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INTERVIEW

ICELAND AND THE EUROPEAN ECONOMIC AREA

INTERVIEW BY **SARAH COLLINS**

Settling for membership of the European Economic Area after leaving the EU would be a "great humiliation" for the UK, Iceland's finance minister, Benedikt Jóhannesson, has told The European Actuary. In a wide-ranging interview, he revealed his thoughts on Brexit ("political chaos"), the króna's appreciation ("we need more stability") and his country's EU membership bid.

REYKJAVIK

Mr Jóhannesson, a first-time minister and leader of the liberal Reform party (Viðreisn), is baffled by the UK's decision to quit the EU. 'I see a complete lack of direction for the UK on what they want to do,' he says. 'They invented some sort of bogeyman and didn't really know what it meant.'

The ardent pro-European - and trained actuary - says that joining alternative blocs such as the European Economic Area (EEA) and European Free Trade Association (EFTA) has been good for Iceland, but would amount to a step backwards for the UK. That's because the EEA, which effectively serves to extend single market rules to Iceland, Liechtenstein and Norway, offers little the UK doesn't already have and much it doesn't want - the free flow of workers, mandatory EU rules and ongoing financial contribution.

'If the UK were a member of the European Economic Area, it would be stuck with all the things that the UK thinks are disadvantages,' Mr Jóhannesson said, 'but they would have no say on how to form the rules and regulations. So it would actually be a great humiliation for the UK, going from a full member to being an associate member.'

But Mr Jóhannesson says Iceland would have been "far worse off" had it not been in the EEA and EFTA (the four-member trading bloc joining Iceland, Liechtenstein, Norway, and Switzerland), and

> *You always try to stick to the fact that one and one is two, no matter what you'd like it to be*

Benedikt Jóhannesson

admits it might be the least worst option for the UK.

'It would certainly be better for the UK to join the EEA than breaking off all relations. Leaving altogether would be the worst,' he said. 'It's certainly been true here in Iceland that we've had great economic advances within the European Economic Area, and had we not been members we'd be far worse off. For example, now we have an expanding economy and the free flow of labour has helped us greatly.'

Following the biggest banking crash in history (compared to the size of its economy), Iceland has rebounded. GDP growth was 7.2pc last year and is set to rise by 6pc in 2017, according to the International Monetary Fund. The government has shrunk its debt pile by almost half since its 2011 peak, after letting its three major banks go bust. The buoyant tourism sector is hoovering up the free flow of EU workers, and foreign visitors are pouring in, despite the strong króna, with more than 1.2 million visiting in the first half of 2017 (four times the entire Icelandic population).

But the currency is still a worry for the finance minister, who says it was "completely in shambles" after the crisis hit. It initially lost 50pc of its value before beginning a steep climb upwards, rising by over 20pc against the euro and by over 30pc against the pound just last year.

'It's certainly true that I hold the Icelandic króna in low regard,' he explains. 'It's been independent for almost 100 years and it's lost 99.99 percent of its value. There are not many similar examples in the developed world,' he says. 'We need more stability.'

He has made no secret of the fact that he wants to peg the currency to the euro, but the biggest party in Iceland's coalition government - the Eurosceptic Independence Party - is more cautious. The government has commissioned a monetary and currency policy review, due to be completed by the end of 2017, though it's not certain it will lead to a major policy shift.

'We all agree that the goal is more stability of the currency,' he says of his coalition partners. 'And that could involve pegging, or pegging within some range, but no decision has been made on this.' As a "stepping stone", Mr Jóhannesson is pushing for a currency board, styled on the institutions that kept a strict exchange rate regime in place in Lithuania and Estonia in the run-up to EU membership.

The minister, who ran his own financial consulting and publishing firm for over 30 years before deciding to enter politics, pushes for economic stability and sees membership of the EU as a tool to achieve that. He hopes to restart Iceland's accession talks, which began in 2010 but stalled in 2013 under the previous Eurosceptic government. Opinion polls in local media show Icelanders are in favour of a vote on whether to restart EU membership talks, but are not necessarily in favour of membership itself - especially if it means having to give up their fishing rights.

'I think that would be the main negotiation point - keeping our independence in fisheries, as we have them now. That would actually be no sacrifice on behalf of the European Union because the EU has no rights within Icelandic fishing limits at the moment,'

STJORNARRADID, the seat of the Prime Minister's Office and the Icelandic Government's headquarters.

Mr Jóhannesson explains. It's emotional issue, as the sector contributes around 8pc to GDP and makes up a fifth of Iceland's exports.

But Brexit may serve as a sobering tale for Icelanders, he says. 'The political chaos within the UK should teach people a lesson, but I don't know whether it will,' he says. 'If people in Iceland follow the news, the problems the UK has with the Brexit process and defining what it wants, should certainly make it more likely for Iceland that we should join the EU.'

With the US under President Donald Trump turning increasingly isolationist, Mr Jóhannesson says it is more important than ever to build alliances. 'Even before the crisis, the US, which has been a very close ally of Iceland, decided well, Iceland should be part of Europe,' he explains. 'So we need some friends. I think that's one lesson that we should have learned: we need friends when we are in a crisis. And we did not find these friends within the US. Actually, we didn't have all that many friends in Europe, either, probably because we were not part of the club,' he says.

His political views have been honed over years of work in the private sector, in insurance and in pensions. But he was "always interested in politics", he says. 'I come from a very political family, and politics was much discussed at home, so probably, as a child, I foresaw becoming a politician,' he says. 'But then as I grew up I became less and less interested.'

The Damascene conversion came in the run-up to the 2008 banking crash. 'Business people, up to a point, took over everything in Iceland in the years leading up to the banking crash,' he says. 'After that, in 2008, 2009, I thought, "This has to change". You can say that I was waiting for someone to step in and try to make that change, and since no one came, I finally felt that I had to give it a try myself.'

