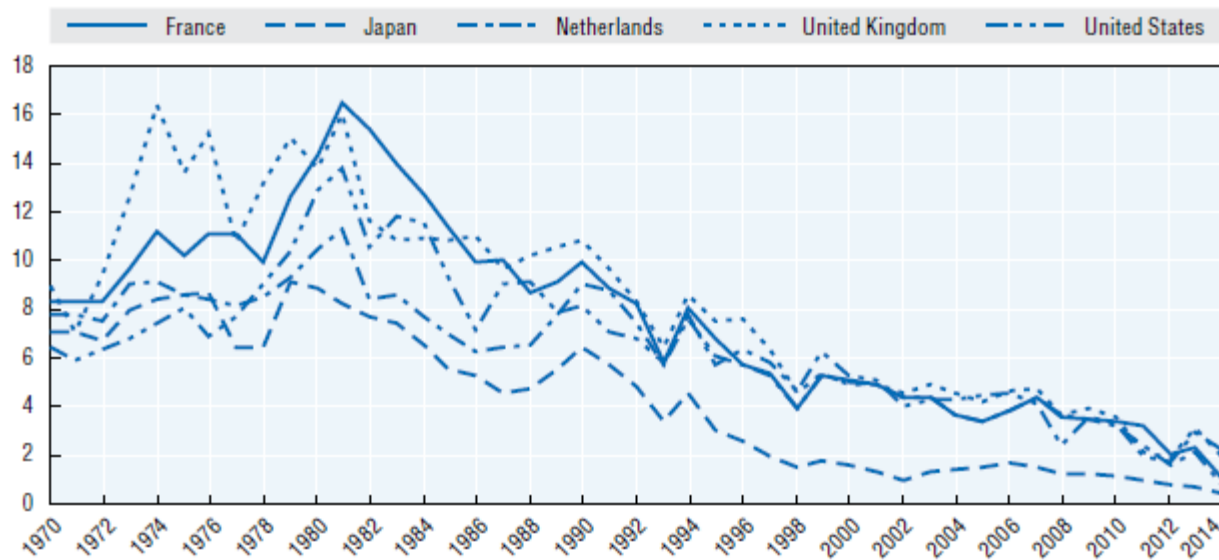


# Insurance and Pensions in the low interest rate environment **Impact on Pensions**

Matti Leppälä, Vice Chair, OPSG  
Joint meeting of IRSG and OPSG in Frankfurt  
1 December 2015

# Long-term downward trend of interest rates

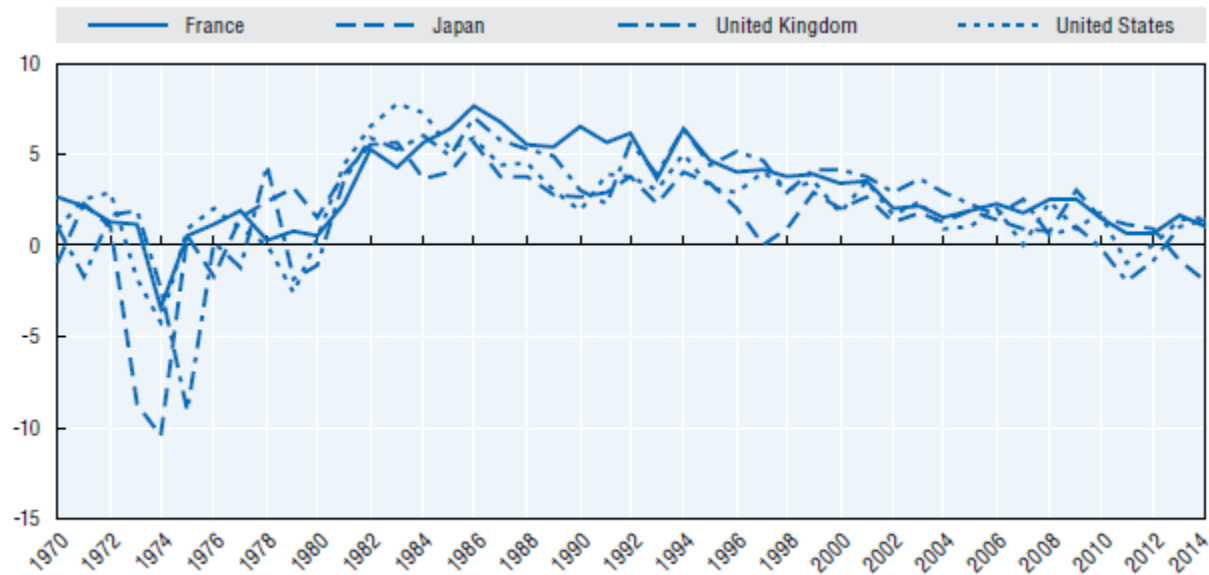
Nominal yields (percentage) on 10-year government bonds in selected OECD countries, 1970-2014 (source: OECD Business and Finance Outlook 2015)



Source: Datastream.

