OPINION

John Turner
Head of life & health underwriting propositions,
Swiss Re, Switzerland

RISK-BASED UNDERWRITING

Dangers in forgetting risks

Without any risk selection, private insurance is not financially viable

Insurance is not like a loaf of bread or a carton of milk that costs the same for every customer. Bread and milk have the same costs of production regardless of who buys them. The costs of insurance products, by contrast, are not fixed, because insurance is about risk and each person has a very different risk profile, driven by multiple factors.

Risk-based pricing is essential to a sustainable voluntary insurance market. This is especially the case for insurance such as cancer coverage and critical illness or disability coverage, which are products that do so much to help affected individuals. Underwriting keeps the price of products affordable. Restricting or removing risk-based selection has a direct impact on price, and therefore reduces the accessibility of insurance. In an era in which regulators are considering limits on this risk-based selection model it is important to explain why we price insurance the way we do.

Basic risk-related pricing

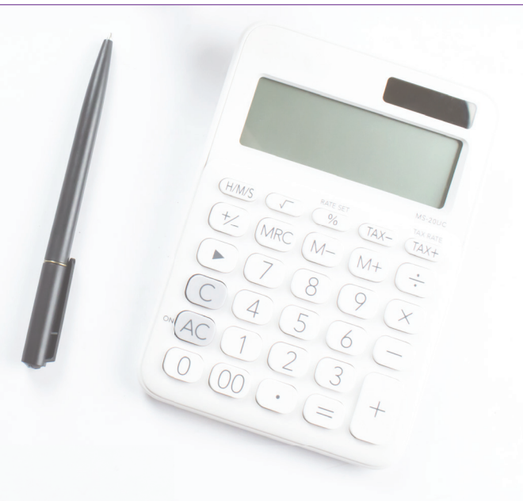
Private insurance, especially products such as life insurance, is cheaper than most people assume and needs to be appropriately priced as demand for insurance is very elastic; the higher the price, the less people buy. For most, the decision to purchase is an entirely voluntary act, so if it is poor value they do not buy or buy only the minimum. If it is great value, they buy a lot.

In mathematical terms, a typical life insurance product might

A question of relative risk

30-year-old male to female	**1.6 : 1**
30-year-old smoker to 30-year-old non-smoker	**1.7 : 1**
80-year-old to 20-year-old (unisex)	**120 : 1**
30-year-old with terminal disease* to healthy 30-year-old	**2520 : 1**

** 90% expected to die in the next 12 months*
Source: Internal Swiss Re comparisons



"Some risk variances can be absorbed at a fixed price, others would simply disrupt too much."

be priced at an annual event risk of less than 1 in 1000. In other words, if there are 1000 people insured and all pay the same risk premium and have the same sum assured, there will be sufficient funds in the pool to pay one claim per annum. If the pool needs to pay a second unexpected claim, the cost for everyone doubles to pay that claim. Insurers manage this risk by charging a premium that is proportional to the additional risk that each individual brings to the pool, as this avoids others having to pick up the excess cost.

What is fair?

The matching of price to individual risk situations is fair as it reflects the individual value of the product and also the costs of providing that insurance. To do otherwise essentially forces others to pay more for a risk they do not bring to the pool, which they are unlikely to consider fair. But what would happen if we charged all people the same price by introducing obligatory insurance, as happens in many markets with more social insurance such as basic healthcare protection?

With regulation or taxation to make everyone buy the same type and amount of insurance, it is indeed possible to remove much of the individual risk considerations from insurance. The challenge here is that people have very different insurance needs; some might want to protect their incomes, for example, while others want to protect their families or their financial liabilities. Therefore, any state-driven obligatory purchase may entail many people having to pay for insurance that does not match what they want and need.

Without such obligatory purchase mechanisms, is it at all likely that everybody would buy the same type and amount of fixed-priced insurance? A 25-year-old might see their current voluntary premium rate for life insurance increase 10- or 20-fold for obligatory life insurance. This would represent very poor value for their risk situation, so few — if any — would buy it. A 90-year-old, however, would see fantastic value in the fixed price, and would not only purchase, but would be well advised to spend all available assets they have on buying as much as possible. Increasing the aggregate price for everyone to pay for the additional risk exposure and more/higher claims among the older age group only further discourages younger people from buying. Insurance requires cross-subsidisation between different risk groups, but if that cross-subsidisation is so great that it influences buying behaviour, the whole system becomes untenable.

