

UK DEBT MANAGEMENT OFFICE

Addendum to “Response to DMO Consultation Document on Switch Auctions and ‘Cash-Plus’ Conversion Offers (September 1999)”

Index-linked gilt switch auctions

1. The DMO launched a consultation on 12 March 2001 on extending the switch auction and switch tap framework to index-linked gilts (IGs)¹. The consultation period closed on 6 April 2001 and the DMO published its response on 10 May 2001².
2. This addendum summarises the features of IG switch auctions and IG switch taps.

Summary of the framework for the conduct of IG switch auctions

Candidate stocks:

- The DMO will not hold an IG switch auction for an amount of stock that would leave the resultant amount outstanding in the stock at less than £1.5 billion nominal.
- IG switch auctions will not be used as a means to issue entirely new stocks to the market. The DMO will not hold an IG switch auction into a stock that has been auctioned outright less than 21 days earlier unless both such auctions had previously been announced in a regular DMO quarterly auction announcement. An IG will not be switched out of by auction within six months of its last auction date.
- The DMO will only hold IG switch auctions where both the respective stocks are within the same maturity bracket: 4½ years and over.

Size of IG switch auctions:

- The size range of an IG switch auction will be £250 million to £750 million nominal of the source stock. A maximum allocation limit at IG switch auctions may be considered on a case-by-case basis depending on the circumstances of the IG switch auction in question.

¹ “Index-linked Gilt Switch Auctions: Consultation Document”.

² “Index-linked Gilt Switch Auctions: Response to Consultation”.

Timetable for the conduct of an IG switch auction

- The possibility of using IG switch auctions will be specified in the Treasury's annual remit to the DMO published in the Debt and Reserves Management Report.
- The DMO will preannounce the auction and settlement date(s) of IG switch auction(s) in the quarterly auction calendar, including the stocks involved. This will follow the usual consultation with market participants at the relevant quarterly meetings.
- At 3.30pm on the Tuesday of the week prior to the IG switch auction, a press notice will be issued confirming the details of the IG switch auction, settlement details, maximum size and whether any limit on maximum allocation will apply. However, given the uncertainty over the amount of the destination stock to be created as a result of the IG switch auction, this stock would not be created and listed until settlement (as with a standard conversion offer or conventional switch auction). Consequently, a formal 'when-issued' market in the new stock will not exist.
- On the IG switch auction day:
 - At 10am, the DMO will publish on its wire service screens a fixed clean price for the source stock involved in the IG switch auction.
 - Between 10.00am and 10.20am, Index-linked Gilt-edged Market-Makers (IG GEMMs) will be allowed an unlimited number of telephone bids to switch a nominal quantity of the source stock at the price announced by the DMO into the destination stock at a clean price of the destination stock.
 - Between 10.20am and 10.30am, IG GEMMs will be allowed up to 10 telephone bids to switch a nominal quantity of the source stock at the price announced by the DMO into the destination stock at a clean price of the destination stock.
 - Before accepting any bids, the DMO will be mindful of fair value in the market and reserves the right not to switch upto the full amount on offer. Any shortfall from the pre-announced maximum simply means that less of the destination stock will be created.
 - By 11.10am, the DMO will aim to publish the results of the IG switch auction. This will include the common allotment clean price of the destination stock, and its dirty price ratio equivalent; the percentage allotted of the bids at the common allotment price; the nominal amount of the source stock to be switched; and the nominal amount of the destination stock that will be created as a result.

- Settlement of the IG switch auction (and cancellation of the source stock purchased) will normally occur on the following business day unless specified otherwise.

DMO secondary market activities

- The DMO will refrain from certain secondary market activities around IG switch auctions. It will refrain from:
 - outright sales and purchases and switches in the source bond once the IG switch auction has been announced (usually at the end of the previous quarter) to 1½ weeks after the IG switch auction (this includes switch tapping out of the source bond);
 - outright sales and purchases and switches in the destination bond once the IG switch auction has been announced (usually at the end of the previous quarter) to 1½ weeks after the IG switch auction (this includes switch tapping into the destination bond);
 - outright sales and purchases (via the IG Shop Window) in the other medium and longer IG stocks in the period 1½ weeks either side of an IG switch auction;
 - tapping or switch tapping *any* IG in the three weeks either side of an IG switch auction.

Worked example of an IG switch auction bid and settlement

As a worked example, assume that an IG switch auction had been conducted out of 4 3/8% IL 2004 into 2½% IL 2016 on 22 October 1999 with the following parameters:

- Maximum nominal amount of 4 3/8% IL 2004 for switching: £500 million.
- Clean price fixed by the DMO for 4 3/8% IL 2004: £127.65 (dirty price for next business day settlement - £127.708356).
- Accrued interest for 2½% IL 2016 for next business day settlement: £1.254217 per £100 (nominal).
- Individual bids to comprise the following pairing: clean price for 2½% IL 2016 and nominal quantity of 4 3/8% IL 2004 (in £1 million units) offered.

