Preferred life products in life insurance

«The insurance of mortality risks has undergone considerable change over the past few decades. Until the 1970s, the mortality component was typically combined with a savings product (which frequently proved to be disappointing owing to changes in the financial markets). However, life insurance choice has greatly expanded by the unbundling of the mortality element. Universal life insurance now has many variations and the market for long-term term insurance (10 to 30 years) has grown substantially in the United States since the 1980s.

Both the intensification of competition and progress achieved in risk assessment have helped to make the market more sophisticated with the introduction of «preferred life» insurance.

In this 24th newsletter, the head of our actuarial department, in consultation with a senior member of our Canadian underwriting team, explains how these typical North American products work and the problems related to them. I invite you to contact your usual SCOR Vie correspondent should you require any further information.»

Denis Kessler, Chairman and Chief Executive Officer, SCOR

Preferred life insurance: origins and organization

Life insurance is based on the pooling of risk

To avoid excessive disparity in risks that would call this pooling into question, it is frequently necessary to proceed with a segmentation of risks. This consists of dividing risks into a number of classes that each present a certain degree of homogeneity in the level of risks they contain and priced at a level corresponding to the risk insured. For substandard risks – risks whose individual probability of occurrence is greater than the expected average – the insurer offsets the increased risk by charging an additional premium.

The notion of substandard risk has existed since the beginning of the 20th century. It was only after the Second World War that life insurance rates began to be differentiated on the basis of the gender1 of the policyholder. In the late 1970s and early 1980s, different rates for smokers and non-smokers appeared in the United States. This differentiation has since spread to Europe and Asia. At the beginning of the 1990s – thanks, in particular, to the more detailed information obtained by insurers in their risk assessment process – there emerged in the United States an even more refined segmentation of the standard class. This subsequently led to the appearance of so-called “preferred lives” life insurance products.

The approaches used

In the simplest model, the class of normal risks (excluding substandard risks), which typically represents more than 90% of individual life insurance portfolios, is divided into two categories that are usually of similar size:

- The preferred lives whose expected mortality is lower than the average of these normal risks,
- The other standard risks whose expected mortality is greater than the average of normal risks.

1See SCOR Vie Newsletter n°17: “Rate differentiation according to gender: the European debate”
To obtain the same premium volume after the introduction of preferred rates (in the absence of rate differentiation), the base rate for standard risks is higher than the rate used for the class of normal risks as a whole. In contrast – and this is the principal objective – the preferred lives enjoy more attractive rates. This categorization has proved to be de facto more refined than a simple division into two types. It was at first added to the basic distinction made between smokers and non-smokers, thereby creating classes of preferred non-smokers and standard non-smokers along with classes of preferred smokers and standard smokers. It also became more sophisticated thanks to the introduction of several degrees of preferred risk by distinguishing, for example, between "preferred" and "super-preferred" risks. In the current practices of the North American markets, the number of classes can reach 3 to 5 for non-smokers and 1 to 2 for smokers. There may also exist a special category for cigar smokers.

Two principal methods are used for the segmentation of preferred lives:

- The debit and credit method: each risk factor is attributed a number of points following the practice adopted by certain operators vis-à-vis substandard risks. This is felt to be the fairest approach.
- The "all or nothing" method: a given risk class includes limits for each distinguishing factor within which the applicant for insurance must fall. If applicants exceed the limits of a single factor, they are automatically excluded from the class in question.

This second method is widely used in the industry at present because it is easier to explain and to understand but, because it adopts a rather ruthless approach, it is frequently applied in a more discerning manner.

The assessment of preferred lives

To enjoy preferred rates, policyholders must possess a certain number of characteristics vis-à-vis the causes of mortality in the insured population that improve their life expectancy. Accidents are the primary cause of mortality among young people (road accidents, personal habits or lifestyle) while the principal causes of mortality among more elderly people are medical in nature: cancer, cardiovascular conditions, etc.

As far as cancers are concerned, for example, any history of malignant tumours in members of the policyholder’s family (diagnosis or death before the age of 60) is scrutinized in the assessment process. For cardiovascular conditions, the insurer bases his decision on a number of different criteria: body mass index (BMI), blood pressure, overall cholesterol and HDL levels, history of diabetes in the individual or his or her family. Regarding accidents, the criteria usually include the individual’s driving history, leisure activities and other lifestyle factors such as alcohol consumption and the use of illegal drugs or, indeed, any criminal record or personal bankruptcy that the assessment process attempts to identify.

In all cases, to obtain a preferred rate, applicants must firstly be a “standard” risk on the basis of the usual pricing criteria. Certain medical conditions therefore immediately exclude applicants from preferred-rate insurance: cancer, cardiovascular conditions – including high blood pressure – or renal disorders, diabetes or hyperlipidaemia, chronic obstructive pulmonary disease, inflammatory intestine disorders, multiple sclerosis or all conditions that are only acceptable upon payment of an additional premium.

Access to the most “preferred” category – which obviously offers the lowest rates – depends on a set of even more demanding eligibility criteria. The criteria used must be both quantifiable and objective. To ensure this, insurance companies make use items that can include the following: a medical or para-medical examination carried out by a nurse or doctor, blood tests and urinalysis, serological markers, at-rest or stress electrocardiograms, reports from the family or usual doctor, investigation reports with verification of databases such as driving record files, legal records or the register of bankruptcies.

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Two principal methods are used for the segmentation of preferred lives
The challenges of preferred life underwriting

The shift to the underwriting of risks based on preferred classes has created new challenges for the different stakeholders in this segment of the insurance industry.

