

Clarity before Solvency

A DISCUSSION PAPER ON THE APPLICATION OF
MARKET CONSISTENCY TO PENSION FUNDS IN EUROPE





Foreword

With this paper the Actuarial Association of Europe (“AAE”) intends to discuss from an independent and actuarial point of view some technical issues with regard to the application of a ‘market consistent’ framework to pension funds. The AAE aims to address some of the broad issues currently being debated and to consider some of the social implications.

The AAE wants to highlight some important elements of the discussion on the quantitative elements of the IORP review. In doing this the AAE hopes to provide insights that can be used to bridge the different views that have been recently expressed within the broader debate. In this paper we concentrate on a market consistent approach as the starting point.

When developing a financial framework for IORPs an important priority is to protect the interests of all stakeholders: scheme members, beneficiaries and sponsors. Therefore this discussion paper has a direct connection with consumer protection. A topic also high on the agenda of the European Commission.

Consumer protection is not only about how the national or European Government can protect its citizens, but also about how citizens can protect themselves. Providing clarity on what the value of a pension is, and what the risks are, is key to informing the individual members. Protecting members and beneficiaries does not imply removing all risks, nor does it imply security above adequacy and sustainability. It is all about delivering what is promised and that does include uncertainty.

This paper is intended for pension policymakers, supervisors, pension experts, actuaries, politicians and any other interested persons and is a discussion paper of the Actuarial Association of Europe.

The AAE will continue to work with the European Commission, the European Parliament and other stakeholders on further development of methods and approaches to quantify pensions and assess the financial risks.



Michael Renz
Chairperson of the AAE

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Introduction

Providing clarity to all stakeholders

The purpose of this paper is to discuss from an independent, actuarial, point of view:

- Some technical issues with regard to the application of a “market consistent” framework to occupational pensions and occupational pension institutions and
- Some of the broad issues currently being debated within the European pension environment and the social implications

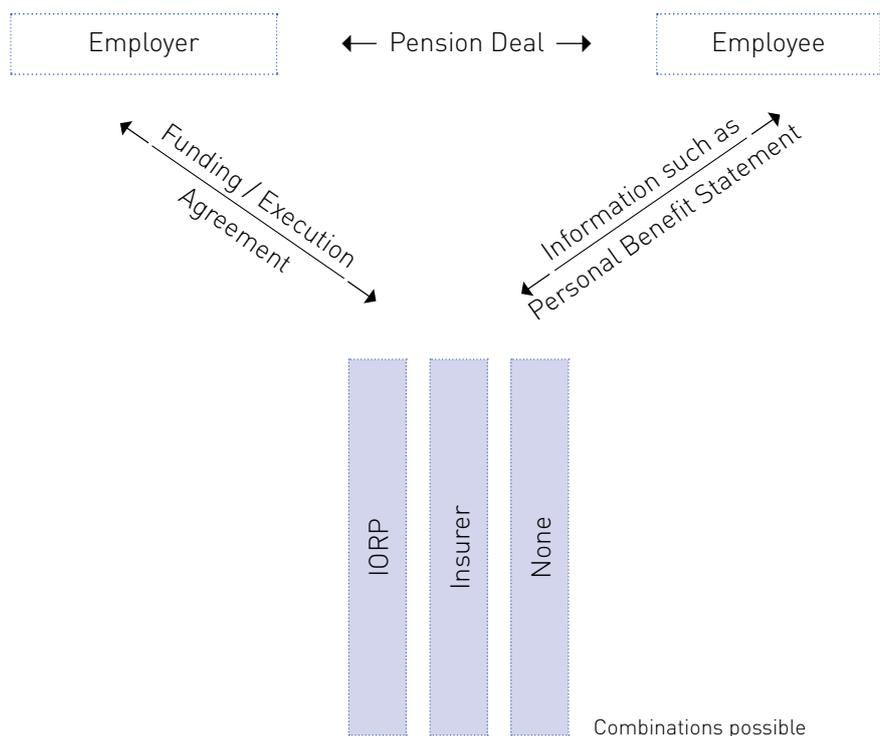
In doing so the Actuarial Association of Europe is supporting its vision:

“to be recognised as being the leading quantitative professional business advisers in financial services, in risk management and in the financing of social protection, contributing to the well-being of society”

In general, occupational pension schemes are established as part of the labour relationship between employers and employees, with the scheme usually forming an integral part of a wider remuneration package. The ultimate value of such a package is often linked to the long-term prospects of the sponsoring employer and may therefore differ in both the benefit level and risk (in some Member States this is only true for future accrual).

