



ASSOCIATION ACTUARIELLE INTERNATIONALE
INTERNATIONAL ACTUARIAL ASSOCIATION



Institute of Actuaries of India



13th Global Conference of Actuaries 2011

Emerging Risks... Daring Solutions

Pension Buy-Outs in the United Kingdom

Dieter Kroll

General Manager – Hannover Life Re International
Germany

February 20 – 22, 2011

Disclaimer

The information provided in this presentation does in no way whatsoever constitute legal, accounting, tax or other professional advice.

While Hannover Rückversicherung AG has endeavoured to include in this presentation information it believes to be reliable, complete and up-to-date, the company does not make any representation or warranty, express or implied, as to the accuracy, completeness or updated status of such information.

Therefore, in no case whatsoever will Hannover Rückversicherung AG and its affiliate companies be liable to anyone for any decision made or action taken in conjunction with the information in this presentation or for any related damages.

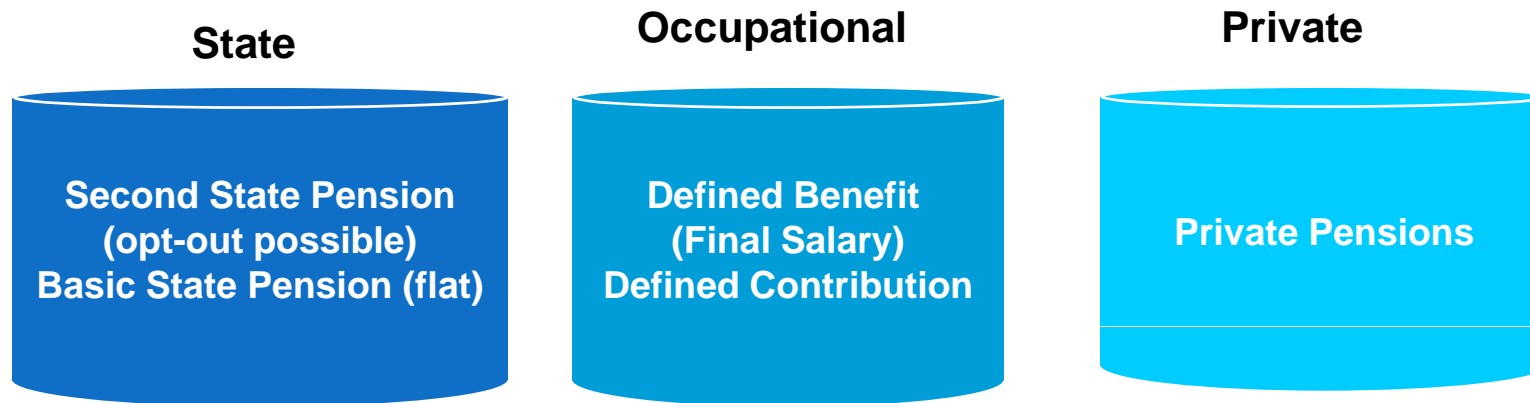
© Hannover Rückversicherung AG. All rights reserved.

Hannover Re is the registered service mark of Hannover Rückversicherung AG.

