Barnett Waddingham
a true partnership approach

Actuarial Consultant
Barnett Waddingham

UK Actuarial Advisory Firm of the Year

Notts County Council Pension Fund AGM

Outlook for 2013 Actuarial Valuation…and beyond……

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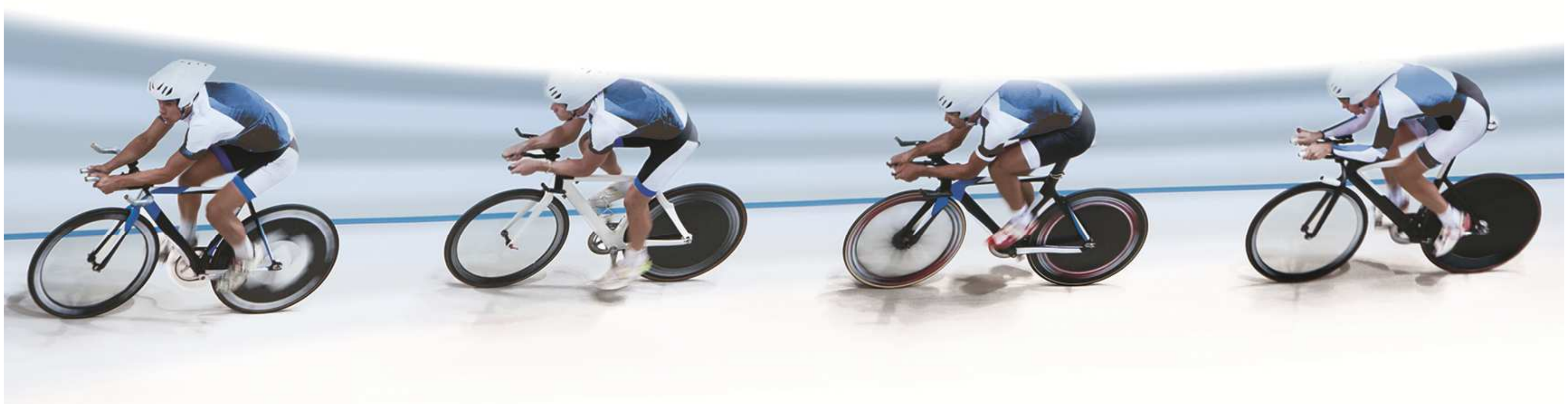


October 2013

Agenda

- Purpose of the valuation
- How do we do it - reminder
- Funding models and assumptions
- Where have we got to?
- Summary and Conclusions
- Questions and discussion

Purpose of valuations

Approach depends on question being asked	• Many questions!
Ongoing triennial funding valuation	• How much do employers need to pay in future to have enough assets to pay benefits?
Annual accounting valuations (IAS19/FRS17)	• Help accountants compare • If we were a plc how much would we need to borrow to finance liabilities?
Cessation valuations	• Have we enough assets to meet liabilities? • How much risk do we leave on the table? • Different approaches depending on employer situation

Triennial Funding Valuation

Set out in LGPS Regulations	• to *certify* levels of employer contributions to secure the *solvency* of the Fund
Also have to look at Funding Strategy Statement	• As determined by administering authority • With some actuarial help!
Actuary to "have regard to desirability of maintaining as **stable** a contribution rate as possible"	• Function of Funding Model / investment strategy • Spreading and stepping
Different approaches possible for different employer types	• Statutory/non statutory bodies • Open or closed admission agreements

Annual Accounting Valuations

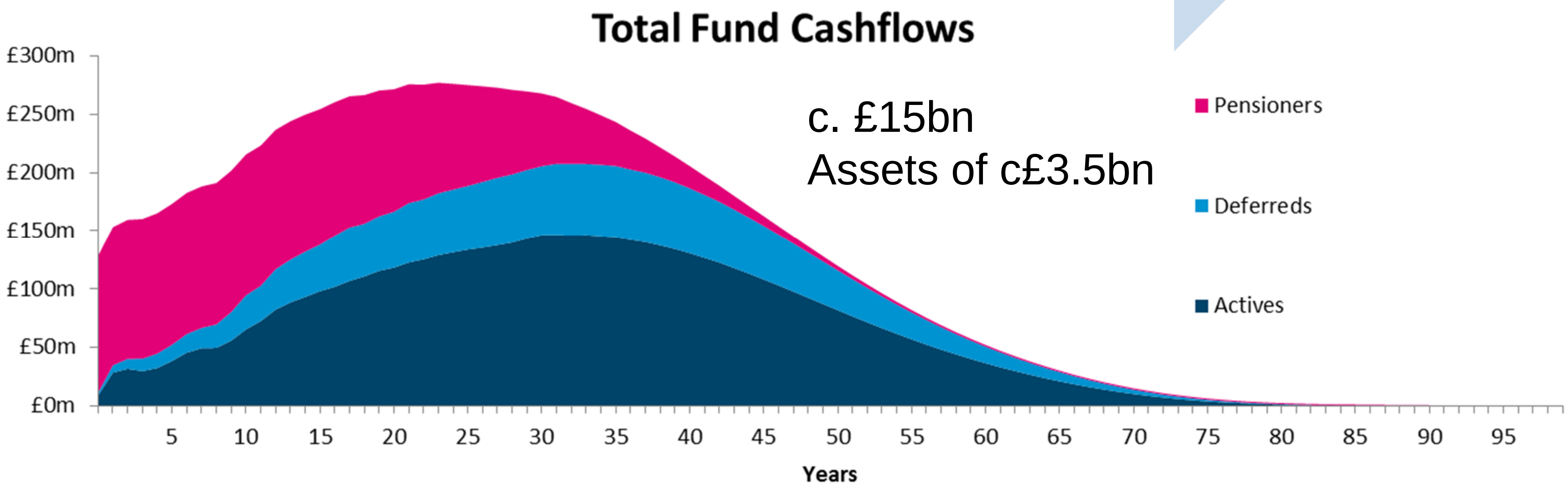
FRS17 or IAS19	• Essentially the same
Key objective is consistency of measurement	• Help accountants compare
Some hard coding of assumptions	• Discount rate
Inconsistent asset and liability valuations	• Lots of volatility • Some counter intuitive results sometimes

How do we do it?

Step 1
- **Projection of all possible benefit payments for each member**

Step 2
- **Attach probabilities to each possible payment to get “expected” payments**

Step 3
- **Discount “expected” payments to obtain “value”**



How do we do it?

Look at accrued benefits and future benefits separately

Past Service

- Compare assets with value of accrued benefits

Future Service

- Determine contribution required to meet value of annual accrual of benefits

Calculations completed at

- Whole fund level
- At individual employer level to identify any outliers and for accountants!

But maybe pool similar employers to help with stability

- Price of stability is some cross subsidy

Assumptions

Price Inflation (RPI)

- Usually difference between fixed interest and index linked gilts
- CPI adjustment required

Salary Increases

- Usually 1-2% pa more than price inflation
- Short term adjustment?
- Long term adjustment?

Discount rates

- Depends on purpose and objectives of valuation

Statistical assumptions

- Investigate past experience
- Use national data
- Adjust for actual experience

Discount Rates

Accounting valuation

- Corporate bond yields / cost of borrowing

Minimum risk cessation

- Gilt yields

Ongoing funding valuation

- Expected future investment returns from actual investment strategy

Gilts and bonds – easy….

- Redemption yields

Equities – less easy….

- Fixed risk premium over gilts (Gilt + model)
- Economic model (BW model)

Property/alternatives – keep it simple

- Somewhere between equities and gilts

Discount Rates / Equity Returns

Gilt Plus models

"Risk based" approach based on alleged tPR approach

- Doesn't apply to LGPS!

