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# CLIMATE CHANGE

BY **PASCAL DEMURGER**


PASCAL DEMURGER

Climate change is no longer an object of debate but a measurable reality, especially for risk professionals such as insurers. Its impact on our profession has been noticeable for some years now: natural disasters or even drought are straining our financial resources while jeopardizing our business models. Henri de Castres, then CEO of Axa, said more than five years ago that a world with an average temperature 4 degrees higher than pre-industrial times would no longer be insurable. Yet, this critical limit is becoming more likely every day. According to the first work that will feed into the next assessment report of the UN Panel of Climate Experts, scheduled for 2021-2022, the worst scenario suggests an overall average temperature increase of 7°C by 2100. This disaster scenario, however, is simply based on the presumption of rapid economic growth powered by fossil fuels. If awareness is real, actions must follow. Scientists remind us that the average temperature of the planet at the end of the century depends very heavily on the measures that will be implemented now.

No one, if in good faith, can deny the impact of human activity on climate change. This lucidity about the challenges to be met and the relative inability of States to face them alone places all individuals in a more acute perception of their role, committing them to act at their level. Among us, the younger generations embody this aspiration to build a more virtuous and sustainable world for 'tomorrow' even more. While everyone has a role to play, attention is increasingly turning to business and urging it to act.

*'No one can deny the impact of human activity on climate change'*

Thus, a company can no longer remain deaf to the problems of the world, it must use the major levers it has: through its investments, the networks of suppliers or partners with which it coordinates or simply through its ability to mobilize its employees and customers.

Companies are therefore gradually called upon to make their contribution to meet the challenges of our time. In the past, complying with the law and not being a major polluter was enough. Today they must demonstrate that their social and environmental impact is positive. The answers that were theirs in the past, CSR (corporate social responsibility) or corporate philanthropy disconnected from core business, will no longer be enough to meet public expectations. People are beginning to ask, and will soon require, companies to prove their virtue in their very activity, both towards their employees, their customers and their environment.

Yet, far from being a constraint, this new requirement is a real opportunity for companies. An opportunity to leverage their resources to solve problems of our time. An opportunity to imagine business models that make contribution and commitment a source of performance. Faced with growing social pressure, companies has no choice but to assume their political responsibility. It does not matter enough whether we rejoice or regret this development, it is time to anticipate it and to prepare for it. In any case, it would be dangerous to overlook this phenomenon. I am conscious that these new requirements are very significant for old-economy businesses. They come in addition to increasing competition exacerbated by the opening of borders, digital market disruptions and shocks to the existing system and constant real-time public scrutiny. Yet, although somewhat jostled, companies have much to gain.

*'It will enable companies to put their resources at the service of the world'*

On this subject, the company I have had the chance to lead for more than 10 years, MAIF, has an experience to share. Created 85 years ago out of a desire to break with the market practices of the time, its economic success has taken it to becoming a large French group, insuring today more than three million households. Long torn between two opposites, an ethical requirement and an economic constraint, a willingness to contribute positively and a need for performance in a highly competitive market, MAIF has gradually invented an original business model that makes its commitment a major source of its performance. By stopping opposing each other, it leads to a particularly virtuous circle in which more commitment to its stakeholders and to the world creates more performance for itself, allowing even more engagement...

The challenge is no longer to limit the nuisances of productive activity, to compensate for or to repair its effects, to eliminate the most harmful environmental and social consequences. Regardless of the terms used (positive impact company, healthy business, mission enterprise, contributory enterprise, general interest company), all reflect a single trend: the creation of economic value is no longer the purpose but becomes the means of collective action with a higher ambition. No creation of value without affirmation of values, no progress without virtue, no wealth without ideals. A business project then becomes meaningful only if it puts a company at the service of a project that exceeds it. My conviction, fed by ten years of running the company, is now clear: not only do I know that this model works, but I believe it is reproducible, transposable regardless of industry or legal form.

We are one of a number of companies, whose ranks are growing every day, to have started this approach. And against all odds, the company also finds its feet. The quest for meaning and the quest for performance do not oppose themselves, quite the contrary. I measure, on a daily basis, how one and the other are intertwined and enter into a virtuous circle. Aligning the interests of our employees, those of our customers, those of our suppliers, is not only possible but it is the only key that can nurture a global and sustainable performance.
In France, the PACTE law recently enshrined the concept of 'mission enterprise', encouraging economic actors to make their 'purpose' an engine of their development. This is a decisive step, all the more so as it will trigger others, including at European level. Thus, it is at this level that it would guarantee both a truly significant impact on the world and an alternative path to a European capitalism that pits itself against the United States and China.

*'As risk professionals you have a real role to play in guiding this new business model, this change in society'*

As climate risk professionals, you actuaries have a real role to play in guiding this new business model, this change in society. Your expertise in modeling and translating scientific data 'in the real world' gives you the capacity to make an impact and therefore a real responsibility. Far from being mere guardians of the present, you understand the changes taking place and enrich the debate with objective and rational elements, especially with the companies with whom you collaborate.

I am therefore convinced that, like me, you have come to realize that there is an urgent need to act: for the world as well as for companies themselves and the crisis linked to the Covid19 pandemic that we are experiencing only reinforces this need. The year 2019 had already marked a turning point in understanding the need for the company to no longer simply focus on its operational efficiency and profitability. The last few months have deepened this movement to question its place in the world, its role in the City, in a very concrete, almost daily way. To protect the most precious thing we have, the environment and the social bond, the planet and humanity, we must, together, transform business so that it is no longer part of the problem but becomes the solution.

**PASCAL DEMURGER**
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# CLIMATE CHANGE AND INSURANCE PRICING FOR NON-LIFE INSURERS

BY **TONY O'RIORDAN** AND **DECLAN LAVELLE**

**The impact of climate change is already being felt in the pricing and management of insurance and reinsurance contracts. This article explores the processes in place for non-life insurers in pricing insurance risk, and the impact which climate change is having, and will have, on such pricing activity.**

## PRICING PROCESS

Practices relating to insurance pricing are well established in the market. Pricing for direct writers involves a combination of input from underwriters and actuaries, and reflects inputs such as relative risks across market segments, lines of business and groups of policyholders, cost of capital and reinsurance, and competitive positioning.

Reinsurer pricing is in addition influenced by the appetite of global capital providers, and tends to be cyclical, with rates increasing after severe market events and reductions after a run of good years. This underwriting cycle is an important driver of overall customer premium levels.

