



It's all in the Detail

In many of the world's high-growth group life markets, technical risk assessment is being increasingly undermined by competition based mainly on price. This poses a threat to each insurer's profitability and stability. The good news is that even with price pressure, an underwriter working with sufficiently detailed risk data can deliver the best price with minimal delay. With the recent launch of the PartnerRe Group Life Pricing Tool (see figure 1), we revisit technical pricing, explaining why key risk data makes such a difference and showing how simple it can be to deliver it.

For example, a generic role description, such as "engineering", is a relatively imprecise basis for determining the occupational class of an individual. It could describe an office-based engineer with management responsibilities and minimal site visits, who would be considered to be in the lowest occupational risk category. In contrast, an on-site, hands-on engineer in an industrial environment is likely to be in a much higher risk category, and the difference in pricing between these classes can be quite significant. The underwriter will generally assume the higher risk, when potentially it is not so. In this example, lack of information has directly led to a less competitive quote.

Where only a company name is supplied without any occupational details or activities, the underwriter will need to make assumptions as to occupational class divisions (which are likely to be



Right risk, right price

Quantitative data – the actuarial best estimate

Pricing group life business involves combining an actuarial best estimate of the risk with the judgment of the underwriter. Actuarial best estimates are derived from aggregated regional and portfolio experience. For group business, these underlying best estimates generally integrate the following standard risk factors:

- age
- gender
- occupational class
- travel and high-risk activities.

Based on this information, the underwriter can calculate the actuarial best estimate. Unfortunately, it is often the case that this data is incomplete or insufficiently detailed, introducing uncertainty into the best estimate assumptions.

PartnerRe

Inputs

Group information

Name	Demonstration Group
Type of activity	Energy / Resources
Description	Local office of large multinational
Country	UAE
Currency	AED
Underwriting year	2013

Benefits

Death any cause

- Accidental death (ADB)
- Permanent Total Disability accident
- Permanent Total Disability sickness
- Permanent Partial Disability accident
- Permanent Partial Disability sickness
- Total Temporary Disability accident
- Total Temporary Disability sickness
- Accidental Medical Expenses

amount 25000 AED

Portfolio summary

Valid	Excluded	Total
10034	-	10034
Total		
Death Sum Insured	74269518	74018
Annual Benefit		
Age (Min/Avg/Max)	18	36
		70

Portfolio data (All amounts in AED, fields in bold are mandatory)

ID	Year of birth	Death	Annual benefit	Class	Specific risks	Offshore risks
1	1968	750000	-	1		
2	1964	451535	-	1		
3	1967	734000	-	1		
4	1968	483795	-	1		
5	1974	660373	-	1		
6	1969	425427	-	1		
7	1960	322682	-	1		
8	1971	283469	-	1		
9	1966	207958	-	1		
10	1966	465256	-	1		
11	1970	513900	-	1		
12	1966	734000	-	1		
13	1966	381680	-	1		
14	1968	499120	-	1		
15	1973	321786	-	1		
16	1964	73400	-	2		
17	1961	73400	-	2	Helicopter pilot / Crew	
18	1963	73400	-	2		

Quotation status

Status	QUOTED
Created	07-10-13
Last quoted	07-10-13
Referred	
Expiry	21-11-13

Figure 1: The PartnerRe Group Life Pricing Tool – Making it even easier for you to do business with PartnerRe.

This tool provides our clients with a fast, interactive means to receiving an optimized group life quote from PartnerRe. It is user-friendly, convenient and follows a step-by-step approach with clear identification of data errors and referral items. By improving data accuracy and speeding up the quoting process, the tool helps keep users ahead of the game when it comes to securing business. If you are interested in knowing more, contact us at www.partnerre.com/contacts.

PartnerReviews October 2013

conservative). In the worst case, this leads to a case of mistaken identity and a wholly inappropriate quote if the underlying company has not been correctly identified. Detailed, per-employee information, supplied at the time of the quote, is a key building block to accurate risk assessment and pricing.

Adjusting for experience – detailed claims data can also improve competitiveness

An additional, valuable source of information is the past claims experience of the group. For larger groups, this will in fact be the key determinant of the price as multiple years of experience for a specific group are a better estimator of future experience than an estimate based on market tables. For smaller groups, a mixture of actual experience and the actuarial best estimate will be used; this involves applying different relative weights to the actuarial best estimate and the experience, depending on the credibility of the experience and other characteristics of the group.

