PERFORMANCE AND EFFECTIVENESS IN INSURANCE COMPANIES

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ABSTRACT: *The current paper aims to present the effectiveness and performances of the insurance companies. In order to express the effectiveness and efficiency of insurance activity we have to take into account their efforts to achieve all those performances. We will discuss the main efficiency indicators helping us to understand the effectiveness of insurance activity, such as: damage ratio, cost of insurance activity; net income ratio, liquidity ratio, solvency ratio, risk coverage ratio, damage coverage ratio, claims rejection ratio, average amount insured, average written premium.*

KEY WORDS: *insurance, effectiveness, performance, damage ratio, net income ratio efficiency, coverage ratio.*

JEL CLASSIFICATION: *G00, G22.*

1. INTRODUCTION

Effectiveness is a complex concept, expressing insurance company's performances comparative with their efforts of achieving these performances.

Assessment process of the performances of an insurance company and the expression of the efficiency of the activity carried out by those companies must take into account both the financial results, the ratio between the effects achieved and the efforts made to achieve this effects, but also the assessement of the insurer's success in meeting the needs of its customers.

Efficiency of the insurance activity is assessed by comparing mainly the efforts with effects in connection with this activity. Efficiency indicators help us to understand the effectiveness of insurance activity (Monea, 2013).

Effectiveness of insurance activity has to be discussed related both of the insured person's interests and the insurer (insurance companies) managing their activity through economical and financial principle.

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For insured person:

- the effects related to insurance policy are represented by indemnity and compensatory damages awarded by the insurer;
- the efforts consist on cost of the insurance policy through the insurance premiums paid;
- Insurance efficiency from the point of view of the insured person is even greater when the compensatory damages received are higher and insurance premiums paid are lower.

For insurance company:

- the effects are represented by their financial performances which warrant further maximum financial security;
- the insurer's efforts consists in organizing, leading and managing in good and proper conditions the funds set up in various financial operations;
- Insurance activity from the point of view of the insurance company is more efficient as their total expenses are lower (expenses are related to indemnities, compensations, and those of managing insurance funds).

At the time of contracting the policy the insurer collects the insurance premium without knowing exactly the amount of the damages that will occur, having only their estimates, calculated on the basis of probability theory.

2. CRITERIA AND INDICATORS REGARDING THE ASSESSMENT OF THE INSURANCE ACTIVITY EFFICIENCY

For an objective assessment of the insurance activity efficiency we will take into discussions an adequate indicators system.

The choice for these efficiency indicators is made in accordance with several criteria such as:

- the aim of the specific objectives;
- level of the assessment activity;
- legal requirements for insurance sector;
- specific insurance classes;

Each of the selected indicators underlines some side of insurance activity, neither of these being considered more important than others.

The main important and useful indicators are:

- damage ratio;
- relative cost of the insurance activity,
- risk coverage ratio;
- damage coverage ratio;
- renewal ratio;
- net income ratio,
- solvency ratio;
- liquidity ratio;
- growth ratio;

- promptness of claim settlements;
- claims rejection ratio;
- average amount insured;
- average written premium;

Damage ratio is used to assess the financial performances of an insurer, and shows the proportion between indemnity paid (compensations) by the insurer and written premiums.

$$Damage\ Ratio = \frac{Indemnity\ Paid}{Written\ Premiums} \times 100, \tag{1}$$

This ratio is expressed as a percentage and ratio level could be lower, equal or higher than 100%. The indicator is relevant in case of property insurance and liability insurance; in the specific case of the life insurance we speak about sum insured not compensations, the insurer pay to the insured person or beneficiary an indemnity or sum insured not damages.

Relative cost of the insurance activity is calculated as a ratio between total expenses and total revenues (premium and other incomes)

$$Relative\ cost\ of\ the\ insurance\ activity = \frac{Expenses}{Revenues} \times 100, \tag{2}$$

Usually, the relative cost of insurance activity is lower than 100%.

If, the level of the relative cost is higher than 100%, the insurer could not cover the total expenses from total revenues.

