Tokio Marine & Nichido Fire Insurance Co., Ltd.	×	○
	SCOR Re Insurance Company Korea	×	○
	RGA Re Insurance Company Korea	×	○
	Hannover Re Insurance Company Korea	×	○
	Pacific Life Re international Korea Branch	×	○
	NongHyup Property & Casualty Insurance Co., Ltd.	×	○
	Allianz Global Corporate & Specialty South Korea	×	○
	Factory & Mutual Insurance Co Korea Branch	×	○

Note : ○ → In business, × → Not in business

The number of employees and solicitors hired by non-life insurance companies is approximately 1.9 times more than that hired by life insurance companies. Moreover, non-life insurance companies have 4.7 times more agencies than life insurance companies.

Employees and Distribution Channel by Insurance Business

	Branch Offices	Employees	Solicitors	Agencies
Life	1,847	22,599	77,482	6,106
Non-Life	2,813	32,965	159,995	28,999

Note: Number of dependent sales agents on the basis of registration

Source: Financial Supervisory Service(FSS), Financial Statistics

Chapter 2 : Non-Life Insurance Market

1. Written premiums and Incurred Loss by Line of Business

In the non-life insurance market, the total written premiums grew from 94,386 billion won in 2019 to 118,748 billion won in 2023. The decrease in written premiums in 2023 was mainly due to the contraction of Others insurance.

Written premiums By Line of Business

	Billion won												
	Automobile	%	Long-term	%	Guarantee	%	Marine	%	Fire	%	Others	%	Total
2019	16,649	5.1	53,095	5.0	1,641	-3.5	598	1.2	269	-1.0	18,844	7.8	94,386
2020	18,573	11.6	55,922	5.3	1,705	3.9	700	17.1	274	1.7	23,822	26.4	100,995
2021	19,284	3.8	58,834	5.2	1,722	1.0	740	5.8	316	15.5	25,441	6.8	106,337
2022	19,733	2.3	61,798	5.0	1,802	4.6	872	17.8	318	0.6	34,118	34.1	118,769
2023	19,918	0.9	64,263	4.0	1,911	6.0	952	9.2	327	2.8	31,213	-8.5	118,748

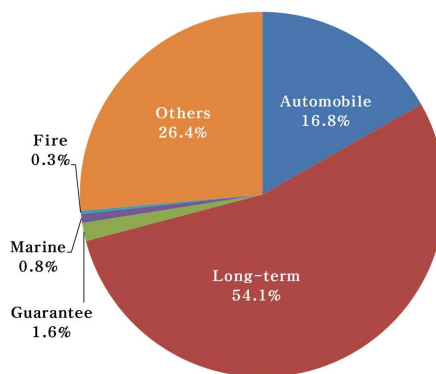
Note: 1. Others include casualty, personal accident, retirement insurance, etc.

2. % refers to annual change

Source: KIDI, Monthly Insurance Statistics, Monthly Auto Insurance Statistics(Automobile)

- In 2023, the amount of written premiums in long-term insurance reached 6.4 trillion won, which accounted for 54.1% of the non-life insurance market.
- Automobile insurance came second with 19.9 trillion won (16.8%), followed by Guarantee insurance with 1.6% and Marine with 0.8%.

Written premiums by Line of Business



In 2023, long-term insurance and automobile insurance recorded high loss ratios of 83.0% and 81.2%, respectively, whereas guarantee insurance showed a relatively low incurred loss ratio of 67.1%. The loss ratios of long-term insurance were stable, ranging from 82.5% to 85.2% over the past five years, compared to those in guarantee, marine, and fire insurance.

<u>Automobile</u>				<u>Long-term</u>			
	Billion won, %				Billion won, %		
	EP ₁	IL ₂	L/R		EP ₁	IL ₂	L/R
2019	16,094	14,709	91.4	2019	54,902	46,787	85.2
2020	17,351	14,806	85.3	2020	57,410	48,543	84.6
2021	18,775	15,216	81.0	2021	59,593	50,449	84.7
2022	19,435	15,934	82.0	2022	62,260	51,365	82.5
2023	19,755	16,049	81.2	2023	64,582	53,571	83.0

<u>Guarantee</u>				<u>Marine</u>			
	Billion won, %				Billion won, %		
	EP ₁	IL ₂	L/R		EP ₁	IL ₂	L/R
2019	1,502	911	60.7	2019	277	198	71.6
2020	1,522	1,021	67.1	2020	295	243	82.3
2021	1,577	742	47.0	2021	326	154	47.1
2022	1,639	709	43.2	2022	389	229	58.9
2023	1,654	1,109	67.1	2023	399	226	56.7

<u>Fire</u>				<u>Others</u>			
	Billion won, %				Billion won, %		
	EP ₁	IL ₂	L/R		EP ₁	IL ₂	L/R
2019	240	155	64.4	2019	8,917	6,556	73.5
2020	226	187	82.8	2020	9,310	7,006	75.2
2021	239	144	60.4	2021	9,907	7,451	75.2
2022	242	170	70.4	2022	11,404	8,772	76.9
2023	235	164	70.0	2023	10,695	8,354	78.1

Note: ₁Earned Premiums, ₂Incurred Losses

Annuity / Retirement insurance is included in the Long-term insurance

Loss Adjustment Expenses are excluded

Source: FSS, Financial Statistics, Monthly Auto Insurance Statistics(Automobile)

The "Big Five" companies (Samsung, DB, Hyundai, Meritz, and KB) accounted for 81.1% of total written premiums in the non-life insurance market. In 2023, Samsung had the largest market share (22.4%), followed by DB (17.3%), Hyundai (15.3%), Meritz (13.4%), and KB (12.6%).

Written premiums and Market Share by Non-Life Insurance Company

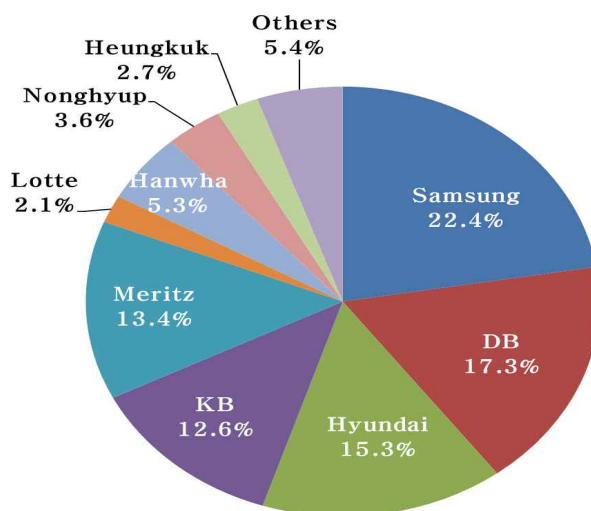
Company	Written premiums	Share(%)
Samsung	26,617	22.4
DB	20,583	17.3
Hyundai	18,154	15.3
Meritz	15,964	13.4
KB	14,915	12.6
Lotte	2,465	2.1
Hanwha	6,238	5.3
Nonghyup	4,239	3.6
Heungkuk	3,149	2.7
SGIC	1,898	1.6
MG	1,136	1.0
AXA	849	0.7
AIG	662	0.6
Hana	554	0.5
Others	1,326	1.1
Total	118,748	100.0

Note: 1. Others included Shinhan EZ, Ace American, First American, Mitsui Sumitomo, Korean Re, Carrot, and KaKaopay

2. Ceded and assumed premiums are excluded in Written premiums

Source: KIDI, Monthly Insurance Statistics

Written premiums by Insurance Company



Note: Others include Shinhan EZ, Ace American, First American, Mitsui Sumitomo, Korean Re, MG, AIG, SGIC, Hana, Carrot, and KaKaopay

2. Non-Life Insurance Expense by Line of Business

In 2023, as shown in the table below, expenses incurred by the others insurance decreased by 0.9%, compared with the previous year, while expenses of long-term, marine, fire, guarantee, and automobile insurance increased by 18.8%, 12.4%, 4.9%, 1.8%, and 1.4%, respectively.

Expenses by Line of Business

	Billion won												
	Automobile	%	Long-term	%	Guarantee	%	Marine	%	Fire	%	Others	%	Total
2019	2,807	-1.3	12,995	12.9	244	-17.3	101	-2.9	113	-5.0	2,075	11.4	18,334
2020	2,885	2.8	13,123	1.0	261	6.9	92	-8.3	114	1.0	2,116	2.0	18,591
2021	3,079	6.7	12,885	-1.8	292	12.2	103	12.0	121	5.5	2,208	4.3	18,687
2022	3,170	3.0	13,466	4.5	314	7.6	113	9.0	124	2.7	2,517	14.0	19,704
2023	3,215	1.4	15,995	18.8	320	1.8	127	12.4	130	4.9	2,495	-0.9	22,282

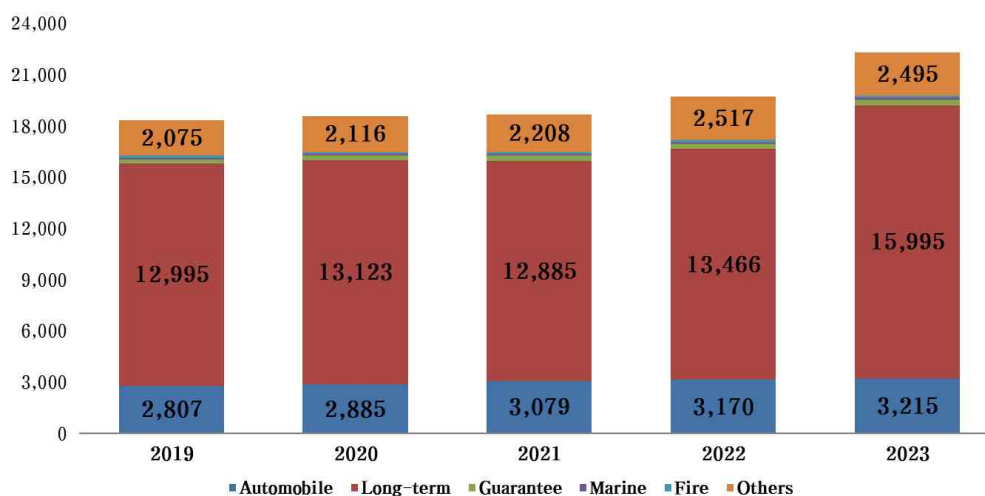
Note: 1. Annuity is included in the Long-term insurance

2. % refers to annual growth change

3. Claim survey fee is excluded in operating expenses in accordance with IFRS basis

Source: FSS, Financial Statistics

Trends in Expense by Line of Business



Among non-life insurance, long-term and fire insurance have been in deficit for a long time.

Underwriting Results by Line of Business

	Billion won												
	Automobile	%	Long-term	%	Guarantee	%	Marine	%	Fire	%	Others	%	Total
2019	-1,655	-128.3	-4,879	-53.9	347	-24.1	-22	-266.7	-28	-300.0	287	-17.3	-5,951
2020	-384	76.8	-4,256	12.8	241	-30.5	-40	-81.1	-76	-171.9	189	-34.2	-4,327
2021	391	201.8	-3,741	12.1	543	125.3	69	271.9	-26	65.5	248	31.5	-2,516
2022	433	10.7	-2,571	31.3	616	13.5	47	-31.8	-52	-100.8	115	-53.7	-1,413
2023	591	36.4	-4,984	-93.8	225	-63.5	46	-2.8	-60	-13.7	-154	-234.5	-4,337

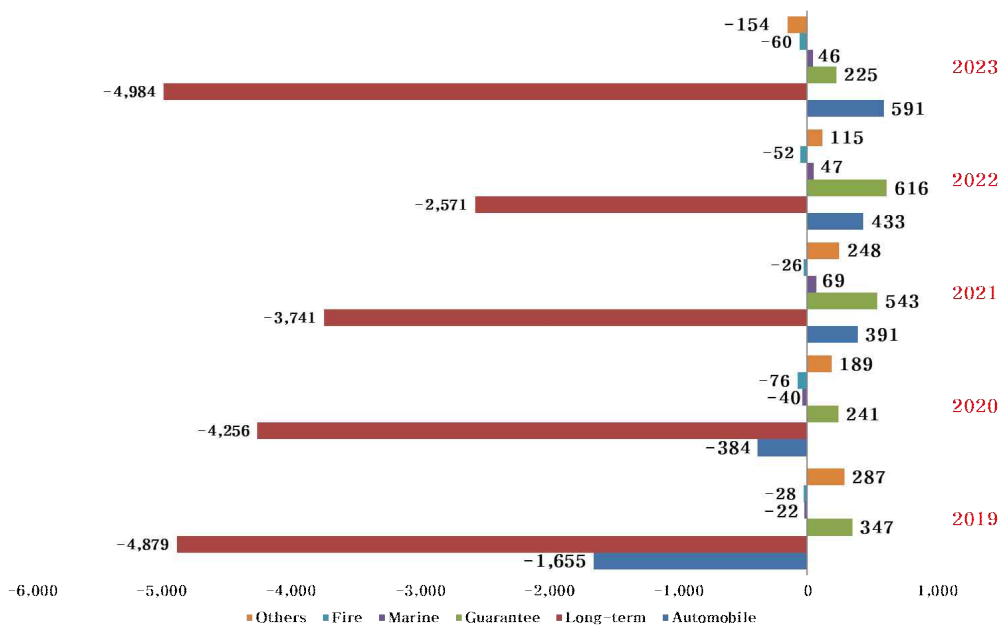
Note: 1. Annuity is included in the Long-term insurance

2. Underwriting results(Operating income) = earned premiums - incurred losses - net expenses

3. % refers to the annual growth rate

Source: FSS, Financial Statistics

Trends in U/W Results by Line of Business



Chapter 3 : The Korean Automobile Insurance Market

1. Number of Registered Vehicles

The number of registered vehicles has continuously increased over the past five years. Last year, the number of vehicle registrations grew by 1.8%: 1.8% for personal vehicles, and 1.1% for commercial vehicles. The growth rate decreased from 2.4% to 1.8% by 2023.

