HYMANS ROBERTSON
The Spirit of Independence

Suffolk County Council Pension Fund

Strategic review - options

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PUBLIC SECTOR

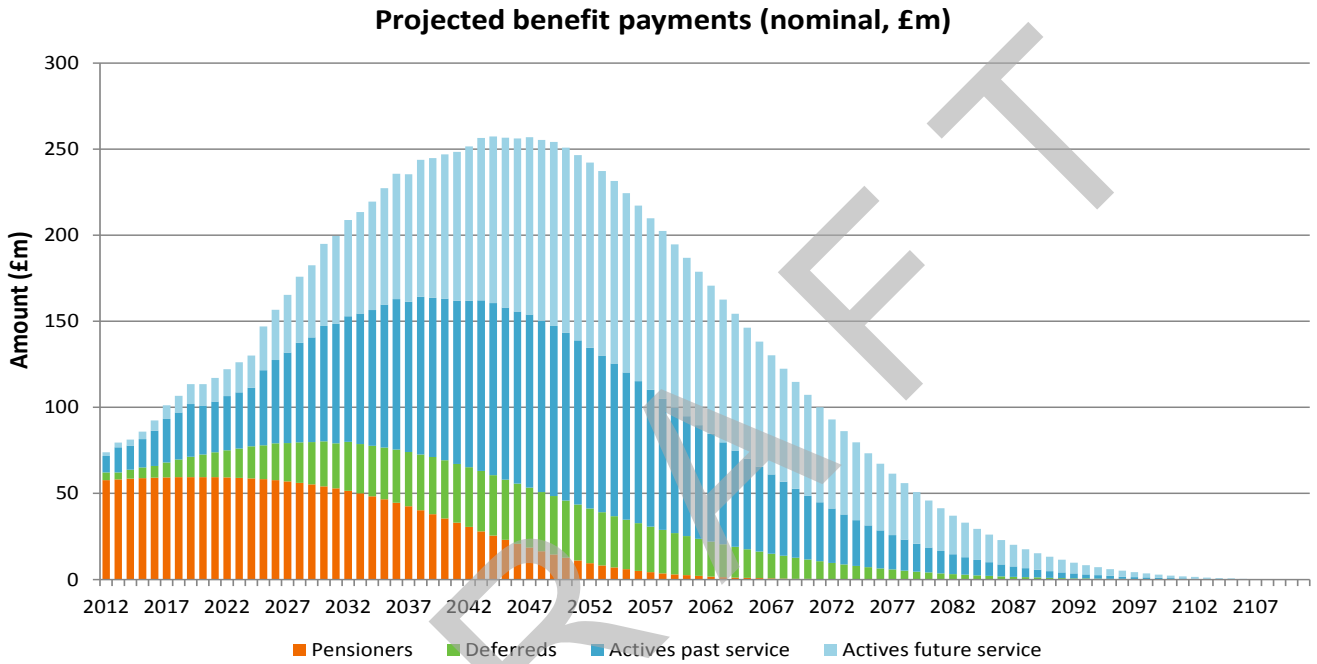
Agenda

- Review of objectives
- How the review was conducted
- Timescale to recover deficit
- Findings
  - Effectiveness of current funding strategy
  - Potential alternative approaches
- Conclusions

Objectives

- The funding level has deteriorated over several years
  - This has happened to most defined benefit pension schemes
  - Private and public sector, UK and internationally
  - Due to low prevailing interest rates and volatile investment returns
- The objective of the review is to determine whether the current strategy remains capable of recovering the deficit
- The deficit applies to accrued benefits
  - Deficit is a debt owed by the employers to the Fund
    - But return on assets can help deficit repair
  - Deficit is unaffected by Hutton changes (to the post 2013 Scheme)
  - It will take time to repair deficit, but deficit needs addressed

Process



- The funding level expresses how well the value of assets cover the value of liabilities
  - Assets are taken at market value
  - Liabilities are assessed as value of benefit cash flows
  - These are discounted at an interest rate which assumes asset growth

Asset structure

Equities (42% - 52%)

	Manager	Target %
UK	BlackRock	11.0
	All. Bernstein	7.5
Regional	LGIM	20.0
Global	Newton	4.0
Emerging	LGIM	6.0
Private	Pantheon	4.0
	Wilshire	

Stable (0%)

	Manager	Target %
Currency	Millennium	-

Inflation-linked (12.5%)

	Manager	Target %
Ind-linked	Implemented	7.5
Infrastruct.	KKR	5.0
	Partners	
Timberland	Brookfield	2.0

Property (10%)

	Manager	Target %
FoFunds	Schroder	10.0

Alternative (22% - 32%)

	Manager	Target %
Targeted	Pyrford	7.4
	BlueCrest	5.3
	Winton	3.5
Credit	M&G	1.6
EM debt	L&G	2

Overlay (0%)

	Manager	Target %
Currency	Millennium	-

Return seeking
Stable
Real assets
Diversifying

Modelling basis

- The modelling we carried out is based on the estimated funding position of the Fund as at 31 March 2012

Assets	**£1,556**
Liabilities, split by Actives Deferreds Pensioners **Total liabilities**	 £932m £353m £943m **£2,218m**
Deficit	**(£662m)**
Funding level	70%
Future service rate (excluding expenses)	28.4%

- Assumptions consistent with the 2010 valuation
  - Funding basis used for valuing the liabilities (both pre and post retirement) is gilts +1.6% p.a.
  - Demographic assumptions unchanged

