

United Kingdom  
**Debt  
Management  
Office**

# DMO Annual Review

2002 | 2003



The United Kingdom  
**Debt Management Office**  
is an Executive Agency of  
HM Treasury

July 2003

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## Chapter 1: Introduction and foreword

2002-03, the fifth year of the DMO's operations, was notable in a number of respects; it saw the first year of positive net gilt issuance since 1997-98 (+£8.9 billion) as the Government's financing requirement rose; it saw the return to issuance in the short maturity sector for the first time since 1999, with the issue of 5% Treasury Stock 2008, and it also saw the issue of the first new index-linked stock for a decade (2% Index-linked Treasury Stock 2035). Geopolitical turbulence in the Middle East and the consequent 'flight-to-quality' by investors put downward pressure on gilt yields, which fell to levels not seen since the 1950s.

In the cash markets, the stock of Treasury bills continued to climb over the financial year from £9.7 billion to £15.0 billion (peaking at over £22 billion) as their importance as a cash management tool grew. We also expanded the range of available maturities and in May 2002 the DMO began issuing six-month Treasury bills alongside the existing one- and three- month maturities.

The DMO continued to manage a short-term cash position as an extension of its cash management operations. In line with published plans this has been progressively run-down; it started the financial year at £11.0 billion and ended it at £4.4 billion.

Institutionally, the year also saw the continued expansion of the DMO with the integration on 1 July 2002 of the activities of the Public Works Loan Board (PWLB) and the Commissioners for the Reduction of the National Debt (CRND). The reorganisation, implemented following a Treasury Review, is designed to deliver improved management of the central government balance sheet and to offer a more robust, flexible and innovative service to public sector clients. I believe we are taking the right steps to deliver this.

On a more personal note 2002-03 saw the departure of my predecessor, Mike Williams, who had headed the DMO since its formation in April 1998. Mike's input over the past five years played a major part in establishing and maintaining the reputation of the DMO with both the Treasury and the financial markets more generally and I am most grateful to him for his valuable contribution. I look forward to building on the solid foundations which have been laid down. I am convinced that these foundations leave the DMO well placed to respond to the challenge of meeting the significantly increased financing requirement in the current financial year.

This Review is slightly narrower in scope than recent annual publications; it focuses primarily on the delivery of our remits from HM Treasury and associated developments in the gilts and cash markets. This reflects the decision taken to redesign our Quarterly Reviews to provide a vehicle for topical or research articles as appropriate rather than providing these in a single annual publication. This has enabled the Annual Review to appear some three months earlier than last year.

Robert Stheeman  
Chief Executive  
14 July 2003

## Chapter 2: Market conditions

### The macro-economic environment

During 2002-03, the UK economy experienced a second consecutive year of sub-trend economic growth. GDP grew by 2.1% in real terms over the period, compared to 1.2% in 2001-02. Within GDP, household expenditure grew 3.8% and government expenditure rose 2.7% over the year, contributing 2.59% and 0.52% to overall growth respectively. Conversely, investment spending fell by 1.8% and net exports by 14.2%, resulting in negative contributions to growth of 0.33% and 0.44% respectively.

Inflation<sup>1</sup> ranged between 1.5% and 3.0% during 2002-03 and averaged 2.3% for the period (relative to the Bank of England's target of 2.5% ±1%). It stood at 3.0% at the end of the financial year, largely due to the combination of a surge in international oil prices, resulting from the conflict in Iraq, and high levels of domestic house price inflation.

In terms of the UK's public finances, at the end of the financial year public sector net debt rose to 31% of nominal GDP (from 30% at end 2001-02) whereas central government gross debt remained stable, at 38% of nominal GDP. However, output was below its trend level in 2002-03 and public investment spending was increased, albeit within the Government's fiscal framework. This was reflected in the central government net cash requirement (CGNCR) for 2002-03 which was £21.5 billion (2% of GDP), compared to £2.8 billion (0.3% of GDP) the previous financial year. This led to a significant increase in the net financing requirement for 2002-03 (see Chapter 3).

### Gilts market developments

Between March 2002 and March 2003, yields on conventional gilts fell along the curve. Overall, the yield curve steepened with par gilt yields falling by 138 basis points (bp) at the 5-year maturity, by 102 bp at the 10-year maturity and by 52 bp at the 30-year maturity (see Chart 1).

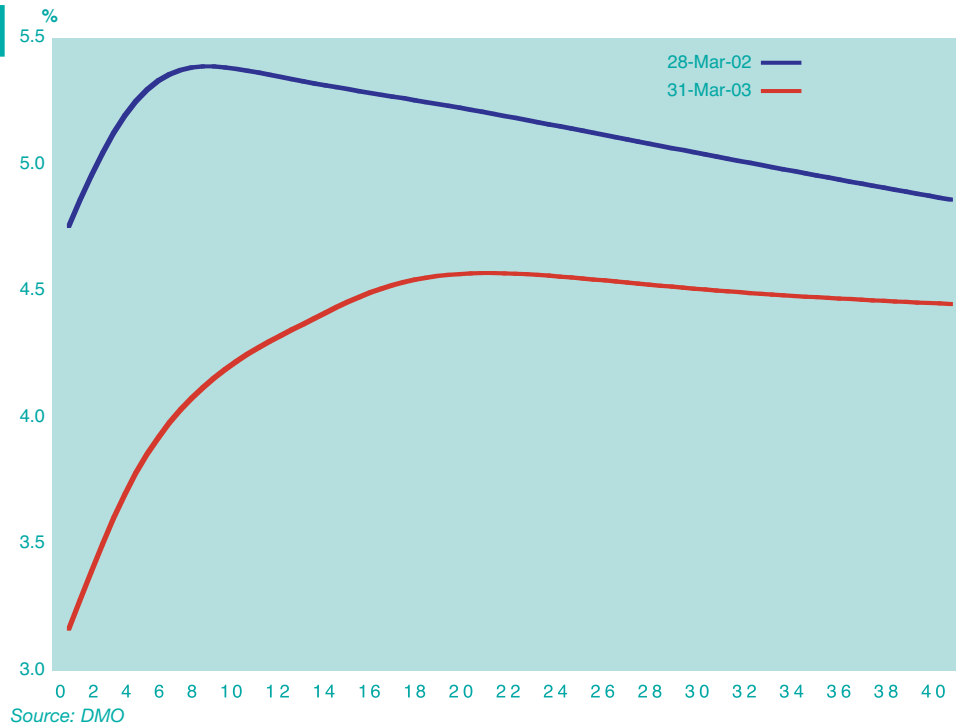
The financial year opened with a gradual decline in gilt yields (see Chart 2). Weak economic data coincided with poor equity market performance to reduce the market's expectations of an early increase in interest rates. By end-June 2002, the Bank of England's Monetary Policy Committee (MPC) had left the Bank's repo rate unchanged for seven consecutive meetings. As a result, the short-end of the yield curve steepened (with the yield on the 2-year benchmark stock 5% Treasury 2004 falling 30 bp). Yields also fell at all other points on the curve in this period, with ultra-long gilts slightly underperforming relative to the short and medium sectors of the curve.

Yields continued to fall during the second quarter of the year as further weak economic data from the Eurozone, the United States and, in part, the UK combined with further sharp falls in equity market indices to increase market expectations that

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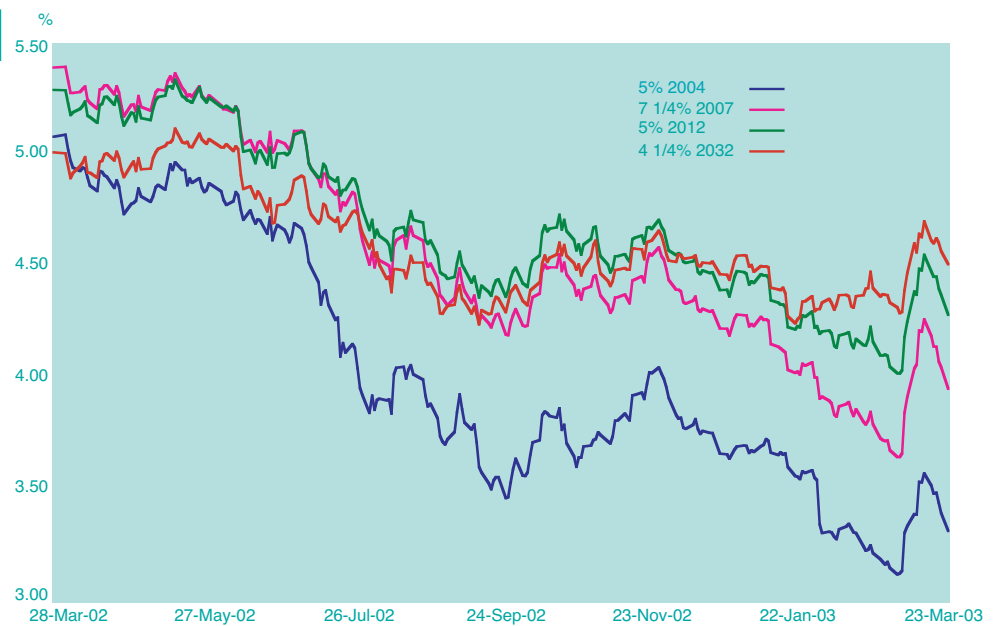
<sup>1</sup> As measured by the annual percentage change in RPIX (the retail price index excluding mortgage interest payments).

Chart 1  
Par gilt yield curves



the MPC would cut its repo rate. The short-end of the yield curve steepened further with the ultra-long sector of the curve continuing its underperformance. In July, the yield on 5% Treasury 2004 fell by 64 bp compared to a 3bp fall on 4¼% Treasury 2032, while the spread between the yields on 30-year and 10-year benchmark gilts moved from –23 bp to –7 bp over the quarter. The yield on 5% Treasury 2004 reached 3.47% on 30 September 2002 - at the time, the lowest level for 2-year yields since 1954.

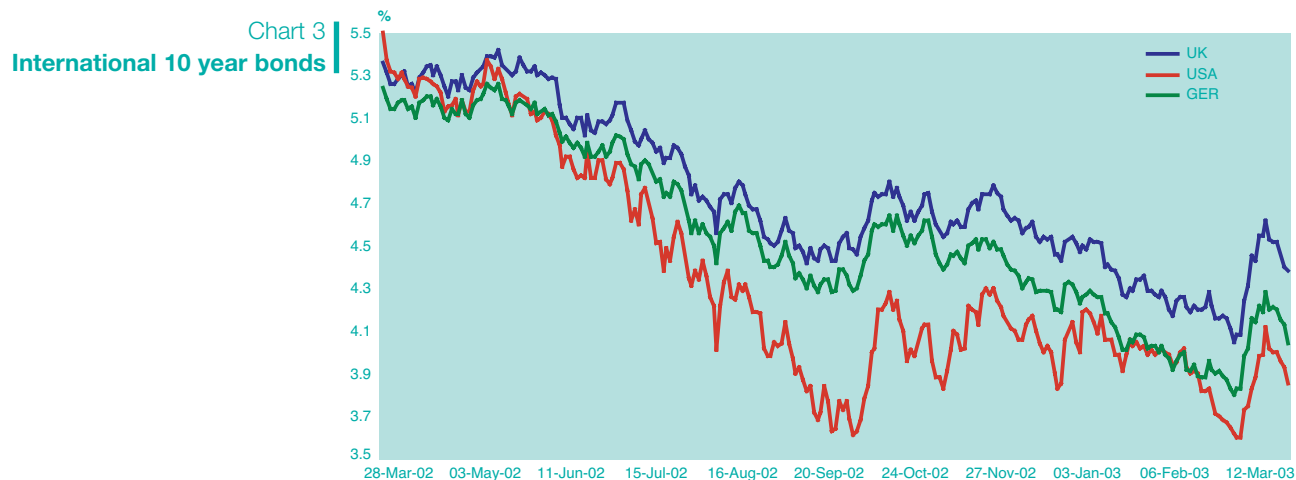
Chart 2  
Benchmark gilt yields



In contrast to the first half of the financial year, at the start of the third quarter, yields began to rise. Expectations that the MPC might cut the Bank's repo rate began to be discounted in the face of somewhat more robust domestic economic data. In particular, the continued strength of both consumer spending and house price inflation were frequently cited by market analysts as the main barriers to a reduction in official interest rates. Rising yields at the long-end of the curve resulted in a marked disinversion of the curve. However, yields resumed their descent in January with continued "flight-to-quality" in response to heightened geopolitical uncertainty and continued equity market volatility, hitting record lows in mid-March, just before the start of the war in Iraq.

### International comparisons

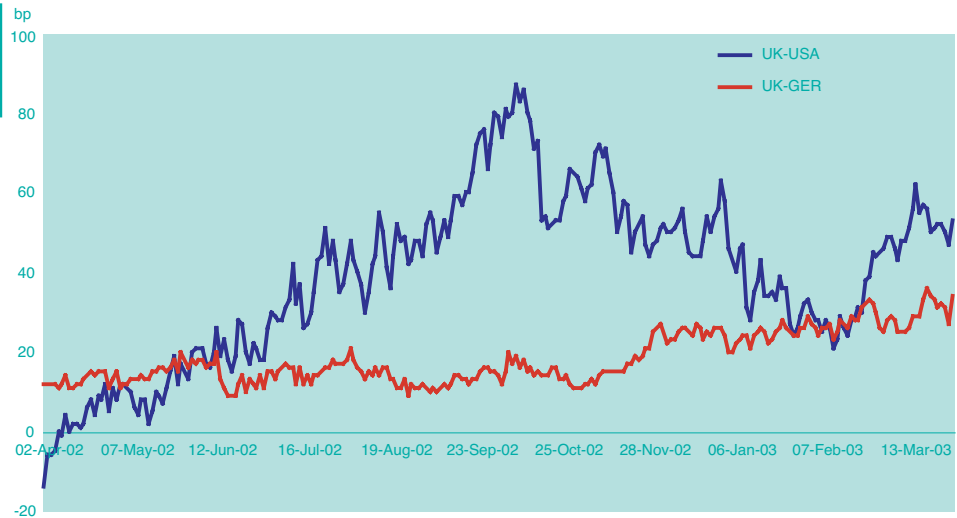
Chart 3 shows the path of 10-year bond yields in the UK<sup>2</sup>, the USA<sup>2</sup> and Germany over the financial year – all fell steeply in the face of weaker economic data particularly in the US and Germany but also more generally in the face of political turbulence in the Middle East. US Treasuries benefited most from the subsequent flight to quality - with the yield on the 10-year Treasury falling by 165bp over the year to 3.85%. The corresponding yield on bunds and gilts fell by 120bp to 4.04% and 98bp to 4.38% respectively. Bunds out-performed relative to gilts and Treasuries toward the end of the financing year as the euro appreciated relative to sterling and the dollar. Chart 4 shows the change in spreads.



Source: DMO and Reuters.

<sup>2</sup> UK and US yields are annualised.