# Long-term downward trend of interest rates

Real yields (percentage) on 10-year government bonds in selected OECD countries, 1970-2014 (source: OECD Business and Finance Outlook 2015)



Source: Datastream; IMF International Financial Statistics and OECD Main Economic Indicators databases, <http://dx.doi.org/10.1787/data-00052-en>.

# Both the asset and liability side of pension systems are influenced

- \* Low interest rates influence the liabilities of pension funds and annuity providers since the liabilities are depending on the discount rate used to calculate the present value of future promises.
- \* Low interest rates also influence the future value of savings because fixed securities are often a big part of the investment portfolio.

# Negative effect of low interest rates

- \* Low interest environment, partially a result of QE as well, has a negative effect on the funding ratio of funds.
- \* 1 per cent decrease in the interest rate leads to a 20 per cent decrease in the funding ratio of a fund. If half of this risk is hedged, the impact on the funding rate would be 10 per cent.

# DB pension funds

- \* DB pension funds with long-dated, interest rate sensitive liabilities will, unless they are hedged, have a negative duration gap.
- \* Long lasting low interest rate environment is likely to further accelerate the closure of DB schemes.

# Basic mechanism

- \* Negative duration gap
  - \* The duration of long-term fixed liabilities exceeds that of assets
- \* Lower yields increase negative duration gaps: duration increases as long-term rates fall and the more so the longer the original duration. The value of liabilities rises faster than that of the assets
- \* Exposure limits and solvency constraints become binding
- \* Hunt for duration: greater demand for long-term bonds as long term rates fall
- \* Amplification of yield decline

# DC pension funds

- \* The situation is more positive for DC pension funds as they experience gains in their bond holdings from the drop in interest rates meaning they see a temporary improvement in their investment performance.
- \* However, those buying an annuity with their DC pension pot, will find them more expensive because of the low interest rates.



# Search for yield

- \* Low interest rates and the search for yield are a norm for a longer time.
- \* By searching for yield the pension funds are only fulfilling their obligations to policymakers. Otherwise they ended up having problems with the guarantees.
- \* Without search for yield people would have smaller pensions anyway.

# Some solutions

- \* There are possible solutions in both the area of changing the way pensions and pension schemes are handled as well as temporarily relaxing supervision:
  - \* Adjust the discount rates (DB)
  - \* Change the benefits or accrual (DB and DC)
  - \* Relax the rules for annuitisation (DB and DC)
  - \* Relaxation capital requirements by supervisors (DB)

# Adjust the discount rates (DB)

- \* IORPs and supervisors should reconsider how pension liabilities are discounted, to the extent that these are distorted by QE. A solution for QE could be to introduce a QE adjustment to discount rates or to use corporate bond yields instead of (distorted) governments yields or interest rate swaps.

# Change the benefits or accrual (DB and DC)

- \* Alternative solutions in the pensions area are changing the nature and characteristics of the benefits. This could be done in the form of lowering the guarantees (or even stop offering these) and shift towards DC.
- \* Even though this would increase the clarity with regard to who is bearing the risks, the consequence of these measures would be that risks will be shifted towards members and beneficiaries.
- \* A solution with possibly less sustainable impact on members could be to – temporarily – lower the accrual of new benefits; this would also safeguard beneficiaries.

# Relax the rules for annuitisation (DB and DC)

- \* For members and beneficiaries there should be more transparency and understanding of the impact on their pensions. The expected negative impact of QE on the benefits should be communicated in a way so that members and beneficiaries understand them and can take action if and when necessary.
- \* The introduction of medium term annuities – with a term of 3, 5 or even 10 years – with the option for subsequent life annuities if and when market conditions have normalised after QE has halted.

# Relaxation capital requirements by supervisors (DB)

- \* Supervisory rules can cope with the unforeseen and undesirable consequences of QE. How capital requirements and not meeting these will be handled? These could be applied and extended to the extent that and for the time period QE impacts pensions negatively, but no more and longer than necessary.
- \* Lengthening the horizon of recovery plans and extending the period that new recovery plans have to be filed to the supervisors.
- \* Accepting (temporarily) higher risks. This can be in the form of accepting less liability hedging, less bond buying and higher exposure to equities and other riskier assets.



**Thank you!**