His actuarial studies have helped him throughout his career - including in the political realm – 'because you get so used to thinking in models, and thinking in terms of problem solving. It probably helps me that people know that I have this background in mathematics, actuarial science, economics, that probably helps me implement some things,' he says. He says the key for an actuary in politics is to stay "true to yourself". 'That is, you always try to stick to the fact that one and one is two, no matter what you'd like it to be.'

BIG DATA IS COMING
ARE YOU READY?

INSURANCE PRINCIPLE AND ACTUARIES IN THE AGE OF FINTECH

BY **ESKO KIVISAARI**

Insurance is based on the idea of pooling of risks: everyone in the insured pool pays a modest premium so that the unlucky ones in the pool encountering a loss will be compensated.

Risks accepted into the pool will be uncertain. It should be possible to quantify their extent and probability. Providing that the risks are (at least to a large extent) uncorrelated the law of large numbers makes the pool manageable – the larger the pool the less the losses vary around the average. An additional concern in the management of the pool is to take care of moral hazard – members of the pool should take care to manage their risks responsibly. Especially they should not be able to benefit from the pool at the expense of other members through their own actions (or inactions).

Through all the history of insurance insurers have used all possible tools to manage insured pools as well as possible. Initially this has meant that insured risks are analysed and differentiated into separate categories based on their riskiness. This has made it possible to set an as fair as possible premium to each risk. Insurance in its voluntary form does not contain inappropriate cross subsidies from one member of the pool to another member (it needs to be noted that in compulsory or social insurance such cross subsidies are possible – and also when the use of gender as a tariff factor became forbidden in the EU also voluntary insurance has more cross subsidies than before).

The risks in the pool are monitored even when they are already in the pool. This plays a role when insurers calculate their technical provisions that show how much assets they need to have in order to cover their risk position. In the extreme a member of the pool can become too risky and will be excluded from the pool (although legislation often has strict limitations for this exclusion).

BIG DATA IS COMING
ARE YOU READY?
INSURANCE PRINCIPLE AND ACTUARIES IN THE AGE OF FINTECH

It has been said on some occasions that the emergence of fintech and especially the phenomenon of Big Data with developing data analytics will make insurance obsolete. This is based on the idea that with new tools it will become possible to forecast the future so minutely that there is no room for uncertainty and no role for insurance. While it is true that many new challenges to the insurance principle are emerging with Big Data we feel the insurance principle is alive and well for the foreseeable future.

WHAT IS BIG DATA?
Big Data denotes the idea that the exponentially increasing amount of digitally stored data creates a radically new world. In addition to the volume of data the concept includes the advances in the following areas:

veracity (meaning data quality needs to be checked and biases, distortions and noise should be cleaned),

variability (data comes from many sources and is often less structured), and

velocity (due to Moore's law it is possible to use increasingly sophisticated methods to analyse data, with the cost going down).

It can already now be said that the possibilities involved in this development present insurers revolutionary new tools to manage insured pools. Traditionally actuaries have used simple proxies (like age, gender, address, smoker/non-smoker) to differentiate risks into different tariff classes. If however the insurer would today know a person's shopping habits for ten years, what this person buys from the pharmacy, how often this person goes to the gym etc., one could (at least in theory) say it is unnecessary to know the age or gender of this person. It needs to be said that today's analytical knowledge is catastrophically lacking in this area: there is a huge lack of understanding the causality of certain data leading to different outcomes.

It needs to be added that the revolution is not only about the volume of data but also very much of velocity: in earlier times even when there was data exact methods would have used too much computing power, leading to the use of inexact/proxy methods. Also in earlier times data was a very expensive resource meaning it made a lot of sense to create simpler proxies.

We'll start this analysis from the idea of a "perfect" world. In an ideal world we would have complete information and our analytical tools would make perfect predictions of the future. Would we be able to say exactly when a house burns, when two vehicles crash or when a person contracts a disease or dies? No, we would still only have probabilities, albeit more exact ones than today, of what will happen. We would still not be omniscient and omnipotent gods knowing in advance how things turn out.

We would certainly be able to know the probabilities better. We would be able to differentiate insured risks into more exact categories. We would be able to set fairer premiums for the risks. But we would still need to pool the risks to benefit from the stabilising effect of the law of large numbers. The insurance principle would be a stronger, not a weaker tool to manage our destinies.

BUILDING THE MODEL
One of the main problems in utilising the possibilities is our lack of proficiency in data analytics. One of the main dangers and challenges is our limited understanding of different causalities. From huge amounts of data we can find many interesting correlations between different things. Correlation means two things happening more or less together. But correlation does not mean one can deduce an outcome. To forecast one needs causality, i.e. the knowledge of something leading to another. It is extremely dangerous to misinterpret correlations as causalities. Without advances in data analytics we cannot make good use of the new possibilities.

Insurance is always based on modelling the reality (model can here also be called an algorithm). These models are always imperfect. With increasing amounts of data it will be increasingly difficult to make certain that the models created will represent the reality correctly. The danger – connected heavily to what is said on correlation and causality – is that the models might only be adapted to the available data with no predictive power to situations not included in this data. Big Data will make increasingly complicated models possible with an increasing need to make certain the models have some real sense.

ASYMMETRY TRADITIONALLY BENEFITS THE CONSUMER

Traditional understanding in insurance is that the information asymmetry benefits the customer. With this we mean that the customer always knows more of his/her situation compared to what the insurer knows. This situation might be overturned with the emergence of big data – the insurer with huge amounts of data and advanced analytical capabilities might be in a fundamentally better position vis-à-vis the customer. This is a threat if this leads to insurers misusing this situation to the detriment of the customer. In the extreme insurers will be able to segment risks into many more categories than what is possible today, with some risks becoming uninsurable. It is unclear how much regulatory attention this might need in the future.

CONCLUSION

As a conclusion we feel the insurance principle will retain its applicability also with the emergence of Big Data. Big Data will create possibilities and challenges to its application but generally there are more possibilities than threats. In the increasingly complicated and interrelated world of tomorrow there will be an increased need for pooling of risks and better techniques available to make this pooling possible. The emergence of Big Data creates a radically new landscape. Such paradigm shifts have occurred earlier. Laplace presented scientific advances with the famous quote "Je n'avais pas besoin de cette hypothèse-là" (referring to God). During the time of the Soviet Union some Russian scientists said that stochastics is only a science needed before full communism where all things will be certain. From the 1980's, advances in genetics and sequencing of the human genome have generated thoughts of full certainty of human life. The insurance principle has easily survived these challenges and will do so in the age of Big Data.

