

A Common Framework for Pension Contracts,
Irrespective of the Type of Contract or the Type of
Provider

Informing Participants, Employers and National Governments about the Distribution
of Risks in Pension Contract

Rick Hoogendoorn, Wilfried Mulder and Erik Schouten

A common framework for pension contracts, irrespective of the type of contract or the type of provider

Informing participants, employers and national governments about the distribution of risks in pension contracts

Thesis

Netspar Masterclass Cyclus Pensioeninnovatie 2014/2015

Authors:

Mr. H.C. (Rick) Hoogendoorn

De Nederlandsche Bank

Mr. Drs. W.F. (Wilfried) Mulder

APG

Drs. E.A.P (Erik) Schouten CPC

Aegon Levensverzekering N.V.

Supervisor:

Prof. Dr. D.W.G.A. (Dirk) Broeders

De Nederlandsche Bank

This thesis has been written on personal basis. The views expressed represent the views of the authors and do not represent the views of De Nederlandsche Bank, APG or Aegon Levensverzekering N.V.

Management summary

This thesis investigates the development of a common legal and/or prudential framework that equally covers any type of pension contract, operated by any type of provider. The key objective of such a common framework is to inform participants and other stakeholders in a single way about the content of an occupational pension contract and the distribution of risks within that contract. That way the common framework contributes to the ‘protection of members and beneficiaries’. Furthermore, the common nature of the framework promotes a level playing field between (the occupational pensions activities of) insurance companies and pension funds. As both institutions provide occupational pensions in EU Member States, the framework should apply irrespective of the pension provider.

There are important institutional and legal differences between pension funds and insurance companies, not in the least because of a significant difference in level of harmonization between the relevant European legislations (the IORP Directive for pension funds, the Solvency II Directive for insurance companies). However, the content of a pension contract is not dependent on the type of provider that is chosen for the execution of the contract.

There are many different pension contracts, ranging from pure Defined Benefit schemes to pure Defined Contribution schemes. Each pension contract can be unravelled by the way it distributes risks across its three main risk bearers: the employer, the participant and the pension provider. The distribution of risks is contract-specific, but should fit within the boundaries set within the national framework that applies to pension contracts and/or pension providers. A common framework for pension contracts should therefore be able to capture any distribution of risks across the risk bearers.

A common framework supports the protection of members and beneficiaries. Therefore, such a framework should ensure that promises made to the participant are likely to be realized. A precondition for that is that the stakeholders involved can live up to the risks which have been attributed to them. In order to realise this objective all three parties involved in a pension contract should in theory be subject to such a framework.

The common framework should consist of three pillars, consistent with recently implemented or proposed European legislation. The pillars are (i) security requirements, (ii) governance and risk management requirements and (iii) transparency and information requirements respectively.

The holistic balance sheet, as developed by EIOPA, serves as a first inspiration for a common framework. In fact, the HBS-approach provides to a certain extent for an insight in all elements of a pension scheme (the ‘contract balance sheet’). As such the HBS-approach could in theory be developed into a tool for pillar 2 and pillar 3 supervision. However, both in pillar 2 and in pillar 3 other (and more important) tools will also be necessary. Furthermore, the HBS-approach cannot form an adequate tool for financial supervision (pillar 1). Taking this into consideration, the HBS-approach itself will not be able to develop into a common framework which covers all pension providers. As a consequence alternatives for such common framework will have to be investigated.

A life insurance company could in theory be regulated by the IORP Directive. However, the IORP Directive focuses entirely on the pension provider and doesn't take the employee and the employer into account. The sole focus on the pension provider is the main reason why the (revised) IORP Directives cannot function as a basis for our common framework.

The Solvency II framework for life insurers already consists of three pillars, comparable to the pillars we suggest for our common framework. But, similar to the IORP framework, the Solvency II framework only focuses on the pension provider and doesn't take the other stakeholders (the employer and the employee) into account. So the Solvency II Directive can't be a basis for our common framework either.

We therefore suggest a new common framework for pension contracts. The starting point of this framework is that all three risk bearers of a pension contract fit into this framework. This means we consider both the social and prudential dimension. With social dimension we mean the competence of each EU Member State to design the national pension system as well as the freedom of contract for employers and employees. With prudential dimension we mean financial security to be delivered by risk bearers. Our new common framework consists of three pillars:

- Pillar 1 (security requirements): when risks are borne by the employer and/or the pension provider, there must be a degree of certainty that these risks effectively can be borne by these stakeholders. When the participant bears all the risks, the focus of supervision should be on Pillars 2 and 3.
- Pillar 2 (governance and risk management requirements): pension providers deliver a periodic overview of the expectations of the pension contract. It must be clear to the stakeholders how the distribution of the risks develops in the future. This is comparable to the ORSA (from Solvency II), but then applied to the entire pension contract. We label this as the Occupational Pensions Total Risk Assessment - OPTRA.
- Pillar 3 (transparency and information requirements): it must be clear to the participant what the risks of the pension contract are (the outcome of OPTRA), the level of security of his pension entitlement when the risks are borne by the employer or the pension provider (the outcome of the assessment of Pillar 1) and what this would mean for the retirement income of the participant.

This common framework will fit perfectly in the European Commission's Green Paper 'Towards adequate, sustainable and safe European pension systems'. The development of a common framework along the lines sketched in this thesis doesn't entail a transfer of national competences to the European Commission. The design of the national pension system will stay the competence of the Member State as it is now. The common framework only prescribes a certain format for the assessment of the distribution of risks and starts at the point where the social partners, within the boundaries of the national legislation, distribute the risks between the stakeholders.

Index

Management summary	2
Index	4
1. Introduction	5
2. Comparing life insurance companies and pension funds, and the pension products they provide	6
2.1. Institutional differences between life insurance companies and pension funds	6
2.2. Differences in legal frameworks under which life insurance companies and pension funds operate	8
2.3. Pension contracts and their differences	10
2.4. Conclusions from the comparisons made	13
3. Approaches to design a common framework	14
3.1. Three-pillar approach	14
3.2. The concept of EIOPA's holistic balance sheet	17
3.3. Conclusions regarding the design of a common framework	22
4. Finding a common framework for pension contracts	24
4.1. Can a life insurance company be regulated by the IORP Directive?	24
4.2. Can a pension fund be regulated by the Solvency II Directive?	26
4.3. Proposal for a common framework	27
5. Advice: develop a common framework for occupational pensions	34
References	33

1. Introduction

Every now and then someone (usually from the insurance industry) calls for a level playing field between life insurance companies and pension funds, at least in the field of occupational pension activities. The argument that is often used is that if two institutions cover the same risks, the same rules should apply to them.

It is true that life insurance companies and pension funds are capable of providing similar pension schemes. However, there are differences between them by nature of their institutional differences and because of the prudential frameworks under which they operate. Furthermore, the type of contract (DB, DC or hybrid) also plays a role in how large differences and similarities are between life insurance companies and pension funds.

As a result of the differences between life insurance companies and pension funds, as well as the different types of contract that exist, it is difficult for parties involved in pension contracts to adequately understand the pension contract and the risks the contracts entails for them. This is particularly the case for the participants¹ in the contract, as they rely on the pension contract providing them an adequate retirement income.

This thesis investigates whether a common legal and/or prudential framework could be developed that would cover pension contracts of any type and operated by any type of provider. The aim of such a common framework would be to inform (especially) participants in a single way about the content of a pension contract and the distribution of risks within that contract. Thus, the common framework would contribute to the ‘protection of members and beneficiaries’. The common framework would also contribute to organizing the level playing field between (occupational pension activities of) insurers and pension funds, as the framework should apply irrespective of who the pension provider is.

This thesis is organised in the following way. The second chapter compares life insurance companies and pension funds, as well as the products they (can) provide. The third chapter then looks at the global design of a potential common framework. The fourth chapter investigates whether existing EU legislation could serve as the basis for such a common framework and contains an innovative proposal for a brand-new common framework. The final chapter of this thesis contains the conclusions and recommendations.

The starting point of our thesis is the situation in the Netherlands. That means for instance that we distinguish two pension providers: life insurance companies and pension funds. Other possible pension providers, that may exist in other EU Member States, are not in the scope of this thesis. However, the common framework we propose in chapter 4 could also be applied to those other pension providers.

¹ This thesis uses the term ‘participants’ as a general term that intends to cover active and deferred members of a pension scheme, as well as the beneficiaries of the scheme.

2. Comparing life insurance companies and pension funds, and the pension products they provide

This chapter contains three different comparisons. The first one relates to the institutional differences between life insurance companies² and pension funds. The second comparison is about the currently applicable legal frameworks that apply to life insurance companies and pension funds respectively. The third comparison looks at the differences between types of pension contracts.

2.1 Institutional differences between life insurance companies and pension funds

Pension funds and life insurance companies have very similar objectives.

- Wilson (1980)³ states the objective of a life insurance company as being “to maximize return, subject to risk, within an asset structure that takes the term structure of its liabilities into account”;
- Martin and Grundy (1987)⁴ state the objective of a pension fund as being “to invest the scheme monies in such a way as to ensure that the scheme will always have resources available to meet its liabilities to pay benefits as and when they fall due at all times in the future; and, in so doing, to take account of the risk factors inherent in any investment situation”.

However, there are also some important differences between life insurance companies and pension funds. These are highlighted in the table below and explained in the subsequent sections.

Life insurance company	Pension fund
Financial institution	(Financial) Institution with primarily a social purpose
Mostly joint-stock companies, sometimes mutual funds	Mutual funds
For-profit institution (in case of a joint-stock company)	Not-for-profit institution
Offers complete contracts, with only limited possibilities to change	Offers incomplete contracts

2.1.1. Life insurance company

A life insurance company is, first of all, a financial institution. The intention of an insurance company is to share risks across larger groups of people, especially where a risk may in itself be small for an individual, but the impact in case the risk materializes is so large that the individual cannot bear it on his/her own. Life insurance companies are specialized in risks around life and death.

