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Analysis of demand and supply in the Algerian reinsurance market (2009-2018)

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Abstract:

The aim of this study is to describe and analyze the state of the reinsurance market in Algeria through studying the demand for reinsurance by ceding companies and reinsurance supply by central reinsurance company (CCR) between 2009 and 2018**.**

We have found that the Algerian insurance and reinsurance companies have a high retention capacity, and the insurance companies in Algeria cede more than the obligatory cession rate to the CCR, which as a result, reduces outward flow of hard currency and raises the turnover of the CCR Company.

Key Words: Reinsurance supply and Demand, Ceded premiums, National acceptances, Central Reinsurance Company (CCR).

JEL Classification: G15, G22, G32.

1. INTRODUCTION

The purpose of insurance is to protect the insured against potential heavy losses that may be faced from everyday activities. The reinsurers provide a similar approach of protection to the insurers therefore; reinsurance exists by virtue of insurance. The insurance companies cede risks that are beyond their capacity to reinsurance companies to protect themselves. Algerian authorities are interested in reinsurance activity due to its international nature. It is a factor that can either attract or reduce the outward flow of hard currency. Laws issued may affect the insurance market for both ceding company and central reinsurance company. The period between the years 2009 and 2011 has been marked by three major events in Algerian insurance and reinsurance market:

- Increasing the minimum capital requirement for insurance and reinsurance companies, and implementing the decision to separate between damage and life insurance in 2009;
- The raising of the compulsory cession levels up to 50% in September 2010 for CCR applicable as of January 1st 2011;
- The transition from the National Chart of Accounts to the New Countable Financial System after the effective implementation in January 1st2010.

The problem of this research was formulated through the following question: **What is the state of the Algerian reinsurance market after the occurrence of these major events?** The main questions that follow:

- How has the reinsurance activity developed in Algeria? What are its characteristics?
- What is the state of demand for reinsurance in Algeria?
- What is the state of the reinsurance supply in Algeria?

To answer these questions, the following three hypotheses have been proposed: Firstly, the production shares of Algerian insurance companies affect the size of the ceded premiums; secondly, insurance companies are not allowed to reinsurance supply or make acceptance; and the final hypothesis states that ceded premiums from insurance companies are contributing to strengthen the central reinsurance company's business.

Research objectives: This study aims to achieve the following points:

- Identify the basics of reinsurance
- Describe the structure of the insurance and reinsurance market in Algeria; and evolution of the reinsurance in Algeria
- Analyze the demand for reinsurance and reinsurance supply in Algeria.

Research methodology: In order to investigate the purpose of the study and analyze the reinsurance market in Algeria, the study was based on an analytical descriptive approach. The data was obtained from the annual reports of the Ministry of Finance on insurance activities in Algeria and the financial reports of the Central Reinsurance Company between the years 2009 and 2018. Statistical data was analyzed by using Microsoft Excel to calculate averages and graphs.

2. Reinsurance

2.1 Definition and concept:

A reinsurance process is a contractual arrangement between a reinsurer and a professional insurer (called cedant), who is the only responsible to the policy holder, under which, in return for remuneration, the former bears all or part of the risks assumed by the latter and agrees to reimburse according to specified conditions all or part of the sums due or paid by the latter to the insured in case of claims. (Deelstra & Guillaume, 2014, p. 45)

Reinsurance is a contract in which an insurance company (the primary insurer or reinsured) cedes to another insurance company (the reinsurer) all or half of the risk of loss. In return for agreeing to indemnify the reinsured for losses that may occur, the reinsurer receives premiums from the reinsured. (Noussia, 2013, p. 19)

Essentially, reinsurance can be characterized as insurance to face larger risks for insurance companies that the latter cannot handle on their own. (Chasseray, Eldin, & Lefebvre, 2017, p. 15)

2.2 The History of reinsurance

We can notice the development of reinsurance through the table1:

Table 1. The History of reinsurance.

The date	The Event
1370	The first written reference of a reinsurance transaction was related to a maritime policy covering the travel of goods from Italy to the Netherlands. The trip period between Spain and the Netherlands was considered to be the most risky, and was absolutely reinsured. Therefore, the insurer only kept the portion of the trip between Italy and Spain on his own account.
the XIVth century	Reinsurance is performed under the facultative form. For each object that the insurer underwrites, he has the choice to ask for the help of a reinsurer and this reinsurer has the choice to accept the risk or not.
the XIXth century	The first use of reinsurance treaties were for risks of fire.
1821	The first obligatory insurance treaty that covered all the risk of a specific portfolio, it was reached between “La Royale de Paris” and “Les Propriétaires Réunis de Bruxelles”.
1842	The fire devastated the city of Hamburg, At this point the insurer realized that it was impossible to conserve by themselves risks that could accumulate so much. A geographical and time diversification was necessary.

