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The protection of supplementary pensions in case of insolvency of the employer for defined benefit and book reserve schemes

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TABLE OF CONTENTS

1. Executive summary

- No financial institution or other company can deliver a watertight financial guarantee for the payment of occupational pensions, especially as they form a very long term obligation.

- In general, in the countries surveyed the measures in force aiming at the protection of supplementary pensions in case of insolvency of the sponsoring employer when a pension scheme is underfunded are of a tolerable level taking into account the actual promises made to the employees, which differ enormously between countries.

- The measures in force aiming at the protection of supplementary pensions in case of insolvency of the employer when a pension scheme is financed via book reserves are non-existent or very low in a number of countries; in other countries, they are of a reasonable to high level.

- The measures in force aiming at the protection of supplementary pensions in case of insolvency of the employer when an IORP is underfunded is low in a number of countries; in other countries, they are of a reasonable level and in a few countries the protection level is very high.

- Although the requirements of the legislation may be fairly adequate, the actual result can be inadequate. In the past, the reasons for these results seem to have been :
  - on wind up, some beneficiaries, such as pensioners, have priority rights and therefore other beneficiaries' rights might be reduced in a disproportionate way.
  - no clear legislation about the actual obligations of an employer in case he implements a defined benefit scheme, e.g. it is sometimes not clear whether or not the employer can refuse to finance the deficit in case of underfunding
  - no clear communication requirements between employer and employees. The employees expect that the employer will continue to finance the benefits, while the employer engages himself only to paying the contributions that the pension fund asks up to the moment he wishes to decide to stop these payments (after due negotiations or not with his employees).

- in funded systems with no guarantee of the sponsoring employer or solvency insurance, the additional assets in the fund, even if they are very high, may in turbulent financial times not be sufficient to cover the total benefits.

- For book reserves systems it should be compulsory to be affiliated to a kind of guarantee scheme, that should have sufficient members to spread the risk and built up reserves in order to minimize the problem of cyclicality.

- It is also recommended that funded systems are affiliated to a kind of guarantee scheme, that should have sufficient members to spread the risk and built up reserves in order to minimize the problem of cyclicality.

- In all countries where the protection of the occupational pensions is not equal to best practice, the stakeholders are of the opinion that the cost for supplementary protection should be limited, as otherwise employers will close or reduce the defined benefit plans.

- In general, the protection of the employees' pension rights can be different in the different countries due to the different expectations the employees have with respect to these pensions. If employees have no vested rights, they know they can loose their rights if they leave the employer or in case of restructuring. The need for protection of such rights is therefore low. If employees have not negotiated unconditional indexed pensions, it is not felt that it is necessary to protect possible indexed rights. However it is of course highly recommended to communicate in a clear and understandable way the actual rights to the employees. These rights, whether or not in case of insolvency should be understood by employees such that they understand the possible risks and can take account of the risks involved in their personal financial planning.

- Where employees are moving amongst countries, this need for communication is even more important. E.g. employees coming from countries where pension rights are indexed should be aware that this indexation is possibly not available in all countries or that sometimes the lump sum value available does not necessarily represent the underlying pension.

2. Introduction

Context

The Social Agenda of the European Commission (2005-2010) has fixed as its overall strategic goal to promote more and better jobs and to offer equal opportunities for all. In this light PROGRESS was adopted. PROGRESS aims at supporting the core functions of the European Community towards fulfilling its Treaty-delegated tasks and powers in its respective areas of competence in the employment and social sphere.
In this respect and in the context of the implementation of the 2009 annual plan of work the European Commission has engaged Esofac Belgium for the preparation of a study on the protection of supplementary pensions in case of insolvency of the employer for defined benefit and book reserve schemes.

This study relates to one of the objectives of the PROGRESS namely to support the Commission's role in monitoring the implementation of EU labour legislation in Member States, assessing overall impact in relation to its objectives, promoting co-operation between Member States and social partners, and contributing to improved dissemination among citizens, workers and enterprises of their rights and obligations as derived from the application of EU labour law and legislation.

Background

Article 8 of Directive 2008/94/EC of the European Parliament and of the Council on the protection of employees in the event of the insolvency of their employer obliges Member States to ensure that the necessary measures are taken to protect the interests of employees and of persons having already left the employer's undertaking or business at the date of the onset of the employer's insolvency in respect of rights conferring on them immediate or prospective entitlements to old-age benefits, including survivors' benefits, under supplementary company or inter-company pension schemes outside the national statutory social security schemes.

All the Member States are facing the social and economic effects of ageing. Many have launched pension reform strategies giving an increasingly important role to occupational pension schemes and other forms of privately managed schemes. This has been made necessary by the growing awareness of declining replacement rates in statutory systems and the need to prevent a fall in the relative living standards of pensioners. As a result, many Member States are pursuing policies to increase the funded part of their pensions systems.

As the number and importance of occupational pension schemes increase across the EU Member States, the associated economic risks are expected to become more visible and will raise problems from the perspective of protecting workers' and pensioners' rights. Employers' insolvency is one of those risks.

On 11 April 2008, the Commission presented a Staff working document on implementation of the abovementioned Article 8. The Commission services analyzed
a) the objective and scope of Article 8,
b) the implementation requirements for Member States and
c) provided an overview of the measures adopted by Member States.
The conclusion was that further investigation was needed in order to address the following issues:

a) how to protect employees and retired persons against the risk of underfunding of the pension schemes, and to what extent;
b) how to guarantee any unpaid contributions to the pension schemes;
c) how to deal with cases where the supplementary pensions scheme is managed by the employer himself.

The present study will focus on two of the above issues, i.e. the protection of employees and retired persons in case of insolvency of the employer when the pension scheme is under-funded and when the pension scheme is managed by the employer himself.

Indeed, Directive 2003/41/EC of the European Parliament and of the Council of 3 June 2003 on the activities and supervision of institutions for occupational retirement provision (IORPs) which aims to coordinate the rules applicable to such institutions, provides for a very high level of protection of the living standards of beneficiaries of such schemes and efficient operation of IORPs, particularly where financial investments and cross-border activities are concerned. According to this directive (Article 16(1)) IORPs must have at all times sufficient and appropriate assets to cover the technical provisions in respect of the total range of pension schemes operated. However, temporary underfunding is allowed provided a suitable recovery plan is approved. The insolvency of a company can occur at a moment when the pension scheme is underfunded as a result for example of a sharp drop in bond and stock prices or during the implementation of a recovery plan under Article 16(2).

Considering the important role of sponsoring undertakings in the provision of benefits and the funding of the IORPs, their insolvency presents a particular risk that the interests of scheme members remain unprotected. Therefore it is convenient to examine in detail the existing mechanisms of protection of supplementary pensions in situations of underfunding of defined benefit schemes. The adequacy of solvency rules for IORPs is currently being examined by the Commission and is not the objective of this study.

Furthermore, Directive 2003/41/EC does not apply to companies using book reserve schemes for the payment of retirement benefits to their employees (Article 2(2)). Since, in the absence of any special protection mechanism, the insolvency of the employer presents a high risk for the payment of retirement benefit, there is a need to examine in detail the existing mechanisms of protection of pensions in these situations. This need is more acute in the present situation of economic crisis which might result in underfunding of pension schemes and in an increase of companies in insolvency situations.

The European Court of Justice has ruled that the Directive places no obligation on the Member States themselves to fund the rights to old-age benefits. As it states in a general manner that the Member States “shall ensure that the necessary measures are taken”, the Directive leaves the Member States some latitude as to the means to be adopted to ensure the required protection. Member States may therefore impose, for example, an obligation on employers to insure or provide for the setting-up of a guarantee institution in respect of which they will lay down the detailed rules on funding, rather than provide for funding by the public authorities. Furthermore, the Court considered that the Directive cannot be interpreted as demanding a full guarantee of the rights in question. The Directive does no more than call, in general terms, for adoption of the measures necessary to “protect the interests” of the persons concerned, but, when it comes to the level of protection, leaves the Member States considerable latitude, which excludes any obligation to provide a full guarantee. However, the Court considered that even though no provision of the Directive contains any elements which make it possible to establish with any precision the minimum level of protection required, a system that may, in certain cases, lead to a guarantee of benefits limited to 20% or 49% of the expected entitlement, that is to say, of less than half of that entitlement, cannot be considered to fall within the definition of “protect” applied in the Directive.

In a number of Member States, IORPS do not exist (CZ, EE, HU, and LT) or in practice provide pure defined contribution schemes (BG, LV, PL, RO, SI and SK). Moreover, book reserves are not operated in those Member States.

Therefore this study focuses on the situation in the 20 remaining Member States and EEA/EFTA countries, i.e. Belgium, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Cyprus, Luxembourg, Malta, the Netherlands, Austria, Portugal, Finland, Sweden, the United Kingdom, Iceland, Liechtenstein and Norway.

This study has for each of the 20 countries mentioned above aimed to describe in a systematic way the measures in force (including ongoing reforms) aiming at the protection of supplementary pensions in case of insolvency of the sponsoring employer when the pension schemes is based on book reserves or when the pension scheme is under-funded and to assess the effectiveness of these measures. The study also identifies best practices aiming at the protection of supplementary pensions in case of insolvency of the employer

The detailed systematic description of the measures in force has been performed by gathering the answers to 71 questions. These questions were related to the following 10 subjects :

1. Description of legal framework
2. Overview of (funded) defined benefit (DB) and book reserve (BR) schemes
3. Requirement of additional assets (for DB schemes)
4. Independence of the IORP from the sponsor (for DB schemes)
5. Employee representatives' involvement in the governance of the pension scheme
6. Underfunding of DB schemes
7. Priority creditors rights
8. Guarantee schemes
9. Evidence of inadequate protection and other measures
10. Overall assessment of the protection of pensions in case of insolvency of the employer

The answers to the questions are attached in the annex : detailed information on the countries.

For each of the 10 subjects a summary has been made in section 3 of this report to describe the general measures taken in the countries concerned.

From this summary, best practices can be derived and have been described in section 4

The main recommendations per country have been described in section 5 of this report.

In the next section, we describe which kinds of pension benefits have been included in this study.

3. Scope of the study in terms of employee benefits aimed

Company sponsored employee benefits

The study focuses on company sponsored benefit schemes. Company sponsored benefit schemes are all schemes were the employer pays benefits directly to the beneficiary or the employer pays contributions to an external organism that will pay the benefits. This includes all the systems where companies are obliged to participate but ***fall outside*** the statutory social security schemes (those are ***financed by social security charges or taxes***). Therefore the project includes defined benefit (obligatory) sector plans and also for example the "TFR" benefit in Italy or the "Indemnité de fin de carrière" in France where a lump sum is paid when leaving the employment.

Employers

The employers are all employers providing company sponsored benefits. Our focus is on ***privately owned companies*** as state owned companies usually have the state guarantee and can only become insolvent if the state guarantee is not available anymore. We do not aim at benefits for civil servants.

Funding vehicles - IORP

For the purposes of this project, the funding vehicle is a funding entity subject to the directive 2003/41/EC (IORP directive). Pension insurers in countries that have chosen to apply Article 4 of this directive (chosen to be subject to the IORP directive) are to be assimilated to IORPs.

