Retirement System Risk Management

Implications of the New Regulatory Order

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Risk Disclosure in the European Insurance Industry: Implications for Occupational Pension Funds

Karel Van Hulle

The original aim of insurance undertakings and occupational pension funds is to pool risks. Through various types of insurance policies, insurance undertakings allow individuals to prepare for their old age by offering them a fixed guarantee. That guarantee is delivered on the basis of an insurance premium paid by policyholders and invested by insurance entities. Similarly, occupational pension funds provided for pension entitlements on the basis of an agreement between the employer and the employees. The entitlement was delivered on the basis of premiums paid by the employer on behalf of the employees and invested by the pension fund at its own risk (often sponsored by the employer).

Because of the volatility in financial markets and increasing longevity, insurance entities and occupational pension funds in the European Union (EU) are moving away from providing fixed guarantees. Investment risk is then no longer borne by the institution, but instead transferred to policyholders (unit-linked businesses) and to the members of the pension fund (defined contribution (DC) plans), who now bear investment risk.

Risk disclosure must take account of this changing environment. It is important to first describe the regulatory changes before analyzing risk disclosure in more detail.

Solvency II: The New Risk-Based Solvency Capital Regime for the European Insurance Industry

All (re)insurance entities, or so-called undertakings, in the EU (about 5,000 in number) must comply with insurance legislation adopted by the Council of the European Union and the European Parliament. This takes the form of a directive, which is a legal instrument addressed to the 28 member states of the EU, requiring them to transpose its provisions into national law.
within a stated period of time. Application of European legislation by member states is supervised by the European Court of Justice. From January 1, 2016, all EAA member states, that is, all EU member states plus Iceland, Liechtenstein, and Norway, must apply the new risk-based solvency capital regime, commonly referred to as Solvency II. This new regime constitutes a complete overhaul of past insurance solvency regulations, and as such, it will have a profound impact on the activities of (re)insurance entities in the EU.

Why Solvency II?

The prior solvency regime, often referred to as Solvency I, was developed in the 1970s (Sandström 2011). It required insurers to set up technical provisions for their expected risks and to create a capital buffer, called a solvency margin, for unexpected risks. The capital buffer mainly looked at underwriting risk. The disadvantage of this limited approach to risk became apparent during the capital market crisis at the beginning of the 21st century. The capital buffer did not require insurers to hold sufficient capital for market risk, and there were no specific rules dealing with concentration risk. As a result, many insurers that were heavily invested in equity suffered major losses when the value of their investments went down.

In general, Solvency I did not contain an incentive for insurers to manage their risks properly. As a result, some insurers were operating with too much capital, while other insurers were underwriting business for which they lacked capital. Furthermore, studies have shown that, when insurers fail, it is less likely due to an insufficient amount of capital, but more likely to a lack of proper governance and poor management (Sharma 2002). This qualitative aspect of prudential supervision, already recognized in Basel II, had not yet been reflected in EU insurance regulation. Another important weakness that resulted from Solvency I is that insufficient attention was being paid to group supervision. Most supervisors in the EU were in favor of solo supervision and looked at group supervision as a form of supplementary supervision, rather than as a form of supervision in its own right.

In terms of public disclosure and supervisory reporting, Solvency I mainly provided for (limited) supervisory reporting. Public disclosure was limited to the filing of financial statements and an annual report. However, these financial statements, which also served as a basis for prudential supervision under Solvency I, were not fully harmonized (European Economic Community 1991). Moreover, comparability of financial statements between undertakings was limited. This was particularly true for the valuation of technical provisions, for which no agreement could be reached on a uniform accounting treatment.
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The 1999 Financial Services Action Plan undertook a reform of the Solvency I regime (European Commission 1999). In contrast to the banking sector, which had already been the subject of a series of reforms, the insurance sector had thus far managed to remain outside the scope of the reforms. It was felt that the creation of an internal market for financial services in the EU could not really take place without a modernization of EU insurance regulation.

Development of Solvency II

The development of the new EU risk-based solvency capital regime started with the European Commission (EC) developing, together with experts from the finance departments of member states and from national supervisory authorities, a Framework for Consultation. This set out the main characteristics of the new solvency regime. On the basis of this Framework, the EC developed a series of questions addressed to the Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS), set up in 2001 as part of the so-called Lamfalussy reform. This grew out of a report submitted by a Committee of Wise Men under the chairmanship of Alexandre Lamfalussy (Lamfalussy 2001). This report emphasized the important role of national supervisory authorities in the practical implementation of EU legislation on financial services. The report also advocated a principles-based approach to regulation, whereby EU regulation should only set principles that could then be implemented by the EC and by national supervisory authorities.

The EC sent out three series of Calls for Advice to CEIOPS over the period 2005–6. This resulted in about 1,000 pages of technical advice subsequently summarized into 60 pages of EU legislation that formed the basis for the new solvency regime. At the request of member states, the EC also codified the 13 existing insurance Directives into one single document, to which were added the new provisions containing the new solvency regime. These replaced the old Solvency I solvency provisions. This document was introduced in 2007 as the official proposal for a Solvency II Framework Directive (European Commission 2007).

Following the Lamfalussy approach, Solvency II was developed as a regulatory regime with different levels. Level 1 contained the basic principles of the new solvency regime. Because of its importance, this level of legislation was adopted by the Council of the European Union and the European Parliament (the co-legislators). Level 2 comprised the implementing measures developed by the EC based upon a delegation from the Council and the European Parliament and upon advice submitted by CEIOPS. Level 3 consisted of Guidelines and Recommendations from CEIOPS to ensure a
common interpretation of the new rules. Finally, at Level 4, a series of measures was put in place to ensure proper enforcement.

