# The experimental series of gilt-edged auctions

*During 1987/88 the Bank held an experimental series of three auctions of gilt-edged stock covering a part of the Government's funding need. The purpose of the experiment was to assess the usefulness of auctions as a possible addition to the authorities' existing methods of issue: this note reviews the experiment.*

The experiment with auctions had been flagged before Big Bang in the Bank's paper on official operations in the gilt-edged market[1] and was preceded by extensive consultation with market participants on the specific form of the auctions.[2] The experiment was only begun once experience of the new market had been gained. Big Bang created a more favourable climate for auctions by increasing the number and capitalisation of firms at the centre of the gilt market: this presented an opportunity to test the auction technique, which the Bank was keen to take.

## The features of auctions

There are three main differences between the auction technique as applied in the experiment and the Bank's other method of public offer, the minimum price tender. The most fundamental difference is that whereas at tender the Bank sets a minimum price below which it will not allot stock—and therefore underwrites the issue—at the auctions no minimum price was set and all the stock was allotted (though the Bank reserved the right not to allot all the stock on offer in exceptional circumstances). The absence of a minimum price at auction would be expected to have less impact in a rising market (when otherwise any minimum price might not bite) than if prices were tending to fall.

The second major difference between the auctions, which were held on a bid-price basis, and conventional tenders is that at the auctions bidders paid the prices they bid (except that small non-competitive bids—up to £100,000 each—were allotted at the average competitive price) whereas at tenders all successful bidders pay the same price.

The third difference is that 'when-issued' trading took place in auction stocks whereas this facility does not operate at tenders. 'When-issued' trading—that is buying or selling of stock for settlement when the stock is issued—was allowed between the announcement of the details of the auction and auction day. The facility should help in establishing a guide to the price which may be expected at the auction.

Other differences between auctions and tenders are that for auctions up to several months' advance notice was given of the type of stock (short, medium or long) and the approximate timing of the auction; this is not done for tenders. Furthermore the precise details of the auction were announced at least seven calendar days in advance, three days earlier than is typical of tenders. Following an auction the Bank did not sell other stock of the same type during the period between announcement of the auction details and 28 days after the auction. This 'fallow' period is designed to give the market reasonable certainty that stock in the maturity area offered at the auction will not be offered again for a known period ahead, thereby encouraging bids.

**Table A**
**Summary of auctions**

| | Short auction | Long auction | Medium auction |
|---|---|---|---|
| Date announced | 5/5/87 | 15/9/87 | 5/1/88 |
| Date held | 13/5/87 | 23/9/87 | 13/1/88 |
| Stock | 8% Treasury 1992 | 9% Treasury 2008 'A' | 8¾% Treasury 1997 'C' |
| Nominal amount | £1,000 million | £800 million | £1,000 million |
| Total value of bids | £2,337 million | £1,228 million | £1,066 million |
| Value of non-competitive bids | £0.6 million | £0.2 million | £0.4 million |
| Coverage (times) | 2.3 | 1.5 | 1.07 |
| To be paid in further instalments | £50 per cent | £40 per cent | £50 per cent |
| Minimum yield at auction (per cent) | 8.32 | 9.51 | 9.88 |
| Average yield at auction (non-competitive bids) (per cent) | 8.43 | 9.57 | 9.99 |
| Maximum accepted yield at auction (per cent) | 8.45 | 9.60 | 10.15 |
| Tail (basis points(a)) | 2 | 3 | 16 |

(a) Differences between maximum and average yield.

