

EIOPA calls for transparency to protect consumers



By David Nicholson

The relentless transfer of pension responsibilities from employers to employees has to be accompanied by a fundamental change in the way that the sector is regulated, according to Gabriel Bernardino, Chairman of the European Insurance and Occupational Pensions Authority (EIOPA).

'I think we need a paradigm shift,' he says. 'The information that we've been providing, while it is literally correct, is not right for those who have to take decisions about their pensions.' Documents running to hundreds of pages, dealing with arcane financial products, need to be supplemented by straightforward, easy to understand literature which makes clear the responsibilities and liabilities involved. 'There needs to be less material, but more standardised and explainable,' says Bernardino.

Simpler concepts

'We have to move from the assumption that people understand all the financial information that they receive. We need to base our information on much simpler concepts. I think this is going to take a huge shift from the regulatory side.'

The European industry's switch from defined benefits to defined contribution pensions has created a generational gap between late 20th and the early 21st century provision, with employees left confused by their pension conditions and responsibilities. European states must act to remedy the situation, says Bernardino.

Concrete action

'It is not enough to talk the talk, we must have concrete action,' he

says. 'We want to take the lead on bringing increased transparency to the pensions market.'

Transparency is the so-called 'Pillar III' of the EC's proposed supervisory regime for pension schemes. Pillar I relates to technical provisions and Pillar II is about governance and supervisory review.

EIOPA is due to release a major quantitative impact study (QIS) into the impact of the Institutions for Occupational Retirement Provision (IORP) directive this spring, with a full report expected in June 2013. Its main concern is to look at developing a more risk-based approach for European pensions. All regimes in the financial sector need to

concentrate more on governance, on how they view risk and capital, according to Bernardino.

So many things have changed, including risk management tools and advances in actuarial sciences

The parameters of risk management have changed in many ways, he argues. The use of complex derivatives, held partly responsible for the ongoing credit crisis, presents new risks. Low interest environments have changed the profile of pensions products. The issue of sovereign risk has changed radically in recent years, along with a newfound instability in equity markets. 'So many things have changed, including risk management tools and advances in actuarial sciences,' says Bernardino.

The European Commission was calling for action on pensions reform and asked EIOPA to conduct this QIS research, as a means of moving towards a system with a better understanding of risk. 'We needed to have impact assessment of the advice we were giving, so this process has gone ahead,' Bernardino says.

Although the process of reforming both insurance and pensions markets was underway before the 2008 crisis emerged, certain issues were highlighted that needed to be addressed, once again feeding in to the need for greater risk management and more robust regulations.

Among the recommendations that Bernardino emphasises are:

- A more realistic valuation of assets and liabilities by pensions providers:
- Clearer comparability between assets and liabilities:
- The reinforcement of standards of governance, with specific emphasis on the defined contribution side.



The challenge of how to calculate risks is enormous

Communicating with pensions beneficiaries is the 'biggest challenge' facing the industry, according to Bernardino. 'The challenge of how to calculate risks is enormous. When people hear about billions of euros, it's hard for them to make sense of the information. The challenge is to relook at the information we provide.'

New generation

If successful, Bernardino argues that such regulatory changes will 'pave the way for a new generation' of pensions providers, who will recognise the need for shared risk profiles between employers and employees, 'We're not saying that defined contribution pensions are a bad thing,' explains Bernardino. 'They should still be seen as employers providing for employees. But there needs to be room for the financial sector to take its own share of the risks. It shouldn't act solely as an asset manager. They're the specialists, so they should take part of the risk.'

This may be an unpopular sentiment at a time when European companies are suffering under the yoke of austerity policies and failing demand, but Bernardino is determined to place his organisation's sympathies firmly with the employee. Defined contribution policies have the advantage that they can easily be moved to new employers, in line with the more fluid and volatile employment situation in 21st century Europe.

Challenge

The situation for the insurance market across Europe is more stable, says Bernardino, because it has had a longer experience of implementing EU directives. 'The main challenge for insurers is Solvency II,' he comments. 'Because this is already approved and implemented and comes directly from the causes of the financial crisis.' The pensions industry is some years behind



insurance, from a regulatory standpoint, whereas insurance has less issues to overcome, he argues – although there remain guidelines and standardising elements which national governments need to adopt. 'This is a fundamental issue,' he says.

As a public authority, the EIOPA's job is to protect consumers and members of pension schemes. In the current environment, with employers looking to offload risk, it is a tough assignment. But Bernardino is determined to fight his corner.