ESKO KIVISAARI is Deputy Managing Director of the Federation of Finnish Financial Services and is chairing the AAE Insurance Committee. This article is written on personal capacity.

INTERVIEW

WRITING THE **ACTUARIAL MODEL STANDARDS** ON INSURANCE

INTERVIEW BY **SARAH COLLINS**

Micheline Dionne is not taking her retirement lying down. The Canadian native, who has held several top posts in life insurance companies, is now active on the board of Assuris, a non-profit that protects policyholders against the failure of life insurance companies, and on the International Actuarial Association's (IAA) executive committee.

Her task: to write the actuarial model standards on insurance, following the adoption of the first comprehensive international financial reporting standard (IFRS) for insurance contracts in May this year.

'IFRS17 has been very long to develop, and there has been some controversy,' she tells The European Actuary over the phone from Montréal. 'Because of the fact that all jurisdictions have different approaches, it's probably even more difficult than for some other IFRSs to move into this new standard.'

But it will be worth it, she says, because, for the first time, an attempt has been made to harmonise how liabilities for insurance contracts are valued, making it much easier to understand global financial statements.

'It's already difficult to understand the financial statements of insurance companies, but if you add to this the complexity of having different methods across the planet, it makes it even more difficult to understand,' says Ms Dionne, who is the IAA's representative on the IFRS advisory council.

By 2021 the International Accounting Standards Board (IASB) wants all jurisdictions to apply the standard, though it is up to each jurisdiction to determine a date and adapt the content. 'The IASB hopes very strongly that when people adopt IFRS17, they adopt it as is,' said Ms Dionne, who was speaking in a personal capacity. 'At the same time, adopting it with some changes is better than not adopting it at all.'

But while over 120 jurisdictions use IFRS standards, the United States is sticking to its US Generally Accepted Accounting Principles (USGAAP). The two standards have been 'evolving in similar directions' - for instance, IFRS17 uses current assumptions and USGAAP is moving that way. But there are still differences, including on risk. Whereas IFRS17 takes risk into account 'on an explicit basis' USGAAP looks at risk and profit together, Ms Dionne explains. 'This way, under IFRS17, even if at one point you don't have any profit left, you still have some money set aside for the risks that are involved in these contracts.'

The big difference, though, is the "look" of the financial statement. 'The IFRS is more complex to get at from an actuarial point of view,' she explains, 'but you get much more information. If you have only

> *The IASB hopes very strongly that when people adopt IFRS17, they adopt it as is.*

one big number - the liabilities - then it's very hard to see what's really happening.'

An IAA task force on insurance accounting - chaired by Ms Dionne - is developing an International Standard of Actuarial Practice (ISAP4) to guide actuaries in applying IFRS17. 'We're complementing it, but not in a restrictive way,' she says. 'The idea is not to restrict but to improve the understanding of actuaries, and also to convey the responsibility that they have when signing off on the numbers for the financial statements.'

The ISAP4 exposure draft will be published by mid-2018, with a final vote expected in autumn 2019, after several rounds of exposure, comments, reviews and votes. The IAA is also providing practical, educational materials to help actuaries, including a risk adjustment monograph to deal with the new IFRS. 'It was felt there was a need to look at the different ways that companies view risk,' she says. 'We have to really look at something that applies at the higher level, because this is mixing property, casualty and life.'

MICHELINE DIONNE

AN IDEA FOR **A NEW, SOLID SOCIAL SECURITY SYSTEM** FOR GREECE

GEORGE SYMEONIDIS

BY **GEORGE SYMEONIDIS**

The NTS proposal actuarial valuation has won the Best Practical Paper Award at the IAA 2017 Cancun PBSS/IACA Colloquium.

Reforming state pensions is a major challenge for many governments. At the IAA Colloquium recently in Cancun, three academics (Nektarios, Tinios, Symeonidis - NTS) put forward an idea for a reduction of public pension contributions and introduction of Notional Defined Contributions (NDC) for social security, Pillar I of the pension system.

BACKGROUND

Greece has one of the largest percentages of social security contributions for pensions, amounting to almost 24 percent for special groups of employees, scoring among the highest in the EU. At the same time, its pension system became unsustainable a few decades ago, without enough government taking action to bring it back to financial stability.

The current situation in Greece is beyond control, with pension expenditure exceeding 19 per cent of GDP in 2016. Such a burden to the economy nurtures uncertainty for pensioners and undermines economic competitiveness. Recent pension cuts have deprived pensioners of more than 50% of their income in some cases. The reforms and cuts were all a result of necessity following the Greek debt bailout.

GEORGE (GEORGIOS) SYMEONIDIS is a Board Member of the Hellenic Actuarial Authority

The pension system layout today is a classic three-Pillar one. Pillar II accounts for Occupational Schemes (IORPS) and Pillar III for Private Insurance. Neither of the two is very popular and the first Pillar, Social Security, accounts for most of the expenditure. The latter operates as a Defined Benefit Pay-as-you-go system (DB PAYG) and provides three types of benefits: a main pension, a secondary (auxiliary) pension and lump sum amounts. It also provided provident grants.

THE PROPOSAL

The NTS proposal has been quantified, potential problems have been identified and solutions have been proffered; even the considerable transition problems are likely to be more tractable than the most probable future course of the present, possibly non-viable, arrangements.

The first pillar is suggested to become a single provider for all primary pensions. The contribution rate for the main pension fund will be 10% on income flat, previously 20% and in some cases for professions of special nature, 23,6%. It will be working on a Notional Defined Contribution basis financed on Pay-as-you-go principles. The legislated age thresholds will continue to exist as minima (62 with 40 years of work or 67 with at least 15 years of work).

