

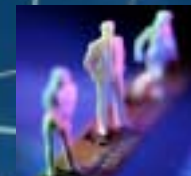


Risk sharing in  
employer pension  
provision

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[WWW.WATSONWYATT.COM](http://WWW.WATSONWYATT.COM)

***ICA Cancun, 22 March 2002***

**W** **Watson Wyatt**  
Worldwide



## Risks associated with ...

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- Amount of benefit
- When the benefit will be paid
- How long the benefit will be paid for
- Investment returns relative to nature of liability
- Options exercised by employee



# Employers' objectives

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- Post retirement income for former employees
- Derive value from benefits provided to support business objectives
- Minimise cost and cost volatility of funding benefit promise

Objectives may be in conflict



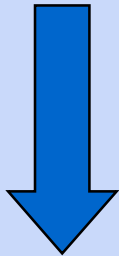
# Risk spectrum of pension plan design

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Defined benefit



Hybrid



Defined contribution

Highest risk (to employer)

- final salary/career average/  
cash balance

Lowest risk



# Career average plans

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- Accumulation of pension amounts without linkage to final salary
- Can provide higher unit accrual of pension than final salary plan for same cost **or** could have part guaranteed benefit plus part variable bonus to give same expected cost
- May be able largely to hedge investment risk
- Not many in UK at present



# Cash balance plans

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- Benefit specified as cash at retirement, not as pension
- Longevity risk transferred to employee
- Investment risk with employer
- Common in US - interest often linked to deposit rates
- In principle any kind of index - whether related to investment or consumer prices - can be specified



# Asset/liability mismatch

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- No traded asset available to hedge final salary liability
- Companies **should** consider issuing pension promises of a type capable of being matched by available traded assets eg cash balance/career average
- Ideal: invest in portfolio of assets with yield close to cost of servicing own long-term debt, without credit risk
- We **suggest**
  - career average/cash balance pension formula, indexed to LPI
  - development of substantial markets in LPI bonds



# Longevity risk

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- Typical DB promise has lifetime guarantee - significant risk
- DC plans typically have no such guarantee - is this sustainable?
- Solutions:
  - promise lump sum at retirement
  - regular upward review of retirement age
  - discretionary pension increases
- New annuity model: Wadsworth/Findlater reinventing annuities





## Summary/conclusion

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- Need to look at new/uncommon plan designs
- Consider investments that reduce asset/liability mismatching
- Revisit traditional annuity structure