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# Security in occupational pensions

## Report of working party

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Any views expressed in this paper are the personal views of the working party members and should not be read as being representative of their employers or professional organisations.

# Contents

# Section 1: Executive summary

**European pensions landscape**

1.1 The principles of partnership, flexibility and subsidiarity appear to be fundamental for co-operation between member states. We make the assumption that these principles are here to stay since they are already embedded in social and labour law all across Europe. Whilst some form of equalisation at the EU level to bring greater homogeneity in pensions is always a theoretical possibility, we feel the practical problems of doing so would be considerable. The design of pension schemes, IORP structures and practices has evolved, and we believe will continue to evolve, around the objectives and constraints of nationally decided social and labour law. Any reforms to improve the security of occupational pension benefits will need to have the flexibility to respect this.

1.2 We therefore think that it would be more helpful to focus on the wider concept of pension security which we define as a combination of financial and behavioural tools, some qualitative and others quantitative, some within the pension scheme and others outside it, all of which operate jointly to maximise the likelihood of the delivery of pension plan benefits and to manage the expectations of stakeholders. We distinguish this from the narrower, and more easily measurable, concept of solvency which is associated more with funding criteria and any additional buffers to absorb risk. Where products are homogeneous, then a focus on solvency alone may be sufficient to bring about a greater degree of harmonisation to security levels, but where they are not then regulatory tools need to be wider and more flexible. We believe defined benefit pensions generally fall in the latter category.

**Security as a pension scheme benefit**

1.3 In Section 3 we introduce the concept of pension security as a benefit of the scheme, comprised of numerous interconnected components which need to be considered together. Appendix A sets out how the diverse ways in which five European countries currently balance these components to provide pension security.[1] By analogy with other financial services legislation, the components of pension security span the full spectrum of Pillars I (funding and solvency), II (supervisory process) and III (disclosure and market discipline).

1.4 In practice the overall level of pension security depends on the trade-off between its different components. These trade-offs vary between schemes depending on differing objectives and constraints imposed by social and labour law in the home state. In the same way that there is no compelling argument for equalising

[1] *These are described in greater detail in the supplementary paper accompanying this report 'Survey of pension security in some European countries'*

pension accrual rates or indexation levels or absolute amounts of pension benefits across member states, we question whether there should be a compelling reason for equalising pension security across IORPs throughout the EU; indeed we foresee many practical and other problems in doing so. Consequently, a ‘top down’ approach with a single solvency requirement across all European countries would seem perverse against a background of non-uniform pension provision, raising many questions about the effectiveness of the end result. We think a more flexible ‘bottom up’ approach might be better placed to address the principles of partnership, flexibility and subsidiarity[2] which appear to underpin the new European System of Financial Supervisors.

**Decision making**

1.5 We have set out a framework in Section 4 within which discussion can take place on possible reform, against a background of the key obstacles, the key issues and the key impacts. We believe this framework provides sufficient flexibility to entertain a range of acceptable solutions which recognise the diverse requirements and preferences between different countries, as well as the balance in decision-making powers between Europe-wide and national legislation. The required level of consistency and convergence should be achievable through appropriate policy measures at the four levels of decision making at the EU level, as set out in the Lamfalussy framework, working in coordination with three levels of decision making at the national and IORP levels:

***Level 1*** *- framework legislation, voted on by the Council and Parliament*

***Level 2*** *- implementing measures for the Level 1, led by the Commission*

***Level 3*** *- supervisory committees facilitating convergence of regulatory outcomes*

***Level 4*** *- enforcement of all EU measures, led by the Commission*

***Level A*** *– national law*

***Level B*** *– national supervisory bodies*

***Level C*** *– individual scheme sponsors, trustees or managers*

[2] *EC Communication COM (2009) 252 setting out the new supervisory framework for the EU*

1.6 The new European network of financial supervision is being built '*on shared and mutually reinforcing responsibilities, combining nationally based supervision of firms with centralisation of specific tasks at the European level so as to foster harmonised rules as well as coherent supervisory practice and enforcement'*. We believe the holistic approach to pension security which we have outlined provides a suitable framework within which the appropriate supervisory processes and tools for pension security can be developed further.

**Market tests**

1.7 Policy measures, however implemented, are most effective if underpinned by best practice principles. Eight high level best practice principles for the effective supervision of pension schemes are proposed and discussed in Appendix B. These are 'market-tested' against existing supervisory regimes in Section 5 (and Appendix C) in the context of a holistic pension security structure involving different balances between funded security and other forms of external security, to demonstrate that it is possible to respect national prerogatives and social choices and yet achieve the desired outcomes in terms of member security.

1.8 This analysis by itself provides much food for thought on many of the issues that need to be addressed, and how. Some observations from this analysis are:

i. To improve pension security it is not necessary to focus on funding and solvency alone. Pension security should be viewed more holistically. CEIOPS also came to the same conclusion in 2008[3]. This diversity is of course quite consistent with the principles of partnership, flexibility and subsidiarity, but it also highlights the scope for a different balance between uniformity of principles and the detailed implementing measures.

ii. We also find that different member states apply different levels of focus to the different elements that make up the full spectrum of security (for example to direct funding or external support from other sources), and usually other elements of security may then compensate; therefore it is necessary to understand the checks and balances being applied to deliver the overall level of security in any one regime. In regimes that rely significantly on the sponsor covenant for security, there may or may not be other security measures to protect members against the sponsor's credit risk (for example contingent funding vehicles or compensation schemes).

[3] *CEIOPS-OPSSC-01/08 Final: Survey on fully funded, technical provisions and security mechanisms in the European occupational pension sector* **(***31 March 2008*): Member States currently use different **valuation methods** and different **security mechanisms** to protect pension benefits. The differences have historical and cultural roots, and at times reflect national Social and Labour Law. This variance in valuation measures and security instruments does not necessarily imply substantially different security levels between Member States: in practice, the variances are linked and often cancel each other out. As the interaction between security mechanisms and technical provisions takes differing forms, analysis of any one element in isolation does not accurately reflect the security provided to members. Put differently, partial analyses of security levels based on individual valuation elements or adjustment instruments are misleading and conclusions can only be drawn from a comprehensive analysis of all different elements. By implication, as different methods can be used to secure pension benefits, national pension supervision frameworks do not have to be identical.

Such protection does not exist in all countries – where it does not then the immediate security would be poor if the pension scheme failed to meet the funding standard. Specific protection against a solvent sponsor walking away from its obligations exists in only one country.

iii. In general, we find that the practices in the countries we have examined do comply with the best practice principles but in different ways to accommodate social preferences and the nature and structure of national regulatory processes. Where there are obvious shortcomings, it would appear that progress is being made to address them. There are however exceptions.

iv. There is generally a higher standard of transparency to the supervisor than to other stakeholders (like sponsors and members); most supervisors also have the power to demand extra information. A large gap can exist between expectations and delivery, partly due to insufficient understanding by members of risks taken on their behalf and their potential consequences. We think the greatest room for improvement is in providing more transparency to stakeholders other than supervisors in how the various components of pension security have been reconciled overall, what this means in terms of the ongoing risks being run on behalf of members, and communication of the potential impact of these risks on members expectations in a language that they can understand. Whilst some countries are making some progress in this area, we perceive a major need in all countries for better communication and pension education.

v. Most pension systems were not designed to cope with counter-cyclicality and seem to put an extra burden on the economy when it is least affordable. The pragmatic solution to this during the present financial crisis has appeared to be a relaxation in recovery periods, but from the members' viewpoint this entails an increased risk. This may not matter in countries that have compensation schemes which can withstand the shock of multiple insolvencies, but elsewhere members might be justifiably concerned. This is an area which has already been flagged by others for further examination.

vi. In some countries the regulatory approach is specifically related to the level of risk, but not in all. The funding requirement in some countries is based on snap-shots of the funding position each year or every three years; other countries use forward looking approaches with stress tests, ALM (like) analysis or proactive monitoring requirements of the principal risks.

vii. In pensions the concept of 'market-consistency' (as defined for insurance in Solvency II) does not generally exist, although even here we note that there is an unresolved debate about the appropriateness of an allowance for the illiquidity characteristic of long-term liabilities. For IORPs assets are mostly based on market value, but the calculation of technical provisions varies from fixed discount rates to methods which come close to 'market-consistent' (notwithstanding the illiquidity point) to others which, whilst market based, incorporate some risk in the discount rate through advance credit for some of the expected outperformance from the scheme's asset portfolio.

viii. The concept of 'proportionality' varies between countries between countries. In some countries the focus is on reducing the administrative burden for small schemes through exemption or simplified (but prudent) rules. In other countries the focus is on the risks to the system and the proportion of regulatory resource applied to the 'high impact' schemes relative to others. For individual members these are very different perspectives.

ix. Some regimes are more flexible than others in the way in which they cope with changing conditions, ranging from rigidly prescribed boundaries for funding levels and recovery plans, to greater flexibility in the extent to which under-funding can be permitted or the length over which deficits can be repaired. The risk connotations for members and sponsors are different but they need to be considered against other checks and balances for a more meaningful picture.

**Possible ways forward**

1.9 The exact nature and design of any new EU-wide regulation for IORPs will depend on its objectives. However we expect pension security to be a central feature since it has been a common theme in the debate that has preceded this paper. A successful framework for the effective supervision of pension schemes can be constructed to meet desired objectives within the constraints of an uneven European pension landscape. Broad principles could be incorporated in European law with detailed implementation of those principles left to national law and to individual schemes. The different trade-offs between component elements of security at a national level lead to a requirement for flexibility which can be limited by the need to comply with best practice principles, and if necessary by stronger guidance at Level 3.

1.10 We have set out in Section 6 many of the issues likely to be raised and considered the merits of dealing with them within our proposed framework in three ways:

i. A 'care and maintenance' approach within the existing IORP Directive, using analyses of the type carried out in Section 5 to inform where changes might be appropriate, and if necessary using the strengthened supervisory network for the Level 3 committees to enable best practices to be better enforced.

ii. 'Total harmonisation' within a new EU wide standard in the form of a 'top down' regime aimed at harmonisation of all rules for all IORPs across the EU. If member states considered it to be desirable then this could pave the way for a uniform Solvency II type standard for occupational pensions, possibly with a new form of balance sheet which incorporated elements of non-tangible pension capital.

iii. 'Evolutionary development' within a new EU wide standard which could take the form of a more flexible 'bottom up' regime, but with a greater focus on pension security. This could incorporate more detailed principles, this time from a risk perspective and consistent with the high level principles for banks and insurance companies. Disclosures could embrace valuation concepts from the Solvency II framework. There should be flexibility for individual governments to decide the exact implementation tools between the three pillar supervisory process, underpinned by a structure for strengthened EU-wide governance, regulation and enforcement.

**Further work**

1.11 Pensions and insurance are different in many respects, and the framework we have set out respects these. But there are also many similarities between pensions and some forms of insurance, especially participating insurance contracts and mutual insurance funds. The concepts of 'loss absorbency' and 'ancillary own funds' are of course also applicable to pensions. The supervisory approach employed in Solvency II for participating insurance and mutual funds may well help to narrow the gap between pensions and insurance. However, we have not investigated this further and suggest that this is something which is best pursued jointly by the GCAE Insurance and Pension Committees.

# Section 2: Introduction and summary of current debate

2.1 Occupational pension funds fulfil an important socio-economic role. Hardly a day goes by without a major pension story in the European press which, at its heart, has concerns about the sustainability of long term pension provision to meet the dual challenges of maturing economies and ageing populations. In many European countries with highly developed pensions systems, pension funds also have an important influence on the stability of their financial systems. Appropriate prudential treatment for pensions is therefore recognised to be of prime importance, but what form should it take?

**Current pension regulation**

2.2 Currently, prudential regulation at the EU level, as encapsulated in the IORP Directive, is largely principles-based. Technical provisions are established using actuarial methods recognised by the relevant member state supplemented by actuarial certification; investments are governed by a broad set of principles, notably the prudent person principle and, apart from regulatory own funds (which are not dissimilar to insurance funds, and regulated as such), there are no hard solvency requirements. Member states then have the freedom to develop these principles into more detailed rules and practices as appropriate, and at this level some choose to develop the principles further into a light-touch workable framework whilst others choose to prescribe a more detailed set of rules. This structure recognises that the primary responsibility for pensions rests with each member state and that, in most states, it is discharged as part of a balanced package of inter-related social objectives with a variety of delivery mechanisms and different degrees of regulatory control.

2.3 In other words, there is currently no requirement at the EU level for a uniform standard of capital adequacy for pensions. This is in contrast to prudential requirements in banking and insurance where uniform EU-wide capital adequacy standards are being introduced, with the common denominator being the risk implicit in the contract. Defined benefit schemes are exposed to many of the same generic risks as insurance and banking operations so should they not be regulated in a similar way? There has been much discussion on this in the last few years and the Groupe Consultatif and others have been active in setting out the issues. The consensus suggests that, whilst there are some similarities between pensions and insurance, given the different context behind the design and delivery of pensions, an identical standard for pensions may not be the logical extension. This is recognised in Recital 138 of the Solvency II Directive which instead puts out the challenge that the 'Commission, assisted by CEIOPS, should develop a proper system of solvency rules concerning institutions for occupational retirement provision, whilst fully reflecting the essential distinctiveness of insurance and, therefore, should not prejudge the application of (the Solvency II) Directive to be imposed upon those institutions'[4].

**Review of current debate**

2.4 Is there a need for change in pensions? If so, is harmonisation the correct way forward? Is there a clear consensus on what is meant by harmonisation and the objectives it seeks to achieve? If change is needed, then should the resulting framework apply at the EU level or a lesser level and should it operate on some or all of technical provisions, capital buffers, investment rules, governance and disclosure? There has been much debate on this recently, often against a background of diverse and unclear objectives. Our analysis of current stakeholder opinion[5] on these matters is as follows:

2.4.1 If harmonisation is defined as the application of the same solvency rules in each member state, then there are some natural obstacles arising from the practical application of subsidiarity which may render the resulting solution unequal unless certain aspects of social and labour law are also harmonised.

2.4.2 The European Commission's consultations indicate that there is little concrete evidence of an unlevel playing field between pension funds and insurance undertakings[6]. Whilst there are similarities between pensions and insurance as products, the institutional environments in which they operate are vastly different and any regulation which fails to recognise these differences may fail to achieve its objectives.

2.4.3 There appears to be a broad consensus that the overall objective of solvency rules for IORPs should be to provide a high degree of security for members, at a reasonable cost to the sponsors and with the right incentives for risk management. This underlines the importance of occupational pensions as the principal source of income in retirement for most pensioners and, given the longer term challenges facing European economies, it also emphasises the need for this to remain a sustainable source.

2.4.4 There is more to pension security than a uniform set of solvency rules. A holistic view is required, recognising the trade-offs implicit in social and labour law between the quality and quantum of pension benefits and the security of pension delivery systems. The three pillar system used elsewhere in financial services may provide a suitable template for further examination.