Detailed claims data gives the underwriter the opportunity to provide a more competitive quote for all group sizes. For example, no claims for a medium-sized group of workers in a high-risk industry would suggest good risk management. Two claims in a small group could be due to a systematic risk issue or could just have been "bad luck". Supplying full claims details allows the underwriter to price for the one or the other as appropriate.

Generally, groups with better-than-average experience submit their experience data during the quote to help justify more competitive rates. As a result, if no claims data is received, the underwriter will probably assume that the experience is worse than average.

Qualitative adjustments – the underwriter's judgment

To arrive at a final risk rate, the underwriter should also use additional information that was not necessarily integrated into the original pricing tables. Any additional risk-relevant information can be used here, ranging from specific knowledge of the company involved (e.g. human resources policies), the industry (is it expecting a downturn?), or even the countries where foreign travel is expected.

In addition, specific modifications to terms and conditions, such as increased free cover limits or a waiver on risk management measures (e.g. declarations of health/actively at work), would lead the underwriter to modify the price based on their view of the impact that the changes are likely to have on the specific scheme's experience.

It is at this stage of the process that the underwriter applies their skill and judgment to determine the final price for the scheme. If the scheme needs to be referred to a second underwriter (for example to a reinsurer), having all relevant risk information readily available will significantly speed up the referral process.

Case study

As an example, let us consider how different information about a group scheme would lead to different rates. Let us compare two groups, 150 lives each, both described as construction/engineering companies. Both groups submit only age bands and aggregate sums assured per age band, with no gender information.

Initially they would both receive similar quotes, which will inevitably be conservative due to the lack of detailed information and the range of assumptions which would need to be made, including group age/gender mix and occupation.

It really is all in the detail.

Both missing risk data and lack of risk detail reduce the underwriter's confidence in the assumptions and lead to a (potentially substantial) loading for uncertainty. By supplying as much relevant risk information as possible to the underwriter, the client can ensure that they receive the most competitive price.

However, further enquiries reveal some key differences.

Company A has a high proportion of office-based workers and a large proportion of female staff (females have lower mortality rates than males). Some employees travel, however there is very little foreign travel and the company's senior managers carry out only minimal on-site visits. Given this additional information, the quote can be lowered to reflect the reduced risk compared to an average construction/engineering company.

Company B is specialized in the construction and deployment of offshore drilling platforms, with most of their senior staff travelling for more than 100 days a year to unstable world regions. They also frequently travel by helicopter to offshore locations. Company B is a much higher risk than initially assumed, and the rates should be loaded appropriately.

The broker however points out that company B has strict travel policies regarding how many employees can travel together and a 10-year claims-free history. While the underwriter would generally disregard any claims experience that is older than 3-5 years, depending on the age of the company, such a long claims-free period indicates good risk management and is likely to be taken into account. Based on this additional information, the underwriter could bring down the additional loadings for the scheme.

Missing detail means delays

If key risk data is missing or lacks detail, or a risk is in some way unusual (generating a need for additional risk data), an underwriter has to go back and ask questions. This causes delay. In markets where fast turnarounds are expected, delays generally equate to lost opportunities.

Getting there

Getting there – right risk, right price and quick turnaround – requires knowing exactly what risk information is key to pricing decisions, what risk characteristics are likely to impact pricing, and being able to pre-empt questions with additional data if a risk falls beyond the norm (or requires a referral). This is more easily achieved if brokers, insurers and reinsurers all work together from the start, sharing knowledge and requirements and thus managing expectations to establish clear and efficient working practices.

At PartnerRe we maintain a very open relationship with our clients as regards

our fundamental pricing requirements and techniques, and are frequently sharing know-how on risk trends, relevant risk factors, and modeling (e.g. Best Estimate Assumptions for Biometric Risk, PartnerRe 2011). Our group life pricing tool is another way in which we are improving quoting and referral efficiency and helping clients to understand the benefits of complete data. Regular analysis of quotes and claims experience can help with identifying weak spots in underwriting processes or data supply, and these can then be improved. By working in partnership with our clients, we help them withstand the day-to-day pricing pressure by focusing on the opportunities which will grow their portfolio in the most profitable way.

If you would like to find out more about optimized group life pricing with PartnerRe or are interested in using our group life pricing tool, please contact us at: www.partnerre.com.

Contributor

Alexis Iglauer, Head LS Group Life, PartnerRe

www.partnerre.com

PartnerRe

