

## **THE INSURANCE MARKET IN ROMANIA – MOTOR THRID PARTY LIABILITY INSURANCE: COMMUNICATION ON DEVELOPMENTS, RISKS, CHALLENGES AND PERSPECTIVES**

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### **Abstract**

The risks faced by the Romanian insurance market are significant and come from both the difficult global context and the internal dynamics. Paradoxically, however, the underdevelopment of the market, especially in the life insurance sector, and the dependence on the mandatory insurance type RCA, reduce the exposure of Romanian insurance companies to some risks, such as a fall in income or an increase in interest rates. In this context, the paper aims to make an estimate of the risks and challenges in the RCA insurance market for the coming years starting from a series of official data for these mandatory policies from 2019-2023. We find that compulsory car insurance stands out as a bright spot, comprising over 45% of total premiums. A small number of companies dominate the market, with the top 10 controlling roughly 60%. In the compulsory car insurance sector, there's a mix of growth and decline: voluntary premiums are rising, but the number of contracts is falling. Despite fewer claims, the average cost per claim has increased compared to the previous year. Overall, the results suggest that the dependence on mandatory insurance like RCA paradoxically shields Romanian insurance companies from certain risks.

### **Keywords**

Insurance, Motor Third Party Liability, Romania, Bonus-Malus System

**JEL Classification** G22, G52

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### **Introduction**

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Understanding how the insurance market works is essential for crafting fresh regulations and guiding supervisory actions. As demonstrated by the 2007–2008 global financial crisis which originated within the financial sector and inflicted significant harm on the real economy, insurance market sector raises concerns over the potential systemic risks that may occur. It underscores the importance for regulatory authorities in emerging insurance markets to implement measures for monitoring systemic risk within their respective insurance sectors. In the aftermath of crisis, insurance companies have become more regulated on a global scale. As an extension of this overarching effort, subsequent to the identification of globally systemically important banks, the Financial Stability Board (FSB) and the International Association of Insurance Supervisors (IAIS) initiated a collaborative endeavor to recognize and oversee globally systemically important insurers. In Romania, Financial Supervisory Authority (FSA) is the main regulatory body in charge of supervising and regulating insurance companies. As Romania is an emerging market, the insurance sector is under development but it still holds a large part of the current account balance. The industry continues to grow rapidly, closing the year 2021 with a total of RON 9.8 billion in gross written premiums, a 15% increase compared to the previous year. This paper analyzes the structure and the evolution of the Romanian insurance market. The objectives of this paper are two-folded. First, we study the general evolution of the Romanian insurance market. We find that although Romanian insurance market faces challenges due to high inflation and economic uncertainty, compulsory car insurance remains a bright spot, as it is less affected by these factors and represents a significant portion of the market (over 45% of total premiums). In terms of market share, only a small number of players control a large share of the Romanian insurance market, with the top 10 companies holding roughly 60%. Second, we dive into the Romanian compulsory car insurance (RCA) and we find that the market has not a stable path: there is a mix of growth and decline. Voluntary car insurance premiums are growing, while the number of RCA contracts (excluding branches) is decreasing. Additionally, we note that the average cost per RCA claim has increased compared to the previous year, despite a decrease in the total number of claims. An RCA insurance is mandatory and it serves two main purposes: financial protection of the person responsible for the accident (in the absence of insurance, the person injured in the accident may claim material compensation for bodily and moral injuries of significant values, which may be difficult to cover by the guilty person) and financial protection of the person injured by an accident, in order to benefit from the compensation of material and/or moral damage suffered, independent of the financial situation of the person who caused the damage, and to release the guilty person of the risk of paying the damage caused. RCA insurance are highly relevant as of 2020, there were 8,680,244 road vehicles registered in Romania, one of the highest numbers in the European Union. Out of the total number, nearly 7.3 million were cars.