Moreover, pension schemes can be, and often are, an extension of the first pillar social security pension system. As a result there exists a wide variety of pension schemes within a Member State and differences in pension systems between Member States.

When an employer agrees a pension scheme with an employee, a value can be placed on such an agreement independent of the financing vehicle (which could be an IORP, an insurer, a book reserve or any combination).



The selected means of financing the scheme can result in varying degrees of certainty and can impact the value of the promise even if pension scheme designs are otherwise identical.

With this in mind, we want to highlight some important elements of the discussion on the quantitative elements of the IORP review. Although the current proposal for the revision of the IORP Directive does not include Pillar 1 (quantitative requirements) amendments, EIOPA continues to work on the quantitative requirements and a consultation paper has recently been released and finalised¹. We hope our discussion paper may provide insights that can be used to bridge the different views that have been recently expressed within the broader debate but concentrating on a market consistent approach since that has been the emphasis of EIOPA.

When developing a financial framework for IORPs, an important priority is to protect the interests of all stakeholders: scheme members, beneficiaries and sponsors. This means that the content of this discussion paper has a direct connection with consumer protection, which is a topic that is high on the agenda of the European Commission. Consumer protection is not only about how the national or European government can protect its citizens, but also about how citizens can protect themselves. Providing clarity on what the value of the pension is, and what the risks are, is key to informing the individual members. Protecting members and beneficiaries does not imply removing all risks, nor does it imply security above adequacy and sustainability. It is all about delivering what is promised and that does include uncertainty.

Note that a formal response has been submitted by the Actuarial Association of Europe to EIOPA's consultation, which presents the official view of the AAE on the specific technical points addressed in that consultation².

Before continuing further we would make the following observations. Whilst as noted above part of one of the purposes of this paper is aimed at determining the value of pension entitlements at a certain point in time in a 'market consistent' framework:

- "There are strongly held and differing views on how to interpret market consistency for certain types of liabilities (and assets) that are not readily traded on a market. It is not the purpose of this paper to express opinions on the validity of views expressed in these areas."³
- The excerpt from the Call for Advice refers to creating an 'internal market' in occupational retirement schemes. However, what this means in practice remains unarticulated.
- The emphasis from EIOPA has been on the application of "market consistent" approaches, other approaches which reflect the long-term nature of liabilities and assets may equally be valid.
- The paper is not about funding considerations. We note that funding valuations may differ from immediate solvency valuations and that such valuations may legitimately not be "market consistent" in the sense used in this paper.

This paper is intended for pension policymakers, supervisors, pension experts, actuaries, politicians and any other interested persons and is a discussion paper of the Actuarial Association of Europe.

¹ EIOPA, CP-14/040 Consultation Paper on Further Work on Solvency of IORPs, 13 October 2014, https://eiopa.europa.eu/consultations/consultation-papers/index.html?no_cache=1&cid=6717&did=45335&sechash=19f36de0

² Actuarial Association of Europe, Comments Template on Consultation Paper on Further Work on Solvency of IORPs, 13 January 2015, http://www.actuary.eu/documents/EIOPA_Template-for-Comments-on-CP-14-040_AAE_Final.pdf

³ Quote from the Educational Note on Market Consistency, page 9 – by the European Actuarial Consultative Group (now Actuarial Association of Europe) and edited by Philipp Keller, Malcolm Kemp and Christoph Krischanitz, November 2012. (http://actuary.eu/documents/MC_paper_and_letter_051212.zip). We refer those interested to this Educational Note for more background and context.

Part 1: Discussion of some technical issues.....

Market Consistency

"Replicating liabilities with assets that are traded in a deep, liquid and transparent market"

The starting point for the European Commission is to apply a 'market consistent' valuation framework. This is therefore also the starting point for this paper. We do not state an opinion about whether market consistency is a bad or good concept, nor do we recommend to use or not to use market consistency as a principle for regulation.

