

## **Recommendation for assumptions for the Financial Ombudsman Service pension review loss assessments from 1 October 2005**

### **Financial Assumptions : 1 October 2005**

These assumptions apply for calculations of:

- (a) prospective loss, *and*
- (b) redress

### **Validity**

All calculations done in the period from 1 October 2005

### **As at date**

All calculations of prospective loss and redress of prospective loss done in this period, and the value of all personal pensions, should be done as at 1 October 2005.

### **Discount rate**

Using this basis the table of interest rates is shown below

Term to Retirement	Average Interest Rate in force over Period to Retirement
0	<b>5.0</b>
1	<b>5.1</b>
2	<b>5.2</b>
3	<b>5.2</b>
4	<b>5.3</b>
5	<b>5.3</b>
6	<b>5.4</b>
7	<b>5.5</b>
8	<b>5.6</b>
9	<b>5.7</b>
10	<b>5.8</b>
11	<b>5.9</b>
12	<b>6.0</b>
13	<b>6.1</b>
14	<b>6.1</b>
15-19	<b>6.2</b>
20-24	<b>6.4</b>
25-29	<b>6.5</b>
30 or more	<b>6.6</b>

The interest rate for annuities in payment is that for zero years to retirement.

Retail Prices Index (“RPI”)	3.00% per annum
Limited Price Indexation (“LPI”)	2.90% per annum
Section 21 orders (future)	RPI + 2.0% per annum
Statutory revaluation in deferment	3.00% per annum
Escalation of post 5 April 1988 GMP	2.90% per annum
Escalation at RPI capped at 3%	2.90% per annum

### **Mortality**

Standard table PA(90) rated down 6 years

### **Overview**

In 1994, the investment regulator at that time, the Securities and Investments Board (which became the FSA in 1997) announced an industry-wide review of personal pension sales. Over two phases the review covered personal pensions sold between 1988 and 1994.

Peter Tompkins, a PwC partner, was a member of the Institute and Faculty of Actuaries working party which was consulted by the regulator on a methodology for performing loss assessments in cases where inappropriate personal pension advice had been given. Subsequently PwC were engaged to advise the regulator on setting the assumptions underlying pension review loss assessments.

PwC advised the FSA on assumption setting quarterly from the beginning of the review until April 2003 when the FSA set the assumptions and calculation for subsequent case work which might emerge. Most recently PwC reviewed the assumptions in 2004 although pension review calculations continue to be performed using the April 2003 assumptions and calculation date.

PwC has now been asked to derive a set of assumptions for use by the ombudsman service in loss assessing personal pension cases which fall outside the boundaries of the FSA pension review. It is proposed that initially calculations will be performed with an effective date of 1 October 2005 and we have recommended assumptions with reference to this date.

In order to avoid the potential for an anomaly between the assessment of compensation for FSA pension review cases and for those under the jurisdiction of the Financial Ombudsman Service, we have used a process consistent with that used for FSA assumption setting for the proposed Financial Ombudsman Service assumptions.

### **Commentary on basis used for setting assumptions.**

There are 3 main financial assumptions underpinning the loss assessment – the expected returns on bonds and equities and expected inflation which are defined below. The calculation of the reference yields was defined at the start of the FSA review as follows:

- Gilt returns: Bond yields contain two elements – price inflation and the risk free real interest rate ie the return on a index-linked gilt

$$\text{Gilt rate} = (1 + \text{inflation}) * (1 + \text{risk free real rate}) - 1$$

- Equity returns: The equity rate contains 3 elements – price inflation, rate of dividend increase and dividend yield. For the review, the long term real dividend yield growth has been taken as 1.5% so the formula is:

$$\text{Equity rate} = (1+\text{inflation}) \times (1+\text{dividend yield}) \times 1.015$$

- Inflation rate: The inflation rate is estimated as the difference in the yield on an irredeemable gilt and an index-linked gilt:

$$\text{Expected inflation} = ((1+\text{yield on irredeemable}) / (1+\text{yield on I-L gilt})) - 1$$

The assumptions are set on the premise that there is some risk associated with occupational pension schemes and an element of equity investment is deemed appropriate for long-term investments. In setting the interest for use in loss assessment calculations the original basis used a mix of bonds and equities which ranges from 100% bonds at or close to retirement to 90% equity and 10% bonds for investors with more than 10 years to retirement.

However since 11 June 2003 the obligations of the employer have been considerably strengthened with relation to occupational schemes and the actuarial profession is currently revising its guidance in respect of the calculation of transfer values, the principles of which underlay the pension review loss assessment calculation.

To reflect the greater strength of obligation to a pension scheme, it is now appropriate to use a more cautious investment mix assumption - 70% equities rather than 90% would better reflect a typical investment mix today and may be appropriate to reflect this strengthening of the position of the pension scheme. We have therefore used an investment mix of up to 70% equity when calculating the pre-retirement interest rate.

