

SPECIFIC ASPECTS OF THE TECHNICAL RESERVES OF INSURANCE ACCOUNTING

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ABSTRACT: *The formation, increase, release and reduction of technical reserves are accounting transactions that are only found in insurance companies. Technical reserves are established for each line of insurance as special funds so that the stability and solvency of insurance companies are not affected.*

KEY WORDS: *insurance companies; technical reserves; premium; loss reserve; technical reserves accounting*

JEL CLASSIFICATION : *G22, M41.*

1. INTRODUCTION

Insurance companies operate by providing, brokering, negotiation, conclusion of contracts of insurance and reinsurance, premium collection, liquidation of damages, regression and recovery activities, as well as equity investment or fructification.

Insurance is a reduction factor of economic uncertainty and a means of resuming the temporarily interrupted activity. When a person is insured, it is aware of a certain risk and tries to protect himself from negative consequences. The risk does not disappear, but its effects move from the insured to the insurer. Thus the future for the insured acquires a certain certainty, a stabilization of the financial risk, insurance premium becomes a production cost or an expense in the family budget.

The biggest insurance companies' revenues are derived from the sale of insurance policies. In most cases, premiums are collected at the beginning of the insurance, that is anticipated, in the amount and terms established in the insurance policy, and based on these the insurance company promises to pay compensations if the insured risk occurs. Because insurance premiums are collected in advance with the

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promise of payment of compensation, the company establishes a premium reserve if it has to repay part of the premiums.

2. DEFINITION OF TECHNICAL RESERVES

General insurance companies must constitute technical reserves relating to past and future liabilities arising from insurance contracts written in the reference year.

Insurance companies which are engaged in the life insurance business are required by law¹ to establish and maintain technical reserves, referred to as mathematical reserves for the life insurance fund.

Technical reserves must have at any time an amount sufficient to enable the company to move forward, to the extent of what is reasonably foreseeable, the commitments arising from insurance contracts².

“Specific for insurance companies is the establishment of technical reserves, namely: the premium reserve, life insurance technical reserves (mathematical reserve, reserve for bonuses and rebates on life insurance, other technical reserves), reserve for insurance damage done separately for general and life insurances, the reserve for bonuses and rebates on general insurance, the equalization reserve and other reserves relating to general insurance.” (Cistelecan Rodica, et al., 2006)

“Technical reserves are estimates of future payments for risks produced in the past (for general insurance) or for those that will occur in the future (for life insurance) and the value of technical reserves should allow the insurer, at any time, to honor its commitments arising from the insurance contracts.” (Nagy Cristina Mihaela, Trif Viorel, 2010, pp 604)

According to law 32/2000³ insurance companies engaged in the **general insurance business** are required to establish and maintain the following **technical reserves**: the premium reserve, loss reserve, unreported loss reserves, catastrophe reserves, the reserve for unexpired risks, the equalization reserve.

Reserves are established during the conduct of business at a level at least equal to the total compensation of the previous financial year.

The value of technical reserves should allow the insurer, at any time, to honor its commitments arising from insurance contracts.

3. SPECIFIC ASPECTS OF THE TECHNICAL RESERVES ACCOUNTING

The formation of these reserves is different from the constitution of reserves from commercial companies, being made based on costs, having a role in predicting the future insurance claims.

¹ Law 32/2000 updated in January 2011, art. 21, paragraph (3)

² Rule no.5/2001 on calculation and record of minimum technical reserves for general insurance, issued by the Insurance Supervisory Commission, reprinted.

³ Law 32/2000 updated in January 2011, art. 21, paragraph (1)

This form shows up just from the random nature of the insurance contract where the collection of the insurance premiums will not generate automatically an obligation to pay a compensation or indemnity to each insured, the insurance company's obligations occur randomly for certain unidentifiable contracts during the agreement.

