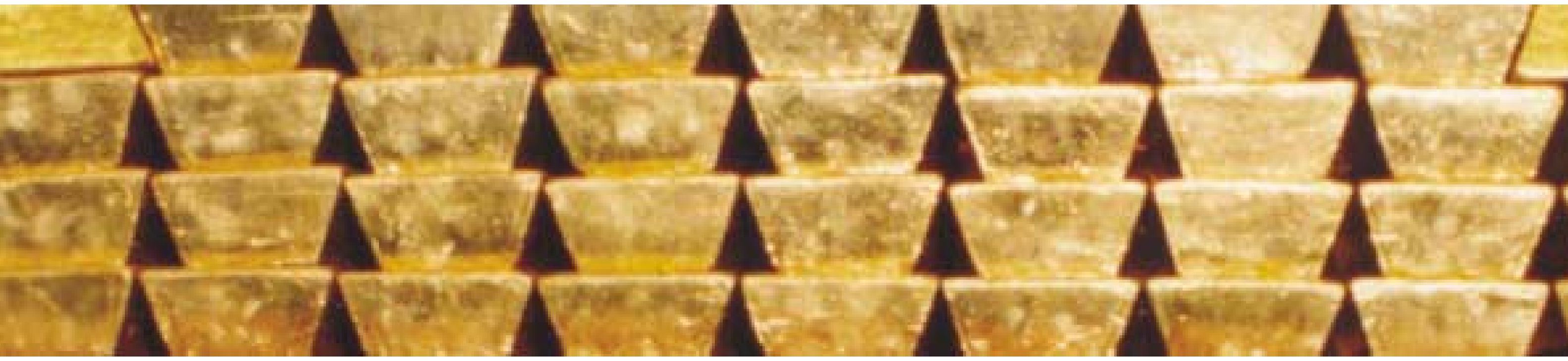
HM Treasury

The Sale of Part of the UK Gold Reserves



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executive summary

In this chapter

1 On 7 May 1999 the Government announced that it would sell around 415 tonnes (approximately 60 per cent) of UK gold reserves over the medium term - a three-year period based on the current frequency of sales. This is a report about the implementation of the first nine sales in that programme, the degree of success achieved and the lessons that might be learned for future sales.

2 The overall aim of the gold sale programme is to 'restructure the UK's reserve holdings to achieve a better balance in the portfolio by increasing the proportion held in currency'. The decision was taken against a background of a decreasing market value of gold, which over the last twenty years has fallen from a high of $850 per ounce in January 1980 to an average annual price of under $300 per ounce since the start of 1998[1] (see **Figure 1 overleaf** for average yearly prices). Since the announcement to sell gold, market prices have fluctuated widely from a low of $252 per ounce shortly after the first auction on 6 July 1999 to a price spike of $325.50 in October 1999, following an agreement by European central banks to limit gold sales, and dropping back to $269.95 on 28 November 2000. The auctions were conducted in, and proceeds were received in, US$. Between July 1999 and November 2000 the Treasury had generated revenues of $1,990 million (£1,357 million at the 18 December 2000 US$1.467/£ exchange rate prevailing when this report was finalised) which has been re-invested in a spread of foreign currency investments - US Dollars (40 per cent), Euros (40 per cent) and Yen (20 per cent).

3 This report does not question the merits of the decision to sell, which is a policy matter outside the remit of the National Audit Office. It addresses three key questions about the conduct of the gold sale programme:

- Have the sales undertaken so far achieved good prices?
- Has the Treasury met the Government's sale objective?
- Are there any ways in which future sales might be improved?

1 *Gold is conventionally traded in US Dollars per 'troy' ounce. Prices are shown in the money of the day.*