Number of Registered Vehicles

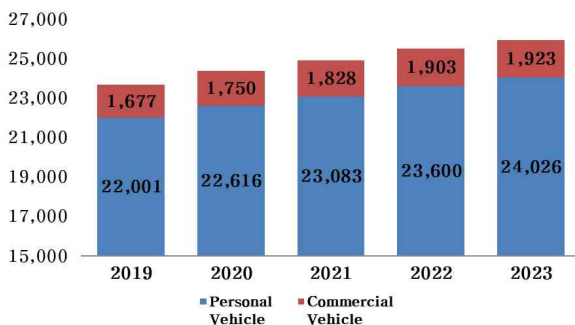
	2019	2020	2021	2022	2023
	Thousand, %				
Personal Vehicle	22,001	22,616	23,083	23,600	24,026
	1.7	2.8	2.1	2.2	1.8
Commercial Vehicle	1,677	1,750	1,828	1,903	1,923
	6.6	4.4	4.5	4.1	1.1
Total	23,677	24,366	24,911	25,503	25,949
	2.0	2.9	2.2	2.4	1.8

Note: 1. Numbers in the second row of vehicles indicate the annual growth change
 2. Motorcycles are excluded

Source: Ministry of Land, Infrastructure and Transport (MOLIT)

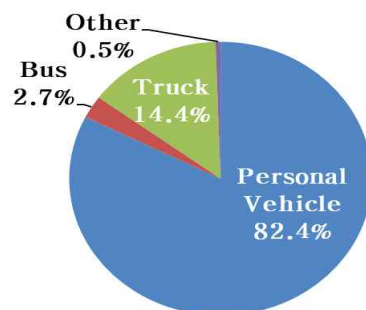
As shown in the pie chart below, personal vehicles had the largest market share (82.4%) in 2023, followed by trucks (14.4%) and buses (2.7%).

Trends in number of registered vehicles



Note: Motorcycles are excluded
 Source: MOLIT

Types of Vehicles

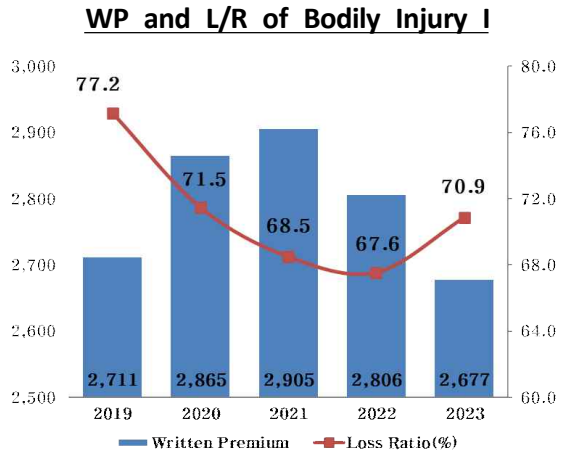


Note: Motorcycles are excluded
 Source: MOLIT

2. Written premiums and Incurred Losses

In 2023, the written premiums of Bodily Injury Liability Coverage I were 2,677 billion won. This loss ratio increased from 67.6% to 70.9% by 2023.

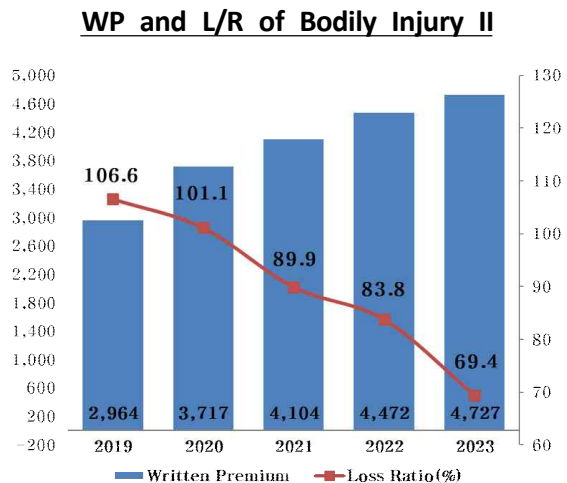
	Billion won, %			
	Written premiums	Earned premiums	Incurred Losses	Loss ratio
2019	2,711	2,677	2,066	77.2
2020	2,865	2,762	1,974	71.5
2021	2,905	2,879	1,972	68.5
2022	2,806	2,863	1,934	67.6
2023	2,677	2,731	1,935	70.9



Note: Loss Adjustment Expenses are excluded
Source: KIDI, Monthly Automobile Statistics

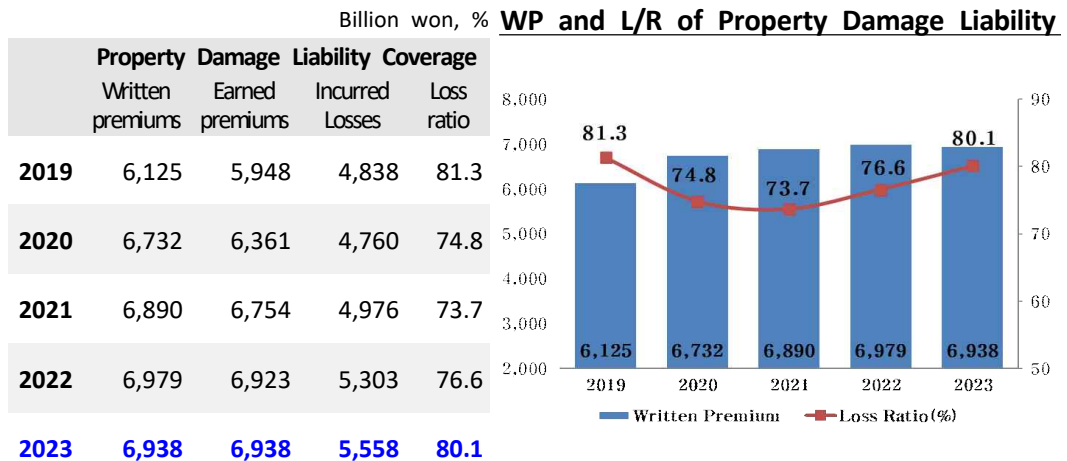
The written premiums of Bodily Injury Liability Coverage II were 4,727 in 2023. The loss ratio decreased in 2023, reaching 69.4%.

	Billion won, %			
	Written premiums	Earned premiums	Incurred Losses	Loss ratio
2019	2,964	2,815	3,000	106.6
2020	3,717	3,232	3,268	101.1
2021	4,104	3,878	3,486	89.9
2022	4,472	4,228	3,542	83.8
2023	4,727	4,581	3,181	69.4



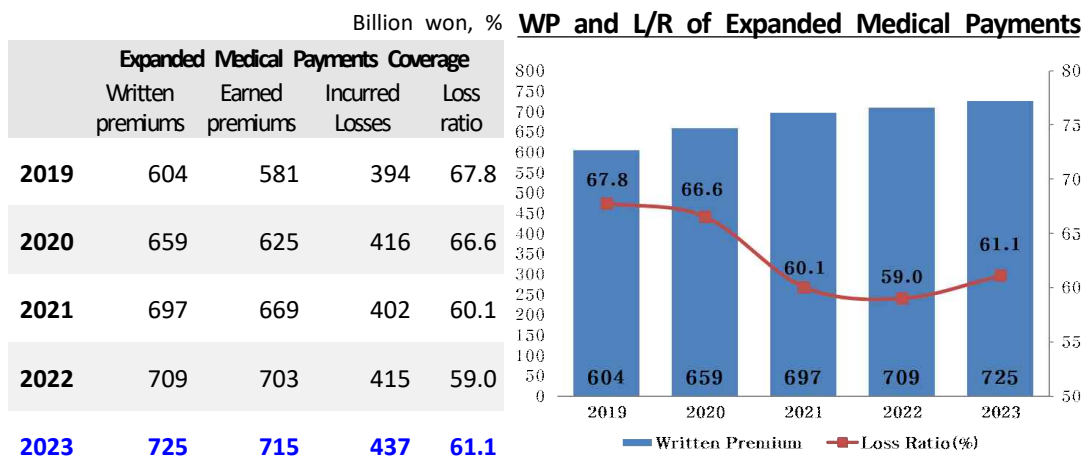
Note: Loss Adjustment Expenses are excluded
Source: KIDI, Monthly Automobile Statistics

The written premiums of Property Damage were 6,938 billion won, a decrease of 0.6% compared with the previous year. The loss ratio of property damage liability improved from 2019 to 2021 but started to worsen in 2022.



Note: Loss Adjustment Expenses are excluded
Source: KIDI, Monthly Automobile Statistics

The written premiums of the Expanded Medical Payments Coverage were 725 billion won in 2023 and have increased constantly over the last five years. The loss ratio of the expanded medical payments coverage increased by 2.1 percentage points in 2023. The loss ratio began to exhibit a downward trend in 2020.

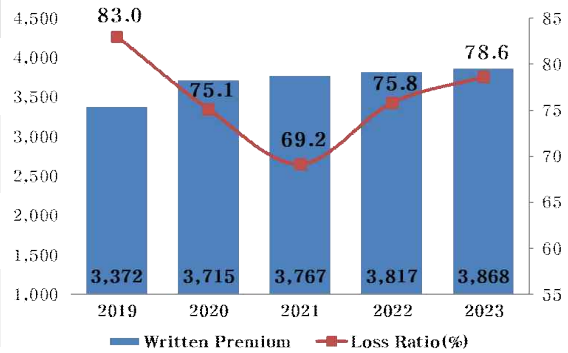


Note: Loss Adjustment Expenses are excluded
Source: KIDI, Monthly Automobile Statistics

The written premiums for Physical Damage Coverage were 3,868 billion won, an increase of 51 billion won compared to the previous year. The loss ratio also increased by 2.8 percentage points in 2023.

Physical Damage Coverage				
	Billion won, %			
	Written premiums	Earned premiums	Incurred Losses	Loss ratio
2019	3,372	3,213	2,668	83.0
2020	3,715	3,500	2,629	75.1
2021	3,767	3,695	2,556	69.2
2022	3,817	3,801	2,882	75.8
2023	3,868	3,816	3,001	78.6

WP and L/R of Physical Damage

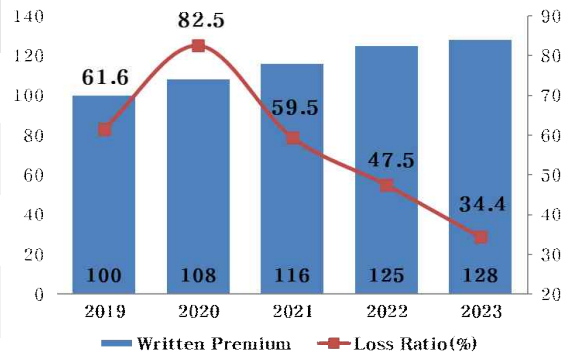


Note: Loss Adjustment Expenses are excluded
Source: KIDI, Monthly Automobile Statistics

Written premiums for Uninsured Motorist Coverage have increased constantly over the last five years. The loss ratio decreased from 47.5% to 34.4% in 2023 and has been constantly decreasing since 2020.

