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Memoire

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Thème

Analysing the role of automobile insurance on insurance company growth: The Case of CAAT Agency 191 Béjaia.

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ABSTRACT.

Automobile insurance is the most dynamic branch of the insurance sector of Algeria. In 2021, this branch had a market share of 52%, which is more than all the other combined insurance branches. Thereby, this study investigates the impact of the automobile insurance branch on the growth of an insurance company that offers many other insurance products. Indeed, it seeks to analyse the factors that determine the growth of an insurance company. To do this, we analysed-the data related to the CAAT Agency 191 Béjaia over the period 2012-2021. The findings show that within the CAAT agency 191, claims management and management of accounts receivables positively influenced the performance of the company. The three branches impacted the company's growth in diverse ways. The automobile branch was found to be contributing the most to the real growth of the company with its large number of clients. The transport branch was found to be favourable with its limited risk occurrences and the IARD was found to be beneficial with its large risks, in the sense that the premiums tend to be high also and the risk occurrences were found to be less frequent than those in the automobile branch.

Even though this study was carried out in a relatively short period and with limited data, it provided new insights into insurance company growth. We suggest the improvement of the financial security market to enable rapid placement returns that quickly multiply the income of the agency, we suggest as well the revision of the reformed compulsory marine cargo insurance for the transport branch.

Keywords: Insurance, company growth, data analysis, CAAT agency Bejaia.

DEDICATION

Caroline:

To my dearly cherished mother, Jesina Sandra Sadock, I cheerfully dedicate this Master's thesis with all my love, and to all who have inspired and encouraged me.

Raymond:

It is with great joy and gratitude that I dedicate this work to my loving parents Tarasika Zvarowa and Winnet Ajiji whose words of encouragement and prayers have shaped who I am. To my two brothers Darlington and Isheanesu Zvarowa, the best brothers I could ever ask for.

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LIST OF ABBREVIATIONS

2A	ALGÉRIENNE DES ASSURANCES
AGA	AGENT GENERAL D'ASSURANCES
AGF	ASSURANCE GENERAL DE FRANCE
AIM	AUTOMOBILE INSURANCE MARKET
BC	BEFORE CHRIST
BDG	BRISE DE GLACE
CAAT	COMPAGNIE ALGERIENNE DES ASSURANCES DE TRANSPORT
CAAR	COMPAGNIE ALGERIENNE D'ASSURANCE ET DE REINSURANCE
CASH	COMPAGNIE D'ASSURANCES DES HYDROCARBURES
CAT-NAT	CATASTROPHES NATURELLES
CCR	COMPAGNIE CENTRALE DE REASSURANCE
CCRMA	CAISSE CENTRALE DE REINSURANCE DES MUTUELLES AGRICOLES
CDW	COLLISION DAMAGE WAIVER
CEO	CHIEF EXECUTIVE OFFICER
CIAR	COMPAGNIE INTERNATIONALE D'ASSURANCE ET DE REINSURANCE
CIV	VOL ET INCENDIE DE VEHICULE
CNA	CONSEIL NATIONAL DES ASSURANCES
CNMA	CAISSE NATIONALE DE MUTUALITE AGRICOLE
CR	CENTRALE DES RISQUES
CSA	COMMISSION DE SUPERVISION DES ASSURANCES
DA	DINAR ALGERIEN
EPE/SPA	ENTREPRISE PUBLIC ECONOMIQUE/ SOCIETE PAR ACTION
FGAS	FOND DE GARANTIE DES ASSURES
GAM	GENERALE ASSURANCE MEDITERRANEENNE
GDP	GROSS DOMESTIC PRODUCT
GWP	GROSS WRITTEN PREMIUMS
IARD	INCENDIES, ACCIDENTS ET RISQUES DIVERS
IRD	INCENDIES ET RISQUES DIVERS
LLN	LAW OF LARGE NUMBERS
LSM	LEAST-SQUARES METHOD

MAATEC	MUTUELLE ALGERIENNE D'ASSURANCE DES TRAVAILLEURS DE L'EDUCATION ET DE LA CULTURE
MMA	MUTUELLES DU MANS ASSURANCES
MPT	MODERN PORTFOLIO THEORY
SAA	SOCIETE ALGERIENNE D'ASSURANCES
ULIP	UNIT LINKED INSURANCE PLANS

SUMMARY

GENERAL INTRODUCTION

Background

Humankind has made ridiculously amazing accomplishments over time. Dams, planes bullet trains, or the Burj Khalifa, just the beauty we find in all these and many other great creations of human hands, it's just remarkable. Although many factors come into play in order to see through these high-value projects, we are particularly interested in one of those factors, insurance to point out. Insurance brings security, investors feel secure to spend more money on high-value projects because they know they can be compensated if some disasters were to befall their expensive projects. It also acts in a complementary fashion with the banking sector, offering easier access to credit, channelling savings into long-term investments and providing greater transparency and liquidity to the markets, thus providing further support and growth to the economy. We can't ignore all the people working in insurance companies all around the globe, yes employment, insurance helps create employment as well as many other benefits.

In 2021, the insurance sector of Algeria had about twenty-four insurance companies operating. Life insurance had a market part of 8.7% while general insurance dominated with a share of 91.3%. The aggregate income from the life insurance sector increased by 5.7% since 2020 while that of general insurance rose by 7.7%. General insurance with its wide range of products performs better than life insurance. By 12/31/2021, the global income from general insurance totaled 131.9 billion DA, an increase of 4.7% compared to the income recorded at the same time of the previous year. This was the result of the increase observed in certain branches, particularly the Fire and Divers Risks (IRD) which occupied a share of 45% of the general insurance portfolio. Concerning the general insurance sector, the automobile insurance branch is very dominant representing around 52% of all the activities of the sector as well as contributing more than 50% to the global income of the industry[1]. So many factors can be taken into account in an attempt to understand how the insurance sector in Algeria is performing.

Problem statement

The first appearance of insurance is witnessed in Babylon dating back to as early as 1755 – 1750 BC. Included in the code of Hammurabi, it had a different form than that we are familiar with today. It only protected debtors from having to pay back their loans should any personal catastrophe make it impossible, for example, floods, death and others. Throughout history, we

[1] Atlas Magazine 2022, *Marché algérien des assurances : hausse du chiffre d'affaires en 2021*, viewed on 25 April 2022, <https://www.atlas-mag.net/article/marche-algerien-des-assurances-hausse-du-chiffre-d-affaires-en-2021>

see different kinds of risks becoming insured against, in 1684 fire losses, in 1688 transport insurance, and the first life insurance company in 1759. All these and others helped shape the form of insurance as we know it now.

Today, insurance is considered one of the most important activities globally in the financial and economic environment. The insured and their keens get to enjoy income, life and property protection as benefits of their subscription with an insurer. On the same note, income accumulation that can be used at retirement to help preserve the desired lifestyle or living standards is as well another benefit to count.

The Committee of European Insurance carried out a study that brought forth results that help further explain the contributions of insurance to economic growth and these include: Offering protection to firms; in this way their financial stability is enhanced by the insurance company taking over any damage or interruption in the production process occurring as a result of the insured events; Promoting entrepreneurial attitude, encouraging investment, innovation, the vitality of the market and the competition; offering protection, in joint participation with the state, relieving pressure on the state concerning covering large damages; increasing financial intermediation, the creation of liquidity and savings through life insurance products; promotion of risk prevention from the companies or the people, thereby contributing to sustainable and responsible development.

However, that being said, it might be worth knowing different kinds of insurance services that may exist within an insurance company and these include automobile insurance, credit insurance, life insurance and a few more. Many insurance companies register a lot of income from automobile insurance products. These products present the highest frequency of risks in comparison with the other insurance products. This can be explained by many factors which include primarily an increase in the number of cars accompanied with poor road safety and according to the Statista website, in the United Kingdom there is one car registered for every two people. However, the increase in cars is leading to a high rate of traffic accidents and hence more claims thus reducing the profit margins for automobile insurance companies and this is the case in all countries. For that fact, automobile insurance appears to be an interesting insurance branch to investigate, which brings us to our Case study “the Algerian company of insurance, CAAT.

The Succursal of the CAAT Company in Sétif province has up to five branches, industrial risk insurance and CAT-NAT, transport insurance, automobile insurance, engineering insurance, credit insurance, and agriculture insurance. In 2021, the automobile insurance branch recorded an income of 555 688 946 DA and then paid 523 062 270 DA in claims, 80 567 244 DA was the income recorded from the transport insurance branch and the claims paid were 10 352 620 DA, industrial risk and CAT-NAT branch had an income of 318 838 376 DA and yet the claims paid were 81 168.09 DA[2].

Evidently, the automobile insurance branch is bringing in a very significant level of income. However, the branch is spending an aggressively huge amount of money on claims, more than all the other branches. Just looking at this information, one would wonder how much this branch is contributing to the company if it's taking so much from it. Therefore, this research aims at uncovering the impact that the automobile insurance branch has on the growth of the host company.

How the automobile insurance branch affects the CAAT agency's growth?

Subsidiary questions.

1. To what extent does the automobile insurance branch contribute to the growth of the host company?
2. What are the factors that contribute to the remarkable influence that the automobile branch has on the host company?
3. What is the contribution of other branches in relation to the automobile branch?

Objectives of the study.

1. To examine the influence of accounts receivables management on Gross Written Premiums.
2. To examine the influence of claims management on Gross Written Premiums.

Hypothesises.

1. Management of accounts receivables has a significant effect on the growth of the host company.
2. Claims management has a significant effect on the growth of the host company.
3. A large part of the gross written premiums (GWP) of the host company comes from the automobile branch.

[2] Compagnie Algérienne Des Assurances, 2020. *Rapport annuel 2020*

Methodology

To carry out this study and respond to the questions presented above, we adopted the following approach:

For the theory aspect, we did bibliographical research where we consulted books, documents, reports, articles, thesis and different studies and indicators which were realised internationally.

Concerning the analysis, we used the data collected from the CAAT AGENCY 191 Bejaia to perform a univariate data analysis, bivariate data analysis and analysis of the Agency growth indicators using Eviews 10, and excel.

Work Plan

The study is organised into an introduction, four chapters and a conclusion. The introduction covers the Background of the study, Problem statement, Research questions, objectives of the study, hypothesis, methodology and work plan. Chapter one is a review of relevant literature and it covers the history of Insurance, the Insurance industry in Algeria, generalities of insurance which covers the definition of insurance, elements of an insurance operation and actors of an insurance policy, and lastly the chapter covers types and roles of insurance. Chapter two talks about how automobile insurance is carried out in Algeria. Chapter three is the methodology section. It focuses on the research perspectives, the definition of studied variables which explains the main concepts, variables and as their indicators and measurement and description of used data. Chapter four is a presentation of the host company, presentation of results, analysis of results and findings summary, conclusion and suggestions. The final conclusions are in the general conclusion.

CHAPTER 1: LITERATURE REVIEW

INTRODUCTION

The insurance industry was founded to provide security against risks. Due to the rapid emergence and evolution of new societies and the climate changes that have affected the world, the risks that people face are more unpredictable. Because of the numerous risks that men face, they have continuously developed effective ways to manage and protect their finances and properties. These are some of the factors that have contributed to the development of the insurance industry.

SECTION 1: HISTORY OF INSURANCE.

1.1 History of Insurance.

1.1.1 World history of insurance

Insurance started with Bottomry contracts by merchants of Babylon as early as 4000-3000 BC. Later there was developed what is known as the code of Hammurabi by the King of Babylonia around 1750 BC the code comprised of laws that gave early forms of liability, risk management and risk transfer which over the next centuries and millennia would develop into the insurance industry we recognize today. The code contained rules concerning an early form of Bottomry. These ancient people who practised maritime commerce looked for a way to secure their businesses against the perils of the sea. This is where a ship is used as security against a loan to finance a voyage, the lender losing their money if the ship sinks. The loan with interest is payable if the ship completes the voyage. So here we find the birth of insurance in the maritime sector before all sectors.

Then the Phoenicians developed the *Lex Rhodia* which was found mentioned in later Roman writings. It articulated the general average principle of marine insurance which has become a fundamental principle that underlies all insurance. The law stated that “where merchandise is thrown overboard to lighten a ship, what has been lost for the benefit of all must be made up by the contribution of all”.

Romans and Greeks then set up guilds called benevolent societies around 600 BC which cared for Funeral expenses and the family of the deceased. Then Pope Gregory IX of Rome as well, condemned the practice of Bottomry loans as usury in his decretals because they involved paying for risk. Then the Romans were the first to structure insurance as a financial contract that could protect the merchants against losses and at the same time evade the usury law under what was called the *commenda* contract which joined the advantages of the sea loan with the main advantages of the partnership (sharing of risks and profits between lender and borrower, with no suspicion of usury). In the 14^{th} century, Italian merchants introduced cambium contracts where borrowers had to buy the bills of exchange from the lenders. The first contract was established in Genoa in Italy in 1347 which became the first insurance policy that was not tied to loans and premiums were paid.

The second half of the 17^{th} century witnessed two important events that led to the development of the insurance industry that is the implementation of the insurance statistical methods and techniques, and the London fire of 1666. Fire insurance was created for assistance, unlike marine insurance which was a form of speculation. The great fire of London in 1666 caused considerable damage, around 13,200 houses and nearly 1,000 churches were burnt. These events impacted the public at large to take precautions against such disasters. Then in 1680, the fire office was established and then the first Fire insurance called Friendly society started to operate. In 1688 the foundation of Lloyds was formed to operate maritime insurance then it grew to cover all types of insurance.[3]

In 1652, the Italian banker Lorenzo TONTI invented "tontines". These are associations of people formed for a certain period of time: 10, 15, or 20 years. The partners pool funds. At the end of the term, the association is dissolved and the funds are distributed either among the survivors (association in case of life) or among the beneficiaries of the persons decided (association in case of death).

For a long time, tontines were considered immoral and were forbidden by the church. For it is considered immoral to speculate on human life. But life insurance only really appeared at the end of the 17th century. Thanks to Blaise Pascal's mathematical work on the "geometry of chance" in 1654. In 1693, Edmond Halley, an English astronomer, designed the first mortality table. The first life insurance company was created in England in 1762. From the beginning of the 18th century until the 19th century, there were three forms of insurance: Marine, Fire, and Life. Their progress is closely linked to both the development of economic activity and the legal revolution.

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[3] Wikiwand, *History of insurance*, viewed on 27 April 2022, <https://www.wikiwand.com/en/history_of_insurance>

1.1.2 The industrial revolution

Between 1760 and 1840, insurance starts to evolve with the industrial revolution towards the form with which we now know it. Today it covers the risks of modern life, from cars to pollution. This progress in insurance reflects a new attitude towards risk, which was once regarded as inevitable. A typical example is that of disease, when medicine was primitive, the death of several people of all ages from disease was a normal affair. Nowadays, with the development of medicine and longer life expectancy, any death before old age is much more keenly felt. This has required coverage against the risk of illness and death. Technical and economic progress has enabled the spread of insurance to the point where it is impossible to draw up a list of risks covered by insurance, especially as this list is growing daily. The appearance of new goods, the increase in the cost of industrial installations, and the development of transport have increased both the number and the seriousness of risks (factory fires, machine breakdowns, industrial accidents, etc.)

At the same time, the evolution of society, marked by the decline of family solidarity, the generalisation of wage employment, and the specialisation of work, has made insecurity increasingly difficult to bear. Today, despite the diversity of coverages provided by insurance companies, there are two (02) main branches of insurance classified according to the purpose to which they apply: life insurance and general insurance.

In addition, one of the specific mechanisms of insurance is the combination of legal and statistical techniques to provide a service to society that is useful in two ways:

- to enable everyone to protect themselves and their families against everyday risks
- to allow human activity to progress in new directions without leaving those who assume or suffer the risk of innovation unprotected

1.2 History and Evolution of Insurance in Algeria.

Insurance was introduced by the colonial administration in Algeria. Before 1830, Algerians lived in a community, and the principle of solidarity and mutual aid dominated. It was after independence that insurance knew a remarkable rise with the development of rules and laws that would govern the industry.

1.2.1 Colonial period.

This period was characterised by the monopoly of French companies in the insurance sector. In 1861 a fire mutual insurance was created to run in Algeria and other French colonies. Then in 1933, a Central Agriculture Mutual was instituted to respond to the colonial farmer's demands.

1.2.2 The period from 1962-1965

After gaining independence in 1962, there was an institution of obligatory reinsurance with the formation of CAAR, and law number 63-197 of 8 June 1963 was placed that obligated all insurance societies to transfer 10 percent of their premiums to CAAR.

Law number 63-201 of 8 June 1963 demanded insurance companies regardless of nationality, some guaranties in form of;

- The control and surveillance by the ministry of finances of all insurance companies
- Agreement by the ministry of finance that all foreign companies must have

SAA was also created by the decree of 12 December 1963 of which 39 percent of the capital was owned by Egyptians.

In October 1963, following the institution of law 63-197, many insurance societies left Algeria and out of 236 societies that were there at independence, only 13 remained and they limited their branches to 1 or 2.

The creation of MAATEC by the decree of 29 December 1964 marked this period also.

1.2.3 The period from 1966 to 1988

Then in 1966, the exploitation of all insurance operations was now reserved for the State through national companies.

After this, Algeria was left with four insurance companies, on one side two public insurances that are SAA and CAAR, and on the other hand, two private insurances that are MAATEC and CCRMA. And the sector was divided as follows

- CAAR received a legal transfer and all kinds of insurance operations
- SAA focused on direct insurance operations.
- MAATEC covered risks of the members of the mutual.
- CCRMA specialized in agricultural risks.

This continued like that until 1976 when the insurance companies started to specialise in the covering of a certain number of risks

- CAAR started to cover huge risks.
- SAA specialized in simple risks.
- MAATEC took charge of the risks of the members of this mutual
- La CCRMA specialised in risks associated with agriculture

Seeing the Importance of the transport branch in CAAR the State decided to form CAAT by decree number 85-82 of April 1985 which would focus on covering risks linked to air, land, and maritime transport.

1.2.4 The period of 1989- up to today.

It was the period when Algeria transitioned from a planned economy to a market economy. It marked an end to the period of specialization. In 1990 the national companies were liberated to commercialise all insurance branches and that created competition in the sector.

The law 95-07 of 25 January of 1995 brought remarkable changes to the insurance sector.

- It cancelled the monopoly of the state and liberated the insurers to act freely in their companies.
- It reduced obligatory insurance for certain risks
- Freedom for insurance companies to practice insurance operations and reinsurance
- Creation of the National Insurance Council

This law gave rise to the creation of private companies

Then obligatory insurance against natural disasters (Cat-Nat) was put at the beginning of 2004, in line with the presidential ordinance number 03-12 of 26 October 2003.

The law 06-04 of 20 February 2006 came up to complete the ordinance of 95-07. This law brought the following

- Reinforcement of life insurance
- A generalisation of the collective insurance
- Reform of the beneficiaries' law
- Creation of bank-assurance

- Separation of life insurance activities and non-life insurance activities
- Reinforcement of financial securities
- Creation of the insurance guaranty fund funds.
- Opening of the market to foreign societies

The law instituted a Commission of Supervision of Insurances

The year 2008 was marked by the final settlement of the Algerian-French insurance dispute. The dispute dates back to 1966 when the insurance sector was nationalised by the newly independent Algerian state. French insurers operating in this market were forced to cease all activity and leave. Once the French companies left, their engagements were taken over by Algerian companies. However, the assets acquired in return for these engagements remained legally in the possession of the French companies. As a result, the Algerian companies had to settle the claims without being able to use the corresponding assets to do so.