Technical reserves are shown separately in accounting, according to each type of reserve formed according to the given destination, having created positions in the chart of accounts. The general principle of these reserves is that they are formed since the insurance contract is made and maintained throughout the period of validity, therefore, reserves related to contracts of life insurance are higher than those related to general insurance contracts as life insurance are concluded for much larger periods.

Accounting ensures records of technical reserves formed by insurance companies under the law and it uses accounts from class 3 Technical Reserves Accounts which include the following groups of accounts:

- 31 "Technical reserves of life insurance and general insurance premium reserve"
- 32 "Reserves for claims on life insurance and general insurance"
- 33 "Technical reserves for general insurance"
- 39 "Technical reserves related to contracts ceded in reinsurance".

"The amounts transferred to technical reserves are obligations of the insurer and are deducted from its income in calculating profits.

The technical reserves established and maintained in the currency are registered in accounting in lei, at the rate in force at the time of operations.

Technical reserves are inventoried and assessed at the end of each period. The methods of assessing technical reserves adopted by the company (temporis prorata, statistical, etc.) must be the same throughout the year and from year to year." (Negru Titel, 2007, pp 116)

"In case of cancellation or termination of an insurance contract, the insurer will perform the accounting transactions required to issue such contracts related to technical reserves." (Bunica-Petrescu Elena, 2003)

The company estimates a rate of claims to be paid corresponding to its portfolio of insurance and subsequently creates reserves for claims and pays compensation to policyholders from these reserves which are reduced by the amount paid. The main liabilities of insurance companies are subject to premium and loss reserve.

Premium reserves (Bogdan Decebal Manole, 2005) are reserve funds created for each form of insurance, in order to supply the insurance fund with the difference between the net written premiums and net paid premiums.

The premium reserves are highlighted using the accounts 315 "Premium reserve on general insurance" and 615 "Expenditure on the premium reserve". The accounting operations on the creation and use of premium reserves for direct general premiums are:

a) forming the premium reserve:

6151 “Expenses related to premium reserve on direct general insurance” = **3151** “Premium reserve on general insurance” with the amount formed

b) reducing the premium reserve:

3151 “Premium reserve on general insurance” = **6151** “Expenses related to premium reserve on direct general insurance” the amount by which the reserve reduced

The *premium reserve* for life insurance - is calculated by summing the shares in gross written premiums for unexpired periods of insurance contracts.

The premium reserves for life insurance are highlighted using the accounts 318 “Premium reserve for life insurance” and 618 “Expenses related to premium reserve for life insurance”, and accounting operations for the creation and use of premium reserves related to life insurance are:

a) forming the premium reserve for life insurance:

6181 “Expenses related to premium reserve for direct life insurance” = **3181** “Premium reserve for direct life insurance” with the amount formed

b) reducing the premium reserve for life insurance:

3181 “Premium reserve for direct life insurance” = **6181** “Expenses related to premium reserve for direct life insurance” the amount by which the reserve reduced

The **loss reserve** (Galiceanu Mihaela, Galiceanu Ioan, 2007, pp 256) is established for reported claims in process of liquidation and is calculated for each insurance contract that the insured was notified of the event, starting from the expenditure expected to be incurred in the future to resolve these claims. The loss reserve that must be formed will be obtained by summing up the calculated values for each insurance contract.

The loss reserve - is formed and is registered in accounting separately for approved loss and unapproved loss distinctly for general insurance and for life insurance.

On life insurance, the value of loss reserves for claims is equal to the amount due to customers, plus the costs of damage. The value of these reserves includes both approved loss reserve and reserve for unreported loss.

The loss reserve for general insurance are highlighted in accounting using the accounts 627 “Expenses related to loss reserve on general insurance” and Account 327 “Loss reserve for general insurance” with the related analytics.

