



REPORT OF THE  
DEBT MANAGEMENT  
REVIEW

Her Majesty's Treasury  
and  
the Bank of England



July 1995

**FOREWORD BY THE ECONOMIC SECRETARY  
TO THE TREASURY**

The Debt Management Review was announced by my predecessor, Anthony Nelson MP, in November of last year. His move to the Department of Trade and Industry, whilst representing a well deserved promotion, has unfortunately had the side-effect of preventing him from publishing this final Report, for which he deserves much of the credit. I would also like to thank Treasury officials for the work they have undertaken in the course of the Review and the preparation of this Report, and officials at the Bank of England for their advice and assistance throughout the Review. I take this opportunity to recognise the continued importance of the Bank's role in the management of the Government's debt.

Debt management is not a subject that attracts much public or political attention, and the Government's success in cutting the deficit has made the task of funding it easier. But at more than £20 billion every year, debt interest is clearly a heavy burden on the Exchequer.

My job is to minimise that cost by making sure that we manage our debt in an efficient and effective way. I believe that the best way to do that is to pursue an open, predictable and transparent gilts issuance policy; and to promote the liquidity and efficiency of the gilts market.

The changes set out in this Report will do just that. They are not revolutionary; they build on the development of the gilts market in recent years. But I believe that, taken together, they will increase the liquidity and efficiency of the gilts market, and will reduce funding costs, to the ultimate benefit of taxpayers.




ANGELA KNIGHT, MP.  
Economic Secretary to the Treasury

## FOREWORD BY THE GOVERNOR OF THE BANK OF ENGLAND

The reforms to the gilt market currently in train represent the most important programme of change since Big Bang. Combined with the successful market-making system, repo and strips will add to the liquidity and efficiency of the market; and the development of the auction programme, and our market management techniques, increases the market's attractions to international investors and traders. None of this would be possible without close cooperation between HM Treasury as issuer and the Bank as debt manager, nor without very close consultation with market participants.

The developments already implemented, in train and in prospect should all help to reduce the Government's funding costs. More fundamentally, that goal will be promoted by our success in reducing inflationary expectations and convincing investors that inflation will be kept permanently low. The Chancellor's clear inflation target and the monetary framework do, I believe, lay excellent foundations for that achievement, which would be the best possible news for the gilt market.



E A J GEORGE  
Governor of the Bank of England

## EXECUTIVE SUMMARY

The Debt Management Review, which was announced by the then Minister of State to the Treasury on 10 November 1994, had the following terms of reference:

“To review the existing arrangements for the setting of debt management policy, the selling of Government debt and the management of outstanding debt.”

The Review covers gilt issuance only. It does not cover National Savings. It was conducted by the Treasury's Debt and Reserves Management Team, and involved an extensive process of consultation. The Review was conducted in close coordination with the Bank of England.

This joint Report by the Treasury and the Bank of England, contains the conclusions of the Review, and also discusses a number of other current developments in the gilts market. It covers the following principal issues:

**(i) Objectives.** The Government has decided to change the stated objectives of debt management policy to reflect current practice more accurately. The primary objective of debt management policy is to minimize over the long term the cost of meeting the Government's financing needs, taking account of risk, whilst ensuring that debt management policy is consistent with monetary policy;

**(ii) Funding Rule.** Beginning in 1996-97, the Government has decided to introduce a new framework for financing, which will continue to ensure a prudent maturity structure for debt issuance. The Government will aim to sell sufficient gilts, of any maturity, Treasury bills and National Savings products to finance the Central Government Borrowing Requirement (CGBR) (plus maturing debt and any net increase in the official foreign exchange reserves). All such debt issuance will take place within a set maturity structure, to be determined and published each year. The Government has no current plans to make significantly greater use than at present of short-term debt issuance. This change will not affect the amount the Government needs to borrow, or change the PSBR's role as a fiscal control aggregate;

**(iii) Debt Management Report.** The Government will publish an annual Debt Management Report and Remit to the Bank of England, setting out advance details of the annual issuance programme, including an auction timetable and the maturity structure of issuance for the forthcoming financial year. The first such Report was published in March 1995;

**(iv) Auctions.** Auctions will constitute the primary means of conventional gilt issuance. The authorities will consider the possibility of using uniform-price auctions, on an experimental basis;

**(v) Tap Sales.** In order to improve predictability and transparency, the authorities will make a number of changes to the process by which tap and “unofficial” sales are made. In future, conventional tap sales will function primarily as a market management mechanism, and will not normally constitute more than 10 per cent of total issuance;

**(vi) Index-linked.** The authorities will seek views on the development of the market in index-linked gilts. The Bank of England has arranged a conference for September on index-linked government debt;

**(vii) Tax.** Next year's Finance Bill will provide that from April 1996, all returns on gilts should be taxed as income for corporate holders. This will increase market efficiency, and facilitate the introduction of a strips market;

**(viii) Market Structure.** An open gilt repo market will be introduced in January 1996; an official gilt strips facility will be introduced subsequently, but not before the second half of 1996;

**(ix) Consultation.** The authorities will introduce a formal consultation process to enable them to ascertain the views of market participants on strategic debt management policy issues.

Some of these proposals have already been implemented; others are not firm decisions, but are subject to consultation and further consideration. The Government and the Bank of England believe that these changes, taken together, will increase the liquidity and efficiency of the gilts market, and should reduce funding costs, to the ultimate benefit of taxpayers.

## INTRODUCTION

### Legal and institutional structure.

Government borrowing takes place within the framework set out by the National Loans Act (1968), the National Savings Bank Act (1971), and the National Debt Act (1972). Debt management policy is a responsibility of the Treasury. It is responsible for:

- structural and institutional questions relating to debt management;
- strategic debt issuance policy decisions, including the annual Debt Management Report and Remit to the Bank of England;
- ensuring debt issuance represents good value for money for the taxpayer; and
- approving all issues of government debt, including gilts, Treasury Bills and new National Savings products.

