

(Original article at http://en.wikipedia.org/wiki/Day_count_convention#Actual.2FActual_ICMA)

Actual/Actual ICMA

Formulas:

$$\text{Factor} = \frac{\text{Days}(\text{Date1}, \text{Date2})}{\text{Freq} \times \text{Days}(\text{Date1}, \text{Date3})}$$

For regular coupon periods:

$$\text{CouponFactor} = \frac{1}{\text{Freq}}$$

For irregular coupon periods, the period has to be divided into one or more quasi-coupon periods (also called notional periods) that match the normal frequency of payment dates. The interest in each such period (or partial period) is then computed, and then the amounts are summed over the number of quasi-coupon periods. For details, see (Mayle 1993) or the SWX references (Accrued Interest & Yield Calculations and Determination of Holiday Calendars).

This method ensures that all coupon payments are always for the same amount.

It also ensures that all days in a coupon period are valued equally. However, the coupon periods themselves may be of different lengths; in the case of semi-annual payment on a 365 day year, one period can be 182 days and the other 183 days. In that case, all the days in one period will be valued 1/182nd of the payment amount and all the days in the other period will be valued 1/183rd of the payment amount.

This is the convention used for US Treasury bonds and notes, among other securities.

Other names:

- Actual/Actual
- Act/Act ICMA
- ISMA-99
- Act/Act ISMA

Sources:

- ICMA Rule 251.1(iii)
- ISDA 2006 Section 4.16(c)
- (Mayle 1993)
- Accrued Interest & Yield Calculations and Determination of Holiday Calendars