THE THORNY ISSUE



OF ANNUITIES

By Romain Durand

Financial crisis made us concentrate on the financial issues in pension funds. Literature, articles have been concentrating on the issue of revenues in existing plans, on average returns, on discount rates to calculate pension funds reserves. All this ado would perhaps convince most people that the issue of pension funds, as well as life insurance, is about long term accumulation about the "account value" when they plan to retire.

Even if it is a big part of the problem, I would say it is only a minor part of it. Retirement is somewhat about how much money you have accumulated, but it is also mainly about how long this money will help sustain your expenses. To make a long story short, it is a balance between how much was accumulated and how long this accumulation can care for expenses after retirement. And this last point is heavily determined by longevity.

Benefits

With the progressive shift from defined benefits to defined contribution, the pension industry makes a clear divide between accumulation and pay out phase. In a defined benefit product, the annuity "amount" is set in the contract and calculations of pay out phase are determined by the agreed benefits. In the defined contribution world, the annuity will only derive from the accumulated fund at time of retirement.

Conservative forecasts

But calculation of annuities are the consequence of a predominant factor: longevity. And how sure are we today about longevity? During a round table organized by Daria Kachakhidze of Scor and the reinsurance magazine Reactions1 about longevity, James Vaupel, the well-known demographer mentioned: "the most judicious way to think about it (the longevity) is that there is no evidence of a looming limit in the foreseeable future." And "there is likely to be further increases, but the forecasts I see are very conservative". And Chris Madsen, Group Vice President / Head of Risk Structuring & Transfer of Aegon, stated that: "I think we at least have to acknowledge the possibility that there may not be a finite limit to life expectancy".

life expectancy would never, never exceed 62 years old...

These views are coherent with what we experienced over the last century: an unending increase of longevity, to the point that it was difficult to believe and include in calculations. In the same round table, James Vaupel mentions that in the 20's, Louis Dublin, then chief actuary at Metropolitan life insurance company (NY), published that life expectancy would never, never exceed 62 years old...

To face this major challenge, the uncertainty of life expectancy when calculating an annuity, what are the options offered to actuaries in charge of pricing?

Unfair

The first one is over prudence regarding the tables used in computation of annuities. But, as stated above, it is possible that over prudence is not over prudent in regard of "real" development of longevity (and the scarcity of data regarding insured populations should not be underestimated). Moreover over prudence could prove unfair to current annuitisers and make annuities totally unattractive. Paradoxically including a sharing of longevity profit will only benefit survivors. Second, facing such uncertainty, actuaries should not rely on one method but compare multiple approaches when pricing annuities (such as deterministic, stochastic, or scenarios). They should also favour company mortality tables (if available) with adjustments for mortality improvements.

A more balanced approach

Thirdly they could rely on risk mitigation, namely transfer of risks to the market (reinsurance or a SPV). This solution doesn't alleviate the uncertainty attached to longevity as the level of expert knowledge is more or less the same across the market. In my view, it only creates a more balanced approach to the risk by confronting "at arm's length" different appreciations of risks and mixing experts views with "wisdom of markets".

But whatever the option, the bets that actuaries have to make would be easier if more data were available. In the days of high financial returns moderate attention was paid to the biometric studies. The view was that financial income would pay for errors of forecast, or that few people would annuitise. These days are perhaps gone, it is therefore of utmost importance for the insurance industry in general and the actuaries especially to invest heavily in this field.

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^{1 -} an age old problem Reactions July August 2011

Mortgages: interesting asset class for pension funds?

By Peter van Meel and Peter Tompkins

Like all banks, the Dutch banks have a financing problem. The current outstanding mortgages of € 650 billion outweigh the amount of money on the current saving accounts of the Dutch households which is € 350 billion. Before the crisis, banks and insurers borrowed the difference from foreign investors. Nowadays this has become more difficult which have led to a bigger dependency on the ECB (European Central Bank).

Wientjes, the chairman of VNO-NCW¹, proposes Dutch pension funds, which have approximately € 900 billion of assets under management, to invest in at least € 130 billion worth of mortgages of banks for which a government guarantee is applicable. With this money banks can increase the credit line to the small and medium sized enterprises. This idea is a vital element of a master plan between government, employers, unions and pension funds to provide a growth impulse for the (Dutch) economy.