The definition of market consistency that we adopted in our Educational Note⁴ is the one preferred in Kemp [2009]⁵, i.e.:

A market consistent value of an asset or liability⁶ is its market value, if it is readily traded on a market at the point in time that the valuation is struck, and, for any other asset or liability, a reasoned best estimate of what its market value would have been had it been readily traded at the relevant valuation point.

The actuaries of the UK Institute and Faculty of Actuaries wish to express here that in a UK context pension liabilities are "tradeable" only within an insurance buy-out or buy-in context.

For a further introduction to market consistency we refer to our Educational Note that we published in November 2012. The Educational Note also presents thoughts on the notion of 'risk-free' that might be a good introduction to the next paragraph of this paper.

Stochastic or Deterministic Methods?

"Ensuring that where there is uncertainty of future financial outcomes, actuaries are trusted and sought after for their valued analysis and authority"

Depending on the purpose for which an actuarial assessment is undertaken, actuaries use a variety of financial modelling techniques. Some of these modelling techniques may be stochastic as per the broad definition below: others may be deterministic in approach.

From the book "Stochastic Modeling" as published by the IAA:

"The often-quoted definition of actuarial science as "the quantification, analysis, and management of future contingent risk and its financial consequences" was probably not made specifically in reference to stochastic modelling, but in many ways it could have been. We have only to consider the simplest examples, such as to determine the present value at a fixed interest rate of €1 to be paid at the death of an individual at some future time, or the amount of payment an insurer might be obliged to make for the negligent action of one of its policyholders, to appreciate how this definition applies. In these and nearly all applications in actuarial science, we are faced with a range of possible future outcomes, some more likely than others, and are called upon to make assertions about quantities whose actuarial values are uncertain. This function – the determination of various possible values of unknown quantities – provides a broad definition of stochastic modelling."

⁴ Market Consistency – by the Groupe Consultatif Actuariel Européenne (now Actuarial Association of Europe) and edited by Philipp Keller, Malcolm Kemp and Christoph Krischanitz, November 2012. (http://actuary.eu/documents/MC_paper_and_letter_051212.zip)

⁵ Kemp, M.H.D. (2009), Market Consistency: Model Calibration in Imperfect Markets. John Wiley & Sons

⁶ For definitions of the terms assets and liabilities we also refer to IFRS. Definitions can be found in the Conceptual Framework of the IFRS. Please note, that the term asset is not restricted to financial assets, the same for liabilities. Financial assets, financial liabilities and financial instruments are defined in IAS 32.

In dealing with market consistency, stochastic would appear to be the preferable approach from a mathematical perspective, being more capable of reflecting the complex considerations of market valuation than a deterministic approach. However, stochastic valuations are typically seen as expensive to undertake. Most occupational pension institutions in Europe have not yet developed

stochastic models for their own use. There are thus many occasions when an actuary, exercising appropriate professional judgement, may choose to use a deterministic approach, particularly when the results will not be materially different from those arising when a stochastic method is applied.

Discount Rate

“Depending on the properties of the pension promise”

We are currently engaged in a debate about what discount rate to use to value liabilities. Should it be ‘risk-free’, which is normally viewed as based on the expected return on a portfolio of bonds free of credit risk, with cash flows that match those of the liabilities, or based on the expected return on portfolios of assets?⁷

In theory, the market consistent framework is very clear and leaves little doubt: Project the cash flows of the pension promise, including all possible outcomes, and discount the cash flows using risk-free interest rates. However, recent experience across Europe has indicated that what may have previously been assumed to be a matching portfolio of risk free assets does not necessarily exist; nor is it possible to exactly determine future liability cash flows since pension schemes often have all sorts of additional conditions. These conditions are like options. Producing cash flows for such schemes requires modelling the terms of that particular scheme.

As noted above, in theory, where option-like elements exist, a stochastic approach to their valuation might then be appropriate. However, in reality only a relatively small number of European pension funds have stochastic models available. So pensions are usually valued deterministically.

That is where the debate about which discount rate to use starts.