² In this thesis, we focus on the relationship between pension funds and life insurance companies, as these are two types of institutions that can serve as providers of occupational pensions. The thesis does not look at non-life insurance companies, even though sometimes pension funds provide some form of non-life activity in addition to the retirement provision ('disability pension').

³ Evidence presented in 1977 to the Wilson Committee, 1980.

⁴ Martin and Grundy, 1987, p. 3.

Although most life insurance companies are joint-stock companies⁵, there are also mutual insurance undertakings. Mutual undertakings are owned by the policyholders, while joint-stock companies have shareholders. These shareholders invest in the life insurance company to make a profit. Shareholders are not obliged to pay additional amounts of money into a joint-stock company if the company is unable to fulfil its obligations. They have so to speak limited liability. In theory, this means that joint-stock companies can go bankrupt. However, the funding requirements for life insurance companies, as well as the supervision of those requirements, ensure that bankruptcies are the exception rather than the rule. Furthermore, at least in the Dutch situation an ‘emergency mechanism’ exists that allows the court to appoint an administrator, who will be charged with restoring a healthy financial position and/or liquidating the insurance companies. This means the emergency regulations may involve a restructuring or liquidation procedure. Barring a few exceptions, when the emergency regulations are applied, the insurance company will no longer have to meet the obligations that arose before the emergency regulations were declared applicable.

The fact that a life insurance (joint-stock) company is a for-profit institution does of course not mean that the stakeholders can take out money at will. The net profits of the life insurance company (after deduction of costs, salaries etc.) are distributed in accordance with explicit rules. Usually, participants in insured pension contract also get a share of these net profits.

A life insurance contract is in principle a complete contract: the insurer and the policyholder enter into a contract that will run until a pre-specified end date. The retirement capital or benefit that the policyholder is prospecting when entering into the contract is based on the assumption that the contract is continued until retirement, including all agreed premium payments. Once the contract has been agreed, the life insurance company will only have a possibility to unilaterally change the contract for the future if such a possibility is explicitly foreseen in the contract. Especially in the long-term business of pensions, life insurance companies tend to include the contractual possibility to alter the premiums every 5 years. Without such an option, much more prudence should be included in the premiums to make sure that the life insurance company can still deliver the prospected outcome in case market circumstances change negatively.

2.1.2. Pension fund

There is no common view on the character of a pension fund. Some authors consider it is as (primarily) a financial institution⁶, while others consider it to be an institution with a social purpose⁷. In reality, this discussion is merely semantic, as pension funds are both financial institutions and serving a social purpose: the financial characteristics can be found in the fact that pension funds ‘insure’ risks that are related to retirement, whereas the social purpose is visible from the fact that pension funds are special purpose vehicles that are only used for a retirement perspective.

⁵ An insurance company can also be a private limited company. Our remarks on joint-stock companies are also applicable to private limited companies.

⁶ An example of this can be found in recital 20 of the Legislative proposal for the revision of the IORP Directive, which states that IORPs provide ‘financial services’.

⁷ See for instance the draft opinion of Jeroen Lenaers, rapporteur for the European Parliament’s Employment Committee, who suggests to change recital 20 of the draft IORP II Directive to state that IORPs ‘first and foremost serve a social purpose’: <http://www.jeroenlenaers.nl/media/documents/IORP.pdf>.

There are no prescriptions what legal form a pension fund should have. To emphasise the social purpose, most pension funds are set up as some kind of mutual, such as a foundation or a trust fund. In some countries, such as Spain and Portugal, the pension fund is actually nothing more than a pool of assets, managed by a pension fund management company. The mutual character also reflects in the fact that in many EU Member States, the pension fund's management (or 'board of trustees') is made up of representatives of employer(s) and participants.

One of the main purposes⁸ of a pension fund is to manage money that is set aside during the working life of a participant and is meant to provide an income after retirement (or a survivor's pension in case the participant deceases before retirement). This is also the reason why people sometimes call pensions 'deferred salary'. It also implies that pension funds are not intended to make profits, because all net returns (after deduction of the pension fund's own costs and the costs of outsourcing certain activities) are used to improve the retirement income of the participants.

Pension funds typically provide an incomplete contract, with numerous possibilities to change the contract before the end date. Typically, employer(s) and employees (or their representatives) negotiate the pension arrangement for a limited period of time, as part of the negotiations for collective labour agreements. This implies that the pension arrangement can be changed at the start of any new collective labour agreement. This, in turn, leads to pension contracts between a pension fund and the employer and participants that have a limited horizon. Furthermore, the pension fund's board regularly possesses discretionary powers to deviate from the regular policy arrangements. EIOPA (2014)⁹ shows that such discretionary powers exist in many EU Member States.

2.2 Differences in legal frameworks under which life insurance companies and pension funds operate

Although pension funds could theoretically be classified as a specific type of life insurance company, they are governed by quite different European legislation. Life insurance companies are governed by the Solvency II Directive¹⁰ and pension funds are governed by the IORP Directive¹¹. The IORP Directive allows Member States to apply (the largest part of) the IORP Directive also to the occupational pensions business of insurance companies, but that possibility is only used in three Member States¹².

⁸ Another main purpose of a pension fund is to share risks between participants, both within and between generations, that cannot be borne by an individual.

⁹ EIOPA (2014) – Mapping Exercise for Further Work on Solvency for IORPs, 13 October 2014, page 28 and further

¹⁰ Directive 2009/138/EC of 25 November 2009 on the taking-up and pursuit of the business of insurance and reinsurance (Solvency II directive) (recast), *PbEU*, L 335, 17 December 2009, p. 1-155: <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32009L0138>.

¹¹ 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, *OJEU*, 2003, L 235, 10-21: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32003L0041>.

¹² France, Slovenia and Sweden.

2.2.1. Life insurance company

The Solvency II Directive is European legislation that provides for maximum harmonization. This means that there is little room for interpretation from Member States or for national legislators to choose specific options. Theoretically, Member States could choose to apply national rules that go beyond the Solvency II rules, but such ‘goldplating’ would almost by definition mean that the life insurance companies of this Member State would be in competitive disadvantage as compared to life insurance companies from other Member States.

The Solvency II Directive requires life insurance companies to hold risk-based buffers to ensure that guarantees provided by the insurance company can be delivered. The security level for these buffers is 99.5%, which roughly equals a 1-in-200 chance that the insurance company will still be able to deliver the guarantee one year from now. This requirement ‘forces’ the insurance company into a binary choice to either take up all risks from a contract (DB), or to leave all risks with the policyholder (pure DC). There are nevertheless two ways a life insurance company can build in some risk-sharing:

1. by ‘cutting’ the contract in a DB part and a DC part; or
2. by fixing a limited term for the contract, which would allow the insurance company to periodically negotiate a revised contract, including a revised premium that is asked from the policyholder.

2.2.2. Pension fund

The EU legislation for pension funds is limited to the minimum harmonization of the IORP Directive. This directive provides for a broad set of general principles that need significant additional rules from national countries. In May 2014, the European Commission published a proposal for a revision of the IORP Directive. This proposed IORP II Directive¹³ aims to take the next step in harmonization of especially the risk management and governance requirements (‘pillar 2’) and the transparency and information requirements (‘pillar 3’), but leaves solvency rules for pension funds out of the European legislation¹⁴.

The most important rules dealing with pension funds are therefore national rules. This automatically implies that these rules are quite different across countries. Governance rules vary, but the differences in prudential frameworks are even more significant.

In the Netherlands, the prudential rules, the so-called ‘FTK’ – or ‘financial assessment framework’ - can be found in the Pensions Act. These prudential rules are relatively similar to the Solvency II rules¹⁵. Like Solvency II, the FTK uses a risk-free interest rate term structure to discount liabilities and applies risk-based solvency requirements. However, the security level in the FTK framework is set to 97.5%. The FTK framework does not take into account whether an employer would be willing to take on some of the risks associated with the pension contract, but focuses solely on the pension fund.

¹³ Proposal for a Directive of the European Parliament and of the Council on the activities and supervision of institutions for occupational retirement provision (recast), Brussels, 27 March 2014, COM(2014) 167 final.

¹⁴ The decision not to include solvency rules in the IORP II proposal was announced by (then) Commissioner Michel Barnier on May 23rd, 2013: http://europa.eu/rapid/press-release_MEMO-13-454_en.htm.

¹⁵ A more elaborate comparison between the FTK and Solvency II is made in Willemsen and Hoogendoorn (2011).

Most other EU Member States do not use a specific security level, nor do they use a risk-free discount rate¹⁶. The exceptions are countries that have chosen to treat pension funds the same way as life insurance companies, by effectively applying the Solvency regulations also to pension funds¹⁷. In a number of Member States, the employer is used as specific source of pension provisions, either by allowing employers to ‘fund’ their pension obligations through their own balance sheet (a ‘book reserve’)¹⁸ or by requiring employers to guarantee the fulfilment of the pension contract even after the pension provider has ceased to exist¹⁹. Furthermore, some EU Member States²⁰ have installed a ‘pension protection scheme’ that kicks in when both the pension fund and the employer have ceased to exist.

2.3 Pension contracts and their differences

The previous sections focused on the differences between life insurance companies and pension funds, in their capacity of pension providers. This section looks at the differences in pension contracts, irrespective of who the pension provider is for such a contract.

There are three main risk bearers in pension contracts: the pension provider, the employer and the participant. Where pension protection schemes exist, they are set up to take over (some of) the risks that are borne by the pension provider and/or the employer, in case that party is no longer capable of bearing the risk itself. Hence, pension protection schemes are not the direct risk bearers in a pension contract.

Where the risks are all borne by the participant, the contract is called ‘pure defined contribution’. In all other cases, the contract is at least partly defined benefit, either by providing the participant with a guaranteed minimum amount of capital that can be used to purchase a retirement income or by providing the participant with a guaranteed (minimum) retirement income.