1846	The creation of the first professional independent reinsurance company was created; it called the" Kolnische".
The 1850s	The introduction of life reinsurance treaties at the very first beginning, it was proportional form.
The 1950s,	The reinsurance methods started becoming more sophisticated and then the non-professional reinsurers stared disappearing. Over the years, the reinsurance companies created more and more regulations to stay solvable in all circumstances.
The 1970s	The emergency of non-proportional reinsurance at a time where insurance companies were getting stronger and were able to handle more frequent small risks. They had to find a way to reinsurer only the larger risks and accumulated losses that could bankrupt the insurance company.
2011	The reinsurance industry has proved to be very robust because it has treated global disasters including the many natural disasters that happened (Japan's tsunami and Fukushima, Thailand's flooding, US hurricanes, and many more).
2016	The reinsurance shareholders' funds are estimated around 338 billion USD, this shows that the reinsurance market has a strong capital base allowing reinsurance companies to take on very large and complex risks.
2017	There are around 200 companies that offer reinsurance worldwide, most of which are specialist reinsurers. Germany, Switzerland and the US host the biggest reinsurance companies. However, there are also well large insurance companies that also offer reinsurance business (such as AXA with AXA Global P&C).

Source: (Chasseray, Eldin, & Lefebvre, 2017, pp. 15-17)

3. Title Legal Forms of reinsurance

There are four types according to legal criteria, two of which are applicable, and there are hybrid versions known as semi-mandatory reinsurance. Two cases can theoretically exist: the FACOB and the OB-FAC. (Walhin, 2012, p. 13) As shown in the table below:

Table 2. Legal Forms of reinsurance

	Acceptance (Reinsurer)	
Cession (Insurer)	Facultative	Obligatory
Facultative	FAC	FAC –OB (open-cover)
Obligatory	OB-FAC	Treaty (OB)

Source: (Walhin, 2012, p. 13)

3.1 Facultative reinsurance

Historically, it is the first type of cover, the purpose of the treaty is a defined risk that has already been evaluated by the insurer who will forward his analysis to potential reinsurers. The cedant proposes a protection for this risk that may be accepted in full or in part by one or more marketplace reinsurers. (Deelstra & Guillaume, 2014, p. 48)

It is the most simple type of reinsurance activity, where the reinsurer decides to accept a specific risk or not, and the reinsured retains a proportion of the risk. In facultative reinsurance, every risk is being considered separately and individually, both insurer and reinsurer have a choice whether to enter a reinsurance contract in respect of each risk. (Deelstra & Guillaume, 2014, p. 48)

It uses a case by case approach. The insurer has the option to reinsure or not the risk and the reinsurer has the option to accept or not the risk. Each contract is negotiated between the reinsurer and the insurer. It is typically used for big, unusual or catastrophic risks like a building which is exposed to several different hazards. The risks this building carries must be known to the reinsurer. Therefore it must be handled separately from other assured objects. Today facultative reinsurance is used as an additional cover to some of the risks already covered by obligatory treaties. (Chasseray, Eldin, & Lefebvre, 2017, p. 18)

Other uses of facultative reinsurance include:

- When an insurer is offered a risk that exceeds its standard underwriting or reinsurance limits for that class, facultative reinsurance can permit the ceding company to accept the risk.
- Insurers can fill gaps in coverage caused by reinsurance treaty exclusions by seeking separate facultative coverage for a specific policy or group of policies.
- A reinsurer can issue facultative reinsurance to participate in a market in the short term to minimize risk and take advantage of favorable rates.
- A treaty reinsurer may purchase facultative reinsurance to protect itself and its treaty reinsurers. (Raim & Langford, 2007, p. 16)

3.2 The Obligatory or treaty reinsurance

The Obligatory reinsurance is settled by an arrangement generally referred to as a treaty, whereby the reinsured agrees to reinsure a designated class of primary insurer, and the reinsurer agrees to accept the company. Both the reinsured and the reinsurer have no right to refuse reinsurance, whether the company falls under the treaty range. (Kyriaki, 2013, p. 22)

The treaty reinsurance is the situation where an insurer has to cede a portion of the risk of all the policies in a portfolio (such as car policies, health insurances policies...) to the reinsurer, and the reinsurer has to accept the risk. It is the most common form of reinsurance**.** (Chasseray, Eldin, & Lefebvre, 2017, p. 17)

It is the predominant method of reinsurance. Therefore, the central distinctive characteristic of the reinsurance contract system is that the insured is obliged to cede those risks to the reinsurer as he has agreed to cede under the arrangement and the reinsurer is obliged to accept such risks. As such it is the prevalent reinsurance process. (Kyriaki, 2013, p. 22)

A Treaty allows the insurer and the reinsurer to have long-term relationships because the reinsurer will consider any new risk the insurer has, it is automatically accepted by the terms of the contract. Both parties have to cede or accept any risks that are covered in the treaty they agreed on, they cannot exclude a risk if it fits within the terms of the contract. Because the treaties work automatically, it is easier for the administration to have a obligatory treaty, but also increases the risks of insolvency. (Chasseray, Eldin, & Lefebvre, 2017, p. 17)

3.3 Facultative-obligatory or (open-cover) reinsurance

The FACOB means facultative reinsurance for the insurer and obligatory reinsurance for the reinsurer: The term FACOB is also used to designate full surpluses of a very high level, particularly unbalanced, even if they are compulsory treaties. FACOB highlights the asymmetry of information existing between insurer and reinsurer since the insurer can select the risks it reinsures, whereas the reinsurer is obliged to accept them. (Walhin, 2012, p. 14)