Hesitant

The largest pension funds react that they already have invested in mortgages taking into account the current applicable limits. They are hesitant to invest more in Dutch mortgages. Investments have to provide a proper return for the risk they embed. In the end the assets are needed for to pay out the future pensions of the participants.

Currently trading in mortgages is possible via securitizations but these have as drawback that they all have different characteristics which hinders trading. The Dutch Central Bank sees a possible solution for financing the Dutch housing market via standardizing mortgages. This makes them easier to trade and gives an opportunity for pension funds to invest in.

Fresh money

Blok, the Dutch Minister of Housing, has set up a committee which will look into the role pension funds can have in the Dutch mortgage market. Van Dijkhuizen, vice president of NIBC and former treasurer general of the Ministry of Finance, chairs this committee. He will look into the possibility to increase the room to maneuver for institutional investors on the mortgage market. They can help to provide fresh money to companies or potential buyers and to kick start the housing market and the recovery of the construction sector. In a recent announcement of the committee the introduction of a national mortgage bank which emits mortgages with government backing is presented as a viable option worth further investigation.

UK

This is different compared to the UK. Here pension funds do not tend to invest directly in the mortgage market. Government and corporate bonds are the usual form of fixed interest investment. although there is some recent interest in other forms of incomegenerating asset such as infrastructure investment (roads and bridges etc). There is some interest to finance houses who provide equity release loans to the elderly in return for a mortgage on their homes, looking at the possibility that this type of investment might suit a pension fund, since it becomes increasingly difficult for it to satisfy the rigorous requirements of Solvency II funding for an insurance company.

In a few other countries pension funds have been more active in taking an investment in infrastructure, such as the Canadian pension fund which has invested in Eurostar trains or the Australian fund which invested in the only toll freeway in the country.

To summarize: the assets under management of pension funds might be a tool to recover from the crisis. To prevent this idea does not fire back, a committee has been installed in the Netherlands to further study on this. Other countries have not yet taken steps in this area. Maybe they await the outcome before taken further steps.





^{1 –} VNO-NCW is the largest association of companies in the Netherlands. These companies represent approximately 90% of the total jobs market. VNO-NCW looks after the collective interest of the Dutch companies and wants to improve the business environment of Dutch companies on national level as well as international level.

SOCIAL RESPONSIBILITY

'from maximising financial return to maximising genuine wealth'



By Falco Valkenburg

The topic social responsibility seems to be the start of a lot of controversial opinions. Are companies there to "just" maximize their financial return for their shareholders or should they benefit the society at large? This is an highly ethical issue. It does sound very nice to serve the society at large, but this would distract from the fundamental economic role of businesses is what critics argue. Others are afraid that it would just give more power to governments as a watchdog over the highly independent operating large corporations. It seems a fact that there is no negative impact on shareholder's financial results from social responsible acting by companies who do as compared to others who don't. A significant number of studies support this finding.

Let's just accept that it is the fundamental role of businesses to produce economic results. This reminds me of a very inspiring lecture of Satish Kumar where he told the story about when he was invited to speak for the London School of Economics. He asked "where is your Department of Ecology"? The answer was "Well, we do teach environmental studies, but we do not have Department of Ecology, as such". Then Satish gave an explanation of where the words Ecology and Economy come from:

"Ecology and economy are derived from three Greek words: oikos, logos, nomos. 'Oikos' means home: a place of relationships between all forms of life, sharing and participating in the evolution of the Earth community. 'Logos' means the knowledge of our planet home, and 'nomos' means management of that home.

Now what is taught at the LSE is economy; management of the home, and not ecology, the knowledge of home. How can anyone manage something they know nothing of? If you don't know your living room, bedroom, dining room, kitchen or garden how are you going to manage them? If you don't really know your mother, father, husband, wife or children, how are you going to manage those relationships?

So ecology should come before economy; knowledge before management. But at the LSE, as well as at most other universities, the study of the economy dominates. These universities are sending thousands upon thousands of young people into the world equipped with management skills but without knowledge of what they are going to manage. These graduates are half-educated, which is worse than being uneducated."

Satish then continued we need a third 'E': "ethics. Our 'oikos', our planet home, has to be built on the firm foundation of ethical and spiritual values. Without such a foundation our home will be unstable and unsustainable. The credit crunch as well as the Nature crunch offer us a challenge and an opportunity to redesign our money system and our economies in such a way that we can restore the wellbeing of the human community as well as the Earth community."

