

# Occupational Pensions in Europe

An actuarial perspective on some important developments

Bologna, 16 June 2016

# Agenda

- **Revision of the IORP Directive**
- **EIOPA's Quantitative work**
- **Financial Management in Pension Funds**

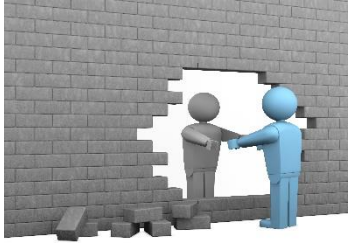
# REVISION OF THE IORP DIRECTIVE

# IORP II proposal

- Published on 27 March 2014
- As announced: no Pillar 1 changes (quantitative requirements)
- Significant Pillar 2 and Pillar 3 amendments/additions
- Likely that proposal will be amended after discussions with European Council and European Parliament

# IORP II proposal

## 4 Main objectives:



Removing remaining prudential barriers for cross-border IORPs



Ensuring good governance and risk management



Providing clear and relevant information to members and beneficiaries



Ensuring that supervisors have the necessary tools to effectively supervise IORPs

# IORP II Commission proposal – Pillar 2

## Pillar 2 – qualitative requirements

- Governance
- 4 eyes principle
- Fit and proper requirements
- Sound remuneration policy
- Function holders for:
  - Risk management
  - Internal audit
  - Actuarial function
- Risk evaluation for pensions
- Outsourcing requirements
  - Must appoint a depositary



# IORP II Commission proposal – Pillar 3

## Pillar 3 – reporting and disclosure requirements

- Information to beneficiaries
  - In common format
  - Correct, understandable, not misleading
  - Easy to read
- Pension Benefit Statement
  - Annually (free of charge)
  - Key information – 2 pages A4
  - Electronically available
  - Great detail in content requirements
- Specific information
  - 2 years before retirement and in pay-out phase



# Some key amendments by the Council

- Takes out the Delegated Acts on:
  - Risk evaluation
  - Remuneration
  - Communication
- Mitigates requirements by adding:
  - Proportionality
    - “... *appropriate to their size and internal organisation, as well as the nature, scale and complexity of their activities*” e.g. in:
      - Risk management
      - Internal Control
  - Subsidiarity
    - “*Member States may decide not to apply*” (e.g. depository)
- Adds an **an internal control function** to the risk-management function, internal audit function and **actuarial function**



# Some key amendments by Parliament

- *“Long-term interests of members and beneficiaries”* in e.g.:
  - Cross-border transfers (art. 3)
- *“ensure long-term sustainability”* in e.g.:
  - Available solvency margin (art. 17)
- *“impact of investment decisions on environmental, social, governance or ethical factors”* (e.g. art. 20)
- *“... taking into account the objective of ensuring the intergenerational balance of the pension scheme”* (e.g. art. 20)
- To inform the competent authority *“of any finding that could have a significant impact on the interests of members and beneficiaries.”* (whistle blowing)
  - It is striking that the Council takes the whistle blowing requirement out

# Actuarial Function (Article 28)

- We were missing in the Commission's proposal:

*“The actuarial function shall be carried out by persons who have knowledge of actuarial and financial mathematics, commensurate with the nature, scale and complexity of the risks inherent in the [business] [**activities**] of the [insurance or reinsurance undertaking] [**Institution for Occupational Retirement Provision**], and who are able to demonstrate their relevant experience with applicable professional and other standards.”*

- This text is now added by Parliament in Recital 25, but not yet in Article 28

# Own Risk Assessment / Actuarial Function

Need for European Standards of Actuarial Practice?

An AAE working group is already exploring the need

After a first discussion it appeared that it might be too early for standards.