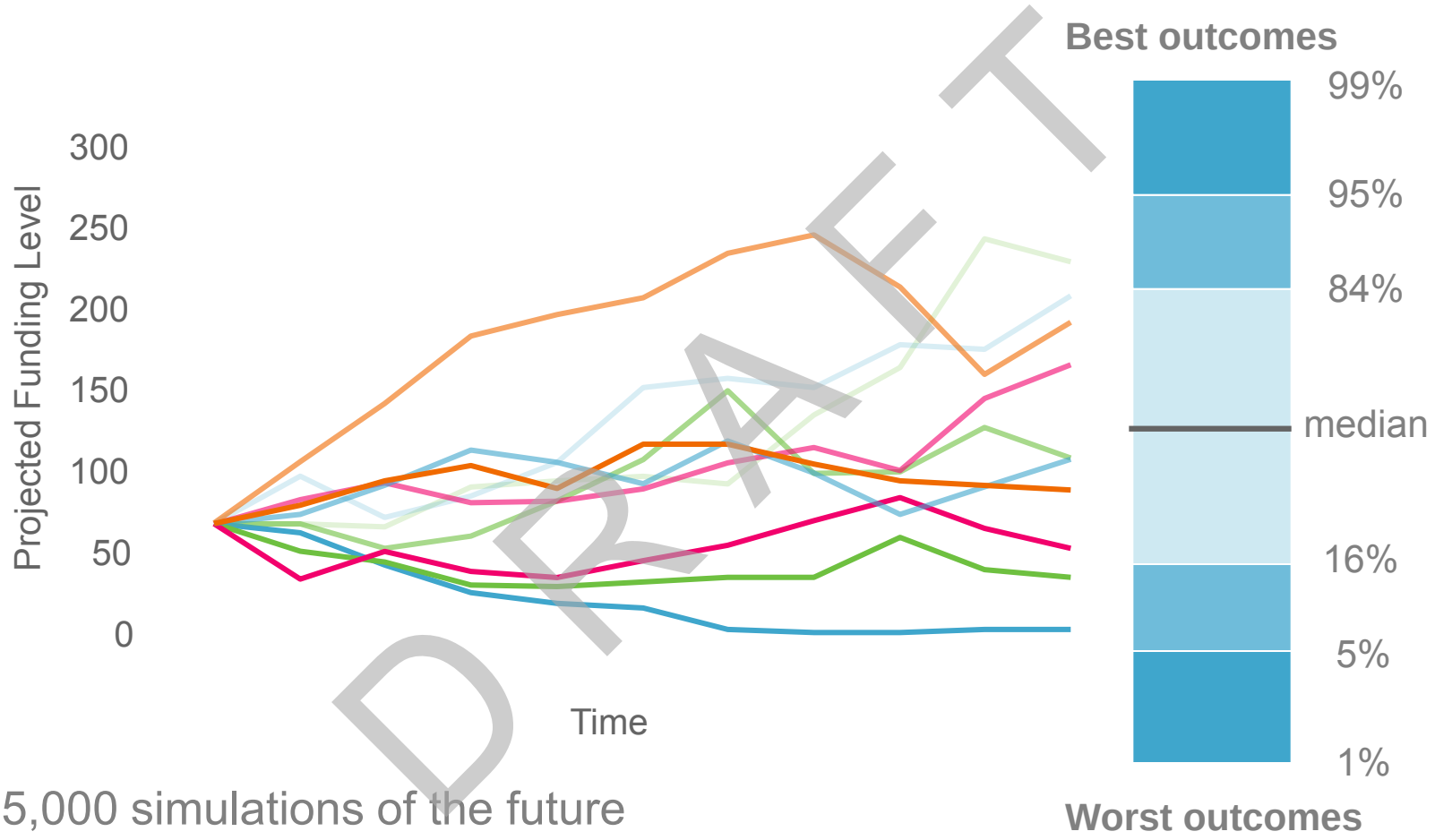
Process

- We use an economic scenario generator (ESG) to project the values of assets and liabilities for next 21 years
  - The ESG is proprietary to Hymans Robertson
  - It projects assets and liabilities consistently using economic variables
    - Market returns, interest rates, inflation
    - These are projected using a “random walk” process, based on “best estimate” variabilities of these factors (drawn from market)
    - We conduct 5,000 random projections
- Every 3 years forward, we conduct an actuarial valuation
  - And reset contributions to reflect valuation result
- We then examine all 5,000 results at end of 21 years
- We do this for different contribution and investment strategies

Why recover deficit over 20 years

- 20 years is a reasonable recovery period
- Trying to recover over a shorter period will “kill” services
  - Economic growth and market returns may be weak for a few years
  - Better to address deficit gradually
- Allowing more than 20 years may bring risks
  - Long-term care will become a greater cost in this time-frame
  - Climate change may also cause difficulties by 2030s
- Council payroll and employee demographics may change
  - Basing deficit recovery amount on payroll might not work
  - Better to use an amount fixed in real terms
  - But, will Council revenue funding grow in real terms?

comPASS modelling process



- 5,000 simulations of the future
- Rank from worst to best outcome to give distribution of possible outcomes

Evaluating results - comPASS

- We compare funding outcomes , assessing contribution and investment strategies against 4 key metrics
- Prudence – the Actuary is required to make prudent assumptions
- Affordability – final salary pensions are unaffordable on a risk-free basis
  - Schemes need to take investment risk
- Stewardship – aim is to ensure funding of pensions does not fall unduly on later generations of Council residents
  - Avoid delaying funding resolution, to detriment of future taxpayers
- Stability – aim to keep contributions stable (not necessarily constant) from year to year, and valuation to valuation
  - To avoid Scheme financing damaging front-line services
- Want to understand:
  - How each funding strategy meets these objectives

