

## Public sector debt: end March 1997

*This article<sup>(1)</sup> continues the annual series of articles in the Quarterly Bulletin analysing the debt position of the public sector. It considers developments in the net and gross debt of the public sector in the financial year to end March 1997 and analyses the composition and distribution of the national debt.*

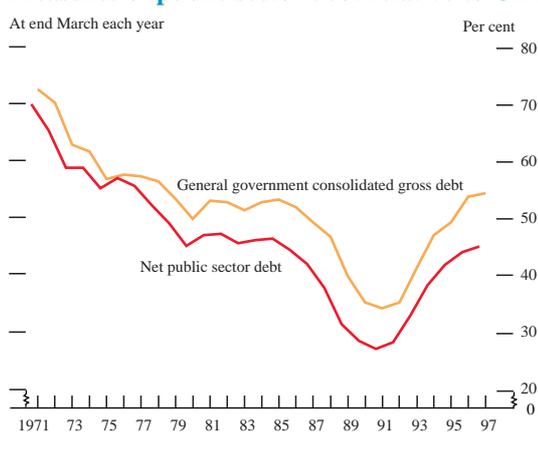
- *In 1996/97, the nominal value of the public sector's net debt rose by £28 billion to £350 billion, an increase of 1 percentage point to 45% of GDP.<sup>(2)</sup> The increase was largely because of a £27 billion rise in public sector gross debt; public sector holdings of liquid assets were virtually unchanged.*
- *Central government gross debt rose by £29 billion to £401 billion. Market holdings of gilts and National Savings products rose by £28 billion and £5 billion respectively; holdings of Treasury bills fell by £6 billion.*
- *The ratio of general government consolidated gross debt to GDP increased slightly to 54.5% at end March 1997, remaining well within the reference value of 60% laid down by the Maastricht Treaty. The general government financial deficit fell further to 4.2%, but remained above the 3% ceiling. The box on pages 358–59 looks at the procedures followed by the Statistical Office of the European Union (EUROSTAT) when interpreting the Maastricht convergence criteria relating to debt and deficit.*

### Public sector debt

At end March 1997, net public sector debt was £350 billion, 9% higher than a year earlier (see Table A). Within this, central government gross debt increased by 8% to £401 billion (52% of GDP). The gross debt of local authorities and public corporations increased slightly to £51 billion and £27 billion respectively; these increases were mostly taken up elsewhere in the public sector and so are not reflected in the consolidated total. Public sector holdings of liquid assets fell by £0.5 billion in 1996/97 (Table B). Falls in central government and public corporations holdings (of £0.7 billion and £1.3 billion respectively) were partly offset by local authorities building up their liquid assets by £1.5 billion.

Net public sector debt as a percentage of GDP has climbed sharply from a low of 27% at end March 1991 to 45% at end March 1997, its highest for twelve years (see Chart 1). By historical standards, current debt ratios are low (see Chart 2); though at its highest for more than two decades, the ratio of national debt<sup>(3)</sup> to GDP is still lower than at any time between 1914 and 1972.

**Chart 1**  
**Measures of public sector debt relative to GDP**



It is useful to consider public sector debt as a proportion of nominal GDP because nominal GDP is closely related to the tax base of the economy, and so to the economy's theoretical ability to service the debt. Expressing public sector debt in this way, however, masks the impact of inflation. Since public sector debt is largely denominated

(1) Prepared by Liz Dixon of the Bank's Monetary and Financial Statistics Division.

(2) The percentage data shown here (with the exception of the memo item) are based on the average measure of GDP, at current market prices, for four quarters centred on 31 March.

(3) The differences between the national debt and net public sector debt are explained in the notes and definitions at the end of this article.

**Table A**  
**Public sector net debt**

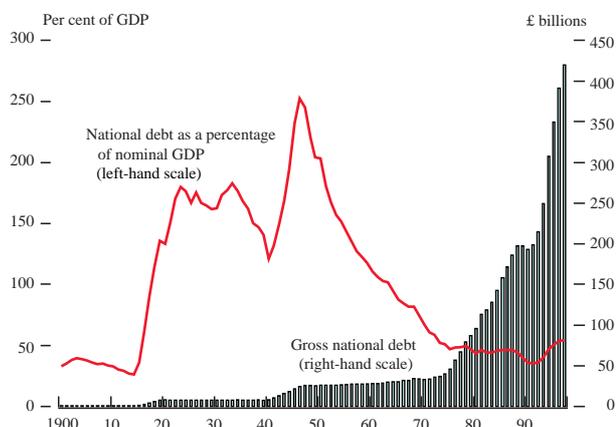
£ millions, nominal values (a)

31 March (b)	1996	1997	Changes 1996-97
<b>Central government</b>			
Market holdings of national debt (Table C) <i>as a percentage of GDP</i>	343,977 47.0	369,332 47.6	25,356 0.6
Net indebtedness to Bank of England			
Banking Department	0	1,149	1,149
Savings banks	1,432	1,417	-15
Accrued interest and indexing on National Savings	3,517	3,422	-95
Notes and coin in circulation	23,427	25,638	2,212
Other	359	419	61
Total central government gross debt <i>as a percentage of GDP</i>	372,711 51.0	401,377 51.8	28,667 0.8
<b>Local authorities</b>			
Total gross debt	50,252	51,276	1,024
<i>less holdings of other public sector debt:</i>			
Central government holdings of local authority debt	41,266	42,556	1,290
Local authority holdings of central government debt	153	156	3
<b>General government consolidated gross debt <i>as a percentage of GDP</i></b>	<b>381,544</b> 52.2	<b>409,941</b> 52.9	<b>28,398</b> 0.7
<b>Public corporations</b>			
Total gross debt	26,595	26,789	194
<i>less holdings of other public sector debt:</i>			
Central government holdings of public corporation debt	25,980	26,295	315
Local authority holdings of public corporation debt	0	1	1
Public corporation holdings of central government debt	6,570	7,788	1,217
Public corporation holdings of local authority debt	890	805	-85
<b>Public sector consolidated gross debt <i>as a percentage of GDP</i></b>	<b>374,698</b> 51.2	<b>401,841</b> 51.8	<b>27,143</b> 0.6
<b>Total public sector liquid assets (Table B) <i>as a percentage of GDP</i></b>	<b>52,636</b> 7.2	<b>52,088</b> 6.7	<b>-549</b> -0.5
<b>Net public sector debt <i>as a percentage of GDP</i></b>	<b>322,062</b> 44.0	<b>349,754</b> 45.1	<b>27,692</b> 1.1
Memo item:			
<b>General government consolidated gross debt (Maastricht basis) (1) <i>as a percentage of GDP (ESA)</i></b>	<b>380,164</b> 53.9	<b>408,534</b> 54.5	<b>28,370</b> 0.6

(a) Figures may not sum to totals because of rounding.

(b) Data from 1970-97 are published in the *Bank of England Statistical Abstract 1997*, Part 1, Table 13.1.