Uninsured Motorist Coverage				
	Billion won, %			
	Written premiums	Earned premiums	Incurred Losses	Loss ratio
2019	100	99	61	61.6
2020	108	103	85	82.5
2021	116	111	66	59.5
2022	125	120	57	47.5
2023	128	128	44	34.4

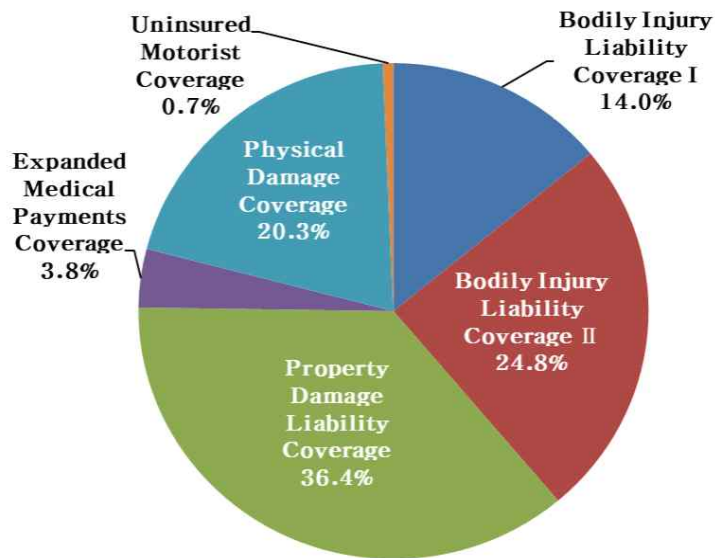
WP and L/R of Uninsured Motorist



Note: Loss Adjustment Expenses are excluded
Source: KIDI, Monthly Automobile Statistics

Property Damage (36.4%) had the largest share of written premiums by coverage, followed by Bodily Injury II (24.8%) and Physical Damage (20.3%). The sum of ratios for Property Damage Liability Coverage and Physical Damage Coverage was 56.7%, accounting for more than half of its total loss.

Written premiums by Coverage



The "Big Four" companies (Samsung, Hyundai, KB, DB) accounted for 85.3% of total written premiums in the automobile insurance market. In 2023, Samsung had the largest market share (28.3%), followed by DB (21.5%), Hyundai (21.4%), and KB (14.0%).

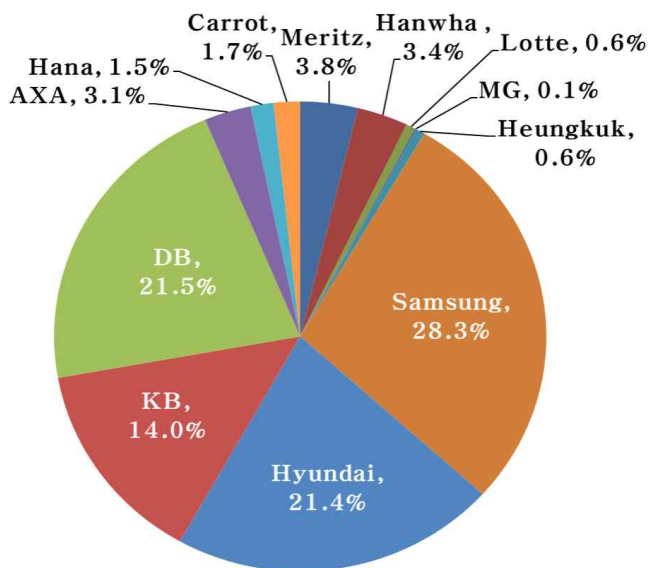
Written premiums by Automobile Insurance Company, 2019~2023

Company	Billion won, %									
	2019	M/S	2020	M/S	2021	M/S	2022	M/S	2023	M/S
Meritz	618	3.7	663	3.6	763	4.0	793	4.0	747	3.8
Hanwha	812	4.9	765	4.2	701	3.7	679	3.5	666	3.4
Lotte	417	2.5	220	1.2	175	0.9	127	0.6	119	0.6
MG	39	0.2	39	0.2	29	0.2	24	0.1	21	0.1
Heungkuk	134	0.8	148	0.8	135	0.7	126	0.6	116	0.6
Samsung	4,871	29.5	5,466	29.7	5,572	29.1	5,623	28.7	5,617	28.3
Hyundai	3,366	20.4	3,847	20.9	4,038	21.1	4,188	21.4	4,250	21.4
KB	2,086	12.6	2,468	13.4	2,511	13.1	2,663	13.6	2,785	14.0
DB	3,295	19.9	3,810	20.7	4,032	21.1	4,169	21.3	4,269	21.5
AXA	598	3.6	655	3.6	701	3.7	643	3.3	610	3.1
Hana	291	1.8	294	1.6	328	1.7	320	1.6	301	1.5
Carrot	-	-	23	0.1	141	0.7	256	1.3	343	1.7
Total	16,527	100.0	18,398	100.0	19,125	100.0	19,610	100.0	19,843	100.0

Source: KIDI, Monthly Automobile Insurance Statistics

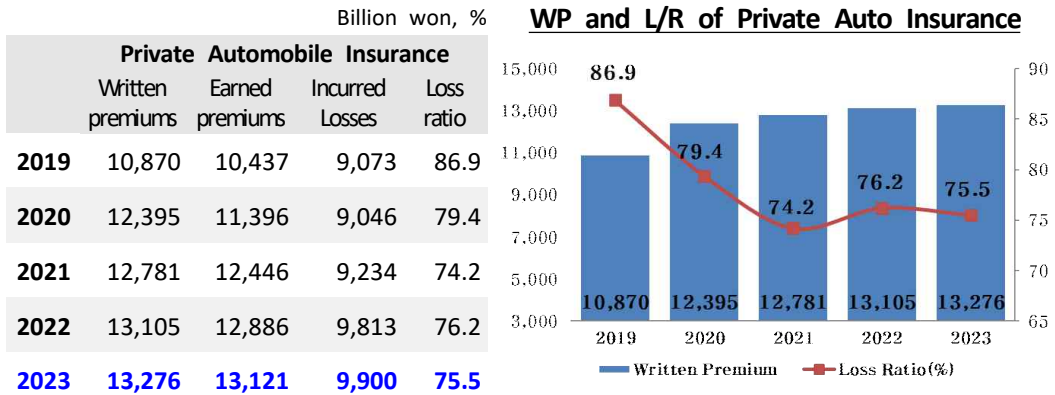
Note: Written Premiums do not cover Driver's Insurance, Insurance in Foreign currency and etc. Written Premiums for the residual market are excluded.

Market Share : Written premiums



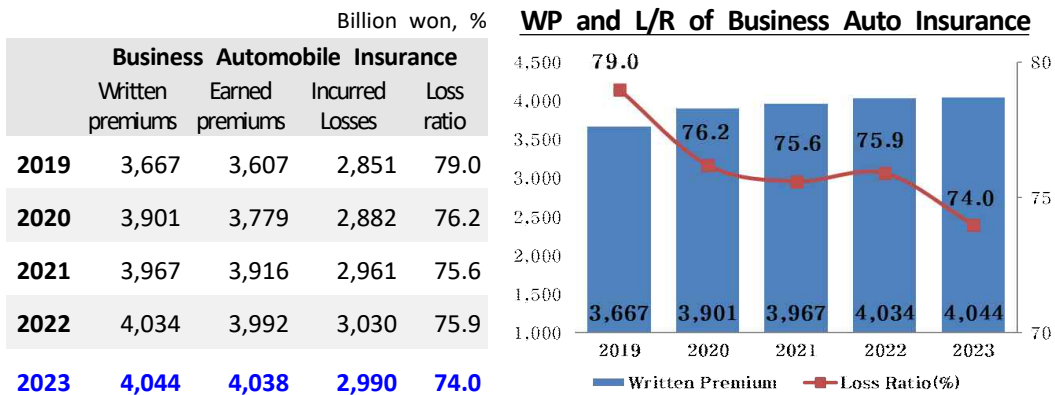
3. Written premiums and Incurred Losses by Line of Automobile Insurance

Written premiums in private automobile insurance increased by 1.3%, reaching 13,276 billion won in 2023. The loss ratio for private automobile insurance decreased from 2019 to 2021. However, the loss ratio worsened again by 2 percentage points in 2022, but improved back to 75.5 in 2023.



Note: Loss Adjustment Expenses are excluded
Source: KIDI, Monthly Automobile Statistics

Written premiums in business automobiles also increased by 0.2%, reaching 4,044 billion won in 2023. The loss ratio decreased by 1.9 percentage points compared to the previous year and reached 74.0% in 2023.

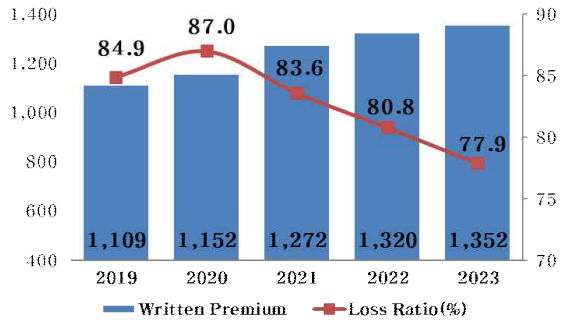


Note: Loss Adjustment Expenses are excluded
Source: KIDI, Monthly Automobile Statistics

Written premiums for commercial automobile insurance reached 1,352 billion won in 2023, a 2.4% increase compared to the previous year. The loss ratio decreased by 2.9 percentage points, reaching 77.9% in 2023.

Billion won, % **WP and L/R of Commercial Auto Insurance**

Commercial Automobile Insurance				
	Written premiums	Earned premiums	Incurred Losses	Loss ratio
2019	1,109	1,081	918	84.9
2020	1,152	1,119	973	87.0
2021	1,272	1,214	1,015	83.6
2022	1,320	1,294	1,046	80.8
2023	1,352	1,336	1,041	77.9

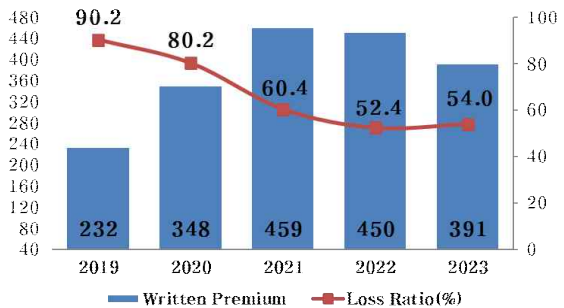


Note: Loss Adjustment Expenses are excluded
Source: KIDI, Monthly Automobile Statistics

Written premiums for motorcycle insurance were recorded at 391 billion won, and the loss ratio of motorcycle insurance was 54.0% in 2023.

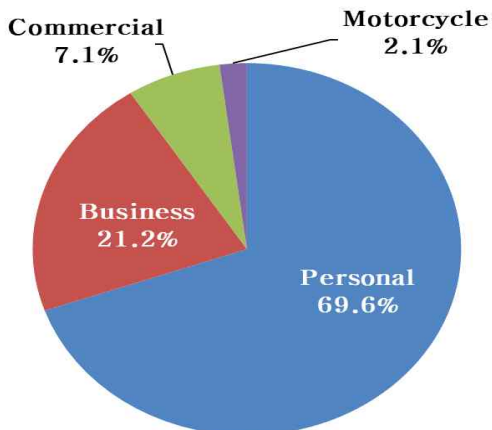
Billion won, % **WP and L/R of Motorcycle Insurance**

Motorcycle Insurance				
	Written premiums	Earned premiums	Incurred Losses	Loss ratio
2019	232	207	186	90.2
2020	348	288	231	80.2
2021	459	409	247	60.4
2022	450	466	244	52.4
2023	391	415	224	54.0



Note: Loss Adjustment Expenses are excluded
Source: KIDI, Monthly Automobile Statistics

Written premiums by Line of Automobile insurance



- Private automobile insurance (69.6%) had the largest share of written premiums, followed by business automobile insurance (21.2%), commercial automobile insurance (7.1%), and motorcycle insurance (2.1%).

4. Accident Statistics

4-1. General Accident

The number of car accidents and registered vehicles increased by 0.7% and 1.7% in 2023, respectively. As a result, in 2023, the accident rate was 0.8%, which was the same as the accident rate over the past three years.