## PRICING FACTORS

Pricing models typically incorporate relevant factors such as

- Expected cost of claims, including frequency, severity, large claim estimates and expected inflation;
- Analysis by specific perils, e.g. fire, theft, liability, wind, flood, hail etc., allowing for relative riskiness of different policyholders, e.g. geo-coding
- Regulatory restrictions, e.g. relating to location based loadings or exclusions
- Price elasticity and customer behaviour
- Profit margins and targets
- Cost of reinsurance and capital
- Expenses and investment returns
- Discounting of future cash flows

Actuarial analysis based on these inputs is overlaid with competitor analysis and underwriters' expert judgement to arrive at the customer premium.

## RELEVANT CLIMATE FACTORS

Insurance is normally sold on a one-year basis, with the ability to reprice or change terms and conditions annually. Longer-term trends such as climate change will be reflected gradually over time. The effects of climate change tend to be mitigated by policy exclusions or refusal to renew cover for risks which are deemed to be uninsurable. Factors to be taken into account are shown below.

### *Frequency of events*

Weather-related events, ranging from drought to hurricanes, are expected to become more frequent as climate change continues. The past observed frequency of these events may not be a reliable predictor of future frequency, which increases the uncertainty associated with pricing.

*Severity of events*
More severe weather events can lead to more severe insured losses. Pricing teams must consider the resulting level of likely increases in the severity of events and associated claim costs.

*Location of events*
Location is extremely important when pricing climate-exposed risks, driving many factors such as the cost of affected property.

*Insured losses related to events*
Accumulations of risk in areas that might experience a higher frequency and severity of severe weather events will also impact on price. Multi-year contracts that are more exposed to catastrophe events will generally be avoided as reinsurers will be reluctant to make long term commitments in such areas.

*Expected scenarios*
Scenario modelling is crucial for pricing teams to estimate how exposed they are to climate-related risks.

**INCORPORATING CLIMATE FACTORS IN PRICING**

For all but the largest direct writers, the cost of extreme events is typically covered by reinsurance, so many direct writers will factor in the increasing cost of reinsurance cover, rather than factoring in climate change effects directly.

Reinsurers analyse the frequency and severity of climate-related risks and allow for the fact that historical data will not necessarily reflect experience over the next year and in the longer term. In particular, more recent trends in the frequency of storms or floods may be used to override longer term average frequency to arrive at more appropriate frequencies for events. Reinsurers' analyses also reflect the outputs from Catastrophe Risk models, which combine historical disaster information with current demographic, building (age, type and usage), scientific and financial data to assess the potential losses caused by natural and man-made catastrophes.

**THE IMPORTANCE OF DATA**

Data on factors relevant to climate change is vital to determine the price of insurance coverage. Over time, the ability of insurers and reinsurers to analyse data continues to improve, e.g. geo-coding analysis to identify high-risk or uninsurable risks. Where data is not available, insurers may factor in trends from the past or apply expert judgement.

Reinsurers are reluctant to price catastrophe covers without accurate exposure data. There can be significant changes to pricing following from, or in anticipation of, significant events. For instance, there is evidence of hardening of rates (or of regional cover limitations being imposed) following hurricane activity, Californian wildfires and Japanese earthquakes.

**MARKET FORCES; COMPETITION AND ANTI-SELECTION**

No insurer can accept all the risks which others were unwilling to cover and expect to survive.

Therefore, insurers aim to ensure that their pricing and policy wordings

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and exclusions are in line with competitors in order to avoid being left with the less attractive risks.

In addition, insurers need to manage exposure and aim not to be over-exposed to any particular location. As their exposure increases, the premium rates charged for incremental risks may increase. On the other hand, the price for a similar risk in a different location may reduce to ensure sufficient geographical diversification.

### 'SHARED RESILIENCE SOLUTIONS'

COVID-19 has highlighted the difficulties for insurance customers which can be caused by risk exclusions. Many businesses had anticipated support from their Business Interruption policies following on the loss of income emerging from COVID-19 related restrictions and other economic impacts. The growing level of insurance exclusions as certain risks become effectively uninsurable, or prohibitively expensive for the policyholder, draws attention to the need for some form of coverage to deal with the worst impacts of pandemics or other such shock events, e.g. cyber shocks, climate change impacts in natural catastrophes, and terrorism. This need is being considered by EIOPA and the European Commission with input from many stakeholders including the AAE.

The need cannot be addressed in isolation by (re)insurers, and is likely to require a wider solution which may include involvement of a combination of insurers, reinsurers, member states and the European Union.

### MITIGATION OF IMPACT ON PREMIUMS OF CLIMATE CHANGE

Incentives should be provided to encourage behaviour across the universe of customers, which will in aggregate promote climate change benefits and limit the additional cost of climate change events. This activity is in the public interest and should be shared across both public and private sectors. The message of higher pricing levels in response to climate risks may itself be a driver of actions by customers to mitigate their risks in the future.

Data sharing and risk modelling, discussed above, will enable better understanding of likely events and impacts. Learnings from these activities should be used to create customer awareness and to facilitate effective assessment and implementation of prevention measures.

Exclusions will inevitably be required to keep premiums to affordable levels; these should be clearly communicated to customers, with policy wordings clear as to coverage.

Insurance pricing will reflect the tools, data and other inputs discussed above, seeking to keep pace with the evolution of climate change and other developments over decades to come. Pricing practice, combined with underwriting approaches and product design, will also be expected to focus on providing affordable and effective coverage for insurance customers, with clear benefits for risk mitigation and clear communication of product features. 'Shared resilience solutions' will be needed to cope with the additional economic impact of shock events such as pandemics.

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# THE ROAD TO THE 2021 SOLVENCY II REVIEW

BY **SYLVIE FOCQUET**
AND **DIDIER MILLEROT**

**SYLVIE FOCQUET**

The Solvency II review is approaching and, along with the upcoming technical advice from EIOPA, the debate on the content of the review is about to culminate. Stakeholders' views are essential in this context. As evidenced by the public consultation launched in July, the Commission is keen to engage on the matter with all actors involved. We hope this paper will help feeding this essential debate.

These are too early days to expose what the content of the Solvency II review could look like. But it seems clear that some key topics will emerge and should, without prejudging the political process that will decide on the final shape of the proposals, be at the center of the debate.

Like many stakeholders, we have observed the benefits of having the Solvency II framework in place in times of crisis. COVID-19 was and still is a real life test. The added value of Solvency II in terms of risk-based prudential and capital requirements, sounder risk management and enhanced supervision across the European Union for insurance and reinsurance undertakings, needs to be preserved.

Nevertheless, 'better regulation' principles call on us not to be complacent. Time has come, after four years of implementation, to assess how the system has performed and seek ways to ensure it remains fit for purpose.