Value liabilities on minimum risk gilts basis

- Increase risk factor via fixed risk premium
- Discount rate then gilts plus something
- Based on asset strategy and employer covenant
- Seems quite sensible and nice and simple

But liability values then behave like gilts

- Potential for lots of volatility
- Equities and gilts not well correlated especially in short term

Problems with quantitative easing

- BoE making pensions "more expensive"
- Government taking an interest

Discount Rates / Equity Returns

Our economic model

- Been using and developing for 15 years
- Specifically designed for LGPS

Assumes equity returns function of

- Dividend income plus
- Economic/dividend growth

Returns then risk adjusted

- If more than 75% in equities
- Minimum and maximum real discount rates as well

Valuation results assessed over 6 month period spanning valuation date

- Essentially some smoothing
- Helps meet stability objective

More complex model

- But more robust and stable valuation results

Where were we?

2010 Valuation

Average ongoing employer cost

- **13.5% of payroll**

Funding Level

- **84%**

Deficit Contribution

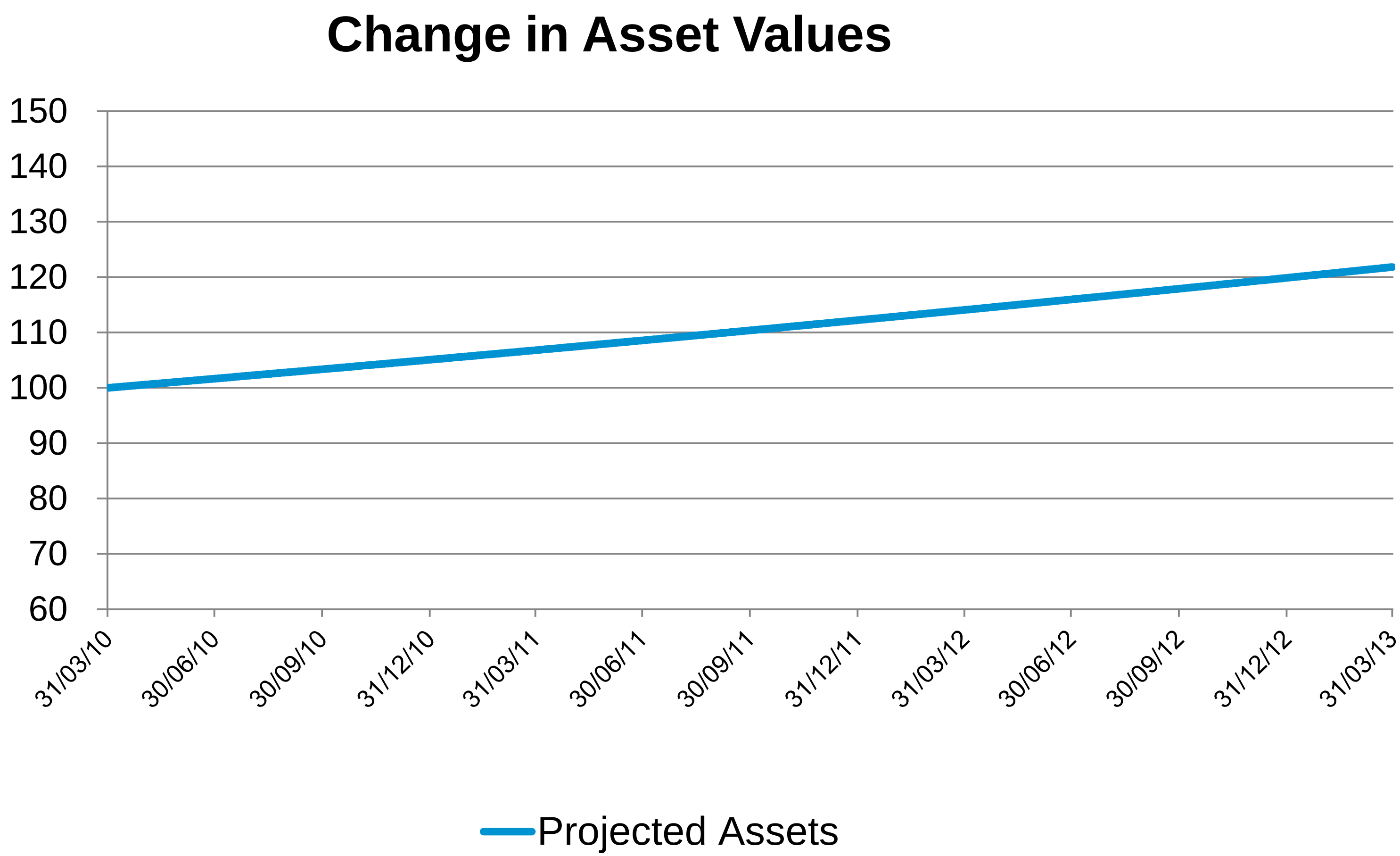
- **4.5% of payroll for 20 years**

Total Average Employer Contributions

- **18% of payroll**

Individual employer recovery periods and funding strategies

What's happened since then?



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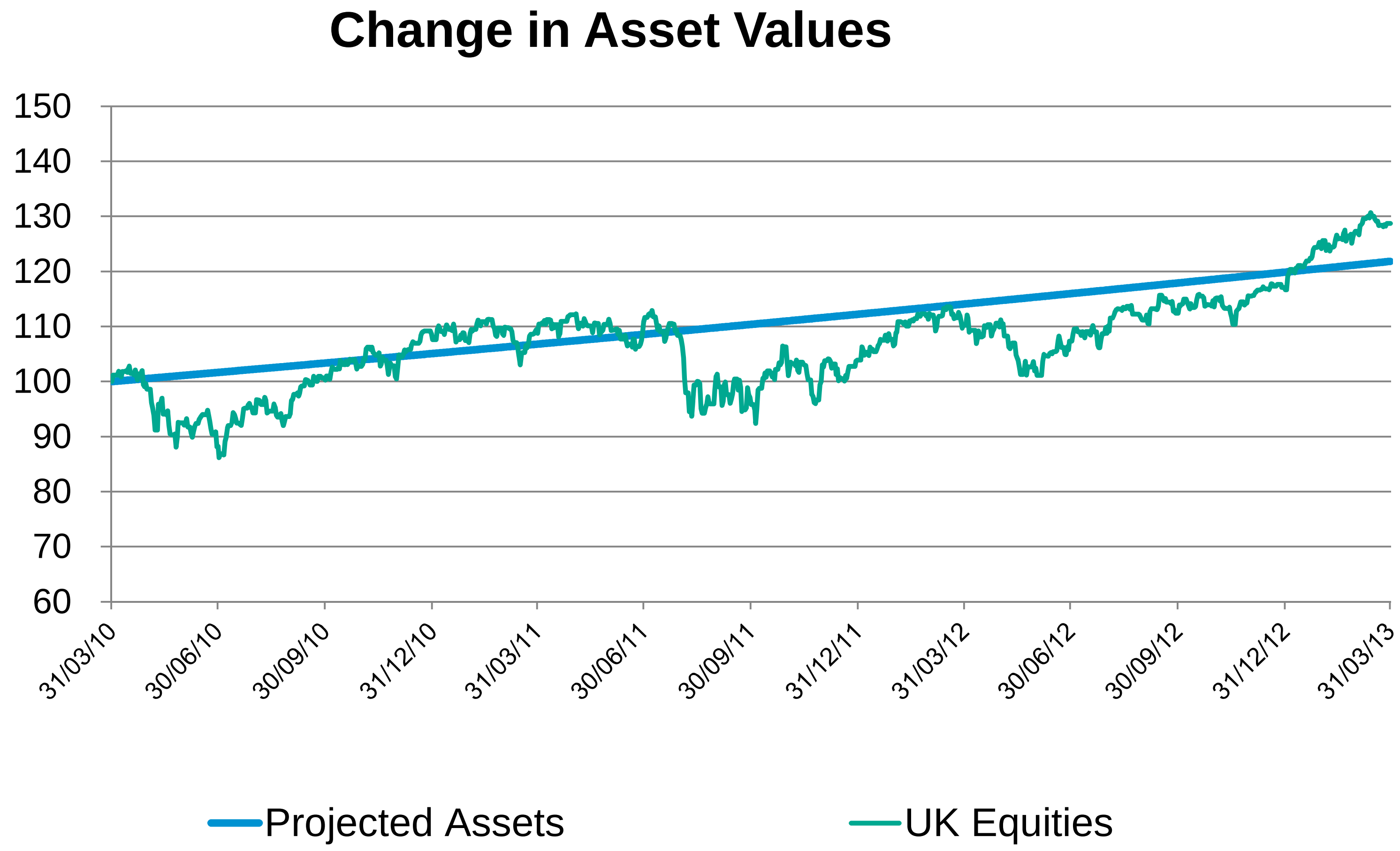
What’s happened since then?