Accident Number and Accident rate

	Number of Accidents	Annual change	Accident rate	Number of Registered Vehicles	Annual change
					Cases, %
2019	229,600	5.7	1.0	23,677,366	2.5
2020	209,664	-8.7	0.9	24,365,979	2.9
2021	203,130	-3.1	0.8	24,911,101	2.2
2022	196,836	-3.1	0.8	25,503,078	2.4
2023	198,296	0.7	0.8	25,949,201	1.7

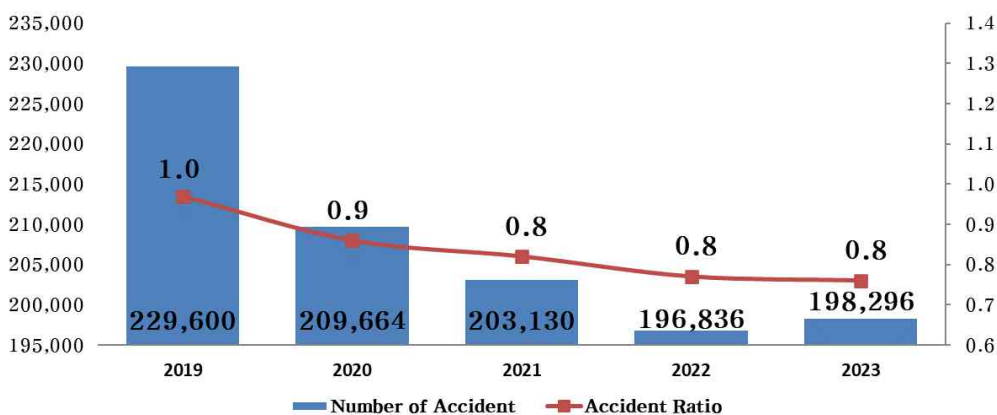
Note: 1. Annual change refers to the growth rate compared with the previous year

2. Motorcycles were excluded from the number of registered vehicles

3. The number of registered vehicles is accumulated at the end of the year

Source: National Police Agency (NPA), Traffic Accident Statistics

Trends in Number of Accident and Accident Rate



Source: NPA, Traffic Accident Statistics

The number of accidents per 10,000 registered vehicles was 66.6 cases in 2023, a decrease of 0.9% compared to the previous year.

Accident Numbers per 10,000 registered vehicles

	2019	2020	2021	2022	Cases, % 2023
# of	83.5	74.2	73.5	67.2	66.6
Accidents	3.9	-11.1	-1.0	-8.6	-0.9

Note: 1. Figures in the parentheses indicate annual growth rates

2. Motorcycles are included

3. Construction machinery and farm machinery are included since 2005

Source: NPA, Traffic Accident Statistics

In 2023, the number of deaths due to traffic accidents and that of injuries was 2,551 and 283,799, respectively. The number of deaths due to traffic accidents has decreased since 2019. The number of fatalities per 100,000 residents decreased from 6.5 persons in 2019 to 4.9 persons in 2023. The number of injuries per 100,000 residents had decreased from 2019 to 2022, but increased back to 550.4 in 2023.

Number of Deaths and Injuries

	Persons	
	Number of Deaths	Number of Injuries
2019	3,349	341,712
2020	3,081	209,654
2021	2,916	291,608
2022	2,735	281,803
2023	2,551	283,799

Source: NPA, Traffic Accident Statistics

Number of Deaths and Injuries per 100,000 Population

	Persons	
	Number of Deaths	Number of Injuries
2019	6.5	660.8
2020	6.0	591.3
2021	5.6	562.7
2022	5.3	545.8
2023	4.9	550.4

Source: NPA, Traffic Accident Statistics

As shown in the table below, the total number of accidents caused by traffic violations increased to 198,296 cases in 2023. Careless driving was the major cause of traffic violations (55.9%). In 2023, traffic light violations increased by 2.6% compared to 2022, while careless driving decreased by 0.4% compared to the previous year.

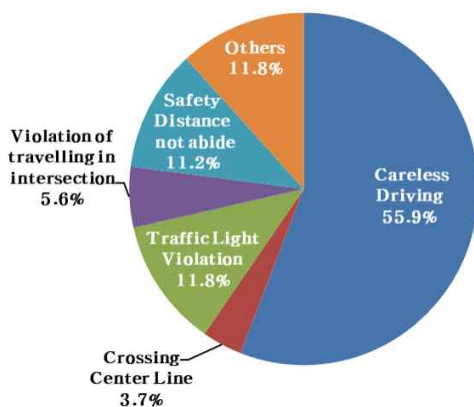
Accident Number by Traffic Violation

	Cases												
	Careless Driving	%	Crossing Center Line	%	Traffic Light Violation	%	Violation of traveling in intersection	%	Safety Distance not abide	%	Others	%	Total
2019	126,006	54.9	9,344	4.1	27,921	12.2	15,372	6.7	22,473	9.8	28,484	12.4	229,600
2020	116,272	55.5	8,364	4.0	24,512	11.7	14,079	6.7	21,469	10.2	24,947	11.9	209,643
2021	111,766	55.0	8,524	4.2	24,608	12.1	12,218	6.0	21,045	10.4	24,969	12.3	203,130
2022	111,307	56.5	7,710	3.9	22,850	11.6	11,453	5.8	19,900	10.1	23,616	12.7	196,836
2023	110,868	55.9	7,385	3.7	23,444	11.8	11,060	5.6	22,231	11.2	23,308	11.8	198,296

Note: % indicates the share of accidents by the traffic violation

Source: NPA, Traffic Accident Statistics

Share of Accidents by Traffic Violation



- In 2023, Careless Driving was the major cause of traffic violations, accounting for 55.9%.
- Traffic Light Violation came second (11.8%), followed by Safety Distance not Abide (11.2%), and Intersection Violation (5.6%).

In 2023, the number of traffic accidents caused by drunk drivers was 13,042, a decrease of 13.4% from the previous year. Drinking and driving accidents accounted for 6.6% of all traffic accidents.

Accident Number of Traffic Accidents by Drunk Driver

	Cases, %				
	2019	2020	2021	2022	2023
Number	15,708	17,247	14,894	15,059	13,042
Rate₁	6.8	8.2	7.3	7.7	6.6

Note: ₁Share of accidents by drunk drivers

Source: NPA, Traffic Accident Statistics

The number of traffic accidents by unlicensed drivers was 5,165, accounting for 2.6% of the total number of traffic accidents in 2023. The share of traffic accidents by unlicensed drivers in 2023 were the same as that in 2022.

Number of Traffic Accidents by Unlicensed Drivers

	2019	2020	2021	2022	Cases, % 2023
Number	5,177	5,307	4,628	5,066	5,165
Rate₁	2.3	2.5	2.3	2.6	2.6

Note: ₁Share of traffic accidents by unlicensed drivers

Source: NPA, Traffic Accident Statistics

The number of traffic accidents caused by hit-and-run drivers was 6,677, accounting for 3.4% of the total number of traffic accidents in 2023. The share of traffic accidents by hit-and-run drivers in 2023 were the same as that in 2022.

Number of Traffic Accidents by Hit-and-Run Drivers

	2019	2020	2021	2022	Cases, % 2023
Number	7,129	7,418	7,492	6,778	6,677
Rate₁	3.1	3.5	3.7	3.4	3.4

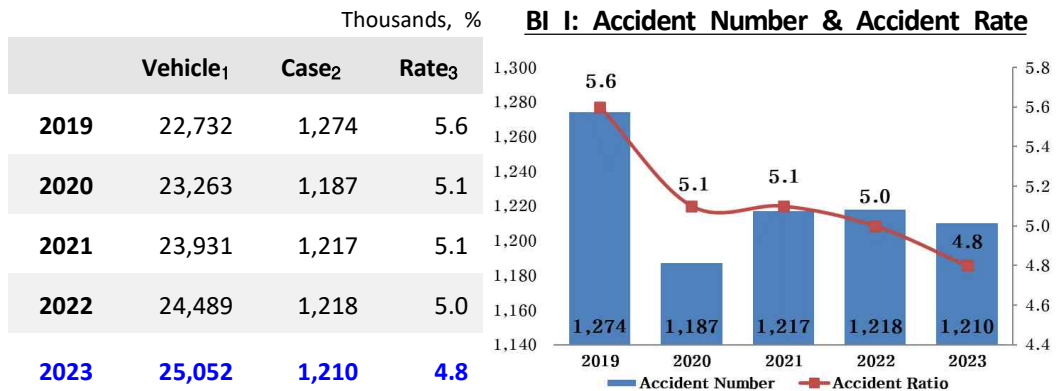
Note: ₁Share of accidents by hit-and-run drivers

Source: NPA, Traffic Accident Statistics

4-2. Insurance Accident by Coverage

The number of vehicles(incident involved) in Bodily Injury I (BI I) increased compared to the previous year. The accident rate decreased by 0.2 percentage points in 2023, while the number of accidents was almost the same as in 2022.

Bodily Injury I Accident Rate

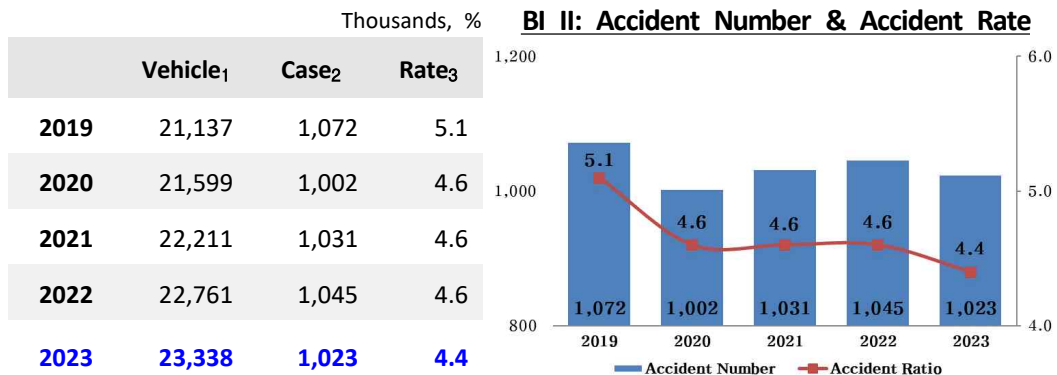


Note: ₁Number of insured vehicles per year, ₂Number of accidents, ₃Accident rate

Source: KIDI, Annual Automobile Insurance Statistics

The number of accidents in Bodily Injury II was 1,023 thousand cases, a decrease of 2.1% compared to the previous year. The accident rate decreased by 0.2 percentage points in 2023.

Bodily Injury II Accident Rate

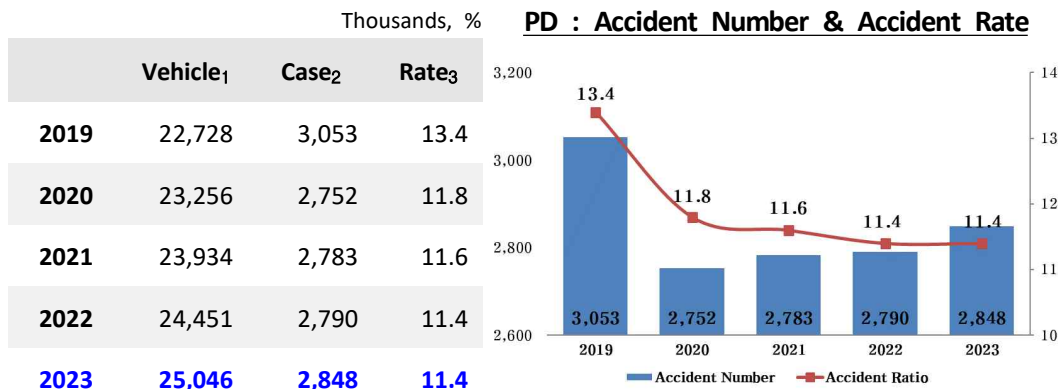


Note: ₁Number of insured vehicles per year, ₂Number of accidents, ₃Accident rate

Source: KIDI, Annual Automobile Insurance Statistics

The accident rate for Property Damage remained the same at 11.4%. The number of accidents was 2,848 thousand cases, an increase of 2.1% compared with the previous year.

