

THE PROBLEMATIC OF REAL VALUE ESTABLISHMENT FOR PROPERTY INSURANCE

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Abstract: "The practice of insurance is permanently confronting with a delicate problem related to the real value of property insurance. In this paper we will analyze the correlations between real value, insured sum and market value for motors' insurance, homeowners' insurance and insurance for stock of goods. The sum insured may generate an adequate value for the insured object, or a subinsurance, and this fact will be put into evidence through compensation principles. also, we will present practical and technical situations in order to maintain the insured sum at the real value level, and this automatically will generate a full compensation of any loss."

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Introduction

A delicate problem inside the property insurance contracts is referring to the real value of the insured object. The way this value is determined depends of the type of the property: motors (or equivalent fixed assets), buildings, stock of goods. All these aspects must take into account different knowledge related to evaluation process.

All the insurance companies expect the client to insured their assets at the real value. In case there appear differences is very important to have a discussion about how this value is determined.

Literature review

In the insurance literature and also in the claims adjusting process, inside the insurance companies there are two principles of damages' compensation. The debating problem inside these two principles is the correlation between the insured sum and the real value of insured object (Motors, buildings, stock of goods).

The first principle is known as first risk principle (prim risk). No matter the real value of the insured object is the compensation of the insurance company is limited to the insured sum. In that case a partial loss is reimbursed entirely by the insurance company, and the owner of the insurance has no financial prejudice. For example if a building has a real value of 100,000 Euro and the insured sum is of 60,000 Euro we are in a traditional case of underinsurance. Using this principle any loss will be paid by the insurance company up to 60,000 Euro. So if the loss is of 3,000 Euro the compensation will be of 3,000 euro. The situation is negative for the owner of the property if the loss is a total one. In that case the reimbursement of the insurance company is only 60,000 Euro, and the owner will support the difference up to the real value of 100,000 Euro.

The second principle is the proportional compensation one. In this case the compensation from the insurance will be the report from the insured sum and the real value.

$$C = L \times \frac{S.I.}{R.V.}$$

Where C. – Compensation

L – Loss

S.I. – Sum Insured

R.V. – Real Value

Using the same presumption as in the first principle if we have a loss of 3,000 euro the compensation is:

$$C = L \times \frac{S.I.}{R.V.} = 3,000 \times \frac{60,000}{100,000} = 1,800 \text{ Euro}$$

That principle is similar to a mathematical report, in our case the insurance company judge that the insured object was insured at a 60% of its real value.

Problem solution

After analyzing the insurance market we noticed that the first principle – prim risk principle, is more a theoretical one and it was used only in the beginning of the insurance markets in more developed countries. Also this principle is still used by some small insurance companies in the homeowners insurance in their expectation for insurance premiums increasing. Using such a principle is very uncomfortable for the owners just in case of total losses. But also the insurance premium is lower than for a quotation applied to the real value.

So if the quotation for block of flats insurance - whole risks is around 0.25%, if the sum insured is 60,000 Euro the insurance premium is 150 Euro per year, instead of 250 Euro per year in case of insured sum equal to the real value of 100,000 Euro. So the premium for the insurance is at a lower level and cumulated with other losses for the same type of insurance may cause financial problems in loss payment. This is why the most insurance companies used the second principle.

The second principle is very used by the insurance companies, and the fair insurance companies that followed strictly ethic principles, let their insured people know about this principle at the moment of initial payment. These differences between insured sum and real value must be explained very well and understood, because nobody desire to argue in the moment of a loss.

In this research we will focus on the real value for three types of cases: homeowners, motors and stock of goods.

In case of homeowners insurance the potential insured persons may choose the sum insured between the actual value of the building (market value) or the reconstruction value. No matter the option will be made the person will be entirely reimbursed in case of partial or total loss. In case of personal houses the market value is usually higher than the reconstruction value. The difference may be done by the land value. But the land is not insurable, so the client may choose for a lower level of sum insured. If a property has a price of 500,000 Euro and a premium quota is 0.25% – whole risks policy, the insurance premium is 1,250 Euro per year. But if the house is evaluated at 350,000 Euro and the land at 150,000 Euro there is no reason to pay insurance for the land. So the premium is only 875 Euro. The insurance company may put this aspect into evidence also. Each insurance company has theirs own evaluation systems correlated to the existed situation on the market. Moreover the insurance companies use the services of professional evaluators to determine a medium price per square meter, taking into account the location, materials and utilities of the house. In our case if the house has 250 squared meters the insured sum of 500,000 Euro (2,000 Euro/square meter) will be refused by the insurance company because is too high and we are in a case of over insurance. But if we decrease the land value, it remains 350,000 Euro (1,400 Euro/square meter) that may be close to reality of the real estate market.