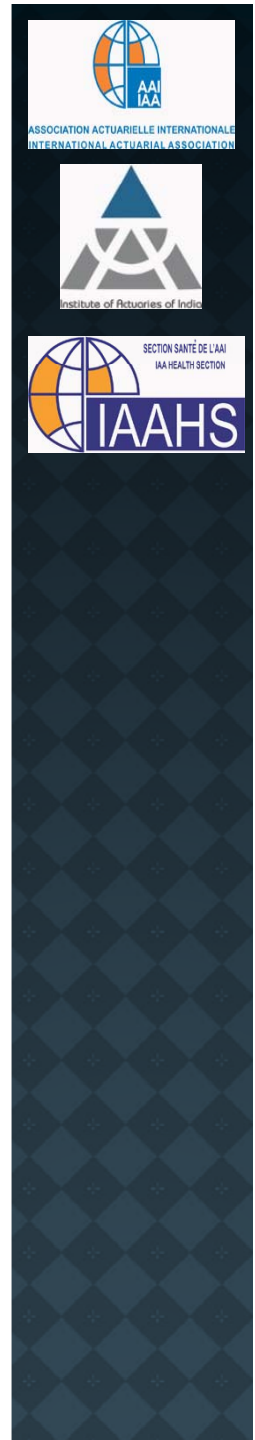


UK Pension System

Occupational Pensions



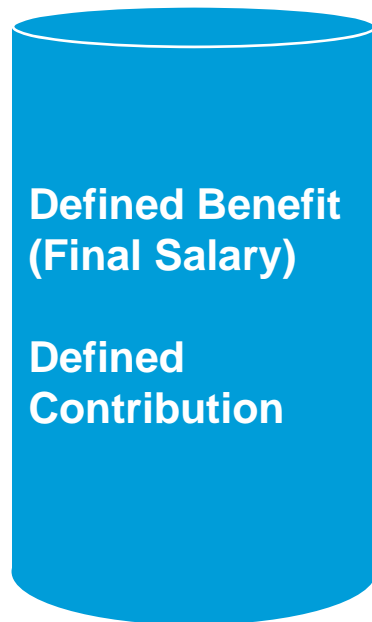
- Occupational and Private Pensions are supported by tax advantages
- Private and Occupational Pensions dominate



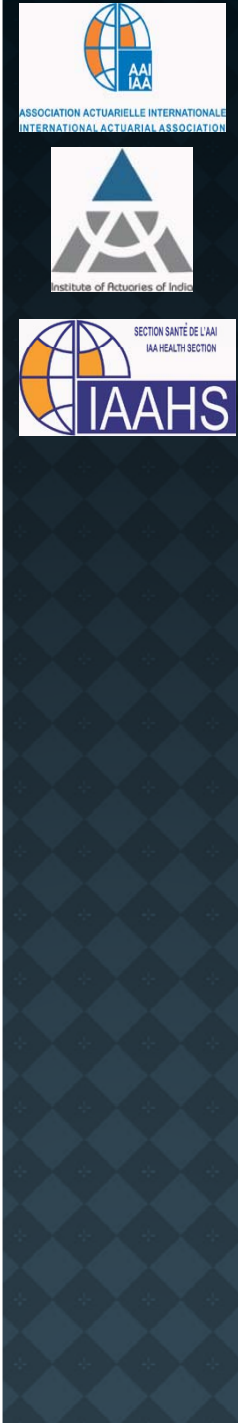
UK Pension System

Pension Buy-Out - Second Pillar

Occupational



- ⦿ Pension Funds with Defined Benefit Schemes:
- ⦿ Employer guarantees retirement benefits
- ⦿ 80% of defined benefit Schemes closed for new business
- ⦿ Pension liabilities exceed employer's life expectancy and make M&A deals difficult
- ⦿ Insolvencies & restructurings give rise to pension buy-outs
- ⦿ Shareholders' want management to concentrate on core business rather than on pensions



