Debt and reserves management report 2007-08

March 2007

HM TREASURY

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Contents

Foreword by the Economic Secretary to the Treasury

This is the fourteenth report outlining the Government's debt management activities. It also includes details of the management of the Official Reserves by the Bank of England.

Interest rates at long maturities fell to very low levels last year. They have risen more recently but, nonetheless, remain at close to historic lows, partly reflecting global factors. The UK yield curve has been consistently inverted for the better part of a decade, suggesting a sustained UK-specific influence on long-term interest rates over and above that exerted by global influences. One important explanation for this is the rising demand from defined benefit pension schemes for long-conventional and index-linked gilts in order to match pension liabilities. The Government has listened carefully and responded to this strong demand.

In accordance with meeting the Government's objective to minimise long-term cost subject to risk, and in response to investor demand, debt issuance has been skewed towards long-conventional and index-linked gilts in 2006-07 with these gilts set to account for a forecast 68 per cent of total gross gilt issuance. Gross gilt issuance in 2006-07 is forecast to be some £62.5 billion. It is to the credit of the UK Debt Management Office (DMO), the Gilt-edged Market Makers (GEMMs) and the gilt markets in general that the operational demands of the programme have been met successfully. A record number of auctions (36) took place in 2006-07 and these have been conducted efficiently by the DMO.

Our annual consultation in January 2007 with GEMMs and investors showed clear support for skewing issuance towards long-conventional and index-linked gilts. Underlying conditions, notably the shape of the yield curve and strong demand for long-conventional and index-linked gilts, are very similar to a year ago. Reflecting this, our policy of skewing issuance towards long-conventional and index-linked gilts will continue in 2007-08. These gilts will account for a forecast 66 per cent of gross gilt issuance.

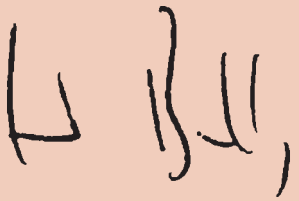
Net gilt issuance in 2007-08 is projected to be £29.2 billion and gross issuance is projected to be £58.4 billion. The structure of issuance and the planned gilt auction calendar reflect the Government's commitment to a well-functioning gilt market as well as its aim to be responsive to investor demand and the market environment.

In the medium term, consistent with the debt management policy objective of minimising long-term costs taking into account risk, our annual decisions about gilt issuance will continue to be informed by a number of factors including: the size of the annual financing requirement; supply-side considerations including the Government's risk preferences; investors' demand for gilts; the shape of the yield curve; and other financial market conditions. It is likely that strong demand for long-conventional and index-linked gilts will persist in the medium term and continue to influence the shape of the yield curve. Should that be the case, our policy of skewing issuance towards long maturities would continue.

In the retail sector, National Savings & Investments (NS&I) sold more than £15.4 billion of retail products, bringing its net financing contribution to an estimated £5.5 billion in 2006-07. Of the commitment in its five year plan, published in 2003-04, to raise £15.0 billion, it has now raised £15.8 billion. I have decided, that in the next five years, NS&I should pursue a strategy of cost effectiveness rather than growth in net finance raised. This strategy will raise £2.8 billion in 2007-08 and £13.0 billion over five years while achieving £1.6 billion of cost savings to the Government overall. The 50th anniversary of the launch of Premium Bonds fell on 1 November 2006. To mark the occasion, NS&I distributed five prizes of £1 million (instead of the normal two) at the December 2006 draw, and will distribute another five in the June 2007 draw.

For the first time, I am setting out the key indicators against which the DMO's cash management performance will be measured in 2007-08.

21 March 2007



ED BALLS

Economic Secretary to the Treasury

INTRODUCTION

1.1 This is the fourteenth report outlining the Government's debt management activities.

1.2 The Debt and reserves management report (DRMR) is published in compliance with the *Code for Fiscal Stability*[1] which requires that a debt management report be published every year covering the following areas:

- the overall size of the gilt issuance programme for the coming financial year;
- the planned maturity structure and the proportion of index-linked and conventional gilts;
- the gilt auction calendar; and
- a forecast of net financing through National Savings & Investments (NS&I).

1.3 The UK Debt Management Office (DMO) publishes detailed information in its Annual Reviews on developments in debt management and the gilt market over the previous year. To avoid duplication, only a summary of developments in the gilt market during 2006-07 (up to January 2007) is set out in Annex A of this report.

[1] The *Code for Fiscal Stability* can be found on HM Treasury's website at:
http://www.hm-treasury.gov.uk/documents/uk_economy/fiscal_policy/ukecon_fisc_code98.cfm

2 Size and structure of UK Government debt in 2006-07

Debt stock

2.1 The total nominal outstanding stock of United Kingdom central government marketable sterling debt (including official holdings by central government) was £535.4 billion at end-December 2006. This debt comprised £322.3 billion of conventional gilts, £115.6 billion of index-linked gilts (including accrued inflation uplift) and £19.4 billion of Treasury bills (see Table 2.1). In addition, there was £78.1 billion invested in NS&I's instruments.

Table 2.1: Composition of UK Central Government sterling debt

	End-March 2006	End-December 2006
(£ billion, nominal value including official holdings)		
Conventional gilts[1]	305.6	322.3
Index-linked gilts[2]	106.3	115.6
Treasury bills[3]	19.1	19.4
Total gilts and Treasury bills	**431.0**	**457.3**
National Savings & Investments	73.3	78.1
Total central government sterling debt	**504.3**	**535.4**

1. Includes undated gilts

2. Includes accrued inflation uplift

3. Treasury bill stock in market hands

Source: Debt Management Office/National Savings & Investments

Maturity and duration

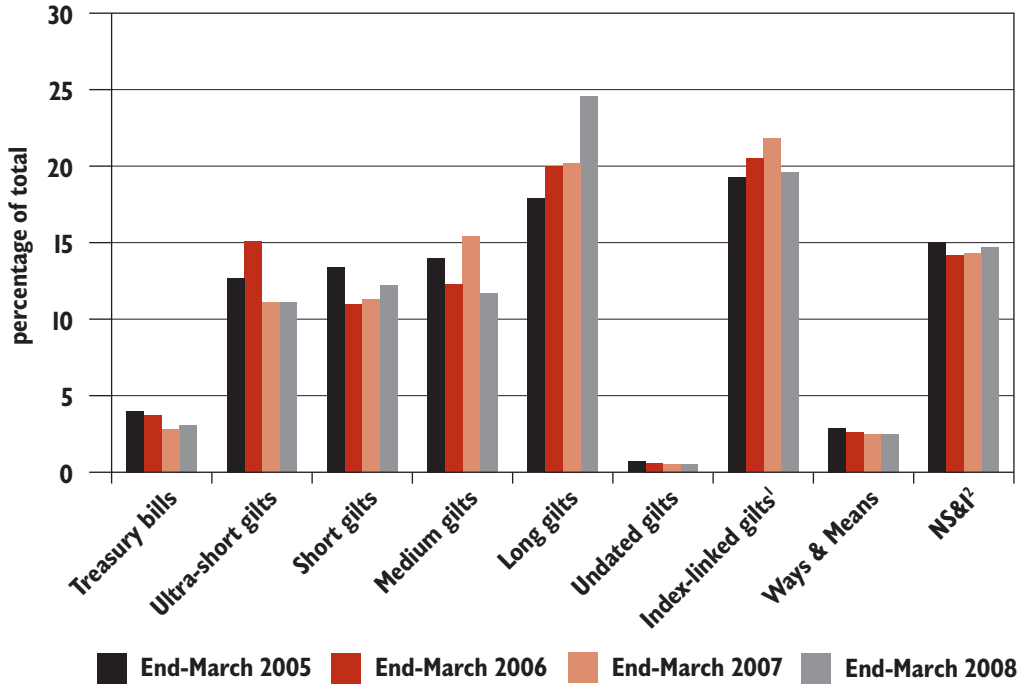
2.2 The average maturity of the stock of all marketable gilts increased from 13.1 years to 13.9 years between end-March 2006 and end-December 2006. Over the same period, the modified duration[2] of the conventional portfolio of marketable gilts increased from 8.0 years to 8.4 years. The maturity and duration of the UK Government's marketable domestic debt continues to be amongst the longest compared with OECD countries[3].

2.3 Chart 2.1 (below) shows a comparison of the Government's debt portfolio at end-March 2005 through to a projected composition at end-March 2008. It assumes that new debt is issued in accordance with the DMO's financing remit. It also takes into account the ageing of existing debt.

[2] Modified duration is defined in Box 11.1.

[3] According to the OECD (2006), Central Government Debt Statistical Yearbook, comparable portfolio maturities were: France 6.8 years, Italy 6.6 years, Germany 6.3 years, Japan 5.1 years and USA 4.5 years.

Chart 2.1: The composition of government marketable debt (including official holdings)



Source: Debt Management Office / National Savings & Investments

[1] Includes indexation uplift
[2] Includes accrued interest

Interest payments

2.4 Gross central government debt interest payments in 2005-06 were £25.8 billion, equivalent to 4.9 per cent of total managed expenditure (TME). In 2006-07 and 2007-08, they are forecast to be £27.4 billion (4.7 per cent of TME) and £29.1 billion (4.4 per cent of TME) respectively.

Gilt issuance and the gilt market

2.5 The DMO was established as part of the Government's reforms to the macroeconomic framework announced in 1997. The DMO took over responsibility for the issuance of gilts from the Bank of England in April 1998. Gross gilt issuance in 2006-07 is expected to be £62.5 billion, around £10 billion higher than in 2005-06[4].

2.6 The central government net cash requirement (CGNCR) measures the cash amount that central government needs to borrow for the financial year and is the key fiscal measure from which the volume of gilt issuance is derived. The CGNCR for each of the years in which the DMO has been responsible for gilt issuance and the volume of gilt sales in each of those years is shown in Table 2.2 (below).

[4] Figures are in cash terms unless otherwise stated.

Table 2.2: Central government net cash requirement and gross gilt sales 1998-99 to 2006-07

Financial year	CGNCR (£ billion)	Gross gilt sales (£ billion)
1998-99	–4.5	8.2
1999-00	–9.1	14.4
2000-01[1]	–35.6	10.0
2001-02	2.8	13.7
2002-03	21.8	26.3
2003-04	39.4	49.9
2004-05	38.5	50.1
2005-06	40.8	52.3
2006-07[2]	37.0	62.5

1. Reflecting the proceeds from the 3G Spectrum auction

2. CGNCR forecast at Budget 2007

Source: HM Treasury/Debt Management Office

2.7 In the first years of the DMO's operations, the size of the gilt market shrank as net issuance was negative (i.e., gross issuance was exceeded by gilt redemptions). However, net issuance turned positive in 2002-03 as the financing requirement began to rise. Net issuance is expected to be £32.6 billion in 2006-07 and similar levels of net issuance are projected over the medium term. Chart 2.2 (below) shows the trend in gross and net issuance since 1990-91.

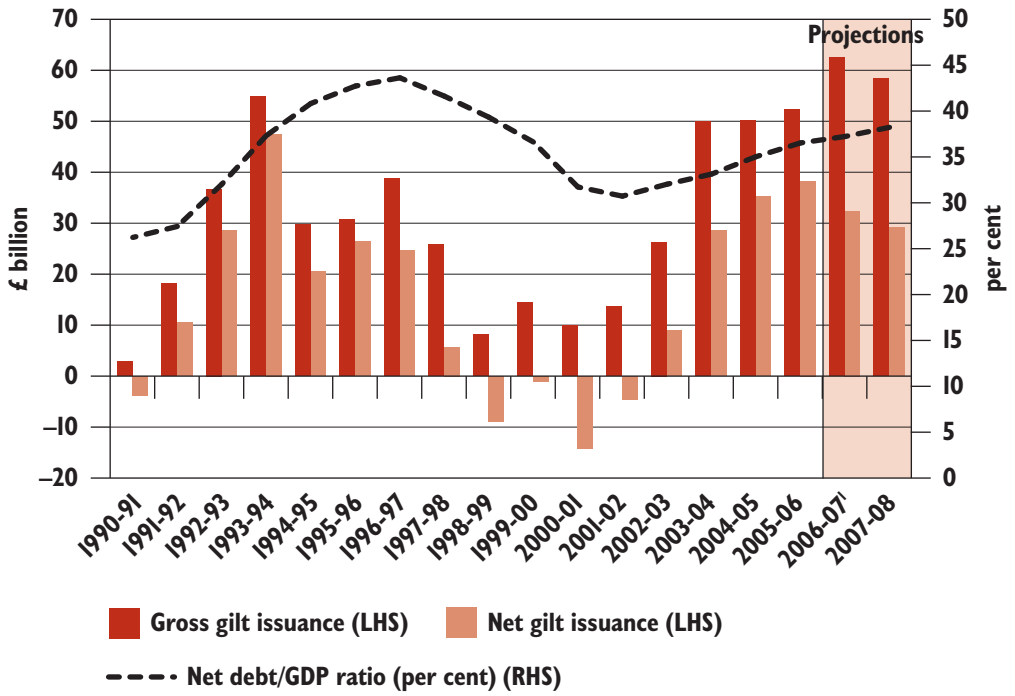
2.8 The size of the gilt market reflects these trends: in March 2002 the nominal value of the gilt market (including accrued inflation uplift) was £278.8 billion but by end-January 2007 it had reached £452.3 billion (nominal) – an increase of 62 per cent. Chart 2.3 (below) shows the change in the size of the gilt market since 1990-91.

2.9 Turnover[5] in the gilt market has been rising since 1999-2000. Average daily turnover increased by 139 per cent between 1999-00 and 2005-06 (from £5.7 billion to £13.6 billion). In 2006-07 to date[6] this trend has continued with aggregate daily turnover increasing to £15.1 billion. Trading intensity, as measured by the turnover ratio, increased sharply from 4.1 in 1999-00 to 9.0 in 2004-05. It has fallen back slightly so far in 2006-07 (to 8.3) largely as a result of the marked increase in the size of the underlying portfolio. Chart 2.4 below shows these trends.

[5] Turnover is a measure of the level of trading activity in the secondary market. The turnover ratio is aggregate turnover relative to the market value of the portfolio at the start of the year.

[6] Data to end-January 2007.