Where none of the risks are borne by the participant, this is called ‘pure defined benefit’. In this case, all risks are borne by the employer and the pension provider. Between these two risk bearers, the risks can be distributed in many ways: the employer could take all risks (in a so-called ‘book reserve’), or the pension provider could take all risks (through an insured contract under Solvency II), or any other distribution. Note that a ‘full’ guarantee by a pension provider does not exist, as even the most stringent prudential requirements cannot definitely prevent a failure (e.g. a bankruptcy or a liquidation due to severe underfunding) from the pension provider²¹. In reality, a security level of 99.5% is seen to represent a ‘full’ guarantee. A ‘full’ guarantee by an employer doesn’t exist either, because the default risk of the employer ultimately precipitates with the employee.

¹⁶ EIOPA’s report of prudential requirements in EU countries (<https://eiopa.europa.eu/CEIOPS-Archive/Documents/Reports/ReportonFundSecMech.pdf#search=survey%20fully%20funded>), still provides an illustrative comparison of the many changes between countries, even though the underlying data are ‘outdated’ for many countries.

¹⁷ Examples of Member States that made this choice are Denmark and Sweden. Norway is a further example.

¹⁸ Germany and Austria for example.

¹⁹ Germany for example.

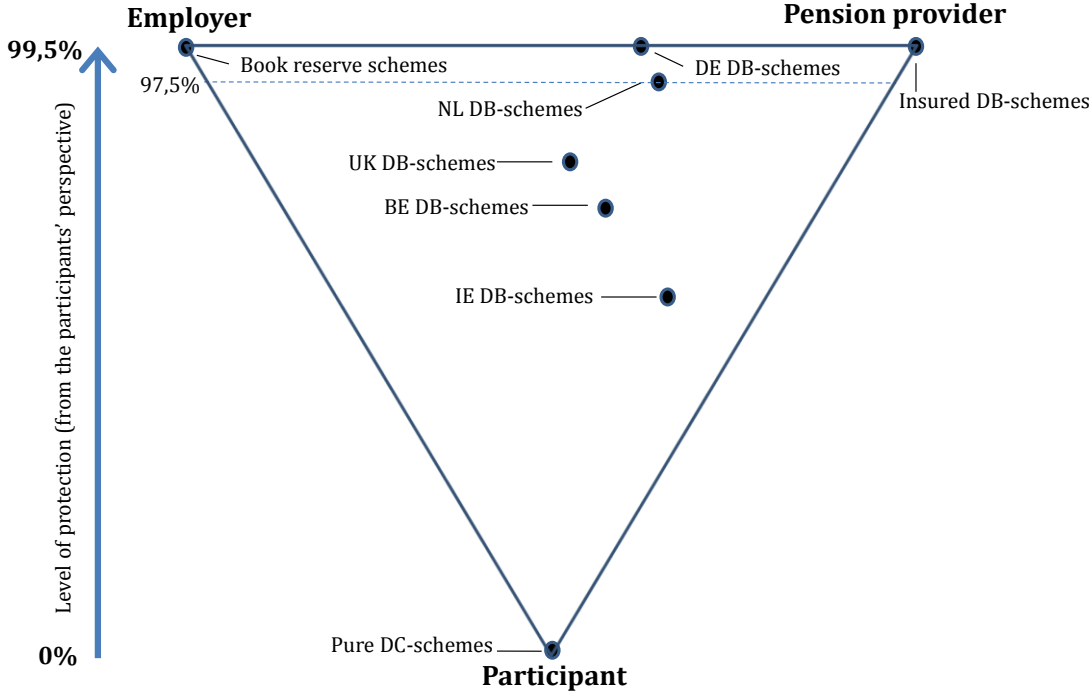
²⁰ Pension protection schemes exist in Germany, Sweden and the United Kingdom.

²¹ See section 2.1.1. for a broader discussion on this issue.

The distribution of risks across the main risk bearers is identified through national legislation and through negotiations between employer(s) and employees. The importance of national legislation is that it usually identifies which part of the risks is borne by the pension provider. A pension fund that needs to cover liabilities discounted with the actual risk-free term structure of interest rates by definition can take up a larger part of the risks than a pension fund that needs to cover liabilities based on expected returns on investments (as the former will be required to hold more assets). Also, a pension provider that needs to hold a risk-based solvency buffer based on a security level of 97.5% (such as a Dutch pension fund) takes up a smaller part of the risks than a pension provider that needs to hold a risk-based solvency buffer based on a security level of 99.5% (such as an insurer under Solvency II), but takes up a larger part of the risks than a pension provider that is not subject to any solvency buffers at all (like UK or BE pension funds).

Labour negotiations between employer(s) and employees (or ‘social partners’) can distribute the remaining risks between themselves. Or, alternatively, they could decide to limit the level of risk borne by the pension provider by setting up part of the pension contract as a DC-scheme, for which the pension provider does not bear any risks at all.

All pension contracts can be unravelled as distributing risks across the three main risk bearers. The following graph illustrates that. Note that the graph is subjective, as it aims to refer to the actual distribution of risks in a number of Member States. This actual distribution may, as a consequence of current economic circumstances, differ from the distribution that was envisaged when national legislation and pension contracts were set up.



The position of the various 'dots' can be explained as follows:

- In a **pure DC** scheme, all risks are borne by the participants, and no risks at all are borne by the employer or the pension provider;
- In a **pure DB**-scheme, the participant does not bear any risk at all. The graph contains three examples of pure DB-schemes:
 1. In **Book reserve schemes**, all risks are borne by the employer and kept on the employer's balance sheet. In this case, there is no external pension provider;
 2. In **Insured DB-schemes**, all risks are borne by the pension provider, usually an insurance company. The only role the employer has in this case is the obligation to pay contributions to the pension provider;
 3. Between these extreme cases, there is also the possibility to distribute all risks between the employer and the pension provider, which is why **German DB-schemes** (with a 100% coverage from the pension protection scheme) are placed on the line between the employer and the pension provider;
- **Dutch DB**-schemes (operated by pension funds) distribute risks between all three risk bearers: most of the risks are borne by the pension funds, but part of the risks are borne by the employer (if the pension fund has the possibility to unilaterally increase the contributions from the employer) and by the participants (through cutting down on indexation and through the possibility to reduce accrued benefits as a measure of last resort);
- In **UK DB**-schemes, the majority of risks is distributed between the employer and the pension provider. UK employers are legally committed to 'sponsor' the pension contract and therefore bear a significant part of the risks. The pension provider takes up a part of the risks, but the level of risks they bear depends on their funding status. Note that, because of the employer commitment, UK pension funds are allowed to value their liabilities on the basis of a higher discount rate than Dutch pension funds. UK participants also bear a part of the risks, but only if both the employer and the pension fund have ceased to exist. In that case, the pension liabilities are transferred to the Pension Protection Fund, which applies both a cap and a reduction of participants' benefits that are covered;
- **BE DB**-schemes provided by pension funds operate under a similar system as UK pension funds, except that there is no pension protection scheme in Belgium. This means that Belgian participants are subject to an additional part of the risks as compared to UK participants;
- In **IE DB**-schemes, participants are subject to an even larger part of the risks, as Irish employers are not legally committed to providing the pension benefit and there is no pension protection scheme.

2.4 Conclusions from the comparisons made

The comparisons made in this chapter lead to four overarching conclusions:

1. There are significant institutional and legal differences between pension funds and life insurance companies, not in the least because of a significant difference in level of harmonization between the relevant European legislations (the IORP Directive for pension funds, the Solvency II Directive for insurance companies);
2. The content of a pension contract is not dependent on the type of provider that is chosen for the execution of the contract;
3. Each pension contract can be unravelled as distributing the risks across the three main risk bearers: the pension provider, the employer and the participant. The actual distribution of risks is contract-specific, but should fit within the boundaries set within the national framework that applies to pension contracts and/or pension providers;
4. A common framework for pension contracts should therefore be able to capture any distribution of risks across the risk bearers.

3. Approaches to design a common framework

In the previous chapter we concluded that a common framework should be able to cover all possible types of pension contracts, irrespective of the pension provider of such a contract. In this chapter we investigate which pillars should form part of such a framework, and more in particular if a three pillar approach would be desirable and possible. Furthermore the Holistic Balance Sheet-approach which has been proposed by EIOPA will be explained in this chapter, and it will be discussed whether this approach could give inspiration for our common framework and/or could provide for elements of such a framework.

3.1 Three pillar approach

3.1.1 Introduction

The possibility of covering all possible types of pension contracts could give a common framework a sustainable character. In particular taking into consideration the fact that nowadays in various EU Member States (for example the United Kingdom and the Netherlands) broad discussions take place about reforms of the national pension systems and of the forms of pension contracts that can be offered in these Member States²².

The main goal of such a common framework should, as already stated in Chapter 1, be the protection of members and beneficiaries. Therefore supervision based upon such a framework should have as main objectives that (i) promises made in the past to the participant are likely to be realized and (ii) the parties involved can live up with the risks which have been attributed to them. In order to realise this objective all three parties involved in a pension contract should be subject to such a framework. However, neither all pillars of the common framework nor all elements within a pillar will be applicable to all three parties. For example, the common framework will not contain requirements directly addressed to the participant, since the participant does not have commitments towards the provider and the employer (other than paying his/her own share in the agreed pension premiums).

The common framework should consist of three pillars, each with its own specific function. This way, the building blocks of the common framework would be consistent with other recently implemented or proposed regulations for other business sectors in the EU, notably the Capital Requirements Regulation for credit institutions²³, the Solvency II Directive for insurance companies and the recent proposal for a revised IORP Directive (IORP II) for pension funds. An additional argument for a three pillar building block system could be that such system would follow the main areas of attention for a common framework: the financial position of the parties which have made promises, the governance and the risk management function and the communication to participants.

