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About the Office for National Statistics

The Office for National Statistics (ONS) is the government agency responsible for compiling, analysing and disseminating many of the United Kingdom's economic, social and demographic statistics, including the retail prices index, trade figures and labour market data, as well as the periodic census of the population and health statistics. It is also the agency that administers the statutory registration of births, marriages and deaths in England and Wales. The Director of ONS is also the National Statistician and the Registrar General for England and Wales.

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National Statistics are produced to high professional standards set out in the National Statistics Code of Practice. They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political influence.



Economic Trends

No. 610, September 2004

Regulars

- 2 In brief**
Summary from last month's economic statistics releases
- 5 Economic update – September 2004**
Anis Chowdhury
Monthly overview of latest economic statistics
- 12 Forecasts for the UK economy – August 2004**
Monthly comparison of independent forecasts for the UK economy
- 13 International economic indicators – September 2004**
Richard Wild
Monthly review of international economic indicators
- 26 Corporate services price index (experimental) - Quarter 2 2004**
Lyndsey Severn
Quarterly results of the CSPI

Features

- 39 Research and experimental development (R&D) statistics 2002**
Julie Owens
The latest annual article that brings together a range of data produced and published by ONS
- 64 Measuring health care output in the UK: a diagnosis based approach**
Nicola Mai
A report on methodological work undertaken in developing new ways to calculate output in the UK health care sector
- 74 Input-Output and GDP revisions analysis: 1992–2002**
Sanjiv Mahajan
A presentation of a revisions analysis for 1992 to 2002 as published in the 2004 edition of the *UK Input-Output Analyses*

Methods

- 111 UK official productivity estimates: review of methodology**
Matthew Barnes and Mark Williams
An explanation of previously announced changes in the compilation of UK official productivity estimates

Tables

- 139 List of Tables**
- 140 Notes to Tables**
- 141 Tables**
- 220 Sources**

Publications

- 226 Portfolio of ONS macro-economic publications**

in brief

At a glance – economic summaries recently released on the National Statistics website.

GDP growth

Growth in services has remained steady at 0.9 per cent, with growth reflected across most service industries.

The distribution, hotels and catering sector rose by 1.1 per cent; government and other services rose by 1.0 per cent; business services and finance rose by 0.9 per cent; and the transport and communications sector rose by 0.8 per cent with a recovery in telecommunications.

Output of the production industries rose by 0.9 per cent driven by a rise in oil and gas extraction. Manufacturing output rose by 0.9 per cent in 2004 Q2, with the most significant rises in machinery and equipment; transport equipment; and basic metals and metal products.

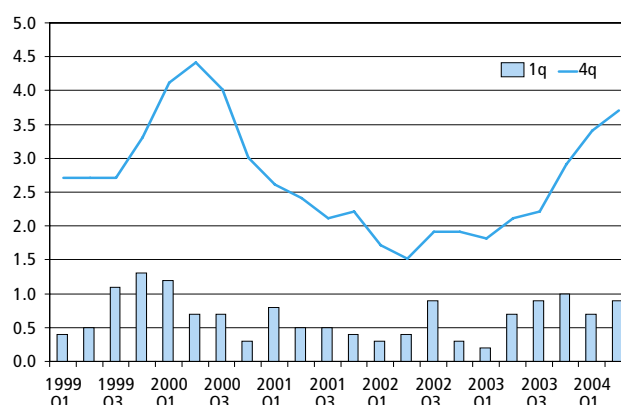
Construction output rose by 0.9 per cent in the latest quarter.

Household expenditure rose by 1.1 per cent with strong growth in net tourism and retailing.

Government expenditure rose by 1.0 per cent over the quarter and is now 6.0 per cent above the level seen in 2003 Q2. Investment rose by 1.4 per cent over the quarter due to increased investment in machinery and equipment. The trade balance remained unchanged at £11.9 billion in deficit as

GDP quarterly growth CVM

Per cent change



imports of goods rose by 2.7 per cent and exports of goods rose by 2.4 per cent.

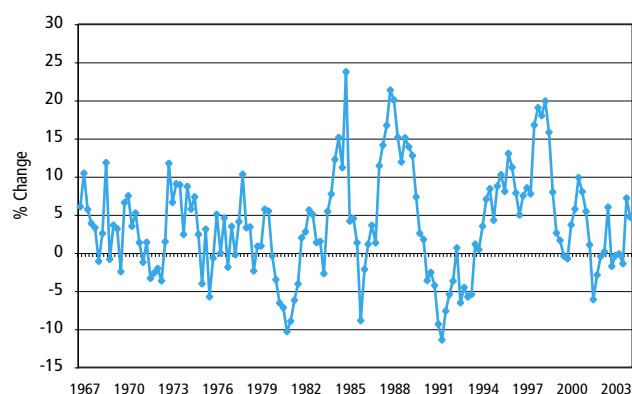
On the income side, compensation of employees, in nominal terms, rose by 0.9 per cent and corporate incomes rose by 2.1 per cent in 2004 Q2.

Released: 25 July 2004

Business investment

Total business investment percentage change

Quarter on corresponding quarter of previous year



The provisional estimate of business investment for the second quarter of 2004 is 4.7 per cent higher than the same period of last year and 0.5 per cent higher than the previous quarter. This follows a rise of 1.9 per cent in the first quarter of 2004 and brings business investment to a new record level. Although investment by manufacturing industries increased in the latest quarter, the slow long-term rise comes mainly from non-manufacturing industries.

The quarterly rise is due mainly to increased capital spending from the other production industries. Quarterly increases were also observed from manufacturing, construction, other services and non-manufacturing public corporations. These increases were slightly offset by a fall in investment from distribution services.

Private sector manufacturing investment is up 2.4 per cent on the quarter. By industry, the quarterly increases were most marked in engineering and vehicles (+28.8 per cent), metals and metal goods (+13.5 per cent) and solid and nuclear fuels (+1.1 per cent). By asset, increased investment was most notable in other capital equipment.

The quarterly fall in distribution services investment is due mainly to decreased spending in new building work and other

capital equipment from the retail industry.

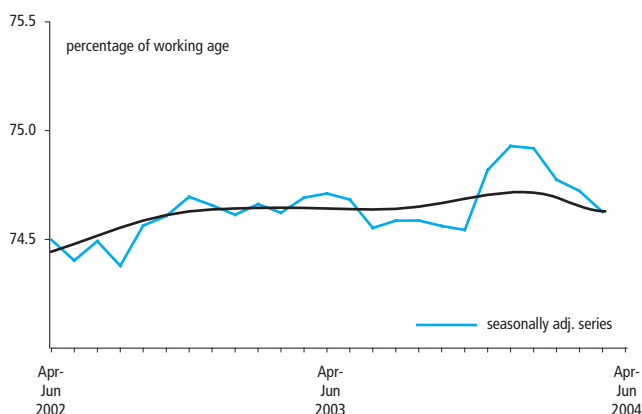
Total manufacturing investment rose by 1.4 per cent and construction and other production rose by 5.8 per cent compared with the same quarter a year ago.

Released: 21 August 2004

Employment

Working age employment rate

Sampling variability ± 0.3 per cent



Labour market statistics published on 11 August 2004 show that the working age employment rate has fallen over the past three months, and that the rising trend appears to have levelled off.

The number of people in employment has also fallen, although the trend is still upward, and job vacancies are up compared with a year ago. The unemployment rate is up compared with three months ago, and the falling trend may have started to level off. However, there is another fall in claimants of the Jobseeker's Allowance. Growth in average earnings, both excluding and including bonuses, is unchanged.

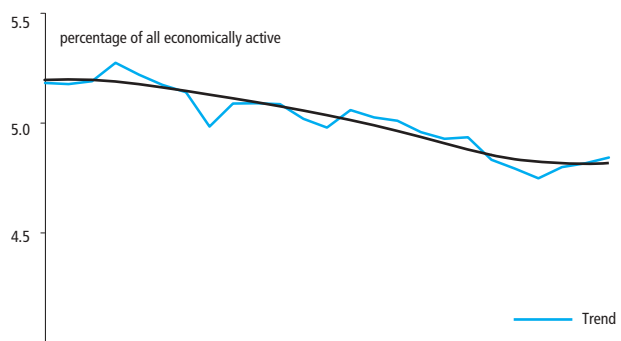
The employment rate for people of working age was 74.6 per cent for the three months ending in June 2004, down from 74.9 per cent for the previous quarter. The number of people in employment fell by 53,000 over the last quarter to reach 28.3 million.

Total hours worked per week fell by 3.6 million hours to 903.5 million hours.

The average number of job vacancies for the three months to July 2004 was 658,300. This was 74,100 more than a year earlier.

Unemployment rate

Sampling variability ± 0.2 per cent



The unemployment rate increased slightly to 4.8 per cent, from 4.7 per cent the previous quarter. The number of unemployed people increased by 27,000 to reach 1.44 million.

While the number of people unemployed for up to 12 months has increased by 45,000 over the quarter to reach 1.15 million, the number of people unemployed for over 12 months has fallen by 18,000 to reach 290,000. This is equal to the lowest figure recorded since comparable records began in 1992.

The claimant count (Jobseekers' Allowance claimants) fell by 13,700 to 835,200 in July, the lowest level since July 1975.

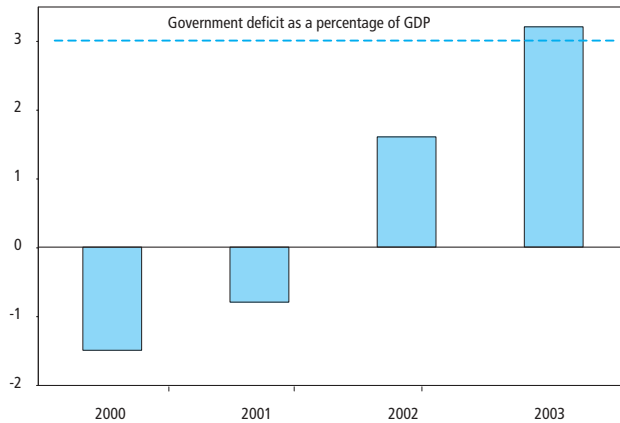
The inactivity rate for people of working age increased to 21.5 per cent for the three months ending in June 2004, compared with 21.3 per cent for the previous quarter. The number of economically inactive people of working age increased by 89,000 over the last quarter to reach 7.85 million.

The annual rate of growth in average earnings (the AEI), excluding bonuses, was 4.2 per cent, unchanged from last month. Including bonuses, the AEI was also unchanged on last month's figure, at 4.4 per cent.

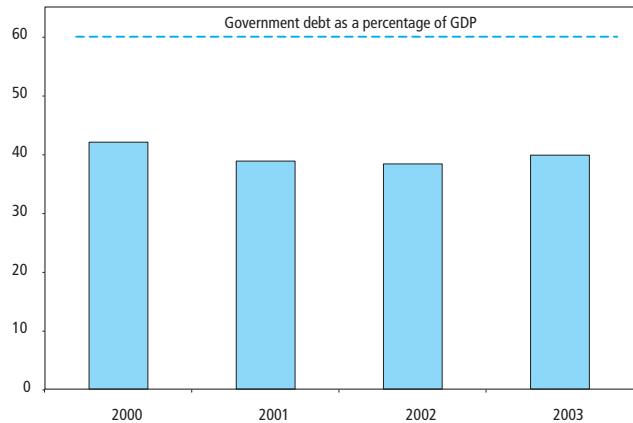
Released: 13 August 2004

UK Government debt and deficit

Government deficit as a percentage of GDP



Government debt as a percentage of GDP



Latest estimates confirm that in 2003 the UK recorded a government deficit of £35.0 billion, which was equivalent to 3.2 per cent of gross domestic product (GDP). This exceeded the reference value in the Maastricht Treaty's Excessive Deficit Procedure. The procedure sets deficit and debt targets of 3 per cent and 60 per cent respectively for all EU countries.

At the end of 2003 general government debt was £437.4 billion, equivalent to 39.8 per cent of GDP. This was the first increase in the debt percentage level since 1996, but it remains substantially within the reference value for excessive debt.

Released: 29 August 2004

Summaries on other economic topics as well as social subjects can be found at www.statistics.gov.uk/glance

Economic update

September 2004

Anis Chowdhury
Office for National Statistics

Overview

- GDP growth in the second quarter was 0.9 per cent, up from 0.7 per cent in the first quarter of the year.
- A buoyant service sector continued to lead economic growth, construction sector growth rose again and manufacturing output bounced back sharply after a fall in quarter one.
- Consumer spending rose by 1.1 per cent in the second quarter and retail sales growth remained buoyant into quarter two.
- Fixed investment rose by 1.0 per cent in the second quarter, a slower rate of growth than the first quarter of 2004 but still robust.
- Government spending is currently a positive contributor to economic growth although the public sector finances are falling further into deficit.
- Export activity increased in June. The growth rate for quarter two was significantly stronger than the first three months of the year.
- Labour market aggregates and average earnings remain largely stable.
- Producer output price inflation eased in July reflecting a fall in petroleum product prices. Input price inflation was also lower than last month but remains considerably above the levels of a few months ago.
- The CPI measure of consumer prices is still below target with the inflation rate falling in July.

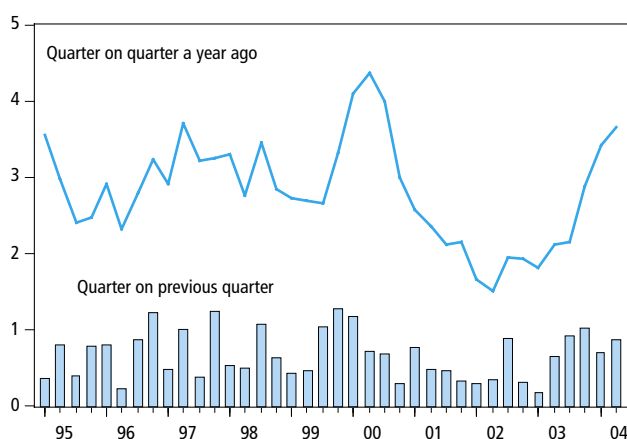
GDP activity – overview

The GDP growth for the second quarter of 2004 was left unchanged from the initial estimate at 0.9 per cent after the release of the UK output, income and expenditure figures for that quarter. This maintained the momentum built up in 2003, but represented an acceleration over the previous quarter when growth was 0.7 per cent. The second quarter annual growth rate is estimated at 3.8 per cent, also representing an increase on the first quarter annual growth rate of 3.4 per cent (Figure 1). This latest release contains more information than that contained in the preliminary GDP one. It gives first estimates for the main expenditure categories and more complete information on the output side. It is still, however, based on as yet incomplete information.

Second quarter GDP data are available for the major OECD economies and these show a mixed picture of the world economy. Second quarter GDP growth in the US was 0.8 per cent, down from 1.1 per cent in quarter one. The slowdown was narrowly based on consumer spending with a decline in motor vehicle sales together with a negative impact of higher oil prices affecting disposable income and therefore spending

Figure 1
GDP

Growth



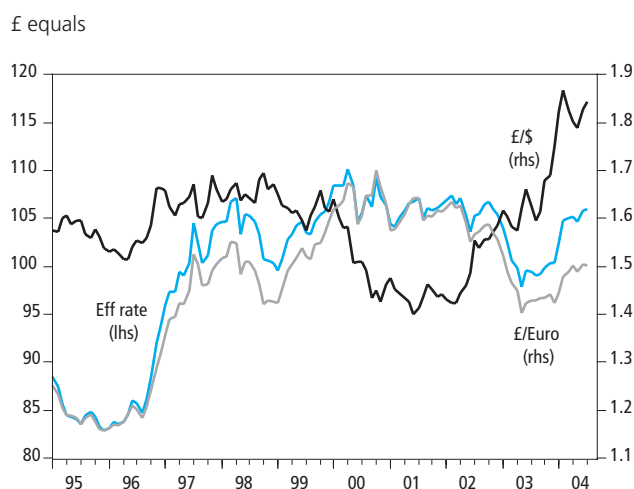
plans. However, this was offset by a pick up in business investment and net trade. Japan showed the weakest GDP growth of all the major economies. Following strong growth of 1.6 per cent in 2004 quarter one, growth moderated to 0.4 per cent in quarter two. The slowdown was due to weak consumption growth and corporate investment. This was offset by exports, which continues to be the main driver of Japanese growth with Asian trade particularly from, Taiwan, South Korea and China fuelling export demand. Growth in the three biggest mainland EU economies, France, Germany and Italy, maintained their momentum in quarter two. French GDP in quarter two was 0.8 per cent, unchanged from quarter one. Strong consumer spending and increased investment again underpinned this. German GDP grew by 0.5 per cent in quarter two, up from 0.4 per cent in quarter one. This was led by strong exports offset by stagnant demand. Italy GDP grew by 0.3 per cent, down from 0.4 per cent in quarter one, mainly due to subdued consumption growth.

Financial Market activity

The latest developments in financial markets suggest that the recovery in stock values since the low reached in March 2003 is still somewhat fragile. Last year saw some optimism return with the FTSE All Share Index ending 2003 up some 16 per cent, after three consecutive years of declines. 2004 also started positively with a good stock performance in the first quarter but a more erratic performance in the second quarter. By the end of July, the FTSE All Share Index was up almost 2 per cent when compared with the end of 2003. The increased volatility in the second quarter seemed to continue through August and, at the time this article was written, the FTSE All Share Index had declined enough to more than offset the gains accumulated through the year leaving the index level lower than at the end of 2003.

The last twelve months or so have seen substantial exchange rate volatility, as sterling first declined and then rebounded. The early part of last year saw the pound fall against the euro but strengthen against the US dollar, and as a result the effective exchange rate fell by 7.2 per cent between December 2002 and May 2003. From this low the pound's effective rate rose slightly over the rest of the year as sterling continued to be buffeted between a strong euro and a weak dollar. For 2003 as a whole the effective index ended the year down about 5.0 per cent, as a fall of over 8 per cent in the bilateral rate versus the euro was partially offset by a rise of 10 per cent against the dollar (Figure 2). Early 2004 has seen the pound continue to rise, most prominently against the dollar but also recently against the euro as well. This has continued through July. The effective exchange rate rose around 3 per cent on the month in July. The rebound may in part be due to the fact that the Bank of England has raised interest rates five times in recent months, by a total of 125 basis points in all, at a time when most other major central banks seem content to keep interest rates stable.