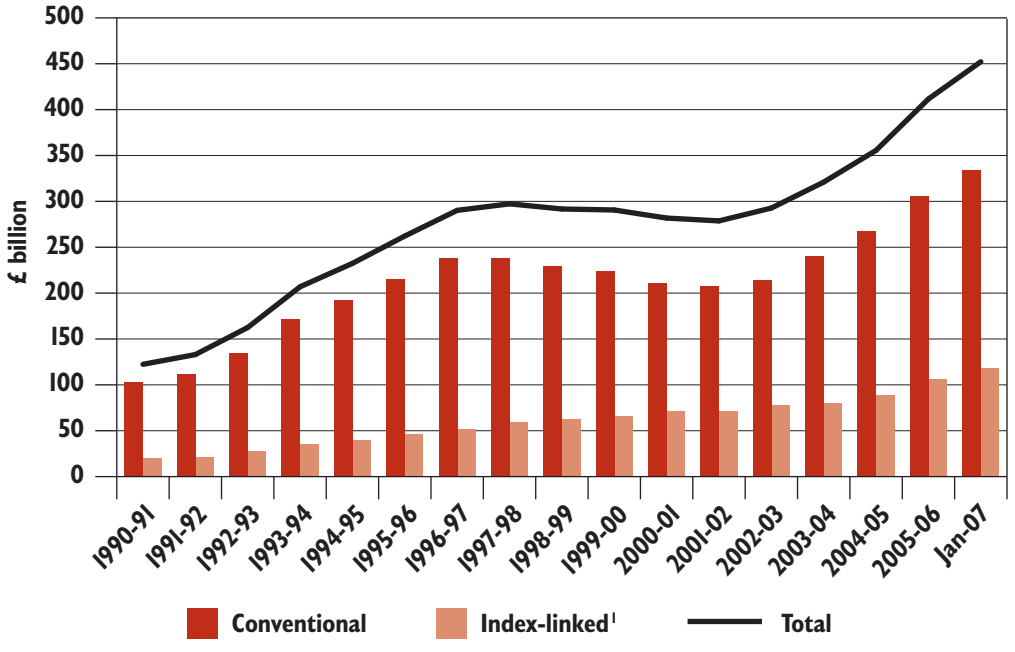
Chart 2.2: Gross and net gilt issuance 1990-91 to 2006-07



Source: HM Treasury/Debt Management Office

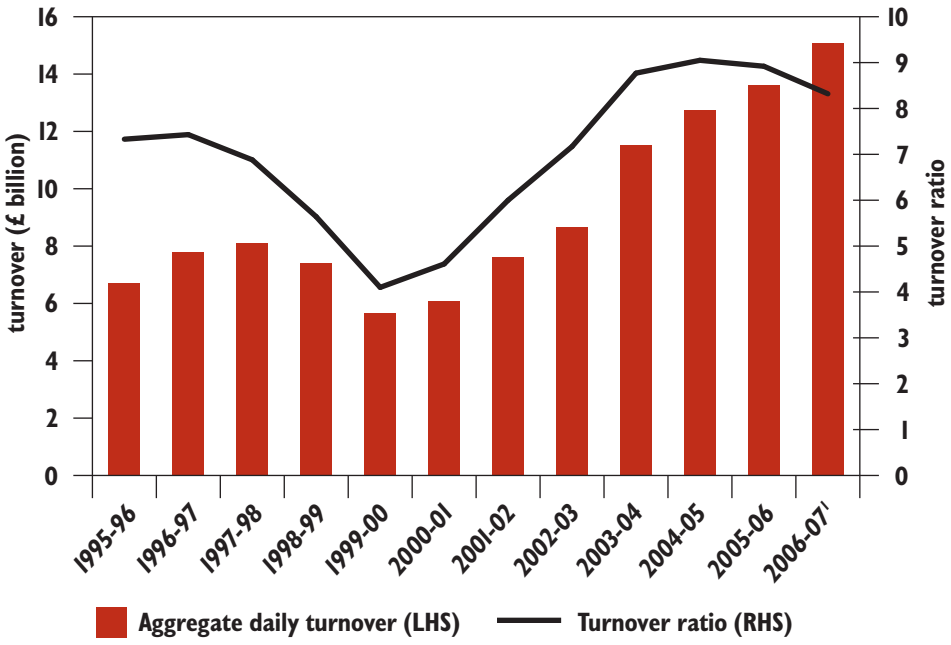
[1] *Gross and net gilt issuance are outturns*
Net debt/GDP ratio is an estimate

Chart 2.3: Size of the gilt market since 1990-91



Source: Debt Management Office
[1] *Includes indexation uplift*

Chart 2.4: Gilt market turnover



Source: Debt Management Office

[1] *Finance year to end-January 2007*

2.10 In 2006-07 the Government sold gilts from British Nuclear Fuel's Nuclear Liabilities Investment Portfolio. Details of the sale are outlined in Box 2.1.

Box 2.1: The sale of index-linked gilts from the Nuclear Liabilities Investment Portfolio

On 6 December 2006, the Government announced that, as part of its broader restructuring of the nuclear industry, the DMO would sell the index-linked gilts in the Nuclear Liabilities Investment Portfolio (NLIP) held by British Nuclear Fuels Limited (BNFL).

The index-linked gilts comprised approximately half of the total assets in the NLIP, the total value of which is around £3.5 billion. The remainder of the NLIP, comprising managed investment funds, and holdings of the maturing 2½ per cent Index-Linked Treasury Stock 2006, was liquidated in June-July 2006. The DMO sold the holdings of index-linked gilts into the secondary gilt market, in tranches, between 15 January and 12 March 2007. The DMO executed the sales in a pre-announced schedule in a predictable and transparent manner.

The schedule of tenders was:

Date	Gilt	Nominal amount
15 January 2007	2½% Index-Linked Treasury Stock 2009	£10 million
15 January 2007	2½% Index-Linked Treasury Stock 2013	£65 million
29 January 2007	2½% Index-Linked Treasury Stock 2024	£164 million
12 February 2007	2½% Index-Linked Treasury Stock 2016	£168 million
26 February 2007	2½% Index-Linked Treasury Stock 2020	£161 million
12 March 2007	2½% Index-Linked Treasury Stock 2024	£164 million

The proceeds from the tenders (£1.8 billion (excluding accrued interest)) were remitted to the Secretary of State for Trade and Industry and surrendered to the Consolidated Fund; they did not count towards the DMO's annual remit for gilt sales.

As the sales were of existing gilts, they had no impact on the amount of gilts on issue or on gilt market indices.

3 UK Government's debt management policy

Objectives of debt management

3.1 The Government's debt management objective is:

"to minimise, over the long term, the costs of meeting the Government's financing needs, taking into account risk, whilst ensuring that debt management policy is consistent with the aims of monetary policy".

3.2 The debt management policy objective is achieved by:

- pursuing an issuance policy that is open, transparent and predictable;
- issuing gilts that achieve a benchmark premium;
- adjusting the maturity and nature of the Government's debt portfolio, primarily by means of the maturity and composition of debt issuance and potentially by other market operations including switch auctions, conversion offers and buy-backs;
- developing a liquid and efficient gilt market; and
- offering cost-effective savings instruments to the retail sector through National Savings & Investments.

3.3 HM Treasury has overall responsibility for meeting the debt management policy objective, but has delegated operational responsibility for debt management to its agents: the DMO undertakes borrowing in sterling through issuance of government bonds and short-term debt instruments in the wholesale market; National Savings & Investments (NS&I) undertakes retail borrowing through sales of retail savings products; and the Bank of England undertakes borrowing in foreign currencies through issuance of foreign currency denominated government bonds.

The role of the Debt Management Office

3.4 HM Treasury has two overarching requirements for the DMO in the conduct of its delegated responsibility for wholesale debt financing operations, namely, that it:

- raises the quantum of financing set out in its annual financing remit. This means that the DMO is expected to achieve the sale of inflation-linked ("index-linked") and nominal ("conventional") gilts and Treasury bills within the operational tolerances specified in the financing and Exchequer cash management remits respectively (see Chapters 4, 5 and 6); and

- conducts its operations in accordance with the principles of openness, predictability and transparency, which underpin the Government's approach to debt management policy more generally. The Government judges that by conducting its operations in accordance with these principles, the DMO will effectively contribute to achieving long-term cost minimisation subject to risk.

3.5 In practice, this means that HM Treasury expects the DMO to:

- *adopt a predictable approach to debt issuance*, which includes publishing an annual gilt issuance calendar before the beginning of each financial year and holding auctions in accordance with its remit;
- *pre-announce the details of its debt issuance plans* to the market to ensure transparency about its activities; and
- *act in a manner consistent with its remit* and explain the basis for its decisions about gilt issuance as fully as possible to the market in order to allow market participants better to understand the rationale behind the DMO's decisions.

3.6 In addition, HM Treasury expects the DMO to:

- *provide advice* in its capacity as the Government's official presence in the gilt market on: (i) the appropriate structure and contents for the financing remit in preparation for publication of the remit each year alongside the Budget; and (ii) how to accommodate revisions to the remit during the course of the year;
- *report on progress against the remit*, in particular, progress of gilt sales against the remit targets;
- *monitor developments in the gilt market and the wider economy* and report in a timely manner on changing conditions that might require the terms of the remit to be revisited;
- *maintain open channels of communication with market participants* both formally and informally to solicit their views on gilt issuance and other issues affecting the remit and, as far as possible, to explain the rationale for decisions;
- *advise on any operation to manage the maturity and nature of the Government's debt portfolio and conduct any such operation if so directed by HM Treasury*, through gilt issuance decisions and through use of other market management techniques;
- *develop a liquid and efficient gilt market* primarily through regular issuance of benchmark gilts;
- *provide advice on the introduction of any new financing instrument or debt management technique* as deemed appropriate to fulfil the Government's debt management objective, and
- *ensure the continuing and efficient functioning of the gilt market* by undertaking market management operations as necessary.

3.7 This approach to debt management policy, based on the principles of openness, predictability and transparency, is recognised internationally as the most effective way to minimise the long-term costs of debt management, although there is no recognised way to measure quantitatively whether long-term costs are minimised through this approach. In order to demonstrate that the DMO is taking decisions aimed at fulfilling the objective of long term cost minimisation subject to risk, HM Treasury expects the DMO to explain publicly in its Annual Review the key drivers that motivated its decisions on implementation of the remit during the course of the previous financial year. Quantitative reporting of aspects of the DMO's performance is also undertaken against a range of measures and indicators wherever that is possible. A number of these measures are set out in the DMO's annual Business Plan[7].

3.8 In 2006-07 the Government introduced further measures to enhance openness, predictability and transparency as shown in Box 3.1.

[7] The DMO's Business Plan for 2006-07 can be found on the DMO's website at: http://www.dmo.gov.uk

Box 3.1: Openness, transparency and predictability

The case for basing the Government's debt management policy on the principles of openness, transparency and predictability was explained in the Report of the Debt Management Review (1995), published jointly by HM Treasury and the Bank of England. The policies of most other major sovereign debt issuers are also underpinned by the principles of openness, transparency and predictability.

The Government's approach to the principles of openness, transparency and predictability is based on debt management theory, which suggests that uncertainty and unpredictability in debt issuance is likely to lead to the Government being charged a risk premium leading to higher financing costs for the Government. Other relevant considerations in the 1995 review were 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 together with the experience of other countries, in particular, those with a highly developed and liquid government bond market.

The key ways in which the Government implements openness, transparency and predictability are through:

- pre-commitment to an auction calendar up to one year ahead;
- pre-commitment to issuance in specific amounts at particular maturities and types of gilts up to one year in advance;
- announcement of specific gilts to be auctioned at least one month preceding the auction, excepting those gilts to be issued in the first quarter of the financial year;
- advance announcement of the size of each auction, normally at 3.30pm on the Tuesday of the week preceding the auction;
- establishment of large, liquid issues at key maturities along the yield curve;
- formal market consultation about the remit (annually) and issuance plans (quarterly); and
- publication of information sufficient to allow the public to scrutinise the Government's conduct of debt management policy (principally through publication of the Debt and reserves management report and the DMO's Annual Review).

Openness, transparency and predictability were enhanced in 2006-07 by the introduction of a number of innovations listed below:

- quarterly consultation meetings between the DMO and market participants held in the penultimate month of each quarter; and
- a quarterly issuance calendar for the following quarter which is announced at the end of the penultimate month of each quarter (except in the first quarter when it is announced as soon as possible after the Budget).

In addition, the size of the financing requirement in 2006-07 allowed:

- a commitment to build up new 5- and 10-year maturity conventional benchmarks;
- a commitment to frequent long-conventional issuance and issuance of long index-linked gilts at least monthly; and
- a commitment to at least quarterly issuance of short and medium conventional gilts.

Maturity and composition of debt issuance

3.9 In order to determine the maturity and composition of debt issuance, the Government needs to take account of a number of factors including:

- investors' demand for gilts;
- the Government's own appetite for risk, both nominal and real;
- the shape of both the nominal and real yield curves and the expected effect of issuance policy; and
- changes to the stock of Treasury bills and other short-term instruments.

Considerations underpinning the 2006-07 financing remit

3.10 A key consideration underpinning the remit in 2006-07 was the inversion of the yield curve. Given this, long-term cost savings for the Government could be achieved through skewing issuance towards longer maturities. HM Treasury and the DMO had also received representations from gilt market participants that there was strong underlying demand from gilt investors for both long-dated conventional and index-linked gilts. In the context of a large quantum of planned gilt issuance (forecast at Budget 2006 to be £63.0 billion), the desire to maintain a well-functioning and liquid gilt market across the maturity spectrum motivated the decision to continue issuance at key short and medium-dated benchmark maturities.

3.11 The DMO's 2006-07 financing remit was also set against a background of low and sometimes volatile gilt yields at the longest maturities. Uncertainty existed about whether these market conditions would continue into 2006-07 and how this may affect, in particular, demand for long-dated gilts over the course of the year. This uncertainty was a key consideration that motivated the introduction of temporary flexibility to the DMO's remit in 2006-07 to be reviewed for 2007-08. Other changes that enhanced openness, transparency and predictability in debt issuance were also introduced (see Box 3.1 above).

3.12 In 2006-07 the DMO is forecast to issue £25.3 billion (40 per cent of total issuance) and £17.3 billion (28 per cent of total issuance) in long conventional and index-linked gilts respectively in a total gilt issuance of £62.5 billion.

Medium-term approach

3.13 In the medium term, consistent with the debt management policy objective of minimising long-term costs taking into account risk, the Government's annual decisions about gilt issuance will continue to be informed by a number of factors including: the size of the annual financing requirement; supply-side considerations including the Government's risk preferences; investors' demand for gilts; the shape of the yield curve; and other financial market conditions. When balancing these factors formal modelling, amongst other approaches, is used to illustrate some of the cost and risk implications of possible issuance strategies. It is likely that strong demand for long-conventional and index-linked gilts will persist in the medium term and continue to influence the shape of the yield curve (see Box 3.2). Should that be the case, the Government's policy of skewing issuance towards long maturities would continue.

3.14 In conjunction with sound judgement, formal modelling plays a key role in providing analytical support for the formulation of the medium term debt management policy. A debt strategy simulation model can be used to illustrate the debt service cost and risk of different debt issuance strategies, given assumptions about the shape of both the nominal and real yield curves. The DMO has built such a model – the Strategic Debt Analysis (SDA) model. Simulations using the SDA model are set out in Annex B.

3.15 It should be noted that the simulation modelling presented in Annex B is intended to convey the impact that different issuance strategies could have on the debt service cost and risk of the Government's debt portfolio. It is based on a number of strong assumptions, including those for the nominal and real yield curves. The model has not been used to determine a particular debt issuance strategy but to illustrate the impact of different issuance strategies.