In respect of gilts, the Bank of England acts as the Government's debt manager and fiscal agent. In this capacity, it is responsible for:

- advising the Treasury on gilts issuance policy;
- selling gilts to the private sector through auctions and other means;
- conducting secondary market operations;
- gilts registration and settlement services.

The Bank also supervises the core participants in the market, in particular the Gilt-Edged Market Makers (GEMMs).

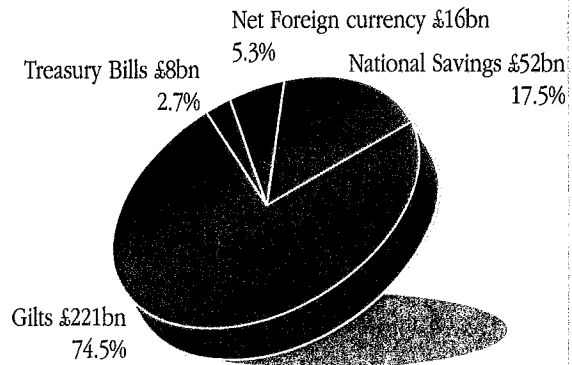
The Department of National Savings sells investment products to retail investors.

### Why does debt management matter?

As of end-March 1995, the outstanding stock of government debt instruments totalled about £297 billion (nominal), of which

- £221 billion were gilts,
- £8 billion were Treasury bills,

### Breakdown of Debt Outstanding (end of March 1995)



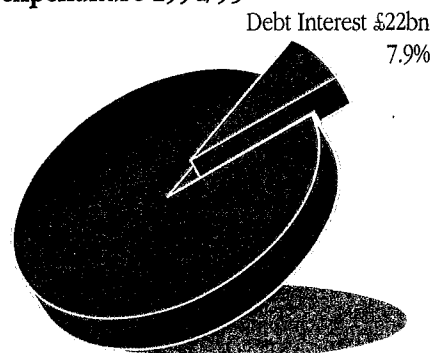
- £16 billion was foreign currency debt,
- and £52 billion were National Savings products.

This is equal to about 44 per cent of GDP.

Debt interest, forecast to be about £23.4 billion in 1995-96, is among the largest public expenditure programmes. Yields on government debt instruments, and hence the size of this interest bill, are primarily determined by macroeconomic factors not directly related to debt management, such as interest rates, inflation expectations and fiscal deficits.

Nevertheless, a small increase in the "efficiency" of debt management can, over time, result in large benefits; a fall in yields of just one hundredth of one per cent (one basis point) will eventually save £25 million a year.

### Central Government: Total Current and Capital expenditure 1994/95



# REPORT OF THE DEBT MANAGEMENT REVIEW

**TABLE 1**

**Stylized Funding Requirement Projection (£bn)**

Year	94/95	95/96	96/97	97/98	98/99
PSBR	35.2	23.6	16.1	5.0*	-1.0*
Net Change in Reserves	0.1	-	-	-	-
Gilts Maturing #	8.3	4.1	11.5	20.0	18.0
Underfunding (+) Overfunding (-)	-10.3	0.8 <sup>+</sup>	-	-	-
Brought Forward					
<b>Funding Requirement</b>	<b>33.3</b>	<b>28.5</b>	<b>27.6</b>	<b>25.0</b>	<b>17.0</b>

\* Projections taken from the 'Financial Statement and Budget Report 1995-96'. These have not been revised in the light of the Treasury's Summer Economic Forecast and are therefore illustrative only.

# Stylized projection given maturity profile of gilts in issue as of 31 March 1995. No allowance has been made for future possible issuance.

+ Provisional outturn.

The falling deficits expected by the Government over the next few years will substantially reduce the amount of net debt issuance. But gross issuance will remain substantial; the Government expects to issue more than £20 billion of gilts a year for each of the next three financial years, (including 1995-96), partly to refinance a large amount of maturing gilts. Eventually, of course, virtually all of the Government's debt must be either refinanced or repaid; debt management is therefore likely to remain an integral and important part of the overall management of the public finances for the foreseeable future.

### Recent developments

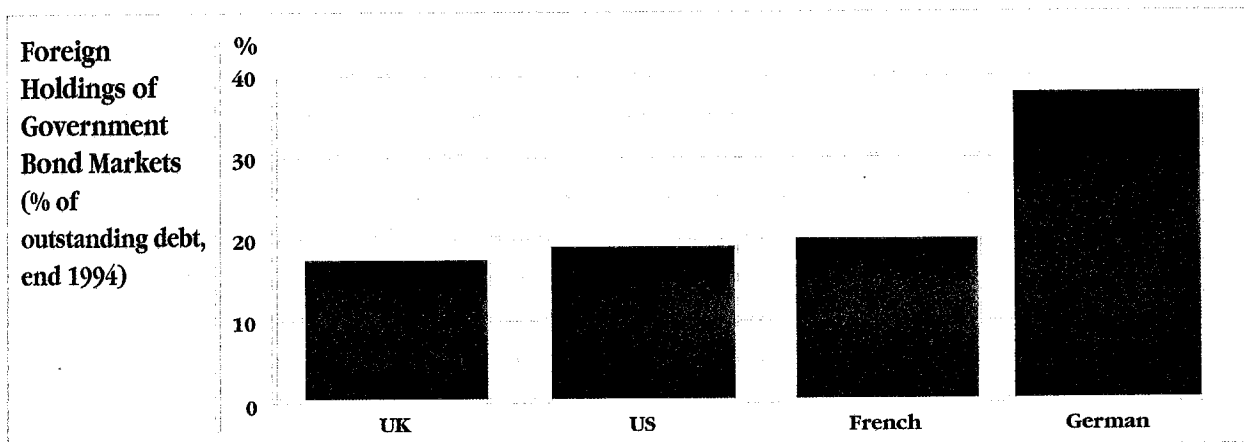
The most important recent development in the Government's debt management policy was the introduction, beginning in the 1994-95 financial year, of a Remit setting out publicly the framework within which the Bank of England would perform its debt management functions. This represented a move to a more predictable issuance policy; and to a clearer public statement of the allocation of roles between the Treasury and the Bank.