Figure 2
Exchange rates

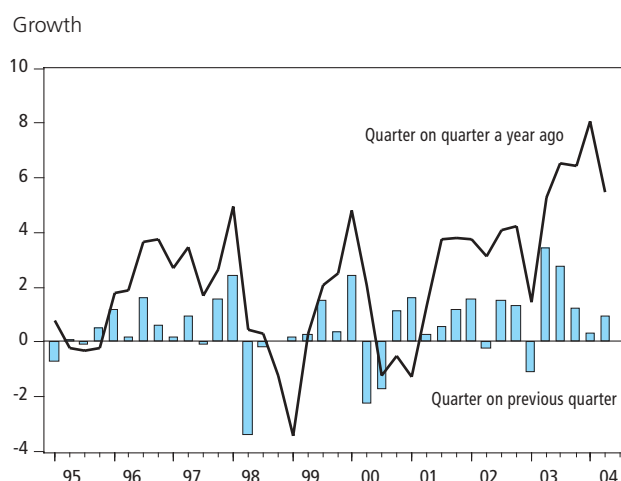


Output

Gross domestic product (GDP) is still estimated to be growing by 0.9 per cent after the release of the output, income and expenditure release for the second quarter. This is published a few weeks after the preliminary GDP figures and gives initial estimates for the main expenditure and income categories of GDP along with more detailed figures on the output side. It is at this stage that a fuller picture of economic growth in the quarter starts to emerge, although at least some of the numbers are still as yet based on incomplete information and so are liable to revision. The initial estimate of GDP growth in the second quarter of 2004 was 0.9 per cent, acceleration over the previous quarter when growth was 0.7 per cent. The second quarter annual growth rate is estimated at 3.8 per cent is also, a little stronger than the first quarter annual growth rate of 3.4 per cent.

According to the preliminary figures growth was rapid in all sectors of the economy. The service sector, by far the largest part of the UK economy, continues to be the major driver of growth while the production sector, which had seen output declines in the first quarter of the year, picked up sharply in the second quarter and grew at the same rate as the service sector. Construction activity is also estimated

Figure 3
Construction output



to have performed quite well though not growing as quickly, as in 2003. It grew by 0.9 per cent in quarter two following growth of 0.4 per cent in quarter one (Figure 3). External indicators of construction – mainly the RICS and the CIPS surveys – signal very strong growth in activity in the second quarter, though possibly not as strong as in the first quarter. The CIPS indices show activity rising in both housing and commercial activity. Commercial growth was more moderate than in quarter one, while the housing sector grew slightly more quickly.

Manufacturing output is estimated to have expanded rapidly in the second quarter, having grown by as much as 0.9 per cent. This is a notable pickup considering output had declined in the first quarter. (Figure 4). Growth was positive in most sectors with the notable exception of textiles, leather and clothing. By industrial grouping output in all industries – durable and non-durable consumer goods, capital goods, intermediate consumption and energy – has increased in recent months with the exception of consumer non-durable, which were flat in the three months to June. External surveys of production for the second quarter of 2004 generally

Figure 4
Manufacturing output

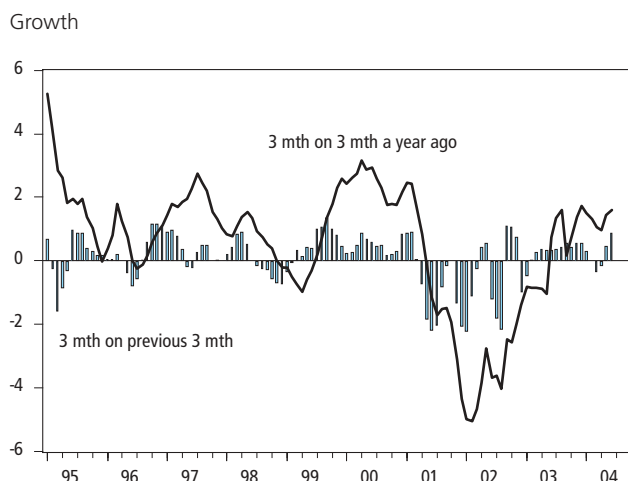
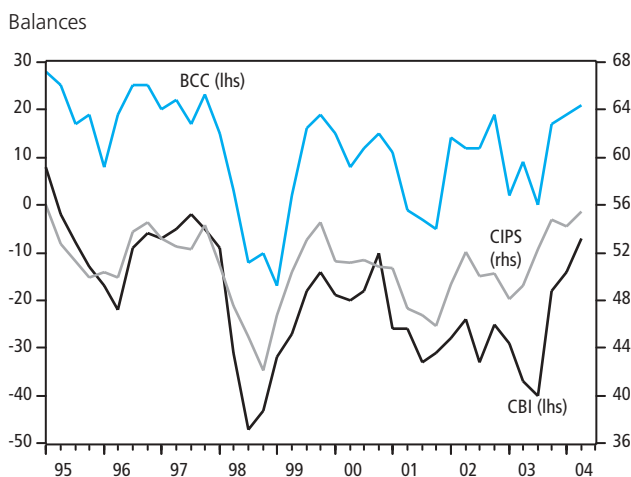


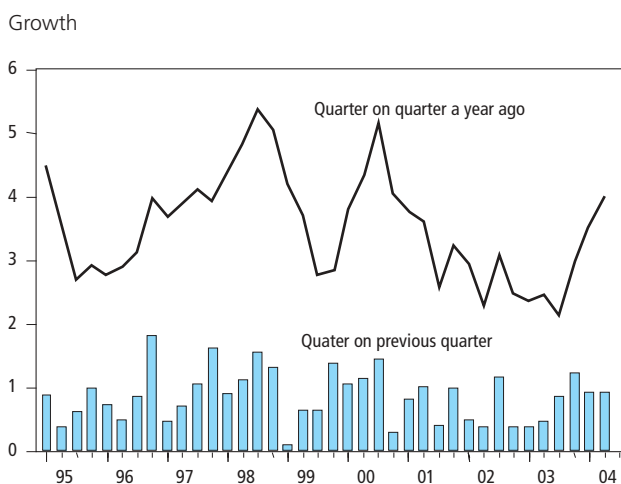
Figure 5
External manufacturing



confirm the strength of the production sector (Figure 5). The CIPS survey, which has consistently signalled expansions since July last year, was particularly strong in the months from April to July 2004 showing increases in both output and orders figures. The quarterly BCC survey on manufacturing, on the other hand, provided somewhat more mixed signals. In particular, while home sales rose in the quarter, orders fell. The quarterly CBI survey published in July shows the recovery slowing down with output growth slipping back and orders slowing. This according to the CBI reflects the effect of some moderation in growth in the fast-growing economies of the US and China and the recent interest rate rises.

Overall service sector output is estimated to have grown by 0.9 per cent in quarter two, expanding at the same rate as in quarter one. Growth in this sector has been very rapid since the second half of 2003 (Figure 6). Growth in this sector has been broadly based from both the public and private sector. Distribution, hotels and catering provided the largest contribution at 1.1 per cent followed by government and other services at 1.0 per cent.

Figure 6
Services output



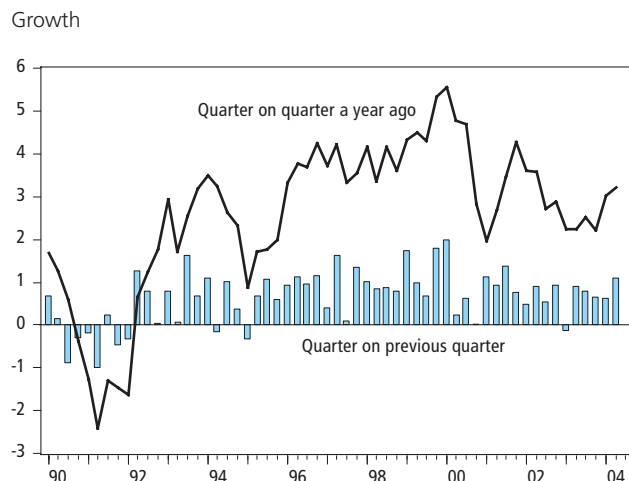
Surveys undertaken by other organisations point to continued strong growth in the service sector in the second quarter of the year. In spite of a slight drop from the first quarter, the CIPS index of services remains very strong signalling rapid growth in both activity and orders. The CIPS business expectation's indicator on the other hand shows a slight decrease following strong growth in the previous months, when it had reached its highest level since 1999. The CBI survey overall showed that activity remained high in quarter two although there was a slight decline in the level of business in volume terms. The optimism indicator on the other hand was particularly strong. Finally, the BCC survey remained very strong and actually improved over the last quarter, with the deliveries (sales) index at its highest level since 1997.

Household demand

In the second quarter of 2004 quarterly growth in household final consumption was 1.1 per cent, up from 0.6 per cent in the previous quarter. Growth compared with the same quarter a year ago was 3.2 per cent, compared to 3.0 per cent

in quarter one. (Figure 7). A detailed breakdown of consumer spending is not published at this time but it appears as though stronger spending growth on services explains some of the pick up when compared with the previous quarter.

Figure 7
Household demand



Most of the fundamentals for consumer spending remain fairly supportive. Real disposable income growth remains consistent with a moderate growth in spending. The labour market is tight and getting tighter, having a small upward effect on wages and generally ensuring that consumers remain relatively unconcerned about their job prospects. Meanwhile consumer confidence is still reasonably high and the continued buoyancy of the housing market is a further positive. Increased uncertainty in the stock market could act as a deterrent for consumption, although it would be premature to judge the impact of the recent volatility. Also, there is as yet little hard evidence to suggest that the five base rate hikes since November have had a significant or indeed any impact on consumer behaviour, although some commentary in the media has suggested that the pace of house price rises is now starting to slow.

Growth for consumption as a whole in quarter one was significantly weaker than that of retail sales, which rose by 1.8 per cent in quarter and was up 6.0 per cent when compared with the same quarter a year ago. It should though be noted that household consumption accounts for a much wider range of spending than retail sales and that retail sales is still not calculated using chain linking the method now used to produce the GDP numbers.

Retail sales figures showed an increase of 1.8 per cent in the three months to July, slightly down from the three month rate in June but still providing some evidence that consumption remained strong into quarter three. (Figure 8). External figures for retail sales seem to support this picture. Both the CBI retailing and the BRC like-for-like sale surveys pointed to slowing growth in retail sales volumes. Both explain the slowdown partly to promotions linked to Euro 2004 coming to an end and partly, higher interest rates deterring spending and bad weather. (Figure 9).

Figure 8
Retail sales

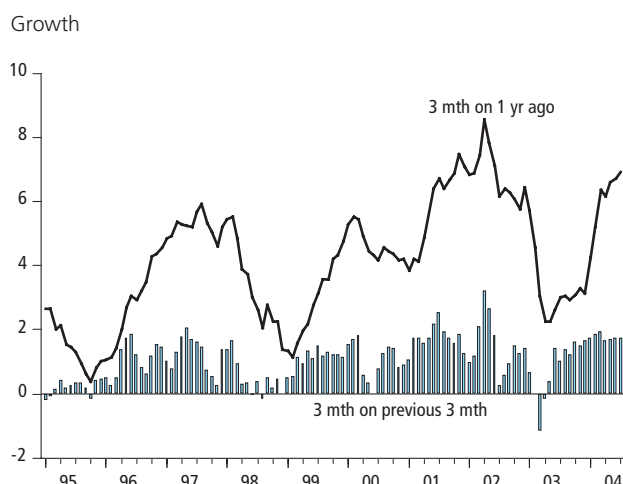
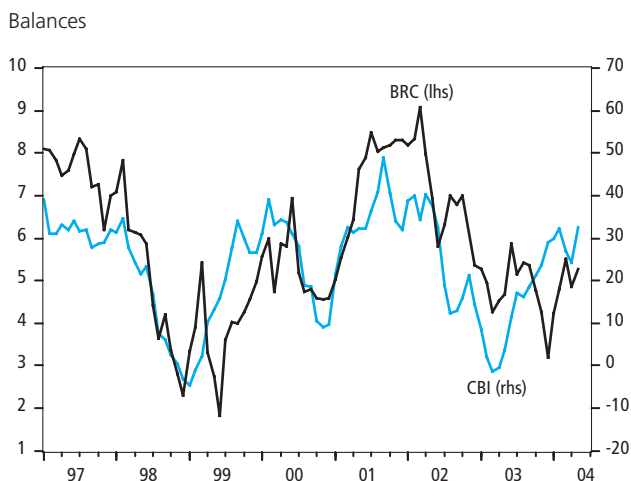


Figure 9
External retailing



Business demand

The provisional estimate of business investment for the second quarter of 2004 shows private and public sector manufacturing rising by 2.6 per cent since the previous quarter and by 1.4 per cent since the second quarter of 2003. Within the private sector, services fell by 2.2 per cent while construction and other production rose by 11.4 per cent. (Figure 10).

Despite the rise in spending over the last twelve months, the environment still remains a mixed one for investment. An increase in investment depends upon firms finding it both affordable and profitable to invest. The last few quarters have seen an improvement in this to some degree. Preliminary data provides an incomplete picture, however there are indications that gross operating surplus is continuing to improve through the second quarter of 2004. The first quarter saw the non-financial corporate sector record another big quarterly net lending position due to another rise in the gross operating surplus and a high return on investments (Figure 11). However, because of the high level of borrowing in the late 1990s the corporate sector does still have very high levels of net liabilities. The financial balance sheet shows the sector

Figure 10
Business Fixed Investment

Growth

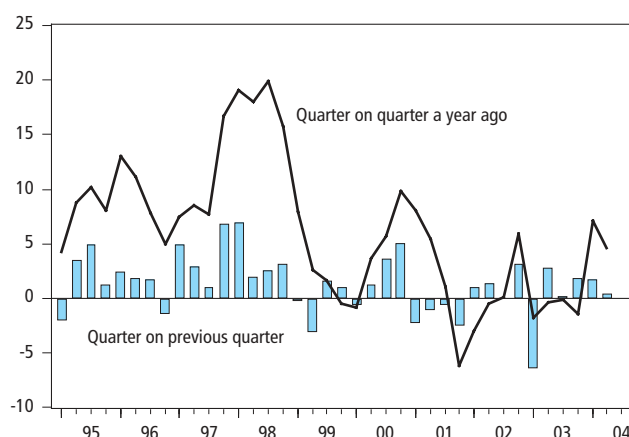
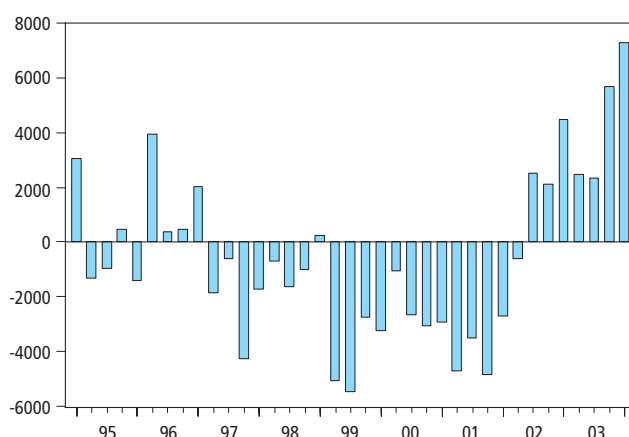


Figure 11
Net lending by the Non-financial corporate sector

Balances



had net liabilities of £1,327 billion in the first quarter of 2004, another rise when compared with the previous quarter.

It is also unclear whether firms perceive this as a favourable environment in which to boost investment. They generally continue to report a low level of capacity utilisation possibly indicating that further investment may not be required. Also, evidence on investment intentions from the latest BCC survey seems to be mixed with manufacturing sector figures weakening and service sector figures strengthening.

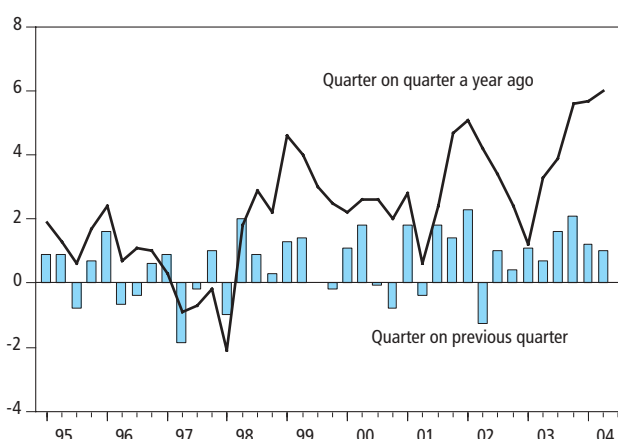
Government demand

Government final consumption expenditure in real terms grew by 1.8 per cent in the second quarter of 2004, a higher pace of growth than in the first quarter where activity rose by 1.2 per cent (Figure 12). Some of the recent strength reflects higher defence spending, but in reality, expenditure on health, education and social protection seems to account for the bulk of the expenditure. Growth compared with the same quarter a year ago was up 6.8 per cent, while for 2003 as a whole it had been up 3.5 per cent compared with a 3.8 per cent rate of increase in 2002. It is worth recording that government output figures were recently revised in conjunction with

the annual publication of the *Blue Book*, out on 23 July. In all periods since 2001, growth in government consumption has been revised up thanks partly to improved estimates of health output but also to other factors such as revised data on departmental spending and a review of the allocation of spending to functional categories.

Figure 12
Government spending

Growth



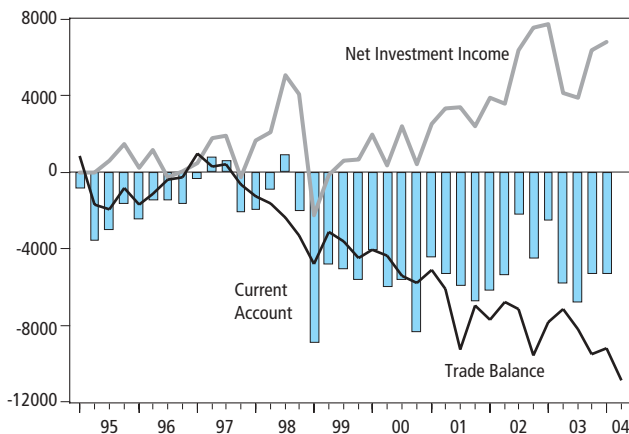
The combination of faster government expenditure growth alongside weaker revenues reflecting the more subdued economic activity has led to deterioration in the public sector's finances. The public sector, a substantial net lender in the years 1998 to 2001 became a net borrower again in 2002. The net borrowing figure for 2002 was £18.2 billion, which compares with a net lending figure of £7.6 billion in the previous year. This deterioration has continued into 2003 and 2004. Net borrowing in calendar year 2003 was £38.1 billion and the second quarter of 2004 saw a further borrowing of the order of £13.5 billion. The latest budget deficit estimates for the end of July, Show the public sector net borrowing was -£1.0 billion (that is, net lending); this is £0.2 billion higher net borrowing than in July 2003, when net borrowing was -1.2 billion.

