IMPROVEMENT OF LIFE INSURANCE-RELATED ACCOUNTING OPERATIONS WITHIN THE NEW ECONOMY

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Abstract

This paper outlines the life insurance-related accounting operations, in consideration to the harmonization of the Romanian legislation with the International Financial Reporting Standards.

The main accounting operations specific to the life insurance sector include: accounting of revenues and expenses derived from life insurance operations (recording the premiums written, recording the payment of insurance premiums, termination of insurance policy, recording the compensation expenses), accounting of operations related to the setting up and using the technical reserves for life insurance (general principles, accounting of premium reserves, accounting of loss reserve, accounting of the reserve for benefits and discounts, accounting of mathematical reserve, accounting of other life insurance-related technical reserves).

Key-words: *revenues and expenses, life insurance, technical reserves for life insurance, reported/not reported loss reserve, reserve for benefits and discounts, mathematical reserve*

JEL Classification: D31, G00

Introduction

In the new economy, the life insurance sector has undergone a series of considerable changes, especially after the introduction of insurance products that provide not only protection against the death risk, but also saving and investment possibilities.

The insured risk in these types of insurances is represented by the death of the policy holder written in the insurance policy, irrespective of the cause triggering the event. Furthermore, additional clauses can be added to these policies: death and permanent disability caused by accident; hospitalization caused by accident or disease; temporary disability caused by accident or disease; surgery following an accident or disease; burns and fractures; severe medical conditions; payment of insurance premiums by insurer in case of permanent 1st degree disability.

The main types of life insurance available on the insurance market are: temporary life insurance; insurance for a rent study and a dowry plan, mixed life insurance and Unit Linked life insurance.

We shall continue with an overview of the main accounting operations specific to the life insurance sector. Some synthetic accounts are used both for the general insurances and life insurances, whereas the two insurance categories are divided in the 2nd degree synthetic accounts and no further description of these accounts shall be made. For example, account 401 'Transactions in relation with insurance premiums'. Since the accounts of the life insurances must be kept separately from those of the general insurances, the account 401 'Transactions in relation with insurance premiums' shall be divided into two accounts as follows: *4011* 'Transactions in relation with insurance premiums for *life insurances'* and *4012* 'Transactions in relation with insurance premiums for *general insurances'*.

I. ***Accounting of REVENUES FROM AND EXPENSES with life insurance operations***

A. **Recording the premiums written**

a. *Recording the revenues from life insurances in the current period according to the insurance policy.*

Two accounts shall be used for this operation: account 4011 'Transactions in relation with insurance premiums for life insurances' and account 701 'Revenues from gross premiums written related to direct life insurances'.

Account 701 ' Revenues from gross premiums written related to direct life insurances'

✓This account is used to keep record of the revenues from gross premiums written concerning life insurances related to direct insurances.

The following accounting formula shall apply:

4011 'Transactions in relation with insurance premiums for life insurances'	=	701 'Revenues from gross premiums written related to direct life insurances'	– amounts falling due X*

* According to the applicable legal provisions, the amounts X can be:

⇒ for life insurances where the duration of the insurance contract is less or equal to 1 year, the gross premium written shall represent the value of the paid and payable gross premiums related to the insurance contract;

⇒ for life insurances where the duration of the insurance contract is longer than 1 year, the gross premium written shall be determined as follows:

a) in case of life insurance contracts with single premium, the gross premium written shall represent the value of the single gross premium related to the insurance contract;

b) in case of life insurance contracts where the policy holder pays the insurance premium by instalments, the gross premium written shall represent the value of the paid and of the payable gross premiums due within one calendar year according to the insurance contract;

c) in case of investment-related life insurances, the gross premium written shall represent the overdue gross premium.

b. *At the end of the reporting period, the credit balance of the account 701 'Revenues from gross premiums written related to direct life insurances' shall be transferred to the account 121 'Profit or loss'.*

The following accounting formula shall apply:

701 'Revenues from gross premiums written related to direct life insurances'	=	121 'Profit or loss'	– balance of account 701

B. **Recording the payment of insurance premiums**

The following accounts shall be used for this operation: account 4041 'Transactions in relation with life insurance brokers', account 4011 'Transactions in relation with life insurance premiums', account 54711 'Petty cash in lei related to life insurances' and account 54411 'Cash at bank in lei related to life insurances'.