### **1. Review of the scientific literature**

The literature on insurance markets usually takes two main perspectives: a macro level perspective discussing systemic risk and a micro level perspective on how consumers perceive the different types of insurance. The first perspective empirically measures if insurance markets could be a source of systemic risk. Different scholars have proposed

definitions of systemic risk. Kaufman's work (1999, 2000) emphasizes three real economy effects: breakdown in an entire system, contagion, and externality caused by shocks to one firm. In this sense, Grace (2010) studied how insurance companies expanded into various financial services, including credit derivatives through its Financial Products subsidiary during the global financial crisis. These credit derivative products created interconnectedness among institutions, leading to significant counterparty exposure. The study emphasizes the fact that Insurers are less interconnected and have different product risks compared to banks. Baluch et al. (2011) focus on the effect of the crisis on insurers' underwriting activities and the liabilities they assume. Their study investigates the European insurance market and concludes that systemic risk, while traditionally lower in insurance compared to banking, has seen a rise. This increase is attributed to the expansion of noncore activities within the insurance sector. Kaserer and Klein (2017) provide that some insurers are as systemically risky as the riskiest banks and that insurers' systemic risk varies by line of business. Their study offers an extended framework for analyzing systemic risk for insurance markets. Cummins and Weiss (2014) examine systemic risk in the US exploring the role of macroeconomic fundamentals, insolvency, and interconnectedness in insurance. They find that non-core activities like financial guarantees may cause systemic risk.

The second perspective is more micro-based focusing on how consumers choose and perceive insurance. Seog (2008) explores the concept of informational cascades in the insurance market. The study delves into how public information can disrupt or create cascades in insurance purchases. It discusses how public information affects consumer expectations, demand for insurance, and the insurance cycle, emphasizing the interplay between public information and decision-making processes. The study connects loss shocks to changes in consumer expectations and subsequent demand shifts in the insurance market. It suggests that even small changes in risk perception due to loss shocks can lead to significant fluctuations in demand, contributing to the insurance cycle dynamics. Joeveer and Kepp (2023) focus on consumer switching behavior in the auto insurance market using the expected utility approach. They use a logistic model to study how consumers show inertia in updating choices over time. Bongini et. al. 2013 study behavioral biases and trust and how these factors affect demand for insurance. They proved that financial literacy influences how consumers of insurance behave.

Another approach comes from Dionne, G (1999), an expert in economics and finance, who highlights a number of key topics related to car insurance, including the specific risks associated with young drivers and insurance fraud. These two phenomena, fraud and the impact of young driver behavior, contribute to the high cost of auto insurance policies, prompting insurers to adjust prices and develop risk mitigation strategies such as telematics or traffic education campaigns. Telematics, the technology that monitors driver behavior, can help personalize insurance policies and reduce risks and improve road safety, according to Verbelen, R, & al (2018). Also, climate change has already generated major changes in the insurance market, as shown by several studies (Berry-Stölzle, T & al., 2024) and damages caused by floods, storms or other natural calamities already influence car insurance rates.

## 2. Research methodology

This is an exploratory study based on descriptive and basic statistics about the insurance market in Romania. Data source for the information on the Romanian RCA market: Financial Supervisory Authority (FSA) of Romania. In the first step of the analysis, using a machine learning tool, we automatically extract data from the FSA reports. The tool scanned the reports, identifying structures like tables, charts, and text paragraphs. It recognized and classified relevant financial entities like „premiums,” „contracts,” „claims,” and company names. It extracted the relevant data points. For instance. It found the values in the „Coefficient” column for each „Bonus-Malus Class” and store them in a structured format. In the second step of the analysis, we performed basic descriptive statistics to gain a deeper understanding of the market dynamics.

## 3. Results and discussion

### General Insurance Market Dynamics and Market shares

According to the February 2024 edition of the EIOPA Risk Board, based on data from quarter III 2023, market risks for the European insurance sector are high, while the other risk categories remain at an average level, according to the latest Financial Markets Stability Report conducted by ASF. Despite the persistence of macroeconomic risks in the insurance sector, with projections pointing to a moderate outlook for GDP growth, there is a downward trend, driven mainly by the reduction in forecasted inflation in all geographical areas considered. Credit risks remain at an average level, with spreads for the most relevant categories of fixed-income securities falling slightly at the end of 2023. Market risks are significant as bond volatility remains high and commercial real estate prices have continued to fall. In addition, liquidity and financing risks are at a medium level, with a growth trend driven by the evolution of disaster bond issues. Compulsory motor insurance (RCA) dominates the Romanian market and is less affected by the erosion of purchasing power. Romania is the European leader in terms of inflation, and tax increases from the beginning of this year will continue to influence price growth. In this context, insurers face higher costs for compensation and a decrease in the purchasing power of the population, thus reducing the interest in the purchase of insurance, which is not a priority. However, the reliance on RCA, which accounts for more than 45% of all Gross Written Premium (PBSs), works paradoxically as a form of market protection.

