EMPIRICAL STUDY REGARDING THE DEVELOPMENT OF AGRICULTURAL INSURANCES IN ROMANIA

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Abstract: Maintaining a certainty degree for the agricultural producers in order to obtain stable and efficient results makes it both necessary and welcomes the protection through insurance and reinsurance in this field. In this paper we carry out an analysis regarding the penetration degree of agricultural crops insurance in Romania, as well as regarding the government implication as an insurer. The authors’ conclusions is that from the 43 insurance companies that presently operate on the market, only 11 offer agrarian insurance contracts. To reach the level of the developed countries in the European Union, where the degree of insurance covering of agricultural fields is situated around an average of 65-70%, for Romania there is a 48-53% segment of the total insurable agricultural field that still needs to be covered.

Keywords: agricultural corps’ insurance, gross premiums subscribed, damage rate, insurance coverage

JEL code: G22 Q18

1. Introduction
Natural calamities and other highly dangerous situations existing in agriculture are the factors that can overturn the results of the agricultural process. That is why maintaining a certain degree of certitude in what concerns the obtainment of stable and efficient results implies the protection through insurance and reinsurance in this field.

2. Material and Methods
As a working material the authors have used information and statistics data published in different papers or specialty books and as a working method we have used observation, analysis, selection, and comparison and statistics interpretation.

3. Results and discussions
1. Recent evolutions of the agricultural insurance in Romania
With a percentage of approximately 32% of the total work force, in agriculture, but with a contribution to the GDP formation of only 10%, Romania’s agriculture is an important segment of the economy.
There are many risks that threaten the agricultural crops, causing farmers’ important losses each year and, at larger scale generating big losses to the national economy as a whole. As risks we can mention some events that already have a chronic character, like: draught, floods, winter freezing that have an objective character, outside the men’s possibility of intervention. Besides these objective risks, we can also identify some subjective factors with structural (lack of proper equipment and tools, of different sorts of selected seeds, as well as the lack of financial resources in order to get them) and conjectural character (price variations from year to year, theft, etc.)
An adequate measure of protection against agriculture specific risks and against their effects is the transfer of those risks through insurance. Agricultural insurances have a significant role in stimulating investments in agriculture and in stabilizing revenues of agricultural producers.

Agricultural insurances that are already used in Romania have as guarantee the function of compensation of damages caused by natural calamities and different accidents and diseases, as well as the function of preventing damages. Hence, the main categories of insurances practiced in this field are:

- insurance of agrarian crops, grape wine and orchard harvest;
- animals’ insurance.

The risks against which the insurances are made are excessive and time persistent drought, that affects not irrigated soils; floods; excessive and durable rain; excessively low temperatures, under the resistance limit of plants; thick snow layer that produces damages in both the vegetal and animal sector; as well as other extended disasters and catastrophes. In a larger way we could say that it is insured, the quantitative and qualitative damages, as well as animal mortality, or the need of their scarification, produced through a destructive manifestation of some extended natural catastrophes and diseases. Insurance companies do not cover catastrophic risks like: drought, winter freeze, floods; long term rain; weir rupture; river floods etc. These last ones, like many other similar ones remain under government or local authority protection, hence being covered partially by public resources.

The scope of the optional agrarian insurances was and continues to be relatively reduced. In the agrarian year 2006-2007 there were only 1.8 million hectares insured, out of a total potential of around 10.5 million hectares, thus resulting only a 17% degree of insurance coverage of the agrarian fields. The insured areas have only grown with 20-25% according to the agrarian year 2005-2006. In order to reach the level of the developed countries in the European union, where the degree of insurance covering of agricultural fields is situated around an average of 65-70%, for Romania there is a 48-53% segment of the total insurable agricultural field that still needs to be insured.

In order to highlight the development degree of the agricultural insurances we have focused on the analysis of this domain in the period 2007-2008. Regarding the first half of the year 2008, in the market for agricultural insurances, the value of the gross premiums subscribed is 41,40 million lei i.e. EUR 11,3 million. According to the latest data published by the specialized website www.1asig.ro, in the whole of year 2008, the agricultural insurances represented only 0,92% of the total national subscriptions. With an absolute value of around EUR 22 million (RON 81,3 million), this represents a nominal growth of 8,7% in euro, which is way beyond the medium growth of the Romanian specialized market in this domain, situated at 17%.