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[4] http://register.consilium.europa.eu/pdf/en/09/st03/st03643-re06.en09.pdf

[5] http://ec.europa.eu/internal_market/pensions/commission-docs_en.htm

[6] http://ec.europa.eu/internal_market/pensions/docs/hearing052009/introduction_ET_en.pdf

2.4.5 There appears to be some support for harmonisation at the EU level, but within a principles-based framework rather than rules-based, and for the harmonised regime to be tailored to the specific features of occupational pensions and the diverse ways in which they are delivered throughout Europe. This acknowledges the need for individual member states to have the flexibility to decide their own social and labour objectives but at the same time recognises that there is room for the promotion of certain EU level objectives, notably strengthened risk management. This is not inconsistent with the de Larosière recommendations on banking and insurance which also seek to strengthen risk management but favour greater harmonisation through limiting national discretions and with a stronger and more coordinated supervisory regime. The de Larosière recommendations are directed at banking and insurance where the greater homogeneity of products may support such a view but the impact of subsidiarity in pensions requires, we believe, a different approach to deliver similar objectives.

2.4.6 A prudential framework for IORPs should be forward-looking and risk-based. It should also be transparent, flexible, proportionate and market-consistent. Stakeholder feedback also emphasises the need to incorporate diversity and to make sure pension provision remains sustainable. Lessons from the global financial crises have also provoked opinions on the need to address pro-cyclicality. Above all, it should seek to achieve an acceptable balance between a high degree of security and affordability to sponsors.

**Our objective**

2.5 Our inspiration for this paper comes from the desire to take this debate forward by providing some new thinking to address some of the natural constraints and set out a coherent framework within which informed decisions on pension security can be made at various levels. The debate in the past has highlighted a wide range of objectives from key opinion formers, ranging from

- The removal of regulatory arbitrage to prevent unequal treatment of market players, avoid distortion of competition and promote cross-border business, to
- The promotion of a common market in financial products based on the 'same risk same capital' principle for all financial institutions, to
- The reassessment of what is perceived in some quarters as an inadequate pricing of pension risks, to
- The promotion of a more risk focussed environment to foster better risk management and encourage more efficient allocation of capital.

2.6 At the same time some reality checks have also been registered, in particular that any new reform should take account of the specific features of occupational retirement provision (European Parliament)[7] and that there should be a balance between protection for members and the cost for sponsors (European Commission)[8]. Clearly all of these objectives cannot be accommodated in a single standard, so some prioritisation may be appropriate. At this stage we do not know what the primary objectives will be of any new reforms initiated at the EU level and what the format of the resulting standard will be.

2.7 We do, however, believe that a central feature of any new standard should be a desire to improve the security of benefits to members. Accordingly, in our deliberations, we have put member security centre stage without ruling out any options on the methods by which it is to be achieved, but recognising many of the obstacles that would need to be addressed. Our main contribution is to flag the principal issues that would need to be resolved, and to provide a decision making framework within which they can be addressed to provide an acceptable balance to decision-makers on numerous desirable but conflicting features of a supervisory system to provide better pension security.

2.8 Our focus is on defined benefit pensions since the concepts of security, solvency and adequacy of capital to meet promised benefits are more relevant here than for defined contribution pensions. The composition of the working party which prepared this report reflects this purpose, with membership representing a cross-section of practising pension professionals from most European countries with significant defined benefit pension provision.

However, we see no reason why the same framework could not be applied, with suitable modifications, to defined contribution and hybrid schemes.

*[7] Motion for a European parliament resolution on financial services policy (2005-2010) - White Paper (2006/2270(INI))*
*[8] Speech at CEIOPS 2007 Conference by Elemér Terták, Director Financial Institutions*

# Section 3: Pension security

**The pension deal**

3.1 In a pension arrangement the deal between the sponsor and the members can be interpreted in a number of ways. At one extreme, there is the view that the member has been promised a predetermined amount of pension and that the sponsor has a contractual obligation to honour that promise under all circumstances. Considerations of security then focus entirely on protecting the member against all adverse circumstances, including the risk of the sponsor becoming insolvent.

3.2 At the other extreme there is the view that the provision of pensions is a benevolent act on the part of the sponsor and that the pension benefit is provided to the member on a voluntary basis, with the implication that the sponsor must be protected at all times, and in adverse conditions it is the member who should take all the pain.

3.3 In practice most pension schemes are somewhere in-between due to social laws and other practices which may require varying degrees of guarantees from the sponsor, or risk sharing between the sponsor and members. It is arguable whether the extent to which pension scheme members understand the implications of such risk sharing is as good as it should be – this raises potential governance issues which we discuss later.

3.4 We prefer to look at occupational pensions as part of the remuneration package. Employees are remunerated for their services partly in cash and partly by other forms of compensation including deferred pay in the form of a pension. The balance between cash and deferred pay is for employees and employers to decide (within reason). At one extreme, the deferred pay could be guaranteed in which case its amount should reflect the cost of providing the guarantee. At the other extreme, the employee may be willing to link all the deferred pay to the fortunes of the sponsoring company in which case, to compensate for the risk of non-payment, he might expect the amount of deferred pay to be correspondingly higher. In practice, employers and employees will settle for a suitable middle course which reconciles many other factors, the important point being that a balance is being struck between the security of the deferred pay and its amount (i.e. a cast iron guarantee is not always part of the pension 'deal').

3.5 Once this balance has been decided, employees have a reasonable expectation to receive what has been agreed (notwithstanding the risks) and it is also reasonable that there should be some prudential rules to protect the employees' interests. Governments may feel it appropriate to impose some quality requirements to further social objectives (and these may define further the form of the deferred pay, whether cash or annuity, with or without indexation or contingent benefits on death etc). These in turn may require a further balancing of cost, security and amount of deferred pay (but rarely on what has already accrued). Sponsors, on the other hand may feel that the prudential rules and quality requirements should not be so onerous as to threaten their own viability; otherwise they would simply seek a different and less onerous deal with the employees.

3.6 There is thus a complex balance in an occupational pension arrangement between cost, security and amount of pension, together serving to deliver the different expectations of the stakeholders. Security is often the implicit balancing item. We therefore refrain from using the phrase 'pension promise' with its connotations of a guarantee and prefer instead the phase 'pension expectations' which describe this balance much better.

3.7 By contrast, other forms of financial products may strike a different balance between security, cost and amount of benefit. For example, in insurance, security is usually an externally determined parameter which is then factored into the price of the insurance product, and the balancing item is usually the amount of benefit the policyholder purchases.

**Financing vehicles**

3.8 The financing vehicles used to deliver pensions vary between countries, from unfunded 'pay as you go' pension arrangements to other more secure forms of funding. In many countries, the principal source is a segregated fund, with assets separated from the sponsor's business, but having a lifeline back to the sponsor and therefore benefitting from additional support from the sponsor when needed, but also to a degree dependent on the sponsor's financial health. Common examples are the trust-based pension schemes widely encountered in the UK and Ireland.

3.9 In other countries, although similar arrangements are in use, their legal constitution may be different and there may not be such an explicit lifeline back to the sponsor (or if there is then it may be limited). Since there is no (or limited) recourse to the sponsor at a later date, for such arrangements prudential regulation needs to focus on the resources of the pension vehicle and the financing arrangements needed to get the requisite resources into it within a reasonable timeframe. Examples are the 'regulatory own funds' in the Netherlands where pension security comes mainly from the buffer in the pension scheme which is expected to absorb the downside from the principal risks up to a level defined by regulation (in these funds some additional security can also come from future contributions and the sponsor but this is limited). These pension funds do not have any other sources of capital, and therefore risks which cannot be absorbed by the buffers are mainly borne by the members, i.e. the pension fund operates implicitly as a mutual fund.

3.10 Elsewhere we believe there are schemes which are not strictly ‘regulatory own funds’ and there may be a limited lifeline back to the sponsor, but not an open-ended commitment from the sponsor.

3.11 Pensions may also be delivered partly via arrangements set up with insurance companies. These come in different forms. If the contract with the insurance company does not mirror the deal between the sponsor and the members then there is residual benefit to be provided by the sponsor, and the insurance contract is merely an investment vehicle. An obvious example is that the final salary risk stays with the employer (and probably even elements of indexation), and not all insurance companies would take on some of the other demographic and data risks and member options associated with pension schemes. Prudential regulation clearly has a dual role in these arrangements.

3.12 In some European countries, however, the sponsor can fully reinsure its liabilities with an insurer, in which case the regulation of these is dealt with through the regime for insurers, and the sponsor does not have any further obligations (assuming that the risk of the insurer’s failure is covered in other ways).

3.13 It is clear that most financing vehicles need to be supplemented by other sources of finance such as direct support from the sponsor at the appropriate time, or other forms of external capital which also have an important role in ensuring delivery of pension expectations. Accordingly, in this paper when we talk about pension security, we refer to the security of the entire pension expectation and not just the part funded by the principal vehicle.

**Security as a benefit of the scheme**

3.14 Individuals make pension savings, or join pension schemes, so that they can have some financial ‘security’ in their retirement. The desired ‘security’ has many aspects, embracing more than just an expectation that a pre-determined level of income will be payable at a pre-determined date with 100% certainty. Many people will be prepared to take a holistic view and be flexible around individual aspects of security, provided they understand how the flexibility in each aspect balances within the overall package. For example, some people may be willing to give up the certainty of a fixed benefit at a fixed age to have more flexibility over the timing of their payment, even though the benefit amount consequently becomes less predictable. Others may prefer a lower level of benefit but with a greater certainty of payment.

3.15 Of course all this pre-supposes a full transparency of the underlying risks, in particular an understanding by the individuals concerned of the risks they remain exposed to, the risk management processes that are in place to control them (often on their behalf by third parties such as pension scheme trustees and supervisors) and how their financial security might be affected by a partial or total failure of these processes. We think that there is a clear role for supervisors and others to encourage such transparency where it is lacking.

3.16 In practice discussions of ‘security’ often focus on a narrow definition of assets being always available as collateral for a given benefit. This works well in situations where the benefit is clearly defined at the outset on the basis of an independently assessed, and fixed, unit price. For example, in insurance where policyholders are clear about the price they have paid and the contractual benefit they have bought, it makes sense to assess the security of the arrangement subsequently by reference to the amount and quality of assets backing the obligation. In defined benefit pension schemes, where the contractual arrangement is rarely so clear, and often complicated by many external factors, such a narrow definition can be restrictive with the risk that it may undermine the very arrangements it is trying to protect.

3.17 Defined benefit pension schemes strike a more complex balance between the benefit provided (in terms of nature, quantity and probability of payment) and its affordability. In pensions, all of these factors are taken as a whole and a change in one may well be accompanied by a mitigating change in another to maintain the required balance. A key feature of this balance depends on how the subsequent risks of delivery are shared between the scheme sponsor and members.

3.18 Consequently, scheme members, when assessing how secure their pension expectations are, need to consider a number of inter-related factors, including:

- The quality and quantity of the target benefit (benefit security);
- The assets available to back the benefits either on a dedicated basis, say, in a pension scheme (scheme collateral) or in other indirect ways (external assets);
- The management of the assets relative to the underlying liabilities (investment strategy);
- The processes employed to identify, monitor and manage risks (risk management); and
- The information necessary to communicate the deal and how it is being managed by third parties on behalf of the members (disclosure).

**Components of pension security**

3.19 In the supplementary report to this paper[9] we have provided a discussion and examples of the way in which external factors, pension design and financing together contribute to the overall security of the pension benefit in different ways. In essence, security can be viewed as a benefit of the scheme in the same way

[9] *Deborah Cooper and Job Stigter (2010) “Pension security in some European countries”*

as all other benefits: it has a number of inter-locking components which together govern the pension expectations of members and any change in one may call for additional finance or an adjustment to one or more of the other components. We have set out the principal components below and, in Appendix A, we have shown the different balance being struck between these in five European countries. In Appendix D, we have shown a mapping of the components of pension security to the three pillars of Solvency II. Although the discussion below frequently refers to trust-based pension schemes, it is clearly also applicable to unfunded pension arrangements and others which may not be formally constituted as trusts.

**Quality and quantity of benefits**

3.20 The design of pension schemes varies significantly from country to country and many of the differences result from the requirements of national law. The differences may be rooted in social or other aspirations and can contribute to pension scheme security in different ways.

3.21 Common examples are statutorily imposed criteria on the type and minimum level of benefits to be provided. These can range from minimum levels of indexation for pensions to protect some of their purchasing power, to attaching spouses' and dependants' pensions to minimise family hardship following a scheme member's death. The UK, for example, mandates indexation in payment as well as deferment, whilst Germany does so for pensions in payment and Ireland for pensions in deferment.

3.22 In contrast some countries (for example the Netherlands) allow certain benefits, such as indexation, to be provided on a conditional basis with the decision (subject to regulatory process) taken at scheme level. Clearly, all else being equal, the security attaching to these is less than in those countries where they are mandated.

3.23 Additionally, some countries[10] have strict rules preventing the reduction of accrued benefits (for example the UK) whilst others permit reductions under certain (often extreme) conditions. In the former case (all other things being equal), members may feel more secure in the knowledge that sponsors cannot retrospectively reduce accrued benefits, and the latter case is a clear example of the fact that even accrued benefits carry some risk of non-payment. In practice the comparison is of course much more complicated due to how the overall package of risks has been balanced – for example, a pension of 100 with guaranteed indexation from a UK pension scheme with a funding level of 70% and a weak sponsor covenant may not necessarily be preferable over a pension of 100 with conditional indexation from a scheme in the Netherlands having a funding ratio of 120%.

[10] *CEIOPS identified seven countries in Europe where this can happen, generally as a mechanism of last resort in IORPS where there no or limited further recourse to a sponsor for additional payments*

3.24 However, benefit prescription creates inflexibility, which then impinges on other aspects of security. Benefit flexibility (for example, permitting defined benefit arrangements to reduce, as well as increase, accrued benefits) can take pressure off some aspects of security, but it also increases the need for transparent disclosure so that members can consider carefully the choices they have made (or are being made on their behalf) and initiate appropriate action if not satisfied. The stage at which benefits can be reduced will also affect how effective the flexibility is – for example, benefit reduction is only possible once the compensation schemes (the PSV in Germany and the PPF in the UK) become responsible for payment, whereas in the Netherlands and in Ireland it is possible to reduce benefits within an ongoing scheme, so that the employer's exposure to scheme liabilities can be managed without an insolvency event having to occur.

**Scheme collateral**

3.25 This component of security measures the extent to which a pension scheme is 'self sufficient', that is, it can afford to meet all accrued benefits without any further support from the sponsor. The amount and ownership of, and the investment strategy applied to, the underlying assets are key to the value of the collateral. Commonly scheme assets must be segregated from those of the sponsoring employer(s) and a 'prudent investor' principle applied. Some countries go further, restricting exposure to certain asset classes and, importantly, to investments held with the sponsoring employer. For members, there is a direct correlation between the amount of collateral and how it is managed and the security provided.