54711 'Petty cash in lei related to life insurances' or 54411 'Cash at bank in lei related to life insurances'	=	4041 'Transactions in relation with life insurance brokers'	– paid amount

4041 'Transactions in relation with life insurance brokers'	=	4011 'Transactions in relation with life insurance premiums'	– the amount collected by brokers and distributed per policy

Note:

As for the outstanding premiums, they shall be reflected in the debit balance of the account 4011 'Transactions in relation with life insurance premiums' and shall be release as they are paid.

C. **Termination of insurance policies**

The following accounts shall be used for this operation: account 4021 'Cancelled premiums and premiums to be paid back related to life insurances', account 4011 'Transactions in relation with life insurance premiums', account 54711 'Petty cash in lei related to life insurances', account 54411 'Cash at bank in lei related to life insurances' and account 7081 'Cancelled gross premiums written related to life insurances'.

The termination of the insurance policy shall lead to the cancellation of the insurance premiums written relating to the terminating period and this operation shall be reflected in the accounting records as follows:

– Recording the cancellation of the gross premium written

7081 'Cancelled gross premiums written related to life insurances'	=	4021 'Cancelled premiums and premiums to be paid back related to life insurances'	– value of cancelled gross premiums written

4021 'Cancelled premiums and premiums to be paid back related to life insurances'	=	4011 'Transactions in relation with life insurance premiums'	– value of cancelled outstanding premiums

and:

4021 'Cancelled premiums and premiums to be paid back related to life insurances'	=	54711 'Petty cash in lei related to life insurances" or 54411 'Cash at bank in lei related to life insurances'	– value of insurance premiums cancelled and paid back

D. **Recording the compensation expenses**

a. *Recording the amounts paid cash at the company's office representing insurance compensations*:

6011 Expenses with losses and payments for direct life insurances'	=	54711 'Petty cash in lei related to life insurances'	– value of amounts paid

Account 601 'Expenses with losses and payments for direct life insurances'

⇒ This account is used for recording the expenses with losses, annuities, buyback and other expenses with losses and payments for direct life insurances.

b. *Recording the amounts paid by bank transfer and representing insurance compensation*:

6011 'Expenses with losses and payments for direct life insurances'	=	54411 'Cash at bank in lei related to life insurances'	–value of amounts paid

c. **At the end of the reporting period, the balance of the account 6011 'Expenses with losses and payments for direct life insurances' shall be transferred to the result of the reporting period:**

121 'Profit or loss'	=	6011 'Expenses with losses and payments for direct life insurances'	– balance of account 601

II. ***Accounting of operations concerning the set up and use of TECHNICAL RESERVES for life insurances***

The ***technical reserves*** *for life insurances represent estimates of future payments to be made for risks occurring in the future.*

According to the law, the insurer performing a **life insurance** activity has the obligation to set up and maintain the following technical reserves (*Order no. 113131 of November 6, 2006 concerning the application of the Norms concerning the technical reserves for life insurances, assets admitted to cover them and the distribution of the assets admitted to cover the gross technical reserves, as subsequently amended and completed*):

A) premium reserve;

B) loss reserve;

– reported loss reserve;

– not reported loss reserve.

C) reserve for benefits and discounts;

D) mathematical reserve;

E) other life insurance-related technical reserves.

The insurance companies performing a life insurance activity have to set up technical reserves, including mathematical reserves, to an extent that enables them to fulfil all their obligations, according to the insurance contracts.

The value of the technical reserved shall be determined according to the following principles:

A. General principles

The value of the technical reserves for life insurance shall be carefully calculated based upon a prospective actuarial assessment, taking into account all future obligations determined by the insurance terms for each existing insurance contract, including:

a) all guaranteed benefits, including the guaranteed buyback values;

b) bonuses to which the insured persons, the additional insured persons or the beneficiaries are already entitled, either jointly or individually, irrespective of the bonus type –acquired, declared or distributed;

c) all options available to the insured persons, the additional insured persons or the beneficiaries according to the terms of contract;

d) expenses, including fees, from which the value of the future outstanding premiums shall be deducted.