The agreement of 7 March 2008 between the French companies GRS, Aviva, AXA, Groupama, and MMA and the Algerian public companies SAA and CAAR regularised in Algerian law the de facto situation described above and organised a transfer of portfolios between the two signatory parties with retroactive effect from 1966. The French companies that signed the agreement were now deemed to have discharged their engagements and were therefore automatically eligible for authorisation to carry out insurance operations in Algeria. They were also deemed to have discharged all liabilities, including tax liabilities, relating to insurance operations and their real estate assets in Algeria, their management, and their transfer.

The year 2009 was marked by the publication in the Official Gazette of the People's Democratic Republic of Algeria of Executive Decree No. 09-375 of 16 November 2009, which was intended to supplement Executive Decree No. 95-344 of 30 October 1995 on the minimum share capital (or establishment fund) of insurance and/or reinsurance companies.

The minimum share capital of insurance and/or reinsurance companies is set at

- One billion dinars for joint-stock companies carrying out life insurance and capitalisation operations;

- Two billion dinars for joint-stock companies carrying out general insurance operations;

- Five billion dinars for joint-stock companies carrying out exclusively reinsurance operations. The establishment fund of mutual companies is set at

- Six hundred million dinars for companies carrying out life insurance and capitalization operations;

- One billion dinars for companies carrying out general insurance operations.

SECTION 02: GENERALITIES OF INSURANCE

2.1 Definition of Insurance

2.1.1 General definition

Insurance is an economic device transferring risk from an individual to a company and reducing the uncertainty of risk via pooling.

ABDEL-Elah Na'ama 2008 A service provided by the insurance company to the insured and that service is limited to covering the physical risk to the insured in exchange for paying a certain amount to the insurance company that undertakes to pay the material value of the covered risk.[4]

2.1.2 Legal definition (article 619 civil code)

Insurance is a contract under which the insurer commits to pay to the insured person and the beneficiary for whom the insurance has required a sum of money, rent, or any other financial compensation in the event of the occurrence of the accident or the risk of the contract in exchange for a premium or other financial payment by the insured to the insurer.

2.1.3 Economic and financial definition

Economic insurance is a product marketed by insurance companies to consumers in the form of a guarantee package. It is a purely legal product since it consists only of the obligations undertaken by the insurer. Insurance is a means of covering the financial consequences of risks that cannot be eliminated by preventive measures. The cost of insurance is proportional to the amount of coverage provided and is therefore necessarily included in the cost of the products sold or provided by the professional insurer.

2.1.4 Technical definition

According to *Fourastie. J*: insurance is an operation by which an individual, in return for a contribution (the premium), acquires for himself or a third party a right to a benefit in the event of the occurrence of a risk, this indemnity being paid by a company or an organisation which, taking on a set of risks, compensates them per the law of statistics.[5]

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[4] Salm, N.O. and Hafsi, R., 2020, Algerian review of economic development, *Financial Placements and Financial Performance in the Algerian Insurance Companies A case study of the National Company of Insurance during 2012 to 2018*, p333. [accessed 29 April 2022]

[5] Couiboult F, Eliashberg C, Latrasse M, (2002) *Les grands principes de l'assurance*, édition l'argus, 5ième édition, p82

According to *Joseph Hémard*, insurance is an operation by which one party, the insured, is allowed, in return for remuneration (the premium), to receive, for himself or a third party, in the event of the realisation of a risk, a presentation by another party, the insurance company, which, assuming a set of risks, compensates for them following the laws of statistics[6]

2.2 Elements of an Insurance Operation.

2.2.1 Risk

It is uncertainty concerning the possibility of loss by a peril for which insurance is pursued. Insurable risks must be future, uncertain, random, and involuntary (they should be independent of the desire of the insured).

The insurance company faces four significant risk elements:

- Ineffective risk assessment
- Poor diversification strategy
- Inefficient performance in core insurance practices such as claims processing and fraud detection
- Digitalization challenges

Poor management of these risks results in poor growth.

a) Risk management

It is the process of identifying, assessing and controlling threats to an organisation's capital and earnings. The ability to manage risk will not only affect the company's growth, but it could also mean the difference between staying in business or not.

There are five methods of risk management which are

- avoidance,
- retention,
- sharing,
- transferring and,
- prevention and reduction.

[6] Joseph H, (1924) *Théorie et pratique des assurances terrestres,* Paris, impr. Contant-Laguerre,

2.2.2 Premium

Premium is the amount of money the insured pay to an insurance company in exchange for coverage. Depending on the policy, the premium can be paid in a variety of ways, such as monthly payments, or possibly in a single upfront payment. The premium amount is determined by a variety of different factors and will be different depending on the type of policy, the individual or entity, deductibles, limits, etc [germanianinsurance.com]

2.2.3 Loss

Loss is a direct consequence of a particular peril. It is any injury or damage that the insured suffers because of a covered accident or misfortune. It generally refers to a reduction in a property's value or harm affecting a person, such as an injury after a car accident.

2.2.4 An insurance policy

This is a contract between the insurer and the insured, which determines the claims that the insurer is legally required to pay. In exchange for an initial payment, known as a premium, the insurer promises to pay for loss caused by perils covered under the policy language.

2.2.5 Compensation.

Compensation is the commitment made by the insurer in the event of the realisation of the risk, which consists in paying a benefit. Generally speaking, this is a sum of money intended either to the policyholder and insured, for example in fire insurance, or to a third party, for example in liability insurance, or to the beneficiary, for example in life insurance (in the event of death).

Compensation may be in the form of indemnities which are determined after the event has occurred according to its importance (e.g., glass breakage, theft), or lump-sum benefits which are determined beforehand and contractually at a mutually agreed lump sum.

2.2.6 Compensation within the mutual society

A mutual society is a civil society of people insured against the same risk, who contribute mutually to face the consequences of this risk by each contributing a sum of money, creating a solidarity fund.

This fund will help the contributor who suffers one of the losses they have mentioned, in case none of these losses is produced, the fund will be returned to the contributors. The part of the contributions that did not need to be used to cover the claims of the contributors during the year is not kept by the cooperative: it is either returned to the contributors or it is kept and counted as a contribution fund already paid for a new year. If the fund is not sufficient to cover the damage expenses, it will be up to the contributors, either to make new contributions to cover the surplus or to accept that the co-operative will not cover all the costs for the contributors.

2.3 Actors of an Insurance Policy

2.3.1 Insurer

The insurer is the company that provides insurance coverage and services on a policy for example:

Public non-life insurance companies: SAA, CAAR, CAAT and CASH.

Private non-life insurance companies: TRUST, CIAR, 2A, SALAMA, GAM and ALLIANCE ASSURANCES.

A mixed company: AXA ASSURANCES

2.3.2 Insured

The insured can also be called a policyholder. A policyholder is a person who owns a specific insurance policy. In fact, it doesn't even need to be a person. It can be an organization, company, or another type of entity. The policyholder is the one who can decide who is covered, who the beneficiaries are, and who benefits from the policy's protection

2.3.3 Beneficiary

A beneficiary is an individual who may become eligible to receive payment due to a will, life insurance policy, retirement plan, annuity, trust, or another contract.

2.3.4 Underwriter

Underwriting is the process of assessing the risk of insuring a certain person or business and in the process setting premiums to be paid. An underwriter is a person who identifies, examines, and classifies the degree of risk represented by a proposed insured to determine whether or not coverage should be provided and, if so, at what rate.

An insurance underwriter evaluates the risk and exposures of potential clients. He/she decides on the risk of an applicant seeker on behalf of the insurance company; by determining if the particular insurance package would be beneficial to the applicant as well as the insurance company. The role of an underwriter needs analytical and technical skills, good communication skills and experience in research. Typically, the underwriter analyses financial statements and prepares a report using flowcharts and graphs to summarise the company's financial gains, giving expert advice by submitting it to management for a review before taking any action on an insurance application.

2.3.5 Third party

A third party is a person other than the insured or insurer who has incurred losses or is entitled to receive payment due to acts or omissions of the insured.

2.3.6 Broker

A broker is an individual who receives commissions from the sale and service of insurance policies. These individuals work on behalf of the customer and are not restricted to selling policies for a specific company but commissions are paid by the company with which the sale was made. These are the agents who are required to generally present tailor-made offers for their clients seeking cover according to the tariff negotiated in advance vis-à-vis the insurers on the one hand and their clients (insured) on the other. They are intermediaries between insurer and insured for example Mib, Grs, AXA Cessions brokers, pioneer insurance and reinsurance brokers private limited.

SECTION 03: TYPES AND ROLES OF INSURANCE

3.1 Types of Insurances

3.1.1 General insurances.

This is the same as non-life insurance. It covers non-life assets such as homes, vehicles, ships, health, and travel; from floods, fire, thefts, accidents, and man-made disasters. It is a promise to make good on the losses, but with no savings or Investment Avenue, i.e., no part of the premium can be reimbursed if the claim is not made and pay-outs are made in an unexpected loss such as an accident or a theft or a sudden liability.

a) Types of general insurance

- **Health insurance**

An essential risk-mitigating tool, health insurance prevents out-of-pocket expenses while dealing with a medical emergency. A general health insurance plan is an indemnity plan that pays for hospitalisation expenses up to the sum insured. While one can avail of a standalone health policy, family floater plans provide coverage to all the members of your family.

On the other hand, critical illness plans are fixed-benefit plans that provide a lump sum upon diagnosis of a critical ailment and cover medical costs such as pre- and post-hospitalisation costs

- **Automobile insurance**

Automobile insurance covers vehicles against accidents, damage, theft, vandalism, fire, and so forth. It covers risks associated with driving or owning an automobile. This form of insurance comes in two forms – comprehensive and third-party. A comprehensive automobile insurance policy provides a 360-degree cushion to the vehicle against damages caused due to floods, fires, riots, theft etc. Along with this, it also offers the rider or add-on benefit, personal accident coverage, and third-party liability.

On the other hand, third-party automobile insurance takes care of the damages suffered by a third party in case of an accident caused by the insured vehicle. It won't cover any damages to the insured vehicle. As per ordinance 74-15 of 30

January 1974, it's mandatory for every vehicle plying on the road to have third-party insurance.

- **Home insurance**

As the name suggests, a home insurance policy protects the home and its belongings from the damages suffered due to man-made or natural disasters. Some home insurance policies also provide coverage for temporary living expenses if the insured lives on rent due to their home undergoing renovation.

- **Travel insurance**

In case one is travelling abroad, a travel insurance policy protects against losses suffered due to loss of baggage, delays in flight, and trip cancellation. In some cases, if the insured is hospitalised while travelling, travel insurance may also offer cashless hospitalisation.

- **Marine Insurance**

It covers the loss or damage of ships, cargo, and shipment from perils like sinking, collision, burning, weather conditions, navigation errors, theft, jettison, hook damage, strikes, wars, and natural disasters.

3.1.2 Life insurance

As the name suggests, life insurance covers life. In case of the policyholder's premature demise within the policy term, the insurance company pays the sum assured to the nominee. One of the essential financial instruments, life insurance, helps the family of the insured stay financially independent, square off liabilities taken in the form of loans, maintain the lifestyle provided, and keep essential goals on track. It has provisions to provide a savings and investment avenue. Savings here mean the benefits one receives on maturity. For example, if the policyholder outlives the policy period, he or she can get back the premium paid over the years.

a) Types of life insurance.

- **Term life insurance**:

Term insurance is the simplest form of life insurance available in the market. A pure protection plan, term insurance offers extensive coverage at an affordable premium.

It pays the insured's nominee the sum assured in case of the demise of the insured within the policy term. The insurance proceeds received help the family to meet daily expenses and pay off debts. Note that pure-term plans have no maturity benefits. It means, in case the insured survive the policy term, they don't get these benefits.

However, of late, insurers have come up with the return of premium term insurance plans that return all the premiums paid if the insured survives the policy term. But these plans are slightly more expensive than pure term plans.

- **Endowment plans**

Weaving insurance and investment in a single product, endowment plans offer life cover and build a corpus for essential life goals. A certain portion of the premium goes towards the sum assured, while the other portion is invested in low-risk avenues. In case of the demise of the insured during the policy term, their nominee gets the sum assured.

In case one survives the policy term, they get the sum assured as maturity amount along with the accumulated bonuses. Thus, endowment plans to fulfil the dual needs of insurance and investment.

- **Money-back policies**

Money-back policies are similar to endowment plans, except that they pay a certain amount at pre-defined intervals during the policy term. For instance, a money-back policy for a term of 15 years may pay a certain amount at the end of the 5th and 10th years of the policy term. On policy maturity, it pays the maturity benefits along with the accumulated bonuses.

- **Unit-linked insurance plans (ULIPs)**

Combining insurance and investment in a single product, ULIPs offer life protection and the opportunity for capital appreciation by investing in various funds of varying degrees of risk. Like endowment policies, in ULIPs a certain portion of the premium provides life cover, while the other is invested in markets to earn returns.

Every ULIP has underlying funds belonging to different asset classes such as equities, debt, and hybrid where it invests to generate returns. ULIPs offer partial withdrawal after the end of the lock-in period (5 years) and provide a switching facility whereby the insured can switch from one fund to another. This facility comes in handy when the insured is nearing their goal, wherein they can switch from an aggressive fund to a debt fund.

- **Whole life insurance**

As the name suggests, whole life insurance offers one coverage for their entire life. The policy term for whole life insurance plans extends up to 100 years and as long as the premiums are paid, the policy's benefits are kept intact.

If the policyholder survives the policy term, then he/ she gets the maturity benefits. If one wants to remain insured throughout their life, whole life insurance plans are a good choice to make.

3.2 Roles of Insurance.

Insurance is not limited to intervening in the unfortunate events to which individuals are exposed, but it may take different other forms. The importance of insurance was highlighted by the words of Henry Ford: *New York is not the creation of men, but of insurance*. Without insurance, there will be no skyscraper, for no worker would accept to work at such a height, risking a fatal fall and leaving his family in misery. Indeed, without insurance, no investor would have risked the billions of dollars needed to build the skyscrapers of Manhattan without the guarantee of being reimbursed for the consequences of a fire or a construction defect that only the insurers can offer thanks to the mechanisms of insurance.[7]

[7] Tosseti A, Behar T, Fromentaux M, Menart S, (2002), Assurance *comptabilité réglementation actuariat,* Economica, p.34

3.2.1 The economic role of insurance

The social function of the insurer has a positive impact on the economy. By enabling victims of accidents or illness to regain their resources, insurance prevents them from being burdened by the community and maintains their consumption power. By enabling companies to continue operating after a disaster, insurance consolidates jobs and production and preserves the economic fabric. But the economic role of insurance does not stop at preserving economic assets at a given moment. Insurance is an essential engine of economic development for at least two reasons: guaranteeing investments and investing contributions.

Investment security: From an oil platform or a telecommunication satellite to the most modest local business, no investor would agree to invest his money in it at the risk of seeing the capital invested "go up in smoke", without having at hand, not a promise but a guarantee to recover his money when losses occur.

Investment of contributions: The insurer collects premiums before policyholders are subject to the risks against which they are insured. This normally gives the insurer a cash surplus which it must manage in the best interests of the mutual. In addition, there is always a time lag between the date of occurrence of claims and the date of their settlement. At any given time, therefore, insurers are aware of a list of reported claims for which the probable cost can be assessed and which are awaiting settlement. Therefore, the insurer can put the contributions into investments for example to the public treasury and gain some interest at the end of the given time.

3.2.2 The social role of insurance

The purpose of insurance is, thanks to the contributions paid by the insured, to compensate those who are victims of misfortune. It is an eminently social function. To guarantee an income to widows and orphans after the premature death of the head of the family; to provide the means to rebuild one's home or to buy another home for those whose residence has been destroyed by fire; to pay compensation for the loss of professional income to those who are unable to work as a result of an accident; provide the financial means for the sick or injured to receive the most effective treatment and thus increase their chances of recovering their health. It should be noted that the social role of insurance has its limits. The insurer's intervention in the event of a loss consists of offering cash compensation to the victims, whereas money is only financial compensation for the damage caused by the loss. While a cash settlement is sufficient for a company director to recover his equipment and raw materials destroyed by a fire, money can never replace a husband or father, or a hand or leg lost in an accident that has left the victim unable to work. This is obvious, but insurance at least allows the cripple, the widow, and the orphans, to receive an income and thus maintain a respectable standard of living[8].

Conclusion

In the early 20th century, the insurance companies completed their organisation so that they can respond to all the insurance needs of society and reach a level that could serve effectively. This industry has met a lot of complications in order to be fully developed in Algeria until the 1990s when the country transitioned to a market economy since then, the industry has also marked tremendous developments such that today there exists all forms of insurance policies, with the majority policies being private companies. And it is remarked that automobile insurance is the most demanded insurance in Algeria which is influenced by many factors. So the birth of modern insurance was led by maritime, land insurance was led by fire and accident insurance was led by personal accidents.

[8] Abdali W, Baa M, (2015), *la concurrence assurantielle entre les compagnies publiques et privées, cas de la région de Béjaia*, Université Abderrahmane Mira - Béjaia

CHAPTER 02: EVOLUTION OF THE AUTOMOBILE INSURANCE MARKET.

Introduction

Like any other African country, insurance in Algeria appeared later and is still growing with life insurance still in its infancy**.** Due to colonization in Algeria through the decades before independence, the evolution of the insurance industry was confused with the evolution of insurance in France. It was only after the abrogation of French laws and putting in place of new Algerian laws that Insurance in Algeria really experienced evolution. The non-life insurance has so much grown to provide diverse services from automobile insurance to marine insurance. In addition to the evolution of the insurance industry in Algeria, we shall also discuss below the most dynamic branch in the insurance industry in Algeria, the operations involved therein and how it has grown over time.

SECTION 01: HISTORY OF THE AUTOMOBILE INSURANCE MARKET IN ALGERIA

1.1 Before Independence.

During the colonial period, the French dominated the insurance industry and governed it through its laws[9]. The laws that were applied to the French government were applied also to Algeria. The economic and social development of Algeria was guaranteed by France as stipulated in Article 13 of law number 58-95 of 5 February 1958 on institutions in Algeria. The French government introduced the law of 27 February 1958 on compulsory automobile insurance. This law made civil liability insurance compulsory for owners and users of land motor vehicles. This text was modified and completed by the order of 7 January 1959. The French continued to govern the affairs of the Algerian economy until 1962 when Algeria got its independence.[10]

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[9] Tafiani M, (1987), *les assurances en Algérie : étude pour une meilleure contribution à la stratégie de développement*, Alger, OPU, p22.

[10] Sidhoum M. et Kezmane L, (2020), A*nalyse de la branche automobile au niveau de la SAA cas de l'agence code 2069, Période 2015-2019.* Tizi Ouzou, Université Mouloud Mammeri de Tizi Ouzou, p42.