²² See for example Netspar, "Duurzame vormgeving van het Nederlandse collectieve aanvullende pensioen", Ilja Boelaars, Lans Bovenberg, Dirk Broeders, Peter Gortzak, Sascha van Hoogdalem, Theo Kocken, Marcel Lever, Theo Nijman en Jan Tamerus, 14 november 2014.

²³ The CRR consists of two legal acts: (i) Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms, and (ii) Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms.

In order to be able to apply a common framework to all possible types of pension contracts, irrespective of who the pension provider is of such a contract, it is necessary to explicitly separate the risks that are borne by each of the three main risk bearers. This may require both national legislators and employers and employees to reflect on whether they have achieved in practice what they were aiming for when developing the national legislation and the pension contract respectively. As AAE (2015)²⁴ states ‘this might lead to disappointments to either the employer or the employee representatives or both’.

3.1.2 First pillar

The first pillar (security requirements) of the common framework refers to the pension promises that the pension provider and/or the employer have made to the participant, i.e. cover the risks that are not borne by the participant.

Insofar as promises have been made by the pension provider, the first pillar should consist of capital requirements. In this respect several aspects with regard to the provider will have to be investigated:

- Which promises have been made?
- Are sufficient assets available to realise these benefits?
- What are the risk and return characteristics of the assets?
- Which additional mechanisms are available for the provider if needed?

The risks that are borne by the employer should be separated explicitly from the promise made by the pension provider. As a consequence they should not be included in the first pillar of the common framework in the form of a capital requirement. However, there should also be a mechanism in order to verify whether the employer will in practice be able to bear the risks attributed to him. In this respect margin requirements or contingent assets to be delivered by employers related to the risks taken by them could for example be considered. By means of such mechanisms a potential future situation should be avoided in which the employer would not be able to bear these risks, which would as a result materially be transferred to the participant.

3.1.3 Second pillar

The second pillar (governance and risk management) of the common framework will have to refer to the future in respect of the pension contract: what is likely to happen and what could potentially happen with the performance of this contract? It should be noted that the relative importance of risk management is increasing rapidly, because the adjustment and steering mechanisms (pension premiums, sponsor support and investment returns) for a pension provider in order to solve a funding deficit have weakened during the last few years, for example due to the increased volatilities on the financial markets and the sharp drop of discount rates²⁵. Against the background of the weakening of these “repair mechanisms” it would be recommendable to put more focus on instruments which can reduce the risks on underfunding situations, such as a strong risk management function.

²⁴ Actuarial Association of Europe, 2015, “Clarity before Solvency, a discussion paper on the application of market consistency to pension funds in Europe”, p. 20, May 2015.

²⁵ Theo Kocken, Risicomanagement voor pensioenfondsen, TIAS Master Class Risicomanagement, 25 November 2014.

As said, the second pillar should focus on the risks which could materialize and on the possible ways in which these risks can be managed. In particular a judgment should be made whether the outcomes of these possible future scenarios fit with the goals that the participants and the employers had in mind when the pension contract was closed. All elements of the pension contract should be taken into account in the context of such judgment, in order to obtain an insight in the probabilities of a future shift of risks from one risk bearer (for example the pension provider) to another risk bearer (for example the participant).

The risk management function ensures that the management of the provider has full control with regard to the activities undertaken. In respect of this function the following aspects should be investigated:

- Is this function adequately tailored to the duration of pension promises and the characteristics of the participants (such as age and marital status)?
- Are the policy instruments of the provider adequately assessed?
- Is the risk management process based on models which take into account all relevant aspects of the economic environment the provider operates in?
- Are all possible risks adequately taken into account in the daily management processes within the provider?

The governance aspect of the common framework refers to the question whether the governance forms applied are adequate in relation to the pension promises made by the pension provider and/or the employer and the activities undertaken in order to realise these promises. In respect of this function the following aspects should be investigated:

- Do the decision makers within the provider have sufficient expertise and integrity?
- Are all processes and internal control functions adequately structured?
- Can all legal requirements adequately be fulfilled, also when these have been outsourced?

3.1.4 Third pillar

The third pillar (transparency and information requirements) of the common framework focuses on the needs of the participant. The participant should have access to and receive information which can be of interest to him. This pillar should, similar to the second pillar, refer to all the elements of the pension contract. It must be transparent whether, and if yes to what extent, risks borne by the pension provider and/or the employer could shift to the participant.

3.1.5 Tailor-made supervision in a three pillar approach tailor-made

Supervision based on such a common framework should be tailor-made, in the sense that it should be dependent on the character of the pension contract. In practice, a majority of the pension contracts (for example collective DC-schemes) nowadays offered in EU Member States are “hybrid” pension schemes, because they include both DB- and DC-elements. With regard to all of these pension contracts all three pillars will be relevant, but the degree of relevance of each pillar in the supervision based upon the common framework will vary depending of the character of the pension contract involved, in particular whether the DB-elements or the DC-elements are dominant.

In case of a pure DB-scheme the focus of supervision should be on the first pillar, because in that case it is highly important that (i) the pension provider will have sufficient capital in order to be able to realize the pension promises the provider has made, and (ii) the employer is strong enough to cover the risks that are attributed to him.

Oppositely, in case of a pure DC-scheme, in which all the risks are borne by the participant and no risks are borne by the pension provider or the employer, there is much less need to focus on supervision of capital requirements. Only limited capital requirements in order to accommodate the operational risks of the pension provider could be implemented. As a consequence, the focus of supervision of pure DC-schemes should be on pillar 3 requirements, in particular when the participant would have substantial choices and options related to his pension scheme, e.g. in respect of the investment profiles.

Summarizing, third pillar elements should be applicable for all pension promises (with a focus on these elements in case of a DC pension promise), but if more risks are borne by the employer and/or the pension provider more and stricter rules should be implemented in the first and second pillars.

3.2. The concept of EIOPA's holistic balance sheet

3.2.1 Historical background and main characteristics

The Holistic Balance Sheet approach as proposed by EIOPA can be considered as a common framework aiming at being applicable for both pension funds and life insurance companies.

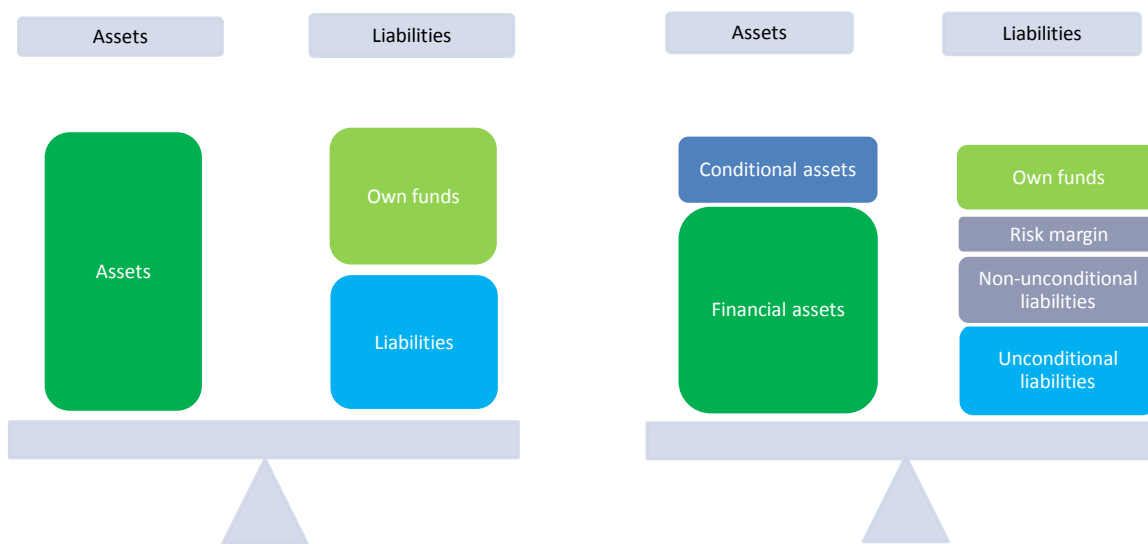
The starting point of EIOPA's development process of the HBS-approach was a Call for Advice (CfA) from the European Commission to EIOPA in 2011 with regard to a future revision of the IORP-Directive. In this CfA, the Commission requested EIOPA to investigate if the Solvency II Directive for insurance companies, including its quantitative rules, could also be applied to occupational pension funds. In its reaction, EIOPA stated that various provisions of Solvency II could in theory be applicable for pension funds, but that specific characteristics which make pension funds different from insurers should be taken into account. EIOPA suggested to do this by means of the HBS-approach. Within this approach, IORPs resident in EU Member States should not only value their normal (financial) assets and (un)conditional liabilities, but also their adjustment- and steering mechanisms such as increases of contributions, discretionary decision making processes (for example not -fully- granting indexation), sponsor support and reduction of accrued benefits. Furthermore, EIOPA proposed to combine the HBS with the calculation of a Minimum Capital Requirement (MCR) and a Solvency Capital Requirement (SCR)²⁶. By means of these elements EIOPA aimed at developing an approach which accommodate the principle differences between pension funds and insurance companies.

²⁶ See for example Jacqueline Lommen, "Europa, "Catalyst for change" in de Nederlandse pensioensector", TIAS Master Class Regelgeving, Toezicht & Governance, 15 April 2015.

The figure below provides for both the traditional balance sheet and the holistic balance sheet for a pension fund. As such a comparison between both balance sheets can be made. In this respect it should however be noted that the holistic balance sheet is not a formal balance sheet²⁷. Taking this into account the AAE has proposed changing the name into “Holistic Framework”.

Figure Holistic Balance Sheet

Traditional vs. holistic balance sheet



The most recent step in EIOPA’s HBS-process is a Quantitative Assessment which has recently (on 11 May 2015) been submitted by EIOPA, jointly with a Stress Test for occupational pension funds²⁸. By means of the Quantitative Assessment the potential consequences for a number of pension funds in 6 EU Member States will be investigated. On the basis of this exercise, EIOPA intends to provide the European Commission with an advice about the possible ways of using the HBS-approach in (early) 2016.