The secondary/auxiliary fund is proposed to be a new mandatory funded Supplementary Pension System. Unlike other countries, Greece already houses the auxiliary pension funds under the first pillar and the proposal is that this remains in the first pillar. Contributions are aimed at 6% at minimum.

Pensions in the auxiliary funds will be financed by the accumulation of reserves, which are expected to rise to EUR 50 billion in the first ten years and to EUR 378 billion by 2060 (around 50% of GDP). Reserves are utilized to create a new National Fund for Investment. To increase the sense of ownership of accounts, opting out into other funds is allowed.

The second Pillar is proposed to be a voluntary occupational pension funds pillar (IORPs). These allow for flexibility across employment sectors inside the European Union and promote saving for the third age within the EU.

One of the main advantages of this proposal is pension protection and the total of the replacement rate is aimed at 75% from the combination of sources. This makes the system more resilient to the fluctuation of the economy and leaves room for higher returns.

Also, state funding is eliminated towards the end of the projection period so the burden is alleviated from the state budget and the aging effect does not negatively affect the state. Regarding aging, intergenerational solidarity is also promoted as the phenomena of older people claiming higher returns on their pensions and later generations finding themselves short on returns because of the demographic changes will be also eliminated. Furthermore, the responsibility is transferred from the state to the individual and people realize the need to save for the third age.

Finally, and most importantly, this proposal is an impetus for growth. Reducing social insurance contributions promotes competitiveness and exports and creates work incentives. Experience has shown that lower contributions lead to more jobs and growth, exactly what Greece desperately needs at this point.

*More information as well as the full actuarial valuation can be found at the IAA website for the Cancun Colloquium 2017, or on https://goo.gl/yaLiOt .

MGAs

INTERVIEW BY
SARAH COLLINS

Actuarial science is not the only way into the insurance sector. Just ask Sam White, the founder and CEO of two successful companies: claims management firm, Action365, and her latest venture, Pukka Insure, which writes commercial motor insurance lines.

SAM WHITE

A psychology degree led to a job in an insurance claims firm, where she says she spotted a gap in the market. 'I saw that it's largely been an area of the insurance market that hasn't been given the consideration and care that I think it needs to be given, both for the consumer experience but also to manage loss ratios,' she tells The European Actuary over the phone from her base in the UK. At the tender age of 24, she left to set up her first insurance enterprise, and she has never looked back.

Pukka, now in its second year of trading, is a managing general agent (MGA), an agent/broker type that she says allowed her to enter the market more easily. 'It requires a lot less investment from a set-up basis,' she explains. 'Solvency - and certainly Solvency 2 - has quite stringent require-ments on the amount of capital you need to retain in order to be able to write motor business. An MGA structure allows you to get into the market more quickly and effectively, without that capital requirement, because you're using somebody else's capital, in essence.'

> ***What an MGA does is giving business control***

SAM WHITE

The other plus for MGAs, she says, is control, with Pukka doing everything itself, from distribution to claims handling to setting rates. ‘The only thing we’re not doing is managing the solvency and capital requirements,’ she says. ‘Fundamentally, what an MGA gives a business, as opposed to a tied agency or a broker scenario, is control.’

Ms White has pushed back against the danger of “silo-ing out” services to different areas, insist-ing on the importance of “cohesion between underwriters and claims”, which an MGA gives her. That cohesion may even benefit reinsurers looking to write much more directly into the market, she suggests. ‘From anybody’s perspective, it must make sense to have as much of the chain under one roof as possible because you get efficiencies and economies of scale,’ she says. ‘And it clearly makes sense, from a reinsurers’ perspective, to kind of come further into that chain.’

Those efficiencies are gained largely by reducing incurred claims costs, which she estimates at 80 percent of each motor insurance premium written in the UK (with 15 percent spent on reinsurance and 8 percent on overall expenses) - a reason the UK motor insurance market has been operating at ‘such a loss’, she says. With Pukka, she expects to cut incurred claims costs by at least 25pc, setting a real challenge to market competitors.

And it doesn’t stop there. Action365 is already trading in Australia, where incurred claims costs have been rising, and she is also looking into the Canadian market. But the road to the top has not always been easy, particularly for a young, female CEO in a traditionally older, male-dominated sector.

‘Have I hit some brick walls at certain times? Absolutely. Trying to get funding into the business has been a constant battle and challenge because we don’t look or sound or operate in the way that they’re expecting to see,’ she admits.

‘But, having said that, I’ve got 170 staff now, Action turned over 10 million last year and Pukka’s on course to write 40 million gross written premiums in its second year. So, it’s working. The female values are producing the result.’

MGA MODEL FOR STARTUPS

AN INTERVIEW WITH JEAN-LUC BOURGAULT

INTERVIEW BY **MARK HEIJSTER**

JEAN LUC BOURGAULT

Innovative insurance models are trying to enter traditional insurance markets. NewRe Chief Underwriting Jean Luc-Bourgault sheds some light on this development.

What do you think about the new MGA insurance model ?
'Well first of all, it is not really new, it has always existed, especially in the UK and in the US. They usually were brokers trying to control the distribution. At a certain moment, they decided to enter the underwriting space as well. So I guess what is new is that a number of MGA's moved from acting like a broker and started trying to make money mainly through commissions. So you still have the old traditional MGA's. But you can see that they are more and more behaving like a real insurer, trying to do everything because in that case they can have an access to insurers papers and reinsurance capacity.'

Why do Risk Carriers often cede high portions of the business to reinsurers?
'It is a lot easier for one insurer to offer insurance papers for MGA's across Europe. Being a risk carrier, there are a number of insurance companies that have been formed just for that purpose. They offer the insurance papers with a fee and then reinsure most the business with a reinsurance. But they are really more interested in the fee income. That is their business model. So the risk is transferred to a reinsurer who takes that risk and he doesn't have the regulatory burden that is part of job of the insurer. So this way he will have access to the business but he doesn't have to take care

> **Innovation brings along new challenges but uncertainties as well**
>
> NewRe Chief Underwriting Officer Jean-Luc Bourgault

of all the regulatory tasks and the administration of an insurance carrier.'