Working group is now studying Educational Notes

Description of good practice

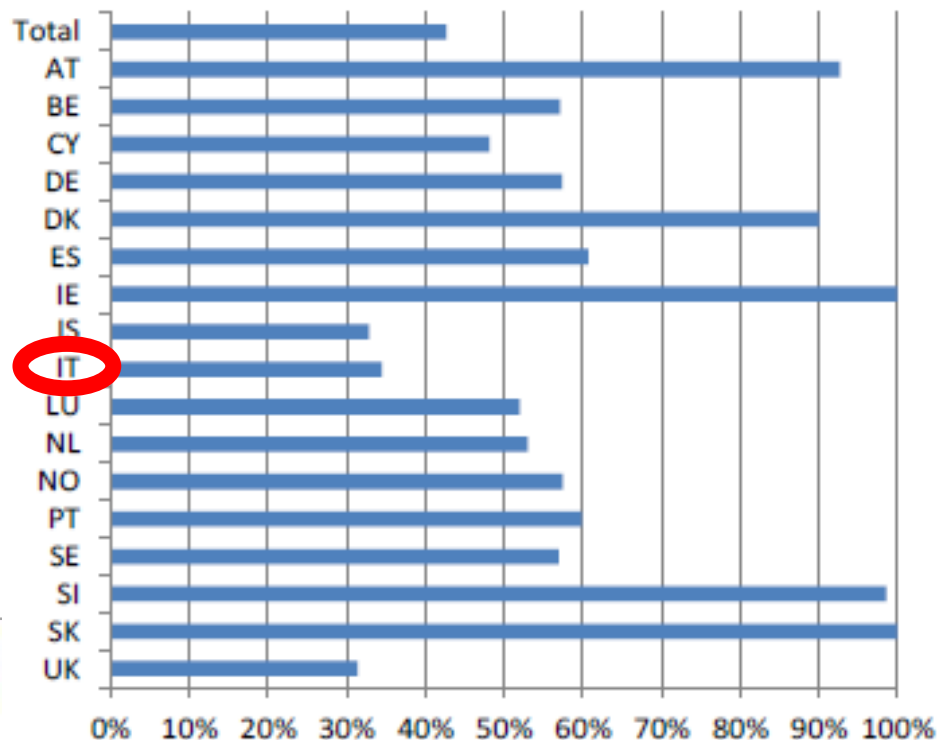
First step on a path towards Standards

# STRESS TEST FOR PENSIONS

# First stress test for pensions

Published 26 January 2016

1. Test the resilience of DB and hybrid schemes
2. Identify potential vulnerabilities of DC



Market coverage in % of total assets of the IORP sector

Source: EIOPA

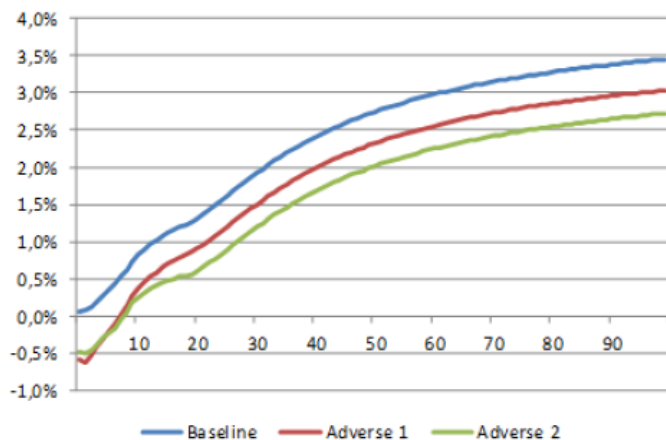
# Stress scenarios

- Adverse market scenario's:
  1. Negative demand shock
  2. Negative demand + supply shock
- Longevity shock scenario for DB IORPs

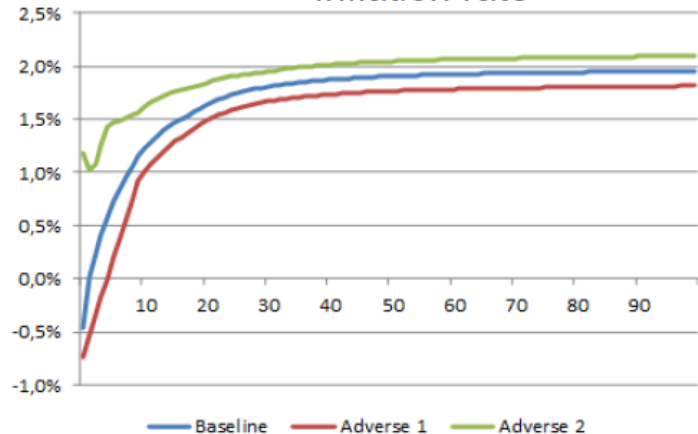
## Main stress impacts in adverse market and longevity scenarios

	Adverse market 1	Adverse market 2	Longevity
EU property (price downward shock)	-55%	-36%	-
EU stock prices (price downward shock)	-45%	-33%	-
EU government bonds (spread widening)	120 bps	67 bps	-
Corporate bonds (spread widening)	120 bps	204 bps	-
Euro-dollar exchange rate	+20%	-2%	-
Mortality rates (permanent decrease )	-	-	- 20%

Interest rate



Inflation rate



Source: EIOPA

# Results for DB/Hybrid schemes

RESULTS UNDER DIFFERENT SCENARIOS  
(Excess of assets over liabilities)

eiopa

Scenario	NBS	EIOPA Common methodology
DB/Hybrid pre-stress	-78 bn EUR	- 428 bn EUR
DB/Hybrid Market Adverse 1	- 373 bn EUR $\Delta$ -295bn	- 755 bn EUR $\Delta$ -327bn
DB/Hybrid Market Adverse 2	- 346 bn EUR $\Delta$ -268bn	- 773 bn EUR $\Delta$ -345bn
DB/Hybrid Longevity	- 164 bn EUR $\Delta$ - 86bn	- 526 bn EUR $\Delta$ - 98bn

## Important elements to consider:

- ✓ Liabilities have a very **long-term nature**
- ✓ Regulatory regimes usually include substantial **recovery periods**
- ✓ Future gaps can usually be covered by **sponsor's contributions** and/or **benefit adjustment** mechanisms

# AAE comments

- We support presenting effect of adverse scenarios
  - In addition to the expectation
- Results in itself not surprising
- For employers and employees to discuss as pensions are part of the labour relationship
- Supportive of developing a common-market sensitive methodology
- We suggest to look at more forward looking (ALM-like) methods as well



EIOPA

# **OPINION TO EU INSTITUTIONS ON A COMMON FRAMEWORK FOR RISK ASSESSMENT AND TRANSPARENCY FOR IORPS**

# EIOPA

- Working on “open issues” from Quantitative Impact Study
- EIOPA’s own initiative
  - no brief from European Commission
- Quantitative Impact Study → Quantitative Assessment
- Results and EIOPA’s opinion were published 14 April 2016