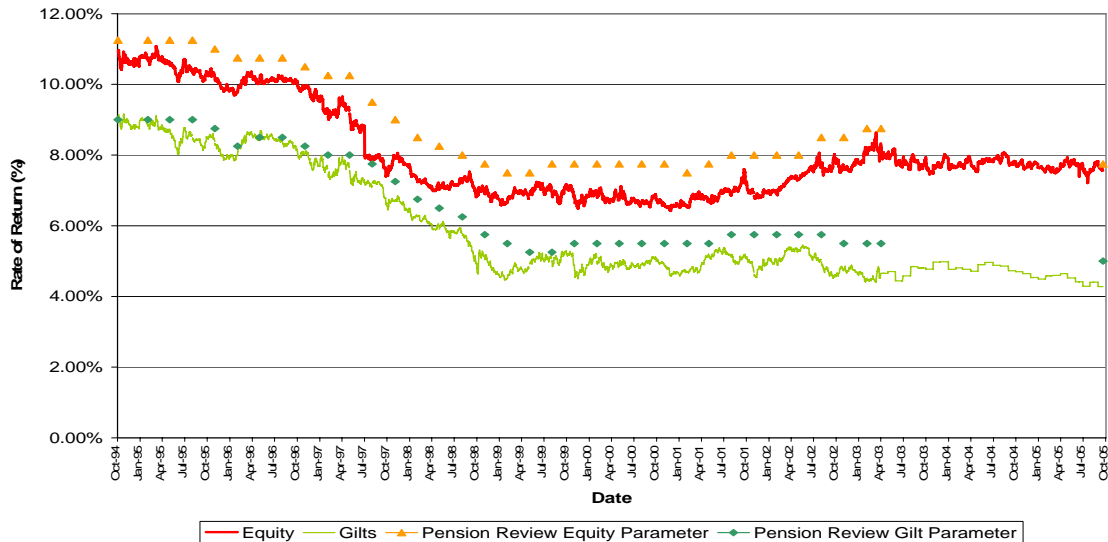
The equity and bond returns are combined to set a range of rates by which the future pensions in the loss assessment are discounted.

### **Data used for assumption setting**

In order to arrive at appropriate assumptions we have considered market conditions with reference to movements in the yields of government stocks and equity markets and inflation expectations. We have also considered conditions in the annuity markets although our investigations have shown that annuity rates follow bond rates quite closely.

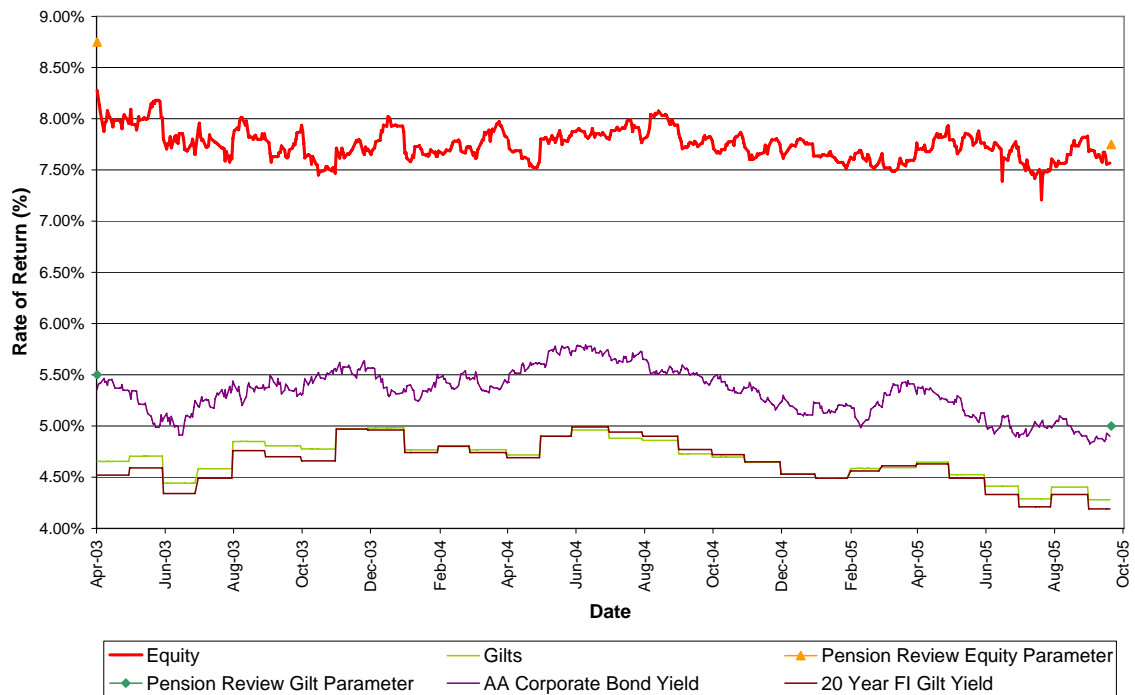
We have tracked these movements though with a lag to ensure yield movements persist. This has been designed to take account of the broad mix of investments in pensions including with profits where the returns are smoothed in a similar fashion.

