N° **25**
MAR 2021

aae
actuarial association of europe

# GOOD POLICY STARTS WITH GOOD DATA

INTERVIEW BY
**ANDRÉ DE VOS**

**The Dutch handling of the corona pandemic is driving Maurice de Hond crazy. According to this Dutch political pollster, medical professionals wield far too much power when it comes to curbing the virus. 'We need to make decisions based on good data, not on the medical opinions of a small group of specialists.'**



MAURICE DE HOND

**MAURICE DE HOND** has a background in market research and runs his own polling agency View/Ture. He started publishing blogs and scientific publications on corona on his website Maurice.nl in March 2020.

'*First they ignore you, then they ridicule you and in the end they say they knew all along.*' Maurice de Hond is not the person to shy away from a public quarrel. De Hond became well-known in the Netherlands with his method for predicting the outcome of general elections. Since then he has been in the Dutch media with an array of topics ranging from proposals for the improvement of the educational system to trying to revoke a conviction in a murder case.

His interest in corona started when news of the outbreak in Wuhan first hit the headlines. By the end of January 2020 he included a question about the novel virus in his own periodic poll amongst Dutch citizens. '*Is this going to be as bad as the Spanish flu?*'

He decided to dive into international scientific research on viruses and even launched a website where he publishes his views and that of scientists from around the world. From the beginning De Hond has been a strong defender of the theory that the coronavirus is spread through the air by aerosols rather than by small droplets that hit nose or mouth. The latter theory is the one that is embraced by the national Dutch institute for public health (RIVM) and the World Health Organisation (WHO). It's also the theory upon which official Dutch corona policy is based.

De Hond had his 'Eureka moment' at the beginning of April 2020 when he saw a video by a Japanese professor that showed how aerosols move around in a closed space. '*That video explained most convincingly how the virus is spread and why all these 'superspreader events' always occur indoors. And why good ventilation systems are essential. In Japan and many other countries this was the dominant theory from the beginning. In the Netherlands we stuck to the droplet-theory, and based all corona measures on it. Mistakenly so.*'

It took a while before mouth masks were accepted in the Netherlands to prevent spreading. In the beginning they were regarded as useless by RIVM and the government. Instead the focus was on hand washing and keeping a distance of 1.5 metres. Only recently and not quite wholeheartedly has RIVM, and the Dutch government, admitted that aerosols might play a role in spreading the virus. And that good ventilation is important.

> '*The mass hysteria is fuelled by doctors. They've become part of the problem.*'

De Hond explains the stubbornness of the government in ignoring alternative explanations looking at the Dutch approach to controlling the pandemic. '*Doctors are in the lead. It's virologists and epidemiologists who are determing Dutch policy. They have become very powerful because the government chooses to heed their advice exclusively. The dominant view in the medical profession is that every Covid-death is one too many. Hence the lock-down, the closing of schools and shops, the 1.5 metre rule. Even though we don't know how effective each measure is.*'

'*Virologists and epidemiologists are scaring people, the media are making it worse, the general public gets scared and politicians feel forced to react with even starker measures. The medical approach hardly leaves room for a different view. The mass hysteria is fuelled by doctors. They've become part of the problem.*'

A good illustration is a recent interview with a prominent Dutch health official who cited the death of a 17-year-old to demonstrate that Covid-19 doesn't only affect the elderly. '*I checked the statistics in that period and there was only one death under 25 in the whole of the Netherlands: exactly the person that was mentioned by the official. You can't use that as an example! Unless your goal is to scare people. I might counter with the case of the 90-year-old that jumped from a balcony because he couldn't stand the isolation anymore.*'

De Hond would rather see a broad range of professionals

advising the Dutch government how to address the pandemic. Not just virus specialists, but economists, behavioural scientists, psychologists, data-specialists, you name it. *'The problem with the current medical monopoly is that they don't get to see the drawbacks of the policy they are defending. Shops and cafes that go under, the increasing number of children facing psychological and learning problems because they can't go to school.'*

*'The medical focus on avoiding every single Covid-death doesn't make sense. Hundreds of traffic deaths can be avoided every year if we start driving 30 km per hour on our inter-city highways. But nobody in his right mind would suggest such a thing. Why not have the same approach to corona? The risks for under 60-year-olds aren't that much bigger than those of a common flu. There's no need to keep all those people in lock-down. It's the over 60's you want to protect. Base your policy on that.'*