3.26 The IORP directive requires schemes to determine a 'prudent' measure of their 'technical provisions', and to aim for this to be covered by the assets directly available to the scheme. In this context prudence can be viewed as a source of solvency capital or additional security (relative to technical provisions assessed on a best estimate basis).

3.27 For underfunded schemes the length of permissible recovery periods determines the scheme's exposure to the credit risk of the sponsor. In principle, provided the sponsor remains able and willing to support the scheme as and when necessary, scheme collateral is irrelevant except to the extent it provides a funding discipline. In practice, the collateral will be required if the employer becomes less willing to finance the scheme, or, in extremis, insolvent. Unless legislation prescribes the approach scheme trustees must use to determine the level of their technical provisions, trustees must consider these aspects when determining their 'prudent' framework. In that case, the regulator will apply oversight to ensure that funding plans (both the measure of technical provisions and any steps required to restore a shortfall between the technical provisions and the assets) are adequate.

**External security**

3.28 This component of security takes into account the extent to which scheme trustees or managers can rely on assets external to the scheme, including the sponsoring employer's covenant, to finance scheme benefits. This can be achieved in various ways:

- Through a mandatory requirement for the sponsor (or an agent) to hold sufficient capital to cover the pension scheme's risks up to a specified level.
- Providing contingent assets, including intra-company guarantees or charges on specific company assets, to the scheme to protect against certain events (such as employer insolvency). Member security is clearly dependent on the quality of the collateral available and, if none is available, then on the pension scheme's rights as an unsecured creditor.
- Mandating that trustees access some form of insurance or compensation fund, to provide scheme benefits (usually at a reduced level) in the event of an employer insolvency when the scheme's collateral is insufficient (for example, the PSV in Germany and the PPF in the UK).
- Requiring that, as long as the employer is solvent, it has a legal or constructive obligation to ensure that scheme benefits are paid in full and its actions cannot dilute the obligation without providing alternative security to the scheme. Such requirements are by no means universal across Europe, with important consequences on member security where such an obligation exists as well as where it does not.

**Disclosure**

3.29 This component element of security ensures that the recipients understand the benefits they receive from the scheme and the way it exposes them to risk – for example, due to underfunding or to benefit inadequacy. The value of good disclosure is in the power it provides to members and their representatives to understand what is happening in the scheme and to challenge it if necessary, with a view to initiating action to improve security if not satisfied. Disclosure is appropriate at a number of levels:

- *From the scheme trustees*:
  a) To members, who are likely to need to know:
     i. the characteristics of the benefit, including when it is likely to be paid, and the control they, the trustees or employer have over their scheme benefit;
     ii. what financial security is available to the scheme (internal and external) and the effect of the choices the trustees have made about this on the likelihood of payment; and
     iii. how the trustees make their decisions.
  b) To regulators, who are likely to need information about the position of the scheme and of the employer relative to any statutory requirements, as

well as any duties they may have in connection with protecting members' interests.

c) To the scheme sponsor, who will want sufficient information to understand how the contributions it is required to pay are calculated, and how the trustees reach decisions that affect the level of contributions.

- *From the sponsor to the trustees and regulator*, who are likely to need to know about plans to restructure that could affect the strength of the sponsor's covenant to the scheme, or require the trustees to take actions to ensure they meet various obligations, legal and otherwise, in relation to the scheme.
- *Taking this one stage further*, if employers are required to disclose information about the scheme to their investors, then the increased oversight from market observers could encourage better discipline to manage more effectively the risks taken in the pension scheme on behalf of shareholders by the company management (or scheme trustees), in turn strengthening the covenant they provide to the scheme.

**Governance**

3.30 Underlying all of these elements of security is a high standard of governance, from the trustees, the regulator and the employer, and the advisers to these parties. The additional security provided to members depends on the quality of the governance, in particular:

- The regulator's statutory powers to intervene if not satisfied with the management of the scheme or with the key policy decisions affecting members' interests, such as investment, funding and risk management strategies.
- The regulator's powers and abilities to provide education, guidance, directions, and other prompts in order to oversee sound management of the scheme, to influence the right behaviour and generally ensure that trustees, employers and advisers fulfil their responsibilities appropriately.
- Requirement for trustees to have access to adequate 'knowledge and understanding' of the scheme, for example, to be familiar with the environment in which the scheme is operating, and how their actions can contribute to, or detract from, the overall security available to members. Similarly, a requirement for trustees to have adequate internal controls to ensure good decision-making and sound administration, which should help to improve other aspects of scheme security under their control.
- Requirement for sponsors to consider the pension scheme's position when engaging in corporate activity which may have a detrimental effect on members' security.

# Section 4: A framework for decision making

4.1 This section sets out a possible high level framework for the effective regulation of defined benefit pension schemes. It is a framework that recognises the existing decision-making protocol between the EU and member states, and puts the security of members' benefits at its heart whilst at the same time recognising the importance of the historic traditions of defined benefit pensions within different member states and the different trade-offs that exist within individual states (for example, those between benefit quality and funding).

**Outline of decision making in EU**

4.2 The Lamfalussy arrangements set out the framework for making decisions on financial services at the European level. These can be summarised as follows[11]:

- **Level 1** - framework legislation, voted on by the Council and Parliament
- **Level 2** - implementing measures for the Level 1 legislation, led by the Commission
- **Level 3** - supervisory committees facilitating the convergence of regulatory outcomes
- **Level 4** - enforcement of all EU measures, led by the Commission.

4.3 For the effective implementation of the high level decisions taken at the European level, it is also necessary for co-ordinated decisions to be taken at the national level. Whilst the details of the decision-making process at this level will vary according to the constitution of individual member states and the flexibility provided by the Level 1 principles, it is possible to define three broad levels for decision-making at the national level. For the purposes of this report, these have been designated as follows:

- **Level A** – national law
- **Level B** – national supervisory bodies
- **Level C** – individual scheme sponsors, trustees or managers.

4.4 The required level of consistency and convergence is generally achieved through co-ordinated policy measures at all these levels – European, national and pension scheme levels. The two most important levels in this framework are Level 1 which sets out the overriding principles at the EU level, and Level A which provides the detail of how different member states implement the Level 1 decisions. The relative importance given to decisions at Levels 2-3 and B-C depends on the

[11] *This summary is taken from the website of the UK's Financial Services Authority (http://www.fsa.gov.uk/Pages/About/What/International/european/lamfalussy/index.shtml).*

power and flexibility devolved to them by the decisions taken at Levels 1 and A respectively.

4.5 Our understanding of the draft legislation published in Oct 2009 to strengthen financial supervision is that the Lamfalussy framework remains largely unchanged but that the Level 3 committees get reconstituted with new names and new powers. Amongst these is the new power to issue binding technical standards and guidelines at the European level. Whether this entails a potential shift away of powers and decision-making from Levels B and C (and also possibly at Level A) is a matter for debate, particularly on how the new process of agreeing Europe-wide technical standards would accommodate active participation from member governments and their supervisors. For our purposes, these are matters affecting the focus of prudential regulation, and to some extent the detailed process of implementation. They should not affect the high-level framework we are suggesting for considering the right issues at the right level in order to develop principles that are fit for purpose and ones that respect the bonds that bind together the EU.

**Decision-making at a European level (Levels 1-3)**

4.6 Level 1 is currently represented by the IORP Directive. The decisions taken at Level 1 are vital in establishing a robust framework for the supervision of pension schemes. The role of Level 1 policy measures is to set out the fundamental principles around which EU states agree to function in a co-ordinated way to respect the principles that bind them together but at the same time observing the national freedoms of each member state – the principles of partnership, flexibility and subsidiarity.

4.7 Whilst the high level principles are set out in Level 1 directives, these are then supplemented by implementing measures at Level 2 led by the European Commission and supplementary guidance, standards and advice at Level 3 to explain how these principles should be achieved in practice. Under the strengthened supervisory network now proposed[12] the Level 3 supplementary guidance will in future be provided by the European Insurance and Occupational Pensions Authority (EIOPA) working in co-ordination with national supervisors.

4.8 The new regulatory framework has provisions for the EIOPA to issue binding technical standards on genuinely technical matters (the Level 3 committees currently only have an advisory role) as well as non-binding guidelines to facilitate consistent supervisory practices and application of EU legislation. As mentioned earlier, the precise process for decision making at this level has yet to evolve, but we would expect that member states (or at least their supervisors) would have a key role in whatever is decided, particularly where binding standards are involved.

[12] *http://ec.europa.eu/internal_market/finances/committees/index_en.htm#overview*

This is important if the different nature of pension provision in the member states is to be reflected in a balanced way in any new standards at Level 3.

**Decision-making at a national level (Levels A-C)**

4.9 Level A represents policy decisions taken at the national level. Each member state is expected to comply with the principles set out at Level 1 and to pay careful attention to the implementing measures at Level 2 and any guidance and standards provided at Level 3 in reaching its national policy decisions. However, within that framework, member states are generally free to take decisions on appropriate ways of meeting the Level 1 principles whilst still reflecting the particular trade-offs that apply at their national level.

4.10 Given that trade-offs between the different elements of pension security can be very diverse, it may be logical for the high level supervisory principles agreed at Level 1 (as well as Level 3 in future) to retain flexibility for individual member states to reach appropriate decisions at Level A which reflect their desired preferences, some of which may already have been built into their existing social and labour law. The alternative of greater uniformity at Level 1 (or Level 3) would first require major changes to social and labour laws.

4.11 Examples of how this flexibility is already employed in practice are the Level A decisions reached by the Netherlands and the UK to reflect their respective preferences on the appropriate trade-off between funding and benefit quality. These in turn recognise that a relatively rigid requirement in one area probably works best if it is balanced by greater flexibility in another, as reflected in the national regulatory regimes. There is no reason to suppose that either approach is better than the other – each serves its purpose and would probably continue to do so under any new EU-wide standard for pensions (possibly in a revised IORP directive), depending on its objectives and structure and the methods chosen to implement it at Levels 1 and 3.

4.12 Level A decisions may be supplemented by additional guidance or requirements issued at Level B by national supervisory bodies, such as the Pensions Regulator in the UK or the DNB in the Netherlands and, in future, potential European wide guidance and binding standards by EIOPA.

4.13 The final level of decision making at the scheme specific level (Level C ) is most relevant in circumstances where the member state's Level A policy measures consider it more effective for certain decisions to taken at the individual scheme level. For example, in the UK, the current Level A framework (the Pensions Act 2004) is based on the understanding that whilst pension schemes need to be funded prudently the more detailed decisions required to reconcile many complex interactions associated with risk taking, its affordability and its consequences, are best balanced by individual trustees and scheme sponsors working together, with the assistance of their advisers and supported by codes of practice and guidance at Level B from the national supervisor.

**Proposed framework**

4.14 The main challenge with any prudential framework, and in particular the strengthened regulatory framework now being implemented at the EU level, is how to achieve the desired objectives within what are generally viewed as the binding principles of the EU - partnership, flexibility and subsidiarity. We believe that it is possible within the framework we are suggesting to consider the right issues at the right level, once the objectives have been clearly defined, and to then develop high level principles that are fit for the purpose and yet respect any further constraints that may considered necessary to respect national laws and freedoms.

4.15 Our proposed decision-making framework is therefore one at which high-level EU-wide principles can be set out at Level 1, explained or further developed at Levels 2-3 with supporting guidance and technical standards of a binding as well as non-binding nature, and implemented in detail at Levels A, B and C. In some respects this is what already happens and what we are suggesting is greater coordination (or at greater recognition of the interaction) between the EU-wide and national decision making processes – this is particular important under the new supervisory framework for the EU where there is now the possibility of binding technical standards at Level 3. At the national level, the division between Levels A, B and C would continue to be decided at member state level, notwithstanding the interaction between national and European regulators. In some areas, Level A policy measures or Level 3 technical standards may provide detailed specification or quantification, leaving less scope for further decisions to be taken at Levels B or C. In other areas, Level A and B policy measures may also be principles-based, supported by Level 3 guidance and standards which could also be confined to principles, but developed in greater detail (either of a binding or advisory nature, as appropriate), and leave the detailed implementation to Level C.

4.16 A key feature of the proposed framework is that member states should have the flexibility to decide how to implement the broad Level 1 principles at Level A (notwithstanding the interaction with Level 3 binding technical standards), and where appropriate decide on the extent to which some decisions are best left to be determined at Level C. This flexibility is important to accommodate the various trade-offs between the component elements of security taken in individual member states, as described above. Superficially this might appear to be different from the situation that applies under Solvency II for insurers where the bulk of the regulatory decision-making is happening at Levels 1 and 2[13]. However, even here

[13] *In July 2009, CEIOPS issued for consultation a second set of advice on Solvency II Level 2 implementing measures. See http://www.ceiops.eu/media/files/consultations/consultationpapers/Cover-letter-Consultation-Papers-37-62-SII-Level-2-draft-advice.pdf*

there are provisions for some of the detailed decision-making to happen at individual company level in conjunction with the supervisor (Level C).

4.17 We do not think the flexibility advocated in this proposed framework should in any way undermine the primacy of security in the effective regulation of pension schemes. Flexibility does not mean that member states are completely free to decide on any system of pension regulation they like. Instead, the principles on which the framework is based should ensure that the decisions taken at Levels A, B and C are consistent with the high level principles at Level 1 and achieve a minimum level of security for members' benefits.

4.18 Concerns about too much flexibility can also be addressed through other checks. A requirement to observe certain best practice principles is one possibility. A suitable set of best practice principles we would suggest are those which seek to:

I. Achieve a *balance* between a high degree of security and affordable cost to the sponsor in the context of sustainable pension systems as decided by member states.

II. Take account of the inherent *risks*, not just at particular points in time but also on a *forward-looking* basis.

III. Use available market inputs to determine the appropriate measurement basis for assets and liabilities, within the context of the risks that are considered acceptable.

IV. Provide full *transparency* to all stakeholders about how the financial position has been determined, including how the various risks are managed and their potential rewards and consequences.

V. Be *proportionate* to the nature, complexity and scale of the inherent risks without imposing disproportionate compliance costs.

VI. Have *flexibility* to adapt to changing conditions.

VII. Be *counter-cyclical*, with incentives for pension schemes to improve security buffers during favourable economic and business conditions so that they may provide protection in less favourable conditions.

VIII. Be *practical* to implement and administer.

These principles are discussed further in Appendix B.

4.19 The policy measures proposed by member states at Levels A-C (and also at Level 3) could be tested against these principles which, taken together, could inform the effectiveness of the supervisory process. In the next section we illustrate this by benchmarking the current regulatory regimes of five European countries, each of whom strikes its own preferred balance between 'funded' and 'unfunded' security, against these principles.