The other option – the reconstruction value involve more technical issues because the owner of the house must calculate (using the initial house planning and the actual prices of the materials) the value of its components. Usually, this value is lower than the first one.

No matter these option are taken, the person is insured entirely and in case of a partial/entire loss there will be an equality between the sum insured and the real value, and the compensation is equal with loss:

$$C = L \times \frac{S.I.}{R.V.} = L$$

In Eastern European countries the real estate market is now into an ascending trend, both for the price evolution and number of the new buildings. So there appears a very probable situation that the price to increase 10-20% per half of year, and in the moment of a loss the real value of the building is 20% higher than the insured sum. Because this trend is very hard to be exactly predicted, if the insured sum was equal to real value at the beginning of the insurance policy, the insurance companies will not make any proportion in case of any type of losses.

There is in practice another situation that may generate proportional compensation principle. We refer to the case when a person insures its unfinished house. In that case the person chooses for an open insured sum at the beginning of the insurance, adjustable at every three, four or six months. The adjustment of the insured sum will take into account the added value since the last period. In case the owner refuse or forget to adjust the insured sum, in case of a loss the insurance company will reimburse him proportionally (the rapport between the insured sum and undeclared existed value).

But if the owner adjusts the insured sum, he will pay only for added value and for the remaining period.

For example the owner of the house that is building decides to make an insurance policy for an insured sum of 60,000 Euro. The insurance quota is 0.25%, so the insurance premium is 150 Euro per year. The owner agree a special clause for adjusting the insured sum at every 4 months, so after the first four months period the value of the house became 100,000 Euro.

In that case the insurance companies use the formula:

$$P' = (S.I._1 - S.I._0) \times Cp \times \frac{n}{12} = (100.000 - 60.000) \times 0.25\% \times \frac{8}{12} = 67 \text{ Euro}$$

S.I. – Insured Sum at moment 0, moment 1

Cp – Premium quota

n – Numbers of months to the end of the insurance contract

In that case, after the payment of this supplementary insurance premium, if any type of loss occurs, the insurance company pays the entire loss. The situation will be the same after the next period mentioned in the insurance contract.

Secondly we will analyze the situation existed in the motors' insurance market.

The situation is referring to the real value of the motors. In case the motor is a new one, the situation is very simple the sum insured is equal to the new value. Also, in case the motor is buy as new from a Romanian dealer in the next year the real value is determined simply by reducing the new value with the depreciation.

$$R.V. = S.I. = N.V. - D.$$

R.V. – Real Value

S.I. – Sum Insured

N.V. – New Value

D. – Depreciation – determined by actuarial departments of each insurance company

In that case if a loss occurs the compensation will be entirely.

The same formula operates also in case of used motors (imported used motors) but there is a very important aspect related to the establishing of the new value. The insurance agents must identify in the specialized catalogues (APIA, Schwacke, Nuts) the new value taking into account the model of the motor and existing features (cube centimeters, power, model, additional options etc.). After this step the real value is determined very simple:

$$R.V. = N.V. - D.$$

There appear a difficult moment is insurance negotiation when the potential client find the real value of the motor, that may be 10-15% higher than the price he paid for it. In many cases the market value of a motor on the Romanian second hand market, or the value of a used motor imported from other countries are lower than the real insurance value.

So if the market price of a used car (let assume 3 years old) is 15,000 Euro and the new value determined from the specialized catalogues is 24,000 Euro and the depreciation is 30%, the real value is:

$$R.V. = N.V. - D. = 24,000 - 30\% \times 24,000 = 16,800 \text{ Euro}$$

The percentage quota for full insurance is 7% and in that case the insurance premium is of:

- 1,176 Euro per year if the insured sum is equal to the real value or
- 1,050 Euro per year if the insured sum is equal to the market value

As we notice there is a difference between the insurance premiums of 126 Euro per year.

In case the owner of the motor agrees the insured sum propose by the insurance company in case of any loss the compensation will be entirely.

In case the option will be for an insured sum equal to the market value in the compensation process there will be applied the proportional principle. So if we assume the client has a minor loss of 1,000 Euro the compensation is:

$$C = L \times \frac{S.I.}{R.V.} = 1,000 \times \frac{15,000}{16,800} = 893 \text{ Euro}$$

The owner of the car will support the difference of the 107 Euro.