Good policy starts with good data, according to De Hond. And that's where he thinks it all went wrong in the Netherlands. *'Good data have been lacking from the beginning. The Covid-data in the Netherlands are still horrific. Only now do we get reliable daily figures on the number of positive tests per day. Ten months into the pandemic! When we started testing in the spring, we could have asked each positive tested person to fill out a survey with*

all kinds of relevant questions. *We would've had a gold mine of information by now, a database with 8 million responses, for good policy building. But even now we are installing new regulations without knowing how they will work out, and without knowing how to get back to normal, because we haven't got the right data. When the contaminations go down, are we going to open up the hairdressers, or the schools? Nobody knows.'*

> ' *I would surely spend a few millions more on data analysts in every hospital. Make data accessible.'*

The problem according to De Hond is that neither medical professionals nor their organisations are very good with statistical data. *'That makes you miss out on a lot of relevant information. Data are my job, my life, it's what I do. It's a different angle altogether. At the beginning of the pandemic you could see the pattern that the regions most affected all had the same climatic conditions: temperature between 4 and 12 degrees, low humidity. That's no coincidence. It had been affirmed by a group of scientists that these are perfect circumstances for the spread of corona. Based on these data I predicted that New York would become the new Bergamo. The data also explained why there were no extra deaths in Rome in March and April.'*

De Hond suggests the use of open data that are accessible to everybody. *'Good data can be gathered. Good analysis is difficult. We're spending billions on corona. I would surely spend a few millions more on data analysts in every hospital. Make data accessible. You would be surprised by the smart models that even interested civilians can come up with. Why not use that intellectual power?'*

The vaccination in the Netherlands – which only started in the beginning of January – is just as clumsily organized as the corona measures, says De Hond. *'At the beginning of the pandemic in 2020 we should have nationalised and centralized health organisations. We would have been prepared for a second wave and vaccination. Now we make the same mistakes all over. We have discussions on who to vaccinate first. It's all very bureaucratic.'*

De Hond didn't contract corona himself. He keeps himself safe by avoiding badly ventilated and dry spaces. He carries a CO2-meter that tells him if enough fresh air is circulating. He agrees that western countries can't battle Covid-19 the way China does. So it will have to be done in a clever way. With the acknowledgment that it's impossible to avoid all corona deaths. *'We need to learn to cope with the risks of this virus. As we do with traffic risk, or all kind of other risks in daily life.'*

# HOW TO PRIORITISE
# VACCINATION

Remarkably, mankind has developed a range of vaccines in little more than 12 months since the identification of the novel coronavirus in late 2019. The big issue as we enter 2021 is how should those vaccines most responsibly be rolled out? Stuart McDonald, Yifei Gong and John Roberts, three actuaries working on demographic and epidemiological data, have been to the fore of analysis of the benefits of the strategic distribution of early vaccines to the most vulnerable categories of the population. We set out here a summary of their recent work.

**IN THE UK, THERE WERE 9 PRIORITY GROUPS IDENTIFIED. BROADLY SPEAKING THEY WERE:**

1. residents in care homes, together with care home workers
2. over 80s, together with health care staff
3. over 75s
4. over 70s and clinically vulnerable
5. over 65s
6. people under 65 with health issues
7. over 60s
8. over 55s
9. over 50s
10. the rest

Using actuarial techniques, the groups were analysed to see what proportion of COVID-19 deaths had occurred in each segment of the population and what proportion of the population fell into each category. Acquiring suitable data in an emerging pandemic is difficult but Governments have collected copious material to enable them to monitor the situation. The modelling was done on the basis of COVID-19 attribution featuring on certificates of death as a reasonably objective piece of information.

The population of England was analysed to categorise the population by group and to analyse the death data into the same groups. Some approximations were needed but the majority of the age-related categories were easily extracted. A table was then built up to show the proportion of deaths that might have been saved with an effective vaccine having been delivered to that category. Clearly, the vaccine might not be totally effective and vaccination not carried out to the full, but the relative impact of each category is clearly seen in the data.

At its simplest, how many vaccinations are required to prevent one death:

| Priority Group | Percentage of Population (Cumulative) | Number of vaccines required to save a life | Percentage of Lives Saved (Cumulative) |
|---|---|---|---|
| 1 | 2% | 10 | 32% |
| 2 | 15% | 90 | 67% |
| 3 | 19% | 180 | 78% |
| 4 | 28% | 360 | 88% |
| 5 | 33% | 570 | 93% |
| 6 | 47% | 2000 | 96% |
| 7 | 50% | 900 | 97% |
| 8 | 55% | 1800 | 98% |
| 9 | 60% | 3500 | 99% |
| The rest | 100% | 23000 | 100% |

