

Solvency trends and prudential and Risk Management challenges of the Algerian damage insurance

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Received: 27/11/2024

Accepted: 27/12/2024

Published: 17/03/2025

Abstract:

The purpose of this article is to analyze the solvency indicators of Algerian damage insurance companies, to examine the current regulatory framework of solvency, its foundations, and its limits and to identify the challenges of adopting “new prudential rules based on risks”. According to the conclusions of this study, the solvency indicators very clearly improved during the observation period 2015-2022. Furthermore, the evolution of the Algerian current prudential rules based on Solvency II system based on a “risk-based approach” is necessary to strengthen the insurer’s risk management and the protection of the policyholders’ interests. A multitude of challenges (issues linked to the roadmap definition, macroeconomic context, operational and technical specifications of the Algerian damage insurance market) must be integrated from the beginning of the reflection on the establishment of a new solvency prudential system.

Keywords: damage insurance, risk management, challenges, solvency II, solvency I.

Jel Classification Codes : G22, G28, G32, G33.

1. INTRODUCTION

Insurance business operates in an uncertain environment with risks that prevent insurance companies from achieving their objectives. Therefore, the crucial challenge of any organization wishing to ensure its financial sustainability lies in adopting mechanisms, practices aimed at effectively mitigating the risks' negative effects.

The fundamental specificity of the insurance activity resulting from its reverse productions cycle intensifies the criticality of risks. Thus, insurers' solvency is the key issue of the regulatory authorities, exercising continuous and rigorous supervision of insurers to protect the policyholders' interests by ensuring the prudential solvency rules' strengthening. In this context, the European supervisory authorities have developed European prudential rules by adopting of the Solvency II rules based on a risk-based approach to strengthen the protection of the insured' interests.

The insurance solvency regulatory framework in Algeria is essentially based on the principals of solvency I which has shown its limits both quantitatively and qualitatively. Consequently, the evolution of the current prudential rules is necessary to strengthen the control of insurers and to protect policyholders.

The main objectives of this study are to examine the damage insurance market solvency, analyze the limits of the Algerian current prudential rules of Algerian damage insurers and to identify the main challenges of adopting new prudential rules based on the philosophy and foundations of Solvency II based on risks.

To identify and analyze the prudential system rules, the chosen methodology is descriptive, analytical, and historical adopted in the social and economic sciences using past experiences to analyze events.

To address this article issues, we present the foundation of Solvency II. Then, we analyze the activity of the Algerian damage insurance market including the macroeconomic context, technical activity, and solvency indicators, and we identify the limits of the current prudential system. Finally, we present our analysis of the challenges of the Algerian insurance market's adoption of new prudential rules based on risks.

2. Foundations of solvency II based on risks

2.1. Philosophy and objectives

Solvency II has profoundly modified the prudential rules. The main issues are summarized as follow (EIOPA, 2024):

- * Strengthening profoundly the protection of policyholders' interests.
- * Improving risk assessment by the integration of "all risks" impacting insurance activity in solvency requirements.
- * Strengthening governance requirements encouraging insurers to profoundly improve their risk management policies.
- * Considering the existing correlation mechanisms between assets and liabilities of insurers by requiring equity capital proportionate to the "Assets/Liabilities" risks actually incurred by insurers.

- * Establishing “best practices” in risk measurement by adopting a prospective “risk-based” approach in assessing the solvency prudential requirements.
- * Strengthening the European insurance market by harmonizing control rules and practices.

2.2. Solvency II standards

Solvency standards are made up of three (03) levels (EIOPA, 2024):

The first level constitutes the prudential regulatory basis and sets out the main principles of Solvency II reform.

It is defined by directive 2009/138/EC modified by Omnibus Directive: Directive 2014/51/UE

This Directive has been adapted: a first adaptation in 2019 which took a form of the revision of delegated regulation and concerned the standard formula parameters for assessing capital requirements, a second adaptation is underway and will come into force in 2025 or 2026 and will concern a broad range of issues without impacting the main foundations of the three (03) pillars of Solvency II.

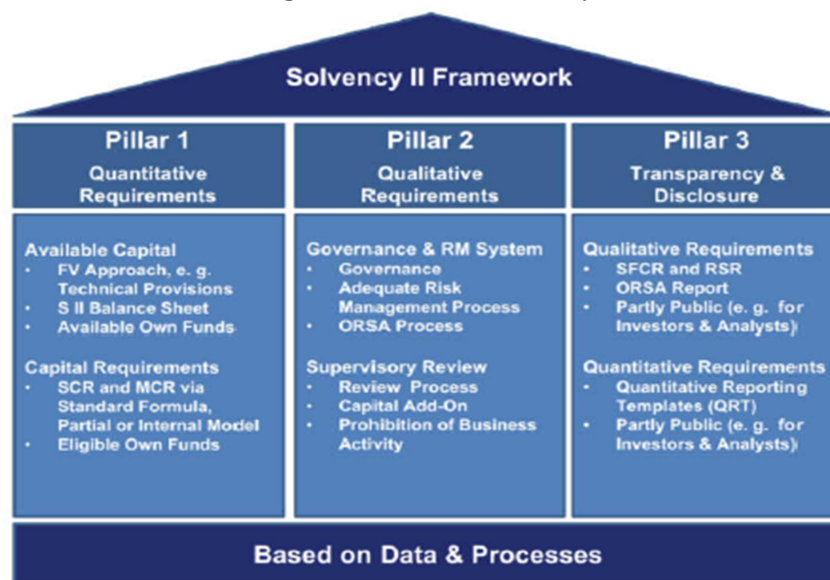
Level (2) complements the principles of level 1 with implantation measures and regulatory technical standards. This level is defined by Delegated Acts (EU) No 2015/35 of October 10,2014.

Level (3) includes the Implementation Technical Standards, recommendations and guidelines of the European Insurance and Occupational Pension (EIOPA).