Are these MGAs really innovative? Do they get advantage of new technologies more easily than traditional insurers?
'Yes, they are creative because they access the system making use of new concepts developed by innovative people with new ideas. The cloud technology is making all this a lot easier. It used to be quite difficult to enter the market, but that is not the case anymore. The digitalization made it easier to target a client and you can develop a very efficient system because you can start from scratch whereas traditional insurers have to deal with an old system that needs to be adapted to new realities.

So traditional insurers are doing this now outside the normal set up. Take for example AirGo in Germany. At a certain moment they had launched AirGo Direct which used the old system as a back office. It turned out to be very inefficient, so they finally created a completely new digital company outside the main company with creative people. These new MGA's usually are very innovative and that is what we like. The old MGA model is a traditional model and it is lacking efficiency. These new virtual insurers are making the system more efficient at a lower cost.'

Isn't there a risk for insured people that their interests are less covered, with this spread of responsibility?
'In terms of coverage I don't think so because the supervisor authority makes sure that the consumer is protected. I think the problem may be that there is a high risk of failure. These new startups bring along some uncertainty. Normally a case would be paid. But there could be delays. So yes in terms of solvency there is a risk, but it's more a problem of regulation.'

Why is NewRe so motivated and successful to participate to the new insurance startups?
'That's obvious, because they are new clients. Our clients are insurance companies. A new insurance startup is a new client and they usually need a lot of reinsurance. Often they access businesses that are not heavily insured. So this development attracts new business for us. These new virtual insurers having a good potential, we provide them with insurance and we can reinsure their business. We really give access to businesses we otherwise we would not see.'

Where are the markets where this new model is most successful?
'There is a lot of potential, mostly in markets that are very inefficient. That means where the traditional insurance is inefficient. There is quite a lot of volume so you don't need a big capacity. These startups are mostly into consumer products. If you look for example at Motor UK, that is the most competitive market in Europe. There are old startups like Admiral who stepped into the market 15 years ago. Today they are very efficient and competitive. I wouldn't support a startup trying to enter that market. But if you go to Italy for example where there isn't a lot of competition, there is a potential. So it's a question of inefficiency: the traditional market shouldn't be efficient and it is mostly about niche products.'

INSURANCE RISK MANAGEMENT

INTERVIEW BY **SARAH COLLINS**

Risk management might be his principal task, but Philippe De Longueville is increasingly becoming a kind of 'chief regulatory officer', he says.


PHILIPPE DE LONGUEVILLE

'WE SPEND FAR TOO MUCH TIME on regulatory aspects, instead of working on the real risk management of our own companies,' Mr De Longueville explains from his office in one of Brussels' tallest buildings. The Belgian native is chief risk officer (CRO) and a director on the board of Belgian cooperative insurer, P&V group (though he was speaking to The European Actuary in a personal capacity).
'You can ask every CRO', he will tell you the same. 'In Europe, we are all convinced that the regulators are going far too far in what they ask - that is not necessarily to be sure that the sector is safe,' he says. And the cost of complying with 'such a complex machinery' is driving smaller players out of the market. 'You have a kind of "big is beautiful" phenomenon,' he says. 'The concentration has been really accelerated by the new Solvency norms. Their principles are often very good, the only problem is the translation in practice - sometimes you completely miss the goal.'

IF YOU ARE A SMALL INSURER, the key to surviving in such a globalised marketplace, he counsels, is to specialise. 'If you are a generalist company, a classical insurance company selling every product, it's very difficult to

> ***If you think in terms of risk management, one of the risks is that it is just the channel you are not using to sell your products that is booming tomorrow.***

survive because your percentage of costs will be higher than the competitors,' he explains. 'If you are a specialist company, I think there is still a future.'

HIS SECOND TIP IS TO BE present 'in every distribution channel', from tied agents to brokers, from bank insurance to newer channels like Managing General Agents (MGAs). 'If you think in terms of risk management, one of the risks is that it is just the channel you are not using to sell your products that is booming tomorrow,' he said.

IN BELGIUM, PRODUCTS ARE still sold through largely traditional distribution channels. P&V works mainly with brokers and tied agents. He notes that the agents tend to be a lot younger than brokers - a phenomenon he can't explain. 'Basically, there is not such a difference in the activities. It's still to help your clients to find the right insurance product,' he notes. 'But the tied agents are part of the family, they really belong to the group. The disadvantage is really that they have only one product to sell,' he adds. Brokers, on the other hand, have more freedom to design their products and treat insurance companies solely as 'risk carriers'.

INSURANCE RISK MANAGEMENT is a relatively new task for De Longueville, who spent 20 years in the reinsurance business, specialising in underwriting. And one thing he has noticed is that insurers' risk appetite has not always been consistent across the business. 'We have seen in the past, for example, companies that were very prudent on the underwriting side - meaning very selective with their clients, only trying to take the really best risks - and on the other hand, being very aggressive on the investment side,' he said. The new way of doing risk management is to have 'a central view on everything', he says, making sure you 'consider the risk the same way in whatever activity you have'.

HE ALSO TEACHES RISK management to actuarial science master's students at the Catholic University in Leuven (UCL). As an actuarial sciences graduate himself, what does he think drives mathematicians into the insurance sector? 'I don't think that actuaries are originally interested in insurance. It's challenging, but they are interested in applied mathematics, and insurance is a fantastic role to apply mathematics,' he says. In fact, De Longueville's once-held dream was to go into astronomy. 'Astronomy is also a fantastic area of applied mathematics. The only thing is that to find a job in astronomy is much more difficult than in insurance.'

PHILIPPE DE LONGUEVILLE
is Director and Member
of the Executive Committee
of P&V Group

ACTUARIES AND **EMPLOYABILITY**

INTERVIEW BY **PIERRE MIEHE**

Christelle Dieudonné is Partner, Insurance and Financial Services Practice at Aliotts Executive Search. Our Editorial Board member Pierre Miehe interviewed her about actuaries and employability.