*'These are too early days to expose what the content of the Solvency II review could look like'*

**DIDIER MILLEROT**

In this regard, we have indeed extended the initial roadmap by 6 months, mainly to allow EIOPA to incorporate the impact of the COVID-19 crisis in its technical advice, which is now planned for the end of 2020. Based on EIOPA's advice, we now expect that the Commission will publish its legislative proposals and the accompanying impact assessment during the third quarter of next year.

Regarding the emerging topics, a first question is Solvency II's sensitivity to risks faced by insurers. On the one hand, capital requirements should reflect market conditions in a risk based regime, but on the other, short term noise in the market is not necessarily relevant to the long term strategy of insurers, and a too sensitive mechanism can create 'artificial' volatility. The LTGA [1] package (such as the volatility or matching adjustment) was designed to absorb such artificial volatility,

1 'LTGA': Long-Term Guarantees Assessment.

and reviewing its efficiency will be very important, especially in the light of the volatility observed at the beginning of the COVID-19 turmoil. Clearly, the economic context was very different when Solvency II came into force four years ago.  A volatile and low or negative interest rate environment is now the new reality, so we need to take this into account.

The Insurance sector is essential for the EU's economy. It protects our citizens and businesses against life hazards. But it's also a major player in terms of investment and financing of the economy. That role cannot but increase. How to ensure that European insurers contribute to their full capacity to the key political objectives of the European Union, in particular the Green Deal and the Capital Markets Union? How to design the right incentives while not jeopardizing the protection of policyholders and financial stability? What lessons can we draw from past experience, in particular to stimulate investment in long-term equity? These challenging questions will be central to our reflections and most certainly an important aspect of next year's review.

Proportionality, the idea that small insurers should not be burdened by a too complex process, is a principle deeply embedded in Solvency II. But does it work well enough in practice? Is it operational enough? Is there enough legal certainty for both insurance firms and supervisors? The review is a timely opportunity to assess the proportionality principle and ensure that it is applied in a concrete and consistent way.

As policyholder protection remains one of the fundamental principles of Solvency II, we will also need to assess whether we have the right framework in place to avoid insurers running into trouble and, in case of failure, ensure that we have the right tools to organise resolution and bankruptcy in an orderly way or compensate policyholders who are victims of an insurer's failure. In this context, it will also be important to assess how we can potentially improve the supervision of cross-border business and insurance groups and the consistency in policyholder protection across jurisdictions.

*'Proportionality, the idea that small insurers should not be burdened by a too complex process, is a principle deeply embedded in Solvency II'*

Last but not least, the current environment calls us to assess whether the existing toolkit to deal with macro-prudential and financial stability issues is appropriate, in particular in light of the consequences of the crisis and of the market turmoil of the past few months.

To conclude, the Solvency II review represents a timely opportunity to build on the framework and further improve it. The political debate will need to consider the founding principles of Solvency II, namely policyholder protection and financial stability, and find the best way to combine these with the key political objectives of the EU over the next years. No revolution is expected there but a timely evolution that should strengthen an industry essential to our economy and maintain its global competitiveness.

So, appointment is made for the summer next year! In the meantime, we look forward to EIOPA's technical advice in December, an essential step in the process. We will also continue to engage with all stakeholders, public or private, to ensure the soundness of our proposals and a legislative process as smooth as possible with the European Parliament and the Council.

**SYLVIE FOCQUET** and **DIDIER MILLEROT,** DG FISMA, European Commission.

# IFRS 17: THE STICKING POINT OF ANNUAL COHORTS

BY **PIERRE-E. THÉROND** AND **VICTOR FROMENT**

**On September 30, the European Financial Reporting Advisory Group (EFRAG) published its Draft Endorsement Advice on IFRS 17 Insurance contracts. Comments are requested by 29 January 2021. It concluded on a consensus basis that IFRS 17 meets the various criteria for endorsement, with the notable exception of the requirement to apply annual cohorts to intergenerationally-mutualised and cash-flow matched contracts. In this paper, we focus on this particular issue and show how annual cohorts fail to give a pertinent picture of participating life insurance business, as practiced in many continental European countries.**

PIERRE-E THÉROND

> ***The first problem that arises is that the current market consistent estimate is made based on all the participating contracts***

The International Accounting Standards Board (IASB) has chosen a *group of contracts* as a level of aggregation to respond to several issues: pooling, which prevents individual contracts, reversal of the production cycle with the issue of mismatch between investments and provisions. On the basis of the notion of a *portfolio of insurance contracts*, the IASB defines the notion of a group of contracts in §16 of IFRS 17 as the set of insurance contracts resulting from the division of a *portfolio of insurance contracts* into contracts taken out within a period of at least one year at the most and corresponding respectively, at the time of initial recognition: - to loss-making contracts, - to contracts that have no significant possibility of subsequently becoming loss-making, - to contracts that are not in any of the above cases. Furthermore, in §22 this definition is specified with the notion of cohort, i.e. one cannot have two contracts issued more than one year apart.

This new level of aggregation leads to a double articulation around the periods of risk coverage and the issue of contracts. The aim is to record sales at a loss during the period, so that on the one hand the profits made by a generation of contracts are put and on the other hand the losses due to the Contractual Service Margin (CSM) allocation method. The general model succeeds in translating the business model: mutualization allows the use of mathematical expectations. The imperfections of mutualization are represented by the Risk Adjustment (RA). This choice of level of aggregation is consistent, in the general model, with the insurance business model by offering the insured a viable level of premium thanks to mutualization. There are operational problems with this level of aggregation, particularly when certain flows depend on non-linear mechanisms defined at higher levels. We will therefore focus more specifically on direct participatory contracts under the Variable Fee Approach (VFA) accounting model.

Life insurance contracts such as some investment contracts are well subject to IFRS 17, if there are discretionary participations and are issued by an entity that issues insurance contracts. The VFA accounting model is an adaptation of the general model to incorporate the participation and the underlying elements. Under IFRS 17 the current estimates must be market consistent. The projections are made in such a way that the business model is good and all contracts that participate in the same underlying elements are retained. The first problem that arises is that the current market consistent estimate is made based on all the participating contracts. In addition, a second problem arises, which is the management of the investments that are made in this level of aggregation (e.g. general fund). So, the projected flows depend on the underlying investments and other contracts that jointly participate in the profits of the underlying investments.