The Remit approach was extended and developed in the 1995-96 Debt Management Report, which took account of some of the initial recommendations of this Review, and which is described in more detail below.

### Developments in UK and international markets

Recent years have seen a number of important developments in UK and international bond markets. Increased capital mobility has given investors and traders a wider choice of markets and of government bonds; this in turn has led both to closer correlations between prices and interest rates in different markets, and more volatility in investment flows between them.

The structure of different markets has also been affected. Governments which previously could rely on captive domestic capital have sought to modernize their markets, to attract both international investors and domestic investors able to diversify their portfolios.



The US Treasury market is the largest and most liquid securities market in the world, with about \$3 trillion of US government securities outstanding, and a trading volume of around \$175 billion a day. Consequently, it is not surprising that bond markets elsewhere appear to be converging on the US model. Its prominent features are:

- regular and non-discretionary issuance, entirely through auctions;
- a market making structure based on primary dealers;
- an open repo market;
- a strips market.

Since Big Bang, the gilts market has moved a considerable distance towards this model, with the introduction of primary dealers, electronic book entry transfer settlement, a regular auction programme, the concentration of issuance on benchmark stocks, and other measures designed to open up the market to international investors. The result has been intensified competition and much lower transaction costs. In parallel, the gilt futures contract on LIFFE has developed into one of the most actively traded in the world.

Developments in the French market also provided an important impetus to the Review. Beginning in the mid-1980s, the French authorities pursued a policy of rapid modernization on US lines; in particular, the introduction of an auction calendar, and repo and strips markets. This programme resulted in substantial increases in liquidity and in international investor interest. Whilst the effect on bond yields is impossible to measure, given the importance of other macroeconomic factors, it is widely believed to be significant.

### The Debt Management Review

As a result of these developments, Ministers decided that a wide ranging review of debt management policy was appropriate. The Review, which was announced by the then Minister of State to the Treasury on 10 November 1994, had the following terms of reference:

“To review the existing arrangements for the setting of debt management policy, the selling of Government debt and the management of outstanding debt.”

The Review covered gilt issuance only. It did not cover National Savings.

## REPORT OF THE DEBT MANAGEMENT REVIEW

The Review was conducted by the Treasury's Debt and Reserves Management Team. It involved an extensive process of consultation:

- Treasury officials visited 10 GEMMs; in response to a letter seeking views, 6 more wrote to the Treasury;
  - Treasury officials met 15 institutional investors and 3 representative bodies, and spoke informally to a number of others;
  - Treasury officials visited 4 European countries to discuss debt management with the responsible officials in finance ministries and central banks; and spoke to a number of other finance ministry officials;
  - Treasury officials reviewed the academic literature on debt management and techniques of sale, and met a number of economists with relevant expertise.
- The Review was conducted in close cooperation with the Bank of England. The Bank drew on their regular meetings with market makers, traders and investors, undertook empirical research and consulted the market on some specific proposals.
- This joint Report, by the Treasury and the Bank of England, contains the conclusions of the Review, and also discusses a number of other current developments in the gilts market. It covers a number of areas:
- further moves to a more predictable and transparent issuance policy;
  - the publication of an annual Debt Management Report and Remit to the Bank, setting out in advance details of the annual issuance programme;
  - a possible experiment with uniform-price auctions for conventional gilts;
  - the introduction of an open repo market in January 1996;
  - the subsequent introduction of an official gilt strips facility;
  - possible measures designed to develop the market in index-linked gilts;
  - reform of the taxation of gilts;
  - the introduction of a formal consultation process, to allow the authorities to ascertain the views of market participants on strategic debt management policy issues.

Some of these proposals have already been implemented; others are not firm decisions, but are subject to consultation and further consideration.

- changes to the objectives of debt management policy;
- the replacement of the funding rule with a new financing framework, within a set maturity structure for debt issuance;



## OBJECTIVES OF DEBT MANAGEMENT

The Government's formal objectives for debt management policy were set out in the Financial Statement and Budget Report for 1990-91.

Currently, they read as follows:

- (i) to support and complement monetary policy;
- (ii) subject to this, to avoid distorting financial markets;
- (iii) subject to this, to fund at least cost and risk.

The Government has decided that these objectives are no longer an appropriate description of the way that debt management policy functions in practice, for a number of reasons:

- funding at least cost and risk is the primary objective of debt management policy;
- an efficient and liquid gilts market should lower yields and hence reduce funding costs, helping to achieve the primary objective;
- debt management is not a major tool of monetary policy; nor is monetary policy the main objective of debt management, although the Government and the Bank take monetary policy considerations into account to ensure consistency, particularly when formulating the Government's strategic issuance policy; and

- the current objectives do not mention the important specific roles of the gilts market and of National Savings.

The Government has therefore decided to restate the objectives as follows:

"The objective of debt management policy is to minimize over the long term the cost of meeting the government's financing needs, taking account of risk, whilst ensuring that debt management policy is consistent with monetary policy.

This objective is achieved by:

- adjusting the maturity and nature of government debt instruments;
- developing a liquid and efficient gilts market; and
- offering cost-effective savings instruments to the retail sector through National Savings."

## THE FUNDING RULE

The current funding rule states that the Government aims to sell enough National Savings products and gilts of three or more years maturity fully to "fund" the public sector borrowing requirement (PSBR), maturing debt and any net increase in the foreign currency Reserves. Issues of Treasury bills do not count as funding, and the Government does not currently issue gilts with a maturity of less than three years.

### The Current Funding Requirement Arithmetic

PSBR Forecast

+	Expected Increase in Net Official Reserves
+	Gilt Redemptions
+/-	Under- or Overfunding Residual from Previous Year
=	<b>Funding Requirement</b>
-	Expected Net Inflow into National Savings
-	Expected Net Sales of Other Public Sector Debt
=	<b>Gilt Sales (of over 3 years maturity) Required For Full Funding</b>

When the 'full fund' policy was introduced in 1985, it was designed to ensure that the financial transactions of the public sector had no direct effect on the M4 money supply. However, while sales of Treasury bills to banks do not count as funding, sales of gilts do. But both have a similar effect on M4. Whilst the Government continues to set a monitoring range for M4, it no longer serves as an intermediate target for monetary policy decisions.