Beneficiaries

The study does not only cover the protection of the benefits for the active employees, but includes the protection of the rights of the ex-employees (deferred employee's rights and pensioners rights) and the protection of the beneficiaries' rights (spouse's pensions, orphans pensions)

Kind of benefits

The study covers the company sponsored benefits of the following types :

- ***Retirement benefits*** in the form of a periodic pension or lump sum

- ***Death benefits*** in the form of survivor's pensions or lump sums provided via pension schemes.

Therefore this study does not cover disability, sickness and indigence.

Defined benefit/defined contribution

For the ***funded schemes***, the study only covers ***defined benefit*** schemes. The defined benefit schemes are the schemes that define the benefit to be paid and for which the costs are not known until the last beneficiary dies. They ***include*** the so called ***cash balance plans and other hybrid forms of plans***. The study does not cover funded defined contribution schemes. Defined contribution schemes are schemes where the main obligation of the employer is to pay the contribution and where the employer has very little or no other obligations in respect of the pension scheme.

In case of ***bookreserves all benefit schemes*** are covered by this study.

4. Main findings

4.1 Legal Framework

In most countries a detailed legal framework exists. A summary of the framework per country is summarized in the next table.

Book reserves

A summary of the framework per country is summarized in table 1.

In most countries, where book reserves are allowed in a significant way, rules about the calculations for the book reserves exist. Exceptions are :
Cyprus : no minima for book reserves exist
Finland : no minima for book reserves exist, but only a limited number of employees receive their benefits from a book reserve scheme
France : no minima for book reserves exist and the employer does not need to account for the liabilities on the balance sheet, he is obliged to calculate the liabilities and disclose them with the balance sheet.
Italy : specific rules for TFR benefits exist, for other book reserve pension schemes no minima exist, but only a limited number of employers finance pension benefits via book reserves

In Greece retirement indemnities are paid from general expenses (Pay as you go), no book reserves are set up and no external financing is set up. These benefits do not vest.

External guarantees for book reserve schemes are only available or required in Germany, Luxembourg, for TFR in Italy and for ITP-plans in Sweden.

Table 1 : Legal framework : bookreserves

Country	Book reserves	Minimum book reserves	Vested rights	External guarantees required
Austria	Allowed, regulated and used	Calculated following principles of prudence	Yes, after max 5 years of service = technical reserves	Minimum 50% have to be covered by financial assets or insurance policies
Belgium	Not allowed except for persons with independent status	Not applicable	Not applicable	Not applicable
Cyprus	Book reserves are allowed but not used widely; for retirement indemnities, no book reserves, nor funding exists	No minimum requirements	No legislation, it depends on the plan rules	No external solvency guarantees required
Denmark	Not allowed, except for directors	Not applicable	Not applicable	Not applicable
Finland	Allowed, regulated and used	No minimum requirements	No legislation, but plan rules have to describe the vested rights	No external solvency guarantees required
France	Allowed, regulated and used	No minimum requirements	None	No external solvency guarantees required
Germany	Allowed, regulated and used	Calculated following principles of prudence, according to accounting rules	Yes, after max 5 years of service and at least age of 25; accrued rights, no indexation until pension becomes payable	Yes, affiliation to the guarnatee scheme PSVaG is compulsory
Greece	Allowed, but not used	Not applicable	Not applicable	Not applicable
Iceland	Not allowed	Not applicable	Not applicable	Not applicable
Ireland	Allowed but virtually not used	Not applicable	Not applicable	Not applicable
Italy	Allowed, regulated and used	No minimum requirements	No, pension plan rules need to determine these, however for TFR specific rules exist	No external solvency guarantees required
Liechtenstein	Not allowed	Not applicable	Not applicable	Not applicable
Luxembourg	Allowed, regulated and used	Calculated following principles of prudence	Yes, after max 10 years : accrued pension rights ; no indexation	Yes, affiliation to the guarnatee scheme PSVaG is compulsory
Malta	No legislation yet, not used	Not applicable	Not applicable	Not applicable
Netherlands	Not allowed	Not applicable	Not applicable	Not applicable
Norway	Allowed but virtually not used	Not applicable	Not applicable	Not applicable
Portugal	Allowed but virtually not used	Not applicable	Not applicable	Not applicable
Spain	Only allowed for financial institutions for plans in force before 1996	Calculated following principles of prudence	No	No external solvency guarantees required
Sweden	Allowed, regulated and used	Calculated following principles of prudence, including reserves for pension supplements and indexation	Yes equal to book reserves	For ITP - plan : PRI pensionsgaranti
United Kingdom	Allowed but virtually not used	Not applicable	Not applicable	Not applicable

Funded defined benefit schemes

A summary of the framework per country is summarized in table 2.

In this table, we refer to “IORP’s” in case of IORP’s that do not take themselves any biometric risk or provide no guarantees with respect to return on investments or benefit levels. These IORP’ s have not guaranteed any pensions to the beneficiaries, they are only legally separate vehicles that manage funds to finance pensions and pay pensions.
IORP’s under art.17, are the IORP’s that are responsible themselves for the pension liabilities and therefore employers may settle the total or partial liability for their pensions in this IORP. These IORP’s fall under art.17 of the Directive 2003/41/EC. In some countries (Austria, Italy and Ireland) the implementation of article 17 has been postponed until September 2010.

Minimum funding requirements exist in nearly all countries where external funding is regulated. There are no minimum funding requirements in Greece and Italy for IORP’s not falling under art. 17 of the Directive.
The minimum funding requirement is in most countries fully funded, only in Iceland small deficits are allowed.

Furthermore in many countries, additional assets above the assets covering technical provisions calculated in a prudent way are required.
In case of external funding, mostly no other external guarantees are required. However in Germany for book reserves, "Unterstützungskassen", pension funds and in special cases direct insurance, affiliation to the external guarantee company is required. In Liechtenstein, affiliation to the Swiss LOB Guarantee Fund is compulsory even though the pension funds in Liechtenstein are all required to fund and have solvency margins in line with pension funds falling under art. 17. In the UK, affiliation to the Pension Protection fund is compulsory.

Table 2 : Legal framework : Funded defined benefit plans

Country	Funded systems	Minimum funding requirements	Vested rights	External guarantees required
Austria	IORP's under art. 17	Fully funded following principles of prudence	Yes, after 5 years of service = technical reserves	No external solvency guarantees required
Belgium	IORP's, IORP's under art. 17 are legally possible but do not exist	Fully funded following principles of prudence	Yes, after 1 years of service; accrued rights, no indexation	No external solvency guarantees required
Cyprus	IORP's under art. 17	Fully funded following principles of prudence	No legislation, it depends on the plan rules	No external solvency guarantees required
Denmark	IORP's under art. 17	Fully funded following Danisch market value principles	No legislation, but plan rules have to describe the vested rights	No external solvency guarantees required
Finland	IORP's, IORP's under art. 17 are legally possible but do not exist	Fully funded taking into account future indexation	No legislation, but plan rules have to describe the vested rights	No external solvency guarantees required
France	No IORP's for defined benefit plans	Insurance legislation	None	Insurance legislation
Germany	IORP's and IORP's under art. 17	Fully funded following the principles of prudence or insurance legislation	Yes, after 5 years of service and at least 25 years; accrued rights, no indexation until pension becomes payable	Yes, affiliation to the guarnatee scheme PSVaG is compulsory for "Unterstützungskassen" and pension funds.
Greece	IORP's and IORP's under art. 17	No minima	No, pension plan rules may determine these	No external solvency guarantees required
Iceland	IORP's	Fully funded, but small deficits may be allowed	Yes equal to technical reserves	No external solvency guarantees required
Ireland	IORP's	Fully funded using buy out assumptions for current pensions and prescribed assumptions for deferred benefits	Yes, after 2 years of service ; accrued pension rights with some indexation	No external solvency guarantees required
Italy	IORP's and IORP's under art. 17	No minima	No, pension plan rules need to determine these, however for TFR specific rules exist	No external solvency guarantees required
Liechtenstein	IORP's guaranteed by a public authority not falling under the directive, according to art. 5	Fully funded following principles of prudence	Yes equal to technical reserves	Yes, affiliation to the LOB Guarantee Fund
Luxembourg	IORP's	Fully funded following principles of prudence	Yes, after 10 years : accrued pension rights ; no indexation	No external solvency guarantees required
Malta	IORP's proposed	Fully funded following principles of prudence	No legislation yet	No external solvency guarantees required yet
Netherlands	IORP's under art. 17	Fully funded following principles of prudence, taking into account the investment risks, requirement for a certainty of 97.5% that the pension fund will not have less assets than liabilities within a period of one year	Yes, accrued pension rights, future indexation optional and if so conditional	No external solvency guarantees required
Norway	IORP's under art. 17	Fully funded	Yes equal to technical reserves	No external solvency guarantees required
Portugal	IORP's, IORP's under art. 17 are legally possible but do not exist	Fully funded following principles of prudence	No, pension plan rules may determine these	No external solvency guarantees required
Spain	IORP's under art. 17	Fully funded	Yes, equal to technical reserves	No external solvency guarantees required
Sweden	IORP's	Fully funded following principles of prudence	Yes equal to technical reserves	For ITP - plan : PRI pensionsgaranti
United Kingdom	IORP's and a few IORP's under art. 17	Fully funded following principles of prudence	Yes, to a refund of member contributions, after 3 months service to a transfer value, and after 2 years to an accrued pension with some indexation	The Pension Protection Fund covers insolvency of employer

Vested rights

The need for full protection of the employees benefits is higher in case employees expect to receive the benefits under all circumstances and also proportionate benefits in case of leaving the service of the employer during the career. In case pension benefits are not vested, employees (should) take account of the probability of not receiving the pensions promised due to the fact that they leave the service of the employer early.

Therefore in the evaluation on the protection of the benefits, it is important to know whether benefits are vested. In most countries, vesting of some kind of proportionate benefits is required by legislation after a period of service (going from immediate vesting to vesting periods of maximum 10 years). In France, retirement indemnities do not vest and usually pension plan benefits that are not financed externally do not vest either. In Greece benefits do not vest.

In the following countries vesting is not required, but can be regulated in the pension scheme's rules : Cyprus, Denmark, Finland, Greece, Italy, Portugal and Spain.
However, for TFR in Italy specific rules exist.

4.2 OVERVIEW OF DB AND BR SCHEMES

An overview of DB and BR schemes is provided in table 3.

Countries with significant defined benefit schemes funded via IORP's are : Belgium, Germany, Ireland, Netherlands, Norway and UK.
Funded defined benefit schemes also exist in nearly all other countries except in France.

Countries with significant book reserve schemes are : France (retirement indemnities), Germany and Italy (TFR). Book reserves also exist in a less substantial form in Austria, Cyprus, Finland, Luxembourg, Spain and Sweden.
In Iceland, DB plans only exist for employees in the public sector. Employees of the private sector all benefit from a defined contribution plan. In Liechtenstein, there is only on DB plan for 10% of the working population, all other plans are cash balance plans.