IASB has decided to keep the same level of aggregation in the general model for the VFA model while adding the possibility of allocating between the different groups of contracts, the Fulfilment Cash Flows (FCFs) determined at a high level of aggregation and allocating the variation of the underlying elements to each group. Conventionally this is good because it is not based on economic representation at the group level. But this poses some problems, particularly with regard to the evolution of the CSM, because if there is a loss at the group level, it will be recognized immediately, whereas the expected profits established are in line with the rate of transfer of the service. Furthermore, the rate of income allocation between groups is heterogeneous, and an increase in the fair value of the underlying assets will be identified more quickly if it is a group of older contracts than a group of recent contracts.

VICTOR FROMENT

Thus, the valuation measure of the FCF is Current Estimate Market Consistent which considers the elements. The business model for life insurance in euros practiced in France is such that there is a common management of the general assets. However, this poses a problem at the level of aggregation with the IASB's level of aggregation because the mechanics of the VFA at the level of groups of contracts fail to represent the life insurance business model correctly, leading to an arbitrary allocation. There is a collective right to general assets between policyholders and not individual policyholders. Thus the development of the CSM into VFA, which consists in identifying the fair value variations that come up against the problem of the allocation of investments or the allocation of the fair value representing neither the rights of the policyholder of the group of contracts nor the business model.

> ***The projected flows depend on the underlying investments and other contracts that jointly participate in the profits of the underlying investments***

In addition, the Current Estimate Market Consistent projects all insurance contracts participating in the same fund. The valuation is therefore at a higher level than the one recommended by the IASB, and if we change this valuation level of aggregation, we will end up with something inconsistent, i.e. we will have an arbitrary and irrelevant allocation for investors. This would also require allocating the FCF between different groups in a portfolio and once again we have an arbitrary method that is not very consistent over time because the underlying assets are artificially allocated.

So the problems of this VFA level of aggregation are multiple: first of all, there is a poor representation of the business model, furthermore, the operational implementation is complicated and expensive, since we quickly arrive at an arbitrary allocation and finally, this only leads only to an illusion of accuracy for financial statement users.

Thus, a solution seems to stand out which is to make a different level of aggregation for contracts eligible for VFA which participate in the results of the same underlying elements to be considered as a single group. This would lead to consider only one CSM for all these contracts (if they belonged in the same profitability bucket at inception). This would make it possible to avoid arbitrary allocations of FCF and bad behavior on the part of the CSM. This recommendation poses a problem for new contracts that are of interest to users of financial statements and that could not be seen with the recommended level of aggregation size. Nevertheless, some additional disclosures could be required in order to solve this issue, such as the premiums of new business booked in the group over the period, the contribution to the CSM of new business booked in the group over the period, and finally the allocation pattern of CSM income between three periods - the beginning, end and end of the period in the absence of new business.

This article is based on:
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# SYSTEMIC RISK AND FINANCIAL STABILITY


BY **MALCOLM KEMP**

**The 2008 Global Financial Crisis (GFC) introduced into common financial speech the term *systemic risk.* For the EU this is commonly taken as 'a risk of disruption of the financial system with the potential to have serious negative consequences for the internal market and the real economy'. Closely associated with (financial) systemic risk is the notion of *financial stability*. We want our financial systems to avoid becoming unstable and falling over. We also want them to contain the system-wide risks that might otherwise have these outcomes.**

Other examples of financial crises that dragged down entire economies include the 1929 Wall Street Crash (and subsequent Great Depression), several of the Twentieth Century's hyperinflation episodes and many past sovereign debt crises (which often went hand-in-hand with banking crises). The majority of systemic risk episodes are not this bad, but can still be very expensive. Whilst banking is commonly seen as more prone to systemic risk than other financial sectors, other parts of the financial system are not immune, as the blow-up of Long Term Capital Management, a hedge fund, in the 1990s illustrates. AIG, an insurance company, was bailed out in depths of the GFC, although insurance industry practitioners typically argue that it was not AIG's insurance business that caused its problems, but liquidity issues with e.g. its CDS and securities lending activities. A handful of other insurers around the globe also needed support during the GFC. Looking further afield, several Japanese insurers failed in the late 1990s, partly because of declining interest rates.

Many central banks and financial regulators now have financial stability departments or the like. Most also now produce regular financial stability reports. And rightly so! Large systemic risks can dwarf most other risks such organisations are aiming to manage. The EU has even established a specific institution in this area, the European Systemic Risk Board, which is part of the EU's System of Financial Supervision (alongside EIOPA, ESMA and EBA). For a systemic risk event to arise we typically need some underlying vulnerabilities to be present and for some trigger to come along that uncovers these vulnerabilities. Being able to spot such triggers just before they happen is nearly as difficult as working out when a volcano is just about to explode. So the teams working in these departments generally focus on identifying potential vulnerabilities and then figuring out what policies might best contain these vulnerabilities.

*'Many central banks and financial regulators now have financial stability departments or the like'*

Inevitably, the associated policymaking is coloured by politics, economics and other things happening at the same time. Right now, we are in the middle of a pandemic. Maybe the direction of causality is reversed compared to typical systemic risk events (with the worry perhaps being more about how a hit to the real economy could hammer the financial sector than vice versa). But, as one might expect, financial stability teams have still gone into overdrive trying to address financial vulnerabilities that the pandemic might create or uncover.

*'But, as one might expect, financial stability teams have still gone into overdrive'*

Banking is probably in a better regulatory shape than before. The GFC highlighted that as economies sour, so too could bank loan portfolios and banks' ability and willingness to lend to support the real economy. The GFC spawned many policy measures that aimed to improve the amount and quantity of bank capital, leaving them generally better capitalised this time round. Some policy measures also sought to reduce the tendency of the banking system to behave pro-cyclically, e.g. by establishing counter-cyclical capital buffers that could be temporarily released if needed. We have seen some relaxation of these buffers in the light of Covid-19. Banking regulators also gained more effective powers to e.g. limit dividend payouts, which they are using to further protect bank lending firepower.

Less clear is the picture for insurers. Solvency II doesn't currently have many '*macro-prudential*' elements specifically aiming to assist with financial stability, so Covid-19 will likely hasten a beefing up of these as part of the current Solvency II Review. Not all may be to the industry's liking. For example, we might see more explicit powers given to regulators to restrict dividend payouts (which in the banking world are typically system-wide, to avoid the stigma for weaker firms that comes with allowing stronger firms to continue to make payouts). A common central bank response so far to Covid-19 has been to further contain or reduce interest rates, which in many jurisdictions are hovering close to multi-year lows. This could have knock-on implications for life insurers (and pension funds) whose liabilities include guarantees expressed in nominal terms. Several Solvency II features such as the ultimate forward rate, the volatility adjustment and the interest rate stresses included in the SCR calculation link with how we think interest rates might evolve over the longer term.