The current rule tends to distort debt management policy in two ways:

(i) It relates debt issuance to the PSBR, not the central government borrowing requirement (CGBR), despite the fact that money raised through debt issuance is used entirely to finance central government operations. Any difference between the PSBR and CGBR must, by definition, be covered by short-term borrowing or lending. In fact, since the PSBR is currently less than the CGBR (as local authorities and public corporations have been making net debt repayments to the private sector), the current rule has meant that Government sales of gilts have been insufficient to cover central government's cash needs, and hence short-term borrowing has increased; and

(ii) it precludes any financing with debt of maturity less than three years, in contrast to the practice of most other industrialized countries.

The current full fund policy will continue for the remainder of 1995-96. Beginning in 1996-97, the Government has decided to introduce a new framework for financing, which will continue to provide the necessary discipline to ensure a prudent maturity structure for debt issuance. The Government will aim to sell sufficient gilts, of any maturity, Treasury bills and National Savings products to finance the CGBR (plus maturing debt and any net increase in the foreign exchange reserves). All such debt issuance will take place within a set maturity structure, to be determined each year. This maturity structure will be published in the Debt Management Report before the beginning of each financial year. The Government has no current plans to make significantly greater use than at present of short-term debt issuance.

This change will not have any effect on the PSBR, nor on the amount the Government needs to borrow; it merely reflects the inclusion of borrowing that would have been necessary in any case within the published financing requirement. Nor does this change imply any change to the PSBR's role as a fiscal control aggregate, or to the financial control regime for local authorities and public corporations.

**The New Financing Requirement Arithmetic**

CGBR\* Forecast

- + Expected Increase in Net Official Reserves
- + Net Gilt and Treasury Bill Redemptions
- +/- Under- or Overfunding Residual from Previous Year
- = **Financing Requirement**

- Expected Net Inflow into National Savings
- Expected Net Sales of Other Public Sector Debt
- = **Net Gilt and Treasury Bill Sales Required For Full Financing**

---

*\* The CGBR is the Central Government Borrowing Requirement. The CGBR plus Local Authorities' Market and Overseas Borrowings (LAMO), plus Public Corporations' Market and Overseas Borrowings (PCMO), is equal to the PSBR.*

A forecast for the CGBR for the financial year ahead, as well as the current year, will now appear in the Financial Statement and Budget Report and the Treasury's Summer Economic Forecast.

## MATURITY AND COMPOSITION OF DEBT ISSUANCE

### Optimal issuance strategy

In order to determine the maturity structure of debt issuance, the Government, with advice from the Bank of England, constructs an "optimal issuance strategy". In accordance with the objectives set out above, this is designed to minimize the long-term cost of Government debt, taking account of risk, and to ensure consistency with monetary policy. The determination of the optimal issuance strategy takes account of a number of considerations:

- (i) the size and maturity structure of the existing stock of debt;
- (ii) investors' demands for gilts, which depend on the maturity of the existing stock of gilts, on the liquidity of debt instruments, on the maturity structure of their liabilities and on any relevant regulatory constraints;
- (iii) the Government's attitude to risk, both real and nominal; and
- (iv) the shape and slope of the yield curve, and the expected effects of Government issuance.

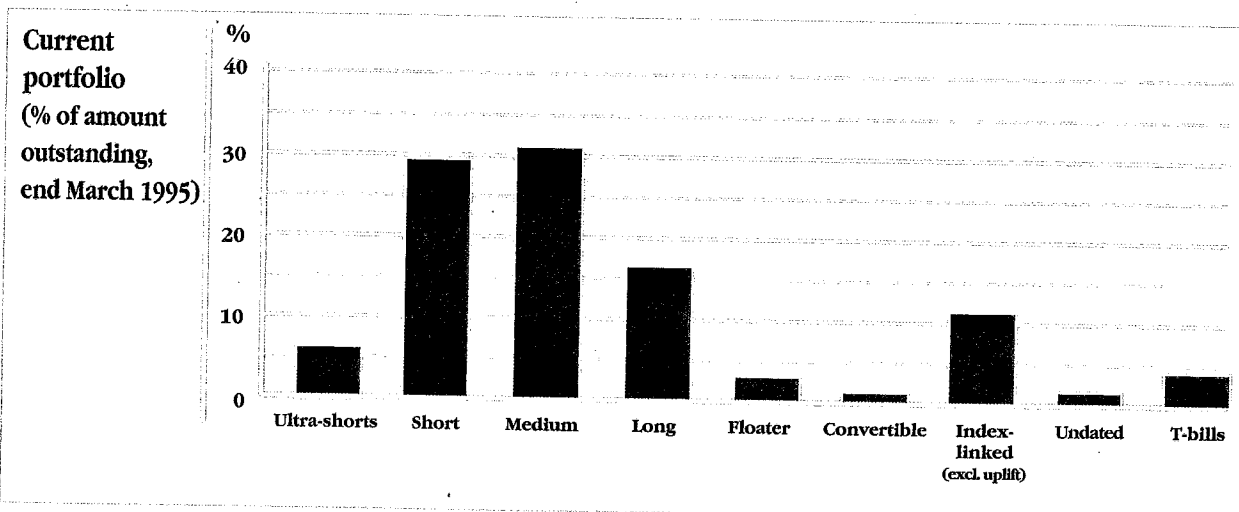
This exercise is carried out annually.

### Debt instruments

Having decided the annual issuance programme, it is necessary to determine the stocks to be issued. For the foreseeable future, the bulk of debt issuance will be in the form of conventional stock, reflecting investor demand. Index-linked gilts and various possible new instruments are discussed separately below.

There are two competing pressures in determining the nature of the conventional stock issued. Issuing a relatively small number of "benchmark" stocks, and hence a relatively large volume of each individual stock, should increase the liquidity of each stock, reducing funding costs. It should also help to increase the predictability of the Government's issuance programme, reducing uncertainty.