When we are using a market consistent framework, the theory is quite unambiguous about the discount rate, if the uncertainties are modelled in the cash flows, including, where relevant, allowance for employer insolvency and asset underperformance, then a ‘risk free’ discount rate has to be used⁸. We accept that there are a great deal of practical difficulties with deciding what could be called risk-free. It is not the purpose of this paper to address these issues in any detail. For a recent and extensive analysis of risk-free rates and related topics we refer to the report from the European Systemic Risk Board “On the regulatory treatment of sovereign exposures”⁹.

We also accept that this framework does not generally apply for the purposes of funding assessments of pension schemes where the objective of the assessment is to establish a contribution rate required over a suitable period in order to ensure that income and capital proceeds from assets (including investment of new contributions) will be sufficient to meet the benefit outflows to scheme members. In this type of assessment, since no trading of assets or liabilities is involved, the market consistency definition above would rely on the reasoned best estimate principle which would recognise a long term outperformance (net of associated long term risk) from scheme assets (and future contributions) in excess of risk-free rates. This is akin to an illiquidity premium (see below)

LIQUID RISK FREE RATE

It is not in the scope of this paper to elaborate in detail on what a risk free rate is. It has often been argued that yields on government bonds are a good proxy for the risk free rate. In recent years it has become evident that this is not necessarily the case. In order to be a proxy of risk free one might want to add the requirement of a triple AAA government bond with a stable outlook. Such a risk free rate could be labelled as the “liquid risk free rate”. Further analysis and debate is necessary to specify the exact requirements of such a liquid risk free rate.

⁷ For a fuller discussion of some of the issues related to this debate see Institute and Faculty of Actuaries paper of November 2012 “A Framework for the use of Discount Rates in Actuarial Work” (<http://www.actuaries.org.uk/research-and-resources/documents/framework-use-discount-rates-actuarial-work>)

⁸ See for example the famous article by Nobel Laureate Robert Merton: R.C. Merton, “Theory of Rational Option Pricing”, Bell Journal of Economics and Management Science (The RAND Corporation), 4 (1): 141–183, 1973.

⁹ European Systemic Risk Board, Report on the regulatory treatment of sovereign exposures, 10 March 2015, <https://www.esrb.europa.eu/pub/pdf/other/esrbreportregulatorytreatmentsovereignexposures032015.en.pdf?5f69783f860010d7cf5f7cb9b7451b9d>

ILLIQUID RISK FREE RATE

In the environment of pensions and other long-term guarantees it could well be argued that the liquid risk free rate is not appropriate, e.g. in case there are no, or only few, observations of liquid risk-free rates in the market. In such a situation one could use a model to derive the liquid risk free rate¹⁰ or decide to look at a risk free, but illiquid, replicating portfolio. Using the illiquid risk free rate could be considered for the valuation of long-term guarantees, such as pensions, depending on the purpose of the valuation.

If the risks are not modelled in the cash flows, the uncertainties could be reflected by adding an appropriate risk premium on top of the risk-free discount rate.

ECONOMIC RISK PREMIUM

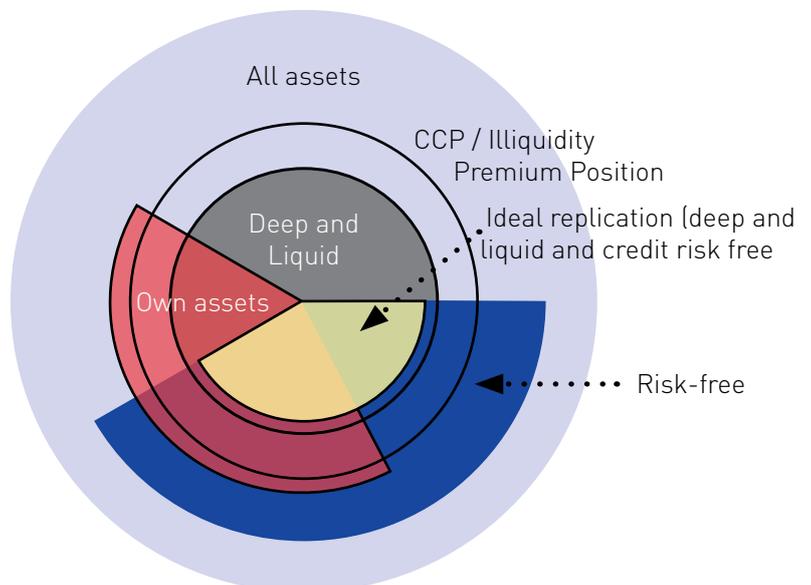
In some member states, the regulatory regime permits, subject to prudent judgement, the use of a discount rate based on the expected return on assets for valuations¹¹. This can be decomposed into the risk free rate and the risk premium based on the portfolio of assets that is considered.