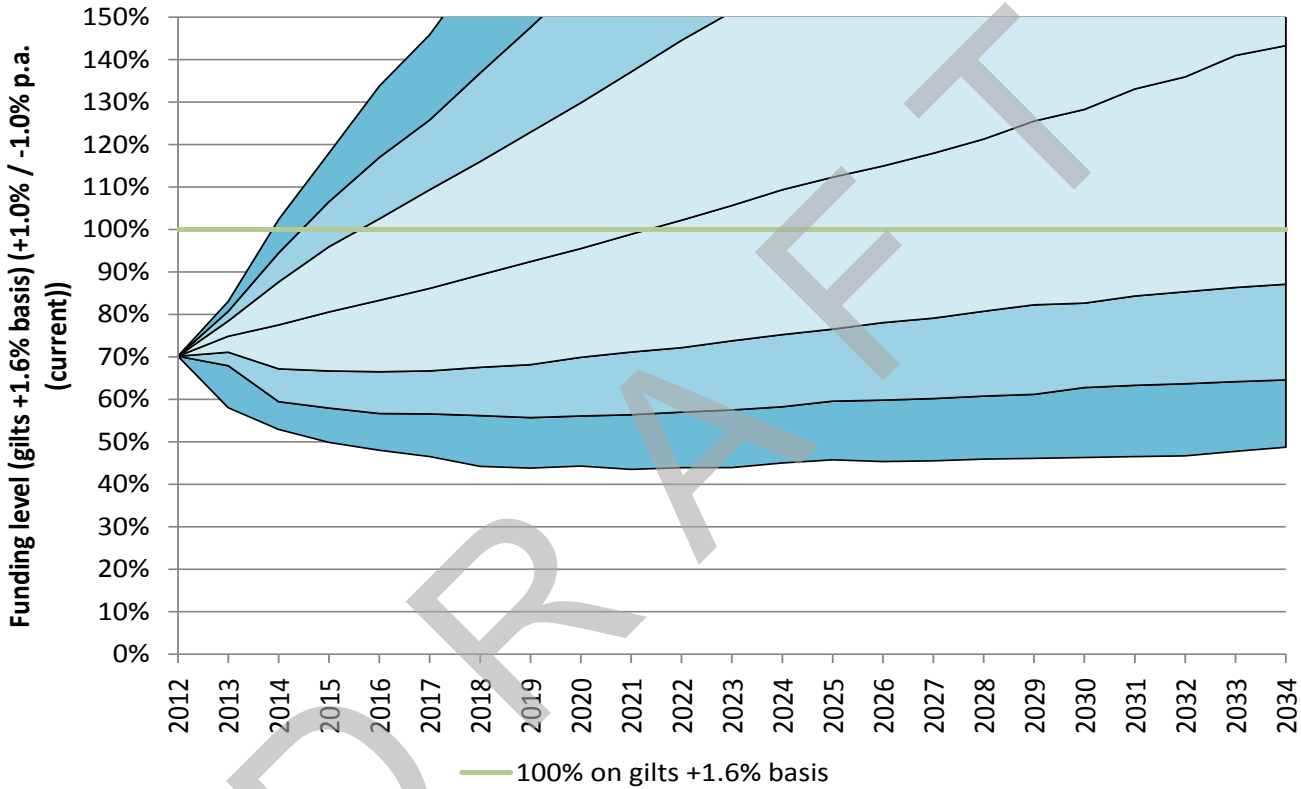
Scenarios tested

Scenario	Short term restriction		Long term stabilisation parameters	Contribution cap	Investment strategy
	Rate	until			
Unconstrained	22.3%	03/2014	Theoretical rate from 2014	No cap	Current
2 - Current	22.3%	03/2014	+1% / -1% from April 2014	No cap	Current
3	22.3%	03/2014	+2% / -2% from April 2014	30% of pay	Current
4	22.3%	03/2014	+2% / -2% from April 2014	No cap	Current
5	Initially 16.2% plus £16.2m, +0.5% / -0.5% and +/- £1,550k p.a. from 2014			No cap	Current
6	22.3%	03/2014	+1% / -1% from April 2014	No cap	-20% equity

Notes:

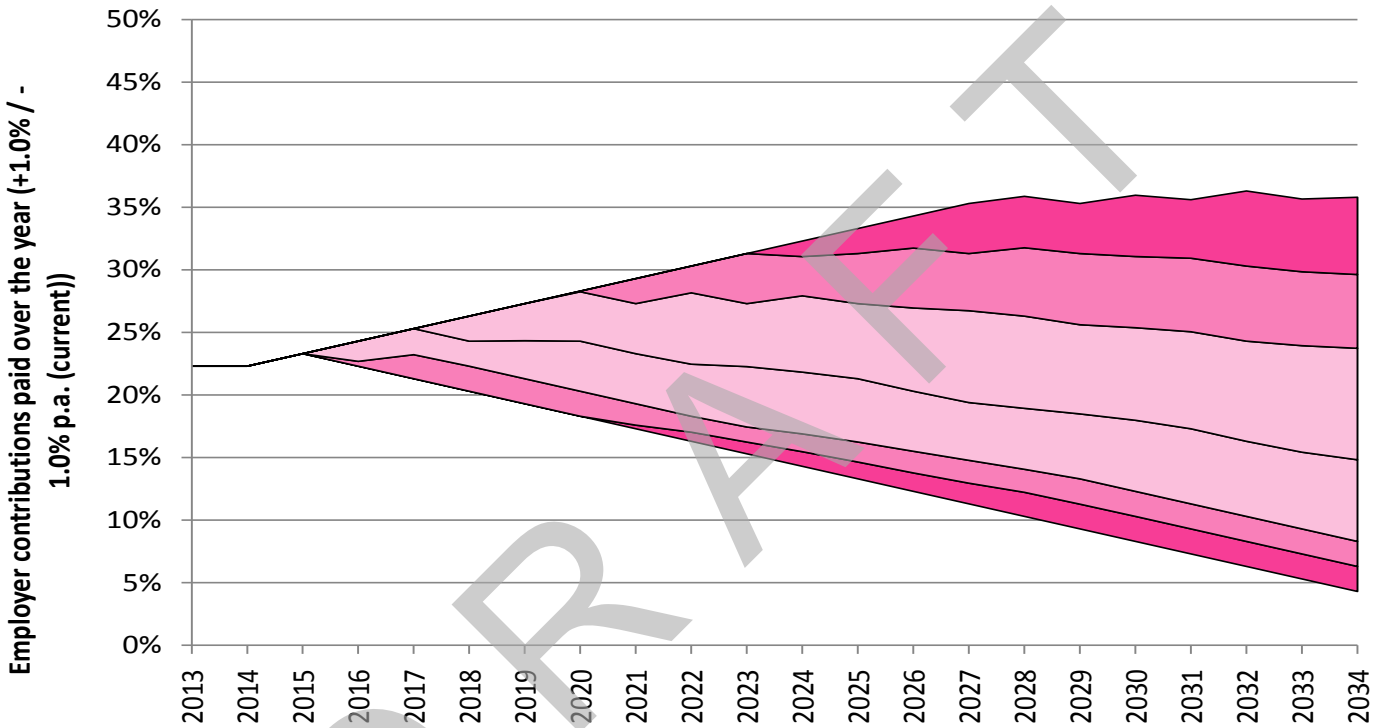
- The rate payable over the period of the short term restriction is the previously agreed common contribution rate for 2013/14 as agreed at the 2010 valuation
- Current strategic benchmark investment strategy is assumed to be circa 62% equities / 28% bonds (predominantly credit) and / 10% property – this includes some approximations for the existing assets mix and the allocation to diversifying asset classes
- 20 year deficit recovery spread period assumed under all scenarios
- The figures above exclude expenses