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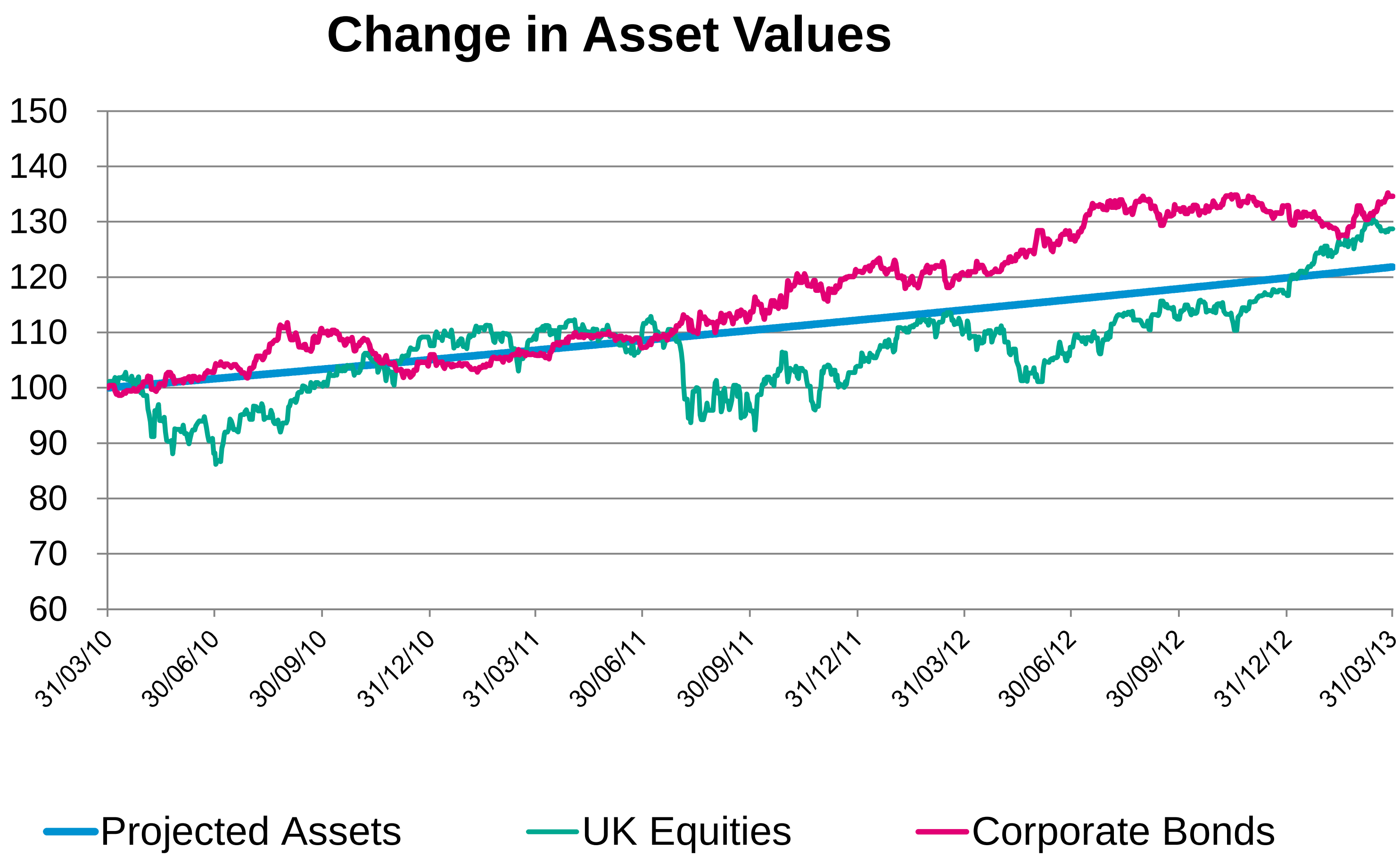

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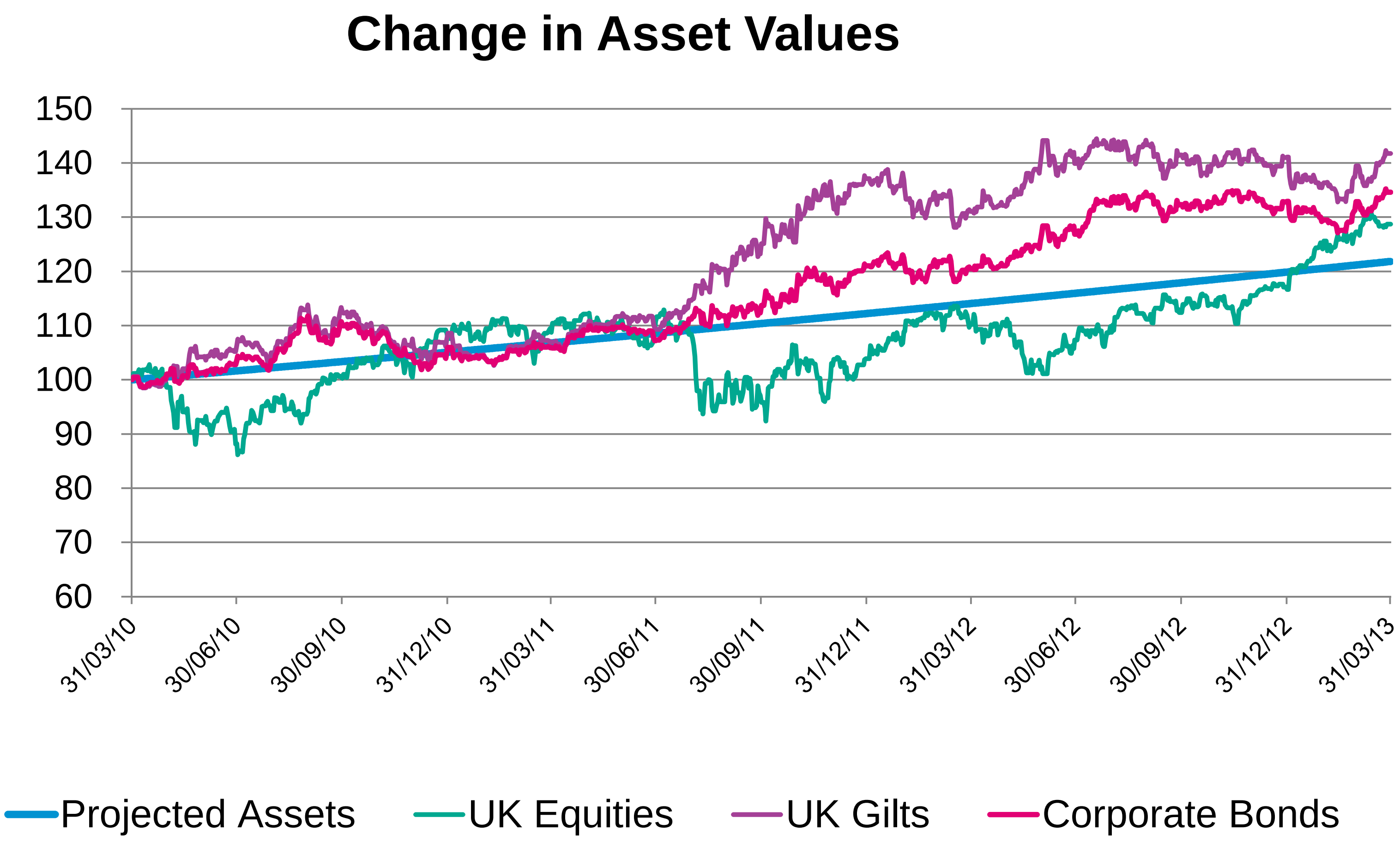