The risk premium should reflect the uncertainties inherent in the pension agreement. Where the investment risks and the longevity risk are borne by of beneficiaries, the total risk for beneficiaries can be larger than just the risk on assets. As a result the appropriate discount rate will be higher.

The risk premium described here is purely based on the uncertainties of the scheme and the economic environment.

SUBJECTIVE RISK PREMIUM

In addition to the objective valuation of the pension promise itself, the value for stakeholders could be different. This leads to the concept of a subjective risk premium. A good example in the case of pensions could be the valuation of the pension promise by either the employer/sponsor or the employees/beneficiaries. The employer will not consider its own probability of default, whilst beneficiaries will. So employers and beneficiaries experience different risks. This will most likely mean that the risk premium that beneficiaries will use will be somewhat higher than the risk premium used by the sponsoring company. We have called this concept Subjective Risk Premium. This subjective risk premium could be different depending on which stakeholder is doing the valuation since different stakeholders could experience different risks and/or put a different weight to those risks¹².



¹⁰ An example is the use of an Ultimate Forward Rate model

¹¹ EIOPA showed 15 October 2014 the results of a mapping exercise: https://eiopa.europa.eu/fileadmin/tx_dam/files/Stakeholder_groups/occupational-pensions/2014-10-15/Item_4_20141015-EIOPA-CP_further_solveny_work_OPSG.ppt

¹² Each stakeholder will most likely have a different utility function.

In summary what we have argued here means that:

- The discount rate is in many cases neither just risk free (level A) nor the expected return on assets (level B)¹³
- The discount rate depends on the choice made in allowing for a liquid risk free rate or an illiquid risk free rate
- The discount rate depends on the stakeholder doing the valuation as different stakeholders might be exposed to different risks

This implies that one single discount rate for all pension schemes does not exist. The discount rate depends on the characteristics of the pension promise, on whether or not the liquid/illiquid approach is chosen and whether or not the valuation is intended to be objective from an economic point of view or subjective taking into account specific risks that a specific stakeholder is experiencing and/or the specific purpose of the valuation.

Setting the proper discount rate requires unbiased expert judgement. Too high a discount rate would undermine a proper valuation of the promise. Too low a discount rate could similarly provide a false view of the value of the promise.

The following sections consider how other aspects of the valuation of the pension promise might be interpreted in a market consistent framework.

Counter Cyclical Premium¹⁴ *“Hiding the real pension liability”*

Solvency II introduced a ‘counter cyclical premium’ to reduce the risk that insurance companies would have an incentive to replace long term assets with short term assets to reduce the amount of regulatory capital they must hold.

Justifications for having a counter cyclical premium in the insurance market include:

- It helps ensure that insurers can continue to hold assets throughout market cycles, which will maintain stability in volatile financial markets and reduce systemic risk;
- It removes a disincentive to insurers to provide long term products.

To the extent that IORP sponsors would be required to finance schemes as a result of a solvency (or similar) measure, similar arguments would apply.

The basic question here is whether assets and liabilities should be valued separately or together. In terms of risk management, our advice is, in principle, to value assets and liabilities in a consistent manner, as far as is possible, but separately and simultaneously keep an eye on the dynamic relationship between the two.

The liability is the pension promise and this promise is in principle independent of the covering assets and the funding method. That does not mean that the concept of counter cyclical premium is of no use at all. There could be merits in using the concept of a counter cyclical premium (in the insurance industry this is now called the ‘volatility adjustment’). The counter cyclical premium might fulfil a constructive role in the supervisory framework. However, we advise against using the counter cyclical premium as an addition to the discount rate. We recommend keeping the valuation unbiased when following a market consistent approach. This enables a transparent view of

¹³ The names “level A” and “level B” first emerged in the European Commission Quantitative Impact Study (QIS) on Institutions for Occupational Retirement Provision (IORPs) - Technical Specifications -, Brussels, 8 October 2012: http://ec.europa.eu/finance/pensions/docs/qis-tech-specs_en.pdf

¹⁴ In Solvency II/Omnibus II environment this term is replaced by the term “volatility adjustment”

the valuation and reduces the risk of discussion with stakeholders about the difference between the market value of the liabilities on the one side and the value based on discount rate plus counter cyclical premium on the other.