It splits the symmetry between the freedom to cede and agree to the reinsurer's detriment. The aim is to cover the risk during a given time period of a category or subcategory. If the insurer is presented with a claim falling beyond the meaning of the arrangement, he decides to cede part of the claim to the reinsurer. In this sense the treaty remains facultative for him. The reinsurer, on the contrary, is obliged to accept the cessions agreed by the cedant. In this context, the Treaty is obligatory for him. (Deelstra & Guillaume, 2014, p. 48)

3.4 The OB – FAC:

The OB- FAC means obligatory for the insurer and facultative for the reinsurer. This type of reinsurance does not exist in practice. (Walhin, 2012, p. 14)

4. The Technical kinds of Reinsurance:

The Reinsurance can also be proportional or non-proportional.(Kyriaki, 2013, p. 22)

4.1 Proportional Reinsurance

The proportional Reinsurance is form of reinsurance in which the premiums and losses of the primary insurer (cedant) are shared proportionally by the cedant and reinsurer. (Okotha, 2017, p. 8)

They are structured in order that:

$$\frac{\text{Ceded Premiums}}{\text{Gross Premiums}} = \frac{\text{Ceded Claims}}{\text{Gross Claims}}$$ (Deelstra & Guillaume, 2014, p. 51)

The ceded premium and claim ratios are equal. There are two forms of proportional treaties:

a. The quota-share treaty: is the basic form of participating treaty whereby the reinsurer accepts a stated percentage of each and every risk within a defined category of business on a pro rata basis. Participation in each risk is fixed and certain. (Okotha, 2017, p. 9) Quota-share is the simplest form of proportional reinsurance. The reinsurer takes an agreed percentage of all the policies written by the insurer. The losses work the same way, the reinsurer will have to pay that percentage of the amount of the claim in case of a loss. This type of reinsurance is ideal for homogeneous portfolios such as house or car insurance. In the case of quota-share reinsurance, the reinsurer will always have to pay when a claim occurs even if it's just a little bit. The portion of the risk that the reinsurer takes is called the ceded risk and what the insurer keeps for himself is called the retention. (Chasseray, Eldin, & Lefebvre, 2017, p. 18) A percentage $(1 - a)$ of his premiums and his gross claims are ceded to the reinsurer. $(1 - a)$ is the cession rate, and the retention rate. The simplicity at which this Treaty can be enforced and treated is an advantage, The cedant and the reinsurer each have the same S / P ratio. (Deelstra & Guillaume, 2014, p. 51)

Table 3. The quota-share

Risk	Premiums	Claims
Total		
Retained	aP	aS
Ceded	(1-a)P	(1-a)S

Source: (Deelstra & Guillaume, 2014, p. 52)

b. The surplus treaty: is the more popular kind of proportional reinsurance. The primary insurer takes the risk up to a specified sum in the contract and the reinsurer has to pay the excess that reaches the specified amount called retention whereas in the case of a loss of quote part reinsurance, the reinsurer will have to pay starting from the first dollar of the loss. It also operates in proportions that are determined with the premium price and the insurer's retention. (Chasseray, Eldin, & Lefebvre, 2017, p. 18) Surplus treaties apply to categories for which the insured interest (fire, theft, deaths) is specified without any ambiguity. It is effectively a quota-share whose rate of cession is not established when the treaty is signed, but is determined on a risk-by-risk basis once the underwriting is completed. The precise mechanism is as follows: For each risk "i", the insurer and the reinsurer agree on the maximum gross value that the insurer can guarantee. It is the underwriting limit "Ki". They also fix the retention limit "Ci", or the maximum net value, which the cedant therefore remains liable for after reinsurance. If the actual value of the insured risk is "Ri" , the treaty applies to i as an individual quota-share whose cession rate $(1- a_i)$ is given by:

$$1 - a_i = \frac{\min((R_i - C_i)^+, (k_i - C_i)^+}{R_i}$$ (Deelstra & Guillaume, 2014, p. 53)

Once these cession rates are determined, the treaty operates as a quota-share for each policy, See the following table:

Table 4. The surplus treaty

Risk	Premiums	Claims
Total		
Retained		
Ceded		

Source: (Deelstra & Guillaume, 2014, p. 53)

In practice, the underwriting limit is given as multiples of the surplus retention (called the limit). The Risks whose insured value exceeds the underwriting limit does not fall within the scope of the treaty. (Deelstra & Guillaume, 2014, p. 53)

4.2 Non-proportional reinsurance

The Non- proportional reinsurance emerged at a time where insurance companies were getting stronger and were able to handle more frequent small risks. They had to find a way to reinsurer only the larger risks and accumulated losses that could bankrupt the insurance company. Any of the damages below that level are at the insurer's expense. The fixed amount is called the priority. The benefit of non-proportional reinsurance is that the priority reflects the insurer’s capacity, and the cost of administration is fairly low because they do not have to measure the proportions for each risk. (Chasseray, Eldin, & Lefebvre, 2017, p. 19)