## The individual auctions

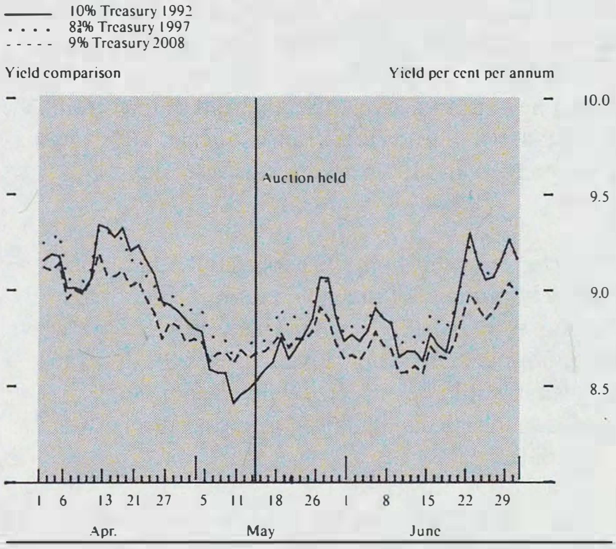
### The first auction

The first gilt-edged auction, for £1,000 million of 8% Treasury 1992, was announced on 5 May 1987 and held on 13 May 1987. The market background to the auction was favourable, with yields on short-dated stocks having fallen steadily since mid-April (see Chart 1).

This reflected the downward pressure on UK interest rates and upward pressure on sterling, in part fuelled by speculation about the timing and result of the General Election. Short-term interest rates fell on 8 May, and the date of the election was announced on 11 May, both

(1) Reproduced in the December 1986 *Bulletin*, pages 569–74.
(2) The arrangements for auctions were set out in the Bank's notice 'The gilt-edged market: auctions', of 13 April 1987, reproduced in the May 1987 *Bulletin*, page 203.

**The first auction**

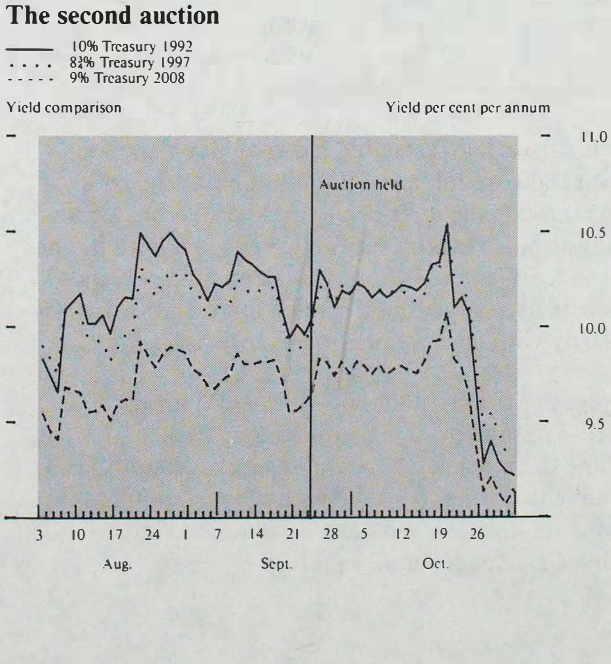



during the offering period. Though gilt prices had edged back a little by the time the auction was held, the market was then still close to its peak, with market conditions remaining favourable. The auction was covered about two and a quarter times, similar to coverage in the United States. The tail (the difference between the average and lowest accepted bids) was 2 basis points in terms of yield, broadly comparable with US experience. Non-competitive bids amounted to less than 0.1% of the amount of stock on offer, much lower than the typical level for non-competitive bids in US Treasury auctions of around 5%. Prices in the gilt market dropped away sharply after the auction, in tandem with a weakening exchange rate, reflecting in part a degree of nervousness ahead of the election, rather than any reaction to the auction result.

### The second auction

The second in the series of gilt-edged auctions, for £800 million of 9% Treasury 2008 'A', was announced on 15 September 1987 and held on 23 September 1987. During the first half of September, the tone of the market

