

Each evening the DMO, based on prices provided by members of the Gilt-edged Market Makers Association (GEMMA), publishes reference prices and the associated gross redemption yields for each gilt on its wire services pages. This box briefly explains how the prices and yields are derived.

Members of GEMMA provide clean¹, mid-market prices for all conventional gilts (except When-Issued gilts prior to auctions and gilts that are rump gilts²) and mid-market yields for strips (which are then converted into prices by the DMO). Prices for index-linked gilts (IGs) are provided by the IG GEMMs. Prices for rump gilts are derived by the DMO from the prices of other gilts with similar characteristics. The median value of the prices contributed for each gilt is first derived; any outlying prices are then excluded, and the arithmetic mean of the remaining prices calculated. For conventionals (including double-dated and undated gilts), the margin for outliers is 15p, for floating rate gilts 3p, for IGs 20p and for strips 30p. The averaged clean prices for conventionals and IGs are first rounded to 2 decimal places (consistent with the normal trading convention) and then adjusted to provide dirty prices for settlement the following business day. Dirty prices and strips prices are rounded to 6 decimal places. All prices are quoted per £100 nominal.

All yields are calculated from prices (and prices calculated from yields for the strips³) using the DMO yield formulae, which are set out in "Formulae for Calculating Gilt Prices from Yields", published in March 2005 (available on the DMO's website at: www.dmo.gov.uk/public/technical/yldeqns.pdf). This includes the use of a 3% inflation assumption for the calculation of yields on index-linked gilts with an 8-month indexation lag. Yields are calculated from the rounded averaged prices for each gilt, and the yields are rounded to 3 decimal places.

The prices are published on the DMO's wire service pages shortly after 5pm each evening⁴. A table setting out the page layouts can be found on the DMO's web site. This is directed mainly towards those end-investors who have or wish to set up automatic field captures linked to live market data services.

Although the DMO monitors the quality of the prices provided by the GEMMs and IG GEMMs, no warranty is given of their accuracy. In addition, the prices are for reference only and do not constitute an offer to buy or sell securities.

Example (assuming 7 contributors, for simplicity)

Gilt: 6% Treasury Stock 2028;

Settlement date: 16 June 1999

Clean prices contributed (arranged in increasing order of magnitude): 117.32, 117.45, 117.76, 117.82, 117.86, 117.98, 117.99

Median clean price = 117.82

Outlier exclusion: reject clean prices which are more than 15p lower or higher than 117.82

Remaining clean prices: 117.76, 117.82, 117.86

Averaged clean price = arithmetic mean of the remaining clean prices = $(117.76 + 117.82 + 117.86)/3 = 117.813333333...$

Rounded averaged clean price = **117.81**

Rounded accrued interest = 0.147541

Rounded dirty price = $117.81 + 0.147541 = \mathbf{117.957541}$

¹ ie excluding accrued or rebate interest.

² An explanation of rump gilts can be found in the annex.

³ For strips, the process is slightly different. For each strip, the raw yield data provided by the GEMMs are first converted into prices. The outlier exclusion process is then applied to these prices, and the remaining prices are then averaged and the result is rounded to 6 decimal places. The rounded price is then converted back into a yield, which is rounded to 3 decimal places. These intermediate roundings will mean that the price to yield and yield to price calculations on the published prices and yields will not agree precisely. This is an interim solution and is necessary due to the setup of the DMO's system.

⁴ These pages can be found from GEMMA01 (and from GEMMA13 for strips).

Rounded DMO yield (calculated from the rounded dirty price) = **4.857**

The figures in bold are published alongside the gilt's name on the wire services.

ANNEX: RUMP GILTS

Rump gilts are small gilts (in terms of nominal amount outstanding), for which the GEMMs are not required to make a market, but for which the DMO will be prepared to provide a bid price if requested. Periodically the DMO revises the criteria which determine whether or not a gilt has rump status. The table below indicates the changes that have been made to the rump criteria:

- Up until 22 July 1998 gilts with less than £110 million nominal were classified as rumps.
- From 22 July 1998 (3:30pm) the rump threshold was increased to £250 million nominal. [11.75% 2003/07 became a rump]
- From 26 July 1999 (3:30pm) the rump threshold was increased to £310 million nominal. [9.5% 2004 and 2.5% Consols became rumps]
- From 21 September 1999 (3:30pm) the rump threshold was increased to £400 million nominal. [8% 2009 and 4% Consols became rumps]
- From 23 July 2001(8:30am) the rump threshold was increased to £410 million nominal. [9% 2012 became a rump]
- From 5 August 2002 (8:30am) 9% 2008 was classified as a rump. Although above the usual rump threshold of £410 million nominal the decision was made to make this a rump gilt following the conversion into 5% 2008 because the remaining holdings were so tightly held as to prevent the existence of a viable two way market in the gilt.
- From 21 December 2004 (3:30pm) the definition of rump gilts was amended to include all gilts with less than £750 million nominal outstanding. As a result, 2½% Treasury Stock (undated) was declared a rump.