**Chart 2**  
**Gross national debt: 1990-97**



Source: HM Treasury.

in nominal terms, inflation erodes its real value. During the 1970s, the nominal debt stock increased substantially, but the debt ratio fell by some 24 percentage points. High inflation throughout the period led to increases in nominal GDP that outpaced the rise in the debt stock. As inflation has been brought under control, the rate of growth of nominal GDP has slowed. Because of this, the increases in the nominal debt stock due to large financial deficits in recent years have not been matched by nominal GDP growth and have led to a higher debt ratio.

The Treasury's forecasts in the July 1997 Financial Statement and Budget Report suggest that the public sector net debt ratio has peaked and will decline steadily in the coming years, in line with the Government's plans to reduce the deficit.

**Table B**  
**Public sector liquid assets**

£ millions, nominal values

31 March (a)	1996	1997	Changes 1996/97
<b>Central government</b>			
Gold and foreign exchange reserves	30,463	25,547	-4,916
Commercial bills (including those held under repo)	1,093	1,790	697
British government stock held under repo (b)	2,465	6,081	3,616
Treasury bills held under repo	0	41	41
Loans against export credit and shipbuilding paper	286	0	-286
Net claim on Bank of England			
Banking Department	135	0	-135
Bank and building society deposits	1,802	2,062	260
<b>Total central government liquid assets</b>	<b>36,243</b>	<b>35,521</b>	<b>-722</b>
Local authorities:			
Bank deposits	6,024	6,496	472
Building society deposits	4,205	4,780	575
Other short-term assets	2,826	3,256	430
<b>Total local authority liquid assets</b>	<b>13,055</b>	<b>14,532</b>	<b>1,477</b>
<b>Public corporations</b>			
Bank deposits	3,088	1,773	-1,315
Other short-term assets	250	262	12
<b>Total public corporation liquid assets</b>	<b>3,338</b>	<b>2,035</b>	<b>-1,303</b>
<b>Total public sector liquid assets</b>	<b>52,636</b>	<b>52,088</b>	<b>-549</b>

(a) Data from 1970-97 are published in the *Bank of England Statistical Abstract 1997*, Part 1, Table 13.1.

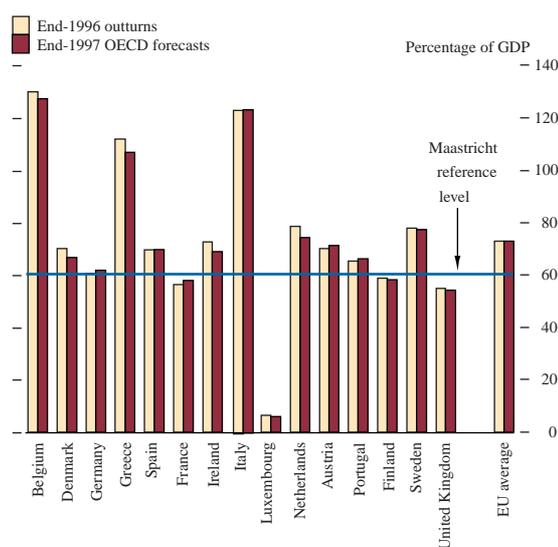
(b) Excludes repos between public sector bodies. Claims arise in connection with the Bank of England's provision of liquidity to the money markets through its gilt repo facility. Take-up of liquidity is variable, depending on the prevailing and expected level of interest rates and forecasts of money-market liquidity.

## General government debt (Maastricht basis)

The Maastricht measure of debt is general government consolidated gross debt (GGCGD) on the European System of Accounts (ESA) basis.<sup>(1)</sup> GGCGD is thought to have peaked in 1996/97 at 54.5% of GDP (a sharp increase from 34% of GDP in 1990/91), comfortably below the Maastricht reference value of 60%. This compares favourably with figures for the European Union as a whole, where the weighted average debt burden at end 1996 was 73% (see Chart 3). At end 1996, only four Member States (Finland, France, Luxembourg and the United Kingdom) had debt ratios of under 60% of GDP, though the ECOFIN Council has already ruled that Ireland and Denmark do not have

(1) See the notes and definitions on page 366 for a description of how this differs from the UK definition of GGCGD.

**Chart 3**  
General government consolidated gross debt



Sources: Eurostat, OECD.

'excessive' deficits. OECD forecasts for end 1997 show the debts of a number of other Member States falling towards the reference value (see the box on pages 358–59 for more detail on the Maastricht debt and deficit criteria).

### Public sector borrowing requirement

The net debt of the public sector is the approximate stock counterpart to the public sector borrowing requirement (PSBR). The box opposite explains why the change in debt is not exactly the same as the PSBR, though the two are closely related.

The PSBR fell sharply in 1996/97 to £22.7 billion (£27.2 billion excluding privatisation proceeds), from £31.7 billion in 1995/96 (see Table C). The PSBR is projected to continue falling, to approximate balance in 1999/2000 and to a surplus in 2000/01. The PSBR will be temporarily reduced by windfall tax payments of around £2.6 billion in both 1997/98 and 1998/99. This effect will be unwound during the period to 2001/02 by associated spending on the Welfare-to-Work scheme.

**Table C**  
Composition of the PSBR<sup>(a)</sup>

£ millions

	1995/96	1996/97
<b>Central government borrowing requirement (CGBR)</b>	<b>35,519</b>	<b>25,041</b>
Memo item: CGBR on own account	35,832	24,880
Local authority borrowing requirement (LABR) <i>less borrowing from central government</i>	-1,141 473	-760 1,517
<b>General government borrowing requirement (GGBR)</b>	<b>33,905</b>	<b>22,764</b>
Public corporations' borrowing requirement (PCBR) <i>less borrowing from central government</i>	-3,006 -786	-1,451 -1,356
<b>Public sector borrowing requirement (PSBR)</b> <i>As a percentage of GDP</i>	<b>31,685</b> 4.5	<b>22,669</b> 3.0

(a) Source: *Financial Statistics*, September 1997.

### The PSBR and public sector net debt: reconciliation

The PSBR is financed by transactions in assets and liabilities and is calculated on a cash-flow basis. Public sector net debt is a stock and its change is calculated on a nominal, accrued basis. Slight differences arise between the change in public sector net debt and the PSBR, largely because of the following:

- The value of foreign currency liabilities and assets changes with fluctuations in exchange rates, independently of any transactions. The 17% rise in sterling's effective exchange rate in 1996/97 meant that this was particularly significant in this year; the fall in the sterling value of the foreign exchange reserves was only partly offset by a corresponding fall in the value of foreign currency debt.
- Capital uplift on index-linked gilts is only recorded in the borrowing requirement when it is paid out (when the stock is redeemed), but accrues in the debt during the life of the stock. In 1996/97, the redemption of an index-linked stock meant that the increase in debt due to accrued uplift on outstanding stocks was partly offset in the PSBR by the capital uplift paid on the maturing stock.
- When gilts are issued (or bought in ahead of their redemption date) at a discount or premium, the borrowing requirement is financed by the actual cash amount received (or paid out), but the level of debt is deemed to have changed by the nominal value of gilts issued (or redeemed). Current practice is to issue gilts with coupons close to the prevailing market rate and so discounts/premia tend not to be large.