On the other hand, issuing a relatively large number of different stocks could, in theory, make it easier to target specific investor groups. It also gives the Government maximum flexibility about the maturity of stocks issued. However, in practice, most investors make their decisions by broad maturity bands, not by targeting specific maturities, whilst the optimal issuance programme is not specified with sufficient precision to justify such "fine-tuning" of the maturity of the debt.



Furthermore, there is a clear trend in major government bond markets towards benchmark issuance. There are a number of factors behind this:

- the move towards more predictable patterns of issuance;
- the increasing importance of international investors, who attach a great deal of importance to liquidity;
- strips markets have been developed, enabling investors to build their own bonds; and
- increased market efficiency, making arbitrage opportunities easier to exploit, and hence reducing the importance or desirability of targeting specific investor groups.

Current practice is to auction primarily benchmark stocks.<sup>1</sup> This will continue. In general, the Government will aim to auction only the minimum number of conventional stocks necessary to ensure that there are outstanding benchmarks at each of a number of maturities.

The Government may also issue floating rate gilts. Convertible gilts will not form part of the regular issuance programme, but may be sold in exceptional circumstances. Various possible new instruments are discussed below.

---

*1. Currently, there are sixteen stocks with over £5 billion outstanding, of which two are over £8 billion and a further two are over £7 billion.*

## ISSUANCE POLICY

### Predictability and transparency

The guiding principles of the Government's primary issuance policy will be predictability and transparency. This approach is based on a number of different considerations:

- economic theory suggests that uncertainty and unpredictability in debt issuance is likely to lead to a risk premium in debt yields, and hence to higher debt interest costs to Government, although the extent of any premium is unquantifiable;
- the views of market participants, who made clear that a predictable and transparent issuance policy was necessary to allow them to plan their investment strategies;
- the experience of other countries, in particular those with highly developed and liquid government bond markets. For example, the US Treasury states:

*"The Treasury has a regular, predictable schedule for offering marketable securities, which is well known to market participants... and has helped to reduce the Government's borrowing costs". (US Treasury Borrowing and Debt Management).*

Complete predictability is not practically possible, since a degree of flexibility must be retained to take account of changes to the financing requirement and unforeseen market conditions. However, the Government and Bank believe that the arrangements set out here will give the high degree of predictability which the market requires.

The presumption in favour of predictability and transparency applies in two main areas;

- pre-announcement of issuance policy;
- methods of sale.

### Debt Management Report and quarterly timetables

The Government has therefore decided that each financial year its issuance policy should be set out in advance, in as much detail as possible. This will be in the form of a Debt Management Report, which will include the Government's Remit to the Bank of England, and be published in late March. It will include the three most important pieces of information for the gilts market:

- **the financing requirement;** the Debt Management Report will set out the estimated financing requirement for the coming financial year, and an indication of how debt sales will be split between gilts, National Savings, and other sources;
- **auction dates;** the Debt Management Report will set out planned auction dates for the coming financial year;
- **maturity structure of gilt issuance;** the Debt Management Report will set out the approximate proportions of index-linked and short, medium and long conventional stock to be issued in the coming year. Following the introduction of the financing framework described above, it will also set out any plans for issuance of debt instruments of less than three years maturity.

The Report will also contain other information about debt management and the gilts market of interest to market participants.

The Bank's annual review of the gilts market, published shortly after the beginning of each financial year, will set out further detailed analysis.

The Debt Management Report will not include details of the exact stocks to be auctioned. Before the beginning of each calendar quarter, the Bank of England will publish the maturity ranges for the stocks to be sold at auctions scheduled to be held

## REPORT OF THE DEBT MANAGEMENT REVIEW

in that quarter. The announcement will also give details of progress to date with the financing programme, and of any changes to the financing requirement.

The Government and the Bank also concluded that a number of other changes to the Government's primary issuance policy would increase predictability and transparency, and hence benefit both Government and market participants.

### Auctions

Gilt auctions were introduced in 1987. In recent years, most conventional gilts have been sold through auctions (see table 2).

**TABLE 2**

#### Methods of Official Gilt Sales (1992-3 to 1994-5)

	1992-3		1993-4		1994-5	
	£bn	%	£bn	%	£bn	%
Auctions	12.4	37.1	32.6	64.1	19.6	71.0
Taps	21.0	62.9	18.3	35.9	8.0	29.0
Of which:						
Index-linked	4.9	14.7	6.5	12.7	3.4	12.3
Conventionals	16.1	48.2	11.8	23.2	4.6	16.7
<b>Total</b>	<b>33.4</b>	<b>100.0</b>	<b>50.9</b>	<b>100.0</b>	<b>27.6</b>	<b>100.0</b>
Taps as a proportion of conventional issuance (%)		56.5		26.6		19.0

The auction system operated by the Bank has been successful in the UK market (see table 3).

**TABLE 3**

**The Average Results of Gilts Auctions (1992/3-1994/5)**

	Average Size (£m)	Average Yield (%)	Average Cover	Average Tail (bp)
1994/95 <sup>+</sup>	2056	8.31	1.58	1.46
1993/94 <sup>+</sup>	3050	7.21	1.63	1.84
1992/93	2550	8.89	1.43	0.78

<sup>+</sup> Excludes the floating rate gilt auction

Auctions are open to all bidders. They are conducted primarily on a bid-price basis, in which successful bidders are allocated stock at the price at which they bid. Non-competitive bids can be made for quantities below £500,000.

This procedure has been progressively developed year by year. Following the institution of the annual Debt Management Report, the run-up to the auction now works as follows:

- (i) auction dates and a range for auction size (in 1995-96, £2-3 billion) are published in the Debt Management Report;
- (ii) before the beginning of each quarter, the Bank announces the "maturity range" (which could be, for example, "2004-2006") for each auction in that quarter;
- (iii) 8 days before the auction, the Bank announces the precise auction stock and quantity. At this point, "when issued" trading can commence (see below); and

(iv) on the auction day itself, the Bank takes bids until 10am. GEMMs can bid by phone, either on their own behalf or for clients.