Table 3 : Overview defined benefit schemes and book reserve schemes

Country	Total coverage	Defined benefit funded via an IORP	Defined benefit book reserves
Austria	About 32% of working population	Between 5% and 10% of working population	Between 5% and 10% of working population
Belgium	About 62% of working population	About 10% of working population	Not allowed except for persons with independent status
Cyprus	About 50% of working population	About 400 employees or less than 2 per thousand	About 3% of working population
Denmark	Allmost 100% of working population	Only a very few number of plans	Not allowed, except for directors
Finland	About 10% of working population	Defined benefit schemes are almost all in run off	A limited number of employees
France	100% for the retirement indemnities, less than 15% for pensions	None, most are insured	Nearly 100% for the retirement indemnities, less than 3% for pensions
Germany	About 52% of working population	About 35% of working population	About 28% of working population
Greece	Not known	Not known	Allowed, but not used
Iceland	100% of working population	100% of working population but all plans are contribution based plans	Not allowed
Ireland	About 45% of working population	About 30% of working population	Allowed but virtually not used
Italy	100% for TFR and about 21% for pensions	Less than 4% of working population	A very high percentage for TFR, for pensions less than 1% of working population (133 pension schemes)
Liechtenstein	100% of working population	10% of working population (in one plan) have a defined benefit scheme, others have cash balance plan	Not allowed
Luxembourg	About 17% of working population	Between 5% and 10% of working population	Less than 5% of working population
Malta	Not known	Not known	No legislation yet, not used
Netherlands	About 90% of working population	Between 70% and 80% of working population	Not allowed
Norway	100% of working population	Between 30% and 35% of working population	Allowed but virtually not used
Portugal	Less than 5% of working population	Less than 4% of working population	Allowed but virtually not used
Spain	Less than 10% of working population	Less than 10% of working population	Only allowed for financial institutions for plans in force before 1996
Sweden	Allmost 100% of working population	Between 5% and 10% of working population	Between 5% and 10% of working population
United Kingdom	50% to 60% including private pension policies that employers may contribute to (source: Pension Commission)	Around 30% of working population are active or deferred DB scheme members (sources: TPR and Pension Commission)	Allowed but virtually not used

Working population = working population in private sector
Total coverage = % of working population benefiting from a supplementary company pension (including DC plans)

4.3 REQUIREMENT OF ADDITIONAL ASSETS

An overview of the requirements of additional assets in the different countries is provided in table 4.

For IORP's falling under art. 17 of the Directive, regulatory own funds as described in the Directive are required in all countries except for Austria, Italy and Ireland. The definition of IORP's falling under art. 17 is the same as the definition used in the section on the legal description.

In most countries a requirement for additional assets above the assets covering the technical provisions exists. Solvency margins of 4% of technical reserves are often required or Regulatory own funds, following art. 28 of dir 2002/83/EC are required. In the following countries no additional assets are required (apart from possible solvency margins for risk benefits or funds falling under art. 17) : Belgium, Germany, Greece, Iceland, Ireland, Italy, Luxembourg and UK. Except for Iceland, where the plans are contribution based, in these countries, the pension funds not falling under art. 17 do not provide any guarantee and the sponsors are ultimately responsible for financing the possible deficits.

In some countries the requirements for additional assets seem fairly weak, but the requirements for the basis used to calculate the technical reserves and the contributions are very strong and/or the benefit promise is strengthened by mandatory indexation, such as in the UK. In other countries the requirements for funding are maybe weaker but the requirements for solvency capital may be strong. These requirements have to be seen together in order to evaluate the actual requirement for financing and the actual security mechanism built in for the benefits.

The requirement for additional assets for pension funds falling under art. 17 is usually very strong, namely regulatory own funds as set out in art. 28 of directive 2002/83/EC with high minima, but the technical provisions and contributions can be calculated using normal discount rates and no provision for future increases in the benefits.

Table 4 : Requirement for additional assets

Country	Under art 17	Additional assets required for IORP's under art. 17	Not under art 17	Additional assets required for IORP's not under art. 17	Can assets return to employer
Austria	Yes, all	Regulatory own funds	None		No
Belgium	Allowed but non existant	Regulatory own funds	All	Solvency margin for risk benefits	No
Cyprus	Yes, all	Regulatory own funds	Yes, all	Regulatory own funds	No
Denmark	Yes, all	Regulatory own funds	Yes, all	Regulatory own funds	Yes, under strict circumstances
Finland	None		All	Administration reserve of 5% of technical reserves plus additional reserve of up to 8% of technical provisions plus difference between market value and book value	Yes, under strict circumstances
France	None		None	Insurance legislation	No
Germany	Yes	Regulatory own funds	Yes	None	No
Greece	Yes	Regulatory own funds	Yes	None	Only on wind-up of the plan
Iceland	None		All	None	No
Ireland	None		All	None	Only on wind-up of the plan
Italy	Yes	Regulatory own funds	Yes	None	No
Liechtenstein	None		Guaranteed by a public authority	A risk based fluctuation reserve of usually between 15% and 25% of the technical reserves	No
Luxembourg	None		Yes	None, risk benefits must be insured	No
Malta	None		None	No legislation	No legislation
Netherlands	Yes, all	Regulatory own funds	None		Yes, under strict circumstances at high level of cover ratio
Norway	Yes, all	Regulatory own funds and market value adjustment reserve and fun for risk smoothing	None		No
Portugal	None		All	4% of technical reserves if guaranteed return, 1% of technical reserves in no guarantee minimum Euro 800 000	Yes, under strict circumstances
Spain	Yes, all	Regulatory own funds	None		Yes, but only with the employees consent
Sweden	None		All	Safety margin plus 5% of technical provions plus funds for pension supplements plus special indexation funds	Yes, in case of surplus
United Kingdom	Only a few	Regulatory own funds	Nearly all	None	No

Regulatory own funds means solvency margins according to art 28 of dir 2002/83/EC
Under art. 17 = IORP's that fall under art.17 of the Directive 2003/41/EC

4.4 Independence of the IORP from the sponsor (for DB schemes)

A summary of the independence requirements per country is summarized in table 5.

Investments in securities of the Sponsor

In all countries rules have been introduced by which the assets of an IORP can only in a limited way be invested in securities of the Sponsor. The maxima are often 5% of the securities of the sponsor and 10% in securities of the group to which the sponsor belongs. Only in Lichtenstein and Germany, investment in securities of the sponsor or his group are forbidden.

Management of the IORP

In all countries at least part of the IORP can be managed by the sponsoring employer's representatives. In most countries, the employer has a dominant role in the management of the IORP, but other parties are also involved in this management, usually representatives of the employees or of the members of the scheme. In many countries, the trustees or management members are obliged to act independently in the interest of the beneficiaries of the pension plans, regardless of whether or not they are appointed by the employer.

The nomination of the official functions, such as the actuary and the auditor is often only possible with consent of the employer, either because the employer has a majority in the board or general assembly nominating these persons or because the employer is entitled to nominate these persons directly.

In some countries the auditor and the actuary are directly paid by the employer. In most countries they are paid by the pension fund, but as the funds of this pension fund are financed mainly by employer's contributions, the employer often pays the auditor and the actuary indirectly.

Table 5 : Independence of IORP

Country	Under art 17	Limits on investments in sponsor's securities	Subordonated loans	Management	Official functions
Austria	Yes, all	Max 5% of all assets	None allowed	Can be employees of sponsor	May be nominated by employer
Belgium	None	Max 5% of all assets; 10% for group of companies	Only in case of recovery plans and for max 1 year	Can partly consist of employees of sponsor	Nominated by pension fund
Cyprus	Yes, all	Max 5% of all assets; 10% for group of companies	No provision	Can partly consist of employees of sponsor	Nominated by pension fund
Denmark	Yes, all	Max 5% of all assets	Max 1% of assets	Can be employees of sponsor	Nominated by pension fund
Finland	None	Max 25% of all assets	Max 5% of assets	Can partly consist of employees of sponsor	Nominated by pension fund
France	No IORP's	Insurance legislation	Insurance legislation	Not related to sponsor	Not related to sponsor
Germany	Both	Max. 5% of all assets; 15% if more than two sponsors exist	Allowed for debitors in EEA	Can consist of employees of sponsor	Nominated by IORP
Greece	Both	Max 5% of all assets; 10% for group of companies	Not allowed	All sponsors (employees and/or employers) need to be represented	Nominated by pension fund and approval of National Actuarial Authority required
Iceland	None	Max 10% of assets	Max 5% of assets	Elected by the members	Nominated by pension fund
Ireland	None	Max assets covering surplus and amount needs to be disclosed	Max assets covering surplus and amount needs to be disclosed	Are usually employees of sponsor	Nominated by pension fund but often paid by sponsor
Italy	Both	Max between 5% and 30% of assets	None allowed	Can partly consist of employees of sponsor	Nominated by pension fund
Liechtenstein	Guaranteed by a public authority	Not allowed	Within very strict principles of safety	Can partly consist of employees of sponsor	Nominated by pension fund
Luxembourg	None	Max 5% of all assets; 10% for group of companies	Within prudential investment standards	Can partly consist of employees of sponsor	Nominated by pension fund
Malta	None	Max 5% of all assets	Max 5% of assets	No legislation	No legislation
Netherlands	Yes, all	Max 5% of all assets; 10% for group of companies	Max 50% of required capital	Can partly consist of employees of sponsor	Nominated by pension fund
Norway	Yes, all	Max 4% of all assets; 8% for group of companies	Max 4% of all assets; 8% for group of companies	Can partly consist of employees of sponsor	Nominated by pension fund
Portugal	None	Max 5% of all assets; 10% for group of companies	No explicit legislation	Can partly consist of employees of sponsor	Nominated by pension fund
Spain	Yes, all	Max 5% of all assets and security must be quoted in the market	No explicit legislation	Can partly consist of employees of sponsor	Nominated by pension fund
Sweden	None	Max 5% of all assets; 10% for group of companies	No explicit legislation	Can partly consist of employees of sponsor	Can be nominated by the sponsor
United Kingdom	IORP's and a few IORP's under art. 17	Max 5% of all assets	Not allowed	Can partly consist of employees of sponsor	Nominated by pension fund but can be paid by sponsor

4.5 EMPLOYEE'S REPRESENTATIVES' INVOLVEMENT IN GOVERNANCE OF THE PENSION SCHEME

A summary description of the employee's representatives involvement in made in table 6.

Where book reserve schemes are allowed, employee representatives have no right of participation in the relevant decisions (apart from the definition of the benefits and the communication thereof) on the book reserves.

In IORP's employee representation in the relevant bodies of the IORP's is required in many countries. No such requirement exists in Cyprus, Greece, Iceland and Ireland. In Greece and Iceland, employee representation is regulated in by laws of the IORP. In Ireland, many IORP's have member representation on a voluntary basis and members have the right to demand participation in the selection of the trustees (where there are at least 50 members), but the right has been invoked only a minority of cases.

The required employee representation and the actual employee representation is usually less than 50% except in Denmark, Lichtenstein, The Netherlands, Spain and Sweden, where a 50% representation is the norm.

The involvement of employees in the financing level of the IORP is in all countries limited to the involvement they have via their representatives in the relevant bodies of the IORP.

In many countries an information requirement exists. This information requirement varies from required detailed yearly information on the accrued and projected benefits to only global information on the situation of the IORP.

As to the benefit information, most countries require that yearly information on the individual's benefits is provided. This is however not required in Austria, Germany and France for book reserve schemes, in Denmark and in Portugal in case the scheme foresees no employee contributions.