**The second auction**

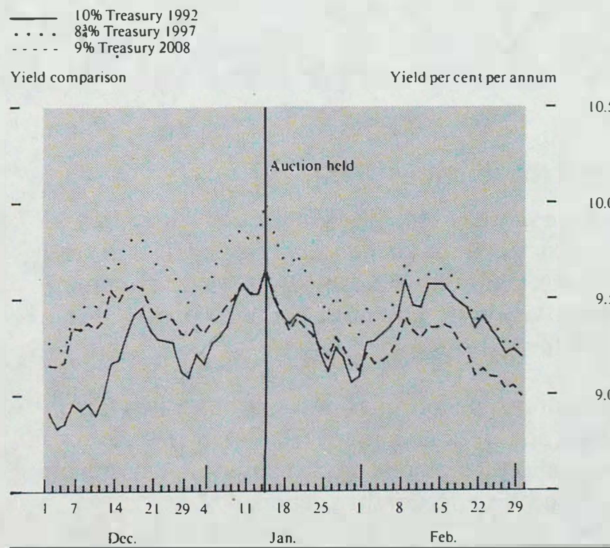



was in general much less favourable than in May. Worries about the current account of the balance of payments, monetary developments and buoyancy of the economy had become more pronounced, yields had risen and the market was more uncertain than it had been earlier. However, as Chart 2 shows, the auction fell into a pocket of favourable sentiment which boosted demand for gilts and lowered yields. In the run-up to the auction, sentiment improved with the release of a run of favourable figures which showed a low PSBR and subdued bank lending in August and buoyant manufacturing output. Yields declined to about $9\frac{1}{2}$% on long-dated stock, about $\frac{3}{8}$% below the level before the auction was announced. Despite this improvement, retail interest in the auction was limited and the auction was covered only one and a half times. The day after the auction the release of poor trade figures hit the market badly, with long yields again rising to $9\frac{3}{4}$%.

### The third auction

The details of the third auction of gilt-edged stock, for £1,000 million of $8\frac{3}{4}$% Treasury 1997 'C', were announced on 5 January 1988 and the auction was held on 13 January 1988. The general market background to the third auction was much less comfortable than it had been before either of the first two auctions (Chart 3).

**The third auction**




The market, which had seen yields in mediums fall by about 1%, to below $9\frac{1}{2}$%, in the wake of the equity market crash in October, had become unsettled towards the end of the year. The autumn reductions in short-term interest rates were seen as a response to the equity market crash and the gilt market worried about their sustainability and their implications with the UK economy already growing quickly. Uncertainties surrounding currency movements following the G 7 meeting in December also undermined the market.

Against this uneasy background, the auction stock designedly contained a number of attractive features: it was partly paid (£50 to pay in February); FOTRA (free of tax to residents abroad); could be hedged in the new medium gilt futures contract; and, to enhance its liquidity, comprised part of the largest gilt issue. However, retail interest was limited as investors held back ahead of the US trade figures due to be released on 15 January. In the event, the auction was only just covered, with competitive bids for a total nominal value of £1,065 million of stock.

The tail was sixteen basis points in terms of yield, as compared with three basis points in the second auction and only two basis points in the first auction. Thus successful bids were much more widely dispersed; but the tail, though long, was very thin, as can be seen by the fact that the yield at the average allotment price was seven points below the previous day's closing level.

Even though the amount of stock allotted at the lower prices was small, the spread of bids accepted initially caused some surprise. The Bank had, however, indicated at the outset of the auction experiment that only in exceptional circumstances would it consider exercising its right to allot less than the full amount of stock on offer, and the clarification which the third auction provided on this point may help to encourage a greater range and volume of bids in future.

In the event, the spread of bids accepted helped stimulate good retail interest as medium yields briefly touched 10%; the evidence of buying demand led the market into a general rally in the period after the auction, sustained by the relatively good US trade figures released two days later.

## Effect of the auctions

At both the short and the long gilt auctions there seems little evidence that the auctions had any significant adverse effect on turnover: Table B shows the pattern of trading activity in the gilt future contracts on LIFFE as a proxy for turnover.

At the medium auction, gilt futures turnover was lower during auction week than in the rest of January. However, this may reflect the general market environment rather than any specific effect of the auction.