After the adoption of the Solvency II Framework Directive by the Council and the European Parliament on November 29, 2009 (European Union 2009), the EC and CEIOPS started to prepare the Level 2 and Level 3 measures during the course of 2009–11. The new regime was supposed to start on November 1, 2012, but the financial crisis, initially believed to only influence the Level 2 implementing measures of Solvency II (CEIOPS 2009a), caused important delays in the process. In order to improve the supervisory architecture in the EU, the EC proposed to transform the existing European committees of supervisors, including CEIOPS, into authorities with more powers and resources in order to strengthen EU prudential supervision. This led to the creation of EIOPA, the successor of CEIOPS (European Union 2010a). The creation of EIOPA in turn made it necessary to amend the recently adopted Solvency II Framework Directive. This was done through a new proposal, called Omnibus II, which the Commission introduced in February 2011 (European Commission 2011). This proposal also included a number of transitional measures not provided for in the Solvency II Framework Directive, but which were felt necessary to smooth the transition from Solvency I into Solvency II.

The negotiation of Omnibus II took more time than expected (three years), for a number of political and technical reasons. On the political side, the European Parliament, whose powers had been increased as a result of the Lisbon Treaty of December 13, 2007 (European Union 2007), wanted to have more say in the development of the new solvency regime. It therefore insisted that a number of topics traditionally dealt with by the EC would now be adopted at Level 1. Furthermore, it insisted that the Solvency II Framework Directive would allow the adoption of Regulatory Technical Standards and Implementing Technical Standards, which would be developed by EIOPA and become legally binding after endorsement by the EC. The advantage of this approach was that both the Council and the European Parliament would then have the possibility to scrutinize the texts before their endorsement at the EC. On the technical side, the low interest rate environment and the volatility in financial markets made it difficult to develop a solution for the treatment of long-term guarantees. It was difficult to agree on the definition of the appropriate risk-free rate for the discounting of technical provisions, since the government bond rate, which had until the break-out of the financial crisis been considered as the reference point for a risk-free rate, could no longer be considered as risk-free. In addition, because of the existence of many different life insurance products, a one-size-fits-all solution for the treatment of long-term guarantees was not possible. Moreover, it was necessary to introduce tailor-made transitional
measures for the existing book of life insurance contracts, which had been negotiated in a completely different legal and economic environment.

Omnibus II was finally adopted on April 16, 2014 (European Union 2014). Because of the delay in the finalization of the Level 1 regulation, it was impossible to proceed with the adoption of the Level 2 and Level 3 rules. As a result, the start date of Solvency II had to be postponed several times. The Level 2 legislation was adopted as a Commission Delegated Act on October 10, 2014, published in the Official Journal of the European Union on January 17, 2015 after a three-month scrutiny by the European Parliament and the Council (European Commission 2014a). Meanwhile, EIOPA had started the development of the Level 3 rules in the form of technical standards (Regulatory Technical Standards and Implementing Technical Standards) and guidelines. All relevant texts were finalized in June 2015. As a result of the delays in the development of Solvency II, the new regime became applicable in 2016. Member states need to transpose the Framework Directive of 2009 (amended by Omnibus II in 2014) by March 31, 2015. In total, the Solvency II package will comprise about 2,000 pages of regulation.

**Essential features of Solvency II**

Solvency II follows the three-pillar approach of Basel II. The first pillar contains the quantitative requirements; the second pillar the qualitative requirements; and the third pillar the supervisory reporting and disclosure requirements. The three pillars are of equal importance and are interlinked. Overarching them is group supervision, which is equally important to solo supervision (see Figure 5.1).

As the new solvency regime applies to all (re)insurance entities, the nature, size, and complexity of the businesses concerned must be taken into account. This is done through the proportionality principle, which applies to all provisions in each of the three pillars. Moreover, this principle must be respected by the EC and by EIOPA in the further development of the Level 2 and Level 3 measures, and it must also guide supervisory authorities when carrying out their task.

Pillar 1 requires the development of a solvency balance sheet in which all assets and liabilities are calculated on a market-consistent basis. Two capital requirements are introduced: a Solvency Capital Requirement (SCR) which reflects unexpected quantifiable risks (such as market risk, credit risk, underwriting risk, and operational risk) and can be calculated on the basis of a standard formula or on the basis of an internal model to be approved by the supervisory authority and a Minimum Capital Requirement (MCR), which represents an absolute floor. If the SCR is breached, the supervisory
authority must analyze the causes for the breach together with the insurance undertaking concerned as part of the Supervisory Review Process (SRP). This dialogue is an essential feature of Solvency II, and remedies must be taken to ensure that the SCR is restored as quickly as possible. If the Minimum Capital Requirement (MCR) is breached, the supervisory authority must place the undertaking into run-off. The SCR does not provide an absolute guarantee, since it is calculated on the basis of a confidence level of 99.5 percent VaR over a one-year time horizon. Figure 5.2 provides an overview of Pillar 1.

Pillar 2 introduces the new governance rules, which require all insurers to implement four functions: risk management, internal control, internal audit, and actuarial. The persons managing these functions as well as the members of the board must be fit and proper. Each undertaking must develop an own risk and solvency assessment (ORSA) at least annually, in which it examines its solvency position in comparison with its SCR. The ORSA, which can be regarded as the DNA of the insurance undertaking, must ensure that the undertaking does not underwrite business for which it lacks the necessary capital. Pillar 2 also introduces new (more extensive) powers for supervisory authorities, such as on-site and off-site inspection, and stress testing.
Pillar 3 deals with public disclosure and supervisory reporting. All insurers must produce a Solvency and Financial Condition Report which must be made publicly available. In addition, they must provide supervisory authorities with the regular ORSA supervisory report, along with annual and quarterly quantitative templates specifying in greater detail and supplementing the information presented in the Solvency and Financial Condition Report. Small insurers may be relieved from some of the supervisory reporting requirements on the basis of the proportionality principle.

As group supervision has now been elevated to the same importance as solo supervision, parent undertakings will also have to calculate a group SCR and a group MCR. They must conduct a group ORSA, prepare and publish a Group Solvency and Financial Condition Report, and submit to national supervisory authorities annual and quarterly quantitative templates.