There are three type of Non-proportional reinsurance as following:

a. Excess-of-loss treaties: are in all points identical to direct insurance contracts with a deductible and a limited guarantee of the insurer. For an excess-of-loss treaty aXSb, the reinsurer's compensation is the following function of the cost x of an event falling within the guarantee of the treaty:

$$\min(\max(x-b,0)\,,a)\ \text{(Deelstra \&}\ Guillaume, 2014, p. 55)$$

Therefore, if the cost of the event is greater than b, the reinsurer intervenes. He then pays the cost of the event subject to a deductible b, without however paying an amount greater than a. The notation aXSb therefore means that the reinsurer pays at most a on the cost part exceeding b. In reinsurance terminology:

- b is the treaty priority;
- a is the treaty guarantee;
- (a +b) is the treaty ceiling. (Deelstra & Guillaume, 2014, p. 55)

An event whose cost is less than b will not give rise to any payment from the reinsurer. If the total cost of an event exceeds (a+b), the cedant will be responsible for the entire portion of the compensation sum above (a+b). An excess-of-loss is equivalent in a more financial language to purchasing a call option with a strike price b and selling a call option with a strike price a +b on the claims. (Deelstra & Guillaume, 2014, p. 55) Assuming that of category "i" is covered by an excess-of-loss treaty a_iXSb_i for which the notion of event coincides with that of a direct insurance claim, retentions and cessions are presented in Table 5, where Q is the ceded premium rate. (Deelstra & Guillaume, 2014, p. 55)

Table 5. Excess-of-loss treaty

Risk	Premiums	Claims
Total		
Retained	(1- Q)P	
Ceded	Q P	

Source: (Deelstra & Guillaume, 2014, p. 55)

In practice, an excess-of-loss treaty is divided into different layers. Two regularly used indicators to characterize an excess-of-loss layer are the rate on line and the pay-back. They are defined as follows: (Deelstra & Guillaume, 2014, p. 56)

$$rate\ on\ line = \frac{layer\ price}{layer\ guarantee} = \frac{1}{pay\ back}$$ (Deelstra & Guillaume, 2014, p. 56)

b. Annual Aggregate Loss: The annual aggregate loss is an excess-of-loss for which the event is the insurer's total annual claim amount. Thus, the cessions and retentions for an aggregate UXST are presented in Table 6. The annual aggregate loss may cover only one or many branches of the company. (Deelstra & Guillaume, 2014, p. 56)

Table 6. The Annual aggregate

Risk	Premiums	Claims
Total		
Retained	(1- Q)P	
Ceded	Q P	

Source: (Deelstra & Guillaume, 2014, p. 57)

c. Annual Stop-Loss: The stop-loss is identical to the aggregate loss, the only difference being that the guarantee and the priority are not expressed in figures but in percentages of gross premiums. Thus, for a stop-loss treaty U%XLT%, cessions and retentions are presented in Table 7:

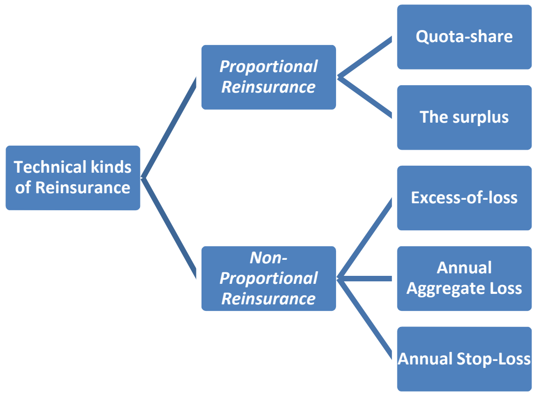
Table7. The Annual Stop-Loss

Risk	Premiums	Claims
Total		
Retained	(1- Q)P	
Ceded	Q P	

Source: (Deelstra & Guillaume, 2014, p. 57)

The technical kinds of reinsurance can be summarized in the following figure:

Fig.1. Technical kinds of Reinsurance



Source: Prepared by the researcher, based on (Deelstra & Guillaume, 2014, pp. 51-57)

5. Reinsurance in Algeria.

5.1 Definition:

The Algerian legislator defined reinsurance as contract or treaty, it is an agreement by which the insurer or ceding company discharges to a reinsurer or assignee all or part of the risks it has insured. In matters of reinsurance, the insurer remains solely liable to the insured. (ORDONNANCE N ° 95-07, 1995)

Reinsurance is a transaction by which an insurer insures itself with a company (reinsurer) for some or all of the risks it has guaranteed, in return for the payment of a premium. (Conseil National de la Comptabilité, 2011, p. 107)

5.2 The History of reinsurance in Algeria

The development of reinsurance in Algeria is shown in the table below:

Table 8. The History of reinsurance in Algeria.