2.3 Pillars of Solvency II

Solvency requirements applicable to insurers are divided into three (03) pillars:

Fig.1. Structure of Solvency II

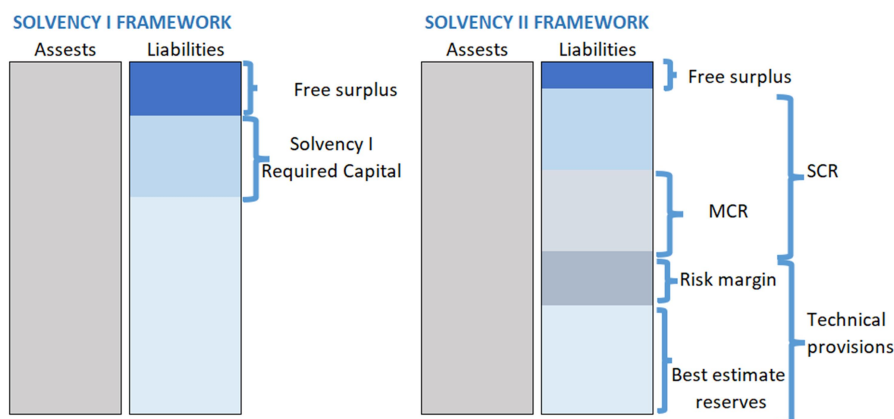


Source : Maria et al., 2018, p 02

2.3.1. Pillar (1): quantitative requirements

This pillar defines the rules for valuating balance sheet items (assets/liabilities), capital requirements, and their calculation methods in “standard formula” or “internal model” (complete/partial model) (EIOPA,2024).

Fig.2. Balance sheet valuation



Source: Presented based on “Solvency II” Directive

2.3.2. Pillar (2): qualitative requirements

This pillar defines Governance & Risk management Rules and establishes the Own Risk and Solvency Assessment (ORSA).

Indeed, insurers’ governance system must provide at least: two effective managers to comply with the principles of four (04) eyes and key functions (risk management, internal audit, compliance and actuarial functions).

Effective managers and those responsible for the key functions must comply with *fit* and *proper* requirements.

Furthermore, the “ORSA” is an internal process intended to illustrate the ability of insurers to identify, assess and manage all the elements impacting their solvency or financial situation.

This process is materialized by the production of reporting composed of three (03) evaluations (EIOPA,2024):

- * Assessment of the insurers’ overall solvency requirements.
- * Assessment of ongoing compliance with solvency regulatory obligations concerning coverage of Technical Provisions, Minimum Capital Requirement and Solvency Capital Required.
- * Assessment of the gap between the insurers’ risk profile and the assumptions for calculating Solvency capital.

2.3.3 Pillar (3): information for “public” and “supervisor”

This third pillar aims to harmonize the information communicated by the European insurers and profoundly sets transparency requirements on the solvency of insurers towards all relevant parties: the supervisor and the public. Indeed, insurers must publish “qualitative” and “quantitative» reports on a regular and periodic basis **(EIOPA,2024)**.

This pillar is closely linked to the work carried out under the previous pillars. It is therefore essential that the reporting requirements are defined into the work plans for Pillars 1&2.

Table 1. Solvency II reporting

Reporting	Solvency and Financial Condition Report, “SFCR”	Regular Supervisory Report, “RSR”	ORSA Supervisory Report	Quantitative reporting templates, “QRTs”
Frequency	* Annual.	* Full RSR every three (03) years unless regulator requires full RSR in intervening years * Annual summary of changes in business, etc., if full RSR not required.	* Regularly (at least annually).	* Quarterly and annual.
Internal approval	* Yes, by administrative or management board.	* Yes, by administrative or management board.	* Yes, by administrative or management board.	* Yes, by administrative or management board.

Source: Presented based on “Solvency II” Directive, EIOPA 2024

3. Foundations of the current Algerian solvency requirements

The Algerian solvency rules are mainly based on Solvency I.

3.1. Conditions for approval of Algerian damage insurance companies

Insurers can carry out their insurance activity after obtaining approval granted by the Ministry of Finance following a favorable decision from the National Insurance Council and published in the official journal of the “Algerian Democratic and People’s Republic”.

To obtain approval, Algerian insurers must respect the following conditions:

- * Constitution of an entity under “Algerian law”, either in the form of a joint stock company or a mutual company. **(Executive Decree “95-07” amended and complemented by “06-04” Law of February 11, 2006, Art.215).**
- * Mutual insurance must have a “non-commercial” purpose. **(Idem, Art.215 Bis).**
- * Insurers must choose the field of their activity, either “underwriting life insurance” or “damage insurance”. **(Idem, Art.203, 204 and 204 Bis).**
- * The object of the activity of insurers must be reserved “exclusively for insurance operations”. All others commercial activities should be excluded. **(Executive order 96-267, art.9)**

- * The main managers of insurance companies must have a “good moral character”, and have established “professional qualification”.
- * The capital must be fully paid up, and in cash upon subscription. The amount of capital must reach two billion dinars for damage insurers, and five billion dinars for reinsurance companies (**Executive order n°09/375, art.04**).
- * Any acquisition of shares reaching (20%) of capital must be approved by the supervisor (**Law n°06-04, 2006, p. 10**).

3.2. Evaluation of the commitments of Algerian damage insurers towards policyholders

Insurers must establish “sufficient and prudent” technical provisions allowing the settlement of all their commitments towards policyholders. Indeed, insurers must record their future commitments and build up sufficient reserves which will be used to fully settle claims.

The regulated commitments consist of regulated provisions and technical provisions.

3.3. Regulated commitments’ representation of damage insurers

As the insurance production cycle is “reversed”, insurers notice a “time lag” between the time they collect insurance premiums and the time they pay claims. As a result, insurers naturally have excess cash to invest. Consequently, the legislator has established rules of security, liquidity, and profitability to secure and govern the insurers’ investments.

In fact, the supervisory authorities have clearly set the different “categories” of authorized assets and “limits” within which insurers can invest and hold these assets.

The Algerian legislator requires all damage insurers to ensure that regulated commitments are subject to equivalent representation on the balance sheet by the following assets: state securities up to at least 50% of regulated commitments, real estate assets and term deposits (**Order of May 14, 2016**).

Regulated commitments registered with the national reinsurer “Compagnie Centrale de Réassurance, CCR” are reduced by 60% of their amounts.

3.4. Solvency margin

Insurers must have, beyond their technical provisions, a sufficient amount of own funds called “solvency margin” above a minimum threshold called “regulatory solvency margin”.