Conversely, Covid-19 could also impact how policymakers interpret '*systemic risk*' and '*financial stability*', with more emphasis placed on pandemic and other similar risks. Systemic risk thought already to an extent includes longer-term bigger-picture risks such as climate change risk. Covid-19 has already encouraged regulators like EIOPA to explore shared resilience solutions, to tackle fall-out from future pandemics and other similar events.

***'This could have knock-on implications for life insurers (and pension funds) whose liabilities include guarantees expressed in nominal terms'***

One thing we can be pretty sure of is that policymakers will continue to focus on systemic risk and how it might impact the world in which we live. This ongoing policy imperative will continue to drive regulation relevant to professionals, such as actuaries, involved in the field of risk management.

**MALCOLM KEMP** is Chairperson of the AAE's Risk Management Committee, an Associate at Barnett Waddingham and the author of the book '*Systemic Risk: A Practitioner's Guide to Measurement, Management and Analysis*'. The views expressed in this article are the author's own and do not necessarily correspond with those of any organisation he is associated with.

# EUROPEAN UNION:
# UNITED IN DIVERSITY

BY **FALCO VALKENBURG**

***'United in diversity'*** **is the motto of the European Union. 27 member states, with rather different socio-economic and cultural backgrounds. Yet another seven candidate countries and potential candidates. 24 official languages. The European Union is formed by treaties, which form the basis for democratic cooperation. The European Union has a quite unique organisational set-up:**

**The European Parliament**

**- voice of the people**
*David Sassoli,*
President of the European Parliament

**The European Council**

**- voice of the Member States**
*Charles Michel,*
President of the European Council

**The European Commission**

**- promoting the common interest**
*Ursula von der Leyen,*
President of the European Commission

The European Parliament counts 705 members. The Parliament numbers 20 committees and two subcommittees, each handling a particular policy area. The committees examine proposals for legislation, and MEPs and political groups can put forward amendments or propose to reject a bill. These issues are also debated within the political groups. The Parliament has plenary sessions to pass legislation. These are normally held in Strasbourg for four days a month, but sometimes there are additional sessions in Brussels.

**The making of EU laws** usually takes quite some time. That is good news for the Actuarial Association of Europe as experts and the many interest groups as there is plenty of opportunity to contribute to the legislative process. The standard process starts with discussions and consultations among citizens, interest groups and experts before the Commission makes a formal proposal. A formal proposal will then be presented to both the Parliament and the Council of Ministers for joint decision-making. Usually both the Council of Ministers and the Parliament will have wishes for amendments to a Commission proposal. Those wishes are jointly discussed in so called trilogues, which are conversations between the three bodies of the European Unions: Commission, Council and Parliament. This part of the law-making activity takes on average some 1.5 years. The regulatory

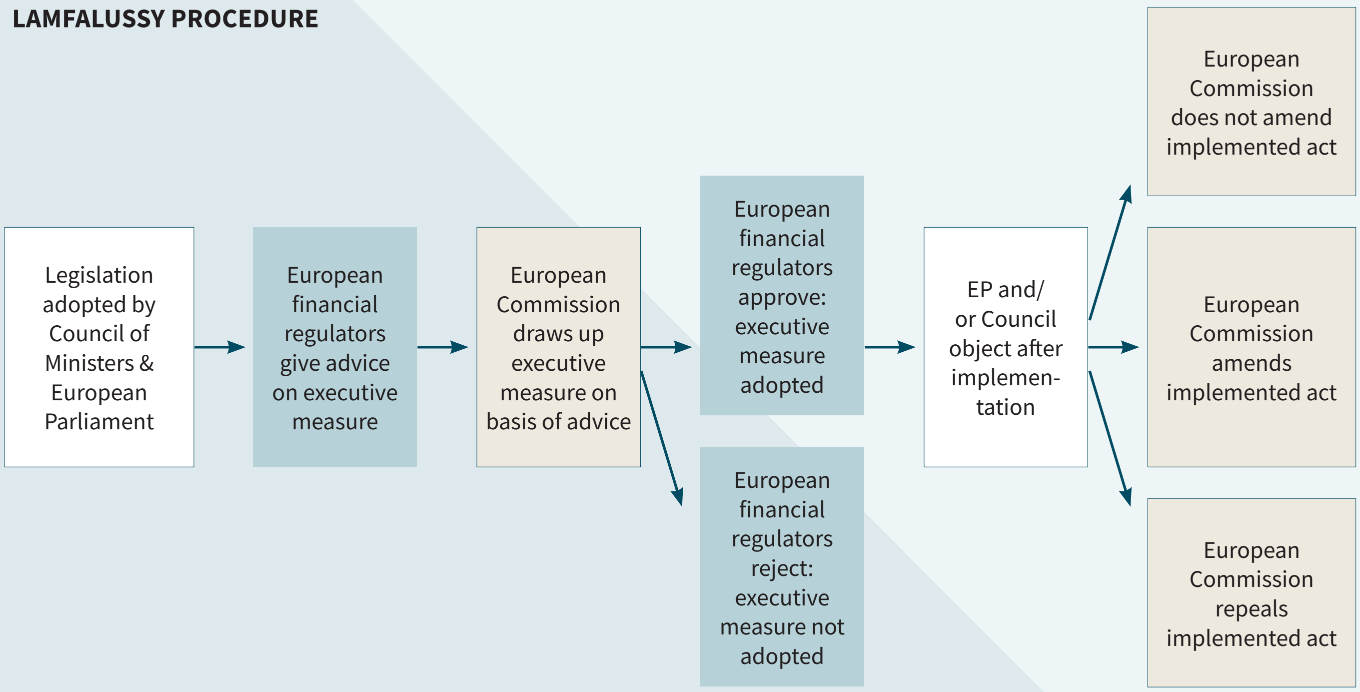
process in financial services has in addition to 'normal' EU law-making three additional levels.
This is referred to as the Lamfalussy regulatory approach, named after Alexandre Lamfalussy, who chaired the EU advisory committee that created it in 2001. The first step is the adoption of the basic law in the traditional co-decision procedure. The basic laws sets out the principles. The second level is then the development of technical implementing measures and, since the Lisbon treaty in 2009, delegated acts. The technical implementing standards are drafted by the European supervisory authorities. Level three is about supervisory convergence and level four is about the correct enforcement of EU rules by national governments.

