

HOME INSURANCE, A SOCIAL PROTECTION INSTRUMENT BY REDUCING THE IMPACT OF NATURAL DISASTERS

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Abstract:

This scientific approach addresses the issue of Romania home insurance in the context of the changes in the legal framework, namely in context of establishing the Insurance Pole against Natural Disasters. The research has as its starting point the need to reduce the risk of natural disasters in our country and it highlights the home insurance market dynamics between 2008 and 2016 in order to identify the market malfunctions. We have intended to answer the following question: "How the home insurance market can be made more effective?" The research hypotheses in order to give possible answers are the following: "Is the national legislation in force an appropriate framework?", "Has the home insurance market segment been supported by the national authorities upon models from developed countries?"

Keywords: home insurance market, social protection, insurance pole against natural disasters, risk of natural disasters

JEL Classification: G22

1. Introduction

The protection of the population against the effects of natural disasters must be a priority of the public policies in Romania, mostly due the fact that the effects of such events are extremely difficult to manage by the central and local public authorities. In addition to the specific measures meant to prevent and minimize the effects of natural disasters (for example, building consolidations, embankments, etc.), it is very important to identify effective solutions to guarantee the financial capacity of the citizens to rebuild the damaged households and thus to avoid the risk that unforeseen expenses occur in the public budgets.

From this point of view, providing home insurance with a wide level of coverage is both a solution to protect the property and the individual interest of each citizen, and a way to ensure macroeconomic stability and predictability, by preserving the assets of citizens and minimizing the allocations of public funds required in case of state emergency situations.

2. Research Methodology

The research methods that were used were descriptive methods that is case studies, to give a more complete picture of home insurance situation in our country. The research was for years 2009 - 2015 and tried to answer the main question: "How can the home insurance market can become more efficient?"

3. Natural disasters, a serious threat to Romania

Romania is a country with particularly significant exposure to the risk of natural disasters. Events like the earthquake in 1977, which caused significant losses – of billions

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of Euros – can repeated at any time, therefore it is very hard to absorb and manage by public resources the social and economic impact of such events.

The statistical analyses on the history of earthquakes in the Vrancea area showed an increasing trend of seismic activity. For the centuries ahead, it is expected to increase in the incidence of earthquakes with magnitude of at least 6.7 ° Richter. (Amaritei, 2012)

Regarding the effects of a major earthquake, the estimates undertaken by the famous company AON Benfield, at the request of the National Association of Insurance Companies in Romania, show that a similar event to 1977 earthquake in Romania would affect about 850,000 households and cause damages of over 6.5 billion Euro. (Badea, 2016)

Moreover, in addition to major events such as earthquakes, the experience of past decades has shown us that our country was constantly exposed to major risks of floods and landslides, which have caused considerable material losses every year. The Romanian Waters National Administration, in its the hazard and potential risk maps, published in 2014, showed that in Romania there are "*375 sectors with significant potential risk of flooding on 313 rivers, which covers about 16,000 km², that is 20 % of the cadastral hydrographic network of Romania*". (Romanian Waters National Administration, 2014)

To exemplify the catastrophic consequences of such events, we refer to the latest statistics of year 2015, during which more than half of Romania counties (28 counties) were affected by floods; it is estimated that the impact cost due to flooding reached 260 million Eur. (Romanian Waters National Administration, 2015)

4. Natural Disasters Insurance Pool – a social protection solution for homeowners in Romania

Given the high risk of natural disasters and the need to find a suitable solution for our country, Romania has developed, together with the World Bank, a project whose aim was *How to Mitigate the Risks caused by Natural Hazards and to prepare for Emergencies*. Following this project, it resulted the need to implement a national home insurance against disasters program. Consequently, at the end of 2008, Law 260 concerning the mandatory home insurance.

The main new element of this law was that home insurances became mandatory and a new entity to take over the insurance risks of earthquake, floods and landslides was established. The technical solution was the establishment of an insurance pool (Natural Disasters Insurance Pool - PAID), whose shareholders are 13 insurance companies in Romania.

The international experience should be a model for Romania. In this respect, it is extremely important to note that the solutions must be implemented before natural disasters occur, and not as a consequence of natural disasters.