The date	The Event
Before independence	The Reinsurance operations were not in Algeria. The French public government was responsible for insurance and/or reinsurance activity in Algeria.
1962	The creation of the CAAR as the first Algerian insurance company.
1963	According to the order 63-197 of June 8th 1963, the reinsurance operations were covered by the CAAR company, with insurance companies in the Algerian market ceded 10% of the total premiums.
1966	The monopoly of all insurance and reinsurance by the Algerian State under Executive Decree N° 66-127.
1973	The creation of the Central Reinsurance Company "CCR" by the Order N° 73-54 of October 1st, 1973.
1995	Under Executive decree n°95-409, of December 9th, 1995, relating to compulsory reinsurance cession, The minimum cession rates of the risks to be reinsured are determined as following:

	✓ 80% for industrial risks; ✓ 40% for risks of transport; ✓ 25% for other risks.
1998	According to Executive Decree No. 312-98 of 30/09/1998, the Insurance companies are obliged under current regulations to cede a portion of premiums to the Central Reinsurance Company (CCR), for all lines of business, as follows: ✓ 10% for industrial risks; ✓ 5% for transport risks; ✓ 5% for other risks.
2002	Under Decision No. 43 of the Ministry of Finance on July 29th , 2002: - The compulsory cession instituted by Order 95/07 relating to insurance is made to the benefit of the national reinsurer (CCR). - A right of priority is granted to CCR over all facultative cessions. In order to benefit from this right, CCR must offer equal if not better conditions than those offered by foreign reinsurers. - Reinsurance assignments must be made to reinsurers rated, at least, BBB.
2004	The CCR company benefits from a State guarantee for the reinsurance coverage of the risks of natural disasters.
2006	The Algerian legislator approved Article 208 of Law No. 06-04 issued on February 20th, 2006 amending and supplementing Ordinance No. 95-07: It can be instituted the responsibility of the approved insurance companies to make a compulsory assignment on the reinsurance risks. The minimum rate, the beneficiary of this cession as well as the conditions and modalities of application of this article shall be specified by regulation".
2009	The minimum capital of reinsurance companies is set at five (5) billion dinars.
2010	Executive Decree No. 10-207 of September 9th, 2010, amending and supplementing Executive Decree No. 95-409 of December 9th , 1995, relating to compulsory ceding in reinsurance, sets the minimum rate of compulsory ceding of risks to be reinsured at 50% for the benefit of the (CCR).
2011	Executive Decree n° 11-422 of December 8th, 2011 approving the authorization to exercise, on the Algerian insurance market, issued to foreign reinsurance brokers.
2013	Executive Decree No 13-114 and 13-115 of March 28th, 013 on the regulated commitments of insurance and/or reinsurance companies.

Source: Prepared by the researcher, based on the executive decrees listed in the table above.

5.3Characteristics of reinsurance in Algeria:

- The reinsurance activity in Algeria is carried out mainly by the Central Company of reinsurance (CCR), which remains the sole operator specialized in reinsurance on the Algerian market;
- The obligatory cession in favor of the CCR, fixed at a minimum of 50%, of the amount of reinsurance ceded;

- A right of priority for the CCR in facultative cessions. The benefit of this right is acquired when the CCR presents offers of reinsurance equal to or better than those obtained on the market international reinsurance;
- Use of foreign reinsurers with a minimum rating of BBB in order to promote reinsurance programs with high sufficient levels of security. (Ministère des finances, 2018, p. 28)

5.4 Structure of the insurance and / or reinsurance market in Algeria

There are 23 companies in Algerian insurance market divided as follows:

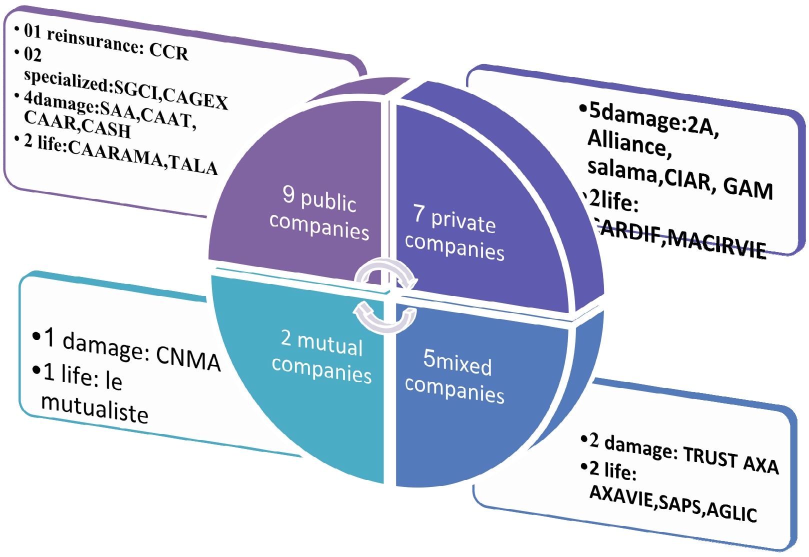
- One company is specialized in reinsurance (CCR);

- Two companies are specialized in the insurance of real estate credit and (SGCI); export credit (CAGEX);

- Twelve companies are specialized in damage (Non-life) insurance;

- Eight companies are specialized in life insurance.

Fig.2. Structure of the Algerian insurance market.