**Table no 1. Evolution of the number of contracts on all types of insurance in Romania**

Class of Insurance AG	30.09.2019	30.09.2020	30.09.2021	30.09.2022	30.09.2023*
A1	1,067,306	931,096	834,642	761,041	740,757
A2	381,869	342,668	326,453	172,882	187,464
A3	1,021,509	1,021,668	1,096,146	969,184	1,346,186
A4	260	281	301	290	305
A5	113	128	172	179	229
A6	1,216	1,102	1,188	1,091	1,084

A7	5,604	5,409	5,053	4,960	4,555
A8	3,765,723	4,236,778	4,760,599	3,939,996	3,900,099
A9	172,539	180,759	192,204	225,456	224,976
A10	6,208,105	6,557,176	7,007,238	6,907,099	6,288,157
A11	194	194	194	351	372
A12	248	248	292	319	461
A13	827,538	901,215	986,872	1,051,829	1,015,036
A14	96	69	60	49	45
A15	72,546	93,099	80,918	59,414	61,872
A16	15,938	32,399	32,339	51,182	83,527
A17	3,915	23,302	38,704	44,612	486,308
A18	413,014	393,067	310,490	291,061	232,521
TOTAL AG	13,955,723	14,704,499	15,674,992	14,481,016	14,573,954

Source: FSA, Romania, 2023<sup>†</sup>

Auto Civil Liability Insurance (RCA) is an agreement between the owner of a vehicle, either a natural or legal person, and an authorized insurance company. Under this contract, the insurance company issuing the RCA policy covers compensation for third parties affected in an accident caused by the insured vehicle, including material damage, death or personal injury, including, as well as the moral damage resulting from that accident. In the event of a road accident, the damage caused to other people can be significant and covering it can be difficult, especially in the unfortunate situation where the accident results in victims. Accidents occur unexpectedly, so we can be taken by surprise financially unprepared, which can add extra pressure to the emotional or other stress associated with the event.

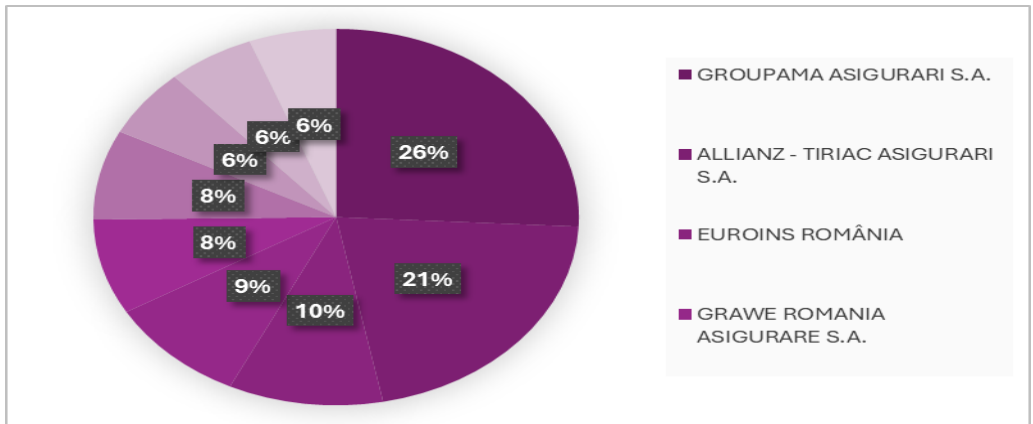
The RCA price in Romania is influenced by a number of factors, including the driver's age, damage history, vehicle age and place of purchase. First, driver's age is one of the most important factors influencing the RCA price. According to the annual statistics provided by the competent authorities, young drivers tend to be involved in a greater number of accidents than older drivers. For this reason, insurance companies implement different rates, which decrease with the passage of time and with the accumulation of driving experience. Second, driver's damage history is another crucial aspect in determining the RCA price. The bonus-malus system is used to reward responsible drivers and penalize those who have had incidents in the past. Thus, those with a clean