An additional technical reserve shall be calculated if the present or predictable return on the assets of the insurer performing a life insurance activity is insufficient for the proper fulfilment of the obligations concerning the interest rate to be paid to the insured persons.

The value of the technical reserve can also be determined based upon a retrospective method, provided that it can be demonstrated that the technical reserves thus resulted are not less than the reserves that would have resulted based upon a prudent prospective calculation or provided that a prospective method cannot be applied for the type of contract in question.

A prudent assessment is not an assessment ‘according to the best estimate’, but it includes an adequate margin for the negative variation of the factors with relevant influence.

The assessment method used for the technical reserves should not only be a prudent one, but it should also consider the assessment method used for the assets covering the technical reserves in question.

The technical reserves shall be calculated separately for each contract. Nevertheless, adequate generalizations or approximations are allowed, provided that they produce approximately the same results as the individual calculations. The principal of separate calculation does not impede the setting up of additional reserves for general risks that are not individualized.

If the buyback value of an insurance contract is guaranteed, the value of the mathematical reserves for that particular insurance contract shall be continuously maintained at least at the level of the guaranteed value.

B. The applied interest rate shall be selected in a prudent manner, considering the following aspects:

✓ if the life insurance contracts provide for a guaranteed interest rate, it can vary depending on the contract currency, provided that it does not exceed 60% of the interest rate of the bonds issued by the State whose currency is the same with the contract currency. Furthermore, the guaranteed interest rate shall be maximum 3.5% for the newly closed insurance contracts, issued in lei, and maximum 2.5% for the newly closed insurance contracts, issued in Euro. These provisions shall not apply to the following types of insurance contracts:

➢ life insurances and annuities related to investment funds;

➢ single premium insurance contracts for a period of up to 8 years;

➢ insurance contracts without share in benefits and annuity contracts without buyback value;

➢ setting up a maximum interest rate does not imply that the insurer shall be forced to use such a high rate.

In the last two cases mentioned, the following aspects can be considered when selecting a prudent interest rate: the currency in which the contract and the assets held at the time are expressed and if the company’s assets are assessed at their current value the anticipated return on future assets.

The applied interest rate cannot exceed the forecasted return on assets, also considering an adequate deduction.

C. The statistical elements included in the assessment and distribution of expenses shall be selected in a prudent manner, considering the assumed obligations, the type of insurance policy, the administrative costs and the fees estimated to be paid.

D. For the contracts with a share in the investment result, the method used for calculating the technical reserves can take into account either implicitly or explicitly all types of future bonuses, considering both the future projections and the current method of bonus allocation.

E. The assessment of the future expenses can be made implicitly, using for example the future value of the net premiums of management fees. Nevertheless, the implicit or explicit general assessment has to be higher or equal to a prudent estimate of the future relevant expenses.

F. The method applied for calculating the technical reserves shall not change from one year to the next due to arbitrary changes made in the method or basis of calculation and shall allow for the adequate identification of benefit allocation.

A. **Accounting of premium reserves**

The **premium reserve** shall be calculated separately for each insurance contract and the sum of the results thus obtained shall represent the overall premium reserve.

The **premium reserve** shall be calculated on a monthly basis by adding up the shares of gross premiums written related to the remaining periods of the insurance contracts, so that the difference between the volume of the gross premiums written and this reserve reflects the gross premiums allocated for the share of risks expired at the calculation date.

The premium reserves for life insurances shall be reflected using the following accounts: account 318 "Premium reserve relating to life insurances" and account 618 "Expenses with the premium reserve relating to life insurances".