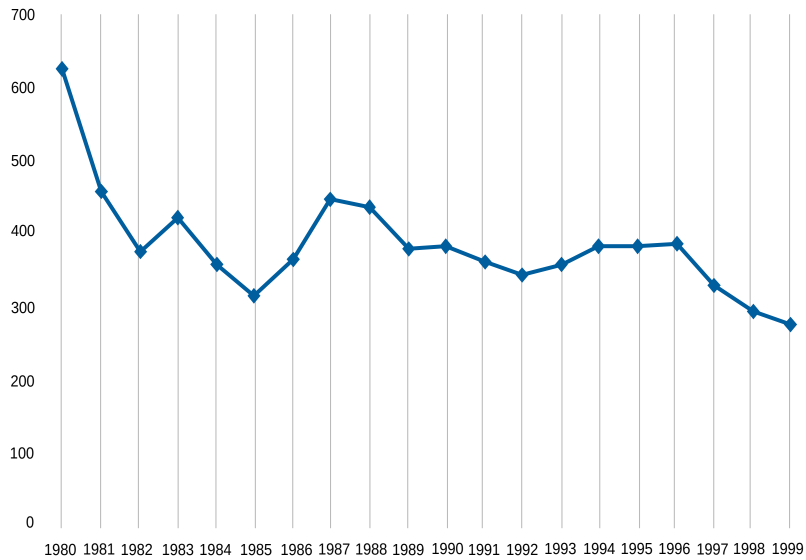
Have the sales undertaken so far achieved good prices?

4 In acting as an agent for the Treasury, the Bank of England has held nine auctions for a total of 225 tonnes of gold at two-month intervals, starting on 6 July 1999 with the most recent one on 7 November 2000. Eligible bidders include the Members of the London Bullion Market Association*, (62 at the start of the auction programme, 53 in November 2000) and also central banks and other international monetary institutions. We analysed the prices and proceeds achieved in relation to available benchmarks, in particular the London Gold Fix*. This is a well-established mechanism for selling gold, widely recognised in the UK and around the world as providing the best available benchmark for gold **(Figure 2)**.

1 **The average yearly price for gold over the last twenty years**

The price of gold has fallen over the last twenty years

Average yearly gold price ($ per ounce)



Source: National Audit Office

2 **The London Gold Fix**

Buyers and sellers at the London Gold Fix relay their bids to the five Fix members and agree a 'clearing' price for all the bids.

The London Gold Fix is a long-established system that enables buyers and sellers of gold around the world to trade twice daily with one another.

The Fix takes place at 1030 and 1500 each day. It is run by five Fix members from different trading houses who, from a dedicated Fixing room in NM Rothschild, relay bids from their own organisation along with the numerous traders they represent (at a commission). Each session begins by the chairman suggesting an opening price, to which each member indicates if they are a seller or buyer at that price. The price is then moved up or down until quantities offered and required are matched. Gold is then traded at a common 'clearing' price. It was first established in 1919 and had earned an international reputation as a competitive market place for gold and recognised as offering a daily 'benchmark' for gold prices.

Source: National Audit Office

* *See Glossary*

5 We compared the prices achieved against:

i) The London Gold Fix price on the day of sale (for each auction).

ii) The average London Gold Fix price from the date of the first auction (6 July 1999) to the date of the last auction on 7 November 2000 to provide additional context to the comparison in (i) above.

iii) The average London Gold Fix price over the period 10 May 1999 to 9 November 2000, as the Bank of England would have been able to start the sale programme in May 1999 if the Treasury had chosen to sell through the Gold Fix. In this comparison average prices over an 18 month period are used to take account of auctions taking place every two months.

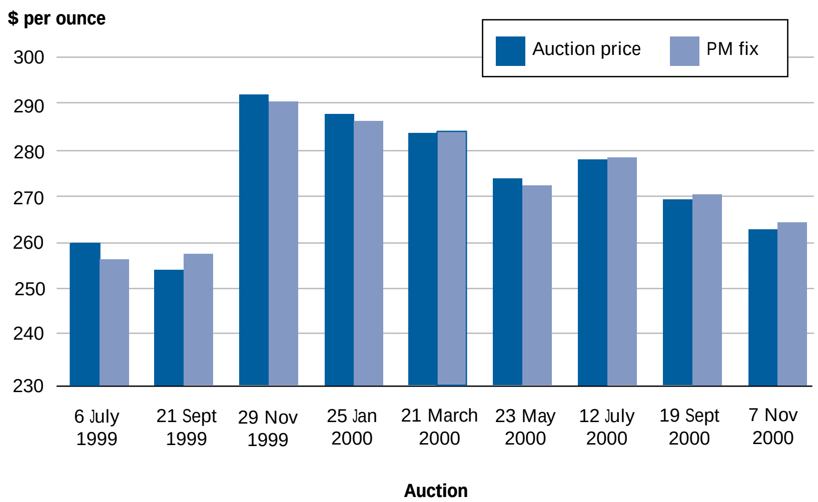
iv) The prices typically achieved in nine recent foreign central bank sales (themselves benchmarked against the London Gold Fix).