Stewardship – testing the current approach



- Median funding level 140% in 2034
- Chance of being >100% funded circa 75%
- Downside risk of funding level being as low as 55% in 21 years

Affordability – impact of current stabilisation



- Contributions kept within agreed bounds due to stabilisation
- Median employer contribution rate 15% in 2034
- Long term there is 1-in-6 chance of contributions of 25% or higher, 1-in-20 chance of contributions of 30% or higher

Comparing 2010 previous analysis

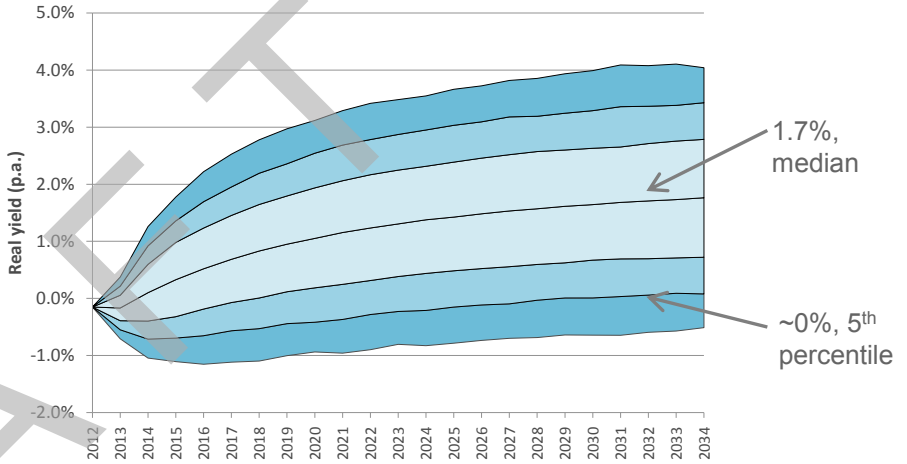
- Projected median outcome at end of 21 years has improved since last review conducted on same basis in 2010
- The spread of potential is outcomes consistent with 2010
- Factors that affect results
  - Growth in asset base since 2010 (+ve)
  - Increases in value of liabilities due to yield shift (-ve)
    - Gilt yields have reduced over period since 2010
  - Our model builds in assumptions that gilt yields will rise
    - This assumption is extremely influential

Impact of real yield projections on liabilities

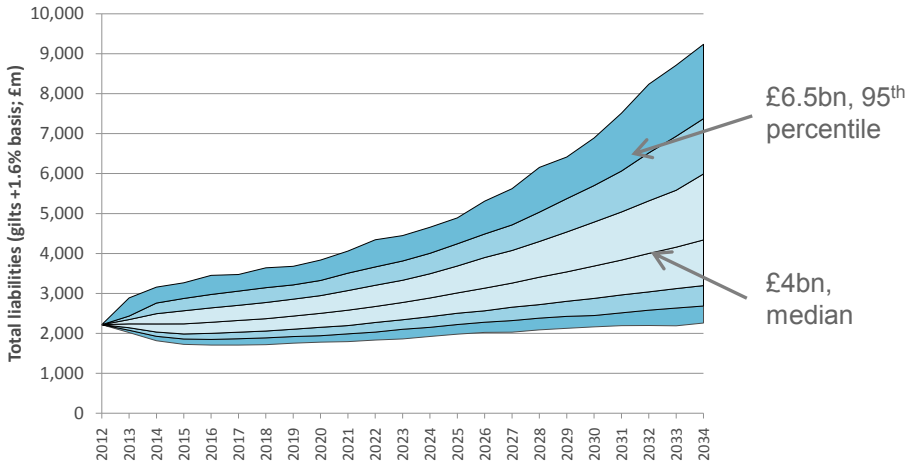
Comments on yield assumptions

- At the median level real yields are projected to rise from just below 0% p.a. currently, to around 1.7% p.a. in 20 years time (1.2% p.a. in 10 years time).
- However, there is considerable variation around this, with 2/3rds of the simulated real yields being in the range 0.7% p.a. to 2.7% p.a. (0.3% p.a. to 2.2% p.a. in 10 years).
- 1-in-20 chance that yields in 20 years will be as low as, or lower than, current yields.
- Liabilities (in nominal terms) are expected to grow from £2bn currently to a median figure of £4bn by 2032. Future accrual is acting to increase liabilities while rising yields are acting to reduce them.
- The liability value in 20 years time would be around 50-60% higher than the projected median liability value (30-40% higher in 10 years time) if yields were to remain at their current level.