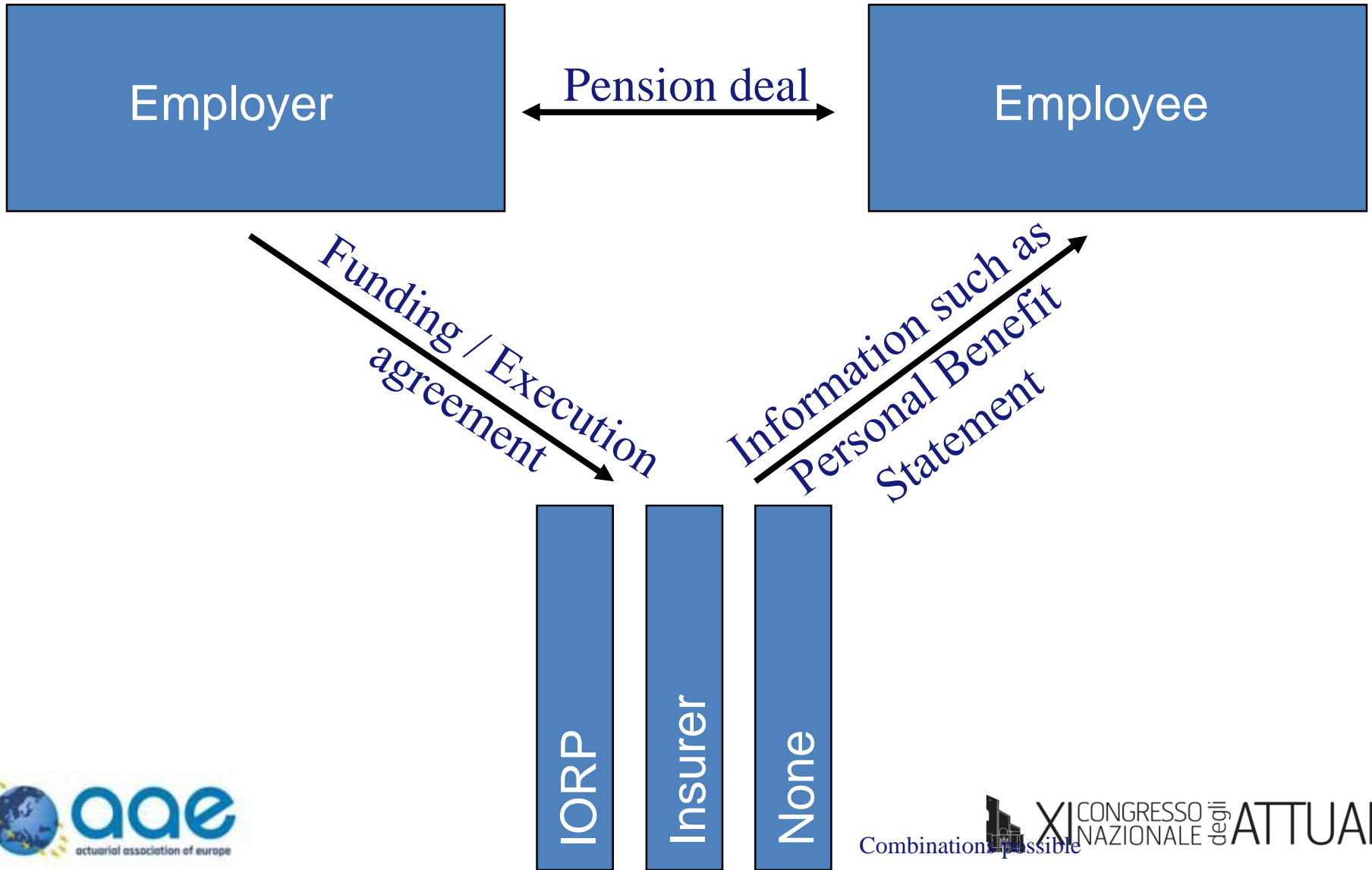
# Clarity before Solvency

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

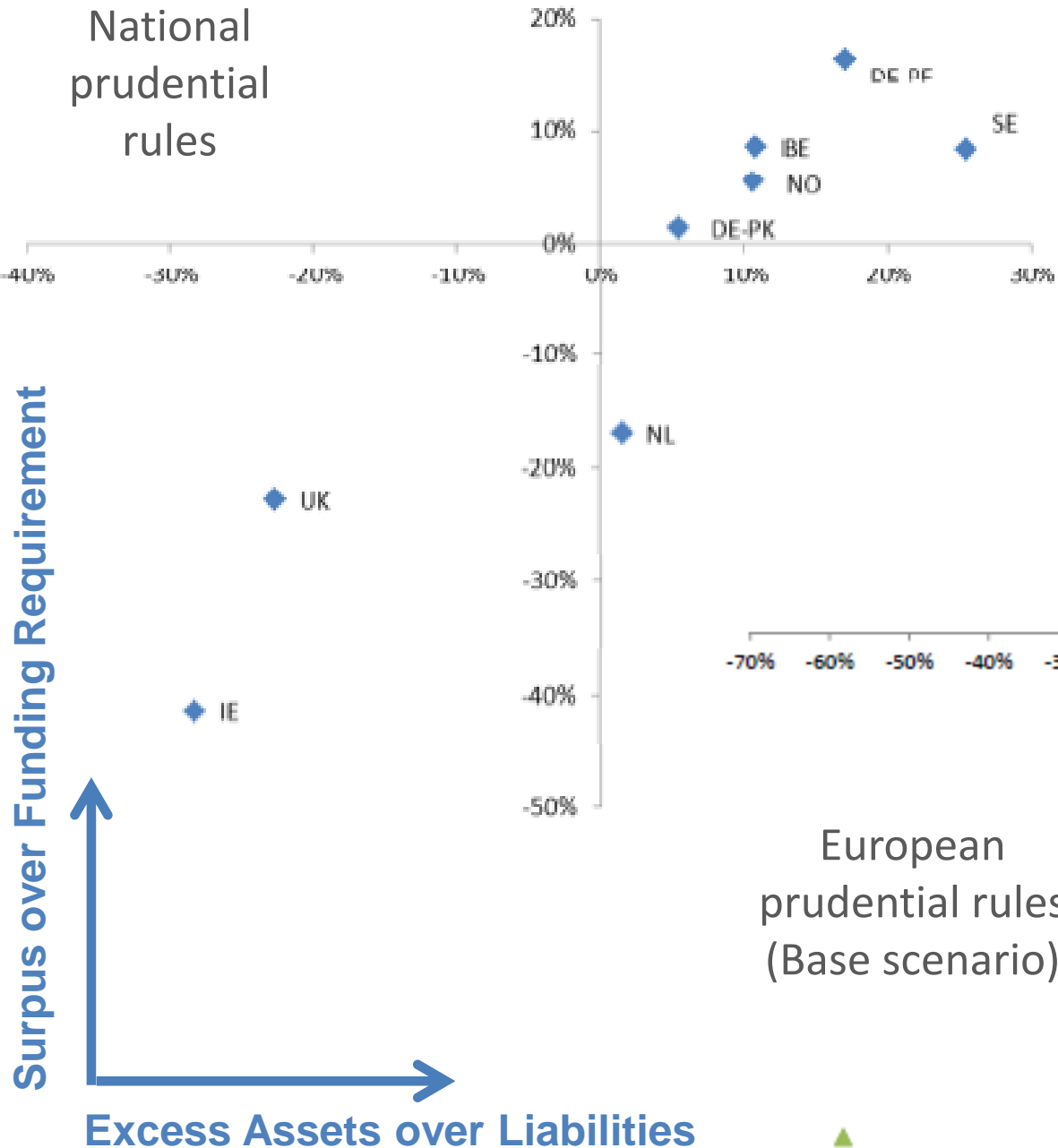


A PUBLICATION OF THE ACTUARIAL ASSOCIATION OF EUROPE  
MAY 2015

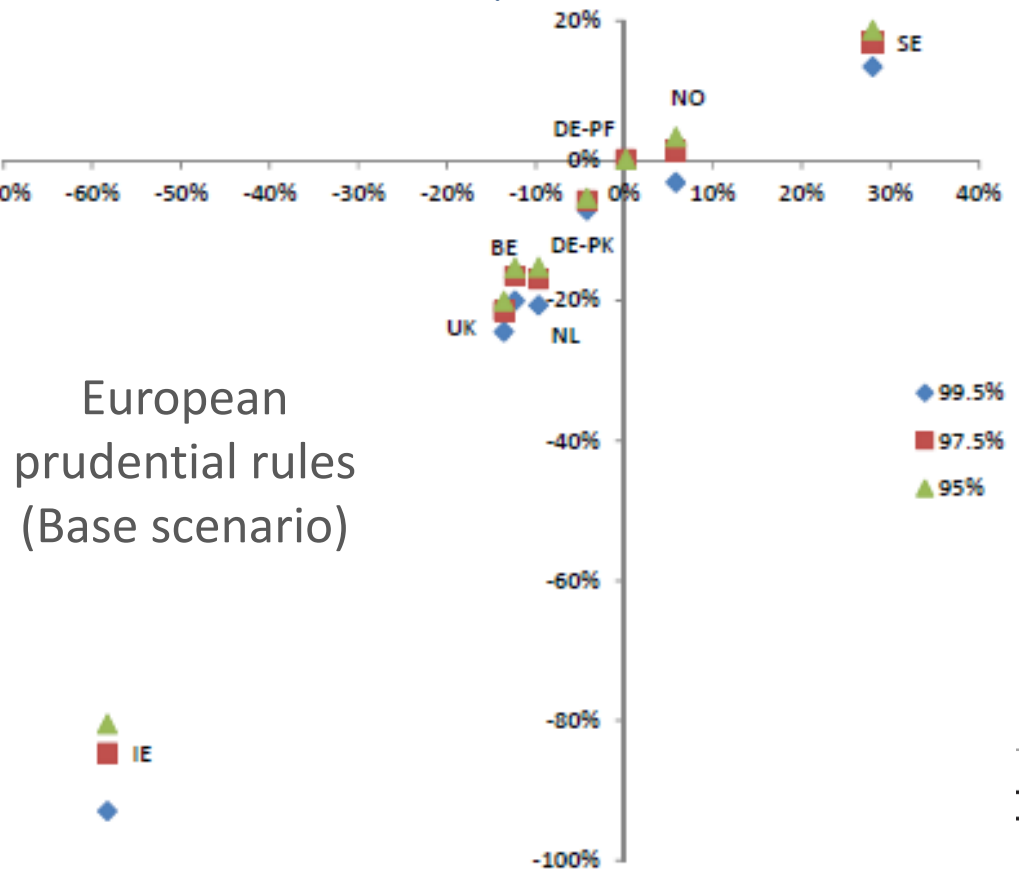
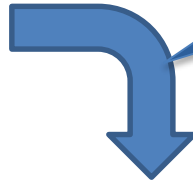
# Supervising Pension Deal or IORP?



# National prudential rules



Impact going from national systems to one European system



# European prudential rules (Base scenario)

# Market Consistency for Pensions

## *Discount rate*

### Debate

- Level A, risk-free interest rate
- Level B, expected return on assets

### Considerations

- It is about putting a value on a pension scheme
- Particularities pension scheme should be known
  - In principal different discount rate for each scheme

### Suggestion

- Fully guaranteed pension scheme
- Fully funded pension scheme with assets

when the discount rate should be the risk-free rate in order to

There is more than just one single interest rate curve  
There is a single interest rate curve for each and every type of pension scheme!!