Matching Premium

“Understating the value of the pension liability”

The ‘matching premium’ is another factor arising from the negotiation of the core Solvency II quantitative specification of the technical provisions, to address how annuity providers use corporate credit to match their long term liabilities in the absence of long term ‘risk free’ credit. If there is not an active market in the matching asset, the excess return over the risk free rate can include a liquidity premium, in addition to a premium for credit risk (although it is possible for the liquidity premium to be negative). The matching premium enables insurers to allow for this in calculating their technical provisions.

Within the context of placing a value on the pension promise without regard to the financing mechanism, we would recommend a similar approach to that suggested with regard to the counter cyclical premium.

It might be argued that, if illiquid liabilities are matched with illiquid but matching assets, the value of the liabilities could be proportionally reduced. This would depend, however, on the definition of the pension promise. The characteristics of the pension promise are in our view paramount in the valuation of the liabilities as we explained in the paragraph on the discount rate. We recommend therefore that the effects of matching are part of the assessment of the whole financial situation, and of the risks of the pension scheme, rather than an intrinsic part of the measurement of the liabilities.

An argument often heard in favour of adding the matching premium to the discount rate is that otherwise the value of the liabilities could be very volatile. That might indeed be the case. If the liabilities are, however, fully matched, both assets and liabilities will move hand in hand. As a result, the volatility in the balance sheet, the financial position, will be zero or very small.

In all cases (matched position or not) the volatility needs to be monitored continuously as this is important risk management information to the IORP and could lead to revising the asset mix.

Solvency

“Supporting risk-based information resulting in better management”

Solvency II requires insurance companies to hold additional capital in case the actual assets held prove, relative to the model used for this purpose, insufficient to meet the liabilities. The original consultation on the quantitative aspects to the revised IORP Directive proposed that, in addition to technical provisions, IORPs also should measure a ‘risk margin’ and ‘solvency capital’.

An occupational pension agreement is an agreement between employer(s) and employees. The characteristics of an occupational pension plan, as well as the characteristics of the funding of the plan, are decided and agreed by employers and employees together.

As a result each pension plan is unique and will differ in the certainty with which benefits are provided and in how security is afforded to those benefits. The approach taken to measurement of the amount of ‘reserves’ additional to technical provisions will depend on the purpose. A buffer on top of the ‘market-consistent’ value of the liabilities could reflect the risks of how the liabilities are funded and managed, and any goal for a security level

as might be implied by national social and labour law and/or by any target that might be part of the pension scheme design. To consider this in some more detail, we discuss three different sets of the many possible pension schemes in Europe:

1. if the risks are resulting from a hard guarantee (insurance-like), the need to measure Solvency Capital in excess of technical provisions will be higher than otherwise, relative to the value of any promised benefits, perhaps targeting a 99.5% certainty level,
2. if the risks are resulting from a weaker pension promise (than insurance-like) then the need to measure Solvency Capital will be less, reflecting the alternative sources of capital available as well as the value of any promised benefits. (A concrete example would be DB pensions in The Netherlands where employers are normally not obliged to finance shortfalls in assets and social and labour law requires a 97.5% certainty level
3. and if all the risks lie with the beneficiary, the need for Solvency Capital will be minimal and perhaps only reflect the possible impact of operational risk (some examples are Defined Ambition, Collective Defined Contribution and Defined Contribution schemes)
4. In some jurisdictions IORPs are not taking on any of the risk of the pension promise. In such situations the need to measure Solvency Capital might not apply to the IORP itself, although it could still be used for the communication to stakeholders.

The actuaries of the UK Institute and Faculty of Actuaries wish to express here that in a UK context pension liabilities are “tradeable” only within an insurance buy-out or buy-in context and that thus “solvency” in such a context is usually defined by reference to such insurance cost which is naturally based on insurance actuarial techniques (including risk-free rates and stochastic methodologies).