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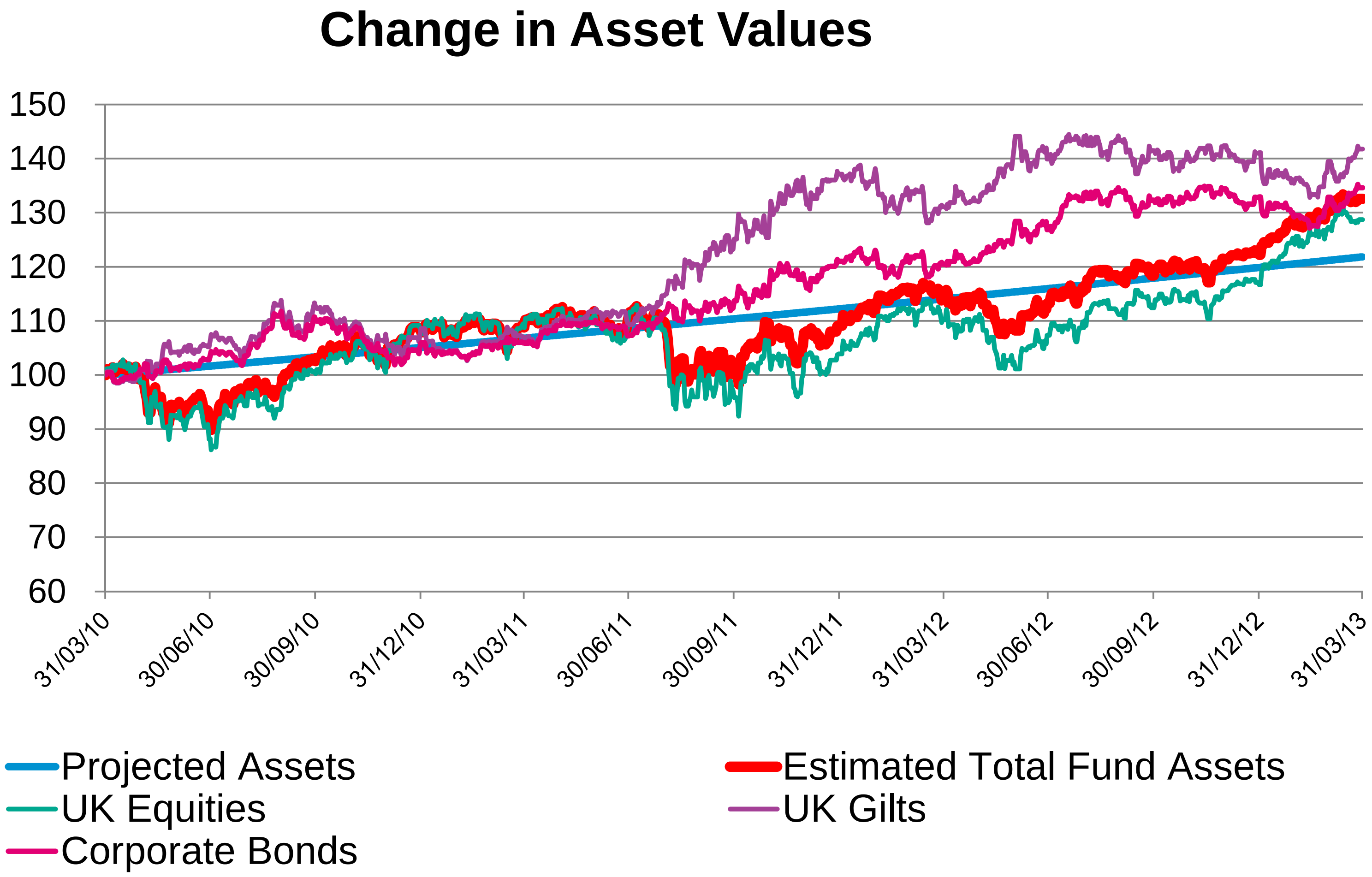
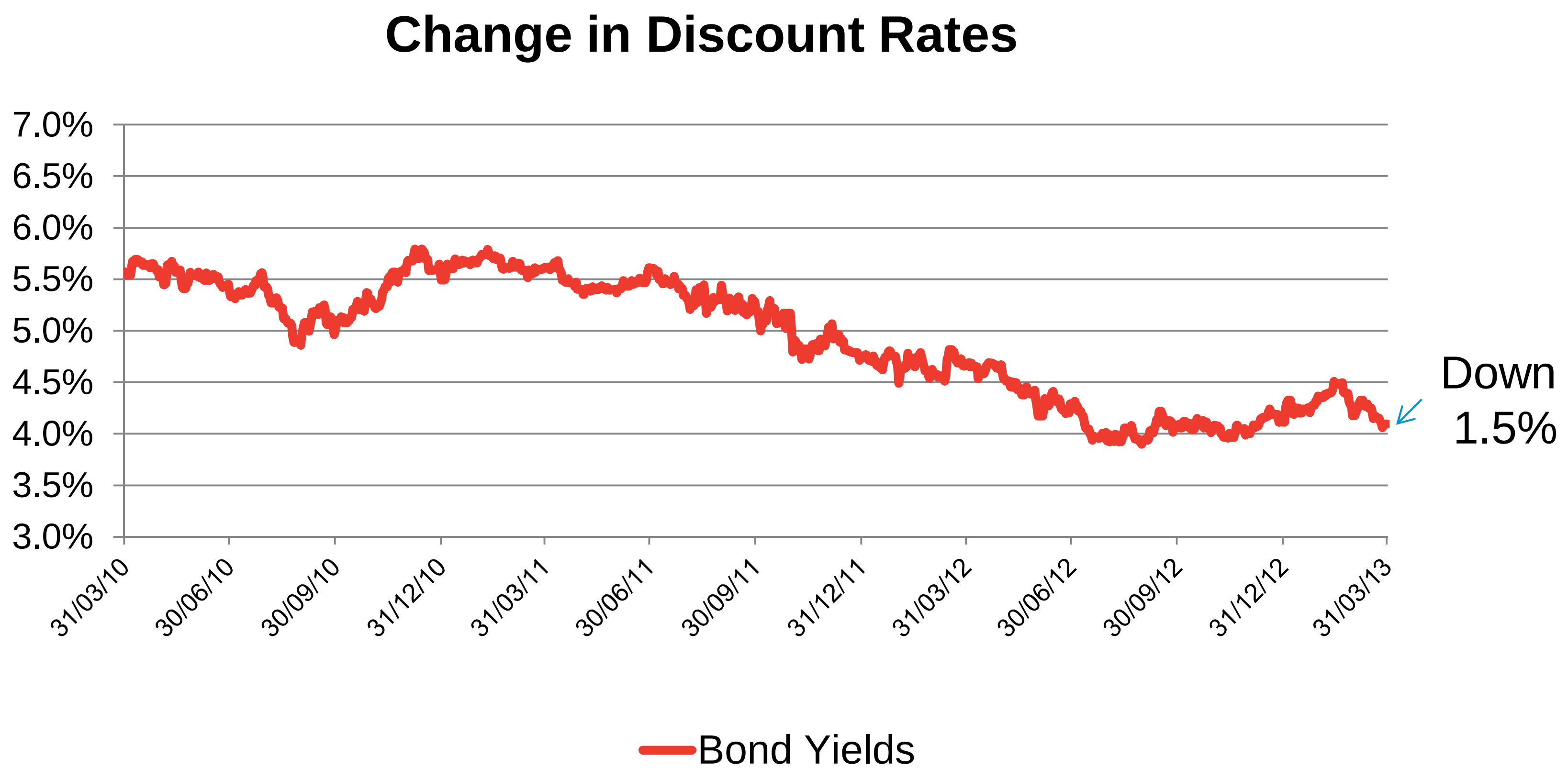