Trade and the Balance of Payments

The UK current account remained in substantial deficit in the first quarter of 2004 at a level almost identical to that of the previous quarter. The first quarter deficit figure was £5.3 billion, the same rate as in the fourth quarter of last year and down on the £6.8 billion deficit of the third quarter. The first quarter figure comprised of a record deficit on trade in goods of £13.9 billion, partially offset both by a rising surplus on trade in services of £4.8 billion and by positive income flows. The fall in the deficit from the fourth quarter was partly due to a stronger performance on trade in services and partly to more favourable income flows on direct investment activity. The deficit number for last year was revised upward from the earlier estimate due to less favourable figures in trade in goods and investment income (Figure 13).

Figure 13
Balance of Payments

£ million



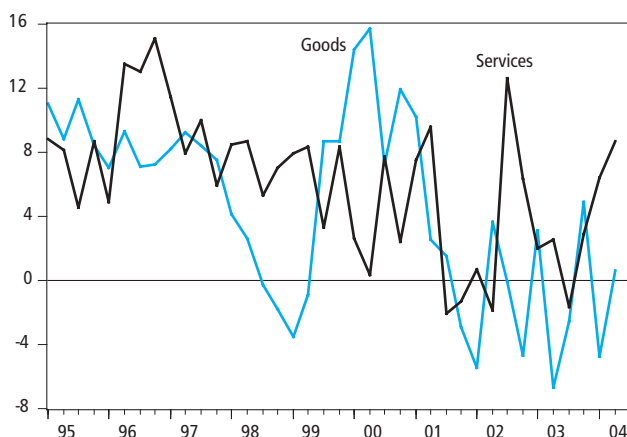
The UK's balance on trade in goods and services in June is provisionally estimated as a deficit of £3.8 billion, compared with a revised deficit of £3.6 billion in May. More generally, the latest estimate of the trend suggests that the UK trade deficit is widening. This deterioration is due in part to worsening balances in trade in oil and erratic items such as ships and aircraft. The UK's surplus on trade in services in June was £1.2 billion, unchanged from the previous month.

Detailed figures on imports and exports of goods are now available for all three months of the second quarter. Exports of goods rose by 2.5 per cent. Exports to EU countries rose one per cent while exports to non-EU countries rose 4.4 per cent. Manufacturing exports rose with fuels showing the only fall within the main commodity groups.

Imports in volume terms rose. Imports in the three months to June rose by 2.7 per cent. Imports from the EU increased by 2.8 per cent and from the Non-EU by 2.6 per cent. It is worth noting that from the May release EU figures include trade with the ten new countries which joined the Union on 1 May 2004. Figure 14 depicts the movements of trade in goods and services over the last few years.

Figure 14
Exports

Growth, 3 months on 3 month a year ago



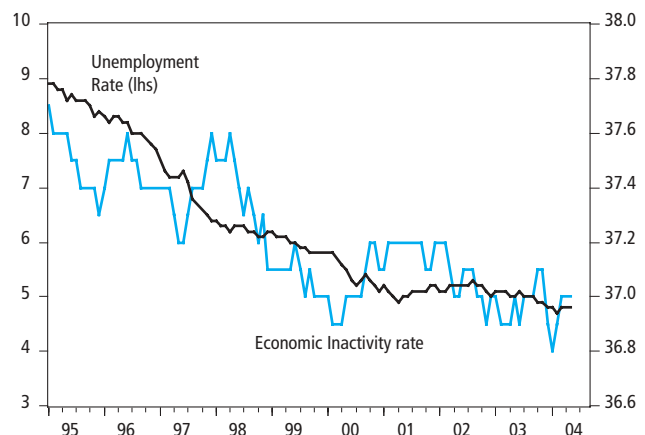
External surveys on exports generally point to a slowdown in the second quarter, broadly matching the pattern followed in monthly official figures so far. According to the BCC survey, the manufacturing sector's export balances recorded falls in both export sales and export orders – but remained relatively strong overall. In the service sector, in contrast, the export balances rose with both sales and orders rising. Finally, according to the CBI Quarterly Industrial Trends Survey, export orders and sales fell. However, export deliveries were unchanged from quarter ones level but were still positive, and appreciably than the negative balances of 2003.

Labour Market

Headline labour market statistics continue to be remarkably stable. Employment is high, with the labour force survey (LFS) employment rate at 74.6 per cent in the period April to June, down marginally from the previous quarter. Meanwhile the LFS count of employment decreased by 53,000 over the same period. The ILO unemployment rate was 4.8 per cent in the three months to June, up 0.1 per cent on the quarter. However, the claimant count unemployment rate, at 2.7 per cent in June unchanged from the previous month. All these figures point to a fairly tight labour market, a conclusion that is somewhat confirmed by the recent rises in average earnings. When taking into account those people who are officially designated as economically inactive, that is, neither employed nor unemployed but actively seeking work, however, the position does not look quite so tight (Figure 15).

Figure 15
Unemployment & Economically Inactive

Per cent



Full-time employment has been falling over the last year or so as most job gains have been in part-time work. Also, a recent trend has been for job gains to be in self-employment. The recent job loss in the three months to June, however, was mostly amongst full and part-time employees with some fall in part-time self-employment, unpaid family workers and workers with second jobs. The only category of jobs, which increased and partly offset the loss in other jobs, was the one of 'government supported training and employment programmes' and full-time self-employment.

The industry disaggregation from 'workforce jobs' is still only available for the three months up until March. The

figures show a similar pattern to previous recent surveys. Manufacturing continues to shed jobs, whilst 'public administration, health and education', 'distribution, hotels and restaurants' and construction continue to increase employment. Notably, the 'finance and business services' contributed quite significantly to the total job loss in the three months up to March.

Earnings growth seems to have been on a steady though not steep rise over the last year. The latest available figures for June 2004 indicate wage inflation is 4.2 per cent (excluding bonuses) and 4.4 per cent (including bonuses), unchanged from last month. The gap between public and private sector earnings growth had been narrowing up to May this year, when public sector and private sector wage inflation were only 0.1 percentage points apart. A rise in public sector inflation in June helped open up the gap once again.

Prices

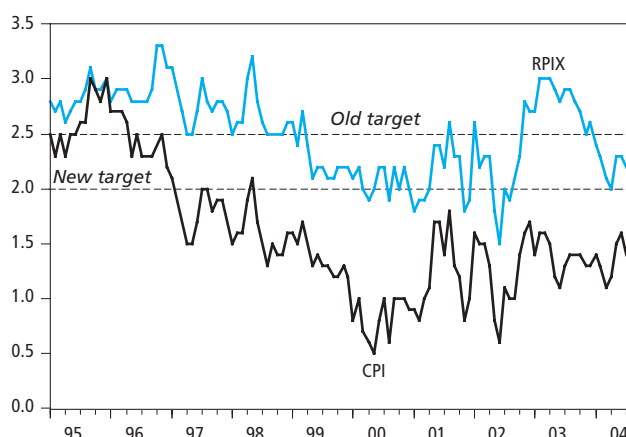
The producer price index has been edging up throughout 2004. When looking at the PPI excluding food, beverages, tobacco and petroleum products, the index has been much more stable suggesting a probable major impact from the recent increase in oil prices on the PPI. The effect of oil price rises is particularly notable in the input PPI which has accelerated sharply this year.

Producer output prices rose by 2.5 per cent annually in July, down from 2.6 per cent in June. This mainly reflected rises in 'other manufactured and metal product prices, being partially offset by a fall in petroleum product prices. Output prices excluding food, beverages tobacco and petroleum products rose by 1.6 per cent in July, up from 1.4 per cent from the previous month. It seems possible then that underlying inflationary pressures are still being dampened by the strength of sterling. Input prices have climbed sharply in early 2004 although the series seems to have been quite erratic. Input prices had ended 2003 up 2.1 per cent compared with a year ago. The first two months of 2004 saw falls in input prices in annual terms but since then prices have been climbing and in June and July input prices were 3.3 and 3.2 per cent higher than a year ago respectively. Most of this rise is due to higher crude oil and metal prices.

Consumer price inflation as measured by the CPI was at 1.4 per cent in July down from 1.6 per cent in June. The RPIX has also come down in July and is now 2.2 per cent, still very close to the Bank's old target (Figure 16). Finally, the RPI measure of inflation also remained unchanged in July at 3.0 per cent. Overall, inflationary pressures seem to have been rising this year, partly because of oil price movements but possibly also because of strengthening demand. However, in July that pressure seems to have dampened.

Figure 16
Inflation

Growth, month on month a year ago



Forecasts for the UK economy

A comparison of independent forecasts, August 2004

The tables below are extracted from HM Treasury's Forecasts for the UK Economy and summarise the average and range of independent forecasts for 2004 and 2005, updated monthly.

Independent forecasts for 2004

	Average	Lowest	Highest
GDP growth (per cent)	3.3	2.5	3.6
Inflation rate (Q4 per cent)			
CPI	1.6	1.0	1.9
RPI	3.3	2.5	4.1
Unemployment (Q4, million)	0.85	0.75	1.03
Current account (£ billion)	-26.6	-33.3	-21.2
Public Sector Net Borrowing (2004-05, £ billion)	35.4	25.6	46.0

Independent forecasts for 2005

	Average	Lowest	Highest
GDP growth (per cent)	2.6	0.4	3.5
Inflation rate (Q4 per cent)			
CPI	1.9	1.6	2.7
RPI	2.7	1.8	4.3
Unemployment (Q4, million)	0.85	0.54	1.06
Current account (£ billion)	-28.0	-43.6	-15.0
Public Sector Net Borrowing (2005-06, £ billion)	36.4	24.0	52.0

NOTE Forecasts for the UK Economy gives more detailed forecasts, covering 27 variables and is published monthly by HM Treasury, available on annual subscription, price £75. Subscription enquiries should be addressed to Claire Coast-Smith, Public Enquiry Unit 2/S2, HM Treasury, 1 Horse Guards Road, London, SW1A 2HQ (tel 020 7270 4558). It is also available at the Treasury's Internet site: <http://www.hm-treasury.gov.uk> under 'Economic Data and Tools'.

International economic indicators September 2004

Richard Wild

Office for National Statistics

Overview

- Preliminary GDP growth estimates for 2004 quarter two are now available for the major world economies. France and the US grew at the fastest rate, followed by Germany, Italy and Japan.
- Japanese growth in quarter two was notably weak at 0.4¹⁸ per cent, following a rise of 1.5¹⁸ per cent in quarter one. US growth also slowed but less dramatically, with GDP expanding by 0.7¹³ per cent.
- The major Eurozone economies all expanded at much the same rate as in quarter one, with France again growing by 0.8⁶ per cent and Germany and Italy both going up by 0.5¹ per cent and 0.4¹¹ per cent respectively.
- The US recovery last year was led primarily by buoyant private consumption demand, which continues to be the main growth driver this year. Fixed investment also recovered throughout 2003 and contributed considerably to the expansion in recent quarters. The trade deficit, however, grew yet further in quarter two.
- Japanese growth, though weak, has again resulted from a fairly balanced combination of both domestic and foreign trade components –but negative price growth has been a persistent phenomenon and this factor is still partly responsible for real output gains in quarter two.
- The recovery in the Eurozone economies continues. Output growth in Germany came again from an improvement in the trade balance, while domestic growth was broadly flat. Conversely, French growth was led by private consumption whilst erratic big ticket items increased the trade deficit. Expansion in Italy resulted from growth in industrial production and the service sector.
- Up to 2004 quarter one, annual industrial production growth was positive for all countries except Italy, where growth was roughly flat. External indicators in July for manufacturing in the Eurozone^{2,3,7,8} weakened in France but strengthened in Italy and in Germany overall. The July PMI Services indices weakened only in France. In the US, the ISM manufacturing¹⁴ and non-manufacturing (services)¹⁵ Purchasing Managers' Indices continue to indicate sustained high levels of activity.
- The Italian unemployment rate looks to have levelled out at 8.5 per cent and the (revised) French and German rates are broadly flat at 9.5 and 9.8 per cent, respectively. US unemployment, at 5.6 per cent, is below last year's average of 6.0 per cent, whilst in Japan the rate is 4.6 per cent, equal to the May figure, but still in excess of historical norms.
- Global inflationary pressures have picked up a little. Consumer price inflation in France and Italy is above the ECB target of two per cent, while it is close to it in Germany. For those countries, producer price growth has been positive but more sluggish, except in Italy where recent growth has been strong. In the US, both consumer and producer price growth have picked up markedly since last year. New monthly data for Japan indicate flat growth in the CPI, but further increases in the PPI.
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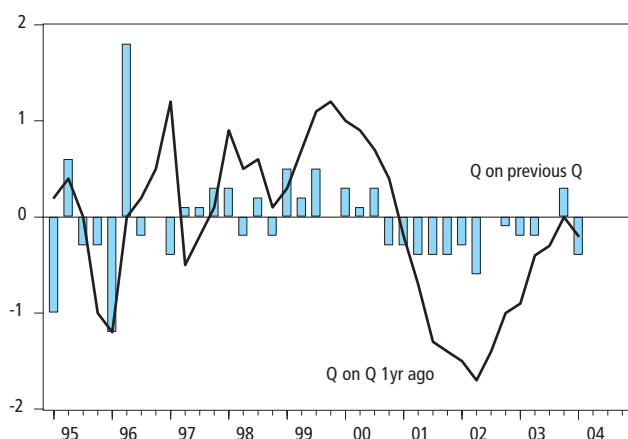
Germany

Detailed but, as yet, incomplete GDP figures are now available for quarter two of 2004 and the headline figure indicates that national expenditure increased by 1.5¹ per cent in annual terms. GDP (now revised) previously grew by 0.0¹ per cent in 2003 Q4, followed by a rise of 0.8¹ per cent in 2004 Q1, signalling the end of the brief recession. As in the preceding quarter, growth was again driven by a further improvement in Germany's net trade position; however, the contributions to GDP growth of trade and other components on an annual basis were not available at the time of publication. In 2004 Q1 net exports contributed 1.3 per cent to growth annually. Excluding 2003, this component has made positive annual contributions in each of the last four years. Domestically, household consumption remained weak, subtracting 0.5 per cent annually in quarter one of this year. Investment has been in decline since 2000 and the trend continued into this year with a negative input of 0.2 per cent in Q1. Inventories added 0.2 per cent to growth in the same period, having added 0.6 per cent in 2003. Government expenditure also made a modest positive contribution of 0.2 per cent last year, but only had a neutral effect in quarter one of 2004.

On a quarter-to-quarter measure, German GDP increased by 0.5¹ per cent in Q2, fuelled almost entirely by net exports, as was the case in the previous quarter. Government consumption added a modest 0.1¹ per cent to growth, but the gain was broadly offset by a subtraction of 0.2¹ per cent from investment. This was nevertheless an improvement on quarter one, where GFCF cut growth by 0.5¹ per cent (see Figure 1). Inventories and household consumption both made flat contributions to GDP,¹ the latter not having added to growth since 2003 Q1. Overall, it is clear that rapid gains in external demand are masking subdued domestic consumption and declining investment, and this imbalance implies that the expansion may be more fragile than the headline figure suggests. However, a relative domestic recovery has taken place: whilst in the absence of trade the German economy would have declined by 0.8 per cent in Q1, in Q2 the combined effect of consumption, investment and stocks on output growth was approximately flat.¹

Figure 1
Germany: Fixed Investment

Annual and quarterly GFCF growth



After several months of faint and faltering optimism, the key external surveys have yet to offer solid positive news, due to continued worries over the negative effect of higher oil prices on domestic demand and the portent of global economic deceleration from recent US data.² Despite a momentary upswing over June and July to 48.4² points, the ZEW Indicator of Economic Sentiment (expectations)² fell significantly to 45.3² points in August. On the plus side, there was a marked improvement in analysts' evaluation of the current situation.² The August IFO business climate survey³, encompassing manufacturing, construction, retailing, and wholesaling also fell, but only marginally, following an isolated rise in July.³ Opinions of the overall current situation have brightened since June, but expectations fell over a point on the July figure.³ From a sectoral perspective, expectations improved only for construction, whilst those for retailing fell further as home demand remained stagnant.³

The industrial production index has undergone some fairly standard and mainly downward revisions since June, although these are more evident in the monthly data. Industrial production in 2004 Q1 rose at a rate of 1.4 per cent, 0.3 per cent less than in the previous period. This compares to a slowdown of -1.2 per cent in quarter three of last year. The monthly data beyond quarter one point to a greater annual rate of increase in quarter two, with growth of 2.8 per cent and 4.4 per cent in April and May, respectively. On a month-to-month measure, gains of 1.3 per cent and 1.1 per cent in April and May suggest real output gains when viewed alongside the annual figures. Generally, industrial production has been weak since 2001, after exceptional gains were made in 2000. Nevertheless, even if there were further downward revisions next month, as extra information became available, the outlook for the near future looks positive as long as export demand continues to act as a substitute for private consumption expenditure.

Inflation was stable yet subdued in 2003, although the figures quoted here represent the national measure of consumer prices – figures for the HICP inflation measure used in EMU monetary policy are a little higher and are currently very close to the euro-area target of 2.0 per cent.⁵ In 2004 Q1, the German CPI rose by 1.0 per cent, just below the annual rate posted for the previous year as a whole. Between July 2003 and March 2004, monthly annual inflation averaged 1.1 per cent. However, in April and May growth climbed by 1.6 per cent and 2.0 per cent, and the momentum was maintained with a rise of 1.7 per cent in June. For July, the current estimate places CPI inflation at 1.8 per cent⁴, and the official expectation for August is for price growth to reach 2.0 per cent.⁵ A more subdued rate of increase is observable in the PPI. After bottoming out at -0.1 per cent in February, German producer prices picked up and annual inflation had reached 1.6 per cent by May. After posting a comparable rate of 1.5 per cent in June, the latest data indicates even higher PPI growth of 1.9⁴ per cent in July, in line with the oil-driven upward trend seen in the other major economies.