# The 10 “S’s” of Dutch Pension Risk Management

S1 : interest rate risk

S2 : equity and property risk

S3 : exchange rate risk;

S4 : commodity risk;

S5 : credit risk;

S6 : insurance risk;

S7 : liquidity risk;

S8 : concentration risk;

S9 : operational risk

S10: active management risk

$$VEV = \sqrt{S_1^2 + S_2^2 + 2 \cdot \rho_{1,2} S_1 S_2 + S_3^2 + S_4^2 + S_5^2 + 2 \cdot \rho_{1,5} S_1 S_5 + 2 \cdot \rho_{2,5} S_2 S_5 + S_6^2 + S_7^2 + S_8^2 + S_9^2 + S_{10}^2}$$

waarbij  $\rho_{1,2} = 0,40$  en  $\rho_{1,5} = 0,40$  indien voor  $S_1$  wordt uitgegaan van een rentedaling en nihil indien  $S_1$  is gebaseerd op een rentestijging, en  $\rho_{2,5} = 0,50$ .

# What is risk-free?

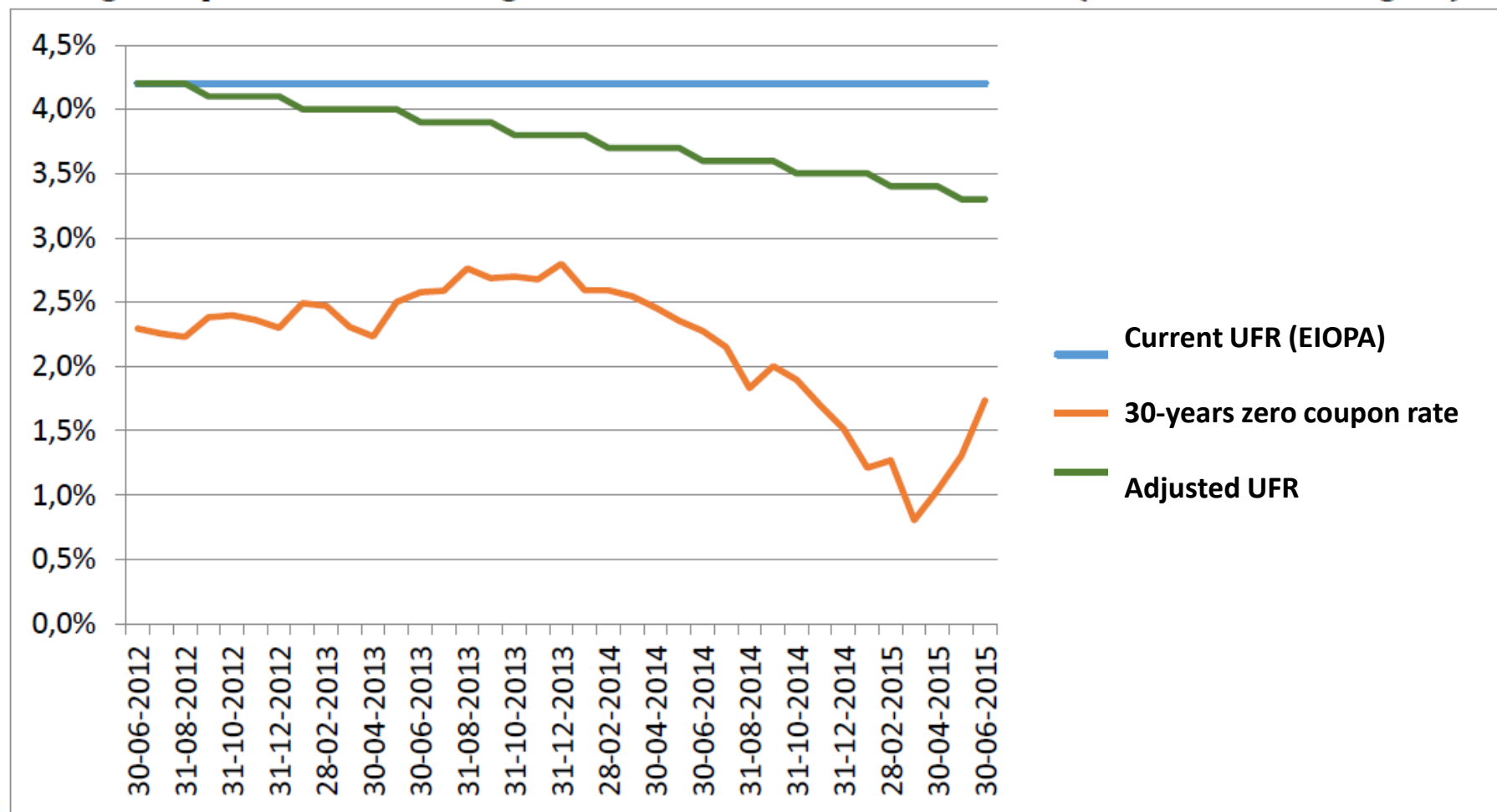
## Ultimate Forward Rate changed in Netherlands

- Since 1-7-2013 level fixed at 4.2% (EIOPA)
- Since 15-7-2015: dynamic, starting at 3.3%
  - based on 20-year forward rates of last 10 years
- First Smoothing Point: 20 year
- Rate climbs gradually towards UFR
  - however UFR level will never be reached