Given the severity of natural disasters, and the need to empower extremely large financial resources, worldwide insurance pools were set up after disasters stroke. We would like to present the examples of Turkey, Taiwan, New Zealand and the Caribbean region.

In Turkey, after the 1999 devastating earthquake, which caused losses of over 10 billion Euros, household insurance became mandatory and the Turkish Compulsory Insurance Pool (TCIP), managed by a state entity, has been established. The development of this system has encountered significant difficulties, its coverage is currently below 50%, although an insurance policy costs less than 40 Euros. (<http://www.1asig.ro/Romania-si-Turcia-Modele-actuale-ale-sistemelor-de-asigurare-obligatorie-a-locuintelor-articol-3,100-51691.htm>)

In Taiwan, following the devastating 1999 earthquake (7.3 on the Richter scale), the Taiwan Residential Earthquake Insurance Pool (TREIF) has been established. The local insurance companies, which are members of TREIF, cover risks up to 5 million Euros, and 1.2 billion Euros are taken and placed by TREIF to international reinsurance companies. (Bulugea.pptx, 2010)

In New Zealand, following a number of major earthquakes, a government agency dealing with managing a compensation fund in case of wars and earthquakes has been established since 1942, and it has been gathering funds from a surcharge applied to all fire policies. In 1988, this government agency turned into Earthquake Commission, an independent commercial entity, which still preserves the state guarantees in case of exhaustion of its own funds. After that, the insurance remained mandatory only for those who purchase an insurance policy for fire risks. (<http://www.eqc.govt.nz/about-eqc>)

In the countries of the Caribbean region, following the 2004 natural disasters, a new independent entity has been established (The Caribbean Catastrophe Risk Insurance Facility - CCRIF). This entity has been dealing with the reinsurance international markets, and has acted as an intermediary between the member countries and the international financial markets. This new entity took the form of an insurance pool for several countries in the region.

Thus, the international experience shows that the establishment of an insurance pool meets the need to create a very solid financial structure, able to tackle major challenges, such as disasters caused by earthquakes. Also, another main target in establishing insurance pools is the provision of social protection to the citizens through the opportunity of purchasing an insurance product at a low cost. That is the reason why the implementation of a "social" solution can be achieved either through direct state involvement in managing the insurance pool or by the state taking over a part of the risk or providing state guarantees.

As for the compulsory system of home insurance that has been established in Romania by Law no. 260 of 2008, the new insurance pool (PAID) began to work after two years since the adoption of the law. The first mandatory home insurance policy (called PAD), was issued on 15 July 2010.

Given the necessity to adopt a comprehensive social protection solution (home insurance at a price which most Romanian citizens can afford), the law has imposed PAD policies for fixed insured amounts, depending on the type of the building, of 10,000 Euros (constructions whose exterior walls are made of unburnt brick or of any other materials which were not subject to heat and/or chemical treatments) or of 20,000 Euros (constructions whose resistance structure is made of reinforced concrete, metal or wood, or with exterior walls made of stone, burnt brick, wood or any other materials which resulted from a thermal and / or chemical treatment) for which the insurance policies cost 10 Euros and 20 Euros.

The peculiarity of this system is the fact that the PAD is a first risk policy, which means that regardless of the house value, the events resulting in damages up to 10,000 Euro or 20,000 Euro will be fully compensated, thus giving the owner a full protection within the insured amount of money. Unlike the PAD policy, in optional insurances of proportional kind, the compensation is charged in proportion to the ratio of the insured amount, stated on the policy, and the value of the insured property. For this reason, in case of an optional proportional policy, with an amount of 20,000 Euros insured, for a property value of 100,000 Euro, the compensations paid by the insurers represent only 20% of the damage.

Basically, if we compare the PAD insurance policy features with those of an optional insurance policy, we note that the mandatory policy has the advantage of giving a

full protection for damages of up to 10,000 Euros or 20,000 Euros, but limits itself to the three kind of risks, namely earthquake, floods and landslides risks. Obviously, a complete protection, both in relation to a compensation to the full value of house and a coverage for all the other building specific risks (for instance, fire risk) involves the purchase of additional optional insurance policy.

5. The evolution of the main indicators concerning home insurance in Romania

Although Romania is a country highly exposed to natural disasters, the underdevelopment of the insurance market and its low level of coverage is a constant phenomenon throughout the past decades, both in case of the compulsory home insurances, and in case of the optional policies.