Projection of real yield



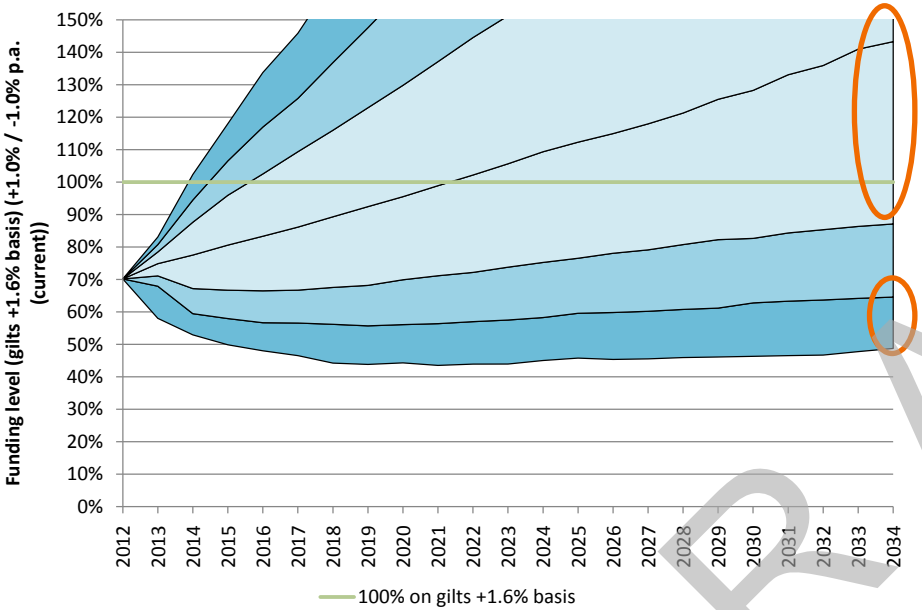
Projection of liability values



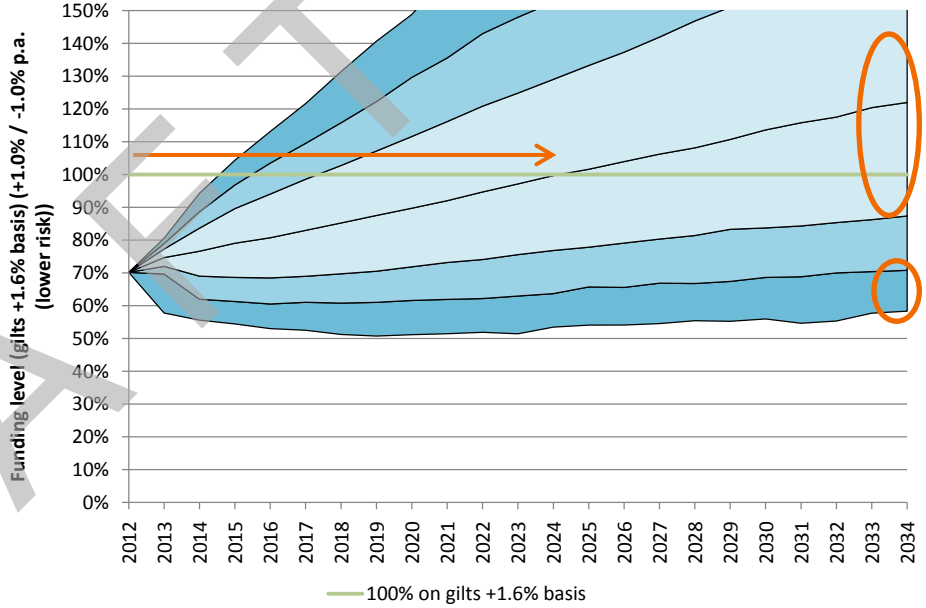
MEDIAN OUTCOME SHOULD NOT BE THE FOCUS

Stewardship – comparing outcomes

Current (+/-1% p.a. stabilisation)