**Occupational Pension Funds**

Occupational pension funds became the subject of EU regulation rather late, to some extent due to the fact that pension policy had traditionally been regarded as ‘national territory.’ In accordance with EU law, member states retain full responsibility for the organization of their pension systems, as well as for decisions on the relative roles of each of the three retirement system pillars (social security, occupational pension funds, and private insurance/savings). Attempts by the EC to create an internal market for occupational pension funds were initially strongly resisted by member states, as they were considered a direct attack on what had been traditionally regarded as an area of exclusive competence for member states.

Today, there are about 110,000 pension funds in the EU, most of which are situated in Ireland (62,000), the UK (44,600), the Netherlands (381),
Italy (310), Belgium (199), Portugal (191), Germany (178), and Sweden (85). There are virtually no employer-based pension funds in the new member states in Central and Eastern Europe, or in the Baltic States.

**The Institutions for Occupational Retirement Provision (IORP) Directive of 2003**

The 1999 Financial Services Action Plan stressed the urgent need to deal at EU level with the prudential supervision of institutions for occupational retirement provision (IORPs). Two main reasons were given. First, occupational pension funds are major financial institutions with a key role in ensuring the integration, efficiency, and liquidity of financial markets. Second, making them subject to a coherent EU legislative framework would allow them to benefit fully from the advantages of the internal market.

The first step on the way to an internal market for occupational pension funds was made by the IORP Directive. An occupational pension fund is defined in Article 6(a) of this Directive as

> an institution, irrespective of its legal form, operating on a funded basis, established separately from any sponsoring undertaking or trade for the purpose of providing retirement benefits in the context of an occupational activity on the basis of an agreement or a contract agreed, individually or collectively between the employer(s) and the employee(s) or their respective representatives, or with self-employed persons, in compliance with the legislation of the home and host Member States. (European Community 2003: 5)

The Directive required occupational pension funds to be registered and to be supervised by a competent supervisory authority. It laid down some solvency rules (technical provisions, investment rules, regulatory own funds) and made it possible for undertakings located in one member state to sponsor an occupational pension fund authorized in another member state. The prudential rules for occupational pension funds that offer defined benefits are similar to those applying to life insurance undertakings. They are therefore also required to hold regulatory own funds that serve as a buffer. Occupational pension funds that only provide for DC pension schemes do not have to hold a capital buffer.

As far as technical provisions are concerned, Article 15 of the IORP Directive required IORPs to establish an adequate amount of liabilities corresponding to the financial commitments arising out of pension contracts. Where IORPs provide for defined benefit (DB) pension schemes, they are required to establish sufficient technical provisions in respect of the total range of these schemes. The minimum amount of these technical provisions is to be calculated on a forward-looking, going-concern basis, including a margin for adverse deviation. The Directive does not require a
risk-free discount rate: rather, it allows the use of asset-based rates, high-quality corporate bond yields, and government bond yields. Article 14(2) of the IORP Directive provides for supervisory powers if an institution fails to establish sufficient technical provisions, but it does not include the explicit supervisory power to require the IORP to increase the amount of technical provisions.

In terms of transparency, the Directive requires an occupational pension fund to provide certain information to the competent authorities, such as its annual accounts and annual reports. Yet there are no specific rules for these annual accounts and annual reports. The authorities are particularly interested in collecting information about funding, operational, market, liquidity, and credit risks (EIOPA 2011). Members and beneficiaries must also receive, on request, a copy of the annual accounts and of the annual report, as well as of the statement of investment policy principles. Each member may also request detailed and substantial information on key elements of the pension scheme.

Revision of the IORP Directive

Though one of the main objectives of the 2003 Directive was to open up the market for cross-border pension arrangements, it must be admitted that the Directive was not a success. Indeed, the number of cross-border arrangements increased marginally from 70 in June 2008 to 76 in 2015. Compared with the total number of occupational pension funds in the EU (110,000), this can hardly be called an impressive achievement (EIOPA 2015). There are numerous reasons for this: the need for an occupational pension fund to respect the local social and labor law (and the lack of clarity about this concept), the need to ensure that the technical provisions are fully funded at all times in the case of cross-border activity, the difficulty of transferring pension assets from one member state to another, and the difficulties in dealing with different national supervisory authorities in home and host member states. Although the last topic was governed by the so-called Budapest Protocol in the context of CEIOPS (CEIOPS 2009b), the working relationships between home and host authorities were made difficult by a lack of clarity about the applicable rules. CEIOPS therefore called several times on the EC to revise the IORP Directive on this particular issue.

While the EC was preparing an overhaul of its solvency rules for insurance undertakings, the question was raised in 2006 whether occupational pension funds should be included in the scope of the new solvency regime (Solvency II). There was some logic to this, particularly for DB schemes. In fact, past reference had been made in the IORP Directive to the Solvency I rules applying to life insurance undertakings, rules that would be abolished...
under Solvency II. It would therefore seem logical to make the new solvency rules also applicable to occupational pension funds. Yet after reflection, the EC decided not to extend the scope of application of Solvency II to occupational pension funds because the Quantitative Impact Studies (QIS) that analyzed the potential impact of the new solvency regime on the insurance industry did not cover occupational pension funds. It was believed to be imprudent to extend the application of the new regime without prior examination of the potential impact. Yet organizing a new QIS specifically for occupational pension funds would have delayed the introduction of the new solvency regime.

During the negotiation of the Solvency II Framework Directive in the European Parliament, several amendments were tabled asking for an extension of the scope to include occupational pension funds. In the end, the Council and the European Parliament decided to keep the status quo. In the Preamble of the Solvency II Framework Directive (recital 138), the EC was asked to conduct a review of the IORP Directive as soon as possible.