Genuine Wealth Model 2.0

Satish has helped me looking at things in a different way. I am glad to have met him personally. In this last paragraph he talks about big things: redesigning our money and economies and restoring wellbeing of the community.

That lead me to another person I would like to introduce to you, my friend Mark Anielski. Mark is an Canadian economist and author of the book "Economics of Happiness". Mark has developed a Total Asset Management system, the Genuine Wealth Model 2.0. This model takes an integrated accounting approach to assessing well-being of a City, a region, a country, a set of countries or the world as a whole.



Mark shows that our measurement in pure financial terms, most of the times expressed in terms of Gross Domestic Product (GDP) is providing us with incomplete information. Example: if we experience a lot of people suffering from cancer it is immediately clear that this is a very undesired circumstance. When we measure the effect in the way we do, in terms of GDP, it has a very positive contribution to our GDP due to all the medical and medicine activity. So our statistics show that we have become wealthier due to the fact that a significant number of people suffers from cancer. What is wealth? Mark provides, similar as Satish Kumar does, background to the word wealth which originally means "the conditions of well-being".

So the supporters of Social Responsible behavior of businesses and the critisisers are both right. The issue is that our measurement is too one-sided. Mark Anielski has developed a model where we can measure wealth, not only financial, but genuine wealth is a combination of Financial capital, Human capital, Social capital, Natural capital and Built capital. There is not enough space here to touch deeper on these elements, but if you are interested you could take a look at some successful communities that started to use a more holistic measurement of wealth:

- City & region Well-being Index http://www.well-beingindex.com/stateCongresDistrictrank.asp
- Canadian Index of Well-being (https://uwaterloo.ca/canadian-index-wellbeing)
- Eindhoven Brainport Monitor (www.brainport.nl)

I have seen actuaries feeling sad that their message was not picked up

I think that we, actuaries, who help to put a value on many things, could drive change by suggesting measuring the value in a wider sense than only the financial aspect. The financial value only is not providing the right answers. My involvement over the last 3 decades has been in pensions. Big issues have appeared. These issues go beyond financial measurement only. It is about how we share money between groups of people, between generations. It is how we invest the pension savings in a way that those investments contribute to genuine wealth. For a long time a financial-only management can show very positive outcomes. Although we, experts, already foresee underlying issues that will pop-up on the longer run, we have difficulty getting attention for our warnings. I have seen actuaries feeling sad that their message was not picked up. I am convinced we should embrace a more holistic way of measuring. Not only the financial side but include the other elements that all together constitute genuine wealth. That would be a giant step forward. Since we could value the issues we already foresaw ahead of many other experts and by doing so be able to convey our messages in a much more powerful way, as guardians of society by always assessing issues in terms of genuine wealth. This is the next step ahead: the birth of the socially responsible actuary.

Falco Valkenburg is Chairman of the Pensions Committee of the European Actuarial Consultative Group. The view in this article is entirely his own and does not reflect the view of the Groupe Consultatif. Follow Falco on Twitter: @FalcoValkenburg

UNINTENDED FUTURE RISK

By Patrick van der Lee and Peter van Meel

Since last year the Dutch Central Bank (DNB) prescribes Pension Funds to include the Ultimate Forward Rate (UFR) in the term structure used for the valuation of pension liabilities. The current market circumstances, which DNB judges to be exceptional, and the liquidity for long duration investments, which is deemed to be scarce, were put forward as the main reasons for this decision.

Although the reasons to move away from market value might make sense, the introduction of the UFR seems to be done a bit hastily without having a clear overview of all the consequences.

As the term structure including the UFR is only allowed to be used for the valuation on the liability side, the balance sheet becomes imbalanced. The inclusion of the UFR moves the term structure up after the Last Liquid Point (set at 20 years). Hence the value of the liabilities, which for Pension Funds include liabilities with a duration longer than 20 years, goes down. As the methodology to value the assets does not change, the equity position of the Pension Fund goes up and the funding ratio improves. An improvement without any change in expected cash flows or market indices. And people say there is no such thing as a free lunch!

Critical level

If there would not be a financial crisis and pension funds would not worry about their financial position, maybe less attention would have been given to this change. However the funding ratio for a large number of Pension Funds in the Netherlands is at a critical level. Valuation of the liabilities with an adjusted term structure can push the funding ratio to a funding position which is deemed less dangerous. However, on market value basis it might be the opposite!

