### PENSIONS AND LOW INFLATION

P.M.C. Meredith, N.P. Horsfall, J.M. Harrison, K. Kneller, J.M. Knight and R.F. Murphy

### ADDITIONAL TABLES

### Table 4

The projection of pensions as a percentage of salary after 30 years' contributions at 10% of salary in table 4 [para 3.4.1] is extended to include other values for the equity risk premium in addition to our central assumption of 2% p.a.:

Equity risk premium	Equity real return	Level pension at retirement	Index-linked pension at retirement
% p.a.	% p.a.	%	%
4	6.5	36	25
3	5.5	30	21
2	4.5	26	18
1	3.5	22	15

## Tables 6 & 7

The projections in tables 6 and 7 [para 4.7] have been reworked as follows:

- (a) an equity risk premium of 3% and a real return of 5.5% p.a.; and
- (b) an equity risk premium of 1% and a real return of 3.5% p.a.

Even on the more optimistic assumption, the contributions still fall short of the actual rates required to fund for the promised benefits at retirement. Only in Model 1a does this not pose a problem on an ongoing basis – since in this predominantly equity-based scheme, the surplus compensates for the fact that future contributions are less than the cost of future accrual. In all the projections, the buy-out solvency levels remain worryingly low – reflecting the high buy-out costs in a low interest rate environment.

Table 6a. Model 1a: The 'typical' scheme with assumed equity real return of 5.5% pa

Years from projection date	0	3	5	7	10
Funding level	118%	115%	113%	112%	110%
Assumed actual contributions (110% of MFR rate)	12.5%	12.5%	12.5%	12.5%	12.5%
Cost of future accrual	14.9%	14.9%	14.9%	14.9%	14.9%
Total contribution required	11.6%	11.7%	11.8%	11.9%	11.9%
Buy-out solvency level	64%	62%	61%	61%	60%
Residual buy-out solvency level for non-pensioners	57%	54%	53%	52%	50%

Years from projection date	0	3	5	7	10
Funding level		85%	82%	80%	77%
Assumed actual contributions	12.5%	12.5%	12.5%	12.5%	12.5%
(110% of MFR rate)					
Cost of future accrual	21.2%	21.2%	21.2%	21.2%	21.2%
Total contribution required	23.5%	25.1%	26.2%	27.3%	28.9%
Buy-out solvency level	64%	60%	58%	56%	53%
Residual buy-out solvency level for non-pensioners	57%	52%	49%	46%	42%

# Table 6b. Model 1b: The 'typical' scheme with assumed equity real return of 3.5% pa

# Table 7a. Model 2a: The mature scheme with assumed equity real return of 5.5% pa

Years from projection date	0	3	5	7	10
Funding level		100%	99%	99%	98%
Assumed actual contributions	18.0%	18.3%	18.6%	18.9%	19.2%
(110% of MFR rate)					
Cost of future accrual	22.2%	22.8%	23.3%	23.7%	24.4%
Total contribution required	21.6%	22.8%	23.8%	24.8%	26.8%
Buy-out solvency level	79%	78%	78%	77%	76%
Residual buy-out solvency level for non-pensioners	62%	57%	54%	51%	45%

# Table 7b. Model 2b: The mature scheme with assumed equity real return of 3.5% pa

Years from projection date	0	3	5	7	10
Funding level		89%	88%	86%	84%
Assumed actual contributions	18.0%	18.3%	18.6%	18.9%	19.2%
(110% of MFR rate)					
Cost of future accrual	25.6%	25.9%	26.1%	26.3%	26.6%
Total contribution required	31.2%	34.6%	37.5%	41.1%	49.4%
Buy-out solvency level	79%	76%	74%	72%	70%
Residual buy-out solvency level for non-pensioners	62%	54%	47%	41%	30%