Beyond the economic problems, such as the low income households, the main reasons which led to the establishment by law of a compulsory insurance mechanism were the extremely low level of financial education and the people's lack of confidence in the insurance industry.

For this reason, the analysis of the home insurance market should start from a broader context that is the context of the entire insurance market in Romania. The insurance market in our country is the last in the rankings in Europe as the penetration of insurances at the end of 2015 was of nearly 1.23% of GDP. (FSA, 2015)

This percentage is much lower than the European average. In the developed countries it reaches even 10% of GDP. Compared with the period of the economic boom, that is 2006 - 2008, it recorded a declining trend. Moreover, we need to say that the insurance market in Romania has been and continues to be mostly a car insurance market (particularly, civil liability car insurance - RCA), and that the development of the remaining classes of insurances is extremely low.

The analysis of the home insurance evolution was based on the indicators included in the periodic reports issued by the supervisory authority (the Insurance Supervisory Commission for the period before 2012, the Financial Supervisory Authority after year 2013). Table 1 and Table 2 present the evolution of the number of contracts and their coverage compared to the total number of households over the period 2009 - 2015:

Table no.2

*The evolution of the number of contracts and of insurance coverage
in case optional home insurance in Romania*

Indicators	Optional insurances						
	2009	2010	2011	2012	2013	2014	2015
Number of contracts	1,528,253	1,714,393	4,392,647	3,324,910	2,462,765	1,830,996	1,786,112
Number of households	8,384,972	8,427,941	8,722,398	8,760,923	8,799,832	8,840,595	8,882,090
Coverage	18.20%	20.30%	50.40%	38.00%	28.00%	20.70%	20.10%

Source: Annual reports by the FSA

Table no.2

**The evolution of the number of contracts and of insurance coverage
in case mandatory home insurance in Romania**

Indicators	Mandatory Home Insurance – PAID						
	2009	2010	2011	2012	2013	2014	2015
Number of contracts	-	367,287	574,229	331,131	736,318	1,491,329	1,590,954
Number of households	8,384,972	8,427,941	8,722,398	8,760,923	8,799,832	8,840,595	8,882,090
Coverage	0.00%	4.40%	6.60%	3.80%	8.40%	16.90%	17.90%

Source: Annual reports by the FSA

As shown by the aggregate national indicators show, the development of the home insurance market in Romania is very low. We note that the two categories of insurances, the mandatory ones and the optional ones, have had different trends over the past 3 - 4 years. Thus, on the one hand, we are witnessing a sharp decline in the optional insurances, from more than 4 million contracts in 2011 to less than 1.8 million contracts in 2015, and, on the other hand, we are witnessing an uptrend in the share of mandatory insurance.

As a result, although the compulsory insurance had an extremely shy start (from its debut in 2010 to 2013, its evolution dropped below 1 million contracts), over the past two years an increasing trend in terms of coverage has been recorded and, at the end of 2015, it reached roughly 1.6 million insurance policies in force. Moreover, the latest statistics issued by PAID show that, in 2016, a slight upward trend has maintained, so that, on 31 August 2016, 1.73 million PAD policies were in force. (<https://www.paidromania.ro/statistici-lunare>)

To identify the reasons and explanations concerning the oscillations and contradictory developments of the two segments of home insurance, namely the mandatory ones (PAD) and the optional ones, we must analyse which the main factors that influenced the emergence and further development of PAID were.

The foundation of Law no. 260 of 2008 on compulsory household insurance – which supported the emergence of PAID and of mandatory household insurance in Romania – was the need to apply the principle of social solidarity and to support the population, so that the segment of citizens receiving an insurance premium at a reasonable value to be as broad as possible, by including all households in Romania into the insurance.

Basically, unlike the regular mechanisms of the insurance industry, in case of the mandatory insurance policies (PAD), the tariff is set uniformly for all households, regardless of various geographic areas or other risk criteria that normally apply in the case of certain types of optional insurance, which shows the social nature and high degree of mutuality of insurance sold by PAID.