Source: (Ministère des finances, 2018, p. 6)

Overall, these companies generated sales 143.7 billion AD, broken down as follows:

- Direct insurance: 137.7 billion AD, including 12.7 billion AD in insurance.

- Specialized insurance: 1.7 billion AD.

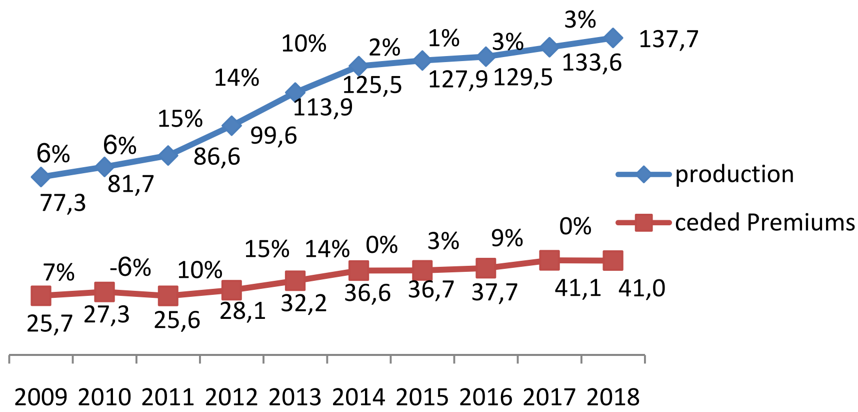
- Reinsurance: 4.3 billion AD (the international acceptances carried out by CCR). (Ministère des finances, 2018, p. 7)

6. The Demand for Reinsurance in Algeria:

6.1 The Change in global ceded premiums 2009-2018:

The changes of the premiums cessions by the Algerian insurance companies and compare it to the total production in the following figure:

Fig.3. Global ceded premiums in Algeria (2009-2018) (Unit: million AD)



Source: Prepared by the researcher, based on the Ministry of Finance reports on insurance activity in Algeria for the years 2009-2018.

In general, the more total production, the more ceded premiums;

The cession process is a transfer of premiums from insurance companies to reinsurance companies;

In the turnover of insurance market, the ceded premiums are not calculated because it included in written premiums;

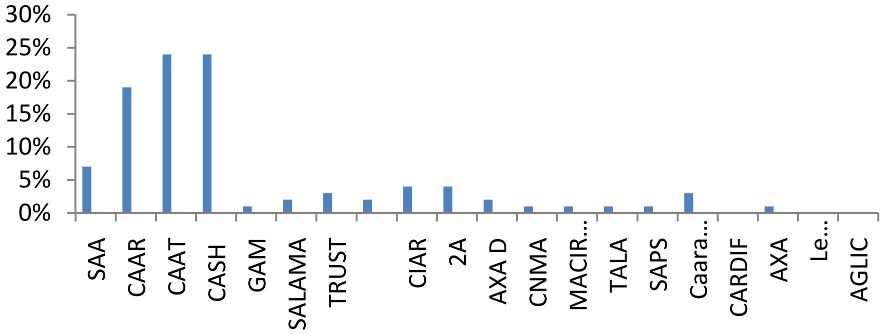
The cession rate of insurance companies in general ranges between 28 and 34%, which indicates that insurance companies retention's between 66 and 72% of the written premiums;

In the period between 2009-2018, the average retention rate for the insurance companies is 70% of total premiums issued, this indicates their capacity to take risks; In return the average cession rate for it is 30%.

6.2 Average cession of insurance companies in Algeria (2009-2018)

The rate cession varies from one insurance company to another; this will be shown in figure below:

Fig.4. Average cession of insurance companies in Algeria (2009-2018)



Source: Prepared by the researcher, based on the Ministry of Finance reports on insurance activity in Algeria for the years 2009-2018.

Damage insurance companies dominate 93% of the ceded premiums and 7% for life insurance companies;

Public insurance companies dominate 79% of the total premiums ceded; 74% of it are damage insurance companies (SAA, CAAR, CAAT, CASH) due to the importance of their (IARDT) portfolio.

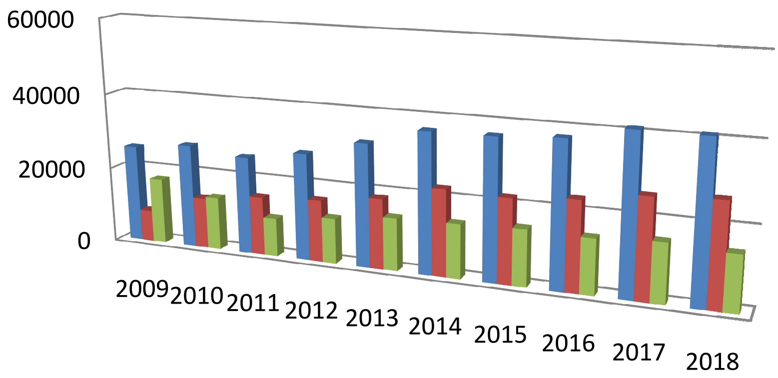
The share of private insurance companies in the total ceded premiums is 14% and 7% for mixed insurance companies.