In all cases, employers, members and representatives of employees should aim to have clarity on what benefits have been (most of the times implicitly) agreed to, and the extent to which payment might be conditional. This is necessary in order both to be clear in the communication to members and beneficiaries as to what they might expect, and to consider how technical provisions and the Solvency Capital might be measured. We also believe that the social partners involved in the scheme should be prepared and have plans ready in case of adverse economic, demographic or operational circumstances. In such cases they should have made the assessment before a recovery plan is determined satisfactory to the supervisory regime.

ALM Test

“Exploring the future in addition to assessing the current financial position”

The current discussions are very much focussed on the valuation of assets and liabilities and the solvency capital disclosure at a certain point in time. In addition it is important to analyse the future development of the financial position of the pension scheme in the long run and to evaluate whether prudential requirements could then be met.

Given the very long-term nature of the pension liabilities, we would suggest adding an ALM Test, a specific kind of Asset Liability Modelling (ALM) analysis. The parameters and methods should be decided by independent experts to avoid bias and preferably not by the IORP or the sponsor. The purpose of the ALM Test would be to provide information to stakeholders on the robustness

of the financing of the pension promise and the expected outcomes for the (deferred) pensions. We believe this would be a very valuable addition to the “snapshot” approach of a valuation¹⁵.

Supervision – basic principles

“Ensuring that all parties live up to their promises”

Putting it very simply, the starting point is “say what you do and do what you say”. Employers and employees have the duty to be as clear as possible about what has been agreed. Supervisors will monitor whether parties live up to that.

The basis for supervision should always be the pension agreement. Although pension agreements have to comply with the national social and labour law, they certainly can be very different in nature.

Supervision should always respect the agreement characteristics, including an analysis of who is taking on the risks.

In principle any stakeholder involved may carry (part of) the risks or uncertainties in the scheme. Any risk-carrying stakeholder should determine his or her own risk appetite (individual members are normally seen as one stakeholder group and they might be represented by a body or agency acting on their behalf). The prudential regulations will apply to all stakeholders that have accepted risk, in proportion to the risks they have accepted. In all cases the individually carried and accepted risks should be known and transparent to all parties involved.

¹⁵ Aswath Damodaran, professor of finance at the Stern School of Business at New York University, wrote the following interesting comments on “Misconceptions about Valuation (<http://pages.stern.nyu.edu/~adamodar/>):

Myth 1: A valuation is an objective search for “true” value

Truth 1.1: All valuations are biased. The only questions are how much and in which direction.

Truth 1.2: The direction and magnitude of the bias in your valuation is directly proportional to who pays you and how much you are paid.

Myth 2: A good valuation provides a precise estimate of value

Truth 2.1: There are no precise valuations

Truth 2.2: The payoff to valuation is greatest when valuation is least precise.

Myth 3: The more quantitative a model, the better the valuation

Truth 3.1: One’s understanding of a valuation model is inversely proportional to the number of inputs required for the model.

Truth 3.2: Simpler valuation models do much better than complex ones.



Part 2: Discussion of some of the social implications

Member and Beneficiary protection

"Providing clarity is fundamental to protection of stakeholders' interests"

As stated before, it is our view that providing clarity, and appropriate protection of the wider interests of members and beneficiaries should be key priorities for IORPs. The quantitative requirements that apply to the IORP, and that are used to determine its funding, should be well understood. In cases where the IORP's obligations do not extend to cover all the risks, the members and beneficiaries should be made aware of the remaining risks. This will prevent members and beneficiaries from misunderstanding the pension promise and expecting more security than is actually present in the pension agreement.

There are some risks that an IORP may not cover. These could be covered by a sponsor covenant and/or a pension protection scheme. If such arrangements exist, they clearly have a value to the members and beneficiaries of the scheme, even if the level of benefit supported is only partly guaranteed.

We support EIOPA's view that all these important elements should be included in the regulation of the communication to members and beneficiaries in order to achieve an adequate level of transparency and clarity.

Past and Future

"Disconnect past and future to allow the transition to sustainable pensions going forward"

Current EU developments may cause a major shift in approach in the pension industry. We would advise distinguishing between past and future accruals and giving IORPs and social partners¹⁶ sufficient time to make the transition.