On July 7, 2010, the Commission published a Green Paper for consultation on adequate, sustainable, and safe European pension systems (European Commission 2010). It drew almost 1,700 responses from across the EU, including from member states, national parliaments, business and trade union organizations, civil society, and industry representatives. The Green Paper puts much emphasis on the adequacy and sustainability of pension promises. In order to ensure sustainability, the Green Paper proposed a revision of the solvency rules in the IORP Directive. In order to ensure that occupational pensions can actually deliver what they promise, the liabilities and the assets to cover those liabilities must be properly reflected on the solvency balance sheet. In a follow-up White Paper on adequate, sustainable, and safe European pension systems of February 16, 2012, the EC confirmed its intention to revise the IORP Directive (European Commission 2012a).

On April 7, 2011, the EC asked EIOPA for advice on a revision of the IORP Directive. The EC gave three main reasons: the development of measures which would simplify the setting up of cross-border pension schemes; the introduction of a risk-based solvency regime for occupational pension funds coupled with measures that would allow pension funds to benefit from risk mitigation mechanisms; and a modernization of the prudential rules covering DC schemes. EIOPA organized two consultations on its draft advice. On February 15, 2012, EIOPA came forward with its final advice (518 pages), and it organized an exchange of views among stakeholders during a public hearing in March 2012 (EIOPA 2012).

In its advice on possible new (harmonized) solvency rules, EIOPA proposed the adoption of a holistic balance sheet to allow full comparability between the different risk-sharing mechanisms that exist in member states.
The allocation of the demographic and financial risks of occupational pension commitments differs greatly between member states. Thus, risks are sometimes borne by the pension fund itself (e.g., in the Netherlands), by the sponsoring undertaking (e.g., in the United Kingdom), by the members and beneficiaries (e.g., in the case of DC pension schemes), or any combination thereof. European pension funds also use different security mechanisms, such as solvency capital, sponsor support, and pension protection schemes, and they use different benefit adjustment mechanisms, such as conditional indexation, for-profit mechanisms, and the possibility of reducing accrued benefits as a measure of last resort.

In the holistic balance sheet proposed by EIOPA, all security and benefit adjustment mechanisms must be explicitly included. Thus, the asset side would include the value of sponsor support and pension protection schemes, while the liability side takes account of the unconditional, conditional, and discretionary nature of the benefits as well as possible benefit reductions. The holistic balance sheet follows the market-consistent approach of Solvency II: all assets and liabilities must be valued on a market-consistent basis. In the view of EIOPA, this is the only way to achieve a comparable and realistic view of an occupational pension fund’s financial situation. The Solvency Capital Requirement (SCR) in the holistic balance sheet measures whether the pension fund has sufficient capital, security mechanisms, and/or benefit adjustment mechanisms to absorb demographic and financial shocks given a certain confidence level (99.5 percent VaR over a one-year time horizon).

At the request of the EC, EIOPA carried out a QIS in 2012 to collect information on the financial impact of the holistic balance sheet on occupational pension funds. Results of this QIS were published in July 2013 (EIOPA 2013), and eight member states participated in the exercise: Belgium, Denmark, Ireland, the Netherlands, Norway (member of the European Economic Area), Portugal, Sweden, and the United Kingdom. In the benchmark scenario, IORPs were requested to include all security and benefit adjustment mechanisms on their holistic balance sheet, and to value all assets and liabilities on a market-consistent basis by discounting future cash flows using the risk-free interest rate. It is important to note that IORPs providing only pure DC schemes, which do not provide any guarantees, were not included in the QIS exercise.

In its report on this QIS exercise, EIOPA pointed out that the overall impact of the holistic balance sheet differed substantially across participating countries, from substantial surpluses in some countries to large shortfalls in other countries. This is due to differences in the availability of financial assets and the relative strength of the existing security and benefit adjustment mechanisms. For instance, German ‘Pensionsfonds’ are able to reduce the SCR to zero through the loss-absorbing capacity of sponsor support and
pension protection schemes, the latter effectively absorbing all residual risk. On the other hand, the German ‘Pensionskassen’ in most cases have sponsor support but are not covered by the national pension protection scheme. This results in a relatively modest shortfall relative to liabilities and the SCR. In Ireland, there was a substantial shortfall because the sponsor support on which the IORP can count is not legally mandatory, so the employer can choose not to provide support. In the UK, there is a shortfall with respect to liabilities as well as the SCR. All IORPs in the UK are covered by unlimited sponsor support, but the value of sponsor support recognized is, in most cases, not sufficient to close the gap, nor does the Pension Protection Fund guarantee the full level of benefits. EIOPA decided to continue its technical work to improve the definitions and methodologies for implementing the holistic balance sheet. In 2014, it launched a public consultation on ‘Further Work on Solvency of IORPs’ (EIOPA 2014), met with great reservations by the pension fund sector.\(^2\)

The main argument against introducing a Solvency II type of regime was that the holistic balance sheet approach was conceptually wrong. It suggested that a volatile mark-to-market valuation of pension liabilities would be unsuitable for the assessment of very long-duration pension liabilities, since reflecting these liabilities at their current market value would be purely theoretical and not informative on future developments of the IORP’s financial position. Other arguments referred to the unacceptable burden that such a regime would place on IORPs and their sponsors, with the consequence that employers would no longer want to provide this important social benefit and that members’ benefits would be lowered as the members would have to bear additional costs. The holistic balance sheet would not be suitable as a regulatory instrument at EU level. At most it could serve as an internal risk management tool. As stated by Pensions Europe: ‘Putting more money aside to cover risks that might be overcome over time would also make long-term investment financing of the economy more difficult and would have a substantial impact on further economic development, innovation and growth’ (2015: 3).