# Section 5: The framework in practice

5.1 In this section we look at how the framework could work in practice by testing five countries against the eight best practice supervisory principles referred to in the previous section and described in Appendix B.

The supervisory systems we have briefly examined are those in the Netherlands, UK, Ireland, Switzerland and Germany (where we have looked at insurance-based as well as non-insurance financing vehicles). The main occupation-based defined benefit pension systems in these countries are described in greater detail in the supplementary report to this paper[14].

5.2 The results are summarised in Appendix C. The purpose of this analysis is to examine how existing regulatory systems approach the matter of pension security, and in particular how they balance the different elements of pension security we have identified earlier against the background of their own cultural practices and social preferences, and how the resulting system then compares against the best practice principles.

5.3 We illustrate this through a particular focus to two countries, UK and the Netherlands, being examples of systems which comply with the requirements of IORP Directive but in very different ways – almost defining the different ends of a wide spectrum of implementation methods. The UK regime relies on reasonably detailed principles set out in national legislation, with relatively little ‘across the board’ quantitative prescription but with sufficient guidance and codes of practice from a powerful regulator setting out what is expected from individual sponsors and trustees. The regime in the Netherlands, on the other hand, places greater emphasis on the funding and solvency requirements with detailed rules at national level setting out an ‘across the board’ quantitative prescription.

In the terminology of Solvency II, the regime in the Netherlands aims to achieve the desired level of security through a focus on Pillar I whilst that in the UK places greater emphasis on Pillars II and III to promote the right behaviours and actions. These two examples seem to us to provide a good demonstration of how differing national objectives, cultural differences and implementation preferences can be reconciled within a broad policy measure whose principles have been agreed at EU level.

[14] *Deborah Cooper and Job Stigter (2010) ‘Pension security in some European countries’*

**Balanced**

5.5 The Netherlands and UK are examples of two regimes which balance the different elements of pension security in different ways.

In the Netherlands,

a. The regulatory focus is on Pillar 1 with a high level of funded security on the core benefit and less reliance on the sponsor covenant. Technical provisions are measured on a 'risk-free' basis, and in addition a solvency buffer (of 20-25%, depending on risk taken)[15] is required for the "hard benefits" (mostly nominal only[16]).
b. There are risk mitigation tools built into the benefit design – indexation on a conditional basis and, ultimately the possibility of a reduction in accrued benefits (under strict conditions)
c. For the member, pension security is a balance between a high level of funded security on the core benefit with indexation on a 'best endeavour' basis and a small risk of a reduction in accrued benefits in the event of the scheme having to wind up whilst in deficit.

In the UK,

d. The regulatory focus is on Pillars II and III (supervisory process, market discipline and education/disclosure). There is no minimum funding requirement, but a funding plan needs to be established on a 'scheme-specific' basis taking account of all the relevant factors.
e. Technical provisions have to be prudent but the discount rate can include an allowance for expected outperformance from the scheme's assets (ie can be above the risk-free rate). Recovery plans need to focus on how soon the sponsor can afford to pay off the deficit. There is no explicit additional solvency requirement above the requirement to fund technical provisions on a prudent basis, but the sponsor's covenant needs to be regularly monitored and appropriate action taken.
f. Core benefit levels are higher due to social protection of purchasing power via compulsory indexation. Accrued benefits cannot be reduced, and a solvent sponsor cannot 'walk away' from its obligations without funding the scheme to the level of an insurance buy-out.
g. In essence, overall pension security is a balance between the agreed level of funded security on a socially protected benefit, and other forms of indirect solvency capital, primarily the sponsor covenant, with the ultimate back-stop of the Pension Protection Fund.

[15] *This will most likely increase after the current review of the FTK*

[16] *There is no buffer requirement for the soft benefits like conditional indexation. There are contribution restrictions, however, to ensure that the contribution policy is in line with the indexation objective. And in the continuity analysis, there is a check on the overall policy to see whether it is in line with the (indexation) objective and whether the likelihood of reaching this objective is high enough.*

**Forward-Looking and Risk-Based**

5.6 Both regimes are forward looking and risk-based, but again in different ways.

In the Netherlands,

a. The solvency requirement is higher when the pension fund is taking more risk, with a specific requirement to take into account six risk factors (with market and interest rate risks being the most important). The solvency buffer is calculated to provide 97.5% confidence that the scheme will be more than 100% funded in one year's time. If the scheme has a buffer deficit (funding ratio above 105%, but below the buffer requirement) it is granted a 15 year period to fund the required buffer, with the security level then falling below 97.5% in the intermediate period.

b. In addition to requiring that the foreseeable trends in liability development should be included in the liability calculation, the FTK also requires a stochastic 'continuity analysis' at least every three years to demonstrate that the funding policy is sound and that the scheme is likely to be able to realise its ambitions; if not, the supervisor can ask for suitable amendments and/or additional contributions.

c. The parameters for the continuity analysis and recovery plans are set by the regulator and reviewed every three years by a commission of independent experts and the supervisor. They are designed to prevent pension schemes being overly optimistic about the future development of the fund.

d. There is also a minimum standard for contributions which cannot be below 'cost price' unless the fund has sufficient resources to finance the balance.

In the UK,

e. The trustees and the scheme actuary play a more important role. There are no strict rules or formulae, but trustees have to take appropriate advice, develop a funding strategy to comply with the supervisory framework, agree it with the sponsor and formally document it. This leaves more room for individual tailoring, judgement and implementation, making it possible to define (within reason) the level of security considered most appropriate for the fund. In particular, the trustees should consider the scheme's investment policy and the ability of the employer to cope with the financial consequences of assumptions not being borne out by experience. In practice, this means that a scheme with a strong employer covenant should be able to allow for some measure of outperformance, whereas a scheme with a very weak covenant may have to fund on something close to a risk-free basis.

f. The quality of the sponsor's covenant and affordability of risks play an important part and there is an onus on trustees to keep the sponsor covenant under review in the light of changing economic circumstances, the sponsor's business environment and corporate activity (a form of continuity analysis). Ultimately, the regulator has powers to intervene if it believes that trustees and employers have agreed on insufficiently prudent technical provisions.

**Market-based**

5.7 From the CEIOPS survey[17] it appears that not all countries use market rates to discount liabilities, although discount rates which are not directly referenced to financial markets can of course still be prudent. Where pensions are provided using insurance (for example, some German schemes), then the basis is less likely to be directly market-related.

5.8 In both the UK and the Netherlands the liabilities are calculated using market-based measures, but with differing emphasis on risk.

5.9 In the context of Solvency II for insurance companies, 'market-consistency' appears to have a specific meaning, whereby technical provisions are calculated on a best estimate basis using a 'risk-free' discount rate (with an unresolved debate at the moment as to whether an illiquidity premium should be added on top), with a further requirement for a risk margin to allow for the uncertainty in the liability cash flows due to non-hedgeable risks. The concept of market-consistency in pension funds may be different – if discount rates are referenced to market instruments, or informed by other market indicators (for example on inflation expectations or future prospects for equity markets) then they are arguably also market consistent. The difference between the Solvency II definition and what might currently be practice in pensions is really in the amount of risk embedded in the discount rate used to calculate the liabilities:

a. In the UK, the trustees decide the appropriate discount rate (having taken actuarial advice and usually with the employer's agreement). The discount rate must be prudent and take into account either or both of (i) the yield on assets held by the scheme to fund future benefits and the anticipated future investment returns, and (ii) the market redemption yields on government or other high-quality bonds. The Pensions Regulator's code of practice on funding indicates that the discount rate can take advance credit for expected out-performance from the scheme's investment policy above a least-risk measure. In the Netherlands the discount rate might be closer to the definition of market consistency in Solvency II (notwithstanding an unresolved debate on illiquidity premiums).

b. In contrast with Solvency II, pension funds across Europe may not always include an explicit risk margin in the calculation of the liabilities so, unlike insurers, they may not explicitly take into account any uncertainty in the calculation of the liabilities for non-hedgeable risks, although in some case there may be an implicit margin for prudence (for example, in the UK).

c. Even though there may not be a deep and transparent market for pension liabilities, there could be disclosure requirements on an appropriate market consistent basis to provide better understanding of their 'fair value'. In the

[17] *Survey on fully funded, technical provisions and security mechanisms in the European occupational pension sector (CEIOPS-OPSSC-01/08 Final, 31 March 2008).*

Netherlands, pension funds have to file their market-consistent funding ratio on a regular basis. In the UK, there is a requirement to publish a ‘solvency’ calculation where the liability is measured approximately on the basis that insurers would use for the purposes of buying out the liabilities.

**Transparent**

5.10 In the Netherlands, disclosure requirements include reporting to the supervisor and also to members. Schemes must send out a Uniform Pension Overview (UPO) to the members once a year. This UPO is standardised across all pension plans.

5.11 In the UK, pension schemes are required to make a number of disclosures to the Pensions Regulator, to the sponsor and to members. The disclosures to the regulator include (i) an annual scheme return (ii) a summary of any funding valuation that shows a deficit (iii) reports where there is a breach of legislation that the Pensions Regulator would consider material e.g. where member contributions have not been paid to the scheme by the employer and (iv) reports where certain ‘notifiable’ events occur i.e. events that have been specified as likely to cause particular concern, e.g. a change of control of the sponsoring employer or a large augmentation of benefits without adequate funding.

5.12 In the UK, there are also responsibilities on sponsors to consult members if future benefits are changed, as well a discipline to consider the position of the pension scheme when engaging in any activity which may have a detrimental effect in members’ security, for example special dividend payments, or additional gearing which may have the impact of reducing the priority of the pension scheme’s claim over company assets on a wind up.

5.13 Generally, all countries have requirements for members of defined benefit pension schemes to be provided with information about the scheme when they join; information on significant events e.g. leaving service, retiring, death and an annual statement summarising the funding position of the scheme. It is also usual to receive an annual statement setting out the level of benefits that a member has in the scheme.

5.14 However, most of this information is of an administrative nature and it is questionable whether members fully understand the benefits that they will eventually get and the risks associated with them. Members seem to have low awareness of the relevance of indexation to their purchasing power. In the Netherlands, with conditional indexation, this means that they might be running more inflation risk than they realise[18]. Better communication of the purchasing

[18] *In the UK, there is some guaranteed indexation. However statutory indexation does not apply at all to pension benefits accrued before 1997. Between 1997 and 2005 the statutory cap was 5% and since 2005 2.5% so there remains some exposure to inflation risk in the UK also.*

power of the benefits is essential[19] and should, we think, be an important factor in disclosure.

5.15 Another important risk factor that members should be helped to understand better, via appropriate disclosure and financial education, is the likelihood and extent of the pension fund not being able to fully meet its liabilities. In the Netherlands, this should lead to better insight into the likelihood of the pension plan cutting benefits, and in the UK into the likelihood of the sponsor becoming insolvent before the pension ‘debt’ has been fully funded (and for some members the additional concentration of an employment risk as well with the same sponsor).

5.16 In general, disclosure requirements to others are rare or non-existent. Such parties include analysts and financial journalists who could be influential in challenging how schemes are managed, or providing education through interpreting what is happening, and generally promoting discussion on relevant issues. To the extent that they can help to bring change for the better they could be viewed as improving security.

5.17 To conclude, better member disclosure is needed on inflation risk, risk in general and the sponsor covenant risk in particular and greater disclosure in the public domain. This transparency should lead to better communication with stakeholders. More discussion with stakeholders is not a goal in itself, but should be encouraged in the interests of better security or better understanding of the complexities and risks in pension schemes. Such discussions could lead to better alignment of the expectations of various parties and the outcomes.

**Proportionate**

5.18 In the Netherlands, pension funds can use a simplified method for calculating their solvency requirements if they comply with certain criteria for size and asset allocation. The simplified method is easier to apply, but is also more prudent. Other supervisory requirements, like having a continuity analysis (a type of ALM study) are more onerous on smaller funds[20].

5.19 In the UK there are many small funds[21]. Many funds have even fewer than 10 members. To prevent the burden of supervision being too high, simpler rules could be devised, which may be more prudent to offset the risk of lower

[19] *In the Netherlands, from 2010 onwards an ‘indexation label’, an indicator of the expected indexation in normal and in stress circumstances is to be published by pension funds.*

[20] *Some pension funds came to the conclusion that running their own fund is complex and expensive and decided to either merge with another (sector) fund or move to an insurer, to benefit from more expertise and scale..*

[21] *The Pensions Regulator estimates that there are around 7,500 defined benefit schemes in the UK. Approximately 36% have fewer than 100 members and 81% have fewer than 1,000 members.*

security[22]. Similarly, the Pensions Regulator identifies those larger schemes, particular the few very large schemes, that pose the largest regulatory risk, and dedicates more resource to ensuring that they are properly managed.

**Flexible**

5.20 The supervisory arrangements should be able to cope with changing conditions, including extreme events, such as those experienced in 2008. In the Netherlands, the minister of Social Affairs and Employment, who has legislative responsibility for the Pension Act, has lengthened the period of three years for the recovery plans to five years[23]. In addition, the DNB as supervisor can use tailor-made rules for individual pension funds depending on their funding status and their sponsor, also allowing DNB to use stricter rules if and when thought appropriate.

5.21 In other countries there has also been relaxation of rules, like a lengthening of the recovery period. Being principles-based, the UK system is flexible and solutions can be tailor-made since the trustees (having taken advice from their actuary) have to decide on how to demonstrate adequate funding to the supervisor.

5.22 By contrast the regime in Germany is regarded as relatively inflexible, with rigidly prescribed boundaries on funding levels and recovery plans. In the ‘insurance’ vehicles in Germany, no underfunding is allowed (leading to additional contributions or reduction of benefits); in ‘non-insurance’ vehicles it is possible to have funding deficits of up to 10% and 3-10 years for recovery.

**Counter-cyclical**

5.23 Counter-cyclical rules should reduce the risk that pension funds deepen the ‘dip’ in economic downturns, and encourage them to strengthen funding peaks during upturns. It is fair to say that none of the regulatory systems were designed with counter-cyclicality in mind; whilst they have had the flexibility to relax the rules to adapt to the recession, it remains to be seen how they will adapt as European economies come out of the recession.

5.24 During economic downturns, employer covenant tends to worsen. In the UK, because of the connection between covenant and discount rate, the regulator expects technical provisions to be higher when covenant is weaker. However, contributions to meet the deficit are determined by affordability to the employer and so, during the financial crises the regulator has been expecting to see higher technical provisions and longer recovery periods; it remains to be seen what happens when financial and economic circumstances improve.

