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Investment Strategies for Closed DB Schemes

David Bowie
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Agenda

- The End Game
- Impact of asset allocation
- Financial engineering
- Dynamic strategies

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End game: headline considerations

- Funding plan
- Member security
- Trustees’ attitude to risk
- Sponsor covenant
- Sponsor attitude to risk
- Evolution of fund
- Legislative/regulatory environment

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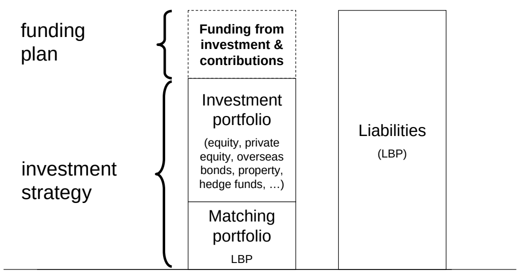
Funding plan – the framework



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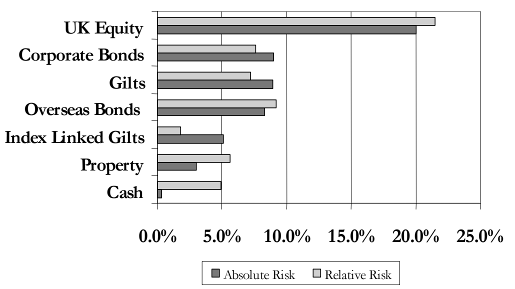
Asset class risks



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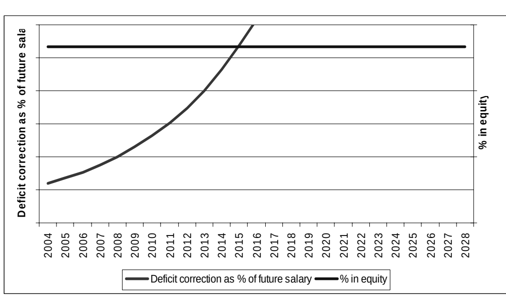
Maintain equity exposure



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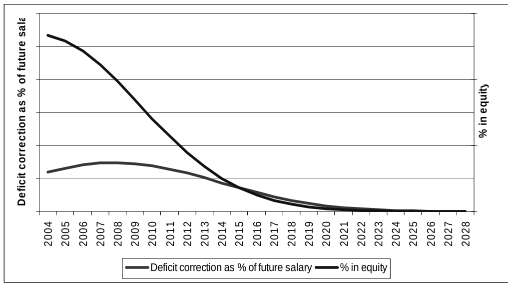
Reduce equity exposure



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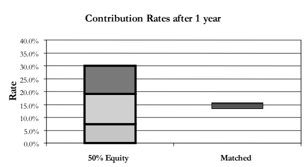
Matching



- Risk versus cost
- Closed Scheme

	Assets	Liabilities	Recovery
Outset	100	100	0%
20% Fall	80	100	25%
£15m Cash flow	65	85	31%
2 consecutive years	37	70	89%

- Big step or not at all?

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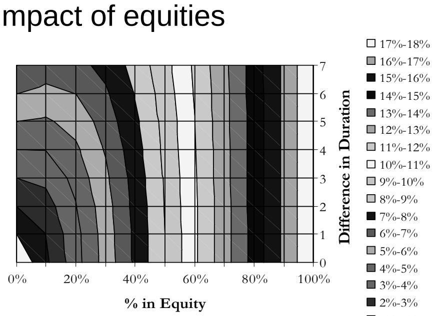
Impact of equities



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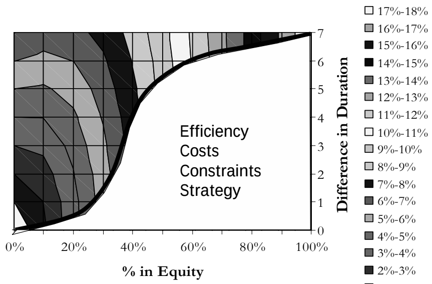
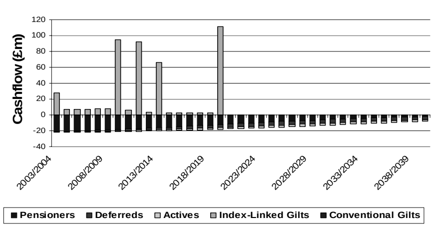
Impact of equities