Equally, there seems no strong evidence that either of the first two auctions had any significant impact on the general level of yields (see the charts). Yields did rise in front of the third auction, but it is difficult to relate this movement specifically to the auction since other factors were at work in the same direction. More significantly, the outcome of the auction did seem to help the market establish a new trading level after a period of uncertain movement: as medium yields briefly touched 10%, buying demand emerged and the new stock was quickly absorbed.

**Table B**
**Turnover during auction periods**
Average daily number of gilt contracts on LIFFE; thousands

| | Short auction | Long auction | Medium auction(a) |
|---|---|---|---|
| Month preceding auction | 30.6 | 28.5 | 16.4 |
| Auction month(b) | 32.5 | 26.2 | 30.0 |
| Auction 'week'(c) | 32.3 | 28.1 | 26.3 |
| Month following auction | 29.8 | 31.9 | 33.9 |

(a) Includes medium contract.
(b) May 1987 for short auction, September 1987 for long auction and January 1988 for medium auction.
(c) Period beginning with announcement of auction and ending on auction day.

On *a priori* grounds it might be expected that auctions would affect the shape of the yield curve. At the first auction short yields fell relative to medium yields between 5 May (announcement) and 13 May: this is the contrary result to what would be expected when a short stock is announced, and reflects the fall in interest rates between those two dates.

Long yields did not fall as much as mediums ahead of September's auction of long-dated stock, but this may reflect the fact that variations in longer yields are generally more damped, rather than any effect of the auction's announcement.

At the third auction, when market conditions were less propitious for the issue of new stock, yields on mediums rose relative to those on longs between the auction's announcement and auction day itself; and medium yields rose sharply relative to longs on auction day.

Thus the experience of the first three auctions suggests that, though in certain market conditions auctions may affect both the level and the shape of the yield curve, the effect in normal trading conditions is in any case one which the market can absorb relatively smoothly. As compared with tenders, the certainty auctions give in the amount of stock that is sold is necessarily balanced by less certainty about the yield at which this is achieved, but experience so far suggests that the difference in outturn between the two approaches is not large.

Investors generally held back bids at the auctions until as close to the 10 am shutting time as possible. Since only gilt-edged market makers (GEMMs) have the facility to bid by telephone (both on own account and for customers) the vast majority of bids—over 95% by value at the last two auctions—came through GEMMs.

The when-issued (WI) facility has been popular, with between £800 million and £900 million of WI trades passing through the inter-dealer brokers at each auction. Spreads on WI trades have been narrow and liquidity has been good. So far, the WI price has tended to overstate prices paid at auction, but this effect may diminish as familiarity with the auction process increases.

Coverage at the third auction—it was 1.07 times covered—was lower than at either of the earlier auctions, reflecting the much less favourable market conditions. It is possible that the experience with the spread of bids at the third auction, and the Bank's response to it, will encourage greater coverage in future.

## Conclusions from the experiment

It would be premature to draw definitive conclusions from the limited experiment of three auctions, since the experience has clearly involved a learning process, which may not be complete. The allocation of small amounts of stock at the third auction at relatively low prices may encourage bidding at future auctions; and the when-issued price may also become a better indicator than hitherto of auction results.

The first two auctions, held in favourable market conditions, showed that the auction method can work effectively in the new market structure, but in terms of the outcome it is possible that in the same circumstances stock could have been sold on broadly equivalent terms by other means. The third auction was a more formative experiment: it achieved sales of stock in conditions that probably would not have allowed equivalent sales to be achieved by other means; and it also proved successful in helping the market establish a new trading level after a period in which it had lacked direction.

The auction experiment proved to be useful, both in helping to meet the Government's funding needs in 1987/88 and in allowing assessment of the technique itself. The results were sufficiently encouraging to suggest that auctions could complement existing methods of issue; and this was the general response from the Bank's survey of the views of market participants—both market makers and investors—following the auctions. On this basis, it has been decided that two further gilt-edged auctions will be held in 1988/89. It is expected that the first auction will be held in July or August 1988, and the second in January or February 1989. The general arrangements for the auctions are expected to be as set out for the past three auctions.