

UNITED KINGDOM DEBT MANAGEMENT OFFICE

Accrued Interest and Coupon Calculations for the Floating Rate Gilts

Operational Circular

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ACCRUED INTEREST AND COUPON CALCULATIONS FOR THE FLOATING RATE GILTS

This notice sets out the method for accrued interest calculations for the Floating Rate Gilts (FRGs), and for information also states the method used by the Bank of England for calculating the quarterly interest payments.

Calculation of coupon

The Bank of England, as soon as practicable after 11.00 am on each interest determination date, determines the rate of interest per annum and calculates the amount of interest payable per £100 nominal of Stock (the “interest amount”) for the relevant interest period, and publishes both figures. The rate of interest, as calculated by the Bank of England, is rounded to the nearest fifth decimal place. The interest amount is calculated by multiplying the rate of interest per annum per £100 nominal of Stock by the actual number of days in the interest period concerned divided by 365 and rounding the resulting figure to the nearest fourth decimal place. The Bank of England’s determination of the rate of interest and the interest amount is final and binding upon all parties.

Calculation of accrued interest

The correct method for the calculation of accrued interest for the FRGs is as follows:

- (i) Floating Rate Treasury Stock 1999, which has an ex-dividend period of seven working days

$$AI = \begin{cases} \frac{t}{s} \cdot C & \text{if the settlement date occurs on or before the ex - dividend date} \\ \left(\frac{t}{s} - 1 \right) \cdot C & \text{if the settlement date occurs after the ex - dividend date} \end{cases}$$

Where:

| | | |
|------|---|--|
| AI | = | Accrued interest per £100 nominal of the gilt. |
| C | = | Next interest amount per £100 nominal of the gilt, as published. |
| t | = | Number of calendar days from the last dividend date to the settlement date. |
| s | = | Number of calendar days in the full coupon period in which the settlement date occurs. |

(ii) Floating Rate Treasury Stock 2001, which does not have an ex-dividend period

$$AI = \frac{t}{s} \cdot C$$

Where:

| | | |
|------|---|--|
| AI | = | Accrued interest per £100 nominal of the gilt. |
| C | = | Next interest amount per £100 nominal of the gilt, as published. |
| t | = | Number of calendar days from the last dividend date to the settlement date. |
| s | = | Number of calendar days in the full coupon period in which the settlement date occurs. |

Examples

1. Floating Rate Treasury Stock 1999 (which has an ex-dividend period of seven working days)

(a) Settlement date occurs on or before the ex-dividend date

| | | |
|-------------------------|---|------------|
| Settlement date | = | 20/11/1998 |
| Annual rate of interest | = | 7.18750% |
| Previous dividend date | = | 11/9/98 |
| Next dividend date | = | 11/12/98 |

s = Number of days between 11/9/98 and 11/12/98 = 91

t = Number of days between 11/9/98 and 20/11/98 = 70

Interest amount = Annual rate $\times \frac{s}{365}$ rounded to the nearest fourth decimal place = 1.7920

Accrued interest = $\frac{t}{s} \times$ Interest amount = 1.378462

(b) Settlement date occurs after the ex-dividend date

Take the example in (a), and suppose the settlement date is 9/12/98, which is in the gilt's ex-dividend period.

t = Number of days between 11/9/98 and 9/12/98 = 89

Accrued interest = $\left(\frac{t}{s} - 1 \right) \times$ Interest amount = -0.039385

2. Floating Rate Treasury Stock 2001 (which does **not** have an ex-dividend period)

Settlement date = 23/11/98
Annual rate of interest = 7.06250%
Previous dividend date = 8/10/98
Next dividend date = 8/1/99

s = Number of days between 8/10/98 and 8/1/99 = 92

t = Number of days between 8/10/98 and 23/11/98 = 46

Interest amount = Annual rate $\times \frac{s}{365}$ rounded to the nearest fourth decimal place = 1.7801

Accrued interest = $\frac{t}{s}$ x Interest amount = 0.890050

Any queries concerning the calculation of interest amounts should be made to the Bank of England (0171 601 4540). For other queries concerning the FRGs (including the calculation of accrued interest), contact Mark Deacon (0171 862 6516) or Gurminder Bhachu (0171 862 6512) at the UK Debt Management Office (UK DMO). Copies of the prospectuses for the FRGs are also available from the UK DMO.