<sup>†</sup> There are several classes of insurance A1. Accidents, A2. Health, A3. Land vehicles, excluding rolling stock, A4. Rolling stock, A5. Aircraft, A6. Ships, also for lake, river, A7. Goods in transit, A8. Fire and natural disasters (for goods other than those insurable in classes A3-A7), A9. Hail, frost and other risks than those stipulated in class A8 (for goods other than those insurable in classes A3-A7), A10. Civil liability for the use of terrestrial motor vehicles, A11. Civil liability for the use of aircraft, A12. Civil liability for the use of maritime, lacustrine and river vessels, A13. General civil liability, excluding that referred to in Classes A10 - A12, A14. Credits, A15. Guaranties, A16. Financial losses, A17. Legal protection., A18. Assistance for people in difficulty during travel

history can benefit from substantial discounts at the first conclusion or at the renewal of the insurance, while those with a loaded history will pay higher rates. Third, the technical condition and age of the car are important factors in calculating the RCA price. It is essential to maintain the vehicle in good condition, both technically and aesthetically, in order to benefit from lower insurance rates. Forth, the place of purchase has become increasingly important. Online RCA purchase becomes more and more popular in Romania, due to the advantages offered, including lower prices. Compared to traditional intermediaries, the costs associated with online purchasing are lower because they do not include wages, rents and other costs associated with a physical space. Understanding these factors is crucial to predicting market developments in the coming years.

The degree of concentration is also high on the voluntary motor insurance market, the first 3 insurance companies totaling a market share of about 74% in terms of gross written premiums. Overall, the Romanian insurance market is dominated by a small number of major players, with the top 10 companies controlling roughly 60% of the total market share, as it can be observed in Figure 1. The Romanian insurance market exhibits a high concentration, with a few leading companies holding a substantial portion of the market. Groupama Asigurari SA and Allianz-Tiriac Asigurari SA are the two undisputed market leaders. The market shows positive growth trends, experiencing an annual increase of roughly 10%.

**Figure no. 1. Market share of insurance companies for RCA**



Source: FSA, Romania, 2023

**The Bonus Malus System and micro-level evolutions for compulsory car insurance**

There are 17 bonus malus classes: initial class B0, eight bonus classes (B1-B8) and eight malus classes (M1-M8). The Bonus-Malus Factor (BM) is determined by reference to the applicable framework established in Regulation A.S.F. no. 20/2017 on motor insurance in Romania, according to the risk exposure distribution grouped by B-M classes detailed in Annex 5 table of Regulation No. 20/2017. The BM factor was

calculated as the weighted average of the exposures in each Bonus Malus class in the total risk exposure, for policies subscribed in the previous 12 months, separately for individuals, legal persons and at the level of the following categories of vehicles: a) Vehicles intended for the carriage of passengers, SUVs and mixed vehicles with a maximum authorized mass of less than 3,5 tones and a maximum of 9 seats; b) Vehicles for the carriage of goods; c). The Rest of vehicles; In the tables below, we present the risk exposure related to the policies subscribed in the last 12 months prior to the reference date 31 December 2022, divided by classes of Bonus Malus as well as the BM factor used in the calculation of gross reference premiums RCA: a) Vehicles intended for the carriage of passengers, SUVs and mixed vehicles with a maximum authorized mass of less than 3,5 tones and a maximum of 9 seats:

**Table no. 2. Bonus-Malus Factor**

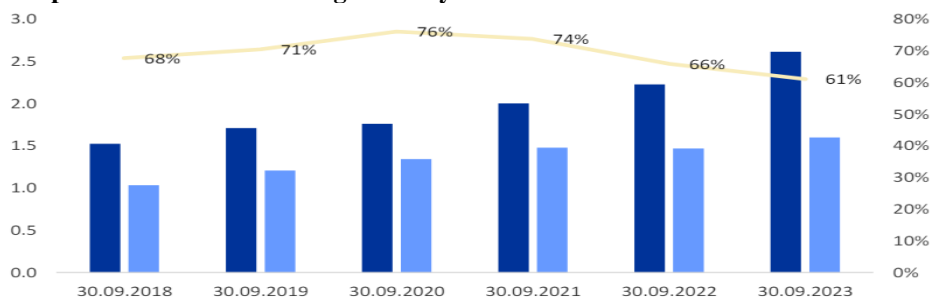
Class Bonus-Malus	Coefficient Applied on Premium	Exposures PF	Exposures PJ	Total Exposure
B8	50%	1,364,565	78,209	1,442,774
B7	60%	113,095	8,303	121,398
B6	70%	159,827	17,166	176,993
B5	75%	216,241	29,064	245,305
B4	80%	194,886	38,818	233,704
B3	85%	153,616	53,466	207,081
B2	90%	166,650	55,691	222,340
B1	95%	160,286	70,867	231,153
B0	100%	137,962	87,808	225,770
M1	110%	13,947	4,606	18,553
M2	120%	6,015	2,636	8,651
M3	130%	2,172	994	3,165
M4	140%	1,171	430	1,601
M5	150%	475	250	726
M6	165%	262	114	376
M7	170%	135	80	214
M8	180%	154	59	213
Total		2,691,457	448,561	3,140,018

Source: FSA, Romania, 2023

The value of gross written premiums for motor insurance (class A3 - Ground transportation insurance, land insurance, other than rail and compulsory motor liability insurance – RCA) was about 9 billion lei in the first nine months of 2023, of which 30% of the volume was subscribed for optional auto insurance, and 70% are underwritings related to compulsory motor insurance. The value of gross written premiums for class A3 and RCA also includes the underwriting activity carried out by the branches operating on the territory of Romania on the basis of the right of establishment (about 97 million lei for class A3, 857 million PBS for RCA). The value of gross premiums

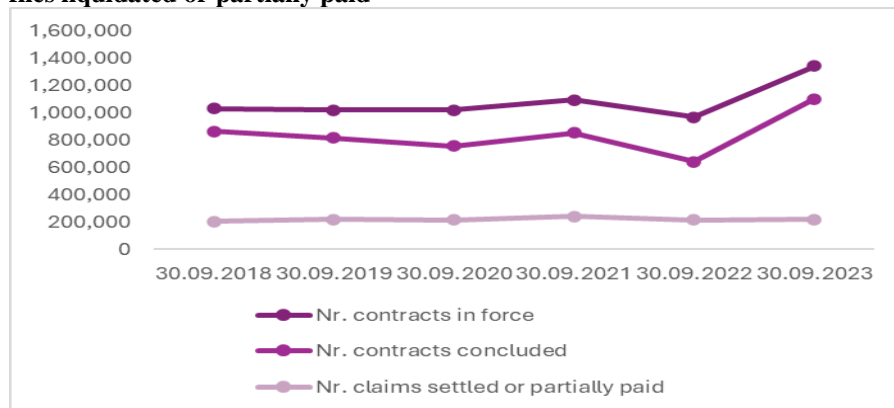
subscribed by companies authorized and regulated by ASF stood at about 2.62 billion lei for the segment of voluntary motor insurance (Class A3), increasing by 17% compared to the first nine months of 2022 (2.23 billion lei). At the same time, the gross compensation paid registered a value of 1.6 billion lei in the analyzed period, an advance of 9% compared to the level of the similar period of the previous year. As a share of gross written premiums, gross compensation paid was 61%.