²⁷ Valkenburg, F.R., and H. van Meerten (2015), “Naar een Europese pensioenrichtlijn: over holisme, rekenrente en pensioen”, PensioenMagazine april 2015

²⁸ EIOPA, Press Release, EIOPA launches pensions stress test and quantitative assessment on solvency for occupational pension funds, Frankfurt, 11 May 2015.

3.2.2 Advantages and disadvantages HBS-approach

3.2.2.1 Advantages

The HBS-approach provides for several advantages. First of all a positive aspect of the HBS-approach is that this approach aims at demonstrating a “holistic” view on the pension contract, by taking into consideration the commitments and risk bearing of all three stakeholders involved in a pension contract. In particular the fact that the adjustment- and steering mechanisms of a pension fund are taken into account is an innovative step. This does not only provide for a more comprehensive view on the assets, liabilities and mechanisms of a pension provider, but also pays attention to the positions of the employer and the participant.

Furthermore, the HBS-approach makes it possible to take into account the differences between pension funds and insurance companies. On the one hand this implies “same risks, same capital”, but on the other hand the extent to which the benefits and related risks of pension funds are different as a result of the availability of specific adjustment and steering mechanisms will be included in the holistic balance sheet.

In addition, the HBS-approach, in particular due to the fact that the adjustment and steering mechanisms are taken into account, makes it possible to compare to a certain extent the pension schemes delivered by pension funds in EU Member States.

Due to these advantages the HBS-approach might play a role in one or more of the three pillars of general framework for pension providers based in the EU. Section 3.2.3 in this Paper will elaborate more about such a possible role of the HBS-approach.

3.2.2.2 Disadvantages

The HBS-approach, at least in the form as proposed so far by EIOPA, also contains several disadvantages²⁹.

A first problem with the use of the HBS concerns the supervisory response, given that the HBS can only be calculated assuming a complete contract (including an agreement beforehand on the sharing of surpluses and deficits between the different stakeholders). This can be demonstrated for an IORP with an insufficient “holistic funding ratio”. Suppose it has a deficit of 100 million Euros in order to comply with the SCR. In this situation an additional payment by the sponsor of 100 million Euro will be impossible, because this security mechanism has already been valued in the HBS. Therefore, the outcome of the HBS will only show whether or not the IORP’s steering and adjustment mechanisms are strong enough to deal with all potential future scenarios. If the steering and adjustment mechanisms are not strong enough (and the HBS shows a deficit), the only option left would then be to amend the contract.

²⁹ See also Investment & Pensions Europe (IPE), January 2015, Wilfried Mulder and Peter Vlaar, Flaws in the holistic balance sheet, p. 38.

Furthermore the combination of an HBS and an SCR is not consistent. The HBS shows the current market value of all conditional and unconditional pension promises (assuming there is a complete market, which is not the case), and the way in which these promises are backed by current assets and conditional future payments (or benefit reductions). As capital requirements are neither part of the pension promise nor of the financing of this promise, there is no place for an SCR on the HBS.

There is also a model risk, because the outcomes of the valuations to be made in a HBS-approach are sensitive to the assumptions made. These assumptions may relate to various elements of the HBS, e.g. the horizon which is taken into account by the pension fund involved and the parameters to be chosen in the (risk neutral) scenario-set.

And last but not least, the calculation of the options included in the HBS is complex and therefore costly. In order to mitigate this several simplifications to calculate an HBS have been proposed by EIOPA, but these primarily result in a balance sheet without logical economic interpretation.

3.2.3 Use of HBS-approach in the three pillars?

Taking into consideration its advantages, the HBS-approach could certainly play a role in the context of a common framework, but such role may not be possible in all three pillars.

This is due to the general circumstance that one and the same (holistic) balance sheet will by definition not be able to simultaneously play a role in all three pillars, taking into account that the focus points of pillar 1 (the 'hard' promises - can the pension provider, with his capital position, live up to the promises made by him?) and pillar 2 (both the 'hard' and the 'soft' promises - which events and risks might occur in the future, and will these have consequences in the form of not granting indexation and/or cutting off pension rights?) differ fundamentally.

Furthermore the HBS-approach only addresses to the pension provider, although this approach also takes the position of the employer into consideration. But in that respect only the probability of the employer is taken into account as a given factor, but no security measures are imposed on the employer.

Despite the fact that the HBS-approach will not be able to play a role in all three pillars, the HBS could possibly play a role in one or more of these pillars. This will be explained in the following subsections.

3.2.3.1 First pillar

The HBS-approach will, taking into consideration the aforementioned drawbacks, not be able to develop into a suitable tool for setting security requirements under pillar 1 of a common framework.

3.2.3.2 Second pillar

The HBS-approach could possibly play a role in pillar 2 of a common framework, because the inclusion of all the adjustment and steering mechanisms could lead to an increased discipline. This is due to the fact that, in order to also include these mechanisms, these mechanisms and policy guidelines related to these mechanisms will have to be defined. This will certainly contribute to the realization of a more complete contract, which in turn will contribute to an increase of the discipline with the operations of the pension fund and as such of the performance of the risk management function³⁰.

Furthermore, the HBS might possibly provide for more insight into the relative risks of the balance sheet, in particular into the relative risks for different stakeholders. However, it is important to note that the HBS does not provide insights into the main goals of an IORP, which are for example the capacity to pay the current benefits or the capacity to compensate for inflation. The HBS only provides the current value against market prices (assuming there is a market, which is not the case) of (uncertain) future cash flows of conditional and unconditional pension benefits and the way these cash flows would (likely) be financed.

It will therefore never be possible to use the HBS as the sole instrument for risk management. Other instruments will always be needed. Other instruments can for example consist of some sort of solvency projection (continuity analysis), ALM calculations and stress tests. Such instruments might in addition be less complex, and thus less costly and less time-consuming than the HBS-approach. As a consequence, these instruments might in practice be preferred instead of the HBS-approach.

3.2.3.3 Third pillar

The HBS-approach might also play a role in pillar 3 supervision because the HBS can provide more insight in the possible consequences of the adjustment and steering mechanisms for the various generations of participants.³¹ As such, the HBS could show the relative risks for the different stakeholders involved including the participants.

However, the role of the HBS in pillar 3 can only be very limited. This is in the first place due to the complexity of the HBS and its sensitivity for the assumptions made. Furthermore the HBS does not provide insight to participants in the underlying risks of their pension benefits, for example in the probability that these benefits will be decreased or not adjusted to inflation and the implications of such events. The option values that are shown on the HBS do not provide this information, as they are not forward looking but only provide for a relative ranking of risks. The fact that an indexation option (the market value of conditional indexation) currently has a value of for example 5, does not convey any information about the probability that the pensions will actually be indexed.

³⁰ Netspar, Design Paper 06, Dirk Broeders, Niels Kortleve, Antoon Pelsser and Jan-Willem Wijckmans, The design of European supervision of pension funds, p.43.

³¹ ESB, Jaargang 98 (4663), Generatie-effecten pensioenbeleid in beeld, Erwin Franssen, Jurre de Haan, Karin Janssen, Niels Kortleve and Eduard Ponds, 28 juni 2013.

Taking into account these drawbacks we conclude that the HBS-approach will only be able to play in limited role in pillar 3: on the one hand it does not provide for an insight in future scenarios and risks for a participant, but on the other hand it gives information about the current status of his pension rights. Taking this into consideration it might be recommendable to make the HBS-information only available on request for participants.

3.3. Conclusions regarding the design of a common framework

A common framework should be the protection of members and beneficiaries. Therefore, such a framework should ensure that promises made in the past to the participant are likely to be realized and that the parties involved can live up with the risks which have been attributed to them. In order to realise this objective all three parties involved in a pension contract should in theory be subject to such a framework.

The common framework should consist of three pillars, consistent with recently implemented or proposed European legislation:

- The first pillar contains security requirements with regard to the pension promise that has been made by the pension provider, because this promise will have to be realized. Similarly, the first pillar should also contain a mechanism to verify whether the employer will in practice be able to bear the risks attributed to him;
- The second pillar relates to the governance and risk management, more specifically in the governance of the pension provider and the risk management of the pension contract. This pillar should focus on the risks that could materialize and on the possible ways in which these risks could in such case be handled. In particular a judgement could be made whether the outcomes of these possible future scenarios fit with the goals that the participants, employer(s) and pension provider had in mind at the time then the pension contract was closed;
- The third pillar relates to transparency and information requirements. This pillar should primarily focus on the needs of the participant, as he/she should have access to and receive information which is of interest for retirement purposes.

EIOPA has developed the concept of a holistic balance sheet. Although EIOPA's statement that specific characteristics which make pension funds differ from insurers should be taken into account can in general be supported. However, the HBS-approach in our view is not be able to develop a common framework comprising all three pillars at the same time. In particular, the HBS-approach can in our opinion not form an adequate tool for financial supervision (pillar 1). This is due to the practical and technical problems and complexity, which makes that it will be difficult (in particular for small and medium-sized pension funds) to utilize this approach.

On the other hand the HBS-approach provides to a certain extent for an insight in all elements of a pension scheme (the 'contract balance sheet'). As such the HBS-approach could be able to develop into a tool for pillar 2 supervision and pillar 3 supervision. However, both in pillar 2 and in pillar 3 other (and more important) tools will also be necessary.

Taking this into consideration the HBS-approach itself will not be able to develop into a common framework which should cover all pension providers. As a consequence other alternatives for such common framework will also have to be investigated. These alternatives will be discussed in Chapter 4 of this thesis.