We would expect that in some cases, perhaps even in many cases, the social partners may want to reconsider the pension deal in the light of this increased transparency. We would see an assessment of the current status quo as a necessary starting point.

We appreciate that it will not always be possible to change the nature of accrued liabilities due to legal constraints. Nevertheless we offer some thoughts on a possible way to deal with the past even if it would require changes to legislation and regulation.

As a practical way forward we advise working retrospectively to "find" the "balancing discount rate" for the past accrual. This provides an indication of the implicit level of security that has been provided to date.

The balancing discount rate can then be decomposed into the risk-free rate and the implicit risk premium. Social partners may then discuss and agree whether the implicit risk premium reflects the initial expectations of the pension deal. If the implicit risk premium indicates potential limits to given guarantees, this information should be used to inform the stakeholders in the scheme.

When the implicit risk premium does not reflect the initial expectations, social partners could discuss and decide whether or not to amend the pension policy to deal with this new information. Alternatively, or in addition to determining the implicit risk premium, an assessment should be made of the probability of the arrangement not being able to meet the "expected" benefits. This could be done using an ALM test as has been discussed earlier in this paper.

Of course legal requirements could apply and their impact should be evaluated. This could mean that whilst social partners could accept some

¹⁶ Social partners are in this case the representatives of both the employers and the employees discussing and agreeing on the pension promise (most likely as part of a wider discussion on the total employment deal)

lower levels of guarantees, this might not always be legally allowed. In any case we expect social partners to reach an agreement on the pension deal going forward.

It would require social partners to accept that in most cases they have not expressed all the characteristics of the pension scheme in detail. By assessing the current situation now, they are informed in a practical way of what they implicitly have agreed. This might lead to disappointments to either the employer or the employee representatives or both.

Once they have a better insight into the development of their scheme we are convinced that they will find a new balance.

Comprehension and Conciliation approach

“Understanding and respecting each other to find constructive ways forward together”

Given what has been said in the last paragraph, we would suggest adopting a drive for all parties to reach an understanding and acceptance of the basic facts of the issues involved, and reach an amicable agreement on the way forward.

Given the results of the QIS, we would expect there to be many cases where the initial pension promise cannot be kept as the financial impact could be such that it is not feasible any longer to live up to the promise.

Stakeholders can therefore react in two ways: initiate legal action against another party or enter into a sincere dialogue to resolve the issue more amicably. It is our wish that issues of the past can be discussed and solved in the latter way.

Actuaries are willing to help by presenting the facts in an unbiased way to all stakeholders. We believe in honest intentions in most cases and therefore a “Comprehension and Conciliation Approach” could make a difference and would make the most sense in solving the issues of the past. As these will not simply vanish - and could even become bigger over time - we believe that ignoring them is not an option.

While this issue is of enormous importance to those involved, it may not be thought comparable to cases of civil strife involving violence. However Desmond Tutu and his daughter, Mpho, seek in their “Book of Forgiving” to draw conclusions from the Truth and Reconciliation process in South Africa which can be applied in day to day life¹⁷. Such an approach might be considered for this issue.

¹⁷ The Book of Forgiving: The Fourfold Path for Healing Ourselves and Our World – by Desmond Tutu and Mpho Tutu, 2014, ISBN 978-0-06-220356-4





The Actuarial Association of Europe

The Actuarial Association of Europe (AAE), founded in 1978 under the name of Groupe Consultatif Actuariel Européen, is the Brussels-based umbrella organisation, which brings together the 37 professional associations of actuaries in 35 countries of the EU, together with the countries of the European Economic Area and Switzerland and some EU candidate countries.

The AAE has established and keeps up-to-date a core syllabus of education requirements, a code of conduct and discipline scheme requirements, for all its full member associations. It is also developing model actuarial standards of practice for its members to use and it oversees a mutual recognition agreement, which facilitates actuaries being able to exercise their profession in any of the countries concerned.

The AAE also serves the public interest by providing advice and opinions, independent of industry interests, to the various institutions of the European Union - the Commission, The Council of Ministers, the European Parliament, ECB, EIOPA and their various committees - on actuarial issues in European legislation and regulation.



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