FIGURE 1. DEATHS PREVENTED VS POPULATION VACCINATED BY PRIORITY GROUP
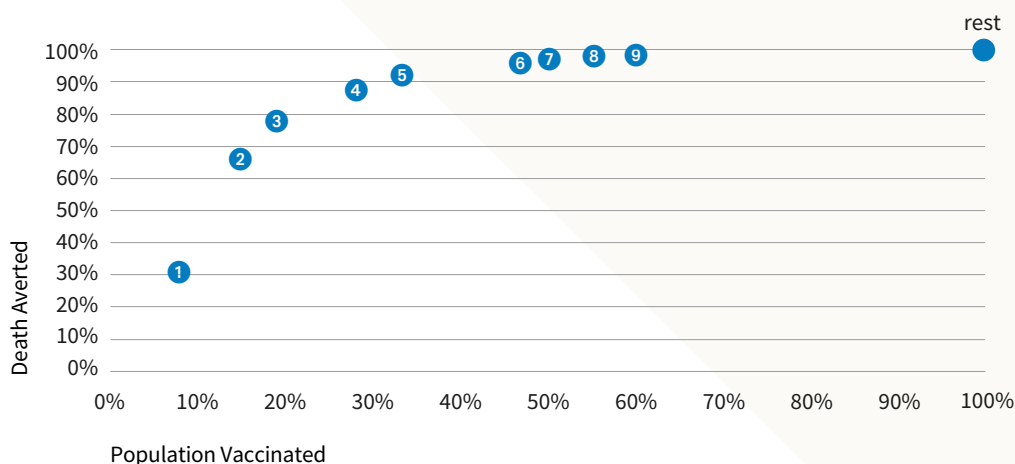
It can be seen that the first four priority groups (targeted by mid-February 2021 in the UK) cover 28% of the population but 88% of the probable deaths.

It is also important to note that there are good reasons to get vaccinated beyond reducing our own risk. We get vaccinated to protect others, by breaking chains of transmission, as much as to protect ourselves.

This work also uses a simple analysis of death counts rather than an alternative such as Quality Adjusted Life Years (QALYs), which would place more value on younger lives. Whilst a QALY approach would have merit, a simple analysis seems appropriate here, given the relatively short time interval expected between the different priority groups becoming eligible for the vaccine and the likelihood that full population vaccination will not be long delayed in any case.

A further public debate has concluded in the UK with the decision to prioritise the first dose of a two-dose vaccination programme on the basis that it is likely (though not demonstrably certain) that most of the life-saving and hospital-saving impact will arise with the first dose and that it is better to administer one dose to twice as many people as two doses to the first groups. Clearly it is possible that the second dose to the highest categories just might save more than the first dose to the accelerated lower categories but the data to demonstrate this does not exist and a political decision was taken in the UK unlike most other states.

## HOSPITAL ADMISSIONS

The public debate is further coloured by discussion about whether the focus should be on the avoidance of preventable deaths or hospitalisations and consequent pressures on the health system, with the ensuing impact on the conduct of non-urgent normal healthcare. Fortunately, the data does lend itself to further analysis of the impact of vaccination on reducing hospital admissions.

There is a logical order to studying the impact of the virus. Cases precede hospitalisations (and in some cases intensive care), with deaths following. We also needed to build in the period before the vaccine becomes effective in preventing illness – we know from the medical trial data that it is possible to be infected up to two weeks after the first shot. The impact of this additional period will be important to understand, as an anxious public is waiting to see the first positive effects of the vaccination programme.

## INFLUENCING FACTORS

The overriding influence is the prevalence of the virus. For simplicity, the analysis assumed constant prevalence, and so recent falls since the latest lockdown started will add to the benefit shown. The vaccination will not be 100% effective, and neither will we see a 100% take-up from those offered the vaccine. Vaccine effectiveness will also affect measures in different ways. For instance, an effectiveness of 70% may only reduce cases by that amount, but would hopefully reduce serious illness and death by a much greater percentage. In contrast, the take-up rate will affect each measure in a consistent and intuitive way. However, as the early phases are concentrated on the most vulnerable, and those who are caring for them, it is reasonable to assume that there will be a relatively high take-up rate – certainly greater than would typically be seen with the annual flu vaccination programme.

### Cases

The analysis considered how long it is likely to be before we start to see an effect in the various reported statistics. It should be noted that these are estimated average delay periods. In reality there is a spread of actual delays around the mean. Allowing for the two-week period after vaccination before protection kicks in, a further three to four days is typical for the first symptoms to occur, and we should allow another two to three days for a test to be taken and the results to be reported in the data published. Overall 20 days was assumed.