Table 6 : Employee's representatives' involvement

Country	In Board	Involved in financing	Information on level of financing	Benefit information	Involvement in book reserves
Austria	In supervisory board, 50% minus 1	Advisory role	Yearly global financial information and expected change in level of benefits	IORP : yearly information ; book reserves : none	None
Belgium	In the board often min 50%, sometimes none	In their capicity of board members	Each year information on level of financing	Yearly benefit statement with accrued and projected pensions	Not applicable
Cyprus	No legal requirement	No legal requirement	Only on request of employees; yearly information on level of financing of accrued rights and the financial situation	Yearly information on accrued rights	None
Denmark	Min 50% of board need to be members of the pension plan	In their capicity of board members	Via copy of the annual report and the auditor's report	None	Not applicable
Finland	In the board : min 50% minus 1	In their capicity of board members	Yearly global financial information	Yearly information on pension rights	None
France	No IORP's	Not applicable	No requirement	None required (no vested rights)	None
Germany	A right of co-determination exists and of 50% of the highest committee in some kind of IORP	Only if employee representatives are members of the committees of an IORP, mostly only advisory role	No requirement	IORP : yearly information is usually provided ; book reserves : some employers also provide yearly information	None
Greece	No legal requirement, regulated in by laws of IORP	In their capicity of board members	Yearly information required	Yearly information required	Not applicable
Iceland	No legal requirement, regulated in by laws of IORP	In their capicity of board members	Via copy of the annual report that is available on request	Yearly information on earned and projected pension entitlements	Not applicable
Ireland	Members may demand representation on trustee body. Even where they do not exercise this right, member participation on a voluntary basis is common.	Only as trustees	Via annual report that includes actuarial statement	Yearly information on entitlements with projections	Not applicable
Italy	Possibly 50% represenation in board	In their capicity of board members	Each year information on level of financing	Yearly information on contribution and benefits	None
Liechtenstein	50% of board	In their capicity of board members	Via annual report that includes the degree of coverage	Yearly information on contributions and benefits	Not applicable
Luxembourg	For ASSEP, min 2 of 3 "partners" are member representatives; in ASBL no representation required	In their capicity of board members	Each year information on level of financing	Yearly information on vested and projected benefits	None
Malta	Optional	No legal requirement	No legal requirement	No legal requirement	Not applicable
Netherlands	50% of board	In their capicity of board members	Via annual report and on request	Yearly information on vested and projected benefits	Not applicable
Norway	Min 1 employee represenative	In their capicity of board members	Via annual report and effect of asset management on the pension rights	Yearly information on vested benefits	Not applicable
Portugal	Min 1/3rd in a compulsory advisory commission	Information needs to be provided to the advisory commission	Via annual report on activities of the pension fund	In case of employee contributions, yearly benefit statements required	Not applicable
Spain	50% in a compulsory controlling committee	In their rôle as member of the controlling committee	Via annual or quarterly reports	For pension funds, yearly information, for book reserves no individual information	None
Sweden	50% of board	In their capicity of board members	Via report on activities	Information on the benefits is required	None, but represantation in PRI Pensionsgaranti
United Kingdom	Min 1/3rd of trustees	In their capicity of trustees	Via a summary funding statement	Information on the benefits is required	Not applicable

In most countries IORP's are required to inform their members on the level of financing, This information requirement can be global information on the financial situation of the scheme or individual information on the level of financing of the individual's accrued rights. Only in Germany, IORP's are not obliged to inform employees on the financing level of the benefits, but on the other hand a guarantee fund that takes over the pension liabilities in case of insolvency of the employer and underfunding exists.

4.6 UNDERFUNDING OF DB SCHEMES

The measures in case of underfunding in the different countries are summarized in table 7.

Underfunding is not allowed in Denmark and is allowed for limited periods in the other countries. In all countries maximum periods exist in practice, these periods are either determined by law or agreed with the supervising authorities. Underfunding always needs to be reported to the supervising authorities and in many countries recovery plans need to be approved by these authorities.

In most countries, the sponsor is obliged to finance the underfunding of the DB schemes. This obligation is limited in Austria, Cyprus, Ireland and Spain, either because some maxima exist or because the obligation of financing depends on the agreement between the employees and the employer and the IORP.

Furthermore, in Iceland and Liechtenstein, most of the schemes are contribution based and therefore, no obligation of payments above the agreed contributions can be required from the employer.

In the Netherlands, the employer has no obligation to finance the underfunding unless otherwise agreed.

The employee's involvement in the decisions about a recovery plan is mostly via their representation in the relevant bodies of the IORP. In some countries they do are not at all informed, in other countries the information on a recovery plan is available via the annual reports on the activities of the IORP.

Table 7 : Underfunding and recovery

Country	Sponsor obliged to pay underfunding	Recovery plan allowed and time	Reporting and approval	Basis to require payment of contributions	Employee involvement in recovery plan
Austria	Based on contract and technical business plan	Yes, maximum 10 years	None required, but advisory board may have rights for information and legal obligation to inform employees	Normal creditor	Based on contract, employees may be informed, advisory role
Belgium	Yes	Yes, for vested rights within one year, for technical provisions, usually max 5 years, period to be agreed by authorities	Actuary needs to report to authorities, approval of authority needed	Normal creditor	Employees need to be informed at least once a year
Cyprus	No legal provision, to be agreed between employer and employees	Yes, to be agreed between employer and employees	Approval of supervising authority needed	Legal action under Civil law and non payment treated as an offence	On request, information needs to be provided
Denmark	Yes	Immediate contributions required	Approval of supervising authority needed	Normal creditor	Employees need to be informed at least once a year
Finland	Yes	Yes, maximum 10 years	Approval of supervising authority needed	Normal creditor	Employees need to be informed at least once a year
France	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Germany	Yes	Yes, maximum 10 years and if underfunding more than 10%, immediate for exceeding part	Supervising authority needs to be informed	Normal creditor	None
Greece	Yes	Yes, length at discretion of board of IORP, but max 3 years	Supervising authority needs to be informed	Normal creditor	Employees need to be informed at least once a year
Iceland	Not possible (basis = DC)	Yes, length at discretion of board of IORP and benefits may need to be reduced	Supervising authority needs to be informed	Normal creditor	Employees need to be informed at least once a year
Ireland	Negotiation of shared cost between employer and employee or decision of winding up	Yes, aim is 3 years, but longer periods allowed	Approval of supervising authority needed	Normal creditor	Employees need to be informed at least once a year
Italy	In most cases, yes	No specific legislation	Supervising authority needs to be informed	Normal creditor	No legislation
Liechtenstein	No	Yes, maximum 5 to 7 years	Approval of supervising authority needed	Normal creditor	Employees need to be informed immediately
Luxembourg	Yes	Immediate for ASBL's, At the discretion of the board for ASSEP's	Supervising authority needs to be informed	Normal creditor	Employees need to be informed at least once a year
Malta	Yes	Yes, to be decided by the board	Approval of supervising authority needed	Non payment of contributions is an offence under the special funds act	No legislation
Netherlands	No	Yes, for next years expenses, maximum 3 years, for required buffers maximum 15 years	Approval of supervising authority needed	Normal creditor	Based on contract, employees informed on request, advisory role
Norway	Yes	yes, length at discretion of board	Approval of supervising authority needed	Normal creditor	Employees need to be informed at least once a year
Portugal	Yes	Yes, maximum 1 year, but extention to 3 years may be possible	Approval of supervising authority needed	Normal creditor	Only via the advisory commission
Spain	Yes, but up to certain maxima	Yes, maximum 5 years or exceptionally 10 years	For recovery plans longer than 5 years, approval of supervising authorities required	Normal creditor	Employees need to be informed at least once a year
Sweden	Yes	Yes, length at discretion of the board	Approval of supervising authority needed	Normal creditor	Employees need to be informed at least once a year
United Kingdom	Employer must agree ongoing payments with trustees, and employer debt if scheme winds up	Yes, but no set time limit. Supervising authority expects payments as soon as employers can reasonably afford	Approval of supervising authority needed	Normal creditor	Employees need to be informed following the actuarial valuation (each year or at least every three years)

The basis on which IORP's may require the normal and additional contributions in case of underfunding is mostly via the agreements between the employees and the employer and the IORP. Sponsors are normal creditors for the IORP's. In Cyprus and in Malta, the non-payment of contributions towards an IORP is by law regarded as an offence.

4.7 PRIORITY CREDITORS RIGHTS

The priority creditors' rights per country are summarized in table 8.

IORP's are in all countries normal creditors. Preferential rights on the assets on the Sponsor exist in a very limited way in four countries, namely in Cyprus, Denmark, Luxembourg and the Netherlands for the contributions due before bankruptcy of the sponsor, often during a limited period.
In most countries, employees have also no priority rights on the assets of their employer in respect of their pension benefits in case they are financed via an IORP. Only in Belgium and Cyprus some priority is established for employment related benefits.

In case of book reserves schemes, usually employees have no priority rights either. Only in Austria, pensioners, than ex-employees and then employees have priority rights for their accrued benefits.

Table 8 : Priority creditor's rights

Country	IORP	Employees for their benefits
Austria	Normal creditor	Book reserves : Pensioners, former employees, employees ; IORP's : none
Belgium	Contributions have priority	After contributions, employees have priority for employment related benefits
Cyprus	Contributions have priority	After contributions, employees have priority for employment related benefits
Denmark	Contributions for the last 6 months	None
Finland	Normal creditor	None
France	Not applicable	None
Germany	Normal creditor	None
Greece	Normal creditor	None
Iceland	Contributions have priority	None
Ireland	Contributions have priority	None
Italy	Normal creditor	None
Liechtenstein	Normal creditor	None
Luxembourg	Contributions for the last 6 months	None
Malta	No legislation	None
Netherlands	Contributions fo the last year	None
Norway	Normal creditor	None
Portugal	Normal creditor	None
Spain	Normal creditor	None
Sweden	Normal creditor	None
United Kingdom	Normal creditor	None

4.8 GUARANTEE SCHEMES

Table 9 shows the existence of guarantee schemes in the different countries.

In six countries some form of guarantee schemes exist. Luxembourg and Germany use the same guarantee scheme.

Table 9 : Existance of guarantee schemes

Country	Do guarantee schemes exist ?
Austria	No
Belgium	No
Cyprus	No
Denmark	No
Finland	No
France	Insurance company guarantee fund
Germany	Yes PSVaG
Greece	No
Iceland	No
Ireland	No
Italy	Yes, TFR guarantee fund
Liechtenstein	Yes, Swiss LOB Guarantie Fund
Luxembourg	Yes, PSVaG
Malta	No
Netherlands	No
Norway	No
Portugal	No
Spain	No
Sweden	Yes, PRI Pensionsgaranti
United Kingdom	Yes, Pension Protection Fund

An overview of the main characteristics of the guarantee schemes is made in table 10. The French scheme covers insurers as in France IORP's for defined benefit plans do not exist.

Affiliation to the guarantee scheme is compulsory for pension schemes in UK and Liechtenstein, in Italy for TFR benefits, in Sweden for ITP-plans funded as book reserves, in Luxembourg for book reserve schemes and in Germany for book reserve schemes and "Unterstützungskassen", pension fund and in special cases direct insurance.