3.16 These considerations are reflected in the 2007-08 remit. As set out in Chapter 5, the skew of long-conventional and index-linked gilts will account for a forecast 66 per cent of gross gilt issuance. The annual consultation in January 2007 with GEMMs and investors showed clear support for this continuing strategy.

Box 3.2: Recent developments in demand for long-conventional and index-linked gilts

In January 2006, yields on long-conventional gilts reached historic lows: the yield on the conventional 30-year benchmark gilt fell to 3.7 per cent, compared with over 5 per cent in 2001, while the real yield on the 30-year index-linked gilt fell below 0.7 per cent, compared with over 2 per cent in 2001. At the same time, the yield curve remained sharply inverted at the long end. As shown in Annex A, long gilt yields have risen since January 2006 but, nonetheless, remain at close to historic lows.

Sustained low interest rates in the UK, reflect, in part, a global phenomenon, associated with the success of central banks around the world in maintaining low inflation but also reflect trends in global savings and investment. However, unlike the yield curve in the United States and the Euro-area, the UK yield curve has been consistently inverted for several years (Chart A). This suggests a sustained UK-specific influence on long-conventional and index-linked gilt yields over and above that exerted by global influences.

One possible determinant of the inversion of the yield curve is the rising demand from defined benefit (DB) pension schemes for long-conventional and index-linked bonds[8]. Over the past decade, pension schemes have gradually shifted the composition of their portfolios from equities to bonds and similar fixed-income assets - the percentage of equities in DB schemes has fallen from around 75 per cent in 1995 to around 60 per cent in 2005 (Chart B). More recently, since 2005 Q4, pension funds' net investment in bonds has been sustained at high levels (Chart C). These data reflect direct purchase by pension funds. However, pension funds are increasingly using derivative products (such as inflation and interest rate swaps) to hedge their liabilities. These derivatives are typically sold by investment banks, effectively providing insurance to the funds against interest rate and inflation risks but the banks then need to hedge their own positions by investing in long-conventional and index-linked bonds. These indirect purchases are not reflected in the data, but there is some evidence they have also increased, e.g. through the development of the swaps market (Chart D).

Underlying the increased attractiveness of long-conventional and index-linked bonds for pension funds' portfolios are a number of factors including:

- the growing maturity of pension schemes both due to the ageing of schemes' members and in some cases to the closure of DB schemes to new entrants and/or restrictions on the acquisition of new rights for existing members. Equities offer a higher return than gilts on average in the long run but typically at a higher risk. As the balance shifts from younger members with longer investment horizons to older members with shorter horizons and those who have already retired, it is rational gradually to shift to a more conservative asset allocation other factors held constant;
- the cumulative effect of regulation over a long period of time, designed to provide more protection to scheme members and which made pension fund liabilities a more explicit liability;
- a better understanding of risks (including the measurement of risk) and a decrease in risk tolerance of both trustees and corporate sponsors, creating a demand for assets (such as bonds) that better match the nature of pension funds' liabilities[9]; and

[8] Although there are also important non-pension related sources of demand for long-dated and index-linked gilts.

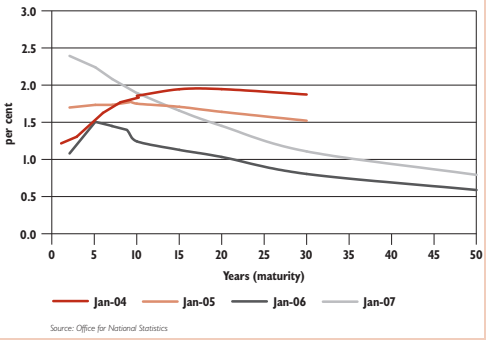
[9] However, bonds do not match perfectly pension liabilities, not least because they don't hedge the considerable longevity risk that pension schemes continue to experience.

Box 3.2: Recent developments in demand for long-conventional and index-linked gilts *(continued)*

- the implementation of new accounting standards (Financial Reporting Standard 17), which require liabilities to be discounted by AA-rated corporate bond yields. By requiring a marking-to-market of the liabilities, FRS17 highlighted a source of volatility to pension funds and sponsoring companies' balance sheets (through interest rate fluctuations), that was not apparent in the previous system. This greater awareness of risks has encouraged pension funds to invest in assets that better match their liabilities, such as bonds, in order to offset the volatility of liabilities on the balance sheet.

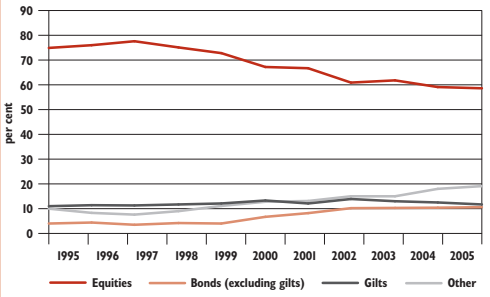
These factors are likely to underpin sustained demand for long-conventional and index-linked gilts from DB pension schemes in the medium term and therefore, other factors held constant, an inverted yield curve. The Government debt management objective is to minimise cost subject to risk. In line with this objective, the Government has weighted its gilt issuance programme increasingly towards longer maturities over the last few years.

Chart A: The UK real yield curve since 2004



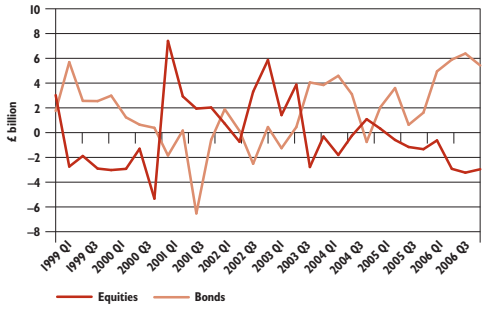
Source: Office for National Statistics

Chart B: Pension funds' portfolio – asset classes as a share of total assets



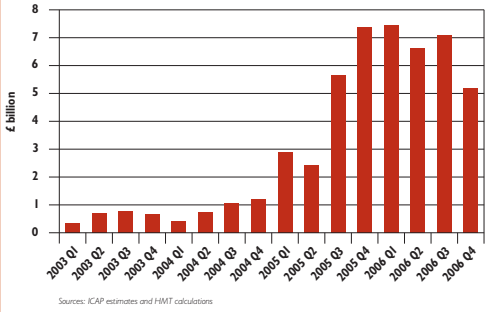
Source: Office for National Statistics

Chart C: Net investment in equities and bonds



Source: Office for National Statistics

Chart D: Notional value of UK RPI swaps traded



Sources: ICAP estimates and HMT calculations

4 UK Government's financing programme for 2007-08

Financing framework

4.1 The Government intends to continue to finance the CGNCR using the framework that was established in the 1995 Debt Management Review. The Government aims to finance its net cash requirement plus maturing debt and any financing required for additional net foreign currency reserves through the issuance of debt. All such debt issuance will take place within a set maturity structure. Auctions remain the preferred means of issuance for all gilts. In addition, the Government may hold conversion offers, switch auctions, reverse auctions of non-benchmark gilts and syndicated offerings of gilts (although there are no current plans to hold such operations in 2007-08).

Financing arithmetic

4.2 The new forecast for the CGNCR in 2007-08 is £37.6 billion, an increase of £2.9 billion from the Pre-Budget Report (PBR) 2006 forecast. Gilt redemptions, excluding official holdings, are expected to be £29.2 billion.

4.3 Table 4.1 gives details of the financing arithmetic for 2007-08. It outlines the proposed debt instruments that the Government intends to use to meet its financing requirement in 2007-08.

National Savings & Investments

4.4 NS&I's net contribution to financing (including accrued interest) in 2007-08 is forecast to be £2.8 billion. This assumes gross sales (i.e., sales and deposits including accrued interest) of £13.9 billion. This forecast is not a target but an estimate based on experience in previous years, trends in the retail savings product market during 2006-07 and NS&I's own forecasts and objectives.

Table 4.1: Financing arithmetic 2007-08

			£ billion
Central government net cash requirement			**37.6**
Gilt redemptions			29.2
Financing for the Official Reserves			0.0
Buy-backs[1]			0.0
Planned short-term financing adjustment[2]			–4.2
Gross financing requirement			**62.6**
less:			
National Savings & Investments			2.8
Net financing requirement			**59.8**
Financed by:			
1. Debt Issuance by the Debt Management Office			
a) Treasury bills			**1.4**
b) Gilts			**58.4**
of which:			
	Conventional	short	10.0
		medium	10.0
		long	23.4
	Index-linked		15.0
2. Other planned changes in short-term debt[3]			
Change in Ways & Means			0.0
3. Unanticipated changes in net short-term debt cash position[4]			**0.0**
Total financing			**59.8**
Short-term debt levels at end of financial year			
Treasury bill stock[5]			17.0
Ways & Means			13.4
DMO net cash position			0.5

Figures may not sum due to rounding

1. Purchases of "rump" gilts which are older, small gilts, declared as such by the DMO and in which Gilt-edged Market Makers (GEMMs) are not required to make two-way markets. The Government will not sell further amounts of such gilts to the market but the DMO is prepared, when asked by a GEMM, to make a price to purchase such gilts.

2. To accommodate changes to the current year's financing requirement resulting from: (i) publication of the previous year's outturn CGNCR and/or (ii) carry over of unanticipated changes to the cash position from the previous year.

3. Total planned changes to short-term debt are the sum of: (i) the planned short-term financing adjustment; (ii) Treasury bill sales; and (iii) changes to the level of the Ways & Means advance.

4. A negative (positive) number indicates an addition to (reduction in) the financing requirement for the following financial year.

5. The DMO has operational flexibility to vary the end-financial year stock subject to its operational requirements from 2007-08.

Financing for the Official Reserves

4.5 If the Government judges that there is a value-for-money case for doing so, consideration would be given to issuing foreign currency securities to finance the borrowed reserves in 2007-08. Any decisions will be taken on the basis of the least cost comparison set out in paragraph 9.7 below.

4.6 If foreign currency bonds are issued in place of swapped sterling liabilities to finance the Official Reserves then the net sterling financing requirement will decline by the sterling value of the bonds issued. Similarly, when the foreign currency bonds mature (assuming the level of the borrowed reserves remains unchanged and new foreign currency bonds are not issued) the net sterling financing requirement will rise by the equivalent amount.

4.7 For the purposes of the financing arithmetic in Table 4.1, it is assumed that swapped sterling will remain the main form of financing the borrowed reserves (as has been the case in recent years) and no new foreign currency debt will be issued in 2007-08. As no Government foreign currency debt matures in 2007-08, the forecast in Table 4.1 shows zero impact due to the financing of the Official Reserves. If the Government were to decide to issue a foreign currency bond later in the year, this would be taken into account in subsequent revisions to the DMO's financing remit, either at the Pre-Budget Report in the autumn or in Budget 2008, depending on when the bond was issued.

Treasury bill sales

4.8 The financing plans for 2007-08 assume that the outstanding stock of Treasury bills is expected to increase to £17.0 billion. In 2007-08, in addition to the scheduled weekly tenders, the DMO may reopen on request existing issues of Treasury bills for sale on a bilateral basis, to raise funds for cash management. Consequently, the DMO will have operational flexibility to vary the end-financial year stock subject to its operational requirements (see paragraph 6.8). The financial year outturn for the Treasury bill stock will be reported alongside the CGNCR outturn for 2007-08 in April 2008.

Other short-term debt

4.9 The level of the Ways & Means advance from the Bank of England planned for 31 March 2007 is £13.4 billion and is assumed to remain at this level for 2007-08.

4.10 The average level of the DMO's cash balance at the Bank of England is forecast to be £500 million.

4.11 It is anticipated that the level of the DMO's net cash position at end-March 2007 will be £4.7 billion. This will be reduced during 2007-08 to £500 million through planned short-term financing of £4.2 billion, reducing the net financing requirement in that year accordingly.

Quantity of gilt sales

4.12 The DMO will aim to meet the remainder of the financing requirement by selling gilts to the private sector. On the basis of the forecast for the CGNCR, this means that there will be gross gilt sales of approximately £58.4 billion (cash).

Benchmark gilts

4.13 Through its gilt issuance programme, the Government aims this year at regular issuance across the maturity spectrum throughout the year and at building up benchmarks at key maturities.

5 The Debt Management Office's financing remit for 2007-08

Objectives

5.1 The UK Debt Management Office (DMO), an Executive Agency of HM Treasury, has been given the following objectives in respect of Government debt management:

- to meet the annual remit set by HM Treasury Ministers for the sale of gilts, with due regard to long-term cost minimisation taking account of risk;
- to advise Ministers on setting the remit to meet the Government's debt management objectives and to report to Ministers on the DMO's performance against its remit, objectives and targets;
- to develop policy on, and promote advances in, new instruments, issuance techniques and structural changes to the debt markets that will help lower the cost of debt financing, liaising as appropriate with the Bank of England, Financial Services Authority, London Stock Exchange and other bodies and to provide policy advice to HM Treasury Ministers and senior officials accordingly;
- to conduct its market operations, liaising as necessary with regulatory and other bodies, with a view to maintaining orderly and efficient markets and promoting a liquid market for gilts;
- to provide, including in liaison with Computershare Investor Services plc and CRESTCo, a high quality efficient service to investors in government debt and to deal fairly and professionally with market participants in the gilt and money markets, consistent with achieving low cost issuance;
- to contribute to HM Treasury's work on the development of the medium-term approach for the debt portfolio; and
- to make information publicly available on the debt markets and DMO policies where that contributes through openness and predictability to efficient markets and lower costs of debt issuance.

Quantity of gilt sales

5.2 The DMO, on behalf of the Government, will aim for gilt sales of £58.4 billion (cash)[10] in 2007-08. As in 2005-06, all conventional gilt issuance is pre-allocated to short, medium or long maturities in 2007-08. The split of total gilt issuance between conventional and index-linked gilts is also pre-allocated.

5.3 In January 2007, at consultation meetings with GEMMs and investors, there was some support for retaining remit flexibility in 2007-08. Remit flexibility had been introduced to allow the DMO greater capacity to respond to the possibility that the unusual conditions observed in the market at the end of the previous financial year would continue in 2006-07. Recent developments in demand for long-conventional and index-linked gilts are set out in Box 3.2. Consistent with its commitment to predictability, and given the anticipated strong and sustained demand for long-maturity gilts over the medium term, remit flexibility introduced for 2006-07 will not be continued for 2007-08.

[10] Figures in Chapter 5 are in cash terms unless otherwise stated.

Amount and maturity of conventional gilt issuance

5.4 The planned amount of issuance and maturity mix of conventional gilts in 19 auctions in 2007-08 is:

- 4 auctions in the short (1-7 years) maturity area, aiming to raise £10.0 billion cash;
- 4 auctions in the medium (7-15 years) maturity area, aiming to raise £10.0 billion cash; and
- 11 auctions in the long (15 years and over) maturity area, aiming to raise £23.4 billion cash.

