



# Six trends explored: top of mind for reinsurance companies

From a global perspective, reinsurance remains to have a distinctive business model compared to traditional insurance companies. It comes with its own characteristics and challenges. Internal reinsurance vehicles are seeking for opportunities to align with corporate strategy in a tempestuous environment to improve solvency capital diversification effects and regulatory arbitrage.

In the past years, the industry faced some headwinds relating to the business model, regulations and internal operations. In this article we explore six trends we observe.

**1 PROFITABILITY PRESSURE**  
Reinsurance companies are facing profitability pressure due to volatility in investment income combined with a low interest rate environment. Due to increased interest rate risks and income volatility there is pressure on internal budgets, key performance indicators (KPI) and ratios. The pressure on the profitability and the traditional business model might increase the search for capital relief or alternative market entry.

**2 ALTERNATIVE MARKETS SEARCH**  
Global oriented reinsurers might look for opportunities in new markets to drive insurance premium growth and gain market share. The reinsurance market in Asia is projected to grow with a compound annual growth rate (CAGR) of 7% through 2018–2019 which is above the CAGR of 1.5% in the US and the CAGR of 0.4% of the global reinsurance market through 2019–2024<sup>1</sup>.

The increased amounts of alternative capital (e.g. cat bonds) in the sector (approx. 15% of global reinsurance capital according to Aon<sup>2</sup>) and the current soft market have forced reinsurers to diversify their business portfolio more and improve their performance in other areas of business and products.

We observe a shift to new product areas like advanced aerospace and cyber. Emerging markets in addition, might be interesting as growth is driven by the strengthening economy, growing population, urbanizations and a rising middle class. Yet, reinsurers might face barriers of market entry as a protection measure in high-growth markets.

Since 2015, we have seen reinsurers investing and partnering significantly on multiple foundations of innovation closer to the end user of insurance products.

**3 CATASTROPHIC EVENTS**  
With the rise in natural catastrophes, reinsurers can look to improve insurance coverage and reduce the increasing protection gap. The global insurance protection gap, the difference between economic losses and the insured amount, was USD 280 billion in 2017 and 2018<sup>3</sup>.

In the past years we observe the sophistication of modelling catastrophic risk (cat risk). This is mainly driven by increased focus from rating agencies, embedding cat modelling in solvency regulations, increased data availability, increased computer power to run models and increasing focus on climate change effects.

**4 EMERGING TECHNOLOGIES**  
The adoption of emerging technologies offers opportunities to innovate and develop new insurance offerings with enhanced customer oriented focus, improved operational processes and assess risks arising from products and portfolios.

Robotics is used to perform potential tasks and processes regarding sales, underwriting, policy issuance and servicing, claims processing and risk management. We recognize that (re)insurance companies often set up specialized departments focusing on implementing robotics process automatization.

Another interesting field of use is satellite imaging, which enables to gather information that can be utilized in loss and risk assessments to

assess damage from natural disasters. Satellite imagery also enhances claim handling processes to assess the extent and type of damage, even for remote locations.

A blockchain enabled reinsurance platform can help reduce the losses on claim leakage and fraud, reduce time and cost of contract processing and facilitates automated processing of settlements between insurers, reinsurers and retrocessionaries.

**5 IFRS 17 IMPLEMENTATION**  
(Re)insurance companies face challenges in implementing IFRS 17 as reinsurance specific challenges arise. In the exposure draft of 26 June 2019 the IASB attempts to minimize the accounting mismatches arising between direct and reinsurance contracts.

The main challenges (re)insurance companies still facing are for example:

- Grouping of treaties that cover multiple lines of business, portfolios or products;
- Allocation of new (direct) business to the annual cohorts;
- Contract boundary mismatch with the underlying direct insurance contracts vs. the reinsurance (treaty) contract boundaries; and
- Implementation IFRS 17 regarding specific topics e.g. “proportionality”, “profit commission” and “profit sharing”.

Additionally, the Variable Fee Approach (VFA) is not applicable to apply on reinsurance contracts. This might cause a mismatch in case the underlying direct insurance contracts are modelled for VFA. Insurance companies who have reinsurance held might utilize the possibilities to rearrange treaty and contract structures in case this is realistic from a cost/benefit point-of-view.

**6 INVOLVEMENT OF INSURTECH**  
Reinsurers are partnering with technology firms to implement big data and analytic strategies. New business models are explored and often combined with partnerships and investments in InsurTech, with a strong focus on data analytics. The activity of especially the two largest reinsurers, Swiss Re and Munich Re, has been noteworthy.

On the Internet of Things (IoT), we see for example Munich Re acting as partner with Bosch and investing in IoT platforms like Relayr. Other start-up investments include Swiss Re as partner of Startup Bootcamp and Munich Re as investor in on demand direct insurers Trov and Slice. In turn, Trov plans to insure Waymo’s self-driving cars, bringing telematics developments and many different innovations within reach of Munich Re. In the Dutch market, we have seen the arrival of IptiQ (a Swiss Re white label) in the health insurance market, which was the first new arrival in the health insurance market 10 years’ time.

**Work to do for actuaries**  
The discussed trends above show there are a lot of areas across the entire (re)insurance cycle in which an actuary should take his/her role.

Product development, pricing and reserving are traditionally fields in which actuaries have a relevant role. An actuary is able to analyze the different risks and manage or advise the different stakeholders adequately. The increasing involvement of InsurTech will only further expand these roles as the traditional fields will be broadened. Additionally, emerging technologies will change the landscape, as (re)insurance companies are able to make use of more sophisticated and complex models and have (direct) access to more (policy) data. An actuary is able to fill this gap as they can combine their understanding of the models with their data management skills. Going forward, we observe that actuaries work closely together with data management and data scientist teams, in order to enhance data quality and getting more insight in the portfolio resulting in better analyses.

Looking at transition to IFRS 17, we observe that the effective date comes closer and the pressure to overcome implementation and dry-

run challenges increases. Compared to the introduction of Solvency II an increased joint effort and interaction between actuaries, finance and IT is observed. Actuaries will play a vital role in this as they are able to provide meaningful explanations about, among others, the IFRS technical results and profit and loss accounts. We foresee an involved role for actuaries in performance management of the insurance contract portfolio.

Furthermore, the above trends also influences the 2<sup>nd</sup> line actuarial functions. Next to the actual implementation and (dry) runs for IFRS 17, reconciliations between IFRS 17 and Solvency II have to be made as the (re)insurance companies try to align their choices and assumptions. With knowledge of both valuation methodologies actuaries are perfect for this job and to add significant value to the business and product managers departments.

We advise (re)insurance companies to already involve the actuarial function holder in the IFRS 17 implementation and dry-run results to speed-up the adoption and understanding of the new balance sheet, the profit and loss statement presentation and understanding of the reinsurance results.

Concluding, we expect an increasing demand for actuaries in reinsurance in the innovative environment, on the alternative markets and in responsibly addressing climate change, among others. Understanding of the insurance landscape, data, models and new techniques will be needed to stay in control. Now, the actuary has these capabilities and will stay as relevant as can be. ■

1 – Sources: SwissRe & Reuters  
2 – Reinsurance Market Outlook – July 2019  
3 – SwissRe Sigma

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