**The period before** the formal proposal by the Commission is published might take several years, depending on the topic. To give you an idea: the Solvency II process for insurers was launched by the European Commission already in May 2001. The legislation was passed in 2014. This is extremely long. The revision of the IORP directive for pension institutions started with a first consultation by the Commission in September 2008 and the Directive came into force on 12 January 2017.

**The European law-making** process provides plenty of opportunities to bring our actuarial view forward. It is important to participate from early on in the process. This may sound pretty straightforward, but in reality this is not always easy for an organisation like us that is based on the work of volunteers. In the early days of discussions and consultations the field is still very broad and it is not clear at all how the point on the horizon will look like. When you realise that the members states still have two years to implement EU legislation into their own national laws, it appears to become only really relevant in the final stages of the law making, whereas the important choices for the direction of the law were made much earlier on in the process.

**Zooming in on** the European Commission teaches us that the Commission has formed 33 Directorates General. The very first of big interest to the actuarial profession is DG FISMA. FISMA is the acronym for Financial Stability, Financial Services and Capital Markets Union. All legislation for insurers and pension institutions as well as for banks is developed by DG FISMA. DG FISMA was led till 13 September by executive vice-president of the European Commission Valdis Dombrovskis. Changes in the leadership are expected now Dombrovskis is appointed as Trade Chief of the European Commission and as the Irish Mairead McGuinness is his successor as Commissioner for DG FISMA. We expect though that our important first point of contact for us will stay Didier Millerot, who

**LAMFALUSSY PROCEDURE**



### DG FOR FINANCIAL STABILITY, FINANCIAL SERVICES AND CAPITAL MARKETS UNION ADMINISTRATIVE

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*John Berrigan **

**Deputy Director-General**
/../

**Policy Assistant**
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**Assistant Assistant & HR-BC**
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*Dpty: Kai Spitzer*

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**Resolution Task Force**
*Sabino Fornies Martinez*

*) Principal Adviser P. Dejmek Hack seconded to UK Task Force
Principal Adviser N. de Basaldua seconded to the Cabinet of Commissioner McGuinness

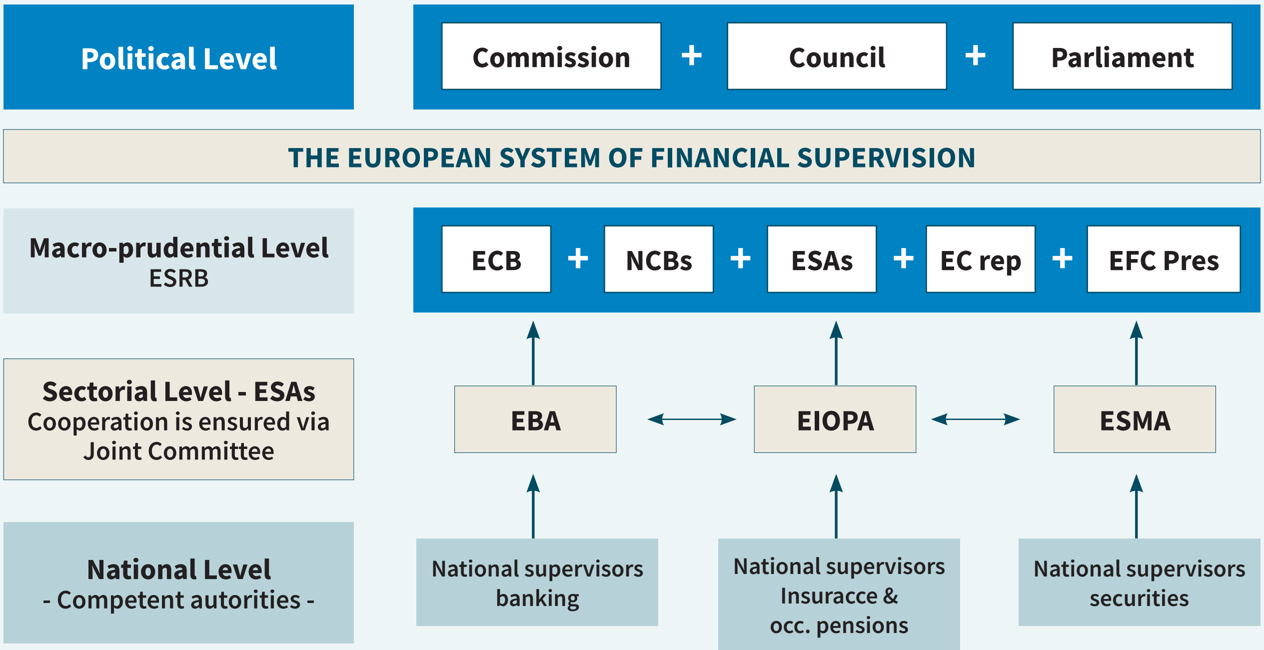
**) Antoine Bégasse – Del. Washington
Ionut Raduletu – Del. Beijing
Charles Canonne – Del. London

leads the Insurance and Pensions unit.

**Other Directorates General** that we are in contact with are DG Employment, Social Affairs and Inclusion (triannual Adequacy report), DG Economic and Financial Affairs (triannual Ageing report), DG Health and Food Safety (they co-authored our paper on pandemics in 2006), DG Informatics (big data, cyber risks), DG Eurostat-European Statistics and DG Climate Action.

**In 2010 the European** system of financial supervision (ESFS) was

**FOLLOWING THE RECOMMENDATIONS OF THE REPORT BY DE LAROSIÈRE EXPERT GROUP (FEB 2009) OPERATIONAL SINCE 1 JANUARY 2011**




introduced. ESFS consists of the European Systemic Risk Board and three European supervisory authorities, the European Banking Authority (EBA), the European Securities and Markets Authority (ESMA) and the European Insurance and Occupational Pensions Authority (EIOPA).

**The European actuarial** profession is in contact with all three authorities and in particular with EIOPA. The AAE is represented in the two stakeholder groups of EIOPA, one on Insurance and Reinsurance and the other on Occupational Pensions. The AAE responds to many consultations issued by these authorities. These consultations form the basis of their advice to the European Commission on (amendments of) European legislation as well as for the regulatory technical standards and implementing technical standards they develop.

The authorities can issue opinions to Parliament, Council and Commission. The Boards of supervisors of these authorities consist of representatives of the national supervisory authorities in the member states. Yet another important goal is to further supervisory convergence in Europe. The stakeholder groups of the three authorities consist of 30 persons each (with a provision for overlapping membership). The membership is personal, but a variety of stakeholders is represented: consumers, beneficiaries, representatives of industry, professional associations, SMEs and academia. The stakeholder groups are consulted on standards and recommendations and can do so called 'own initiative work' as well. Your author is honoured to serve as one of the two vice-chairpersons of the Occupational Pensions Stakeholder Group.