5.5 The DMO will aim to build up new 5- and 10-year maturity conventional benchmarks through quarterly issuance of short and medium-dated gilts and frequent long-dated conventional gilt issuance.

Amount of index-linked gilt issuance

5.6 In 2007-08, the DMO aims to sell £15.0 billion (cash) in index-linked gilts.

5.7 15 auctions of index-linked gilts are planned in 2007-08. This will include frequent issuance at long maturities.

Size of gilt auctions

5.8 The gilt sales targets in paragraphs 5.4 and 5.6 above are specified in cash terms, but the gilt auctions are sized in nominal terms, typically in £0.25 billion increments for conventional gilts and £0.025 billion increments for index-linked gilts. Therefore all gilt sales targets are expressed in approximate terms.

Method of issuance of gilts

5.9 Auctions will constitute the primary means of issuance of all gilts (conventional and index-linked). All auctions will be single auctions held on the day indicated.

5.10 Each outright auction of conventional gilts is planned to be between £1.5 billion and £4.0 billion (cash) on a competitive bid-price basis. Each outright auction of index-linked gilts will be between £0.5 billion and £2.0 billion (cash) on a uniform price basis.

5.11 The expected timing of gilt sales is set out in the auction calendar in Table 5.1 below. A more detailed auction calendar for the first quarter of the financial year, including the gilts to be auctioned on each date, will be announced by the DMO at 3.30pm on Friday 30 March 2007. For the rest of 2007-08 the quarterly calendar announcements will be made at 3.30pm on 31 May, 31 August and 30 November[11]. Full details of all auctions will normally be announced at 3.30pm on the Tuesday of the week preceding the auction.

[11] The November announcement is subject to confirmation following the Chancellor's decisions on the Budgetary timetable.

Table 5.1: Gilt auction calendar 2007-08

Date	Type
2007	
3 April	Conventional
12 April	Index-linked
24 April	Index-linked
3 May	Conventional
22 May	Index-linked
24 May	Conventional
5 June	Conventional
21 June	Conventional
26 June	Index-linked
3 July	Conventional
10 July	Index-linked
26 July	Index-linked
9 August	Conventional
11 September	Conventional
13 September	Conventional
26 September	Index-linked
2 October	Conventional
10 October	Index-linked
24 October	Index-linked
1 November[1]	Conventional
6 November[1]	Conventional
20 November[1]	Index-linked
28 November[1]	Conventional
4 December[1]	Conventional
12 December[1]	Index-linked
2008	
8 January	Conventional
17 January	Index-linked
29 January	Index-linked
5 February[1]	Conventional
14 February[1]	Conventional
27 February[1]	Index-linked
4 March[1]	Conventional
13 March[1]	Conventional
27 March[1]	Index-linked

1. Any auction in November/December 2007 or February/March 2008 is subject to confirmation following the Chancellor's decisions on the Budgetary timetable.

5.12 The above programme of conventional and index-linked gilt auctions and any others that may be added during the year may be supplemented between auctions by official sales of gilts by the DMO "on tap". Taps of gilts will be used only as a market management instrument in exceptional circumstances.

5.13 The DMO has no plans to issue gilts by syndicated offering in 2007-08.

5.14 After an auction, the DMO will generally refrain from issuing gilts of a similar type or maturity to the auctioned gilt for a reasonable period, unless already pre-announced, or if there is a clear market management case for doing so.

5.15 For the purposes of market management, the DMO may create and repo out gilts in accordance with the provisions of its Standing Repo Facility launched on 1 June 2000.

Reverse auctions

5.16 The DMO has no current plans for a programme of reverse auctions in 2007-08.

Conversions and switch auctions

5.17 The DMO has no current plans for a programme of conversion or switch auctions in 2007-08.

Coupons

5.18 As far as is practical, coupons on new issues will be set to price the gilt close to par at the time of issue.

Buy-ins of short maturity debt

5.19 The DMO will have responsibility for buying in gilts close to maturity to manage Exchequer cash flows.

Revisions to the remit

5.20 Any aspect of this remit may be revised during the year, in the light of exceptional circumstances and/or substantial changes in the following:

- the Government's forecast of the gilt sales requirement;
- the level and shape of the gilt yield curve;
- market expectations of future interest and inflation rates; and
- market volatility.

5.21 Any revisions to this remit will be announced.

6 The Debt Management Office's Exchequer cash management remit for 2007-08

Exchequer cash management objective

6.1 The Government's cash management objective is to ensure that sufficient funds are always available to meet any net daily central government cash shortfall and, on any day when there is a net cash surplus, to ensure this is used to best advantage. HM Treasury and the DMO work together to achieve this.

6.2 HM Treasury's role in this regard is to make arrangements for a forecast of the daily net flows into or out of the National Loans Fund (NLF); and its objective in so doing is to provide the DMO with timely and accurate forecasts of the expected net cash position over time.

6.3 The DMO's role is to make arrangements for financing and for placing the net cash positions, primarily by carrying out market transactions in the light of the forecast; and its objective in so doing is to minimise the costs of cash management while operating within the risk appetite approved by Ministers.

6.4 The Government's preferences in relation to the different types of risk taking inherent in cash management are defined by a set of explicit limits covering four types of risk, which taken together represent the Government's overall risk appetite[12]. The risk appetite defines objectively the bounds of appropriate Government cash management in accordance with the Government's ethos for cash management as a cost minimising rather than a profit maximising activity and playing no role in the determination of interest rates. The DMO may not exceed this boundary but within it the DMO will have discretion to take the actions it judges will best achieve the cost minimisation objective.

The DMO's cash management objective

6.5 The DMO's cash management objective is to minimise the cost of offsetting the Government's net cash flows over time, while operating within a risk appetite approved by Ministers. In so doing, the DMO will seek to avoid actions or arrangements that would:

- undermine the efficient functioning of the sterling money markets; or
- conflict with the operational requirements of the Bank of England for monetary policy implementation.

Instruments and operations used in Exchequer cash management

6.6 The range of instruments and operations that the DMO may use for cash management purposes is set out in its Operational Notice[13]. The arrangements for the issuance of Treasury bills, and the management of the Treasury bill stock in market hands, will be set out in, and operated according to, the DMO's Operational Notice.

[12] The four types of risks are liquidity risk, interest rate risk, foreign exchange risk and credit risk. An explanation of these risks and the Government's cash management operations more generally is set out in Chapter 5 of the DMO's Annual Review 2004-05, which is available on the DMO's website at: http://www.dmo.gov.uk/documentview.aspx?docname=publications/annualreviews/gar0405.pdf&page

[13] The current edition of Exchequer Cash Management Operational Notice and Treasury Bill Information Memorandum is available on the DMO's website at: http://www.dmo.gov.uk/index.aspx?page=publications/money_markets

6.7 One component of the debt sales planned to meet the Government's annual financing requirement is the year-on-year change in the outstanding stock of Treasury bills (excluding bills issued solely for collateral purposes). This change is announced as part of the financing remit given by HM Treasury to the DMO (see Chapter 5).

6.8 During the financial year the DMO will manage the level of the Treasury bill stock and may increase or reduce the stock vis-à-vis the end year target level, in order to support the implementation of Government cash management (see paragraph 4.8). The DMO will announce the dates of Treasury bill tenders on a quarterly basis. The precise details of the maturity and the amount of the Treasury bills on offer at specific tenders will be announced one week in advance.

6.9 As a contingency measure, the DMO may also issue Treasury bills in the market to assist the Bank of England in its management of the sterling money markets. In response to a request from the Bank, the DMO may add a specified amount to the size(s) of the next bill tender(s) and deposit the proceeds with the Bank, remunerated at the weighted average yield(s) of the respective tenders. The amount offered to accommodate the Bank's request will be identified in the DMO's weekly Treasury bill tender announcement. Treasury bills issued at the request of the Bank will be identical in all respects to Treasury bills issued in the normal course of DMO business.

DMO collateral pool

6.10 To assist the DMO in the efficient execution of its cash management operations, a combination of Treasury bills and gilts, which shall be chosen to have a negligible effect on relevant indices, may be issued to the DMO on the third Wednesday of April, July and October 2007 and January 2008. Any such issues to the DMO will only be used as collateral in the DMO's cash management operations and will not be available for outright sale. The precise details of any such issues to the DMO will be announced in advance. If no issue is to take place in a particular quarter, the DMO will announce that this is the case in advance.

Review of cash management

6.11 The combination of HM Treasury cash flow forecasts and DMO market operations characterises the active approach to Exchequer cash management. A review of cash management operations since the DMO took over cash management in 2000 was conducted jointly by HM Treasury and the DMO during 2004-05. To help enhance public accountability, this review recommended the introduction of a performance measurement framework for active cash management in which discretionary decisions that are informed by forecast cash flows can be evaluated against a range of indicators. These include measuring, in a quantified way, the actual cost of cash management compared with the notional cost associated with a benchmark strategy.

6.12 Implementation of the 2004-05 review recommendations began in June 2005 with the development of a quantified internal performance measure against which active cash management can be compared.

6.13 Subsequent HM Treasury analysis conducted in 2006 concluded that the benchmark comparator, which represents a default 'passive' or 'neutral' strategy that might be applied in the absence of forecasting or cash dealing operations, together with the risk limits proposed in 2004-05 remained valid[14]. No conceptual problems had been encountered in the first year of operation, although the array of risk limits should be reassessed after more experience has been gained of operating in the sterling money markets following implementation of the Bank of England's money market reforms[15]. It recommended that formal reporting of the performance of active cash management would take place in 2007-08, which would be the first full year of operating under the new cash management regime, and should be considered for the 2006-07 outturn. The analysis cautioned that DMO and HM Treasury should not look at the performance against the benchmark issuance strategy in isolation because active cash management performance must be evaluated against a series of key performance indicators that together reflect the ethos and objectives of the Government.

6.14 The quantitative comparison of active cash management against a benchmark is one such measure. Other indicators and controls that are used to monitor and assess performance in meeting the Government's cash management objectives are listed in Box 6.1 below.

[14] The risk limits are covered in detail in DMO's Annual Review 2004-05 http://www.dmo.gov.uk/documentview.aspx?docname=publications/annualreviews/gar0405.pdf&page

[15] The Bank of England's money market reforms, which were implemented in May 2006, required the DMO to adjust its cash management operations.

Box 6.1 Exchequer's cash management objectives and key performance indicators and controls

Cash management objective	Key performance indicators & controls
DMO must supply sufficient cash each day to enable the Government to meet its payment obligations. This is fundamental and unconditional.	Ways and Means transfers must be avoided by ensuring that there is a positive end-of-day balance on the Debt Management Account (DMA). HM Treasury is responsible for monitoring and reporting performance of the forecasting function against outturns.
Cash management operations and arrangements should be conducted in a way that does not interfere with monetary policy operations.	The DMO will conduct market operations with a view to achieving, within a very small range, the weekly cumulative target for the DMA balance as agreed with the Bank of England. The DMO will maintain formal and informal channels of communication with the Bank on conditions in the Sterling money markets. The DMO will seek to avoid holding weekly or ad hoc Treasury bill tenders when the Bank conducts its weekly open market operations.
Cash management operations and arrangements should be conducted without impeding the efficient working of the Sterling money markets	The DMO will advise HM Treasury as appropriate on the impact of Exchequer cash flows on liquidity conditions in the Sterling money markets.
The DMO should maintain a system in which the costs and risks are transparent, measured and monitored and the performance of government cash management is assessed. The DMO maintains an ethos of cost minimisation rather than profit maximisation.	The DMO will report to HM Treasury on a quarterly basis the details of its cash management activity, its performance against the benchmark and the market and credit risks incurred. Performance may also be reported in the DMO Annual Review.
The DMO should maintain a credible reputation in the market that leads to lower costs in the long term and a cash management system that is sustainable.	The DMO should maintain channels of communication with money market participants and Treasury bill counterparts both formally and informally to explain, as far as possible, the nature and intent of its operations in the money markets. The DMO should monitor compliance with its operational market notices; provide complete, accurate and timely instructions to counterparties, agents, external systems and operators; and achieve the successful settlement of agreed trades on the due date.

7 National Savings & Investments' activities in 2006-07

Introduction

7.1 National Savings & Investments (NS&I) is both a government department and an executive agency of the Chancellor of the Exchequer. It is one of the largest savings institutions in the UK and is an integral part of the Government's debt management strategy. NS&I contributes to reducing the cost of government borrowing by raising cost-effective financing from the retail sector. NS&I meets this primary objective by offering customers secure savings and investment products that are both attractive and competitive.

7.2 In 2006-07, NS&I's overall cost of financing was an estimated £334 million lower than that of comparable gilts, taking into account management costs and imputed tax foregone. NS&I announced six packages of interest rate changes during 2006-07. For new issues of fixed rate products these reflected changes in gilt yields and for variable rate products these reflected changes in the Bank of England's repo rate as announced by the Monetary Policy Committee. For both fixed and variable rate products, the cost of providing the product to the customer was also taken into account in the setting of interest rates.

7.3 The net contribution to financing in 2006-07 is estimated to be £5.5 billion with gross sales (including reinvestments and gross accrued interest) of approximately £15.4 billion. Table 7.1 below outlines changes in NS&I's product stock during 2006-07.

Table 7.1: Changes in National Savings & Investments' product stock during 2006-07

	End-March 2006 £ billion	End-March 2007[1] £ billion
Variable rate	47.7	52.4
Fixed rate	16.0	15.4
Index-linked	9.7	11.0
Total[2]	**73.3**	**78.8**

1. Estimates

2. Totals may not sum due to rounding

Source: National Savings & Investments

NS&I's net financing target

7.4 The target for NS&I's net contribution to financing the Government's gross financing requirement published at Budget 2006 was £3.0 billion (with a range of +£0.9 to -£0.1 billion around this central target). The forecast for NS&I's contribution was revised upwards at the 2006 Pre-Budget Report to £5.2 billion. This was a result of higher than expected sales as part of the Premium Bonds' 50th Anniversary celebrations and increased interest in Inflation Beating Savings. However, despite the revised forecast, the official target remains unchanged.

Premium Bonds' 50th Anniversary

7.5 The 50th anniversary of the launch of Premium Bonds fell on 1 November 2006. To mark the occasion, NS&I distributed five prizes of £1 million (instead of the normal two) at the December 2006 draw. This action resulted in extremely high Premium Bond sales in October 2006 (as the deadline for purchasing bonds for the draw was 31 October 2006), resulting in an estimated total sales of Premium Bonds of over £8 billion in 2006-07.

Diversification of products and distribution channels

7.6 NS&I has continued to diversify its product range in order to reduce the risks of becoming too dependent on any single product. In April 2006, it launched the "Direct ISA" – a cash ISA (with a maximum investment limit of £3,000 per annum) available through telephone and internet purchases only. The Direct ISA is estimated to contribute approximately £1 billion to NS&I's net financing in 2006-07.

