

Innovative reserving process in non-life insurance: a challenge for risk management

Recent surveys carried out among various market players have shown that aggregated reserving methodologies remain preferred in the calculations of non-life insurance reserves. However, the recent development of machine learning in actuarial sciences allows the emergence of new visions of claims and shows a growing interest in new ways to estimate reserve based on individual assessment. This approach presents a new way to integrate these methods by the actuarial reserving team to produce a complete and innovated process.

The use of data analysis and data science techniques helps to complete the database if necessary, to better understand the impact of each of the variables on the claims experience, and thus to define finer homogeneous cohorts and large claims thresholds, better adapted to the underlying risk.

These preliminary analyses make it possible, for example, to anticipate the future deterioration of specific cases using a segmentation model for atypical and attritional claims. It is also interesting to consider individual reserving within the different cohorts created, especially when the development of claims strongly differs. This is precisely what the Automatic Segmentation for Individual Claims Reserving (ASICR) methodology offers: within each of the cohorts, an individual assessment of the future development of a case is estimated from an average of the historical developments observed, weighted by the proximity of the claims records to each other.

Reserving can therefore be approached in a different way, with a global and innovative process starting with a precise data analysis and ending with an individual estimate of its reserves. In particular, this enhances the use of data available by the insurer in order to help it define an appropriate risk management policy, in view of the risk profiles that could affect its profitability.

Addactis

Addactis® is the global brand of actuarial and financial software and service solutions from Addactis Group. Present in 24 locations around the 5 continents, the company ensures an effective and responsive support across Europe, Latin America, Asia-Pacific and Africa. About 500 companies worldwide in over 50 countries have already chosen Addactis.

www.addactis.com



Volada AG

Volada AG was founded in 2016 in Zug, Switzerland and offers software and service solutions for the insurance and finance industries. Volada uses state-of-the-art methods to support its customers in optimizing their business processes.

Please address all enquiries regarding this abstract to:

Peter Klein, CEO
peter.klein@volada.ch

Volada AG
Aegeristrasse 7
6300 Zug
Switzerland
+41 41 726 89 20
www.volada.ch