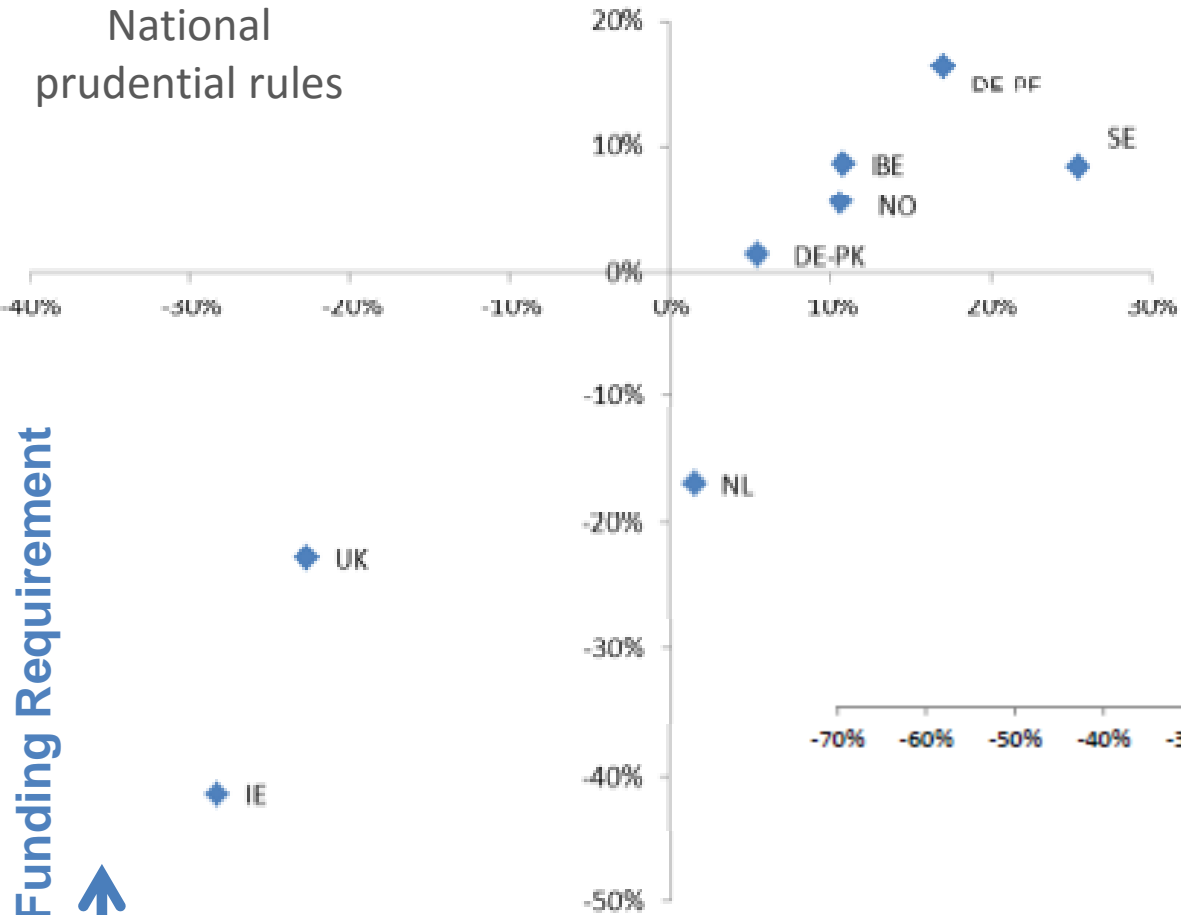
# UFR adjustment as per 15 July 2015

Ultimo juni 2015 was de 30-jaars zero coupon rente 1,735% en zou de aangepaste UFR 3,3% bedragen in plaats van het huidige vaste niveau van de UFR van 4,2% (zie onderstaande figuur).

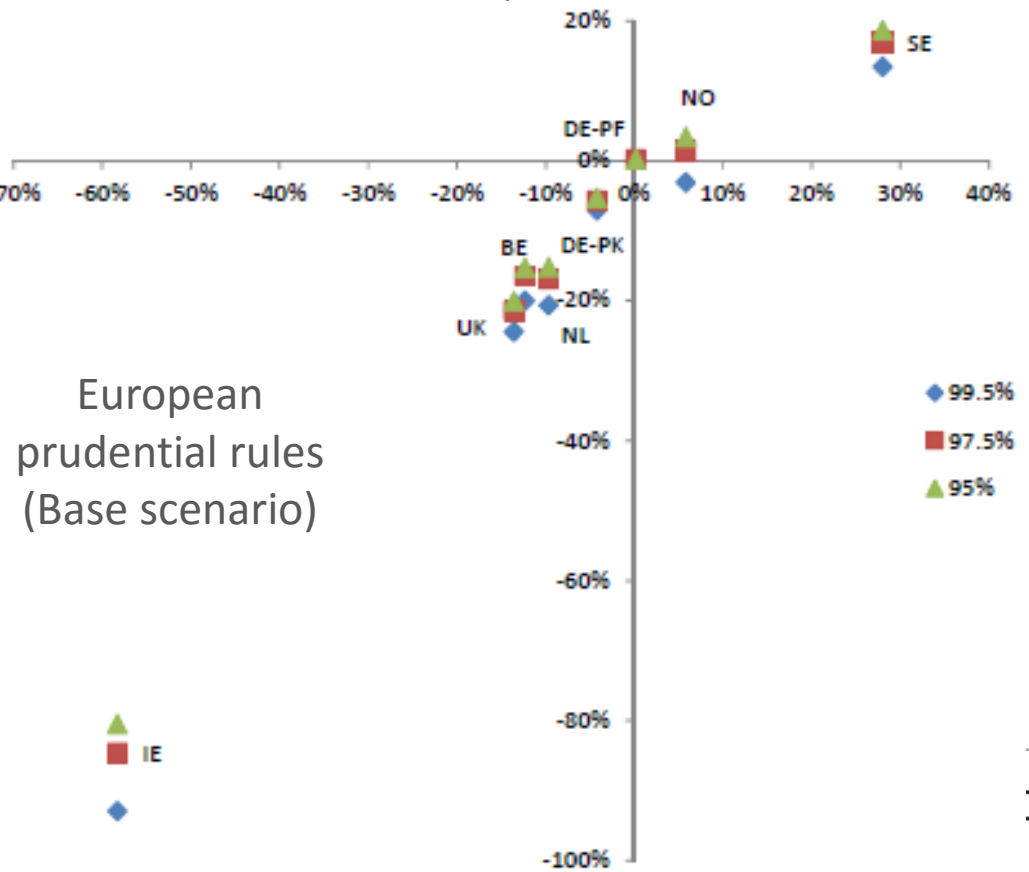
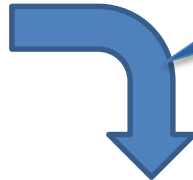