The solvency margin should enable insurers to cope with insufficiencies in “technical provisions” and/or insufficient “returns on financial investments”.

The solvency margin required by the Algerian legislator is made up of share capital or establishment fund, regulated provisions, regulated or non-regulated reserves, profit/loss carried forward.

The regulatory solvency margin of damage insurers must be at least equal to 15% of technical provisions and 20% of insurance premiums issued and/or accepted, net of taxes and cancellations.

If the minimum required is not reached, the insurer will have to establish its balance within a period of 6 months. **(Executive Decree No. 13 - 115, Idem)**

4. Solvency indicators' trends of damage insurers in Algeria

4.1. Overview of the Algerian insurance market

As per the National Insurance Council report 2022, there were 25 licensed insurers:

- 12 Damage insurers (04 public, 06 private, 01 mixed and 01 mutual insurance),
- 08 Life and Health insurance companies (02 public, 02 private, 03 mixed insurers and 01 mutual insurance),
- 02 Takaful insurance companies,
- 01 Reinsurer,
- 02 insurers specialized in credit insurance.

The Algerian insurance industry generates a turnover of 156 billion AD and recorded an increase of 8% in 2022 compared to 2021, corresponding to a growth of 11 billion AD.

The damage insurance represents 90% of the Algerian insurance market. In 2022, the damage insurers generate a turnover of 140 billion AD and recorded an increase of 5% compared to 2021.

4.1.1 Macroeconomic indicators of the Algerian insurance business

The “insurance density” (insurance premium/inhabitant) of the Algerian insurance recorded a significant decrease of 7% in 2020 because of the decline of 5% in the turnover due to the “COVID” pandemic. This indicator raised in 2021 and 2022, going from 3 108 AD per inhabitant in 2020 to 3 422AD per inhabitant in 2022.

The “penetration ratio” of the Algerian insurance activity (global insurance production/country GDP) remains low, being less than 1% during the period of (2014-2022). This indicator can be profoundly enhanced by increasing the number intermediaries, developing best distribution policies, and improving the services and communication quality.

Table 2. Macroeconomic indicators of Algerian insurance activity

	2014	2015	2016	2017	2018	2019	2020	2021	2022
Turnover (million AD)	125 472	129 118	130 653	132 327	135 298	146 259	138 617	146 922	157 977
Turnover evolution	9,00 %	2,91 %	1,19 %	1,28 %	2,25 %	8,10 %	-5,00%	6,00%	8,00%
Population (million)	39,1	39,9	41,3	41,7	42,6	43,9	44,6	45,4	46,2
Population Evolution	2,13 %	2,05 %	3,51 %	0,97 %	2,16 %	3,05 %	2,00%	2,00%	2,00%
Density (Algerian Dinar/Inhabitant)	3 208	3 231	3 164	3 198	3 178	3 332	3 108	3 236	3 422
Density evolution	6,72 %	0,72 %	-2,07 %	1,07 %	-0,63 %	4,85 %	-7,00%	4,00%	6,00%
Density (USD)	39,81	32,18	28,89	28,84	27,25	27,96	23,52	23,31	24,94
Exchange rate (USD/AD)	80,58	100,4	109,5	110,9	116,61	119,16	132,13	138,84	137,22
Gross Domestic Product GDP (billion AD)	17 205	16 702	17 407	18 907	20 259	20 428	18 724	22 079	27 689
GDP Evolution	3,37 %	-2,92 %	4,22 %	8,62 %	7,15 %	0,83 %	-8,00 %	18,00 %	25,00 %

Penetration ratio (Global Insurance turnover/GDP)	0,73 %	0,77 %	0,75 %	0,71 %	0,67 %	0,72 %	0,74 %	0,67 %	0,57 %
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Source: Presented based on the statistical notes, the National Insurance Council, 2014 - 2022

The weakness of these indicators, despite the “enormous” potential that the Algerian economy holds in terms of insurable assets, can be explained by three (03) essential reasons:

- “Weakness” of the national currency compared to strong foreign currencies (dollar or euro). The Algerian dinar recoded a continuous depreciation against dollar during the observation period 2014 – 2022, going from a value (USD/AD) of 80,58 to 137,22, corresponding to a significant depreciation of 41% in 2022 compared to 2014.
- “Voluntary” or “involuntary” underestimation of the values of the insured property in damage insurance. Lack or absence of communication on insurance products offered by insurers.
- “Weakness” of the advisory role that insurers and especially intermediaries, particularly courtiers, should play. The market share of intermediaries does not exceed a third of the overall production (Intermediaries’ share were 32% of production in 2022 and 33% in 2021).

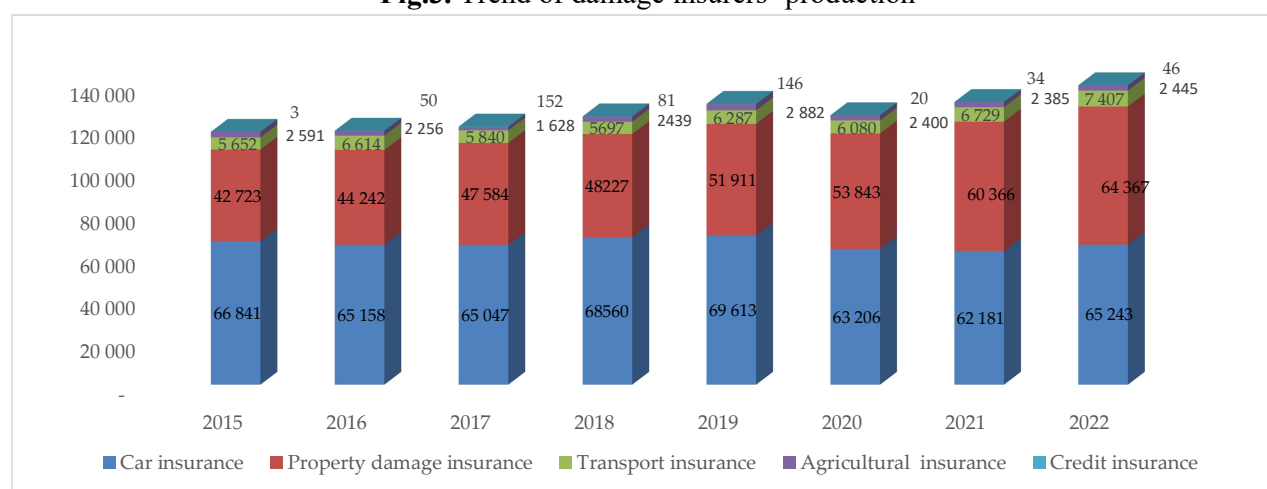
4.1.2. Production trend of the Algerian damage insurance market

We notice an increase of +19,04% in premiums during the period 2015-2022 despite the decrease of -4,04% in 2020 due to “COVID19” crisis.