Given the major social implications and the special interest of policymakers and government in the public awareness with respect to the compulsory insurance, the original law, which had been adopted in 2008, suffered quite frequent changes, equally influencing both the development of the new compulsory insurance, as well as the development of the optional insurance market.

We present below the main amendments made to Law no. 260 of 2008 concerning the compulsory home insurance, by highlighting the impact on Romania's home insurance market:

- **November 2008** - the emergence of the law. Up to PAID operationalization, no immediate effects occurred on the optional home insurance market. The upward trend has continued.

- **July 2010** - PAID started to issue optional insurance policies. Under law of 2008, at the expiry / renewal of an optional insurance policy, homeowners are obliged to first purchase a mandatory policy for the amount of 10,000 / 20,000 Euros; as for the remaining value of the dwelling, the homeowners can purchase an optional insurance policy. Currently, it is expected that the optional insurance will be directly affected because of the loss of a market segment.

- In **December 2010**, by Law 248 of 2010 significant changes were made to the existing legislation, one of the main additions being the removal from the scope of Law 260 of 2008 of the obligation to conclude PAD for "*natural and legal persons who have concluded an optional home insurance covering all risks set out in the compulsory insurance*".

This amendment maintains the requirement of purchasing a home insurance policy, but practically leads to the liberalization of the competition between PAID and other insurance companies. The immediate effect of this measure was the exponential increase of the coverage in case of the optional insurance (the optional policy has become an alternative to the mandatory policy), but it discouraged the first steps and cut PAID's development enthusiasm.

Consequently, in 2011, following the legislation amendments and the emotional impact emerged due to the obligation to purchase a new compulsory insurance, the optional insurance reached a historic high level of about 4.4 million contracts. Also in 2011, which was the first full year of operation for PAID, only 574,000 PAD policies were registered (below 7% of coverage). That level was well below the expectations and far away from the number of insurance policy holders which an insurance pool should focus on.

Subsequently, in 2012, due to the lack of administrative control measures in relation to the compliance with the regulations on compulsory home insurance purchase, the insurance coverage has decreased, both in the optional insurance policies and in the mandatory insurance policies.

- In **July 2013**, in the context of the coverage decrease and the dramatic drop in the number of the compulsory insurance policies, in order to revitalize PAID, the legislator brought a new structural change on the functioning of home insurance in Romania.

Thus, the amendments brought by Law no.243 placed PAID again in the position of sole provider of insurance for the 3 risks (earthquake, flood, landslide), for a coverage of 10,000 / 20,000 Euro.

The insurance companies have now the possibility to issue policies for other risks (e.g., fire) or, in case of the 3 risks - only for amounts of money exceeding the limits of PAD. The immediate impact of this measure was the transfer of a substantial portfolio part from the insurance companies to PAID.

That reflected in the significant decrease - less than 1.8 million optional insurance policies in 2015, and at the same time the increase to almost 1.6 million PAD policies. However, the insurance coverage remained at less than 20%, which means that more than 7 million households were not insured by PAID.

- Following the measure taken in 2013, in **July 2015** (Law no.191/2015), additional amendments were made to the legislation on compulsory home insurance in Romania, the main change being that the issuance of an optional insurance policy depends on the proof that a prior PAD compulsory insurance policy was purchased.

The purpose of these changes was to support PAID and increase the coverage by requiring everyone who has an optional insurance policy to prove the existence of the mandatory home insurance policy as well.

The effects of this change were felt immediately, as until 30 June 2016, there was an increase of roughly 230,000 PAD insurance policies (PAD 1.73 million PAD policies on 30 June 2016, compared to 1.5 million PAD policies on 30 June 2015), but in return there was an identical decrease in the number of the optional contracts (from 1.79 million contracts on 30 June 2015 to 1.53 million contracts on 30 June 2016). (Financial Supervisory Authority, September 2016).