7.7 NS&I's distribution channel diversification strategy has resulted in an increase in sales through its website and the telephone. In 2006-07, approximately 35 per cent of NS&I's sales were achieved through either its website or the telephone. The forecast for sales through these channels is for continued growth and is set to reach over 50 per cent of total sales by 2011-12.

Marketing Activities

7.8 NS&I continued its television advertising campaign featuring Sir Alan Sugar during 2006-07. It was also the sole sponsor of the BBC's Proms in the Park in September 2006 and the sponsor of a garden designed by 'Heavenly Gardens' at the Chelsea Flower Show in May 2006. These marketing campaigns generated new sales and helped to retain existing customers. Steps were taken to stop marketing once the unexpected success of the Premium Bonds' 50th Anniversary campaign became apparent.

Conclusion

7.9 NS&I had a year of stronger than expected sales. In addition, it has been taking steps to build the capacity in terms of customer awareness, distribution channels and compliance in order to ensure that it is able to continue to deliver its targets in the future.

8 National Savings & Investments' financing remit for 2007-08

Introduction

8.1 National Savings & Investments' (NS&I's) aim is to help reduce the cost to the taxpayer of government borrowing now and in the future. To achieve this, NS&I's strategic objective is to provide retail funds for the Government that are cost-effective in relation to funds raised on the wholesale market.

8.2 The key business objectives for NS&I to deliver its strategic objective are:

- to ensure levels of customer service that meet standards of best practice in the retail financial services sector; and
- to develop a more flexible and responsive business that can deliver a range of net financing requirements to HM Treasury.

8.3 In pursuit of its strategic objectives, NS&I will operate fairly, transparently and competitively, engendering customer loyalty and securing new business by offering attractive products on fair terms.

Strategy

8.4 NS&I's new Five Year Strategy: 'Adding Value' is outlined in Box 8.1 (below)[16].

[16] Further information on "NS&I Adding Value" will be available in NS&I's Annual Report and Accounts 2006-07, due to be published in Summer 2007.

Box 8.1: NS&I's new Five Year Strategy: 'Adding Value'

In 2007-08, NS&I will launch a new corporate strategy – "NS&I adding value"– that will alter significantly the focus of the organisation. This strategy will supersede NS&I's "Direction 2007" strategy (intended to run from 2003-04 until 2007-08), the targets in which have largely been met over a four year period.

A Government review of NS&I in 2005 recommended that, for a given net financing target, NS&I's primary objective should be to maximise the savings to the Government made as a result of retail borrowing through NS&I as opposed to borrowing through the wholesale market (measured and reported as 'value added'). The review also recommended that HM Treasury should continually consider the potential impact of NS&I's activities on other providers in the retail financial services market.

"NS&I adding value" will put this recommendation into operation by increasing the sustainable added value of the NS&I business. This will not only ensure that NS&I is well positioned going forward in an increasingly competitive marketplace, but will also help guard against it having any competitive impact on other participants in the retail financial services market.

The central elements of 'adding value' will be:

- shifting focus from growth in net financing to sustainable added value, delivering a lower but more consistent level of net financing;
- delivering an improved experience to customers;
- revitalising the product portfolio to ensure that NS&I continues to meet customer needs and reducing reliance on Premium Bonds;
- focussing on lower-cost channels, such as telephone and internet, although the Post Office will remain an important distributor throughout;
- working with NS&I's operational service provider, Siemens Information Services, to achieve mutually beneficial cost reductions to NS&I's operations ahead of the end of the current contract in 2014;
- strengthening compliance with relevant regulations and Financial Services Authority best practice; and
- engaging and equipping staff with the skills to deliver the new strategy.

Responsibility for setting product terms

8.5 HM Treasury is ultimately responsible, under the National Loans Act 1968, for setting the terms of NS&I's products.

8.6 NS&I will normally take the lead in bringing forward proposals to HM Treasury Ministers on product development (including proposals for new products) or on product terms (including interest rates). If the proposals are consistent with NS&I's objectives, wider government policy and this remit, HM Treasury Ministers would expect to endorse them.

Volume of financing in 2007-08

8.7 Gross sales (including reinvestments and gross accrued interest) of NS&I products are forecast to be around £13.9 billion in 2007-08. After meeting expected maturities and withdrawals, NS&I is expected to make a net contribution to government financing of £2.8 billion.

Cost of financing

8.8 The average cost of NS&I products should lie, on average, below the cost of equivalent gilts or other short-term comparators.

8.9 NS&I or HM Treasury can initiate a review of product terms at any time. NS&I will carry out each review. Any proposed changes will take account of the cost of NS&I's financing, the achievement of this remit and the need for NS&I to retain the capability and market presence to contribute to government financing over the medium term.

Review of remit

8.10 HM Treasury or NS&I may initiate a review of this remit during the course of 2007-08 in the light of any relevant factors.

9 Management of the Official Reserves in 2006-07

Introduction

9.1 The Government's official holdings of international reserves comprise gold, foreign currency assets and International Monetary Fund (IMF) Special Drawing Rights (SDRs)[17]. With the exception of the SDR assets that constitute the UK's reserve tranche position (RTP) at the IMF, these assets are held in the Exchange Equalisation Account (EEA).

Origin and purpose

9.2 The EEA was established in 1932 to provide a fund that could be used, when necessary, to regulate the exchange value of sterling, and therefore is the mechanism through which any UK Government exchange rate intervention would be conducted.

9.3 The Government's macroeconomic framework is designed to maintain long-term economic stability. This is achieved by maintaining low inflation, sustainable economic growth and sound public finances. The framework does not entail management of the exchange rate and the UK has not intervened for the purposes of influencing the sterling exchange rate since 1992. Against this background, foreign exchange reserves are held on a precautionary basis – to meet any change in exchange rate policy in the future, if required, or in the event of any unexpected shocks. The reserves are also used to provide foreign currency services for government departments and agencies, to provide foreign exchange for making payments abroad and to buy, sell and hold Special Drawing Rights (SDRs) as required by the UK's membership of the IMF. The way the reserve assets are invested, financed and managed is primarily designed to meet these policy objectives.

9.4 The Bank of England ('the Bank') may also hold foreign currency reserves on its own balance sheet, including for intervention purposes, in pursuit of the Monetary Policy Committee's monetary policy objective. This is set out in the Chancellor's letter to the Governor of May 1997[18].

Management of the Exchange Equalisation Account

9.5 The EEA is under the control of HM Treasury, which appoints the Bank as its agent to carry out the day-to-day management of the international reserves ('the reserves'). An annual Service Level Agreement (SLA) between HM Treasury and the Bank specifies the parameters under which the reserves are managed. This SLA includes investment benchmarks and limits for controlling credit, market and other risks. The SLA specifies:

- benchmarks[19] for investing the reserves, with limits to the Bank's discretion to take currency or interest rate positions relative to these benchmarks;

[17] The SDR is an international reserve asset created by the IMF. Its value is defined in terms of a basket of the US dollar, the euro, the yen and sterling. More information on the SDR can be found at: http://www.imf.org/external/np/exr/facts/sdr.HTM

[18] This letter is available on the HM Treasury website at: http://www.hm-treasury.gov.uk./media/ED3/C6/foi_boeindep_nremonetarypolicy_40205.pdf

[19] The benchmark is the neutral or passive investment strategy for the reserves portfolio. Active management performance is measured against a target return over the benchmark.

- the framework for controlling credit, market, liquidity and other risks;
- a target return for active management compared to benchmark positions; and
- the programme for financing the reserves, covering the EEA's foreign currency borrowing and currency swaps out of sterling.

9.6 A summary of the current (2006-07) SLA which excludes market-sensitive risk limits is set out in Chapter 10.

Financing of the reserves

9.7 The reserve assets are partly financed either by issuing securities denominated in foreign currencies or, alternatively, sterling financing from issuing gilts is used to acquire foreign currency assets. The Government retains a flexible approach to determining which method to adopt depending upon least cost. Least cost can be determined by comparing, on a swapped basis, the cost of issuing bonds in foreign currency of a given maturity and nominal amount with the cost of issuing in sterling. The Government last issued a US$3 billion five year Eurobond in 2003. The remaining part of the reserves are financed by retained earnings, historic sales of sterling for foreign currency and the EEA's net SDR position.

9.8 The reserve assets are divided between those that are currency-hedged and those that are unhedged for currency risk. The currency-hedged reserves are also largely hedged against interest rate risk, through the use of swaps. The unhedged reserves (also known as the net reserves) are in effect the net asset position in foreign currency: they comprise dollar and euro-denominated bonds, gold, the RTP (which is part of the National Loans Fund) and yen exposure obtained largely through forward yen purchases.

Composition and size of the reserves

9.9 EEA assets need to be highly liquid so that they can be made available quickly for intervention purposes (or other permitted uses) if necessary. Inevitably, these assets (other than gold) carry some element of credit risk. In order to keep this risk at a low level and to ensure a high level of liquidity, the funds of the EEA are predominantly invested in securities issued or guaranteed by the national governments of the United States, euro-area countries and Japan and in the debt instruments of highly-rated banks.

9.10 Table 9.1 sets out developments in official holdings of international reserves. The value of the gross foreign exchange reserves rose over the year, from US$46.2 billion at end-December 2005 to US$51.7 billion at end-December 2006. This was mainly because of valuation effects resulting from rise in the dollar value of gold and the appreciation of the euro against the US dollar. There was also a compositional shift from SDR-denominated assets to foreign currency assets, reflecting repayments from countries that had borrowed from the IMF. The level of the UK's net reserves rose over the year, from US$18.9 billion at end-December 2005 to US$20.9 billion at end-December 2006, also because of revaluation effects.

Table 9.1: UK Official Holdings of International Reserves

Currency breakdown	US$ million – market value	
Assets	**End-December 2005**	**End-December 2006**
US$	11.941	12,563
Euro	23,077	26,895
Yen	4,039	4,063
Other currencies	11	9
SDR	2,051	1,809
Gold	5,126	6,341
Total Assets[1]	**46,246**	**51,681**
Liabilities	**End-December 2005**	**End-December 2006**
US$	–6,167	–6,306
Euro	–17,301	–20,638
Yen	–1,155	–940
Other currencies	–9	–3
SDR	–2,734	–2,878
Gold	—	—
Total Liabilities	**–27,367**	**–30,765**
Net Reserves (Assets – Liabilities)	**18,879**	**20,916**

1. Totals and net figures may not sum due to rounding

Source: HM Treasury/Bank of England

Performance evaluation

9.11 In accordance with the SLA, the Bank manages the Official Reserves consistent with the Government's policy aims. A key objective in that context is to maintain their liquidity and security and, subject to that, to minimise the cost of holding the reserves. HM Treasury sets a target active management return as part of the annual SLA. This target is confidential as the limits and controls on the manager's ability to take risk within the portfolio are confidential for policy reasons. The return from the Bank's active management of the reserves against the benchmarks during the 2005-06 financial year was £20.1million.

Disclosure of financial data

9.12 Since April 2000, the UK has published reserves data in accordance with the IMF/G10's Special Data Dissemination Standard (SDDS). These monthly releases set out the value and composition of the foreign currency and gold assets, liabilities and derivatives on a marked-to-market basis (that is, using current market valuations)[20].

9.13 HM Treasury publishes the financial accounts for the EEA as part of the statutory obligations set out in the Exchange Equalisation Account Act 1979 (as amended by the Finance Act 2000). The financial accounts for 2005-06, audited by the National Audit Office, were accordingly published and laid before both Houses of Parliament on 19 July 2006[21].

Intervention

9.14 The Government announced in September 1997, as part of its commitment to openness and transparency with respect to the reserves, that it would publish details of any intervention undertaken to influence exchange rates in the subsequent monthly press release. Since September 1997, the UK authorities have only intervened on one occasion, when the Government joined a concerted intervention by the G7 to support the euro in September 2000.

[20] Reserves data from July 1999 onwards are available on the Bank of England's website at: http://www.bankofengland.co.uk/statistics/reserves/index.htm

[21] The Financial Accounts for the EEA can be viewed on HM Treasury's website at: http://www.hm-treasury.gov.uk/media/812/D3/eea_accounts190607.pdf

10 The Bank of England's Service Level Agreement for management of the Official Reserves

Introduction

10.1 The Service Level Agreement ('SLA') sets out the arrangements for the Bank acting as HM Treasury's agent in managing the Exchange Equalisation Account ('EEA'). It will remain in force indefinitely and be reviewed annually.

10.2 The SLA provides both parties with an understanding of what constitutes an acceptable level of service in managing the EEA.

10.3 The SLA should be read in conjunction with all relevant legislation, particularly the Exchange Equalisation Account Act 1979, as amended by the Finance Act 2000, which provides that the EEA shall be used:

- for checking undue fluctuations in the exchange value of sterling;
- for securing the conservation or disposition in the national interest of the means of making payments abroad;
- for the purpose specified in Section 1(3) of the International Monetary Fund Act 1979 (payment of charges under Section 8 of Article V of the Articles of Agreement of the International Monetary Fund); and
- for carrying out any of the functions of the Government of the United Kingdom under those of the said Articles of Agreement which relate to Special Drawing Rights (SDRs).

Objectives

10.4 The Bank will at all times:

- carry out efficiently and cost effectively in a legal and proper form foreign currency and gold transactions on behalf of HM Treasury and other government departments, including the issuance of foreign currency debt on behalf of HM Treasury;
- manage the reserves so as to maintain their liquidity and security within limits agreed with HM Treasury and ensure that the public funds entrusted to the Bank in the EEA are properly and well managed and safeguarded. Subject to these limits, manage the reserves to maximise their return and assist HM Treasury in meeting the published Service Delivery Agreement target;
- advise HM Treasury on the financing of the reserves, including, as necessary, the management of foreign currency borrowing (covering new borrowing, hedging and repayments);
- monitor and report to HM Treasury on the level of risk and return on holding the reserves and provide accurate and timely accounting and management information and statistical analysis pertaining to the reserves as requested by HM Treasury;

- ensure that effective management systems, including financial monitoring and control systems, are in operation and that proper financial procedures are followed and that accounting records are maintained in a form suited to the requirements of management as well as in the form prescribed for the published accounts; and
- advise HM Treasury as to how to ensure the EEA assets have the fullest possible protection of sovereign immunity and that the EEA enters into appropriate legal agreements with counterparties, nominees, delegates and agents that provide the fullest possible protection for EEA assets, subject to commercial feasibility.

Authorised financial instruments

10.5 The reserves can be invested in a specified range of financial instruments:

- bonds issued by other national governments, supranational organisations and selected official sector agencies;
- foreign currency spot, forward and swap transactions;
- interest rate and currency swaps;
- bond and interest rate futures, swap notes and swap futures;
- sale and repurchase and buy-sell back agreements;
- gold deposits, gold loco and gold quality swaps;
- forward rate agreements;
- SDRs;
- bank deposits; and
- certificates of deposit and corporate commercial paper.