4. Finding a common framework for pension contracts

In the previous chapter we reviewed different approaches towards a common framework. In this chapter we first investigate whether it is possible to use the current frameworks as a basis for a common framework. First we explore if insurance companies can be regulated by the IORP Directive. Second we discuss if pension funds can be regulated by the Solvency II Directive. As we conclude that both approaches are not optimal, we propose a new common framework.

4.1. Can an insurance company be regulated by the IORP Directive?

4.1.1. Current situation: articles 17 and 4 IORP Directive

The IORP Directive, which has been in force since 2003, regulates funded 'Institutions for Occupational Retirement Provision' (IORPs).³² It provides minimum harmonisation, i.e. contains only general rules that allow the Member States a considerable degree of freedom to set further rules at national level.

According to the IORP Directive, pension funds which underwrite the liability to cover against biometric risk, or guarantee a given investment performance or a given level of benefits, hold on a permanent basis additional assets above the technical provisions to serve as a buffer. Article 17(2) of the IORP Directive stipulates that, for the purposes of calculating the minimum amount of the additional assets, the rules laid down in Articles 27 and 28 of Directive 2002/83/EC shall apply. This refers to Solvency I, the 'old' insurance directive.³³ In other words, IORPs that cover risks themselves would be subject to the same rules as insurance companies. Under Solvency I there were no risk-based solvency requirements. Therefore it couldn't offer 99.5% security like Solvency II does.

The Solvency II Directive included a transposition of references to all the old Solvency I directives into references to the new Solvency II Directive. This would mean that the Solvency II regime would become applicable to IORPs. But the European legislature has used a stratagem. In order to prevent the Solvency II framework applying to IORPs, the old provisions (the above mentioned Articles 27 and 28) of the Solvency I directives were transposed in the new Solvency II framework as they were, meaning that IORPs that cover risks themselves effectively continue to be governed by the Solvency I framework.

³² (Dutch) pension funds we mention in this paper are also regulated by the IORP Directive. For the sake of readability we use the words pension fund instead of IORP.

³³ Consolidated in Directive 2002/12/EC of the European Parliament and of the Council of 5 Mar. 2002 amending Council Directive 79/267/EEC as regards the solvency margin requirements for life assurance undertakings (OJEU, 2002, L 77) and Directive 2002/13/EC of the European Parliament and of the Council of 5 Mar. 2002 amending Council Directive 73/239/EEC as regards the solvency margin requirements for non-life insurance undertakings (OJEU, 2002, L 77, 17-22).

Article 4 of the IORP Directive allows Member States to choose to apply the provisions of Articles 9–16 and Articles 18–20 of the IORP Directive to the occupational pension business of insurance companies.^{34, 35} In that case, all assets and liabilities corresponding to this business will be ring-fenced, managed and organized separately from the other activities of the insurance company, without any possibility of transfer. The application of Article 4 IORP can thus lead to a situation in which an insurance company is effectively split into two separate entities: an ‘insurance’ entity and a ‘pension’ entity. What this means is that insurance companies administrating occupational pensions are subject to Solvency I while their ‘regular’ insurance activities (the insurance entity) may be subject to Solvency II. As a result of this fragmented regime, the occupational retirement business of Dutch insurers may be subject to a stricter system (Solvency II) than the same activities of French insurers, as the latter are governed by Article 4 of the IORP Directive, which entails less stringent requirements (Solvency I) for these activities.³⁶

Concluding: the answer to the question “Can an insurance company be regulated by the IORP Directive?” is yes, that is possible. It is up to the EU Member State whether or not it will allow this by implementing article 4 of the IORP Directive. However, by allowing this the EU Member State has to be aware that by doing so, it will disrupt the level playing field of the domestic insurance companies compared to foreign insurance companies.

4.1.2. Basis for a common framework?

As we described in the previous chapter, for our common framework we look at an entire pension contract and the three parties involved: the participant, the employer and the pension provider. The IORP Directive focuses entirely on the pension provider and doesn’t take the participant or the employer into account. The IORP Directive touches on the three pillars we described in the previous chapter, though not very explicitly. The proposed revised IORP Directive (IORP II) moves more in the direction of a three pillar approach. The sole focus on the pension provider is the main reason why the current and proposed revised IORP Directives cannot function as a basis for our common framework. This doesn’t mean we propose to eliminate the IORP Directive. The content of this Directive will be used in our proposal for a common framework. See Section 4.4.

³⁴ Some Member States (e.g., France) have availed themselves of this option, others (including the Netherlands) have not (Parliamentary Documents II, 2004/05, 30 104, no. 3, 7).

³⁵ See also H. van Meerten and H.W.P. van der Hout, ‘De pensioenaanbieder: nationaal en internationaal’, in: E. Lutjens (red.), *Pensioenwet Analyse en commentaar*, Deventer: Kluwer 2013, p. 64.

³⁶ As Solvency II has stricter (regulated) capital requirements as well as being more risk-oriented, it imposes more requirements on insurers than does Solvency I.

4.2. Can a pension fund be regulated by the Solvency II Directive?

4.2.1. Current insurance framework: the Solvency II Directive

The Solvency II Directive covers life, non-life, reinsurance and insurance groups. It introduces a new, harmonised EU-wide insurance regulatory regime. The legislation replaces 14 existing EU insurance directives. The key objectives of Solvency II are improved consumer protection, modernised supervision, deepened EU market integration through the harmonisation of supervisory regimes and increased international competitiveness of EU insurers. Contrary to the IORP Directive, Solvency II is a maximum harmonisation directive. It means that national law may not exceed the terms of the directive. In practice, this prohibits gold-plating of European legislation when it is transposed into national law.

The Solvency II framework adopts a three-pillar structure. Pillar 1 (financial requirements) requires a market consistent valuation of assets and liabilities of the insurance company. It prescribes the solvency capital requirement and the minimum capital requirement. The directive requires that all investments be invested, managed and monitored in accordance with the "prudent person" principle. Pillar 2 (governance and supervision) aims at the protection of policyholders. It is based on a prospective risk-oriented approach. Responsibility on company management is increased, as entities will be required to meet principles rather than simply comply with regulations. Entities must display a fit and proper system of governance, procedures to assess own risk and solvency, internal controls, risk management and the control of outsourced activities. Supervisory authorities will have the right of access to all relevant data held by the outsourcing services provider and of inspection of the outsourced activities at its premises. The focus of pillar 3 is reporting and disclosure. The degree to which information must be disclosed publicly is increased and all entities must have a public disclosure policy including the publication of a solvency and financial condition report at least once a year.

4.2.2. Basis for a common framework?

In the literature, many articles have been published about the question whether Solvency II is suitable for pension funds.³⁷ Many of these articles state that pension arrangements in the EU Member States vary considerably, including security mechanisms like the sponsor covenant, pension protection schemes and benefit reduction options. The Solvency II Directive doesn't account for these differences. Furthermore, Solvency II is only applicable to one specific pension provider, i.e. the insurance company. The other two risk bearers, the employer and the employee, are not in scope. So the answer to the question "Can a pension fund be regulated by Solvency II?" is no.

³⁷ See for instance O.C.H.M. Sleijpen, *Solvency II ook voor pensioenfondsen*. Tijdschrift voor Pensioenvraagstukken, 2007/14; B. Kuipers, *Solvency II ongeschikt voor pensioenfondsen*, Tijdschrift voor Pensioenvraagstukken, 2009/8; L. van der Meij, *Solvency II: Friend or foe?*, Pensions (2011) 16, 137 – 139.

The Solvency II framework consists of three pillars, comparable to the pillars we described for our common framework. But, similar to the IORP framework, the Solvency II framework only focuses on the pension provider and doesn't take the other parties (the employer and the employee) into account. So this can't be a basis for our common framework. But this doesn't mean we propose to eliminate the Solvency II Directive. It is obvious that insurance companies may have other products than pension schemes. Only because of that reason Solvency II needs to remain in place. And the content of this Directive will be used in our proposal of a common framework.

4.3. Proposal for a new common framework

The starting point of the common framework is the entire pension contract. All parties that can bear risks have to fit into this framework. However, the framework will not contain requirements directly addressed to the participant, since the participant does not have commitments towards the provider and the employer (other than paying his/her own share in the agreed pension premiums). The common framework has to look at both the social and prudential dimensions. With social dimension we mean the competence of the EU Member State to design the national pension system as well as the freedom of contract of the employer and his/her employees (or their representatives). With prudential dimension we mean financial security to be delivered by risk bearers.

As explained in section 3.1.1, the new framework should consist of three pillars:

- Pillar 1 (security requirements): when risks are borne by the employer and/or the pension provider, there must be a certain degree of certainty that these risks can effectively be borne by these parties. As for the risks the participant bears, there is no need for security requirements.
- Pillar 2 (governance and risk management requirements): the pension contract must be handled with care. This leads to requirements on two levels: the pension provider (and the employer) should be governed adequately and the risk management of the contract should be prudent. For risk management purposes, a periodic overview has to be delivered on the expectations of the pension contract. The periodic overview is roughly inspired by the ORSA (Solvency II), but should cover the entire pension contract. We therefore call this the 'Occupational Pensions Total Risk Assessment' - OPTRA. The main difference³⁸ between the ORSA and the OPTRA is that the ORSA only looks at the promises that are made by the pension provider (in this case the life insurance company), whereas the OPTRA looks at all risk bearers in the pension contract³⁹. The OPTRA should show how the distribution of the risks develops in the future. This means that an estimate should be made of future developments and how these developments influence the pension contract. From this estimate, the employer, participant and pension provider can see how many risks they are likely to bear when taking into account future developments. This could then be compared to the distribution of risks that the three of them had in mind when agreeing the pension contract.

³⁸ Another difference is that the ORSA, due to its sole focus on the pension provider, cannot provide insight whether, and to what extent, risks are shifting from one risk bearer to another.

³⁹ This could include pension protection schemes if the risk analysis shows that the pension provider and/or the employer may not be able to live up to their promises anymore and the pension protection scheme may need to take over (some of) the risks.