These percentages are expected for several reasons, the first is that production is on the Algerian market, 93% is for damage insurance by the same shares of rate cession. The second is the risks in damage insurances that are more dangerous and greater than life insurances, and finally, the damage insurance companies need reinsurance coverage more than life insurance.

6.3 Cession to the Algerian and the international reinsurance market (2009-2018):

The progress of the ceded premium can be followed through the figure5:

Fig.5. Cession to the Algerian and the international reinsurance market (2009-2018). (Unit million AD)



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Cessions	25714	27389	25673	28147	32246	36679	36772	37718	41120	41008
Cession to national market	8354	13420	15415	16272	18444	22584	22063	23385	25860	26655
Cession to the international market	17360	13969	10095	11876	13803	14095	14708	14332	15260	14353

Source: Prepared by the researcher, based on the annual reports of the CCR Company and the reports of the Ministry of Finance on insurance activities in Algeria for the years 2009-2018.

First, we mean by the national market mainly the central reinsurance company “CCR”, as it is the only company authorized to practice reinsurance operations in terms of acceptance and retrocession, although the word “market” cannot be used for one company, this term is used in the annual reports issued by the authorities;

In a very narrow and well-defined manner, insurance companies are permitted to make facultative reinsurance deals, in which both parties are free to cede or accept; And that is for some risks may not find adequate coverage or not included in the obligatory treaties concluded, such as the surplus limit reinsurance agreement;

It should be noted that the cession rate in the national market unlike CCR did not exceed 1% during the period examined, so it was not mentioned in the figure above;

The main objective of these deals is to allow insurance companies to gain technical expertise, and to reduce the outward flow of hard currency;

From the year 2011, the cession rate to the CCR by all insurance companies exceeds 50%, in implementation of Executive Decree No. 10-207 issued on 09-09-2010;

By calculating the general average, we find that insurance companies cede 57% to the national reinsurance market and 43% to the international reinsurance market;

Insurance companies believe that the cession rate (50%) is high. However, it is a kind of CCR control of insurance companies in Algeria, to reduce the outward flow of hard currency.

7. The reinsurance supply in Algeria:

7.1 Presentation of the CCR Company:

CCR company Created in1973, Central reinsurance company (CCR) is a joint-stock company with a registered capital of DZD 22 billion, owned by the Algerian State. The Company is headquartered in Algiers (Ouled Fayet). CCR occupies a major place in the reinsurance sector in Algeria. Indeed, CCR offers its services in various reinsurance business lines to its national and international clients. Also, CCR centralizes the insurance against the effects of natural disasters, under the guarantee of the State, by given an automatic reinsurance capacity to all insurance companies of the Algerian market.

The activities of the CCR extend to all forms of reinsurance and to all lines of insurance. For this reason, it has business relationship with all Algerian insurance companies as well as several partners (insurers, reinsurers and brokers) around the world. CCR has a well established reputation and a good Rating (B + by AM Best Rating Agency). CCR has the best technical performances represented by the "loss ratio" and the "combined ratio" among the reinsurers in the MENA region rated by the rating agency AM Best.

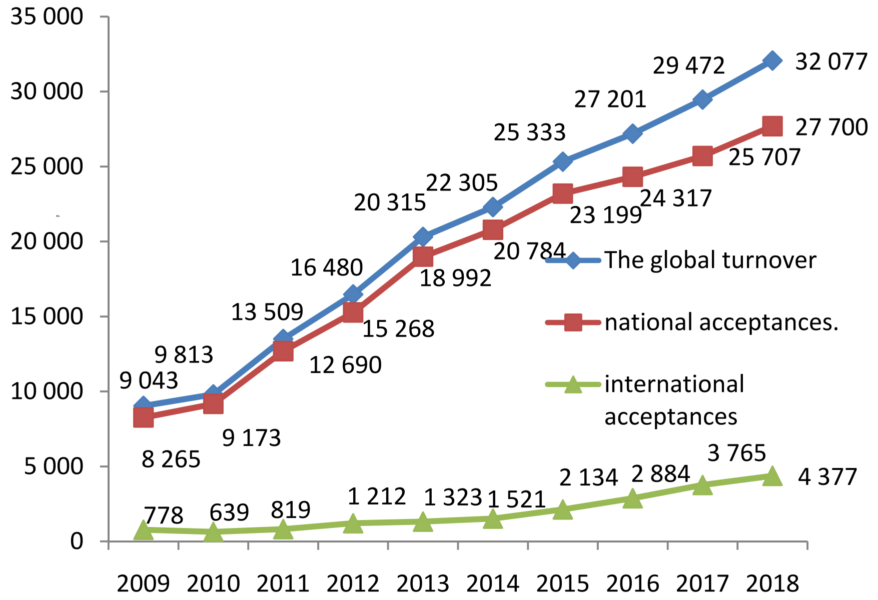
In addition, CCR actively participates in the regional organizations AIO, GAIF, FAIR, and FANAF. CCR is also a member of several pools: AWRIS, FAIR Marine and Non Marine, African Aviation and Fire Pool, Non Marine and Aviation Asian Pools. (CCR, 2018)

7.2 Evolution of the total CCR turnover (2009 – 2018):

The CCR turnover represents the national acceptances and the international acceptances, according to the following equation: Total CCR turnover = National Acceptable Premiums + International Acceptable Premiums;

By referring to the annual CCR financial reports, the development of the total turnover can be shown through the following curve:

Fig.6. The development of the total CCR turnover (2009-2018) (Unit: million DA)



Source: Prepared by the researcher, based on the annual reports of the CCR Company for the years 2009-2018.

