

## 'Real' national saving and its sectoral composition

*This note presents revised and updated estimates of sectoral saving and financial balances adjusted for the effects of price inflation on monetary assets and liabilities.<sup>(1)</sup>*

In this note, estimates of monetary assets and liabilities of all sectors are based for the first time on CSO balance sheet data.<sup>(2)</sup> This should ensure internal consistency and greater reliability. The change has produced substantial revisions to some of the estimates of net monetary liabilities, particularly for the company sector (reflecting, for example, a fuller coverage of trade credit and the inclusion for the first time of items such as unpaid accruals of tax and interest). The notional gains (losses) on net monetary liabilities (assets) are, however, broadly similar to earlier estimates.

Overall, price inflation has tended to erode the real value of the United Kingdom's net monetary debt, and the effect of this has been only partly offset by higher interest payments on floating-rate debt. In years when sterling appreciated, this inflation gain to the United Kingdom was augmented by a fall in the sterling value of foreign currency liabilities, thus reversing the effects of exchange rate depreciation in other periods.

Within the United Kingdom, substantial inflation gains have accrued to the public sector, as a large net debtor. On average in the 1970s, while the nominal public sector financial deficit was equivalent to 4.3% of national income,<sup>(3)</sup> in 'real' terms there was a positive balance amounting to some 3% of 'real' national income. Table C suggests that in the early 1970s nominal public sector borrowing<sup>(4)</sup> was more than offset by the erosion of the real value of existing liabilities, so that the public sector tended to be a 'real' net lender. But in recent years, in part reflecting the depressed economy, the public sector has on average tended to be a small 'real' borrower. This finding is consistent with the decline in nominal national debt outstanding relative to current price GDP up to the mid-1970s, and the rough stability of this relationship thereafter.<sup>(5)</sup>

The company sector as a whole has also benefited from the effects of inflation on its net monetary liabilities, the gain to industrial and commercial companies more than offsetting the loss on the net monetary assets of financial institutions.

By contrast, the personal sector, as a large holder of net monetary assets, has incurred a persistent loss from the erosion of their real value. On average in the 1967-79 period, nominal personal sector saving failed to compensate for the erosion of the real value of existing assets, so that the sector was a 'real' dis-saver. While nominal personal sector saving rose from 4% of national income in 1967-69 to 6% in 1976-78 and almost 9% in 1979-80, in 'real' terms the sector was a small dis-saver until 1980. In 1980, an unusually high nominal saving ratio and the effect of a lower inflation rate in reducing the loss on existing net monetary asset holdings were associated with substantial 'real' saving (see page 154).

The price index used in calculating notional losses and gains on monetary assets and liabilities is the implied deflator of total consumers' expenditure, which provides an adjustment for the effects of general inflation but takes no account of changes in the relative prices of different assets or for changes in the market value of assets arising from changes in real interest rates. A further problem is that while an ideal measure of the real interest rate is the difference between the nominal rate of interest and the *expected* rate of price inflation, the measure implicit in these calculations is the difference between nominal interest rates and the *actual* rate of price inflation. This *ex post* measure changes abruptly with recorded changes in inflation. Subjective expectations of future inflation, and thus real interest rates, probably evolve more smoothly over time. For these and other reasons, the figures for individual years should be treated with caution; the averages for periods of years are probably more reliable.

(1) The estimates are based on the methodology set out in the Bank's Discussion Paper No. 6, 'Real' national saving and its sectoral composition, by C. T. Taylor and A. R. Threadgold and summarised in the June 1980 *Bulletin*, page 196. In this note, as in earlier ones, inflation-adjusted magnitudes are denoted 'real' (i.e. in quotes) to distinguish them from magnitudes measured at constant prices, conventionally described as real (without quotes).

(2) See C. W. Pettigrew, 'National and sector balance sheets for the United Kingdom' *Economic Trends*, November 1980.

(3) At market prices throughout.

(4) For the difference between the public sector financial deficit and the public sector borrowing requirement, see the March 1981 *Bulletin*, page 7.

(5) See the December 1979 *Bulletin*, page 406.

**Table A**  
**Notional loss/gain on real value of net monetary assets/liabilities by sector: 1967-1980**

£ billions

	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979(a)	1980(a)
<b>Sectoral net monetary assets (+)/liabilities (-) mid-year estimates</b>														
Personal sector	35.0	36.3	37.7	39.4	43.3	45.7	47.8	52.9	58.7	65.8	73.9	81.3	88.8	97.0
Company sector	- 2.7	- 2.8	- 3.4	- 5.5	- 8.0	- 8.8	-10.7	-14.8	-15.6	-14.4	-13.8	-11.8	-10.2	-15.0
Public corporations	-11.1	-12.4	-12.4	-12.3	-13.3	-14.0	-14.3	-16.2	-19.4	-22.5	-25.3	-26.6	-27.6	-32.2
General government	-25.4	-26.0	-26.5	-25.7	-25.8	-26.8	-28.2	-29.5	-33.5	-41.3	-47.2	-51.6	-58.2(b)	-63.2(b)
Total domestic sector	- 4.2	- 5.0	- 4.7	- 4.1	- 3.8	- 3.9	- 5.4	- 7.6	- 9.8	-12.4	-12.3	- 8.8	- 7.2	-13.4
Overseas sector	4.2	5.0	4.7	4.1	3.8	3.9	5.4	7.6	9.8	12.4	12.3	8.8	9.0	9.2
<b>Change in consumers' expenditure deflator (Q4-Q4) (per cent)</b>														
	1.9	5.7	5.2	7.2	8.0	7.9	9.6	20.2	23.4	14.1	12.3	8.2	16.1	12.8
<b>Notional loss on net monetary assets (gain on net monetary liabilities) (c)</b>														
Personal sector	- 0.6	- 2.0	- 2.0	- 2.8	- 3.5	- 3.6	- 4.6	-10.7	-13.7	- 9.2	- 9.1	- 6.7	-14.3	-12.5
Company sector	0.1	0.2	0.2	0.4	0.6	0.6	0.8	3.0	3.3	1.5	1.9	0.9	1.8	2.0
Public corporations	0.2	0.7	0.6	0.9	1.1	1.1	1.3	3.3	4.2	2.3	3.4	2.1	4.8	4.6
General government	0.4	1.3	1.4	1.8	2.1	2.1	2.7	6.0	7.7	5.1	5.9	4.3	9.0	7.5
Total domestic sector	—	0.2	0.3	0.3	0.3	0.3	0.3	1.5	1.5	- 0.3	2.0	0.6	1.3	1.6
Overseas sector	—	- 0.2	- 0.3	- 0.3	- 0.3	- 0.3	- 0.3	- 1.5	- 1.5	0.3	- 2.0	- 0.6	- 1.6	- 1.0