1.2 After Independence.

After the independence, the Algerian authorities needed to revise the existing French laws that had been flooding the whole system while Algeria was under colonization. So, in 1966, the French texts that were renewed in 1962, were abrogated, followed by a legal vacuum from 1966 to 1974, which only ended with the promulgation of the first Algerian text relating to insurance, a text devoted specifically and exclusively to automobile insurance, in 1974.

On 30 January 1974, Ordinance 74-15 was introduced. This is a compulsory automobile insurance and compensation scheme for damages. It describes that "any victim (rightful claimants) of bodily injury resulting from a traffic accident is entitled to compensation which may be extended to the policyholder/owner or even the driver responsible for the accident under certain conditions". This ordinance maintains the principle of common law as regards compensation for material damage and introduces a real revolution in the principle of compensation for personal injury. In 1988, law 88-31 of 19 July on the modalities of compensation and revision of the scale was launched. It modified and completed Ordinance 74-15. Article 32 of law 88-31 says the financial operations of special funds of compensation were drafted in the special affectation account 302.029 in treasury writings in the revenues and expenditures.

Then, in 1975, the public authorities decided to organize the insurance market by dividing the coverage of risks between the four companies that were active at the time[11].

These were:

- CAAR: for the insurance of industrial risks, construction risks and transport risks, which were then transferred to CAAT in 1986
- SAA: for automobile insurance, mass risks and personal insurance
- CNMA: for automobile insurance and agricultural risk insurance
- MAATEC: for automobile insurance only

This specialisation lasted from 1975 to 1990.

1.3 The Automobile Insurance Today

Today, automobile insurance is well developed. There are a total of thirteen insurance companies that offers automobile insurance, these are:

[11] KPMG, (2012), *Guide investir en Algérie*, Algiers, KPMG, p.269.

- Six public companies: CAAR, CAAT, CASH, CNMA, MAATEC and SAA
- Seven private companies, created by the ordinance 95-07 of 25 January 1995: 2A, ALLIANCE, AXA Dommage, CIAR, GAM, SALAMA, and TRUST

SECTION 02: AUTOMOBILE INSURANCE MARKET.

2.1 Introduction to the Automobile Insurance Market.

The most dynamic branch of the insurance sector is the automobile insurance branch. Generally, it constitutes a market share of more than 52%. This also translates to the performance of the branch within specific insurance companies. Hence, therefore, of all the insurance branches within one insurance company, the automobile insurance branch contributes the most to the total income made by each insurance company.[12]

Before making a full dive into the automobile insurance market, let's take a small tour back to when Algeria got its independence. In 1962, the Algerian automobile insurance sector continued to be governed by French laws. However, after the independence new laws were instituted. These include Ordinance 74-15 of 1974 relative to the automobile insurance sector. Such laws helped shape the sector and how actors within it operated. In this section, we are going to touch on the actors involved in the automobile insurance market, on how they interact given the environment created by the laws put in place and lastly, their performance.

2.2 Institutions in charge of insurance:

a) The Ministry of Finance:

It is a government ministry of Algeria responsible for public finances. Its roles extend to issuing authorisations for the opening of foreign insurance branches in Algeria and the opening of representative offices of insurance and/or reinsurance companies.

The Ministry of Finance also approves professional associations of insurers under Algerian law. These associations can only carry out their activities after obtaining approval from the Ministry.

b) The National Insurance Council (CNA)

The CNA (**Le Conseil National des Assurances)** is the framework for consultation between the various parties involved in the insurance business. It is a think tank and a consultative body for the public authorities and the centre for the design and implementation of technical studies.

[12] Aps-dz, 2022, *Marché des assurances une hausse croissance de 2019* viewed on 5 May 2022 <www.aps.dz/economie /104381-marche-des-assurance-une-croissance-de-6-2019>

c) The Central Risk Office (CR)

The CR (La Centrale des Risques) is created within the Ministry of Finance and is attached to the structure in charge of insurance. Executive Decree No. 07-138 specifies its missions, which are essentially the collection and centralisation of information related to insurance contracts taken out with insurance and reinsurance companies and foreign insurance branches, which must declare the contracts they issue at the time when the risk centre informs them of any case of a plurality of the same nature of risk.

d) The Insurance Supervisory Commission (CSA)

The CSA (La Commission de Supervision des Assurances) is the state's supervisory body for insurance and reinsurance activities to promote the insurance market and protect the interests of policyholders and beneficiaries of insurance contracts by ensuring the regularity of insurance operations and the solvency of insurance companies.

e) Pricing body

Established within the Ministry of Finance, it is responsible for developing and updating the insurance tariffs in force. It is also responsible for issuing an opinion on any tariff dispute to enable the supervisory body to reach a decision.

f) The policyholders' guarantee fund (FGAS)

The FGAS (Le Fond de Garantie des Assures) is responsible for bearing, within the limits of available resources, all or part of the debts arising from the insurance contracts of insolvent companies.

It intervenes on the orders of the insurance supervisory commission after a reasoned report by the administrators' unions noting a shortfall in the assets of the defaulting company.

2.3 The automobile insurance contract.

The insurance contract is the legal relationship between an insurance company and a policyholder, the insured, which commits them to certain obligations and rights. The contract, also known as an insurance policy, is complex because of the multitude of information it contains and the specificities surrounding it.

2.3.1 Definition of an automobile insurance contract.

Individuals and companies take out insurance policies to protect their property in the event of risks. The contract sets out the rights and duties of the insured and the insurer.

In general, an automobile insurance contract is an agreement between an insurer and its customer to protect the insured on agreed guarantees, with a mutual exchange of documents. In practice, the insurance company offers adequate compensation in the event of damage suffered, in return for payment of an annual premium or contributions at various times (monthly, quarterly, half-yearly). The contract must therefore be well understood by the insured, in order to assert his or her rights in the event of a claim.

2.3.2 Types of automobile insurance contracts or policies

Two types of contracts exist according to CHANH and PECHINOT[13]

a) Personal auto contract/policy

This insurance contract is designed to cover one's personal vehicle. Included coverage may vary with one's policy of choice but just to mention a few, one policy may include:

- **Liability coverage:** this protects other drivers or pedestrians if the policyholder causes any form of bodily injury to them or any form of property damage.
- **Medical payment coverage:** this covers medical payments to the policyholder and any other passengers in the car during the time of the accident.
- **Uninsured motorist coverage:** this protects a policyholder if they are involved in an accident with uninsured drivers.
- **Physical damage coverage:** it covers any physical damage done to the car of the insured either from collusions or non-collusion accidents.

All these will be fully discussed below when we touch on *risks covered and guarantees.*

b) Fleet contract/policy

[13] Chanh S. et Pechinot J, (2016), *Manuel de l'assurance automobile*, Paris, L'argus.p.40.

The fleet is the set of motor vehicles covered within a single motor policy and is divided into two categories. It's for enterprises.

- **Natural fleets**: These are made up of a group of vehicles owned or operated by the same owner or legal entity that has taken out a collective contract for the overall coverage of its fleet. Thus all vehicles are subject to the same tariff rules, the premiums for each of them are collected at once and the conditions of the contract apply to all of them without distinction.
- **Artificial fleets:** These correspond to the "mutualised" grouping of motor contracts covering the separate clients of a prescriber with the same insurance needs, each paying the premium for their vehicle.

2.3.3 The contents of an automobile insurance contract

The insurance contract is an agreement between the insured and the company. It takes the form of an insurance policy, which includes general conditions that contain provisions common to each category of risk. They deal with the underwriting of the contract (the risks covered), exclusions, the obligations of the insured and the insurer, the settlement of claims, and disputes between the parties. The contract is based on the declarations of the insured and those of the underwriter, if the latter is a third party. The contract only comes into effect after it has been signed by the parties and after the first premium has been paid[14]

2.3.4 Taking out an automobile insurance contract

Taking out a contract with an insurer is an important act, which gives us rights but also obligations to be respected, it should not be forgotten that the link with the insurer is above all legal. It is to have the time to measure the scope of the commitment. The insurance code provides for a subscription in several stages from information to the conclusion of the contract. In the formation of the insurance contract, we distinguish two phases[15] necessary to be well insured and at the right time.

a) The pre-contractual phase:

Corresponds, in the process of forming an insurance contract, to all the exchanges that take place between the potential insurer and the potential insured before

[14] Landel J. et Pechinot J, (1996) *les assurances automobiles*, Paris l'argus, p.39
[15] Moussi S. et Mouloud S. (2017) *Modélisation des déterminants de la prime RC en assurance automobile*, Bejaia, Université Abderrahmane Mira - Béjaia

reaching an agreement. This phase imposes two constraints on the contracting parties:

- The applicant must provide the insurer with the information necessary to assess the risk to be covered,
- The insurer must inform and advise the applicant.

b) The contractual phase:

Corresponds, in the process of forming an insurance contract, to the moment when the wills of the parties, i.e., the applicant and the insurer, meet. The applicant expresses his willingness to contract through a proposal: the contract is concluded when the insurer accepts this proposal. The insurer will then provide the policyholder with several documents and the contract will take effect on a specific date

2.3.5 General characteristics of the automobile insurance contract

An automobile contract is[16]:

Consensual: The contract is formed upon agreement of the parties. No formalities are required;

Mutual: The automobile insurance contract is a mutual contract because it involves reciprocal commitments by both parties:

- The policyholder pays the premium corresponding to the risk covered;
- The insurer pays the promised benefit if the risk occurs.

Random: It is random by its very nature since it guarantees a random risk;

Onerous: The guarantee is acquired in return for a premium;

Adhesion: The insurer proposes a contract; the insured subscriber adheres to the proposed conditions;

In good faith: The insured must answer the questions asked in good faith. This good faith is always presumed; it is up to the insurer to prove the contrary.

[16] Regine.M, (2015), *Techniques d'assurance*, Paris, Foucher, Malakoff, P20

Successive: Except for certain fixed-term contracts, the contract is renewed every year at the end of the term. Every year, at the main expiry date, by tacit renewal, without any particular action on the part of the policyholder by the insured subscriber. This character makes it possible to avoid oversight.

2.4 Risks covered and guarantees in an automobile insurance contract

Insuring the car is compulsory. In addition to the legal obligation, insurers offer optional cover to be taken out according to your specific needs. To be properly insured, certain rules must also be respected, at the time of taking out the contract, during and in the course of the contract and in terms of prevention.

2.4.1 Compulsory third party liability cover

In accordance with Article 01 of Ordinance No. 74/15 of 30 January 1974 relating to the obligation to ensure motor vehicles and the system of compensation for damages any owner of a vehicle must, before putting it on the road, take out insurance covering damage caused to third parties by his vehicle". Therefore, only the Civil Liability" cover is compulsory by law.

The only compulsory automobile insurance, civil liability cover allows compensation for damage caused to third parties by the fault of the driver of the vehicle or one of his passengers, injury or death of a pedestrian, a passenger or an occupant of another vehicle; Damage to other cars, two-wheelers, buildings, etc.

This third-party liability insurance covers both authorised and unauthorised drivers. However, after having compensated the victims, the insurer may have recourse against the unauthorised. Failure to comply with this insurance obligation constitutes an offence. A fine, but also a suspension of one’s license and impoundment of the vehicle can be applied.

In order to enable the police to monitor compliance with this legal obligation, the insurance certificate (or sticker) must be affixed to the windscreen of the vehicle. In addition, the insurance certificate or green card may also be checked and this insurance obligation applies even if the vehicle is not in use, for example when it is stored in your garage

2.4.2 Optional cover

a) Vehicle damage cover

The optional coverage of automobile insurance covers the damage to the car

- **Collision and comprehensive cover**: This covers all material damage to the vehicle, regardless of the type of accident or the fault of the driver.
- **Collision Damage Waiver (CDW):** This only applies in the event of a collision with a pedestrian, another vehicle or an animal whose owner is identified. Most policies exclude drivers who have been under the influence of drugs or who have been tested with a blood alcohol level in excess of the permitted limits from all-accident and collision damage cover.
- **Vehicle theft and fire (Vol et incendie de vehicle (VIV)) cover:** This provides compensation equal to the value of the vehicle on the day of the fire or theft, or to a value specified in the insurance contract. In principle, fire insurance also includes compensation for the consequences of an explosion, lightning strike or spontaneous combustion. The insurance contract defines the conditions of application of the theft cover and the terms of compensation. The insurer may require preventive measures against theft (installation of an alarm, installation of a circuit breaker preventing the vehicle from being started, engraving of the registration or serial number on all windows, accompanied by an entry of the vehicle in a file accessible to the police, storage of the vehicle at night in a locked garage). In the event of theft, compensation is paid after the period specified in the insurance contract (usually thirty days). If the vehicle is found during this period, compensation is paid for any damage caused by the thief. Vandalism can be covered in addition to the theft cover, with varying limits depending on the contract
- **Glass breakage cover (BDG):** This covers damage to the windscreen and may also extend to the side windows, sunroof windows, rear window, headlight units and rear-view mirrors.
- **The most common options:** Some off-spec accessories (telephone, roof box, etc.) are not always covered. In order for them to be covered by any insurance, they must be declared to the insurer when the contract is taken out or when they

are installed. Some policies cover new cars at purchase price for six months or more, others cover cars at purchase price for one or two years after purchase, regardless of age. This coverage option, which provides a minimum indemnity for a certain period, increases the number of situations in which the vehicle can be repaired. The contents of the vehicle (mainly clothes and personal effects) can also be covered within certain limits and under certain conditions. The loan of a replacement vehicle is also possible under certain conditions.

- **Compulsory guarantees attached to optional damage guarantees:** If the contract includes a vehicle damage guarantee (all accidents, collision damage, theft, fire, etc.), the vehicle is automatically covered in the event of natural disasters, technological disasters, storms (damage caused by the "effects of the wind" storm is compensated) and attacks and acts of terrorism (the attack guarantee covers damage resulting from acts of terrorism and attacks committed on national territory). If only the "glass breakage" guarantee is taken out, the benefit of these compulsory guarantees will be limited to the only elements corresponding to the definition of glass breakage (most often windscreen and sometimes side windows, sunroof windows, rear window, headlight units and rear-view mirrors).
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2.4.3 Defense and recourse cover

Under this cover, the insurance company guarantees the defence of the insured's civil interests before the competent court when his civil liability is called into question as a result of the use of the vehicles named in the contract. The company also provides for his defence before the regressive court in the event of prosecution by the public prosecutor's office following a traffic offence or for recklessness committed while driving the vehicle; the insurer shall exercise recourse on behalf of the insured against third parties responsible for accidents caused to the insured's vehicle, either amicably or through the court.

2.4.4 Assistance cover: for the vehicle and passengers

This cover allows you to be repaired and towed in the event of a breakdown or accident. Many insurance contracts also include the sending of spare parts, the cost of accommodation while the vehicle is being repaired or driven to its destination, the cost of recovering the vehicle and the payment of a deposit when abroad.

Passenger assistance usually includes repatriation in case of accident or illness, reimbursement of medical expenses incurred abroad, and repatriation of the body in case of death. It is worth checking whether there is a mileage allowance in the event of a breakdown and whether the assistance services apply in the foreign countries travelled through. The assistance company itself provides these services in kind on a simple telephone call after checking the existence of the guarantee.

2.5. Exclusions and Disqualifications in Automobile Insurance

First of all, it is necessary to understand the principle of exclusion of cover and to distinguish the related categories.

2.5.1 Definition of exclusion from cover in automobile insurance

The exclusion of cover is a contractual provision preventing the insured from claiming compensation from his insurer. It is to be distinguished from a lapse in a cover which only penalises the insured after the loss has occurred, in contrast to the exclusion. The insurance company must include the exclusions of cover in a particularly prominent place in the automobile insurance contract so that the customer can normally read them[17].

As a result, exclusion of cover implies that the insured has to pay the expected compensation to the victims of the accident alone, which is often a considerable amount of money, both for property damage and personal injury. There are several situations that may justify a guarantee exclusion, depending on the nature of the loss and the degree of responsibility of the driver. This provision is usually the result of bad behaviour on the part of the insured and there are two categories, legal and contractual exclusions of cover.

2.5.2 Types of exclusions from cover

A guarantee exclusion is a claim that is not taken into account by the insurer and cannot be the subject of any claim by the insured. There are two types:

[17] Lezoum, M. (2017), *La situation actuelle du secteur des assurances en Algérie, quelles sont les alternatives ?* Oran, Université d'ORAN.

a) Statutory exclusions from automobile insurance coverage.

These are exclusions from cover dictated by law, which cannot be avoided by either the insured or the insurer. This means that neither party will be able to negotiate access to these exclusions of cover nor the insured will not be able to claim any compensation under their application[18].

These exclusions of cover are also called "d'ordre public", they are enacted by French legislation. They are linked to the bad behaviour of the driver, which would imply the occurrence of a loss or its aggravation. Legal exclusions of guarantees are therefore particularly prejudicial for the insured, who must ensure that he or she never finds himself or herself in such a situation.

Legal exclusions of cover are subject to a very strict legislative framework. It is the Insurance Code that determines the nature of their occurrence and the conditions of exclusions linked to them. There are two such exclusions[19]:

Driving without a driving license: in the event of invalidation, suspension or cancellation of the driving license, a person who drives anyway and is involved in an accident cannot claim any compensation. As driving without a license is an offence, the driver is also liable to prosecution (fine and imprisonment).

Non-compliance with safety rules: this exclusion concerns in particular the passengers of the vehicle, as the driver remains responsible for their safety in the car. Forgetting to wear a seatbelt usually means a 'simple' reduction in the compensation provided. The insurer will initially pay compensation to third parties, but will then turn to the insured person for reimbursement of the amount used.

b) Contractual exclusions from automobile insurance cover

Unlike legal exclusions, contractual exclusions can be freely dictated by insurers. However, they must be clearly stated in the car insurance contract signed by both parties. In most cases, these exclusions are also linked to the driver's behaviour, which would have put him/her at fault and prevented him/her from claiming the compensation provided for. The exclusions of contractual guarantees are therefore specific to each

[18] CNA, (2012) *revue N°01 : 1e semestre 2012*

[19] Mellal A, (2007), *le marché algérien de l'assurance : une nouvelle dynamique en marche*, Paris, Ecole Nationale des Assurances (ENASS), P 33

contract, although the vast majority are found in the agreements made with the various insurers. For the latter, it is a question of taking security measures so as not to reimburse the insured if the latter is at fault and in a situation of aggravated risk.

Each insurance company is theoretically free to choose the exclusions that will be specific to the contract signed, as long as the law is respected and in particular the insurance code. In fact, the claim related to the offence committed could not be compensated by the insurer and the client would be faced with reimbursing the loss from his budget. The contractual cover exclusions are as follows[20]:

- Driving under the influence of alcohol: this criminal situation prevents the insured from claiming compensation in the event of a claim unless he/she is not at fault, which remains very rare.
- Driving under the influence of narcotics: in the same way as alcohol, driving under the influence of drugs: the same way for alcohol, the insured cannot be compensated in the event of an at-fault accident for driving under the influence of drugs, which remains an offence.
- Refusal to obey: this is the act of resisting the police and not cooperating. In this situation, the driver risks legal proceedings and also the impossibility of claiming compensation in the event of an accident.
- Hit-and-run: in case of an accident and then the insured flees to avoid a penalty, he/she cannot be compensated for the damage suffered, whether material or physical.
- Speeding: this is an offence if the excessive speed is greater than 50 km/h with a repeat offence. The occurrence of a claim involving the insured, or even third parties, in a situation of speeding automatically cancels the compensation provided for failure to respect the legal framework.
- The lending of the vehicle: if the insured lends his car to a friend and the friend has an accident, he may not be insured because of the exclusivity clause which only allows the policyholder to use his vehicle.