£ billions (a)	Year ending March 1997
PSBR	22.7
<i>plus</i>	
Revaluation of foreign currency assets/liabilities	2.3
Capital uplift on index-linked gilts	1.1
Discount/premium on gilt issues	0.7
Other equals	1.0
<b>Change in public sector net debt</b>	<b>27.7</b>

(a) Figures may not sum to total because of rounding.

Within the PSBR, interest payments on public sector debt in 1996/97 rose for the fifth consecutive year, to £26.6 billion. Interest payments represent a current payment for previous expenditure and can influence fiscal policy: to meet a given target for the PSBR, other government spending net of receipts—the primary deficit—must fall when interest payments rise. Despite the recent increase, debt interest payments as a proportion of spending are still relatively low by recent historical standards (see Chart 4), and are expected to remain broadly stable at 8.5% of public sector current and capital expenditure in the short term.

## Decisions on Maastricht debt and deficit accounting rules

The position of each EU Member State in relation to the convergence criteria on public deficit and debt will be taken into account in considering admission to economic and monetary union. Member States are therefore required to report their annual debt and deficit levels biannually to the European Commission for assessment of their budgetary situation.

The Maastricht Treaty<sup>(1)</sup> sets out the procedure for determining whether a Member State has an excessive deficit. Though the treaty does not specify what constitutes 'excessive', a protocol to the treaty<sup>(2)</sup> establishes the reference values of 3% and 60% of GDP for deficit and debt respectively. The ratio of the planned or actual government deficits should not exceed the reference value unless 'either the ratio has declined substantially and continuously and reaches a level that comes close to the reference value or the excess over the reference value is only exceptional and temporary and the ratio remains close to the reference value'. The ratio of government debt to GDP should not exceed the reference value 'unless the ratio is sufficiently diminishing and approaching the reference value at a satisfactory pace'.

### EUROSTAT framework for accounting decisions

To ensure comparability of Member States' statistics, general government deficit and debt are calculated according to the European System of Integrated Accounts, second edition 1979 (ESA79). A new edition (ESA95) will come into force in 1999. The Statistical Office of the European Communities (EUROSTAT) in Luxembourg checks Member States' compliance with ESA79. Certain financial and economic transactions are not clearly defined in ESA79 and problems have arisen in trying to ensure a consistent treatment in all Member States. EUROSTAT has therefore developed a framework for consultations with Member States and taken a number of decisions to clarify the accounting treatment of certain transactions.

EUROSTAT aims to identify the most appropriate technical solution for which there is large support from Member States, based on three criteria:

- the solution must conform with ESA79;
- when ESA79 cannot provide a solution, reference should be made to ESA95; and

- where there are two or more viable solutions, reference should be made to the guiding principles of economic accounts as outlined by the Worldwide System of National Accounts 1993.

EUROSTAT's decision takes account of the opinions expressed by the Committee on Monetary, Financial and Balance of Payments Statistics (CMFB), which comprises senior representatives of the central banks, national statistical institutes, the European Monetary Institute and EUROSTAT. The CMFB's advice is formulated following discussions of the methodological issues by two groups of experts: the National Accounts and Financial Accounts Working Parties. The decision, backed up by its methodological reasoning, and the outcome of the CMFB consultation are made publicly available. Every decision applies automatically to all Member States rather than focusing on specific instances.

### Recent decisions taken by EUROSTAT

Among the rulings made this year were the treatments of certain non-conventional bonds: bonds with capitalised interest (such as Italian Postal Bonds, though some National Savings products have similar characteristics); zero coupon bonds and deep discount bonds (defined as those whose nominal coupon is less than 50% of the yield to maturity at issue); and index-linked bonds where the capital uplift is related to changes in a consumer price index. In all of these cases, it was agreed that the capitalised interest, discount or capital uplift should be recorded in the deficit as an interest payment at the redemption of the bond. Where an index-linked bond is linked to the value of a financial asset, such as foreign currency or gold, EUROSTAT decided that the capital uplift should be regarded as a holding gain/loss (as is the case for foreign currency bonds).

For 'linear bonds' (fungible tranches of bonds issued more than twelve months after the original bond issue), it was agreed that the discount or premium could be accrued over the life of the stock. Countries with small illiquid bond markets issue linear bonds in order to build up a few relatively liquid stocks. This restricts the choice of coupon and, because of changes in prevailing market yields, the bonds may be issued at large discounts/premia. EUROSTAT decided that an accruals accounting method would allow a more

(1) Article 104c of the Treaty on European Union.

(2) Protocol on the Excessive Deficit Procedure.

accurate reflection of the actual interest rate being paid on these bonds. Where any fungible tranche of a bond is issued, the increase in issue price reflecting the accrued interest should be treated as a short-term advance to the government, which is reimbursed when the coupon becomes payable.

Various case studies relating to the financing and exploiting of public infrastructure by the private sector were discussed. Specific examples of this were the United Kingdom's Private Finance Initiative, the 'Vasco-da-Gama' bridge being built over the River Tagus in Portugal and a high-speed rail-link in Spain. A number of classification issues were also considered including: certain types of pension fund, bodies implementing the Common Agricultural Policy and export credit insurance guarantees. The accounting treatments agreed were generally in line with those already being applied by the relevant governments.

EUROSTAT had to make rulings on some potentially controversial cases. France Télécom made a payment of FFfr 37.5 billion (around 0.4% of GDP) to the French government in return for the government assuming its future pension liabilities. The CMFB was split over whether this payment should be recorded as a capital transfer (thereby reducing the 1997 deficit) or as a financial transaction (for example, the pre-payment of a future stream of liabilities or the sale of a government financial asset). EUROSTAT ruled that recording this exceptional payment as a capital transfer was in conformity with a strict interpretation of ESA79. EUROSTAT agreed that though there could be other treatments as financial transactions that were also in conformity with ESA79, these would require additional economic interpretation and so were less close to the letter of ESA79. Following EUROSTAT's decision on the France Télécom case, several other countries have announced similar schemes to take over pension liabilities in return for a one-off payment.

EUROSTAT and the CMFB agreed that the Italian tax on wage funds (part of the 'Euro-tax', the remainder being an income tax surcharge) would be allowed to reduce the deficit. Employees are normally obliged to pay a tax on these statutory savings at the time of their withdrawal. In 1996, the Italian government introduced a law under which 2% of the amounts accumulated (Lit 3.5 trillion) was required to be paid by enterprises in 1997, with the rest due from the employee at withdrawal. This was subsequently increased to Lit 8.5 trillion (0.45% of GDP) with a further part-payment due in 1998. EUROSTAT ruled

that as the government had, by law, changed the due date for payment, the taxpayer and the tax rate, this had to be regarded as a new tax and not as a financial advance (which would not reduce the deficit until the tax receipts became due under the original rules).

Following the sale of gold reserves by the Belgian National Bank (and planned sales of gold and foreign currency reserves by other central banks), EUROSTAT ruled that the transfer to the government of the profits of the sale could not be recorded as a receipt reducing the deficit but could be used to reduce government debt (consistent with the treatment of privatisation proceeds).