The EUR 11,28 million value of subscribed premiums in the first semester of 2008 also represents under 1% of the total subscriptions received by the Romanian insurance companies, which is the cost paid by farmers for the coverage of the 2008 spring crops. As a comparison, in 2007 the total premiums subscribed for the agricultural insurances has reached RON 54,76 million (i.e. EUR 16,41 million). At the same time, the volume of the compensations paid for the damages of the agricultural crops reached RON 5,31 million (EUR 1,45 million), out of which the highest payments have been made by ALLIANZ-TIRIAC (RON 1,88 million), ASIROM (RON 0,92 million) and FATA Asigurări (RON 0,66 million). Among the insurers that practice agricultural insurances we could find as a leader FATA Asigurări, which in the first semester of 2008 has gathered a volume of RON 12,18 million in gross premiums (it was on the third place in 2007 with a total gross value of the premiums subscribed of RON 8,77 million), hence with a

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232 According to the specialized website www.1asig.ro
market share in total agricultural insurances of 29,41%. In the company’s portfolio this share equals 47,6%.

![Figure 1](https://via.placeholder.com/150)

Source: www.1asig.ro

On the next places in the between the first five insurance companies we find ASIROM, with a market share of 18,34% (1st place in 2007 with) and OMNIA SIG, with 13,92% of the market (6th place in 2007). They are followed by ALLIANZ-ȚI RIA C, with a 10,94% market share (2nd place in 2007) and ARDAF with 8,13% market share (4th place in 2007).

The compensation activity can be characterized on one hand, by the volume of compensations paid for the insured corps and, on the other hand by the damage rate calculated as a ratio of the total premiums paid for the agricultural insurances and the value of the compensation paid to insured farmers for the damages of the agricultural crops.

From an agro-meteorological point of view, the agrarian year 2006-2007 can be characterized as an atypical one. Late spring freezes have occurred at the beginning of May, that have damaged mainly the grapevines, fruit trees and vegetables, as well as very hot days that led to drought, followed shortly by heavy rains and storms, between May and September 2007, plus floods in some areas. The described happenings have caused losses because of the destruction of the harvest. The damages encountered have been rather big, so the insurance companies had to pay, a volume of compensations of approximately RON 48,3 million at a total value of premiums raised of 53,7 million.

In this case the damage rate calculated as mentioned above reached the level of 89,94%.

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**Table 1**

| Compensation paid for agricultural insurances in the period 2007-2008 |
|---|---|---|---|---|---|
| **Insurance Company** | **Q1 2008** | **2007** | **Damage rate and the place in the top of the compensation payers in 2007** |
| | EUR -million- | RON -million- | EUR -million- | RON -million- | |
| 1. | **FATA Asigurări** | 0,18 | 0,66 | 0,60 | 2,01 | 22,9% (4) |
| 2. | **ASIROM** | 0,25 | 0,92 | 1,51 | 5,02 | 29,5% (2) |
| 3. | **OMNIA SIG** | 0,08 | 0,29 | 0,04 | 0,12 | 12,6% (8) |
| 4. | **ALLIANZ-ȚIRIAC** | 0,51 | 1,88 | 6,04 | 20,16 | 133,6%(1) |

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233 according to the specialized website www.1asig.ro.
234 There is no a priori established measure for the damage rate.
2. Government involvement in agriculture insurance

The reduced degree of insurance coverage for the agricultural crops in our country, together with the fact that disaster risks have raised in the last years has determined a more active implication from the state as an agrarian insurer. In this way, in 2002, the Romanian government has issued Law 381 regarding the compensations paid in case of calamities in agriculture. As a matter of fact its implication in agricultural insurances regard the financial support for a part of the insurance premium for the risks to crops, animals, birds, bee families and fish, that mere mentioned in an ministry order. In 2007, the state subventions have reached 50% of the total premiums, with a purpose to increase the demand for agricultural insurances from the Romanian producers. For financial reasons, in 2008 there were no more such subventions.