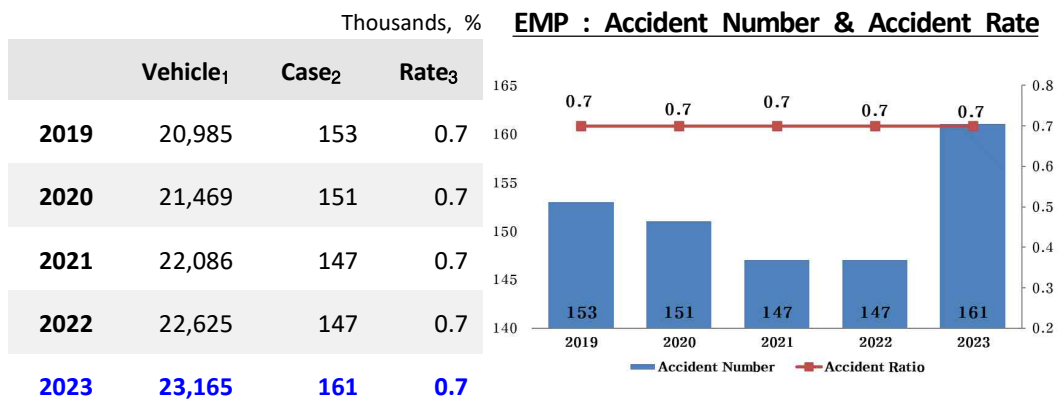
Property Damage Accident Rate



Note: ₁Number of insured vehicles per year, ₂Number of accidents, ₃Accident rate
Source: KIDI, Annual Automobile Insurance Statistics

The number of accidents in the Expanded Medical Payments (EMP) was 161 thousand cases, an increase of 9.5% compared to the previous year. The accident rate remained the same at 0.7% for the last five years.

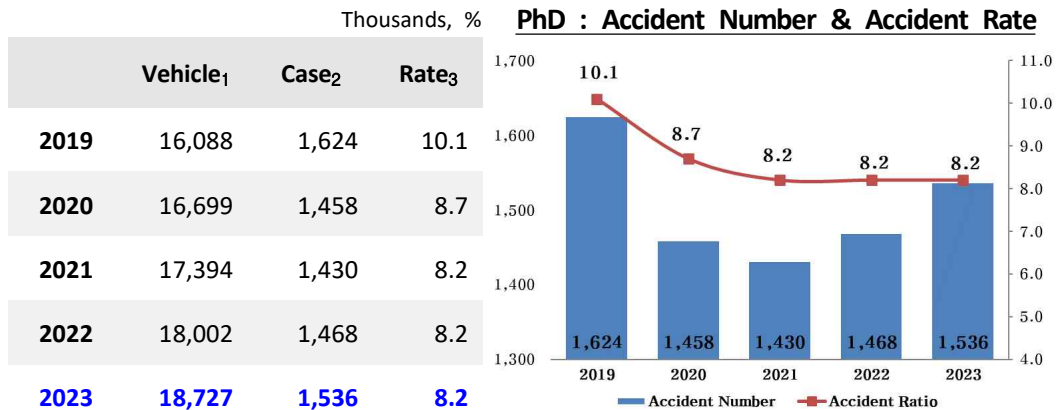
Expanded Medical Payments Accident Rate



Note: ₁Number of insured vehicles per year, ₂Number of accidents, ₃Accident rate
Source: KIDI, Annual Automobile Insurance Statistics

The number of accidents had decreased from 2019 to 2021, but started to increase in 2022, reaching 1,536 in 2023. The accident rate has remained the same at 8.2% for the last three years.

Physical Damage Accident Rate

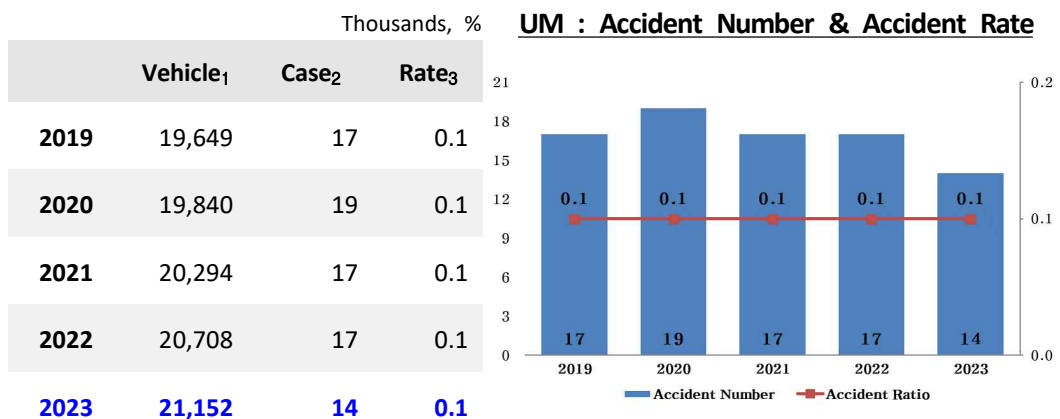


Note: ₁Number of insured vehicles per year, ₂Number of accidents, ₃Accident rate

Source: KIDI, Annual Automobile Insurance Statistics

The accident number of uninsured motorists recorded 14 thousand cases in 2023, which was the lowest in the last five years, whereas the accident rate of uninsured motorists has remained the same at 0.1% for the last five years.

Uninsured Motorist Accident Rate



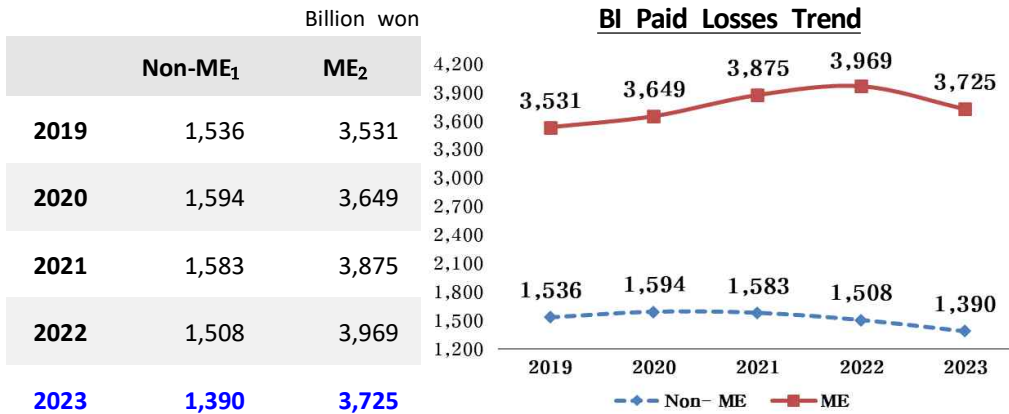
Note: ₁Number of insured vehicles per year, ₂Number of accidents, ₃Accident rate

Source: KIDI, Annual Automobile Insurance Statistics

5. Losses

5-1. Bodily Injury Losses

Medical expenses for bodily injury loss accounted for 72.8% of the total paid losses. Meanwhile, non-medical expenses, such as Solatium and Lost Earnings, accounted for 27.2%. The details of the paid losses for death, injury, and disability are as follows.



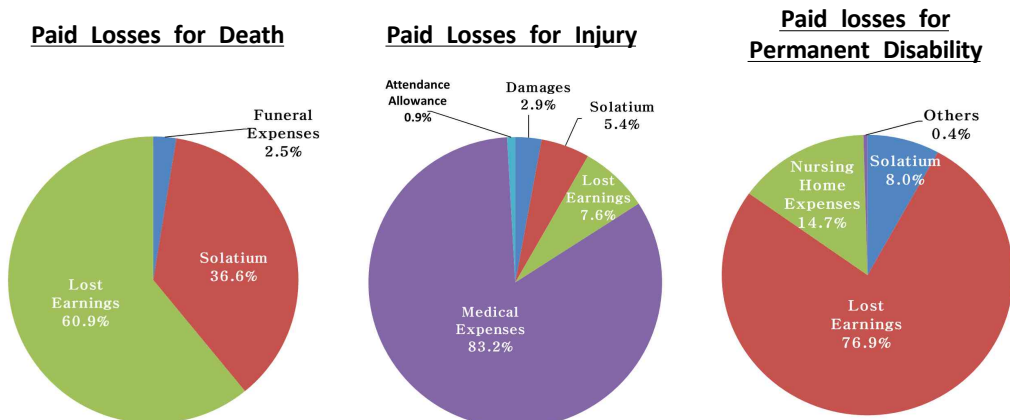
Note: 1. ₁Non-Medical Expenses, ₂Medical Expenses

2. Non-Medical expenses include Solatium, Lost Earnings and etc.

3. Paid Losses are estimated on the base of the payment of closed claims(Accident Year based)

Source: KIDI, Annual Automobile Insurance Statistics

Paid Losses by Type of Payment



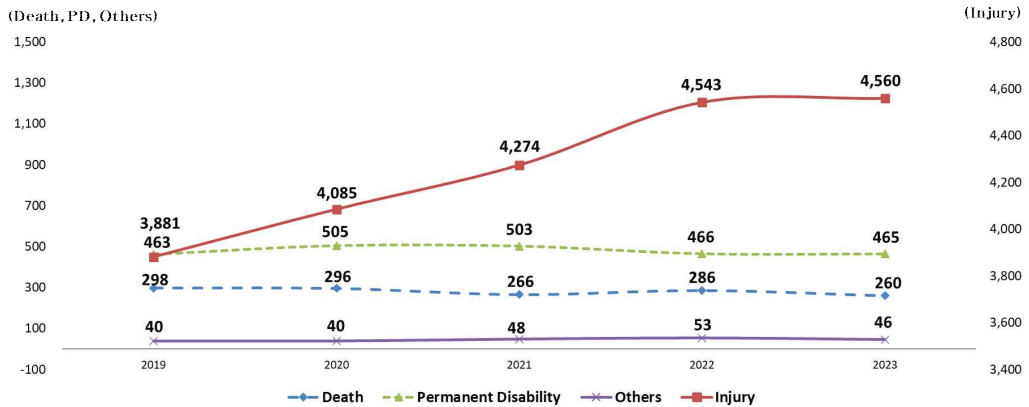
In the context of Bodily Injury paid losses, injury accounted for 87.3% of the total paid losses, a 0.7 percentage points increase compared with the previous year. However, the share of death and others decreased as a result of an increase in the share of Injury. The share of Permanent Disability remained the same at 8.9%.

Bodily Injury Paid Losses Trend

	Billion won, %								
	Death	Share	Injury	Share	Permanent Disability	Share	Others	Share	Total
2019	298	6.4	3,881	82.9	463	9.9	40	0.9	4,682
2020	296	6.0	4,085	82.9	505	10.3	40	0.8	4,926
2021	266	5.3	4,274	85.3	503	10.0	48	1.0	5,009
2022	286	5.5	4,543	86.6	466	8.9	53	1.0	5,243
2023	260	5.0	4,560	87.3	465	8.9	46	0.9	5,225

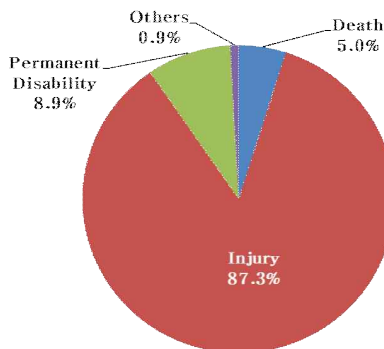
Note: Paid Losses are based on the payment of closed claims

Bodily Injury Paid Losses Trend



Source: KIDI, Annual Automobile Insurance Statistics

Bodily Injury Paid Losses



- In 2023, the total paid losses of Bodily Injury, Permanent Disability, and Death were 87.3%, 8.9%, and 5.0%, respectively.

5-2. Property Damage Losses

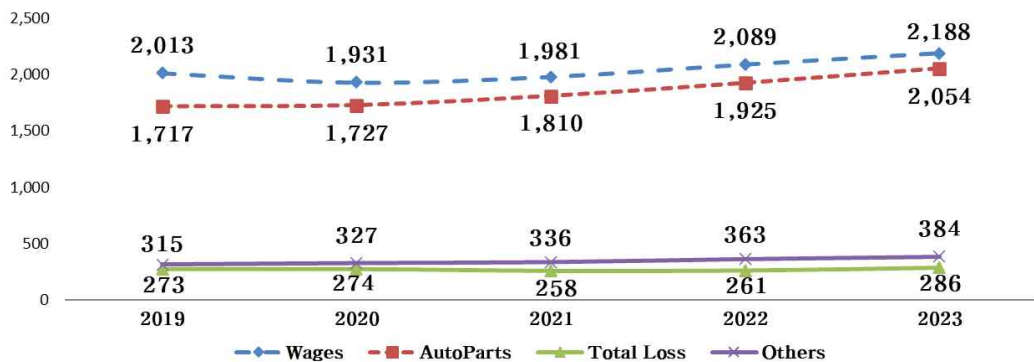
In 2023, property damage paid losses were 4,912 billion won, an increase of 5.9% compared with the previous year. The share of wages was 44.5% and the share of auto parts was 41.8% of the total losses.

