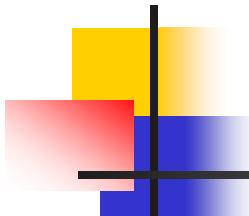


# New Approaches to Asset Allocation Decisions for UK Pension Funds

UK Pensions and Investment Summit

25<sup>th</sup> September 2006  
Brighton

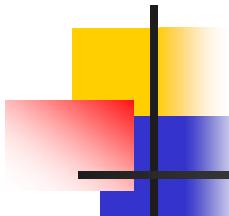
Dr. Ros Altmann



# Disclaimer: my opinions, not advice!

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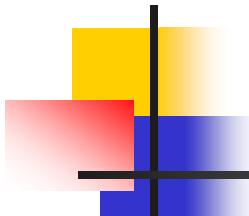
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# Outline

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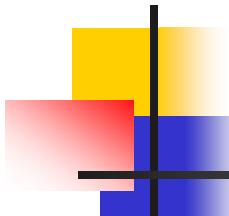
- Challenges facing pension fund trustees
- Moving away from traditional investment thinking
- Controlling downside risk
- Is switching to bonds the answer?
- Alternative investment approaches



# Trustee investment challenges

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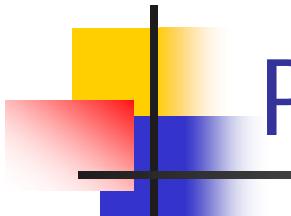
- Historic over-reliance on equities for high returns
  - Unprotected against sharp setbacks
- Focus on outperforming markets or manager benchmarks
- Assumed rewards for taking equity risk would be high enough to meet pension liabilities
  - But no explicit consideration of liabilities
- Deficits arose from asset falls and liability increases
- Trustees now need to eliminate deficits and pay pensions



# Attitudes to risk...

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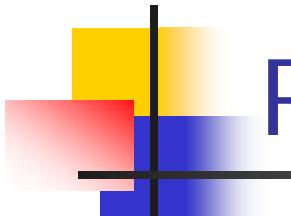
- Traditional attitude: Manage returns and **TAKE** risk
  - Passive acceptance or even welcoming of risk
  - High 'expected' returns from risky equities
  
- Modern approach: Manage returns **AND** **MANAGE** risk
  - Active attention to risk control relative to liabilities
  - Reduce risk of *not* meeting liabilities/large deficits



# Problems of traditional approach

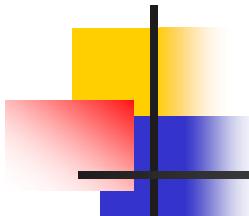
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- 'Expected' returns, not same as *achieved* returns
- Not enough consideration of different scenarios
  - Protecting against falling assets **or** rising liabilities
- Relies on equity risk premium to outperform liabilities
- Sensitivity to worsening deficits
- Ignores main sources of risk in liabilities
  - inflation, duration, longevity



# Relying on equities too 'risky'

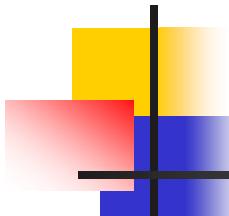
- Equity returns carry two kinds of risk
  1. volatility associated with equity risk premium – trustees can hope to be rewarded for this
  2. risk of not keeping up with liabilities, as interest rates, inflation and mortality change – this is unrewarded risk
- Pension investors only likely to benefit from one risk
- Other risks caused damage as not been controlled



# Controlling risks in 'risky' assets

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- Equities only one source of risk premium for good returns
  - Many different sources in inefficient global markets
- Trustees should take risks they expect to be rewarded for
  - Minimise liability-related risks they don't expect to be rewarded for
- Want risk-controlled returns, outperforming liabilities
  - Asymmetric return profile- limit downside, good upside
- Smooth positive trend may be better than sharp rises followed by sharp setbacks – equity volatility dangerous

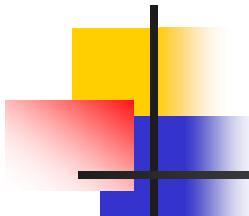


# Avoiding big losses important

- Falling markets are very damaging
- If market halves then doubles, only back where started
- If can protect from severe falls, required returns lower

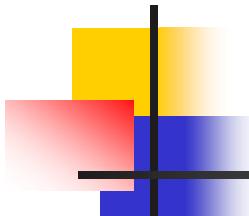
	<u>£100 invested</u>	<u>£100 invested</u>	<u>£100 invested</u>
Yr. 1	- 30%	- 30%	- 3%
Yr. 2	+ 30%	+ 43%	+ 5%
End value	<b>£91</b>	<b>£100</b>	<b>£101.85</b>

- Is switching to bonds right way to control downside?