[20] Cna.dz (2017) *Revue Assurance 2017*, viewed on 11 May 2022 <https://www.cna.dz/Revue_Assurance_2017>

- Theft without breaking and entering: if the vehicle is stolen but no break-in is found (i.e., the doors were left open), the insurer considers this to be an increase in risk and will not pay out.
- Use of a caravan: if a caravan is towed by the vehicle, the insured must have a specific cover. If this is not in place, the insured cannot be reimbursed in the event of a claim.
- Use of the vehicle for racing: the vehicle must be insured as a private passenger vehicle for normal use. The use of the vehicle for racing prevents the insured from being compensated for a claim arising in this context.

2.6 Automobile Income and its Evolution

Automobile insurance is the main branch of the Algerian insurance market, with more than 52% of the market share (all branches combined).

Over the last five years, it has recorded a regular progression of about 12% on average, with a peak of 21% in 2012[21].

This progression is the result of, the increase in the national car fleet, (imports of new vehicles, estimated at 400,000 vehicles on average per year)[22]

[21] Union Algérienne des Sociétés d'Assurance et de Réassurance (2015), *l'assurance automobile en algerie*, *Situation et perspectives,* Alger, UAR
[22] Jeune Afrique, (2015), *Alger veut limiter les importations de véhicules à 400 000 unités par an*, viewed on 14 May 2022 <www.jeuneafrique.com/242845/economie/alger>

Table n°1: The evolution of Gross premium revenue

YEAR	REVENUE (000)	Evolution period	Rate of evolution
2015	66 202 087	2015	-
2016	65 199 840	2015-2016	-1.5%
2017	65 503 601	2016 – 2017	0.46%
2018	69 128 000	2017 - 2018	5.53%
2019	69 396 000	2018 - 2019	0.38%

Source: elaborated by the authors

In 2015, the automobile insurance branch registered its revenue of the year as amounting to around 66 202 087 000 DA. The following year, the branch suffered a decline of around 1.5% of its revenue. In 2017, the branch picked up again and recorded an increase in revenue of 0.46%. 2018 can be termed somewhat a golden year. In this period the revenue increased by around 5.53%. This is attributed to the less amount of money that had to be paid as compensation considering the lower number of claims recorded in the year, thus creating a larger profit margin. The year that followed, 2019, also registered an increase in revenue of 0.38%. In general, one can tell that the automobile insurance market in Algeria growing annually and this could be attributed to the growing automobile manufacturing industry and the growing population as well among other factors.

Conclusion

In this chapter we have discussed the evolution of the insurance industry in Algeria, the different institutions and actors associated and the operations involved in insurance. This helps to bring to view a deeper understanding of how insurance functions and how these different aspects of insurance contribute to its growth and development. In the next chapter, we will discuss the process we have developed to measure the growth of this insurance industry and the different variables involved.

CHAPTER 03: RESEARCH METHODOLOGY

Introduction

The purpose of this chapter is to introduce the research methodology for this study regarding the impact of the automobile branch on the growth of the insurance company. This chapter explores the various steps of the research and provides a justification for each step taken. It involves the general research perspectives, data collection, selection of variables and data analysis methods.

SECTION 01: RESEARCH PERSPECTIVE.

1.1 Research Design and Philosophy

Our study used the positivism philosophical perspective. This is aligned with the hypothetico-deductive model of science that builds on verifying a priori hypotheses and experimentation by operationalising variables and measures. It uses logical, quantitative scientific methods. We chose positivism because the impact of the automobile branch on the growth and development of the company can be examined objectively through the use of established theoretical frameworks and structured instruments to assess and analyse it, upon which generalisations can be made from the findings.

Moreover, we used a deductive design approach which is used to test existing theories and hypotheses and also gives a possibility to generalise research findings to a certain extent. We also used non-experimental hypothesis-testing research.

1.2 Research Purpose.

Since our study involves both qualitative and quantitative results, we adopted a mixed methodology. This study combines all three: explanatory, descriptive and exploratory purposes. Firstly, the study is descriptive in that it seeks to describe in detail the state of the automobile branch in CAAT insurance company, thus giving an in-depth understanding of the reality of the importance of the automobile branch to the whole insurance industry. Secondly, the study is explanatory since it will seek to determine the impact of the automobile insurance branch on the growth and development of an insurance company. It will also explore the contribution of the automobile branch in relation to the contributions made by other insurance branches. Thirdly, the study is exploratory in that, there exists a research gap on the topic of how much contribution is made by the automobile branch in insurance companies with a wide range of different branches offering different kinds of insurance services.

1.3 Research strategy

In this study, we chose a case study which involves studying a specific situation and its impact in order to have an in-depth understanding of a complex phenomenon as it relates to a specific environment. It is mostly used where the purpose is to gain a rich and in-depth understanding of the context of the research and the processes being enacted (Morris and Wood, 1991 in Saunders et al., 2007)[23] It, therefore, uses multiple data collection sources, termed triangulation. Mostly it is related to explanatory and exploratory research that seeks to find out 'why', 'what' and 'how' issues in the case context which is the purpose of our research. Comparably stated by Van Thiel (2014)[24], a case study may entail anything and everything a researcher is captivated to observe or assess (i.e. a project, policy, organization, neighbourhood, city or even a country) by explaining, exploring or describing real-life circumstances in order to search for appropriate solutions, that is why we chose it.

[23] Frank K, Duodu T, (2011), An *Analysis and Assessment of Customer Satisfaction with Service Quality in Insurance Industry in Ghana,* Norrbotten, Luleå University of Technology.
[24] Sandra V.T, (2014) *Research methods in public administration and public management,* London, Routledge.

SECTION 02: DEFINITION OF STUDIED VARIABLES

Operationalisation is about turning abstract concepts into measurable observations. The study aimed to explain how the automobile insurance branch contributes to the growth and development of the company. Just below we are going to present different variables, describe and summarise how relevant concepts and definitions were translated into variables, indicators and values which were measured and collected through various methods in data collection. Various possible valid and reliable methods of collecting and measuring data of the selected concepts were available. The following operationalization approach was taken for the selection of indicators

2.1 Endogenous Variable: Production

In this study, GWP is defined as the sum of premiums as well as gross profit which is a measure of profitability. The study measured the growth of the CAAT Company using its production. This is because, at the Agency level of the CAAT Company, the GWP represents gross profit, production and premiums as well the three are synonyms in this study. At the agency, there is limited data to measure the growth because of the centralisation of the system of the company whereby for example the balance sheet can only be calculated at the headquarters in Algiers and that being global balance sheet cannot be used to measure the activities of the individual branches of each agency. So due to the limitation of data at the host company we used gross profit as a measure of the company’s growth.

2.2 Exogenous Variable 1. Management of Claims

Claims represent the benefits paid to policyholders. They can be grouped into declared claims, paid claims, classified claims, and claims to be paid and retaken claims. The claims can be used to measure the performance of the company by evaluating how the company handles its claims, the size of stocks etc. They do affect the level of financial and underwriting performance, do influence the size of assets, do influence insurance penetration and do reflect the overall insurance activity of a company and thus its growth. Payment of claims which is called coverage is the insurers' obligations agreed upon under the terms and conditions of every signed contract. The weight of claims during a specific period from the automobile insurance branch as a whole were considered and its impact on the GWP of the whole Agency.

2.3 Exogenous Variable 2 Accounts Receivables Management.

Accounts receivables reflect the number of premiums that are not paid instantly after registration with the company. Generally, after registration of the policy, the insured is expected to pay their set premiums and when the client chooses to pay that premium at an ulterior date then this is termed credit and when the client finally pays it out, it is called recovered credit. So in this study, the value of these credits was measured since the insurance company uses primarily the premiums collected for its operations therefore knowing whether clients pay cash at the point of registration or they just register and remain on credit reflects the availability of funds to cater for the insurance contracts listed.

2.3 Other Variables

Many other measures could be involved to help give a bigger picture of how the automobile insurance branch affects the insurance company but due to the unavailability of data at the agency level, they were left out. These include liquidity, asset growth, insurance penetration, management soundness and government intervention among others.

Table n°2: Summarised Operationlisation Table.

Concept	**Variable**	**Indicators**
Company Growth	Production	Gross written premiums
Claims	Claims Management	Claims ratio
Credits	Accounts receivables Management	Accounts receivables ratio

Source: elaborated by the authors

SECTION 03: DESCRIPTION OF USED DATA

Data collection is a significant element of statistical research. It involves collecting information from available sources in order to come up with solutions for a specific problem. The process evaluates the outcome and future trends. Data collection involves identifying data types, their sources and the methods being used. In existence are two methods of data collection which are primary data collection and secondary data collection and these are detailed further below.

3.1 Types of Data.

3.1.1 Primary data

Primary data is a type of data that is collected by researchers directly from main sources through interviews, surveys, experiments, observations, focus groups, etc. In this study, we used interviews as our tool for data collection. An interview can be grouped into a personal interview, self-enumeration interview and telephone interview. Happening between the interviewer and the interviewee, the interview can be structured or unstructured, direct or indirect and focused or unfocussed. In this research, we mostly relied on personal interviews through which we gathered information from the director of the CAAT insurance agency 191 of Béjàia and from the head of the automobile insurance branch. Notepads were very useful tools for jotting down all the information we were obtaining during each interview.

3.1.2 Secondary data

Secondary data is about gathering information from already existing sources like research materials published in research reports and similar documents. These documents can be made available by public libraries, educational institutions, commercial information sources, websites, data obtained from already filled in surveys, and government and non-governmental agencies have this data in their archives. Generally, the secondary data collection method is considered to be cost-effective and quick compared to the primary data collection method since the latter uses already existing data. Two types of secondary data collection are qualitative data collection and quantitative data collection.

Sources of data were collected from reviews of journals, articles, and books both published and unpublished in earlier research

3.2 Data Analysis

3.2.1 Univariate Data Analysis

This is a method of analysing data where there is one dependable variable. The objective is to derive the data describe and summarise it as well as analyse the pattern in it. This method of data analysis explores each variable separately. The data can be described through histograms, pie charts, bar charts, etc

3.2.2 Bivariate analysis.

The bivariate analysis involves two variables. It seeks to show the relationship between the two variables.

Types of bivariate analysis

- **Scatter plot**

  It shows whether there exists a relationship between the two variables and whether positive, negative or no relation.
- **Regression analysis**

  Regression analysis reflects the degree of the influence of the independent variable over the dependent variable.
- **Correlation coefficients**

  The correlation coefficient shows the strength of the relationship between the two variables.

3.2.3 Description of used data

This part focussed on two types of statistics that is descriptive statistics and inferential statistics. The aim is to find patterns and correlations between several variables simultaneously, allowing for a much deeper, more complex understanding of a given scenario. There are two types of analysis techniques used and these are; dependence techniques which look at cause and effect relationships between variables and interdependence techniques, which explore the structure of a data set.

CONCLUSION

This chapter outlined how the research was conducted illustrating the different research approaches chosen, the method used to collect the data as well as data analysis approach. The aim of this was to see how different variables that impact the growth of an insurance company can impact the dependent variable that measures this growth. The next chapter explains the analysis process, results and conclusions.

CHAPTER 04 RESULTS AND DISCUSSION

SECTION 01: COMPANY PRESENTATION.

1.1 What is CAAT?

The “Compagnie Algérienne des Assurances” (CAAT) which would translate to English as the Algerian Insurance Company is a public economic company, a joint-stock company (EPE/SPA) with social capital of 20 000 000 000 DA, entirely owned by the Algerian State, the sole shareholder.[25]

CAAT was created in April 1985 by decree 85/82 to carry out insurance related to transport through specialisation. The economic reforms undertaken towards the end of the 1980s allowed the lifting of the specialisation and consequently the transformation of CAAT into a Public Economic Enterprise, a joint-stock company, approved to practice all the insurance branches. As of 1 July 2011, it has become, by law, an all-branch property and casualty insurance company following the separation of personal insurance from general insurance.

CAAT is one of the main leaders in the Algerian insurance market. It is a major player in the Algerian insurance market. Since its creation, the level of its GWP has always been equivalent to or superior to that of the market.

Very quickly after the end of the specialisation period, CAAT was able to establish itself throughout the national territory and diversify its business portfolio by underwriting all branches of insurance.

As of 2020 the company Portfolio structure had more likely replicated the same structure as observed over the years, that is:

- Industrial risk insurance holds the first position with a contribution of 66% to the total gross profit
- In the second place, automobile insurance with a 28% contribution
- Transport insurance follows with a contribution of 6%.

1.1.2 CAAT's missions and activities

These can be summarised as follows:

[25] Compagnie Algérienne Des Assurances, (2020). *Rapport annuel 2020*

- To compensate its clients in the shortest possible time
- To match information systems and facilitate links;
- To extend its activity to actions that enable it to exercise the role of an institutional investor
- To extend its activity to all the fields of insurance;
- Expand its activity towards financial intermediation and partnership;
- To enable the development of an integrated information system covering all areas of CAAT's activities;
- To follow a strategy on the importance of industrial risks;
- To direct the savings generated by the importance of the collective funds towards the financing and development of the economy;
- Develop a management style and a social climate favourable to the development of the workers.

1.2 The Organisation of CAAT

The company structure is presented in a diagram

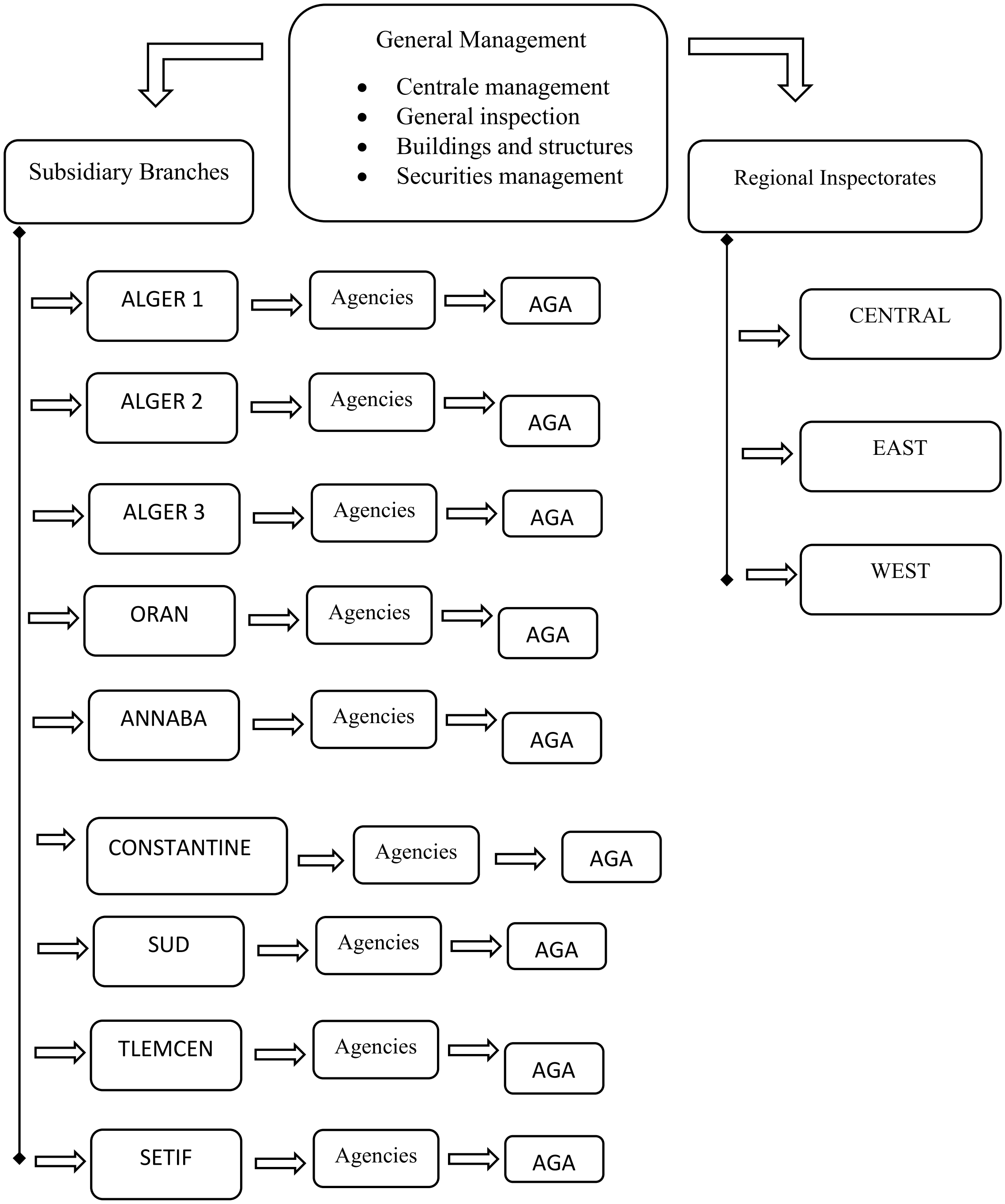

FIGURE 01: Company structure ***Source: CAAT Documents***

1.2.1 The General Management

It is placed under the authority of the President and CEO and comprises

- Two administrative Directorates-General
- An Inspector General;
- Two assistants;
- A real estate management structure;
- Twelve central directorates;

1.2.2 The subsidiary branches

CAAT has seven subsidiary branches located in each regional capital. Three of them are in Algiers (Algiers 1, Algiers 2, Algiers 3), Oran. Constantine, Annaba and Ghardaïa. These branches are organised in the same way as the general management. The branch management is composed of a director and eight departments.

1.2.3 The regional inspectorates

The three regional inspectorates (central, east, and west) are hierarchically attached to the General Inspectorate. Each regional inspectorate is under the authority of a regional inspector and is made up of regional missions.