(a) Bank estimates. The sectoral estimates of net monetary assets are not wholly consistent: the error for 1979 is £1.8 billion and for 1980 £4.2 billion.

(b) Until end-December 1978, gold in the official reserves was included within general government monetary assets: since that date, when the method of valuation was changed to take account of market prices, gold is treated as a non-monetary asset.

(c) The notional loss or gain is not equal to the product (sign reversed) of sectoral net monetary assets/liabilities and the change in the consumers' expenditure deflator, because of the different deflator used for assets/liabilities denominated in foreign currencies. For the latter, the rate of change of the consumers' expenditure deflator is taken net of the percentage change in the effective exchange rate (expressed in terms of foreign currency per unit of sterling). The resulting series used was:

	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Change in deflator (per cent)	-5.4	-3.2	5.7	6.9	8.7	-1.7	0.8	19.8	11.0	-7.7	17.7	5.8	25.0	24.4

**Table B**  
**'Real' saving<sup>(a)</sup> and financial balances: 1967-1980**

£ billions

	Annual averages				1979(b)	1980(b)
	1967-1969	1970-1972	1973-1975	1976-1978		
<b>Personal sector</b>						
Saving:						
Nominal	1.3	1.9	5.1	7.8	13.8	18.4
'Real'	-0.3	-1.4	-4.6	-0.5	-0.5	6.0
Financial balance:						
Nominal	0.7	1.1	4.5	6.4	11.6	16.6
'Real'	-0.8	-2.2	-5.1	-1.9	-2.7	4.1
<b>Company sector</b>						
Saving:						
Nominal	1.8	2.6	2.8	6.0	4.6	3.1
'Real'	2.0	3.1	5.2	7.4	6.4	5.0
Financial balance:						
Nominal	-0.2	0.2	-1.3	-0.3	-4.5	-1.8
'Real'	-0.1	0.8	1.0	1.1	-2.7	0.1
<b>Public corporations</b>						
Saving:						
Nominal	-0.1	-0.5	-1.0	-0.8	-1.9	-2.1
'Real'	0.4	0.5	2.0	1.8	3.0	2.4
Financial balance:						
Nominal	-0.8	-0.9	-1.7	-1.6	-2.1	-2.8
'Real'	-0.2	0.1	1.2	1.0	2.7	1.8
<b>General government</b>						
Saving:						
Nominal	1.8	2.5	-0.1	-2.8	-3.5	-5.4
'Real'	2.8	4.5	5.3	2.3	5.5	2.1
Financial balance:						
Nominal	-0.5	0.5	-3.4	-5.9	-6.2	-8.2
'Real'	0.5	2.5	2.1	-0.8	2.8	-0.8
<b>Total domestic sector (c)</b>						
Saving: (d)						
Nominal	4.8	6.5	6.8	10.3	13.0	14.0
'Real'	5.0	6.8	7.9	11.1	14.3	15.5
Financial balance: (e)						
Nominal	-0.8	0.9	-1.9	-1.4	-1.2	3.7
'Real'	-0.7	1.2	-0.8	-0.7	0.1	5.3

(a) After providing for stock appreciation and capital consumption at replacement cost and plus net capital transfers.

(b) Provisional and/or Bank estimates.

(c) For 1979 and 1980, the 'real' estimates are calculated using the estimates of net monetary liabilities based on the sum of the domestic sectors, rather than an overseas sector estimate.

(d) Equals dis-saving of overseas sector.

(e) Equals financial deficit of overseas sector.

**Table C**  
**Public sector borrowing requirement: 1967-1980**

£ billions; borrowing -

	Annual averages				1979(a)	1980(a)
	1967-1969	1970-1972	1973-1975	1976-1978		
Nominal	-0.9	-1.1	-7.0	-7.8	-12.6	-12.3
<i>As a percentage of national income at market prices (b)</i>						
	-2.4	-2.0	-8.6	-6.2	-7.5	-6.2
'Real'	0.6	1.9	1.3	-0.1	1.3	-0.2
<i>As a percentage of 'real' national income at market prices (b)</i>						
	1.4	3.7	1.6	-0.1	0.7	-0.1

(a) Provisional and/or Bank estimates.

(b) National income plus general government income from net indirect taxes. The 'real' estimate also includes the notional gain on net external monetary liabilities from Table A.