Chart 4  
**Spread of 10-year gilt yields  
 over US and German 10-year  
 yields**

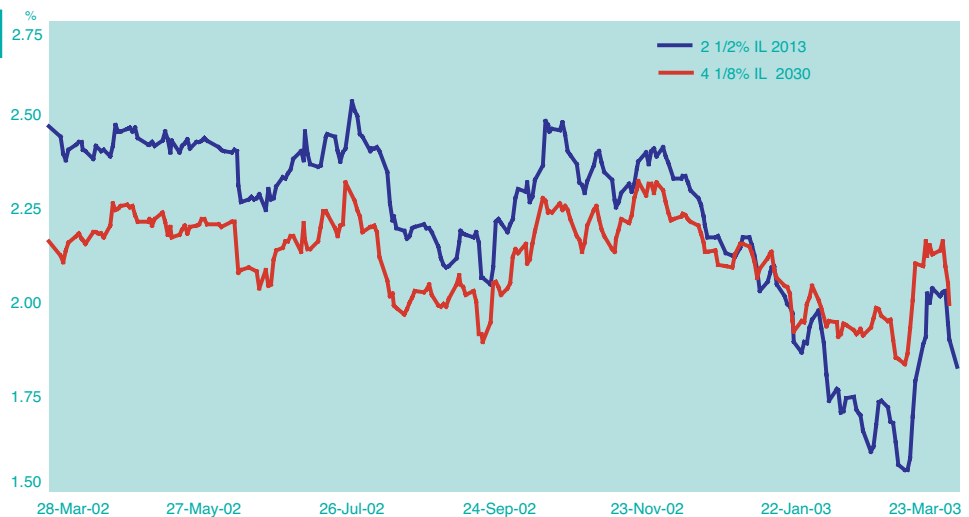


Source: DMO and Reuters

#### Index-linked gilts

The real yield<sup>3</sup> on 2½% Index-linked Treasury 2013 and 4 1/8 % Index-linked Treasury 2030 hit lows of 1.84% and 1.56% respectively in mid-March 2003 (see Chart 5). However, compared to conventional gilts, index-linked gilts underperformed significantly, with break-even inflation rates (BEIRs) falling sharply in the first half of the financial year before stabilising somewhat. By the end of January, BEIRs had fallen by 63 bp in the 10-year maturity sector and 49 bp in the 30-year area of the curve.

Chart 5  
**Index-linked real yields**

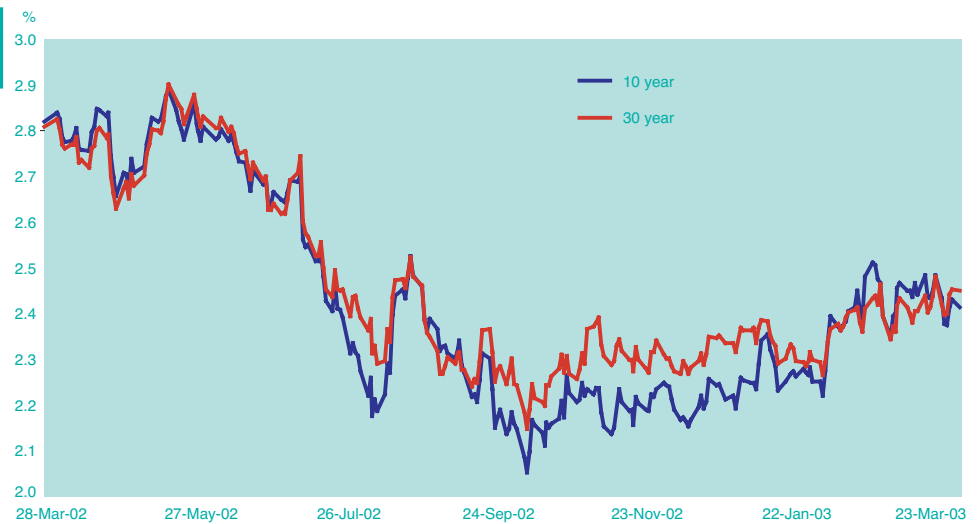


Source: DMO

However, in the last quarter of the financial year, as inflationary pressures began to build in the face of higher oil prices and a significant depreciation of sterling, index-linked gilts began to out-perform again and BEIRs increased. Over the course of the entire financial year, BEIRs fell by 43bp in the 10-year area and by 33bp in the 30-year area of the curve (see Chart 6).

<sup>3</sup> On a 3% inflation assumption.

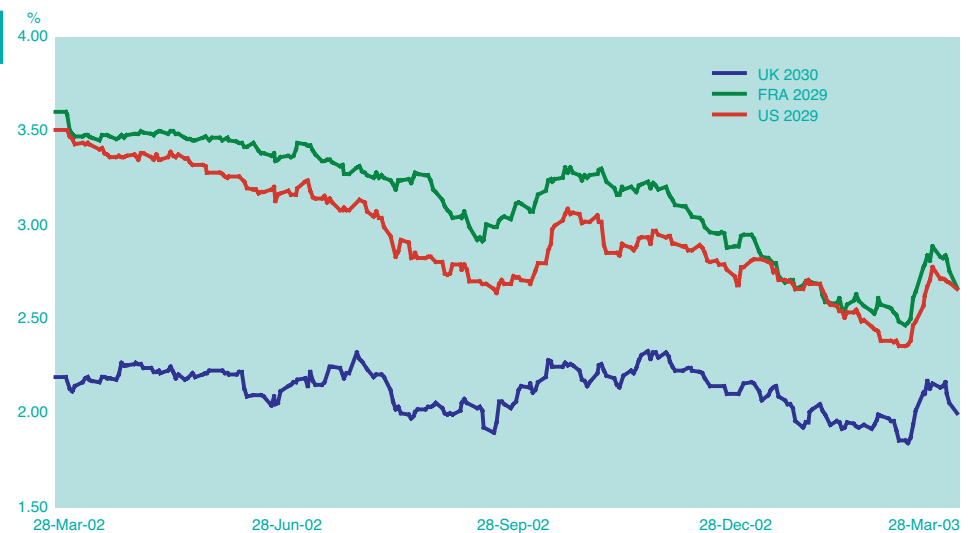
Chart 6  
Index-linked gilts: Break-even inflation rates



Source: DMO

Chart 7 shows the path of real yields on long-dated index-linked bonds in the UK, France and the USA. In the UK, long real yields were relatively stable over the course of the year falling by 19bp to 2.00%. However, real yields fell more markedly in the US and France (by 85bp to 2.65% and 94bp to 2.66% respectively) as part of the general out-performance of US and major European bond markets compared to gilts. Nevertheless, long real yields in the UK remained significantly below those in the US and France (65bp and 66bp respectively).

Chart 7  
International real yields



Source: DMO and Bloomberg

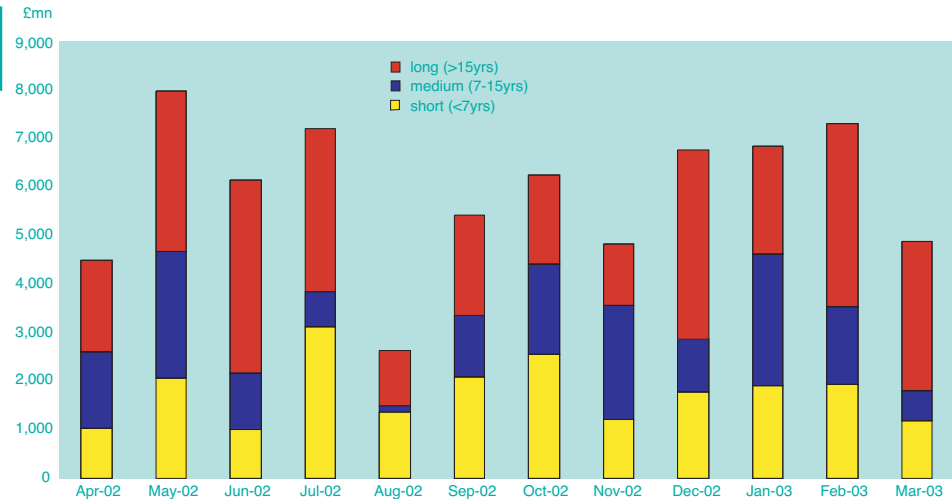
**The sterling corporate sector**

In 2002-03, non-gilt sterling issuance totalled £70.7 billion, (slightly down from the £72.4 billion issued in 2002-03). Issuance peaked in May 2002. Chart 8 below shows the breakdown of corporate issuance by maturity. Long-dated issuance was again the most popular, accounting for 45% of all issuance. Shorts accounted for



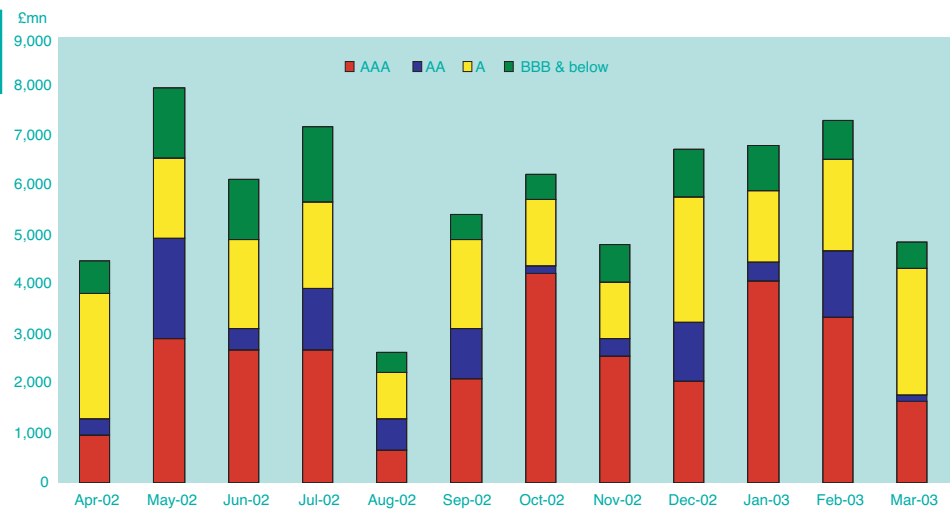
30% and mediums 25%. Issuance was more heavily skewed towards higher quality issuers than in 2001-02 with AAA-rated issuance accounting for 42% of all issuance. Issuers rated BBB and below accounted for only 14% of all issuance compared with 31% in 2001-02.

Chart 8  
Monthly non-gilt sterling bond  
issuance, 2002-03, by maturity



Source: Bank of England

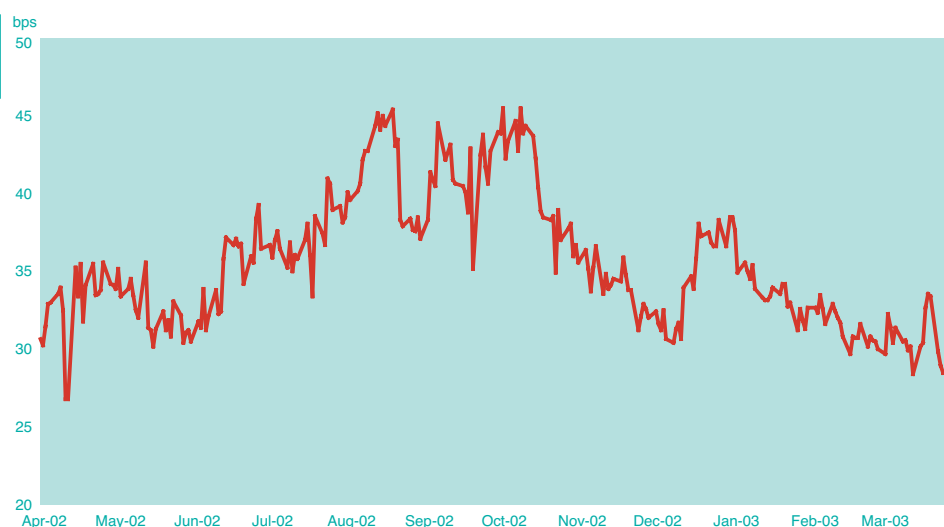
Chart 9  
Monthly non-gilt sterling bond  
issuance, 2002-03, by rating



Source: Bank of England

The 10-year swap spread (the difference between the benchmark gilt yield and the rate on the fixed leg of the equivalent sterling interest rate swap rate) increased steadily over the first half of the financial year from 30bp to 45bp, in the face of flight to quality effects combined with deteriorating credit conditions arising from concerns over corporate solvency. However, spreads fell back in the second half of the financial year as credit conditions improved and government finances deteriorated; they ended 2002-03 where they began (at 29bp), as can be seen in Chart 10.

Chart 10  
10-year swap rate over 10-year  
gilts



Source: Bank of England

### Developments in the sterling money market

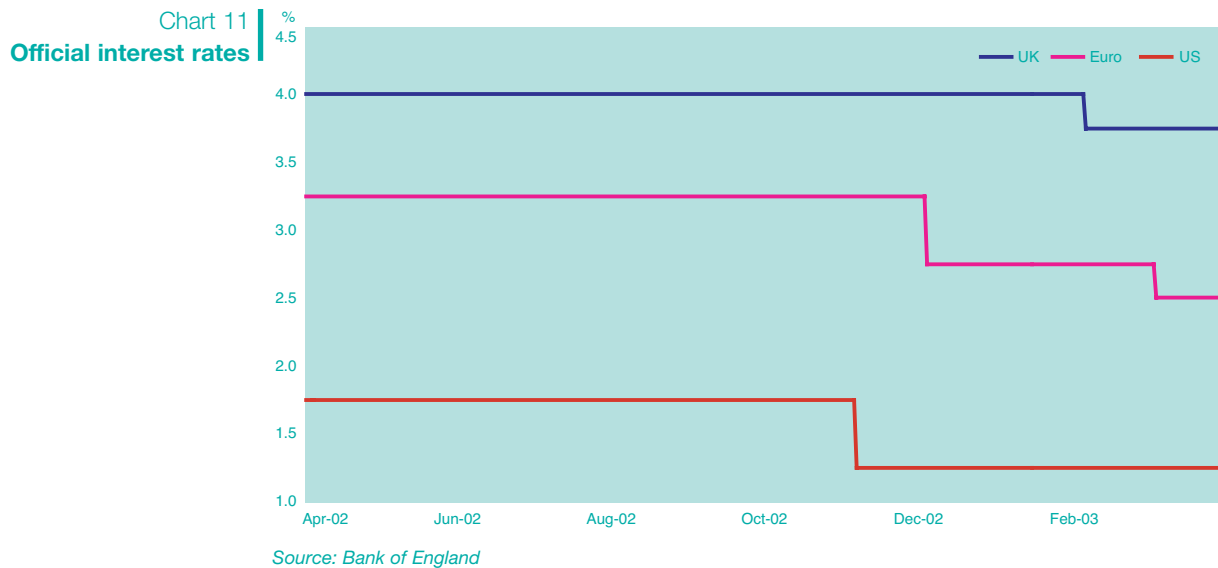
During 2002-03 the size of the sterling money market increased by 8% to £622.8 billion, as in the previous year growth was concentrated in the Interbank market, which increased by £52.9 billion (27.8%), Commercial paper (CP) which rose by £10.8 billion (49.3%) and Treasury bills, the stock of which increased by £5.3 billion (54.6%). See Table 1.

Table 1  
Size of the sterling money  
market (£ millions)

(end-month)	CDs	Treasury bills	Bank bills	CP	Interbank	Gilt repo	Stock lent	Sell/ buy-backs	TOTAL*
Mar-02	139,022	9,700	11,729	22,006	190,327				576,567
Apr-02	136,568	8,100	11,815	23,424	199,496				583,186
May-02	135,130	10,850	11,819	26,308	206,004	147,822	46,412	3,742	588,087
Jun-02	130,099	16,450	10,949	26,331	228,614				610,419
Jul-02	138,574	12,650	11,039	27,771	229,897				617,907
Aug-02	136,051	13,200	11,153	26,857	245,003	116,021	47,375	3,248	598,908
Sep-02	137,983	18,100	11,443	27,250	240,415				601,835
Oct-02	144,538	17,750	11,667	28,363	239,888				608,850
Nov-02	141,661	17,450	12,006	31,344	244,013	135,983	49,862	3,424	635,743
Dec-02	137,305	21,400	11,174	27,479	243,590				630,217
Jan-03	132,598	19,300	11,024	32,525	246,474				631,190
Feb-03	138,375	14,500	10,509	33,068	241,152	126,164	47,320	3,552	614,640
Mar-03	144,068	15,000	10,639	32,847	243,225				622,815

\*Gilt repo and stock lending data is based on a quarterly survey of the market. For the purpose of this table these values are assumed to remain constant during the intervening two months. The March and April 2002 totals include the results of the February 2002 survey.

