THE ROLE OF REINSURANCE IN INSURANCE

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Abstract:

Insurance companies carry out risk spreading through the co-insurance and reinsurance mechanism, consisting of the participation of more companies in the provision of high-value assets.

Reinsurance is a form of insurance whereby an insurance organization can transfer to another reinsurer, partly or fully, its payment obligations arising from the insurance contracts that it has concluded. In the reinsurance ratios, the insurance companies appear in a double position - giving other insurance companies some of the risks assumed under direct insurance, being reinsured, but receiving different risks to reinsurance, acquiring the quality of reinsurers.

Reinsurance intends to satisfy some multiple needs of the direct insurer and can provide means to counteract the risks associated with the fluctuations in compensation costs, the reinsurer will contribute to the payment of compensations on behalf of the reinsurer.

Life insurance has characteristics that influence reinsurance: the average life of the insurance, the insurance is concluded for a fixed amount insured, the capital accumulation. In life reinsurance, almost all reinsurance arrangements are proportional agreements, and the largest share have the "surplus" agreements.

Reinsurance plays an important role because it fulfills the following functions: it confers capacity, creates stability, helps to consolidate financial strength. The adjustment of the client portfolio in terms of the changes of reinsurance agreement, required by the reinsurer, can only be done by concluding the insurance contracts.

In life insurance, reinsurance contracts contain provisions that meet the need of the insurer to have long-term protection.

Keywords: *life insurance, reinsurance, reinsurance agreements, capital accumulation, share reinsurance, co-insurance.*

1.Introduction

Life insurance is a long-term insurance policy and reinsurance will have a long duration, the insurer being able to directly lose reinsurance coverage before the insurance contract runs out or to pay for reinsurance a price inappropriate with the insurance premiums that are collected.

Not all reinsurance types are suitable for long-term protection. The disproportionate agreements with the surplus of damage for protection against the accumulation of risk cannot be concluded for long periods because their provisions depend on the structure of the portfolio.

The amount to be reinsured initially does not depend on the insured amount, but on the amount for risk. The amount for risk is less than the insured amount, requiring a larger initial reserve.

In life insurance, to determinate retention, it is important the amount of risk that insurer may retain in its charge in the event of an insured event. In order to calculate the retention, actuarial models with varying degrees of complexity were used. All actuarial models have the same objective - stabilizing the portfolio's results retained by the direct insurer.

If reinsurance is regarded as a source of funding, the following requirements must be considered: the reinsurer must be able to help with reinsurance to resolve its current funding problems. The amount of retained premiums by the insurer must enable him to cover his current and anticipated expenses.

Insurance companies carry out three main activities: operating, underwriting of insurance contracts, investing and financing. Each one is assigned a risk. Therefore companies should be able to correlate their investments with their general needs. Insurance companies are required to constitute technical reserves for obligations to policyholders. According to law, these technical reserves can be covered on account of admitted assets. The admitted assets must provide insurer's liquidity.[2]

2. The insured interest

In the case of life insurance, there are many situations where share reinsurance provides the best solution for achieving the goal, especially if it intends to simplify the reinsurance management activity.

The share reinsurance agreements are obtained in the case of collective insurances.

Depending on the actuarial model used, proportional reinsurance may be the reinsurance based on co-insurance and reinsurance based on risk premiums. In the first case, the saving items contained in the reinsurance premium may remain to the reinsurer in order to obtain reserves or to be returned to the insurer directly in a deposit form. The decision to make a deposit to the direct insurer depends on the legislation of his country of origin.

These forms of life reinsurance are important from actuarial point of view and of the reinsurer's participation in the risk subscribed by the direct insurer.

In the case of reinsurance under the risk premium, the additional benefits are reinsured separately on the basis of co-insurance.

The flexibility of reinsurance under modified co-insurance with regard to the distribution of results over time is useful to the direct insurer and is also used to expand the life insurance activity, not just the insurance contracting activity.

In reinsurance under the risk premium, no surplus is paid unless the policy runs out or in the case of redemption.