### Impact of decisions on UK accounts

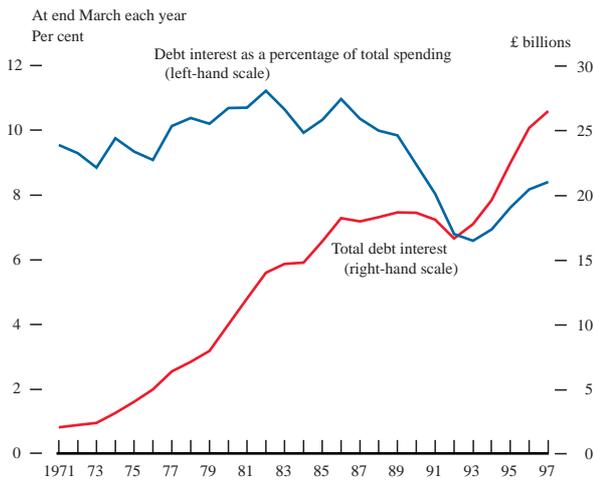
The EUROSTAT decisions have been mostly in line with current UK national accounts practice and so have had little impact on the Maastricht debt figure.

In calculating the general government financial deficit, the treatment of capital uplift on index-linked gilts has been changed to reflect the EUROSTAT decision to record it when it is paid (consistent with the PSBR treatment) rather than accruing it over the life of the bond. This will reduce the UK deficit in years when no index-linked stocks mature, offset by increases in years where there are redemptions. As there are no redemptions of index-linked stocks in 1997, the deficit is expected to be reduced by around £1 billion.

Though the UK authorities do issue fungible tranches of bonds more than twelve months after their original issue, EUROSTAT has agreed that these should not be treated as linear bonds. The size of the UK gilts market means that the authorities can pursue their policy of only issuing bonds whose coupons are close to market yields, and hence large discounts/premia do not arise. EUROSTAT have also agreed that the UK treatment of accrued interest on fungible tranches as negative interest payments is satisfactory, provided that its impact on the deficit is not too different from their preferred treatment.

EUROSTAT has asked for the treatment of certain unfunded public sector pension schemes (such as those paid to teachers) to be changed to reflect the actual cash flows more fully. The surplus of pensions paid over contributions received will now be treated as a non-financial transaction, rather than a reduction in the government's liability to pensioners. This is expected to increase the 1997 deficit by around £1 billion.

## Chart 4 Public sector debt interest



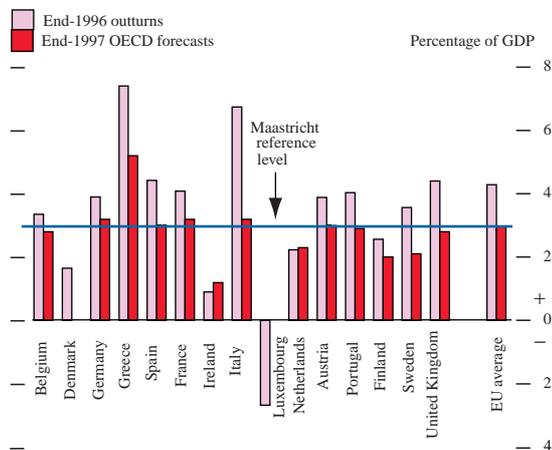
Source: ONS.

## General government financial deficit (Maastricht basis)

The Maastricht deficit measure, the general government financial deficit (GGFD), fell to £31.4 billion (4.2% of GDP) in 1996/97. The GGFD, which excludes privatisation proceeds and the surpluses posted by public corporations, has been slightly higher than the PSBR in recent years. Treasury forecasts suggest that the GGFD will move broadly in line with the PSBR in the next few years, as both of these factors are forecast to fall close to zero.

Though the GGFD remains above the Maastricht reference value of 3%, it has fallen continually and substantially from a peak of 7.8% of GDP in 1993, and is forecast by the Treasury to be 2% in 1997. Five Member States had deficits below the reference value at end December 1996: Belgium, Denmark, Luxembourg, Ireland and Finland. The average deficit for the EU area was 4.3% of GDP. The latest OECD forecasts for 1997 (see Chart 5) suggest that most countries

## Chart 5 General government financial deficit



Sources: Eurostat, OECD.

will be close to the 3% reference value, though some countries may overshoot slightly. The projected weighted average EU deficit for 1997 is 3% of GDP.

## Analysis of central government debt by instrument

Central government gross debt is composed almost entirely of market holdings of national debt. The national debt represents the total liabilities of the National Loans Fund<sup>(1)</sup> and is dominated by six types of instrument (see Table D): gilt-edged stocks, Treasury bills, National Savings, interest-free notes due to the IMF, certificates of tax deposit and foreign currency debt.

### Table D Market and official holdings of national debt

£ millions, nominal values; *percentage of market holdings in italics*

Amounts outstanding at 31 March (a)	1996	1997		1997
<b>Market holdings</b>				
British government stocks	253,567	73.7	281,780	76.3
of which: index-linked	46,127	13.4	51,534	14.0
other	207,439	60.3	230,246	62.3
Treasury bills	10,781	3.1	4,952	1.3
National Savings	52,015	15.1	56,915	15.4
of which: index-linked	7,638	2.2	8,076	2.2
other	44,377	12.9	48,839	13.2
Interest-free notes due to the IMF	5,544	1.6	5,638	1.5
Certificates of tax deposits	1,222	0.4	852	0.2
Other	4,059	1.2	4,855	1.3
<b>Market holdings of sterling debt</b>	<b>327,187</b>	<b>95.1</b>	<b>354,992</b>	<b>96.1</b>
North American government loans	788	0.2	644	0.2
US\$ floating-rate note	2,559	0.7	1,227	0.3
US\$ bonds	1,966	0.6	3,067	0.8
Ecu Treasury bills	2,883	0.8	2,488	0.7
Ecu 9 <sup>1</sup> / <sub>8</sub> % 2001 bond	2,059	0.6	1,777	0.5
Ecu Treasury notes	4,118	1.2	3,199	0.9
DM 7 <sup>1</sup> / <sub>8</sub> % 1997 bond	2,219	0.6	1,828	0.5
Debt assigned to the government	198	0.1	111	0.0
<b>Market holdings of foreign currency debt (b)</b>	<b>16,789</b>	<b>4.9</b>	<b>14,341</b>	<b>3.9</b>
<b>Total market holdings of national debt</b>	<b>343,977</b>	<b>100.0</b>	<b>369,332</b>	<b>100.0</b>
Official holdings	47,194		50,577	
<b>Total national debt</b>	<b>391,171</b>		<b>419,909</b>	

(a) Data from 1970–97 are published in the *Bank of England Statistical Abstract 1997*, Part 1, Table 13.2.