How much deviation can the system absorb?

Some risk variances can be managed at an equal price, as we have seen since the introduction of unisex rates across the EU. Women are lower risk than men for most insurance types, and accordingly previously paid lower prices. The differences were not so huge, however, as to materially disrupt the actual buying behaviour once unisex rates were introduced. Insurers were also able to track the different gender exposures, so they could reserve and set their aggregate price appropriately. Society drives what are acceptable differentiation criteria and regulators enforce those views through anti-discrimination provisions. When setting those regulations, however, it is important to understand that the bigger the variance in risk, the greater will be the disruption to product offerings and to price.

Is demand for insurance so elastic?

In voluntary, private insurance, the price of insurance is a massive influencer on demand, not only due to individual choice, but also due to the actions of brokers and agents whose job it is to find the best-value product for their customers.

Even for credit protection, insurance is usually optional, and certainly the nature of the covers to be selected is (life, critical illness, disability, unemployment, etc.). Add the flexible choice of whom to name on the loan and therefore the insurance, and it is soon obvious that — even here — any moves away from risk-based selection will result in more claims being payable. Additional claims must be paid for via higher premiums, thereby raising the risk that insurance-protected loans become unaffordable for the majority.

What about medical history and data?

If you apply those same pricing principles to the state of health, it becomes arguably more sensitive, but the effects are the same. Consider two people of the same age, one with no medical issues and one with significant health issues that make the insured event much more likely to happen. Trying to charge a health-neutral premium to both will be as doomed to fail as in the earlier age-neutral example; the first person will simply not buy, whereas the second will understandably buy a lot of protection coverage. Of course, nobody chooses to get sick, just as nobody chooses to get old, but there remains significant choice in what insurance to buy.

The required consideration of very finite risks by insurers does create some misunderstandings, such as a patient receiving an apparently different message from their doctor than from their insurer. A doctor may tell the patient they are cured or very low risk, as by most clinical standards the statistics suggest that is the case. Insurers, however, need to focus on even small numbers of additional claims payable from a large pool of similar patients. They are often looking at the same clinical studies before making their prognoses, but the starting point for what risks need to be considered, or not, is very different.

Where does the right to forget cancer fit in?

There is strong debate currently around how the selection

"Cancer is an incredibly varied disease, which needs to be assessed according to the medically proven and risk-relevant elements of each case."

process handles one condition, cancer, with moves to remove many patients with a history of that condition from the risk-based considerations of the insurance process, commonly referred to as the "right to be forgotten". Cancer is an incredibly varied disease, and so insurers use the latest disease type-specific medical studies to make their assessments. This results in many applicants with a history of cancer already being offered the same price and conditions as someone without such a history.

Many other cancers, however, represent a still significant additional risk of the event being insured against, even after many years. Remember we are commonly pricing the insurance at 1 in 1 000, so even a 1 in 100 additional risk due to the cancer history is a very large multiple of the priced-for risk. Forcing a process that removes some patients from risk-based pricing but not others, such as heart patients, seems fundamentally unfair. Yet, forcing a system that removes risk selection for all health conditions would seem to be fair but would not be financially sustainable. Legislation without consultation and adequate consideration of consequences could do more harm than good.

"Forcing a system that removes risk selection for all health conditions would seem to be fair but would not be financially sustainable."

Where next?

Insurers recognise the issues and are already developing and delivering solutions for those who may be disadvantaged by risk-based pricing. These take many forms across markets and companies. They include but are not limited to:

- Heavy investment in using the latest clinical studies to ensure patients get the benefit of medical advances and insurers price products based on the latest medical, statistical and scientific data.
- Directing customers to insurers better able to support higher risk protection needs.
- Partnering with service providers that can help the customer to better manage their disease.
- Developing disease-specific products, as well as easier to access insurance.
- Constantly pushing the boundaries of maximum insurability.

It is in the interests of both insurers and customers to insure as many people as possible. Insurers pay out billions every year to those in most need, but their ability to provide these benefits depends on adequate risk selection and pricing. Challenges to how insurers do this endanger the availability, and certainly the affordability, of products that benefit so many people. ■