**FALCO VALKENBURG** has been Chairperson of the board of directors of the Actuarial Association of Europe from October 2019 – 2020.

# THE IORP2'S APPLICATION IN ITALY

BY **GIAMPAOLO CRENCA**
AND **MICAELA GELERA**

MICAELA GELERA

**In Italy the application of IORP2 depends on the specific rules issued by the Supervisory Authority (Covip). Recently, after a long process of consultation, Covip issued many applicable rules particularly about the key functions and Governance.**

IORP2 is challenging because it must be carried out taking into account two needs: the first related to the need to strengthen the governance system through the use of adequate professional skills - risk monitoring, measuring and managing, internal audit, actuarial activity - from which derives a dutiful acceptance of responsibility by these professionals; the second is connected to the containment of costs for members of the IORP.

These rules concern only the Contracted-out Pension Funds and the so-called *'pre-existing Funds'* (already existing at 15 November 1992), while Open Pension Funds and Individual Pension Funds Plans (PIP), offered by Banks and financial firms and Life Insurance

Companies, are already regulated by respective rules concerning the Actuarial Function and Risk manager (Basel 3 and Solvency 2). From the actuarial point of view some rules concern Risk Manager, compulsory for any kind of pension fund, and the Actuarial Function, compulsory only for the Defined Benefit Pension Fund. Both are however included in the new governance approach of the pension funds that is now risk-based and involves the Board as responsible for the risk management.

***'It is very important to set out every year the Governance approach in a specific report'***

Considering all above, before a question of culture and mentality has to be solved, mainly involving the Board but also all the staff of a pension fund; both must be oriented towards this approach.

The Governance is not regulated in detail, but every Pension Fund can organize it as best the Pension Fund believes; it is very important to set out every year the Governance approach in a specific report.

Moreover, persons who effectively run an IORP will have the opportunity, within the limits of the flexibility introduced by the legislation, to freely decide how to organize the key functions in practice, taking into account the size, nature, scale and complexity of the activities of the IORP.

All the choices made by the IORP, starting from the information about the key functions and their possible outsourcing, passing through the Own-Risk Assessment and the risk management system up to the remuneration policy, must be written in a specific document named '*Document on the governance system*'. In Italy this document will be published on the IORP's website in 2021 together with the 2020 accounting balance sheet.

Conversely, the document named '*Governance policies'*, in which the aforementioned elements characterizing the IORP are more analytically described, together with the strategic plan on information and communication technologies, the information system, the IT security measures adopted and the policy about the management of conflict of interest, has not to be published on the IORP's website. This means that the document of the paragraph above must be obligatorily published on the IORP's website, while another document, always concerning the Governance, but more analtycal, must not be obligatorily published on the webiste. It is a choice/ decision of the Supervisory Authority.

Some of the documents about governance are not new in the Italian regulation; in particular, the duties and responsibilities of the individuals, bodies and structures participating in the investment process were already expected in the rules defined '*Provisions on the investment policy implementation process*' and reported in the document named '*Investment Policy Document*'. Similarly, the description of the organizational model and the procedures implemented was provided in the document named '*Explanatory report on the organizational structure of the IORP*'.

The '*Operating Procedures Manual*' will replace the document named '*Guidelines on the internal organization of IOR*P' and will contain the procedures adopted in order to define the key functions, ensuring the correct distribution of responsibilities, the absence of overlaps and the correct reporting of information, also highlighting any critical issues.

***'The internal auditing is an important key function introduced by IORP2'***

In addition, pre-existing Pension Funds will have to define the figure of the Chief Executive. In Italy, therefore, the role of Responsible Person remains only for open pension funds and PIPs.

The Chief Executive organizes the IORP's activities, supports the Board in making both operational and managerial choices and in implementing them in compliance with the regulations in force.

The IORP's Supervisory Body must monitor the compliance with the legislation, the correct administration, also by requesting the support of other control functions such as the internal audit function, and report any anomalies to the Board, setting out their proposed solution. The Supervisory Body will have to comply with communications to Covip.

A final remark concerns the remuneration policy that will be:

1. established, implemented and maintained in line with the activities, risk profile, objectives, the long-term interest, financial stability and performance of the IORP as a whole, and shall support the sound, prudent and effective management of IORPs;
2. in line with the long-term interests of members and beneficiaries, including the measures aimed at avoiding conflicts of interest;
3. consistent with sound and effective risk management and shall not encourage risktaking which is inconsistent with the risk profiles and rules of the IORP.

In Italy, in case of internal assignment, therefore to employees, reference will be made to CCNL (National Collective Labor Agreement).

The internal auditing is an important key function introduced by IORP2. Also if this function was in place, it was not so developed and thorough. Compliance is not compulsory; Covip in any case suggests putting great attention on to this aspect and asks directly for the Board to follow this matter.

The second point is the rules concerning the risks' map and the report that the Risk Manager must prepare in order to represent the risk exposition. We must emphasise that no quantitative requirement or evaluation are requested by the law and Covip's rules ; instead, in case of the defined benefits scheme, the Actuarial Function assumes a very important role also from the quantitative point of view.

A new regulation, the Own-Risk Assessment which must ensure compliance with national and European legislation and statutory and regulatory rules, will be central in order to avoid penalties, financial losses or reputational damage. Own-Risk Assessment is in turn subject to assessment by the internal audit function (carried out in outsourcing or internally to the IORP). To complete the Own-Risk Assessment, a contingency plan must be drawn up, in which the internal processes and mechanisms for ensuring operations even in emergency situations are defined.

Regarding the requirements of Governance (including the key functions) the Decree of the Ministry of Labor and Social Policies n. 108/2020 establishes that the risk management function and the *internal audit* function are carried out by subjects who, for at least three years, have experience in:

1. regulation of the pension, credit, financial, securities or insurance sector;
2. organizational and governance structures of pension or corporate funds;
3. risk management (identification, measurement, monitoring, management and periodic reporting) in the pension, credit, financial, securities or insurance sector;
4. Own-Risk Assessment and activities;
5. pension, banking, financial, securities or insurance activities and products.

***'The Actuarial Function assumes a very important role also from the quantitative point of view'***

GIAMPAOLO CRENCA

The *actuarial function* in Italy can only be performed by an actuary registered in the official list ('*Albo*') pursuant to law no. 194/1942 or who performed the actuarial function pursuant to the Solvency II Directive for at least three years for an insurance or reinsurance company in the life business.