In life reinsurance, in addition to the most proportionate reinsurance types of the highest weight, there are also occasionally concluded non-proportional reinsurance, catastrophe reinsurance for accidents, being the most used.

Reinsurance protection works only when a certain number of insurance contracts are affected by the same event, as provided by the "minimum number of affected contracts" clause in the reinsurance agreement.

In order to accurately calculate the retention,were used actuarial models of warying degrees of complexity.The mathematical theory has to operate with simplified models that pursue simple objectives and the factors with multifunctional influence should only be analyzed to the extent necessary. [4]

All actuarial models have the same objective: to stabilize the portfolio's results restained by the insurer directly.The simple models assume that in general the damage that is produced is idependent excluding the accumulated risks-ex. of an accident.

Thus, when determining the retention, is taken in account more the commercial considerations and own experience rather than actuarial calculations.

When reinsurance pursues purposes other than portfolio homogenization,other criteria for determining the retention are taken into account.If the reinsurance is regarded as a source of funding, the following requirements should be considered:

-the reinsurer with the help of the reinsurance must be able to resolve its current funding problems

-the amount of premiums retained by the isurer must be able to cover its current and anticipated expenses

In this case, a suitable solution is to establish initial a low retention and rapid growth to reach an appropriate level for the insurer's financial possibilities.

In the case of major standard health risks, composed risks, those due to the advanced age and the insured at the time of closig the insurance, the insurer will want to have a lower retention as these are the real risks leading to high fluctuations in the results.

In the case of insurances that offer the insured the possibility to increase the insured amount, the insurer will set the initial retention to such a level that even after the increase amount of the insured , it does not exceed the maximum limit that it can retain in its charge.Can be taken in consideretion the alleged decrease in the amount of the underwriting risks and the increase in the value of the retention in the course of time.

Additional benefits that increase the amount of risk in the event of death, ex.- additional accident insurance, should be taken into account in determining the retention.

If in an insurance contract it involves both the risk of death and the invalidity, should be established separate retention for the two risks.In practice, both risks are secured in the same proportion, the ceded amount being set according to the risk requiring a higher degree of reinsurance.

In the event of the death of an insured person, all policies concluded for it become due.In order to determine the retention in such situations, the insurer had to take into account all the insurance contracts concluded in the name of the same insured with the amounts for the death risk corresponding to them.This is done using the data from the database, the process of determining such risk accumulations is bearing the name of controlling the accumulation of risk. [1]

The insurance and reinsurance undergo changes leading to the appearance of new types of contracts known as financial reinsurance. Most reinsurance contracts are in the traditional form.

The total increase of values included in the insurance led to the increase of liability of the insurers reaching the situation when a single insurance company could not cover the damages. The insurance fund constituted by a single insurance company becomes insufficient to cover certain major damages being necessary the international cooperation in the insurance field.

The reinsurance companies make the risk dispersion through the co-insurance and reinsurance mechanism respectively.

Coinsurance consists of the participation of several insurance companies in securing a valuable asset. The conclusion of the insurance contract is made by one insured with more insurers who each take a certain independently bearable risk quote. In the case of damages, the insured person deals with problems related to the determination of the damages, the establishment and the payment of the indemnity with one of the participating companies, which is the guarantor company and acts on behalf of all, to the liquidation of the damages requiring the approval of each of the co-insurers, the placement of the risk sometimes requiring a long time and the settlement of damages is cumbersome. For this reason, co-insurance did not have too much development.

The reinsurance is a form of insurance whereby a company or an insurance organization can transfer acts to another insurer (re-insurer) partially or totally, its payment obligations arising from the insurance contracts it has concluded. This method allows an insurance company, called a reinsured, transferor or direct insurer, to protect himself/herself against the risk that exceeds his/her financial power, in return for his/her payment of a certain sum called, the reinsurance premium. In turn, the reinsurer can give some of the reinsurance accepted by him/her, the operation being retrocession (retrocession), the company being retrocession, the transferor company being retroceding company and the reinsurer being retrocessionary. [5]

The reinsurance appears as a new insurance that is based on a reinsurance contract concluded between two insurance companies whereby the first transfers, totally or partially, the liability assumed initially by the insurance contract.