(b) Sterling valuation rates:

31 March 1996: £1 = US\$ 1.5262, Can\$ 2.0798, ECU 1.2142, DM 2.2531.

31 March 1997: £1 = US\$ 1.6303, Can\$ 2.2448, ECU 1.4068, DM 2.7345.

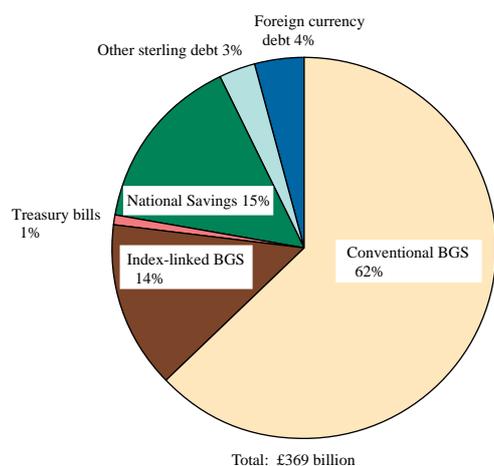
The total nominal value of the national debt rose by £29 billion to £419 billion (54% of GDP) in 1996/97. Holdings by other central government bodies and the Banking Department of the Bank of England<sup>(2)</sup> (together known as official holders) accounted for £3.4 billion of this rise; official holdings of Treasury bills increased by £1.8 billion.

Market holdings of national debt (which include holdings by local authorities and public corporations) rose to £369 billion (48% of GDP). The proportion of debt in market hands that is marketable (instruments that can be

(1) Stocks of nationalised industries guaranteed by the government are not strictly part of the national debt, but would be included here since the market does not generally distinguish them from government stocks. No such stocks are currently outstanding.

(2) The Issue Department of the Bank of England is part of central government.

**Chart 6**  
**Composition of market holdings of national debt by instrument: at end March 1997**



traded in a secondary market: gilts, Treasury bills and some foreign currency instruments) remained unchanged at 81%. There were few significant changes in the share of individual instruments; Chart 6 provides a breakdown of the market holdings of national debt by instrument.

Other central government gross debt includes net indebtedness to the Banking Department of the Bank of England, notes and coin in circulation, deposits in the National Savings Bank, and accrued interest and indexing on other National Savings products. The note issue is backed by assets held by the Issue Department (some of which are national debt instruments), and net indebtedness reflects the Banking Department's holdings of central government debt. The inclusion of these items in central government gross debt therefore partly offsets the effect of subtracting official holdings of national debt. Hence central government gross debt and national debt are very closely related.

Central government net debt is gross debt less the central government sector's holdings of liquid assets (see Table B). Liquid assets fell by £0.7 billion in 1996/97, largely because of two significant, but offsetting, factors: gold and foreign exchange reserves fell by £4.9 billion, partly as a result of the appreciation of sterling, and the Issue Department's claims on the market under gilt repo increased by £3.6 billion.

### British government stocks

Gilt-edged stocks are by far the largest single component of the national debt by instrument, accounting for 76% of market holdings of national debt, with £282 billion outstanding in market hands at the end of March 1997.<sup>(1)</sup>

Total gilt issuance in 1996/97 was £32.7 billion in nominal terms, of which £5.5 billion (including £2.4 billion of accrued uplift) was index-linked. The Government's remit to the Bank of England for 1996/97 specified that

approximately 15% of the gilt sales should be index-linked, with the remainder split broadly evenly between short, medium and long-dated conventional gilts. The actual distribution of gilt sales was very close to this target.

Building up large benchmark stocks has proved attractive to market participants, who value the liquidity such bonds typically enjoy. Continuing this policy, 11 of the 14 auction sales in 1996/97 added to existing benchmarks. Three new stocks were created via auction in 1996/97: new five and ten-year benchmarks (7% Treasury 2002 and 7¼% Treasury 2007) and a floating-rate gilt (Floating Rate Treasury Stock 2001). The conventional stocks will both be strippable when the official gilts strips facility is introduced (expected to be on 8 December 1997). Current practice is to issue new gilts with coupons close to the gross redemption yields available in the market for the relevant maturity. All conventional stocks issued via auction in 1996/97 had a coupon of between 7% and 8% (with a weighted average coupon of 7.6%).

Taps of conventional stock are only issued for market management purposes in situations of temporary excess demand in a particular stock or sector. £0.6 billion of conventional stock was issued via tap in 1996/97, less than 2% of total gilt issuance. Primary issuance of index-linked gilts continued to be via the tap mechanism; the authorities are keeping the possibility of index-linked auctions under review.

Seven stocks with a total nominal value of £13 billion were redeemed in 1996/97. These included the early redemption of 6¾% Treasury 1995/98 (following the fall in market yields, the authorities decided to exercise their right to redeem the stock) and Index-Linked 2% 1996, which included £1.5 billion of indexation on the capital repayment.

There were two conversion offers in 1996/97: from 13½% Treasury 2004–08 into 8½% Treasury 2005 and from 12% Exchequer 2013–17 into 8% Treasury 2015. The offers were primarily made to build up the stock of strippable gilts.

### Stock of gilts outstanding

The maturity structure of the gilts portfolio at end March 1997 was virtually unchanged from that at end March 1996. The average maturity of gilts in market hands was 10.1 years and the average maturity of all stocks excluding index-linked gilts remained at 8.8 years (see Table E and Chart 7).

Chart 8 shows how market holdings of gilts split between different types of instrument have varied during the last decade. The proportion of index-linked gilts has risen from 10% in 1987 to 18% in 1997, partly because of the substantial issuance programme, but also reflecting the accrual of inflation indexation and relatively fewer redemptions than of conventional gilts. Floating-rate gilts,

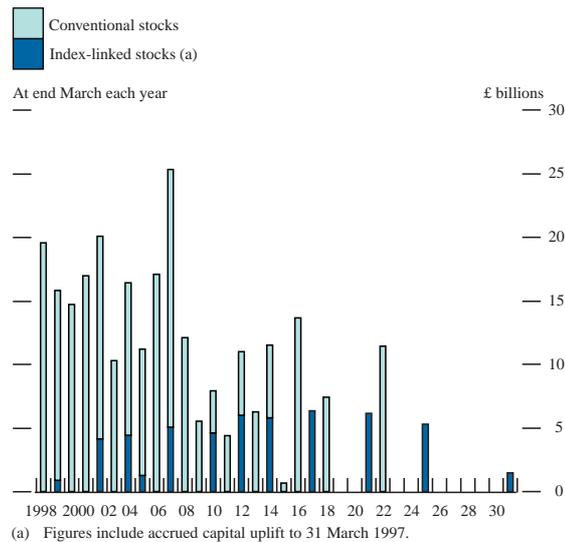
(1) Unless otherwise stated, all figures are in nominal terms and include capital uplift accrued on index-linked stock.