Affiliation to the guarantee schemes is compulsory for the pension schemes in the scope and either the employer or the IORP is obliged to pay the premiums. Only in the UK the premiums are risk based. In Sweden, the premium rates are different for funded and book reserve plans. In Germany there is a premium rate discount only for pension fund (20%).

Table 10 : Characteristics of guarantee schemes

Country	Do guarantee schemes exist ?	Covered pension schemes	Premiums paid by	Premiums risk based	Cicality	Covered benefits	Procedure
Germany	PSVaG	Book reserves, "Unterstützungskassen", pension funds and in special cases direct insurance	Employer	No, but reduced premiums for pension funds (20%)	Premiums depend on the claims of the year but compensation funds and rules on the spraed of increases and decreases in contribution rates	Vested rights with limits on pensions	On insolvency of the employer, PSVaG takes over obligations and assets, if available
Italy	TFR guarantee fund	Part of the TFR financed via book reserves	Employer	No	Guarantee of Social Security	Part of TFR financed via book reserves, no maxima	On insolvency of employer, employees have to send a formal request to obtain their benefits from the fund
Liechtenstein	Swiss LOB Guarantie Fund	All pension schemes	IORP's	No		Vested rights based on max salaries	The guarantee fund may take over the obligations or may pay an amount to the underfunded IORP
Sweden	PRI Pensionsgaranti	ITP plans	Employer	No, but less premiums for funded plans and additional premiums may be requested based on a credit assessment of the employer	Buffers do exist	Vested benefits	The guarantee fund will fund the obligations with insurance company Alecta
United Kingdom	Pension Protection Fund	All private sector DB pension schemes	Employer or IORP	Yes	Premiums will depend on the PPF compensation due to be made and pending, net of assets recovered	Total benefits but they maybe slightly modified and maxima are applied, a reduction of 10% for members not retired	PPF takes over obligations

The guarantee schemes usually only cover the vested rights without increases with a maximum. In Italy the total TFR accrued benefits are covered and in the UK the total indexed accrued benefits up to a maximum and with a reduction of about 10% are covered.

In most cases the guarantee scheme takes over the obligations for the benefits covered. In Liechtenstein the guarantee scheme may also choose to fund the benefits via the existing IORP.

4.9 EVIDENCE OF INADEQUATE PROTECTION AND OTHER MEASURES

4.9.1 EVIDENCE OF INADEQUATE PROTECTION

Although the protection of occupational pensions is clearly of a lower level in some other countries, only in Ireland, the Netherlands and a few years back in the UK, evidence of insufficient protection of the occupational pensions exists. In Ireland the outcome of the level of insufficiency is not clearly known yet.

In Ireland and the UK, this protection refers to indexed (deferred) pensions. Employers in Ireland and the UK provide amongst the highest occupational pensions in Europe and their minimum funding rules require a fairly high funding level compared to most other countries. On the other hand, the expectations of the employees are high. They expect deferred pensions and pensions in payment to increase in line with inflation, although in some cases with maxima as determined in the schemes' rules. Indeed, the UK has mandatory indexation (subject to a maximum) for both pensions in payment and deferred pension rights to be protected against inflation.

In the UK the Pension Protection Fund (PPF) and Financial Assistance Scheme (FAS) now provide a high level of protection for members of Defined Benefit schemes in the event of employer insolvency. Given that FAS helps members of certain underfunded defined benefit schemes that started to wind-up between 1 January 1997 and 5 April 2005, this includes a measure of retrospection.

In Ireland, the priority order on which assets of a pension scheme are distributed on the winding-up of the pension scheme was changed in 2009. This change is designed to ensure better protection of employees and ex-employees rights by de-prioritising pension increases for retirees. Furthermore a proposal exists to introduce a "Pensions Minimum Guarantee Scheme" similar to the Pension Protection Fund in the UK, but the negotiations are in an early stadium.

In the Netherlands, where the funding requirements are also very severe, the control authorities have decided to require that some pension funds with funding deficits reduce accrued and current pensions. Up to now, the maximum reduction required is 14% of the pension rights. 86% of the promised rights is still well protected and this level of protection is generally still considered as acceptable, as these pension rights are the rights above the Social Security pension and that in periods of economic crisis, not only pensions but also other income is often subject to reductions.

4.9.2 Other measures

A measure, that is commonly used to increase the guarantee of the pension rights for the employees, consists of setting up sufficient provisions in the accounts of the employer. In this way, the employer and all parties are aware of the pension liabilities. These pension liabilities should be calculated using "realistic" assumptions in order for them to be a realistic value of the actual liabilities. This is for example the case if International Accounting Standards are applied as they require that a kind of market value of the pension liabilities is published and accounted for. The mere fact that the information is available increases the guarantee of the pension rights as all stakeholders know this pension liability will ultimately need to be settled. Due to the fact that from an accounting point of view, the sponsoring company will have taken the costs for the liabilities and that assets (in the sponsoring company) covering these liabilities need to exist forms on itself also a better protection then if no assets covering these liabilities need to exist.

A summary of the accounting rules applicable in the different countries is made in table 11.

Table 11 : Accounting rules for employers

Country	Local accounting rules	IFRS application
Austria	Contributions are equal to costs, no provisions in balance sheet	Application of IAS 19 is wide spread
Belgium	Contributions are equal to costs, no provisions in balance sheet	Application of IAS 19 is wide spread
Cyprus	Equal to IAS 19	Always application of IAS 19
Denmark	Similar to IAS 19	Application of IAS 19 is wide spread
Finland	Contributions are equal to costs, no provisions in balance sheet	Application of IAS 19 is wide spread
France	Equal to IAS 19	Always application of IAS 19
Germany	Similar to IAS 19	About a quarter of the big companies apply IAS 19
Greece	Contributions are equal to costs, no provisions in balance sheet	Application of IAS 19 is limited to companies quoted on the Stock exchange and most companies are not quoted
Iceland	Similar to IAS 19	Application of IAS 19 is wide spread
Ireland	Similar to IAS 19	Application of IAS 19 is wide spread
Italy	Accrued benefits for TFR, no specific rules for pensions	Application of IAS 19 is limited to companies quoted on the Stock exchange and many companies are not quoted
Liechtenstein	Contributions are equal to costs, no provisions in balance sheet	Application of IAS 19 is rather exceptional
Luxembourg	For benefits provided via an IORP: contributions are equal to costs, no provisions in balance sheet	Application of IAS 19 is wide spread
Malta	No rules	No information
Netherlands	Choice between IAS 19 or contributions are equal to costs, no provisions in balance sheet	Application of IAS 19 is wide spread
Norway	Choice between IAS 19 or contributions are equal to costs, no provisions in balance sheet	Application of IAS 19 is wide spread
Portugal	Similar to IAS 19	IAS 19 is used by the bank and telecommunication sector and by companies quoted on the Stock exchange
Spain	Similar to IAS 19	Always application of IAS 19 or very similar
Sweden	Similar to IAS 19	Application of IAS 19 is wide spread
United Kingdom	Similar to IAS 19	Application of IAS 19 is wide spread

From this summary it can be seen that IAS 19 or very similar accounting is generally applied in Cyprus, France, Germany, Ireland, Portugal, Spain and the United Kingdom. The use of IAS19 accounting is wide in Austria, Belgium, Denmark, Finland, Iceland, Ireland, Luxembourg, The Netherlands, Norway and Sweden. This kind of protection is less present in Greece and Italy.

Very few other measures exist in the countries surveyed. An overview is made in table 12.

In the Netherlands, unpaid contributions need to be reported to the Council of scheme members and the supervising authority and this authority can oblige the IORP to transfer all risks in case the balance between the buffers and the risk taken is not sufficient.

In Germany Contractual Trust Arrangements for protection of the employees rights in case of book reserves are set up. However the legal security, that these kind of arrangements offer, is not totally clear. In any case, the guarantee fund does not take account of the existence of such arrangements.

The Pension Insolvency Payment Scheme in Ireland is a scheme that is willing to take over the liabilities towards current pensioners for non-indexed pensions on condition that premiums are paid. These premiums are determined in a cost neutral way. In this way the pensions can be settled in a cheaper way and more money is available for the rights of the employees and the ex-employees.
In Ireland a proposal exists to introduce a “Pensions Minimum Guarantee Scheme” similar to the Pension Protection Fund in the UK, but the negotiations are in an early stadium.

Table 12 : Other measures

Country	Other measures
Austria	None
Belgium	None
Cyprus	None
Denmark	None
Finland	None
France	Tax measures is incentive for external funding
Germany	Contractual Trust Arrangements in case of book reserves but legal security not clear
Greece	None
Iceland	None
Ireland	Pension Insolvency Payment Scheme and proposed "Pensions Minimum Guarantee Scheme"
Italy	Reforms discussed, no details known
Liechtenstein	None
Luxembourg	None
Malta	None
Netherlands	Unpaid contributions need to reported, Authority can oblige pension fund to transfer all risks
Norway	None
Portugal	None
Spain	None
Sweden	None
United Kingdom	None

4.10 Assessment

4.10.1 Overall assessment

In an overall assessment it is necessary to take account of the fact that no financial institution or other company can deliver a watertight financial guarantee for the payment of occupational pensions, especially as they form a very long term obligation.

It is also clear, that without any insolvency coverage, the protection of the benefits of employees, members of a book reserve system is nihil in case of insolvency of the employer. If money has been paid to a legally separate entity the protection of the benefits is significantly increased and if that legally separate entity is subject to severe rules with respect to funding and setting up buffers the protection is even higher.

Well regulated priority rights on pension benefits in case of insolvency of the employer increase the protection of the benefits slightly. However, these priority rights have to be clearly defined and on insolvency of the employer, a vehicle has to be found that takes over the pension obligations or the benefits have to be converted in a lump sum. The determination of the amount of the lump sum may also vary significantly and may represent the fair value of the rights or not.

In case of book reserves or in case of pension funds, an insolvency insurance increases the protection in so far that the insolvency insurance vehicle has sufficient funds to pay the pension obligations.

Book reserves

For book reserves schemes, most parties agree that some protection of the occupational pensions in case of insolvency of the employer would be beneficial to all stake holders.

In Greece, Ireland, Norway, Portugal and UK, book reserves are allowed but not or virtually not used and we have not assessed the systems used in these countries.

No protection at all exists in Austria, Cyprus, France and Spain. In Austria and Cyprus, some priority rights are in force on insolvency of the employer, but in France and Spain, no priority rights exist. On the other hand in France, the retirement indemnities are also not payable in case of dismissal of an employee, dismissal indemnities are paid in stead. In case of insolvency of the employer, these dismissal indemnities would also be due in stead. In Spain book reserve systems are only used by financial institutions and for plans in force before 1996.

For the other countries that allow book reserve schemes the maximum protection offered is the protection of the vested rights excluding any indexation. The question can arise whether this protection is sufficient. In most of the countries involved, the vested rights are not indexed either when employees leave the service of the employer. In that case, the protection is generally found to be of a reasonable level. Employees having to leave the service because of bankruptcy do not necessarily need to be protected better than employees dismissed due to e.g. a restructuring of the employer.
An overview of the overall assessment per country where book reserves are used in a significant way is provided in table 13.

Funded defined benefit schemes

In funded schemes, the occupational pension benefits are by definition protected a lot better than in book reserve schemes without insolvency insurance. Indeed in the case of funded schemes, assets are kept by a legally separate organisation and these assets can only be used to pay for the pensions promised.