Unemployment has been a cause of national concern in Germany for some time now, having roughly equalled the historical peak of 9.7 per cent reached in 1997. Some significant upward revisions have been made to figures

recently, amounting to approximately 0.4 per cent per month since 2003. The monthly figures averaged 9.7 per cent between May and December of last year, with a marginally upward trend emerging as 2004 progresses. Between January and April of this year, the rate crept up from 9.6 to 9.8 per cent, and it remained at that level at least up until the most recent June observation. Unsurprisingly, annual employment growth has been in decline over the last few years, with particularly strong falls seen in the first half of 2003; the figure now indicates zero growth in 2004 Q1. In quarter-to-quarter terms, there was a positive change in employment of 0.3 per cent in 2003 quarter three, and of 0.6 per cent in quarter four. Employment fell by 1.8 per cent in the first quarter of this year, although this seasonal decline is less marked than in the first quarters of the previous three years.

Earnings growth has picked up since late 2004, although the gains have been modest compared to most other G7 economies. The annual growth in earnings of 2.2 per cent in 2004 Q1 is a little higher than the 2.1 per cent and 2.0 per cent rates posted in quarters three and four of 2003. Earnings grew more strongly in the first half of 2003, up by 2.8 per cent in both quarters one and two, which helped to boost the annual average to a respectable 2.4 per cent.

France

Due to balanced domestic gains, annual GDP growth accelerated to an above trend rate of 3.0⁶ per cent in quarter two, up from 1.7 per cent in the previous period. Private consumption continued to be strong, adding 1.5⁶ per cent to GDP growth and has been the main driver of the expansion in France since 2003 Q1. Stocks made the second largest growth contribution, at 1.0⁶ per cent, followed by government consumption (+0.8⁶ per cent) and investment (+0.7⁶ per cent). Only France's net trade position detracted from GDP, making a deduction of 1.1⁶ per cent, due in part to erratic large ticket items.⁶ Although past articles drew some similarities between earlier French and German figures, aside from the unemployment situations, current differences clearly polarise the two. The stronger French recovery is purely domestic whilst Germany is relying heavily on external demand growth; the French gains are also more broadly based, suggesting that the upward French trend is more robust.

For GDP in quarterly terms, the increase of 0.8⁶ per cent in 2004 Q2 equals the gain of the previous quarter. This builds on the advances made in the latter half of last year, where output climbed by 0.6 per cent in quarters three and four. On this measure, too, growth was reasonably balanced across the domestic components, again with the strongest contribution coming from private consumption, which added 0.4⁶ per cent to GDP. Government expenditure has been steady, adding between 0.1 and 0.2 per cent to the change in output since 2002 Q3.⁶ Whilst export growth has been moderate, adding 0.3⁶ per cent to the expansion, import growth, due to erratic large ticket items⁶, has been relatively rapid (at +3.8⁶ per cent) and caused net trade to subtract a sizeable 0.8⁶ per cent from growth. Investment made a useful addition of 0.4⁶ per cent to GDP, having been consistently weak since the start of 2001. Lastly, stocks are estimated to have increased GDP by 0.6⁶ per cent in quarter two – making this component the biggest

driver of growth in this period, and representing the largest gain for close to five years.

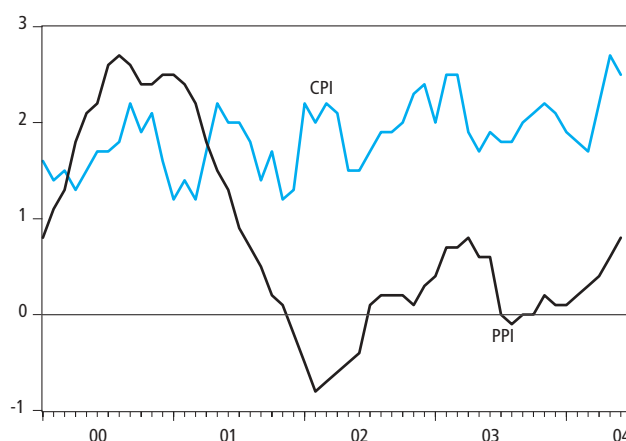
Looking at market indicators, there are mixed signals overall, despite the progression of GDP in the last two quarters. The INSEE monthly business survey⁷ for July shows that activity picked up from June and remains above its long-term level, although the composite index has changed little since May.⁷ The outlook for the coming three months also remained broadly flat, but export order books are still filling up and the prospects for production are improving. Stocks of finished products are also increasing marginally.⁷ In contrast, a fall of 1.2⁸ points was recorded in the Purchasing Managers' Index (PMI)⁸ for manufacturing between July and August, while the services index fell by 2.8⁸ points over the same period. Although the content and construction of such indices can in themselves suggest divergences in sentiment, such falls may result from international concerns over a possible global slowdown in the third quarter.

Recent strength in the French industrial production index seems to suggest that uncertainty is primarily due to expectations about the future rather than the current situation. Following reasonable annual growth of 0.7 per cent in Q1, the latest monthly data indicate a jump of 3.4 per cent in the year to May. This increase, along with lesser gains in each of the previous three months, is consistent with robust domestic and export demand growth. Production grew by 0.4 per cent, quarter-on-quarter, in 2004 Q1 after posting two successive gains of 0.7 per cent in 2003 Q3 and Q4, but the month-to-month rates for April and May imply that quarter two growth will be weaker unless the data show a pickup in production output in June. Nevertheless, the figures on the whole are indicative of a slow and steady improvement. The longer-term picture shows that industrial production has been weak for roughly three years. Production grew by 1.0 per cent in 2001 (a modest performance when compared to 1999 and 2000) and fell by 1.2 and 0.1 per cent in 2002 and 2003, respectively.

Consumer price inflation in France has picked up pace fairly rapidly during recent months (see Figure 2). Following an acceleration to 2.2 per cent in November 2003, price growth fell back to 1.7 per cent in March 2004. Price growth picked up once more to an annual rate of 2.2 per cent in April and

Figure 2
France: Prices

Annual CPI and PPI growth



again to 2.7 per cent in May. Inflation slowed marginally to 2.5 per cent June; this remains somewhat higher than the ECB's target rate of 2.0 per cent. In fact, on this basis, the French HICP inflation rate (rather than the national CPI measure quoted here) is marginally higher for June at 2.7⁹ per cent, annually. On either measure, demand appears to have been in excess of supply of late, perhaps offering an explanation for the rise in imports in Q2.

Producer prices have also risen during 2004, but so far to a much lesser degree. After remaining broadly flat from July to December last year, annual price growth rose by 0.1 per cent each month from the January rate of 0.1 per cent to the April figure of 0.4 per cent. The May figure showed a faster pickup to 0.6 per cent and in June prices grew again by 0.8 per cent. The trend is again indicative of increasing demand on domestic production and also of the effect of rising fuel and energy costs.

A small but uniform upward revision has been made to the unemployment rate figures, amounting to around 0.1 per cent on a monthly basis. The rate rose steadily during 2003, from 9.1 per cent in January 2003 to 9.6 per cent from October to January of this year, the highest rate since April 2000. Since February, the rate has been marginally lower at 9.5 per cent. This could fall during the latter half of 2004, if output continues to grow above trend, which it has not since 2000–01. Up until quarter one of this year – where annual growth was flat – employment had been in steady decline since 2000 Q4. Using the more volatile quarter on quarter measure, a similar stagnation is evident, starting in 2002. In 2004 Q1, growth was negative at 0.1 per cent, but recent official data for payroll employment shows an increase of the same magnitude in Q2.¹⁰ Sustained above-trend GDP growth could encourage more additions to employment in future.

Annual earnings growth has been easing since 2000. After a rise of 3.0 per cent in 2003 Q3, in 2003 Q4 and 2004 Q1, the rate returned to 2.8 per cent. Earnings growth has been easing since 2000 Q2, where it peaked at 5.4 per cent; a fall in the unemployment rate may have a positive effect, but most probably with a lag due to the overall slackness of the labour market.

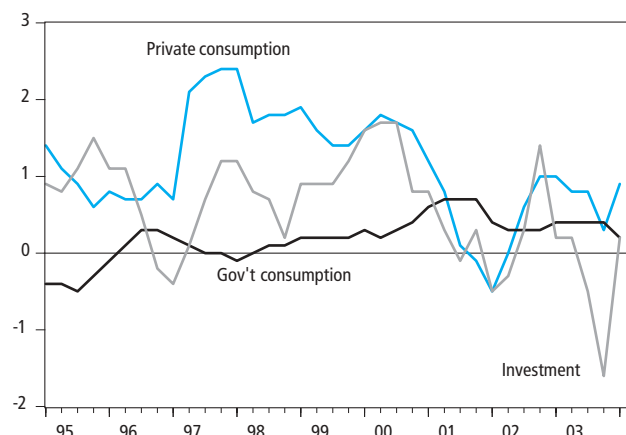
Italy

Preliminary GDP data for the last quarter – along with past revisions – have been released, but so far a detailed breakdown of changes in the expenditure components is not available. Annual growth in 2004 Q2 is estimated to be 1.1¹¹ per cent, building on the 0.8 per cent rise seen in the previous quarter. The gain was driven by advances in industrial production and service sector output, although agricultural production decreased.¹¹ In quarter one, private consumption growth accounted for a 0.9 per cent annual increase in GDP, with government consumption and investment adding a total of 0.4 per cent (see Figure 3). Net exports and stocks subtracted 0.1 per cent and 0.5 per cent, respectively.

On a quarter-to-quarter measure, output rose by 0.4 per cent in 2004 Q1 following a flat rate of growth in 2003 Q4. The main drivers of the expansion were household consumption and investment, which each added 0.5 per

Figure 3
Italy: Domestic demand

Contributions of consumption and investment to annual GDP growth



cent to the expansion in GDP. Investment grew by a notable 2.5¹² per cent on 2003 Q4. Government consumption made a flat contribution, having marginally fallen since 2003 Q4, whilst inventories subtracted 0.3 per cent. Externally, export demand dropped by 2.1¹² per cent, resulting in a reduction in overall demand of 0.6 per cent. However, this effect was partially offset by a concurrent fall in imports that resulted in a combined contribution to GDP growth from net exports of -0.2 per cent.

Household consumption rebounded in quarter one of 2004, having added 0.2 and 0.4 per cent respectively to growth in quarters two and three of 2003 and subtracted 0.1 per cent in the final quarter. Investment fell sharply in 2003 Q1, and continued to stifle the expansion for the remaining three quarters. Net exports followed a similar path to Germany and France. In particular, trade only added to growth in quarter three of 2003. That one-off gain seems to have been linked to improving global economic conditions and increasing demand, especially outside of the Eurozone. In 2003, inventories proved to be one of the main catalysts of growth – especially in quarter one, where they contributed 1.1 per cent and in quarter four, where a further 0.7 per cent was added. Rising household consumption in tandem with falling import demand may explain the destocking that occurred in 2004 Q1.

The external Purchasing Managers' Index for manufacturing⁸ increased by 0.3⁸ points between July and August, following a fall of 0.5⁸ points in the preceding period. However, the corresponding services index, which is higher in levels, fell marginally by 0.2⁸ points over the same period after two consecutive rises of over a point. These changes fall roughly between those observed in France, where both indices fell strongly in August, and Germany, where twin increases occurred.

The Index of Production has been weak since 2001, similar to the corresponding indices for Germany and France. The latest estimates indicate zero annual growth in January and February of this year. Production fell by 0.1 per cent in March but rebounded by 0.9 per cent in April, and by a more substantial 2.1 per cent in May. On a month-to-month basis, an overall contraction in output was recorded from January

to March. However, the results for April and May of +0.6 per cent and +0.0 per cent are more positive on average, and as the preliminary GDP release for Q2 highlights, industrial production was one of the main contributors to expansion in the three months to June.

Consumer price inflation in recent years has been consistently higher than the EU average, with the most recent data for 2004 quarter one indicating an annual price increase of 2.3 per cent. The monthly data show that annual inflation slowed marginally, to 2.2 per cent in January and to 2.3 per cent in all months up to June. Strong household consumption gains in Q1 may generate some extra inflationary pressure. Producer price inflation has been weaker than consumer price inflation since 2000. In the first quarter of this year, producer prices grew 0.4 per cent on an annual basis. PPI growth slowed through 2003, from 2.8 per cent in March to 0.1 per cent in February. After bottoming out, prices picked up by 0.7 per cent in March and by 1.7 per cent in April. In May and June, prices surged upwards by 2.9 per cent and 3.2 per cent, respectively, with rising fuel costs apparently feeding through more strongly than in France or Germany.

Unemployment was broadly flat at a rate of 9.0 per cent in 2002, but declined steadily in 2003, falling monthly from 9.0 per cent in January to 8.5 per cent in September. The latest figures indicate that unemployment remained steady at this level up to January. Data for later months is still unavailable. Annual employment growth has been positive in every quarter of the last nine years, although there have been some recent falls, as shown by the quarter-on-quarter data. Growth rates for 2003 were slightly weaker than those observed in 2001 and 2002, with the most recent data for 2004 Q1 showing a relatively small rise of 0.7 per cent. Looking at quarterly growth, the fall of 0.7 per cent in the same period falls into the midrange of the seasonal declines commonly observed over the last five years and, as such, this does not in itself suggest the onset of a negative growth trend.

The most recent earnings growth data show rises earnings growth of 3.7 per cent in May and June, respectively, following a gain of 3.6 per cent in April. Earnings growth is now considerably greater than CPI inflation. Earnings in 2003 overall increased by 2.6 per cent, and in the year to 2004 Q1, rose by 3.0 per cent. Although there is much data missing, the evidence available indicates a downward trend in unemployment and positive employment growth. Coupled to rising earnings growth, it is apparent that the labour market has undergone some tightening.

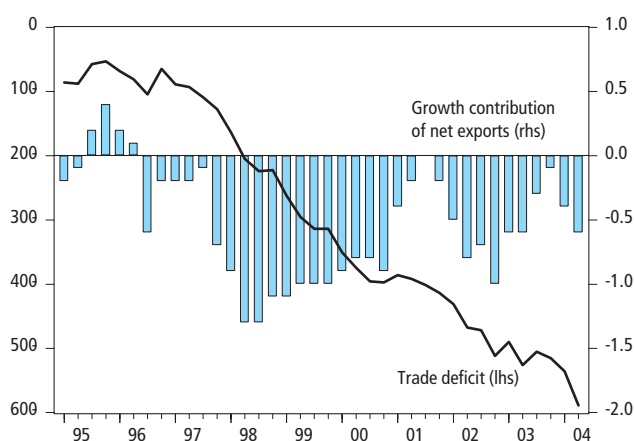
USA

Complete figures for quarter two GDP and its components were recently released. The US economy grew by a revised 3.0¹³ per cent in 2003, outstripping all the other economies analysed here. However, estimates of GDP in 2004 Q2 confirm that the upward trend has softened a little, with annual growth of 4.7¹³ per cent, as compared to +5.0¹³ per cent in Q1. Private consumption in quarter two boosted output by a healthy 2.5¹³ per cent, and investment has been increasingly robust, posting a GDP growth contribution of 1.8¹³ per cent. Government consumption added a modest

0.3¹³ per cent whilst stocks gave 0.7¹³ per cent towards the total gain. The trade deficit worsened, however, subtracting 0.6¹³ per cent from the expansion in output (see Figure 4).

Figure 4
USA: Trade

Deficit in \$US; contribution of net exports to annual GDP growth



Quarter-to-quarter growth of 0.7 per cent¹³ was fostered mainly by investment, which contributed 0.5¹³ per cent to the rise in GDP in Q2. Whether or not investment will continue to be a key driver following the recent increases in the Federal Funds rate remains to be seen, although at 1.5 per cent it is still low in historic terms. Private consumption added 0.3¹³ per cent, whilst stocks and government consumption made respective additions of 0.2¹³ per cent and 0.1¹³ per cent. The already large trade deficit has again widened, with net exports reducing GDP growth by 0.3¹³ per cent. As with investment, higher interest rates may act as a dampener on future growth, if the potentially costly effect of an appreciation of the dollar is counteracted by a concurrent reduction in private consumption. Overall, sustained domestic strength has so far eclipsed the US's weakening trade position, but there are worries (for example in Germany – see above) that the US trend may turn down in the near future, effecting a global slowdown. If high private consumption growth has been encouraged mainly by one-off tax cuts, then such fears may not be without foundation.

Surveys of business activity in July continue to be favourable. The latest Institute for Supply Management manufacturing (diffusion) index remains high at 62.0¹⁴ per cent, having risen 0.9¹⁴ points since June. The index has now increased for fourteen consecutive months. The corresponding non-manufacturing index recovered robustly from the downward blip in June, gaining 4.9¹⁵ points to reach 64.8¹⁵ per cent. This considerable rise represents the sixteenth consecutive month of expansion for this measure. Employment has also risen on the whole, as indicated in the ISM surveys^{14,15}, although growth has flattened for the non-manufacturing sector. Despite current buoyancy, the surveys noted evidence of cautious optimism due to the possibility of rising inflation and interest rates.

The index of production displayed signs of rapid expansion in the second half of 2003, with further minor revisions to the data this month. In quarterly terms, after a decline of

1.0 per cent in 2003 quarter two, the IOP picked up in the third quarter when it grew by 0.9 per cent and was stronger in quarter four, rising by 1.4 per cent. The index increased most rapidly in 2004 quarter one, posting 1.6 per cent growth. Monthly, the recent trend of increasing strength continues, with annual growth rates of 2.8, 3.4 and 4.9 per cent in February, March and April, respectively. In May there was even greater growth of +6.0 per cent, followed by a mild deceleration to 5.7 per cent growth in June. Overall in 2003 the index grew by 0.3 per cent, following on from two consecutive years of contractions, and the annual rate of expansion in the year to 2004 quarter one is currently estimated at 2.9 per cent – the highest figure in the last three years. Clearly, strong private domestic consumption is a main factor in the increase in industrial output.