This system gives investors a considerable degree of advance information about the size and nature of the stocks to be auctioned. In this respect, it is comparable or superior to that in any other major bond market.

The current auction process works well. The Government therefore intends that in future auctions will constitute the primary means of conventional issuance.

The auction structure itself may nevertheless be capable of improvement. In particular, while auctions are currently on a bid-price basis, there is a strong theoretical case for uniform price auctions. By reducing the "Winner's Curse", uniform price auctions have the potential to reduce risk to auction participants, and hence to broaden auction participation and increase revenues to



Government. On the other hand, the current system works well, and the possible risks from changing the system have to be considered.

The United States Treasury has, since 1992, been conducting an experimental series of uniform price auctions for 2-year and 5-year notes. The UK authorities have been observing the US experiment with interest. The results have not yet been analysed in detail, but the results so far broadly appear to support the case for uniform price auctions.

The UK authorities are therefore examining the case for uniform price auctions in the UK market, on an experimental basis. They will be consulting market participants on the merits of such an experiment; and how, if an experiment were held, it should be structured.

## Taps

Tap sales are gilt sales made at or above a minimum price to Gilt-Edged Market Makers (GEMMs) by the Bank of England on the Government's behalf. At present, the Bank usually announces the minimum price and volume of stock available at 3.30pm for sale the next working day.

As the gilts market has become more developed, auctions have become steadily more important, and tap sales of conventional stock less important, as a funding mechanism. Tap sales as a proportion of conventional gilt sales fell from around 57 per cent in 1992-93 to about 19 per cent in 1994-95, as shown in Table 2, and are expected to fall further in the current year.

The more predictable and transparent nature of auctions makes them preferable to tap sales as a funding mechanism. However, taps of conventional stock have a continuing role as a market management mechanism. In keeping with this general objective, the authorities, after consulting market participants, have decided to implement a number of changes to the tap mechanism:

(i) taps will not be used as a routine means of funding into a rising market; instead, they will only be used in conditions of temporary excess demand in a particular stock or sector or when there is an exceptionally sharp general rise in the market.

(ii) the Bank will publish details of how much tap stock it has sold at the initial tender and any subsequent tenders; and how much remains available on tap;

(iii) tenders will be held whenever more than one GEMM bids for a tap stock;

(iv) tap sales will normally be announced at 10.15 am for bids at 10.45, rather than 3.30 pm for bids the following day, as at present; and

(v) the authorities are considering how to handle tap sales in circumstances where the tap stock remains unsold for a considerable period of time. No changes are envisaged at present, but experience with the new system will be reviewed in due course. One possibility is that tap stock that remains unsold for more than a certain period would be removed from sale.

The Bank of England has already discussed these proposals with market participants and will shortly issue a market notice setting out in more detail the arrangements for tap sales.

Since taps will now only be a market management mechanism, auctions will constitute the principal means of gilt issuance. It is envisaged that, in future, conventional tap issuance will not normally constitute more than about 10 per cent of expected total issuance. Future Debt Management Reports will set out the maximum proportion of issuance to be made through conventional taps in each year, consistent with this general limit.

Index-linked gilts will continue to be sold primarily via taps. A fuller description of the Government's policy towards index-linked issuance is set out separately below.

### **“Unofficial” Sales**

The Bank currently makes occasional sales of stock from official portfolios on request to GEMMs. The Bank does not actively offer stock to the market; it only responds to bids. These sales are intended to improve the liquidity and efficiency of the market, by supplying small amounts of stock at times of temporary surges in demand.

The transparency of these operations will be increased. The Bank will post on its screen a complete list of all the stocks, both index-linked and conventionals, available for sale. No other stocks will be sold in this way; if demand persists for a particular stock then the Bank will consider issuing a tap. The system will allow market participants to identify the amount and maturity of stock sold to the market.

This system will have a number of advantages:

- it will provide a clear separation between funding and market management operations;
- it will be more predictable and transparent;
- and it will ensure that all GEMMs are, and are seen to be, treated equally.

Sales made through this system will constitute a very small proportion of total gilt sales.

## INDEX-LINKED GILTS

### Rationale

The UK was the first major sovereign bond issuer to issue substantial quantities of index-linked bonds, with coupon and principal repayments linked to the Retail Prices Index. Index-linked gilts (IGs) are, in principle, an attractive instrument for the Government to issue for three reasons:

- they minimize inflation risk to the Government's finances by stabilising the real cost of borrowing. If *ex post* inflation is lower than the market had expected, the Government pays a high real interest charge for borrowing through conventional gilts. This risk is avoided by issuing index-linked stocks whose real interest cost is fixed at issue;
- by fixing the real return on investment at the point of issue, they minimize inflation risk to investors; this will benefit the Government if investors are prepared to pay a premium for this form of insurance;
- by reducing the Governments' incentive to resort to unanticipated inflation to reduce the real burden of nominal debt, they reinforce the Government's anti-inflationary credibility. In principle, this could reduce inflation expectations, so lowering yields on conventional gilts.<sup>2</sup>

These gains are not just theoretical. In practice, IGs have saved the Government a significant amount of debt interest, since realised inflation has on average been lower than the break-even inflation rate priced into conventional gilt yields.

### The Index-linked Market

Despite substantial issuance, the market for index-linked gilts, both primary and secondary, is very different from that for conventional gilts. Index-linked gilts are largely bought and held by a relatively

small group of domestic long-term investment institutions, although there is also some retail involvement. This limits market-making opportunities and the liquidity of the market.

The relative lack of liquidity and two-way trades in the IGs market arises from the small number of end-users; the fact that much of the stock is bought for liability-matching purposes and is thus held long-term, rather than traded; the absence of a natural hedge against IG exposures and speculative activity in the market; the lack of overseas investor interest; and relatively low volatility.