In 2022, the Algerian damage insurance market recorded a turnover of 140 billion AD compared to 118 billion AD in 2015.

During the observation period 2015-2022, “Car insurance” and “Property damage insurance” branches dominate the damage insurance market and generate an overall share greater than 92%. In 2022, the respective shares of these branches are 47% and 46%, i.e., an overall share of 93%.

Fig.3. Trend of damage insurers’ production



Source: Presented based on the Algerian Insurance activity reports (2015 - 2022), Insurance Directorate, ministry of finance

4.1.3. Claims payment of the Algerian damage insurance market

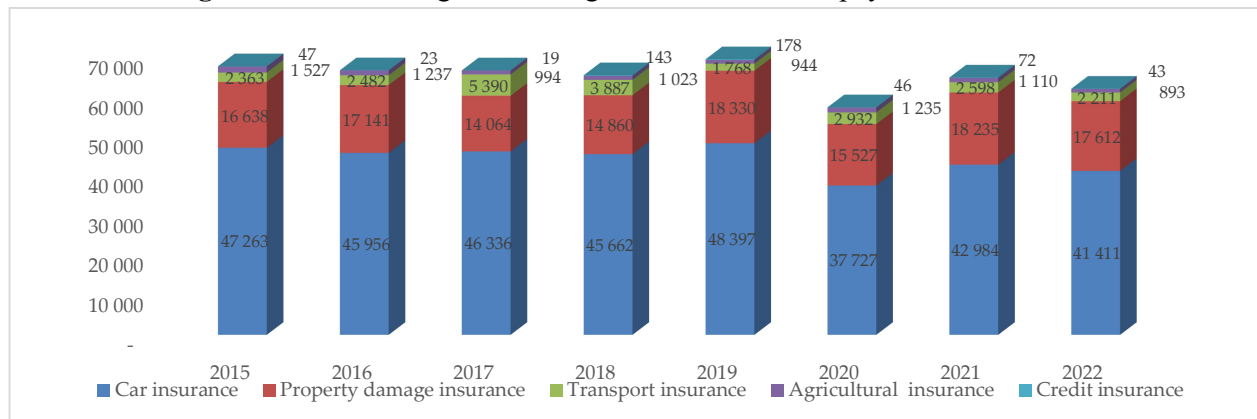
We notice a volatile evolution of “claims paid” during the observation period 2015-2022. Claims vary between 57 billion AD - 68 billion AD.

In 2022, damage insurance branches recorded a decline of 4% in claims payment compared to 2021, and a decline of 8% compared to 2015.

During the observation period (2015-2022), “Car insurance” and “Property damage insurance” branches dominate the damage insurance market and generate an overall share greater than 90%.

In 2022, the respective shares of these insurance branches are 67% and 28% i.e., an overall share of 95%.

Fig.4. Trend of the Algerian damage insurance claims’ payment, 2015 - 2022



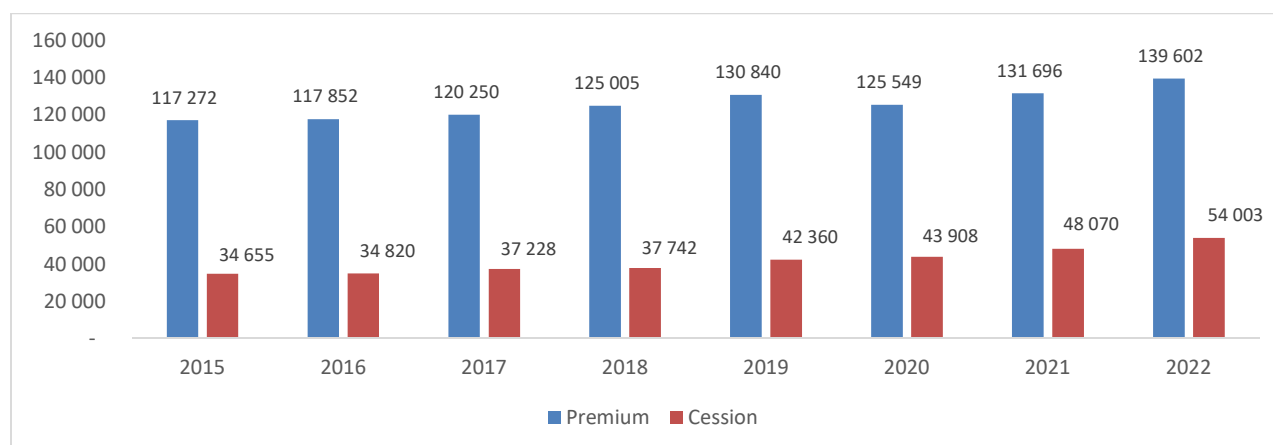
Source: Presented based on the Algerian Insurance activity reports (2015-2022), Insurance Directorate, ministry of finance

4.1.4. Reinsurance of the Algerian damage insurance market

We notice a continuous positive evolution of reinsurance of the Algerian damage insurance business during the period (2015-2022). Reinsurance cession recorded an increase from 35 billion AD in 2015 to 54 billion AD in 2022, corresponding to an evolution of “reinsurance cession rate” from 30% in 2015 to 39% in 2022.

The ceded premiums evolution (+56%) is greater than the written premiums (+19%) during the observation period 2015 – 2022.

Fig.5. Trend of the Algerian insurance damage ceded premiums’ 2015 - 2022



Source: Presented based on the Algerian Insurance activity reports (2015 - 2022), Insurance Directorate, ministry of finance

4.1.5. Return on Equity of Algerian damage insurers

The “ROE” of damage insurers varies between 6% and 9% during the period 2015-2022. The average rate 2014-2022 is about 8%.