Measures

Regulation in the Netherlands determines at what level of funding ratio accrued pension rights have to be cut back and at what level participants are eligible for an increase of accrued pension rights (indexation). Applying the adjusted term structure might even lead to a bizarre situation of granting indexation of pension rights instead of having to cut back pension rights (based on the unadjusted term structure). This fuels the ongoing debate between generations who should pay the price for the financial crisis. Younger generations argue that the timing of this change favors pensioners at their cost. Another consequence is the uncertainty on the asset management strategy for a Pension Fund and specifically on the hedge strategy. Most Pension Funds have taken measures to mitigate the interest rate risk by including Interest Rate Swaps (IRS) or Swaptions in their asset portfolio. These derivatives are entered into based on the unadjusted term structure to close out part of the interest rate risk. By changing the term structure used for the valuation of the liabilities, the interest rate risk changes. This poses a challenge for the Pension Fund. Should you determine your interest rate risk and hence your hedging strategy on the term structure as can be seen in the financial market or on an adjusted term structure which is artificial? The unadjusted term structure has the disadvantage that it causes additional fluctuations in the funding ratio as this has to be calculated based on the adjusted term structure. Using the adjusted term structure leads to an imbalance of the valuation methodologies for the asset side compared to the liability side of your balance sheet. A choice between a rock and a hard place.

Relating to the issue mentioned above, if all Pension Funds and insurers would base their asset management strategy on the adjusted term structure, the financial market will be impacted. We cannot imagine that this was the intention of the introduction of the UFR.

Let's hope the Ultimate Forward Rate will not lead to an Unintended Future Risk. As said before, the intention is clear but the execution has some drawbacks.

Patrick van der Lee and **Peter van Meel** are both working at Milliman Pensioenen, The Netherlands

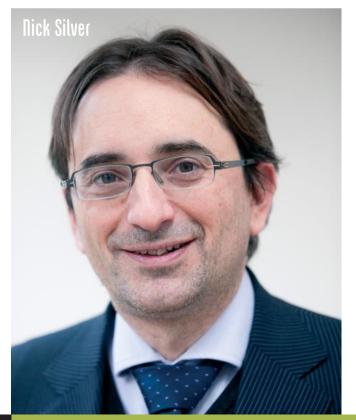




ENVIRONMENTAL ISSUES What can actuaries add to the debate on environmental issues?

By Nick Silver

Environmental degradation and the issue of climate change may at times be controversial issues but there is no doubting that there are serious challenges for the economies of the world. The actuarial profession in the UK has now taken a leading role in addressing some of these risks and the ideas which may affect future economic development and exploitation of resources.



In January this year, the Institute and Faculty of Actuaries launched a major report¹ with the Global Sustainability Institute at Anglia Ruskin University in Cambridge. This report looked at the "Limits to Growth" to mark the 40th anniversary of the book of that title which first looked at the way in which the world's resources were being consumed. One of the original authors, Jorgen Randers, and Simon Upton from the OECD, joined us at our launch discussion.

Supported by a grant from the Institute and Faculty and led by Dr Aled Jones of the University, the economic and actuarial researchers have conducted a thorough review of the depletion of resources, the availability of water, population pressures and environmental degradation, bringing data to bear on an assessment of the prospects for the future and on the question of the degree to which resource limitations might act as a brake on growth.

The report also suggests that financial models fail to factor in the risks

Their conclusions are stark. Resource constraints will, at best, steadily increase energy and commodity prices over the next century and, at worst, could represent financial disaster, with at some point the assets of pension schemes effectively wiped out and pensions reduced to low levels. The report also suggests that financial models fail to factor in the risks of climate change and resource scarcity, apart from a narrow focus in some insurance products related to direct weather events.

How resource constraints affect the economy is complex and depends on a number of factors. Political and market responses to the challenges associated with resource constraints will have far-reaching consequences that need to be understood. To a large extent, these can be managed or, at the very least, influenced. Actuaries are in a position to examine and then explain the risks and the financial consequences to those charged with making decisions about resources and the environment.

Questions that arise include:

- Will the increasing cost of resources, the effect of climate change and the scale of biodiversity loss result in investment into new methods of doing things, or will it merely increase investment into business as usual?
- Will any individual, organisation or sector take responsibility for managing a transition to a new economic paradigm or a new technological revolution?
- Will society or physical events force us to accept this responsibility in time, or will we avoid it until it is too late?

- How do issues of resource constraints interact with other economic factors such as high debt levels and ageing populations in developed countries, and the rapid growth of emerging economies.
- Modelling such a high-impact set of issues is critical not just for actuaries but also for society as a whole.