Christelle, you are an actuary and now focus on recruitment, how did you come to it?
'After 20 years of experience, starting my career as a life actuary during 10 years working within insurance companies and consulting and then as a pension actuary for another 10 years within a consulting firm and corporate, I decided to give another direction to my career and move into Human Resources, devoting my time to recruitment for the Insurance and the Financial sector.

It has been now more than 3 years that I have been serving my clients to find good profiles and assist profiles to give another impulse to their career as well as to challenge themselves. I feel passionate and engaged to find the best match between clients' needs and my projects on professional profiles.'

How would you define today's typical career pathway for an actuary?
'If we consider that a career for an actuary is about 40 years, I think this career can be split into 4 phases. Phase 1 is as junior actuary: he finds a job quickly and brings his hard skills to his employer. Phase 2 is as a confirmed actuary: in most of the cases, he will start to manage a team, usually junior actuaries, and want to increase responsibility, salary et cetera. Phase 3 is as a senior. This actuary is now looking for a professional project, usually around middle life. This actuary is looking for a sense of his day to day job. And finally Phase 4: this actuary depending on the profile will continue to increase responsibility, bringing his global view to the insurance fields and starting to develop younger actuaries. Also and depending on whether the phase 3 was a success or not, this phase can be really difficult on an employability basis: it may happen that he loses his job for example.'

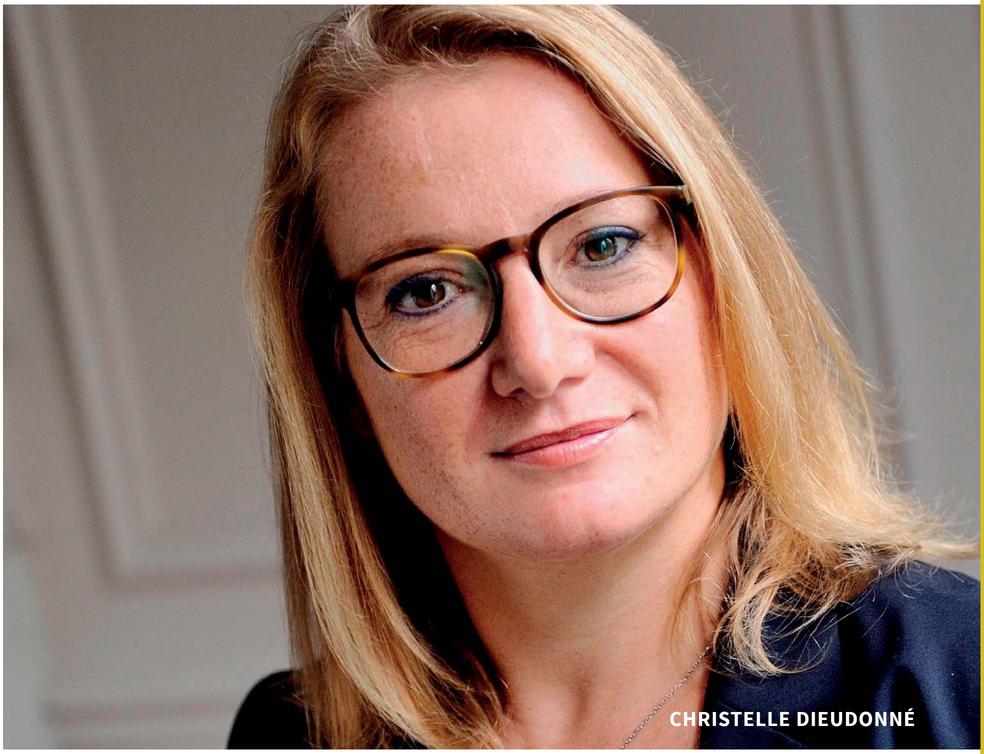
What do you mean by employability?
'It means that the actuary needs to be valuable in the job market and at a level which is consistent with his professional experience and the market where he is working for. For example, employability for a "Fortran programmer" is now close to zero because there are very few employers who are looking for such hard skills!

To keep a certain level of employability, actuaries have to manage their career. Of course, employers can help but in most cases with internal training and specific objectives on these points. However, on a global view, actuaries should be actors of their career.'

What is your advice to actuaries for this?
'To be actor of his career, this does mean to challenge themselves on

An actuary needs to be actor of his own career

technical subjects, stay up to date regarding actuarial hard skills - continuous development -, cultivate the risk view and understand the business and its evolution. This does also mean to increase and develop soft skills throughout the career - soft skills are the most important at senior level. Third; is means to develop and cultivate professional networks which help to meet people and therefore to understand the cosmos of our profession; and finally, it means to be engaged globally within the actuarial profession meeting other actuaries, sharing technical points of view, participating in local actuarial associations - within working groups or other local initiatives - , publishing papers on specific actuarial points of view, research, ideas … and understanding the international organizations which embrace our profession, like the IAA and the AAE. All of these points above give actuaries the opportunity to be open minded and help to be employable.'



CHRISTELLE DIEUDONNÉ

What are the biggest challenges you have found?

'Well, I can notice that in some cases, actuaries during phase 4 can't find any job opportunities and therefore don't have any other options than doing consulting on their own. This option can be a good way to terminate a career. However, this phase will be easier if actuaries have paid attention to the points above throughout their career.

Also, I can notice that the best career has been developed with people together, working within a team spirit. This explains why, I always say to candidates, that if they want to change their job, they need to find first the professional project, the team they will work with and of course the company where they feel they will be in line with the management and the strategy.

So to conclude, managing one's career when we have the privilege to be an actuary is to work hard during the whole career to stay up to date on the technical subjects, which does not mean keeping the capacity to do the technical job but to understand objectives, concepts, reaching the point where the actuary has the global picture and understands interactions between subjects, like a pyramid built with cards, and at the same time, develop the soft skills which are key to developing a career.'