Over the years, the largest share of the CCR turnover is due to national acceptances;

The development in the CCR turnover as a result of the application of the obligatory cession rate by insurance companies in Algeria;

From 2009 to 2015, the percentage of national acceptances represented more than 90% of the total CCR turnover;

The last three years (2016-2018) witnessed an increase in international acceptances;

Usually, the ceded premiums to the national reinsurance market (mainly to the CCR Company shown in figure5) are equal to the national acceptances in CCR (shown above in figure 6), because the process is only a transfer of premiums from insurance companies to the CCR. However, the difference between this values is due to many reasons, first is the difference in accounting dates between the insurance and reinsurance companies, then, the complexity of the accounting operations related to insurance and reinsurance; next, in the annual reports of some insurance companies, we find that reinsurance exists as a product or as a branch in a narrow framework, and companies that have accreditation are allowed to practice accepting risks only from the local market; Finally, the reinsurance commission paid by the reinsurer to the ceding companies, which is usually deducted directly from the ceded premiums;

By calculating the general average during the period 2009-2018, we find that national acceptances constitute 90% of the total CCR turnover; and 10% of international acceptances.

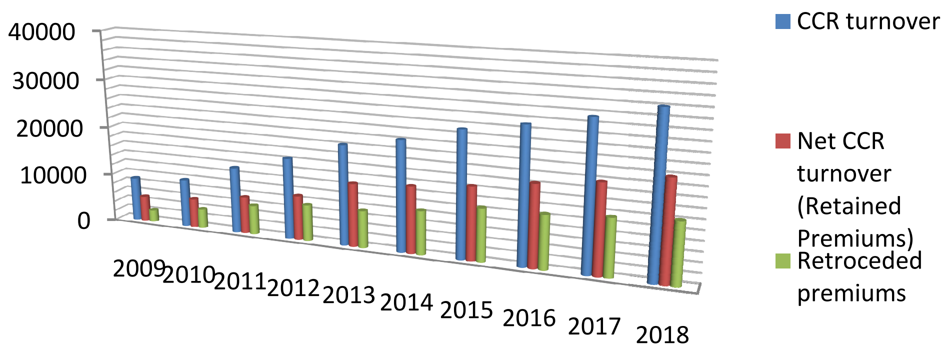
7.3 The Retention and Retrocession in CCR company:

CCR can keep a part of the acceptable premiums and retrocede the part that exceeds its capacity, to the international reinsurance market, in other words:

Net CCR turnover (Retained Premiums) = Total CCR turnover (Total Accepted Premiums) – retro-ceded premiums.

The development of the retention and Retrocession ratios can be shown through the following figure:

Fig.7. The Retention and Retrocession in CCR (2009-2018) (Unit: million D)



Source: Prepared by the researcher, based on the annual reports of the CCR Company for the years 2009-2018.

In all years the retention ratios remained higher than the retrocession ratios; By calculating the average, we find 59% for retention and 41% for retrocession to the international market, which reflects the strength of the CCR and its ability to absorb risks.

8. CONCLUSION:

Through our study, we concluded that:

- The insurance companies are making acceptance operations within a very tight frame and with limited conditionality after the approval of the CCR where reinsurance is provided as a product or branch this is only in facultative deals.
- The Algerian insurance and reinsurance companies have a high retention capacity Insurance companies in Algeria cede more than the obligatory cession rate to the CCR which reduces outward flow of hard currency therefore raising the turnover of the CCR Company.
- Retrocession rates are lower than retention rates at the central reinsurance company.

- The results allow us to accept the first theory stating that the production quotas effect the ceded premiums where we have reached wide convergence between them in deferent companies and in the insurance branches (person and damage). Therefore, production quota in the insurance damage branch is equal to ceded premiums quota. The second theory stating that insurance companies are not allowed to reinsure supply or accept, is rejected, considering the fact that certified insurance companies are allowed to offer supplies and accept optional deals, which possibly explains the difference between the ceded premiums amounts in the reinsurance market and the national acceptance amounts for CCR over the years. Lastly, the ceded premiums from insurance companies are contributing in strengthen the central reinsurance company's business is correct, since more than 90% of turnover of the business of central reinsurance company comes from the national acceptance.

This study suggests the following recommendations and suggestions:

- ✓ Review within the rate of legal ceded imposed on Algeria insurance companies
- ✓ Expand the acceptance operations within the frame work of insurance companies.
- ✓ Opening new branches of CCR or verify other companies specialized in reinsurance
- ✓ Acquire and legalize modern or alternative ways of reinsurance.

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