A more liquid and efficient index-linked market would be attractive to investors and should in principle enable the Government to sell index-linked stock at lower real yields. The authorities are therefore considering a number of measures which might have a beneficial impact on the liquidity and attractiveness of index-linked stock, although no decisions have yet been taken. The issues under consideration include:

- the role of index-linked debt in the Government's portfolio of liabilities;
- the question of whether, and if so how, to hold IG auctions. The authorities envisage that if they were to proceed with a pilot programme of index-linked auctions, it would be of limited scope (perhaps £0.5 billion per auction, on a uniform price basis), with no taps brought in the surrounding period;
- the possibility of reforms to the market-maker system, and whether a separate group of index-linked market makers would be beneficial to market liquidity. The authorities envisage that if such a structure were introduced, GEMMs who chose to become IG market makers would undertake to quote realistic spreads in all index-linked market conditions in return for a continuing dealing relationship with the Bank in index-linked gilts and restricted entry by other GEMMs.

<sup>2</sup> A helpful by-product of index-linked issuance is that the existence of index-linked and conventional stock of similar maturity allows the calculation of a market-determined level of inflation expectations.

## REPORT OF THE DEBT MANAGEMENT REVIEW

- the role of the Bank in encouraging liquidity in the index-linked sector;
- the lack of a good hedge for index-linked exposures and whether suitable derivatives (eg. index-linked futures, RPI futures) would be feasible;
- the design of the index-linked gilt itself (eg. the eight-month lag in indexation);
- the likely demand for Limited Price Indexation (LPI) gilts;
- the range of different index-linked stocks to be issued: could liquidity in the market be increased by the authorities continuing to limit the number of stocks at their current level and building up the total holdings of each?
- whether there is a case for a move to long maturity benchmark IG issuance, if the introduction of strips makes lower duration IGs available;
- ways to improve international interest in index-linked; and
- the choice of index, and in particular whether there would be demand for an earnings-linked gilt.

The Bank of England will be hosting a conference on index-linked government debt in September 1995, to be attended by market participants, other government debt issuers and academics. The authorities will submit papers to this conference which will discuss the above issues in greater detail. Decisions on how to proceed will be taken in the light of views expressed at the conference, and in discussions between the authorities and market participants.

## TAX

Gilt interest is currently taxed as income, while capital gains and losses are untaxed and unrelieved. On 25 May 1995, the Government announced proposals for a major reform of the tax treatment of gilts and other bonds. On 10 July 1995, the Chancellor announced the Government's intention to proceed with these proposals. Next year's Finance Bill will provide that all returns on gilts are to be taxed as income. This will have a number of beneficial effects on the gilts market:

- it will make the tax system simpler and more neutral;
- it will reduce tax-induced anomalies in gilt prices, and hence bring low and high-coupon gilts closer to the yield curve;
- it will facilitate the introduction of a strips market (see below); and
- by allowing gilt returns to be taxed on an accruals basis, it will bring the tax system in line with many company accounts.

In order to avoid excessive complications for small retail investors, who are not accustomed to accounting on either a mark-to-market or an accruals basis, there will be a threshold, set at £200,000 of total nominal holdings, below which capital gains and losses will continue to be untaxed and unrelieved. Moreover, two low coupon gilts, widely held by private investors, will not be brought within the new regime.

Tax reform will not affect the levying of withholding tax on most gilts. However, from January 1996, most holders of gilts will be able to receive dividends gross, with quarterly accounting for domestic corporate investors; this development is part of the new arrangements designed to facilitate the introduction of an open repo market (see below). This mechanism will make the current distinctions between FOTRA (free of tax for residents abroad) and non-FOTRA gilts largely irrelevant for most investors.

However, the Government believes it essential that the tax system should not artificially encourage or discourage gilt stripping. Withholding tax could not in practice be levied on gilt strips. So the Government has decided that strippable gilts should be exempt from withholding tax and the quarterly accounting arrangements to be introduced in connection with gilt repo.

The abolition of withholding tax on strippable gilts will have a cashflow cost to the Exchequer. However, since under the proposals described above, gilts will only gradually be made strippable, such cashflow effects will be relatively small.

New issues of strippable gilts are likely to command a premium reflecting the advantages of strippability and of exemption from withholding tax. Over time, any cashflow costs to the Exchequer should be outweighed by the benefits in terms of reduced gilt yields resulting from a more liquid and attractive market.

## MARKET STRUCTURE

Most G7 countries, including the UK, have a bond market structure modelled to varying degrees on that of the US. Bonds are sold in the first instance largely to primary dealers (in the UK, the GEMMs), who sell them on to "end-users" and act as market-makers in the secondary market. This basic structure appears to work well as far as the market for conventional gilts is concerned (the index-linked market has been discussed separately).

### Repos

The major change to the structure of the gilts market in the immediate future is the introduction of an open gilt repo market, announced by the Chancellor in February 1995. The repo market will commence on 2 January 1996.

A "gilt repo" is a sale and repurchase agreement, under which a market participant agrees to buy a gilt and to sell it back at an agreed date for an agreed price. It can thus be used by market participants for secured lending in the money market; to "borrow" stock; and to finance long positions in gilts.

Open gilt repo trading should bring a number of benefits to the gilts market:

- repos will provide a familiar financing technique for international investors, using gilts as collateral;
- repos will enable all market participants to borrow stock and to go short, widening arbitrage opportunities;
- repos will introduce the price mechanism into the stock borrowing market.

All these factors are likely to make the gilts market more attractive, particularly to overseas investors. The overall result should be increases in liquidity and market efficiency, with consequent reductions in funding costs.

The Bank has consulted market groups to consider and develop a master legal agreement, Code of Best

Practice and settlement arrangements to help ensure that the open repo market is orderly and safe.

### Strips

In conjunction with the tax proposals described above, the Bank of England published on 25 May 1995 a consultative document on the possible introduction of an official gilt strips facility operated by the Central Gilts Office.