Pension Fund Options

Buy-out, Buy-in, Longevity Swaps

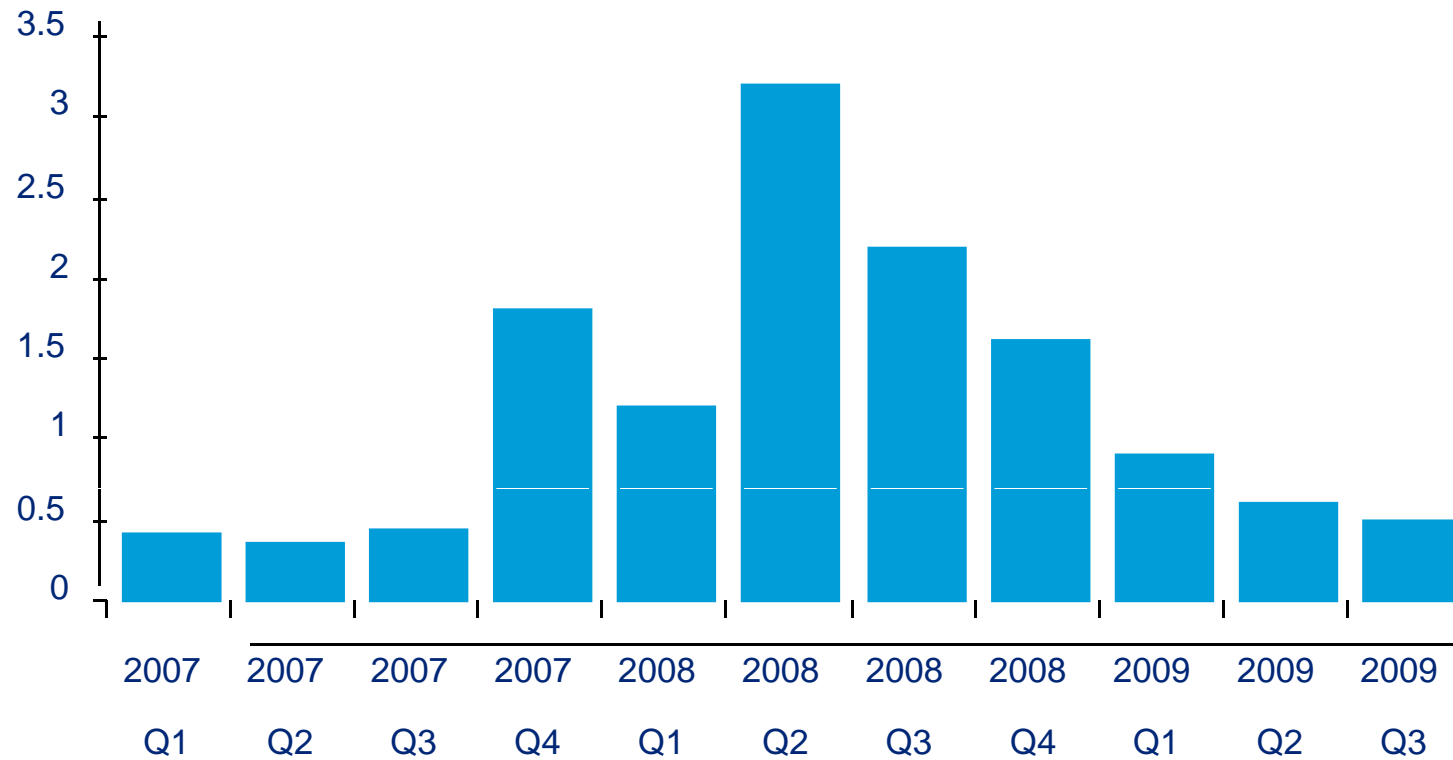
- ◎ **Buy-out**
 - Pension Fund assets and liabilities are transferred to an insurance company
 - Insurance company assumes responsibility for transferred risks
- ◎ **Buy-in**
 - At outset the Pension Fund invests the assets to buy an insurance policy
 - Longevity risk is transferred to an insurance company
- ◎ **Longevity Swap**
 - Regular exchange of premium and claims
 - Pension Fund keeps the assets

Preference depends on market environment



Volume of Bulk Annuity Business

Placed by Pension Funds *)