**Figure no. 2. Evolution of gross written premiums and gross compensation paid by companies authorized and regulated by ASF for Class A3**



Source: FSA, Romania, 2023

**Figure no. 3. Evolution of the number of contracts and of the number of claims files liquidated or partially paid**



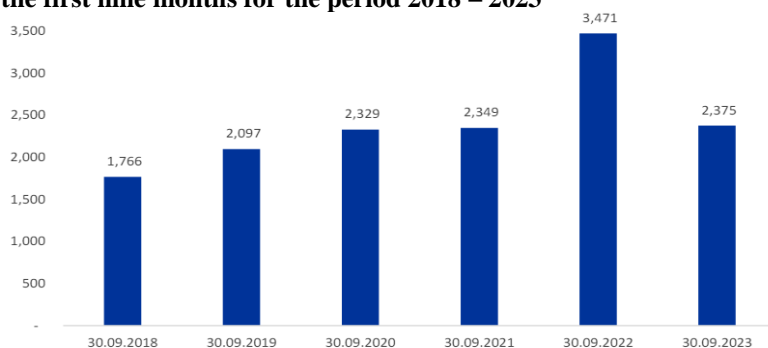
Source: FSA, Romania, 2023

The average premium for voluntary motor insurance, calculated as the value of gross premiums subscribed by companies authorized and regulated by ASF reported to the number of contracts concluded during the reference period, it stood at 2,375 lei in the first nine months of 2023, a level well below the one registered in the same period of the previous year (3,471 lei). The average premium for voluntary insurance differs from that recorded in the segment of compulsory motor liability insurance, given the risks covered, as well as the differences between the insured amounts, and, the different



compensation limits between the two products. There are also significant differences in the volumes registered for the two categories of insurance. If the number of contracts concluded for voluntary insurance was about 1.1 million, the number of contracts concluded for RCA by companies authorized and regulated by ASF was significantly higher, over 5 million, that is about 4.5 million expressed in annual exposure units (annualised) between January and September 2023 (not including the number of contracts concluded by branches).

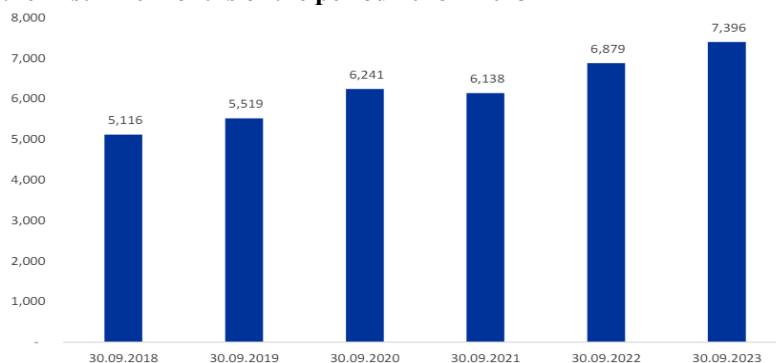
**Figure no. 4. Evolution of the average premium for voluntary motor insurance in the first nine months for the period 2018 – 2023**



Source: FSA, Romania, 2023

As regards the average damage for class A3, an indicator calculated as the ratio between gross compensation paid and the number of claims files liquidated or paid in part during the reporting period, it stood at 7,396 lei in the first nine months of 2023, up 7.5% compared to the same period of the previous year.

**Figure no. 5. Evolution of the average damage for voluntary motor insurance in the first nine months of the period 2018 – 2023**

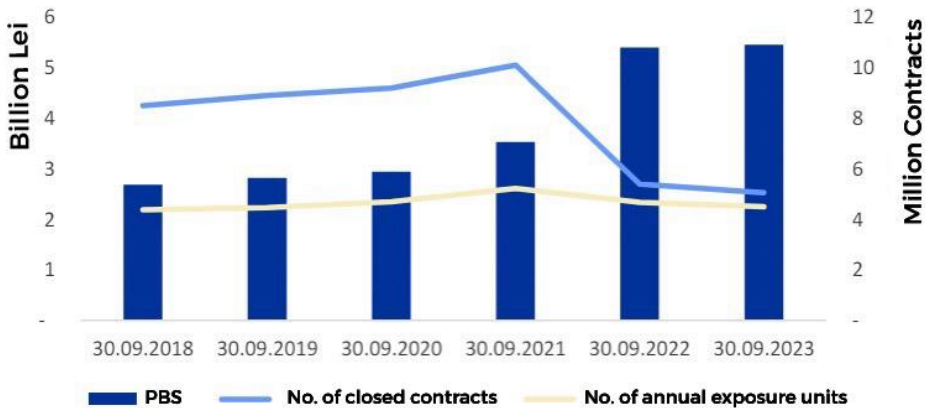


Source: FSA, Romania, 2023

Regarding the market of compulsory civil liability insurance – RCA, on September 30, 2023, seven insurers were authorized by ASF to carry out RCA insurance activities: Allianz-Tiriac Insurance SA, Romanian Insurance - Asirom Vienna Insurance Group SA, Eazy Asigurari SA, Generali Romania Insurance Reinsurance SA, Grawe Romania Insurance SA, Groupama Insurance SA and Omniaisig Vienna Insurance Group SA.