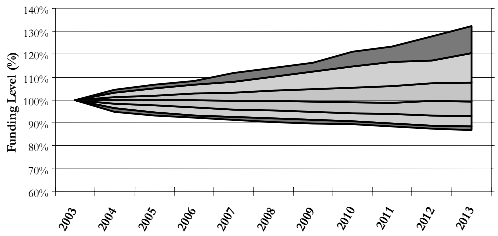
Low risk strategies

- Key sensitivities
  - Interest rates
  - inflation
- Spectrum of possibilities
  - Bonds
  - Immunisation
  - Cash flow matching
- What can be achieved?

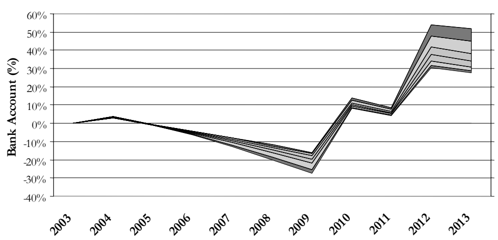
Just bonds – cash flows



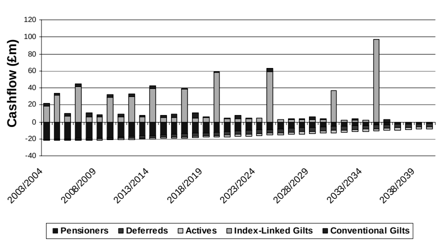
Just bonds – funnel of doubt



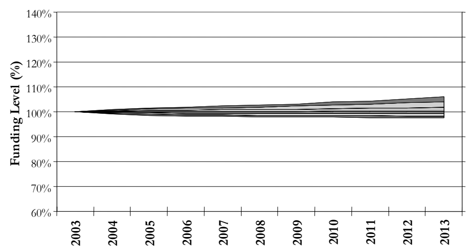
Just bonds – 'bank account'



Fine-tuned bonds – cash flows



Fine-tuned bonds – funnel of doubt



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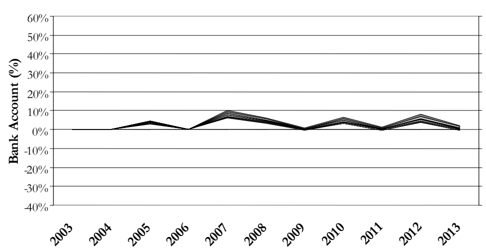
Fine-tuned bonds – 'bank account'



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Financial engineering

- Using swaps to fill in the gaps
- Using swaps to focus risk taking
- Using derivatives to take risk

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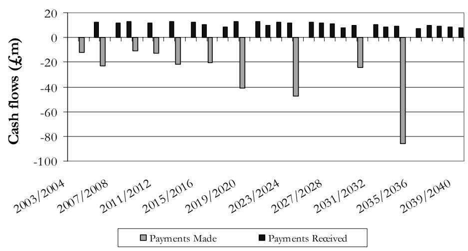
Swaps - cashflow matching



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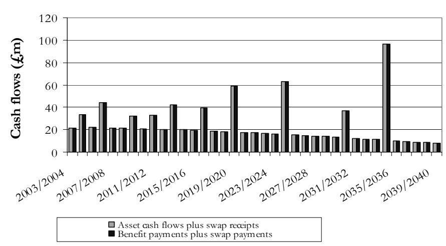
Swap plus bonds



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Yield enhancement

- Credit Risk
- Corporate bonds instead of gilts
  - Credit risk in cash flows
  - Diversification?
  - Matching assets as benchmark
- Swaps
  - Systemic credit risk
  - Credit linked
  - Duration matching plus bond portfolio

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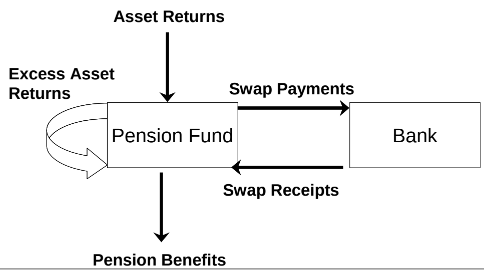
Yield enhancement with swaps