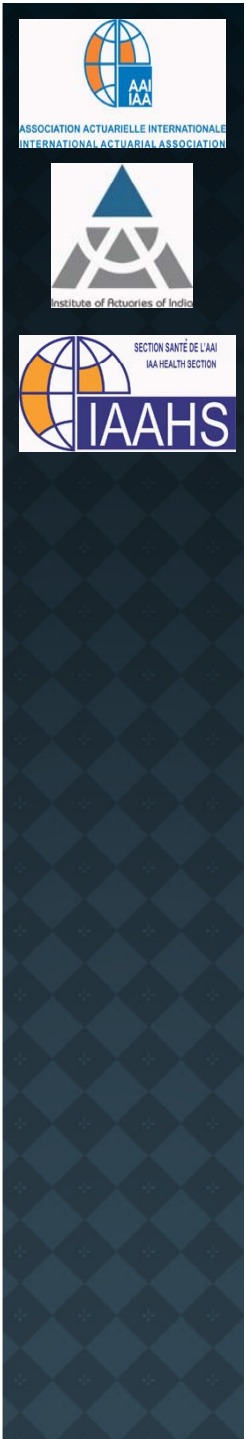
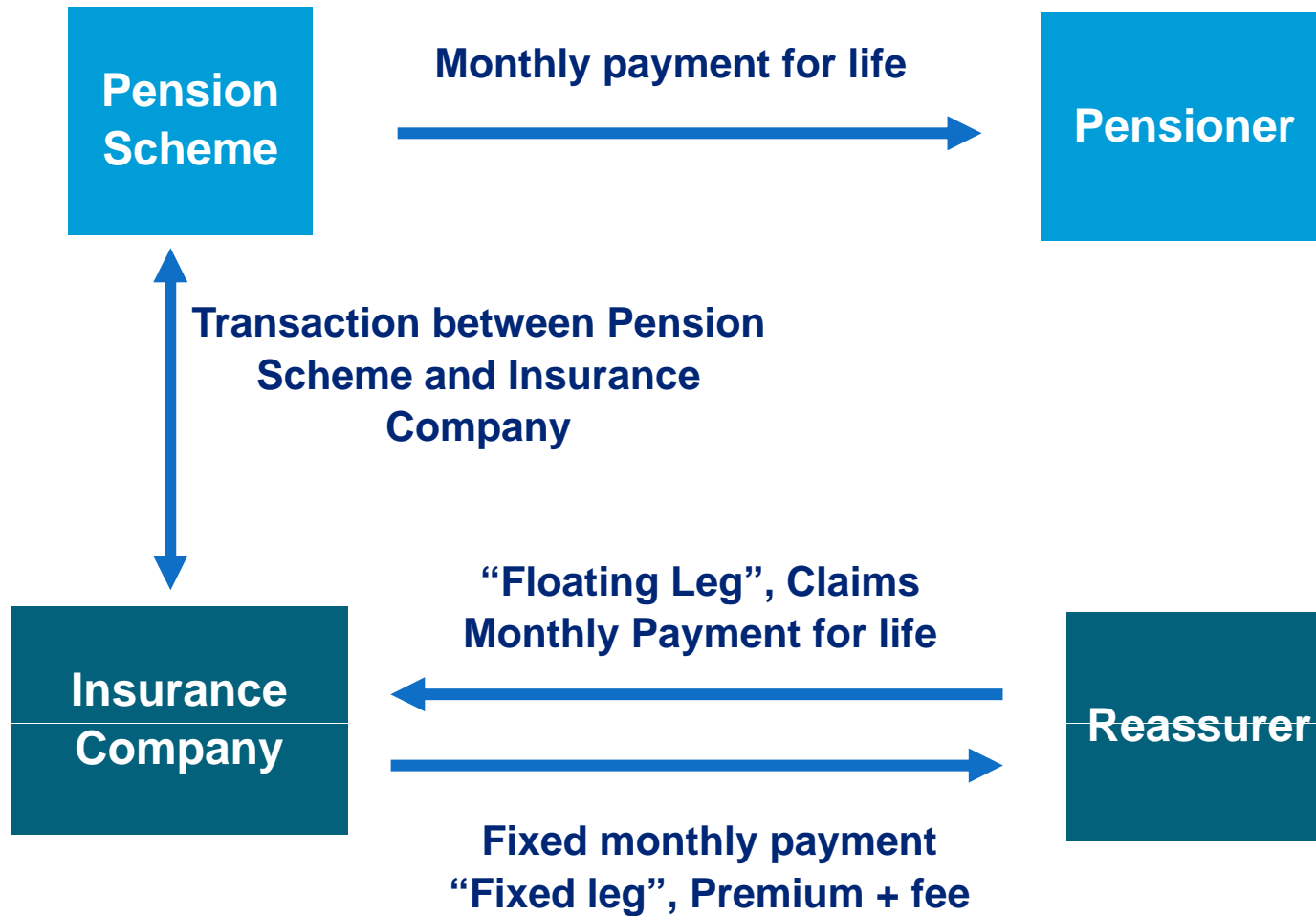