Property Damage Paid Losses Trend

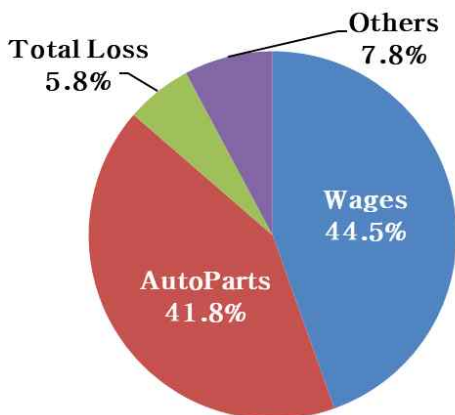
	Billion won, %								
	Wages	Share	Auto Parts	Share	Total Loss	Share	Others	Share	Total
2019	2,013	46.6	1,717	39.8	273	6.3	315	7.3	4,316
2020	1,931	45.3	1,727	40.6	274	6.4	327	7.7	4,259
2021	1,981	45.2	1,810	41.3	258	5.9	336	7.7	4,386
2022	2,089	45.0	1,925	41.5	261	5.6	363	7.8	4,638
2023	2,188	44.5	2,054	41.8	286	5.8	384	7.8	4,912

Note: Paid Losses are based on the payment of closed claims

Source: KIDI, Annual Automobile Insurance Statistics



Property Damage Paid Losses



- In 2023, wages (44.5% of losses in Property Damage) and auto parts (41.8% of losses in Property Damage) accounted for 86.4% of the total amount.

5-3. Physical Damage Losses

In 2023, Physical Damage Paid Losses amounted to 3,596 billion won, an increase of 4.8 percent compared with the previous year. The share of total losses decreased in 2023.

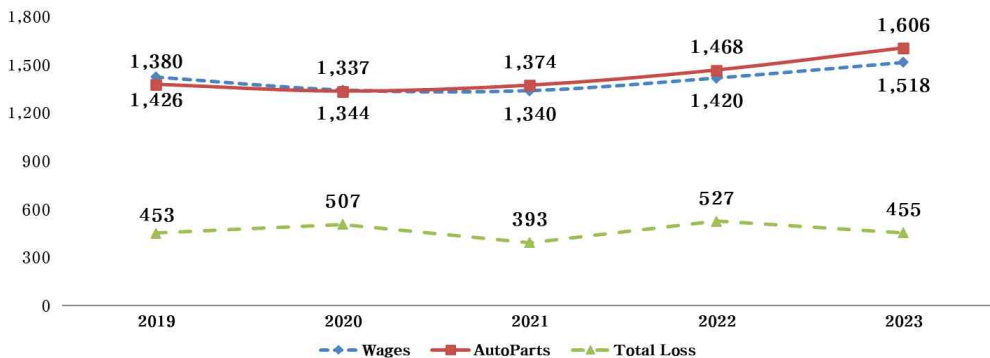
Physical Damage Paid Losses Trend

	Wages	Share	Auto Parts	Share	Total Loss	Share	Others	Share	Total
	Billion won, %								
2019	1,426	43.5	1,380	42.1	453	13.8	15	0.5	3,274
2020	1,344	42.0	1,337	41.7	507	15.8	15	0.5	3,203
2021	1,340	42.9	1,374	44.0	393	12.6	14	0.5	3,120
2022	1,420	41.4	1,468	42.8	527	15.4	14	0.4	3,430
2023	1,518	42.2	1,606	44.7	455	12.7	16	0.4	3,596

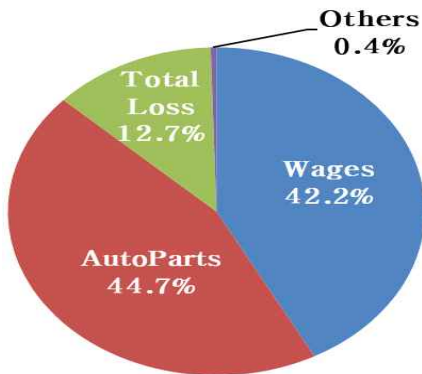
Note: Paid Losses are based on the payment of closed claims

Source: KIDI, Annual Automobile Insurance Statistics

Physical Damage Paid Losses Trend



Physical Damage Paid Losses



- In 2023, wages (42.2%) and auto parts (44.7%) in Physical Damage accounted for 86.9% of the total paid loss.

6. Expenses and Expense Ratio

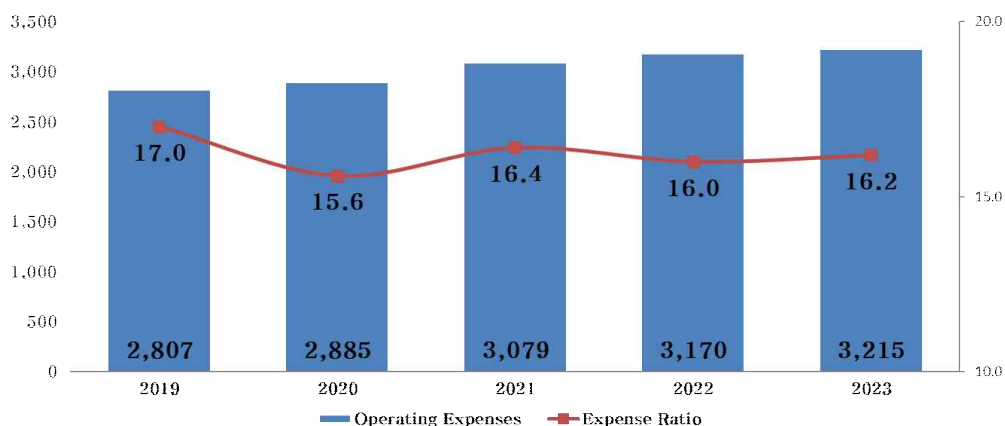
In 2023, operating Expenses were recorded at 3,215 billion won, and the expense ratio was 16.2%, a 0.2 percentage points increase compared with the previous year.

Trends in Expenses and Expense Ratio

	2019	2020	2021	2022	2023
Operating Expenses	2,807	2,885	3,079	3,170	3,215
Expense Ratio	17.0	15.6	16.4	16.0	16.2

Note: Claim survey fee is excluded from Operating Expenses in accordance with IFRS basis
Source: FSS, Monthly Financial Statistics

Expenses and Expense Ratio in Automobile Insurance



7. Underwriting Results

In 2023, the underwriting results for automobile insurance were 591 billion won and started to increase by 2020. The difference between the underwriting results for 2022 and 2023 was 158 billion won.

Trends in Underwriting Results

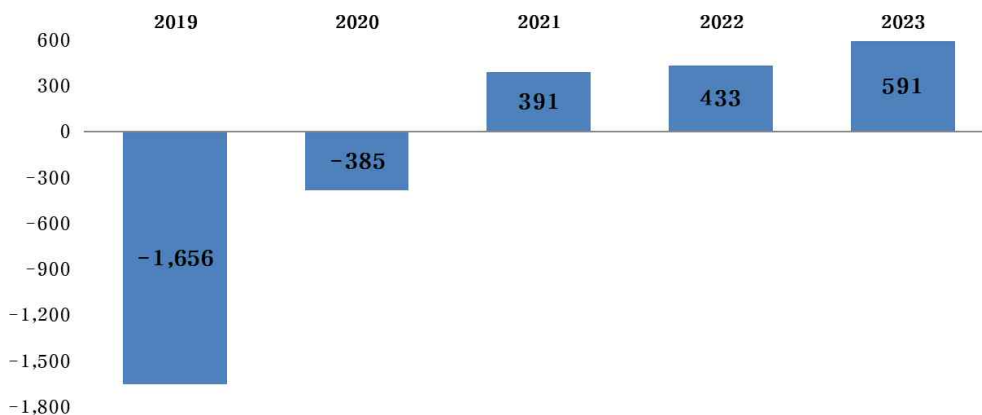
	Billion won, %	
	Underwriting Results	Annual Change
2019	-1,656	-124.1
2020	-385	76.7
2021	391	201.6
2022	433	10.7
2023	591	36.4

- Underwriting results had usually been positive for the past three years.
- In 2023, as shown in the table on the left, the result improved compared to the previous year and recorded 158 billion won.

Note: Annual % change refers to the growth rate compared to the previous year

Source: FSS, Monthly Financial Statistics

Trends in Underwriting Results of Automobile Insurance



8. Residual Market

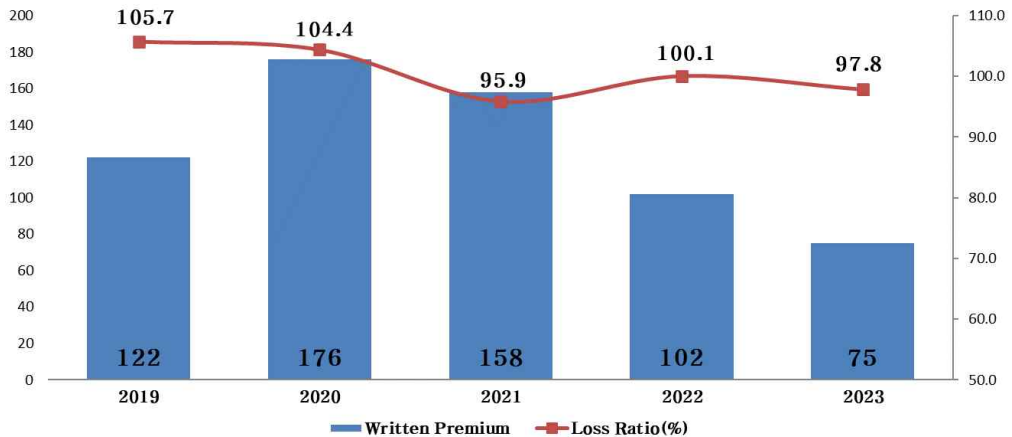
The residual market continues to provide coverage to those who cannot purchase insurance in the regular market. Written premiums for the residual market increased in 2020. However, it began to shrinking in 2021. In 2023, the written premium was 75 billion won, a decrease of 27 billion won compared with 2022. The loss ratio was 97.8% in 2023, a 2.3 percentage points decrease compared with the previous year.

Residual Market : Written premiums, Earned premiums, Incurred Losses, Loss ratio

	Billion won				
	Written premiums	Earned premiums	Incurred losses	Loss ratio (%)	
2019	122	117	124	105.7	
2020	176	152	159	104.4	
2021	158	170	163	95.9	
2022	102	130	131	100.1	
2023	75	85	83	97.8	

Source: KIDI, Monthly Automobile Insurance Statistics

Trends in Written premiums, L/R of Residual Market



9. Acts Related with Automobile Insurance

9-1. Guarantee of Automobile Accident Compensation Act

- o The Guarantee of the Automobile Accident Compensation Act was first enacted in April 1963(Act No. 1314) and was last amended in December 2016(Act No. 14450) to protect victims of motor vehicle accidents by compensating for losses resulting from the death or injury of any person and the destruction or damage of any property caused by motor vehicle accidents.

- o The law provides that if any person who operates a motor vehicle for personal use injures, kills another person, or damages any property of a third party through such an operation, he/she shall be liable to compensate for the damages therefrom. To ensure this, the law provides that any motor vehicle owner shall purchase a liability insurance policy that covers an amount that shall be paid to a third party who has died, been injured, or whose property is destroyed or damaged due to the operation of the motor vehicle.

- o Business of Guaranteeing Motor Vehicle Accident Compensation allows the Government to conduct investigations ex officio and compensate for damage sustained by the victim to the extent and amount covered by liability insurance if the victim had died or been injured by an accident that the owner of the motor vehicle is unidentified or a person other than a policyholder is liable to compensate for damage except for any accident that occurred during the operation of any motor vehicle in any places other than on a road.

- o On February 22, 2005, Insuring Coverage for Property Damage became compulsory and the liability limit of Bodily Injury was raised.

Bodily Injury Liability Coverage	Death/Permanent Disability (1st Degree)	80 mil. won → 100 mil. won
	Injury (1st Degree)	15 mil. won → 20 mil. won
Property Damage Liability Coverage	Liability for paying an amount up to 10 million won to a third party whose property is destroyed or damaged	

* There are standards for grading Injury and Permanent Disability. The standards include 14 levels of injury and permanent disability categories for each one.

- o On April 1, 2016, the limit of liability for Bodily Injury and Minimum liability for Property Damages was raised.