In all countries, the assets held by an IORP can only in very exceptional cases return to the sponsoring employers.

In the case of funded schemes, the level of financing together with the requirements for buffers or additional assets is determining for the level of protection of the occupational pensions.

In some countries, most IORP' s have not guaranteed any pensions to the beneficiaries, they are only legally separate vehicles that manage funds to finance pensions and pay pensions. In that case, the employer has the final responsibility to pay the benefits.

In other countries, most IORP's are responsible themselves for the pension liabilities and therefore employers may settle the total or partial liability for their pensions in this IORP (these IORP's are referred as IORP's under art.17). The requirements for funding and additional assets are more severe in these IORP's.

Table 13 : Overall assessment for countries with book reserves

Country	Defined benefit book reserves	Proiority rights for employees on their benefits	Minimum book reserves	External guarantees required	Overall assessment
Austria	Not very widely used	Pensioners, former employees, employees have priority rights	Calculated following principles of prudence	Minimum 50% have to be covered by financial assets or insurance policies	Low protection
Cyprus	Not very widely used	Employees have priority for employment related benefits	No minimum requirements	No	Very low protection
Finland	Scarcely used	None	No minimum requirements	No	Very low protection
France	Widely used for the retirement indemnities	None	No minimum requirements	No	Very low protection
Germany	Very widely used	None	Calculated following principles of prudence, according to accounting rules	Yes, accrued pension rights, affiliation to the guarnatee scheme PSVaG is compulsory	High protection
Italy	Very widely used for TFR	None	No minimum requirements	Yes, TFR guarantee fund, other plans no protection	High protection for TFR, very low protection for pensions
Luxembourg	Not very widely used	None	Calculated following principles of prudence	Yes, accrued pension rights, affiliation to the guarantee scheme PSVaG is compulsory	High protection
Spain	Only allowed for financial institutions for plans in force before 1996	None	Calculated following principles of prudence	No protection, but very few and closely regulated and monitered	Very low protection
Sweden	Widely used	None	Calculated following principles of prudence, including reserves for pension supplements and indexation	For ITP - plan : accrued pension rights in PRI pensionsgaranti	High protection

IORP's not falling under art. 17

Apart from Greece and Italy, the legislation requires full funding. In Iceland, the principle is that IORP's should be fully funded, but deficits are currently allowed. The requirement of full funding differs between the countries, especially as in many countries, full funding means full funding of the accrued rights, not taking into account the future increases of these rights.

In most countries recovery plans are allowed in case of underfunding. Only Luxembourg requires immediate recovery. In Finland, Germany, Greece, Portugal and Sweden some additional assets are required and in Germany, Lichtenstein, Sweden and the UK, an external guarantee is required.

An overview of the overall assessment per country is provided in table 14.

IORP's under article 17

Apart from Greece and Italy, the legislation requires full funding. In most countries recovery plans are allowed in case of underfunding. Only Denmark requires immediate recovery.

For these IORP's, in all countries buffers equivalent to regulatory own funds are required.

Apart from these IORP's in Greece and Italy, the protection of the pensions is therefore fairly high in this kind of IORP's.

An overview of the overall assessment per country is provided in table 15.

Table 14 : Overall assessment for countries with IORP's not falling under art. 17

Country	Defined benefit funded via an IORP	Funding requirements	External guarantees required	Additional assets required	Limits on investments in sponsor's securities	Other measures	Have current pensions priority ?	Overall assessment
Belgium	Widely used	Principle of prudence, recovery plan possible	None	Solvency margin for risk benefits	Max 5% of all assets; 10% for group of companies	None	No	Limited protection
Finland	Not very widely used	Principle of prudence, recovery up to 10 years	None	Administration reserve of 5% of technical reserves plus additional reserve of up to 8% of technical provisions plus difference between market value and book value	Max 25% of all assets	None	Yes	High protection
Germany	Widely used	Principle of prudence, recovery up to 10 years	Yes, affiliation to the guarnatee scheme PSVaG is compulsory for "Unterstützungskassen" and pension funds.	Regulatory own funds	Max. 5% of all assets; 15% if more than two sponsors exist	None	No	Very high protection
Greece	Not very widely used	No minima	None	Regulatory own funds	Max 5% of all assets; 10% for group of companies	None	No	Limited protection
Iceland	Very widely used	Small deficits may be allowed	None	None	Max 10% of assets	None	No	Low protection
Ireland	Very widely used	Principle of prudence, recovery plan possible	None	None	Max assets covering surplus and amount needs to be disclosed	Proposed "Pensions Minimum Guarantee Scheme	Yes	Limited protection
Italy	Not very widely used	No minimum funding requirement	None	None	Max between 5% and 30% of assets	Reforms discussed, no details known	No	Low protection
Liechtenstein	Not very widely used	Principle of prudence, recovery up to 7 years	Yes, Swiss LOB Guarantie Fund	A risk based fluctuation reserve of usually between 15% and 25% of the technical reserves	Not allowed	None	No	Very high protection
Luxembourg	Widely used	Principle of prudence, immediate recovery required	None	None	Max 5% of all assets; 10% for group of companies	None	No	Reasonable protection
Portugal	Not very widely used	Principle of prudence, recovery up to 3 years	None	Regulatory own funds	Max 5% of all assets; 10% for group of companies	None	No	High protection
Sweden	Widely used	Principle of prudence, recovery plan possible	For ITP - plan : PRI pensionsgaranti	Safety margin plus 5% of technical provions plus funds for pension supplements plus special indexation funds	Max 5% of all assets; 10% for group of companies	None	Yes	High protection
United Kingdom	Very widely used	Principle of prudence, recovery as soon as reasonably can be afforded	The Pension Protection Fund covers insolvency of employer	None	Max 5% of all assets	None	Yes	High protection

Table 15 : Overall assessment for countries with IORP's falling under art. 17

Country	Importance	Funding requirements	External guarantees required	Additional assets required	Limits on investments in sponsor's securities	Other measures	Have current pensions priority	Overall assessment
Austria	Not very widely used	Principle of prudence, recovery up to 10 years	None	Regulatory own funds	Max 5% of all assets	None	No	High protection
Cyprus	Scarcely used	Principle of prudence, recovery plan possible	None	Regulatory own funds	Max 5% of all assets; 10% for group of companies	None	No	High protection
Denmark	Scarcely used	Principle of prudence, immediate recovery required	None	Regulatory own funds	Max 5% of all assets	None	Yes	High protection
Germany	Widely used	Principle of prudence, recovery up to 10 years	None	Regulatory own funds	Max. 5% of all assets; 15% if more than two sponsors exist	None	No	High protection
Greece	Not very widely used	No minima	None	Regulatory own funds	Max 5% of all assets; 10% for group of companies	None	No	Limited protection
Italy	Scarcely used	No minimum funding requirement	None	Regulatory own funds	Max between 5% and 30% of assets	Reforms discussed, no details known	No	Limited protection
Netherlands	Very widely used	Principles of prudence, taking into account the investment risks, requirement for a certainty of 97.5% that the pension fund will not have less assets than liabilities within a period of one year, recovery up to 3 years	None	Regulatory own funds	Max 5% of all assets; 10% for group of companies	Unpaid contributions need to reported, Authority can oblige pension fund to transfer all risks	No	High protection
Norway	Widely used	Principle of prudence, recovery plan possible	None	Regulatory own funds and market value adjustment reserve and fun for risk smoothing	Max 4% of all assets; 8% for group of companies	None	No	High protection
Spain	Not very widely used	Principle of prudence, recovery up to 5 years	None	Regulatory own funds	Max 5% of all assets and security must be quoted in the market	None	No	High protection
United Kingdom	Scarcely used	Principle of prudence, recovery as soon as reasonably can be afforded	Yes, Pension Protection Fund	Regulatory own funds	Max 5% of all assets	None	Yes	Very high protection

4.10.2 ASSESSMENT PER COUNTRY

Austria

- In case of an IORP, accrued rights are well protected, indexation is conditional, all participants rights would be reduced proportionally and therefore the chance that less than 50% of the accrued rights will be paid is very low in periods of stable financial returns on assets. As significant buffers are required, even in case of turbulence on the financial markets, the accrued benefits are reasonably protected.
- In case of book reserves, on insolvency of the employer, priority rights on at least half of the accrued rights exist. As a consequence, the chance that less than 50% of the accrued rights is paid is also relatively low, although of course clearly higher than with an IORP and much depending on the value of the financial assets on which the priority rights exist.

Belgium

- Accrued rights are reasonably well protected, indexation in unusual (lump sums), all participants rights would be reduced proportionally and therefore the chance that less than 50% of the accrued rights will be paid is low in periods of stable financial returns on assets. No buffers are required, so the benefits may be less well protected in periods that recovery plans are allowed.

Cyprus

- In case of bookreserves, accrued rights are only protected via priority rights and therefore the chance on losing a significant part of the benefits is real.
- In case of IORP, the benefits are well protected and therefore the chance that less than 50% of the accrued rights will be paid is low in periods of stable financial returns on assets. As significant buffers are required, even in case of turbulence on the financial markets, the accrued benefits are reasonably well protected.

Denmark

- Current pension rights are well protected, accrued rights are slightly less protected, indexation is conditional and the chance that less than 50% of the pension or accrued rights will be paid is very low in periods of stable financial returns on assets. As significant buffers are required, even in case of turbulence on the financial markets, the accrued benefits are reasonably well protected.

Finland

- Current pension rights financed via an IORP are well protected, accrued rights are less protected, indexation is conditional and the chance that less than 50% of the accrued rights will be paid is low in periods of stable financial returns on assets. Significant buffers are required, so current pensions are always well protected, but the accrued benefits may not be well protected in periods that recovery plans are allowed.
- In the scarce cases of bookreserves, the benefits are not protected at all and the chance of losing the benefits in case of insolvency of the employer is real.

France

- Pension benefits are mostly provided via insurance.
- Retirement indemnities are often not protected but are not paid either in case of redundancy programs. Dismissal indemnities are paid instead.

Germany

- Accrued rights financed via an IORP are well protected, indexation is conditional and the chance that less than 50% of the accrued rights will be paid is very low in periods of stable financial returns on assets. Or significant buffers are required, or affiliation to an insolvancy insurance is required and therefore even in case of turbulence on the financial markets, the accrued benefits are well protected.
- In case of book reserves, the accrued rights are also protected via the solvency insurers. Only in case this insurer cannot request sufficient contributions from solvable employers, the accrued rights are not guaranteed.

Greece

- Retirement indemnities are not protected and even no book reserves exist (unless IFRS is applied).
- Accrued pension rights are financed via IORP's but may not be well protected because no minimum funding requirements exist.

Iceland

- Although, funding deficits are temporarily allowed, accrued rights are reasonably protected, indexation conditional and the chance that less than 50% of the accrued rights will be paid is low in periods of stable financial returns on assets. No buffers are required, so the benefits may be less well protected in periods that recovery plans are allowed.

Ireland

- Current pension rights are well protected, accrued rights and promised indexations are less protected due to the priorities for the pensioners. The chance that less than 50% of the promised rights will be paid is still low in periods of stable financial returns on assets. No buffers are required, so the benefits may be less well protected in periods that recovery plans are allowed.