FIGURE 2. VACCINE EFFECT (GROUPS 1 TO 4 ONLY)
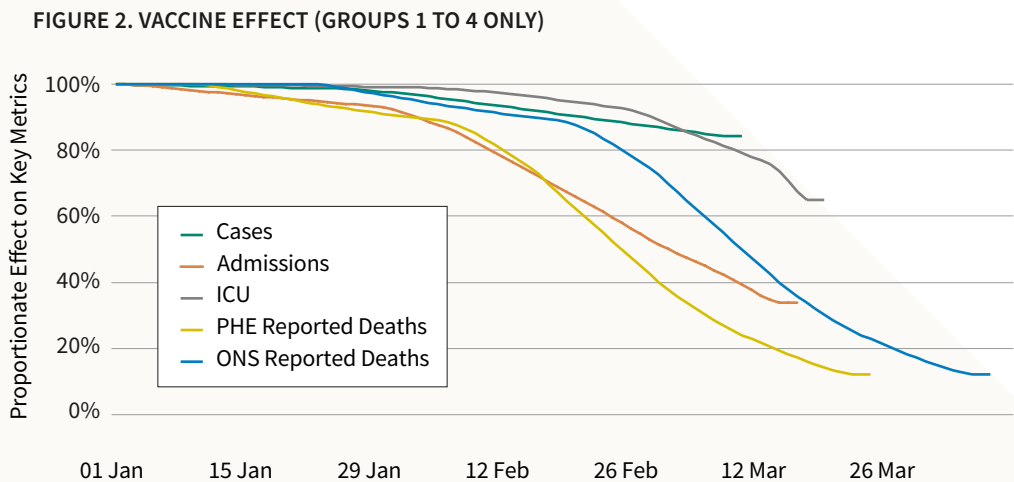


## Hospitalisations

Added to the two-week effectiveness delay, following infection there is typically a 10-day period before admission to hospital, plus two days for reporting which translated to an assumption of 26 days.

## Hospital deaths (PHE)

These are on average 6 to 8 days after hospitalization plus around 3 days for reporting delays which resulted in an assumption of 34 days.

## ONS Deaths (National Statistics)

With a focus on excess deaths, as reported by ONS, it is also useful to understand the additional delay period before these begin to be impacted. Registrations are reported weekly, with a 10 to 16 (average 13) day lag from registration, to which the period between death and registration should be added. This latter delay can be very variable, and extend into many weeks

in some instances. However, given that the majority of deaths are recorded within a week, the analysis assumed a further delay of 3 days. Adding this to the 31 days from the hospital deaths estimate above gives a total period of nearly nine weeks produced an assumption of 47 days.

The modelling then took these periods of time and identified these with the schedule for vaccination drawn up by the authorities for these priority groups in order to show the likely impact on the reported data and the implied pressures on hospitals and their Intensive care facilities.

The graph above shows the currently estimated timescale impact from vaccinating the first four priority groups on the likely reduction both in deaths and in hospitalisations. It shows clearly that whilst we should expect a rapid fall in deaths, the first four priority groups will have a lesser impact on hospital admissions,

and an even smaller impact on intensive care (ICU) admissions, where very few of the oldest patients will be considered clinically to benefit from the treatment available.

This is a moving subject and one where actuaries have been able to produce information of critical importance to public policy decision-making, particularly by elected politicians making a balance of judgments. There will be more decisions to take on the way and the speed at which society's normal behaviour can commence again and professional actuarial modelling of this kind should enable better judgments to be made.

# DECISION-MAKING
# IN UNCERTAINTY

BY **PETER KINGSLEY**

**The finance, pensions and insurance sectors have long relied on data and mathematical models to justify decisions, many backed by the authority of actuarial practice. Everything from projecting life expectancy to aligning long-term pension obligations and capital allocation decisions are measured, creating a shared set of norms. Risk is traded. Value exchanged.**

The problem is that these models are cultural constructs rooted in historical experience. They rely on collective confidence. In 'edge of chaos' conditions dominated by high levels of interdependence, complexity and uncertainty, this confidence is under growing threat.

If actuarial and risk modelling is to remain relevant, anticipation is paramount. Above all, practices shared by actuaries, financial analysts and investors are necessary but no longer sufficient to meet the challenges facing leadership teams in government, financial institutions and corporations.

**THE CLIMATE CRISIS AND COVID-19** show that if strategic advice is to be relevant to policy and board-level decision-makers, it must both anticipate potential shocks and make intelligence-

based assessments of possible —distinct from probable— outcomes.