The accounting operations on the creation and use of loss reserves approved and unapproved for general insurance are:

a) forming the approved loss reserve:

62711 “Expenses related to the approved loss reserve on direct general insurance”	=	32711 “Loss reserve approved for direct general insurance”	with the amount formed
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b) reducing the approved loss reserve:

32711 “Loss reserve approved for direct general insurance”	=	62711 “Expenses related to the approved loss reserve on direct general insurance”	the amount by which the reserve reduced
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c) forming the unapproved loss reserve:

62721 “Expenses related to the unapproved loss reserve on direct general insurance”	=	32721 “Loss reserve unapproved for direct general insurance”	with the amount formed
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d) reducing the unapproved loss reserve:

32721 “Loss reserve unapproved for direct general insurance”	=	62721 “Expenses related to the unapproved loss reserve on direct general insurance”	the amount by which the reserve reduced
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The loss reserve for life insurance are highlighted in accounting using the accounts 626 “Expenses related to loss reserve on life insurance” and Account 326 “Loss reserve for life insurance” with the related analytics, and the accounting operations on the creation and use of loss reserves approved and unapproved for life insurance are:

a) forming the loss reserve for approved life insurance

62611 “Expenses related to the approved loss reserve on direct life insurance”	=	32611 “Loss reserve approved for direct life insurance”	with the amount formed
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b) reducing the loss reserve for approved life insurance

32611 “Loss reserve approved for direct life insurance”	=	62611 “Expenses related to the approved loss reserve on direct life insurance”	the amount by which the reserve reduced
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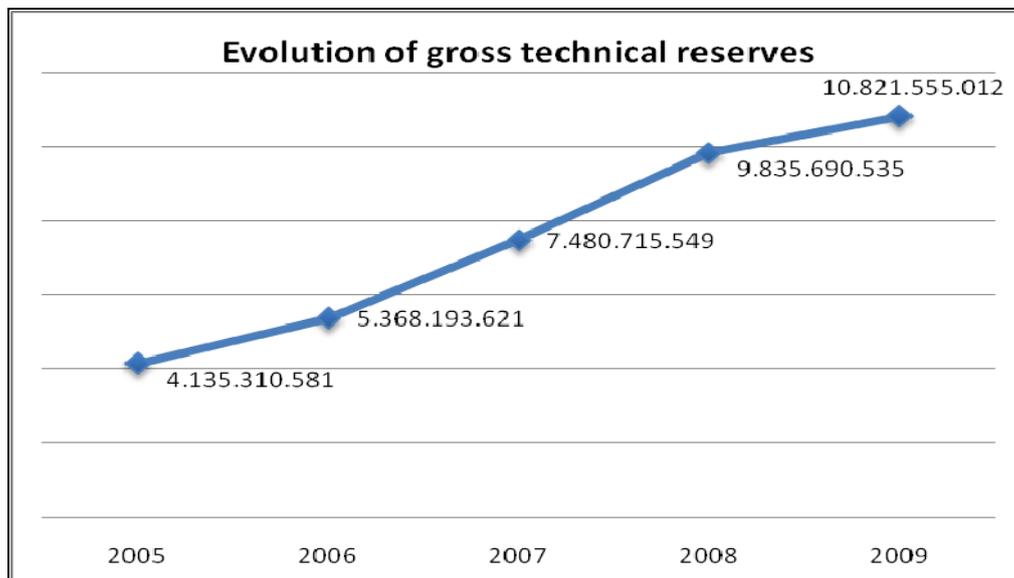
c) forming the loss reserve for unapproved life insurance

62621 “Expenses related to the unapproved loss reserve on direct life insurance” = **32621** “Loss reserve unapproved for direct life insurance” with the amount formed

d) reducing the loss reserve for unapproved life insurance

32621 “Loss reserve unapproved for direct life insurance” = **62621** “Expenses related to the unapproved loss reserve on direct life insurance” the amount by which the reserve reduced

According to the legal regulations, for the risks assumed through the insurance contracts, the insurers should form technical reserves.