[22] *In practice, in the UK there are relatively few dispensations for small schemes and the requirements for them are not more prudent.*

[23] *In 2008, this 3 year period was stretched to 5 years.*

5.25 None of the countries included in our review of regulatory regimes operates explicitly counter-cyclical regimes, although some have aspects that achieve this to a limited extent. For example,

a. In Germany long term assets can be included in valuations at the lower of book and market value, or at their value on the previous year's balance sheet, which enables smoothing of results over a business cycle.
b. In the Netherlands, the required solvency margin is built up during good times, and stands a better chance of absorbing the risks during economic downturns. Also, the regulator (the Minister of Social Affairs and Employment) can decide to lengthen the recovery period for underfunding from three years (in 2008 it was lengthened to five years).
c. In the UK, although the regime was not designed to be counter-cyclical, the regulator has tried to use its flexibility to reduce the burden on sponsors by permitting longer recovery plans at times of financial hardship.

**Practical**

5.26 In the Netherlands, the supervisor (DNB) has standard tools for the solvency test making them easily applicable even for smaller funds. Small funds with limited risks are allowed to use a simplified, but stricter, method. This leads to a lower administrative burden, but a higher solvency requirement. Also, for other purposes, DNB uses many standardised templates and prescribed parameters. However, there is the risk that if conditions change sufficiently then the standard rules become restrictive and at times impractical (as the UK learnt with its Minimum Funding Requirement a few years ago).

5.27 In the UK, the scheme-based funding and investment plans are set following professional advice, which should be designed to be practical and should evolve with changing conditions. But this puts more responsibility on individual pension schemes and requires more governance (and proportionately greater cost for smaller schemes).

## Section 6: Ways forward and principal issues

6.1 Pension funds have to meet their liabilities as and when they fall due; all other considerations are secondary. The objective of any regulation must be that the benefits promised within an occupational IORP can be fulfilled with a sufficiently high level of probability at an acceptable cost. The security level for pensions is not just a question of the quantitative aspects of funding and solvency regulations but also a function of the supervision of the internal as well as the external sources of capital. Elements of the third pillar (as defined in Solvency II), namely disclosure and market discipline, are also important. In addition to improving measurement and management of risks, a better understanding by the members of the benefits and the risks implied by the overall package of measures chosen to deliver their pensions is important. Disclosure can be an effective tool not just for explaining the risks but also to manage expectations of stakeholders as well as to provide an opportunity for informed parties to challenge the management practices and governance in order to provide more effective delivery.

6.2 The policy options for ensuring this are many and varied. They depend amongst other things on clarifying the obligations as well as expectations of the stakeholders in the light of the chosen supervisory objectives; assessing all the risks of non-delivery and the significance of the resulting outcomes; putting in place effective and proportionate mechanisms to guard against the critical risks thus identified; and telling all stakeholders (especially members), in a language they can understand, what has been done and the residual risks that remain uncovered. The practical details provide unavoidable complication, further compounded in any EU-wide regulation by the need to reconcile the many diverse pension systems and policy ambitions supporting different cultures and objectives.

6.3 In the debate that has preceded this paper various opinion-formers have articulated a wide range of objectives, ranging from harmonisation of various aspects of pension design, pricing and financing to sound conduct of business with proper management of financial risks. The European Commission has embarked on a process of consultation and reflection to narrow down its options and clarify the particular objectives it wishes to pursue going forward. The exact nature and design of any new EU-wide regulation for IORPs will depend on the outcome of this. It could range from doing nothing through to an evolutionary development of the present regime on a ‘bottom-up’ basis to recognise the principles of partnership, flexibility and subsidiarity and to take account of the different approaches to pension provision in different member states, to, at the other extreme, a radical new ‘top-down’ standard involving total harmonisation of all rules for all defined benefit (and hybrid) occupational schemes across the EU. Whatever the exact nature of the regulation, we expect pension security to be a central feature since it has been the common theme throughout.

6.4 Each of the supervisory options mentioned above has its merits as well as challenges. We consider below how many of the issues raised elsewhere in this paper might manifest themselves within these supervisory options.

**Do nothing**

6.5 We start with the natural question in the minds of many commentators: why change? What is wrong with the current standard as encapsulated by the broad principles set out in the IORP Directive and supplemented by enabling legislation at the national level? After all, this was introduced following lengthy debate over many years to accommodate the complexity of pension systems across Europe and to respect the diversity of thought and practices amongst participating member states and, if this is considered to leave too many gaps then the new European System of Financial Supervisors provides further tools for EU-wide enforcement.

6.6 We have shown in the previous section that, in its practical application, the present standard is implemented in widely different ways by member states to accommodate particular features of their pension systems and their interaction with social and labour law, company law and other national objectives. Whilst the importance attached to the individual components of security varies from one member state to another, it does not necessarily translate to an equally wide variation in the overall security levels since the different components may compensate each other. This is consistent with the conclusion reached by CEIOPS in April 2008[24]. The Commission has already identified further work[25] to examine how supplementary pensions are protected upon insolvency of the employer across a very wide group of member states – this is a vital piece of the pension security jigsaw.

6.7 Our framework model highlights scope for potential improvements to national prudential frameworks at two levels: the comparison of best practice between countries shows weaknesses in some relative to others which are worth further examination, and the test against an independent set of best practice principles highlights areas in which pension security could be further improved. Section 5 gave examples of some improvements that could be considered in the five countries we analysed; a more comprehensive analysis may well highlight more.

6.8 Individual governments can of course take suitable action within the current regulatory framework to improve appropriate aspects of pension security, and

[24] *CEIOPS, Survey on fully funded, technical provisions and security mechanisms in the European occupational pension sector, March 31st 2008.*

[25] *Invitation to tender No VT/2009/033 – The protection of supplementary pensions in case of insolvency of the employer for defined benefit and book reserve schemes.*

some are doing so to rectify particular weaknesses they perceive in their national supervision frameworks (for example, recent changes in the Irish regime or the review currently underway of the Dutch regime). The issue for European legislators is whether this is enough and, if not, then are the reforms they seek, once they are clear about the objectives and the 'natural' limitations of any, such that they need to look outside the current IORP Directive framework?

**A new EU-wide standard**

6.9 A new or substantially revised standard should ideally be designed, as far as is possible, for uniform application to all IORPs throughout the EU (funded or unfunded; trust based, insured or book- reserved; defined benefit, defined contribution or hybrid). Consideration would need to be given to what is meant by 'uniform' given the diversity of the underlying EU pension landscape to which it would apply. The main sources of such diversity come from differing national practices and differing focus on

a. The relative importance of social security and occupational pensions
b. Types of occupational pension schemes.
c. Prescription on particular aspects of plan design and risk sharing mechanisms
d. Direction in national legislation on funding practices and legislation
e. Differing company law, social security systems, tax and labour law
f. Differing levels of protection on insolvency of pension schemes and sponsors
g. Existence of certain schemes which are excluded from the IORP Directive

6.10 Much of this diversity derives from the principles of partnership, flexibility and subsidiarity which might be viewed as an external constraint. Whilst the process of levelling some of these differences, insofar as they affect IORPs, has been in progress for some years (e.g. vesting conditions and survivor's benefits), many of the substantial differences emanating from social security systems, company and pension law (especially their interactions on insolvency of sponsors and consequential effects on pension security) would be extremely difficult to unify (if at all) within the timeframe of any new regulatory framework for IORPs.

6.11 An EU-wide standard applied to this uneven landscape could, at the European level, raise issues about the sustainability of pensions and competitive disadvantage for countries that may be affected disproportionately. It may also call for special transitional arrangements to phase-in the impact on capital markets of any new capital requirements of a disproportionate nature, raising further issues about the effectiveness of the measures in the short term.

6.12 How such a standard is designed would need careful consideration. Any 'levelling up' of isolated components of pension security would need to be considered against its potential impact on other compensatory components. For example, conditional indexation in the Netherlands is a risk management tool which makes it possible for the funding and solvency requirements to be set more rigidly. An identical funding standard applied to a country like the UK (where indexation is compulsory) could raise issues about the affordability of the additional security or mitigating changes to accrued liabilities (which may not be socially acceptable to some countries).

6.13 This prompts some fundamental questions about where the line is drawn in decision-making between the EU and national levels. Should the new standard focus more on some very general principles (as in the current IORP Directive) or more specific and detailed principles (as in the Solvency II Directive)? Both have their merits, so why not a best of both within a framework that can accommodate such a mix to address the flexibility desired by member states? Whether this is possible would depend on how the higher order issues flagged above are dealt with at the EU level to the satisfaction of member states.

**Total harmonisation**

6.14 A standard with a common set of detailed and specific principles is held out by some to have the merit of more uniform application across member states. It would cater well for objectives like ‘same risk, same capital’, ‘better pricing of risks’ and ‘removal of regulatory or competitive arbitrage between pensions and insurance’. It would make it easier to apply a uniform set of quantitative rules which would put greater focus on funding and solvency requirements. Whilst these are the most important elements of security, there are many others which would also need to be brought into the equation. Equalisation of just the funding and solvency components raises many issues:

a. Consideration would need to be given to the merits of applying some uniformity to what may be a small fraction of an individual’s overall pension when in many cases a larger component, the social security element, may not be similarly regulated.

b. Since the rules only operate on the chosen components of security, they would either have the effect of levelling up overall security for some (with issues about affordability, competition etc) or ways would have to be found to mitigate some of this cost through compensatory changes on other elements of security.

c. Detailed rules would need to be devised and agreed with member states, taking account of the special features of their IORPs. These may prove to be rather more difficult than was the case under the more homogeneous insurance landscape for Solvency II. It may be that the Solvency II-equivalent of the ‘internal models’ concept could be developed further to allow some of the scheme specific complexity and other features of decision making in IORPs to be handled in a satisfactory way.

d. For IORPs solvency capital comes in many forms other than capital in the pension scheme. Under a quantitative standard a new form of pension balance sheet would be necessary to show the fuller financing picture. Consideration would need to be given as to how to give credit in the pension balance sheet to the full range of capital backing the pension obligation, including some of the less easily quantifiable components. These include the sponsor covenant, contingent assets (which may come with varying grades of asset backing and priority levels), book reserves and externally 'purchased' insolvency protection.
e. Consideration would also need to be given to the extent of 'loss absorbing' potential of pension liabilities, and how this should be reflected in their measurement. The treatment under Solvency II of participating insurance contracts may relevant here.
f. The structure of pension schemes would need to be considered, particularly the interaction between pension and company law, and in some countries the rules regarding ownership of pension assets. Unlike insurance companies, pension schemes do not necessarily have the same clear distinction between technical reserves and solvency capital, which raises issues ranging from where any explicit solvency capital would reside, its ownership, its tax treatment, its management and its policing.
g. How some of these additional forms of solvency capital are regulated raises resourcing and compliance issues. At one extreme, monitoring the quality of the sponsor capital could bring every pension scheme sponsor within the scope of financial services regulators!

6.15 The task of devising an elaborate set of rules capable of being applied successfully across all EU states in all types of financial conditions, and at the same time respecting national objectives and preferences, appears immense and time-consuming.

6.16 Appendix E sets out some preliminary thoughts on the potential application of some elements of a Solvency II framework to pension schemes, ranging from an EU-wide disclosure requirement to solutions drawing on the lessons learnt from the detailed development of the insurance supervisory framework.

**Evolutionary development**

6.17 A successful framework for the effective supervision of pension schemes can be constructed to meet desired objectives within the constraints of an uneven European pensions landscape. Broad principles could be incorporated in European law (Level 1) with detailed implementation of those principles left to national law and to individual schemes (Levels A and C).

6.18 A more qualitative and principles-based standard has the merit of respecting the principles of partnership, flexibility and subsidiarity by working around the existing uneven landscape of pension provision across the EU. Consideration could therefore be given to developing the framework of the existing IORP Directive further by agreeing with member states a set of comprehensive principles which aim to deliver the desired objectives by promoting the right behaviours.

6.19 These could capture the high level objectives within a more detailed set of principles which respected the different styles and structures for pension provision within member states. They would most likely be more comprehensive than the principles embedded in the current IORP Directive, covering all aspects of pension security, and if necessary more detailed and supplemented by technical guidance at the European level. If consistency with other financial institutions was essential, then the principles could be developed accordingly, recognising the desired common objectives but also the essential differences between IORPs and the other financial institutions.

6.20 At individual country level, member states could decide on the exact nature of the implementing legislation to comply with the principles but tailored to suit particular features of pension provision in that country and any national preferences on delivery mechanisms. This would allow member states some flexibility to decide the appropriate trade-off, within reason, between the different elements of security, and set out national legislation accordingly. It would not rule out a quantitative rules based standard which focused on Pillar I for those who preferred it (for example, similar to the one in the Netherlands), or a lighter touch principles based standard for others supported by a stronger governance at regulatory as well as scheme level (Pillar II) and greater disclosure (Pillar III).