In setting our parameters we have considered the relationship between equity and gilt returns and the FSA pension review assumptions. The following graph shows the calculated equity and gilt returns and the corresponding FSA Pension Review quarterly assumptions since the commencement of the pension review and shows how the FSA rates have tracked markets albeit with an implicit smoothing as a result of their quarterly nature. The final points show the proposed Financial Ombudsman Service assumptions as at 1 October 2005.



It should be noted that only the bond quarterly assumption was published by the FSA - the equity assumption is used in the calculation of the interest rate where an investor has not reached retirement using the 0 to 70% range for the equity content of the portfolio.

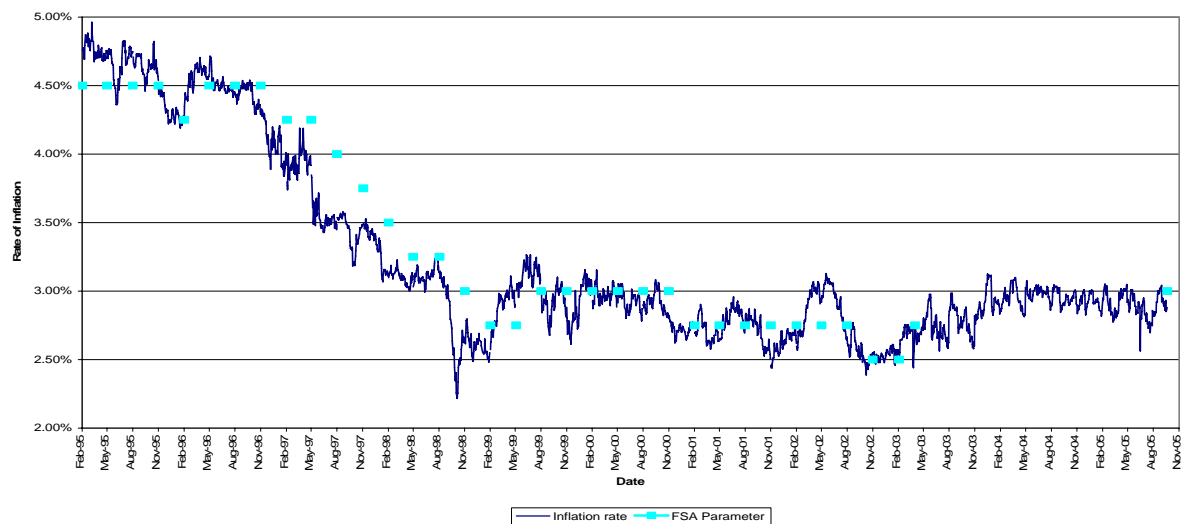
The FSA quarterly bond rate has been set to include an allowance for corporate bond rates on a highly rated investment grade corporate bonds and in setting the assumptions we have also considered the level of investment grade bond yields since the assumptions were last set in April 2003. The graph below shows how the bond rate has been set with reference to these rates and their relationship with fixed interest bond rates over the period since the FSA assumptions were last set.



In order to arrive at the equity rate we have considered the difference between expected returns on equities and bonds - the equity risk premium (ERP).

In our most recent review of the assumption setting assumptions for the FSA Pensions Review an ERP of 2.75% was used. Following our investigations and with reference to PwCs Survey of the City which corroborates an ERP of this magnitude, it is in our view still appropriate and we have used this rate in setting the assumptions for the ombudsman service calculations.

In considering the expected rate of inflation we have followed the practice of assessing the difference between the yield on fixed interest gilts and on indexed-linked gilts, the difference being a proxy for the implied expected long term rate of inflation. The results are shown below along with the historic FSA assumption for inflation.



## Mortality

When the FSA set their calculation assumptions as at 1 April 2003 (which are still in force for Pension Review cases) they also reviewed the demographic assumptions being used. As a result of continuing improvement in the mortality of the population as a whole more investors were expected to live until retirement and those that reached retirement were expected to live longer in retirement. In order to accommodate this in the calculation the mortality assumptions was changed from rating down three years to rating down four years.

By increasing the rating down the improvement in mortality is accounted for by using the mortality of a younger person that that of the actual age of the person. For example for calculating an annuity at age 60, a -4 rating would use the mortality of person aged 56 to reflect the improvement of a 60 year old since the tables used were formulated.

In order to review this we have compared the mortality tables used in the FSA Pension review calculations "PA(90)" with tables typically in use for actuarial valuation work today. The mortality basis generally in use is stronger than that used in the pension review calculation with an effective date of 1 April 2003 reflecting continued improvements in mortality. We would therefore recommend that the the ombudsman service adopt a mortality assumption which reflects this continued improvement in mortality by changing the mortality assumption from a rating down of 4 years to a rating down of 6 years.