Bodily Injury Liability Coverage	Death/Permanent Disability (1st Degree)	100 mil. won → 150 mil. won
	Injury (1st Degree)	20 mil. won → 30 mil. won
Property Damage Liability Coverage	Minimum Liability	10 mil. won → 20 mil. won

- o On July 28, 2022, the exceptions to indemnification were changed to compulsory insurance.

		drug, drunk drivers	unlicensed, hit and run drivers
before 2022.7.28.	Bodily Injury	10 mil. won (per 1 case)	3 mil. won (per 1 case)
	Property Damage	5 mil. won (per 1 case)	1 mil. won (per 1 case)
since 2022.7.28.	Bodily Injury	150 mil. won (per 1 victim)	
	Property Damage	20 mil. won (per 1 case)	

9-2. Act on Special Cases concerning the Settlement of Traffic Accidents

- o The act on Special Cases concerning the Settlement of Traffic Accidents was first enacted in December 1981 (Act No. 3490) and last amended in December 2016 (Act No. 14277) to facilitate the prompt recovery of damage caused by traffic accidents and to promote the convenience of people's everyday lives by providing special cases on criminal punishment of drivers of vehicles involved in traffic accidents caused by occupational or gross negligence.
- o According to the Act, a victim cannot file a lawsuit with the court in accordance with Article 4 of the Act; as long as a person has insured oneself for all amounts, the victim can be fully compensated. In other words, the person must insure oneself for Bodily Injury Liability Coverage I and Bodily Injury Liability Coverage II which can indemnify the victim for an unlimited amount of liability. The exceptions are as follows: death of the victim, hit-and-run accident, and ten cases of severe violation of traffic law; traffic light violation, crossing the center line, speed limit violation, violation of overtaking prohibition, violation of traveling in intersection, violation of pedestrian protection, unlicensed driving, drinking and driving, encroaching upon the sidewalk, and starting a vehicle with the door open (violation of passenger protection)
- o On December 22, 2009, the Act was amended. There was an addition to exceptions for indemnification; namely, "School Zone Accident". A driver who causes injury to a child in the zone of Child Protection (School-zone) can not be indemnified for his behavior.
- o On December 3, 2017, the Act was amended again. There was an addition to exceptions for indemnification; namely, "Violation of loading freight". A driver who fails to prevent freight from falling off while driving cannot be indemnified for his behavior.

9-3. Insurance Business Act

- o The purpose of this Act is to guide and supervise the insurance business, efficiently protect the rights and interests of the policyholder, the insured and other interested persons concerned, thus contributing to the sound development of the insurance business and balanced growth of the national economy.
- o Insurance Business Act was enacted and promulgated on January 15, 1962.
- o Paid-in capital was raised (Life Insurance: 0.2 billion won → 10 billion won, Non-life Insurance: 0.3 billion won → 30 billion won) and Insurance Guarantee Fund was established on December 31, 1988.
- o The qualification of shareholders was limited to actively cope with the trend in globalization and to strengthen competitiveness in the financial industry and paid-in capital increased to 30 billion won from 10 billion won on August 28, 1997.
- o In the past, the Advisory Organization (KIDI) calculated premiums by adding expenses on top of pure premiums. After the Act was amended on February 5, 1999, the Advisory Organization (KIDI) provided only pure premiums, and insurers added their own expenses to pure premiums to set their own loadings.
- o On January 21, 2000, the Act provided that an insurance company, intending to perform part of the insurance business among the types of insurance business, could select a different paid-in or foundation fund within the limit of not less than 10 billion won.
- o On May 29, 2003, the Act provided that the paid-in capital of tele-marketing insurance companies was set at two-thirds of that of other general insurance companies.
- o On September 1, 2008, solicitors were permitted to cross-sell insurance under a new sales scheme. This allowed non-life insurers to sell life insurance products and life insurers to sell property and casualty insurance schemes.

9-4. Automobile Insurance Plan (AIP)

- o Comprehensive automobile insurance is voluntary. Therefore, insurers can select whether to underwrite a policy based on their underwriting policies and procedures (insurance companies normally evade those who have excessively high loss ratios).
- o Consequently, automobile insurance companies denied auto insurance coverage to people they considered high-risk drivers. Those at high-risk will eventually increase the total premiums that will be divided equally, even among bona-fide third party.
- o Accordingly, non-life insurance companies concluded an agreement, 「Agreement of Joint Underwriting」, to provide automobile insurance coverage to those who were unable to obtain coverage in the voluntary market and protect the victim. This plan became effective on April 24, 1987.
- o As the number of people unable to obtain coverage in the voluntary market rapidly increased, Detailed Operational Directives for the Implementation of Agreement of Joint Underwriting were formulated on February 10, 1995. Since May 1, 1995, the distribution was automatically conducted by KIDI's computer network.
- o In view of the application of premiums, KIDI has made premiums for the residual market, in which an extra percentage is added compared to other premiums in the voluntary market, considering the risk of accidents and the features of joint underwriting.

10. Ratemaking System

10-1. Ratemaking

- o The Applied premium of automobile insurance is calculated using the base premium and various rates that depend on the characteristics of the automobile and the insured. The base premium is determined by usage, type of automobile, coverage and the limit of liability for each of the coverage. In addition, many types of rates are considered to calculate the insurance price, merit-demerit rate, insured characteristic rate, rate on a particular contract, special rate, and so on. The applied premium is calculated as follows.

$$\boxed{\text{Applied premium}} = \boxed{\text{Base premium}} \times \boxed{\text{Insured characteristic rate}} \times \boxed{\text{Merit-Demerit rate}} \times \boxed{\text{Special rate}} \times \boxed{\text{Other rates}}$$

- o Merit-demerit rate is applied to fleet and non-fleet risks, respectively. This rate is determined by the accident records and loss records of the insured. The rate begins in Class 11 and ranges from Class 1 (surcharge) to Class 29 (discount).
- o The insured characteristic rates reflect the previous auto insurance records and traffic violation records. The rate of previous auto insurance experience was highest for beginners. The rate of traffic violations is determined from the insured's traffic violation records during the valuation period. The surcharge rates applied to each traffic violation type were as follows.

Group	Traffic Violation Type	Rate	
Surcharge Group	1	1. Unlicensed Driving	20%
		2. Leaving the Scene of Accident	20%
	2	3-1. Driving under the influence (1 times)	10%
		3-2. Driving under the influence (more than 2 times)	20%
		4-1. Traffic light violation, Failing to Yield Right of Way, Speeding over posted limit, Violation of the duty to comply with pedestrian protection (2 - 3 times)	5%
		4-2. Traffic light violation, Failing to Yield Right of Way, Speeding over posted limit, Violation of the duty to comply with pedestrian protection (more than 4 times)	10%

- o The rate on a particular contract reflects coverage characteristics such as who is qualified to drive or who will drive. When the policy excludes drivers under the age of twenty-one or twenty-six, a lower premium is applied. Furthermore, when drivers are limited to named insured and relatives, the premium will be discounted. Especially, special clauses for families or married couples are usually selected.
- o Special rate applies to special risks that have different automobile safety devices or different characteristics based on the use or type of car. For example, there are rates for cars equipped with ABS, sports, sports-type cars, and so on.

10-2. Improvement in Ratemaking System

- o The improved Bonus-malus system has been applied since January 2007. The period in which the merit-demerit rate reaches its highest (200%) and lowest (40%) is liberalized to each company according to the risk of the insured. Safeguards, such as the 'Guard grade system on long non-accident' are established to prevent policyholders' confusion. It is expected to enhance the degree of equity among insureds and solve the problem of non-acceptance of high discounted group.
 - * In 2011, classes in the Bonus-malus system were subdivided into 23 classes, and the number of classes increased to 29 from 2012 to 2017. The rate for the 29th class will be 30%. If the policyholder made an insurance contract under the 23rd class condition in 2011, a person is subject to 38%, and the under the 24th class condition in 2012, it was subject to 36%.
- o In April 2007, classification based on the car model was adopted for physical damage to private automobiles. In 2007, private automobiles were grouped into 11 levels, based on their relative loss ratios. The vehicle model grade was expanded to 21 grades from 2010 to 2013 and 26 grades from 2014 to the present. Each company can freely determine its rate. However, the size of all written premiums must remain unchanged. This improves the degree of equity and helps manufacturers reduce the price of auto parts.

- o The policyholder can purchase a lease rider charging insurance fees according to mileage from December 2011. Policyholders could obtain a maximum discount rate of 13%.
- o There is no classification based on territorial areas. However, there have been significant differences in loss ratios by territorial area, and the KIDI has collected much data to apply them to premium rating.

10-3. Deregulation on Insurance Rate Approval System

- o Before April 1, 2000
 - Prior approval system
 - Insurance companies can use rates provided by KIDI
- o Since April 1, 2000
 - File & use system
 - Insurance companies can calculate additional premiums determined according to their own business results. But they shall use the pure premiums provided by KIDI
- o Since August 1, 2001
 - File & use system
 - Every insurer can make their own premiums. The pure premiums provided by KIDI is only reference rates for insurance companies.
- o Since September 2003
 - Use & report system
 - Insurance companies can freely use the changed rates. After using the rates, they must report information concerning rate revisions to the authorities on a quarterly basis. However, in some limited cases, such as a highly fluctuating rate change or a newly introduced rating factor, the file & use system should be used for the new rates.

< The Annual Plan of Insurance Rate Liberalization >

(Unit : %)

Year	Bonus-Malus Rate				Driving Experience Rate		Base Premium		
	Non-Fleet		Fleet		Liability	Comprehensive	Liability	Comprehensive	
	Liability	Comprehensive	Liability	Comprehensive					
'94.4		10		20					Flex Rate (±1%)
'96.8		Abolished		20		10		3~10	
'97.8				20		10		3~10	
'98.8				20		Abolished		6~20	
'00.4				Abolished				Abolishing Flex Rate	Abolishing Flex Rate
								Liberalization of Loading Charge	Liberalization of Loading Charge
'01.1								Liberalization of Pure Premium of Multi-personnel Vehicle	
'01.4								Commercial Auto Policy	
								Liberalization of Pure premium	Liberalization of Pure premium
'01.8								Personal & Business Auto policy	
								Liberalization of Pure premium	Liberalization of Pure premium

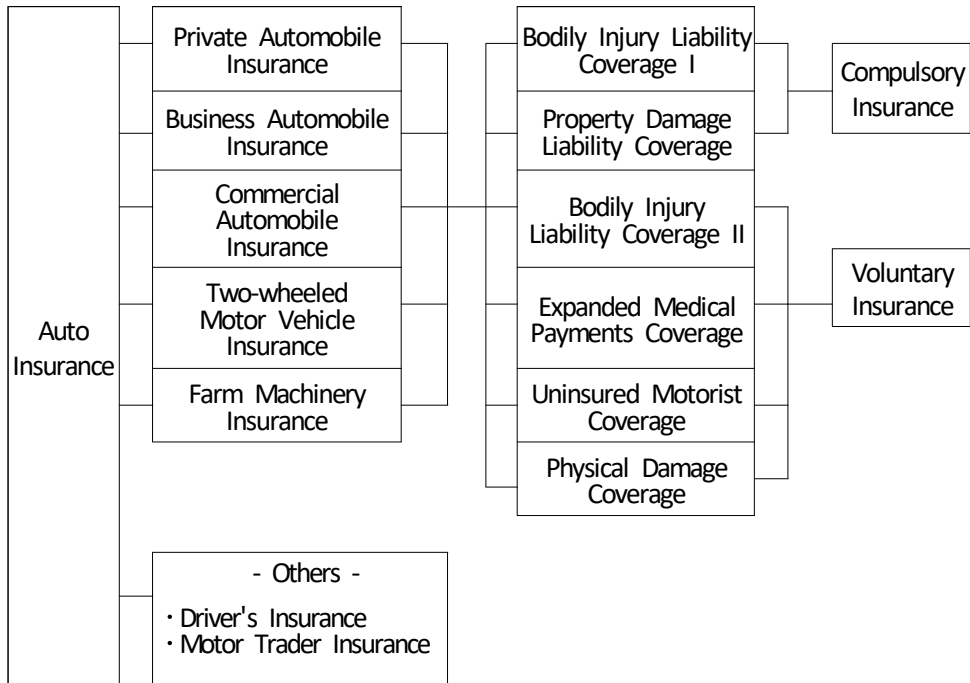
【APPENDICES】

- **Appendix I. Korea's Automobile Insurance**
- **Appendix II. Glossaries**
- **Appendix III. Special Clauses**
- **Appendix IV. KIDI's Brief History**
- **Appendix V. KIDI Organizational Chart**

APPENDICES

Appendix I. Korea's Automobile Insurance

Automobile Insurance Products



Motor Vehicle to be Insured by Insurance Product

o Private Automobile Insurance	All private passenger vehicles owned by an individual or a self-employed person
o Business Automobile Insurance	All passenger vehicles, official vehicles, and construction machinery except for private automobiles
o Commercial Automobile Insurance	All commercial vehicles, construction machines, and rental vehicles
o Two-wheeled Motor Vehicle Insurance	All two-wheeled motor vehicles and motorbikes
o Farm Machinery Insurance	Cultivators, farm tractors, and combines

Appendix II. Glossaries

Private Automobile Insurance

Privately-owned motor vehicles with a seating capacity of ten or less persons can be insured. A policyholder can select one or more of six types of coverage (Bodily Injury Liability Coverage I, Bodily Injury Liability Coverage II, Property Damage Liability Coverage, Expanded Medical Payments Coverage, Uninsured Motorist Coverage, and Physical Damage Coverage) and insure oneself or the person's property. Bodily Injury Liability Coverage I and Property Damage Liability Coverage are compulsory for all automobiles.