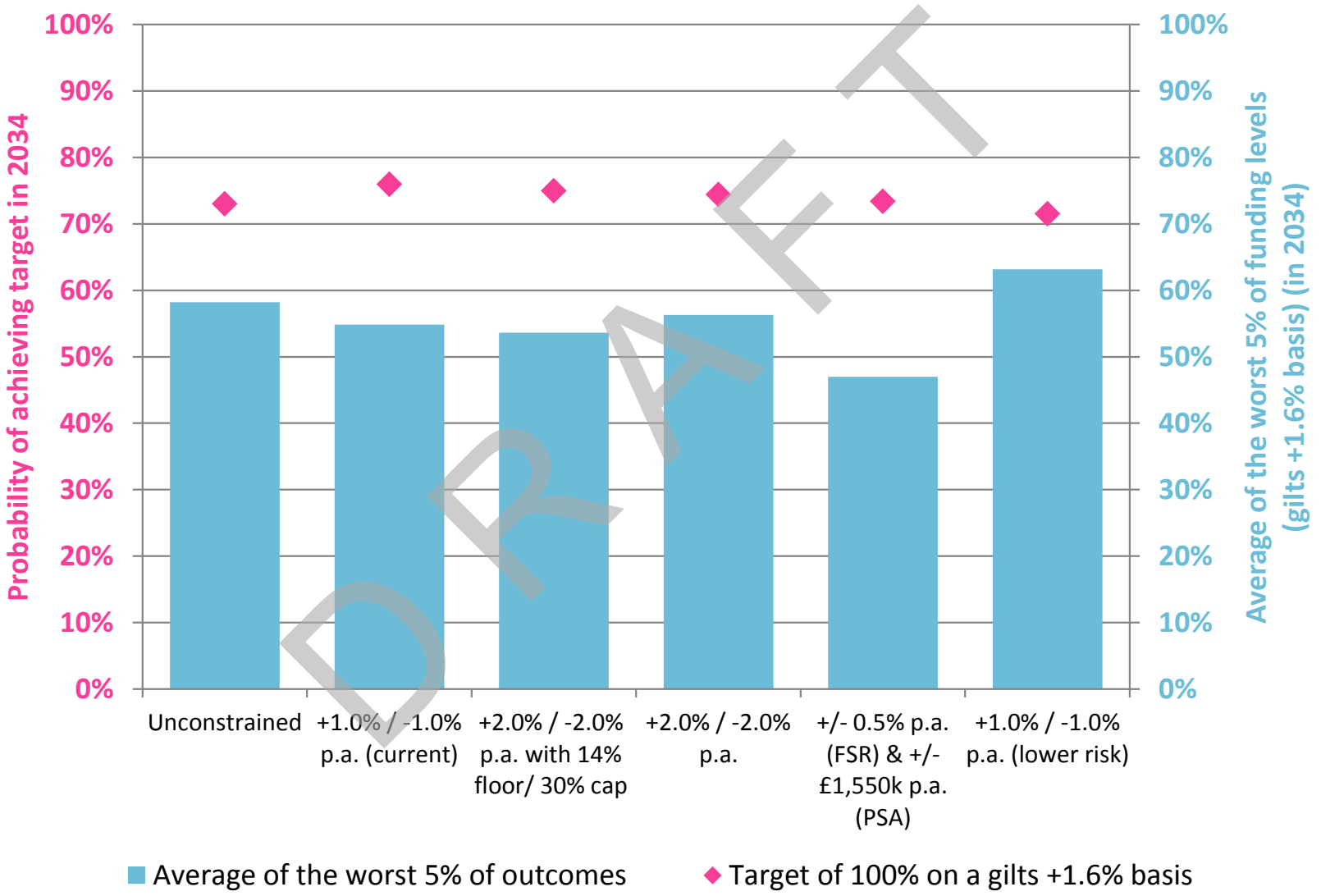


Lower risk (+/-1% p.a. stabilisation)

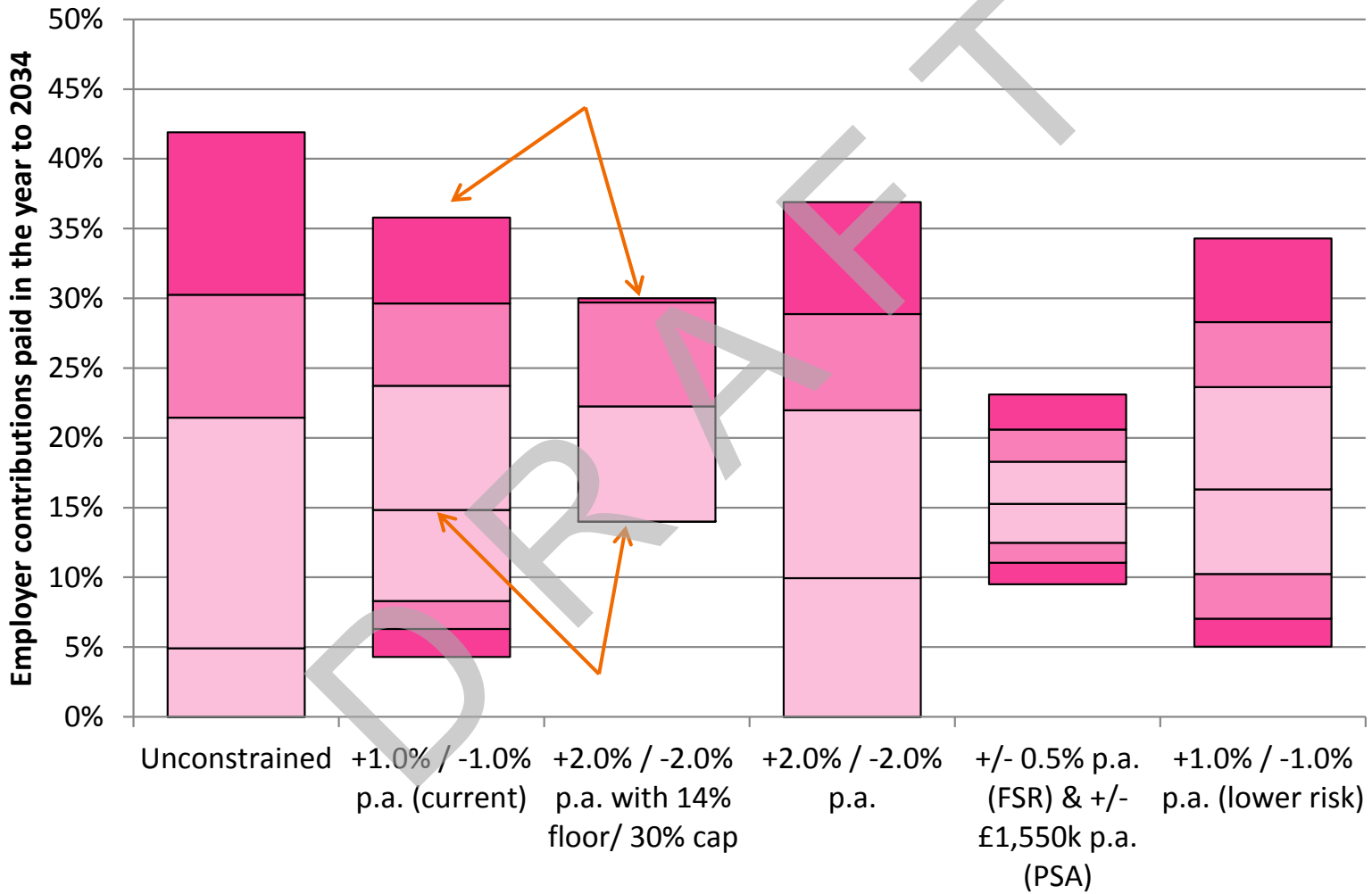


- Lower risk strategy vs current
  - Results in a lower median funding level (although still over 100%)
  - Number of observations above 100% is lower (chance of success falls)
  - Longer period on average to get back on track
  - Funding outcomes better in worst case scenarios