Figuur 1: Vergelijking van de huidige UFR, 30-jaars zero coupon rente en aangepaste UFR sinds de introductie van de UFR

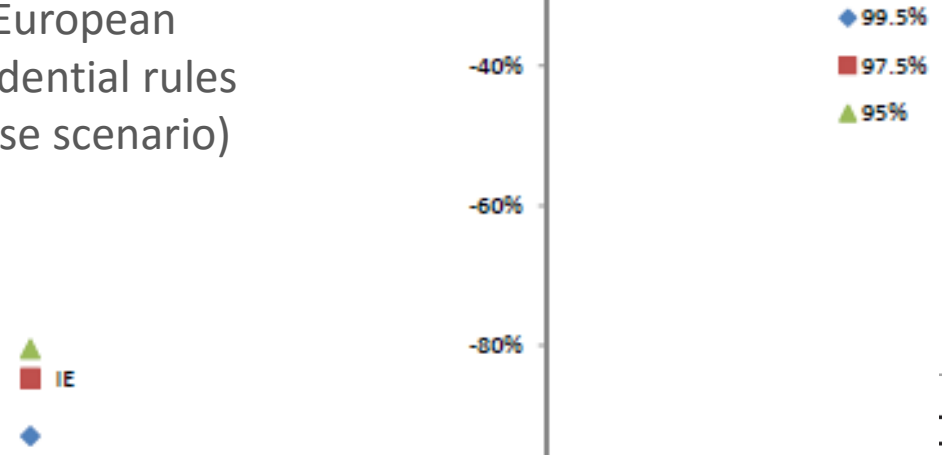
# National prudential rules



Impact going from national systems to one European system



# European prudential rules (Base scenario)

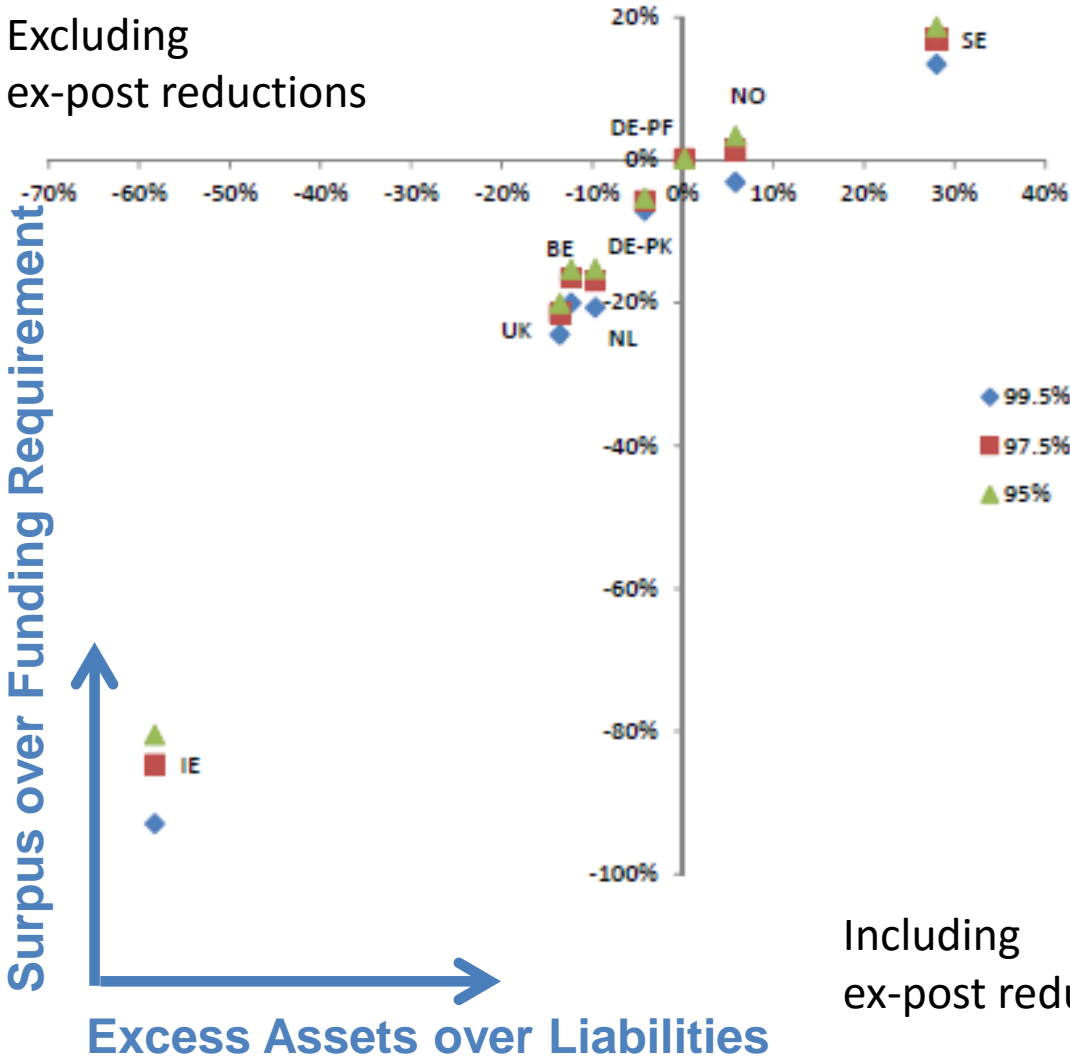


Surplus over Funding Requirement

Excess Assets over Liabilities

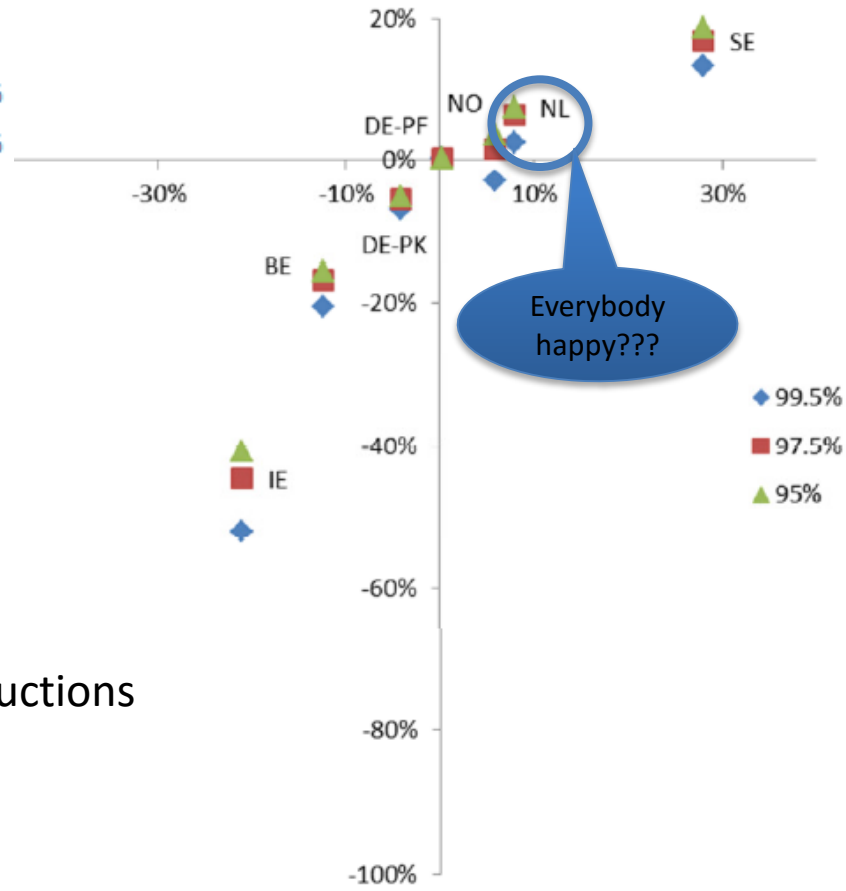
# Impact ex-post benefits reductions

Excluding  
ex-post reductions



Impact reductions  
of accrued pensions

Including  
ex-post reductions



# Dan Brown presents in his latest book 'Inferno' a quote from Dante Alighieri

THE HOTTEST PLACES IN HELL ARE RESERVED FOR THOSE WHO  
MAINTAIN THEIR NEUTRALITY IN TIMES OF GREAT MORAL CRISIS.

My take: we, actuaries, should speak up

# Paolo Fazioli (1944)

**LA STAMPA** ITALIA

I pianoforti dell'ingegnere che ha sposato arte e scienza

A Sacile Paolo Fazioli costruisce gli strumenti ricercati da musicisti di mezzo mondo



In Friuli Lo stabilimento Fazioli si trova a Sacile e dà lavoro a 50 persone. Oltre all'area produttiva, recentemente raddoppiata, si trova una sala concerti da 200 posti dove si esibiscono i più affermati pianisti

Source:

La Stampa 25 January 2016

XI CONGRESSO NAZIONALE degli ATTUARI

# Concluding remarks

A model will always cause debate

- It is never completely accurate

If we don't like the results we could

- Fight against the introduction of the model
  - And push financial issues forward (to the next generation)
- Assess whether the pension promise is sustainable
  - And address the issue together and find new ways forward

I believe that The New Retirement Story is about

*"Creating a Life & Work You Love  
and Never want to Retire from"*

**Falco Valkenburg**

**Independent Actuary**

**Chairperson Pensions Committee of the Actuarial Association of Europe**

*M +31 (0)6 22 78 50 29*

*E hello@falcovalkenburg.eu*

*W www.falcovalkenburg.eu*

*Skype frvalkenburg*

*Twitter @FalcoValkenburg*

*LinkedIn: nl.linkedin.com/in/falcovalkenburg*