Assume that an IG GEMM offered £10 million (nominal) of 4 3/8% IL 2004, and that the common allotment clean price of 2½% IL 2016 was £204.71.

Case 1: Bid is successful with no scaling required (i.e. the clean price £204.75 (say) bid for 2½% IL 2016 is greater than the common allotment price)

The nominal quantity of 2½% IL 2016 allocated is derived as follows:

$$\begin{aligned} (1) \text{ Effective dirty price ratio} &= \text{dirty price of } 4 \frac{3}{8}\% \text{ IL 2004} / \text{dirty price of } \\ &\quad 2\frac{1}{2}\% \text{ IL 2016} \\ &= £127.708356 / [£204.71 + 1.254217] \\ &= 0.6201 \text{ (when rounded to 4 decimal places)} \end{aligned}$$

$$\begin{aligned} (2) \text{ Nominal } 2\frac{1}{2}\% \text{ IL 2016 allocated} &= (1) * \text{Nominal } 4 \frac{3}{8}\% \text{ IL 2004 offered} \\ &= 0.6201 * £10,000,000 \\ &= £6,201,000 \end{aligned}$$

Case 2: Bid is successful but scaling of 60% is applied (i.e. the clean price bid for 2½% IL 2016 is equal to the common allotment price)

The nominal quantity of 2½% IL 2016 allocated is derived as follows:

$$\begin{aligned} (1) \text{ Effective dirty price ratio} &= \text{dirty price of } 4 \frac{3}{8}\% \text{ IL 2004} / \text{dirty price of } \\ &\quad 2\frac{1}{2}\% \text{ IL 2016} \\ &= £127.708356 / [£204.71 + 1.254217] \\ &= 0.6201 \text{ (when rounded to 4 decimal places)} \end{aligned}$$

$$\begin{aligned} (2) \text{ Nominal } 2\frac{1}{2}\% \text{ IL 2016 allocated} &= (1) * \text{Nominal } 4 \frac{3}{8}\% \text{ IL 2004} \\ &\quad \text{offered} * \text{Scaling factor} \\ &= 0.6201 * £10,000,000 * 0.6 \\ &= £3,720,600 \end{aligned}$$

Methodology for IG switch taps

The choice of IG switch tap stocks would be constrained by the same considerations as for IG switch auctions, except that the maturity bracket would not apply to IG switch taps. However, an IG switch tap would be announced at short notice and would be limited to a maximum of £250 million nominal of the source stock. The tap result and allocation would be calculated on a uniform price basis. The DMO would not publish a minimum price for the destination stock but would reserve the right not to allot bids if they were at too great a discount to prevailing market terms. Given the greater complications of bidding at an IG switch tap, the DMO would give more notice than for an outright tap of stock.

Timetable

Day preceding the IG switch tap:

3.30pm: The DMO announces its intention to switch tap including the source gilt against which the switch will occur; the destination stock; and the maximum nominal amount of the source gilt allowable for switching. The DMO has the discretion to impose a per IG GEMM allocation limit.

Day of the IG switch tap:

10.15am: The DMO announces the clean price of the source stock at which it will settle the switch.

10.45am: Opening of bidding by IG GEMMs. Bids comprise nominal quantities offered of the source stock (in units of £1 million), and the clean prices bid for the destination stock (to 2 decimal places). IG GEMMs would be limited to a maximum of six bids.

10.50am: Close of bidding.

As soon as practicable after 10.50am: Publication of IG switch tap results. The DMO would publish on the screens the nominal amount of the source gilt offered and the nominal amount successfully switched, the nominal quantity of the destination gilt created, the new amounts outstanding following the IG switch tap, the striking (clean) price of the destination gilt and its dirty price ratio equivalent. Settlement and creation of the new stock would be next business day. Source stock that was successfully switched would be cancelled at the same time as the new stock was created.

In the tap process, the bids would be ranked as usual. The bids would be filled from the top but the striking price would be calculated on a uniform price basis (as with outright taps). The nominal quantities of the destination stock created and allocated to each IG GEMM would be calculated as the ratio of the dirty prices of the two gilts, which would be rounded to the nearest 4th decimal place as with switch auction dirty price ratios, multiplied by the nominal quantity of the source stock.

The DMO reserves the right not to allot bids if they were at too great a discount to prevailing market terms. If the IG switch tap attracted insufficient demand to clear at an acceptable price, the remainder of the destination stock would not be created, and an announcement made to this effect.