Market developments in the period from April 2002 to end-January 2003 were characterised by a period of stability in official interest rates. The MPC kept the Bank of England's repo rate unchanged at 4.0%. During this period, there was one 50bp reduction in official rates in both the US (to 1.25% on 6 November 2002) and the Eurozone (to 2.75% on 5 December 2002). However, in February 2003, the MPC surprised the market and cut the Bank's repo rate by 25bp to 3.75%; this was followed by a further 25bp cut by the ECB in March, taking the official rate to 2.5%. The path of official rates is outlined in Chart 11 below.



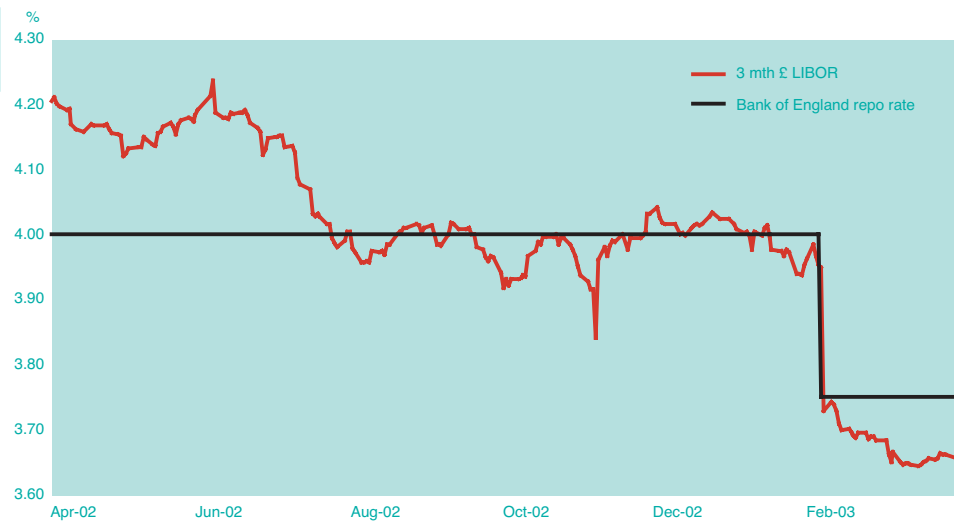
The cuts in key interest rates by the US Federal Reserve and the ECB were reactions to continuing poor economic data, exacerbated by rising geopolitical tension in the Middle East. In the UK, resilient house prices and the general strength of consumer spending acted as a brake on similar rate reductions. However, UK rates were cut by 25 bp on 6 February 2003 with the Bank citing the deterioration in the global economy and revisions to the Bank's inflation projections (published in its *Inflation Report* on 12 February) as the main reasons for the cut, which was largely unanticipated by the market.

The ECB cut its repo rate again by 25bp (to 2.50%) on 6 March 2003 but rates remained unaltered held in the US and the UK, despite growing geopolitical turbulence culminating in the conflict in Iraq which began on 18 March 2003. In the UK, 3-month LIBOR ended the financial year 9bp below the repo rate.

In the UK, the spread between 3-month sterling LIBOR<sup>4</sup> and the Bank's repo rate started the financial year at +20bp and was as high as +23 bp (i.e. pricing in a rate rise) in early June. See Chart 12. However, as less robust economic data was published throughout the summer, the expectations of a rate rise began to be discounted. In July 2002, 3-month LIBOR fell below the Bank's repo rate and stayed at or below that rate for most of the rest of FY2002-03. There was a sharp spike down to -16 bp on 7 November after the unexpectedly large cut by the US Federal Reserve, but the spread ended 2002-03 at -9 bp and averaged 3 bp over the period.

<sup>4</sup> London Interbank Offer Rate – the rate at which AA-rated banks lend to each other. LIBOR is a key market rate.

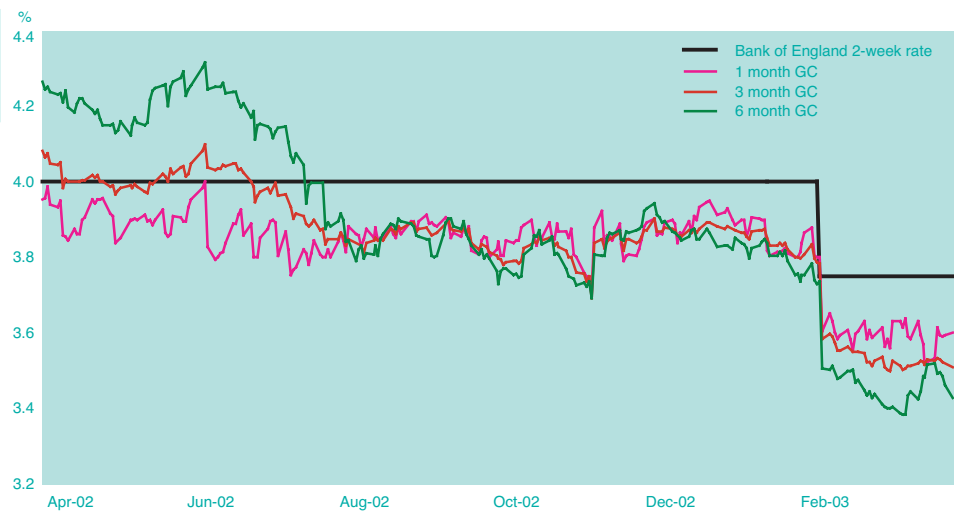
**Chart 12**  
**Bank of England repo rate and**  
**3 month LIBOR**



Source: Bank of England/BBA

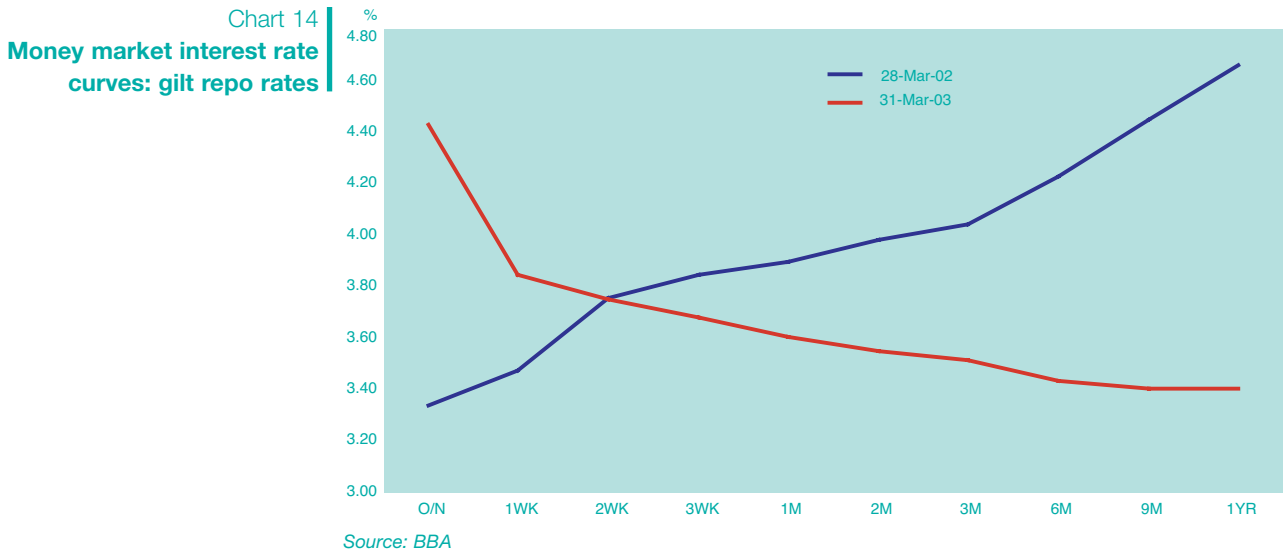
The same broad pattern can be seen in the relationship between 1-, 3- and 6-month GC repo rates and the Bank of England repo rate (see Chart 13). At the start of the financial year the six-month GC repo rate was 26bp above the Bank repo rate (pricing in a full quarter point rise later in the year); however this rate joined the shorter maturities below the repo rate from mid-July onwards as the market began expecting that the next move in rates would be down. Following the rate cut on 6 February 2003 GC repo rates consistently pointed to market expectations of a further cut in rates. By the end of March 2003 the 1-month rate was 15bp below the repo rate, the 3-month 25bp below and the 6-month rate was 32bp below.

**Chart 13**  
**BBA GC repo rates and the**  
**Bank of England 2-week repo**  
**rate**



Source: BBA

The change in money market expectations for the direction of interest rates over the course of 2002-03 can be seen in the term structure of GC rates in Chart 14 below. The spread between 2 week and 1-year repo rates was +90bp on 28 March 2002, reflecting expectations of rate increases, but by 31 March 2003 the spread was -35bp (pricing in a quarter point cut).



## Chapter 3: Gilts remit

### The provisional remit 2002-03

The *Code for Fiscal Stability* requires HM Treasury to publish a debt management report, including an outline of the next financial year's financing plans, prior to the start of that financial year. Given that the 2002 Budget was scheduled for 17 April 2002, the *Debt and Reserves Management Report 2002-03* was published on 14 March 2002, to comply with the Code. It included a provisional remit based on the public finance projections published in the Pre-Budget Report (PBR) on 27 November 2001. This set out planned gilt sales of £23.0 billion (cash)<sup>5</sup>.

On the basis of the PBR forecast for the central government net cash requirement (CGNCR) for 2002-03 of £13.6 billion, a net financing requirement of £32.3 billion was forecast. This was to be financed by:

- **gross gilt sales of £23.0 billion split as follows:**
  - short conventional issuance of £5.5 billion;
  - medium conventional issuance of £5.5 billion;
  - long conventional issuance of £7.5 billion; and
  - index-linked issuance of £4.5 billion.
- **net short-term debt sales of £9.3 billion made up of:**
  - a £4.3 billion increase in the stock of Treasury bills (taking it to £14.0 billion); and
  - a run-down of £5.0 billion in the DMO's net cash position (taking it to £2.7 billion).

The provisional remit included contingencies that could be implemented if the Budget forecasts led to changes in the financing requirement. In the event of a falling financing requirement, the first contingencies to be considered would be:

- increasing the size of the DMO net cash position by up to £3.0 billion;
- reducing planned long conventional issuance by up to £2.5 billion; and
- reducing planned index-linked issuance by up to £0.75 billion.

In the event of a rising financing requirement, the first contingencies to be considered would be:

- reducing the size of the DMO's net cash position by up to £1.0 billion;
- increasing planned short conventional issuance by up to £2.5 billion; and
- increasing planned medium conventional issuance by up to £2.5 billion.

### Budget 2002 and revised remit

The 2002 Budget on 17 April 2002 included the outturn figure for the CGNCR in 2001-02 as well as a new forecast for 2002-03 – these were (with the previous forecasts in brackets):

- 2001-02: £2.9 billion (£6.3 billion)
- 2002-03: £13.5 billion (£13.6 billion).

Over the 2001-02 and 2002-03 forecast period, the financing requirement fell by

<sup>5</sup> Unless otherwise indicated references to planned gilt sales are in cash terms.

£3.6 billion compared to the original forecasts published in the *Debt and Reserves Management Report 2002-03*. In line with the published contingencies, £0.6 billion of this difference was taken account of by a reduction in long conventional gilt sales to £6.9 billion (cash), thus reducing total planned gilt sales to £22.4 billion (cash). The remainder (£3.0 billion) was accommodated by an increase in the forecast level of the DMO's net cash position at end-March 2003 to £5.7 billion. This required an increase of £0.4 billion in the planned run-down in 2002-03 to £5.4 billion.

### Pre-Budget Report 2002

The Pre-Budget Report 2002 published on 27 November 2002 included revised forecasts for the public finances. The forecast for the CGNCR in 2002-03 increased by £5.2 billion to £18.7 billion. The net financing requirement increased by £5.0 billion<sup>6</sup> to £37.1 billion. It was announced that the DMO planned to meet the additional financing requirement by:

- an increase of £3.8 billion in planned gilt sales, including scheduling an additional gilt auction on 15 January 2003, taking them to £26.2 billion; and
- an increased run-down of £1.2 billion in the DMO's net short-term cash position.

Planned short gilt sales were increased by £3.0 billion to £8.5 billion and planned long conventional gilt sales were increased by £0.8 billion to £7.7 billion.

The change in the DMO's net cash position meant that the planned run-down for 2002-03 was now £6.6 billion with the level at end-March 2003 expected to be £4.4 billion.

### Provisional Debt Management Report 2003-04

The financing arithmetic for 2002-03 was updated in the *Provisional Debt Management Report 2003-04* published on 20 March 2003 to reflect a revision to the forecast for National Savings and Investments' net contribution. This was revised from a negative financing contribution of £1.5 billion in the 2002 Budget to a positive contribution of £0.2 billion. This is a reflection of recent strong demand from retail investors for ultra-safe cash products.

Consequently, the net financing requirement was revised from £37.1 billion to £35.9 billion, a decrease of £1.2 billion from the PBR forecast.

Additionally, the planned level of outstanding stock of Treasury bills was increased by £1.0 billion to £15.0 billion in order to facilitate efficient cash management.

Overall, this meant that the expected rundown of the DMO's net cash position was decreased by £2.4 billion to £4.2 billion, leaving an expected end-March 2003 level of £6.9 billion.

### Budget 2003

The 2003 Budget on 9 April 2003 included a new forecast for the CGNCR in 2002-03 of £21.4 billion, an increase of £2.7 billion on the forecast published in the Pre-Budget Report 2002. Other changes to the financing requirement included adjustments to both the overall level of gilt sales, the level of debt buy-backs and the contribution to financing from the adjustment of the DMO's cash deposit at the

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<sup>6</sup> Secondary market net gilt purchases of £0.3 billion and a reduction of £0.5 billion in National Savings & Investment's expected de-financing also impacted on the net financing requirement.

Bank of England. Additionally NS&Is net contribution increased by £0.5 billion to £0.7 billion. Overall, the net financing requirement for 2002-03 was forecast to be £38.3 billion. These changes meant that the end March 2003 level for the DMO's net cash position was expected to be £4.5 billion, a decrease of £2.4 billion from the forecast level published on 20 March.

### CGNCR 2002-03 outturn

The outturn for the 2002-03 CGNCR was published on 23 April 2003 - at £21.5 billion it was £0.1 billion higher than the forecast published in the Budget. The corresponding increase in the financing requirement for 2002-03 was accommodated by a higher run down in the DMO net cash position, taking it to £4.4 billion. This left less scope for the run down of the DMO net cash position in 2003-04 to contribute to financing in that year. The shortfall was made up by an increase of £0.1 billion in planned Treasury bill sales, taking them to £3.3 billion to give a planned stock at end March 2004 of 18.3 billion. (See the section on the DMO remit for 2003-04 on pages 21-23 below).