# Appendix A: How pension security is balanced in five countries

## GENERAL

<table>
<tr><th></th><th>Netherlands</th><th>UK</th><th>Ireland</th><th>Switzerland</th><th>Germany Insurance type</th><th>Germany Non insurance type</th></tr>
<tr><td></td>
<td>• Pension contract between sponsor and participants (often represented by labour unions) determines level of risk-sharing.<br>• Approx. 84% of workforce has an average pay DB promise with (partly) conditional indexation.<br>• Conditional indexation is allowed for both active and non-active participants.<br>• Other forms of pension provision are<br>o final pay DB covering approx 7% of workforce<br>o (Collective) DC covering approx 1% of workforce.<br>• At end of 2008 there were<br>o 75 industry-wide pension funds<br>o 543 company pension funds<br>o 33 pension funds for professional groups<br>o Number of funds is declining (smaller ones merge or switch to insurance -based).</td>
<td>• Final salary pension schemes cover approx 30% of the workforce.<br>• Employers only need to provide access to a DC arrangement; they do not need to sponsor any DB pension scheme but if they do then they are subject to minimum standards on the quality of benefits (indexation , preservation and spouses' benefits) and have to fund the benefits in a separate trust fund.<br>• The terms of pension provision are set out in the pension scheme's trust deed and rules, not in employment contracts.<br>• Funding is generally through separate trust funds - insurance vehicles are rarely used. Funds paid into the trust fund are virtually impossible for employers to access subsequently.<br>• Other forms of DB pension provision are:<br>o Career average schemes covering approx 12% of workforce<br>o Hybrid schemes approx 10% of workforce<br>o Cash balance plans covering approx 5% of workforce</td>
<td>• The principal DB benefit is a final salary pension<br>• Employers do not need to sponsor any pension scheme (they only need to provide access to a scheme or standard PRSA)<br>• The terms of pension provision are set out in the pension scheme's trust deed and rules, not in employment contracts.<br>• Funding of DB scheme s is generally through separate trust funds - insurance vehicles may be used for smaller DB schemes or DC schemes. .<br>• Other forms of DB pension provision are:<br>o Career average schemes<br>o Cash balance plans<br>o Hybrid plans<br>o Industry wide schemes</td>
<td>• Employers have to provide minimum benefits by law and pay at least 50% of cost of pension benefits.<br>• 90% of workforce covered by cash balance plans; balance through traditional DB schemes.<br>• All schemes have to be externally funded, typically through a 'foundation' or multi-employer plan.<br>• Indexation is not compulsory, but cash balance plans need to guarantee a minimum level of investment return and offer guaranteed annuity conversion rates.</td>
<td colspan="2">• Employers do not need to sponsor any pension scheme (they only need to provide access for deferred compensation) but if they do then they are subject to minimum standards on the quality of benefits (indexation, vesting conditions, and plan reductions).<br>• In the past final salary plans were most common; now contribution based plans (involving some risk sharing) are common<br>• Funding vehicles:<br>o Book reserves<br>o Pensionskasse: separate legal entity – which is required to give insurance-type guarantees and is subject to strict supervision<br>o Pension Fund: separate legal entity, - comparable to pension funds in UK and Netherlands. Has characteristics of an investment fund and does not have to give a guarantee on the pension benefits<br>• Pension funds and Pensionskassen are usually DC with minimum guarantee covering the nominal sum of contributions paid.<br>• Industry wide plans exist in the metal industry (for management - book reserves) and for civil servants ( several funds not all of them fully funded )</td></tr>
</table>

# QUALITY OF BENEFITS

| | Netherlands | UK | Ireland | Switzerland | Germany (*Pensionskasse* and Pension Fund) | Germany |
|---|---|---|---|---|---|---|
| **Statutory minimum benefits** | • Pension contract describes whether indexation is conditional or unconditional.<br>  • If indexation is unconditional, then indexation is compulsory. Future entitlement can be changed.<br>  • If conditional: Indexation not compulsory but if provided then should be same for deferred benefits as for retirees | • For pensioners, statutory indexation in payment on pensions accrued since 1997<br>• For deferred pensioners, statutory indexation during deferred period | • For deferred pensioners, statutory indexation during deferred period | • Minimal benefit defined by law (guaranteed minimum return)<br>• No statutory right to indexation | • For pensioners:<br>- 1% increase p.a. guaranteed by employer<br>- or increase according to the development of the German Consumer Prize Index by the employer if possible<br><br>For Pensionskassen it is sufficient to increase pensions in payment according to the surplus earned by the assets corresponding to the pensioners | |
| **Additional scheme based guarantees** | • Generally, no guarantees | Quantum at sponsor's discretion, with various qualifying requirements to protect tax exempt status | Quantum at sponsor's discretion, with various qualifying requirements to protect tax exempt status | Minimal funding defined by law | • *Pensionskasse*: Insurance type guarantees<br>• Pension Fund: Insurance type guarantees possible | • No guarantee required |
| **Conditional benefits** | • Usually, indexation (price/wage) is conditional during non-active phase.<br>• Conditional indexation during active phase is becoming common practice.<br>• Pension funds (almost) always have discretionary powers concerning indexation | Possible but not as a substitute for statutory minimum benefits | Possible but not as a substitute for statutory minimum benefits | Possible but unusual | Indexation according to CPI increase only if the economic situation of the employer allows for an increase | |
| **Power to reduce accrued benefits** | • Pension fund can reduce the accrued benefits, after consent of the regulator, in case of underfunding.<br>• Conditions for reducing accrued benefits:<br>  o Situation of underfunding (funded ratio < 105%)<br>  o Maximum application of all instruments available to the pension fund.<br>  o Recovery is not possible within maximum recovery period | None, except with individual member consent. | Recent legislation provides for reduction in accrued benefits for all members as part of a recovery plan.<br>This legislation is very recent and has not yet been tested in practice with trustees, employers, trades unions and regulators (and indeed there are likely to be test cases in court).<br>This is intended to be a last resort when the only alternative is a scheme wind-up. It is intended to be used if there is | None (except for indexation granted in last 10 years but under very restrictive conditions) | If the *Pensionskasse* or the Pension Fund is not able to fulfil the pension promise the promised benefits have to be reduced to the extent the *Pensionkasse* or Pension Fund is able to finance. The difference between the reduced and the originally promised benefits has to be fulfilled by the employer himself (direct pension promise). | |

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|---|---|---|---|---|---|
| | o This is considered fair /equal treatment of all stakeholders | | an ongoing employer who cannot afford the contributions required under any acceptable recovery plan- If the employer is insolvent the scheme would be wound up | | |

## SCHEME COLLATERAL

| | Netherlands | UK | Ireland | Switzerland | Germany (*Pensionskasse* and Pension Fund) | Germany |
|---|---|---|---|---|---|---|
| **Technical provisions** | • Cover only accrued benefits<br>• Market valuation based on swap curve<br>• Assumptions are explicitly described by supervisor<br>• Mortality assumptions based on own population and includes foreseeable trend<br>• No prudence in technical provision (this is captured in regulatory capital requirements) | • Prudent funding plan to be agreed between trustees and sponsor on actuarial advice (except where scheme rules allow trustees to decide unilaterally)<br>• Regulatory oversight to ensure trustees do not set a 'weak' standard, with powers to intervene<br>• No prescription on specific method or assumptions, other than a requirement for prudence; however, proactive regulator uses guidance, education and publicly disclosed triggers to drive the right behaviour eg stronger technical provisions where sponsor covenant is weak | • Scheme required to meet minimum funding standard (MFS) – wind-up test where pensions in payment must be assumed to be secured by purchase of annuities and transfer values on a prescribed basis are payable for other members<br>• Trustees required to obtain a valuation every 3 years to review the long term funding and contribution requirements. Assumptions are not prescribed. | • Actuarial cost method and assumptions are decided by the pension fund board<br>• Based on generally accepted actuarial practice but have to respect the minimal legal requirements | • Technical provisions are built by the *Pensionskasse* or Pension Fund according to actuarial methods and security loadings required<br>• Principle of prudence (i.e. discount rate max. 2.25%) | • Technical provisions are built according to actuarial methods<br>• prudent person rule |
| **Deficit funding requirements** | • Short term recovery (3 years, now 5 years) plan (approved by regulator) in case of underfunding (funding ratio <105%)<br>• Balanced advocacy between different stakeholders<br>• Long term recovery (15 years) plan in case funding ratio less than required solvency level: Recovery should be evenly through time<br>• Cutting benefits only if everything else fails | • To be agreed between trustees and sponsor following actuarial and other advice.<br>• No prescribed assumptions or recovery periods but trustees required to strike a sensible balance between affordability by sponsor and credit risk of a long recovery period.<br>• Regulatory oversight with power to intervene if necessary | • If MFS not met at annual certification date, trustees and sponsor must agree a funding proposal (FP) to restore 100% MFS over a specified period and submit to the Pensions Board (regulator).<br>• Projections must comply with Actuarial Standards of Practice which sets upper limits to e.g. investment return assumptions<br>• Pensions Act provides for 3 year FP period but extended periods permitted at Pensions Board discretion.<br>• Annual check that FP is "on track". If not, revised FP must be submitted. | • Temporary deficit tolerated but has to be made good over an "adequate" period (usually 6-7 years) Pension fund has to submit a recovery plan to the supervisory authority<br>• Board of pension fund can decide to introduce temporary additional company and employee contributions | • *Pensionskasse* and Pension Fund are supervised by the *Bundesanstalt für Finanzdienstleistungsaufsicht* (BaFin) with power to intervene if necessary<br>• no underfunding allowed<br>• If the *Pensionskasse* or Pension Fund is not able to fulfil the pension promise the employer has to pay extra contributions or fulfil part of the obligation by himself | • In case of a deficit a recovery plan has to be established which recovers the deficit at least within 10 years. If the deficit is more than 10% the exceeding part of the underfunding has to be compensated immediately. |

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|---|---|---|---|---|---|---|
| **Asset protection measures** | • Segregation of scheme assets from sponsor's assets (in foundation)<br>• No more than 5% of scheme assets in sponsoring employer<br>• Prudent person principle<br>• Leverage allowed only for liquidity purposes | • Segregation of scheme assets from sponsor's assets<br>• No more than 5% of scheme assets in sponsoring employer<br>• Statutory requirement for trustees to take advice and prepare Statement of Investment Principles after consultation with sponsor. | • Segregation of scheme assets from sponsor's assets<br>• For MFS may not take account of assets in sponsoring employer<br>• For MFS, maximum 10% concentration limit (except for Government bonds)<br>• Statutory requirement for trustees to prepare Statement of Investment Principles (if 100 or more members) | • Pension assets held by an independent entity (foundation)<br>• Maximum of 5% of total assets in one investment (bond, share, debt or real estate) | • Pension assets held by an independent entity<br>• Investment principles and limits according to the German Insurance Supervisory Law (VAG)<br>• insurance type guarantee:<br>- Shares ≤ 35%<br>- Real Estate ≤ 25%<br>- Asset Backed Securities and Credit Linked Notes ≤ 7,5%<br>• No more than 5% of scheme assets in sponsoring employer | • Pension assets held by an independent entity<br>• prudent person rule<br>• principle of diversification and spreading |
| **Contribution** | • Cost covering contribution, including components for accrual of new benefits, cost of unconditional indexation and possibly conditional indexation, cost loading and solvency capital loading<br>• Maximum discount rate for calculating the contribution equals expected return (subject to legal restrictions) | | | | • When pension becomes payable it has to be fully funded according to the insurance type guarantee | • When pension becomes payable it has to be fully funded according to prudent person rule |

## EXTERNAL SECURITY

| | Netherlands | UK | Ireland | Switzerland | Germany (*Pensionskasse* and Pension Fund) | Germany |
|---|---|---|---|---|---|---|
| **Sponsor covenant** | • External security strongly depends on the pension contract and 'administration' agreement between social partners/employer and pension funds<br>• In some cases, the sponsor is committed to 'refund' the pension fund in case of underfunding: conditions are based on pension contract (e.g. if additional payments based on solvency level are included or a sponsor guarantee is given) | • Sponsoring employer required to meet obligations of pension scheme; trustees expected to monitor sponsors' covenant on an ongoing basis and review funding plans as necessary.<br>• Various checks and balances to avoid security of members' benefits being significantly diluted by corporate events or restructuring, with powers for regulator to intervene.<br>• Solvent employer cannot cease to participate without paying 'employer debt' or securing third party arrangements acceptable to trustees | • Sponsoring employer required to meet contribution requirements under Rules of Scheme and to meet funding proposal commitments but may give notice of termination at any time.<br>• Solvent employer can cease to participate without meeting funding shortfall. The Scheme rules may provide for a notice period during which the Trustees can/should seek a contribution to cover  he MFS shortfall but there is no requirement in pensions legislation for a solvent employer to make any further contributions (although there will clearly be pressure from employee representatives)<br>• Trustees must have regard to sponsor covenant in deciding on application for extended FP period | • If assets not sufficient then sponsor and active members can be obliged to pay additional contributions to rectify deficit<br>• If employer does not pay the agreed contribution the board of the pension fund has to inform the supervisory authority | • Sponsoring employer required to pay the contributions (including security loadings) | • Sponsoring employer required to pay the contributions (without security loadings)<br>• If the employer fails the requirements of the recovery plan the plan is automatically changed in insurance type guarantee with the consequence of reduced benefits. The difference in benefits is to be fulfilled by the employer directly. |
| **Risk based capital** | • Yes (based on 97.5% percentile funding ratio < 100% in one year time) and continuity analysis.<br>• For most funds this means a required funding ratio between 115% and 125%, depending on asset and liability risk<br>• Long term recovery plan (15 year horizon) if funding ratio falls below requirement ratio | No explicit requirement | No explicit requirement | No explicit requirement | Current solvency requirement:<br>• *Pensionskasse and Pension Fund*: 4% of the book reserve + 0.3% of the capital at risk<br>• If the Pension Fund has more than 3% assets for which the risk is borne by the employer or the employees: 1% of the book reserve | Current solvency requirement:<br>• 1% of the book reserve |
| | • Possibly subordinated loans<br>• Possibly sponsor | Subject to agreement between trustees and sponsor, guarantees | Subject to agreement between trustees and sponsor, guarantees from | | None | |

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|---|---|---|---|---|---|
| | commitments | from employer (or parent) or charges against specific company assets can provide additional protection for members against specified events. | employer (or parent) or charges against specific company assets can provide additional protection for members against specified events. | | |
| **Guarantee funds** | • Not applicable | If scheme insufficiently funded on sponsor's insolvency then members' benefits protected by PPF: members over pension age receive full pensions, others receive 90% of accrued pensions subject to a cap (currently £ 29,748.68 pa). | • If scheme winds up with insolvent employer, any contributions due over last 12 months can be recovered from statutory Insolvency Payments Scheme (but only to the extent needed to make good any deficit).which is funded from general taxation ie not specially set up for pension schemes<br>• If scheme winds-up in deficit, and employer is insolvent, annuities to provide for pensions in payment may be purchased from the statutory Pensions Insolvency Payment Scheme established under SWPA 2009. PIPS is intended to provide a more efficient form of risk transfer (effectively a non profit organisation and no Solvency II type capital requirements) rather than provide protection against underfunding on insolvency. There are also proposals under discussion for some limited State support in cases of "double insolvency" | National guarantee fund steps in if the pension fund is insolvent (salary cap at approx CHF 110'000) | If a Pension Fund is not able to fulfil the pension promise and the employer neither because of insolvency, the benefits are protected by the PSV, subject to a cap (7,500€ per month per member).<br>Some Pensionskassen are covered by Protector (insurance industry protection fund). But if a Pension Fund is not able to fulfil the pension promise and the employer neither because of insolvency, the benefits are protected by the PSV, subject to a cap (7,500€'s per member). |