In the first quarter of this year, consumer prices rose annually by 1.7 per cent. The effects of rising fuel and energy costs are still being felt, with monthly annual inflation broadly rising from 1.7 per cent in November of last year to the June rate of 3.3 per cent; however, inflation dropped marginally to 3.0¹⁶ per cent in July. The change in the growth rate of producer prices followed a similar pattern to consumer price growth but the path has been much more volatile. A moderate annual growth rate of 1.5 per cent was posted in 2004 quarter one. PPI inflation fell from a peak of 4.5 per cent in March 2003 to 1.1 per cent in March 2004, but since then it has pulled up sharply, reaching +5.6 per cent in May. In June, PPI inflation eased a little to 4.9 per cent per annum. On a month-to-month basis, producer prices rose by 0.1¹⁷ per cent between June and July, again driven by high fuel and energy costs.¹⁷

Unemployment appears to have settled at 5.6 per cent, on average, for the first half of 2004. The rate had risen from 2000 when it bottomed at 4 per cent, reaching a peak of 6.0 per cent in 2003. Recent falls indicate that output growth has been accompanied by a relative tightening of the labour market. Employment growth has also been fairly steady in the first six months of the year, climbing from 0.7 per cent in January through to April, to 1.0 per cent in June. Month-on-month growth, although more volatile by construction, has also been positive and rising since January, with a gain of 0.8 per cent in June. Negative growth of 1.0 per cent in 2004 Q1 seems to fit within an established seasonal pattern, and does not suggest any alteration of trend.

Annual earnings increases in the last five years have been in the region of 3.0 to 3.6 per cent. In the first five months of 2004, however, earnings growth remained at a steady 2.8 per cent; the latest data for June show a relatively poor gain of 1.8 per cent. This downward trend may serve to lower the average annual rate of growth below 3.0 per cent for the first time in four years unless a further tightening of the labour market, or an upswing in price inflation, brings about renewed wage pressure.

Japan

Quarter two GDP estimates have been published in some detail – as have some notable past revisions – but the contributions of each expenditure component to annual GDP growth are not yet available. On an annual basis, expenditure is estimated to risen by a rapid 4.4¹⁸ per cent in the year to 2004 Q2, on the back of 5.9¹⁸ per cent growth in the year to 2004 Q1. However, whilst

the growth rate in Q2 appears healthy, on a quarter-to-quarter basis expansion came in significantly below expectations at 0.4¹⁸ per cent. This figure followed an impressive gain of 1.6¹⁸ per cent in the previous quarter; the main force behind the decline was a marked fall in private sector investment.¹⁸

On a quarterly basis, growth in 2004 Q2 was generated by a weak yet balanced combination of domestic and external components. Household and government consumption added 0.3¹⁸ per cent and 0.1¹⁸ per cent, respectively, although total GFCF subtracted 0.2¹⁸ per cent from GDP growth. Net exports made a positive addition to growth of 0.3¹⁸ per cent, 0.1 per cent up on the figure posted in quarter one. In annual terms, whilst the exact nature of contributions was not available at the time of publication, a broad description can be made. Private consumption and investment both underpinned the rise in GDP (although much weaker investment growth occurred in this quarter in comparison to quarter one), and government consumption grew modestly. Some significant stock additions were also made. Lastly, net exports had a similar positive effect on national expenditure as in the previous period. Overall, annual growth again appears well balanced and significantly above trend.

As with other major economies, the index of production contracted in 2003 quarter two by 0.6 per cent, having grown by 0.3 per cent in the previous quarter. The index, however, saw a rebound in quarter three when it grew by 0.9 per cent, and grew rapidly in quarter four when it registered a gain of 3.6 per cent. 2004 Q1 saw a more moderate increase of 0.7 per cent. Looking at the annual change on a monthly basis, a substantial amount of growth has occurred since September 2003; in April, May and June, respectively, output increased by 8.1 per cent, 8.0 per cent and 7.6 per cent. The month-on-month figures indicate that, in general, output is on the rise in current as well as historical terms, although it fell in June by 1.1 per cent. Japanese industrial production now looks to be a little more stable than it has in the recent past, although it is still a comparatively variable indicator within the group of countries detailed here. In 2003, the index rose by 3.1 per cent, a minor improvement over the previous year's fall of 1.2 per cent, and a notable improvement on 2002's fall of 6.1 per cent. In summary, industrial production growth in Japan has been somewhat erratic over the past five years, but the gains in 2003 and early 2004 have on the whole been positive.

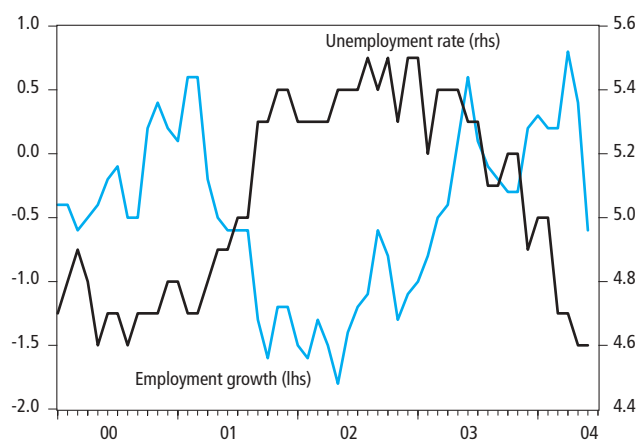
Quarterly consumer prices continue to deflate, albeit at a decreasing pace than in 2001 and 2002. Prices only fell by 0.2 per cent in 2003, the lowest reduction in several years, and in the year to 2004 Q1, the fall was more modest still at 0.1 per cent. The monthly figures show a flat posting for annual consumer price inflation in June, following increasing rates of deflation recorded in March, April and May. As yet, there is still no trend to suggest that positive growth will be recovered. PPI deflation, on the other hand, seems to have reversed. Prices dropped by 0.8 per cent in 2003 as a whole, and continued to fall in the first three months of 2004. However, after positive annual PPI inflation of 0.4 per cent in April, prices grew by 0.8 per cent in May, and by a useful 1.2 per cent in June. It is notable, though, that rising oil and energy costs have played a significant part in boosting producer price growth in most of the major world economies in the last six

months. It is plausible that higher factory gate prices may feed through to consumer prices, but such an effect could be isolated if oil prices stabilise.

The unemployment rate in June 2004 was 4.6 per cent, equal to the May rate, and slightly down on the March and April rate of 4.7 per cent (see Figure 5). Unemployment declined in 2003 as a whole (to 5.3 per cent, down from 5.4 per cent in 2002) and the current rate of unemployment looks to be moving closer to Japanese historical standards. From 1999 to 2003, the number of people employed fell in every year (see Figure 5). In 2003, quarter-on-quarter employment growth picked up towards the end of the second quarter but the trend reverted in the second half of the year, falling in all months from July 2003 to the February figure of -0.2 per cent, on a month-to-month measurement. However, the number of people in work rose by 1.1 and 1.2 per cent in March and April, and by a further 0.5 per cent in May. The latest June figure indicates a slight decline of 0.2 per cent. In the year to 2004 Q1 employment increased by 0.2 per cent compared to a drop of 0.8 per cent in the same period a year ago. In summary, the gains are more of a recovery than an advance, coming on the back of negative growth in 2002 and 2003, but the annual change in Q2 looks to be positive.

Figure 5
Japan: GDP

Annual and quarterly growth



Despite slackness in the labour market, there was a positive earnings trend for 2003 in all periods, with an increase of 2.3 per cent for the year as a whole, and of 1.8 per cent annually in 2004 Q1. Last year saw growth of 1.8 per cent in quarter one, and 2.5 per cent in quarter two. Further rises of 2.3 per cent were seen in both quarters three and four. The monthly data show particularly strong rates of annual growth in 2003 for both July (4.6 per cent) and December (4.1 per cent), potentially as a result of bonuses. The growth for this year is weaker, yet still positive, with increases averaging just less than 1.6 per cent from January to May. Overall, the labour market has become less slack over the last year, and although earnings growth has been volatile it has been positive, albeit less so than in 2002. However, it should be noted that the earnings index used here (and for the other four countries) is based on wages in the manufacturing sector rather than the whole economy. As such, the overall picture may differ from the description above.

Notes

International Economic Indicators uses information from OECD as well as from other organisations. All data is from OECD Main Economic Indicators unless otherwise noted:

1. DESTATIS, <http://www.destatis.de/presse/englisch/pm2004/p3540121.htm>, plus author's own calculations based on this data
2. Zentrum für Europäische Wirtschaftsforschung, http://www.zew.de/en/presse/presse.php?action=article_show&LFDNR=351
3. Institute for Economic Research at the University of Munich, http://www.cesifo.de/pls/cesifo_app/CESifoFrameSet.SwitchFrame?factor=10&page=/link/gk-e.htm
4. DESTATIS, <http://www.destatis.de/indicators/e/pre110je.htm>
5. DESTATIS, <http://www.destatis.de/presse/englisch/pm2004/p3560051.htm>
6. INSEE, http://www.insee.fr/fr/indicateur/indic_conj/donnees/doc_idconj_26.pdf; plus author's own calculations based on this data
7. INSEE, http://www.insee.fr/en/indicateur/indic_conj/indconj_frame.asp?ind_id=11
8. REUTERS, <http://www.reuters.com> (available on subscription)
9. OECD, available on subscription
10. INSEE, http://www.insee.fr/en/indicateur/indic_conj/indconj_frame.asp?ind_id=18
11. ISTAT, http://www.istat.it/Comunicati/In-calenda/Allegati/Economia/Stima-prel/stimapil_0402.pdf
12. ISTAT, <http://www.istat.it/fmi/ITALY-NSDP.html>
13. BEA, <http://www.bea.gov/bea/newsrelarchive/2004/gdp204p.pdf>, plus author's own calculations based on this data
14. Institute for Supply Management, <http://www.ism.ws/ISMReport/ROB062004.cfm>
15. Institute for Supply Management, <http://www.ism.ws/ISMReport/NMROB062004.cfm>
16. Department of Labor, <http://stats.bls.gov/news.release/cpi.nr0.htm>
17. Department of Labor, <http://stats.bls.gov/news.release/ppi.nr0.htm>
18. ESRI, <http://www.esri.cao.go.jp/en/sna/qe042/gdemenua.html>, plus author's own calculations based on this data

Please note that, unless otherwise stated, graphs do not include data from the above sources

Comparisons of indicators over the same period should be treated with caution, as the length and timing of the economic cycles varies across countries.

Data for France, Germany, Italy, the USA and Japan are all available on an SNA93 basis. Cross-country comparisons are now more valid.

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1 Germany

Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	Imports	less	loP	Sales	CPI	PPI	Earnings	Empl ¹	Unempl
Percentage change on a year earlier															
	ILFY	HUBW	HUBX	HUBY	HUBZ	HUCA	HUCB	ILGS	ILHM	HVLL	ILAF	ILAO	ILIG	GABD	
1999	1.9	2.0	0.2	0.8	-0.4	1.5	2.3	1.2	0.4	0.5	-1.0	2.6	-0.1	8.4	
2000	3.1	1.2	0.2	0.8	-0.2	4.4	3.2	5.5	1.3	1.5	3.1	2.8	0.6	7.8	
2001	1.0	0.9	0.2	-0.9	-0.8	2.0	0.4	0.2	1.1	2.0	3.0	1.6	0.3	7.8	
2002	0.2	-0.6	0.3	-1.4	0.1	1.2	-0.5	-1.0	-2.1	1.4	-0.6	1.7	-0.9	8.7	
2003	-0.1	-0.1	0.2	-0.4	0.6	0.6	1.0	0.4	-0.6	1.1	1.7	2.4	-1.1	9.6	
2000 Q4	1.9	0.6	0.3	0.4	-	4.9	4.4	5.4	-0.3	1.8	4.2	2.4	0.8	7.6	
2001 Q1	1.9	1.2	0.1	-0.2	-0.5	3.6	2.3	5.6	2.3	1.7	4.6	2.0	0.6	7.6	
Q2	0.8	0.6	0.1	-0.7	-0.4	2.5	1.4	1.2	0.4	2.4	4.6	2.0	0.7	7.7	
Q3	0.7	0.9	0.2	-1.3	-1.2	2.0	-0.1	-1.4	1.5	2.2	2.6	1.2	0.1	7.9	
Q4	0.5	0.7	0.3	-1.4	-1.3	0.1	-2.1	-4.2	0.3	1.6	0.3	1.0	-0.3	8.1	
2002 Q1	-0.2	-0.5	0.3	-1.5	-0.7	0.3	-1.9	-3.7	-4.1	2.0	-0.4	1.1	-0.5	8.3	
Q2	0.1	-0.7	0.4	-1.7	0.2	1.0	-0.8	-1.7	-2.2	1.3	-1.3	1.1	-0.8	8.5	
Q3	0.4	-0.7	0.6	-1.4	0.3	1.6	-	-0.2	-1.0	1.1	-1.1	2.1	-1.0	8.8	
Q4	0.5	-0.4	-	-1.0	0.6	1.9	0.7	1.6	-1.1	1.2	0.3	2.5	-1.3	9.1	
2003 Q1	0.1	0.4	0.1	-0.9	1.2	1.6	2.4	1.3	0.8	1.2	1.7	2.8	-1.5	9.5	
Q2	-0.3	-	0.1	-0.4	0.6	-	0.6	-0.3	-0.1	0.9	1.5	2.8	-1.3	9.7	
Q3	-0.3	-0.3	0.2	-0.3	0.2	0.5	0.5	-1.2	-2.1	1.1	1.9	2.1	-1.0	9.7	
Q4	0.1	-0.3	0.3	-	0.5	0.3	0.7	1.7	-1.1	1.2	1.8	2.0	-0.6	9.6	
2004 Q1	0.7	-0.5	-	-0.2	0.2	2.2	0.9	1.4	-2.0	1.0	0.2	2.2	-	9.6	
2003 Jun	..	..	..	..	..	..	..	-2.1	1.5	1.0	1.4	..	..	9.7	
Jul	..	..	..	..	..	..	..	1.3	-1.5	0.9	1.9	..	..	9.7	
Aug	..	..	..	..	..	..	..	-2.6	-2.6	1.1	2.0	..	..	9.7	
Sep	..	..	..	..	..	..	..	-2.2	-2.1	1.1	2.0	..	..	9.7	
Oct	..	..	..	..	..	..	..	1.4	-0.6	1.2	1.7	..	..	9.7	
Nov	..	..	..	..	..	..	..	0.9	-1.8	1.3	2.0	..	..	9.6	
Dec	..	..	..	..	..	..	..	2.7	-0.9	1.1	1.8	..	..	9.6	
2004 Jan	..	..	..	..	..	..	..	1.8	-2.4	1.2	0.2	..	..	9.6	
Feb	..	..	..	..	..	..	..	1.2	-2.8	0.9	-0.1	..	..	9.6	
Mar	..	..	..	..	..	..	..	1.1	-0.8	1.1	0.3	..	..	9.7	
Apr	..	..	..	..	..	..	..	2.8	-1.4	1.6	0.9	..	..	9.8	
May	..	..	..	..	..	..	..	4.4	-3.0	2.0	1.6	..	..	9.8	
Jun	..	..	..	..	..	..	..	..	..	1.7	1.5	..	..	9.8	
Percentage change on previous quarter															
	ILGI	HUCC	HUCD	HUCE	HUCF	HUCG	HUCH	ILHC	ILHW					ILIQ	
2000 Q4	-	-0.2	0.3	-0.3	-	1.8	1.5	0.3	0.2					0.9	
2001 Q1	0.9	0.7	-	-0.3	-0.7	-0.1	-1.2	0.4	2.3					-2.0	
Q2	-0.1	0.3	-0.1	-0.4	0.1	0.1	0.1	-1.4	-0.8					1.0	
Q3	-0.2	0.1	-	-0.4	-0.6	0.2	-0.5	-0.7	-0.2					0.2	
Q4	-0.2	-0.4	0.4	-0.4	-0.1	-0.2	-0.5	-2.6	-1.0					0.5	
2002 Q1	0.2	-0.5	-	-0.3	-0.1	0.2	-1.0	0.9	-2.1					-2.2	
Q2	0.2	0.1	0.1	-0.6	1.0	0.7	1.1	0.7	1.1					0.7	
Q3	0.1	0.1	0.1	-	-0.5	0.8	0.4	0.8	1.1					-	
Q4	-0.1	-0.1	-0.1	-0.1	0.2	0.1	0.2	-0.8	-1.1					0.2	
2003 Q1	-0.2	0.2	-	-0.2	0.5	-0.1	0.7	0.6	-0.3					-2.4	
Q2	-0.2	-0.3	0.1	-0.2	0.4	-0.9	-0.6	-0.9	0.1					0.9	
Q3	0.2	-0.2	0.1	-	-0.9	1.4	0.3	-0.1	-0.8					0.3	
Q4	0.3	-0.1	-	0.3	0.5	-0.1	0.3	2.1	-0.2					0.6	
2004 Q1	0.4	-	-0.2	-0.4	0.2	1.7	0.9	0.3	-1.2					-1.8	
Percentage change on previous month															
								ILKC	ILKM						
2003 May								-0.5	-1.4						
Jun								-0.8	2.7						
Jul								2.2	-1.9						
Aug								-2.3	-0.5						
Sep								-0.2	0.5						
Oct								2.7	0.7						
Nov								0.6	-1.9						
Dec								-	0.7						
2004 Jan								0.5	-1.1						
Feb								-0.6	-0.2						
Mar								-	0.7						
Apr								1.3	0.4						
May								1.1	-3.0						

GDP = Gross Domestic Product at constant market prices
PFC = Private Final Consumption at constant market prices
GFC = Government Final Consumption at constant market prices
GFCF = Gross Fixed Capital Formation at constant market prices
ChgStk = Change in Stocks at constant market prices
Exports = Exports of goods and services
Imports = Imports of goods and services
loP = Industrial Production

Sales = Retail Sales volume
CPI = Consumer Prices measurement not uniform among countries
PPI = Producer Prices (manufacturing)
Earnings = Average Earnings (manufacturing), definitions of coverage and treatment vary among countries
Empl = Total Employment not seasonally adjusted
Unempl = Standardised Unemployment rates: percentage of total workforce
Source: OECD - SNA93