Table 2  
The 2002-2003 financing  
requirement

(£ billion)	DRMR 14-March-2002	Budget 17-April-2002	PBR 27-November-2002	Provisional DMR 20-March-2003	Budget 09-April-2003
<b>CGNCR forecast</b>	<b>13.6</b>	<b>13.5</b>	<b>18.7</b>	<b>18.7</b>	<b>21.4</b>
Prefinancing forex debt	0.0	0.0	0.0	0.0	0.0
Gilt redemptions	17.2	17.0	17.0	17.0	17.0
Buy-backs	0.0	0.0	0.3	0.3	0.4
<b>Financing Requirement</b>	<b>30.8</b>	<b>30.5</b>	<b>36.0</b>	<b>36.0</b>	<b>38.8</b>
<i>less</i>					
National Savings and Investments	-1.5	-1.5	-1.0	0.2	0.7
DMO cash deposit at Bank of England	0.0	-0.1	-0.1	-0.1	-0.2
<b>Net Financing Requirement</b>	<b>32.3</b>	<b>32.1</b>	<b>37.1</b>	<b>35.9</b>	<b>38.3</b>
<i>Financed by:</i>					
<b>1. Planned gilts sales</b>	<b>23.0</b>	<b>22.4</b>	<b>26.2</b>	<b>26.4</b>	<b>26.3</b>
<i>of which:</i>					
Short conventional	5.5	5.5	8.5	8.5	8.4
Medium conventional	5.5	5.5	5.5	5.6	5.6
Long conventional	7.5	6.9	7.7	7.7	7.7
Index-linked	4.5	4.5	4.5	4.6	4.6
<b>2. Planned net short-term debt sales</b>	<b>9.3</b>	<b>9.7</b>	<b>10.9</b>	<b>9.5</b>	<b>12.0</b>
<i>of which:</i>					
Change in Ways & Means	0.0	0.0	0.0	0.0	0.0
Change in T bill stock	4.3	4.3	4.3	5.3	5.3
Change in DMO net cash position*	5.0	5.4	6.6	4.2	6.7
<b>Short term debt levels</b>					
Ways & Means at end of FY	13.4	13.4	13.4	13.4	13.4
T bill stock at end of FY	14.0	14.0	14.0	19.3	19.3
DMO net cash position**	2.7	5.7	4.5	6.9	4.5

\* excluding changes in the DMO's deposit at the Bank of England

\*\* including the DMO cash deposit at the Bank of England

Source: DMO



### Future financing projections

The 2003 Budget included forecasts for the CGNCR out to 2007-08, these together with current forecasts of redemptions for these years are shown in Table 3 below to produce illustrative financing requirements

Table 3  
Illustrative future financing requirements

Illustrative financing projections				
£bn	2004-05	2005-06	2006-07	2007-08
CGNCR projections (Budget)	28	26	28	25
Redemptions	15	15	18	24
Financing Requirement*	43	41	46	49
Change since PBR	6	5	4	3

\*indicative gross financing requirement

Source: DMO/HM Treasury

### DMO operations

#### Outright gilt auctions

The 2002-03 remit included a calendar of 12 outright gilt auctions (seven conventional and five index-linked) but this was increased to 13 at the announcement of the PBR with the addition of a further short conventional auction. The DMO issued four new stocks in 2002-03: 5% Treasury 2008, 5% Treasury 2014, 4¼% Treasury 2036 and 2% Index-linked Treasury 2035, the first new index-linked stock since 1992.

Table 4 shows the results of the outright gilt auctions held in 2002-03 and those of the mini-tender on 14 November 2002. The latter involved the sale of the residual portion of the (uncovered) index-linked gilt auction held on 25 September. Gilt sales ended the financial year at £26.3 billion.

Table 4  
The results of outright gilt auctions and the index-linked tender

Date	Stock	Amount* (£ nom)	Cover	AAP	Yield at AAP	Tail**
24-Apr-02	2½% IL 2020	£425mn	2.19	£210.17	2.39%	na
29-May-02	5% 2025	£2,250mn	2.24	£97.62	5.18%	1
25-Jun-02	5% 2008	£3,000mn	1.68	£99.63	5.08%	1
10-Jul-02	2% IL 2035	£950mn	1.38	£97.80	2.09%	na
24-Jul-02	5% 2014	£2,750mn	2.02	£101.05	4.88%	2
25-Sep-02	2% IL 2035	£900mn***	0.95	£99.00	2.04%	na
22-Oct-02	5% 2014	£2,750mn	1.99	£102.05	4.77%	1
24-Oct-02	2½% IL 2013	£450mn	3.01	£197.72	2.40%	na
14-Nov-02	2% IL 2035	£74mn	na	£98.76	2.08%	na
03-Dec-02	5% 2025	£2,750mn	1.77	£103.21	4.76%	1
15-Jan-03	5% 2008	£2,750mn	2.65	£103.27	4.28%	1
22-Jan-03	2½% IL 2020	£425mn	2.59	£226.01	2.03%	na
26-Feb-03	4¼% 2036	£2,750mn	1.70	£97.65	4.39%	1
26-Mar-03	5% 2008	£2,500mn	2.78	£103.63	4.18%	0

\* Excluding any amounts sold to CRND.

\*\* Index-linked auctions are held on a uniform price basis and therefore have no tail.

\*\*\*£826mn sold at auction, the balance was sold on 14 November 2003.

Source: DMO

Before the 2002-03 remit had been finalised, the Economic Secretary to the Treasury had chaired meetings with representatives of the GEMMs and gilt investors on 15 January 2002, to canvas views on the shape of issuance for the coming financial year. The meetings indicated general support for the maintenance of the prevailing split between index-linked and conventional issuance and for conventional issuance to be weighted slightly toward the medium and long maturities – but there was a consensus on the need for a new 5-year benchmark stock.

At the regular DMO quarterly consultation meetings on 18 March 2002 to discuss the auction schedule for April-June there was strong support for a short (a new 2008 stock - to be built up by conversion) and long (re-opening of 5% Treasury 2025) in the quarter. There was also general support for long index-linked issuance. All three auctions in the first quarter were well received.

The next consultation meetings on 17 June 2002 strongly advocated an early conversion offer to build up the newly issued 5% Treasury 2008 and strong support for a new 2014 conventional stock and general support for a new ultra-long index-linked stock. The new 2035 maturity index-linked stock was first auctioned on 10 July and re-opened on 25 September – however the second auction coincided with a period of high volatility in both the gilts and equity markets and was uncovered – with bids accepted for only 95% of the stock on offer. This was only the second time a DMO auction had been uncovered (the first being the auction of the 2030 index-linked stock on 28 April 1999). However, the new 2014 conventional stock was well received.

At the 16 September meetings the general market preference was for long and medium conventional auctions in the third quarter and strong preference for a 10-year index-linked auction – this was reflected in good demand at the auction on 24 October, which was covered 3.01 times.

At the consultation meetings on 9 December 2002 there was general support for an auction of medium to long index-linked stock and virtual unanimity regarding the choice of 5% Treasury 2008 for the January auction. There was also significant demand, particularly from investors for a new ultra-long conventional stock in February. 4¼% Treasury 2036 was auctioned for the first time on 26 February achieving a cover ratio of 1.7 times.

### Breakdown of gilt sales 2002-03

The breakdown by type of instrument and maturity of planned and actual gilt sales in 2002-03 is summarised in tables 5 and 6 below. All were in line with agreed remit tolerances.

Table 5  
Gilt sales by type of instrument  
(cash amounts)

Type (£bn)	Provisional remit	Remit	Revised remit	Outturn
Short conventional	5.5	5.5	8.5	8.4
Medium conventional	5.5	5.5	5.5	5.6
Long conventional	7.5	6.9	7.7	7.7
Index-linked	4.5	4.5	4.5	4.6
	<b>23.0</b>	<b>22.4</b>	<b>26.2</b>	<b>26.3</b>

Table 6  
Gilt sales by type of instrument  
(by proportion)

Type	Original remit		Outturn	
	% of total issuance	% of conventional	% of total issuance	% of conventional
Short conventional	24.6	30.7	31.9	38.7
Medium conventional	24.6	30.7	21.3	25.8
Long conventional	30.8	38.5	29.3	35.5
Index-linked	20.1		17.5	

### Conversion offer

One conversion offer was held in 2002-03, from 9% Treasury 2008 into the then newly-issued 5% Treasury 2008 (first issued on 26 June 2002). The conversion offer was launched on 12 July 2002 and closed on 2 August 2002. Acceptances were received for £4.8 billion (87.5%) of 9% Treasury 2008 and £5.9 billion of 5% Treasury 2008 was created, taking the new stock to almost £9 billion in issue. 9% Treasury 2008 was reduced to a rump stock as a result of the conversion. No switch auctions were held in 2002-03. The results of the conversion offer are summarised in Table 7 below.

Table 7  
Conversion offer

Date	Source stock	Nominal converted	Acceptances	Destination stock	Nominal created	Conversion ratio per £100 nominal
05-Aug-02	9% 2008	£4,808mn	87.5%	5% 2008	£5,921mn	£123.15

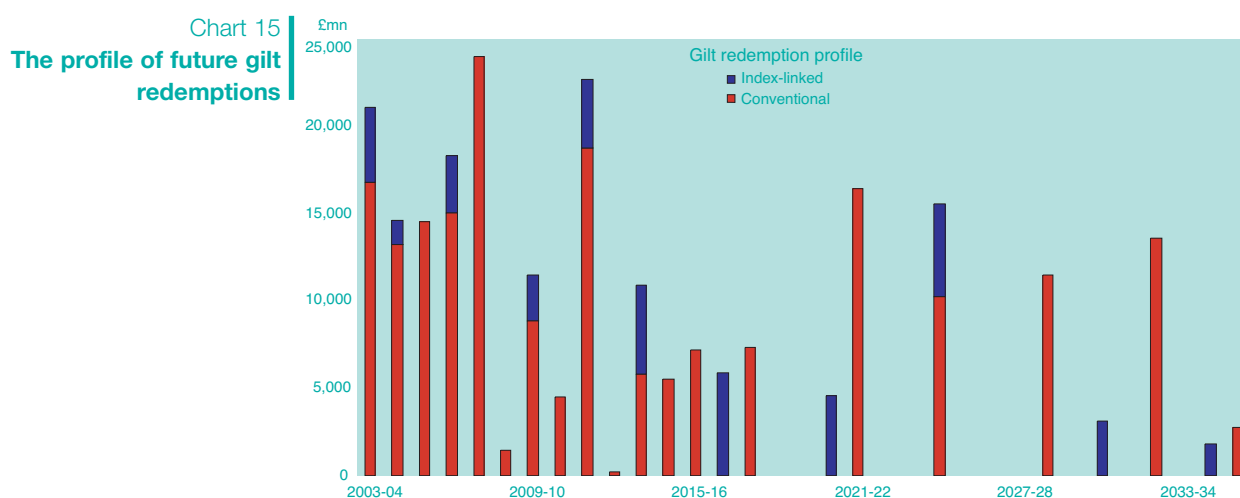
### Gilt redemptions

£17.0 billion of gilts in market hands redeemed in 2002-03; details are shown in Table 8 below. As expected the DMO chose to exercise its option to redeem 11¾% Treasury Stock 2003-07 at the first available opportunity.

Table 8  
Gilt redeeming in 2002-03

Redemption date	Stock	Amount in issue £mn	Official holdings end-Mar 2002 (£mn)	Redemption amount (£mn)
11-Apr-02	10% Conversion 2002	21	12	9
07-Jun-02	7% Treasury 2002	9,012	230	8,782
14-Jun-02	9½% Conversion 2002	3	2	1
27-Aug-02	9¾% Treasury 2002	6,623	434	6,189
05-Oct-02	8% Treasury 2002/2006	2,064	228	1,836
19-Nov-02	9% Exchequer 2002	83	67	16
22-Jan-03	11¾% Treasury 2003/2007	234	78	156
				16,989

The profile of future gilt redemptions at end-March 2003 is shown in Chart 15 below.



### The gilt portfolio

The key statistics of the gilt portfolio at the end of March 2003 (compared to the position at the end of the previous financial year) are shown in Table 9 below.

Table 9  
Key features of the gilt portfolio  
(end-March 2002 and  
end-March 2003)

	28-Mar-02	28-Mar-03
Nominal value*	278.72bn	£292.71bn
Market value	£303.32bn	£332.31bn
Weighted average market yields:		
- Conventional gilts	5.14%	4.09%
- Index-linked gilts	2.35%	1.80%
Average maturity	11.00 years	11.22 years
Average modified duration		
- Conventional gilts	6.56 years	6.89 years
- Index-linked gilts	10.65 years	11.21 years
Average coupon**	7.20%	6.79%

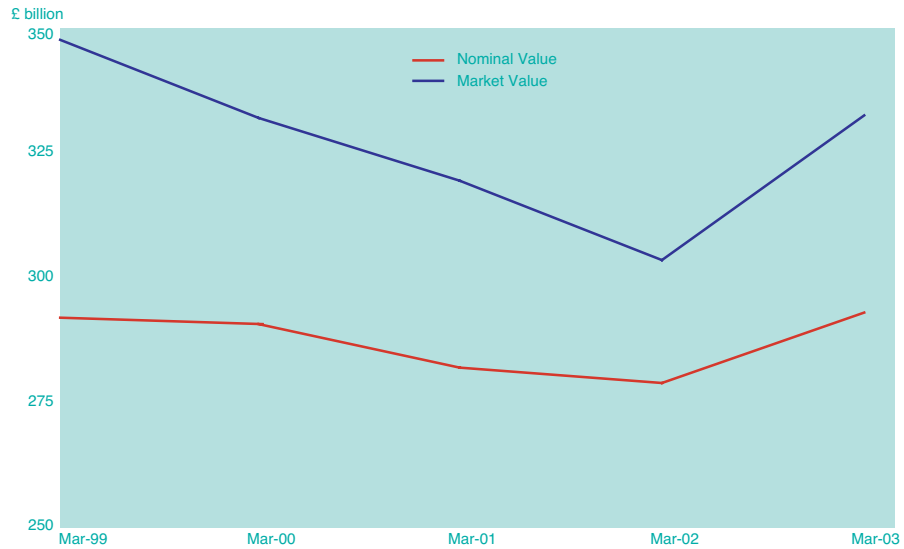
\* including index-linked uplift

\*\* of conventional, double-dated and undated gilts

The nominal value of the portfolio rose by £14.0 billion (5.0%) as new issuance (including stock created for collateral purposes (see Chapter 4 below)) and the impact of index-linked uplift exceeded redemptions. However, the market value of the portfolio increased significantly more, by £29.0 billion (9.6%) as gilt prices (particularly at shorter maturities) rose strongly amidst flights to quality inspired by geopolitical tensions and slowing economic growth. These changes are illustrated in the falls in market yields on the portfolio, -105bp (20.4%) on conventionals and -55bp (23.4%) on index-linked gilts.

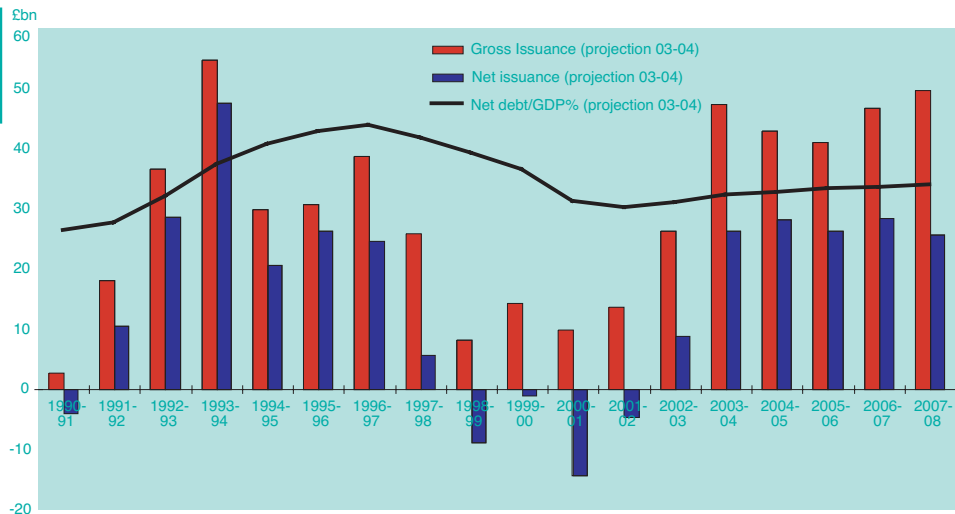
The increases in nominal and market values reversed trends of recent years. 2002-03 was the first year of positive net gilt issuance since 1997-98.

**Chart 16**  
The nominal and market values of the gilt portfolio since March 1999



Given the forecasts for future financing requirements (see Table 3) it is likely that the move to a period of positive net gilt issuance will be continued in the period ahead. See Chart 17 below.