These rather sophisticated products are based on a fairly advanced “technology” as far as actuarial techniques, risk assessment, marketing and sales are concerned. There are correspondingly high expectations for the quality and consistency in the work of the different players involved in order to guarantee a well-controlled – and profitable – development of these products.

The introduction of an innovative product creates new opportunities but raises a certain number of risks:

- Opportunities: the first companies to introduce this product attract – in theory, at least – the best risks (offensive strategy) while others try to protect their existing portfolio (defensive strategy). In any case, a product of this kind represents a way to build a strong, dynamic marketing image among customers and the distribution networks.
- Risks: a higher-than-anticipated lapse rate in existing policies, deterioration in expected mortality rates on the remaining portfolio (on the assumption that the best risks can take out a policy with another company by presenting updated evidence of insurability), greater uncertainty regarding future profitability owing to the lack of experience, dissatisfaction or lack of understanding on the part of insurance intermediaries and customers faced with a sophisticated product, higher risk assessment costs.

Balancing the portfolios

For the creation of preferred insurance products, construction is divided into four main stages:

1. Determine the number of preferred risk classes (both for non-smokers and smokers): this phase implies input from actuaries and representatives from the marketing team.
2. Define and determine the individual assessment criteria: the assessment specialists, risk underwriters, medical advisors and research & development organizations all intervene at this stage.
3. Estimate the expected percentage of applicants included in each risk class: portfolio research carried out by actuaries but also the experience of the assessment and marketing departments are used for this calibration.
4. Calculate the premium rates for each risk category: this work is chiefly carried out by actuaries.

This construction work is complex and supposes excellent coordination among the different parties, i.e. the actuarial, risk assessment and marketing departments. The complementary nature of the contributions and the coordinated control of the different parameters are both decisive for the success of this phase.

In practice, the number of classes offered is frequently more the result of a marketing decision than a decision of purely technical nature: the larger the number of preferred classes, the less the data per individual risk segment is meaningful and the less the actuarial calculations are relevant. The pooling of risk within each class is all the more delicate and fragile when the risk classes contain a limited number of risks.

The complexity of the products constructed in this manner raises a number of challenges for actuaries. The first objective is to define the portfolio distribution assumptions (distribution of policyholders between the different classes) that prove to be as close as possible to the real portfolio profile derived from sales to policyholders. For this, it is vital to set up a regular, precise monitoring system in order to review the assumptions and the pricing scheme, if necessary.

As far as assumptions concerning mortality rates are concerned, the interactions among the different classes are obvious since the aim is to divide a previously single pricing structure into as many rates as there are risk classes. Experience regarding the different classes would be extremely useful in this respect. Policyholders’ portfolio experience is derived from the length of experience and the size of the sample. This experience, unfortunately, is not always fully available in this particular case owing to the innovative nature of the approach and the large number of classes into which the samples are divided.

In any event, this type of product calls for high quality and rigour in its practical application and monitoring. After the product’s construction phase, the selling and underwriting phase is of critical importance: sales must not deviate from the marketing objectives included in the product’s design; they must avoid the pitfall of anti-selection, if not the portfolio runs the risk of becoming unbalanced. Similarly, risk assessment must comply as closely as possible with the criteria laid down by the classification system; if a risk is underwritten in a class higher than the one in which it should have been placed, this will unbalance both the classes in question and jeopardize the overall balance of the portfolio as a whole.
Extremely close monitoring of the portfolio, designed to coordinate the actuarial, sales and assessment aspects, is of vital importance.

More complex everyday work

The introduction of preferred lives has radically modified the work of risk assessment activities. While traditional risk assessment focused on identifying the less than 10% of insurance applicants ineligible for insurance at the standard price, the underwriting of preferred lives concerns more than 90% of all insurance proposals. The risk acceptance services have had to face new challenges regarding:

- Cost control: the number of documents and medical examinations necessary to analyze the risk increases (blood tests, ECGs, driving history reports, etc.), thereby increasing the cost of the assessment process.
- Response times: application processing time increases owing to the large number of documents to be analyzed in order to clearly identify the risk.
- Training of insurance company and distribution network personnel in the use of this new concept and their adaptation to it.

The preferred lives technique also raises new questions for the policyholders themselves. Each company in a position to offer this type of preferred-rate product tries to distinguish itself from its competitors. In practice, there are as many combinations of preferred life criteria as insurance companies. As a result, the comparison between prices becomes much more difficult for consumers as it is no easy matter to compare the different products and their eligibility criteria. In contrast, policyholders enjoy new opportunities to select from the different solutions available in the market, a possibility that involves a certain danger of anti-selection for the insurers.

Worldwide panorama

This type of product has been widely distributed, and has enjoyed a real commercial success in the United States since the beginning of the 1990s: these products now represent the norm in the individual life insurance market.

Three main factors have contributed to this success:

- A highly competitive insurance market, driving the players to attempt to differentiate their offers.
- An extremely broad and active individual life insurance market.
- Insurance for large face amounts, thereby giving an even greater impact for the policyholder to the reduction in the premium.

The cultural context and attitudes have probably also played a major role: in North America, insurance is extremely individualized, it includes a large number of options that, in turn, favours preferred, more customized rates: “I pay the premium corresponding to my personal risk.”

Outside the United States, this approach has not really been adopted widely, with the exception of Canada where preferred life products became established in the 1990s for reasons similar to those observed in the USA. A few attempts have been made, notably in the British market, but without enjoying any great success.

The fact that no preferred life products are distributed in Europe can be explained by two factors in particular: the more important role played by group insurance cover (which limits the role played by individual insurance) and the amount at risk to be insured – typically smaller amounts than in North America – which makes price differentiation less attractive. But the insurance markets are evolving in Europe, Asia and elsewhere, and who can tell what the future will decide?