This challenges tradition and convention. After all, one of the assumptions in financial markets is that history-based modelling has predictive authority. This may work in the short-term, but when it matters most—in political, market or financial crisis—models fail. History is a poor guide to possible futures when shocks begin to cascade through tightly coupled systems. Models fail to capture real-world complexity, particularly in crisis when base-level assumptions break down.

**DATA ARE OFTEN INCOMPLETE** and inaccurate, giving little help to decision-makers in preventing system failures. This can be a matter of life and death. In extreme conditions, options narrow at exponential rates and

> *These realities cannot be modelled or forecast in conventional, logical, rational, statistical, or probabilistic terms.*

PETER KINGSLEY

leave little room for manoeuvre. COVID-19 has illustrated that data are too often lagging indicators.

**THE VIRUS HAS SPREAD** by the time signals are picked up, data validated, and models developed. If policymakers wait for definitive evidence and certainty, they are destined to deliver 'too little, too late'. Faced with radical uncertainty, they have to make imaginative, pre-emptive judgments.

**NOR ARE EMERGING SOLUTIONS** to these challenges necessarily the answer. The most recent artificial intelligence applications have great value and potential, but the machine learning paradigm is narrow, brittle and limited to specialised tasks that cannot adapt to changing system dynamics. Even the most advanced models are fragile in chaotic environments, as some quantitative funds have discovered. They are typically based on 'small world' perspectives that focus on what can be measured, rather than what is essential. They often fail to capture, to take one example, how weak signals gain momentum, or how social interaction shapes behaviour.

**MACHINES DO NOT YET REASON**, or model cause and effect. There is not even a consensus about what 'reason' means. A growing body of research suggests that human reason is not about how to deal with abstract logical

> ‘ *The underlying challenge for financial professionals is that, to recap, anticipation, not measurement, is paramount for leadership teams.*

problems but rather to meet the challenges of living in collaborate social groups.

In other words, decision-making leadership teams are embedded in social environments and shaped by cultural forces.

To compound the problems, decisions are influenced by how individuals and groups imagine the future. These are primary—if not dominant—cultural realities. Imagined futures shape political decisions, policy, corporate stewardship, sustainability and set innovation agendas. These realities cannot be modelled or forecast in conventional, logical, rational, statistical, or probabilistic terms.

**DECISIONS ARE MADE NOT SIMPLY** by careful cost-benefit analysis, but by leadership teams looking for stories that make sense of volatility, particularly in times of crisis and when the future is deeply uncertain. When the stories change and new ones gain momentum, financial and economic shocks emerge.

To illustrate, we might assume that financial analysts are interested only in data, even in low volatility conditions. The reality, as David Tuckett points out, is that financial

markets depend 'nearly entirely on human imagination and emotion.' We act in the present on imagined futures. Or fail to. Asset values in low lying cities like Miami will collapse long before rising sea levels make them uninhabitable.

**TAKE ANOTHER EXAMPLE**, in December 2016, the first signs that major energy companies would come under sustained investor pressure emerged when they were asked to explain their long-term strategies in the context of climate change. Primary asset owners began to project transitions to autonomous electric vehicles, solar and wind power five, ten and more years ahead. The pressure was rooted in imagined futures and the narratives that described them. The future once again showed it can deliver shocks in the here and now.

Too much attention focuses on fine-tuning data, measurements and models, rather than on how real-world decision-makers use them. Models can act as anchors but are often ignored or used to give legitimacy to intuitive judgments. More often, they are challenged, poorly understood, or deliberately distorted.

**THE UNDERLYING CHALLENGE** for financial analysts, fund managers and actuaries is that, to recap, anticipation, not measurement, is paramount for leadership teams.

Decision-makers are searching for answers to the problem of how to deliver resilience in a world of well forecast 'wild card' shocks such as COVID-19 and the momentum of weak signals suggesting runaway climate change is underway. They are asking how they can imagine, navigate and make stewardship-based judgments about the long-term and hedge against worst-case scenarios.

If the actuarial profession is to meet these challenges and remain relevant at the highest levels, it has to think about how to combine imaginative foresight with traditional strengths. After all, professional services firms have to re-invent themselves, leading, not following, their clients. If they cannot picture the long-term, they will struggle to offer strategic advice.

**PETER KINGSLEY** is Chairman of The Oracle Partnership.
**https://oraclepartnership.com/**

# EIOPA OPINION ON SOLVENCY II REVIEW: CONCERNS OF AAE

BY **JENNIFER BAKER**

**This article is a summary of the official AAE Position Paper**

n February 2021, the Actuarial Association of Europe (AAE) set out its main positions regarding the Solvency II 2020 review.