**Chart 17**  
Gross and net gilt issuance (including illustrative projections)



Source: HM Treasury/DMO

**Breakdown of gilt portfolio by maturity**

The breakdown of the nominal value of the gilt portfolio, (including index-linked uplift) by maturity split at the end of March 2003 compared to a year earlier is shown in Table 10 below.

**Table 10**  
Gilt portfolio by maturity (end March 2002 and end March 2003)

	28-Mar-02	28-Mar-03
Ultra-short (0-3 years)	23.3	22.8
Short (3-7 years)	19.9	22.1
Medium (7-15 years)	29.1	27.4
Long (15+ years)	26.6	26.7
Undated	1.1	1.0

Source: DMO

## The 2003-04 remit

### The provisional remit 2003-04

In accordance with the *Code for Fiscal Stability*, HM Treasury published the provisional Debt Management Report 2003-04 on 20 March 2003; this included a provisional DMO remit.

The provisional remit was based on the forecast for the 2003-04 CGNCR as previously published in the Pre-Budget Report on 27 November 2002. The forecast net financing requirement for 2003-04 was £49.8 billion.

The financing requirement was to be met by:

- gilt sales £40.0 billion
- an increase in the Treasury bill stock £ 3.2 billion
- a run-down of the DMO net cash position £ 6.6 billion

The provisional remit included contingencies that could be exercised in the event that the Budget forecast led to changes in the financing requirement; these were:

- **In the event that the financing requirement for 2002-03 changed**
  - any changes to be accommodated by an adjustment to net short-term debt sales.
- **In the event of a falling financing requirement for 2003-04**
  - decreasing the planned stock of Treasury bills in market hands at end-March 2004 by up to £2.0 billion; or
  - decreasing planned conventional gilt sales broadly in line with the relative proportions outlined above.
- **In the event of a rising financing requirement in 2003-04**
  - increasing the planned stock of Treasury bills in market hands at end-March 2004 by up to £2.0 billion; or
  - increasing planned conventional gilt sales broadly in line with the relative proportions outlined above.
  - possible issuance of an ultra-short (2- or 3-year) maturity gilt within the planned increase of short conventional sales.

### The DMO remit for 2003-04

The DMO remit for 2003-04, published on 9 April 2003 in the *Debt and Reserves Management Report 2003-04*, included an increase of £7.4 billion in planned gilt sales in 2003-04, taking them to £47.4 billion, compared with the provisional remit published on 20 March 2003.

The Budget forecasts also showed an increase in the CGNCR for both 2002-03 and 2003-04 as follows (compared with the PBR forecasts published on 27 November 2002 that were used as the basis for the DMO provisional remit):

- 2002-03 CGNCR increased by £2.7 billion to £21.4 billion.
- 2003-04 CGNCR increased by £5.1 billion to £35.3 billion.

The net financing requirements for the two years rose as follows:

- 2002-03 by £2.4 billion to £38.3 billion.
- 2003-04 by £5.0 billion to £54.8 billion.

The increasing financing requirements led to the activation of the following contingencies as published in the DMO provisional remit:

### Gilt sales

Planned gilt sales were increased by £7.4 billion to £47.4 billion, as follows:

- short conventional sales up by £3.0 billion to £16.4 billion;
- medium conventional sales up by £2.4 billion to £13.2 billion;
- long conventional sales up by £2.0 billion to £11.3 billion.

Index-linked gilt sales remained unchanged at £6.5 billion.

A further auction date of 14 August was added to accommodate the increase in conventional sales, taking the total number of planned auctions to 23 (5 each of short, medium and long conventionals and 8 of index-linked).

### Short term debt sales

As provided for in the provisional remit, the increased financing requirement for 2002-03 was accommodated in the level of short-term debt sales. Because Treasury bill sales for 2002-03 were fixed when the size of the final tender of the financial year was announced on 21 March, this increased financing requirement was accommodated by a faster unwind of the DMO's net cash position than had been anticipated in the provisional remit. The unwind increased by £2.5 billion (compared with the forecast in the provisional remit) to £6.7 billion, reducing the forecast level of the DMO cash position at end-March 2003 to £4.5 billion. This adjustment has fed through into lower short-term debt sales (and hence higher gilt sales) in 2003-04. It was envisaged that any subsequent adjustment to the CGNCR outturn for 2002-03 (to be published on 23 April 2003) would be accommodated in the net cash position.

The planned increase in Treasury bill stocks in 2003-04 remained at £3.2 billion, i.e. unchanged from the provisional remit (resulting in a planned stock at end-March 2004 of £18.2 billion).

### Remit contingencies

The DMO remit includes contingencies that can be triggered in the event that the financing requirement changes. These are:

In the event that the financing requirement falls:

- a reduction in planned Treasury bill sales by up to £2.0 billion;
- a reduction in planned conventional gilt sales broadly in proportion to the maturity split in the remit.

In the event that the financing requirement rises:

- an increase in planned Treasury bill sales by up to £2.0 billion;
- an increase in planned conventional gilt sales broadly in proportion to the maturity split in the remit (this may include an ultra-short (2-3 year) maturity gilt).

### Adjustment to reflect the outturn of the 2002-03 CGNCR

The outturn CGNCR for 2002-03 was published on 23 April 2003; at £21.5 billion, it was £0.1 billion higher than the Budget forecast. The higher financing requirement was accommodated by an increase of £0.1 billion in planned Treasury bill sales in 2003-04 taking the planned level at end-March 2004 to £18.3 billion.

The final financing table for 2002-03 and the financing table for 2003-04 (as published in the Budget but including additional £0.1 billion of planned Treasury bill sales added after the publication of the CGNCR outturn on 23 April) is below.

Table 11  
Financing tables 2002-03  
and 2003-04

The financing arithmetic (£ billions)	2002-03 Outturn	2003-04 Budget 2003 revised
<b>CGNCR forecast</b>	<b>21.5</b>	<b>35.3</b>
Gilt redemptions	17.0	21.1
Buy-backs	0.4	0.0
<b>Financing Requirement</b>	<b>38.9</b>	<b>56.4</b>
<i>less</i>		
National Savings and Investments	0.7	1.5
DMO cash deposit at Bank of England	-0.2	0.1
<b>Net Financing Requirement</b>	<b>38.4</b>	<b>54.8</b>
<b>1. Planned gilts sales</b>	<b>26.3</b>	<b>47.4</b>
<i>of which:</i>		
Short conventional	8.4	16.4
Medium conventional	5.6	13.2
Long conventional	7.7	11.3
Index-linked	4.6	6.5
<b>2. Planned net short-term debt sales</b>	<b>12.1</b>	<b>7.4</b>
<i>of which:</i>		
Change in Ways & Means	0.0	0.0
Change in T bill stock	5.3	3.3
Change in DMO net cash position*	6.8	4.1
<b>Short term debt levels</b>		
Ways & Means at end of FY	13.4	13.4
T bill stock at end of FY	15.0	18.3
DMO net cash position**	4.4	0.2

\*excluding changes in the DMO's deposit at the Bank of England

\*\* including the DMO cash deposit at the Bank of England



## Chapter 4: Cash remit

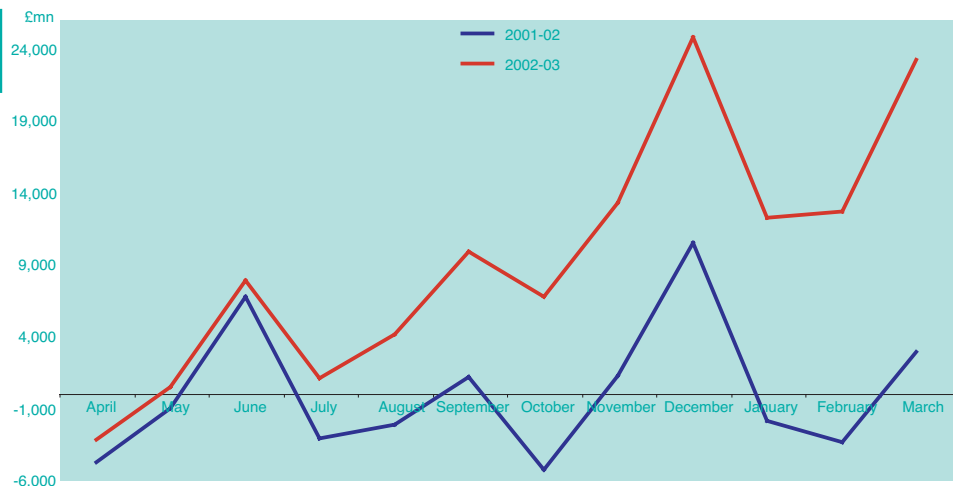
The DMO's main strategic objective in carrying out its cash management role<sup>7</sup> is:

“to offset, through its market operations, the expected cash flow into or out of the National Loans Fund (NLF) on every business day, in a cost-effective manner with due regard for credit risk management.”

The DMO's money market dealers borrow from or lend to the market on each business day to balance the position in the NLF. In order to do so, the DMO receives (from HM Treasury) forecasts for each business day's significant cash flows into and out of central government. Additionally, the DMO requires up-to-date intra-day monitoring of cash flows as they occur.

Over the course of the financial year, the Exchequer's cash flow has a fairly regular pattern associated with the tax receipt and expenditure cycles and also outflows associated with gilt redemptions. Chart 18 below shows the scale of the cumulative monthly CGNCR in 2001-02 and 2002-03. The major change was in the *level* of the overall central government net cash requirement, which was significantly further in deficit in 2002-03.

Chart 18  
Cumulative CGNCR 2001-02  
and 2002-03

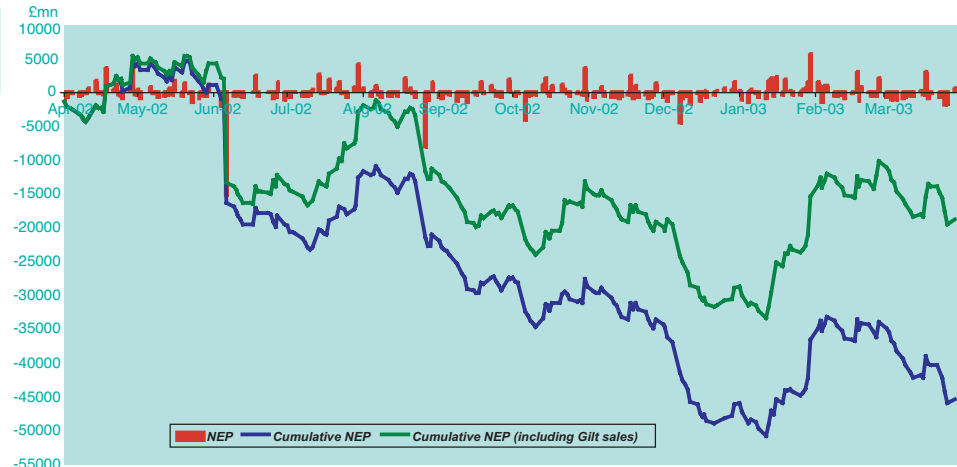


Source: DMO

The cumulative CGNCR for 2002-03 was, as discussed in Chapter 3, £21.5 billion. Gilt sales and other net short term debt sales provide the necessary financing to meet the cash requirement but another aspect of the DMO's cash management operations relates to those periods intra-year when the timing of cash flows requires the Exchequer to raise or place finance on a short-term basis. Overall the scale of cash flows that need to be managed on a daily basis (the net exchequer position) can be seen in Chart 19.

<sup>7</sup> A full description of the DMO's cash management objectives and operations can be found in "Exchequer Cash Management in the United Kingdom: A DMO Handbook", available on the DMO website at: <http://www.dmo.gov.uk/cash/public/cmbook200202.pdf>

**Chart 19**  
**Daily and cumulative Exchequer cash flows 2002-03**

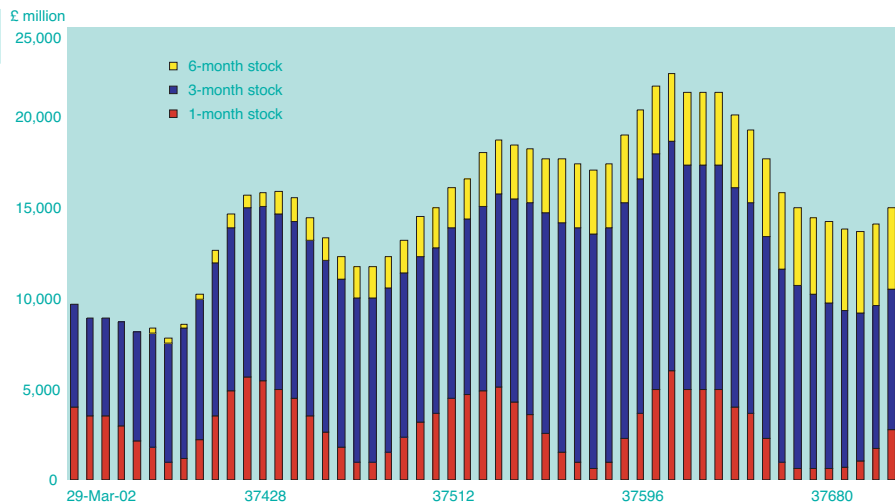


Source: DMO

The increase in the deficit required a general increase in the stock of outstanding Treasury bills in order to help manage seasonal cash outflows. The stock began the financial year at the remit target of £9.7 billion, but following the introduction of tenders for six-month bills and increases in the sizes of tenders of one- and three-month bills, the stock climbed steadily to around £22 billion by late-December 2002.

The stock was reduced to £13.9 billion by early March 2003 reflecting a period of cash inflows in particular those associated with payments of corporation tax. Stocks were built up again in March 2003 ahead of forecast Exchequer cash outflows in April. The Treasury bill stock ended the financial year at it's remit target of £15.0 billion (see Chart 20).

**Chart 20**  
**Treasury bill stocks 2002-03**



Source: DMO

In May 2002 the DMO issued 6-month Treasury bills for the first time. Unlike 1- and 3-month bills which are offered at weekly tenders, 6-month bills are usually offered for sale only once a month.

Additionally, in order to aid the efficient execution of the DMO's cash management operations, on 6 June 2002 HM Treasury issued an additional £3.1 billion nominal of gilts to the DMO to be used as collateral. This was in line with the provisions of the DMO's cash management remit. The issue was designed to be as index-neutral as possible.

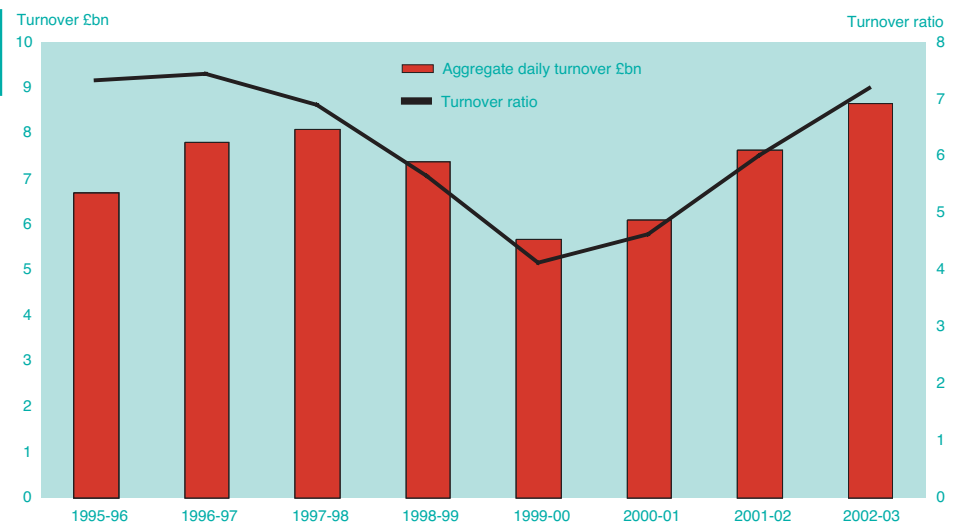
## Chapter 5: Market developments

### Gilts market turnover

Activity in the gilts market increased by almost 14% in 2002-03 compared with the previous year – with average daily turnover reported by the GEMMs to the DMO increasing from £7.63 billion to £8.67 billion. This development has continued the trend of rising market turnover since 1999-2000 (when it fell to an average of £5.68 billion per day). Trading intensity (as measured by the turnover ratio<sup>8</sup>) rose even more significantly in 2002-03, by almost 20% compared to the previous year, from 6.00 to 7.17. See Chart 21.