The total value of insurance premiums subscribed for RCA insurances by companies authorized and regulated by the ASF amounted to approximately 5.4 billion lei during the period January to September 2023. The remainder of the total for class A10 represents the carrier's insurance for goods transported and the RCA insurance underwritten in other EU member states based on the right to freely provide services. Compared to the similar period of the previous year, the value of gross premiums subscribed by companies authorized and regulated by ASF increased by about 1%. If we also include the activity carried out by branches, the volume of gross written premiums in the first nine months of the 2023 stood at 6.3 billion lei, increasing by about 10% compared to the volume of subscriptions related to the first nine months of 2022 (5.7 billion lei, including branches). Expressed in annual units (to take account of the different duration of policies, which may be concluded for a period of 1 to 12 months), the number of RCA contracts concluded by the companies authorized by ASF in January – September 2023 was about 4.5 million, down 4% compared to the first nine months of 2022. However, if we also consider branches, the number of annual units for RCA contracts was about 5.5 million, up 8% compared to the similar period of the previous year (including branches).

**Figure 6. Evolution of gross written premiums for RCA in the first nine months for the period 2018 – 2023**



Source: FSA, Romania, 2023

**Table no. 3. The share of contracts concluded in the first nine months of the period 2018 – 2023 in total contracts depending on the contracted period**

Period	30.09.2018	30.09.2019	30.09.2020	30.09.2021	30.09.2022	30.09.2023
12 months	29.67%	28.65%	29.31%	27.77%	81.41%	85.76%
11 months	0.07%	0.01%	0.01%	2.58%	0.05%	0.02%
10 months	0.02%	0.02%	0.02%	0.03%	0.06%	0.03%
9 months	0.07%	0.08%	0.09%	0.09%	0.09%	0.03%
8 months	0.09%	0.10%	0.07%	0.07%	0.07%	0.03%
7 months	0.12%	0.10%	0.08%	0.13%	0.09%	0.02%
6 months	34.48%	34.35%	35.40%	35.14%	8.19%	4.45%
5 months	0.09%	0.05%	0.05%	0.05%	0.02%	0.01%
4 months	0.25%	0.18%	0.12%	0.13%	0.07%	0.03%
3 months	6.74%	5.67%	4.77%	4.51%	0.65%	0.67%
2 months	3.58%	3.27%	2.73%	2.36%	0.41%	0.44%
1 month	24.80%	27.51%	27.36%	27.13%	8.90%	8.50%
Total	100%	100%	100%	100%	100%	100%

Source: FSA, Romania, 2023

On 30 September 2023, the average annualized RCA was around 1,209 lei, up 5% compared to the same period in 2022, 79% compared to 2021.

**Table no. 4. Evolution of first average RCA**

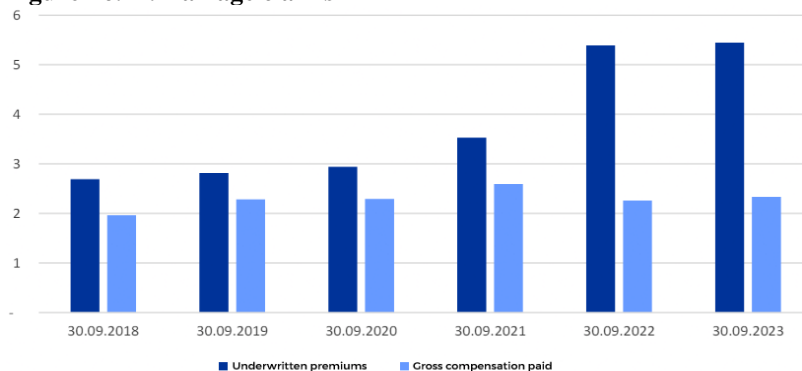
Description	Total	Physical Persons	Legal Entities
Nr. contracts concluded during the period			
Valid for 12 months	5,056,312	3,658,112	1,398,200
Valid for 11 months	4,336,083	3,195,034	1,141,049
Valid for 10 months	1,114	536	578