The issue of volatility was also discussed at the OECD, which concluded that disclosure to plan stakeholders based on current market values of pension assets and liabilities may be appropriate to increase transparency, and the use of current market values could improve risk management. However, regulators should operate flexibly when reviewing a scheme’s funding position or regulators should enable pension funds and plan sponsors to dampen somewhat the volatility of market prices when determining contributions. (Yermo and Severinson 2010: 4–5)

Meanwhile, after serious lobbying by the social partners at EU level,\(^3\) and by an alliance of five governments (Belgium, Germany, Ireland, the Netherlands, and the United Kingdom), published on the website of the
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Belgian Federation of Pension Funds (BVPI), the EC announced in May 2013 that it would come forward with a proposal to revise the IORP Directive without a Solvency II-type regime. The proposal was presented in March 2014 (European Commission 2014b). Although it left the solvency rules in the 2003 Directive largely untouched, the proposal led to a great deal of controversy in the EC and the business community. Within the EC, the Impact Assessment Board, whose opinion is required for every proposal made by the EC, refused to give a positive opinion on the proposal to revise the IORP Directive. In the business community, Business Europe called for ‘a thorough overhaul’ of the new Commission proposal. This statement led to an opposing statement in December of 2014 by a number of organizations representing civil society, insisting that ‘this modest proposal’ should be adopted as quickly as possible. Under the Greek and Italian Presidencies, the Council made swift progress in the course of 2014 and adopted its position on the proposal on December 10, 2014. This position enabled negotiation with the European Parliament. However, because it was uncertain whether the EC would withdraw its proposal, the European Parliament only appointed a Rapporteur for the proposal in December 2014. The discussion within the European Parliament is ongoing, with a vote in the European Parliament to be followed by negotiations with the Council and with the EC. The plenary vote in the European Parliament took place in December 2015. Final approval by the Council and the European Parliament seems likely during the course of 2016.

Essential features of the Revised IORP Directive Proposal

The revised IORP proposal had four key objectives: (1) to improve governance and risk management within IORPs; (2) to remove the remaining obstacles for cross-border provision of services; (3) to ensure that supervisors have the necessary tools to effectively supervise IORPs; and (4) to provide clear and relevant information to members and beneficiaries.

While there was a great deal of disagreement about the usefulness of introducing quantitative rules similar to Solvency II, most stakeholders agreed that there was a need to improve the governance requirements for occupational pension funds (European Commission 2012b). A number of examples of failures or difficulties resulting from a lack of risk management in pension funds were provided in the EC’s Impact Assessment Report accompanying the Revised IORP Directive Proposal (2014c). There also was a large degree of support for improved information for pension scheme members and beneficiaries, particularly in the case of DC pensions.

The governance provisions (Articles 21 to 30) were largely borrowed from Solvency II, (Articles 40 to 50 of the Solvency II Framework Directive)
although they are less detailed. IORPs will have to put in place key governance functions: risk management, internal audit, and actuarial (only required for IORPs that run DB pension schemes). Internal control is not established as a separate function. The persons occupying these functions must be fit and proper. Great importance is attached to proper risk management. Similar to the ORSA for insurance undertakings under Solvency II, IORPs will need to carry out their own risk assessment by producing a risk evaluation for pensions in order to document that assessment (Article 29). If conducted properly, this risk evaluation should clearly show any funding gaps and force IORPs to think about ways and means to close that gap. In the proposal, the EC can further develop the principles in the Directive concerning risk evaluation in a Delegated Act. However, the Delegated Act ‘shall not impose additional funding requirements beyond those foreseen in the Directive’ (Article 30).

As under Solvency II (Article 29 of the Solvency II Framework Directive), supervision of IORPs will have to be based on a prospective and risk-based approach (Article 61). The proposal (Article 63) also introduces the Supervisory Review Process, which is a key element of Solvency II (Article 36 of the Solvency II Framework Directive). Although Article 63 of the proposal is more modest than Article 36 of the Solvency II Framework Directive, it still upgrades the role of the supervisory authorities by requiring them to carry out an assessment of the qualitative requirements relating to the system of governance, of the risks the institution faces, and of the ability of the institution to assess those risks. It also introduces stress-testing as a monitoring tool. IORPs must also make available to the competent authorities a copy of their risk evaluations for pensions (Article 64). New provisions (Articles 66 to 71) deal with professional secrecy; the transmission of information to central banks, monetary authorities, European Supervisory Authorities—EIOPA, European Securities and Markets Authority (ESMA), and European Banking Authority (EBA)—and the European Systemic Risk Board (ESRB); the disclosure of information to government administrations responsible for financial legislation; and conditions for the exchange of information.

A crucial feature of the proposal concerns the information to members and beneficiaries. It introduces a Pension Benefit Statement standardized at EU level (Articles 40 to 54) that provides pension scheme members with simple and clear information about their individual pension entitlements. It aims to support informed decision-making about pension adequacy (answering the question ‘do I need to save more to maintain my standard of living after retirement?’) and investment strategy (answering the question ‘is my investment approach right?’). The Pension Benefit Statement was inspired by the Key Investor Document (KID) required under the legislation on open investment funds (European Union 2010b). It is particularly important in the case of DC pension schemes where members bear
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investment risk. In order to have a standardized document, the proposal provides for the EC to further specify the form and the contents of the Pension Benefit Statement in a Delegated Act (Article 54). The proposal also provides for information to be given to prospective members (Article 55), to members during the pre-retirement phase (Article 56), and to beneficiaries during the pay-out phase.

The Council adopted its position on the EC proposal in December of 2014 (the so-called ‘general approach’). Any disagreements between the Council and the European Parliament will be dealt with during a Trilogue, in which both co-legislators and the EC will participate. The Council’s position departs to some extent from the proposal introduced by the EC. The most important departures include the fact that the Council does not accept any Delegated Act, which means that the provisions in the Directive on subjects such as the Risk Evaluation for Pensions and the Pension Benefit Statement will have to be self-sufficient. Moreover, the Council introduces internal control as the fourth key function. The Council also considers that persons running the IORP should have adequate professional qualifications collectively, rather than individually. The Council further details the contents of the Risk Evaluation for Pensions. And the Council removed some of the form requirements for the Pension Benefit Statement and made a clearer distinction between the information to be given in the case of a DC pension scheme and a DB pension scheme.

**Comparison between Insurance Undertakings and Occupational Pension Funds**

The discussions about applying Solvency II measures to occupational pensions clearly show that there often is a lack of understanding about the differences between insurance entities and pension funds. Identifying who bears the ultimate risk and what types of risk disclosures are relevant is thus in order.