The reinsurance has some features that make it different from the direct insurance.

1. it acts only through the insurance, first there is the insurance operation, from which the reinsurance unfolds;

2. while the direct insurance is practiced between an insurance company called insurer and natural or legal persons in the capacity of insured, the reinsurance intervenes only between two insurance companies, so the reinsurance contract is concluded only between legal persons.

3. the reinsurance covers the risk part that exceeds the insurers' limits and thus reduces their liability in the insurance business.

4. not all insurance contracts are subject to the principle of indemnification (compensation) except for life insurance, accidents, sickness policies, while all reinsurance contracts are compensation contracts, being limited to the payments made by reinsured according to the insurances he/ she has subscribed to.

5. almost all direct insurances (except those maritime and aviation) are mainly domestic and the reinsurance is by its nature an international activity.

In Romania until 1.01.1991, as the State monopoly in the insurance field functioned, we cannot speak of reinsurance operations internally. Currently, as a result of the existence and function of several insurance companies, the reinsurance also operates internally, taking into account that they do not have the capacity to take over a large volume of risks on their own.

6. it creates conditions for widening the scope of activity of the insurance companies and allows them to offer larger guarantees.

The reassurance is aimed at meeting certain multiple needs of the direct insurer.

In the reinsurance relations, the insurance companies appear in a double position: on the one hand, they give to other insurance companies in different countries some of the risks assumed under the direct insurance as reinsured persons, and on the other hand, they receive in reinsurance different risks acquiring the quality of reinsurers. The operations to receive in reinsurance are called active reassurance, and those of yielding in reinsurance, passive reinsurance. [6]

In addition to reinsured person and reinsurer, the reinsurance also includes the following elements: reinsurance contract, reinsurance premium, reinsurance commission, reinsurer's participation in the reinsurer's and reinsurance broker's profits.

To better understand the role of reinsurance, we need to look at how insurers have established the insurance premiums.

An insurer proposes to require from his/her insurers a sum of money which, together with the benefits obtained in one of the investments in the insurance funds, is sufficient to cover all the claims for compensation of the other costs and in order to obtain a reasonable advantage. Sometimes he/ she may not succeed because:

1. competition on the market forces him/ her to reduce the premiums on insurance;
2. the total costs generated by the compensation payment exceed the amount taken into account when determining the insurance premiums;
3. the benefits resulting from the financial investments are lower than those planned, e.g.: due to the decrease in the interest rate;
4. his/ her administrative costs prove to be higher than those predicted.

The costs related to the compensation payment may be higher because the insurer has underestimated the possible losses or large fluctuations of these looses took place. The fluctuations in terms of loss size may occur due to the following causes:

a) Fluctuations due to the size of the portfolio

An insurer can be sure only of one policy holder in relation to the frequency or magnitude of the future losses. He can be sure that, as his/ her portfolio includes more individual risks, the total costs of the indemnities paid over a certain period will be closer to the predicted costs. Thus, the global costs involved in the compensation payment, in the case of small portfolios (consisting of a small number of insured units of exposure) tend to fluctuate more than the costs of large portfolios.

b) Large individual risks

Large fluctuations can occur if the portfolio comprises a small number of large individual risks. E.g.: If a marine insurer's portfolio is made up of lots of yachts and other small craft insured for the amounts of up to $ 100,000 plus a small number of oceanic vessels insured for amounts exceeding 10 million $, then even a single loss of a petroleum tank, let's say, may change the costs related to the compensation payment in a certain year.

c) Interdependent risk exposure units

If there is an interdependence between the risk units included in a portfolio, then the total costs of the indemnities may fluctuate more than it would have been expected, because if one of the insured persons suffers a loss, it is likely that the others have same problems. E.g.: if the object of the insurance is the real estate property and the insurance is against natural calamities, an earthquake or a hurricane can cause damage to a large number of insured buildings to the same insurer.

d) - Statistical fluctuations (pertaining to probabilities)

The situation of compensation claims which an insurer has to deal with over a year may be affected by circumstances that modify the probabilistic distribution of the statistical events. E.g.: a severe epidemic can make the situation of the compensation claims that a life insurance office deal with to be far worse than the one indicated in the mortality statistics tables because these tables only give the long-term probabilities of death within different age groups.