Risk coverage ratio is used to measure the proportion between insured amount and the fair market value of the goods insured. It is significant only if is determined separately for each particular good, being specific for general insurance.

$$Risk\ Coverage\ Ratio = \frac{Insured\ Amount}{Goods\ Fair\ Market\ Value} \times 100, \tag{3}$$

Damage coverage ratio show the percentage between compensations paid by the insurer and the damages caused to the good insured. This ratio is influenced by the coverage principle applied by the insurer.

$$Damage\ Coverage\ Ratio = \frac{Compensations}{Damages} \times 100, \tag{4}$$

Renewal ratio is used to measure the proportion of those clients that renewed their insurance contracts (coverage) to those that could potentially renew their term of coverage.

$$Renewal\ ratio = \frac{Number\ of\ renewals}{Number\ of\ potential\ renewals}, \tag{5}$$

This ratio shows the condition of marketing and distribution and reflects the satisfaction of the clients, being indicated to be measured per product.

Net income ratio shows how profitable and viable insurance activity is, reflecting the quality of management and the viability of the insurance activity. Net income ratio reflects a summary of all activities of the insurance company, in the period reviewed.

$$Net\ Income\ Ratio = \frac{Net\ Income}{Earned\ Premiums} \times 100, \tag{6}$$

Solvency ratio is related to assets and liabilities, reflecting the quality of management and the viability of the insurance activity.

$$Solvency\ Ratio = \frac{Admitted\ \ Assets}{Liabilities}, \tag{7}$$

Liquidity ratio shows the insurer capacity to pay claims, compensations and its expense obligations. It is indicate that the ratio level to be at least 1.

$$Liquidity\ Ratio = \frac{Available\ Cash}{Short\text{-}term\ Payables}, \tag{8}$$

Growth ratio shows the growth of insurance activity from one period to another.

$$Growth\ Ratio = \frac{\Delta\ Number\ of\ \ Insured}{Number\ of\ \ Insured\ in\ the\ previous\ period}, \tag{9}$$

Δ Number of Insured = Number of Insured in the current period – Number of Insured in the previous period.

Promptness of claim settlements indicates the average time spend on settling benefits, or reflect time in days for a policy holder to receive a payment after the occurrence of an event. This ratio measures the percentage of claims paid within each time interval (ex. less than 14 days, between 15-30 days, between 31-90 days, more than 90 days, etc.)

Claims rejection ratio indicates the proportion between number of claims rejected and total claims reported.

$$Claims\ \ Rejection\ Ratio = \frac{Number\ of\ \ claims\ rejected}{Total\ claims\ reported} \times 100, \tag{10}$$

Average amount insured is a ratio between the total amounts insured by the insurer and the total number of insurance contracts.

$$Average\,Insured\ Amount = \frac{Insured\ Amounts}{Number\ of\ insurance\,contracts}, \tag{11}$$

Average written premium is a ratio between total written premiums and the total number of insurance contracts.

$$Average\ Written\ Premium = \frac{Gross\,written\ premiums}{Number\ of\ insurance\,contracts}, \tag{12}$$

3. TRENDS OF THE INSURANCE SECTOR IN ROMANIA

The Romanian insurance market is characterized by a medium to high degree of concentration. At the end of 2017, approximately 89% of gross written premiums were written by 10 insurance undertakings of a total number of 31 authorised insurance undertakings (Financial Supervisory Authority, *Annual Report 2017*).

Table 1. Top 10 insurance undertakings by gross written premiums (weight in total insurance market (general and life insurance)

No.	Insurance undertaking	Weight in total market (%)
1.	City Insurance	12,93%
2.	Allianz Țiriac Asigurări	12,66%
3.	Euroins	11,20%
4.	Omniasig	10,91%
5.	Asirom Vienna Insurance Group	9,96%
6.	Goupama Asigurări	9,52%
7.	NN Asigurări de Viață	7,59%
8.	Generali România	6,32%
9.	Uniqua Asigurări	4,00%
10.	BCR Asigurări de Viață	3,64%
Total (1-10)		**88,73%**
	Other insurance undertakings	11,27%
Total market		**100%**

Source: based on data from Annual Report of ASF, 2017

According to the data from Annual Report, 2017 of the *Financial Supervisory Authority,* the number of the insurance contracts at the end of 2017 was 14.290.468 increasing compared to the previous year by 13%. The increasing trends registered for both segments of the insurance market:

- number of contracts from general insurance increased by 13%;
- number of contracts from general insurance increased by 14%;

The number of insurance contracts at the end of 2017 for general insurance represents 87% of the total number of contracts.