**Are occupational pension funds financial institutions?**

It is often argued that occupational pension funds are financial institutions like banks or insurance undertakings. Accordingly, the same risk-based solvency approach should apply to all such categories of financial institutions, and doing otherwise would destroy the level playing field in the market.

Nevertheless, this view overlooks the fact that occupational pension funds are institutions created by the social partners, employers, and employees. It is for them to decide what pension entitlements will be available and under
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which conditions. Under this latter perspective, several consequences flow. First, in terms of the definitive character of the pension promise: a pension promise agreed between the social partners can more easily be changed than an insurance contract. Second, in terms of the party that bears the ultimate risk: occupational pension funds are linked to a sponsoring employer, while insurance undertakings are ultimately liable for the risks which they underwrite. Third, in terms of transparency: because of their close linkage to a sponsoring employer, there may be less need for occupational pension funds to provide information (such as financial statements) to the public at large than is the case for insurance undertakings. Fourth, in terms of the supply of capital: the suppliers of capital to an occupational pension fund (employers and members) have more extensive commitments than providers of equity to insurance undertakings. They may be required to provide additional capital in the case of a shortfall, they might have to accept a reduction in the benefits, or they may have to spread the cost between generations for schemes of a collective nature. Fifth, in terms of the governance of the institution: occupational pension funds are not-for-profit entities and the members or their representatives are often closely involved in the governance of the institution. Sixth, in terms of supervision: the average duration of pension fund liabilities is longer than in the case of insurance undertakings, which means that more time can be given to occupational pension funds to recover a funding deficit. Seventh, in terms of the competent authority for supervision: as occupational pension funds can be seen as part of the broader social policy of the country, the competent authority for the supervision of occupational pension funds is not necessarily the same as the competent authority for the supervision of insurance undertakings.

Despite these differences, occupational pension funds manage assets worth €2.6 trillion and are important players in the financial market. They are important institutional investors and can compete with insurance entities. This is particularly true in a number of European countries (for instance, Sweden), where insurance entities carry the pension liabilities on their balance sheet. Less stringent investment rules and the use of a discount rate that is not risk-free (for instance, determined by reference to the expected rate of return on assets) can distort a pension fund’s true financial situation. It can therefore rightly be argued that the overall supervisory regime for occupational pension funds should broadly follow that which applies to banks and insurance entities. This is also valid from a financial stability point of view, considering the overall importance of occupational pension funds and the size of DB pensions. In terms of transparency, it is difficult to argue that members should not be informed about the funding position of their DB pension scheme. In the end, it is all about risk. Information based upon a mark-to-market valuation, properly applied and taking into account the long duration of pension liabilities, is still the best reflection of risk.
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The movement from DB to DC

Initially, the workplace-based pension schemes offered in Europe were DB schemes. The employer committed to pay to the employee a lifetime monthly benefit on retirement for each year of service. The risks during the accumulation phase (e.g., investment and operational risk) and the biometric risk during the pay-out phase (mortality) are fully borne either by the employer, the pension fund, or both. By contrast, in DC schemes, the employer commits to contributing on behalf of the employees a certain cash amount per month of service. At retirement, the employee can access the savings accumulated in the pension fund to finance the pay-out phase, and risks during the accumulation phase are fully borne by the employee. The employee also fully bears the biometric risk during the pay-out phase, unless national law mandates the purchase of an annuity (as was the case in the UK until recently). Between the two ends of the spectrum, there are a number of hybrid schemes such as average-salary DB schemes, DC schemes with guarantees, part DB/DC schemes, etc. Hybrid schemes also share the risks between employers and employees.

DC schemes are comparable to investment funds because the outcome depends entirely on investment returns. DB schemes are comparable to life insurance products because they offer protection against risk. DB schemes are not necessarily risk-free for members and beneficiaries: they may reduce accrued pension rights if their funding position deteriorates. This happened, for instance, in the Netherlands, where since the outbreak of the financial crisis, 68 IORPs were compelled to curtail accrued pension rights, affecting 300,000 individuals. In the UK, pension funds that fail may be taken over by the Pension Protection Fund, but in that case, pension rights are cut by 10 percent (European Commission 2014c).

For a number of reasons such as the low interest rate environment and the increase of longevity, many occupational pension funds have discontinued DB pension schemes and are now operating DC pension schemes. In the EU, the predominant pension scheme is DC in Bulgaria, Denmark, Ireland, Greece, Spain, France, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Austria, Poland, Romania, Slovenia, and Slovakia; while it is DB in Belgium, Germany, the Netherlands, Portugal, Finland, Sweden, and the United Kingdom (European Commission 2014c). Those who oppose the introduction of risk-based solvency requirements for occupational pension funds argue that the introduction of such a regime could further fuel the movement towards DC pensions. The solvency debate is largely limited to those occupational pension funds that offer DB pension schemes. Already today, the IORP Directive provides for a different treatment between IORPs that operate a DB pension scheme and IORPs that operate a DC pension scheme. It is only in the first case that IORPs
must hold a capital buffer. If a risk-based solvency regime were to be broadly introduced, that distinction would remain. But IORPs that only operate DC pension schemes would need to introduce a capital buffer for operational risk.

The movement from DB to DC can also be seen in the insurance industry. Low interest rates and rising longevity have led many insurers to avoid long-term guarantees and instead introduce various forms of unit-linked products whereby the policyholder bears the ultimate investment risk. By doing so, insurance undertakings will need to hold less capital.

Looked at from a Solvency II perspective, occupational pension funds and insurance undertakings find themselves in a similar situation: as both move away from offering some form of hard guarantee, they must hold less capital. This is not so much the result of the new risk-based solvency regime, but the logical consequence of a policy change responding to the new socio-economic environment. For both sectors, the question that remains is how to deal with existing contracts that offer long-term guarantees. Under Solvency II, this matter has been dealt with in the context of the amendment of the Solvency II Framework Directive by Omnibus II. A similar solution (including a long transition period) could also be introduced for occupational pension funds. Key in this respect is an agreement on the applicable risk-free discount rate for the calculation of pension liabilities.