Set-up of premium reserve:

6181 'Expenses with the premium reserve relating to direct life insurances'	=	3181 'Premium reserve relating to direct life insurances'	– collected amount

Decrease of premium reserve:

3181 'Premium reserve relating to direct life insurances'	=	6181 'Expenses with the premium reserve relating to direct life insurances'	– amount by which the reserve has decreased

B. **Accounting of loss reserve**

The **loss reserve** shall be set up and updated on a monthly basis based upon the insurer's estimates of the reported losses, so that the reserve thus set up is sufficient for covering the payment of all these losses. It shall be set up for the losses reported and pending settlement and it shall be calculated for each insurance contract for which the occurrence of the insured event has been notified, starting from the predictable expenses to be made in the future for the settlement of these losses. The value of the loss reserve to be set up shall be obtained by adding up the values of the loss reserve calculated for each life insurance contract. The insurers have the obligation to prepare and maintain a distinct record of all reported losses, enabling the Insurance Supervisory Commission to control at any given time the extent and the method used for setting up the loss reserve. Should the insurance benefit be paid in the form of annuities, the loss reserve shall be calculated based upon actuarial methods (*Order no. 113131 of November 6, 2006 concerning the application of the Norms concerning the technical reserves for life insurances, assets admitted to cover them and the distribution of the assets admitted to cover the gross technical reserves*).

The loss reserve shall be set up and recorded in the accounting records **separately** for reported and not reported losses and **distinctly** for general insurances and life insurances.

Unless the insurer's internal regulations provide otherwise, the not reported loss reserve shall be set up and adjusted at least at the end of the financial year based upon the insurer's estimates, the statistical data or the actuarial calculations for the losses incurred but still not reported.

In case of life insurances the value of the loss reserves shall be equal to the amount payable to the beneficiaries, to which the expenses for covering the losses shall be added. The value of these reserves shall include both the reported loss reserve and the not reported loss reserve.

The following accounts shall be used for recording the loss reserves in the accounting records:

Account 626 'Expenses with the loss reserve related to life insurances'

This account is used to record the set-up, the increase or decrease of the loss reserve related to the life insurances concerning direct life insurances and the approvals for reinsurance.

Account 326 'Loss reserve concerning life insurances'

This account is used to record the situation of the reported and not reported loss reserve related to the life insurances concerning direct life insurances and the approvals for reinsurance, set up according to the legal provisions in force.

Set-up of reported loss reserve:

62611 'Expenses with the reported loss reserve concerning direct life insurances'	=	32611 'Reported loss reserves concerning direct life insurances'	– collected amount

Set-up of not reported loss reserve:

62621 'Expenses with the not reported loss reserve concerning direct life insurances'	=	32621 'Not reported loss reserves concerning direct life insurances'	– collected amount

Decrease of the reported loss reserve:

32611 'Reported loss reserves concerning direct life insurances'	=	62611 'Expenses with the reported loss reserve concerning direct life insurances'	– amount by which the reserve has decreased

Decrease of the not reported loss reserve:

32621 'Not reported loss reserves concerning direct life insurances'	=	62621 'Expenses with the not reported loss reserve concerning direct life insurances'	– amount by which the reserve has decreased

C. **Accounting of the reserve for benefits and discounts**

The reserve for benefits and discounts shall be calculated for the life insurance contracts which provide for the right of the insured person to participate in the benefits obtained from using the mathematical reserve according to the contractual obligations. Furthermore, the reserve for benefits and discounts shall be set up for the life insurance contracts which provide for premium discounts for contract renewals and/or for premium reimbursements in case the insured persons have a share in the insurers' profit.

The following accounts shall be used for recording the reserve for benefits and discounts in the accounting records:

Account 312 'Reserve for the share in benefits and discounts concerning life insurances.'

This account is used to record the situation of the reserve for the share in benefits and discounts concerning direct life insurances and the approvals for reinsurance, set up according to the legal provisions in force.

Account 612 'Expenses with the reserve for the share in benefits and discounts concerning life insurances'

This account is used to record the set-up, the increase or decrease or the cancellation of the reserve for the share in benefits and discounts concerning direct insurances and the approvals for reinsurance.

The account 612 'Expenses with the reserve for the share in benefits and discounts concerning life insurances' is divided into:

⇒ 6121 'Expenses with the reserve for the share in benefits and discounts concerning direct insurances';

⇒ 6122 'Expenses with the reserve for the share in benefits and discounts concerning the approvals for reinsurance'.

The recording in the accounting records shall be made as follows:

6121 'Expenses with the reserve for the share in benefits and discounts concerning direct insurances'	=	3121 'Reserve for the share in benefits and discounts concerning direct life insurances'	– collected amount

D. **Accounting of the mathematical reserve**

The ***mathematical reserve*** *represents the actuarial value of the insurer's financial obligations after deducting the actuarial value of the financial obligations of the insured person.*

The mathematical reserve shall be set up according to the legal provisions in force.