Active management

10.6 The Bank will actively manage the reserves against a number of benchmarks. The benchmarks will be reviewed regularly and constructed so that they are replicable and represent HM Treasury's long-term investment strategy. They are split into benchmarks for the currency-hedged reserves (on which currency and interest rate exposures are hedged) and the net reserves which are not hedged against exchange rate and interest rate risk. The Bank's scope to deviate from the benchmarks through active management will be constrained by agreed risk limits.

Risk management

10.7 The Bank will:

- ensure that the risks associated with its management of the EEA are properly identified, evaluated and mitigated and that exposures comply with the detailed credit risk, market risk and operational risk framework and limits agreed with HM Treasury at the start of the year;

- monitor the EEA's credit exposures on a daily basis, applying the credit risk framework agreed with HM Treasury. The Bank will review this framework and the credit limits it provides in the light of market or institutional developments, and changes in the nature of the EEA's activities. The Bank's Credit Ratings Advisory Committee (CRAC) will normally undertake credit assessments at least once a year of each issuer whose securities may be held in the EEA; of counterparties; of banking sectors; of futures clearing brokers; and of commercial global custodians and correspondent banks utilised by the EEA;

- monitor the exposure of the EEA to market risk and ensure that it complies with the limits agreed with HM Treasury using Value at Risk (VaR) which provides a means of aggregating risk consistently across the components of the portfolio and stress tests to quantify the potential loss from particular scenarios; and

- confirm to HM Treasury on a quarterly basis that sufficient controls were in place to mitigate the operational risks affecting the EEA during that quarter, that appropriate mechanisms were in place to identify and address new risks and that the processes and framework in place adequately meet the "Turnbull" requirements relating to the Bank's management of the EEA. If appropriate, exceptions to such confirmation will be listed.

Audit arrangements and accounting requirements

10.8 The Bank will agree the annual programme of work of the Bank's Internal Audit Division pertaining to the EEA with HM Treasury by the beginning of the year. The Bank's internal audit arrangements will follow the standards set by the Institute of Internal Auditors UK and Ireland and will accord with the objectives, standards and practices set out in HM Treasury's "Government Internal Audit Standards". The Bank will maintain the EEA's accounts drawn up in accordance with UK GAAP as far as appropriate and in accordance with the relevant Accounts Directions.

National Audit Office access

10.9 For the purposes of:

- the examination and certification of the EEA accounts; or

- any examination pursuant to Section 6(1) of the National Audit Act 1983 or any re-enactment thereof of the economy, efficiency and effectiveness with which the Bank has managed the EEA:

the National Audit Office (NAO) may examine such documents as it may reasonably require which are owned, held, or are otherwise within the control of the Bank, have access to Bank buildings, and may require the Bank to produce such oral or written factual explanations as it considers necessary. However, the NAO will address substantive questions on the management of the reserves to HM Treasury and not the Bank.

HM Treasury's responsibilities

10.10 HM Treasury is responsible for monitoring the risk environment and performance of the Bank in managing the reserves. To support this process, the Bank provides the following management information:

- monthly financial reporting, detailing the returns made with respect to the management of the EEA and the market and credit risks incurred;
- quarterly management reports on operational risk issues and the Bank's compliance with the guidance issued by the Turnbull Report (Internal Control: Guidance for Directors on the Combined Code issued by the Institute of Chartered Accountants in England and Wales). These reports highlight the Bank's role in identifying, assessing, managing and monitoring the risks relating to its management of the EEA;
- quarterly reports from the Bank's Internal Audit Division on the internal audit programme agreed for the EEA; and
- Bank and HM Treasury officials meet at monthly reserves meetings to review the performance against the parameters set out in the SLA and to consider wider operational and policy issues. The EEA Accounting Officer and the Bank's Executive Director for Markets meet twice each year to discuss overall strategy and governance issues.

Financing the reserves

10.11 The Bank will provide HM Treasury with relevant market intelligence and advice on options for financing the reserves with a view to minimising the costs and risks to the Government. An annual financing programme for the currency-hedged reserves will be agreed between the Bank and HM Treasury at the beginning of the financial year. The Bank will undertake this programme in accordance with the timetable and guidelines agreed, as well as any changes subsequently agreed with HM Treasury.

10.12 The Bank will act as HM Treasury's agent in issuing and managing any foreign currency liabilities associated with the reserves. The Bank will provide regular information on the pricing of foreign currency debt and, if agreed with HM Treasury, will appoint managers to undertake an issuance in accordance with HM Treasury's instructions.

Sterling cash management

10.13 The Bank will liaise closely with the DMO with respect to managing sterling flows relating to EEA operations. The Bank will, so far as is possible, aim to manage the EEA so as to avoid conflict with the DMO's sterling cash management operations while in no way disadvantaging the EEA.

Publication requirements

10.14 The Bank will provide the figures for the United Kingdom's official holdings of international reserves monthly Press Notice, by no later than 2pm on the second working day of every month, to be published on the third working day of every month. The format for this Press Notice will be in accordance with the requirements of the IMF's Special Data Dissemination Standard and will be aligned with the conventions of the G10/IMF reserves template published on the Bank of England's website. The monthly Press Notice will provide details of the amount and date of any official intervention during the month and an explanation of why it was undertaken.

Intervention

10.15 Specific prior authority from HM Treasury Ministers is required for intervention designed to influence sterling exchange rates using the EEA or for EEA participation in concerted intervention in support of any other currency. The Bank will subsequently report on the extent to which any such authority was used, and to what effect, by letter.

II Central government's financial asset and liability risk monitor

Introduction

II.1 The central government's financial asset and liability monitor ('the monitor') is produced in order to aid quantification of the risks faced by central government on its balance sheet and forms part of an ongoing HM Treasury work programme. It should be regarded as a 'work in progress' because it records only current financial assets and liabilities of central government and some of the calculations involve approximating assumptions. Therefore, it cannot be reconciled with other central government accounting publications and is un-audited.

II.2 The monitor is a precursor to the publication of 'Whole of Government Accounts'[22] and is in accordance with the transparency and accountability recommendations published in the International Monetary Fund's 'Guidelines on Public Debt Management' 2003[23].

II.3 It should be noted that the monitor records only one aspect of the Government's wider financial position as it currently covers only financial assets and liabilities of central government. For example, it does not take account of other significant public sector assets and liabilities such as local authorities' assets or non-financial assets and liabilities such as contingent liabilities or future tax revenue streams. Information covering the Government's wider fiscal position and prospects going forward can be found in the 2006 Long-term public finance report[24], which provides a comprehensive assessment of the sustainability of the public finances.

Description of Table II.1

II.4 Table 11.1 below breaks up total assets and liabilities by type and by managing institutions. In addition to nominal and market values of the assets and liabilities, some other key variables are reported, which help to provide greater insight into the characteristics of central government's balance sheet thereby facilitating a better evaluation of the risks that the balance sheet is exposed to. These key variables are explained in Box 11.1.

[22] The Government announced in 2007 that, from the 2008-09 financial year onwards, Government Accounts will be prepared using International Financial Reporting Standards, as adapted in the public sector context. The Whole of Government Accounts will be presented on the same basis from 2008-09.

[23] The latest version of the Guidelines on Public Debt Management can be found on the IMF website at: http://www.imf.org/external/np/mfd/pdebt/2003/eng/am/index.htm.

[24] 2006 Long-term public finance report: an analysis of fiscal sustainability, HM Treasury, December 2006 can be found on HM Treasury's website at: http://www.hm-treasury.gov.uk/media/53E/54/pbr06_longtermpublicfinancereport_476.pdf. See also the 2003 Long-term public finance report, HM Treasury, December 2003, which provides a discussion of the different approaches to assessing long-term fiscal sustainability and can be found on HM Treasury's website at: http://www.hm-treasury.gov.uk/media/8F5/85/pbr04long-term_473.pdf.

Box II.1: Description of variables in the Central Government Financial Asset and Liability Risk Monitor

- **Nominal value and market value**[25] – the nominal value of assets or liabilities is the value at which they would be repaid. The market value is the value of assets or liabilities if they were purchased in the market. For example, the nominal value of central government's gilt liabilities represents the amount that the Government would pay on redemption of these liabilities whereas the market value of the gilt liabilities is their tradable value in the secondary market.
- **Maturities of less than 1 year** – the nominal value of the assets or liabilities that have less than one year before they are redeemed.
- **Average modified duration** – this is a measure of the sensitivity of the value of assets or liabilities to interest rate movements. In the context of the asset and liability monitor, duration offers some indication of how great an impact small interest rate changes might have on the present value of the central government's balance sheet. Other things equal, longer duration suggests a greater degree of sensitivity to small interest rate changes.
- **Average maturity** – indicates the market value weighted average length of time (in years) before assets and liabilities are due to be redeemed.
- **Floating rate composition** – the value of those assets and liabilities that are indexed to a short-term money market interest rate.

Key facts – central government's financial assets

II.5 The nominal value of the central government's total financial assets was £156.1 billion at end-December 2006. This compares with £143.0 billion at end-December 2005. This change was primarily due to an increase of £4.6 billion in short-term bills held by the Commissioners for the Reduction of the National Debt (CRND) in central government funds, other short-term assets (£4.1 billion), gilts held in central government funds by CRND (£3.2 billion) and the Public Works Loans Board (£2.5 billion). These were partially offset by a decrease of gilts held by the DMO (£1.8 billion).

II.6 The market value of central government's total financial assets was £166.1 billion at end-December 2006 compared with £158.5 billion at end-December 2005, an increase of £7.6 billion.

II.7 The average modified duration, which excludes gold volatility and duration for index-linked gilts, increased to 6.6 years at end-December 2006 from 6.2 years at end-December 2005. Average maturity over the period increased to 12.5 years from 10.9 years.

II.8 The largest single contributor to the central government's financial assets is loans to local authorities (£47.7 billion) from the Public Works Loans Board, which make up nearly 31 per cent of the total nominal value. Other significant contributors include deposits given to the DMO by the CRND (£20.0 billion or 13 per cent of total), non-marketable conventional gilts held in central government funds by CRND (£18.1 billion or 12 per cent of total), marketable conventional gilts held by the DMO (£16.6 billion or 11 per cent of total) and foreign currency bonds managed by the Bank of England (£15.2 billion or 10 per cent of total).

[25] Nominal value of index-linked gilts includes inflation uplift.

Key facts – central government's financial liabilities

II.9 The nominal value of central government's total financial liabilities was £633.6 billion at end-December 2006. This is an increase of £47.6 billion compared with end-December 2005 (£586.0 billion). This change is attributable primarily to an increase of £41.6 billion in gross gilts in issue by the DMO to £459.7 billion, an increase of £6.0 billion[26] in NS&I products to £78.1 billion and Treasury bills and other short-term liabilities managed by the DMO to £46.2 billion from £42.3 billion. These were partially offset by a decrease in other short-term liabilities managed by the DMO of £4.7 billion to £12.7 billion.

II.10 The market value of the central government's total financial liabilities at end-December 2006 was £671.5 billion compared with £640.1 billion at end-December 2005, an increase of £31.5 billion.

II.11 The average modified duration of the financial liabilities at end-December 2006 was 6.2 years, a marginal increase of 0.1 years from December 2006 (at 6.0 years) and the average maturity of the financial liabilities was also higher at 10.9 years compared with 10.3 years at end-December 2005, reflecting significant increases in marketable gilts in issue. There was a 10 per cent increase in the nominal value of liabilities with a maturity of less than one year from £102.0 billion to £111.8 billion.

II.12 Gross gilts issued represent the highest proportion of central government financial liabilities (£459.7 billion), accounting for 73 per cent of the nominal value of total financial liabilities. Other significant liabilities include those managed by NS&I (£78.1 billion) accounting for 12 per cent of the nominal value of total liabilities, DMO holdings of other short-term bills (£25.8 billion), Treasury bills (£20.4 billion), Ways and Means advance (£13.4 billion) and the DMO's repos-outstanding (£11.3 billion).

[26] NS&I's stock of debt at end-December 2005 was revised up by £0.1 billion from £72.0 billion to £72.1 billion following publication of the Debt and reserves management report 2006-07.

Table 11.1: Central government's financial asset and liability risk monitor at 31 December 2006

Central government financial assets	Nominal Value[1] (£ billion)	Market Value (£ billion)	Maturities of less than 1 year (£ billion)	Modified duration[2] (years)	Average maturity (years)	Floating rate composition (£ billion)
Managed by:						
Public Works Loan Board (loans to local authorities)	47.7	54.5	0.7	12.8	25.5	0.2
Debt Management Office						
Gilts held by DMO						
Marketable conventionals	16.6	18.1	2.1	7.1	11.0	—
Marketable index-linked	7.5	8.5	0.0	10.4	12.6	—
Total	24.0	26.7	2.1	—	11.6	—
Gilts held in Central Government funds by by the Commissioners for the Reduction of the National Debt (CRND)						
Marketable conventionals	0.0	0.0	0.0	4.1	8.1	—
Non-marketable conventionals	18.1	18.6	5.0	7.1	11.0	—
Non-marketable index-linked	0.7	0.8	0.0	10.4	12.6	—
Total	18.8	19.3	5.0	—	11.1	—
CRND loans to local authorities	0.0	0.0	0.0	0.0	0.0	—
Other short-term bills held by CRND in Central Government funds						
Treasury bills	0.0	0.0	0.0	0.0	0.0	—
Deposits given to DMO by CRND	20.0	20.0	20.0	0.1	0.1	—
Total	20.0	20.0	20.0	0.1	0.1	—
Other short-term assets						
Reverse repos – outstanding	0.1	0.1	0.1	0.0	0.0	—
Deposits at commercial banks	2.4	2.4	2.4	0.0	0.0	—
Cash deposits at the Bank of England	0.6	0.6	0.6	0.0	0.0	—
Sterling Certificates of Deposit	1.0	1.0	1.0	0.2	0.2	—
Sterling Commercial Paper	1.2	1.2	1.2	0.2	0.2	—
FX Commercial Paper	0.0	0.0	0.0	0.0	0.0	—
Total	5.2	5.2	5.2	0.1	0.1	—
Bank of England						
Sterling assets						
Sterling leg of swaps and FX liabilities[3]	10.9	11.0	3.6	0.2	1.6	10.9
Foreign currency assets						
Bonds	15.2	15.3	1.1	2.6	2.6	0.0
Money Market Instruments	4.7	4.7	4.7	0.2	0.2	—
Short-term assets[4]	2.2	2.3	2.2	0.2	0.1	—
Gold[5]	3.2	3.2	—	13.0	—	—
IMF Special Drawing Rights	0.2	0.2	—	0.0	—	0.2
Total	25.7	25.7	8.0	1.6	1.8	0.2
HM Treasury						
Sterling assets						
National Loans Fund loans[6]	3.1	3.1	0.1	9.2	15.4	—
Foreign currency assets						
IMF Reserve Tranche Position	0.7	0.7	—	0.0	—	0.7
Total[7,8]	**156.1**	**166.1**	**44.6**	**6.6**	**12.5**	**11.8**