**Table E**  
**Average remaining life of dated stocks in market hands**

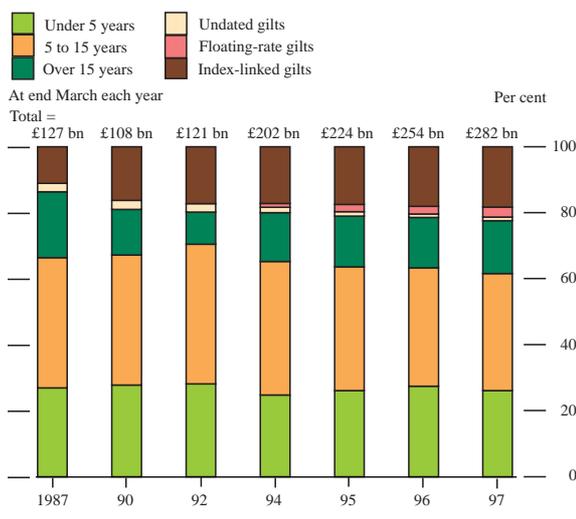
Years to maturity at 31 March	1991	1992	1993	1994	1995	1996	1997
Latest possible redemption: (a)							
All dated stocks (b)	9.9	10.0	10.8	10.6	10.4	10.1	10.1
Excluding index-linked stocks	8.0	8.4	9.4	9.1	9.1	8.8	8.8
Earliest possible redemption date: (a)							
All dated stocks	9.6	9.8	10.5	10.4	10.2	9.9	9.9
Excluding index-linked stocks	7.7	8.1	9.0	8.9	9.1	8.8	8.7

(a) Assumes no conversions (no conversion options were available between 1990 and 1994).  
(b) Index-linked stocks are given a weight reflecting capital uplift accrued to 31 March.

**Chart 7**  
**Maturities of dated stocks in market hands**



**Chart 8**  
**Breakdown of market holdings of gilts**



which were introduced in 1994, now account for around 3% of the gilts portfolio. By end March 1997 there were seven strippable stocks outstanding, with a total nominal value of £66 billion (23% of total outstanding gilts). The proportion of short, medium and long-dated gilts in market hands has remained broadly unchanged during the last ten years. Any

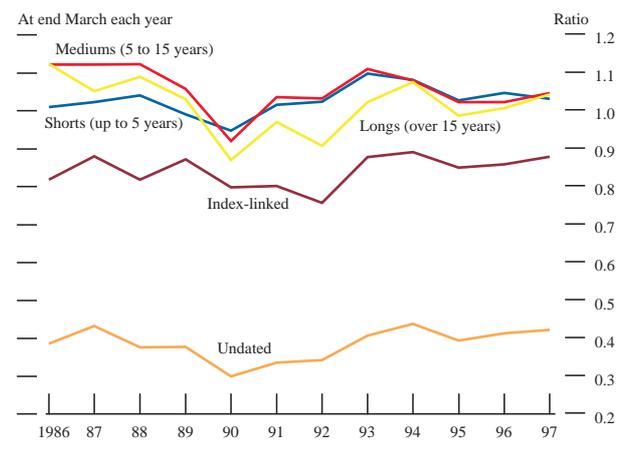
fluctuations have largely reflected the natural ageing of the gilt portfolio; for example, the budget surpluses in the late 1980s meant that very few gilts were issued during that period. As the gilt portfolio aged, the average residual maturity of the portfolio fell and the proportion of long-dated stocks relative to other maturities fell sharply.

**The gilt market in 1996/97<sup>(1)</sup>**

Gilt yields at all maturities fell in 1996/97; the yield on the ten-year benchmark fell by around 50 basis points from 8.2% at end March 1996 to 7.6% at end March 1997. The yield curve became flatter, reversing the steepening seen in 1995/96. Five-year benchmark yields fell by 30 basis points to 7.4%, but the yield on 20-year bonds fell by some 60 basis points, giving a differential over five-year bonds of around 30 basis points.

The market value of gilts in market hands at end March 1997 was very close to the nominal outstanding, at £282 billion, compared with a discount of 1.3% at end March 1996. The changes in market:nominal value ratios of conventional gilts are shown in Chart 9. The premium on

**Chart 9**  
**Ratios of market to nominal values of stocks in market hands**



short-dated gilts fell from 4.5% to 2.8%. The market:nominal value ratios of medium and long-dated gilts increased by 2.4 and 3.6 percentage points respectively to 4.2% and 4.3%. These premia were mostly offset by discounts on undated stocks and index-linked gilts. Undated stocks, such as the 3½% War Loan, only make up 1% of outstanding stocks by nominal value, but have a disproportionate effect on the overall market:nominal value ratio as they generally trade at less than half their nominal value.

The structure of the gilt market developed further in 1996/97 following the extensive changes introduced in the previous year. The average size of individual auctions was reduced by the introduction of periodic dual auctions. Dual auctions allow the issue of two stocks of different maturities in the same month without the inconvenience of having two

(1) For a full review of gilt market developments in 1996/97, please refer to *Gilts and the Gilt Market, Review 1996/97*, available from the Bank of England, PO Box 96, Gloucester, GL1 1YB.

auction weeks within a month (which may clash with the monetary policy round or important data releases). This has the advantage of moderating the supply in any one maturity at a particular time, and may attract a wider range of investors. There were also a number of incremental changes to the auction process, designed to encourage participation in auctions and reduce risks for both the Government and the market.

### The remit for 1997/98 and gilt issuance

The target for gilts sales in 1997/98 specified in the Government's remit to the Bank of England was £36.5 billion. This was reduced to £25.1 billion following the July 1997 Budget. The Central Government Borrowing Requirement (CGBR) is forecast to be much lower than in 1996/97, at £12.4 billion, but this is partly offset by a much higher level of gilt redemptions (£19.6 billion). The target has also been reduced by the carry-forward of the £3.9 billion over-financing in 1996/97. The target for index-linked sales has been increased to 20% of total gilt sales, reflecting expected demand for index-linked gilts and the authorities' assessment that index-linked gilts have cost and risk advantages for the Government. Conventional issuance is still to be spread broadly evenly across the three maturity bands, but with slight skews towards the short and long ends. This reflects a number of factors: the pattern of refinancing; greater expected demand for gilt strips at short and long maturities; and maturities that fit more readily into the dual auction format.

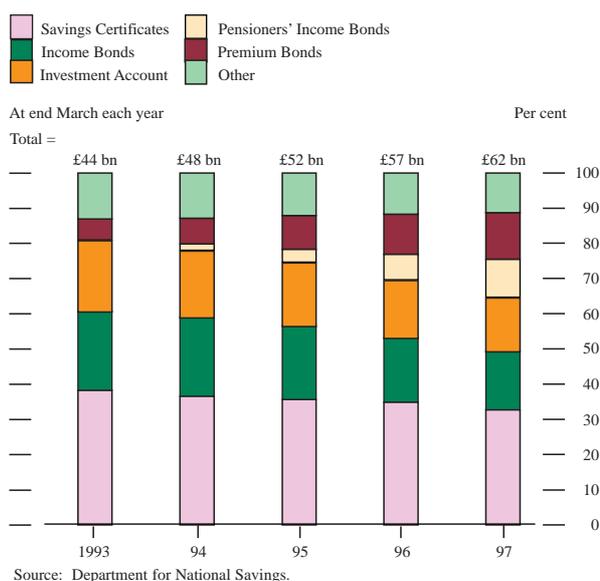
### National Savings

Total holdings of National Savings instruments increased by £4.8 billion in 1996/97 to £61.7 billion, compared with an initial assumption in the 1996/97 financing requirement of £3 billion. The largest contributors were Pensioners' Income Bonds (at £2.5 billion) and Premium Bonds (at £2.1 billion). Gross sales of National Savings products in 1996/97 were around £13 billion and benefited from a high-profile marketing campaign.