This indicator reaches its lowest level in 2022 (6%) which is explained by a sharp drop in profit of 30% in 2022 (going from 14K AD in 2021 to 9K AD in 2022), at the same time, the Algerian damage insurance market equity recorded a little increase of 2%.

4.1.6. Synthesis

The synthesis of the evolution of the activity technical indicators of the Algerian damage insurance industry can be illustrated:

- “Premiums before reinsurance” of the Algerian damage insurers show a continuous, and positive evolution during the observation period (2014-2022), (except 2020 due to the pandemic “COVID”).
- The evolution of “claims before reinsurance cession” of the Algerian damage insurers is volatile during the period (2014-2022).
- The evolution of the “premiums” of the Algerian damage insurers (+20%) is greater than the evolution of “claims” (+5%) during the observation period (2014-2022).
- The evolution of “the technical provision” of the Algerian damage insurers (+36%) is greater than the evolution of premiums (+20%) during the observation period 2014-2022.
- The “expenses” evolution (+26%) is greater than the evolution of “premiums” (+20%) during the observation period 2014-2022. The “expense ratio” is going from 24% in 2014 to 25% in 2022.
- The evolution of the “ceded premiums” (+59%) is greater than the evolution of “written premiums” (+20%) during the observation period (2014-2022).
- The “Net technical margin after reinsurance” (+17%) is lower than the evolution of “written premiums before reinsurance” (+20%) during the observation period (2014-2022).

Table 3. Technical indicators of Algerian insurance activity (2014-2022)

2014	2015	2016	2017	2018	2019	2020	2021	2022
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Premium	Million AD	116 466	117 272	117 852	120 250	125 005	130 840	125 549	131 696	139 602
	Evolution %	10,47 %	0,69 %	0,49 %	2,03 %	3,95 %	4,67 %	-4,04 %	4,90 %	6,00%
Technical provisions	Million AD	114 587	115 322	113 020	122 871	122 726	133 457	135 664	137 665	155 930
	Evolution %	12,08 %	0,64 %	-2,00%	8,72 %	-0,12 %	8,74 %	1,65 %	1,47 %	13,27 %
Claims	Million AD	59 368	67 987	66 847	66 830	65 587	69 636	57 478	65 003	62 182
	Evolution %	13,96 %	14,52 %	-1,68 %	-0,03 %	-1,86 %	6,17 %	-17,46 %	13,09 %	-4,34 %
Expenses	Million AD	27 591	28 764	28 718	28 953	30 784	33 271	32 849	33 470	34 869
	Evolution %	10,15 %	4,25 %	-0,16 %	0,82 %	6,32 %	8,08 %	-1,27 %	1,89%	4,18 %
Reinsurance	Million AD	34 026	34 655	34 820	37 228	37 742	42 360	43 908	48 070	54 003
	Evolution %	14,96 %	1,85 %	0,48 %	6,92 %	1,38 %	12,24 %	3,65 %	9,48 %	12,34 %
Net Technical margin (after reinsurance)	Million AD	36 874	36 442	37 528	38 673	41 475	44 174	44 780	44 448	43 065
	Evolution %	2,72 %	-1,17 %	2,98 %	3,05 %	7,25 %	6,51 %	1,37 %	-0,74 %	-3,11 %

Source: Presented based on the Algerian Insurance activity reports (2014-2022), Insurance Directorate

4.2. Solvency indicators' trend of Algerian damage insurance market 2014-2022

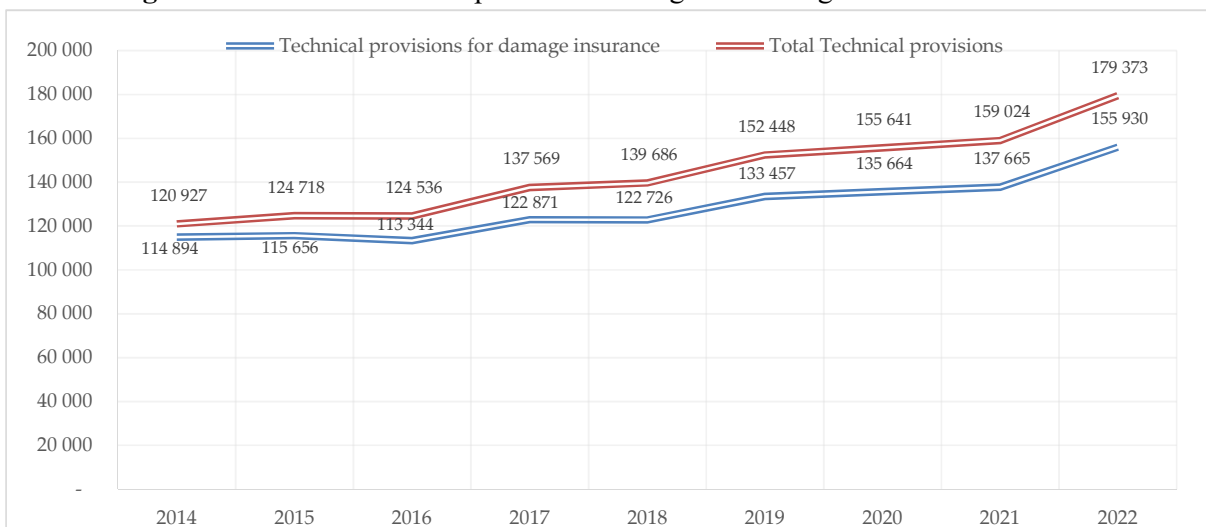
4.2.1. Technical provisions

Except the decrease in 2016, we notice an increase in the Algerian damage insurance technical provision during the period 2014-2022. Damage insurance branches recorded an increase of 36% in technical provisions compared to 2014.

In 2022, damage insurers commitments recorded an increase of 13% going from 159 billion AD in 2021 to 179 billion AD in 2022.

The provisions “for outstanding claims, for unearned premiums” dominate the insurers' commitment. The respective shares of these branches are 57% and 31%, i.e., an overall share of 89%.