Changes in Yields / Discount Rates



1% reduction in discount rate increases liability value by ~20%

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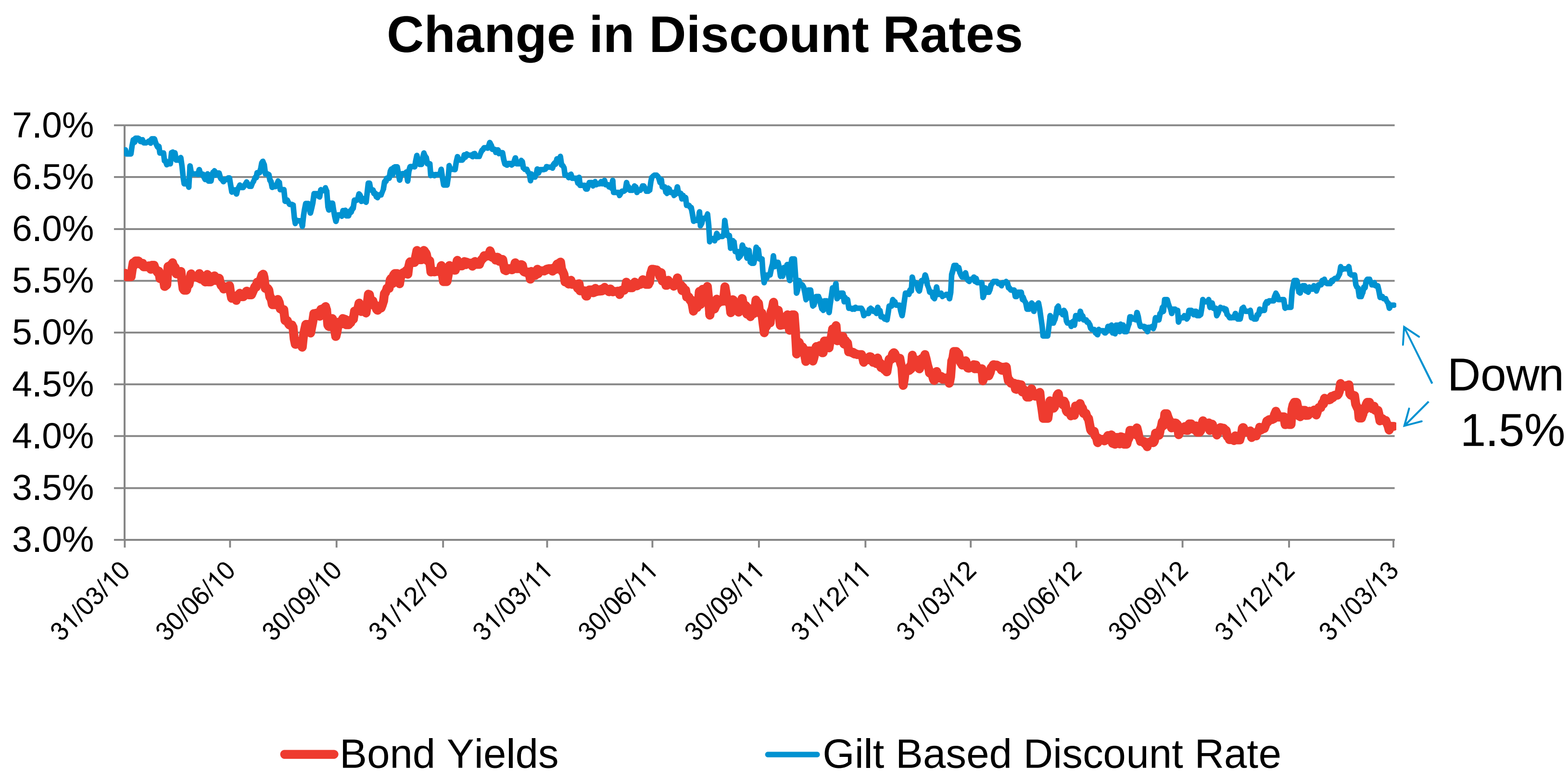

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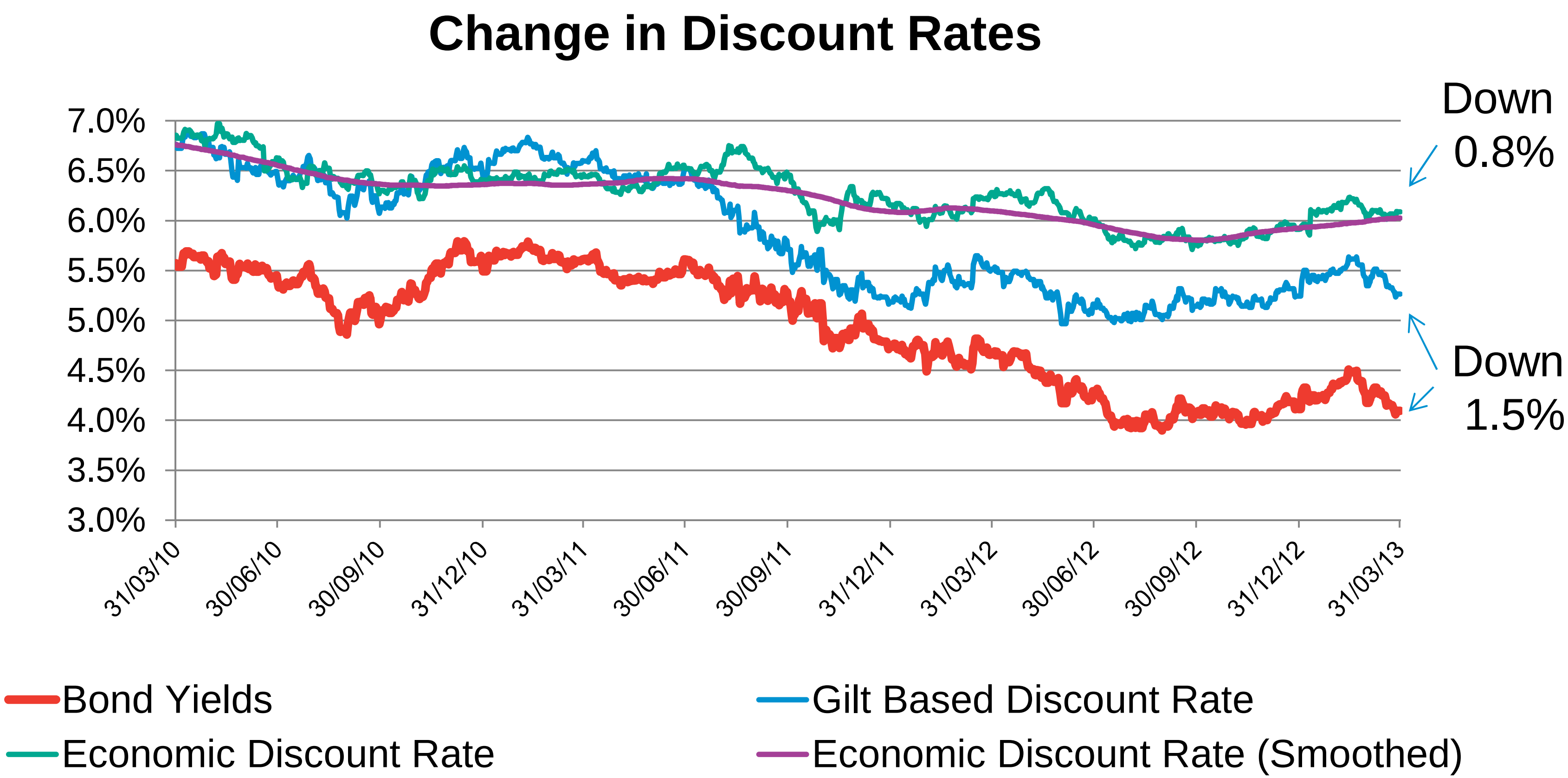