While acknowledging that Solvency II is intrinsically a well-functioning, risk-based framework, the AAE believes that the experience of the past five years of application, along with the low interest environment, reveal a need to change parts of the current framework.

The overall aim is to ensure policyholders protection and financial stability in Europe, and as such it is important not to change the fundamental principles of the Solvency II framework, such as confidence level underlying calibration of capital requirements or the market-consistent basis for the valuation of the balance sheet.

However, the primary demand for the insurance sector to better serve the long-term needs for European citizens and to act as long-term investors requires an appropriate valuation of long-term business and a risk-adequate treatment of long-term investments as well. It is a requirement that such a valuation aims at reducing volatility and thus prevents procyclical behaviour. An appropriate valuation of the obligations resulting from the contracts in a portfolio is indispensable.

Solvency II together with the Long-term guarantee (LTG)-measures has worked well in terms of safeguarding the policyholders in the past and should not be jeopardised by inappropriate new requirements. Our main concerns are related to: the treatment of long-term business with guarantees;

the enabling a well-diversified, sustainable and persistent investment strategy; and the proposed extensions of the Solvency II framework by macroprudential elements.

*'The availability of deep, liquid and transparent (DLT) markets is a precondition for the required market-consistent valuation in the current framework.'*

The availability of deep, liquid and transparent (DLT) markets is a precondition for the required market-consistent valuation in the current framework.

An identified last liquid point (LLP) is the starting point for an extrapolation. Currently, for the Euro, this LLP is 20 years and should not be changed, as that would have a significant market impact which needs to be taken carefully into account.

Another essential criterion is the requirement to reach the Ultimate forward rate (UFR) within a given convergence period (currently 40 years for the Euro) with a given tolerance. This UFR reflects a long-term expectation or a mean-reversion level, annually determined by EIOPA in accordance with the method published in 2017.

The alternative extrapolation method proposed to the European Commission leads to a significant weakening of

the role of the UFR caused by waiving the convergence requirements. Convergence to the UFR is determined by the last liquid forward rate (LLFR) and a mean reversion factor alpha, which is – without scientific justification – set to 10%. The LLFR aims to take into account information from DLT-markets post-LLP and is the starting value for the extrapolation. It can be highly volatile and affects the entire RFR. Convergence is modelled independent from capital markets by applying fixed factors depending solely on the mean reversion factor. Therefore the method cannot compensate short- or mid-term distortions of capital markets (e.g. resulting from ECB-activities, Covid-19). These are carried forward to the entire RFR and thus increase volatility of undertakings' capital position.

Particularly in a low interest rate environment a more volatile and significantly lower risk-free rate, might prevent insurers from maintaining their long-term business model, holding long-term investments in a sustainable way and offering products with guarantees.

*'In terms of interest rate stress, we see the need for corrections, as currently no stress is applied to negative interest rates.'*

Volatility adjustment needs reconsideration. EIOPA's proposal is still based on a reference portfolio calibrated on EU-level. Considering undertaking specific aspects in the ALM and liquidity application ratios plus a quicker and smoother activation of the country component aims at better consideration of undertakings risk. It leads to a higher degree of complexity, but this will not remedy the identified deficiencies on over or undershooting resulting from differences between own assets and the reference portfolio. Taking own assets as a basis should still be definitively part of the Risk Management System and ORSA exercise.

In terms of interest rate stress, we see the need for corrections, as currently no stress is applied to negative interest rates. Considering the one-year horizon required by Solvency II, risk parameters should only be applied to the liquid part of the extrapolated curve. This stressed liquid part should be extrapolated. First stress – then extrapolate!

We welcome the attempt to reduce the risk margin by introducing a factor lambda to attenuate the impact of future SCR. The proposed floor should be omitted as the margin needs further analysis, especially on the way it works for long-term insurance liabilities.

Same risk, same capital is a basic principle of Solvency II. Therefore neither green supporting, nor brown penalising factors should be introduced. Capital requirements should consider the quality of investments and the inherent risk.

Solvency II is a risk-based – although microprudential – framework, and EIOPA acknowledges that risks for financial stability, liquidity risk, etc. in insurance are not comparable to those observed in banks. Any extension of Solvency II should be based on a thorough analysis of current options. With

regard to recovery, resolution and IGS, different treatments across Europe could lead to flaws in policyholder protection. Harmonisation should consider cross-border business, already available solutions and proportionality aspects.

Coherence of the Solvency II framework should be considered. Additional burden for the undertakings resulting from macroprudential measures to reduce risk should be assessed together with the existing prudential framework in order not to go beyond the current 99.5% VaR requirement.