Fig.5. Trend of the technical provisions of Algerian damage insurance 2014-2022



Source: Presented based on the Algerian Insurance activity reports (2014 - 2022), Insurance Directorate, ministry of finance

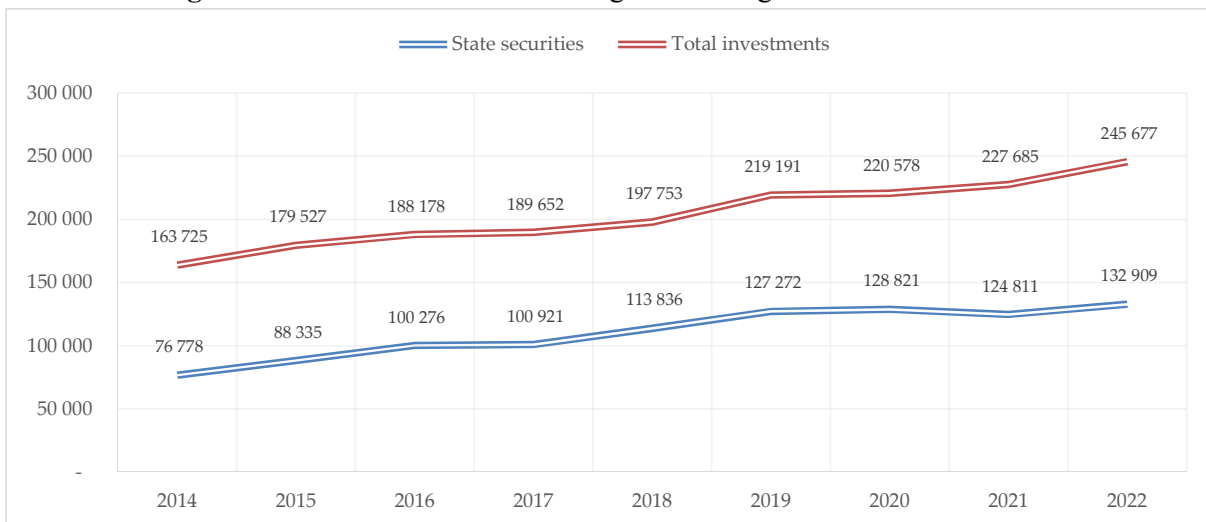
4.2.2. Investments

We notice a continuous increase in the damage insurance investments during the period 2015-2022. The investments recorded an increase of 50% in 2022 compared to 2014.

Overall, investments recorded an increase of 8% and reached 392 billion AD in 2022 compared to 361 billion AD in 2021.

Investments mainly consist of “State Securities” and “Term Deposits”. The respective shares of these investments are 55% and 17%, i.e., an overall share of 72%.

Fig.6. Trend of the investments of Algerian damage insurance 2014 - 2022



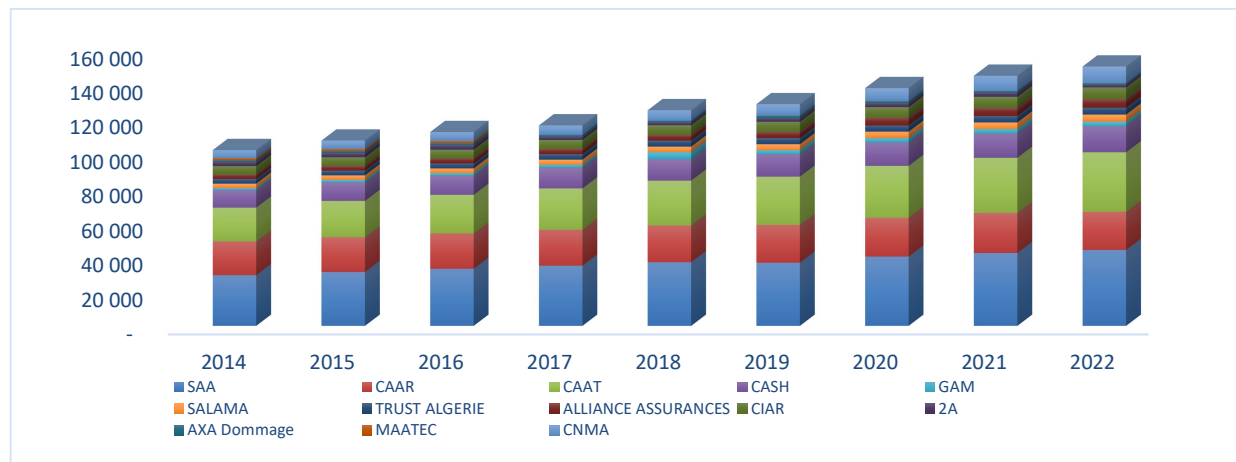
Source: Presented based on the Algerian Insurance activity reports (2014-2022), Insurance Directorate, ministry of finance

4.2.3. Solvency margin

The solvency margin recorded an increase of 48% over the entire period 2014-2022. All damage insurers recorded a positive evolution of their solvency margin during this period.

Solvency margin recorded an increase of 3,69% and reached 150 billion AD in 2022 compared to 2021.

Fig.7. Trend of solvency margin of Algerian damage insurance 2014 - 2022



Source: Presented based on the Algerian Insurance activity reports (2014-2022), Insurance Directorate, ministry of finance

All damage insurance companies establish solvency margins exceeding the minimum required by the Algerian legislator in 2022:

- 6 times the minimum required based on “15% of technical provisions”.
- 5 times the minimum required based on “20% of “premiums”.

Table 4. Solvency Margin of damage insurers in 2022

	“Solvency margin” (million AD)	“Solvency Margin/Technical provisions”	“Regulatory Solvency Margin” (million AD)	number of times of the regulatory minimum	“Solvency Margin/Premiums”	number of times of the regulatory minimum
S A A	43 911	138,80 %	4 746	9,25	147,00%	7,00
C A A R	22 120	122,04 %	2 719	8,14	130,00%	7,00
C A A T	34 418	106,47 %	4 849	7,10	129,00%	6,00
C A S H	15 096	49,09 %	4 612	3,27	80,00%	4,00
G A M	2 630	112,68 %	350	7,51	86,00%	4,00
S A L A M A	4 105	73,62 %	836	4,91	96,00%	5,00
T R U S T A L G E R I E	3 938	104,99 %	563	7,00	59,00%	3,00
A L L I A N C E A S S U R A N C E S	5 129	148,58 %	518	9,91	94,00%	5,00
C I A R	6 678	63,13 %	1 587	4,21	75,00%	4,00
2 A	1 602	39,64 %	606	2,64	41,00%	2,00
A X A D o m m a g e	804	28,49 %	423	1,90	41,00%	2,00
C N M A	9 667	91,73 %	1 581	6,12	74,00%	4,00
Total	150 098	96,26 %	23 390	6,42	107,41 %	5,37