1.3 The Organigram of CAAT

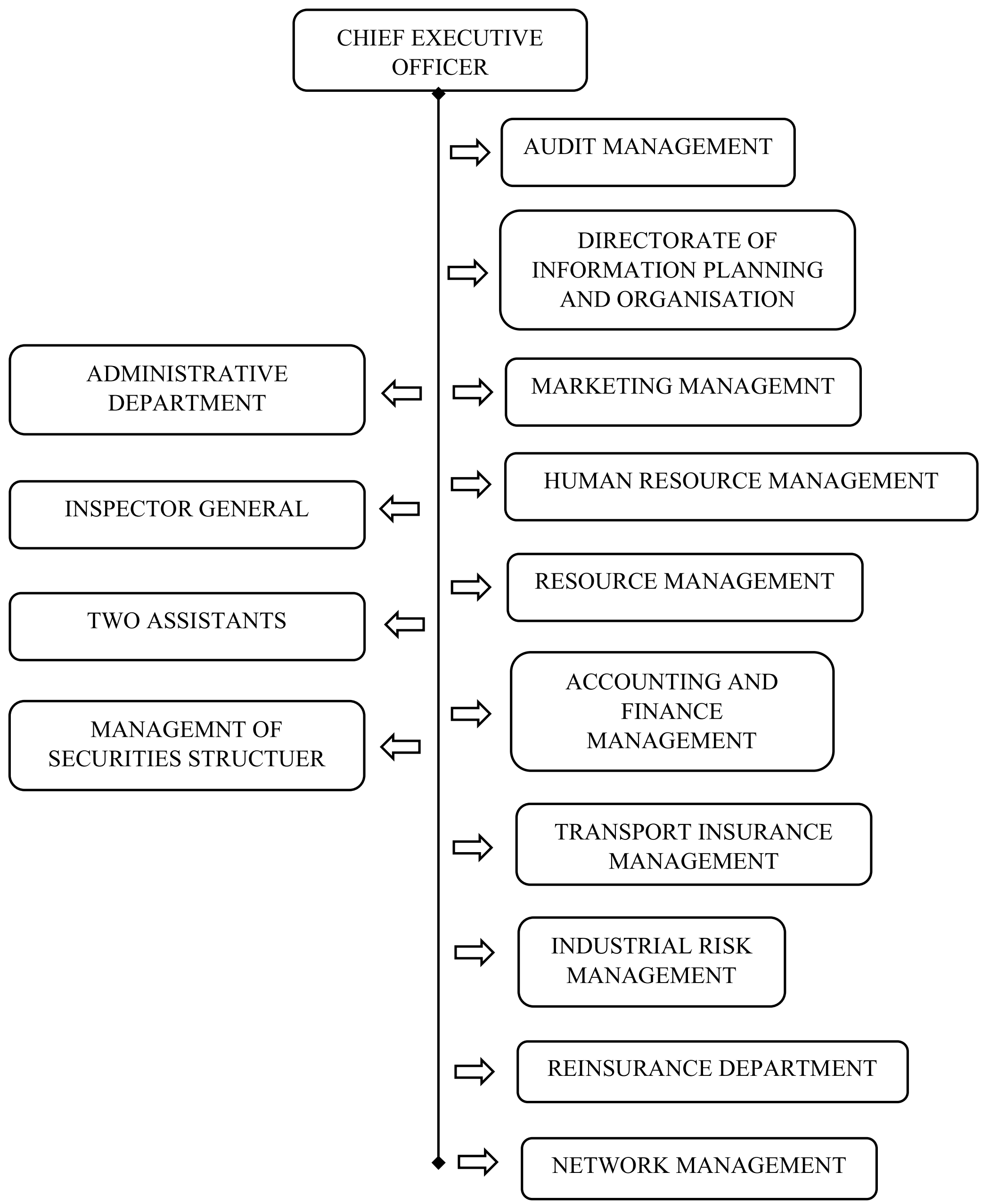

FIGURE 02: Organigram of CAAT. ***Source: CAAT Documents***

1.4 Presentation CAAT Agency 191 Béjàia

1.4.1 Creation and organisation

In the Province of Béjàia, CAAT is represented by two direct agencies and two general agencies (Béjàia and Akbou). The most important one in terms of gross written premiums is agency 191 which we present below:

The 191 Agency in Béjàia was created in 1998. It is affiliated with the Algiers 3 branch and it is composed of four departments headed by a director. It is classified as a type "A" agency. According to *the balance* website[26], an A-rated agency is one that's considered highly likely to repay creditors and any claims presented. It's about an agency's financial performance rated by credit rating agencies.

The mission of this agency is to take care of customer risks and to draw up insurance contracts in various branches. In the event of a claim, it compensates its policyholders within the shortest possible time and in the form prescribed by law. It is responsible for keeping regular accounts and for the collection of all proceeds.

1.4.2 Different services of CAAT 191

The CAAT agency 191 has four departments: automobile, and transport. IARD and Accounting.

In the following, we will try to describe briefly the daily tasks carried out by each department.

a) IARD and personal insurance

In this department, various contracts are taken out, such as fire and miscellaneous risk insurance, CAT-NAT insurance (which became compulsory in 2003 following the earthquake in Boumerdes in May 2003, construction insurance, and other damage, or property insurance, civil liability insurance and simple risk insurance. In addition to personal insurance, group insurance, travel insurance and credit assistance. Until 2010;

[26] The Balance, (2022), *What is an A-rated insurance company*, viewed on 20 May 2022, <https://www.thebalance.com/what-is-an-a-rated-insurance-company-and-why-does-it-matter-4065596#:~:text=An%20A%2Drated%20insurance%20company%20is%20one%20that%20has%20received,policies%20and%20repay%20its%20creditors>.

the 'IARD remains dominant in terms of turnover with a share of 52% in this year's financial year.

Personal insurance and credit insurance account for 5% and 1% of the portfolio structure. This branch has progressed by 29% thanks to the maintenance of "group" contracts in the portfolio, the increase in subscriptions of the product (temporary - credit), and the evolution of travel insurance and assistance.

b) Automobile insurance branch

For each motor claim, there is administrative management of the form in which the information relating to the insured and the third party, the supporting documents, and the accident declarations appear on one hand, and technical, material and bodily management carried out after expert opinion. On the turnover side, automobile insurance is still in the second position with 30% in 2011.

The level of written premiums in this branch has stabilised due to the drop in the volume of new vehicle sales as a result of the abolition of consumer credit.

In addition, automobile insurance claims continued to increase to reach DA 4.396 billion against DA 4.051 billion in 2010, i.e., a variation of 8%. This evolution is justified by the number of claims generated by the increasing number of damages from material accidents, combined with the evolution of repair costs

c) Accounting and finance department.

This department is responsible for the following tasks:

- Entering and accounting for GWP using policies and endorsements from the GWP department;
- Accounting for claims and paid expenses;
- Receipt of cheques from policyholders in settlement of policies and endorsements and issuing of cheque payment advice; Receipt of credit notes and payment advice;

It also settles expenses through:

- The settlement of claims, fees and the issuing of cheques or payment orders
- Settlement of overheads or miscellaneous charges.

d) Transport branch

This department is composed of a GWP section and a claims section. It deals with damage and material losses, loss of weight in quantities, theft and disappearance of goods either during transportation or during handling operations. The share of this branch has increased by one point compared to 2010, with 12%.

In terms of production, this branch shows an increase of around 14% compared to the 2010 financial year. This growth was driven by hull insurance and ship's horn insurance. In addition, several important contracts in marine facultative insurance have contributed to the development of this branch.

1.4.3 Organigram of the agency 191 of CAAT

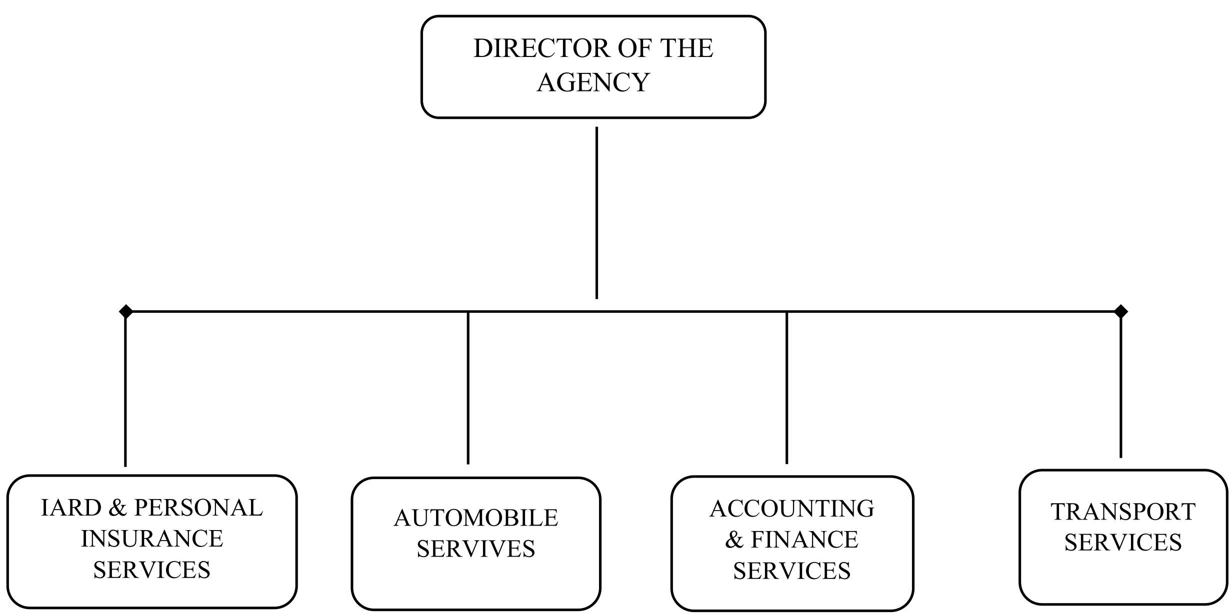

FIGURE 03: Organigram of CAAT agency 191 ***Source: CAAT Documents***

SECTION 02: UNIVARIATE ANALYSIS.

In this part, we analyse each variable on its own and determine its progression and evolution through the studied period in view to see how the behaviour of each of our three variables may have impacted the agency.

2.1 Production

Starting with our dependent variable production, we are going to analyse the Gross Written Premium (GWP) from all the branches of the agency and then determine the branch with the most contribution to the total GWP of the Agency throughout the studied period (2012-2021).

Table 3 shows the GWP and its evolution from all three branches over the period from 2012 to 2021.

Table n°3: GWP (2012 – 2021).

	production			Evolution		
	Automobile (000) DA	Transport (000) DA	IARD (000) DA	Automobile %	Transport %	IARD %
2012	37031	50991	18739	0	0	0
2013	55331	53841	27719	49.42	5.59	47.92
2014	63618	72046	24054	14.98	33.81	-13.22
2015	58684	58218	29274	-7.76	-19.19	21.70
2016	72182	49707	38233	23.00	-14.62	30.60
2017	99790	51870	44016	38.25	4.35	15.13
2018	91938	49876	55206	-7.87	-3.84	25.42
2019	83930	55981	43775	-8.71	12.24	-20.71
2020	68424	53039	41316	-18.47	-5.26	-5.62
2021	65774	55943	53310	-3.87	5.48	29.03
total	696712	551512	375642			

Source: elaborated by the authors

2.1.1 The evolution of the production (GWP).

The graph below shows the evolution of GWP in all three branches over the period 2012-2021.

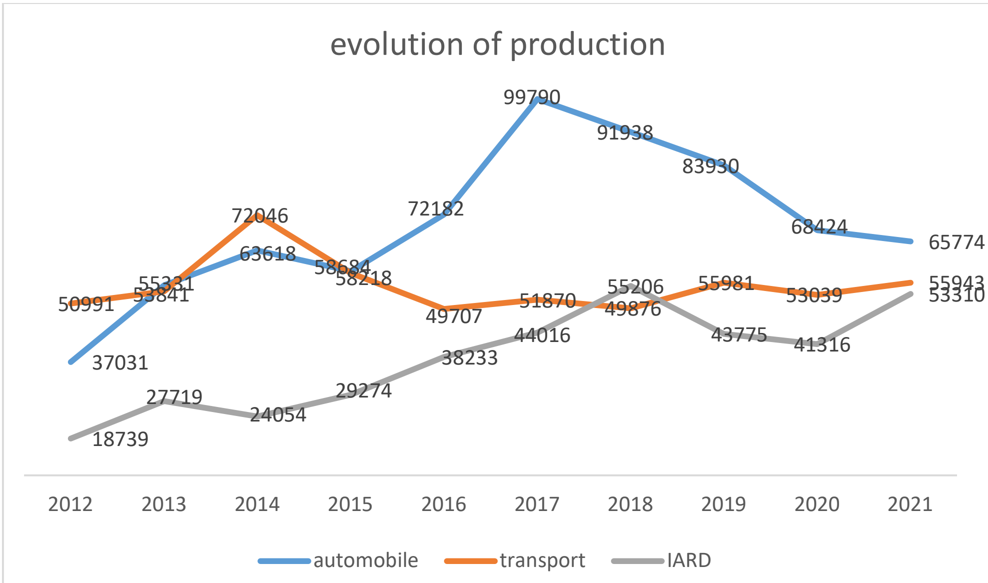

FIGURE 04: Evolution of GWP over the period 2012-2021.
Source: elaborated by the authors

Just by observing, the graph above, we can tell that from the start of the chosen period of research until the year 2021, the GWP of the insurance agency has been growing. Overall, it's evident that the automobile insurance branch had a higher contribution given that its curve for the most part has been higher than the rest of the curves almost for the entire duration.

There are, however, some peculiar years where we can see huge differences, for example in the year 2014, the GWP from the automobile branch was registered at around 63 618 000 DA and this amount was surpassed by the amount of 72 046 000 DA recorded as GWP from the transport branch. The IARD, branch had the least amount of around 24 054 000 DA.

In 2017, we can see an interesting trend as well. The automobile branch had the most amount of GWP at around 99 790 000 DA. The transport branch follows with 51 870 000DA and then lastly the IARD branch had around 44 016 000 DA in production.

In general terms, the automobile branch had the most contribution to the total GWP for the entire year of 2017. In percentages, the automobile branch contributed 51% to the total GWP of the year. The transport branch comes in second with 27% and then the IARD sits in the last place with a contribution of 22%.

2.1.2 Branch contribution to total GWP

Below is a chart showing the contribution in percentage that each branch made for the year 2017.

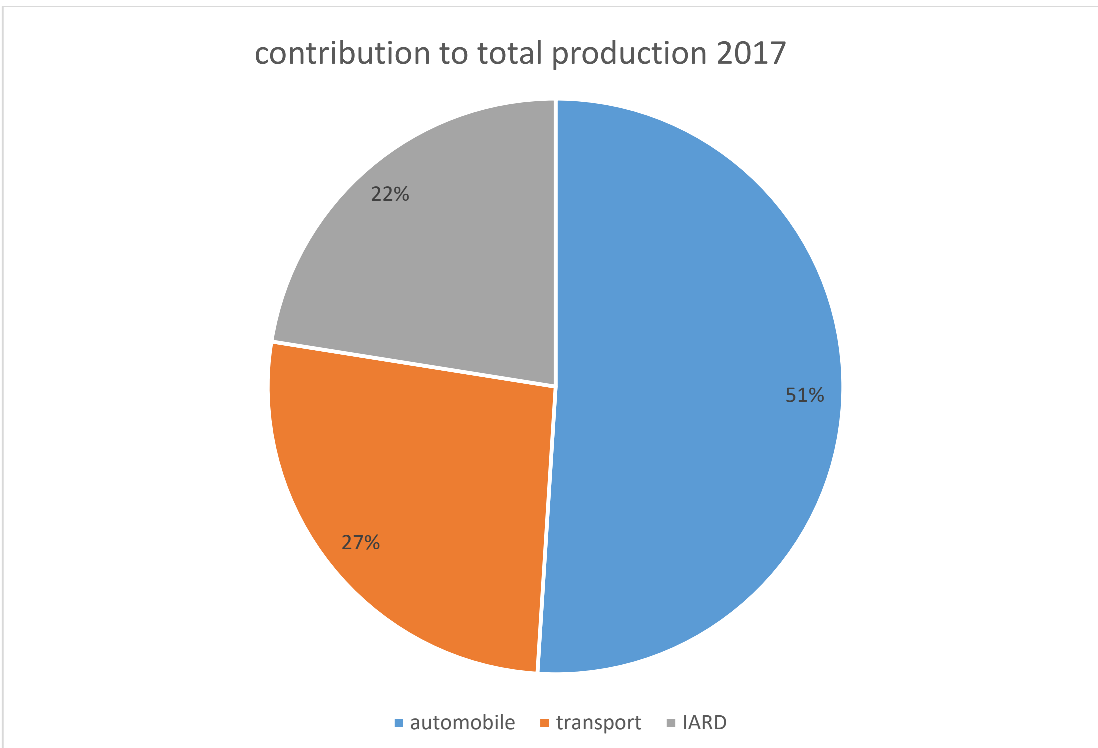

FIGURE 05: Contribution of each branch in 2017

Source: elaborated by the authors

2.1.3 Branch contribution to total GWP in ten years

In the pie chart below, it is shown how much contribution each branch has made to the accumulated GWP for the entire duration of ten years.

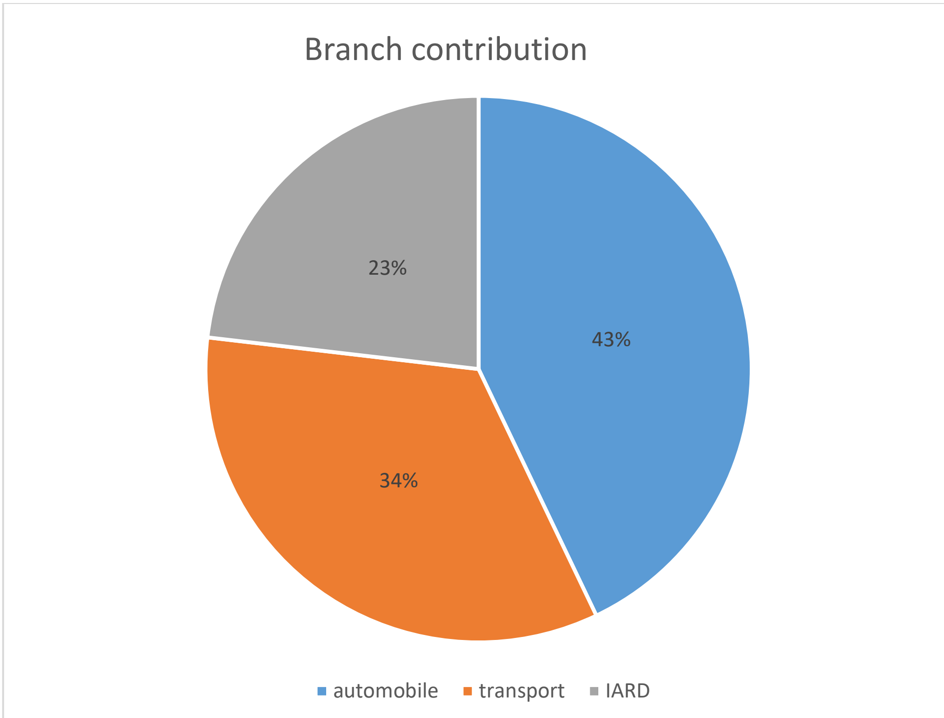

FIGURE 06: Part of the contribution made by each branch

Source: elaborated by the authors

During the entire period of ten years, the Agency, accumulated in total an approximated amount of 1 623 866 000 DA. Of that amount, the automobile branch had a contribution of 43% which is greater than the rest, the transport branch follows with a contribution of 34% and then lastly, the IARD had a contribution of 23%.

2.2 Accounts Receivables

Below is a table showing the amount of the receivables as well as a percentage of their evolution each year from 2012 up to 2021 one as well.