2 France

Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI ¹	Earnings	Empl ²	Unempl
Percentage change on a year earlier														
	ILFZ	HUBK	HUBL	HUBM	HUBN	HUBO	HUBP	ILGT	ILHN	HXAA	ILAG	ILAP	ILIH	GABC
1999	3.2	1.9	0.3	1.6	-0.3	1.1	1.5	2.3	2.4	0.5	-1.6	2.6	2.1	10.5
2000	4.2	1.6	0.7	1.6	0.5	3.6	3.7	4.2	0.5	1.7	2.0	5.2	2.8	9.1
2001	2.1	1.5	0.6	0.4	-0.6	0.5	0.4	1.0	-0.1	1.6	1.2	4.2	1.7	8.4
2002	1.1	1.0	1.1	-0.4	-0.2	0.5	0.9	-1.2	-0.1	2.0	-0.2	3.6	0.6	8.9
2003	0.5	0.9	0.6	-	-0.2	-0.8	0.1	-0.1	..	2.0	0.3	2.8	-0.2	9.4
2000 Q4	3.9	1.2	0.7	1.6	0.5	3.9	3.8	3.6	-1.3	1.8	2.4	5.1	2.6	8.6
2001 Q1	3.3	1.4	0.6	1.0	-0.1	2.7	2.3	3.3	1.2	1.3	2.4	4.4	2.3	8.5
Q2	2.2	1.5	0.5	0.5	-	0.7	1.0	1.5	-0.3	2.0	1.6	4.2	1.8	8.4
Q3	2.5	1.7	0.8	0.4	-1.0	0.2	-0.2	1.2	-0.6	1.8	0.7	4.2	1.4	8.3
Q4	0.5	1.5	0.7	-0.3	-1.3	-1.4	-1.2	-1.7	-0.7	1.4	-	4.0	1.2	8.4
2002 Q1	0.8	1.0	1.0	-0.4	-0.1	-0.7	0.1	-2.3	-1.6	2.1	-0.7	3.9	0.8	8.6
Q2	1.4	1.1	1.2	-0.3	-0.6	0.9	0.9	-0.8	-0.6	1.7	-0.5	3.9	0.6	8.9
Q3	0.9	0.9	0.9	-0.5	0.1	0.7	1.3	-1.4	1.0	1.8	0.1	3.4	0.5	9.1
Q4	1.4	1.0	1.1	-0.3	-0.2	1.1	1.3	-0.5	1.0	2.3	0.2	3.4	0.2	9.1
2003 Q1	0.8	1.2	0.7	-0.3	-0.4	-0.2	0.3	0.3	-0.8	2.4	0.6	2.8	-0.1	9.2
Q2	-0.1	0.8	0.5	-	-0.2	-1.4	-0.2	-1.4	..	1.8	0.6	2.7	-0.1	9.4
Q3	0.4	0.8	0.5	0.1	-0.4	-1.1	-0.4	-0.5	..	1.9	-	3.0	-0.3	9.5
Q4	1.1	0.9	0.5	0.3	0.3	-0.3	0.6	1.2	..	2.1	0.1	2.8	-0.1	9.6
2004 Q1	1.7	1.0	0.6	0.5	0.1	0.5	1.0	0.7	..	1.8	0.2	2.8	-	9.5
2003 Jun	..	..	..	..	..	..	..	-1.0	..	1.9	0.6	..	..	9.5
Jul	..	..	..	..	..	..	..	-0.4	..	1.8	-	..	..	9.5
Aug	..	..	..	..	..	..	..	-1.5	..	1.8	-0.1	..	..	9.5
Sep	..	..	..	..	..	..	..	0.4	..	2.0	-	..	..	9.5
Oct	..	..	..	..	..	..	..	1.9	..	2.1	-	..	..	9.6
Nov	..	..	..	..	..	..	..	0.6	..	2.2	0.2	..	..	9.6
Dec	..	..	..	..	..	..	..	1.3	..	2.1	0.1	..	..	9.6
2004 Jan	..	..	..	..	..	..	..	-0.1	..	1.9	0.1	..	..	9.6
Feb	..	..	..	..	..	..	..	0.9	..	1.8	0.2	..	..	9.5
Mar	..	..	..	..	..	..	..	1.4	..	1.7	0.3	..	..	9.5
Apr	..	..	..	..	..	..	..	1.2	..	2.2	0.4	..	..	9.5
May	..	..	..	..	..	..	..	3.4	..	2.7	0.6	..	..	9.5
Jun	..	..	..	..	..	..	..	..	..	2.5	0.8	..	..	9.5
Percentage change on previous quarter														
	ILGJ	HUBQ	HUBR	HUBS	HUBT	HUBU	HUBV	ILHD	ILHX				ILIR	
2000 Q4	1.4	0.3	0.2	0.5	0.2	1.0	0.8	1.0	-0.4				0.5	
2001 Q1	0.5	0.7	0.1	-	-0.8	-0.1	-0.5	0.7	2.3				0.5	
Q2	-	0.2	0.1	-0.1	0.2	-0.8	-0.3	-0.9	-2.2				0.2	
Q3	0.6	0.5	0.4	-	-0.6	0.1	-0.2	0.4	-0.3				0.2	
Q4	-0.6	0.1	0.1	-0.2	-0.1	-0.6	-0.2	-1.9	-0.5				0.3	
2002 Q1	0.8	0.2	0.4	-0.1	0.4	0.6	0.8	0.1	1.4				0.1	
Q2	0.6	0.3	0.3	-0.1	-0.3	0.8	0.5	0.6	-1.2				-	
Q3	0.1	0.3	0.1	-0.1	0.1	-0.1	0.3	-0.2	1.3				0.1	
Q4	-0.1	0.2	0.2	-0.1	-0.4	-0.3	-0.3	-1.0	-0.5				-	
2003 Q1	0.1	0.4	0.1	-	0.2	-0.7	-0.1	0.9	-0.4				-0.2	
Q2	-0.3	-0.1	0.1	0.2	-0.1	-0.4	-0.1	-1.1	..				-	
Q3	0.6	0.4	0.2	-	-0.1	0.3	0.1	0.7	..				-0.1	
Q4	0.6	0.3	0.2	0.2	0.2	0.5	0.7	0.7	..				0.2	
2004 Q1	0.8	0.5	0.1	0.1	0.1	0.2	0.3	0.4	..				-0.1	
Percentage change on previous month														
								ILKD	ILKN					
2003 May								-1.9	-2.3					
Jun								1.1	..					
Jul								0.5	..					
Aug								-0.3	..					
Sep								0.9	..					
Oct								0.7	..					
Nov								-0.8	..					
Dec								0.2	..					
2004 Jan								-0.4	..					
Feb								1.2	..					
Mar								0.3	..					
Apr								-0.3	..					
May								0.2	..					

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GFCF = Gross Fixed Capital Formation at constant market prices
ChgStk = Change in Stocks at constant market prices
Exports = Exports of goods and services
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Sales = Retail Sales volume
CPI = Consumer Prices, measurement not uniform among countries
PPI = Producer Prices (manufacturing)
Earnings = Average Wage Earnings (manufacturing), definitions of coverage and treatment vary among countries
Empl = Total Employment not seasonally adjusted
Unempl = Standardised Unemployment rates: percentage of total workforce
IoP = Index of Production

¹ Producer prices in manufactured goods

Source: OECD - SNA93

3 Italy

Contribution to change in GDP														
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl	Unempl
Percentage change on a year earlier														
	ILGA	HUCI	HUCJ	HUCK	HUCL	HUCM	HUCN	ILGU	ILHO	HYAA	ILAH	ILAQ	ILII	GABE
1999	1.7	1.6	0.2	0.9	0.3	—	1.4	-0.2	0.8	1.7	-0.2	2.3	1.2	11.3
2000	3.1	1.7	0.3	1.5	-1.1	2.7	1.9	4.2	-0.7	2.6	6.0	2.0	1.8	10.4
2001	1.7	0.5	0.7	0.4	-0.2	0.5	0.1	-1.1	-0.3	2.8	1.9	1.9	2.1	9.5
2002	0.3	0.3	0.3	0.2	0.5	-1.0	—	-1.3	-0.5	2.4	0.2	2.7	1.4	9.0
2003	0.4	0.7	0.4	-0.4	0.6	-1.1	-0.2	-0.5	-0.7	2.7	1.6	2.6	1.1	8.6
2000 Q4	2.6	1.6	0.4	0.8	-1.6	2.4	1.0	3.9	-2.1	2.6	6.6	1.8	2.8	9.9
2001 Q1	2.5	1.2	0.6	0.8	-1.0	1.9	1.0	3.2	1.4	2.9	4.7	1.8	3.2	9.7
Q2	2.1	0.8	0.7	0.3	-0.5	1.5	0.8	-0.3	-0.7	3.0	3.2	1.3	2.0	9.5
Q3	1.3	0.1	0.7	-0.1	1.0	-0.7	-0.4	-1.9	-1.0	2.8	1.0	2.2	1.9	9.4
Q4	0.8	-0.1	0.7	0.3	-0.2	-0.8	-0.9	-5.0	-0.9	2.4	-1.1	2.3	1.2	9.2
2002 Q1	-0.1	-0.5	0.4	-0.5	1.3	-2.2	-1.4	-4.0	-0.1	2.4	-1.0	2.4	1.7	9.0
Q2	0.2	—	0.3	-0.3	0.9	-1.4	-0.7	-1.8	-1.1	2.3	-0.6	3.4	1.9	9.0
Q3	0.5	0.6	0.3	0.3	-0.5	-0.1	0.2	-0.3	-1.2	2.4	0.6	2.3	1.3	9.0
Q4	0.9	1.0	0.3	1.4	0.1	-0.3	1.6	0.8	0.2	2.8	1.7	2.7	1.0	8.9
2003 Q1	0.6	1.0	0.4	0.2	0.7	-1.7	-0.2	—	-0.5	2.7	2.7	2.6	0.9	8.8
Q2	0.3	0.8	0.4	0.2	0.3	-1.6	-0.2	-0.6	0.5	2.7	1.7	1.7	1.3	8.7
Q3	0.4	0.8	0.4	-0.5	0.5	-0.1	0.6	-0.3	-1.1	2.7	1.3	3.2	1.0	8.6
Q4	0.1	0.3	0.4	-1.6	1.0	-1.0	-1.0	0.1	-1.9	2.5	0.9	2.7	0.9	8.5
2004 Q1	0.8	0.9	0.2	0.2	-0.5	0.1	0.2	-0.1	-2.5	2.3	0.4	3.0	0.7	..
2003 Jun	..	..	..	..	..	..	..	-1.7	-1.9	2.8	1.5	1.6	..	8.6
Jul	..	..	..	..	..	..	..	-0.6	-1.1	2.7	1.3	3.2	..	8.6
Aug	..	..	..	..	..	..	..	0.5	-2.0	2.7	1.4	3.2	..	8.6
Sep	..	..	..	..	..	..	..	-0.8	-0.2	2.7	1.0	3.2	..	8.5
Oct	..	..	..	..	..	..	..	—	-2.0	2.6	0.7	2.7	..	8.5
Nov	..	..	..	..	..	..	..	—	-2.2	2.4	1.2	2.7	..	8.5
Dec	..	..	..	..	..	..	..	0.4	-1.6	2.4	0.8	2.7	..	8.5
2004 Jan	..	..	..	..	..	..	..	—	0.6	2.2	0.4	2.5	..	8.5
Feb	..	..	..	..	..	..	..	—	-5.5	2.3	0.1	3.3	..	..
Mar	..	..	..	..	..	..	..	-0.1	-2.5	2.3	0.7	3.5	..	..
Apr	..	..	..	..	..	..	..	0.9	-3.0	2.3	1.7	3.6	..	..
May	..	..	..	..	..	..	..	2.1	-3.7	2.3	2.9	3.7	..	..
Jun	..	..	..	..	..	..	..	..	..	2.3	3.2	3.7	..	..
Percentage change on previous quarter														
	ILGK	HUCO	HUCP	HUCQ	HUCR	HUCS	HUCT	ILHE	ILHY				ILIS	
2000 Q4	0.4	0.1	0.2	-0.5	0.8	0.1	0.2	1.6	-0.9				0.7	
2001 Q1	0.9	0.4	0.3	0.8	-0.9	1.2	0.7	-0.4	-0.6				-0.9	
Q2	—	-0.1	0.2	-0.3	0.8	-0.9	-0.3	-1.7	0.1				0.4	
Q3	—	-0.3	0.1	-0.1	0.3	-1.0	-1.0	-1.4	0.4				1.7	
Q4	-0.1	-0.1	0.1	-0.1	-0.4	—	-0.3	-1.6	-0.8				—	
2002 Q1	—	-0.1	—	—	0.5	-0.3	0.2	0.6	0.2				-0.4	
Q2	0.3	0.4	0.1	-0.1	0.4	-0.1	0.4	0.6	-0.9				0.6	
Q3	0.2	0.3	—	0.5	-1.1	0.2	-0.1	0.1	0.3				1.1	
Q4	0.3	0.4	0.1	1.0	0.2	-0.2	1.1	-0.5	0.6				-0.3	
2003 Q1	-0.2	-0.1	0.2	-1.2	1.1	-1.7	-1.6	-0.2	-0.4				-0.5	
Q2	-0.1	0.2	0.1	—	0.1	—	0.5	-1.0	0.1				1.0	
Q3	0.4	0.4	0.1	-0.2	-0.9	1.7	0.7	1.5	-1.3				0.8	
Q4	—	-0.1	—	-0.1	0.7	-1.1	-0.5	-0.1	-0.3				-0.4	
2004 Q1	0.4	0.5	—	0.5	-0.3	-0.6	-0.4	-0.4	-1.0				-0.7	
Percentage change on previous month														
								ILKE	ILKO					
2003 May								-1.1	-1.1					
Jun								0.6	-1.0					
Jul								1.8	0.2					
Aug								-0.1	-1.0					
Sep								-0.7	0.6					
Oct								0.2	-0.4					
Nov								0.3	-0.2					
Dec								—	0.6					
2004 Jan								-0.4	1.6					
Feb								—	-5.3					
Mar								-0.2	2.0					
Apr								0.6	1.1					
May								—	-1.9					

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Earnings = Average Wage Earnings (manufacturing), definitions of coverage and treatment vary among countries
Empl = Total Employment not seasonally adjusted
Unempl = Standardised Unemployment not seasonally adjusted
Source: OECD - SNA93

4

USA

Contribution to change in GDP														
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl ¹	Unempl
Percentage change on a year earlier														
	ILGC	HUDG	HUDH	HUDI	HUDJ	HUDK	HUDL	ILGW	ILHQ	ILAA	ILAJ	ILAS	ILIK	GADO
1999	4.4	3.4	0.5	1.6	—	0.5	1.5	4.4	8.7	2.1	1.7	3.0	1.6	4.2
2000	3.7	3.2	0.3	1.2	-0.1	0.9	1.8	4.4	6.7	3.4	4.1	3.4	2.6	4.0
2001	0.5	1.7	0.4	-0.5	-0.9	-0.6	-0.4	-3.4	2.8	2.8	0.8	3.0	—	4.8
2002	2.2	2.4	0.5	-0.4	0.4	-0.3	0.5	-0.6	2.3	1.7	-0.7	3.6	-0.3	5.8
2003	3.1	2.2	0.6	0.7	-0.1	0.2	0.6	0.3	5.2	2.2	2.5	3.0	0.9	6.0
2000 Q4	2.2	2.8	0.1	0.8	-0.6	0.7	1.6	2.2	4.0	3.4	3.4	3.4	2.2	3.9
2001 Q1	1.9	1.8	0.4	0.3	-0.2	0.4	0.8	-0.4	2.0	3.3	2.0	2.7	0.8	4.2
Q2	0.2	1.7	0.3	-0.3	-1.3	-0.3	-0.1	-3.3	3.5	3.4	2.0	3.0	0.1	4.4
Q3	—	1.4	0.4	-0.7	-1.0	-1.1	-1.1	-4.5	1.2	2.7	0.6	3.0	—	4.8
Q4	—	1.9	0.5	-1.1	-1.2	-1.3	-1.1	-5.3	4.5	1.9	-1.5	3.3	-0.8	5.6
2002 Q1	1.2	2.5	0.4	-1.0	-0.3	-1.1	-0.6	-3.2	2.1	1.3	-1.9	3.9	-1.2	5.7
Q2	1.8	2.6	0.5	-0.7	0.2	-0.5	0.3	-0.9	1.9	1.3	-1.7	3.6	-0.5	5.8
Q3	3.0	2.6	0.5	-0.2	0.8	0.2	0.9	0.6	4.1	1.6	-0.6	3.6	0.1	5.7
Q4	2.8	1.9	0.7	0.2	1.0	0.3	1.3	1.4	1.0	2.2	1.5	3.2	0.3	5.9
2003 Q1	2.1	1.6	0.6	0.2	0.2	0.2	0.8	1.0	4.0	2.9	3.9	3.2	1.0	5.8
Q2	2.4	1.8	0.7	0.4	—	-0.1	0.5	-1.0	4.3	2.2	1.9	3.1	0.9	6.1
Q3	3.6	2.6	0.6	1.0	-0.4	0.1	0.4	-0.3	6.0	2.2	2.1	3.1	0.5	6.1
Q4	4.3	2.8	0.3	1.3	-0.1	0.6	0.7	1.5	6.6	1.9	2.3	2.5	1.3	5.9
2004 Q1	4.8	3.1	0.4	1.6	0.2	0.9	1.3	2.9	8.6	1.7	1.5	2.8	0.7	5.6
2003 Jun	..	..	..	..	..	..	..	-1.4	4.9	2.1	2.0	3.8	1.0	6.3
Jul	..	..	..	..	..	..	..	-0.6	5.2	2.1	2.1	3.8	0.8	6.2
Aug	..	..	..	..	..	..	..	-0.6	5.8	2.2	2.5	2.8	0.6	6.1
Sep	..	..	..	..	..	..	..	0.2	7.0	2.3	1.6	2.8	0.2	6.1
Oct	..	..	..	..	..	..	..	0.6	6.2	2.0	1.9	1.9	0.8	6.0
Nov	..	..	..	..	..	..	..	1.6	7.1	1.7	2.3	2.8	1.5	5.9
Dec	..	..	..	..	..	..	..	2.3	6.4	1.8	2.7	2.8	1.4	5.7
2004 Jan	..	..	..	..	..	..	..	2.4	6.9	1.9	2.4	2.8	0.7	5.6
Feb	..	..	..	..	..	..	..	2.8	9.4	1.7	1.2	2.8	0.7	5.6
Mar	..	..	..	..	..	..	..	3.4	9.7	1.7	1.1	2.8	0.7	5.7
Apr	..	..	..	..	..	..	..	4.9	8.3	2.3	4.0	2.8	0.7	5.6
May	..	..	..	..	..	..	..	6.0	10.4	3.0	5.6	2.8	0.9	5.6
Jun	..	..	..	..	..	..	..	5.7	7.4	3.3	4.9	1.8	1.0	5.6
Percentage change on previous quarter														
	ILGM	HUDM	HUDN	HUDO	HUDP	HUDQ	HUDR	ILHG	ILIA					ILIU
2000 Q4	0.5	0.6	0.1	—	-0.1	-0.1	-0.1	-0.3	0.3					0.2
2001 Q1	-0.1	0.1	0.2	-0.1	-0.4	-0.1	-0.2	-1.6	0.7					-0.7
Q2	-0.2	0.4	0.1	-0.3	-0.3	-0.4	-0.3	-1.3	1.3					0.5
Q3	-0.3	0.3	—	-0.4	-0.2	-0.5	-0.4	-1.3	-1.1					—
Q4	0.5	1.1	0.2	-0.3	-0.3	-0.3	-0.1	-1.1	3.5					-0.6
2002 Q1	1.2	0.7	0.1	—	0.5	0.1	0.3	0.5	-1.6					-1.1
Q2	0.5	0.5	0.1	0.1	0.2	0.2	0.6	1.0	1.2					1.2
Q3	0.8	0.3	0.1	0.1	0.4	0.1	0.2	0.2	1.0					0.6
Q4	0.3	0.4	0.3	0.1	-0.1	-0.1	0.3	-0.4	0.5					-0.4
2003 Q1	0.5	0.4	—	—	-0.2	-0.1	-0.3	0.2	1.2					-0.4
Q2	0.8	0.6	0.3	0.3	-0.1	—	0.3	-1.0	1.5					1.1
Q3	2.0	1.2	—	0.7	—	0.2	—	0.9	2.7					0.2
Q4	1.0	0.6	—	0.3	0.2	0.5	0.6	1.4	1.0					0.4
2004 Q1	1.0	0.7	0.1	0.3	0.2	0.2	0.4	1.6	3.2					-1.0
Percentage change on previous month														
								ILKG	ILKQ				ILLA	
2003 Jun								—	1.6				0.7	
Jul								0.7	1.2				—	
Aug								—	1.1				-0.3	
Sep								0.6	-0.3				-0.3	
Oct								0.2	-0.1				0.7	
Nov								1.0	1.2				—	
Dec								0.2	0.3				-0.1	
2004 Jan								0.6	1.1				-1.2	
Feb								0.8	1.0				0.4	
Mar								-0.1	2.3				0.2	
Apr								0.8	-0.9				0.5	
May								0.9	1.5				0.3	
Jun								-0.3	-1.2				0.8	