Source: Presented based on the Algerian Insurance activity report, 2022, Insurance Directorate, ministry of finance

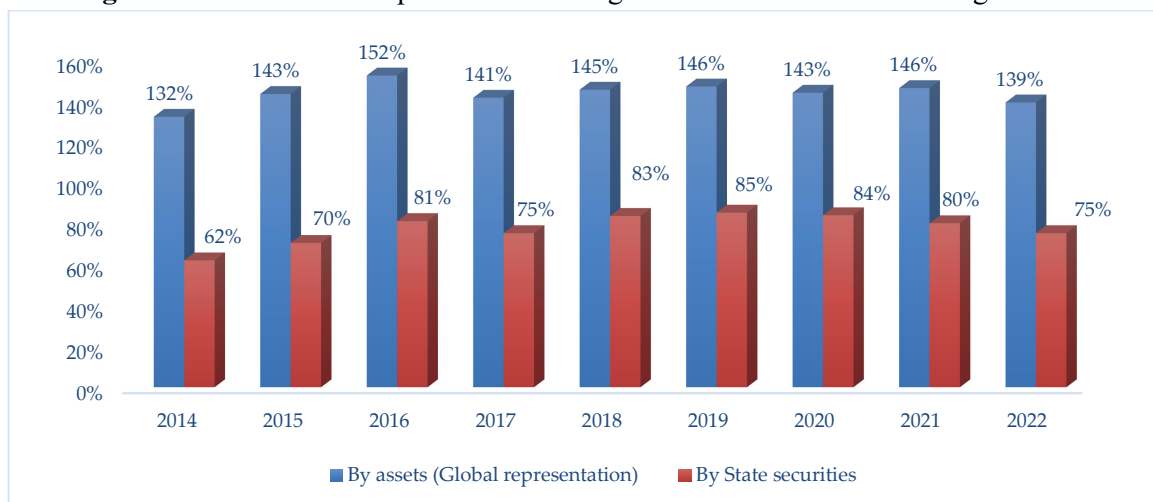
4.2.4. Representation of regulated commitments of insurers

Regulated commitments consist of technical provisions (88,03%) and regulated provisions (11,97%).

These commitments recorded an increase of 13,34% in 2022 compared to the previous year, going from 178 billion AD to 201 billion AD.

The representation rates of the regulated commitments during the observation period are volatile, going from 131,73% (61,77% by state securities) in 2014 to 138,7% (75,03% by government securities).

Fig.8. Trends of rates of representation of regulated commitments of damage insurers



Source: Presented based on the Algerian Insurance activity reports (2014-2022), Insurance Directorate, ministry of finance

4.2.5. Synthesis

During the observation period 2014-2022:

- Globally, all “solvency indicators” of the Algerian damage insurance industry show a continuous positive evolution.
- the “technical provisions” evolution is lower than the regulation commitment evolution (+36%vs+43%)
- The “admissible assets” evolution is higher than the evolution of regulated commitments (+50%vs+43%).
- The “government securities” increase is greater than the evolution of admissible assets commitments (+73% vs +50%).
- The “solvency margin” increase is greater than the evolution minimum required by the Algerian authority (+20% based on premium and +36% based on provisions) during the observation period (2014-2022).

Table 7. Solvency indicators of Algerian damage insurers

		2014	2015	2016	2017	2018	2019	2020	2021	2022
Technical provisions	Million AD	114 587	115 322	113 020	122 871	122 726	133 457	135 664	137 665	155 930
	Evolution %	12,08 %	0,64 %	-2,00%	8,72 %	-0,12 %	8,74 %	1,65 %	1,47 %	13,27 %
Regulated commitments	Million AD	124 289	125 701	123 947	134 513	136 472	149 652	153 789	156 289	177 131
	Evolution %		1,14 %	-1,40 %	8,52 %	1,46 %	9,66 %	2,76 %	1,63 %	13,34 %
Admissible Assets	Million AD	163 725	179 527	188 178	189 652	197 753	219 191	220 578	227 685	245 677
	Evolution %		9,65 %	4,82 %	0,78 %	4,27 %	10,84 %	0,63 %	3,22 %	7,90 %
State Securities	Million AD	76 778	88 335	100 276	100 921	113 836	127 272	128 821	124 811	132 909
	Evolution %		15,05 %	13,52 %	0,64 %	12,80 %	11,80 %	1,22 %	-3,11 %	6,49 %
Solvency margin	Million AD	100 561	106 096	111 021	116 035	124 797	128 282	137 598	144 754	150 098

	Evolution %	-0,12 %	5,50 %	4,64 %	4,52 %	7,55 %	2,79 %	7,26 %	5,20 %	3,69 %
Solvency Margin Regulatory minimum (based on premiums)	Million AD	23 293	23 454	23 570	24 050	25 001	26 168	25 110	26 339	27 920
	Evolution %	10,47 %	0,69 %	0,49 %	2,03 %	3,95 %	4,67 %	-4,04 %	4,90 %	6,00 %
Solvency Margin Regulatory minimum (based on provisions)	Million AD	17 188	17 298	16 953	18 431	18 409	20 019	20 350	20 650	23 390
	Evolution %	12,08 %	0,64 %	-2,00%	8,72 %	-0,12 %	8,74 %	1,65 %	1,47 %	13,27 %

Source: Presented based on the Algerian Insurance activity reports (2014 - 2022), Insurance Directorate, ministry of finance

5. Limitations and prudential and risk management challenges of the current Algerian solvency rules

5.1. Limitations

The prudential solvency framework of Algerian insurance companies, although simple and prudent has several limits. Indeed, several quantitative and qualitative inadequacies jeopardize the financial solidity of insurance companies and can be raised as follows:

5.1.1. Quantitative limits

Insufficient risk “sensitivity”: the current Algerian Solvency regime is “too simplistic”. The quantitative requirements are mainly based on a “flat rate” calculation. In fact, this regime does not include all the fundamental risks faced by insurers. For example, “market and credit risks” are not adequately integrated in the current solvency requirements calculation.