Any negative mathematical reserve shall be reported and recorded as equal to zero.

This reserve shall be calculated separately for each life insurance contract. The calculation shall be performed by an actuary or by another expert in this field based upon the recognized actuarial methods.

The following accounts shall be used for the accounting of the mathematical reserve: account 611 'Expenses with the mathematical reserve' and account 311 'Mathematical reserves'.

Account 611 'Expenses with the mathematical reserve'

This account is used to record the set-up, the increase or decrease or the cancellation of the mathematical reserve concerning direct insurances and the approvals for reinsurance.

The account 611 'Expenses with the mathematical reserve' is divided into the following accounts:

⇒ 6111 'Expenses with the mathematical reserve concerning direct insurances';

⇒ 6112 'Expenses with the mathematical reserve concerning approvals for reinsurance'.

Account 311 'Mathematical reserves'

This account is used to record the situation of the mathematical reserve concerning direct life insurances and the approvals for reinsurance, set up according to the legal provisions in force.

The account 311 'Mathematical reserves' is divided into the following accounts:

⇒ 3111 'Mathematical reserves concerning direct insurances';

⇒ 3112 'Mathematical reserves concerning approvals for reinsurance'.

Set-up of the mathematical reserve:

6111 'Expenses with the mathematical reserve concerning direct life insurances'	=	3111 'Mathematical reserves concerning direct life insurances'	– collected amount

Decrease of the mathematical reserve:

3111 'Mathematical reserves concerning direct insurances'	=	6111 'Expenses with the mathematical reserve concerning direct life insurances'	– amount by which the reserve has decreased

E. **Accounting of other technical reserves related to life insurances**

Account 313 'Other technical reserves related to life insurances'

This account is used to record the situation of other technical reserves concerning life insurances related to direct insurances and the approvals for reinsurance, set up according to the legal provisions in force.

The account 313 ‘Other technical reserves related to life insurances’ is divided into the following accounts:

⇒ 3131 ‘Other technical reserves related to direct insurances’;

⇒ 3132 ‘Other technical reserves related to the approvals for reinsurance’;

⇒ 3133 ‘Reserves for premiums not allocated’.

Account 613 ‘Expenses with other technical reserves related to life insurances’

This account is used to record the set-up, the increase or decrease or the cancellation of other technical reserves related to life insurances concerning direct insurances and the approvals for reinsurance.

The account 613 ‘Expenses with other technical reserves related to life insurances’ is divided into the following accounts:

⇒ 6131 ‘Expenses with other technical reserves related to direct insurances’;

⇒ 6132 ‘Expenses with other technical reserves related to the approvals for reinsurance’;

⇒ 6133 ‘Expenses with reserves for premiums not allocated’.

Set-up of other technical reserves:

6131 ’Expenses with other technical reserves related to direct insurances’	=	3131 ‘Other technical reserves related to direct insurances’	– collected amount

Decrease of other technical reserves:

3131 ‘Other technical reserves related to direct life insurances’	=	6131 ’Expenses with other technical reserves related to direct life insurances’	– amount by which the reserve has decreased

Conclusions

In the new economy, the insurance companies carrying out life insurance activities have to inform the public, at their request, on the principles and methods applied for calculating the technical reserves, including the reserves for benefits and discounts.

The value of the technical reserves must enable the insurer at any given time to fulfil his obligations according to the insurance contracts.

The technical reserves shall be inventoried and assessed at the end of each reporting period.

The methods applied for the assessment of technical reserves adopted by the company (*prorata temporis*, statistical methods etc.) shall remain the same during the entire financial year as well as from one year to the next.

In the new economy, the technical reserves shall be set up and distinctly indicated for the general insurance activities and for the life insurance activities (*Law no. 32 of 2000*).

The decrease or the cancellation of the technical reserves shall be made by crediting the corresponding expense accounts.

Should an insurance contract be cancelled or terminated, the insurer shall also perform the accounting operations of cancelling the technical reserves related to the respective contract.

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