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Empl = Total Employment not seasonally adjusted
Unempl = Standardised Unemployment rates: percentage of total workforce
Source: OECD - SNA93

5 Japan

Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP ¹	Sales	CPI	PPI	Earnings ²	Empl	Unempl
Percentage change on a year earlier														
	ILGD	HUCU	HUCV	HUCW	HUCX	HUCY	HUCZ	ILGX	ILHR	ILAB	ILAK	ILAT	ILIL	GADP
1999	0.2	0.1	0.7	-0.1	-0.4	0.1	0.3	0.6	-2.7	-0.3	-1.5	-0.7	-0.8	4.7
2000	2.8	0.4	0.8	0.8	0.3	1.3	0.8	4.9	-0.8	-0.7	0.2	1.7	-0.2	4.7
2001	0.4	1.0	0.5	-0.4	-	-0.7	-	-6.1	-1.1	-0.7	-2.3	-	-0.5	5.0
2002	-0.3	0.5	0.4	-1.6	-0.2	0.8	0.1	-1.2	-3.4	-1.0	-2.1	-1.1	-1.3	5.4
2003	2.5	0.5	0.2	0.8	0.4	1.1	0.5	3.1	-1.4	-0.2	-0.8	2.3	-0.2	5.3
2000 Q4	3.9	0.6	0.8	1.7	0.6	1.1	0.9	5.1	-0.4	-0.8	-0.6	1.0	0.3	4.7
2001 Q1	3.3	1.1	0.6	1.0	1.0	0.2	0.7	1.3	1.1	-0.5	-1.9	0.3	0.4	4.7
Q2	1.1	1.0	0.5	0.2	0.2	-0.6	0.2	-4.2	-0.7	-0.7	-2.1	0.5	-0.5	4.9
Q3	-0.4	1.0	0.4	-0.3	-0.5	-1.0	-0.2	-8.9	-2.0	-0.8	-2.5	-0.3	-0.9	5.1
Q4	-2.2	0.7	0.5	-2.3	-0.5	-1.2	-0.6	-12.1	-2.7	-1.0	-3.0	-0.5	-1.3	5.4
2002 Q1	-3.2	0.2	0.4	-2.3	-1.5	-0.4	-0.5	-8.9	-4.9	-1.4	-2.8	-1.6	-1.4	5.3
Q2	-0.9	0.3	0.4	-2.0	-0.4	0.8	-	-3.4	-2.8	-0.9	-2.2	-0.7	-1.5	5.4
Q3	1.0	1.1	0.5	-1.8	0.5	1.1	0.5	2.7	-3.1	-0.8	-2.1	-2.1	-0.9	5.4
Q4	1.8	0.5	0.3	-0.5	0.5	1.8	0.7	5.7	-2.7	-0.5	-1.2	0.1	-1.1	5.4
2003 Q1	2.5	0.4	0.3	0.1	1.0	1.3	0.7	5.5	-0.6	-0.2	-0.7	1.8	-0.8	5.4
Q2	2.2	0.4	0.1	0.9	0.3	0.8	0.3	2.0	-2.3	-0.3	-1.1	2.5	0.1	5.4
Q3	1.8	-	0.1	0.7	0.2	1.2	0.3	1.0	-2.0	-0.2	-0.6	2.3	-0.1	5.2
Q4	3.5	1.0	0.2	1.5	-0.1	1.3	0.4	4.1	-0.9	-0.3	-0.8	2.3	-0.1	5.1
2004 Q1	5.0	1.6	0.2	1.5	0.5	1.8	0.7	4.5	-0.6	-0.1	-0.4	1.8	0.2	4.9
2003 Jun	..	..	..	..	..	..	..	1.3	-1.6	-0.4	-1.1	3.9	0.6	5.3
Jul	..	..	..	..	..	..	..	0.3	-2.7	-0.2	-0.8	4.6	0.1	5.3
Aug	..	..	..	..	..	..	..	-0.2	-1.7	-0.3	-0.6	1.8	-0.1	5.1
Sep	..	..	..	..	..	..	..	2.9	-1.5	-0.2	-0.6	0.9	-0.2	5.1
Oct	..	..	..	..	..	..	..	3.7	0.3	-	-0.9	1.8	-0.3	5.2
Nov	..	..	..	..	..	..	..	4.7	-3.1	-0.5	-0.8	1.1	-0.3	5.2
Dec	..	..	..	..	..	..	..	4.0	0.2	-0.4	-0.7	4.1	0.2	4.9
2004 Jan	..	..	..	..	..	..	..	6.1	1.3	-0.3	-0.6	1.7	0.3	5.0
Feb	..	..	..	..	..	..	..	3.4	-1.8	-	-0.5	2.0	0.2	5.0
Mar	..	..	..	..	..	..	..	4.0	-1.2	-0.1	-0.2	1.7	0.2	4.7
Apr	..	..	..	..	..	..	..	8.1	-0.6	-0.4	0.4	1.1	0.8	4.7
May	..	..	..	..	..	..	..	8.0	-2.1	-0.5	0.8	1.3	0.4	4.6
Jun	..	..	..	..	..	..	..	7.6	-2.9	-	1.3	..	-0.6	4.6
Percentage change on previous quarter														
	ILGN	HUDA	HUDB	HUDC	HUDD	HUDE	HUDD	ILHH	ILIB				ILIV	
2000 Q4	1.3	0.4	0.1	0.9	0.1	-	0.3	1.2	-0.3				-	
2001 Q1	0.4	0.6	0.1	-0.3	0.3	-0.4	-0.1	-3.0	1.0				-1.9	
Q2	-1.1	-	0.2	-0.7	-0.4	-0.4	-0.2	-3.1	-2.0				1.4	
Q3	-0.8	-	-	-0.2	-0.6	-0.3	-0.2	-4.2	-0.7				-0.4	
Q4	-0.7	0.1	0.2	-1.1	0.1	-0.2	-0.2	-2.4	-1.0				-0.4	
2002 Q1	-0.6	-	-	-0.4	-0.7	0.5	0.1	0.6	-1.3				-2.0	
Q2	1.2	0.2	0.1	-0.3	0.8	0.8	0.3	2.8	0.1				1.3	
Q3	1.0	0.8	0.1	-	0.3	-	0.2	1.8	-0.9				0.2	
Q4	0.2	-0.4	-	0.2	0.1	0.4	0.1	0.4	-0.6				-0.6	
2003 Q1	0.1	-0.1	-	0.2	-0.1	0.1	0.1	0.3	0.8				-1.7	
Q2	0.9	0.1	-	0.5	0.1	0.2	-0.1	-0.6	-1.5				2.3	
Q3	0.7	0.3	0.1	-0.2	0.2	0.4	0.2	0.9	-0.6				-	
Q4	1.8	0.6	0.1	1.0	-0.2	0.6	0.2	3.6	0.5				-0.6	
2004 Q1	1.5	0.5	0.1	0.2	0.5	0.5	0.3	0.7	1.1				-1.4	
Percentage change on previous month														
								ILKH	ILKR				ILLB	
2003 Jun								-0.6	-				0.8	
Jul								-0.2	-2.2				-0.5	
Aug								-0.1	2.3				-0.3	
Sep								3.7	-0.2				-0.3	
Oct								0.8	1.2				-0.1	
Nov								0.8	-2.5				-0.2	
Dec								-0.7	1.2				-0.3	
2004 Jan								3.4	2.6				-1.3	
Feb								-3.9	-1.9				-0.2	
Mar								0.8	-0.2				1.1	
Apr								3.1	-1.2				1.2	
May								1.0	-1.0				0.5	
Jun								-1.1	-0.8				-0.2	

GDP = Gross Domestic Product at constant market prices
PFC = Private Final Consumption at constant market prices
GFC = Government Final Consumption at constant market prices
GFCF = Gross Fixed Capital Formation at constant market prices
ChgStk = Change in Stocks at constant market prices
Exports = Exports of goods and services
Imports = Imports of goods and services

Sales = Retail Sales volume
CPI = Consumer Prices, measurement not uniform among countries
PPI = Producer Prices (manufacturing)
Earnings = Average Earnings (manufacturing), definitions of coverage and treatment vary among countries
Empl = Total Employment not seasonally adjusted
Unempl = Standardised Unemployment rates: percentage of total workforce
IoP = Index of Production

1 Not adjusted for unequal number of working days in a month

Source: OECD - SNA93

Corporate services price index (experimental)

Quarter 2 2004

What is the CSPI?

The experimental Corporate Services Price Index (CSPI) measures movements in prices charged for services supplied by businesses to other businesses, local and national government. The data produced are used internally by ONS as a deflator for the Index of Services and the quarterly measurement of Gross Domestic Product (GDP). It is also used by the Treasury and Bank of England to help monitor inflation in the economy.

Results for Quarter 2, 2004

Prices of business-to-business services rose by 2.4 per cent in the year to the second quarter 2004, the same percentage growth as in the year to the previous quarter. This is based on a comparison of the change in the top-level CSPI on the *net* sector basis.

Figure 1 shows how the percentage change for the top-level CSPI (net sector) compares with the Retail Price Index (RPI) and the Producer Price Index (PPI) for all manufactured goods (net sector).

The top-level results, on both gross and net sector bases, are shown in Table 1. In Q2 2004, the top-level CSPI (net sector) rose by 1.1 per cent compared to the previous quarter.

Figure 2 depicts the CSPI annual growths for both the net and gross sector time series. The net CSPI growth shows a maintained value of 2.4 per cent in both Q1 2004 and Q2 2004. The annual growth for the CSPI gross series shows a slight decline from a value of 2.4 per cent in Q1 2004 to a value of 2.2 per cent in Q2 2004. The difference in annual growth between the gross sector and net sector CSPI is 0.2 per cent this quarter.

Industry-specific indices

The tables attached at the end of this article contain the data for the thirty-two industries for which indices of corporate services prices are currently available. The weights for each industry index are shown at both gross and net sector levels. Some key points to note are:

- *freight forwarding* rose by 2.9 per cent this quarter due to increases in fuel and security charges
- *national post parcels* rose by 5.1 per cent this quarter as the result of an annual price review in the reference quarter

Figure 1
Experimental top-level CSPI compared with the Retail Price Index (RPI) for services and the Producer Price Index (PPI)

Percentage change on the same quarter a year ago

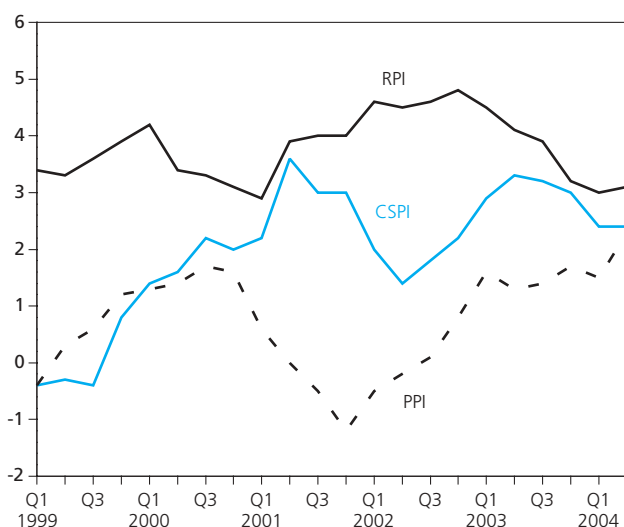


Figure 2
Experimental top-level CSPI (gross and net sector)

Percentage change on the same quarter in previous year

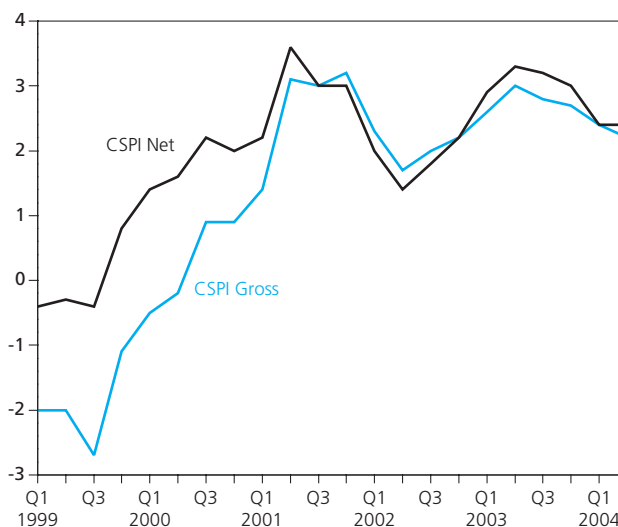


Table 1
CSPI Results

CSPI Quarterly Index Values 2000=100				Percentage change on same quarter in previous year (per cent)	
		Gross sector	Net sector	Gross sector	Net sector
1999	Q1	100.4	98.1	-2.0	-0.4
	Q2	99.8	98.0	-2.0	-0.3
	Q3	99.3	98.1	-2.7	-0.4
	Q4	99.4	98.7	-1.1	0.8
2000	Q1	99.8	99.5	-0.5	1.4
	Q2	99.6	99.5	-0.2	1.6
	Q3	100.2	100.3	0.9	2.2
	Q4	100.3	100.7	0.9	2.0
2001	Q1	101.3	101.6	1.4	2.2
	Q2	102.7	103.1	3.1	3.6
	Q3	103.2	103.3	3.0	3.0
	Q4	103.5	103.7	3.2	3.0
2002	Q1	103.6	103.7	2.3	2.0
	Q2	104.5	104.6	1.7	1.4
	Q3	105.3	105.2	2.0	1.8
	Q4	105.8	106.0	2.2	2.2
2003	Q1	106.3	106.8	2.6	2.9
	Q2	107.6	108.0	3.0	3.3
	Q3	108.2	108.6	2.8	3.2
	Q4	108.6	109.2	2.7	3.0
2004	Q1	108.8	109.4	2.4	2.4
	Q2	110.0	110.6	2.2	2.4

- *real estate* rose by 3.0 per cent this quarter, with strong activity in the industrial, office and retail sectors. Prices have increased since the beginning of 2002
- *film processing* fell by 2.0 per cent over the previous quarter, reportedly due to price reviews within the industry
- *sewerage services* rose by 6.2 per cent this quarter as the result of an annual price review
- *waste disposal* rose by 4.5 per cent over the previous quarter, reportedly due to the annual change in the landfill tax and annual review of contracts.

Background notes

1. The experimental Corporate Services Price Index (CSPI) has been recently rebased to the year 2000 and released on 20 February 2004. Many aspects of the methods and sources used to compile the CSPI have been reviewed and updated in the rebasing. For more information on the methodology and associated impact of the rebasing see http://www.statistics.gov.uk/downloads/experimental/CSPI_Rebasing_Methodology_and_Impact.pdf.
2. The February 2004 release of the rebased CSPI also introduced a redeveloped business telecommunications index and new banking (loans and interest bearing deposits) index. The introduction of the new index has increased the number of published, industry-level CSPIs to thirty two, providing coverage of an estimated fifty five per cent of net corporate service activity in the UK. ONS has also expanded substantially the survey of businesses on which the CSPI is based. We now survey 1,500 businesses, seeking price quotes for 5,000 service-products. For further information on the redeveloped business telecommunications CSPI see http://www.statistics.gov.uk/downloads/experimental/Redeveloped_Business_Telecommunications.pdf. For further information on the new banking CSPI see http://www.statistics.gov.uk/downloads/experimental/New_Banking_CSPI.pdf.
3. The CSPI is shown in this release as both net and gross sector time series, aligning with the PPI release format. The net series is scoped to monitor the corporate-service activity provided to other businesses and government organisations, outside the corporate services sector. The gross series is scoped to monitor the provision of corporate services to all businesses and government organisations.
4. Indices relate to average prices for a quarter. The full effect of a price change, occurring partway through any quarter, will only be reflected in the following quarter's index. All index numbers exclude VAT.
5. Some back data for a few industry specific indices have been revised. The figures previously published are now found to have included transcription errors. Many of the revisions are very small, either 0.1 or 0.2 index points, although some are larger. The largest revisions are to the 2003 index number level and growth rate for hotels and technical testing (around 1 index point). The largest revisions to quarterly growth rates are for

bus and coach hire growth in quarter 3 2000 (revision of 1 index point) and to banking services in quarter 3 2002 (revision of two index points). There were no errors in the top-level CSPI index number levels or growth rates. The index numbers in this publication have now been subject to a further quality assessment and improvements to operational procedures are being put in place as a result.