The total outstanding includes around £4.8 billion of deposits with the National Savings Bank and accrued interest and index-linked increments on other national savings products, which are not included in the national debt (though they are included in central government debt). National Savings (which are all assumed to be in market hands) accounted for 15% of market holdings of national debt.

Chart 10 shows the change in composition of outstanding products during the last five years. Since their introduction in January 1994, amounts outstanding of Pensioners' Income Bonds, which pay a guaranteed monthly interest rate, have grown rapidly and now account for 11% of National Savings holdings. The proportion of National Savings held in Premium Bonds has also more than doubled, from 6% in 1993 to 13% in 1997. This reflects the introduction of a monthly

**Chart 10**  
**Composition of national savings by product**



£1 million jackpot in 1995 and structural changes to the prize fund.

These increases have come largely at the expense of holdings of Income Bonds (which may reflect product switching) and Investment Account deposits (possibly because of the speculation about building society conversions). A new product, the Treasurers' Account, aimed at non profit making bodies, was introduced in September 1996.

In the 1997/98 financing requirement, National Savings products are assumed to contribute £3 billion.

### Sterling Treasury bills

As the Government has decided not to issue any marketable debt of less than three years' maturity to finance the CGBR, the Treasury bill stock is largely determined by the Bank of England's sterling money-market operations.

Market holdings of sterling Treasury bills more than halved in 1996/97, from £10.8 billion to £5 billion (a fall from 3% to 1% of market holdings of national debt). This reflected the reduction in the size of weekly Treasury bill tender to relieve the pressure on the daily money-market shortages. The Treasury bill tender was £400 million at end March 1997 and reached a low of £200 million between 11 October and 31 January; it was £800 million at the start of the financial year and averaged £1.2 billion in 1995/96.

### Foreign currency debt

The sterling value of debt denominated in foreign currency fell by some 15% in 1996/97, from £16.8 billion to £14.3 billion (a fall from 5% to 4% of total market holdings of national debt).

The fall was almost entirely attributable to the sharp appreciation in the value of sterling, as the nominal value of foreign currency debt was broadly unchanged. The only significant change in nominal terms was a ECU500 million fall in the nominal amount outstanding of Ecu Treasury Notes. The redemption of the US\$3.9 billion Floating Rate Note in September 1996 was fully offset by issues of US\$2 billion each of Floating Rate 2001 and 6¾% 2001. The 21% appreciation in sterling against the Deutsche Mark in 1996/97 led to a significant reduction in the sterling value of the 7⅛% Deutsche Mark bond (which matured on 28 October 1997).

### Sterling national debt: analysis by holder (Tables F and G)<sup>(1)</sup>

Total sterling national debt at end March 1997 was £404 billion, of which £355 billion (88%) was in market hands. Gilts accounted for £290 billion (72%) of the total sterling debt, and £282 billion (79%) of market holdings.

Institutional investors remain by far the largest holders of government debt. Their holdings increased by £18.1 billion during the year and account for 49% of total market holdings of sterling national debt (and some 61% of gilts in market hands). The requirement of such institutions to match their long-term liabilities with assets of similar

### Table F Distribution of the sterling national debt: summary<sup>(a)</sup>

£ billions; *percentage of market holdings in italics*

Amounts outstanding at 31 March (b)	1996		1997		Change in 1996/97
<b>Market holdings</b>					
Public corporations and local authorities	5.3	<i>1.6</i>	7.0	<i>2.0</i>	1.7
Banks	26.8	<i>8.2</i>	20.4	<i>5.7</i>	-6.4
Building societies	7.8	<i>2.4</i>	6.9	<i>2.0</i>	-0.9
Other financial institutions	155.2	<i>47.4</i>	173.3	<i>48.8</i>	18.1
Overseas residents	43.3	<i>13.2</i>	48.4	<i>13.6</i>	5.1
Individuals and private trusts	57.9	<i>17.7</i>	68.6	<i>19.3</i>	10.7
Other (including residual)	30.9	<i>9.4</i>	30.2	<i>8.5</i>	-0.7
<b>Total market holdings</b>	<b>327.2</b>	<b><i>100.0</i></b>	<b>355.0</b>	<b><i>100.0</i></b>	<b>27.6</b>
Official holdings	45.7		49.3		3.6
<b>Total sterling debt</b>	<b>372.8</b>		<b>404.3</b>		<b>31.5</b>

(a) See Table G for more detailed analysis. Data for 1970–97 are published in the *Bank of England Statistical Abstract 1997*, Part 1, Table 13.3.  
(b) Figures shown may not sum to totals because of rounding.

duration inclines them towards medium and long-dated gilts and away from such instruments as Treasury bills. Insurance companies increased their holdings of gilts by £12 billion to £108 billion, of which about 85% were held by life insurers. Pension funds increased their holdings of gilts by £5 billion to £61 billion, with index-linked gilts accounting for around one half. Pension funds have significantly increased their holdings of gilts in the past few years. In 1993/94, pension funds accounted for 17% of total gilts in market hands; by 1996/97 this had increased to

### Table G Estimated distribution of the sterling national debt: 31 March 1997

£ billions, nominal value (a) (b)

	Total holdings of sterling debt	British government stocks (c)			Treasury bills	Non-marketable debt
		Total	Up to 5 years to maturity	Over 5 years and up to 15 years		
<b>Market holdings</b>						
Other public sector:						
Local authorities	0.2	<i>0.2</i>	0.0	0.1	0.0	0.0
Public corporation	6.8	<i>1.9</i>	0.2	0.3	0.0	5.0
<b>Total public sector</b>	<b>7.0</b>	<b><i>2.0</i></b>	<b>0.2</b>	<b>0.4</b>	<b>0.0</b>	<b>5.0</b>
Banks	20.4	<i>17.6</i>	9.4	7.2	2.7	0.1
Building societies	6.9	<i>6.3</i>	5.4	0.9	0.0	0.0
Institutional investors:						
Insurance companies	107.9	<i>107.9</i>	19.6	45.3	43.0	0.0
Pension funds	61.3	<i>60.8</i>	9.6	37.5	13.7	0.0
Investment and unit trusts	4.1	<i>4.1</i>	1.3	2.1	0.7	0.0
<b>Total institutional investors</b>	<b>173.3</b>	<b><i>172.8</i></b>	<b>30.5</b>	<b>84.8</b>	<b>57.4</b>	<b>0.0</b>
Overseas holders:						
International organisations	6.8	<i>1.2</i>	0.6	0.4	0.2	5.6
Central monetary institutions	15.1	<i>14.4</i>	6.7	4.8	2.8	0.0
Other	26.5	<i>26.2</i>	7.5	13.0	5.7	0.0
<b>Total overseas holders</b>	<b>48.4</b>	<b><i>41.8</i></b>	<b>14.8</b>	<b>18.2</b>	<b>8.7</b>	<b>5.6</b>
Other holders:						
Individuals and private trusts	68.6	<i>11.6</i>	3.8	5.6	2.2	57.1
Industrial and commercial companies	1.8	<i>1.3</i>	0.6	0.4	0.3	0.5
Other (residual)	28.4	<i>28.4</i>	22.5	3.8	2.1	0.0
<b>Total market holdings</b>	<b>355.0</b>	<b><i>281.8</i></b>	<b>87.2</b>	<b>121.3</b>	<b>73.3</b>	<b>68.2</b>
Official holdings (d)	49.3	8.5	3.2	4.1	1.2	38.2
<b>Total sterling national debt</b>	<b>404.3</b>	<b>290.3</b>	<b>90.4</b>	<b>125.4</b>	<b>74.5</b>	<b>106.4</b>

Figures shown may not sum to totals because of rounding.