The current system does not adequately consider insurers’ Risk profiles specificities and does not correctly distinguish between risks belonging to the same insurance branch. Consequently, insurers are not encouraged to establish best practices in risk measurement and management. Furthermore, the requirements of the Algerian current solvency framework penalize insurers opting for a “prudent” underwriting and provisioning policies.

Accounting valuation framework: the assessment of capital requirements is totally based on retrospective approach (Riad, 2020). The assessment of solvency requirements is based on the past without considering any possible deviations from insurers’ reality. Indeed, the assessment of the minimum capital requirement is carried out based on accounting data recorded at “historical costs” (Boudraa, 2023) using the past as the “unique” reference in estimating the future commitments of insurers.

Poor “Assets/Liabilities” management policies: the current Algerian solvency standards do not consider the correlations between the balance sheet components (assets/liabilities) and could endanger the financial health of insurers having opted for inadequate coverage financial risks. (Sander, 2015).

5.1.2. Qualitative limits

The current Algerian solvency standard being “insensitive” to risks does not encourage insurers to establish adequate risk management policies. Consequently, this system could jeopardize the insurers’ financial health and does not sufficiently protect policyholders’ interests.

The current solvency regime considers only a quantitative requirement (Axelle Brault-Fonters, 2016) and does not include a solid qualitative requirement.

The current solvency requirements are not compatible with “IFRS Standards” (Bourechak, 2023).

5.2. Challenges

The adoption of new solvency rules inspired by Solvency II is necessary and requires knowledge of the challenges raised by the socio-economic background.

5.2.1. Issues related to the basic guidelines' definition

The new solvency framework has to consider the structure, the size and the activity dynamics of the market and the relevant parties' constraints.

The Algerian prudential regime must also consider the market background in terms of reinsurance management (compulsory cession for the national reinsurer CCR), and the allocation of assets (Not less than 50% of regulated commitments to be constituted in State securities).

The supervisory authorities should opt for a roadmap which envisages a gradual implementation of the new standards. Convergence phases aim to support insurers during the transformation process and to achieve the necessary study: conducting quantitative impact studies, carrying out the actor's preparation surveys and issuing preparatory guidelines for the new Algerian prudential framework.

The legislator should involve insurers from the start of discussions on the prudential regime evolution by establishing dialogue to identify and consider the actors' constraints and recommendations.

5.2.2. Issues linked to the macro-economic parameters:

Weakness of macroeconomic indicators of insurance: the contribution of the insurance sector to the country "GDP" is modest. Also, low savings and low purchasing power limit the households' ability to underwrite insurance coverage.

Insufficient development of the Algerian financial market: "investment instruments" and "risk hedging instruments".

5.2.3. Issues linked to the operational and technical specifications of insurance activity:

Algerian insurance business size: establishing a new solvency standard based on the prudential principals of Solvency II Regime could prove to be a "complex" and "costly" process due to some insurers' size. Thus, the complexity and cost of the transformation process towards a new prudential system could slow down the adherence and willingness of insurers to adopt the practices developed in terms of risk management.

Business structure: the market is dominated by "Motor Insurance" production, part of which is a compulsory insurance and regulated by the legislator. Consequently, the insurers' levers are very limited in terms of risk pricing. Furthermore, the optional insurance market is characterized by a strong competition driven by prices to the detriment of the quality of insurance guarantees.

Training: the adoption of new rules requires the implementation of new risk management mechanisms to which operational staff must be made aware and trained in advance. Based on the current context of the Algerian prudential requirements, and considering the training required by Solvency II Regime, the training process can be long and costly.

In addition, organizational burdens will be necessary to establish the new standards inspired by Solvency II, so operational staff must be supported during the transformation process.

Governance: starting from the current Algerian prudential regime focused on quantitative requirements which does not set a clear governance framework, compliance with the Solvency II governance principals which requires the deployment of an effective governance system, and risk management policy can be cumbersome and complex.

Reporting: the introduction of new standards in “reporting and communication” inspired by the third pillar of Solvency II requires the ability to produce reliable information and to respect the publication deadlines required by the legislator. Thus, insurers must develop their information system and reporting tools.

6. CONCLUSION

Insurers’ Solvency constitutes the “key issue” of supervisors. Indeed, Solvency II system set up a new regulatory framework based on risks to strengthen the insurers’ financial solidity and protect policyholders’ interests.

The current Algerian solvency framework requires insurers to constitute a solvency margin corresponding to at least “15% of technical provisions” and “20% of premiums” issued and/or accepted net of taxes and cancellations.

The technical activity indicators (production and claims payment) during the observation period 2015-2022 show that the Algerian insurance sector is continually evolving. Furthermore, the solvency indicators (“Technical provisions”, “admissible investments”, “solvency margin” and “the representation of regulated commitments”) very clearly improved during the observation period 2015-2022.”

By analyzing the solvency regulatory framework of the Algerian damage insurance market, we have identified “quantitative” and “qualitative” limits which weaken the financial health of insurance companies. Indeed, the regulatory framework being based on “retrospective” approach is not sensitive to the risks actually incurred by insurers and does not consider the specificity of their risk profile. Consequently, this regime does not motivate insurers to establish “adequate” risk management policies. Also, the current solvency system is limited to quantitative requirements and does not provide prudential requirements in terms of governance, monitoring process and internal control.

The evolution of the current solvency standards is “necessary” to strengthen control of insurers’ solvency and protect policyholders’ interests. Solvency II foundations constitute a “solid basis” to be adapted to the conditions of the Algerian insurance market, to allow the implementation of a “prospective” approach based on risks.

The establishment of a solvency standard based on risks requires a clear definition of the new standards and guidelines taking into account the Algerian market specificities, a progressive approach in adopting the new regime, completing the necessary studies (quantitative impact studies, the issuance of preparatory guidelines), and onboarding all relevant parties to take into account the concerns and recommendations from the launch of the reflection on the evolution of the prudential rules.

Furthermore, the adoption of new prudential rules requires providing support to operational staff in the transformation process, the evolution of reporting tools, and organizational changes, training of operational staff on risk management in accordance with the new prudential framework focused on Solvency II.

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