In short, the Solvency II review, should aim for an appropriate valuation of long-term liabilities but also offer better possibilities to support a sustainable relaunch of the EU economy in the aftermath of Covid-19. We must also ensure that new, emerging risks are properly considered. But the focus must remain on policyholder protection and the prevention of insolvency risk – it is important not to overstretch Solvency II and to preserve it as a principle-based framework.

Position papers of the aae can be found here: **https://actuary. eu/publications/positions-discussion-papers/**

# XIII ITALIAN ACTUARIAL CONGRESS POSTPONED

**T**he XIII Italian Actuarial Congress was announced early for June 2020 and postponed due to the Covid situation. We now aim to organize it for November 2021 (10-12) in Milan.

The title will be:

**Technological innovation and systemic risks: actuary as a global assessor of uncertainty.**

It is a logical evolution of the Italian strategy for the actuarial profession's development and the congress is a very important moment to take stock of the situation, but also to launch messages for the future. The message in this case will be very ambitious: from *Manager Actuary* to the *Global Actuary*, in order to enlarge actuarial minds and activities especially towards systemic risks and the wider fields.

It is at the same time a step forward especially for the mentality and a confirmation of the Italian strategy, that is to consolidate the traditional fields (insurance, pension) and in parallel to develop the wider fields.

In this context all the sessions are oriented in this direction. Moreover some specific sessions are reserved to the international topics with the participation of IAA, AAE, AFIR-ERM, ASTIN; another session is dedicated to the topic of "*governance*" where the Actuary is more and more present. Other important sessions will concern IFRS17, IORP2, Welfare. We will keep you up to date on developments.

**Giampaolo Crenca**

# THE 2020 AAE
## PRESIDENTS' MEETING

BY **GIAMPAOLO CRENCA**
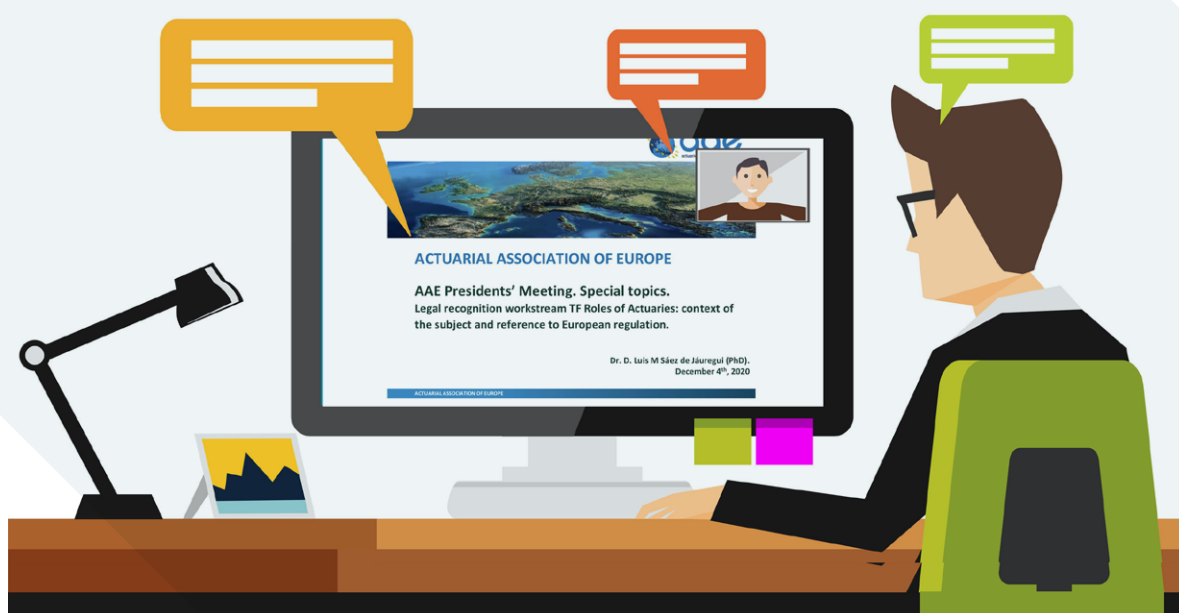


**In 2020 this important meeting was held over two days, in two parts and virtually, due to the Covid situation. The first meeting was on the 12th of November and the second on the 4th of December.**

The AAE Presidents' Meeting is a moment of confrontation and discussion among all the Member Associations (MAs) and so it assumes a strategic value.