Source: Data processed according to CSA reports from 2005-2009

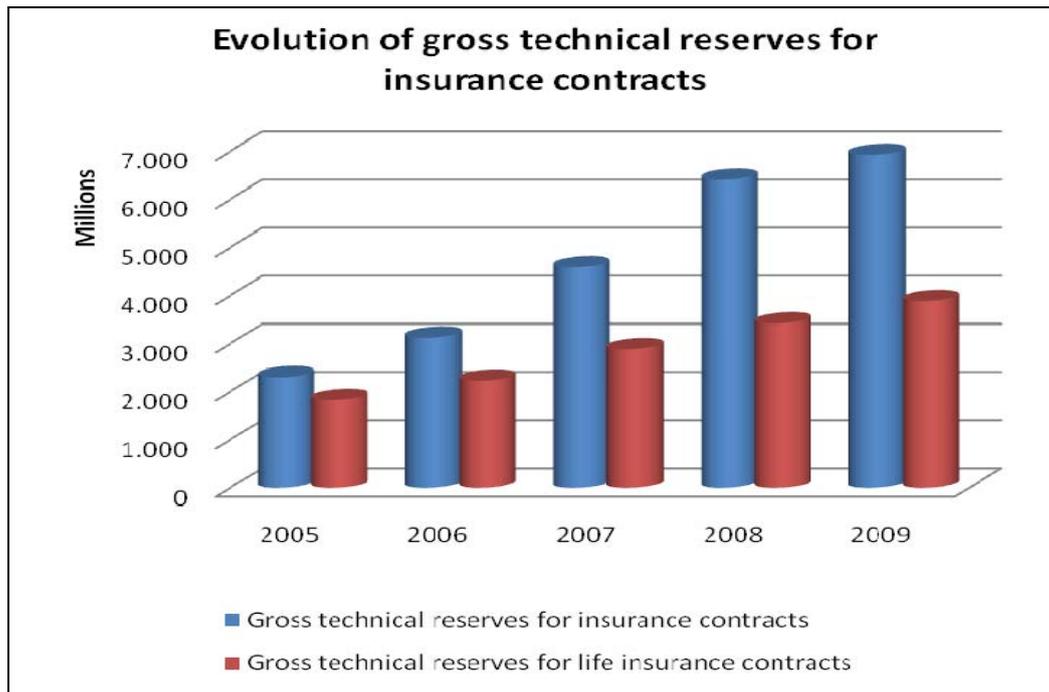
Figure 1. Evolution of gross technical reserves

From Figure 1 we notice that the evolution of gross technical reserves relating to insurance contracts increased continuously both for general insurance contracts and those of life, so the total gross technical reserves increased from 4.135.310.581 lei in 2005 to 10.821.555.012 lei in 2009, so in the past five years the growth was over 260%.

For contracts concluded by insurers which are engaged in the general insurance activity, the total gross technical reserves formed was 2.305.645.336 lei in 2005 and has increased annually, reaching in 2009 an amount of 6.931.624.256 lei, the increase compared to 2005 is approximately 300%.

For contracts concluded by insurers which are engaged in the life insurance activity, the total gross technical reserves formed was 1.829.665.245 lei in 2005 and 3.889.930.756 lei in 2009, the increase is over 210%.

The most important role in an insurance company in calculating insurance premiums is played by the actuary and its tasks are to determine the insurance premium, establish the mathematical reserves, the redemption value for the capitalization products, development of new products etc.



Source: Data processed according to CSA reports from 2005-2009

Figure 2. Evolution of gross technical reserves for insurance contracts

4. CONCLUSIONS

Formation of the increase, and decrease the release technical reserves are accounting transactions that are found only in insurance companies.

Technical reserves are formed since the insurance contract is made and maintained throughout the period of validity, therefore, reserves related to contracts of life insurance are higher than those related to general insurance contracts as life insurance are concluded for much larger periods.

The strict regulation of insurance activity, their control and surveillance, imposing strict conditions for the establishment of technical reserves allow placement on the insurance market only of companies capable of sustaining the insurance market by viable monetary means.

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