6 In this section we are using the Gold Fix as the best available price benchmark. As described in Figure 2, the Gold Fix price is set to balance the demand and supply of gold sold through that mechanism - it is not set to balance the total demand and total supply of gold. If 225 tonnes of gold had been sold through the Gold Fix instead of through auctions, and demand at the Gold Fix had been unchanged, this extra supply, even if spread evenly over the period, would have been likely to lead to lower Gold Fix prices than were actually observed. It is of course possible that all demand from the auctions would have appeared at the Gold Fix and, in those circumstances the Gold Fix prices would have been unchanged from those observed. This is by no means certain so the Gold Fix, although the best available benchmark, is not perfect.

7 The prices achieved at each of the nine auctions held to date as compared to the afternoon London Gold Fix on the same day are shown in **Figure 3**. This comparison illustrates that the prices achieved were well in line with the price benchmark and therefore with prevailing market prices. The average auction price achieved was 21 cents (0.1 per cent) above the average of the London Gold Fix prices on the days of the nine auctions (a variation would have to be some

3 **Comparison of prices achieved at each of the auctions to the afternoon London Gold Fix price on the same day**

The prices achieved at each of the auctions have been in line with prevailing market prices



Source: National Audit Office analysis of auction results

1 per cent to be statistically significant[2]). Small variations between the price achieved in an auction and the Gold Fix price are to be expected as prices routinely fluctuate in the course of a day as markets open and close around the world.

8 We also compared the prices achieved at the UK auctions to the average afternoon London Gold Fix price over the period from the date of the first auction on 6 July 1999 to the most recent auction on 7 November 2000 to put the prices achieved in a wider context. The average sale price of $275.01 achieved at the first nine auctions is 1.6 per cent less than the average afternoon Gold Fix price over the period of $279.56. A variation of 4.2 per cent or above would be needed to suggest that the difference in prices had any statistical significance. The difference does not therefore raise concerns about the success of the UK programme of sales. Much of this difference reflects the volatility in the prices that was seen in October 1999 after the announcement of the European central banks' agreement (see **Figure 6**). If the Gold Fix prices in October 1999 are excluded from the comparison, then the average fix price is $277.50, a price difference of 0.9 per cent.

9 If the Treasury had decided to sell through the Gold Fix it would have been able to start the sale programme earlier than 6 July 1999. We therefore compared the average auction price achieved of $275.01 against the average price over the 18 month period starting 10 May 1999 to 9 November 2000. An 18 month period has been used in this example to take into account the 9 auctions held every two months. The average Gold Fix price over the period was $278.08 - a price difference of 1.1 per cent. Again this variation is not statistically significant. If Gold Fix prices in October 1999 are excluded then the average Gold Fix price is $276.18 - a price difference of 0.4 per cent.

10 With the assistance of the consultants to this study - Gold Fields Mineral Services, who are leading analysts in the gold market sector - our examination also drew on comparisons with recent gold reserve sales from the central banks of nine countries:

- Argentina (125 tonnes; 1994-95)
- Australia (167 tonnes; 1997)
- Austria (258 tonnes; 1989-2000)
- Belgium (1,034 tonnes; 1987-1999)
- Canada (634 tonnes; 1980-1999)
- Czech Republic (56 tonnes; 1997)
- Malaysia (36 tonnes; 1999)
- Netherlands (813 tonnes; 1992 - February 2000)
- Switzerland (160 tonnes; to end November 2000).

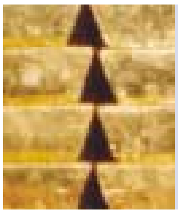
11 This analysis shows that in most cases foreign gold sales have, like the UK auctions, achieved prices in line with the London Gold Fix price benchmark. The reserve sales undertaken by the central bank of Argentina were carried out fully through the use of options*, entered into when the price of gold was higher than when the options were exercised. Sales by the Czech Republic were undertaken partly through options. Although this resulted in significantly higher prices than market prices at the time the sales were completed, the prices prevailing at the time the options were entered into were up to $14 per ounce higher than the average price eventually achieved. If prices had risen instead of fallen over the period between the option agreements and exercise of the options then the countries would have received poor prices compared to market prices at the time the options were exercised.