Table 11.1: Central government's financial asset and liability risk monitor at 31 December 2006 (continued)

Central government financial liabilities	Nominal Value[1] (£ billion)	Market Value (£ billion)	Maturities of less than 1 year (£ billion)	Modified duration[2] (years)	Average maturity (years)	Floating rate composition (£ billion)
Managed by:						
National Savings and Investments	78.1	78.1	11.4	4.8	5.0	51.9
Debt Management Office						
Gross gilts in issue[9]						
Marketable conventionals	322.3	343.7	28.6	8.4	13.6	—
Non-marketable conventionals	21.1	21.6	7.2	2.3	2.4	—
Marketable index-linked	115.6	131.4	0.0	12.1	14.8	—
Non-marketable index-linked	0.7	0.8	0.0	6.3	6.5	—
Total	459.7	497.5	35.8	—	13.4	—
Treasury bills[10]	20.4	20.2	20.4	0.1	0.1	—
Other short-term bills	25.8	25.9	25.8	0.1	0.1	—
Total	46.2	46.1	46.2	0.1	0.1	—
Other short-term liabilities						
Repos – outstanding	11.3	11.3	11.3	0.1	0.1	—
Deposits made by local authorities and commercial banks	1.4	1.4	1.4	0.1	0.1	—
Total	12.7	12.7	12.7	0.1	0.1	—
Bank of England						
Sterling liabilities						
Ways and Means Advance	13.4	13.4	—	0.0	—	13.4
Foreign currency liabilities						
HMG Bonds	1.5	1.5	0.0	1.5	1.5	—
Loans	0.0	0.0	0.0	0.5	0.0	—
Repos	2.6	2.6	2.6	0.2	0.0	—
Swaps & FX Liabilities (*excludes £ leg*)[11]	10.0	10.2	3.1	1.5	1.3	10.0
IMF Special Drawing Rights allocation	1.5	1.5	—	0.0	—	1.5
Total	15.6	15.8	5.7	1.1	1.0	11.5
HM Treasury						
Sterling liabilities						
IMF non-interest bearing securities	7.9	7.9	—	0.0	—	7.9
Total[7,8]	**633.6**	**671.5**	**111.8**	**6.2**	**10.9**	**84.7**

Figures may not sum due to rounding

Source: Bank of England/Debt Management Office/HM Treasury/National Savings & Investments

1 *Nominal value of index-linked gilts includes inflation uplift.*
2 *Modified duration of index-linked gilts is calculated with respect to changes in real yield.*
3 *Modified duration covers swaps only.*
4 *Short-term assets equals deposits plus reverse repos.*
5 *Modified duration gold equals 30-day moving average volatility of spot gold prices.*
6 *NLF loans are composed of loans to nationalised industries and public corporations. Market value is approximated by the nominal value.*
7 *Totals for modified duration are weighted by market value. Gold volatility measure and duration for index-linked gilts are excluded from this caluculation.*
8 *Total for average maturity are weighed by market value.*
9 *Non-marketable gilts are held by the Commissioners for the Reduction of the National Debt (CRND).*
10 *Nominal value is different from Table 2.1 because Table 11.1 includes transactions made prior to end-December 2006 but due to mature in the first quarter of 2007.*
11 *See footnote 3.*

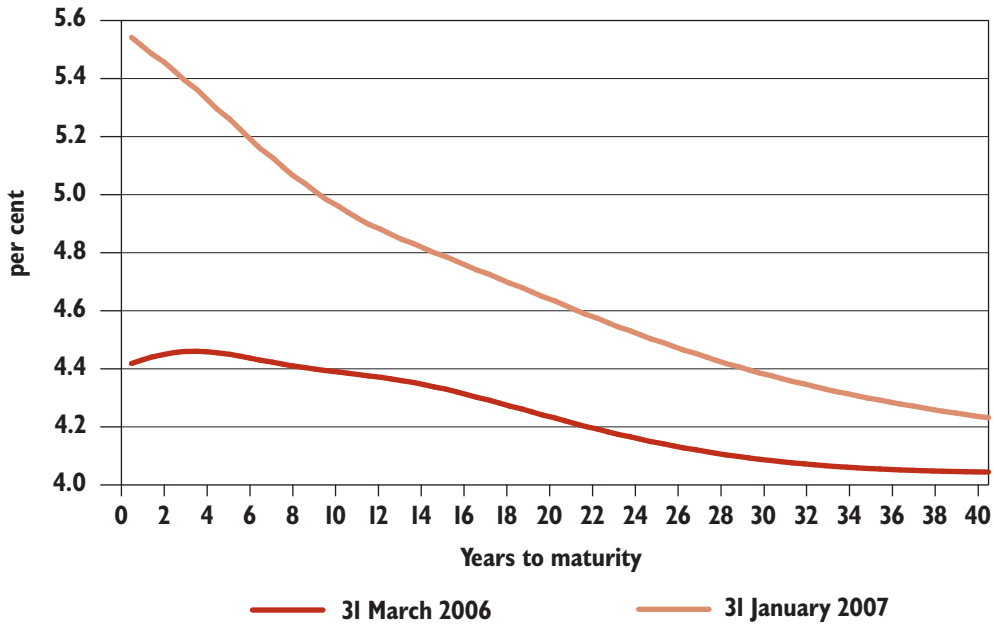
A KEY DEVELOPMENTS IN THE GILT MARKET APRIL 2006 TO JANUARY 2007

A.1 This annex summarises key developments in the gilt market in 2006-07 (to end-January 2007). A more comprehensive review of the year as a whole, in the context of developments in other major international bond markets, will be published in the DMO Annual Review 2006-07.

Nominal par gilt yield curves

A.2 The significant inversion of the gilt yield curve between end-March 2006 and end-January 2007 is shown in Chart A1. Yields rose at all maturities, but short-dated yields considerably under-performed long maturities given rising interest rates. 2-year par yields rose by 101 basis points to 5.46 per cent, 5-year yields rose by 81 basis points to 5.26 per cent, 10-year yields rose by 56 basis points, to 4.96 per cent but 30-year yields rose only by 29 basis points, to 4.38 per cent.

Chart A1: Par gilt yield curves



Source: Debt Management Office

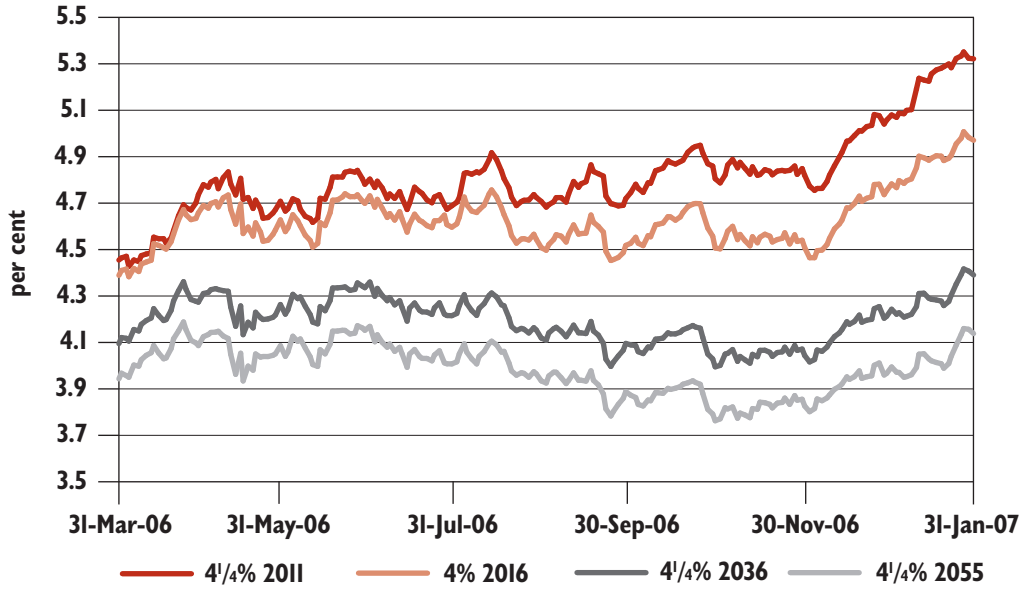
Conventional benchmark gilts

A.3 At the beginning of 2006-07, the gilt market rallied somewhat after the publication of manufacturing and service sector data, but yields soon began the upward trend evident since the beginning of 2006 in the face of subsequent stronger economic data. This direction persisted into the first half of May 2006 but then gilts benefited from a 'flight to quality' in relatively volatile market conditions in which there were sharp downward movements in international equity and commodity markets. Yields increased again in June 2006, largely driven by market speculation about the future paths of interest rates in the US, Euro-area and the UK (see Chart A2).

A.4 After a strong start to the second quarter, as the gilt market benefited from a 'flight to quality' arising from the escalation of the conflict in the Middle East, sentiment also changed in the face of stronger economic data (in particular inflation and service sector data). From mid-summer onwards, the short-end of the curve was increasingly driven by rising interest rate expectations. There was an increase in the UK repo rate of 25 basis points on 3 August 2006. As short yields rose, long yields fell, reflecting the continuing strength of demand at the long-end of the curve - reportedly reflecting Liability Driven Investment plans.

A.5 In Autumn 2006, stronger than expected economic data led to increasing expectations about a possible further interest rate rise in November 2006. The Monetary Policy Committee raised the base rate on 9 November 2006 but the gilt market traded in a tight range. However, gilt yields rose sharply again in December 2006 as economic data remained strong. Consequently, expectations grew about the likelihood of a further UK interest rate rise in early 2007. In the event, the MPC raised rates by 25 basis points on 11 January 2007. Yields rose sharply at all maturities but in particular at the short-end. Yields drifted higher through January 2007, reflecting strong economic data.

Chart A2: Conventional benchmark gilt yields

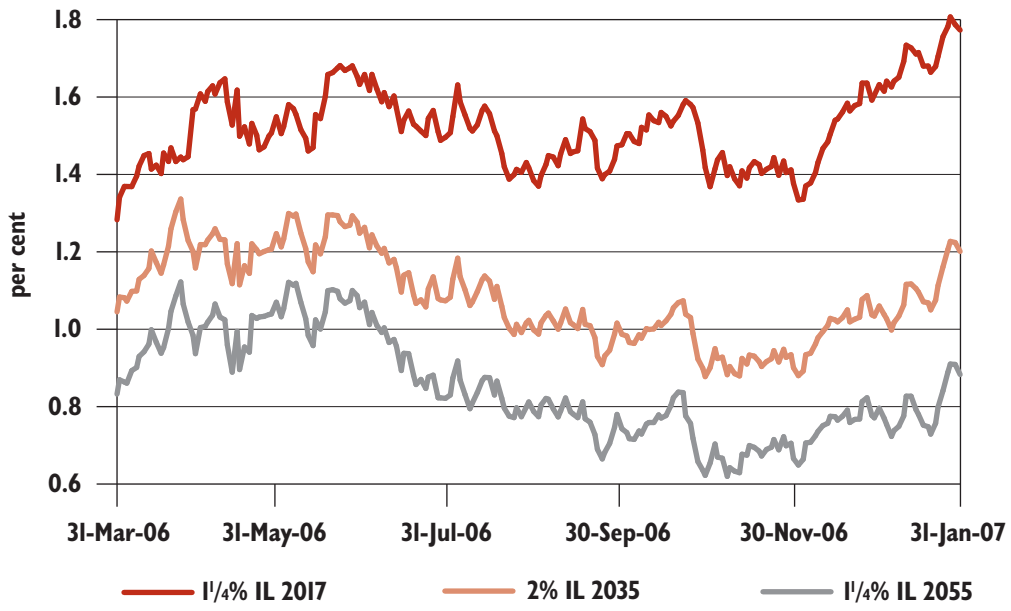


Source: Debt Management Office

Real gilt yields

A.6 Real yields on index-linked gilts followed the same broad trend as conventional gilts reflecting the trends summarised above (see Chart A3). As with conventional gilts, long-dated index-linked gilts considerably outperformed shorter-dated maturities. In the financial year to end January 2007, the yield on the 10-year index-linked gilt (1¼ per cent index-linked Treasury Gilt 2017) rose by 49 basis points, to 1.77 per cent, whereas that on the 50-year maturity (1¼ per cent index-linked Treasury Gilt 2055) rose by only 5 basis points to 0.88 per cent. The strength of the long-end was reportedly underpinned by ongoing strong demand from the pension industry.

Chart A3: Real yields on 10- 30- and 50-year index-linked gilts



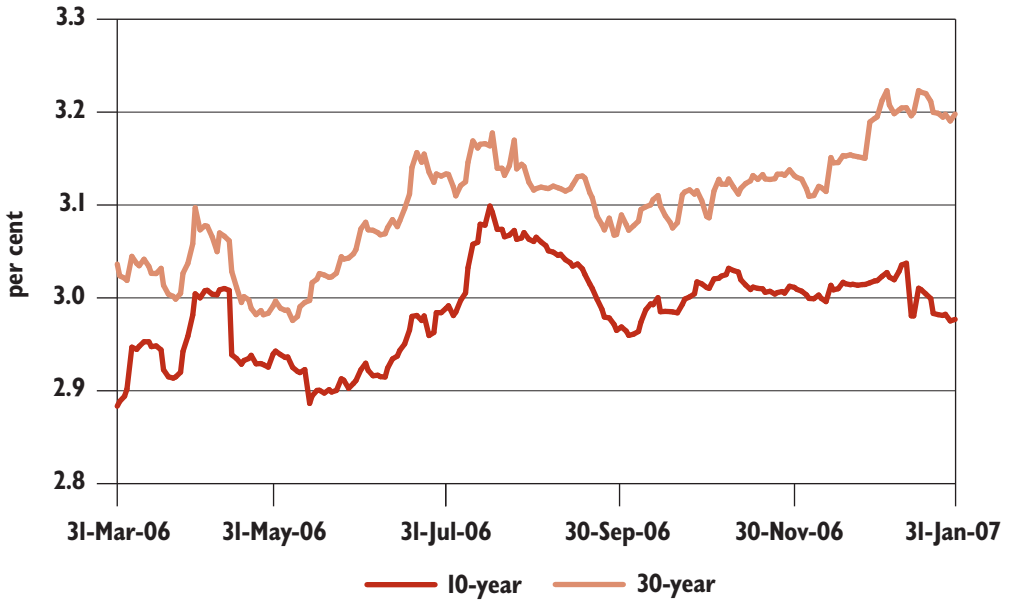
Source: Debt Management Office

Breakeven inflation rates[26]

A.7 In general, the index-linked gilt market was supported by rising inflation expectations throughout the year, which led the sector to out-perform conventional gilts, particularly at the long end of the yield curve. Over the financial year to end January 2007, the 10-year break-even inflation rate rose by 9 basis points to 2.98 per cent, while the 30-year rate rose by 17 basis points to 3.20 per cent (see Chart A4).