*) Hannover Life Re's estimation



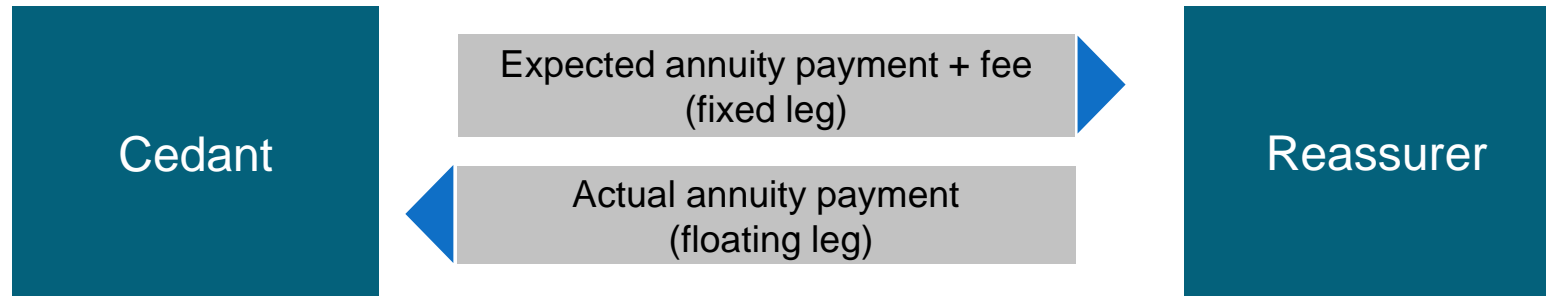
Pension Market Structure

How transactions in the pension market look like

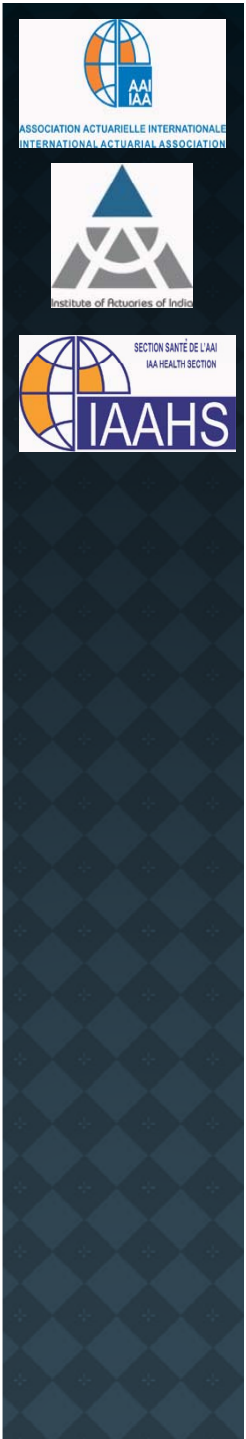


Longevity Swap- The Technical Model

Flow of Regular Premium and Claims



- Proportional reinsurance agreement – typically a quota share
- Reassurer pays actual annuity benefits for reassured business
- Reassurer receives regular reinsurance premium equal to expected annuity payments plus a fee
- Reinsurance premium fixed at inception based on best estimate mortality and mortality improvements
- Net settlement of cash flows



Pension Buy-out Transactions

Avoidance and Retentions

Hannover Life Re is usually happy to reassure...

- ⦿... Longevity risk
- ⦿... Proportion married
- ⦿... Up to natural expiry

Hannover Life Re may be cautious to assume...

- ⦿... Asset risks
- ⦿... Inflation risks
- ⦿... Deferred annuities

Reasonable retention levels required to ensure alignment of interest.



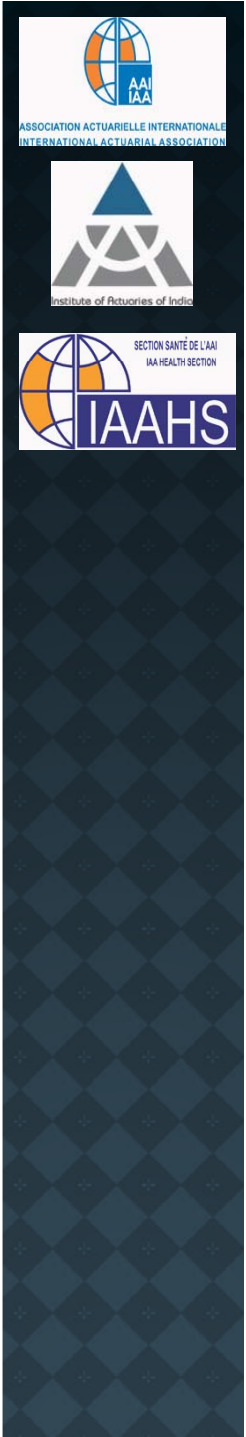
Pension Buyout Transactions

A new market segment for Hannover Life Re since 2005/2006

- Since 2006 Hannover Life Re has developed its pension buy-out proposition
- Building on expertise in Enhanced Annuity market
- Hannover Life Re has already concluded several deals with a volume (in terms of Net Present Value of premiums) of approximately £3.6bn

Positioning Hannover Life Re:

- Hannover Life Re reinsures direct writers of pension blocks
- Hannover Life Re prefers "blue collar industries"
- We focus on "pensions in payment"



Abbey Life / BMW Pension Fund

Deutsche Bank and Paternoster land largest ever pension scheme insurance deal London, February 22, 2010

Deutsche Bank's wholly-owned insurance company, Abbey Life, has announced today that it has executed the largest ever longevity insurance transaction. This transaction will provide the BMW (UK) Operations Pension Scheme with a hedge for life expectancy risks associated with nearly £3 billion of pension scheme liabilities related to approximately 60,000 pensioners.

*Abbey Life utilized the proprietary longevity modeling techniques and structuring expertise of Paternoster, the specialist pensions insurer in which Deutsche Bank is the largest shareholder. Through the transaction, Abbey Life will insure longevity risks of the BMW pension scheme while spreading a proportion of the risk to a consortium of reinsurers (including **Hannover Re**, Pacific Life Re and Partner Re). Unlike other longevity products, Abbey Life's longevity hedge has been constructed to provide the flexibility to adjust the specific benefit structure and hence better match the longevity risk of the scheme.*

BMW chose to insure this risk in order to protect the sponsor against a financial risk in its UK pension scheme...



Thank you for your attention!