- Pillar 3 (transparency and information requirements): the participant needs to get understandable information about the current situation of his pension scheme. But it must also be clear to the participant what the future risks of the pension contract can be, the level of security of his pension entitlement when the risks are carried by the employer or the pension provider (the outcome of OPTRA) and what this would mean for the retirement income of the participant.

The following sections describe the effects that our common framework could have in practice. We start with a summary table that describes the role of the three stakeholders in the common framework. Then we look at the effects on pension providers, on employers and on supervision. Finally, we look at the ‘European’ effects, such as the relation between the European Commission and EU Member States, the relation with the Commission’s Green Paper on Pensions and the necessary changes to current Directives.

4.3.1. Summary table

The following table summarizes the regime for the three stakeholders in the common framework.

Stakeholder	Pillar 1 Security requirements	Pillar 2 Governance and risk management	Pillar 3 Transparency and information requirements
Pension provider	The level of security does not depend on the type of pension provider but on the content of the pension contract	For the entire pension contract: an Occupational Pensions Total Risk Assessment – OPTRA	Disclosure of risks of the pension contract (the outcome of OPTRA) and the level of security of the pension entitlement when the risks are borne by the pension provider (the outcome of the assessment of Pillar 1).
Employer	There has to be some kind of security on the way the employer can fulfil his obligations. The current Insolvency Directive might be sufficient, possibly combined with an assessment of the employer or the obligation to hold contingent assets (like a mortgage).	It is not possible to prescribe general governance rules.	Disclosure of risks of the pension contract and the level of security of the pension entitlements when the risks are borne by the employer (the outcome of the assessment of Pillar 1).

Stakeholder	Pillar 1 Security requirements	Pillar 2 Governance and risk management	Pillar 3 Transparency and information requirements
Participant	When the participant bears all the risks of the pension contract (pure DC), the focus should be on pillars 2 and 3.	It depends on the type of the pension contract. For a DB contract, risk management lies with the pension provider. For a DC contract, risk management can for example consist of prescribed life cycle funds.	The participant needs universal ('holistic') information about the pension contract. The information is depending on the type of pension contract (DC, with all risks carried by the participant, requires other information than DB).

4.3.2. Pension provider

Within this three pillar framework supervision should be tailor-made, depending on the type of pension contract. However, the type of pension provider (insurance company or pension fund) should not be relevant for the framework. Where pension providers also have other activities (e.g. general life insurance business in case of an insurance company), other regulations can be applicable to these providers as well. Because a life insurance company is allowed to administer more types of products than only pension products, in which case two frameworks will be applicable, it is necessary that the pension activities are strictly separated. Ideally, this would be realised by placing the occupational pensions activities in a separate legal entity, as this would avoid contradictory requirements from different EU regulations being applicable simultaneously, e.g. regarding governance of the life insurance company. However, it would also be possible to apply legal ring-fencing within the life insurance company, in which case the common framework will be applicable to the ring-fenced pension activities.

Pension funds and insurance companies are by definition different kind of institutions. Life insurance companies are usually⁴⁰ profit-making institutions owned by shareholders, whereas pension funds are non-profit-making institutions without shareholders.⁴¹ Does this mean that a pension promise made by an insurance company needs more guarantees? The answer is no. Although an insurance company is a for-profit institution, there is no risk that the shareholders could have a claim on the pension capital insured by the insurance company. The reward for the shareholders is the dividend the insurance company pays. In order to be able to pay dividend, the insurance company must make a profit. An insurance company can influence its profit by the determination of the contribution for the pension scheme. But it cannot do that unlimited; the competition in the market ensures that the contributions are constricted.

⁴⁰ See also section 2.1.1.

⁴¹ See for more differences (and similarities) D. Blake, *Portfolio Choice Models of Pension Funds and Life Assurance Companies: Similarities and Differences*, The Geneva Papers on Risk and Insurance Vol. 24 No. 3 (July 1999) 327-357.

4.3.3. Employer

If the employer covers (part of) the risks, there has to be some kind of security on the way he can fulfil his obligations. Our common framework will not provide for detailed rules on this aspect, given the fact that the employer in general undertakes many business activities and that the provision of pension schemes is only one element (and usually not the most important element) of these activities. However, our common framework could include the provision that the governance aspects of the employer should be adequately regulated in other relevant regulations concerning the relations between employers and employees. For example the regulations on Workers Councils. Alternatively, the current Insolvency Directive regarding occupational supplementary pension entitlements⁴² requires Member States to adopt the necessary measures to protect these pension entitlements. This might be sufficient, possibly in combination with an assessment of the employer or the obligation to hold contingent assets (like a mortgage).

4.3.4. Supervision

Supervision is needed on the compliance with the requirements of the common framework. This should entail supervision of the security requirements on the pension provider and the employer, as well as supervision on the compliance with the OPTRA and transparency and information requirements to the participant. As a result of the current Directives, supervisory authorities have been appointed in EU Member States for pension providers. However, the supervision of the entire pension contract, including the OPTRA, still needs to be addressed in the common framework.

4.3.5. Relation European Commission – Member States

The development of a common framework along the lines sketched in this thesis doesn't entail a transfer of national competences to the European Commission. The design of the national pension system will stay the competence of the Member States as it is now. The distribution of risks has to be made clear in all three pillars of the common framework. Therefore, the common framework prescribes a format on the assessment of the distribution of the risks, as well as a format how to monitor and manage those risks.

The national legislator can decide what type of risks or the maximum risk that a participant of the pension scheme can bear (for instance pure DC is not allowed in Denmark). The common framework doesn't state whether participation is compulsory or whether there is some form of auto enrolment. The freedom of social partners to design pension arrangements doesn't change. The common framework starts at the point where the social partners, within the boundaries of the national legislation, have distributed the risks between the pension provider, the employer and the participant.

⁴² Directive 2008/94/EC of the European Parliament and of the Council of 22 October 2008 on the protection of employees in the event of the insolvency of their employer, PB L 283, 28.10.2008, p. 36–42.

4.3.6. Green Paper on Pensions

A common framework will fit perfectly in the Green paper 'Towards adequate, sustainable and safe European pension systems'.⁴³ Such a common framework makes it clear to participants how the pension arrangement in other EU Member States compares with the pension arrangement in their home EU Member State. In this way it contributes to 'removing obstacles for mobility' (Q6 of the Green paper). It makes the distribution of risks between the employee and the pension provider clear (Q9 of the Green Paper), it modernizes the information disclosure requirements for pension products in a standardized way (Q12 of the Green Paper) and it offers an integrated approach that allows the EU to look at pension policy in a common way. And the framework shows clearly what questions the social partners need to answer. It stimulates EU Member States to ensure that more employees get (adequate) pension arrangements. This meets the criticism of for instance the NAPF on the proposed IORP II Directive, who stated that "it would be better to focus on the 60m EU citizens who have no workplace pension, instead of eroding the good pensions already in place".⁴⁴

4.3.7. Adaptations of current Directives

The introduction of a common framework for occupational pension contracts, as proposed in this thesis, will affect existing Directives on specific pension providers, such as the Solvency II Directive and the IORP Directive. These effects will be largely dependent on the way the common framework will be implemented in EU legislation. There are roughly two possibilities for this implementation:

- (i) by creating a single Directive containing the common framework for occupational pension contracts covering all three pillars and all types of providers. In this possibility, the IORP Directive would be withdrawn and the Solvency Directive would no longer be applicable to the occupational pensions activities of insurance companies, or
- (ii) by adding a Directive for the (supervision of) the entire pension contract to the existing Directives for specific types of providers. In this case, the IORP Directive and the Solvency II Directive would remain in place, though with adaptations made to them, and an additional Directive would be created for the part of the common framework that goes beyond the existing Directives⁴⁵.

The choice between these two possibilities and, if applicable, the identification of what should be in the additional Directive (and what should be left in the existing Directives) goes beyond the scope of this thesis and requires further study. In that further study, attention should at least be paid to the effects of both possibilities on:

- The governance of insurance companies (and potentially other providers as well) that provide both occupational pensions and other activities, including the question whether or not the occupational pensions activities of life insurance companies should be placed in a separate legal entity or not. In any case, the implementation of the common framework should ensure that life insurance companies do not face contradictory governance requirements from different Directives;

⁴³ Green Paper *Towards adequate, sustainable and safe European pension systems*, COM(2010)365 final, Brussels, 7 July 2010.

⁴⁴ http://www.napf.co.uk/PressCentre/NAPFbuzz/0380_EU_pensions_rules_could_send_UK_pension_funds_450bn_into_the_red.aspx.

⁴⁵ An example of a requirement that would be part of the additional Directive would be the obligation for pension providers to provide for the OPTRA.

- The Own Risk and Solvency Assessment (ORSA) for insurance companies. The ORSA aims to assess, in a continuous and prospective way, the overall solvency needs related to the specific risk profile of the insurance company. As insurance companies normally provide more than only occupational pensions, there will still be a need for an ORSA for the non-pension activities of an insurance company. However, the ORSA would be obsolete for the occupational pensions activities as the OPTRA will include the risk and solvency assessment for those activities. The implementation of the common framework should therefore ensure an adequate relation between⁴⁶ ORSA and OPTRA;
- The Risk Evaluation for Pensions (REP – part of the proposal for IORP II). The REP will be applicable only to pension funds, and therefore only to occupational pensions. Given that the OPTRA in addition to the elements proposed for the REP also contains other elements, and irrespective of the way of implementation, the implementation of the common framework should ensure that the OPTRA and the REP do not exist side-by-side;
- Transparency for the participant. In our view, the participant needs universal ('holistic') information about the entire pension contract. This means that the participant not only needs understandable information about the current situation of his pension scheme, but also about the future risks of the pension contract and the uncertainties around his retirement income. The existing Directives already contain information requirements regarding the current situation and future expectations of the pension contract, but do not provide for an insight in the possible distribution of risks in various future scenarios (as provided by the OPTRA). The transparency requirements regarding occupational pensions that are part of the common framework should not conflict with transparency requirements set by other (remaining) Directives⁴⁷. In our common framework we do not answer the question what the level of information is the participant needs. We await the outcome of the current discussion regarding this subject on the revised IORP II Directive.
- Article 4 of the IORP Directive allows Member States to choose to apply certain provisions of the IORP Directive to the occupational pensions business of insurance companies. If the common framework would be implemented by creating a single Directive, this article would not be necessary anymore since both life insurance companies (with regard to their occupational pensions activities) and pension funds would be governed by the new Directive. If the common framework would be implemented by adding a Directive to the existing Directives, the implementation should at least ensure that the 'same risks, same rules' principle is applied to all types of pension providers (see also section 4.1.1.).