This situation will be very delicate in the moment of the loss, so the most famous insurance companies in the Romanian market refuse to insure a car at the market value, in that case they eliminate from the beginning the potential negative situations in case of losses.

The other insurance companies accept the market value as an insured sum and worse; they don't explain what this value implies. So in the moment of the loss appearance they will make a proportional compensation, and definitely the client will be unsatisfied.

It is generally known that after each loss the insured sum is depreciated with the loss value. So the insurance will continue for a reduced insured sum:

$$R.I.S. = S.I. - L.$$

R.I.S. – Reduced Insured Sum

L. – Loss

So if the Insured Sum is of 20,000 Euro and the loss is 1,500 Euro, the Reduced Insured Sum is of 18,000 Euro. In that case we fall in the situation of a potential proportional principle because the new insured sum is lower than the real value,

$R.I.S. < R.V.$, and any loss is paid:

$$C = L \times \frac{R.I.S.}{R.V.}$$

This is also an inconvenient for the owner of the motor that may not agree a proportional compensation in case of a future loss. In order to cancel this disadvantage the insurance company offers the possibility to pay a supplementary insurance premium:

$$Ps = L \times Cp \times \frac{n}{12}$$

Ps. – Supplementary insurance premium

L – Loss

Cp – Premium quota

n – Numbers of months to the end of the insurance contract

After the payment of this insurance premium the contract will continue at the real value and if there appears a loss the compensation will be entirely.

The last problem related to the real value and debated in this paper refers to the insured sum of the stock of goods and materials. The value of this insured sum includes the acquisition costs or the cost of the final product, and very important does not include the profit of the company.

The insurance companies offer two possibility of insured sum:

- Sum insured equal to a maximum stock or
- Sum insured periodically adjusted

Sum insured equivalent to maximum stock give the potential insured company to choose for the sum. The company will follow the trend of the stock in the last year, and judging after the existing flux of goods or product, may opt for a maximum value. It is very difficult to predict an exactly maximum stock for the next period and this problem may choose difficulties in claims adjusting.

In case of a loss, the insurance companies verify the accounting papers of the insured company and in case the maximum insured sum is overlapped at least one time, they will apply the proportional principle in the loss compensation.

$$C = L \times \frac{I.M.S.}{M.E.S.}, \text{ Where}$$

C – Compensation of the loss

L – Loss occurred

I.M.S. – Insured Maximum Stock

M.E.S. – Maximum Existed Stock

If we assume that I.M.S. is 1,000,000 Euro and one time the M.E.S. were of 1,200,000 Euro and there is a fire that destroys stock in amount of 25,000 Euro, the compensation is:

$$C = L \times \frac{I.M.S.}{M.E.S.} = 25,000 \times \frac{1,000,000}{1,200,000} = 20,834 \text{ Euro}$$

In case the insured company decides to increase the insured sum in the moment they realize that they exceed the maximum stock, they will pay only for the exceeded value and for the remaining months:

$$P_s = (M.E.S. - I.M.S.) \times C_p \times \frac{n}{12}$$

And if we continue our example, the quota is 0.30% and the moment when the Insured Maximum Stock is exceeded occur after 4 months from the beginning of the insurance, the supplementary premium is of

$$P_s = (M.E.S. - I.M.S.) \times C_p \times \frac{n}{12} = (1,200,000 - 1,000,000) \times 0.3\% \times \frac{8}{12} = 400 \text{ Euro}$$

In case of payment, any loss occurs the compensation will be entirely.

The second option is to adjust the insured sum at a specified term (every three/four/six months). This option is benefic for the insured company because anytime a loss occurs the compensation will be entirely.

So after the mentioned period the insured sum will be increased (only if the insured sum was exceeded) and there will be paid a supplementary premium:

$$P_s = (M.E.S. - I.A.S.) \times C_p \times \frac{n}{12}, \text{ Where}$$

I.A.S. is Insured Adjustable Stock.

Conclusions:

After these analyze in the insurance market we conclude that the real value is very important for the insured person or insured company. There is a directly connection between the real value, insured sum and the compensation principles.

For each type of property insurance (motors, homeowners, stock of goods) there are exactly solution to opt for the real value as insured sum, at the initial moment of the insurance or even during the contract, or after a loss is occurred. The insurance agents have a very important role: to explain the advantages and the methods of the real value' determination.

So in conclusion, it is recommendable to agree the real value suggested by the insurance company, because in this case the reimbursement of the loss will be entirely.

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