Italy

- Due to the existence of the TFR guarantee fund, TFR benefits are well protected and the chance that less than 50% of this benefit will be paid is very low.
- Accrued pension rights are financed via IORP's but may not be well protected because no minimum funding requirements exist.

Liechtenstein

- Accrued rights are very well protected, indexation is conditional and the chance that less than 50% of the accrued rights will be paid is very low in periods of stable financial returns on assets. Significant buffers and affiliation to an insolvency insurance is required and therefore even in case of turbulence on the financial markets, the accrued benefits are still well protected.

Luxembourg

- Accrued rights financed via an IORP are reasonably well protected, indexation is conditional and the chance that less than 50% of the accrued rights will be paid is very low in periods of stable financial returns on assets. No buffers are required, but immediate recovery is required, so that benefits are always reasonably well protected.
- In case of book reserves, the accrued rights are protected via the insolvency insurance. Only in case this insurer cannot request sufficient contributions from solvable employers, the accrued rights are not guaranteed.

Malta

- Legislation is under construction

Netherlands

- Accrued rights and promised increases in benefits are well protected, indexation is often conditional, all participants' rights would be reduced proportionally and the chance that less than 50% of the promised rights will be paid is very low in periods of stable financial returns on assets. Significant buffers are required and therefore even in case of turbulence on the financial markets, the promised benefits are reasonably well protected.

Norway

- Accrued rights are well protected, indexation is conditional and the chance that less than 50% of the accrued rights will be paid is very low in periods of stable financial returns on assets. Significant buffers are required and therefore even in case of turbulence on the financial markets, the accrued benefits are still well protected.

Portugal

- Accrued rights are reasonably well protected, indexation in unusual and the chance that less than 50% of the accrued rights will be paid is low in periods of stable financial returns on assets. Some buffers are required, so the benefits are still reasonably well protected in periods that recovery plans are allowed.

Spain

- Accrued rights financed via IORP are well protected, indexation is conditional and the chance that less than 50% of the accrued rights will be paid is very low in periods of stable financial returns on assets. Significant buffers are required and therefore even in case of turbulence on the financial markets, the accrued benefits are still well protected.
- In case of book reserves (in the financial institutions only) the accrued rights are not protected in case of insolvency of the employer. On the other hand, as these employers are financial institutions they are severely controlled by the authorities.

Sweden

- Current pension rights financed via an IORP are very well protected, accrued pension rights are less protected, indexation is conditional and the chance that less than 50% of the accrued rights will be paid is very low in periods of stable financial returns on assets. Significant buffers are required and for ITP plan affiliation to an insolvency insurance is required and therefore even in case of turbulence on the financial markets, the accrued benefits are reasonably well protected.
- In case of book reserves, the accrued rights are also protected via the solvency insurance. Only in case this insurer cannot request sufficient contributions from solvable employers, the accrued rights are not guaranteed.

United Kingdom

- Current pension rights are well protected, accrued pension rights are less protected and the chance that less than 50% of the promised rights will be paid is very low in periods of stable financial returns on assets. Affiliation to an insolvency insurance is required and therefore even in case of turbulence on the financial markets, part of the promised benefits is reasonably well protected.

5. Best practices

General considerations

Huge differences in protection of supplementary pensions exist between countries. Book reserves systems and funded systems are by nature very different.

Many countries consider funded systems on itself better practice than book reserves systems, even if good solvency insurance exists.

In all countries except Denmark, Iceland, Lichtenstein, TFR in Italy, Norway and Sweden, employers are not obliged to introduce supplementary pensions, although in more and more countries, the obligation rises from negotiations within a certain sector and this way the employers are obliged to introduce supplementary pensions, often financed via sector funds. In countries where it not obliged to provide supplementary pensions, the question arises on who should be financially responsible for the supplementary pensions in case of insolvency of an employer?

It is a general opinion that employers that promise benefits (or have to provide benefits) should make sure these benefits are actually paid. This can be through “funding” the benefits or through taking out a solvency insurance that takes over the pension liability in case of insolvency of the employer.

In some countries it is possible that the employer pays the pensions when they are due, although in most of these countries, the pension liabilities have to be recorded and communicated in the yearly accounts. Furthermore, in many of these countries, the employers are obliged to contribute to a solvency insurance system, in order to make sure the benefits are also payable in case the employer becomes insolvent.

Book reserve systems have the advantage that the level of the protection of the benefits does not depend on the financial returns on investments, they depend on the financial strength of the employer and on the financial strength of the possible insurance system.
In this system, especially where no solvency insurance system is required, the employee is not spreading any of its financial risks with respect to working income. Indeed, his re-

muneration and his pension benefits depend on one company only, his employer. If the employer becomes insolvent, his remuneration and his pension fall away.

Therefore, where such systems without insolvency insurance are still allowed, the protection of the supplementary pensions is not in accordance with the directive and the country should take measures to either forbid book reserve schemes or introduce compulsory insolvency insurance.

The next issue is: how should this insolvency insurance be financed? In some countries these insurance systems ask risk premiums, where the level of the premiums depends on the past claims and no or very low reserves are set up. In that case, the problem of cyclicality arises. In periods of economic growth, nearly no employers go insolvent and the premiums are low and in periods of economic recession, more employers go insolvent and important premiums are required to finance the benefits for the employees of the insolvent employers. These important premiums are payable in periods that employers in general have more difficulty of surviving. This problem of cyclicality can be partially avoided by setting up reserves in the insolvency insurance system, but depending on the level of the economic decline, the reserves can or cannot be sufficient.

However, in periods of economic recession, most persons suffer and by using this vehicle a very high solidarity between employees of insolvent companies and employees of solvent companies can be created. In such systems the cost for the benefits is increased by the cost for the insolvency insurance and each employer pays a part of the benefits for the employees of insolvent employers.

This is not so or far less so in case of funded systems. Funded systems provide a higher level of protection of the pension benefits than book reserves without solvency insurance, but funded systems without insolvency insurance are likely to provide a slightly lower level of protection of the pension benefits than book reserves with solvency insurance.

Although it is generally accepted that funded benefits provide better protection, this is not necessarily the case. Indeed, in periods of serious economic crisis, the value of the assets covering the benefits can drop significantly and in case of pension funds carrying

themselves the pension liabilities, the pension benefits may need to be reduced in such periods.
This is what has happened in the Netherlands. A solution could be to require that these IORP's take out insolvency insurance (as is the case in Lichtenstein). This insolvency insurance would in that case however only be a solidarity vehicle where pension funds that are underfunded would receive funds from this insurance system and all pension funds would be financing the pension funds with underfunding. The problem of cyclicality would also arise but in a much less important way than in case of the insolvency insurance for book reserves, as not the total pensions, but only part of the pensions would need to financed by the insurance system. However, if all pension funds have the same problem due to the economic crisis, the insolvency insurance would not be able to pay for the benefits and at some point all pension funds would need to reduce benefits.

In funded systems where the employer is obliged to pay the underfunding, the benefits are also only well protected if the employers are obliged to take out insolvency insurance. The premiums to the insolvency insurance will normally be significantly lower than in case of book reserves, as assets covering the liabilities are available. The same issue of cyclicality arises as with the insolvency insurance for book reserves, only the amounts involved are smaller.

Some studies such as the study "Rebuilding pensions – 1999" have recommended against the introduction of a guarantee fund. Their reasoning is as follows: "Mandatory insolvency insurance should be rejected for funded plans because of risk of moral hazard consequences, since such an insurance may induce reckless or negligent behaviour on both the asset and liability sides".
In our opinion, the moral hazards and negligent behaviour can be avoided by using risk premiums and other techniques that insurers in general need to use to avoid this behaviour. In countries, such as Lichtenstein, UK and to certain extent Germany, where guarantee funds are used, the employers and/or IORP's do not have a higher negligent behaviour or take higher risks (as they are in any case covered) due to the introduction of the guarantee schemes.

In our opinion, in an ideal world, taking out solvency insurance should be obliged for all employers providing benefits. The insurance companies providing this solvency insurance should of course be subject to the insurance legislation and requirements under the European insurance directives. This way the pensions for all employees would be protected in a reasonable way. Obviously the premiums charged by this insurance should be risk based premiums, where both the funding level and additional assets hold by the pension funds and the solvency of the employer himself should be the major parameters to determine the premiums. This way, employers could have the choice between book reserves with relatively high insolvency insurance premiums, pension fund with reasonable funding and lower insolvency insurance premiums and a pension fund with a very high level of funding and very low insolvency insurance premiums. This way each employer can decide for himself what would financially be the best solution.

On the other hand the costs of determining the actual risk should not be too high. A pragmatic approach towards the assessment of solvency of the employer and the risks the IORP takes is necessary.

While it is clear that such insolvency insurance should operate on an as wide as possible basis and not be limited to the coverage of pension funds and/or book reserves in one country, the actual way in which such an insolvency insurance should operate, how it should deal with periods in which all pension funds might have insufficiencies, etc. should form the subject of a further study.

Book reserve schemes

In countries were book reserves are virtually not used, they are usually not regulated at all and no guarantee schemes exist. It is probably good practice to "forbid" book reserves in countries where they are not well regulated and supervised.

Best practice: affiliation to a guarantee scheme is compulsory; The cost for the guarantee fund should be limited and take account of the risk profile of the employer. On the other hand the costs of determining this risk profile should not be too high. A pragmatic approach towards the determination of this risk profile is necessary.

IORP's that take no risks

In many countries, the IORP's are only a vehicle in which the employers save for the pensions. The IORP does not guarantee any pension and takes no risks. In the countries where these IORP's are used, the employer is usually required to finance the underfunding. The protection of the employees' pensions heavily depends on the solvency of the employer, but also on the actual financing level of the accrued rights in the IORP.

Best practice: Prudent full funding requirements of the benefits including the promised increases in the benefits plus coverage of the insolvency of the IORP by a guarantee fund. The guarantee fund may be a fund operating in more countries, in order to have sufficient guarantees to be provided and to spread the risks.

The cost for the guarantee fund should be limited and take account of the actual risks the IORP and employer represent. On the other hand the costs of determining the actual risk should not be too high. A pragmatic approach towards the assessment of the risks the IORP and the employer take is necessary.

IORP's under art. 17

In a number of countries, the IORP's (have to) guarantee themselves the pensions and they take themselves the investment and/or biometric risks.
In the countries where these IORP's are used, the employer is sometimes not required to finance any of the underfunding, but this has as a consequence that the rights of the employees, pensioners and other beneficiaries may have to be reduced in case of underfunding of the IORP. In that case, the protection of the employees' pensions depends solely on the solvency of the IORP's.

Best practice: Very prudent full funding requirements, taking into account the investment risks and requirement for a very high certainty that the pension fund will not have less assets than liabilities within a period of one year plus regulatory own funds.

However, we would still recommend that these pension funds would take out insolvency insurance in order to increase even further the protection. Obviously, the premiums to the insolvency insurance should be risk based and would therefore be very low for pension funds in countries with high own protection requirements compared to pension funds in other countries where funding requirements are lower.

A balance has to be found between the level of certainty at any particular moment (short term) and the cost to achieve that. Very high funding requirements can be more costly than reasonable funding plus the cost for a guarantee fund.