2 See Appendix 2

** See Glossary*

Has the Treasury met the Government's sale objectives ?

12 Underpinning the Government's aim to restructure the reserve holdings has been a more specific objective implemented by the Treasury:



The objective for the gold sale programme is to sell around 415 tonnes of gold in a transparent manner, over the medium term, fairly and with a view to obtaining value for money for the taxpayer

13 The requirement to sell **transparently** has meant that the gold sales needed to be pre-announced to the gold market and that many of the details of the programme, for example the mechanism of sale, had to be made publicly available. This contrasts with practice adopted in recent gold sales by other foreign central banks. With the exception of sales by the United States and the International Monetary Fund* in the 1970s and more recent sales by the Dutch and Swiss National Banks, gold reserve sales by overseas central banks have been carried out in secret. The UK Government's decision to sell in a transparent manner reflects an emerging but growing commitment amongst leading central banks to provide more timely and open disclosure of reserve fund movements. Moreover the Treasury believes that there is an a priori case that revenue from sales will be increased through predictability and transparency as a result of the reduction in the risk premium priced into bidders' valuations.

14 In terms of **fairness**, the Government's sale objective meant that gold market participants had to be given an equal opportunity to participate in the sales and information released afterwards had to be openly and fairly reported. This aspect of the policy objective effectively excluded using alternatives such as private sales.

15 On **value for money**, the Treasury needed to select an approach that would attract a good price and therefore a good return at each round of sales. Achieving a good price depends on a number of factors including the method of sale, the timing of sales, the sentiment of the market and the technical running of the programme.

The Treasury's decision to sell through a series of bi-monthly auctions met the policy criteria very well

16 The Treasury's decision to sell through a series of bi-monthly auctions met the policy criteria very well and in overall terms should mean that all 415 tonnes will have been sold in three years if the current pace of sales is maintained. An auction approach is a very visible and transparent mechanism of sale. It is demonstrably fair in that all members of the London Bullion Market Association, central banks and other international monetary institutions can participate freely. As illustrated by our analysis of the prices achieved in the nine auctions held to date, it provides for a competitive market place and delivers prices that are in line with the industry benchmark. Of the main alternative methods of sale (shown in **Figure 4 overleaf**), an auction approach, and specifically a 'Uniform Price Auction'*, scores highly on transparency, fairness and value for money. In Uniform Price Auctions all successful bidders pay a single (Uniform) price rather than paying the price bid. Research commissioned for this examination has suggested that Uniform Price Auctions may have a slight advantage over Multiple Price Auctions* in that a greater number of potential bidders may be encouraged to participate (see Appendix 3).

* *See Glossary*

The alternative that fits the objectives next best after an auction - the London Gold Fix - which could still be used for future sales, has only five direct participants and offers slightly less transparency in that information on the volume of sales is not made available. The Gold Fix is used indirectly by nearly all members of the gold market internationally as a benchmark from which to price purchases and sales. Some central banks have used the Gold Fix to sell their holdings.

4 A comparison of different methods of sale in terms of transparency, value for money and fairness

Treating all of the policy requirements with equal importance, auctions and the London Gold Fix are the most suitable methods of sale

Method of sale	Degree of Transparency	Value for Money	Fairness
Auction	High	Medium/High	Very
London Gold Fix	Medium	Medium/High	Medium/High
Derivatives	Medium/Low	Medium/High	Not Very
Private Sale	Medium/Low	Medium/High	Not Very

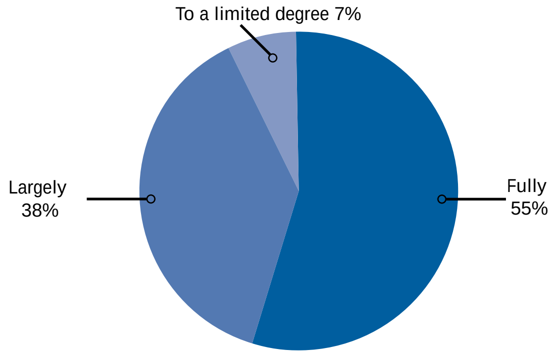
Source: National Audit Office

Of the available methods of sale, an auction methodology scores highly against the sale objective