Private Automobile Insurance Plus

Private Automobile Insurance Plus is a high-quality product that expands the scope of indemnification for bodily injury of the insured and damage of the insured vehicle.

Business Automobile Insurance

All non-commercial motor vehicles except for privately-owned motor vehicle with a seating capacity of ten or less persons can be insured. A policyholder can select one or more of the six types of coverage (Bodily Injury Liability Coverage I, Bodily Injury Liability Coverage II, Property Damage Liability Coverage, Expanded Medical Payments Coverage, Uninsured Motorist Coverage, and Physical Damage Coverage) and insure oneself or the person's property. Bodily Injury Liability Coverage I and Property Damage Liability Coverage are compulsory for all automobiles.

Business Automobile Insurance Plus

There are four types of motor vehicles that can be insured; privately owned motor vehicle of the third class van, light-weight van, privately-owned motor vehicle of the fourth class truck, and light-weight truck. This high-quality product expands the scope of indemnification for bodily injury of the insured and damage of the insured vehicle.

Commercial Automobile Insurance

All the commercial vehicles can be insured. A policyholder can select one or more of the following five types of coverage (Bodily Injury Liability Coverage I, Bodily Injury Liability Coverage II, Property Damage Liability Coverage, Expanded Medical Payments, and Physical Damage Coverage). Bodily Injury Liability Coverage I, Bodily Injury Liability Coverage II, and Property Damage Liability Coverage are compulsory.

Two-wheeled Motor Vehicle Insurance

Two-wheeled motor vehicles and motor bikes can be insured. A policyholder can select one or more of the six types of coverage (Bodily Injury Liability Coverage I, Bodily Injury Liability Coverage II, Property Damage Liability Coverage, Expanded Medical Payments Coverage, Uninsured Motorist Coverage, and Physical Damage Coverage) and insure oneself or the person's property. Bodily Injury Liability Coverage I and Property Damage Liability Coverage are compulsory.

Farm Machinery Insurance

Farm machinery such as cultivators, farm tractors, and combines can be insured. Policyholders can select one or more of the four types of coverage (Bodily Injury Liability Coverage, Property Damage Liability Coverage, Expanded Medical Payments Coverage, and Farm Machinery Damage Coverage) and insure oneself or the person's property.

Driver's Insurance

A person who drives a vehicle, irrespective of vehicle ownership, can be insured. The insured receives indemnification for the damage caused by a car accident.

Motor Trader Insurance

A motor trader, who is a person or persons actively operating a formal business on a full or part-time basis for profit, either selling (used) vehicles or providing a service related to the repair or maintenance of motor vehicles, can insure the person's property. This insurance compensates for damage caused by motor traders during the vehicle use and management.

Bodily Injury Liability Coverage I

This coverage insures the insured for all the amounts that they may have to pay as a result of the person being legally liable for an individual's death or injury, or damage to an individual's property resulting from a car accident. Coverage is compulsory for those who want to insure themselves.

Bodily Injury Liability Coverage II

The coverage insures the insured for all the amounts that exceed the limit of liability of compulsory automobile liability insurance.

Property Damage Liability Coverage

The coverage indemnifies the insured against property damage caused by a third party resulting from a car accident.

Expanded Medical Payments Coverage

The coverage insures the insured or the person's family member(s) for the insured's or the person's family member's death or bodily injury.

Physical Damage Coverage

The coverage insures the insured vehicle for all damages resulted from physical damage, car theft, fire, or floods.

Uninsured Motorist Coverage

The coverage is insured if the insured already has Bodily Injury I, Bodily Injury II, Property Damage, and Personal Accident Coverage. Coverage insures the insured for death or bodily injury caused by an uninsured vehicle.

Appendix III. Special Clauses

Special Clauses for Family Driving only

An insurer shall indemnify if the insured limited the drivers of the automobile specified in the policy to the insured and one's family members only. However, this will not apply to the Bodily Injury Liability I Coverage.

The term 「family members」 refers to ① parents or foster parents, ② parents or foster parents of the spouse of the named insured, living together, ③ legal spouse or spouse in a real marital relationship, ④ child born in a legal or real marital relationship, foster child, or ⑤ daughter-in-law.

Special Clauses for Married-couple Driving only

An insurer shall indemnify if the insured limited the drivers of the automobile specified in the policy to the insured and one's spouse only. However, this will not apply to the Bodily Injury Liability I Coverage.

The 「term spouse」 refers to legal spouse, or spouse in a real marital relationship.

Special Clauses for Driving by age of drivers

For example, in case that the insured limits the drivers of the automobile specified in the policy to those of age 21 or older only, the insurer shall indemnify as prescribed in the clauses. However, this will not apply to the Bodily Injury Liability I Coverage.

Special Clauses for Driving Other Automobile

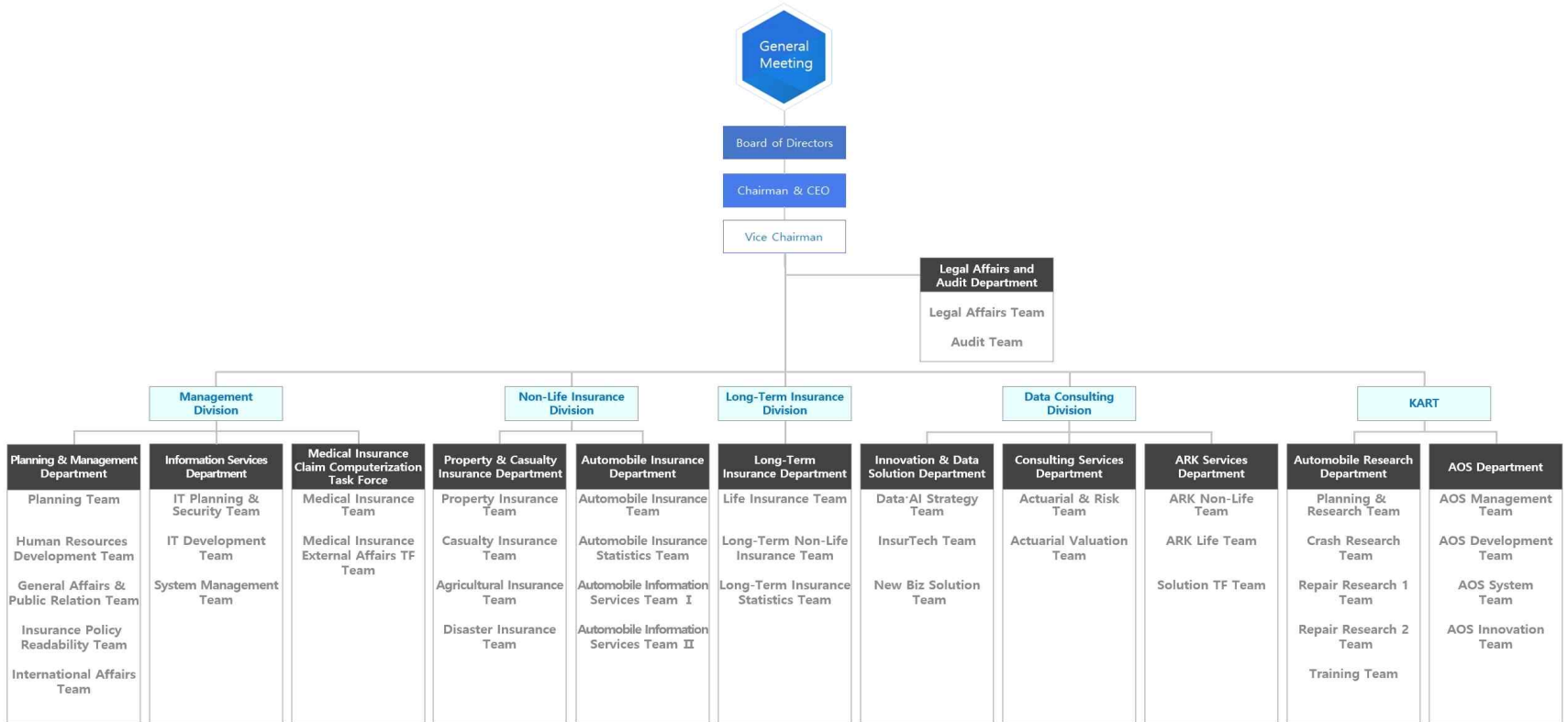
In case that the insured suffers a loss incurred by the legal liability against another party arising out of the bodily injury accident or property damage accident occurred, or that the insured suffered bodily injury while the insured was driving another automobile (except for the accident occurred while parking or stopping the automobile), the insured shall consider the other automobile driven by the insured as the insured automobile covered by Bodily Injury Liability II Coverage, Property Damage Liability Coverage or Expanded Medical Payment Coverage of General Clauses, and indemnify as prescribed in the clauses.

Appendix IV. KIDI's Brief History

1983. 12. 16. Established Korea Non-life Insurance Rating Association
1988. 12. 31. Insurance Business Law amended to include a provision regarding the legal background for the establishment of an insurance rate-making organization
1989. 11. 18. Officially authorized to establish Korea Insurance Development Institute (KIDI)
1989. 11. 27. Established Korea Insurance Development Institute (Korea Non-life Insurance Rating Association dissolved)
1992. 03. 11. Established Korea Automobile Insurance Repair Research & Training Center as a subsidiary of Korea Insurance Development Institute
1992. 05. 06. Designated a business partner responsible for managing Insurance Information Network
1995. 09. 01. Insurance Research Center established
1999. 10. 03. Held jointly EEAC (East Asia Actuarial Committee)
2000. 02. 01. Opened KIDI Digital Management System
2000. 03. 10. Designated as an organization to provide the insurance statistics (published Annual Insurance Statistics, Insurance Statistics Yearbook)
2000. 05. Designated 「Insurance Development Research」 as an academic journal
2000. 06. Designated as the organization operating insurance examinations for actuary and claim adjuster
2000. 08. 01. Opened KIDIPOOL (Knowledge Management System)
2003. 12. 01. 20th Anniversary of Korea Insurance Development Institute
2005. 10. 04. Opened KIDI Consortium Retirement Payment System (DB type)
2005. 12. 01. Opened KIDI Consortium Retirement Payment System (DC & IRA type)

2007. 12. 07. Korea Insurance Research Institute (KIRI) established (Insurance Research Center is developed and specialized)
2010. 11. 25. Korea Insurance Research Institute (KIRI) was founded as a new corporation
2011. 04. Established ICPS (Insurance Claims Pooling System) Claims Map system
2012. 02. Opened AIPIS (Auto Insurance Premium Integrated check System)
2013. 09. Opened Dormant Insurance Claims Inquiry System
2014. 02. 27. MOU with CAPA (Certified Automotive Parts Association)
2015. 03. 24. Opened Automobile Accident Investigation System
2017. 04. 06. Opened INCOS (INSurance statistics CONsumer Service)
2018. 05. 10. Opened MY CAR(<https://mycar.kidi.or.kr>)
2018. 08. Established KIDI-ESG (Economic Scenario Generator) Pro Solution
2019. 06. Established Korean Catastrophe Model
2019. 10. Established IFRS17 Settlement System ARK (Agile, Reliable, Keen)
2020. 05. Opened AOS^α (Automobile repair cost On-line Service)
2020. 07. Expanded the scope of MY CAR(<https://mycar.kidi.or.kr>)
2021. 01. Opened Auto Insurance Premium Inquiry System for customers
2023. 12. MOU with Indonesia Financial Services Authorities (Otoritas Jasa Keuangan, OJK)

Appendix V. KIDI Organizational Chart



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