Risk Disclosure

The transparency requirements under Solvency II (Pillar 3) distinguish between supervisory reporting and public disclosure. At present, the EU requirements (which are minimum requirements) on supervisory reporting and public disclosure for insurance entities and pension funds are relatively modest. This will fundamentally change for insurers under Solvency II. For the first time, harmonized information will be available at the EU level, both to national competent authorities (and to EIOPA), and to the public at large. This will be done through a supervisory reporting package which includes quarterly and annual reporting templates, through the Solvency and Financial Conditions Report, and through the annual accounts and annual report. Both in the supervisory reporting package and in the Solvency and Financial Conditions Report, risk disclosure plays an important role. Risk disclosure under Solvency II relates to the risks incurred by the insurance entity and it will be available to the public at large.

For occupational pension funds, the proposal to revise the 2003 Directive will introduce more elaborate supervisory reporting requirements. Because of the absence of harmonized Pillar 1 requirements (on capital and on valuation of assets and liabilities), the information collected by national
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competent authorities and transmitted to EIOPA or to the ESRB will remain
difficult to compare. In terms of public disclosure, occupational pension
funds are not required to provide any specific information about the risks
incurred to the public at large. The information requirements are limited to
the prospective members, members, and beneficiaries. A key element in the
disclosure to the members is the new proposed Pension Benefit Statement.
Risk disclosure in the case of occupational pension funds is directed to the
members and beneficiaries and covers the risks related to their pension
scheme. This information is not available to the public at large.

Solvency and Financial Conditions Report (SFCR)
The SFCR is a new document introduced under Solvency II, which seeks to
further market discipline. Article 51 of the Solvency II Framework Directive
lists the main elements, which must be disclosed in the SFCR:

(1) a description of the business and the performance of the undertaking;
(2) a description of the system of governance and an assessment of its
adequacy for the risk profile of the undertaking;
(3) a description by risk category of the risk exposure, concentration,
mitigation, and sensitivity;
(4) a description—separately for assets, technical provisions, and other
liabilities—of the bases and methods used for their valuation,
together with an explanation of any major differences in the bases
and methods used for their valuation in financial statements; and
(5) a description of the capital management process.

These requirements are further elaborated upon in Articles 290–303 of the
Delegated Act of November 2014. Article 295 of the Delegated Act deals
specifically with disclosures related to the risk profile of the undertaking.
These include:

(1) quantitative and qualitative information regarding the risk profile,
separately for underwriting risk, market risk, credit risk, liquidity risk,
operational risk, and other material risks;
(2) information regarding the risk exposure (including from off-balance
sheet positions and the transfer of risk to special purpose vehicles),
such as a description of the measures used to assess risks within the
undertaking, a description of the material risks that the undertaking
is exposed to, and a description about the investment of assets in
accordance with the prudent person principle;
a description of the material risk concentration to which the undertaking is exposed;
(4) a description of the techniques used for mitigating risks and the processes for monitoring the continued effectiveness of these techniques;
(5) with regard to liquidity risk: the total amount of the expected profit included in future premiums;
(6) with regard to risk sensitivity: a description of the methods used, the assumptions made, and the outcome of stress-testing and sensitivity analysis for material risks and events; and
(7) other information regarding the risk profile of the insurance undertaking.

In case of major developments significantly affecting the relevance of the SFCR, the information must be updated frequently.

Insurers are not required to disclose any specific information about specific risks incurred by policyholders. The presumption is that, if all relevant risks are properly managed by the undertaking, the solvency position resulting from this will most likely (subject to the agreed confidence level) allow the insurer to deliver its promises to policyholders. In terms of specific product-related disclosures to policyholders, the Solvency II Framework Directive (Articles 183–6) includes the provisions of the earlier Directives which deal particularly with the pre-contractual information to be delivered to policyholders. These provisions were not updated during the negotiation of Solvency II. Most member states have, however, extended the information requirements in their national insurance legislation, as part of their insurance contract law.

**Risk disclosure by occupational pension funds**

As indicated before, present EU legislation does not impose any public disclosure on occupational pension funds. Pension scheme arrangements agreed between an employer and its employees are regarded as private arrangements. Moreover, the beneficiaries of the pension scheme arrangements are at the same time members of the pension fund, so the disclosure provisions in the 2003 Directive are limited to information requirements directed to the members and beneficiaries. The information to be given to the members and beneficiaries in accordance with Article 11 of the 2003 Directive comprises the annual accounts and annual reports, the statement of investment principles, and some information concerning the pension benefits. Members bearing investment risk must receive information concerning investment options, along with information on risk exposure and costs related to the investments.
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The proposal to revise the 2003 Directive does not fundamentally change this approach. Contrary to Solvency II, the proposal does not introduce any requirement for occupational pension funds to disclose their overall risk position to the outside world. However, following the advice of EIOPA, the proposal attaches a great deal of importance to more in-depth information of the members through the new Pension Benefit Statement. This Statement must be sent to each member at least once every 12 months free of charge with an explanation of any material change to the information contained in the pension statement compared to the previous year in an accompanying letter. The statement should be easily understandable and should not be more than two pages. It should clearly state whether there is a full guarantee (by the institution or the sponsoring undertaking), no guarantee at all (where the member bears the investment risk), or a partial guarantee. Where a guarantee is provided, the statement must briefly explain the nature of the guarantee, the current level of financing of the member’s accrued individual entitlements, the mechanisms protecting accrued individual entitlements, and any benefit reduction mechanisms. The statement must further include information about the balance after calculation of the contributions and the costs and show the projected benefits under various hypotheses as well as give information about past performance.