[26] The breakeven inflation rate is the difference between the yield on a conventional gilt of a particular maturity and the yield on an index-linked gilt of the same maturity. It can be interpreted as a measure of inflation expectations.

Chart A4: 10-year and 30-year breakeven inflation rates



Source: Debt Management Office

B The Strategic Debt Analysis model and a comparison of debt issuance strategies

B.1 A debt strategy simulation model can be used to illustrate the debt service cost and risk of different debt issuance strategies, given assumptions about the shape of both the nominal and real yield curves. The DMO has built such a model – the Strategic Debt Analysis (SDA) model – which is described in detail in Chapter 6 of the *DMO Annual Review 2005-06* and in a DMO discussion paper[27]. Simulations using this model are set out below.

B.2 It should be noted that the simulation modelling presented in this section is intended to convey the impact that different issuance strategies could have on the debt service cost and risk of the Government's debt portfolio. It is based on a number of strong assumptions, including those for the nominal and real yield curves. The model has not been used to determine a particular debt issuance strategy but to illustrate the impact of different issuance strategies.

Design of simulation exercises – debt service cost and risk measures

B.3 The cost of the debt in any given period is defined in cash flow terms and is computed as the sum of all nominal coupon payments (interest payments on nominal bonds plus inflation compensated interest payments on inflation-linked bonds) plus the realised inflation compensation effects on maturing inflation-linked bonds. The debt service cost is measured as a proportion of nominal GDP because this ratio provides a clearer indication of the debt cost burden to the Government than does the nominal cost of debt on its own. In addition, the debt service cost ratio is consistent with the Government's fiscal rules.

B.4 The risk measures capture the concept of financing risk, that is, the uncertainty in the financing or cash flow cost related to a given borrowing strategy. The financing risk associated with a given debt strategy is evaluated by:

- the standard deviation of the debt cost ratio, which measures the volatility of the debt service cost ratio; and
- the upper 95th percentile of the debt service cost ratio distribution that gives the largest debt service cost ratio, such that it is exceeded by five percent of the debt service cost ratio realisations[28].

Initial conditions for the simulation

B.5 The initial conditions for the simulation exercises in the SDA model are the:

- initial portfolio – gilt portfolio as at 29 December 2006 (excluding all undated gilts);

[27] Pick, A and ML Anthony (2006), "A simulation model for the analysis of the UK's sovereign debt strategy", UK DMO working paper. This paper can be found on the DMO's website at: http://www.dmo.gov.uk/index.aspx?page=Research/DMO_research

[28] This latter statistic is in the spirit of the commonly used Value-at-Risk (VaR) approach used in finance and risk management and will accordingly be referred to as the debt service cost ratio-at-risk. The debt service cost ratio-at-risk is a useful risk measure especially when the Government is concerned about avoiding extremely high debt cost ratios. In contrast, the standard deviation measures risk symmetrically, in that it relates to deviations from the mean debt cost ratio.

- initial values for the macroeconomic variables,[29] which are their respective long-run average values; and
- initial nominal and real yield curves, which are generated from the long-run average values of those macroeconomic variables that are used to explain how the yield curves vary through time[30]. The yield curves extend to the 30 year maturity[31].

B.6 The simulation horizon is 30 years (120 quarters) and 10,000 replications for each simulation exercise are completed.

Issuance strategies

B.7 Table B1 contains four hypothetical issuance strategies. Strategy 1 comprises 90 per cent conventional gilts and 10 per cent index-linked gilts and the distribution of conventional gilts is skewed towards 5-year gilts. Strategy 2 comprises 70 per cent conventional gilts and 30 per cent index-linked gilts and has a fairly even allocation across the five gilts. The other two issuance strategies – strategy 3 and strategy 4 – both comprise 72 per cent conventional gilts and 28 per cent index-linked gilts. Both strategy 3 and strategy 4 have a larger combined allocation to long conventional and index-linked gilts relative to strategies 1 and 2. Strategies 3 and 4 are similar to the issuance programme in 2006-07.

Table B1: Composition of issuance strategies (per cent)

	5-year conventional gilt	10-year conventional gilt	30-year conventional gilt	10-year index-linked gilt	30-year index-linked gilt
Strategy 1	60.0	15.0	15.0	5.0	5.0
Strategy 2	23.3	23.3	23.3	15.0	15.0
Strategy 3	16.0	16.0	40.0	14.0	14.0
Strategy 4	16.0	16.0	40.0	0.0	28.0

Source: Debt Management Office

Simulation results

B.8 The debt service cost-risk trade-off of each of the four issuance strategies has been calculated assuming that the nominal and real yield curves are downward sloping at the long end of the curve. Specifically, the simulated average shape and slope of the nominal yield curve have similar properties to the average nominal yield curve from 1998 to 2004. Table B2 compares the mean and standard deviation of selected maturity points on the actual nominal yield curve with those on the simulated yield curve. It can be seen that yields on shorter and

[29] The macroeconomic variables in the SDA model are the output gap, the net primary financing requirement (CGNCR, excluding interest payments), the short interest rate, CPI inflation and RPI inflation.

[30] The macroeconomic variables used to explain the behaviour of the yield curves are the output gap, the short interest rate, CPI inflation and RPI inflation.

[31] Consequently, the actual gilt portfolio is adjusted to be consistent with this maturity range. All gilts of maturity greater than 30 years are re-classified as 30-year gilts. This adjustment has no implications for the results of the simulations because it affects all issuance strategies equally. In addition, as the frequency of the SDA model is quarterly, when several conventional gilts mature in the same quarter they are combined and treated as a single gilt. A similar transformation is done for index-linked gilts. These additional minor adjustments have no implications for the results of the simulations because they affect all issuance strategies equally.

medium-dated gilts are higher than those on long-dated gilts so long-dated gilts are a cheaper form of issuance than short and medium-dated gilts. In addition, the volatility of long-dated gilts is lower than that for short and medium-dated gilts.

Table B2: Actual and simulated nominal interest rates (per cent) (1998Q1-2004Q4)

	Actual		Simulated	
	Mean	Standard deviation	Mean	Standard deviation
5-year	4.9	0.7	4.6	0.6
10-year	4.8	0.4	4.5	0.4
30-year	4.5	0.2	4.3	0.2

Source: Debt Management Office

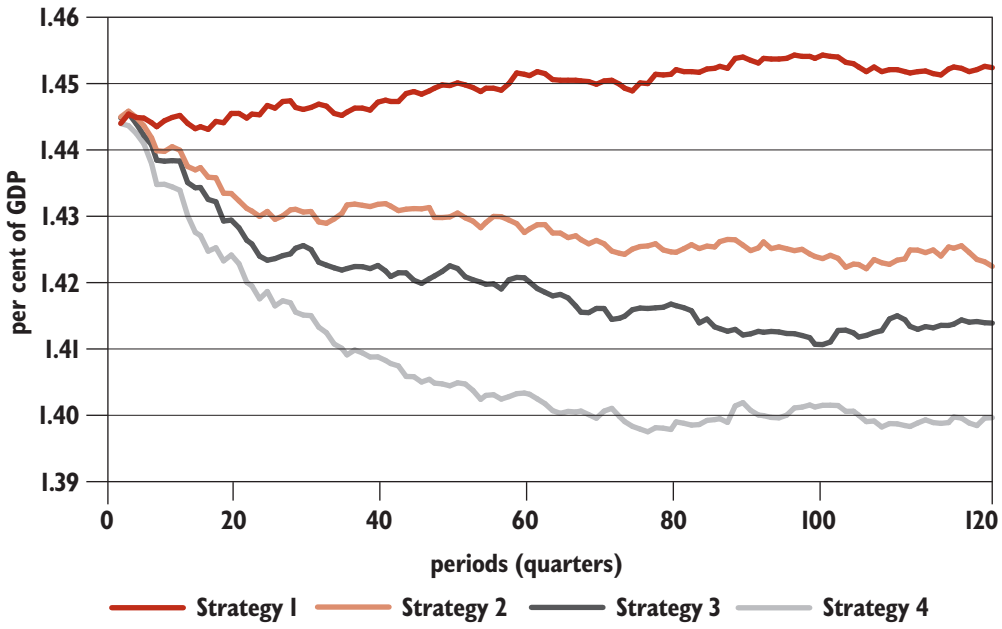
B.9 The results for the average debt service cost (see Chart B1) show that strategy 4 is the cheapest strategy. This result is to be expected because strategy 4 contains a larger share of the relatively cheaper long maturity gilts than the other three strategies.

B.10 The downward trend in the average debt service cost of strategies 2, 3 and 4 illustrated in Chart B1 reflects the fact that, over time, the characteristics of the portfolio (particularly its maturity) are altered by the assumed issuance strategies, which replace older and more expensive maturing gilts with new and relatively cheaper gilts. In contrast, the average debt service cost for strategy 1 trends slightly upwards because relatively more expensive gilts – 5-year nominal bonds – are added to the portfolio over time.

B.11 The results for risk show that overall strategy 4 is less risky than the other three issuance strategies (see Charts B2 and B3 below). This result is to be expected because strategy 4 contains a larger share of long maturity gilts than the other three strategies.

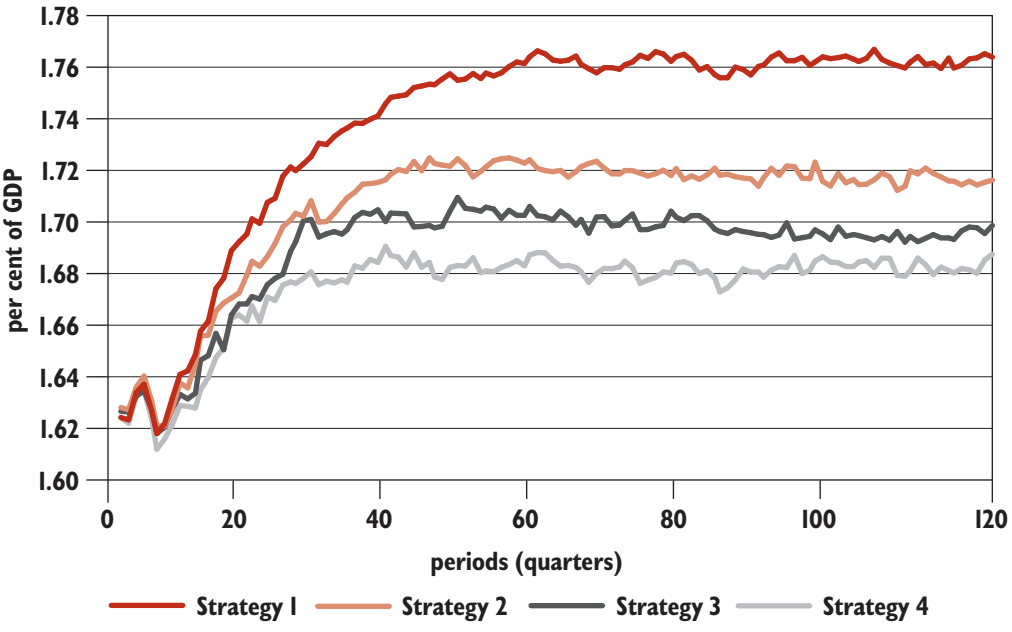
B.12 There are two striking features of the two measures of risk. First, during the early period of the simulation horizon the risk measures do not differ significantly for the respective strategies. That is to be expected because, during this early period, the initial portfolio is the dominant force driving the debt service cost distributions and the marginal impact of the issuance strategies is correspondingly small. Second, both measures of risk rise sharply in the early phase of the simulation horizon. This feature occurs because the range of the debt service cost widens immediately after the initial period of the simulation due to the widening of the range of the debt/GDP ratio.

Chart BI: Average debt service cost



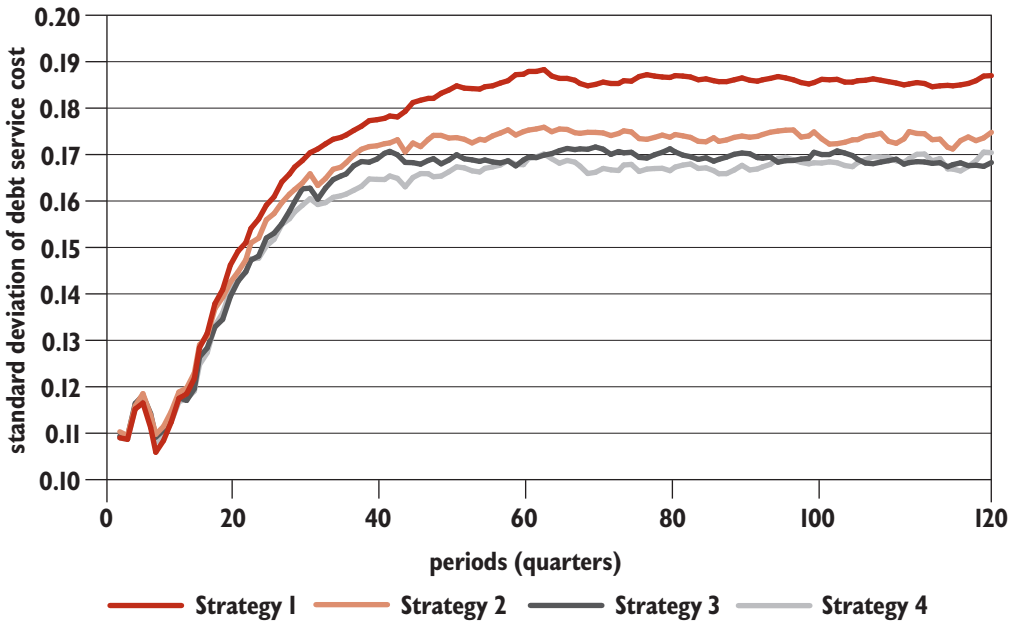
Source: Debt Management Office

Chart B2: Debt service cost at risk



Source: Debt Management Office

Chart B3: Standard deviation of debt service cost



Source: Debt Management Office

B.13 Simulation results from the SDA model suggest that the Government could achieve a better debt service cost - risk trade-off by skewing issuance towards long-maturity gilts in circumstances where yields on long-maturity gilts are, on average, lower than yields on short- and medium-maturity gilts. That is, when the average yield curve is downward sloping, the model suggests that an issuance strategy that has a larger proportion of long maturity gilts would be cheaper and less risky than issuance strategies with a smaller allocation of these gilts.

B.14 It is worth bearing in mind that the simulation modelling only captures one risk to which the Government's gilt issuance plans expose the Exchequer (i.e., the variability in debt servicing costs over time). In practice, debt issuance exposes the Exchequer to other risks that lie outside the scope of the model. For example: (i) the risk that the market for short-dated and medium-dated gilts becomes illiquid and stops functioning efficiently leading to rising costs of issuing into these sectors of the market; and (ii) the risk that the range of investors in gilts is insufficiently diversified to ensure that there will be ready demand for gilts in a range of economic circumstances – this would also have implications for the costs of debt issuance. In practice, consideration of these risks will be included in the Government's decisions about gilt issuance.

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