The increase in turnover is a likely reflection of the increase in primary issuance by the DMO (which increased from £13.7 billion in 2001-02 to £26.3 billion in 2002-03) and the flight to quality associated with geopolitical turbulence and falling equities.

Chart 21  
Gilts market aggregate daily turnover and the turnover ratio

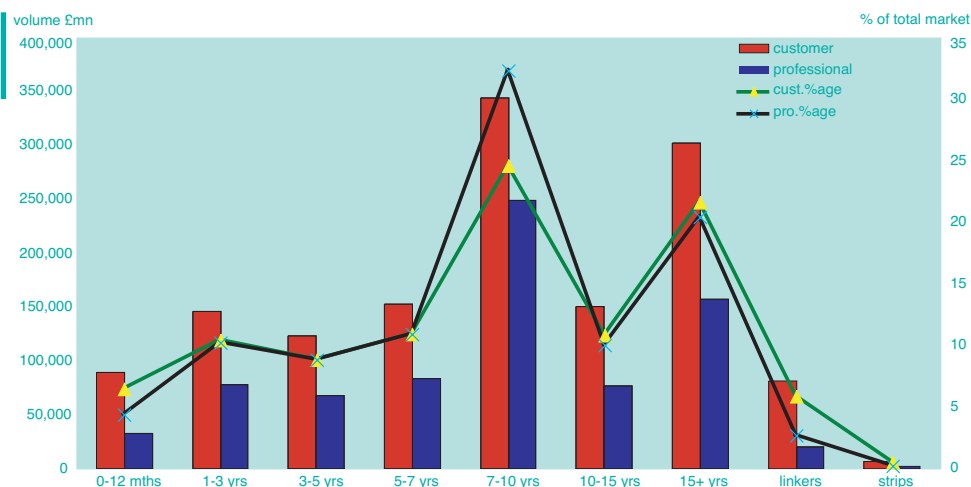


Source: GEMMs

Turnover was heavily weighted toward the medium and longer-term maturities with the 7-10- year maturity band most actively traded reflecting the building-up of a large current coupon 10-year benchmark 5% Treasury 2012 in the year. Long-dated maturities were the second most actively traded sector. See Chart 22.

<sup>8</sup> The turnover ratio for 2002-03 equals the aggregate turnover relative to the market value of the portfolio at the start of the financial year.

Chart 22  
GEMM weekly turnover in gilts  
by maturity band



Source: GEMMs

### Index-linked gilts

On 10 July 2002 the DMO auctioned the first new index-linked stock for 10 years — Index-linked Treasury Stock 2035 (this was then the longest-dated government index-linked stock in issue internationally).

### Treasury bills

Following a consultation exercise with the market, on 17 July 2002 the DMO announced that it will use Treasury bills as collateral in repo and reverse-repo transactions with its cash management counterparties.

The DMO continued to promote the Treasury bill market; in an attempt to enhance interest in Treasury bills further and to encourage development of a secondary market CRESTCo would be prepared to allow Treasury bills to be used as eligible delivery-by-value (DBV) collateral following dematerialisation. This decision followed a positive response from the market to the DMO's proposal and should benefit the gilt repo market by providing increased liquidity as well as widening the appeal of Treasury bills.

### International Securities Identification Numbers (ISINs) and gilts redenomination

On 29 November 2002 the DMO issued a consultation document (jointly with CRESTCo) seeking market views on whether ISINs should change on redenomination in the event that the UK joined the euro. There was insufficient feedback to lead the DMO to alter its view that ISINs should **not** change. This outcome was endorsed by the City Euro Group, chaired by the Bank of England on 3 February 2003. On 4 February 2003 the DMO published its response confirming its intention not to change ISINs on any future redenomination.

### Strippable gilts

A second series of conventional gilt strips dates (7 March / 7 September) was introduced – becoming effective on 2 April 2002 (alongside the existing series of 7 June/ 7 December)<sup>9</sup>. Four stocks (5% Treasury 2008, 5% Treasury 2012, 5% Treasury 2014 and 5% Treasury 2025) had strippable dates on the new series at end-

<sup>9</sup> The official gilt strips facility had been launched on 8 December 1997 at which time there were 7 strippable bonds in issue with a total amount outstanding of just over £80 billion (nominal).

March 2003. 4¼% Treasury 2036 also pays coupons on the 7 March / 7 September cycle, but will only become strippable once at least £5.0 billion (nominal) is in issue (at end-March 2003 it had £2.75 billion (nominal) in issue).

At end-March 2003 there were 14 strippable gilts in the two series with a total amount outstanding of £151.2 billion (accounting for 72.9% of the conventional gilt portfolio). See Table 11. However, at end-March 2003 only £1.5 billion (nominal) or 1.0% of strippable bonds were held in stripped form.

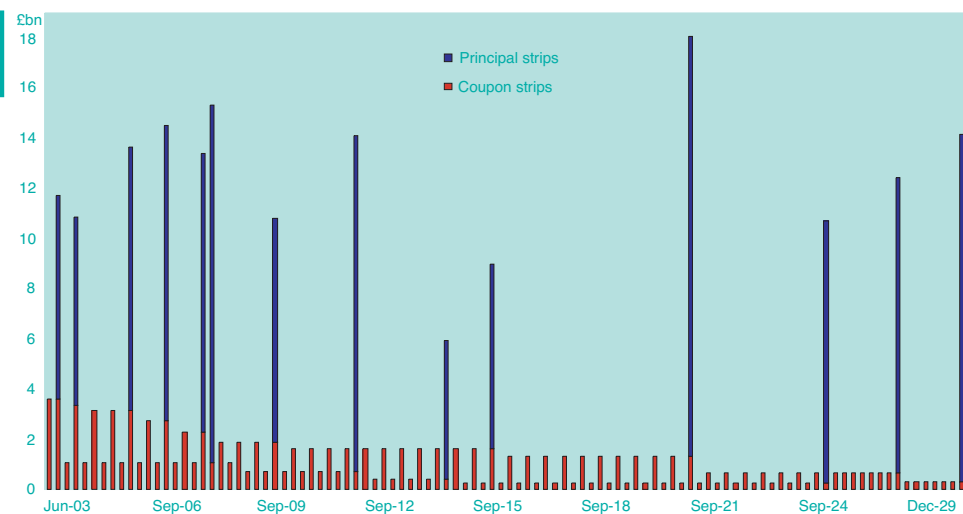
Table 11  
Strippable stocks and amounts held in stripped form (end-March 2003)

	Nominal amount in issue at end-March 2003 (£mn)	Nominal amount held in stripped form at end-March 2003 (£mn)	Percentage held in stripped form at end-March 2003 (%)
<b>Gilt</b>			
<b>7 June/7 December series</b>			
6½% Treasury Stock 2003	8,095	48	0.59
5% Treasury Stock 2004	7,504	7	0.09
8½% Treasury Stock 2005	10,486	128	1.22
7½% Treasury Stock 2006	11,807	202	1.71
7¼% Treasury Stock 2007	11,103	148	1.33
5¾% Treasury Stock 2009	8,937	52	0.58
8% Treasury Stock 2015	7,377	247	3.35
8% Treasury Stock 2021	16,741	263	1.57
6% Treasury Stock 2028	11,756	204	1.74
4¼% Treasury Stock 2032	13,829	197	1.42
	<b>107,635</b>	<b>1,496</b>	<b>1.39</b>
<b>7 March/7 September series</b>			
5% Treasury Stock 2008	14,221	3	0.02
5% Treasury Stock 2012	13,346	5	0.04
5% Treasury Stock 2014	5,550	0	0.00
5% Treasury Stock 2025	10,422	0	0.00
	<b>43,539</b>	<b>8</b>	<b>0.02</b>
<b>TOTAL</b>	<b>151,174</b>	<b>1,504</b>	<b>0.99</b>

Source: DMO

Chart 23 below illustrates the maximum potential size of each coupon and principal strip of the two series at end-March 2003.

Chart 23  
Potential strip cash flows at end-March 2003



Source: DMO

**Standing repo facility**

The DMO operated its standing repo facility only once in 2002-03 (on 25 September 2002 when £230 million (nominal) of 5% Treasury 2004 was created). In contrast, the facility was used 15 times in 2001-02.

**Integration of the Public Works Loan Board (PWLB) and the Commissioners for the Reduction of the National Debt (CRND) into the DMO**

Following a review of the arrangements and future requirements for government debt and asset management HM Treasury announced on 25 March 2002 that the activities of the PWLB and the CRND were to be integrated with the DMO. The reorganisation, which was designed to deliver improved management of the central government balance sheet and to offer a more robust, flexible and innovative service to public sector clients, took effect on 1 July 2002.

The PWLB lends to local authorities for capital purposes. The CRND's principal function is managing the investment portfolios of certain public funds.

Since the merger, PWLB and CRND business processes and the relationship between them and existing DMO processes have been and continue to be reviewed to optimise internal operating efficiencies.

## Chapter 6: Performance Indicators

### Gilt issuance counterfactuals

*Performance measurement of the DMO's financing operations was a feature of the Treasury Select Committee Report on government debt and cash management in 2000. The DMO has been publishing the results of its measurement of auction performance against counterfactuals in its annual review since 2001.*

Hitherto the DMO has compared the results of gilt auctions (in terms of yields achieved) with a number of counterfactuals designed to indicate whether different non-discretionary issuance patterns during the year would have resulted in higher or lower costs of financing.

For conventional issuance the original counterfactual assumes that the same amount of cash was raised but by the sale of equal proportions of three alternative benchmark stocks. For 2002-03 the stocks are assumed to be 5% Treasury 2008, 5% Treasury 2012 and 4¼% Treasury 2032. For index-linked issuance two variants are used

- the yield on the auction stock itself and;
- the average yield of all eligible auction stocks (ie 2009 maturity or longer).

This is the form of counterfactual which the DMO has published in its previous Annual Reviews and which was discussed at the Treasury Sub-committee hearing in 2000. The results are shown in table 13 below.

However, this year the DMO has expanded its performance reporting to cover measurement against additional measures (new counterfactuals A and B below) – along the lines recommended by other contributions to the last Sub-committee Hearing – which compare actual auction yields with the yields on the counterfactual stocks at the close of business on both the day before the auction and the auction day itself. The results are shown in table 14 below.

In measuring actual issuance against such counterfactuals it should be noted that much of the DMO's operations are constrained by its annual remit which fixes dates for auctions as much as a year ahead and the identity of stocks at individual auctions as much as three months ahead. The other key shortcoming of this approach is that it assumes prices and yields are supply inelastic. Some of the shortcomings were noted in the last Sub-committee report; that said however, it is an approach used by other government debt managers.

### Summary of results

- cash weighted average yield of issuance 4.773%
- original counterfactual yield (average) 4.703%
- new counterfactual yield A (day before auction) 4.729%
- new counterfactual yield B (day of auction) 4.742%

### Actual average yield of gilt issuance

The weighted average yield of issuance at the 12 auctions and one tender (on 14 November 2002) in 2002-03 (weighted by cash raised) was 4.773%. See Table 12 below. In tables 12 and 13 real yields are converted to nominal yields using the Fisher identity with a 3% inflation assumption.

Table 12  
Cash weighted average yield of primary issuance in 2002-03

Actual issuance (£mn)	yields		
	cash	real	nom
24-Apr-02	893.2	2.39	5.403
29-May-02	2,195.7		5.18
25-Jun-02	2,986.6		5.08
10-Jul-02	928.9	2.09	5.099
24-Jul-02	2,778.3		4.88
25-Sep-02	817.8	2.04	5.048
22-Oct-02	2,805.9		4.77
24-Oct-02	889.2	2.40	5.414
14-Nov-02	73.1	2.08	5.089
03-Dec-02	2,837.6		4.75
15-Jan-03	2,836.1		4.28
22-Jan-03	960.1	2.03	5.038
26-Feb-03	2,684.8		4.39
26-Mar-03	2,587.6		4.18
	<b>26,274.9</b>		<b>4.773</b>

### Original counterfactual

The actual yield is compared first with the original forms of counterfactual in Table 13 below.

Table 13  
Original form of counterfactual measurement 2002-03

	Actual		Counterfactual 1			Counterfactual 2		
	nominal	real	nominal	real	nominal	real		
Conventional	4,684		Conventional	4,604	Conventional	4,604		
Index-linked	5,198	2,187	Index-linked	5,177	2,167	Index-link	5.168	2.158
Weighted ave	<b>4.773</b>		Weighted ave	<b>4,704</b>		Weighted ave	<b>4.702</b>	

The average yield of actual issuance under-performed both counterfactuals by approximately 7 basis points reflecting the relative weight (in particular of conventional issuance) in the earlier parts of the financial year when yields were higher. Only the last two auctions of the 2008 stock in the last quarter of the financial year benefited from the sharp falls in short yields that had occurred since the second quarter.

### New counterfactual

The actual yield is next compared with cash weighted average yields of counterfactual issuance measured at two points – close of the day preceding, and on the day of, the auctions. This approach, because it focuses on the immediate



period around the auctions, removes some of the distortions caused by timing effects if average yields over a longer period are used (i.e. if an auction was held at the start of a period during which yields fell or rose sharply it would either significantly under or over perform relative to the counterfactual even if it had performed well relative to the market at the time of the auction).

This calculation uses the same conventional counterfactual (average yields of 5% Treasury 2008, 5% Treasury 2012 and 4¼% Treasury 2032) but only one index-linked counterfactual – the average yield of those index-linked stocks eligible to be auctioned. The results are shown in the table below. Actual issuance underperformed these counterfactuals by 3bp and 4½bp, a better performance than relative to the earlier counterfactual. See Table 14.

Table 14  
Results of new counterfactuals

Cash weighted average issuance yields	%	Relative bp
<b>Actual</b>	<b>4.773</b>	
Counterfactual A - cob day before auction	4.729	-4.4
Counterfactual B - cob day of auction	4.742	-3.1

#### Auction concession analysis

Table 15 below compares the yields achieved at outright gilt auctions in 2002-03 (and the tender on 14 November 2002) with the yields on the relevant stocks at the close of business on the night before the auction and the close of business on the day of the auction itself. These are used to construct weighted average yields of issuance which illustrate the extent of the yield movements ahead of and after auctions. In 2002-03, yields rose on average by 3.7bp ahead of auctions and fell by 2.2bp afterwards.

Table 15  
Yield movements around gilt auctions

Auction date (& tender 14 Nov)	Stock	Yield cob day before	Auction yield	Yield cob auction day
		nom	nom	nom
24-Apr-02	IL 2020	5.34	<b>5.40</b>	5.39
29-May-02	5% 2025	5.16	<b>5.18</b>	5.16
25-Jun-02	5% 2008	5.01	<b>5.08</b>	5.10
10-Jul-02	IL 2035	5.05	<b>5.10</b>	5.13
24-Jul-02	5% 2014	4.81	<b>4.88</b>	4.75
25-Sep-02	IL 2035	4.90	<b>5.05</b>	5.01
22-Oct-02	5% 2014	4.72	<b>4.77</b>	4.78
24-Oct-02	IL 2013	5.46	<b>5.41</b>	5.41
14-Nov-02	IL 2035	5.09	<b>5.09</b>	5.13
03-Dec-02	5% 2025	4.73	<b>4.75</b>	4.71
15-Jan-03	5% 2008	4.26	<b>4.28</b>	4.27
22-Jan-03	IL 2020	5.06	<b>5.04</b>	5.05
26-Feb-03	4¼% 2036	4.38	<b>4.39</b>	4.38
26-Mar-03	5% 2008	4.14	<b>4.18</b>	4.14
<b>cash weighted ave yield</b>		4.736	<b>4.773</b>	4.751

### Counterfactual gilt portfolio

Table 16 below compares some key features of the actual portfolio at 31 March 2003 under three hypothetical scenarios

- the conversion offer did not take place;
- two counterfactual issuance scenarios (one assuming the conversion takes place; the second, that it doesn't) under which the same nominal amount of stock was sold at each of the conventional auctions but split equally between 5% Treasury 2008, 5% Treasury 2012 and 4¼% Treasury 2032.