Thus, as it easily can be seen in figure no. 1, the home insurance development in recent years has been directly influenced by the many legislative changes in this area:

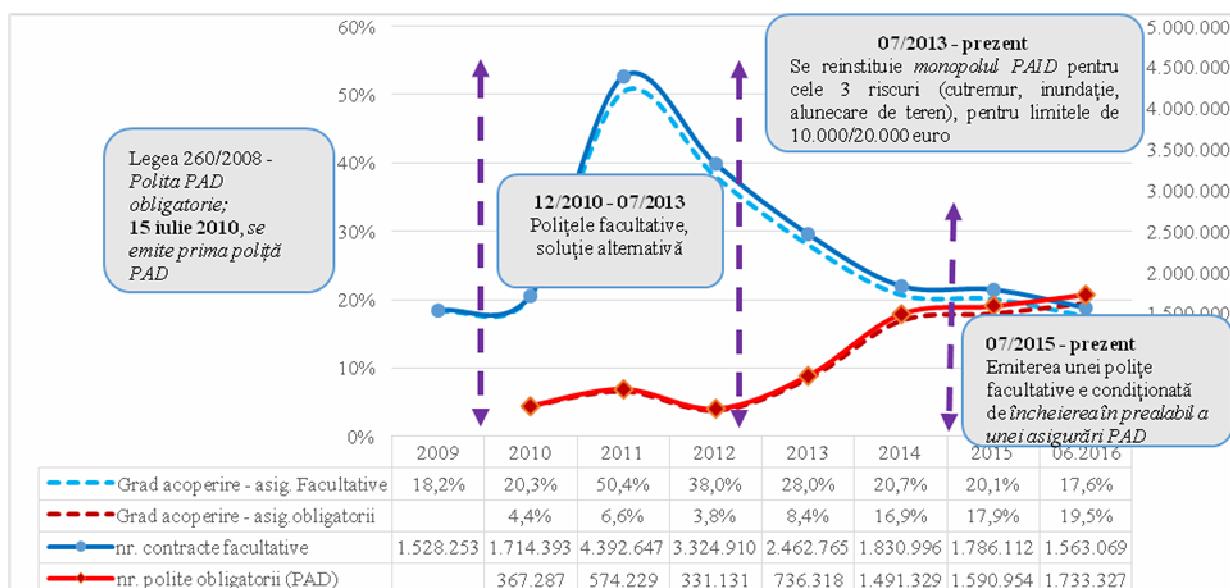


Fig.no3. Coverage and contract number in force at the end of the reporting period (2009- 2016)

Source: Annual reports by the Financial Supervisory Authority

6. Conclusions and solutions regarding the improvement of the home insurance framework in Romania

The attempts made by political factors to impose a mandatory insurance policy model in Romania and support PAID have proven themselves ineffective so far. In terms of protection against natural disasters, less than 20% of the homeowners in our country have a PAD insurance policy, which means that more than 7 million households are not covered by insurance.

Repeated legislative changes not only did not lead to an increase in the coverage, but also affected the existing portfolios of optional policies, which have reached a record low compared to moment of entry into force of Law 260/2008 concerning mandatory home insurance.

Although the law provides penalties for those who do not purchase home insurance (a fine from 100 lei to 500 lei), the local authorities empowered to impose these fines have not made any approach in this direction. For more than 5 years, a general lack of financial education and discipline among the communities in Romania has been tolerated by the local public authorities.

An artificial solution of legislative nature (the prohibition to purchase an optional insurance policy for the PAD uninsured homes) is not a realistic method to increase the insurance coverage and it negatively influences the development of the optional home insurance segment.

PAID was established as a social solution with a high level of mutuality, but the viability of this protection tool for all citizens is subject to obtaining a degree of insurance coverage as large as possible, by guaranteeing a dispersion of risk on a greater number of households. But, in this case, maintaining the level of coverage below 20% may bring doubts about the sustainability of the mandatory insurance framework, both in terms of risk of adverse selection (focusing in the portfolio on only some buildings, highly exposed to the catastrophe risk), and in terms of estimated insufficiency charge of the initial premium (the initial insurance premium calculated on a broad portfolio of clients has remained unchanged, respectively 10 / 20 Euros).

PAID has been regarded with skepticism by some of the experts in the field, because the government's intention to implement a social solution (with discount rates, unique all across the country) solely by funding the private investors was highly criticized.

From this point of view, we find ourselves in a seemingly paradoxical situation: capping the tariff and the low level of coverage are causing an overly high exposure to PAID and its shareholders, so that an increase in coverage would be equal to accumulating a further exposure and may lead to an interest decrease in business development by its shareholders. Moreover, PAID has not carried out an aggressive awareness campaign to win a higher market segment, therefore the task of coverage increasing remained solely on the shoulders of the legislator.