# GOVERNANCE

| | Netherlands | UK | Ireland | Switzerland | Germany (*Pensionskasse* and Pension Fund) | Germany |
|---|---|---|---|---|---|---|
| **Regulatory oversight** | • De Nederlandsche Bank (DNB) exercises prudential and material supervision of pension funds' and pension insurers' compliance with pension regulations.<br>• The Authority for the Financial Markets (Autoriteit Financiële Markten / AFM) is responsible for the conduct of business supervision<br>• The Ministry of Social Affairs and Employment (SWZ) is responsible for the Pension Act (which includes among others parameters used in prudential supervision) | • Use of codes of practice, guidance and directions and other prompts by regulator to oversee sound management, and influence desired behaviours<br>• Access to various information (see Disclosure) with powers to intervene if necessary. | Pensions Board monitors returns made to it and can investigate any scheme in relation to any matter about which it may have concerns. | Same as UK | • ruled by VAG<br>• more detailed disclosures towards the BaFin required on a quarterly basis<br>• powers to intervene if necessary | |
| **Regulatory powers** | • Power to decline short term or long term recovery plan<br>• Power to intervene if short term recovery is not possible in 3 years<br>• Can appoint/remove trustees or issue improvement notices (and penalties) | • Power to serve contribution notices and financial support directions as anti avoidance measures<br>• Can appoint/remove trustees or issue improvement notices (and penalties)<br>• Powers to intervene if not satisfied with running of scheme or with key policy decisions – can issue freezing orders and ultimately even wind up the scheme. | Pensions Board can<br>• impose on the spot fines on Trustees, employers and actuaries for specified offences<br>• prosecute Trustees and employers under criminal law<br>• apply to Court for removal or suspension of trustees<br>• appoint trustees if there are none Refuse to approve applications for extended FPs, or to consent to benefit reductions section 50 or 50A. | Same as UK | • Power to intervene if the minimum solvency margin is not fulfilled by the *Pensionskasse* / pension fund (solvency plan, recovery plan to restore the solvency requirements, close for new entries) | |
| **Scheme governance** | • Explicit Pension Fund Governance with guidelines relating to governing body, accountability and internal supervision<br>• In pension fund representatives of employer(s) and employees<br>• Representatives of retirees | Requirements for trustees to have<br>• sufficient knowledge and understanding,<br>• at least one-third of trustees to be member nominated<br>• demonstrate sound conflict management,<br>• follow prudent person investment principles | • Trustees must comply with Trustee investment regulations<br>• 50% of trustees must be member nominated if the members so request (and the scheme has more than 50 members)<br>• Statutory powers to refuse consent to early retirements<br>• Must appoint registered | Requirements for Board members (company or member nominated) to have<br>• sufficient knowledge and understanding,<br>• step down in event of conflict,<br>• follow prudent person investment principles | Requirements for the members of the executive board (*Vorstand*) and the supervisory board (*Aufsichtsrat*):<br>• sufficient knowledge and understanding<br>• follow prudent person investment principles<br>• must have sound internal controls, good administration and record keeping | |

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| | either in pension fund itself or in council of members | • must have sound internal controls, good administration and record keeping | administrator<br>Mandatory trustee training (soon) | | |
| **Sponsor governance** | • Pension funds have to facilitate a council of participants<br>• Pension funds have to install accountability body<br>• Pension funds have no right to adjust the pension contract. They have to comply with 'administration' agreement. Only social partners can change pension contract. | • Requirement to consult members if future benefits changed<br>• Discipline to consider pension scheme's position when engaging in any corporate activity which may have a detrimental effect on members' security | Pensions legislation imposes few duties on employers – mainly around timely remittance of contributions. In practice changes to benefits will be subject to employment law requirements and any collective agreements with trade unions | | • Requirement to consult BaFin if benefits changed |

## DISCLOSURE

| | Netherlands | UK | Ireland | Switzerland | Germany (only *Pensionskasse* and Pension Fund) | Germany |
|---|---|---|---|---|---|---|
| **To regulator** | • Quarterly overview of financial position (including coverage ratio)<br>• Annual report<br>• Annual overview of contribution decision and financing of future indexation<br>• Solvency test<br>• 3 annual continuity analysis to check whether current and future funding is in line with benefit promises'<br>• Investment principles<br>• Disclosures are increased when in situation of recovery plan. | • Annual scheme return from trustees (information about trustees, financial position on different bases and investment strategy)<br>• whistle blowing by advisers of material breaches<br>• prescribed risk events<br>• failure to pay agreed contributions | • Changes in trustees<br>• Actuarial Funding Certificates<br>• Funding Proposals<br>• Whistle blowing for fraud or misappropriation of assets | • Yearly report submitted by the board to supervisory authority including the accounts, actuarial valuation etc.<br>• Supervisory authority intervenes situation is not considered satisfactory | • Annual actuarial report by the so-called *Verantwortlicher Aktuar* (responsible actuary) on the adequacy of the biometric assumptions and the financial situation of the *Pensionskasse* / Pension Fund<br>• Annual report of the *Pensionskasse* / Pension Fund including a risk report<br>• stress tests<br>• diverse additional information | |
| **To members** | • Yearly Uniform Pension Overview<br>• Indexation label (under construction) | About scheme; about individual benefits; consultations on certain matters | • Basic information about scheme<br>• Annual report and accounts<br>• Annual benefit statements<br>• Statements on leaving, retiring<br>Seek observations on certain matters | • Yearly information about individual benefits<br>• Yearly general information for beneficiaries about the situation of the fund | • About scheme<br>• about individual benefits<br>• consultations on certain matters<br>• Statements on leaving, retiring | |

# Appendix B: Best practice principles for pension supervisory process

B.1 We have set out blow eight best practice principles which we think should underpin the pension supervisory process. Some are broadly consistent with principles identified by CEIOPS[26] and the OECD[27], although the detailed descriptions may not be the same (especially our market-based principle which has a broader definition than the 'market-consistency' principle in the Solvency II Directive).

**PRINCIPLE 1: Balanced**

B.2 Supervisory requirements should focus on achieving a balance between a high degree of security and an affordable cost to the sponsor, but at the same time in a clear and transparent way so that the expectations of stakeholders, particularly members, are not mis-informed. Rules should be set in the context of sustainable pension systems as decided by member states, in order to respect member states' prerogatives regarding social protection and consistent with their responsibilities for the organisation of their pension systems under the principle of subsidiarity, subject to achieving an overall minimum level of security.

B.3 This principle, taken in conjunction with others (especially the risk based and proportionality principles) might require that some risks need to be tolerated in the practical measures adopted for monitoring financial security in pension systems which in many countries are best described in terms of 'reasonable endeavours' rather than 'guarantees' (see the description of the 'pension deal' in Section 3). In effect, the flexibility provided by the benefit design in some pension systems contributes to the security inherent in their financing.

B.4 The supervisory regime should recognise the social elements of benefit prescription as well as the extent to which 'unfunded' security (principally the sponsor covenant) is relied upon to provide financial security, and balance this against the direct financial support available to the scheme. The existence of an external compensation scheme to limit the risks to members can also have an

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*[26] CEIOPS, "Survey on fully funded, technical provisions and security mechanisms in the European occupational pension sector" (March 31st) 2008).*

*[27] Antolín, P. and F. Stewart (2009), "Private Pensions and Policy Responses to the Financial and Economic Crisis", OECD Working Papers on Insurance and Private Pensions, No. 36, OECD publishing, © OECD. doi:10.1787/224386871887*

influence on the regulatory balance, as can risk mitigation tools such as conditional benefits and other last resort security mechanisms such as the ability of pension schemes to reduce accrued rights.

B.5 As an example, at the extreme, in defined contribution schemes, where there is cost certainty for sponsors but where members are potentially exposed to the greatest risks, regulatory supervision can only by definition focus on 'unfunded ' security in the form of appropriate standards of governance, particularly with regard to administration and investment management, financial education and disclosure to members. In defined benefit schemes regulatory supervision can, on the other hand, focus on achieving an appropriate balance between the funding of technical provisions and governance – where the pension deal between the sponsor and member has been agreed to have a greater degree of guarantee then there should be a greater bias towards funded security.

**PRINCIPLE 2: Forward-looking and risk-based**

B.6 The scope and intensity of supervision should be tailored to the potential risks faced by pension schemes and balanced against mitigating factors.

B.7 There should be continual evaluation against changing conditions (as opposed to snapshots only at particular points in time). For example, most countries with significant defined benefit occupational pension provision require snapshot measures of funding to determine immediate financial requirements, usually with scenario testing based on the scheme's circumstances (for example, maturity and investment profile) to enable trustees or managers, the scheme sponsors and the supervisory body to distinguish between short and long term risk and take appropriate actions to mitigate these.

B.8 This evaluation may include the use of stochastic analyses as part of an asset-liability model as well as deterministic models. They could be part of a supervisory process which applies uniformly to all schemes, or an approach tailored to take account of the specific circumstances and risks of individual schemes. However, it should be noted that all models serve only to give more insights to the possible risks and how they are managed, and cannot predict the outcomes with any certainty. This underscores further the need for transparent disclosure to all stakeholders.

**PRINCIPLE 3: Market based**

B.9 Where possible assets should be valued at their actual market values (where these are reliably available in deep and transparent markets), otherwise using suitable models and techniques aimed at emulating what their market prices would be if suitable markets existed (which might require some regulatory prescription). Liabilities should be measured using methods and assumptions consistent with the value of the assets, using all available market inputs to determine the appropriate assumptions.

B.10 It should be noted that 'market-consistency' is a much mis-used term meaning different things to different people[28]. Any regulation or guidance in this area should therefore set out the requirements very clearly, and in the specific context of how the regulatory regime recognises the balance between security and cost (Principle 1).

B.11 The supervisory system should recognise that benefits provided on a 'reasonable endeavours' basis are not risk-free, and therefore their value to members cannot be expected to be the same as that on a 'risk-free' measure.

B.12 However, consistent with the requirement to be risk-based and forward-looking, imperfections in these measures should also be recognised, for example, the extent to which 'risk-free' valuations might not be realistic where 'matching assets' are just not available, or where pension liabilities form a large proportion of an economy's financial market liabilities, thus creating a risk of price distortions if pensions schemes are incentivised to manage risks by reference to regulatory measures.

**PRINCIPLE 4: Transparent**

B.13 Pension schemes should be open to members, to the sponsor and to the relevant supervisory body about how their financial position is determined. Reserves, shortfalls, prudence in technical provisions, financial risks and deficit adjustment instruments should be made explicit to the supervisor and the scheme sponsor. Communications to the members should also explain in simple and clear terms the principal risks implicit in the financial arrangements, how they are managed and the potential consequences of failure.

B.14 Reporting to the supervisory body and to the scheme sponsor are important so that these stakeholders understand the risks which need to be managed and can plan appropriate actions to cater for undesirable outcomes. However, where a stakeholder is not exposed to risk, disclosure need not be mandated – for example, in some European countries, under the insurance regime, sponsors do not bear the risk of underperformance.

B.15 Members should be made aware, in a manner that they can easily comprehend, of the principal risks to them, the consequences of the risks on their benefits and the mitigating factors.

[28] *Chris Daykin and Chinu Patel (May 2010), ''Actuaries and discount rates'' : Work commissioned by the UK Actuarial Profession to provide insights into the variety of discount rates used by actuaries in the UK ,depending on the purpose of the calculation..*

B.16 The mode of communication should be tailored to the audience and, where relevant, members should also be provided with sufficient information to understand the effect the position could have on their eventual benefits and, where benefits are provided on a reasonable endeavours basis, the risk that their target benefits might not be achieved, the measures taken by the trustees or managers to mitigate those risks and other forms of support that might be available (for example, compensation schemes). Depending on the nature of the pension system in a particular country, there may be scope for some generic education at the national level through public awareness campaigns.

B.17 It can be difficult to determine how effective ‘transparency’ is, partly because many scheme members have little knowledge about the way their benefits are provided. However, most countries require some disclosure to members, although this is often limited to benefit statements rather than descriptions and impact of the risks involved. Lack of information on risks has (arguably) led to scheme members having higher expectations of what pension schemes can deliver than may be realistic, and probably higher than what the employer intended when the scheme was first established.

B.18 Other stakeholders also play an important role in improving security by challenging and reporting on the financial status of pension schemes. These include market analysts and financial journalists. Whilst it is not currently the duty of pension trustees or sponsors to disclose anything to them, consideration could be given to making some of the information that is currently reported to others to be more widely available.

**PRINCIPLE 5: Proportionate**

B.19 Supervisory requirements should be proportionate to the nature, complexity and scale of the inherent risks to members, the sponsor, and where relevant to others who may be underwriting national compensation schemes. They should also be proportionate to the costs of compliance (to supervisors as well as pension schemes) relative to the benefits likely to be achieved.
For example, in Germany, where there is a choice of providing pensions under an insurance regime or an alternative lighter regulatory regime, the majority of employers have selected the latter because the burden of meeting insurance supervisory conditions to provide an occupational benefit outweighs the value of the benefit to the employer and its employees.

B.20 Smaller schemes should not be over-burdened with complex requirements; the rules for them may be simpler. The prudential standards applied to large schemes need not be stronger overall, unless the level of risk demands it but in times of financial instability regulatory oversight might have to be greater on the larger schemes on account of their greater risk to the pension system and financial markets.

B.21 Proportionality can mean different things to different people. For example, from an individual member's perspective the risks may all appear the same regardless of the criteria used by supervisory authorities. Consequently, most countries apply identical regimes to all schemes. In the UK, however, the Pensions Regulator has, for pragmatic reasons, attempted to identify schemes where it should concentrate its limited resources, the resulting focus being on schemes with weak sponsors (because it is normally only in the event of employer insolvency that members' benefits are at risk), and on very large schemes (because of the impact that a failure of one of these sponsors would have on the PPF). Clearly, appropriate communication to all stakeholders is also important here.

**PRINCIPLE 6: Flexible**

B.22 The supervisory regime should be able to adapt to changing conditions. Often this might mean that the supervisory process has to be less rigid against certain extreme events than might be preferable, in which case there should also be openness about the practical realities and the circumstances in which the system could fail.

B.23 A Europe-wide supervisory regime should also be able to adapt to the very different circumstances that might apply in different member states, for example the different taxation structures that currently apply to pension schemes across the EU, different elements of social protection in permitted plan designs, different security mechanisms, or different rules and risks associated with different financing vehicles.

B.24 Contrasting examples are the regime in Germany which is regarded as relatively inflexible, with rigidly prescribed boundaries on funding levels and recovery plans, whereas in the UK and the Netherlands, legislation permits the respective regulators to accept solutions that have been tailored to particular scheme circumstances.

**PRINCIPLE 7: Counter-cyclical**

B.25 Supervisory requirements should be such that there are incentives for pension schemes to boost their security during favourable economic and business conditions to create buffers which provide some degree of protection during less favourable economic conditions. Taxation systems need to be coordinated with regulatory requirements so that these buffers are not seen as opportunistic sources of tax revenue or opportunities for tax avoidance.

B.26 The system should not impose disproportionate costs on sponsors during periods of economic downturn when the underlying businesses may themselves be suffering. Maintaining high levels of pension security should not come at the price of corporate insolvencies. In a ‘reasonable endeavours’ regime, achieving this might require more stringent controls when an economy is performing strongly, with the aim of restoring a balance of interests between different cohorts of members.

**PRINCIPLE 8: Practical**

B.27 Supervisory requirements should be practical to implement and administer. Ultimately, the regulatory system needs to function effectively to deliver the social contract established between government and the private sector in each country. For example, if regimes impose disproportionate cost on employers voluntarily providing defined benefit schemes, then there would be a temptation for employers to opt out of pension provision entirely, or provide cheaper forms of pension with greater risks to members who may manage them poorly and ultimately look to the government as a back-stop - the end result being that the risk will have come full circle back to government, but now in a more diffuse form.