The reinsurance is not intended to help an insured person to deal with the non-fulfillments related to earning from financial placements or to handle the increases of unforeseen expenses. However, it can offer ways to counteract the risks associated with the fluctuations in the costs related to separations – depending on the reinsurance type that the transferor company (reinsured person) has acquired, the reinsurer will contribute to the indemnity payment on behalf of the reinsured person. The reinsurance may provide temporary financial support during periods in which the insurance business is unprofitable due to intense competition or due to the increase in the frequency or the size of the compensation claims. [3]

The reinsurance may be manifested in several ways, allowing the insured risks to be distributed as long as possible between a large number of insurers and reinsurers.

The growth and diversification of the economic activity, of the international exchanges of values led to the creation and development of certain active and competitive insurance and reinsurance markets.

The insurances and reinsurances are marked by a high degree of heterogeneity due to the existence of a variety of types and business categories resulting insurance and reinsurance markets, each being individualized by the preponderance of certain types of transactions, through the existence of certain insurance and reinsurance companies, operating mode, trading and rules.

The international transactions with insurances are marked by the national regulations of each country.

The international dispersion of the high risks through insurance can be achieved:

a) by direct insurance possible by the participation of foreign insurers as co-insurers alongside the national companies;
b) by transferring a part of the risks assumed by the national insurers through the international reinsurance.

The foreign insurer / reinsurer may operate through a local company, may authorize an agent abroad delegated by contract to subscribe on his/her behalf or set up his/ her own subsidiaries abroad.

The insurer / reinsurer may exert insurance services in the sense that he/ she, usually at his/ her headquarters, subscribes the risk insurance located in other countries. Such services can be offered to nationals (home or abroad) or to foreigners found in his/ her country. This business category is called "Transfrontier Business", more descriptive term but less confusing than "service business" used in the European Union.

The international trade with insurances is reduced compared to insurance premiums and international transactions world expenses. The quota of the foreign insurers varies from one country to another but has increased mainly due to the liberalization of trade in different regions of the world and mergers and acquisitions in the field that marked the configuration and evolution of this sector. Removing all restrictions could lead to global growth. [5]

The reinsurance markets cannot be treated separately but in correlation with the insurance markets on which they are based. Most times, both insurances and reinsurances are traded on the same markets. The most powerful increase in insurance and reinsurance activity has occurred over the past twenty years.

The following factors are at the base of this rapid evolution:

1) the unprecedented economic growth of the industrialized countries after World War II, the technical progress and socio-human development in all its aspects. The international insurances and reinsurances were the only way to provide sufficient capacity to meet these needs.

2) The changes appeared in the structure of the insurance markets in many parts of the world that were determined by the measures adopted in some countries in order to limit the activity of foreign insurance companies in their territory by establishing the state monopoly in the field of insurances.

Due to the small size of these markets and the lack of experience, the new internal insurers who assumed responsibility for covering the internal risks did not have sufficient capacity, being forced to resort to the facilities provided by the international reinsurances.

The international insurance and reinsurance market was dominated by profile companies from Great Britain, Germany, Switzerland, France, USA and Japan.

At the same time as the demand for insurance and reinsurance grew, there was an explosion in the number of profile companies and in other countries emerging new markets especially in the free zones and in countries offering tax incentives. Preponderantly reinsurance companies have also been set up and develop the activity on a national and regional level.

3) Improving the climate in the field of direct business, which prevented the international companies from developing the activity as direct insurers on the international markets.

The reinsurance companies to maintain these markets were forced to close reinsurance transactions.

The relatively slow increase and even the stagnation of incomes obtained from direct insurance premiums compared to those from reinsurances have led to the situation where many insurers and financial institutions invested in reinsurance for economic reasons.