Table n°4: Accounts receivables from 2012 to 2021

	Accounts Receivables			evolution		
	Automobile (000) DA	Transport (000) DA	IARD (000) DA	Automobile %	Transport %	IARD %
2012	13042	28931	3885	0	0	0
2013	17852	16681	1842	36.88	-42.34	-52.59
2014	9078	19521	6251	-49.15	17.03	239.36
2015	2546	21455	5067	-71.95	9.91	-18.94
2016	4592	18378	5978	80.36	-14.34	17.98
2017	6565	2566	6921	42.97	-86.04	15.77
2018	9421	5404	13775	43.50	110.60	99.03
2019	10151	4461	14583	7.75	-17.45	5.87
2020	12415	4593	19324	22.30	2.96	32.51
2021	10259	52	22896	-17.37	-98.87	18.48
total	95921	122042	100522			

Source: elaborated by authors

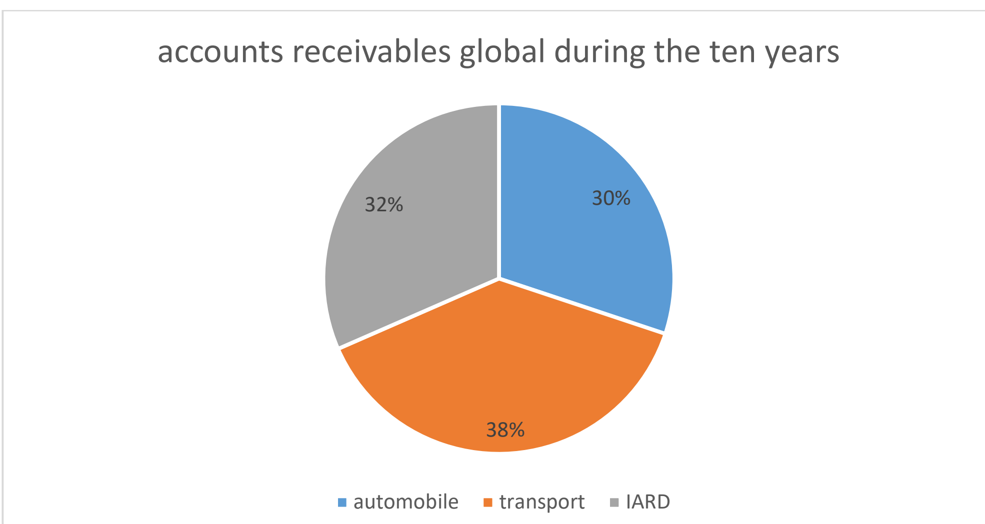

FIGURE 07: Accounts receivables from 2012 to 2021

Source: elaborated by the authors

As explained in chapter 3, accounts receivables are clients that owe the company money. Although they are considered a current asset, they are not as liquid as cash or bank. Therefore, if more policyholders are not paying the premiums in time, the company's capacity to settle claims as they are processed will be reduced. This would be very detrimental to such a company whose primary reason for existence is to dispose of money when needed.

It is a good sign if receivables are lower at the end of each year, it's an improvement if there is a low percentage of evolution and it's even better when negative.

Just looking at the total receivables recorded over the entire period of ten years, the automobile insurance branch has recorded a small figure compared to the other two branches. 95 921 000 Da would be more preferable compared to 122 042 000 Da from the transport branch or 100 522 000 Da, from the IARD. However, in 2021 in the transport branch column, we notice a very unusual event marked by an evolution of -98.87%. The receivables from the transport branch reduce from the amount of 4 593 000 Da recorded the preceding year to 52 000Da. This is the lowest number of receivables ever recorded over the entire period of ten years in all the branches.

Overall, through the ten years, the transport branch has proved to have a high percentage of accounts receivables with 38% of the global accounts receivables. The automobile branch being the minimum of the three, showing that clients in the automobile branch pay their premiums on time hence a positive contribution to the growth of the company by making liquidity available to cater for the short-term needs of the company.

2.3 Claims management.

Claims management includes several different operations. As explained in chapter 3, these include the management of declared claims, coverage, claims to be paid and recourse provisions. These generally represent how services are being delivered to the clients and hence clients' satisfaction, especially when we consider how many claims were declared and how many were actually paid. If fewer claims are settled, there will rest a huge number of claims to be paid also referred to as stock. It is a bad sign if the company closes a year with a huge amount of closing stock. Now let's look at how all of these were behaving over our period of interest.

2.3.1 Declared claims.

Below is a table showing the number of claims declared each year from 2012 until 2021.

Table n°5: Claims declared from 2012 to 2021

	claims declared			Evolution		
	Automobile (000) DA	Transport (000) DA	IARD (000) DA	Automobile (%)	Transport (%)	IARD (%)
2012	37860	2726	3922	0	0	0
2013	35153	9004	9380	-7.15	230.30	139.16
2014	45671	17624	5277	29.92	95.74	-43.74
2015	45445	2782	3410	-0.49	-84.21	-35.38
2016	43848	1954	19798	-3.51	-29.76	480.59
2017	42316	10060	13337	-3.49	414.84	-32.63
2018	42205	3981	10986	-0.26	-60.43	-17.63
2019	37227	9924	22671	-11.79	149.28	106.36
2020	36691	2846	216262	-1.44	-71.32	853.91
2021	37501	10670	211221	2.21	274.91	-2.33
total	403917	71571	516264			

Source: elaborated by authors

When calculating the company underwriting profits, the formula used is:

Premiums paid – (Claim + Expenses) = underwriting profit.

In general terms, for an insurance company to make more profits, it has to realise fewer claims, and more premiums as this will increase its profit margins. In our case, the IARD branch recorded the highest claims in value of around 516 264 000 DA over the ten years, the automobile branch follows with an amount of 403 917 000 DA and then lastly transport with 71 571 000 DA

When we look at the evolution of claims, we can see that they have been reducing almost every year for the automobile department, this is shown by the negative evolution percentages seen throughout the period except for the year 2014 when it was recorded at 29.92%. The other two branches show a very unstable trend throughout the entire period as the figures of evolution were going up and down repeatedly.

It would be a good sign if the automobile department kept increasing the number of clients, or policyholders and then at the same time recorded this kind of evolution in claims declared. This would reflect huge profits and the capacity for growth through self-financing. However, in this case, with this information, we can’t make conclusive remarks as this negative evolution could reflect a decline in the number of policyholders which totally reflect negatively the growth of the company.

2.3.2 Coverage.

The table below shows all the claims that were settled within each year of all the ten years from 2012 until 2021.

Table n°6: Claims paid over ten years

	claims paid			Evolution		
	Automobile (000) DA	Transport (000) DA	IARD (000) DA	Automobile (%)	Transport (%)	IARD (%)
2012	35122	14428	4838	0	0	0
2013	46687	3657	6512	0.329	-0.747	0.346
2014	50572	6743	9283	0.083	0.844	0.426
2015	60077	10021	37295	0.188	0.486	3.018
2016	66392	8013	9323	0.105	-0.200	-0.750
2017	58381	11484	9652	-0.121	0.433	0.035
2018	64658	18339	7915	0.108	0.597	-0.180
2019	60989	4730	7306	-0.057	-0.742	-0.077
2020	52314	8345	22875	-0.142	0.764	2.131
2021	51451	5864	408545	-0.016	-0.297	16.860
total	546643	91624	523544			

Source: elaborated by the authors

Overly, the automobile branch recorded the most payments in claims over ten years. In 2016 the automobile branch paid in coverage the highest amount compared to all the other years. The highest coverage in the transport branch amounted to 18 339 000 DA and these were paid in 2018 while in 2021 IARD branch recorded 408 545 000 DA and this is its highest for the whole period of ten years.

2.3.3 Claims to be paid.

Claims to be paid or stock reflects the amount of money that the company owes to policyholders at the end of each year.

Below is a table showing the amount the company owed to its policyholders at the end of each year.

Table n°7: Claims to be paid recorded at the end of each year

	Claims to be paid			Evolution		
	Automobile (000) DA	Transport (000) DA	IARD (000) DA	Automobile (%)	Transport (%)	IARD (%)
2012	70006	16771	1972	0	0	0
2013	40078	22800	4444	-42.75	35.95	125.35
2014	46493	23400	3372	16.01	2.63	-24.12
2015	40658	6313	2295	-12.55	-73.02	-31.94
2016	36141	8250	12707	-11.11	30.6	453.68
2017	38649	26146	19120	6.94	216.92	50.46
2018	33307	920	8677	-13.82	-96.47	-70.19
2019	19521	8137	22995	-41.39	784.46	165.01
2020	18709	11182	214559	-4.16	37.42	833.07
2021	19415	10319	105825	3.77	-7.72	-50.68
total	362977	134188	405926			

Source: elaborated by the authors

For the most part, one would say that the automobile branch has been improving given the repeated negative evolution throughout the period. The only disappointing years would be 2014 where there is 16.01% evolution and the year 2021 where there is 3.77% evolution. The transport insurance branch recorded one of the most increases in stock at 784,46% in the year 2019 and in the year 2020, the IARD branch recorded the most increase of about 833.07%.

2.3.4 Recourse provision

Recourse provision is when the insurance company collects money from a party responsible for causing a loss for which an insurer has already made an indemnity payout or coverage payment.

Below is a table that shows all the recourse provisions that were recorded over the entire period of ten years.

Table n°8: Recourse provision from 2012 to 2021

	Recourse Provision		
	Automobile (000) DA	Transport (000) DA	IARD (000) DA
2012	8207	14099	0
2013	6963	24076	115
2014	9662	19177	23
2015	9436	9535	0
2016	15159	1995	20
2017	17085	14669	1587
2018	20106	0	0
2019	19098	0	0
2020	9144	0	212
2021	9180	0	0
total	124040	83551	1957

Source: elaborated by the authors

The most recourse provision was recorded by the automobile branch at 124 040 000 DA followed by the transport department which had 83 551 000 DA. The least recourse was recorded in the IARD branch 1 957 000 DA. Generally, the recourse provisions allow for the company to settle claims without using its own money, but that is from the part at fault. In other words, the company saved the most money from the automobile branch followed by the transport branch and then lastly the IARD over ten years.

In summary, we can see that the impact of the automobile branch on the company is undoubtedly immense with the highest GWP through the ten years, the least accounts receivables, and highest recourse provisions, which conditions show a well-performing branch and good management of the risks and the premiums.

SECTION 03: BIVARIATE ANALYSIS

In this study, the data was analysed using bivariate analysis methods to show the relationship between the exogenous variables and the endogenous variable. We used scatter plots, regression analysis and correlation coefficients. The results are presented below

3.1 Claims Management.

3.1.1 GWP and Recourse provision

a) GWP and Recourse provision within the automobile branch

- **Scatter plot**

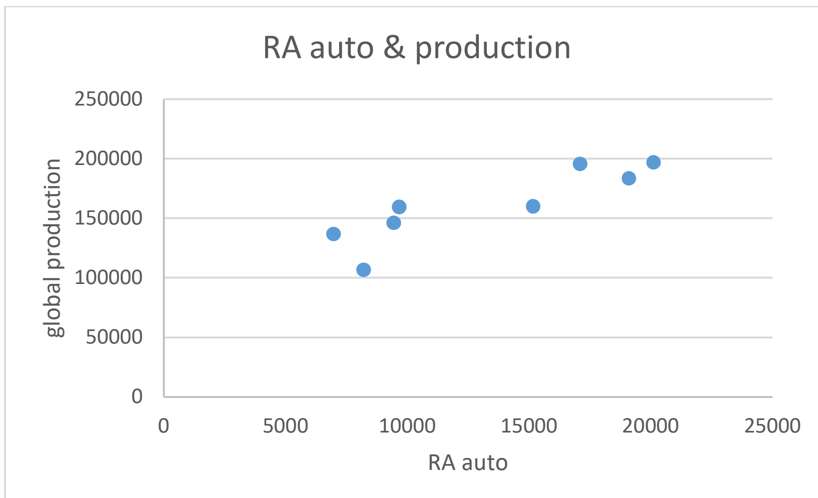

FIGURE 08: scatter plot Recourse provision for automobile branch

Source: elaborated by the authors

The representation shows a positive relationship between the GWP of the agency 191 of Béjàia and recourse provisions for the period of 2012 to 2021. In order to have the degree to which recourse provisions influenced the production, a regression analysis was performed and the result was as follows

- **Correlation coefficient**

The correlation coefficient was 0.7674939**.** This shows a significant and positive relationship exists between recourse provisions of the automobile insurance branch and the GWP of the agency. Practically, this means when most insured members of the agency are not faulty in each accident, it improves the GWP of the agency in the sense that the money used to pay the claims is from the insurance company of the adversary that is faulty in the accident and therefor the money from the company of the one not faulty is preserved.

- **Regression analysis**

Table 9: Regression analysis 1

Dependent Variable: PRODUCTION
Method: Least Squares
Date: 05/25/22 Time: 13:15
Sample: 2012 2021
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RAAUTO	4.328553	1.278259	3.386287	0.0096
C	108694.2	16942.57	6.415452	0.0002

R-squared	0.589047	Mean dependent var	162385.6
Adjusted R-squared	0.537678	S.D. dependent var	27769.93
S.E. of regression	18881.96	Akaike info criterion	22.70666
Sum squared resid	2.85E+09	Schwarz criterion	22.76718
Log likelihood	-111.5333	Hannan-Quinn criter.	22.64027
F-statistic	11.46694	Durbin-Watson stat	1.142124
Prob(F-statistic)	0.009552		

Source: elaborated by the authors

$GWP_t = 108694.231+4.329* RAAUTO_t$

The results of the regression analysis were summarised in the linear regression equation above. The estimated coefficient related to RAAUTO is positive and statistically significant at 1%. Therefore, the model shows that for each unit change in recourse provisions, GWP increases by 4.329 units. So, the recourse provisions significantly improve the GWP of the insurance agency 191 of Béjàia.

b) GWP and recourse provision within the transport branch

- **Scatter plot**

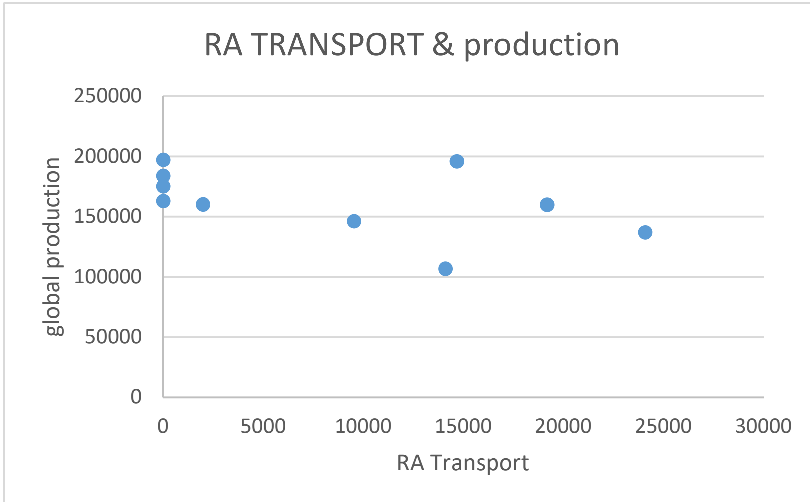

FIGURE 9: Scatter plot recourse provision for transport branch

sources: elaborated by the authors

The plot shows a negative linear relationship between the recourse provisions of the transport branch and the GWP of the agency 191 of Béjàia. Moreover, the correlation coefficient has been conducted to see the nature of the correlation between the studied variables. However, in order to measure the degree to which the recourse provisions negatively influenced the production, linear regression estimation was performed.

- **Correlation coefficient**

The correlation coefficient was -0.48821864

This shows a moderate negative linear relationship between the two variables

- **Regression analysis**

Table 10: Regression analysis 2

Dependent Variable: PRODUCTION
Method: Least Squares
Date: 05/25/22 Time: 13:21
Sample: 2012 2021
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RATRANS	-1.477137	0.933549	-1.582282	0.1522
C	174727.2	11265.69	15.50968	0.0000

R-squared	0.238357	Mean dependent var	162385.6
Adjusted R-squared	0.143152	S.D. dependent var	27769.93
S.E. of regression	25705.53	Akaike info criterion	23.32366
Sum squared resid	5.29E+09	Schwarz criterion	23.38417
Log likelihood	-114.6183	Hannan-Quinn criter.	23.25727
F-statistic	2.503615	Durbin-Watson stat	1.354433
Prob(F-statistic)	0.152243		

Source: elaborated by authors

$GWP_t = 174727.2 - 1.47 * RATRANS_t$

The estimated coefficient related to RATRANS appears with a negative sign and statistically is not significant (because the P-value of T-stat is more than 5% and 10%), implying that RATRANS doesn't have an impact on PRODUCTION.

c) GWP and recourse provisions within the IARD branch

- **Scatter plot**

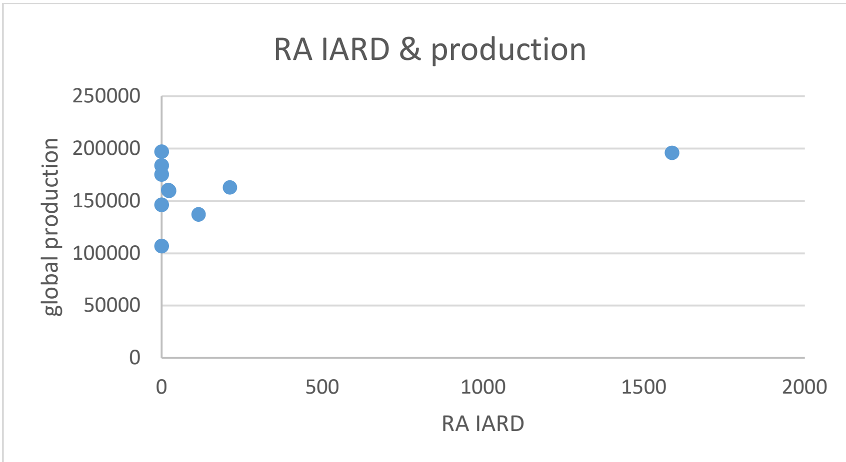

FIGURE 10: Scatter plot Recourse provision for IARD branch

Source: elaborated by the authors

The scatter plot shows a positive linear relationship between the recourse provisions of the IARD branch and GWP in the agency 191 of Béjàia during the period from 2012 to 2021. Moreover, the correlation coefficient has been conducted to see the nature of the correlation between the studied variables. However, an estimation of the simple linear regression function was performed to show the degree of influence of the recourse provisions of the transport branch on GWP using the LSM.

- **Correlation coefficient**

The correlation coefficient was 0.40412562

This shows a moderate positive linear relationship between the recourse provisions of the IARD insurance branch of the CAAT agency 191 of Béjàia and the GWP of the agency. This shows that when the recourse provisions increase, the GWP also increases because the company will be using funds from the other company with the faulty insured member in the damages involved to pay for the loss and therefore the funds from this company are preserved. But the impact is lower in the IARD branch as compared to the automobile branch

- **Regression analysis**

Table 11: Regression Analysis

Dependent Variable: PRODUCTION
Method: Least Squares
Date: 05/25/22 Time: 13:22
Sample: 2012 2021
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RAIARD	22.72619	18.18635	1.249629	0.2468
C	157938.1	9233.343	17.10519	0.0000

R-squared	0.163318	Mean dependent var	162385.6
Adjusted R-squared	0.058732	S.D. dependent var	27769.93
S.E. of regression	26942.10	Akaike info criterion	23.41762
Sum squared resid	5.81E+09	Schwarz criterion	23.47814
Log likelihood	-115.0881	Hannan-Quinn criter.	23.35124
F-statistic	1.561572	Durbin-Watson stat	0.733585
Prob(F-statistic)	0.246755		

Source: elaborated by the authors

$GWP_t = 157938.1 + 22.726 * RAIARD_t$

The estimated coefficient related to RAIARD appears with a positive sign and statistically isn't significant (because the P-value of T-stat is more than 5% and 10%), implying that the RAIARD doesn't affect PRODUCTION.