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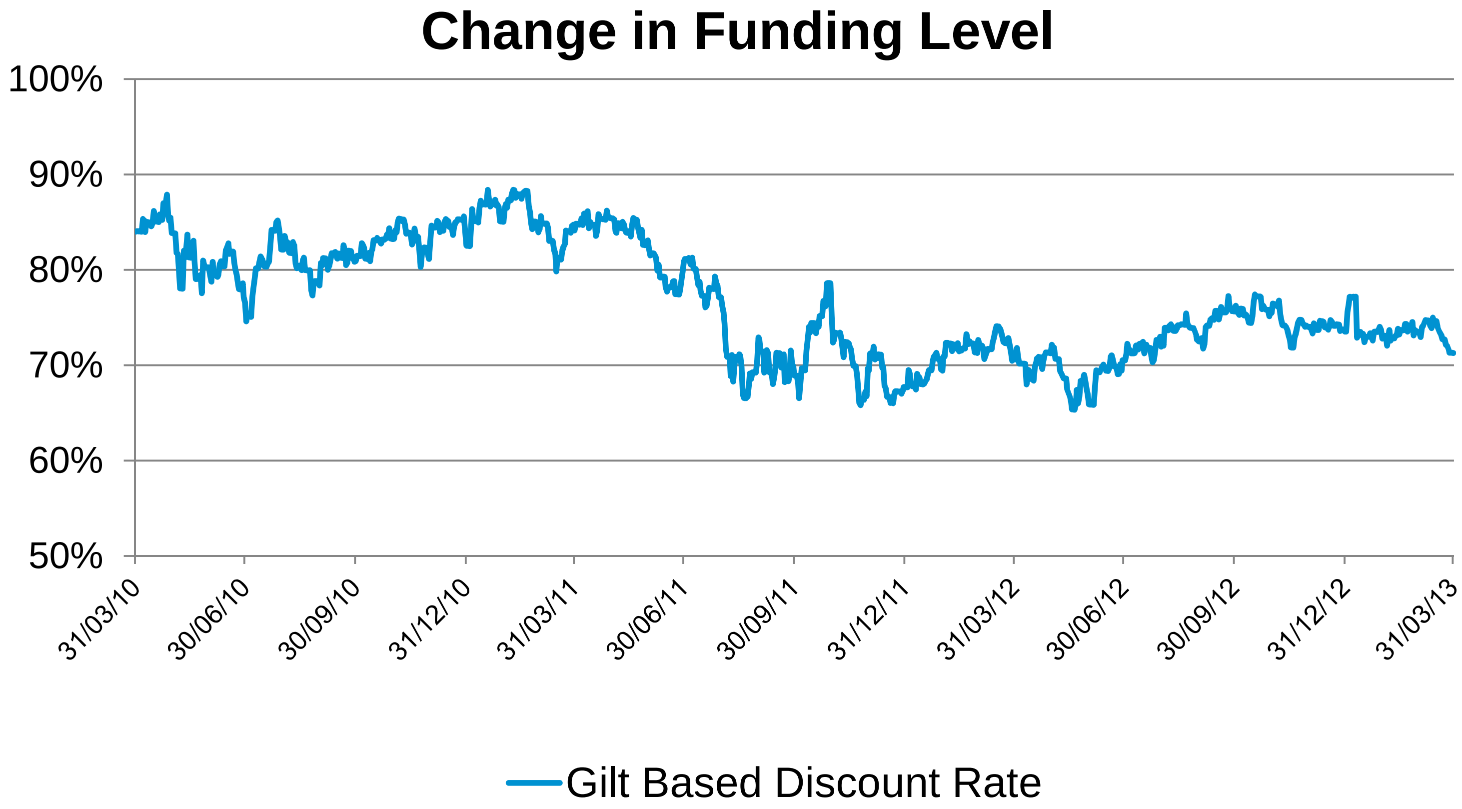
Change in Funding Levels



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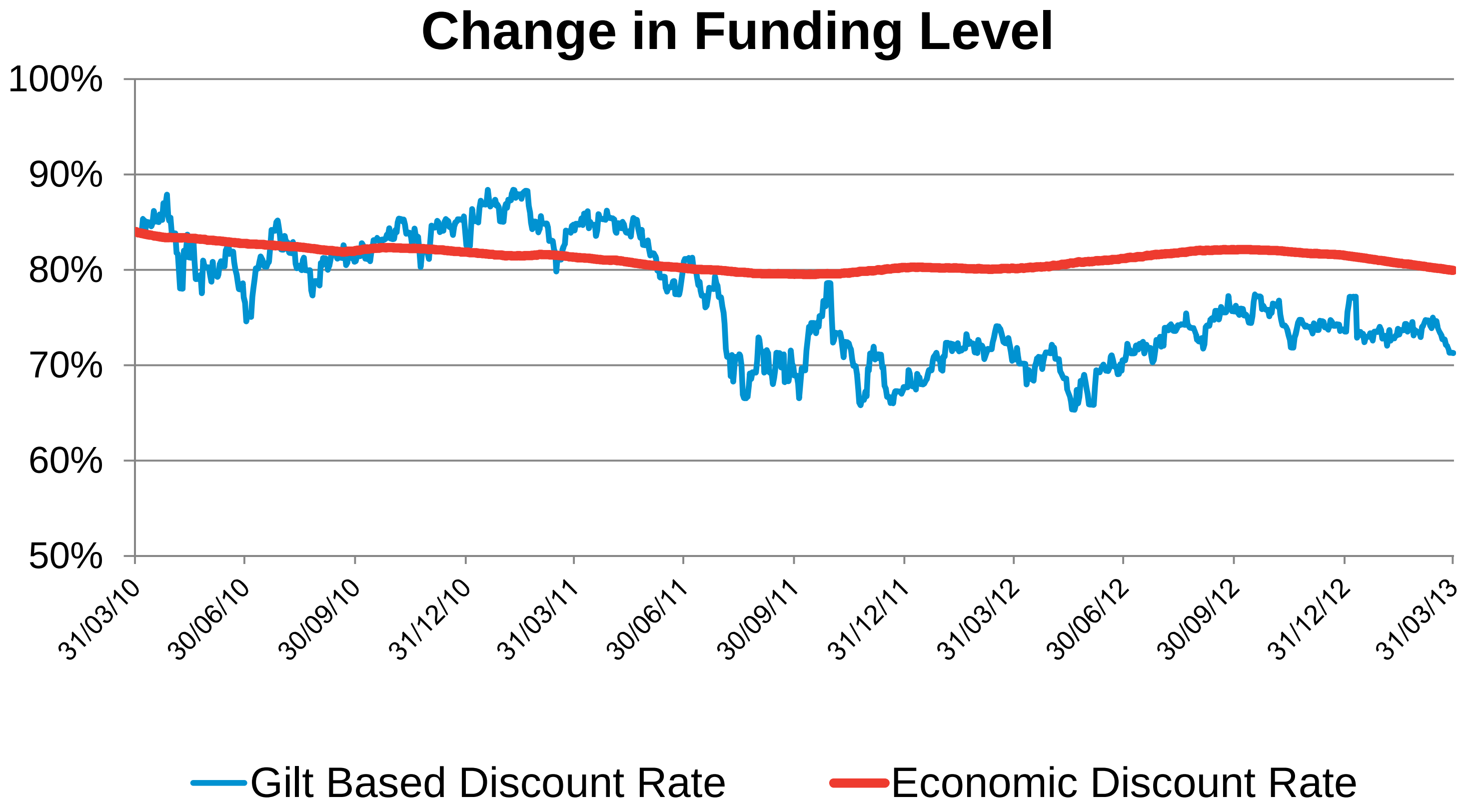