Table 16  
Gilt portfolio at 31 March 2003  
(alternative scenarios)

Gilt portfolio: 31 March 2003 (alternative scenarios)				
	Nominal amount outstanding* (£mn)	Market value (£mn)	Maturity (years)	Duration (years) conventional
<b>Actual</b>	<b>292.71</b>	<b>332.31</b>	<b>11.22</b>	<b>6.89</b>
No conversion	291.60	332.27	11.23	6.89
Counterfactual a	292.61	331.80	11.21	6.88
Counterfactual b	291.50	331.76	11.23	6.88

\*inc index-linked uplift

Counterfactual a: assumes conversion offer takes place

Counterfactual b: assumes conversion offer does not take place

The actual portfolio was some £1.2 billion larger than would have been the case under the counterfactual scenario, principally because of the impact of the conversion offer under which £4.8 billion (nominal) of 9% Treasury 2008 was cancelled and £5.9 billion of 5% Treasury 2008 created.

### Benchmark premia

Chart 24 below shows the spread of 5% Treasury 2008 relative to two older stocks next to it on the curve (7¼% Treasury 2007 and 5¾% Treasury 2009) since June 2002 when 5% Treasury 2008 was first issued. All stocks started the period yielding 5.04%. By the end of the financial year 7¼% Treasury 2007 was yielding 3bp less than 5% Treasury 2008 and 5¾% Treasury 2009 15bp more. So the new stock outperformed against the longer 2009 maturity but fell back against the 2007 maturity. These movements suggest that yield curve movements (with shorter dated stocks out-performing) have had a more important impact on relative yields than effects of any benchmark premia in 2002-03.

**Chart 24**  
**Yield spreads between 5% 2008**  
**and 7¼% 2007 and 5¾% 2009**



**Treasury bill issuance**

Table 17 and charts 25-27 below measure the performance of the Treasury bill tenders over the year by comparing the average yield at the tenders with the average GC fixing on the day of settlement of the tenders. Treasury bill issuance was more cost effective than GC (bid side) at all maturities, by 2.8bp on the one-month tenders, 1.9bp on the three-month tenders and 0.3bp on the six-month tenders. In this respect, therefore Treasury bill tenders provided cost-effective funding relative to secured financing at the same maturity.

**Table 17**  
**Average Treasury bill tender**  
**yields relative to GC repo rates**

	1 month	3 month	6 month
<b>Average tender yield</b>	<b>3.8080</b>	<b>3.8269</b>	<b>3.8389</b>
<b>Average GC repo rate</b>	<b>3.8362</b>	<b>3.8463</b>	<b>3.8417</b>
<b>Tender outperformance (bp)</b>	<b>-2.81</b>	<b>-1.95</b>	<b>-0.27</b>

**Chart 25**  
**One-month Treasury bill tender**  
**yields compare to GC repo**

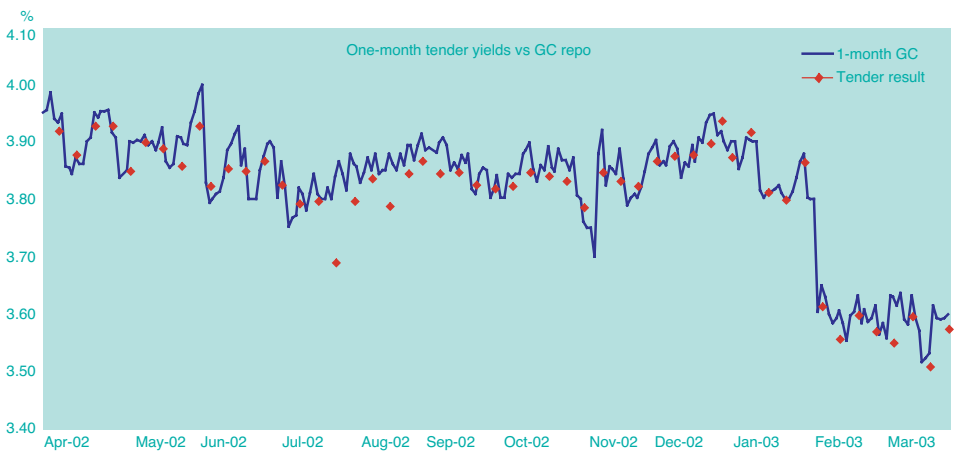


Chart 26  
Three-month Treasury bill  
tender yields compared to  
GC repo

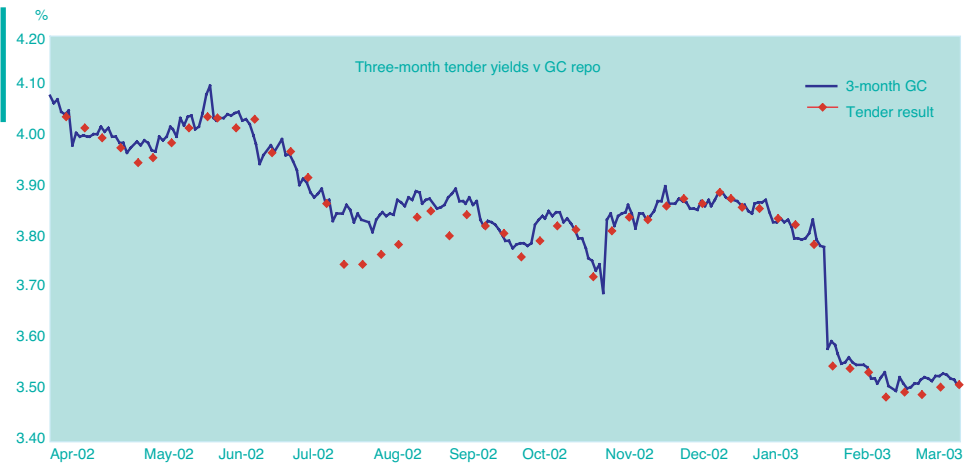
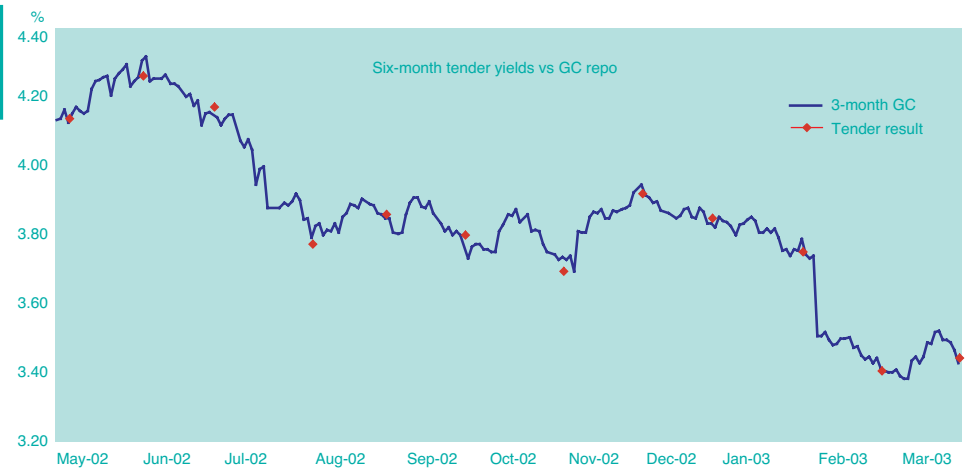


Chart 27  
Six month Treasury bills  
compared to GC repo



## Chapter 7: The DMO

The DMO was established on 1 April 1998, with the aim ‘... to carry out the Government’s debt management policy of minimising financing costs over the longer term, taking account of risk, and to manage the aggregate cash needs of the Exchequer in the most cost effective way’.

In institutional terms, the DMO is legally and constitutionally part of HM Treasury, but, as an executive agency, it operates at arm’s length from Ministers. The Chancellor of the Exchequer determines the policy and operational framework within which the DMO operates, but delegates to the Chief Executive operational decisions on debt and cash management, and day-to-day management of the office.

The separate responsibilities of the Chancellor and other Treasury Ministers, the Permanent Secretary to the Treasury and the DMO’s Chief Executive are set out in a published Framework Document (available on the DMO website at [www.dmo.gov.uk](http://www.dmo.gov.uk)), which also sets out the DMO’s objectives and its Chief Executive’s lines of accountability. The Chief Executive is accountable to Parliament for the DMO’s performance and operations, both in respect of its administrative expenditure and the Debt Management Account.

As noted in Chapter 5, on 1 July 2002 the operations of PWLB, and the CRND<sup>10</sup> were integrated with the DMO, and the relevant staff relocated to the DMO’s premises. The integration increased the number of DMO employees to 81.

### Business planning

The DMO publishes an annual business plan<sup>11</sup>. The plan sets out the DMO’s targets and objectives for the year ahead, and the strategies for achieving them. It also reviews the immediately preceding year. The starting point of the DMO’s business plan is the strategic objectives given by the Chancellor of the Exchequer to the DMO and set out in the Framework Document.

### Organisation and resources

The DMO is organised flexibly to ensure that resources are available as necessary for the respective tasks.

There are two main business areas in the DMO: policy and markets, and operations and resources. These areas are in turn split into a number of teams across which there is substantial cross-team working to ensure that both policy and operational concerns are adequately met; that the relevant skills are brought to bear on tasks or problems; and that important operations are adequately resourced. The DMO’s Managing Committee considers all major operational and management decisions. The Committee comprises the Chief Executive, together with the heads of the two business areas and of the main functional teams.

<sup>10</sup> The activities of the CRND were previously administered by the National Debt Office (NDO).

<sup>11</sup> The DMO Business Plan for 2003-04 was published in April 2003 – it is available from the DMO or the web site at [www.dmo.gov.uk/publication/busplan03.pdf](http://www.dmo.gov.uk/publication/busplan03.pdf)

The Managing Committee is guided by an Advisory Board which comprises the Chief Executive, the Deputy Chief Executive (and head of policy and markets) and the Head of Operations and Resources, together with non-executive members from outside the DMO which in 2002-03 were: James Barclay, Colin Price and, from the Treasury, Paul Mills. James Barclay is also Chairman of the DMO's Audit Committee.

Within the DMO most business issues are considered by one of three cross-cutting committees: on debt strategy; cash strategy; and investment. They are supported by a Credit and Risk Committee, which also reports to the Advisory Board.

The DMO's resource requirement is largely driven by the need to meet its responsibilities, as well as the wider need within Government to maintain taut administrative budgets. Its budget, which is financed as part of the budget for HM Treasury as a whole, has to reflect a need for both skills and systems that are not available elsewhere within Government. The DMO's net operating costs in 2002-03 were £7.8 million, £0.7 million more than in 2001-02.

The DMO's debt and cash trading operations are accounted for separately from its administrative budget, through the Debt Management Account (DMA).

## ANNEX A: Gilts in issue at 31 March 2003

Gilts in issue at 31 March 2003			(£bn nominal)		
Total amount in issue (inc IL uplift) £mn			292.71		
Conventional gilts	Redemption date	Dividend dates	Amount in issue (£mn nom)	Amount held in stripped form at 31 Mar 2003	Central Govt holdings (DMO & CRND) at 31 Mar 2003
<b>Shorts: (maturity up to 7 years)</b>					
3½% Funding 1999/2004*	06-Jun-03	14 Jan/Jul	561	-	55
8% Treasury 2003	10-Jun-03	10 Jun/Dec	7,102	-	522
10% Treasury 2003	8-Sep-03	8 Sep/Mar	1,872	-	107
6½% Treasury 2003	7-Dec-03	7 Jun/Dec	8,095	48	316
5% Treasury 2004	7-Jun-04	7 Jun/Dec	7,504	7	465
6¾% Treasury 2004	26-Nov-04	26 May/Nov	6,597	-	477
9½% Conversion 2005	18-Apr-05	18 Apr/Oct	4,469	-	95
8½% Treasury 2005	7-Dec-05	7 Jun/Dec	10,486	128	306
7¾% Treasury 2006	8-Sep-06	8 Mar/Sep	3,995	-	432
7½% Treasury 2006	7-Dec-06	7 Jun/Dec	11,807	202	275
8½% Treasury 2007	16-Jul-07	16 Jan/Jul	4,638	-	362
7¼% Treasury 2007	7-Dec-07	7 Jun/Dec	11,103	148	241
5% Treasury 2008	7-Mar-08	7 Mar/Sep	14,221	3	140
5½% Treasury 2008/2012*	10-Sep-08	10-Mar/Sep	1,026	-	182
5¾% Treasury 2009	07-Dec-09	7 Jun/Dec	8,937	52	357
<b>Mediums: (maturity 7 to 15 years)</b>					
6¼% Treasury 2010	25-Nov-10	25 May/Nov	4,958	-	477
9% Conversion 2011	12-Jul-11	12 Jan/Jul	5,396	-	205
7¾% Treasury 2012/2015*	26-Jan-12	26 Jan/Jul	805	-	338
5% Treasury 2012	7-Mar-12	7 Mar/ Sep	13,346	5	235
8% Treasury 2013	27-Sep-13	27 Mar/Sep	6,181	-	386
5% Treasury 2014	07-Sep-14	7 Mar/Sep	5,550	0	51
8% Treasury 2015	7-Dec-15	7 Jun/Dec	7,377	247	172
8¾% Treasury 2017	25-Aug-17	25 Feb/Aug	7,751	-	380
<b>Longs: (maturity over 15 years)</b>					
8% Treasury 2021	7-Jun-21	7 Jun/Dec	16,741	263	346
5% Treasury 2025	7-Mar-25	7 Mar/Sep	10,422	0	177
6% Treasury 2028	7-Dec-28	7 Jun/Dec	11,756	204	309
4¼% Treasury 2032	7-Jun-32	7 Jun/Dec	13,829	197	251
4¼% Treasury 2036	7-Mar-36	7 Mar/Sep	2,750	-	1

\*It is assumed that double-dated gilts (which have not been called) currently trading above par will be redeemed at the first maturity date.