3.1.2 GWP and coverage.

a) GWP and coverage within the Automobile branch

- **Scatter plot**

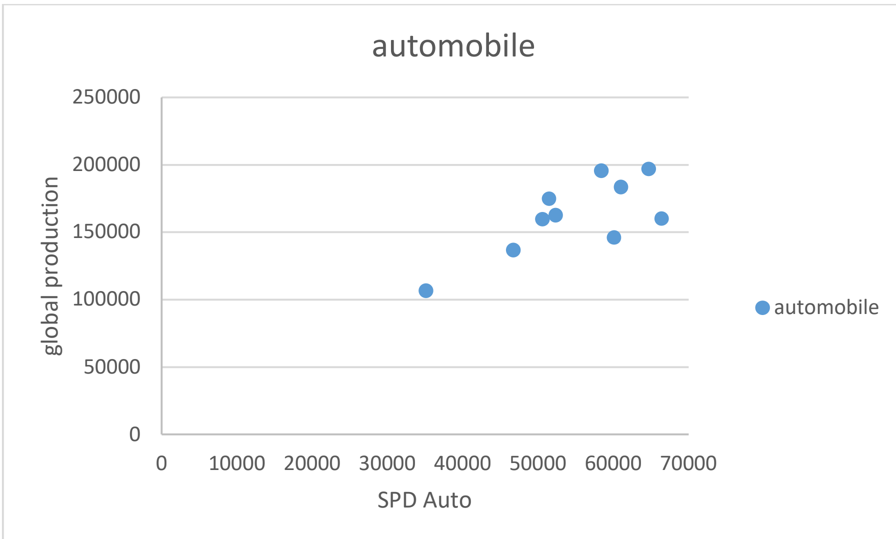

FIGURE 11: Scatter plot coverage for Automobile branch

Source: elaborated by the authors

The scatter plot represented above depicts a positive relationship between the coverage in the automobile branch and the GWP of the company.

- **Correlation coefficient**

The correlation coefficient was 0.74332505

The correlation coefficient that explains the degree to which the coverage impacts the GWP which represents the premiums in this study, is strong and positive.

We employ econometric modelling to estimate the degree of impact of coverage in automobile insurance on GWP

- **Regression analysis**

Table 12: regression analysis 4

Dependent Variable: PRODUCTION
Method: Least Squares
Date: 06/08/22 Time: 23:35
Sample: 2012 2021
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SPDAUTO	2.191258	0.697189	3.142989	0.0137
C	42602.00	38617.32	1.103184	0.3020

R-squared	0.552532	Mean dependent var	162385.6
Adjusted R-squared	0.496599	S.D. dependent var	27769.93
S.E. of regression	19702.98	Akaike info criterion	22.79178
Sum squared resid	3.11E+09	Schwarz criterion	22.85230
Log likelihood	-111.9589	Hannan-Quinn criter.	22.72540
F-statistic	9.878379	Durbin-Watson stat	1.486048
Prob(F-statistic)	0.013743		

Source: elaborated by the authors

$GWP_t = 42602+2.19* SPDAUTO_t$

For every unit change in the coverage of the automobile branch, the GWP which represents the premiums increases by 2.19 units. The purpose of the existence of the insurance company is mainly to pay the coverage of the insured when a loss occurred. Therefore, a company with a positive relationship between GWP and coverage shows a positive impact on the growth of the company in the sense that the company is fulfilling its objectives and purpose of existence.

b) GWP and coverage for the transport branch.

- **Scatter plot**

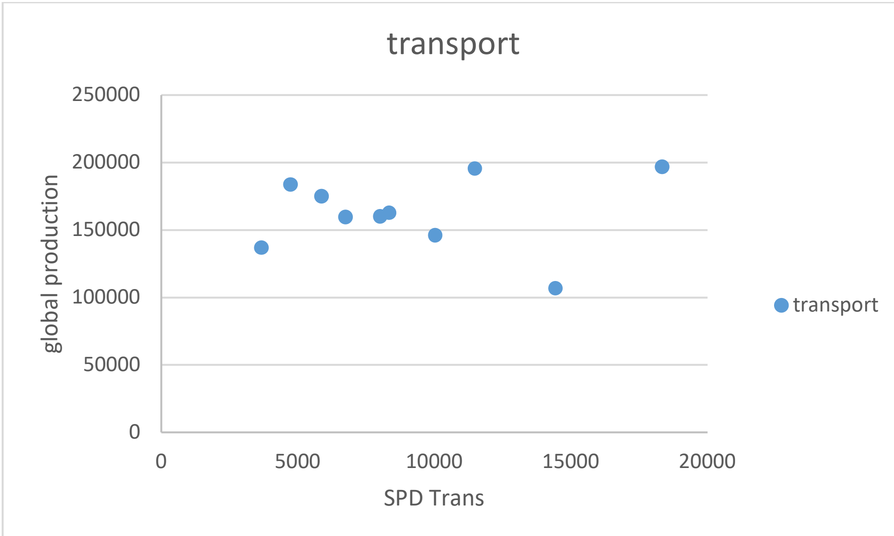

FIGURE 12: Scatter plot for Coverage for Transport branch

Source: elaborated by the authors

According to the plot, we cannot decide on the relationship between the coverage in the transport branch and the production.

- **Correlation coefficient**

The correlation coefficient was 0.08896475. This means there is no correlation between the studied variables

- **Regression analysis**

Table 13: regression analysis 5

Dependent Variable: PRODUCTION
Method: Least Squares
Date: 06/08/22 Time: 23:43
Sample: 2012 2021
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SPDTRANS	0.034112	0.077267	0.441478	0.6706
C	160599.7	10052.72	15.97575	0.0000

R-squared	0.023783	Mean dependent var	162385.6
Adjusted R-squared	-0.098244	S.D. dependent var	27769.93
S.E. of regression	29102.09	Akaike info criterion	23.57186
Sum squared resid	6.78E+09	Schwarz criterion	23.63238
Log likelihood	-115.8593	Hannan-Quinn criter.	23.50548
F-statistic	0.194903	Durbin-Watson stat	0.554392
Prob(F-statistic)	0.670556		

Source: elaborated by the authors

$Production_t = 160599.7 + 0.03 * SPDTRANS_t$

The simple linear regression function performed using the least-squares method shows an insignificant influence of the coverage in the transport branch over the GWP of the agency between 2012 and 2021.

c) GWP and coverage within the IARD branch

- **Scatter plot**

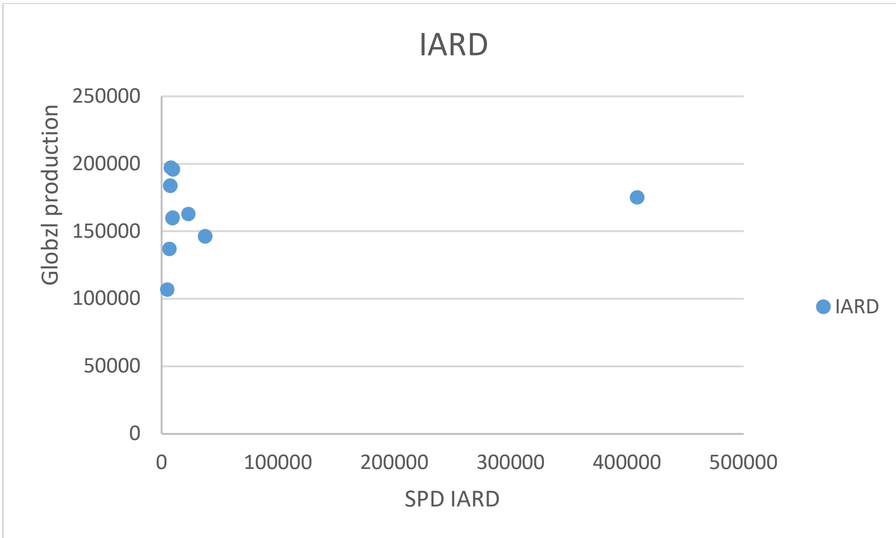

FIGURE 13: Scatter plot for Coverage for the IARD branch

Source elaborated by the authors

The plot shows no linear relationship between the coverage in the IARD and GWP of the agency.

- **Correlation coefficient**

The correlation coefficient was 0.15421891

The correlation coefficient is very low and close to zero which shows an absence of correlation between the coverage and the production.

- **Regression analysis**

Table 14: regression analysis 6

Dependent Variable: PRODUCTION
Method: Least Squares
Date: 06/08/22 Time: 23:52
Sample: 2012 2021
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SPDIARD	0.542368	2.146868	0.252632	0.8069
C	157416.2	21748.49	7.238029	0.0001

R-squared	0.007915	Mean dependent var	162385.6
Adjusted R-squared	-0.116096	S.D. dependent var	27769.93
S.E. of regression	29337.67	Akaike info criterion	23.58799
Sum squared resid	6.89E+09	Schwarz criterion	23.64851
Log likelihood	-115.9399	Hannan-Quinn criter.	23.52160
F-statistic	0.063823	Durbin-Watson stat	0.593230
Prob(F-statistic)	0.806923		

Source: elaborated by the authors

$GWP_t = 157416.2 + 0.54 * SPDIARD_t$

According to the obtained result, there is no impact of the coverage in the IARD on GWP.

SECTION 04: ANALYSIS OF THE COMPANY GROWTH INDICATORS

4.1 GWP and claims management

- **Claims ratio**

The claims ratio is the percentage of claims in relation to the premiums of the same period. This ratio helps to explain how much the premium can cover the claims declared in the same period. It is calculated as follows:

$$Claims\ ratio = \frac{claims}{premiums.}$$

Three possible results are as follows.

1. Claims ratio < 1……. this is a reflection of a good performance
2. Claims ratio = 1 ……. breakeven condition
3. Claims ratio > 1 ……. Shows that the insurance is in difficulty

4.1.1 GWP and Claims Declared (global)

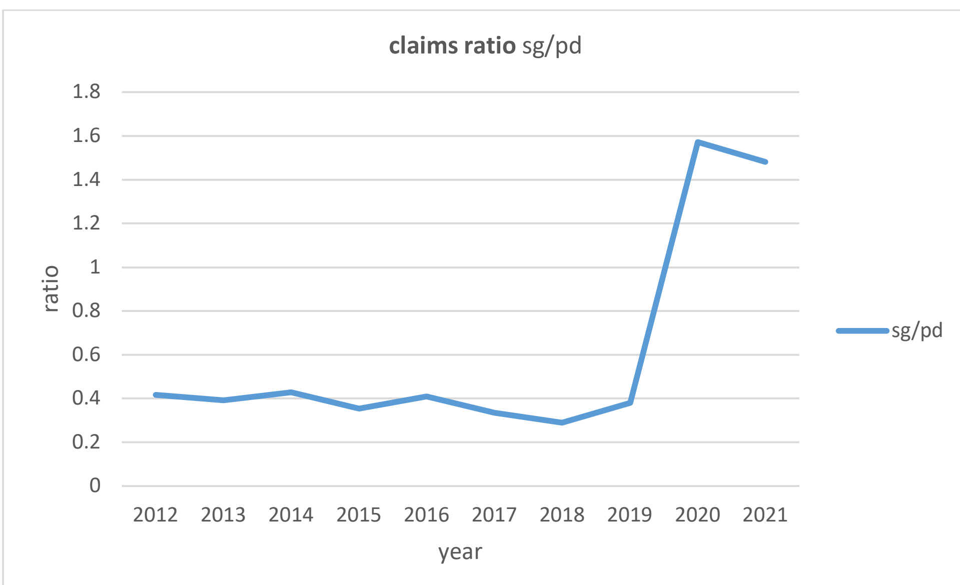

FIGURE 14: GWP and Claims Declared (global)

Source: elaborated by the authors

sg – global claims
pd – total premiums

The claims declared ratio seems to be constant from 2012 until 2019, then there were shocks in 2020 and 2021 which influenced an increase in the ratio. The period from 2012 to 2019 is marked by a good performance, the claims declared ratio is well under 0.5 showing that only less than half the premiums were able to cover all the claims.

In 2020 and 2021, the graph reflects some high-cost accidents. These accidents saw the claims ratio rise to 1.57. This means 157% of the global premiums were needed to cover the claims. Events like this rarely happen, but whenever they do, they require close and great management so that the agency can be able to revert to its normal performance.

4.1.2 GWP and Claims Declared (per branch)

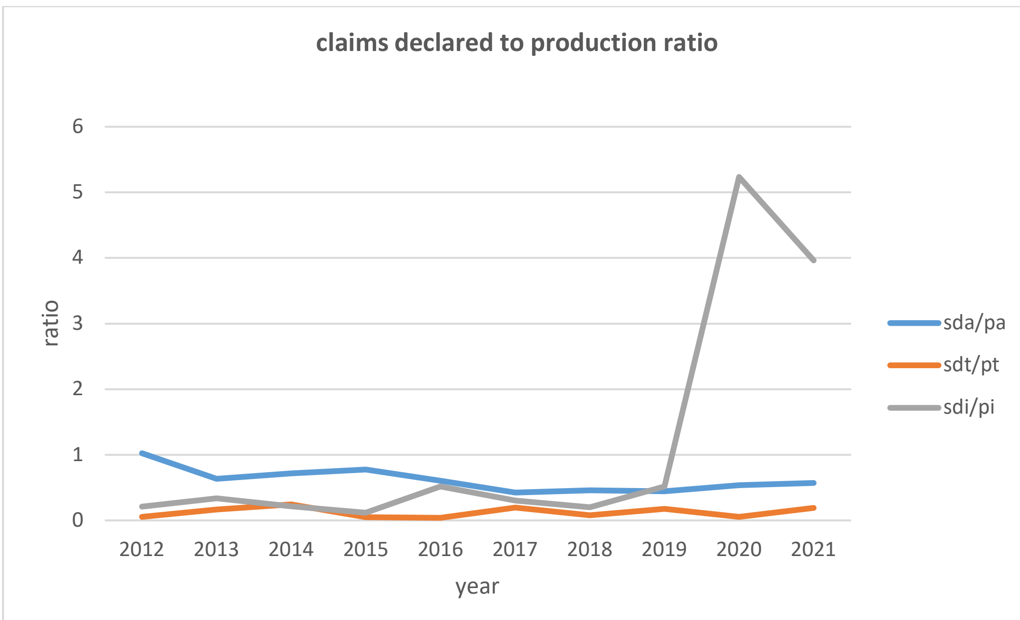

FIGURE 15: GWP and Claims Declared (per branch)

Source: elaborated by the authors

sda- claims declared in automobile insurance branch
pa- premiums of automobile insurance branch
sdt- claims declared in transport insurance branch
pt- premiums of transport insurance branch
sdi- claims declared in IARD branch
pi- premiums of IARD branch

This graph shows the claims declared ratio of the three branches of the agency over the entire period of ten years. The curves sda/pa, sdt/pt and sdi/pt represent the claims ratio of the branches automobile, transport and IARD respectively.

The branches automobile and transport seem to show a good claims declared ratio of under 1 throughout the ten years. Although the two branches both have a good ratio, the transport branch seems to be performing even better through the entire period with an average claims ratio of less than 0.2 meaning that 80% of the premiums can be ploughed back into the agency. The automobile branch claims ratio is slightly above 0.6 leaving around 40% of the premiums in the agency. The good performance in these two branches allows for the agency to widen its profit margin and its ability to make financial placements. Noticeable stability in these branches is a result of the agency having to deal with the same clients and the same problems as well as the agency's ability to control their cases.

In addition to this, the study findings have shown that the automobile branch is governed by the law of large numbers (LLN). The law of large numbers states that as the number of policyholders increases, the more correct the prediction of expected loss is. Generally, an average premium is calculated that should reflect an expected loss. Due to large numbers of clients in the automobile branch because of, partly, the compulsory automobile insurance of the Ordinance 74-15 of 30 January 1974, the agency can predict the loss and thus able to fix accurate premiums that creates an advantage for the agency. That is why the graph is constant through the ten years, because of the LLN, the agency can control the income and outcome thereby avoiding serious disruption of the entire financial system.

The IARD claims declared ratio however is a different case. We observe that it is associated with a good performance of under 0.4 on average for the eight years from 2012 to 2019. Nonetheless, there is a shock resulting in the ratio increasing to a little above 5 in 2020 and then another shock in 2021 resulting in a higher claims ratio of around 4.

Generally, one could say that the IARD branch could have had a good performance throughout the entire period had it not been for the huge losses seen in 2020 and 2021. However, if we take a good look at the contracts involved in the branch we will see that the branch only has very few contracts but each contract pays a huge amount in premiums. This is because the risks involved are those that can be expensive to compensate for. In other words, only one accident in the branch may have the capacity of exhausting all the premiums collected from all the branches. For example, in our case, two accidents happened, one on 5 December

2020 and the other on 3 August 2021. These two incidents involved seaport cranes which were extremely damaged beyond repair and very expensive to compensate for. For example, to compensate for the port crane of 2020 it required around 500% of all the premiums realised from the same branch in 2020 just to cover the loss and this money would have to be raised from the other branches.

However, thanks to the existence of reinsurance, such huge risks are well taken care of. Concerning huge risks, firstly the Algerian government has put in place a rule that each insurance agency should put a certain percentage of premiums collected to the Treasury as a reserve and the agency will have a reserve to honour all the legitimate claims made by the policyholders. In addition to the statutory reserve, the insurance companies seek reinsurance for a large part of the huge risks such that they do not enter into a difficult financial situation when the risk occurs and the decree n° 10-207 of 9 September 2010 amending and supplementing the decree n° 95-409 of December 9; 1995 relating to compulsory cession in reinsurance, sets the minimum rate of compulsory cession of risks to be assured at 50% for the benefit of CCR. The measure aims in particular to reduce currency transfers abroad and to make CCR a powerful national reinsurance company[27].

Therefore, the agency appealed to reinsurance to help reduce the load of the high risk on the agency lest it enters into a shutdown due to the large sums of money required to cover the huge risks. It had the premiums collected beforehand put in financial placements in the Treasury of the state earning some interests through the time before the occurrence of the huge risk and it had a reinsurance policy. This good risk management has turned the IARD branch from being a threat for the agency to a benefit because now due to the reinsurance covered partly by the foreign reinsurers, the agency ends up receiving coverage in foreign currency which is of great advantage to the agency. They also place the premiums in investments which help multiplies the income and improve the growth of the agency.

[27] Haliche M, et Mokhtari H, (2018) *Evolution de la sous branche Transport Facultés Maritime : cas de la Société Nationale d'Assurance (SAA),* Tizi Ouzou, Université Mouloud Mammeri de Tizi-Ouzou, p45.