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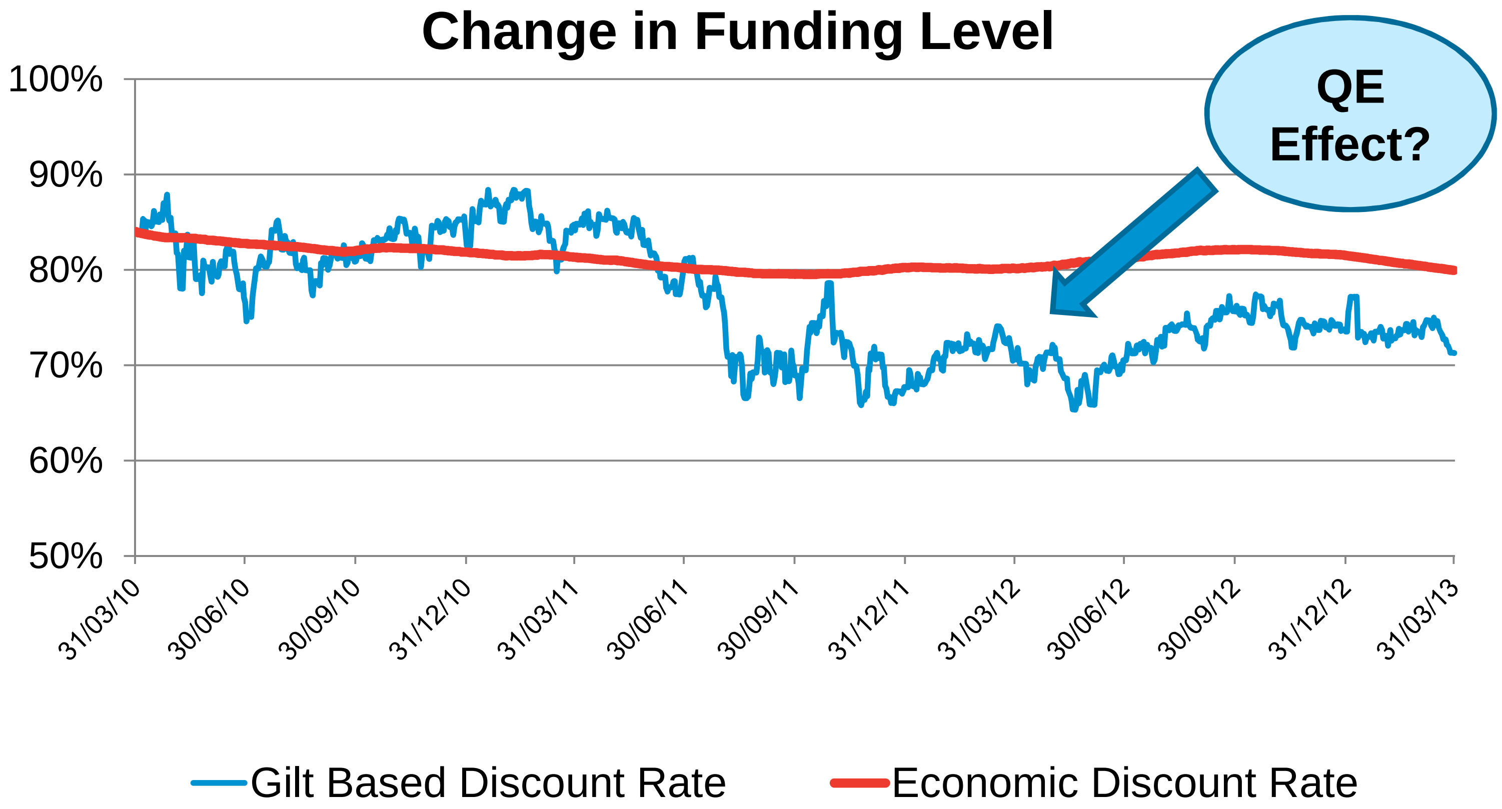

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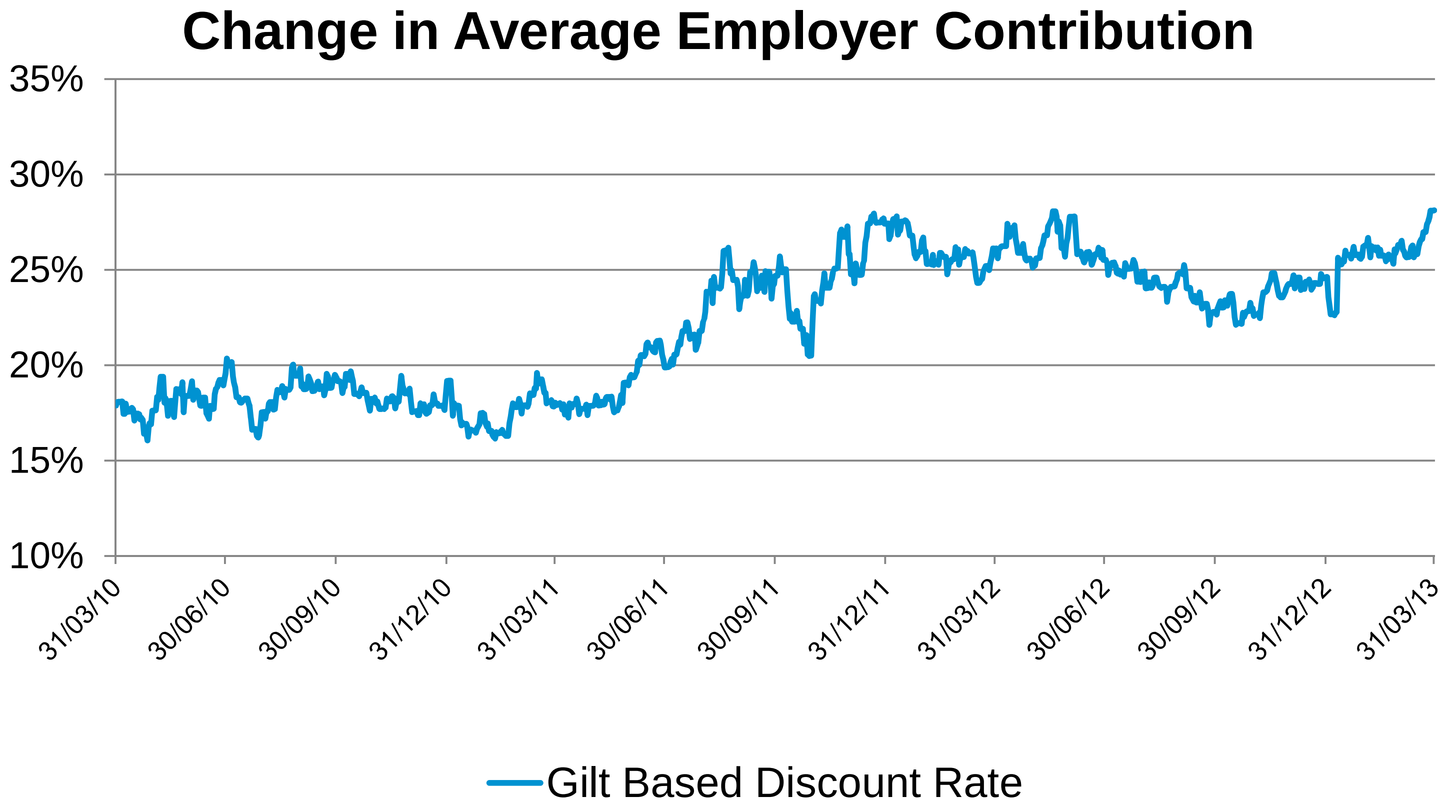
Change in Employer Contribution