4) The globalization of financial services and insurance services has led to a strong concentration of the international trade with these services.

The mergers that express the tendency to focus on the international offer will determine a stronger dominance and will be the ones that are going to create the future market with its rule.

The most representative insurance and reinsurance markets are concentrated in large commercial and financial centers of the world where most of these transactions take place. Some of these are markets that served only to the local direct insurers and which, following the expansion of the activity of some insurance companies, have opened subsidiaries becoming international. E.g. - London, Japan, USA, Continental Europe. Each of them is an international market because a large part of the concluded business is from the insurance and reinsurance companies in other countries and because it largely influences the uses and practices of other markets. They differ in terms of sizes, preponderance of certain business categories, style, usages and the ways of closing the transactions, achieving uniqueness. It acquires within these markets: insurance companies, reinsurance companies and intermediation agencies (brokers). The high value insurance contracts and those of reinsurance are concluded directly; the most significant position is held by brokers to establish the best connections between the parties willing to conclude insurance and reinsurance contracts.

A feature of these markets is that because both insurance companies and reinsurance companies are present, a company is both a buyer and a reinsurance vendor.

Every market is made up of demand and supply; there are customers and bidders on the insurance and reinsurance markets.

Natural and legal persons may be customers that need and want protection for certain risks to which they are exposed.

Thus, the natural persons require insurances for dwellings, motor cars, personal property, life insurance, accidents, and liability to third parties. So, the insurances concluded by the natural persons are an important part of the market. Most of the insurances are concluded by legal persons whose policies have high or very high values.

Specialized companies appear as the bidders of these services. Their nature is special and is determined by the specialized activities that the following categories of companies meet:

1) specialized risk carriers, meaning insurers and reinsurers offering protection to customers;

2) intermediaries, the most important are insurance brokers acting as representatives of insurance or reinsurance buyers in the placement of risks and obtaining protection; the second category is the insurance agents that offer customers the policies of a certain insurer;

3) the compenies providing specialized services related to the insurance activity: founders, assessors, damage liquidators, risk management consultants.

The insurance and reinsurance sales group includes insurance, reinsurance companies that receive (accept) insurance/ reinsurance risks in exchange for insurance/ reinsurance premiums becoming insurers/ reinsurers. It is found that most national and international markets operate a different number of domestic or foreign companies. It is important for the establishment of the market, for the trust of the customers and for the effects that the activity of the insurance and reinsurance companies generates for the respective economy so that they are solvable, to have a proper conduct and lead to increasing or maintaining the trustworthy climate of the customers in the idea of protection by insurance and at the insurers from the market. [3]

3.Conclusions

In life insurance, the reinsurance management activity is complicated by the following factors: the high duration of coverage for each risk, the distinction between initial and renewal commissions and the importance of deposits and interest on them, the change in the amount and the risk premium in each year, in the case of reinsurance under the risk premium.

A known risk accumulation is covered only if, during insurance, it only occasionally presents the specific characteristics of a group.

The reinsurer can assume the compensation that exceeds the full or partial priority up to the maximum limit set in the agreement.

The financial safety and security that reflects the capacity to cope with the assumed payment commitments towards his/ her creditors from the customer's point of view is the central point of any appreciation or evaluation of these. In doing so, they use a number of objective and subjective criteria. A series of general or specific economic and financial indicators contribute to creating a complete and accurate picture. This is professionally done by the "rating agencies" and more known are the American agencies, Standard and Poor's, Moody's and AM Best.

The rating expresses the debtor's ability (of the insurance - reinsurance company) to deal with the payment obligations to the creditors. The rating companies uses a classification and the class in which a company is ranked places it according to these criteria. The more societies fit into a better class, the stronger it is from the financial point of view to deal with contractual obligations; regarding the customers, the rating expresses the ability to pay for the damage. Regardless of the conventional scale used, the two main categories are: "safe" companies and "vulnerable" companies, due to the evolution of the markets and insurers' activity, the rating has a dynamic character and there are many situations where the company's rating is changing from one year to another. The assessment is based on the quantitative and qualitative analysis of the available and necessary information.

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