For pension schemes where members bear investment risk, the pension benefit statement must contain information about the risk and return profile showing a graphical indicator of the risk and return profile of the pension scheme or, where applicable, of each investment option. For pension schemes where members bear investment risk and where they have a choice between different investment options, the statement must indicate the investment profiles providing a list of the investment options available and a short description of each option. For pension schemes where members bear investment risk and where an investment option is imposed on the member by a specific rule specified in the pension scheme (default option), additional information must be provided concerning the rules based on actual age, the rules based on the member’s targeted retirement age, and other rules. The EC will further elaborate the details both in terms of form and substance by way of a Delegated Act.

In addition to the Pension Benefit Statement, the proposal includes information requirements for prospective members, for members during the pre-retirement phase, and for beneficiaries during the pay-out phase. On request, members or beneficiaries should receive a copy of the annual accounts and annual reports and of the statement of investment policy principles.

In the ‘general approach’ agreed by the Council on December 10, 2014, a clearer distinction is made between the information to be provided in the Pension Benefit Statement where the pension scheme provides for a given level of benefits and where the pension scheme does not provide for a given...
level of benefits. For pension schemes where members bear investment risk, the Pension Benefit Statement should provide an explanation of investment risks which are materially relevant, a brief explanation of the actual return, and very importantly, a statement that the lowest risk profile does not mean a risk-free investment.

Since in most member states pension scheme arrangements move away from providing specific guarantees, a proper disclosure of the risks associated with DC pension schemes is particularly important, as the members of the pension scheme bear the ultimate risk of the investment. The proposed revision of the 2003 Directive responds to this concern. It was the intention of the EC to produce a uniform Pension Benefit Statement, similar to the Key Investor Document for open investment funds (UCITS). The Council does not seem to want that and has removed the possibility for the EC to introduce such a statement by way of a Delegated Act.

One should not, however, forget that there are still many DB pension schemes in the EU. For the members of those schemes, the situation does not fundamentally change. There is no way for them to find out to what extent the occupational pension fund is ‘at risk.’ The risk evaluation for pensions, which should allow occupational pension funds to have a better insight into their risk position, remains an internal document that is only available to the management of the pension fund and to the competent authority. Yet risk evaluation does not mean much if it is not based on agreed valuation standards. These valuation standards should reflect proper risk management. This means that it will be difficult to move away from a market-consistent valuation. There are various ways in which a market-consistent valuation can be calculated, particularly for pension liabilities (Actuarial Association of Europe 2015). Problems concerning the back book can be dealt with through long transition periods and through an appropriate definition of the risk-free discount rate.

Conclusion
The development of an EU risk-based solvency capital regime will seriously enhance the quality of risk management by insurance entities. Through the Solvency and Financial Condition Report, it will be possible to get a better insight into how insurers manage their risks and their related capital positions. Public disclosure of these documents will further stimulate insurance undertakings to do it right.

It is regrettable that the reforms recently proposed for pension funds do not go all the way. Although it can be argued that occupational pension funds should not make their solvency positions public just as insurance undertakings do, it would nevertheless be beneficial to them if they were
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required to follow clear rules in terms of how to draw up a solvency balance sheet. This chapter has shown that the development of a risk-based solvency balance sheet in the case of occupational pension funds is more complex than in the case of insurance undertakings. Yet it could be possible to develop such a risk-based solvency balance sheet in stages, for instance by starting the process with a requirement for occupational pension funds to draw up a market-consistent balance sheet and impose risk-based capital requirements in a second stage. Members of DB pension schemes should have the right to know whether their pension fund is at risk, whether there is a funding gap, and how the pension fund intends to address this. Existing problems relating to the back book can be dealt with through long transition periods and through an appropriate definition of the risk-free discount rate.

In terms of risk disclosure, the introduction of a Pension Benefit Statement is a positive development. It allows members of occupational pension funds who bear the risk of their investment to gain a better insight into the risks that they incur and the final entitlement that they could expect based upon their investment choice or the choice made on their behalf by the employer (as a default option).

The absence of a proper solvency regime for pension funds in the EU creates an unfair treatment between policyholders of insurance undertakings and DB pension scheme members. This cannot be justified by the differences between a pension promise and an insurance contract. Members of DB pension schemes should have the right to know whether their pension fund is at risk, whether there is a funding gap, and how the pension fund will seek to address this. This is in the end a question of consumer protection. Through the absence of proper disclosure, DB pension scheme members are not currently in a position to protect themselves in the EU. The pension funds stress test launched by EIOPA in May 2015 coupled with the quantitative assessment of a potential use of the holistic balance sheet may provide some further insight into the possible consequences of introducing a risk-based solvency regime for pension funds in the EU.

Glossary of Terms

CEIOPS Committee of European Insurance and Occupational Pensions Supervisors
EAA European Economic Area
EBA European Banking Authority
EC European Commission
ECON Economic and Monetary Affairs Committee of the European Parliament
Risk Disclosure in European Insurance

EIOPA European Insurance and Occupational Pensions Authority
ESMA European Securities and Markets Authority
EMPL Employment and Social Affairs Committee of the European Parliament
ESRB European Systemic Risk Board
FEMM Women’s Rights and Gender Equality Committee of the European Parliament
IORP Institutions for Occupational Retirement Provision
JURI Legal Affairs Committee of the European Parliament
MCR Minimum Capital Requirement
QIS Quantitative Impact Study
SCR Solvency Capital Requirement
SFCR Solvency and Financial Conditions Report
Solvency II Directive 2009/138/EC of Nov. 25, 2009 establishing a new risk-based solvency regime for insurance and reinsurance undertakings in the EU

Endnotes
2. See, e.g., the comment letters from the UK National Association of Pension Funds (www.napf.co.uk), the Dutch Pensioenfederatie (www.pensioenfederatie.nl), and the European organization representing occupational pension funds, Pensions Europe (www.pensionseurope.eu).
3. See the joint letter of the European Trade Union Confederation (ETUC) and Business Europe of Feb. 14, 2012.

References
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Authority) and the European Supervisory Authority (European Securities and Markets Authority). <http://ec.europa.eu/finance/insurance/solvency/solvency2/index_en.htm>.