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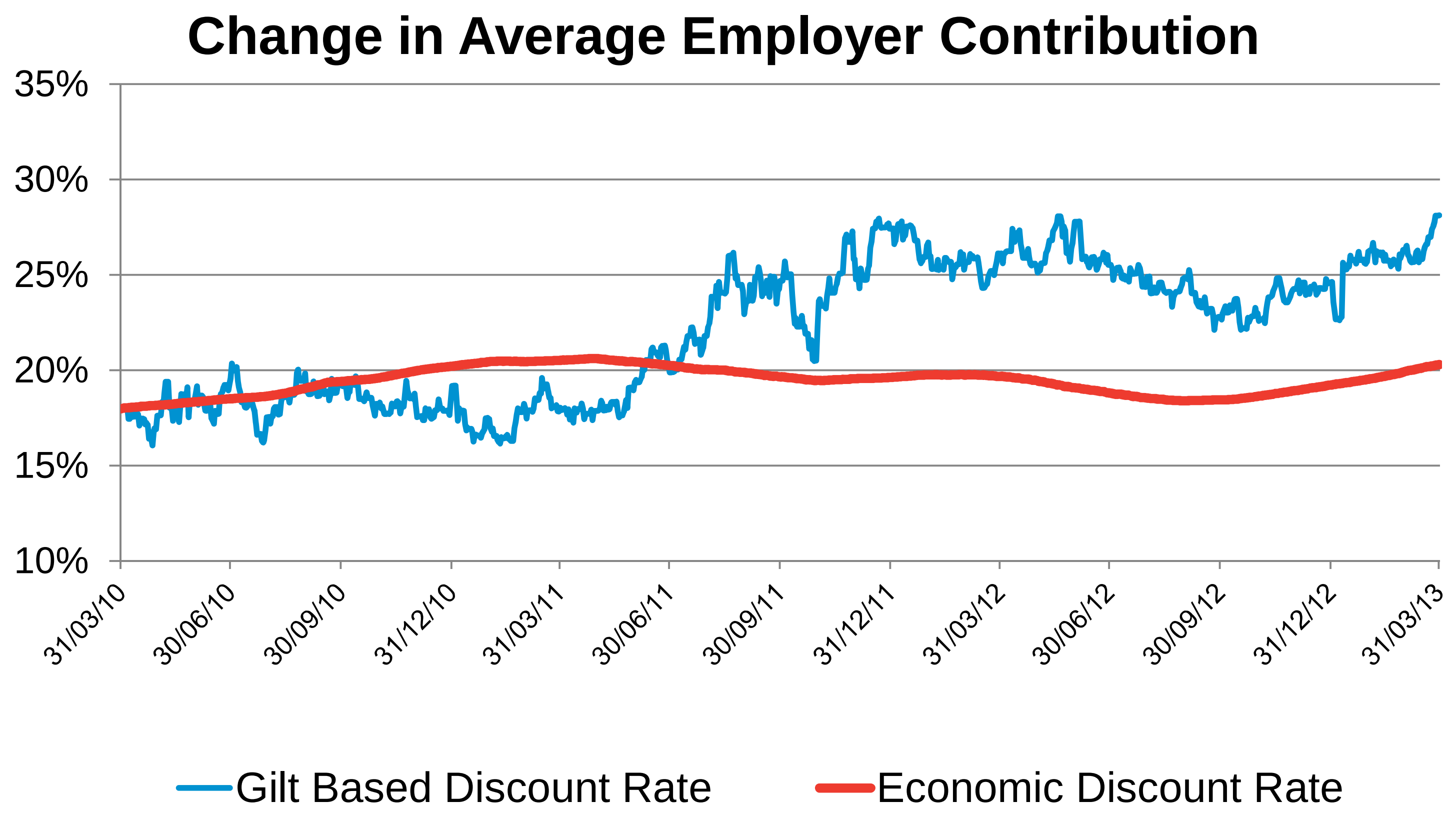


Conclusions

Accrued benefits

- Funding level down a little
- Cash deficit up a bit

Ongoing Employer Contributions

- Average employer contributions up a little
- But LGPS 2014 will save a little for some

Total Employer Contributions

- All else equal - up a little
- But payroll reduced
- So deficit contributions (as % of pay) up a bit

Overall

- Probably more cash required
- Phase in any increases
- Will vary by employer

Changes to LGPS

New benefits and contributions from 2014

- Move to average pay scheme
- Change in pensionable pay definition
- Change in member contribution rates

Public Sector Pensions Act 2013

- Change to current structures
- Re-naming of existing bodies
- Creation of new bodies with new duties and responsibilities
- Increase in regulation
- Greater focus on governance of schemes
- Biggest impact on locally administered schemes – local government, police and fire

Who's Who?

"Responsible Authority"

- **DCLG**

"Scheme Manager"

- **Administering Authority**

"Pensions Board"

- **New local body**
- **Employer representatives**
- **Member representatives**

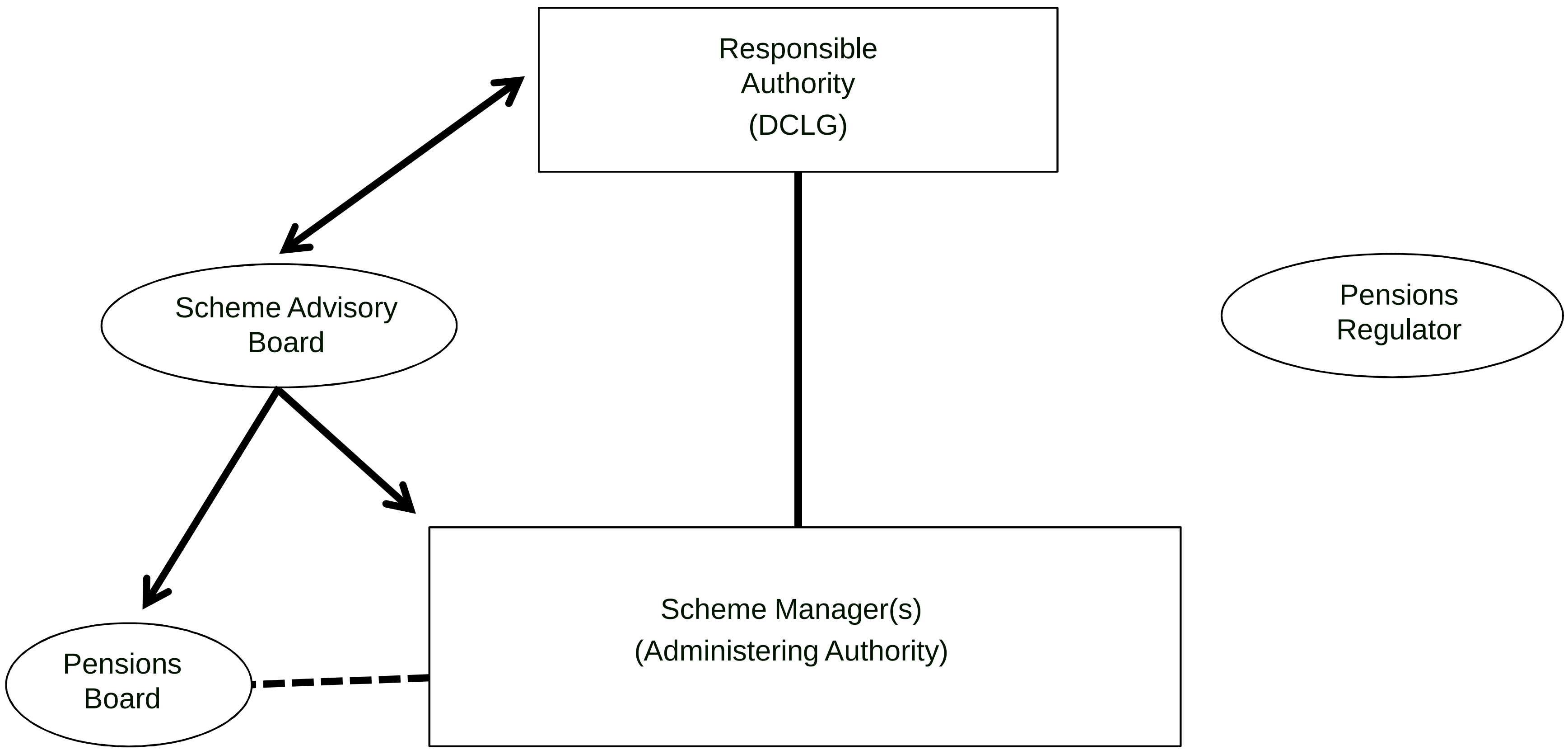
"Scheme Advisory Board"

- **New national "oversight" body**

"The Pensions Regulator"

- **Existing body but new scope**

New Governance Structure (LGPS)



Any questions?