Table 2. Number of insurance contracts

Specification/Year	2015	2016	2017
General Insurance	10.491.533	11.005.401	12.422.480
Life Insurance	2.493.784	1.644.138	1.867.988
Total market	**12.985.317**	**12.649.539**	**14.290.468**

Source: based on data from Annual Report of ASF 2015, 2016, 2017

In 2017 insurance undertakings paid a total volume of gross indemnities for both categories (general insurance and life insurance) of 4.214.963.575 lei, as follows (Annual Report, 2017 of the *Financial Supervisory Authority*):

- 4.056.524.978 lei – gross indemnities paid for general insurance (96% from total market; an increase of 12,6% compared with 2016);

- 158.438.597 lei gross indemnities paid for life insurance (4% from total market; an increase of 2,8% compared with 2016);

The evolution of damage ratio, expenses ratio and combined damage ratio for major classes of insurance (with higher weight in total indemnities paid) is presented in Figure 1.

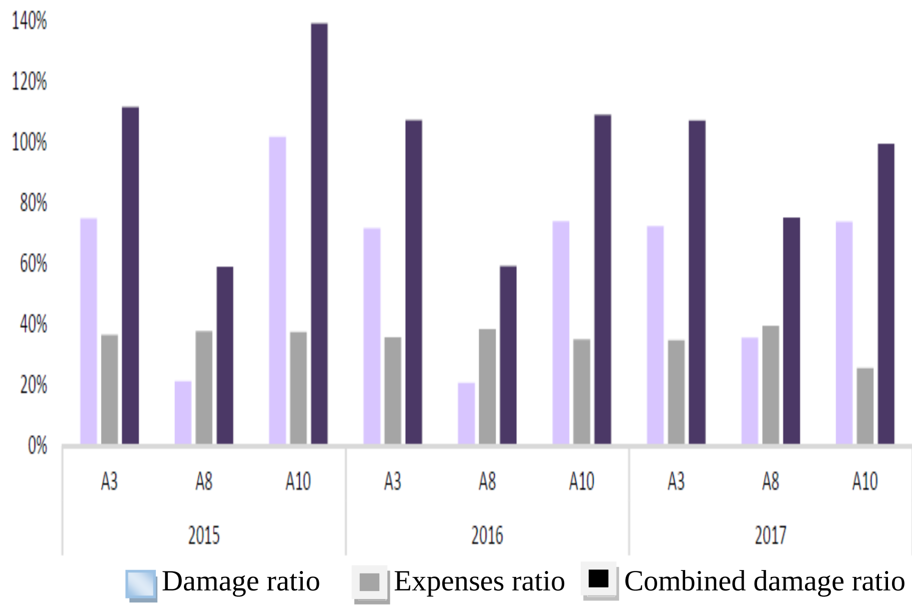

Figure 1. Evolution of damage ratio by major insurance classes (general insurance)

In 2017, in the case of general insurance, the major weight in the total amount of gross indemnities paid were registered by the following insurance classes:

A3 - Insurance for Land transportation means other than rail transport (1.194.013.516 lei - 29%);

A8 - Fire and other natural disasters insurance (239.542.152 lei - 6%);

A10 - Civil liability insurance for motor vehicles (compulsory civil liability insurance for motor vehicles and green card) – (2.240.805.892 lei - 55%)

In the case of life insurance, the major weight in the total amount of gross indemnities paid were registered by the following insurance classes (Annual Report, 2017 of the *Financial Supervisory Authority)*:

• *Class C3, Life insurance and annuities linked to investment funds* (580,840,755 lei - 58%);

• *Class C1, Life insurance, annuity and additional life insurance* (383,834,048 lei - 38%);

4. CONCLUSIONS

Increasing effectiveness of insurance activity, regardless of class of insurance, insured risk, the relationships between insurer and insured depends on the size of incomes and expenses.

Size of incomes depends on gross premium received from total number of insurance policies and incomes received from other specific transactions. While gross premiums are influenced by insurance demand, the other incomes are dependent on financial market. Generally, insurance company take into consideration to decrease the average premium for an insured risk in order to influence increasing of insurance demand, increasing of insurance policies and goods insured and to achieve risk dispersion and reduce relative compensation level.

Discussions on efficiency indicators help us to understand the effectiveness of insurance activity. Main goal of any company, including insurance companies is to gain profit, so that to cover their expenses from incomes and achieve an excess. Analyzing insurance efficiency is necessary to take into consideration that in this sector meets an original-unique phenomenon, the insurance company "to sell" before "to produce", so before knowing "the cost of sales".

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