17 On the technical implementation of the sales, the Treasury's and the Bank of England's handling of the auctions has been very good. To build an understanding of how the gold market reacted to the auctions we distributed a survey to all the members of the London Bullion Market Association asking about the quality of the information provided to them and the technical management of the auctions. The results of this survey showed that the market had been pleased with the implementation of the sales programme. When asked whether advance information on the Government's intentions were sufficiently clear 93 per cent of respondents agreed that they were well-informed (**Figure 5 opposite**).

5 **To what extent was advance information on the 'Government's intentions in the short term' made sufficiently clear and detailed?**

The vast majority of respondents were content with the clarity and detail of advance information on the Government's short term intentions.



Source: National Audit Office survey

18 Similarly, over 90 per cent of respondents who had bid experienced no difficulties with the technical handling of the auctions. The messages emerging from the survey were supported by individual interviews held with key market members and representatives of our expert panel.

Are there any ways in which future sales might be improved ?

19 While this examination has demonstrated that the gold sales programme has been well run and that individual auctions have attracted competitive prices, the Treasury will continue to monitor, review and make revisions to the programme if necessary, in the light of experience. We recommend that the Treasury undertakes a mid point review of the programme now that 225 tonnes have been sold and takes the opportunity to consider four aspects of the programme.

20 The Treasury has been concerned to approach the gold market carefully and to take steps to provide clear and predictable arrangements for the timing and quantity of gold to be sold. Transparency and predictability in the sales process should have a beneficial impact on proceeds. The market is now familiar with the sales programme and the European central banks agreement **(Figure 6)** entered into in September 1999, provides a stable context for the sales. We explored with the Treasury and the Bank of England, therefore, whether there might be benefits in retaining a small amount of flexibility in the volumes to be sold and the timings of individual tranches.

21 The second UK auction took place on 21 September 1999, shortly before the European central banks' announcement. Within two weeks of the auction the price of gold rose by 25 per cent. We explored with the Treasury whether it would have been possible to postpone the auction until after the announcement. In the Treasury's view to have postponed the planned auction to take advantage of a possible but uncertain strengthening in the market would have created very considerable uncertainty in the gold market with a potential detrimental effect both on the gold price, and on the market's confidence in the fairness of the auction programme, putting at risk the prospect of achieving the policy objectives of the programme. It was also not certain on 21 September that such an announcement would have been made.

6 **The European central banks' agreement of 26 September 1999**

Details of the European central banks' agreement

On 26 September 1999 11 Eurozone members, the European Central Bank, Switzerland, Sweden and the UK made the following statement:

- Gold will remain an important element of global monetary reserves
- The above institutions will not enter the market as sellers, with the exception of already decided sales
- The gold sales already decided will be achieved through a concerted programme of sales over the next five years. Total annual sales will not exceed 400 tonnes and total sales over this period will not exceed 2,000 tonnes
- The signatories to this agreement have agreed not to expand their gold leasings and their use of gold futures and options

This was a major announcement that helped to steady concerns over the rising trend of central bank sales. While sales of 400 tonnes of gold per year represented an increase in the average level of sales during the 1990s, the announcement helped to stabilise the gold prices. More widely the announcement contributed to a growing recognition of a need for central banks to disclose publicly movements on gold reserves.

Source: National Audit Office

22 Although there are various forms of flexibility that can be employed during an auction process, each entails retaining an option against bidders and should, therefore, impact on bid prices and result in lower revenues to the seller. The evidence from our comparative analysis of international gold sales does not allow statistically valid conclusions to be made as to whether there may be price benefits from selling on a more flexible basis although in the judgement of our consultant, Gold Fields Mineral Services, there may be such benefits. The Treasury does not think that it could outguess the market successfully nor that it should or could trade on the basis of private information and so considers

* *See Glossary*

that greater flexibility could not be expected to lead to better revenues than the current market expectation.