# Is switching to bonds the answer?

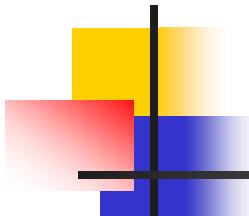
- Bonds reduce 'risk' as measured by volatility of return
  - But in exchange for much reduced upside potential
- Don't forget 'risk' is ultimately about paying full pensions!
- Bond investments also still contain 'unrewarded' risk
  - Salary inflation, Ipi, longevity, duration, capital loss
- So, switching to bonds doesn't match liabilities anyway
  - Could actually *increase* risk of bigger deficits
- Reducing deficit requires *outperforming* liabilities



# Modern approaches

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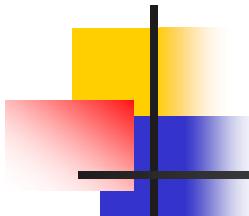
- Diversification of sources of investment return and risk
  - Low correlation, wide range of asset classes
- Seek sources of return from inefficient markets
- More than just equities and bonds
  - Alternative assets portfolio
- But try to protect against interest rates or inflation changes to give insurance against liabilities
- Derivatives can be more effective than gilts or bonds



# Using swaps for downside insurance

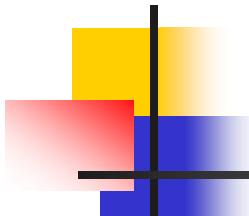
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- Swaps can be helpful for managing interest rate and inflation exposure
- Swaps more liquid and flexible than bonds (Ipi, rpi etc)
- Can use swaps to better match liability profile
- Can achieve specific durations to fit with liabilities
- Protect downside risk of assets relative to liabilities
- Leaves extra capital to invest in high return seeking assets



# Swaps versus index-linked gilts

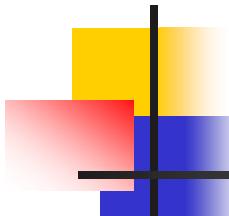
- Buying 15-year index linked gilt gives:
  - Capital + rpi + real yield
  - Pay in full for gilt now – liquidity, maturity constrained
- Buying 15 year Ipi swap gives :
  - Capital + Ipi in 2021
  - Full settlement only in 2021
- Spare cash left to invest for higher returns over time
- Give up real yield on gilts



# Not easy for trustees...

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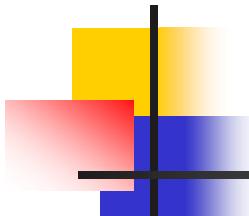
- Derivatives can be useful – BUT essential for trustees to understand them
  - Investment advisers need specific skills
- Experienced management of derivatives vital
  - Administration and collateral can be very complex
- Passive LDI investment products developed
- Need to embrace alternative assets
- No one right answer – complexity, lot of governance time



# Alternative thinking

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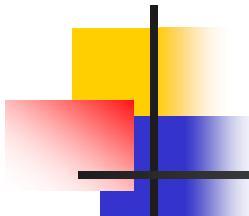
- Equities outperforming bonds is not same as outperforming liabilities
  - Equities could rise, but liabilities could rise more
- When in deficit, require returns much greater than bonds
- Therefore need non-bond diversification
- Alternative assets
  - Currency overlay, small cap, emerging markets
  - Hedge funds, private equity, real estate
- Requires careful risk control too



# Embracing alternative assets

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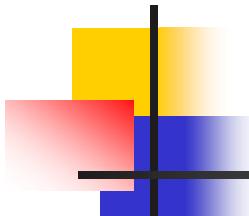
- 1980's push to international markets
- Diversify sources of alpha and beta
- Look for diversified portfolio with talented managers
- Low correlations
- Talented managers hard to find but not impossible!



# Possible challenge for providers

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- Innovative solutions offering asymmetric returns
- E.g. trustees invest £100m, capital and inflation protected
  - Downside protection against much worse deficit
- Plus high return investments – could be leveraged too
  - To help eliminate deficit/mortality risk over time
- Transfers administrative hassle of derivative agreements if all done by a manager in an integrated solution
- Essential to find good alpha generators for added returns



# Conclusion

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- New investment approaches may provide better chance of paying pensions than relying on gilts, bonds or equities
- But no one right solution – it's not easy!
- Protection of downside risk vs. liabilities, keep upside
- Alternative approaches using derivatives could help with downside protection, asymmetric returns
- Need more reliable returns targeting liabilities over time
- Remember the risk of not being able to pay pensions