months			
Valid for 9 months	1,687	759	928
Valid for 8 months	1,746	596	1,150
Valid for 7 months	1,520	697	823
Valid for 6 months	1,199	547	652
Valid for 5 months	224,960	163,003	61,957
Valid for 4 months	742	157	585
Valid for 3 months	1,510	664	846
Valid for 2 months	33,867	16,828	17,039
Valid for 1 month	22,131	13,161	8,970
Gross premiums subscribed RCA (lei), of which:			
Valid for 12 months	5,444,522,398	3,139,821,731	2,304,700,667
Valid for 11 months	5,083,152,782	2,951,964,855	2,131,187,927
Valid for 10 months	1,121,506	443,064	678,442
Valid for 9 months	1,610,019	558,116	1,051,903
Valid for 8 months	1,378,819	269,172	1,109,647
Valid for 7 months	1,272,875	214,755	1,058,120
Valid for 6 months	1,181,923	160,885	1,021,038
Valid for 5 months	157,523,397	93,007,739	64,515,658
Valid for 4 months	852,799	507,478	345,321

Source: FSA, Romania, 2023

The amount of gross compensation paid by insurance companies authorized and regulated by ASF was 2.3 billion lei in the first nine months of 2023 for the damages paid on the RCA segment. The Insured Guarantee Fund approved the amount of about 530 million lei for the payment of the RCA damages in the period January - September 2023, of which 424 million lei are the payments made for the RCA segment as a result of City Insurance bankruptcy. Graph 27 Evolution of gross written premiums and the amount of damage paid for the RCA:

**Figure no. 7. Damage claims**



Source: FSA, Romania, 2023

During January - September 2023, the insurance companies authorized and regulated by ASF made payments worth about 2.3 billion lei for about 217 thousand claims files, resulting in an average damage of about 10,750 lei, up by 12% compared to the same period of the previous year. Gross compensation paid for the RCA increased by 3%, while the number of claims paid decreased by 8% compared to the first nine months of 2022.

**The limitations of this research**, based on statistical data provided by FSA reports, concern the anticipation of the prospects for the evolution of the auto insurance market in Romania, following the legislative changes currently being discussed in the Romanian Parliament. After the completion of this legislative process, we plan to conduct new research that will take into account the new regulations. Additionally, the methodology used does not allow for the anticipation of the price impact of factors such as insurance market fraud, a factor that, according to the specialized literature, can influence the development of pricing for RCA insurance.

### Conclusions

Despite challenges such as high inflation and economic uncertainty, the Romanian insurance market continues to grow rapidly, with gross written premiums reaching RON 9.8 billion (EUR 2 billion) in 2021, representing a 15% increase compared to the previous year. Compulsory car insurance (RCA) remains a significant segment, constituting over 45% of total premiums. This stability is attributed to the mandatory nature of RCA and its role in providing financial protection for both the responsible party and the injured party in accidents. The insurance market in Romania exhibits high concentration, with a few major players dominating a substantial portion of the market. This paper focuses on the Bonus Malus System that played a crucial role in determining RCA premiums, with factors such as driver age, damage history, vehicle condition, and online purchasing influencing pricing. The market for voluntary motor insurance (Class A3) is also significant, with gross written premiums increasing by 17% compared to the

previous year. However, the average premium for voluntary insurance decreased, highlighting differences in risk coverage and compensation limits between voluntary and compulsory insurance products.

However, one of the main challenges for auto insurers is the increase in claim rates, especially in the context of rapid urbanization and growing traffic congestion. This leads to higher costs for insurers, which are often reflected in increased premiums for consumers. Additionally, auto insurance fraud and legislative changes can significantly impact the evolution of prices in this market. However, all these uncertainties can be mitigated by insurance companies through the use of artificial intelligence and big data to analyze drivers behavior and adjust insurance premiums dynamically.

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