Match cashflow



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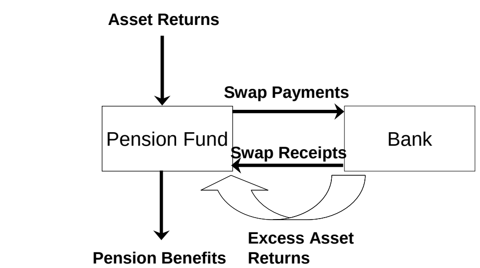
Yield enhancement with swaps

Credit linked



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Limitations of matching

- All or nothing?
- Liabilities still too long
- Demographic risk
  - No point in overdoing it
  - Small schemes
  - In the end game – “tontine effect”
- Immunisation = “bondage”
- Interest rates still move

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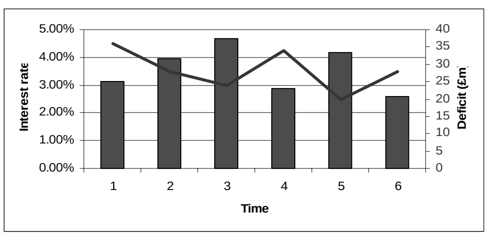
The myth of stability

So, even if assets invested in LBP:

- Future service costs are volatile and
- Deficits (in £m) are volatile so
- Deficit correction costs are volatile

The myth of stability



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Out performance options

- Pension fund liabilities = LBP
- Pension fund assets <> LBP (Strategy A)
- Two outcomes possible after T years
  - £Strategy A > £LBP – hoped for
  - £Strategy A < £LBP – downside risk
- Can we put a price on this?

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Exchange Option

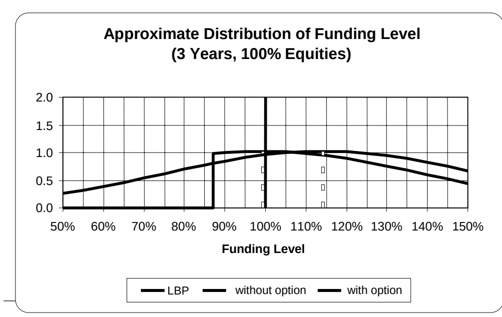
- Provides the holder the option to exchange the value of one portfolio for the value of another in T years time
- In this case:
  - If £strategy A > £LBP option pays nothing
  - If £strategy A < £LBP option pays difference
- Can opt for out performing asset class

Cost of exchange option

- Assume £liabilities = £assets = £100m
  - 3 strategies 0%, 50% & 100% equity
  - protection over 3 yrs

Strategy	0% equity	50% equity	100% equity
Cost of 3yr option	£0	£7m	£15m

Possible strategies…



Dynamic strategies

- The promise
  - Lock in to improvements
    - When(!) equity markets move up, shift into bonds
    - Avoid unrecoverable surpluses
    - Avoid regret
  - Protect against disasters
    - Funding level deteriorates, then move into bonds
    - Lock into deficit (funding then depends on contributions)
    - Shifting floor?

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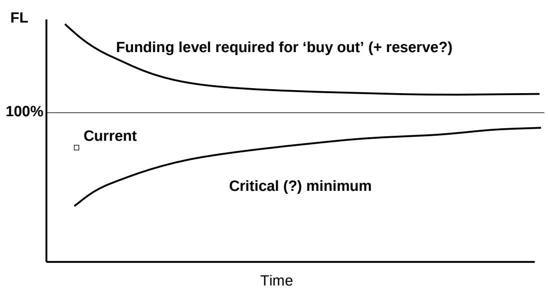
Dynamic strategies



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Dynamic strategies

- Contributions have to be dynamic
- Portfolio insurance is an old product
  - With well-known practical issues
- Setting 'rules'/entering contracts in advance
  - Invest and forget
  - Better options may be available at the time

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Final points

- Closure
  - more focus in risk taking
  - Dynamic problem
- Matching
  - Some risks are removed
  - Some risks remain
  - Some risks are added
- Dynamic strategies
  - Still don't offer a free lunch!

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