THE LAUNCH OF SOLVENCY II: JUST ON ITS WAY

BY **ROBIN ZEEMAN AND JEFFREY HENNEN**

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Solvency II came into force in 2016. The impact of the new regulatory framework on the solvency positions of European insurers has been disclosed in interim reports throughout 2016 and in annual reports earlier this year. Additionally, insurers have now disclosed the effect of the new framework on their business and their risk management in the Solvency and Financial Condition Reports (SFCRs).

This first wave of SFCRs give us the opportunity to evaluate the progress of Solvency II against the following four primary objectives of Solvency II:

1. The main objective, no one will disagree, is improved policyholder protection.

2. Next, the financial crisis showed that updated supervision was necessary, giving supervisors insight in the vulnerability of undertakings and by enabling them to intervene in a timely manner.

3. Furthermore, financial stability should be achieved by implementing harmonised European supervision, enabling assessing and managing the risks in the insurance market as a whole.

4. Finally, the new regime should increase international competition by facilitating the taking-up and pursuit of the activities of insurers by eliminating differences between the rules to which insurance undertakings from different states are subject.

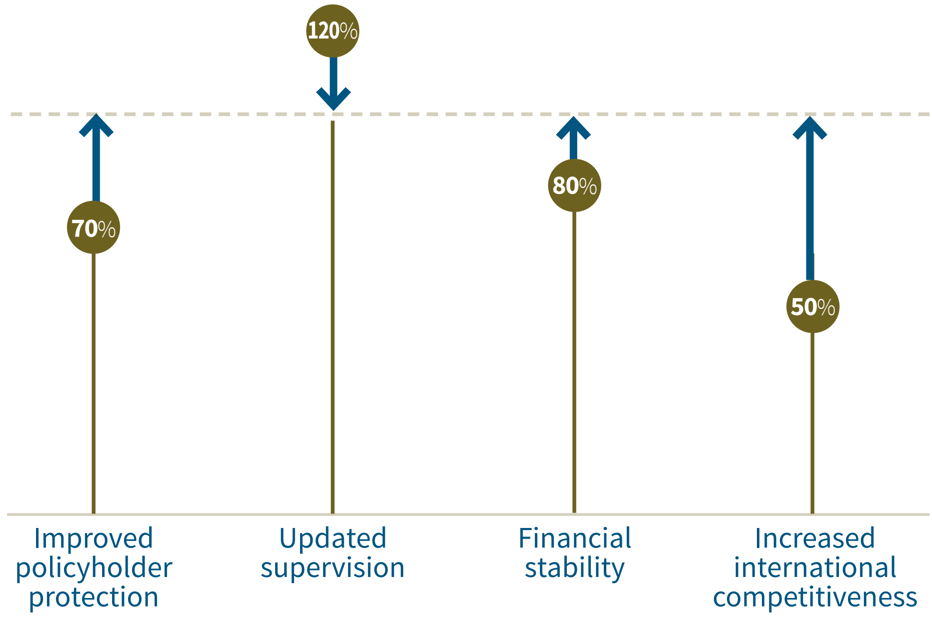
SOLVENCY II OBJECTIVES AND OBSERVATIONS

Below we evaluate the initial objectives of Solvency II and assess to what extend these goals are met.

1. Improved policyholder protection

In July 2007, Thomas Steffen (former chairman of CEIOPS) made an important comment: "Solvency II is not just about capital. It is a change of behaviour." Not only the quantitative risk measures are set to better match the true risks of an insurance company, but more importantly Solvency II significantly increases the quality of risk management within insurers. Risk is now getting in the genes of insurers, leading to a significant improvement of policyholder protection. The future will tell us how risk is embedded by the executive boards in the strategy of insurance companies.

However, insurers have made significant improvements in the field of risk and governance, but steps still need to be taken before the risk culture of companies is mature. Furthermore, there are some subjective elements in Solvency II which can be argued whether they lead to "market valuation". Especially debates on "exit vs. settlement value" and the definition of the "discount curve" are still ongoing and lead to different treatments by local supervisors across Europe. ▶



2. Updated supervision

The supervisory review process ought to make a shift from compliance checking and measurement of capital ratios to monitoring the quality of risk management and governance of undertakings. Currently, regulators have put the (larger) insurance companies under a microscope (called risk-based supervision) and are thus involved in a wide range of business decisions. Next, supervisors have a large set of intervention possibilities in near-default situations. Also, capital management can be influenced by laying restrictions on dividend pay-outs or by introducing a capital add-on in case risks are not effectively measured and/or managed. In this way, one could argue that the current practice of Solvency II might even overreach the target of a principle based regime that aims at better behaviour from insurance companies.

3. Financial stability

The harmonisation of the supervisory regime helps getting insight in assessing the risks in the sector as a whole and also in monitoring the macro risks that face the sector and acting on systemic risks. An example is the EIOPA Risk Dashboards in which sectoral risks are better assessed with similar risk-based data for all insurance companies. Furthermore, where Solvency II is mainly aimed at regulation purposes, it became a very important metric for financial analysts to value companies. Here not only the height of the SII ratio, but extension of the transparency of the underlying risk profile, capital management and generation, and managing the volatility of the solvency ratio are very important topics for financial analysts nowadays.

4. Increased international competitiveness

Taking up new cross-border activities is currently not seen widely in Europe, probably due to the current economic environment. We observe a consolidation trend in the sector, of which cross-border consolidations are a small portion. As such, it is too early to say whether Solvency II has achieved its purpose, but it is definitely a good step forward that group supervision has eased the supervisory roles by letting the group be under supervision of only one national supervisory authority (NSA).

The level-playing field between insurers is then more limited, as NSAs might interpret Solvency II in their own way, imposing additional requirements on a part of the European insurers. With respect to the level-playing field between financial institutions (insurers, banks and pension funds) steps are necessary for European regulation to improve. The differences between capital requirements for pension funds and insurers has a significant influence on the free market system and competitiveness in the field of pension products.

FINAL REMARKS

Solvency II brought a lot to the insurance market and achieved most of its goals, but further steps are necessary to further improve the transparency and to increase the international competitiveness and level-playing field between financial institutions. Solvency II is just on the way to achieve its goals! Time to go from a compliance activity to embedding Solvency II in the steering and management of insurers.