⁴⁶ In case the occupational pensions activities of insurance companies are placed in a separate entity, the ORSA and OPTRA would be completely separate, as they would then cover different entities (and not only different activities).

⁴⁷ In case the common framework is implemented by creating a single Directive, the Solvency II Directive would still be applicable to insurance companies (for their activities other than occupational pensions activities). In case the common framework is implemented by adding an additional Directive, both the Solvency II Directive and the IORP Directive will remain applicable.

Social partners, within the boundaries of the national legislation, distribute the risks between the pension provider, the employer and the participant. The common framework requires pension contracts to be unravelled by explicating the risks that are borne by each of the stakeholders. Where pension providers make a promise to the participant (by taking up their share of the risks of the contract), they should live up to (i.e. 'guarantee') these promises. Therefore, the common framework imposes a security level of 99.5% for the promises made by the pension provider (as this is considered to represent a 'full' guarantee, as mentioned in section 2.3.).

As the common framework applies irrespective of the pension provider, the security level of 99.5% will also be applicable to promises that are made by pension funds. It is however important to realise that most pension funds currently do not provide a full promise for the pension benefits they administer (i.e. do not guarantee the pension benefit they administer). This is due to the fact that in most EU Member States the prudential requirements for pension funds currently do not include an explicit confidence level of 99.5% (if they contain a confidence level at all). This means that a 'translation' needs to be made from the current national frameworks into the common framework, to identify which part of a current pension contract is guaranteed by the pension fund.

An example of how this translation works can be taken from the Dutch case, where a security level of 97.5% is used. Suppose a Dutch DB-pension fund administers a retirement benefit of 100 and complies with the 97.5% security level. If this pension contract is unravelled, it turns out that the participant bears a small part of the risks, resulting from the fact that the pension fund does not provide a 'full' guarantee⁴⁸. Under the common framework, it could for instance be that the pension fund actually made a promise to the participant for a retirement benefit of 95, whereas the remaining part of the retirement benefit of 5 would be fully at the risk of the participant. For the pension fund, this would mean that the common framework would require him to 'guarantee' a retirement benefit of 95 with a security level of 99.5%.

⁴⁸ The fact that the Dutch framework does not provide a full guarantee is acknowledged by the Dutch Government on page 15 of the explanatory memorandum to the Proposal to change the Pensions Act (33 972, nr. 3), as sent to Parliament on June 23rd, 2014: *'Deze bescherming krijgt onder meer gestalte via de zekerheidsmaatstaf van 97,5%. <...> Zoals eerder opgemerkt kunnen de aanspraken hiermee niet worden gegarandeerd'*.

5. Advice: develop a common framework for occupational pensions

Our advice is to develop a new, common framework for occupational pensions that equally covers any type of occupational pension contract operated by any type of pension provider. Such a common framework will fit perfectly in the Green paper 'Towards adequate, sustainable and safe European pension systems', as it makes it clear to participants how the pension arrangement in other EU Member States compares with the pension arrangement in their home EU Member State. In this way it contributes to 'removing obstacles for mobility'. Furthermore, it offers an integrated approach that allows the EU to look at pensions policy in a common way. And finally, the common framework shows clearly what questions the social partners need to answer, thus stimulating EU Member States to ensure that more employees get (adequate) pension arrangements.

The starting point of the common framework is the entire pension contract. All three risk bearing parties (the pension provider, the employer and the participant) have to fit into this framework. The framework can consist of three pillars, comparable to the three pillars of the Solvency II Directive:

- Pillar 1 (security requirements): when risks are borne by the employer and/or the pension provider, there must be a degree of certainty that these risks effectively can be borne by these stakeholders. When the participant bears all the risks, the focus of supervision should be on pillars 2 and 3.
- Pillar 2 (governance and risk management requirements): pension providers deliver a periodic overview of the expectations of the pension contract. It must be clear to the stakeholders how the distribution of the risks develops in the future. This is comparable to the ORSA (from Solvency II), but then applied to the entire pension contract. We label this as the Occupational Pensions Total Risk Assessment - OPTRA.
- Pillar 3 (transparency and information requirements): it must be clear to the participant what the risks of the pension contract are (the outcome of OPTRA), the level of security of his pension entitlement when the risks are borne by the employer or the pension provider (the outcome of the assessment of Pillar 1) and what this would mean for the retirement income of the participant.

The development of a common framework along the lines sketched in this thesis doesn't entail a transfer of national competences to the European Commission. The design of the national pension system will stay the competence of the Member State as it is now. The common framework only prescribes a certain format for the assessment of the distribution of risks and starts at the point where the social partners, within the boundaries of the national legislation, distribute the risks between the employer, the participant and the pension provider.

References

- AAE (Actuarial Association of Europe), 2015, "Clarity before Solvency, a discussion paper on the application of market consistency to pension funds in Europe", May 2015.
- BLAKE, D., 1999, "Portfolio Choice Models of Pension Funds and Life Assurance Companies: Similarities and Differences", *The Geneva Papers on Risk and Insurance* Vol. 24 No. 3 (July 1999), pp. 327-357.
- BOELAARS, I. et al, 2014, "Duurzame vormgeving van het Nederlandse collectieve aanvullende pensioen", *Netspar*, 14 november 2014.
- BRINK, T. van den and H. van Meerten, 2015, "EU bestuurlijke regelgeving in de praktijk: het IORP II richtlijn voorstel als voorbeeld", *NTER*, nr. 4 2015.
- BROEDERS, D.W.G.A. et al., 2010, "Pension benefit security: a comparison of solvency requirements, a pension guarantee fund and sponsor support", Amsterdam: DNB Working Paper, 2010, nr. 268.
- BROEDERS, D.W.G.A., N. KORTLEVE, A. PELSSER and J-W. WIJCKMANS, 2012, "The design of European supervision of pension funds", *Netspar*, Design Paper 06, February 2012.
- EIOPA, 2014, "Mapping exercise on further work on solvency for IORPs", Frankfurt, 13 October 2014.
- EIOPA, 2015, Press Release, EIOPA launches pensions stress test and quantitative assessment on solvency for occupational pension funds, Frankfurt, 11 May 2015.
- EUROPEAN COMMISSION, 2010, Green Paper "Towards adequate, sustainable and safe European pension systems", COM(2010)365 final, Brussels, 7 July 2010.
- EUROPEAN COMMISSION, 2014, Proposal for a Directive of the European Parliament and of the Council on the activities and supervision of institutions for occupational retirement provision (recast), Brussels, 27 March 2014, COM(2014) 167 final.
- FRANSEN, E., J. DE HAAN, K. JANSSEN, N. KORTLEVE and E.H.M. PONDS, 2013, "Generatie-effecten pensioenbeleid in beeld", *ESB*, Jaargang 98 (4663), 28 juni 2013.
- INSURANCE EUROPE, 2014, "Comments on the proposed IORP directive", LIF-PEN-14-089, 6 November 2014.
- KOCKEN, T.P., 2014, "Risicomanagement voor pensioenfondsen", *TIAS Master Class Risicomanagement*, 25 November 2014.
- KUIPERS, B., 2009, "Solvency II ongeschikt voor pensioenfondsen", *Tijdschrift voor Pensioenvraagstukken*, 2009/8.
- LOMMEN, J.M.A., 2015, "Europa, 'Catalyst for change' in de Nederlandse pensioensector", *TIAS Master Class Regelgeving, Toezicht & Governance*, 15 April 2015.
- MARTIN, J. and GRUNDY, M., 1987, "Principles and practical objectives of pension fund investment", in A.G. Shepherd (ed.), *Pension fund investment*, Woodhead-Faulkner, Cambridge.
- MEERTEN, H. van and B. Starink, 2011, "Cross-border obstacles and solutions for pan-European pensions", *EC Tax Review*, 2011/1.

- MEERTEN, H. van and H.W.P. van der Hout, 2013, "De pensioenaanbieder: nationaal en internationaal", in: E. Lutjens (red.), *Pensioenwet Analyse en commentaar*, Deventer: Kluwer 2013.
- MEIJ, L. van der, 2011, "Solvency II: Friend or foe ?", *Pensions* (2011) 16, 137 – 139.
- MULDER, W.F., and P. VLAAR, 2015, "Flaws in the holistic balance sheet", *Investment & Pensions Europe (IPE)*, January 2015, p. 38.
- SLEIJPEN, O.C.H.M., 2007, "Solvency II ook voor pensioenfondsen", *Tijdschrift voor Pensioenvraagstukken*, 2007/14.
- VALKENBURG, F.R. and H. van Meerten, 2015, "Naar een Europese pensioenrichtlijn: over holisme, rekenrente en pensioen", *PensioenMagazine* april 2015.
- WILLEMSSEN, J.H.A. and HOOGENDOORN, H.C., 2011, "Pensioen en Europa: overeenkomsten en verschillen tussen Solvency II en FTK", *PensioenMagazine* December 2011.
- WILSON, Rt Hon. Sir H. (chairman), 1980, *Report of the Committee to Review the Functioning of Financial Institutions*, Cmnd. 7937, HMSO, London.