Particularly in this case five important topics were introduced by the AAE's Board and discussed during the two meetings:

- **climate change,**

- **communication,**

- **professionalism (particularly education),**

- **mutual recognition agreement (MRA),**

- **the role of the actuary.**

**ON THE FIRST DAY** three topics were discussed: climate change, communication, and professionalism (particularly education). About climate change the answers to the survey were observed and substantially all the countries think that it is an important and strategic topic for actuaries and AAE. Moreover it is clear that it belongs to the wider world of the wider fields because it is a systemic risk. Is this just about measurement

or also a model ? This question was very deeply debated and the conclusion was that if we develop models we can also focus on one or more indices, thus satisfying both. AAE could organise a congress about this topic.

**THE SECOND TOPIC** was communication, absolutely strategic and strictly connected with the Board that set up a specific working group just for developing this project. Communication is internal as well as external. External concerns many different stakeholders and we must try to reach everyone with different channels, approaches and languages. Channels are very important and the AAE could use with greater intensity the communication tools already available (for instance the magazine The European Actuary, Actuview) and, if necessary, identify other tools.

**THE THIRD TOPIC**, professionalism, resulted in a discussion concerning education and, in particular, the contents of the core syllabus and the implementation by the Member Associatons (MAs). MRA must be reviewed for some reasons, Brexit the most important, especially now that an agreement with the UK was found about their staying in the AAE.

**A VERY IMPORTANT TOPIC** was the role of the actuary, especially about the legal role, because under the AAE there are different situations from country to country. The goal is to find, if possible, a same legal role valid for all the MAs and officially recognized in the whole of Europe.

**ON THE SECOND DAY** of the meeting there were two important discussions, the first concerning the "Legal recognition workstream Task Force Roles of Actuaries" and the second "Wider Fields". Both were a logical deepening of the topics discussed during the first part. The speakers in the first discussion emphasized the importance of understanding well the situation in each MA, and so a consultation process was in course. Afterwards the goal is to evaluate the following steps and to individuate a legal role for the actuary in Europe valid for each MA.

**THE SPEAKER** about wider fields emphasized the importance of this topic that is now in its own right under the AAE's strategy. He indicated some of these fields and the need to be very prepared to face this challenge especially addressing education needs. So, the strategic proposal is to consolidate and develop the traditional fields (insurance, pension) and at the same time

to develop the wider fields also with the support of very strong communication work.

Other interesting discussions followed with two experiences related to Hungary and Denmark.

**THE AAE'S PRESIDENT**, Wilhelm Schneemeier, encouraged everyone to follow this already well-designed path.



**GIAMPAOLO CRENCA**
is Past President Consiglio Nazionale Attuari.

# COLUMN

## HOW TO PREDICT THE INTEREST RATE IN 2081?

Predicting the market 60 years into the future is extremely uncertain. There is no market information available that can be used as a basis for such an estimate. Hence, analysis has to be based on models and expert judgement and has to consider experience of the last 60 years. Without any doubt we have been in a low interest rate environment for more than 10 years. This was certainly intensified by ECB's quantitative easing programme in the last years. So the biggest challenge is to compensate this effect because it cannot be continued over the next 60 years.

Looking at Omnibus II, the approach for this crucial estimate is (for currency Euro) to have an extrapolation method starting at year 20 (the last point in time with a market deep and liquid enough to be used as an estimator for the risk-free rate) and being after 40 years near the Ultimate Forward rate (UFR) with a maximum 3bp difference.

Now EIOPA's opinion on the Solvency II review has been published. The AAE agrees with many of the changes proposed (see also Article on p. 12), like the introduction of negative interest rate stress and not to change year 20 as last liquid point. But it is certainly not justified to use swap positions (without underlying) between years 20 and 50 to propose an extrapolation method which deliberately does not ensure that the UFR will be reached after 60 years with a predefined difference. This proposal will have extreme consequences for long term life and pension insurance business and will increase capital requirements significantly.

Overall, the proposals will lead to a weakening of the financial positions of insurers, as a balancing of the outcome will not be possible. Another consequence will be a significantly lower capacity for investment in sustainable assets. Undertakings will refrain from offering products with guarantees and thus shift higher performance risk to policyholders. This can result in an increase of the pension gap once these clients retire (and the current gap is already too high).

The AAE advises not to change the convergence target at year 60 and not to implement EIOPA's extrapolation proposal. A wide and deep impact study can help to balance all aspects: Solvency II should safeguard clients. There is no convincing reason to change this fundamental element of the Omnibus II Directive shortly after the start of Solvency II.

*Wilhelm Schneemeier*
*Chairperson Actuarial Association of Europe*