MOTOR INSURANCE IN ITALY: THE DEVELOPING BLACK-BOX TECHNOLOGY

BY **GIOVANNI SAMMARTINI AND DONATO LEONE**


DONATO LEONE

In Italy, the percentage of private cars with a black-box installed reached 19% at the end of 2016 and the trend is still increasing; this kind of motor third party liability (MTPL) cover is widely available in the market, with 26 Insurance Companies among 40 operating in this area offering such a policy to their clients.

It's important to note that MTPL policies with black-box technology are relatively popular in some areas of the South, where MTPL cover is generally more expensive: in Naples, for example, almost 50% of MTPL policies benefit from a black-box technology, while in northern Italy the percentage doesn't reach 10%.

In general, black-boxes are a good opportunity to get access to cheaper MTPL cover for policyholders who are relatively good drivers that nevertheless belong to some high-risk clusters (not only identified by territory, but also by age, car power etc.).

The willingness to have a black-box installed, i.e. to accept to be continuously monitored when driving, acts as a self-declaration that leads companies to consider applying an additional rating factor, leading to a discount (in this sense based on technical reasons rather than commercial ones).

Moreover, the Italian government strongly supports the spread of black-box technology, with the aim of reducing MTPL premiums, that are currently the highest in the E.U.: a very recent law envisages that a significant discount must be

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given when a black-box is installed, based on criteria that will be set by the insurance supervisor.

Based on initial data, it seems clear that the "black-box policyholders" are better drivers: claims frequency is much lower (-20% on average, taking into account all other correlated factors), confirming that the above mentioned discounts are at least to a certain extent justified.

Nevertheless, Italian actuaries are not convinced that MTPL premiums, in their total amount, are going to be progressively reduced as the number of black-box increases. Indeed, there is a great misunderstanding to be removed: black-box technology doesn't instantly make a driver better (as probably someone could wrongly believe), but those who accept having installed are usually the better drivers, and this is the only reason to explain the differences in claims frequency.

The number and the severity of road accidents depend on several factors: traffic conditions, weather conditions, driver's behaviour (i.e. respect for circulation rules), quality of vehicles (active and passive safety systems and their good or bad maintenance), quality of road infrastructure, etc. None of these factors is likely to be modified by the installation of black-boxes (claims frequency has been increasing in the last two years, despite the huge growth of "black-box policies" in the same period). The only improvement we can reasonably expect from an increase in the number of black-boxes is a slight reduction of fraud (fake accidents or claims requests exceeding the effective suffered damages), that in some cases can be detected (but not always recognised during the claim settlement) by black-box technology. Anyway, it has been established that no more than 10% of the total amount of claim reimbursements are currently due to frauds; so it's likely that these little savings in the cost of claims provided by black-box installation can hardly cover major expenses resulting from the whole comprehensive running of black-box technology itself (installing, data collecting, portability).

The combined ratio in the MTPL LoB currently exceeds 100% (101,7% for accident year 2016). Without any predictable reduction of the whole MTPL insurance costs, and given the fact that some policyholders (those who accept to have a black-box installed) will pay a discounted premium, it's likely that there will be others that will pay more (those who don't like to be monitored by a black-box, not necessarily because they are bad drivers).

Please note that Italian context is not easily comparable with other countries, where the purpose of black-boxes is primarily assistance (in case of danger), rather than monitoring of the driver's behaviour.

The MTPL issue needs to be given a comprehensive review. The Italian Actuarial National Board has encouraged legislators many times to set up an "integrated working group" on Motor Insurance, so that with the contribution of all stakeholders plus forthcoming developments in the motor insurance sector, such as those resulting from "autonomous vehicles" we could see the potential rewriting of the concept of motor liability itself.

The above describes the experience of Italy in this field. Italian actuaries hope to contribute to the wider lessons that may be drawn on an international level.

COLUMN OF THE AAE

Historic meeting of the AAE

The 40th General Assembly of the AAE that was held at the end of September in Copenhagen, could rightfully be called historic.

The AAE set out on a new Strategy and Governance structure. Most important changes are that the AAE Board of Directors will no longer consist of the committee chairpersons but will be a separate body with nine elected members. The Board will be responsible for the overall strategy of the AAE and will supervise the execution of the Strategic Plan by the committees. In addition, the Board will recommend to the General Assembly the external relations policy and will focus on a strong relationship with the AAE Member Associations, European institutions and European stakeholders.

In the General Assembly Thomas Béhar was elected as AAE Chairperson and Esko Kivisaari as Vice Chairperson. In his maiden speech Thomas drew attention to his plans to extend the relationship with European institutions so that the AAE can effectively provide them with high quality professional advice with respect to the soundness of decisions from an actuarial perspective. Another key focus point will be the promotion of a European community of actuaries.

The AAE stepped up on its role as Standard Setter. A new European Standard of Actuarial Practice (ESAP) has recently been approved. This standard deals with the actuarial practice in relation to the ORSA process under Solvency II. The adoption of this third model standard represents another important step forward in the development of the actuarial profession in Europe.

To strengthen the ethical standards the Code of Conduct has been revised and modernized. Codes of Conduct of full member associations apply at a minimum to those members of the associations who are fully qualified actuaries and provides guidance on the behaviours expected of actuaries when performing professional services. In order to enable member associations to update their Codes of Conduct the new Code will come into effect from 1st January 2021.

During the General Assembly it was my pleasure to launch the new website of the AAE. So, please have a look at www.actuary.eu.

Ad A.M. Kok AAG Hon FIA
Chief Executive
Actuarial Association of Europe

COLOPHON

The European Actuary (TEA) is the bi-annual magazine about international actuarial developments. TEA is written for European actuaries, financial specialists and board members. It will be released primarily as e-mail newsletter.
The Editorial Board welcomes comments and reactions on this edition under info@theeuropeanactuary.org.

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NEXT ISSUE
The next issue will appear in April 2018. Suggestions can be e-mailed to info@theeuropeanactuary.org

EUROPEAN AGENDA
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