Stripping is the process of separating a standard coupon bond or gilt into its constituent interest and principal payments, so that they can be separately held or traded (so, for example, a ten-year bond with biannual interest payments becomes 20 different coupon payments and one payment of principal). An official gilt strips facility would promote this process, while allowing the coupon and principal strips to remain direct obligations of Government, and hence free of default risk. It would also allow market participants to reconstitute the standard coupon gilt from the equivalent bundle of strips. Both processes would be carried out within the official gilts settlement system.

Strips would in principle enable investors to achieve their desired pattern of cashflows more easily. This would be particularly welcome to investors who seek to construct a gilts portfolio which cannot easily be met by the purchase of ordinary coupon bonds, for example pension funds who need to match long term liabilities but do not want to assume reinvestment risk.

If an official strips facility makes gilts more attractive to investors, that should help reduce yields and save taxpayers' money. Moreover, it is clearly in the wider economic interest of the country that long-term investment institutions like pension funds should be able to meet their investment needs in the most cost-effective and least risky way possible.

However, up to now, the tax treatment of gilts has effectively made the introduction of an official gilt strips facility impossible, for two main reasons:

- strips would be zero coupon bonds for the purposes of the deep discount regime, so they would be taxed on the basis of their discount at issue. This would differ very significantly from the treatment of the parent gilt, and would thus be distortionary. Holders would either strip gilts purely for tax reasons, or avoid doing so entirely;
- since the discount at issue would generally differ for otherwise similar strips created at different times, strips would generally not be fungible, even if they represented identical cashflows. This would severely inhibit liquidity.

The tax reforms described above will remove both problems. Since all returns will be taxed and relieved as income, the tax treatment will be neutral between stripped and unstripped gilts; and similar strips issued at different times and at different yields will be fungible.

The Government has therefore decided that an official gilts strips facility will be established. The introduction of a strips market will not take place before the second half of 1996. In the meantime, the Bank of England will be consulting further on the practical arrangements. The Bank will then publish details of how the facility will operate.

It has also been proposed that the Government should issue other instruments, for example

Limited Price Indexation bonds (which would have coupon and principal payments indexed to the lower of the increase in the RPI and 5 per cent), or zero coupon bonds (which are bonds which have no interest payments, simply a repayment of principal at a given date, like T-bills). The tax reform will also make it technically possible for the Government to do so. The authorities are considering the case for such issues in the light of the responses to the Bank of England's consultative document. No decisions have yet been taken.

### Settlement

The current system of gilts settlement through the Central Gilts Office (CGO) works well. However, overseas investors also hold securities in the two main international settlement systems, Euroclear and Cedel, and would like to hold gilts there for some purposes; at the moment, they have to maintain a separate account at the CGO for their gilt holdings. It is planned that settlement through Euroclear and Cedel will be introduced early in 1996.

### Ex-dividend period

At 37 days, the 'ex-dividend period'<sup>3</sup> for gilts has been longer than that in any other major government bond market. This can cause inconvenience to market participants and inhibit trading in specific gilts; this problem could be exacerbated by the introduction of a repo market. The Bank of England announced on 12 July that the length of the ex-dividend period would be reduced to 7 working days, with effect from 1 January 1996.

*3. The ex-dividend period refers to the number of days before dividends are to be paid. If a gilt is bought or sold before the ex-dividend period, it comes with the right to the dividend. If it is bought or sold during the period, then the dividend goes to the original owner.*

## CONSULTATION WITH THE MARKET

The introduction of the annual Debt Management Report, and quarterly timetables, has increased the emphasis on the formulation of the annual issuance programme and the quarterly timetables described above. The views of market participants are an important input to these key strategic decisions.

Treasury Ministers and officials already have substantial informal and ad hoc contacts with market participants, while the Bank is in continuous contact with all parts of the market. However, the authorities see advantages in supplementing these contacts with a formal structure designed to ensure a regular and transparent input to key strategic decisions.

Such contact would have two principal objectives:

- **structural questions;** does the debt management process as a whole work properly, and should any changes be considered?
- **strategic issuance decisions;** to inform the Government's decisions on issuance strategy.

In order to meet the purposes described above, the authorities require two sorts of information:

- general intelligence on how debt management is functioning;
- specific information on present and future demand (by maturity, IGs versus conventionals, new instruments, etc).

This suggests that the system should have the following characteristics:

- **it must be open and transparent;** the content of meetings could be market-sensitive, so it is vital to ensure a level playing field;

- since it is designed to inform strategic and systemic decisions, not day-to-day ones, **it should involve infrequent meetings;**
- on the Government side, it would need to involve both the Treasury, responsible for debt management policy, and the Bank of England, the Government's debt manager;
- on the market side, it would need to involve both **GEMMs and a wide variety of end investors.**

The system will therefore comprise two elements. First, annual meetings with two groups:

- the Gilt-Edged Market Makers;
- a group of end-investors; the relevant representative bodies would be invited to convene the group.

These meetings would be chaired by the Economic Secretary to the Treasury. Officials from both the Treasury and the Bank would also be present. They would inform annual issuance policy, as set out in the Debt Management Report; they would also provide an opportunity for market participants to raise any major structural or systemic points with the Minister.

Second, quarterly meetings at official level, convened by the Bank of England, between Bank and Treasury officials and these two bodies. These meetings would inform decisions on the quarterly timetable process.

For both sets of meetings, both the authorities and market representatives might prepare written papers or submissions in advance; and written records of the meetings might be made public as appropriate.



Any enquiries about this document should be addressed to:

**Mr Jonathan Portes, Debt and Reserves Management Team, HM Treasury, Parliament Street,  
London, SW1P 3AG; Tel: 0171 270 4612.**

**Mr Paul Tucker, Gilt-Edged and Money Markets Division, Bank of England, Threadneedle Street,  
London, EC2R 8AH; Tel: 0171 601 3187.**

Further copies of this document are available from:

**The Publishing Unit, HM Treasury, Parliament Street, London, SW1P 3AG; Tel: 0171 270 4558.**

**Bank of England (front desk) and Gilt-Edged and Money Markets Division, Threadneedle Street,  
London, EC2R 8AH; Tel: 0171 601 3297.**

produced by  
Halpen Marketing Management Limited  
0171 - 351 5577