Dear friends,

As excitement for the upcoming World Cup tournament builds, I think about the use of big data and analytics in sports and beyond. In our industry, data, both big and small, and access to information have been important for a long time.

While many analyses and benchmarking are not performed due to reasons such as lack of resources, low accessibility and system restrictions, a lot of public and non-public information is available which, after being processed the right way, can add value to your daily operations. We have discussed this with many of you and the response has been very positive. Therefore, we plan to first do a survey to get an overview of what you are interested in and to produce some analyses. As a result of the survey, we hope to be able to develop and add this to our service tool box for your benefit.

Until we meet again, I wish you a great summer filled with memorable World Cup matches. Finally, I remind all to sign up for our yearly conference scheduled for October 12th, another not-to-be-missed event.

Yours sincerely,
Svein-Børre Solvang
CEO SCOR Sweden Re

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### Analysis for Clients

#### Balancing Diversification by Risks, Geography and Markets

The 2018 disclosure of the Solvency and Financial Condition Reports is just around the corner. Reading and mining these reports is one of the many sources SCOR Sweden Re uses to analyze the markets and create benchmarks to share our insights with our clients.

Freeing up capital through diversification is somewhat limited within the SF, and a good reason for using a Full Internal Model (FIM) instead. In the Nordics, however, internal models are rare, and none of the companies in this study employs a FIM.

![Diversification Effect Within SCR](image)

For the Standard Formula, the effect of the diversification is calculated on an aggregate level as $1 - \frac{BSCR}{\sum_{i} SCR}$, where $i$ corresponds to the risk modules of the Basic Solvency Capital Requirement (BSCR).

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### A key metric in the Solvency II regime is the Solvency Capital Requirement (SCR) ratio itself. Looking at the Nordic market, we see the ratios range between 120% - 800%, and the opinions on an optimal ratio varies just as much. A lot less debated is the benefit of the diversification within the SCR calculations; here higher is always better. The graph shows the average diversification effect by country, along with the intervals. The average for the Nordic market is 20%, which is generally obtained through the Standard Formula (SF) approach.

Generally, the cost of implementation is considered too high compared to the rewards. In addition, increasing diversification can be achieved in more cost-efficient ways, and reinsurance remains one the most straightforward options. A cornerstone of SCOR's strategy is balanced diversification in terms of risks, geography and markets. The resulting output from our FIM is a 49% diversification effect, meaning roughly half of our capital can be reinvested in our business. This allows us to take on the risks of our clients at a very cost-efficient rate, creating win-wins and diversifying our shared risks.

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¹The study is based on 50 of the largest life and personal lines companies, with a Life SCR above 1 MEUR.
²A handful of the companies use Partial Internal Models, mostly the version with the Danish longevity module.
Wearables: A Game Changer?

As wearable technology continues to rise, one may ask whether wellness applications, mobiles and wearable devices are life changers, or merely popular gadgets? The SCOR Global Distribution Solutions team examines the results of its study involving Umanlife, a health and wellness application provider based in France, which analysed more than 6 million tracking data points from its 25,000 French users over a 5-year period.

The study measured how wellness apps contribute to health factors like weight loss, sleep and physical activities. Over 60% of users reported weight loss after the first month or two, and while motivation levels fluctuated, consistent use of the app showed an increasing trend of weight loss. In terms of sleep, 32% of users initially slept less than 6 hours per day. Over a year, these short sleepers recorded more than 1.6 hours of additional sleep per person nightly, with the app showing that 85% of those in the healthy 7-9 hour range remained there. For activity levels, 67% of physically inactive users with less than 2000 steps per day consistently recorded more steps over time.

In the future, broader applications of these types of user analytics could bring opportunities for insurers in many areas including risk prediction, claims reduction and in-force wellness management.

Impact of Artificial Intelligence

For the past few years, artificial intelligence (AI) has been progressively transforming the way in which the economy and society operate. This expansion lies at the crossroads of three major technological developments: the emergence of big data, the normalization of the interconnection between humans and machines, and advances in machine learning, commonly referred to as technology that enables machines to learn from experience.

The insurance industry is concerned by these significant changes on two fronts. First, new risks associated with AI must be assessed, quantified, insured and mitigated against. The increasing use of AI raises numerous risk questions.

For example, how can the insurer manage the shift in its risk profile due to impact of AI on biometric, property, casualty, financial, operational and strategic risks? Second, how can the insurance industry leverage off the potential of AI? How can it be used to improve competitiveness, improve the customer experience, reduce risk exposures and improve profits through greater use of automation, efficiency, refined underwriting and segmented pricing?

These questions and more are addressed in SCOR's March 2018 publication, The Impact of Artificial Intelligence on the (Re)Insurance Sector.