23 Professor Binmore suggested that there could be benefits from the Treasury publishing a supply curve prior to each auction, varying the amount of gold available at each auction, and specifying the maximum that would be sold at a particular price or above. The lower the price bid on the day the less gold would be sold. He noted, however, that the market might criticise use of an untested methodology. The Treasury are concerned that this could lead to strategic game playing by dominant bidders and that, as bidders would have a good idea how much the Treasury wished to sell, there would be little incentive for any bidder to bid above the corresponding reserve price. A potential benefit of this approach is that it would reduce the risk of demand in an auction not covering supply.

Further thought could be given to using the London Gold Fix

24 We examined the option of using the London Gold Fix as an alternative method of selling gold. The London Gold Fix has advantages and disadvantages compared to an auction approach. It is less transparent in that total amounts sold are not disclosed but it offers the opportunity to vary the volume of gold sold and the precise timing of sales on a daily basis. There is support in the London Gold market for using the Gold Fix. The majority of the market consider this method of sale to be fair and agree that selling smaller amounts of gold more regularly would be less disruptive to the market. As part of a review after the fourth auction the Bank of England recognised the strengths of the London Gold Fix but found no compelling reasons to recommend a change. This is an alternative that the Treasury could consider again in consultation with the gold market.

Considering whether there is scope to improve the quality of post-auction information

25 During the course of this investigation, our survey of London Bullion Market Association members showed that the large majority were happy with the amount of information available. Some of them were concerned, however, about the quality of post-auction information, in particular the value of the 'bid cover'* ratio which shows the extent to which the volume bid exceeds the volume on offer at each auction (for example 100 tonnes bid at a 25 tonnes auction would have a bid cover of 4:1). It is difficult to interpret the information available on bid cover because the 'true' level of market demand can be manipulated through the submission of lower, less serious bids that can artificially inflate the bid cover. Our analysis of bidding patterns for this study has not revealed any evidence to suggest that this has occurred. A number of survey respondents suggested that disclosing the volumes bid in particular price ranges, for example $5 ranges, would provide them with more useful information.

26 The Treasury and the Bank of England consider that the bid cover ratio is of some limited use but that in uniform price auctions, disclosure on bidding distribution does not provide much useful information. This is because in the same way as the cover ratio can be manipulated so too is there scope for manipulating other information published after an auction - such as on volumes bid in particular ranges. They agree, however, that it would be worthwhile discussing the potential advantages and disadvantages of disclosing more information with the market.

The Treasury should actively manage risks to the sales programme

27 To be able to judge the success of a sales programme and to anticipate the need for changes, a seller should put in place performance indicators and monitor actively changes to the exposure to risk on different elements of the programme. The evidence collected from this examination has pointed towards success in the implementation of the gold reserve sales policy. Gold selling prices at individual auctions have been in line with prevailing market prices; the needs of the market have been carefully handled and in most cases fully met; the requirements of the policy objective to sell transparently, fairly and with a view to achieving value for money have also been well served. As the programme continues, however, different risks are likely to affect the programme. For example, market analysts consider that volumes traded in the market are now thinner than when the programme was initiated and that 25 tonnes is now harder for the market to digest. The 'bid cover ratio' for the programme has varied from a high of 8:1 in September 1999 to a low of 1.3:1 in July 2000. It would be good practice for the Treasury to keep reviewing 'trigger' points for bid cover and price variations against the London Gold Fix which would initiate a review of the prospects for demand in the auction and prices respectively to consider whether existing arrangements remain satisfactory or whether alternatives might be more suitable.

Conclusion

28 In designing and implementing the sales programme so far the Treasury has met successfully its objective to sell in a transparent and fair manner while achieving value for money. The prices achieved at each of the nine auctions have been competitive and well in line with the prices achieved in similar gold sales by overseas central banks. The Treasury's agent, the Bank of England, has worked hard to keep the gold market well informed and to secure a technically successful sales programme that has been applauded by almost all of the gold market participants interviewed and surveyed for this examination. As the programme progresses, the Treasury will continue to review developments. In this context the National Audit Office considers that the Treasury should include in its review the advantages and disadvantages of adapting the existing sales methodology, for example, by changes to the auction design or even to using the London Gold Fix as an alternative or additional means of selling gold.