So what effect will these issues have on actuarial assumptions about the future?

The assumptions that actuaries use in their work should take into account many potential developments:

- The potential of reduced economic growth caused by resource constraints and increased uncertainty.
- Reduced access to many commodities and hence increased prices or lack of availability.
- A series of price shocks caused by greatly reduced access.
- Reduced coordination and international security as countries compete for resources.
- Depression of investment returns as governments direct investment into sectors required to make the economy more resilient.
- Increased differential of investment returns in countries with varying starting points for resources, efficiency and debt levels.
- Increased bankruptcy as indebted countries, companies and individuals fail to make repayments owing to the lack of growth.
- Warmer temperatures and unpredictable weather caused by climate change.
- Increased social tension as inequality and hardships are exacerbated.
- Changes to life expectancy and morbidity caused by changes in temperature, access to resources or ability to afford medical care.

Three broad categories are explored in more detail in the published report, namely discount rates (this includes interest rates and investment returns), inflation (including salaries and prices), and demographic factors (mortality and morbidity).

How society reacts will be a major determinant of outcome. Society will need to invest more and consume less, and the way this is achieved will determine investment returns, both absolute and relative to wage growth.

They will also have a clear impact on international investment, upon which many institutions rely.

In certain circumstances, governments could intervene – either proactively or reactively – to address a threat that could constrain investment returns and wage growth. Resource constraints could lead to international tension, potentially reducing trade, economic activity or even threatening security. They will also have a clear impact on international investment, upon which many institutions rely.

If resource constraints do provide a limit to economic growth, it is vital that these impacts are understood and that actuaries are there to shed light on the issues.

Nick Silver is a Fellow at the Institute of Economic Affairs and a Director at Callund Consulting Ltd. He is an actuary (Fellow of the UK Institute of Actuaries) and economist, specialising in pensions and social insurance.



^{1 -} http://www.actuaries.org.uk/research-and-resources/documents/research-report-resource-constraints-sharing-finite-world-implicati

European agenda

2013

April Commission publishes Green Paper on long-term investments

April 2013 Commission publishes Communication on possible legal proposals on

Shadow Banking

16 April EIOPA Insurance & Reinsurance Stakeholder Group meeting

25 April EIOPA Occupational Pensions Stakeholder Group meeting

June EIOPA submits public report to Commission on revision of IORP

Directive

14 June EIOPA releases Solvency II impact study on products with long-term

guarantees

24-26 June PBSS/AFIR-ERM/Life International Congress in Lyon

(more information http://www.actuaries.org/lyon2013)

July Commission to publish its proposal for the Regulation of the

Production and Use of Indices serving as Benchmarks in Financial

and other Contracts

12 July The Commission to draft report based on EIOPA impact study

1 July EIOPA Insurance & Reinsurance Stakeholder Group meeting

4 July EIOPA Occupational Pensions Stakeholder Group meeting

25-27 September Groupe Consultatif annual conference and general assembly, Dublin

22 October European Parliament to vote on Omnibus II, Strasbourg

22 October European Parliament vote on technical provisions of MiFID II,

Strasbourg

2014

1 January EIOPA has published interim measures, as part of the preparation

for Solvency II, that call for national competent authorities to put in place certain important aspects of the prospective and risk based

supervisory approach to be introduced

No specific dates, but all to take place during 2013:

Draft Directive on acquisition and preservation of supplementary pension rights, also known as the 'Portability Directive to be published.

Development by the Pensions Forum on a code of good practice for occupational schemes.

Feasibility study on the development of a pension tracking service will be initiated. The Commission will further examine with Member States how to better disseminate information to citizens concerning their pension entitlements.

EU consultation on improving consumer information and protection standards for third pillar retirement products.

Commission working on ways to reduce the risk of cross-border pensions, either being subject to double taxation or escaping taxation altogether.



colophon

The European Actuary (TEA) is a bi-annual magazine about international actuarial developments. TEA is written for European actuaries, financial specialists and board members. The magazine is published in cooperation between the four actuarial associations: Deutsche Aktuarvereinigung, The Institute and Faculty of Actuaries, Het Actuarieel Genootschap and the Institut des Actuaires.

It will be released as e-mail newsletter, as well as in print. The Editorial Board welcomes comments and reactions on this edition under contact@the-european-actuary.org. Please also feel free to direct them to one of the members of the Editorial Board.

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