The main topics and solutions to improve home insurance in Romania must be targeted towards two main goals, namely:

a) *Ensuring the sustainability of the insurance system (the ability to cope with compensations for damage following a natural disaster);*

b) *Increasing the insurance coverage.*

a) In terms of *ensuring the sustainability of the insurance system*, we consider that the establishment, by will of the Parliament, of a new PAID entity with an essential social role, the legal granting of a monopoly to PAID on in its segment of activity, as well as the use of a premium charge regulated for the PAD insurance, and the establishment by law of the mandatory requirement for the owners to insure all households with policies issued by PAID are arguments supporting the opportunity and necessity of a more active and direct government involvement in the functioning of PAID.

From this point of view, the situation in Romania is quite unusual, as the international models of social protection and response following a natural disaster have as a common goal the direct involvement of the state (either as a shareholder or as guarantor), the insurance pools against disasters being public entities in most cases, serving the public interest.

Therefore, in Romania we are witnesses of a paradoxical situation where PAID is essentially a private entity whose inherent purpose is to gain profit. On the other hand, the current crisis in the insurance market is a premier in the insurance market, with the top two insurers in Romania, Carpatica and Astra, which are also PAID shareholders, going bankrupt. These crisis situations have led to public mistrust towards all products on the insurance market, and have affected both the strength and the image of PAID.

At the same time, recent discussions in the public environment on the necessity to reevaluate the level of the insurance premium for the policies or to establish a PAD franchise raise questions about the ability to cope with major events, and thus affect PAID's public image and credibility. However, from our point of view, the social solutions should be meant to cope with disasters instead of helping people with the purchase of an undervalued insurance policy.

Therefore, the issues related to the insurance premium and franchise should be treated in a responsible manner, and the state's involvement should be concerned with the subsidization of the insurance premium for low-income families, but not with imposing an insurance premium of a "populist" level which is insufficient when it comes to coping with disasters.

Furthermore, given the social interest to maintain a low fare of insurance, most international mandatory insurance frameworks against natural disasters include a franchise that can be removed by paying an additional premium or by purchasing a separate optional insurance.

b) Although the PAD insurance is compulsory, the lack of interest and involvement by the state authorities, in addition to the lack of means of awareness and financial

education from PAID, led to the maintenance of a coverage below 20%. *The increase of the number of PAD policies* can be achieved both through education and incentives for citizens, and through coercive measures.

Although the law has provided from the beginning the possibility to fine those homeowners who don't have PAD insurance (the fine is between 100 lei and 500 lei), the local authorities have not applied the penalties provided by law so that the law has become obsolete.

From this viewpoint, it is obvious that an immediate measure is needed to return to legality either by decriminalizing the act and return to the system of optional insurance that existed before year 2010, or by applying the sanctions provided by law (e.g., compelling the local authorities to impose the penalties provided by Law 260 of 2008, transferring the power to impose fines to another state institution, etc.).

Obviously, the sanctions cannot be the unique solution to educate and discipline the population. The citizens must be made aware of the benefits of insuring their households, and they should be given easy solutions to purchase PAD policies (by online sale, by using other distribution channels, such as the utilities providers, the providers of communication services, etc.).

Also, given that insurance is directly related to the real estate, the state may consider granting tax breaks to those who prove the purchase of PAD policies (similar to the current building tax reduction in case of prepay by 31 March).

Finally, given the geographical specificity of Romania, the differences between the risk profile among the different regions and many citizens' skepticism with regard to the three risks that apply to their households, we believe that one of the solutions to increase the attractiveness of the compulsory insurance system may be the coverage expansion onto other risks, such as fire.

In addition to the aforementioned solutions, given the sinuous experiences of Law no. 260/2008 concerning mandatory home insurance, we would like to put emphasis on the need for a coherent and stable legal framework.

In this regard, it should be emphasized that one of the key solutions in order to revitalize home insurance is to rethink the business model used within the industry of home insurance, to clearly mark the objectives and the public and private interests, as well as reassigning the state (having as point of departure examples taken from other countries), whether as an active player or as a manager of insurance against natural disasters, or as an independent arbitrator of a free and competitive home insurance market.

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