For the outsourcing of activities the IORP must decide in a justified and documented manner; the risks associated with the outsourcing must be considered in the risk management and the outsourcing of functions does not exempt the Board from the responsibilities.

**GIAMPAOLO CRENCA** is President ISOA and National Actuarial Board.

**MICAELA GELERA** is Member of the National Actuarial Board and Responsible for the Pension Committee.

# **WILHELM SCHNEEMEIER** HAS BEEN ELECTED AS **THE NEW CHAIRPERSON OF THE AAE** FOR THE YEAR TO OCTOBER 2021

Wilhelm is a German national and has served on the AAE Board of Directors since 2017. Wilhelm has been active in many roles in the AAE (member of the Insurance since 2011 and member of the Professionalism Committee from 2005-2008). He was President of Deutsche Aktuarvereinigung (Germany) from 2015-2017 and is still a member of DAV's Executive Board and chairs their International Committee. Wilhelm is also a member of the IAA Strategic Planning Committee as well as member of IAA's Life Section Committee. Wilhelm Schneemeier said: '*I feel privileged to represent this great organisation of volunteers as Chairperson. We face big challenges: COVID-19, the low interest environment, our climate, changing regulations – just to name a few – are all impacting insurers, pension funds, consumers and therefore also the work of actuaries. Being the representation of the European actuaries it is our aim to contribute to complex issues. This will also be an important objective for the next year. I look forward to collaborate with our Member Associations, the European Commission, members of the European Parliament, supervisors and other stakeholders to address the major challenges ahead.*'

WILHELM SCHNEEMEIER

Falco Valkenburg, the Immediate Past Chairperson, said: '*Wilhelm has been very active in the actuarial community both in Europe and internationally and has worked in many areas concerning the development of our profession especially focused on insurance. He had a deep involvement in the AAE Board as ViceChairperson. I am delighted to contribute next year under his chairpersonship which will continue to move our association.*'

During today's General Assembly Mária Kamenárová (Slovakia) was elected as Vice-Chairperson for the coming year. Philippe Demol (Belgium) and Inga Helmane (Latvia) were elected as Board member replacing José Mendinhos (Portugal) and Kartina Thomson (UK) whose terms ended.

# NEWS

**The UK was one of the founding members of the Actuarial Association of Europe (then Groupe Consultatif Actuariel Européen). In the light of both Brexit and the global expansion of the IFoA, the IFoA has reviewed its membership of the AAE. All options were kept open, and the Board of the Actuarial Association of Europe has had many discussions with the IFoA Council and Chair.**

We are delighted that the IFoA has reconfirmed its willingness to remain a full member of the Actuarial Association of Europe. The IFoA is the largest actuarial association in terms of the number of actuaries in Europe and has contributed significantly since the founding of the Actuarial Association of Europe, both in terms of the number of volunteers involved in the activities of the European actuarial profession and in terms of in-depth expertise. The IFoA has contributed in various leadership roles within the Actuarial Association of Europe, as well as making a significant financial contribution to the AAE.

The discussions with the IFoA have made us realise that we were perhaps too dependent from one single member association from a financial budget perspective. For the IFoA Brexit was also a reason to reconsider its financial contribution. The Actuarial Association of Europe is very happy that we have been able to bring all wishes from both parties together. The AAE is now applying a 25% cap of the number of actuaries in Europe on subscription fees for its member associations. This is in fact a way of risk mitigation preventing the Actuarial Association of Europe becoming too dependent from a financial budget perspective on one or two member associations, whilst for the IFoA it met its goal for a reduced contribution level going forward.

We are happy to have been able to successfully bring together the wishes of the IFoA as well as of the AAE. The IFoA will continue as a full member as has been the case from the very start of the AAE. In this light we are very happy that Malcolm Kemp (IFoA representative) was on 9 October appointed for a second term to chair our Risk Management Committee.

**Falco Valkenburg**

# COLUMN

## **SOLVENCY II REVIEW IN TIMES OF DISTORTED MARKETS:** A HUGE CHALLENGE FOR EUROPEAN ACTUARIES

I remember very well the discussions in the years before implementation of Solvency II. Market consistency as a fundamental requirement of valuation gave a lot of room for interpretation: actuarial associations, supervisory bodies and the insurance industry were trying to come up with a fair value proposal often suiting the needs of their local business in relation to existing guarantees. Controversial debates about the distortion of interest rates by ECB measures have been resolved by a bundle of compromises.

After more than four years of practical experience it is therefore not surprising that the Actuarial Association of Europe (AAE) is deeply involved in the current review process of Solvency II.
There is no doubt that the implemented rules and governance had a positive impact on stabilizing business in force and reducing guarantees of new products. But at the same time intervention of ECB on markets continued, and obviously the level of distortion is still high.

Philip Lane (chief economist and Executive board member of ECB): ‘*Overall, taking the Asset Purchase Program, negative rates and rate forward guidance together, ten-year sovereign bond yields would have been almost 1.4 percentage points higher in 2018 without those measures.*’

This should not be interpreted as a plea for an unsound uplift of risk free rates but as a clear request for trying to develop a method to measure these effects properly. Ignoring or underestimating them (‘*because it is conservative*’) would be against actuarial principles and could endanger important pillars of national pension systems. Especially the implicit continuation of the 140 bp distortion for long term valuation seems to be critical.

Therefore the AAE will support an environment where sharing of risk, long term life insurance and pensions can be provided in a safe manner by the industries involved. The tool is Solvency II, which certainly needs additional levers for the challenges ahead to react to possibly even much higher distortions.

Investment into sustainable assets by insurance companies is high on the target list of the European Commission. The AAE takes this very seriously and supports this. But this goes hand in hand with a serious and prudent valuation as well.

Last remark: the AAE will speak with one voice trying not to be impacted by the very different local situations of European actuarial associations. That is not easy but in the best interest of the member associations and all European actuaries.

*Wilhelm Schneemeier*
*Chairperson Actuarial Association of Europe*

## COLOPHON


The European Actuary (TEA) is the triannual 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 1 March 2021. Suggestions can be e-mailed to info@theeuropeanactuary.org
The deadline is 1 February 2021.

### EUROPEAN AGENDA

Please check
http://actuary.eu/event-calendar/
for the most actual forthcoming events.

### ADVERTISING IN THE EUROPEAN ACTUARY

The European Actuary (TEA) is sent as an online magazine to 25,000 actuaries and financial professionals throughout Europe. An advertisement in TEA, size 210 x 145 mm (half A4 and seen as full-screen), costs only 3,500 euros. Information on info@theeuropeanactuary.org