Stewardship – comparing outcomes

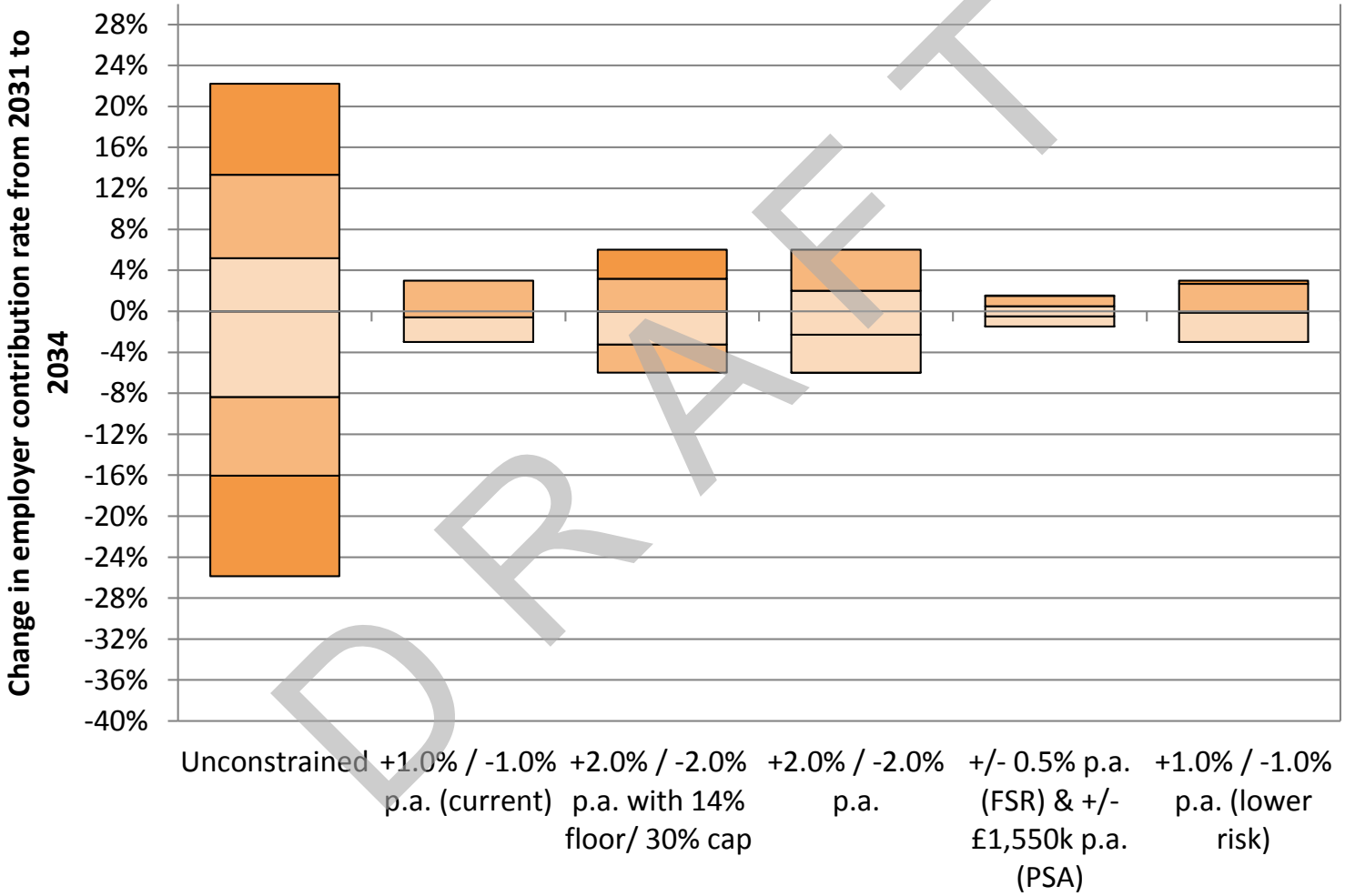


Affordability – impact of stabilising



Note – scenario 5 shows Future Service Rate variation only, Past Service Adjustment variation is in addition to above