# Appendix C: Benchmarking against best practice principles of supervision

| | Netherlands | UK | Ireland | Switzerland | Germany Insurance type | Germany Non-insurance type |
|---|---|---|---|---|---|---|
| 1. Balaced | • Minimum funding level of 105% funded position of "guaranteed" accrued benefits.<br>• Required funding level of 100% + risk-based capital.<br>• Triennial continuity analysis to show strength of policies and the risks. | • Emphasis on getting fully funded asap, subject to affordability by employer<br>• PPF protection on sponsor insolvency (but with capped benefits for those below pension age)<br>• Exit penalty to take funding to approximate buy-out level if sponsor withdraws voluntarily | • Immediate security poor if scheme fails to meet funding standard<br>• Depends on strength/willingness of employer to support recovery plan or make good shortfall on wind-up<br>• State support on insolvency very modest | • Funding ratio over 100% | • SCR 4% of liability plus 0.3% of capital at risk | |
| 2. Forward-looking & risk-based | • Solvency test: takes account of nvestment, interest rate and actuarial risks.<br>• Continuity analysis: 15 year going concern evolution of assets-liabilities based on current policies.<br>• Actuarial assumptions should include foreseeable mortality trend.<br>• Contribution rate to include new accruals, solvency buffer, expenses, unconditional indexation and possibly conditional indexation (depends on contract). | • Scheme specific funding framework and supervisory process focus on specific risks faced by each IORP<br>• Snap shot funding approach not sufficient – trustees expected to monitor key risks and events and be prepared to re-negotiate funding plans as appropriate. | • MFS test is a snapshot and is not forward looking. If the test is failed, a funding proposal is prepared to enable the scheme to meet MFS at specified future date. | • Annual solvency determination<br>• Deficit recovery plan aimed at meeting the solvency requirements within a "reasonable" period (max10 years)<br>• Recovery plan should be based on different scenarios of evolution of assets and liabilities | • Stress test for different scenarios on the asset side | • Stress test for different scenarios on the asset side |

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| **3. Market-based** | • Asset valuations at market value.<br>• Best-estimate liability value.<br>• Regulator (law) prescribes that supervisor can set the discount curve. Currently, the discount curve is the zero coupon swap curve. | • Asset valuations at market value<br>• Liability valuations at discount rates consistent with market value of assets. | • Asset valuations at market value<br>• Liability valuations at discount rates broadly consistent with market conditions. | • Assets valued at market<br>• Liabilities valued at market based discount rates | • Asset valuation acc. to minimum value principle<br>• Exception (introduced in the crisis) for those assets which are meant to be hold long term: no depreciation required<br>• Liability valuations with security loadings (Discount rate 2.25% or at that rate which was admissible at introduction of the plan). | • Asset valuations at market value.<br>• Liability valuations at best estimate. |
| **4. Transparent** | • Reporting to supervisor standardised/ prescribed and transparent.<br>• Prescribed communication to participants (UPO) on accrued benefits, ambitions and expected indexation realisations to participants ("indexation label").<br>• Communication tool on indexation risks has some known defects and is under investigation by Authority Financial Markets (AFM). | - <br>• Reporting to regulator sufficiently transparent<br>• Disclosure to members about benefit and scheme funding. Limited information on risk exposure and the potential consequences of choices taken on their behalf<br>• Analysts complain about not having sufficient information to understand true nature of risks to the sponsor, the size of the pension debt and its volatility | • Minimal reporting to regulator but likely to change – regulator has power to ask for information<br>• Members do not have sufficient understanding of risks taken on their behalf and their potential consequences but general understanding of the problems now better understood due to recent high profile cases | • Reporting to supervisor on yearly basis – overall sufficiently transparent<br>• Members are informed on a yearly basis | • Reporting to supervisor standardised/ prescribed and transparent on a quarterly basis<br>• Information to the beneficiaries on an annual basis | • Reporting to supervisor standardised/ prescribed and transparent on a quarterly basis<br>• Information to the beneficiaries on an annual basis |

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| **5. Proportionate** | • Pension plans that take more risk in asset allocation and/or have more uncertainty in liability value face higher required solvency levels.<br>• Small and large pension funds face the same number of prescribed reports. | • Emphasis on employment of regulatory resource is towards schemes which have greater risks and weak sponsors | • Focus on larger schemes but in practice smaller schemes with weak sponsors may need more supervision | • Reporting requirements often considered as too complicated and detailed for small funds | • The IORP is supervised without any differentiation according to different plans | • The IORP is supervised without any differentiation according to different plans |
| **6. Flexible** | • Flexibility in tailoring of pension scheme, indexation rules and funding plans.<br>• Supervisor has flexibility to look at tailor-made solvency requirements.<br>• Supervisor has flexibility of tailor-made recovery period.<br>• Room for using internal models instead of default/standard tests.<br>• Increase of allowed recovery period (minimum level) for all funds due to financial crisis (part of Pension Act).<br>• Cutting of benefits in severe cases allowed. | • Flexibility to tailor funding plans to suit particular circumstances of scheme and sponsor<br>• Flexibility to deal with emerging issues though guidance, codes of practice and regulatory powers.<br>• Has coped with global financial crises without major changes | • Not flexible but Pensions Board have relaxed some reporting and funding requirements for current crisis<br>• Almost certainly will become more flexible when long term review is completed and implemented | | • No underfunding allowed<br>• In case of underfunding additional contribution by the employer or reduction of benefits | • Underfunding up to 10% allowed, recovery plan for the next 10 years (or less) required |

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| **7. Counter-cyclical** | • Y: Although not designed for purpose of counter-cyclical, the required solvency buffer absorbs risks in economic downturn and is built up in good economic circumstances.<br>• N: Likelihood of increased contributions and sponsor commitments in economic downturn | • Regulator's guidance to deal with current economic crisis suggests counter-cyclicality:<br>❖ Recovery plans expected to run down deficits quicker when sponsor can afford it, slower in times of cash constraints<br>❖ However, technical provisions expected to be set higher when sponsor's covenant weakens. | • No - the regime requires massive employer contributions at bottom of economic/market cycle although flexibility on timing provided by Pensions Board<br>• Revenue practice may inhibit building up buffers in good times | • | • No | • No |
| **8. Practical** | • Default/standard tests are available and restrictions on parameters prescribed. | • Scheme based funding and investment plans set following professional advice, so should be designed to be practical. | • The current system is understood by practitioners but is inoperable in times of great volatility. | • | • Stress Tests<br>• ALM Studies | • Stress Tests<br>• ALM Studies |

# Appendix D: Parallels with the insurance supervisory framework

D.1 Solvency II provides a three pillar framework for the effective regulation of insurance companies:

- Pillar 1: Funding and Solvency
- Pillar 2: Supervisory Process
- Pillar 3: Disclosure and Market Discipline

D.2 The Solvency II framework was designed for insurance. It is a centralised Europe-wide framework in which the objective agreed by member states is that the primary source of security for policyholders is a high level of uniformly defined funded collateral (technical provisions plus risk capital) in the balance sheet of an insurer. Accordingly, the focus is on defining Pillar I on a uniform basis, requiring decisions primarily at Levels 1 and 2, although the ability to use internal models is arguably an example of a Level C measure.

D.3 As discussed in Section 3 and elsewhere, pension schemes appear to require greater flexibility in regulation than insurance companies because of the different trade-offs between component elements of security at national level. Therefore the framework for pensions needs to be flexible enough to accommodate a variety of social preferences, but, despite this, the proposed framework for pension schemes can be mapped in terms of the three pillars of Solvency II. This analysis demonstrates how a different supervisory framework for pensions can nevertheless be modelled to achieve similar outcomes for members.

**Pillar 1: funding and solvency**

D.4 As discussed above, the need for a balanced level of security underpins the supervisory process for pension schemes. This requires decisions between the acceptable amounts of explicitly funded collateral in the pension scheme and other forms of external capital (some funded, others unfunded) against a background of social protection measures (eg guaranteed indexation) or risk mitigation tools (eg conditional indexation, power to reduce accrued benefits). Funded collateral consists of technical provisions, risk based capital on top, rules for financing new accruals, rules for repairing deficits and asset protection measures. External forms of security include sponsor covenant, risk-based capital (where national legislation makes it more sensible to hold this outside the pension scheme), contingent assets and guarantee funds. These are all discussed further in Section 3.

D.5 This is supplemented by best practice implementation principles which strengthen funding and solvency by further defining what in practice constitutes a forward-looking and risk-based supervisory process which is also market-consistent, flexible and counter-cyclical.

**Pillar 2: Supervisory process**

D.6 Section 3 sets out the ways in which governance contributes to security, by means of regulatory oversight and powers as well as scheme and sponsor governance. The supervisory process might be more or less intense, and either focussed on principles or detailed rules depending on the balance chosen between funded and unfunded security, and also between a centralised uniform requirement or a scheme-specific balance.

D.7 Best practice principles which strengthen the supervisory process and make it practical are those that define how it becomes forward-looking and risk-based, proportionate, flexible, and counter-cyclical.

**Pillar 3: disclosure and market discipline**

D.8 Section 3 also sets out how effective disclosure to all supervisors, sponsors and members can contribute to pension security, and our 'market test' in Section 5 shows how much more could be done in terms of education and communication to stakeholders other than supervisors to strengthen pension security.

D.9 Appendix A sets out in more detail the various components of pension security to focus regulatory tools and decisions in the context of a three pillar structure analogous to Solvency II, and it also shows the variety of ways in which different countries deal with them.

**Similarities between pensions and insurance**

D.10 Whilst there are many differences between pensions and insurance, there are also many similarities. Participating insurance contracts and mutual insurance funds have many features similar to pensions – member/policyholder expectations, discretionary/conditional benefits, management's ability to take actions to mitigate losses and ability to call for additional funds. The supervisory approach employed in Solvency II for participating insurance and mutual funds may well provide some lessons which help to narrow the gap between pensions and insurance. We have not investigated this further and suggest that this is an area which is better pursued jointly by the GCAE Insurance and Pension Committees.

# Appendix E: Potential application of elements of the insurance supervisory framework

E.1 Since 2001 the Commission has overseen the development of a new framework for controlling the solvency of both non-life and life insurance undertakings, widely known as Solvency II. Solvency II, which is now expected to come into force on 31 December 2012, has not been fully or finally specified, but conceptually includes:

- Pillar 1 – quantitative requirements as to balance sheet measurement for solvency purposes, together with minimum and target capital requirements to be satisfied by undertakings either according to a standard formula or by use of an 'internal model';
- Pillar 2 – requirements as to information to be made available for supervisory review and powers as to how such a review is to be carried out by supervisors;
- Pillar 3 – requirements as to quantitative and qualitative disclosures by undertakings.

E.2 The Solvency II framework has been influenced by work carried out originally by the International Actuarial Association and the Groupe Consultatif has consistently supported the adoption of the new framework for insurance undertakings as being likely both to offer superior protection to policyholders and to level the competitive playing field as compared with the present Solvency 1 regime. Groupe Consultatif has contributed actively to development of the detail of many quantitative aspects of the framework, and this work continues. The Groupe also expects to play a significant part in establishing standards for holders of the mandatory actuarial function to assure convergent determination of technical provisions throughout Europe.

E.3 For the sake of illustrating the issues involved, we consider three alternative approaches to the possible application of certain elements of the Solvency II framework to the obligations of IORPs to potential beneficiaries:

- The application only of requirements to evaluate and to disclose to various parties the amounts of assets and of liabilities (including technical provisions) determined in accordance with relevant Solvency II principles;
- A further requirement to evaluate and disclose the amount of risk inherent in the funding and investment strategies that are being pursued; and
- Additionally, the application of a requirement to establish or demonstrate an excess of assets over liabilities (i.e. a solvency margin) such as to assure that the latter can be met with a high degree of confidence.

**Option 1: Requirements analogous to those of Solvency II in relation to valuation and disclosure only**

E.4 Essentially these would require IORPs to disclose a balance sheet with assets measured at either market value or the valuation resulting from a market-based model and with technical provisions measured in one of two ways:

- Where the liability is capable of replication or hedging, the value would be the value of the replicating asset portfolio; and
- In other cases the value would be the best estimate in current financial conditions plus a risk margin which may be thought of as representing any amount additional to the best estimate which might be required by another party to assume the liability.

The best estimate plus risk margin if applicable would be likely to be the more usual approach.

E.5 We can envisage a number of issues which would present themselves, none of which is necessarily insuperable:

- It would be necessary for the purpose of determining the risk margin to make some assumption about the nature and status of the entity which might assume the liabilities;
- It would be necessary to consider the implications for appropriate ‘risk-free’ discount rates of the liquidity characteristics of IORP commitments;
- It would be necessary to consider to what degree and how the exercise of discretion in discharge of commitments would be reflected in provisions;
- It would be necessary to consider what might be proportionate approaches to calculation of provisions in the context of IORPs which vary considerably in size.
- Perhaps most importantly, it would be necessary to put such a disclosure in context and explain the implications in the event that assets are less than liabilities.

**Option 2: Further requirement in relation to evaluation and disclosure of pension scheme risk**

E.6 This would require IORPs to disclose a forward looking measure of the risk implicit in the IORP’s funding and investment strategies relative to the liability profile. The quantitative measure could be similar to the arithmetic underlying the SCR, calibrated at a level considered suitable for IORPs and evaluated using a suitable standard formula.

E.7 We can envisage that a requirement of this nature would strengthen risk governance and promote better communication amongst stakeholders of the risks being taken, by whom, on whose behalf and their consequences.

**Option 3: Requirements additionally to satisfy some minimum requirement as to excess of assets over liabilities**

E.8 Within the Solvency II framework, insurers are required to satisfy a Minimum Capital Requirement (MCR) on pain of final supervisory intervention and a higher 'target' Solvency Capital Requirement which is a trigger for requiring remedial action. The SCR is notionally calibrated to 99.5% confidence over one year (although in practice this is not possible) and is calculated either by use of a highly complex 'standard formula' or by means of an approved model. The MCR is estimated to be associated with an approximate 90% confidence of survival over one year.

E.9 We can envisage that application of analogous requirements to IORPs would require consideration of a wide range of issues additional to those raised by any valuation and disclosure requirements. These include:

- What should be any minimum threshold(s) and what intervention should be appropriate in the event of a breach;
- How should formal or other commitments and/or legal requirements applied to employers or other sponsors of IORPs be taken into account;
- How should any national guarantee schemes or other schemes of similar purpose be taken into account;
- How should the availability of various sources of contingent capital outside the pension scheme be taken into account;
- How should the specific character of IORPs in their unique national contexts be reflected in the formulae for minimum and 'target' capital requirements?

E.10 The issues are technically complex and some may be too complex for small IORPS to cope with. We also recognise that there is likely to be political opposition to any such approach. Whilst we are strongly supportive of Solvency II principles, and believe that some elements of the supervisory framework for insurance could be applied to IORPs, we are not convinced that it is necessary or desirable to attempt to achieve full harmonisation of IORPS given the different pension frameworks across the EU.