4.1.3 GWP and Claims paid (global)

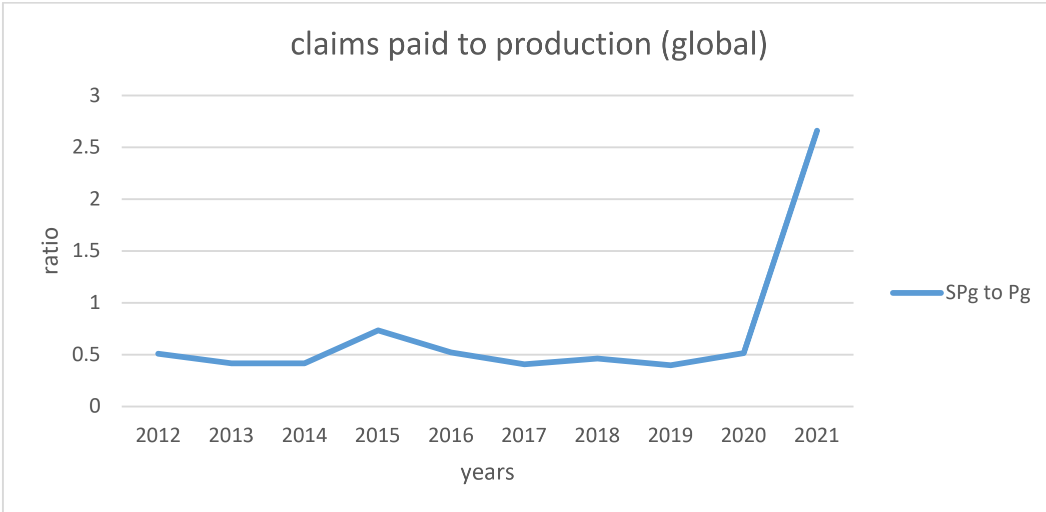

FIGURE 16: GWP and Claims paid (global)

Source: elaborated by the authors

SPg- total Claims paid (definitive)
Pg- total premiums

Now, this graph shows the ratio for the claims that were paid against the total premiums realised in each corresponding year. The first element we can observe is that the ratio is under 1 for nine years, which is from 2012 until 2020. This is a very good sign of good performance. Through the nine years, the average claims paid ratio would be around 0.48 which means that half of the premiums recorded were generally enough to pay the claims. However, in the year 2021, the ratio increases, all the way to around 2.6 meaning that around 260% of the premiums were necessary to pay for the claims.

4.1.4 Claims declared ratio versus Claims paid ratio

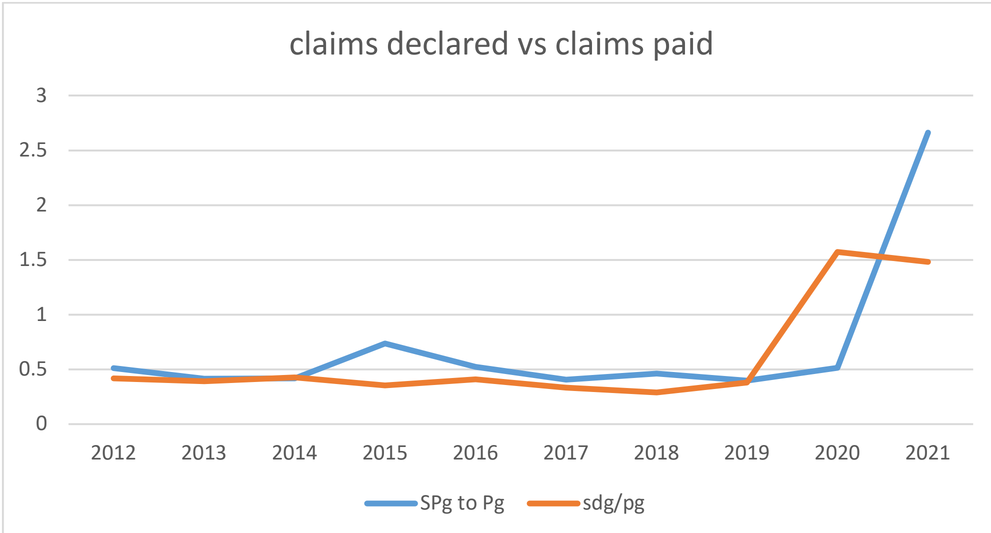

FIGURE 17: Claims declared ratio versus Claims paid ratio.

Source: elaborated by the authors

SPg- total Claims paid
Pg- total premiums
sdg- total claims declared

On this graph, SPg to Pg represents the claims paid ratio while sdg/pg represents the claims declared ratio. We already established above that the claims declared ratio has been stable and reflects a good performance for eight years until 2019, the claims paid ratio on the other hand reflects a good performance for nine years until 2020.

In the year 2020, there was a huge loss which rose the claims declared ratio. However, in that same year, we observe that the claims paid ratio is still stable. In the following year, however, the claims paid ratio is way higher almost doubling the claims declared ratio. This is explained by the fact that the claim declared in 2020 concerning the port crane was settled in 2021. Now, because the two years both recorded huge figures in claims due to the two huge losses, and because most of the year 2020 claims declared were settled in 2021, the ratio rose to around 2.6.

4.1.5 GWP and Claims paid (per branch)

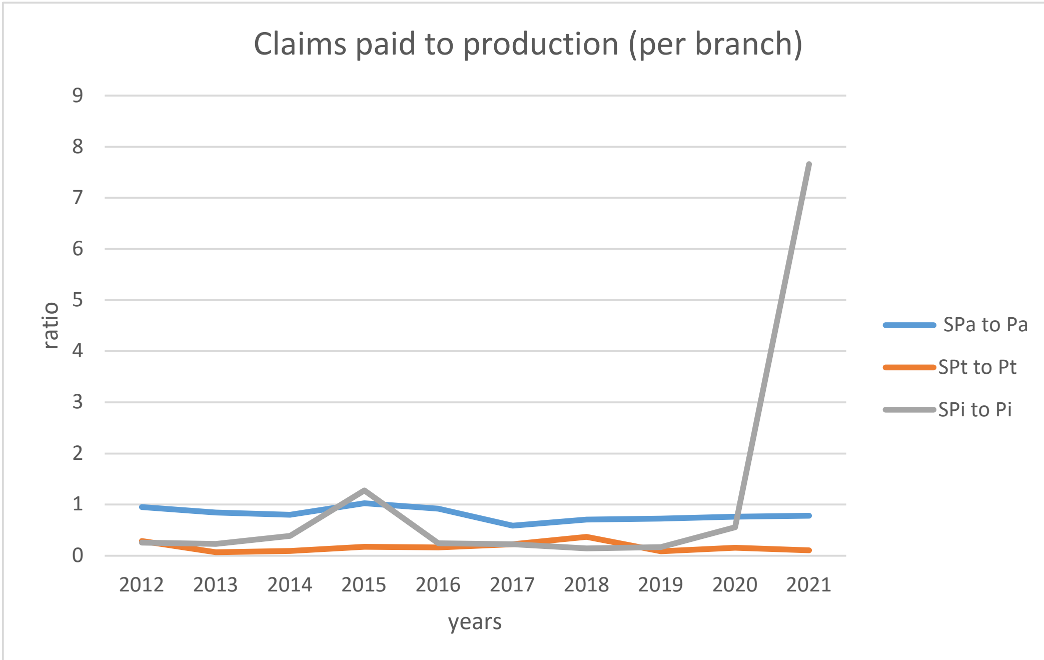

FIGURE 18: GWP and Claims paid (per branch)

Source: elaborated by the authors

Pa- premiums of automobile insurance branch
Pi- Premiums in the IARD branch.
Pt- Premiums paid in transport insurance branch
SPa- claims paid in automobile insurance branch
SPi- claims paid in IARD branch
SPt- claims paid in transport insurance branch

Since the claims declared ratio has been constant and showing a good performance over the entire period for the automobile and transport branch and for most of the period for the IARD branch, the claims paid graph is almost similar to the claims declared graph except for the part it reflects that the IARD huge claims were settled in 2021 hence the shock of the ratio in 2021 rose all the way to around 7.7. In other words, if only premiums from a particular branch were supposed to alone settle the claims declared in that branch, the agency needed 770% of the premiums collected from the IARD in order to settle the claims it settled in 2021.

4.2 GWP and accounts receivables

The accounts receivables to premiums ratio can be calculated as follows:

$$Accounts\ receivables\ ratio = \frac{accounts\ receivables}{premiums.}$$

Conditions:

Accounts receivables ratio close to zero – good performance

Accounts receivables ratio above 0.5- shows bad performance

4.2.1 GWP and accounts receivables (global)

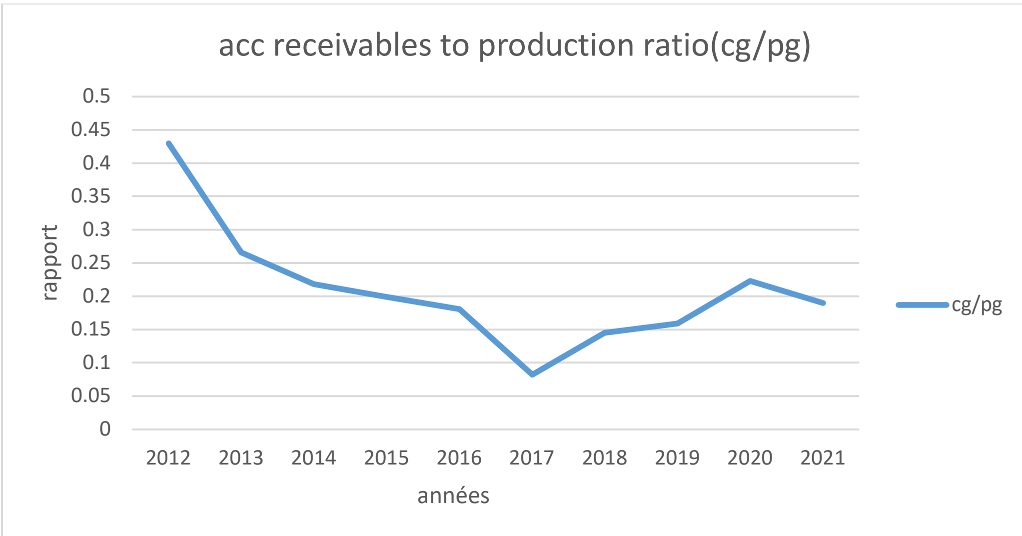

FIGURE 19: Total GWP and Total accounts receivables

Source: elaborated by the authors

cg- total accounts receivables
pg- total premiums

The graph shows a significant decrease from 2012 to 2017, and from 2017 the accounts receivables were increasing and there is a notable change from 2019 to 2020.

In 2017 the accounts receivables were at their minimum.

4.2.2 GWP per branch and accounts receivables par branch

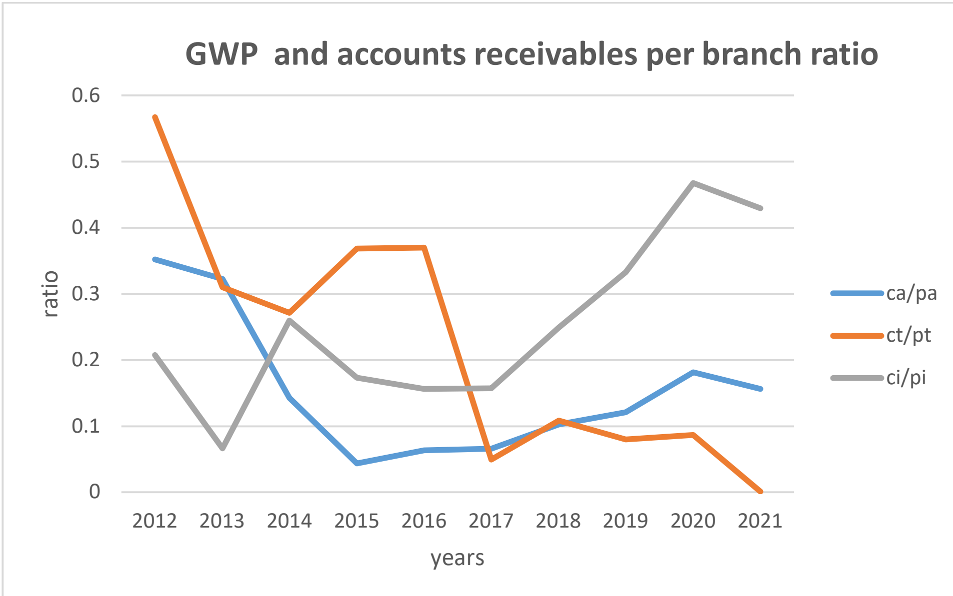

FIGURE 20: GWP per branch and accounts receivables per branch

Source: elaborated by the authors

ca- accounts receivables in the automobile insurance branch
pa- premiums of automobile insurance branch
ct- accounts receivables in transport branch
pt- premiums of transport insurance branch
ci- accounts receivables in the IARD branch
pi- premiums of IARD branch

The accounts receivables for the three branches were relatively fluctuating.

The transport insurance branch shows irregular fluctuations.

There is a notable rise in the IARD branch, which shows that the majority of the policyholders, close to 50% of the premiums in the branch are not paid on time. The majority of clients in the branch are state-owned enterprises which only pay their premiums at the end of each year of exercise, and clients are few but with a large sum of premiums in such a way that if one client fails to pay their premiums on time the impact is great on the agency, also because of their large amounts, the premiums can’t be paid instantly.

The automobile branch has been showing a favourable trend in terms of its accounts receivables, showing that the insured in the automobile branch pay their premiums on time. This is because the automobile branch doesn’t generally offer credits to the personal auto contracts, they do instant payments of their premiums and as well what makes this possible is because the premiums charged are less expensive. And they do allow a delay of payment for the Fleet contracts. This management allows the branch to keep its accounts receivables low and favourable. Some accounts receivables recorded are carried on figures from previous years concerning national companies that are now in difficult situations and so unpaid, showing that the accounts receivables for this branch are relatively small. The more clients pay their premiums on time, the better the agency's solvency and liquidity and hence the higher its growth.

SUGGESTIONS

1. Since the automobile branch has shown the highest income but also high claims through the period, which shows that it consumes the majority of its income through each exercise. So, we suggest that the state may intervene to reduce the number of accidents, already with the reduction of cars since 2018 the claims started to decrease. The agency can as well put more promotions for the clients who don't get into any loss throughout the year, increase civil responsibility and reduce fraud. The manager can actually launch new product development to attract more clients for the branch if faced with adverse competition from other companies. They can for example improve the digital system in a way that the majority of procedures can be done online to reduce physical displacement to the agency by the clients in this busy era.

2. The branch can as well improve the handling of claims in a way that there will be no higher costs overheads, which might disrupt clients' loyalty and thus impede its market competitiveness.

3. The premiums from the automobile branch come in large sums of cash, and at the same time, the frequent occurrences of the risks make the coverage of the risks insured against frequent as well. Therefore, this kind of branch requires short-term as well as active stock markets and money markets which can rapidly multiply the premiums of the agency. Therefore, there is a need for the improvement of the money market and stock market in Algeria.

4. The transport branch can be considered the one that records the least claims, however, fewer steps can be taken in order to increase its contributions to the agency, for example, more advertising to attract more clients. This can increase the income from the branch and improve the growth of the agency as the branch has been incurring the least number of risks annually due to the removal of the compulsory marine cargo insurance by the ordinance n° 95-07. Now nearly 80% of the private importers have no insurance policies. So, the government should put back the compulsory marine cargo insurance to protect the goods imported. This will as well result in the transport insurance branch gaining more clients and improve the income of the branch[28]

5. The IARD branch has proved to pose shocks to the growth of the agency due to the high valued risks they take care of. One occurrence of the risk can require more than 150% of the global annual income of the agency. They can work on prevention by providing specialists who can help the client to operate in such a way that the risk will not happen. They can as well optimise the management of their premiums.

CONCLUSION

From our study findings, we can conclude that the automobile branch is key to the growth of the agency as a whole. Its optimum management of premiums makes provision for much liquidity to cater for short-term coverage and expenses. A large number of clients and the high penetration and support given to the automobile branch together with the obligatory third-party insurance coverage concerning civil responsibility, and the majority of small losses that occur to the clients make the branch thrive and contribute to the growth with the highest GWP through the period.

The transport branch generally records fewer claims in relation to the premiums recorded, the claims ratio is generally low which makes it favourable for the entire agency by making available a reserve of income that can be used to develop the agency even though its incomes cannot equate to the high contributions made by automobile branch. At the same time, the premiums recorded are low because of the removal of the obligation to an

[28] Haliche M, et Mokhtari H, (2018) *Evolution de la sous branche Transport Facultés Maritime : cas de la Société Nationale d'Assurance (SAA),* Tizi Ouzou, Université Mouloud Mammeri de Tizi-Ouzou, p45.

insurance policy in the branch since 2009. That means it’s not at its best performance as before 2009, therefore need to revise the reform

The IARD branch contributes to the agency's growth generally, and from time to time the branch has been characterised by shocks that greatly impact the whole agent by its huge weight and the gravity of the losses that take place in the branch and due to the reinsurance practises, investments and statutory reserves the agency’s performance is improved in the Agency.

GENERAL CONCLUSION

Insurance has proven to be a very key element in the growth and development of an economy. Without it, there would not be multi-storey buildings constructed all over the world, and huge, risky investments to develop our economies would have remained a dream, the same applies to the motor sector with the rampant traffic accidents daily. But, thanks to the emergence of insurance, the insured are now able to transfer their risks to the insurers and go ahead growing and developing the economies with the assurance that if any loss occurs by any chance, the insurance agency will be there for their rescue.

With this in mind, it was necessary for us to study the factors that affect the growth of this key sector for the economy as a whole. The focus was centred on automobile insurance which has been the lead branch in the growth of this sector. The research findings have shown that the automobile branch is very significant to the growth of the agency. In 2017, the automobile branch of the host agency contributed 51% of the income of the agency with the transport and IARD branches covering the remaining 49%. This branch also happened to be the one with the least accounts receivables due to its favourable management of the primes.

This research is relevant because it helps the insurance agency to see clearly the areas that are key to its growth and those that are detrimental so that it can act upon them. The study helps to identify key determinants to achieve firm profits which in turn lead to sustainability and stability at the agency level for the insurer. The study of the impact of the automobile branch on the growth of the agency was crucial because this branch is the branch with the highest number of clients which means high income, but as well with the highest occurrences of the risks especially with the high rate of accidents here in Algeria which might reflect high expenditures thus showing a great need to fully study the real impact of the branch and devising ways to optimise management in the branch to allow good performance in favour of the insurer and as well the insured. The study has opened ground for further research with more variables such as liquidity ratios, leverage ratios, return on assets, inflation; retention ratio, market penetration rate, return on equity, management competence index, and GDP to generalise the findings in the insurance industry in Algeria.

In conclusion, the optimum management of risks and premiums has led to the positive contribution that the automobile branch has reflected on the agency as well

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Résumé du memoire

Automobile insurance has proven to be a very dynamic insurance branch worldwide, in Algeria, its market share is above 50%. The purpose of this work was to analyse how the automobile insurance branch impacts the growth of an insurance company, case of CAAT agency 191 Bejaia. Gross written premiums, claims management and accounts receivables management were the important variables in determining the impact of all three branches within the agency namely; the automobile, transport and IARD branches. It was concluded that the automobile branch contributes the most to the real growth of the company with its large number of clients.