- (a) For explanations, see the notes to similar tables on pages 439–40 of the November 1992 *Bulletin*.  
(b) Some of these estimates are based on reported market values; certain others rely on broad nominal/market value ratios.  
(c) A sectoral analysis of gilt holdings from 1970–97 is published in the *Bank of England Statistical Abstract 1997* Part 1, Table 13.4.  
(d) Official holders include the Issue and Banking Departments of the Bank of England.

(1) Compiled from a variety of sources, though the majority of the data are taken from the ONS' quarterly and annual survey data of various financial and non-financial companies.

22%. The increasing involvement of pension funds in the gilt market may have been encouraged by the minimum funding requirement of the Pensions Act, which came into force in April 1997.

Though banks continued to be the largest holders of Treasury bills, their holdings fell sharply both in nominal terms and as a proportion of total Treasury bills in market hands. The reduction in the Treasury bill stock was almost entirely reflected in banks' holdings, with other sectors keeping their Treasury bill investment broadly unchanged in nominal terms. Banks also reduced their holdings of gilts in 1996/97 (from £19.3 billion to £17.6 billion) and there was some switching from medium-dated into short-dated stocks. Building societies' holdings of gilts remained virtually unchanged at £6.3 billion.

Total sterling debt held by individuals and private trusts increased by £10.7 billion, largely as a result of increased

holdings of National Savings. The proportion of gilts held by individuals and private trusts fell slightly in 1996/97, partly reflecting the transfer of funds from the personal sector to Equitas, the reinsurance company that took over some of the old liabilities of Lloyd's of London in September 1996.

Overseas holdings of sterling national debt rose by £5.1 billion in 1996/97. This was almost entirely because of increased investment in gilts, most of which was concentrated in the short to medium term; the proportion of gilts held by the overseas sector rose slightly to 15%. Gilts may have become more attractive to overseas investors because of the appreciation of sterling, the relatively high yields available in UK markets compared with the rest of Europe and Japan, and possibly the perception of sterling as a safe haven from EMU uncertainty. Gilt market developments in 1996/97 and the introduction of gilt repo may also have boosted overseas interest.

## Notes and definitions

### The national debt

The *national debt* represents the total liabilities of the National Loans Fund (NLF). *Market holdings* include holdings by local authorities and public corporations, but exclude holdings by other central government bodies (principally the funds of the National Investment and Loans Office, the Exchange Equalisation Account, government departments and the Issue Department of the Bank of England) and by the Banking Department of the Bank of England (together called 'official holders').

The national debt comprises:

*British Government Stocks (BGS)*: Sterling, marketable, interest-bearing securities issued by the UK Government. The nominal value of index-linked gilt-edged stocks is increased by the amount of accrued capital uplift. The whole nominal value of all issued stocks is recorded, even where outstanding instalments are due from market holders (where this is the case, the outstanding instalments are recorded as holdings of liquid assets). This article uses the same definition of short and medium-dated gilts as the National Loans Fund accounts (under five years and five to ten years respectively). In the financing requirement, however, short-dated gilts are defined as three to seven years and medium-dated as seven to fifteen years.

*Treasury bills*: Short-term instruments, generally with a maturity of 91 days. The bills, which can be traded on the secondary market, are sold at a discount and redeemed at par. The amount of discount depends on the price accepted by the Bank at the tender.

*National Savings securities*: Non-marketable debt comprising a variety of products available to the public. The national debt excludes deposits in ordinary accounts of the National Savings Bank as well as accrued interest and indexing on National Savings products.

*IMF interest-free notes*: Non-marketable non interest bearing Treasury notes, issued by the Bank on the authority of warrants from HM Treasury. The warrants authorise various sums to be placed at the disposal of the International Monetary Fund (IMF) as a reciprocal facility for loans received by the United Kingdom. All transactions are initiated by the IMF.

*Certificates of tax deposit*: Non-marketable debt available to taxpayers generally, which may be used in payment of most taxes.

*Other sterling debt*: Includes ways and means advances (the method by which government departments etc lend overnight to the NLF), NILO stocks (non-marketable stocks, issued directly to the National Debt Commissioners, whose terms reflect those on existing BGS), and the temporary deposit facility (deposits by central government bodies and public corporations with the NLF).

*Foreign currency debt*: Foreign currency bonds (denominated in US\$, DM and Ecu), Ecu Treasury Notes and bills, long-term post-war loans from the governments of the United States and Canada and assigned debt (debt originally drawn under the Exchange Cover Scheme and transferred to the government following privatisations of public corporations). Converted to sterling at end-period middle-market closing rates of exchange.

### Central government gross debt

Includes market holdings of national debt and also any market holdings of other central government gross debt, which comprises:

*Net indebtedness to the Bank of England Banking Department*: The Banking Department's holdings of central government debt (principally sterling Treasury bills and British government stocks) less its deposit liabilities to the National Loans Fund and Paymaster General. Where this is a net claim, it is recorded in the accounts as a liquid asset (and so does not contribute towards gross debt).

*National Savings ordinary account, accrued interest and indexing on National Savings*: Excluded from market holdings of national debt.

*Notes and coin in circulation*: Excludes holdings by the Banking Department of the Bank of England, which are subsumed within the figure for 'Net indebtedness'.

*Other central government gross debt*: Comprises market holdings of Northern Ireland government debt (principally Ulster Savings Certificates), bank lending and the balances of certain public corporations with the Paymaster General.

### Public sector consolidated gross debt

This includes central government gross debt, as well as all local authority and public corporation debt. All holdings of each other's debt by these three parts of the public sector are netted off to produce a consolidated total.

The local authorities sector comprises all bodies required to make returns under the various local authorities acts. Public

corporations are trading bodies (including nationalised industries) which have a substantial degree of independence from the public authority that created them, including the power to borrow and maintain reserves. For further details see Chapter 4 of the *Financial Statistics Explanatory Handbook* published by the Office for National Statistics.

### Public sector net debt

The public sector net debt is derived from the consolidated debt of the public sector by deducting the public sector's holdings of liquid assets.

### General government consolidated gross debt (GGCGD)

Central government and local authorities' gross debt with holdings of each other's debt netted off to produce a consolidated total. The Maastricht measure of GGCGD is calculated on the European System of Integrated Accounts (ESA) basis, which differs slightly from the UK national accounts definition. In accordance with the ESA, IMF interest-free notes are excluded from the calculation of general government debt, but as a liability of the National Loans Fund, they are included in the other measures of government debt used in this article. Miscellaneous other instruments are also included in government debt on an ESA basis, but excluded on a domestic basis.