Stability – variation of contributions



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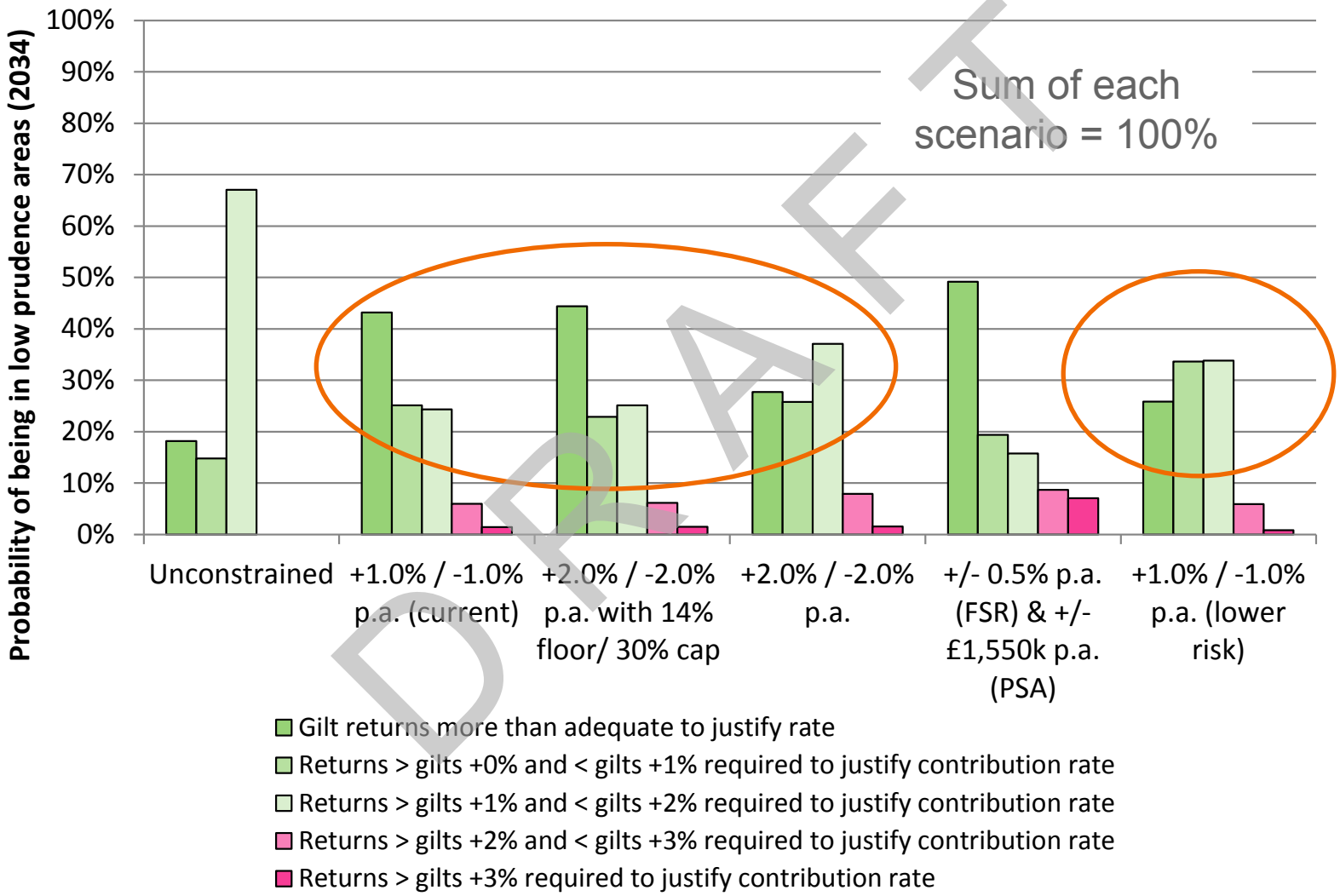
Prudence – justifying funding assumptions



Conclusions

- The main purpose is to test how robust the current strategy is against four key measures and merits of alternatives
- Current approach produces reasonable chance of success
  - However, there are significant risk exposures
  - Allowing greater variation in contributions would not significantly affect ability to meet long term objectives
  - But greater variations could affect budget for other Council services
- Lower growth strategy can reduce some downside risk
  - But could limit recovery if bond yield reversion does not occur
- Analysis assumes existing payroll level sustained
  - Change in membership and maturity will impact on outcomes
- Results relate to Suffolk as a single fund. Employers in Fund may have different tolerances to risk and volatility

THANK YOU

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Prudence

- The Actuary needs to satisfy professional requirements for future valuations to be carried out on a prudent basis. The modelling work enables us to quantify the level of prudence in alternative strategies by assessing the probability that an out-performance assumption of more than “2% above gilt yields” would be required in order to justify the contribution rate. The higher the out-performance assumption required, the less prudent the valuation basis.

Affordability

- The cost of the pension benefits is a major expense for employers. The affordability charts show the range of potential outcomes for the common employer contribution rate in the longer term and allow us to assess the likelihood that the rate exceeds a particular threshold.
- Most employers in the Fund will have an upper limit on the amount of contribution that they can afford to pay. This upper limit affects the speed at which any funding shortfall can be recovered. Therefore, for illustrative purposes, within the modelling a 30% contribution rate cap has been applied to certain scenarios.

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Stewardship

- These charts show the expected funding level and the range of potential outcomes for the funding level in the longer term. This provides a measure of the overall financial health of the Fund and enables us to assess the likelihood that each scenario is consistent with the safe stewardship of the Fund.
- Our modelling assumes that any stabilisation mechanism lasts for the duration of the modelling period, although in practice this should be reviewed at subsequent valuations.

Stability

- This illustrates the variability in contributions from one valuation to the next. Unexpected significant rises in the contribution rates are highly undesirable for employers and it is a requirement of the LGPS Regulations that the funding approach should recognise the need for stability in contributions from year to year. These charts show the level of changes in contribution rates from one formal valuation to the next, expressed as a percentage of pay (i.e. the change in the contribution rate over a 3 year period). A narrow distribution of outcomes centred on zero indicates good stability.

Reliances and limitations

This document is provided to our client, Suffolk County Council, in its capacity as Administering Authority to the Suffolk County Council Pension Fund (the "Fund"). It has been prepared by Hymans Robertson LLP to evaluate the suitability of various contribution stability mechanism for future contribution rates.

Individual employer results will differ from whole Fund results.

This document should not be released or otherwise disclosed to any other party without our prior consent, in which case it should be released in its entirety.

Hymans Robertson LLP accepts no liability to any party unless we have expressly accepted such liability in writing.

Whilst the results are based on Fund specific information as provided by the Administering Authority, there are some elements of the analysis which are based on a sample fund (which are highlighted as such).

Full reliances and limitations are included in the detailed results and analysis comPASS report which has been provided separately to the Council