This practice is not specific for Romania. It has developed in many countries, with a purpose for supporting the agriculture production and producers. As an example, we present the situation of the subventions for insurance premiums in states with tradition in this direction, were it can be easily noticed the support given to agriculture through the compensation of a part of the insurance premiums.

Table 2.

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<th>Subventions given by the state for the agricultural insurance premiums</th>
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Second, according to the specifications of the law 381/2002 regarding the compensation in case of natural disasters for agriculture, the state gives compensations for agricultural producers that were damaged by natural disasters, as well as diseases that generate natural disasters. In this way in the period 2003-2007, the Romanian government has reimbursed agricultural crops of a total surface of 2.142.782 hectares, as a result of natural disasters produced as follows:

Table 3

| Devastated agricultural areas in the period 2003-2007 and state disimbursements |
|------------------------------|----------------------------------|
| Year | Devastated area (hectares) | Calamity |
| 2003 | 432.552                  | drought, freeze |

352
The total value of the amounts paid by the state in the same period to producers for the damaged crops has seen the following evolution:

![Figure 2](image)

Currently the compensation for the losses incurred by producers, individuals or firms, because of natural calamities and diseases is only made for crops, animals and birds that have been insured by the insurance companies. Administration of the amounts meant to compensate the producers’ losses is done by the resort minister. Compensations are given in the following cases:

- for crops and plantations affected by natural disasters, only for damages that exceed 30% of the production, with a maximum of compensation of 70% out of the expenses until the date of the insured event;

- for animals, birds, bee families and fish, the compensations are maximum 80% of the insured value, minus the value of the resulted sub products, that can be valued according to the enforced laws.

The expenses made with crops are being established through the frame estimates given by the Agrarian Economy Institute, considering only expenses with seeds, soil fertilizers, pesticides, and chemical fertilizers, mechanical or manual works. The insurance contract must end until 15 of December for the fall seeded crops and until 31st of May for the cultures established in spring for plantations.

4. Conclusions

The first conclusion that can be drawn from the above study is that the insurance coverage for the agrarian crops is still reduced as compared to the agricultural potential, but also compared with the developed countries in the European Union. As it has been proven according to the data, for Romania there is still a segment of 48% - 53% that needs to be covered by insurances, out of the total insurable agricultural area. On one hand, this difference is difficult to catch up, but on the other hand, it represents an important potential for the agricultural insurance evolution in our country.

The second conclusion that can be drawn from this study is related to the role of the government as an insurer in agriculture. The protection offered by the state is limited to a reduced number of
risks and, the compensations are conditioned by the existence of optional insurance contracts for crops in case of calamities. In our opinion this conditioning is meant to protect as much as possible the agricultural producer in the case of a disaster that threatens its assets. The state involvement, in the following years will increase, from our point of view. The state will remain the main insurer for disaster risk, while for the ordinary ones, that only affect few producers and have a random distribution; the protection will be effected through private insurances. For 2009 there is a project of law that stipulates the possibility for compensations for damaged cultures, even if there is no insurance contract for them, in which case the compensations given by the state would be around 50% form the values given for damaged cultures that have been insured.

A third conclusion is that agrarian insurances have a reduced incidence because of their high costs. The coverage of crops, as it has already been noticed, is risky for many insurers because of the increased frequency and intensity of risks, because of which, in some cases, the insurance premiums reach 6-8% of the insured value. The subventions given by the state for the agrarian insurance premiums could be the base for a durable development for this segment, on one hand and, on the other hand, for Romanian agriculture, thus being able to foster economic growth even in an unfavorable climate, with specific risks. This measure could stabilize farmers’ income. As a corollary of our conclusions we support the necessity for agricultural insurances. moreover, we propose a complex and integrated insurance system that includes, along with agricultural crops and animals’ insurance, also a complex household insurance, that includes building and household inventory insurance.

References
1. 381/2002 Law, regarding indemnity in case of natural calamities in agriculture.
2. 136/1995 Law, completed and modified regarding the activity of insurance-reinsurance.