Treatment of surplus

In many countries, the assets of the pension funds can never return to the employer. This may be an incentive for the employer to negotiate with the IORP an as low as possible financing level of the benefits, especially in schemes that are closed to new participants. A low funding level means a low protection of the employees' occupational pensions.

We agree with the statement in "Rebuilding pensions 1999" that says "An interesting question is to whom the surplus belongs in a defined benefit scheme. In a pure defined contribution scheme, the assets always belong to the plan members and beneficiaries since they take the risk. Similarly, in a defined benefit scheme it seems to us that the surplus should belong to the sponsor(s), i.e. to those that underwrite the plan and, therefore, take the shortfall risk. When there is a surplus, in a going concern situation, the regulation, the plan rules or the fiscal consequences may dictate possible usage of this. If not, a range of possibilities exist such as improving the benefits (e.g. indexing them), decreasing the contribution level or even having contribution holidays. It could also be that the sponsor retrieves money and invests it elsewhere in the company. Any use of the surplus should be decided upon with great care and only after a certain period, since the surplus may be illusionary and could be easily wiped out/turn into a shortfall if market conditions change. In a going concern situation, the surplus gives a cushion of security. If we accept a dynamic minimum funding requirement, it is only for assets in excess of this buffer that any of the above applications of the surplus can be considered"

Best practice: Countries where assets exceeding liabilities calculated with a very safe margin, surplus may be paid to the employer, e.g. Denmark, Finland, The Netherlands or Sweden.

Level of the benefits that needs to be guaranteed by the guarantee schemes

The protection needed depends in our opinion very much on the expectations of the employees.

If e.g. in a country legislation does not provide any minima for vesting and employees do not expect any part of the supplementary pension if they leave before retirement (whether on a voluntary basis, as a consequence of a restructuring or bankruptcy), the need for the protection of these employees pensions is from their prospective fairly low. They did in any case not "count" on this pension. However, in a country were employees vest in proportionate rights (possibly including indexation), the need for protection is very high as these employees take account of this income in their personal financial planning.

Therefore in our opinion, the level of the benefits that needs to be guaranteed should be at least the benefits the employee would expect to receive in case they would need to leave the service of the employer (or the sector) due to a decision of the employer or a restructuring.

A higher level can be guaranteed but may be costly and create a preference for bankruptcy over restructuring.

Communication

Communication of the employee benefits is very important. This communication should include communication on the benefits that will be provided in case of insolvency of the employer and certainly in case of the employer abandoning the further financing of the benefits.

Best practice would be to require that pension plan rules set out clearly the rights of the employees in case of insolvency of the IORP and/or the employer. If in case of insolvency and underfunding, some beneficiaries of the plans have priority, the consequences for the other beneficiaries should be clearly communicated.

Priority rights

In some countries on the wind up of the scheme some beneficiaries (usually the pensioners or older employees) have priority rights over other beneficiaries. This has as a consequence that some beneficiaries' protection may be very low or nihil.

While the reasons for e.g. a priority in the protection of pensioners can be explained, it may seen as unfair to the younger employees and it may also be seen as age discrimination. Furthermore, it may reduce the benefits of these younger beneficiaries such that only a marginal part of their benefits is protected.

In most countries all beneficiaries' rights are reduced proportionally. We would consider this way of dividing the underfunding as fair and possibly best practice.

6. Main recommendations per country

Austria

- The protection of the supplementary pensions financed via book reserves can be improved by requiring sponsors to pay premiums to an insolvency insurer, that should be a multinational as the Austrian market is not deep enough.
- The protection of the supplementary pensions financied via an IORP can possibly be improved by requiring the employers to pay (reduced) premiums to an insolvency insurer.
- On the other hand the costs should be very limited in order to avoid that employers will need to reduce the benefits.

Belgium

- The protection of the supplementary pensions financied via an IORP can possibly be improved by requiring the pension funds to set up fluctuation reserves and/or of by requiring the employers to pay premiums to an insolvency insurer. These premiums should take account of the funding level of and risk taken by the IORP.
- However the costs for the supplementary protection should be limited in order to avoid that employers will close their defined benefit schemes.

Cyprus

- For the few book reserve plans that exist, the protection of the supplementary pensions can be improved by requiring sponsors to pay premiums to an insolvency insurer, that should be a multinational as the Cyprus market is not deep enough.
- For the few defined benefit plans that are financed via an IORP, the protection of the supplementary pensions can possibly be improved by requiring the employers to pay (reduced) premiums to an insolvency insurer.
- On the other hand the costs should be very limited in order to avoid that employers will need to reduce the benefits.

Denmark

- The protection of the supplementary pensions financied via an IORP is fairly high due to the fact that Solvency I rules need to be applied by all IORP's. This protection could even be improved by the requirement for affiliation to a guarantee fund. The costs should be very limited.

Finland

- The protection of the supplementary pensions financed via book reserves can be improved by requiring sponsors to pay premiums to an insolvency insurer, that should be a multinational as the Finnish market is not deep enough.
- The protection of the supplementary pensions financied via an IORP can possibly be improved by requiring formal solvency requirements or by requiring the employers to pay premiums to an insolvency insurer. These premiums should take account of the level of solvency capital in the IORP. However the need for supplementary protection may be limited as all the defined benefit schemes are in run-off.

France

- The protection of the retirement indemnities and occupational pensions financed via book reserves should be improved. This can be introduced by requiring sponsors to pay premiums to an insolvency insurer.

Germany

- The protection of the employees' occupational pensions is in all cases conceived to be adequate.
- For book reserves, "Unterstützungskasse", pension fund and in special cases direct insurance, affiliation to a guarantee fund (PSVaG) is required. This fund covers all vested benefits within limits[*]
- The protection of the supplementary pensions financied via an IORP's falling under article 17 is fairly high due to the high solvency margins and funding levels required. This protection could even be improved by the requirement for affiliation to a guarantee fund.
- On the other hand the costs should be very limited in order to avoid that employers will need to reduce the benefits.

[*] in 2010: 7.665 € pension per month

Greece

- The introduction of minimum financing rules may improve the level of financing and therefore protection of pension benefits.
- The protection of the supplementary pensions can also be improved by requiring the employers to pay (reduced) premiums to an insolvency insurer, that should be a multinational as the Greek market is not deep enough.
- As book reserves are not widely used and not regulated, it is recommended that book reserves are forbidden.

Iceland

- The protection of the supplementary pensions financied via an IORP can possibly be improved by requiring the pension funds to set up a solvency margin or fluctuation reserves and/or by requiring pension funds to pay premiums to an insolvency insurer.
- On the other hand the costs should be very limited in order to avoid that employers will need to reduce the benefits.

Ireland

- The protection of the supplementary pensions financied via an IORP can possibly be improved by requiring the pension funds to set up a solvency margin or fluctuation reserve and/or by requiring pension funds to pay premiums to an insolvency insurer.
- On the other hand the costs should be very limited in order to avoid that employers will need to reduce the benefits.
- As book reserves are not widely used and not regulated, it is recommended that book reserves are forbidden.

Italy

- The protection of the supplementary pensions financed via an IORP can in first instance be improved by introducing more specific legislation and possibly by requiring the employers or the IORPs to reinsure the risk using risk based premiums with an insolvency insurer.
- TFR benefits are adequately protected due the existence of the guarantee fund for this specific compulsory benefit set up by the social security system.

Liechtenstein

- The protection of the vested occupational pensions rights in case of insolvency of the employer is very high and considered as adequate in Liechtenstein.

Luxembourg

- Apart from an issue with respect to the limitation of the vested benefits insured by the German insolvency insurer, the protection of the employees' benefits in case of book reserves and insolvency of the employers is conceived to be adequate.
- The protection of the supplementary pensions financed via an IORP can possibly be improved by requiring the employers to pay (reduced) premiums to the German insolvency insurer.

Malta

- Legislation is under construction and should aim at an adequate protection of the supplementary pensions.
- In order to fully protect the occupational pensions in case of insolvency of the sponsoring employer, it is recommended to introduce a guarantee fund. All pension funds should be affiliated to this fund.

Netherlands

- Only the accrued pension rights and awarded indexation are financed in a prudent way and are well protected. However employees expect increases in the pension rights and the pensions. These indexations are usually conditional on the financial results of the IORP and may therefore not be guaranteed. Some parties are of the opinion that not all beneficiaries understand fully that indexations are conditional and therefore improvement in communication would be useful.
- In order to avoid the reduction in benefits in case of underfunding, affiliation to an insolvency insurance may be appropriate, provided the premiums are low; limited and risk based.

Norway

- The protection of the supplementary pensions financed via book reserves can be improved by requiring sponsors to pay premiums to an insolvency insurer, that should be a multinational as the Norwegian market is not deep enough.
- The protection of the supplementary pensions financied via an IORP is fairly high due to the fact that Solvency I rules need to be applied by all IORP's. This protection could even be improved by the requirement for affiliation to a guarantee fund.
- As book reserves are not widely used and not regulated, it is recommended that book reserves are forbidden.

Portugal

- The measures in force aiming at the protection of supplementary pensions in case of insolvency of the sponsoring employer are fairly adequate and problems can only arise in case of serious underfunding in the penson funds, that need to apply Solvency I type of rules.
- In order to fully protect the occupational pensions in case of insolvency of the sponsoring employer, pension fund may be obliged to affiliate to a guarantee fund. All pension funds should pay premiums to this fund and the level of the premiums should depend on the level of the risk taken by the pension fund.
- As book reserves are not widely used and not regulated, it is recommended that book reserves are forbidden.

Spain

- Apart from the few exceptions, the measures in force aiming at the protection of supplementary pensions in case of insolvency of the sponsoring employer are fairly adequate and problems can only arise in case of serious underfunding in the penson funds. This protection could in theory be improved by the requirement for affiliation to a guarantee fund, but in practice these may be not easy as the costs of such fund could be prohibitive.
- The few exceptions, where book reserves are still allowed, concern closed plans since 1996. in such cases, the entities using book reserves are closely supervised by the financial supervisor and the actuarial calculations have to be performed under assumptions at least as prudent as in the case of pension funds. The protection of

these benefits could also be improved by the requirement for affiliation to a guarantee fund, but this would only be possible in practice if the costs of such fund can be very limited and the guarantee fund would need to be operating on an international level as the market in Spain is not deep enough.

- However the costs for any supplementary protection should be very limited in order to avoid employers to stop providing defined benefit plans

Sweden

- The protection of the supplementary pensions financied via an IORP is fairly high due to the fact that Solvency I rules need to be applied by all IORP's. This protection could even be imporved by the requirement for affiliation to a guarantee fund. The cost should be very limited.
- The protection of supplementary pensions financed via book reserves is provided by the PRI Pensionsgaranti. Therefore the protection of these pensions is considered as adequate in Sweden.

UK

- While the Pension Protection Fund exists and occupational pensions are protected in a reasonable way, this protection can possibly be improved by requiring the pension funds to set up a solvency margin or fluctuation reserves to reduce future calls upon the PPF.
- Increasing the coverage provided by the Pension Protection Fund would be welcome in theory, but the costs for these measures should be limited in order to avoid that employers are moving away from defined benefit plans. This should also be balanced against the high level of mandatory indexation in the UK, which also contributes to the overall protection of benefits currently.
- As book reserves are not widely used and not regulated, it is recommended that book reserves are forbidden.

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