Index-linked gilts	Redemption date	Dividend dates	Amount in issue (£mn nom)	Nominal including inflation uplift	Central Govt holdings (DMO & CRND) at 31 Mar 2003
2½% I-L Treasury 2003	20-May-03	20 May/Nov	2,734	6,154	268
4⅞% I-L Treasury 2004	21-Oct-04	21 Apr/Oct	1,338	1,736	38
2% I-L Treasury 2006	19-Jul-06	19 Jan/Jul	2,037	5,157	37
2½% I-L Treasury 2009	20-May-09	20 May/Nov	2,673	5,970	74
2½% I-L Treasury 2011	23-Aug-11	23 Feb/Aug	3,942	9,301	70
2½% I-L Treasury 2013	16-Aug-13	16 Feb/Aug	5,172	10,199	104
2½% I-L Treasury 2016	26-Jul-16	26 Jan/Jul	6,055	13,049	169
2½% I-L Treasury 2020	16-Apr-20	16 Apr/Oct	5,093	10,798	68
2½% I-L Treasury 2024	17 Jul-24	17 Jan/Jul	5,401	9,727	111
4⅞% I-L Treasury 2030	22-Jul-30	22 Jan/Jul	3,171	4,129	71
2% I-L Treasury 2035	26-Jan-35	26 Jan/Jul	1,850	1,875	0

Undated gilts (non-rump)	Redemption date	Dividend dates	Amount in issue	Central Govt holdings (DMO & CRND) at 31 Mar 2003
2½% Treasury	Undated	1 Apr/Oct	493	22
3½% War	Undated	1 Jun/Dec	1,939	30

Rump gilts	Redemption date	Dividend dates	Amount in issue	Central Govt holdings (DMO & CRND) at 31 Mar 2003
9¾% Conversion 2003	7-May-03	7 May/Nov	12	10
12½% Treasury 2003/2005*	21-Nov-03	21 May/Nov	152	54
13½% Treasury 2004/2008*	26-Mar-04	26 Mar/Sep	96	25
10% Treasury 2004	18-May-04	18 May/Nov	20	6
9½% Conversion 2004	25-Oct-04	25 Apr/Oct	307	144
10½% Exchequer 2005	20-Sep-05	20 Mar/Sep	24	16
9¾% Conversion 2006	15-Nov-06	15 May/Nov	6	3
9% Conversion 2008	13-Oct-08	13 Apr/Oct	687	91
8% Treasury 2009	25-Sep-09	25 Mar/Sep	393	99
9% Treasury 2012	6-Aug-12	6 Feb/Aug	403	154
12% Exchequer 2013/2017*	12-Dec-13	12 Jun/Dec	58	9
4% Consolidated	Undated	1 Feb/Aug	358	37
2½% Consolidated	Undated	5 Jan/Apr/Jul/Oct	272	47
3½% Conversion	Undated	1 Apr/Oct	93	73
3% Treasury	Undated	5 Apr/Oct	53	6
2½% Annuities	Undated	5 Jan/Apr/Jul/Oct	3	0.4
2¼% Annuities	Undated	5 Jan/Apr/Jul/Oct	1	0.4

\*It is assumed that double-dated gilts (which have not been called) currently trading above par will be redeemed at the first maturity date



## ANNEX B: List of GEMMs\*<sup>12</sup> and Inter Dealer Brokers as at 31 March 2003

<p><b>ABN Amro Bank NV</b> 250 Bishopsgate London EC2M 4AA</p>	<p>Web site <a href="http://www.abnamro.com">www.abnamro.com</a></p>
<p><b>Barclays Capital*</b> 5 The North Colonnade Canary Wharf London E14 4BB</p>	<p><a href="http://www.barcap.com">www.barcap.com</a></p>
<p><b>Citigroup Global Markets Limited</b> Citigroup Centre 33 Canada Square London E14 5LB</p>	<p><a href="http://www.citigroup.com">www.citigroup.com</a></p>
<p><b>CS First Boston Limited*</b> One Cabot Square London E14 4QJ</p>	<p><a href="http://www.csfb.com">www.csfb.com</a></p>
<p><b>Deutsche Bank AG (London Branch)</b> Winchester House 1 Great Winchester Street London EC2N 2DB</p>	<p><a href="http://research.gm.db.com">research.gm.db.com</a></p>
<p><b>Dresdner Bank AG* (London Branch)</b> PO Box 18075 Riverbank House 2 Swan Lane London EC4R 3UX</p>	<p><a href="http://www.drkw.com">www.drkw.com</a></p>
<p><b>Goldman Sachs International Limited</b> Peterborough Court 133 Fleet Street London EC4A 2BB</p>	<p><a href="http://www.gs.com">www.gs.com</a></p>
<p><b>HSBC Bank PLC*</b> 8 Canada Square London E14 5HQ</p>	<p><a href="http://www.hsbcgroup.com">www.hsbcgroup.com</a></p>
<p><b>JP Morgan Securities Limited</b> 125 London Wall London EC2Y 5AJ</p>	<p><a href="http://www.jpmorgan.com">www.jpmorgan.com</a></p>

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<sup>12</sup> \*Indicates that the GEMM is also a recognised index-linked gilt market-maker.

**Lehman Brothers International (Europe)\***[www.lehman.com](http://www.lehman.com)

1 Broadgate  
London EC2M 7HA

**Merrill Lynch International\***[www.ml.com](http://www.ml.com)

Merrill Lynch Financial Centre  
2 King Edward Street  
London EC1A 1HQ

**Morgan Stanley & Co. International Limited\***[www.msdl.com](http://www.msdl.com)

20 Cabot Square  
Canary Wharf  
London E14 4QW

**Royal Bank of Canada Europe Limited\***[www.royalbank.com](http://www.royalbank.com)

71 Queen Victoria Street  
London EC4V 3VDE

**Royal Bank of Scotland PLC\***[www.rbsmarkets.com](http://www.rbsmarkets.com)

135 Bishopsgate  
London EC2M 3UR

**UBS Investment Bank\***[www.wdr.com](http://www.wdr.com)

100 Liverpool Street  
London EC2M 2RH

**Winterflood Gilts Limited\***[www.wins.co.uk](http://www.wins.co.uk)

The Atrium Building  
Cannon Bridge  
25 Dowgate Hill  
London EC4R 2GA

**Inter Dealer Brokers****BrokerTec Europe Limited**[www.btec.com](http://www.btec.com)

38 Finsbury Square  
London EC2A 1PX

**Cantor Fitzgerald International**[www.cantor.com](http://www.cantor.com)

One America Square  
London  
EC3N 2LS

**Dowgate**[www.ksbb.com](http://www.ksbb.com)

Old Mutual Place  
2 Lambeth Hill  
London EC4V 4GG

**Garban-Intercapital  
Management Services Limited**

Park House  
16 Finsbury Circus  
London EC3M 7UR

[www.garbanintercapital.com](http://www.garbanintercapital.com)

## ANNEX C: Treasury bill tender results

### One-month bills

Date	Maturity date	Size £mn	Cover	Avg yield %	Avg price £	Yield tail (bp)
5-Apr-02	7-May-02	1000	8.10	3.9200	99.6895	0
12-Apr-02	13-May-02	500	9.44	3.8800	99.7032	0
19-Apr-02	20-May-02	150	7.88	3.9300	99.6994	0
26-Apr-02	27-May-02	150	9.24	3.9300	99.6995	0
3-May-02	5-Jun-02	150	8.71	3.8496	99.6950	0
10-May-02	10-Jun-02	150	8.44	3.9000	99.7017	0
17-May-02	17-Jun-02	700	5.60	3.8892	99.7025	1
24-May-02	24-Jun-02	1200	6.81	3.8590	99.7048	0
31-May-02	1-Jul-02	1500	5.96	3.9292	99.7208	0
7-Jun-02	8-Jul-02	1500	4.47	3.8248	99.7074	1
14-Jun-02	15-Jul-02	1500	5.05	3.8540	99.7052	0
21-Jun-02	22-Jul-02	1000	4.72	3.8512	99.7055	1
28-Jun-02	29-Jul-02	1000	5.47	3.8680	99.7042	0
5-Jul-02	5-Aug-02	1000	4.43	3.8261	99.7073	2
12-Jul-02	12-Aug-02	500	6.62	3.7947	99.7097	1
19-Jul-02	19-Aug-02	150	10.00	3.7983	99.7095	1
26-Jul-02	27-Aug-02	150	7.80	3.6900	99.7077	0
2-Aug-02	2-Sep-02	150	8.47	3.7983	99.7095	5
9-Aug-02	9-Sep-02	500	5.51	3.8375	99.7065	0
16-Aug-02	16-Sep-02	700	6.17	3.7900	99.7101	0
23-Aug-02	23-Sep-02	1000	6.00	3.8468	99.7163	0
30-Aug-02	30-Sep-02	1000	5.59	3.8685	99.7041	0
6-Sep-02	7-Oct-02	1000	7.40	3.8460	99.7058	2
13-Sep-02	14-Oct-02	1500	6.52	3.8482	99.7057	0
20-Sep-02	21-Oct-02	1200	5.12	3.8258	99.7074	1
27-Sep-02	28-Oct-02	1200	5.80	3.8196	99.7078	1
4-Oct-02	4-Nov-02	1200	4.32	3.8249	99.7074	3
11-Oct-02	11-Nov-02	700	4.80	3.8493	99.7056	0
18-Oct-02	18-Nov-02	500	4.79	3.8426	99.7061	0
25-Oct-02	25-Nov-02	150	8.42	3.8322	99.7069	1
1-Nov-02	2-Dec-02	150	7.95	3.7879	99.7103	0
8-Nov-02	9-Dec-02	150	5.90	3.8476	99.7057	0
15-Nov-02	16-Dec-02	150	8.23	3.8324	99.7069	2
22-Nov-02	23-Dec-02	500	6.89	3.8248	99.7075	1
29-Nov-02	30-Dec-02	1500	3.69	3.8689	99.7041	0
6-Dec-02	6-Jan-03	1500	4.52	3.8761	99.7035	0
13-Dec-02	13-Jan-03	1500	4.53	3.8793	99.7033	0
20-Dec-02	20-Jan-03	1500	4.27	3.8978	99.7019	0
27-Dec-02	27-Jan-03	500	3.19	3.9384	99.6988	0
3-Jan-03	3-Feb-03	1500	6.86	3.8753	99.7036	0
10-Jan-03	10-Feb-03	1500	5.63	3.9188	99.7003	1
17-Jan-03	17-Feb-03	500	7.56	3.8135	99.7083	1
24-Jan-03	24-Feb-03	150	7.48	3.7994	99.7094	0
31-Jan-03	3-Mar-03	150	6.45	3.8654	99.7044	0
7-Feb-03	10-Mar-03	150	8.03	3.6134	99.7236	1
14-Feb-03	17-Mar-03	150	8.83	3.5567	99.7279	1
21-Feb-03	24-Mar-03	150	7.02	3.5981	99.7247	0
28-Feb-03	31-Mar-03	150	7.30	3.5707	99.7268	1
7-Mar-03	7-Apr-03	250	6.57	3.5500	99.7248	0
14-Mar-03	14-Apr-03	500	6.79	3.5958	99.7249	0
21-Mar-03	22-Apr-03	800	6.59	3.5083	99.7220	0
28-Mar-03	28-Apr-03	1200	5.30	3.5756	99.7265	0

## Three-month bills

Date	Maturity date	Size £mn	Cover	Avg yield %	Avg price £	Yield tail (bp)
5-Apr-02	8-Jul-02	600	7.35	4.0408	99.0026	1
12-Apr-02	15-Jul-02	700	7.35	4.0186	99.0080	0
19-Apr-02	22-Jul-02	700	7.35	3.9964	99.0134	1
26-Apr-02	29-Jul-02	700	9.29	3.9800	99.0175	0
3-May-02	5-Aug-02	700	5.05	3.9500	99.0354	0
10-May-02	12-Aug-02	1000	6.20	3.9605	99.0222	1
17-May-02	19-Aug-02	1000	5.17	3.9893	99.0152	1
24-May-02	27-Aug-02	1000	6.69	4.0182	98.9973	1
31-May-02	2-Sep-02	1000	7.18	4.0404	99.0244	1
7-Jun-02	9-Sep-02	1000	4.90	4.0393	99.0029	1
14-Jun-02	16-Sep-02	700	6.07	4.0201	99.0076	1
21-Jun-02	23-Sep-02	700	5.04	4.0369	99.0035	1
28-Jun-02	30-Sep-02	500	6.75	3.9700	99.0199	0
5-Jul-02	7 Oct-02	500	5.30	3.9720	99.0194	1
12-Jul-02	14-Oct-02	500	7.25	3.9200	99.0321	0
19-Jul-02	21-Oct-02	500	7.95	3.8699	99.0444	0
26-Jul-02	28-Oct-02	500	7.58	3.7500	99.0737	0
2-Aug-02	4-Nov-02	500	6.94	3.7500	99.0737	0
9-Aug-02	11-Nov-02	700	7.00	3.7699	99.0689	0
16-Aug-02	18-Nov-02	1000	6.09	3.7897	99.0640	0
23-Aug-02	25-Nov-02	1000	5.98	3.8437	99.0611	1
30-Aug-02	2-Dec-02	1000	5.68	3.8561	99.0478	0
6-Sep-02	9-Dec-02	1000	9.04	3.8050	99.0603	1
13-Sep-02	16-Dec-02	1000	7.34	3.8487	99.0496	0
20-Sep-02	23-Dec-02	1000	6.78	3.8249	99.0554	1
27-Sep-02	30-Dec-02	1000	7.26	3.8100	99.0590	0
4-Oct-02	6-Jan-03	1000	5.95	3.7656	99.0699	3
11-Oct-02	13 Jan-03	1000	6.92	3.7957	99.0626	1
18-Oct-02	20-Jan-03	1000	6.36	3.8260	99.0551	1
25-Oct-02	27-Jan-03	1000	6.28	3.8193	99.0568	0
1-Nov-02	3 Feb-03	1000	7.05	3.7250	99.0798	0
8-Nov-02	10-Feb-03	1000	5.70	3.8155	99.0577	1
15-Nov-02	17-Feb-03	1000	7.45	3.8425	99.0511	0
22-Nov-02	24-Feb-03	1000	7.81	3.8371	99.0524	0
29-Nov-02	3-Mar-03	1000	6.24	3.8638	99.0459	1
6-Dec-02	10-Mar-03	1000	6.93	3.8419	99.0512	1
13-Dec-02	17-Mar-03	1000	4.67	3.8699	99.0444	0
20-Dec-02	24-Mar-03	700	4.57	3.8926	99.0389	1
27-Dec-02	31-Mar-03	700	3.64	3.8799	99.0420	2
3-Jan-03	7-Apr-03	1000	6.69	3.8617	99.0464	1
10-Jan-03	14-Apr-03	1000	7.36	3.8605	99.0467	1
17-Jan-03	22-Apr-03	750	8.69	3.8397	99.0417	1
24-Jan-03	28-Apr-03	500	7.60	3.8282	99.0546	1
31-Jan-03	6-May-03	500	7.68	3.7898	99.0538	0
7-Feb-03	12-May-03	500	9.48	3.5494	99.1229	0
14-Feb-03	19-May-03	500	7.75	3.5450	99.1239	1
21-Feb-03	27-May-03	500	7.59	3.5374	99.1163	1
28-Feb-03	2-Jun-03	500	6.83	3.4890	99.1376	0
7-Mar-03	9-Jun-03	500	8.59	3.4980	99.1354	0
14-Mar-03	16-Jun-03	500	6.60	3.4918	99.1370	0
21-Mar-03	23-Jun-03	500	7.30	3.5079	99.1330	0
28-Mar-03	30-Jun-03	500	7.45	3.5119	99.1320	1

**Six-month bills**

<b>Date</b>	<b>Maturity date</b>	<b>Size £mn</b>	<b>Cover</b>	<b>Avg yield %</b>	<b>Avg price £</b>	<b>Yield tail (bp)</b>
3-May-02	4-Nov-02	250	7.28	4.1380	97.9893	1
31-May-02	2-Dec-02	500	6.77	4.2600	97.9424	0
28-Jun-02	30-Dec-02	500	5.57	4.1700	97.9631	0
2-Aug-02	3-Feb-03	500	7.20	3.7750	98.1524	1
30-Aug-02	3-Mar-03	500	5.90	3.8588	98.1122	0
27-Sep-02	31-Mar-03	750	6.79	3.8017	98.1396	2
1-Nov-02	6-May-03	750	6.73	3.6950	98.1811	0
29-Nov-02	2-Jun-03	750	6.41	3.9197	98.0830	0
27-Dec-02	30-Jun-03	750	3.17	3.8500	98.1164	0
31-Jan-03	4-Aug-03	750	6.36	3.7500	98.1645	0
28-Feb-03	1-Sep-03	750	6.29	3.4059	98.3301	0
28-Mar-03	29-Sep-03	750	7.29	3.4429	98.3123	1