Note: Measurement of service sector prices is inherently difficult and challenging. When viewing the results, **it should be borne in mind that the indices shown are regarded as experimental**. This is particularly true of those that have been added to the series most recently. Therefore, some of the results will be subject to revision before the completion of the CSPI development project. The top-level index should also be viewed as **experimental**.

Next results

The next set of CSPI results will be issued on 12 November 2004 via the National Statistics website <http://www.statistics.gov.uk/cspi>.

Further information

- Articles on the methodology and impact of rebasing the CSPI, the re-development of an index for business telecommunications and the introduction of an index for banking services (together with more general information on the CSPI) are available at <http://www.statistics.gov.uk/cspi>
- Inquiry Contact:
Tim Clode
Office for National Statistics
Tel: (01633) 813493
E-mail: cspi@ons.gsi.gov.uk

Note to the main table:

There are external sources for the indices denoted by an asterisk, as follows:

Index	Source
Banking Services	Bank of England
Property rental payments	Investment Property Databank (IPD)
Car contract hire and	
Maintenance and repair of motor vehicles	Yewtree.com.Ltd
Construction plant hire	Construction Plant-hire Association (CPA) up to Quarter 2 of 2002
Business telecommunications	Ofcom (Office of Communications)
Sewerage services	Ofwat (Office of Water Services)
National post parcels	Parcelforce
Business rail fares	Strategic Rail Authority (SRA)

Table 2
Corporate Services Price Indices (Experimental) (2000=100)

		Maintenance and repair of motor vehicles*	Hotels	Canteens and catering	Business rail fares*	Rail Freight	Bus and coach hire	Freight transport by road	
								Total	International component
SIC(2003)		50.2	55.1	55.5	60.10/1	60.10/9	60.23/1	60.24/9	
2000 weights (per cent)									
Gross sector		2.93	3.69	3.03	0.32	0.62	0.12	12.72	
Net sector		2.08	4.08	3.36	0.16	1.03	0.20	21.15	
Annual									
	1999	97.8	97.7	99.9	95.7	101.0	93.9	95.6	97.5
	2000	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	2001	102.9	104.3	104.2	103.1	100.5	106.8	102.9	100.3
	2002	106.1	104.3	105.4	106.1	102.1	114.7	103.9	99.3
	2003	110.2	108.6	106.6	109.8	103.5	120.8	106.2	99.3
Percentage change, latest year on previous year									
	1999	2.2	-2.2	0.2	4.9	1.4	6.5	1.8	0.9
	2000	2.3	2.3	0.1	4.5	-1.0	6.5	4.6	2.6
	2001	2.9	4.3	4.2	3.1	0.5	6.8	2.9	0.3
	2002	3.1	0.0	1.1	2.9	1.6	7.4	1.0	-1.0
	2003	3.9	4.2	1.1	3.5	1.4	5.3	2.2	0.1
Quarterly results (not seasonally adjusted)									
	1999 Q1	96.7	100.0	99.9	95.7	100.5	92.3	93.9	97.7
	Q2	97.6	96.8	100.4	95.7	101.2	93.1	95.2	97.4
	Q3	98.0	96.8	99.8	95.7	101.2	93.8	95.8	97.4
	Q4	98.7	97.1	99.4	95.7	101.2	96.5	97.6	97.4
	2000 Q1	99.1	98.8	99.1	100.0	101.8	98.1	98.9	99.5
	Q2	99.6	100.1	100.1	100.0	99.4	99.9	99.3	99.5
	Q3	100.2	100.7	100.1	100.0	99.4	100.6	100.2	100.0
	Q4	101.2	100.5	100.7	100.0	99.4	101.4	101.6	101.0
	2001 Q1	102.0	102.9	103.2	103.1	100.3	103.4	102.5	100.9
	Q2	102.8	104.7	104.4	103.1	101.1	105.1	103.0	100.2
	Q3	103.5	104.5	104.5	103.1	100.5	108.1	103.1	99.8
	Q4	103.3	104.9	104.6	103.1	100.1	110.8	103.0	100.1
	2002 Q1	104.9	103.7	104.7	106.1	101.3	111.7	102.9	99.6
	Q2	105.5	103.4	105.3	106.1	102.1	113.3	103.6	99.4
	Q3	106.6	104.0	105.7	106.1	102.4	116.4	104.3	99.7
	Q4	107.4	106.0	105.7	106.1	102.5	117.4	104.9	98.3
	2003 Q1	108.9	107.2	106.1	109.8	102.7	119.2	105.6	99.3
	Q2	109.8	107.2	106.4	109.8	103.4	120.8	106.1	99.3
	Q3	110.4	109.1	106.7	109.8	103.6	121.6	106.3	99.5
	Q4	111.7	110.9	107.0	109.8	104.2	121.7	106.8	99.2
	2004 Q1	113.3	110.5	107.2	114.4	103.7	122.2	107.1	98.9
	Q2	114.6	112.3	107.4	114.4	104.1	123.4	107.7	99.1

Table 2 – continued

	Maintenance and repair of motor vehicles*	Hotels	Canteens and catering	Business rail fares*	Rail Freight	Bus and coach hire	Freight transport by road	
							Total	International component
SIC(2003)	50.2	55.1	55.5	60.10/1	60.10/9	60.23/1	60.24/9	
Percentage change, latest quarter on previous quarter								
1999 Q1	0.9	-0.8	-0.3	4.9	1.1	2.5	-0.1	0.9
Q2	0.9	-3.2	0.5	0.0	0.7	0.9	1.3	-0.3
Q3	0.4	0.0	-0.6	0.0	0.0	0.8	0.6	0.0
Q4	0.7	0.4	-0.3	0.0	0.1	2.9	1.9	0.0
2000 Q1	0.3	1.7	-0.4	4.5	0.5	1.6	1.3	2.2
Q2	0.5	1.3	1.1	0.0	-2.3	1.9	0.5	0.0
Q3	0.6	0.6	0.0	0.0	0.0	0.7	0.9	0.5
Q4	1.0	-0.2	0.5	0.0	0.0	0.8	1.4	0.9
2001 Q1	0.8	2.4	2.5	3.1	0.9	1.9	0.9	-0.1
Q2	0.8	1.8	1.2	0.0	0.8	1.7	0.5	-0.6
Q3	0.6	-0.2	0.1	0.0	-0.6	2.8	0.1	-0.4
Q4	-0.2	0.3	0.1	0.0	-0.4	2.5	0.0	0.3
2002 Q1	1.5	-1.1	0.0	2.9	1.2	0.9	-0.1	-0.5
Q2	0.6	-0.3	0.6	0.0	0.8	1.4	0.7	-0.2
Q3	1.0	0.6	0.4	0.0	0.2	2.8	0.6	0.3
Q4	0.8	1.9	0.0	0.0	0.1	0.9	0.5	-1.4
2003 Q1	1.5	1.2	0.4	3.5	0.2	1.5	0.7	1.0
Q2	0.8	0.0	0.2	0.0	0.7	1.3	0.5	0.0
Q3	0.6	1.8	0.3	0.0	0.2	0.6	0.2	0.1
Q4	1.2	1.6	0.2	0.0	0.5	0.1	0.5	-0.3
2004 Q1	1.4	-0.4	0.2	4.2	-0.5	0.4	0.3	-0.3
Q2	1.1	1.6	0.2	0.0	0.4	1.0	0.6	0.1
Percentage change, latest quarter on corresponding quarter of previous year								
1999 Q1	1.9	1.0	1.0	4.9	0.7	6.5	-0.3	1.5
Q2	1.9	-2.8	0.7	4.9	1.1	6.0	1.8	0.7
Q3	2.2	-3.2	0.0	4.9	1.8	6.2	2.1	0.6
Q4	3.0	-3.6	-0.7	4.9	1.9	7.2	3.8	0.6
2000 Q1	2.5	-1.3	-0.8	4.5	1.3	6.3	5.2	1.9
Q2	2.0	3.3	-0.2	4.5	-1.7	7.3	4.3	2.2
Q3	2.2	4.0	0.4	4.5	-1.8	7.2	4.6	2.7
Q4	2.5	3.4	1.2	4.5	-1.8	5.1	4.1	3.7
2001 Q1	2.9	4.2	4.2	3.1	-1.4	5.4	3.7	1.4
Q2	3.2	4.7	4.3	3.1	1.6	5.3	3.7	0.7
Q3	3.3	3.8	4.3	3.1	1.1	7.4	2.8	-0.2
Q4	2.1	4.4	4.0	3.1	0.7	9.2	1.4	-0.9
2002 Q1	2.8	0.7	1.4	2.9	1.0	8.1	0.4	-1.2
Q2	2.6	-1.3	0.9	2.9	1.0	7.7	0.6	-0.8
Q3	3.0	-0.5	1.2	2.9	1.9	7.7	1.2	-0.2
Q4	3.9	1.0	1.0	2.9	2.4	6.0	1.8	-1.8
2003 Q1	3.9	3.3	1.4	3.5	1.3	6.7	2.6	-0.3
Q2	4.0	3.7	1.0	3.5	1.3	6.7	2.3	-0.1
Q3	3.6	5.0	1.0	3.5	1.2	4.4	1.9	-0.2
Q4	4.1	4.7	1.2	3.5	1.6	3.6	1.9	0.9
2004 Q1	4.0	3.1	1.0	4.2	0.9	2.5	1.5	-0.4
Q2	4.4	4.8	0.9	4.2	0.7	2.1	1.6	-0.3

Table 2 – continued

Corporate Services Price Indices (Experimental) (2000=100)

	Commercial vehicle ferries	Sea and coastal water freight	Business air fares	Freight forwarding	National post parcels*	Courier services	Business telecoms services*	Banking services*
SIC(2003)	61.10/1	61.10/2	62.10/1	63.4	64.11	64.12	64.2	65.12/1
2000 weights (per cent)								
Gross sector	0.29	0.73	3.28	7.48	3.48	2.42	11.84	2.90
Net sector	0.37	0.92	1.59	6.20	1.81	1.26	5.39	3.23
Annual								
1999	98.1	97.3	94.7	99.1	96.0	99.8	119.1	90.8
2000	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2001	98.7	100.7	115.1	100.4	103.1	102.7	92.6	108.2
2002	100.6	95.0	122.8	99.8	107.1	107.1	90.6	116.5
2003	102.8	96.1	127.1	104.3	113.3	109.2	87.8	125.6
Percentage change, latest year on previous year								
1999	11.3	-4.8	2.4	-7.1	2.9	1.4	-17.7	..
2000	1.9	2.8	5.6	0.9	4.1	0.2	-16.0	10.2
2001	-4.3	0.7	15.1	0.4	3.1	2.7	-7.4	8.2
2002	2.0	-5.7	6.7	-0.6	3.9	4.2	-2.2	7.7
2003	2.1	1.1	3.5	4.4	5.9	2.0	-3.0	7.8
Quarterly results (not seasonally adjusted)								
1999 Q1	100.6	99.9	93.8	101.6	94.6	99.4	129.7	90.1
Q2	98.7	98.6	94.8	99.1	96.5	99.9	121.3	89.0
Q3	97.7	95.9	94.8	97.5	96.5	100.2	115.0	92.0
Q4	95.5	94.8	95.4	98.3	96.5	99.5	110.5	92.0
2000 Q1	100.9	96.8	96.2	98.9	96.5	98.6	107.0	94.9
Q2	99.8	98.8	98.0	99.3	101.2	99.2	99.6	99.3
Q3	100.4	101.7	100.0	100.5	101.2	100.0	99.1	103.8
Q4	98.9	102.7	105.8	101.2	101.2	102.2	94.3	102.0
2001 Q1	101.5	103.9	111.9	102.2	101.2	100.4	93.1	101.4
Q2	99.0	101.6	113.1	100.6	103.7	101.5	92.8	109.0
Q3	97.0	99.9	116.8	99.4	103.7	104.2	93.7	106.7
Q4	97.3	97.5	118.5	99.4	103.7	104.8	90.8	115.7
2002 Q1	101.8	96.4	120.7	98.5	103.7	106.0	88.3	113.6
Q2	100.5	94.1	122.2	99.5	108.2	106.6	89.5	117.8
Q3	100.6	94.1	123.3	100.4	108.2	107.7	93.0	113.4
Q4	99.6	95.4	124.8	100.9	108.2	107.9	91.4	121.3
2003 Q1	102.6	98.8	124.9	102.2	108.2	108.6	88.2	122.5
Q2	102.8	97.0	127.1	104.4	115.0	109.4	87.3	125.8
Q3	102.8	94.5	128.1	105.0	115.0	109.3	88.2	125.7
Q4	102.8	94.0	128.2	105.5	115.0	109.4	87.6	128.4
2004 Q1	102.6	95.4	129.1	104.9	115.0	110.9	86.1	127.3
Q2	102.5	94.1	129.5	107.9	121.0	111.5	85.0	128.3

Table 2 – continued

	Commercial vehicle ferries	Sea and coastal water freight	Business air fares	Freight forwarding	National post parcels*	Courier services	Business telecoms services*	Banking services*
SIC(2003)	61.10/1	61.10/2	62.10/1	63.4	64.11	64.12	64.2	65.12/1
Percentage change, latest quarter on previous quarter								
1999 Q1	13.7	0.3	0.4	-2.0	0.0	0.3	-1.6	..
Q2	-2.0	-1.3	1.1	-2.4	2.0	0.5	-6.5	-1.2
Q3	-1.0	-2.8	0.0	-1.6	0.0	0.3	-5.2	3.4
Q4	-2.2	-1.1	0.6	0.7	0.0	-0.6	-3.9	-0.1
2000 Q1	5.6	2.1	0.8	0.7	0.0	-0.9	-3.2	3.2
Q2	-1.0	2.1	2.0	0.4	4.8	0.6	-6.9	4.7
Q3	0.6	2.9	2.0	1.2	0.0	0.8	-0.6	4.5
Q4	-1.4	1.0	5.8	0.7	0.0	2.1	-4.8	-1.7
2001 Q1	2.6	1.2	5.8	1.0	0.0	-1.8	-1.3	-0.5
Q2	-2.5	-2.2	1.1	-1.6	2.5	1.1	-0.3	7.4
Q3	-2.0	-1.7	3.3	-1.2	0.0	2.6	1.0	-2.1
Q4	0.3	-2.4	1.4	-0.1	0.0	0.6	-3.2	8.5
2002 Q1	4.6	-1.1	1.9	-0.9	0.0	1.2	-2.7	-1.8
Q2	-1.3	-2.4	1.2	1.0	4.4	0.6	1.3	3.6
Q3	0.1	0.1	0.9	0.9	0.0	0.9	4.0	-3.7
Q4	-1.0	1.3	1.2	0.5	0.0	0.2	-1.8	6.9
2003 Q1	3.0	3.6	0.1	1.3	0.0	0.6	-3.5	1.0
Q2	0.2	-1.8	1.7	2.2	6.3	0.7	-1.0	2.7
Q3	0.0	-2.6	0.8	0.5	0.0	-0.1	1.0	-0.1
Q4	0.0	-0.5	0.1	0.5	0.0	0.1	-0.6	2.2
2004 Q1	-0.2	1.5	0.7	-0.6	0.0	1.3	-1.7	-0.9
Q2	-0.1	-1.3	0.3	2.9	5.1	0.6	-1.3	0.8
Percentage change, latest quarter on corresponding quarter of previous year								
1999 Q1	15.1	1.2	4.0	-6.8	5.6	2.2	-16.7	..
Q2	11.9	2.8	1.9	-8.3	2.0	1.2	-16.8	..
Q3	10.3	-6.0	1.6	-8.2	2.0	1.5	-21.1	..
Q4	8.0	-4.8	2.1	-5.2	2.0	0.5	-16.2	..
2000 Q1	0.2	-3.1	2.5	-2.6	2.0	-0.7	-17.5	5.3
Q2	1.2	0.2	3.4	0.2	4.8	-0.7	-17.8	11.6
Q3	2.8	6.1	5.5	3.0	4.8	-0.2	-13.8	12.7
Q4	3.6	8.3	10.9	3.0	4.8	2.6	-14.7	10.9
2001 Q1	0.6	7.3	16.4	3.4	4.8	1.7	-13.0	6.9
Q2	-0.9	2.8	15.4	1.3	2.5	2.3	-6.9	9.7
Q3	-3.4	-1.8	16.8	-1.1	2.5	4.1	-5.4	2.8
Q4	-1.6	-5.1	12.0	-1.8	2.5	2.6	-3.8	13.5
2002 Q1	0.3	-7.2	7.8	-3.6	2.5	5.7	-5.1	12.0
Q2	1.5	-7.5	8.0	-1.1	4.4	5.1	-3.6	8.1
Q3	3.7	-5.8	5.6	0.9	4.4	3.3	-0.7	6.3
Q4	2.4	-2.1	5.3	1.5	4.4	3.0	0.7	4.8
2003 Q1	0.8	2.5	3.5	3.7	4.4	2.4	-0.1	7.8
Q2	2.3	3.1	4.0	4.9	6.3	2.6	-2.4	6.8
Q3	2.2	0.3	3.9	4.6	6.3	1.5	-5.2	10.8
Q4	3.2	-1.5	2.8	4.6	6.3	1.4	-4.1	5.9
2004 Q1	0.0	-3.4	3.4	2.6	6.3	2.1	-2.4	3.9
Q2	-0.3	-3.0	1.9	3.3	5.1	1.9	-2.7	2.0

Table 2 – continued

Corporate Services Price Indices (Experimental) (2000=100)

	Property rentals*	Real estate agency activities	Car contract hire*	Construction plant hire*	Market research	Technical testing	Employment agencies
SIC(2003)	70.2	70.3	71.1	71.32	74.13	74.30	74.50
2000 weights (per cent)							
Gross sector	7.88	3.71	2.54	2.38	1.15	0.77	14.39
Net sector	12.33	1.56	3.56	5.69	0.98	0.97	6.59
Annual							
1999	94.6	93.9	97.1	95.1	97.7	98.7	97.8
2000	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2001	106.5	101.9	94.9	104.2	102.6	103.8	107.1
2002	111.0	102.6	94.6	102.0	107.0	107.2	112.0
2003	115.6	105.8	89.8	108.2	109.8	111.0	115.5
Percentage change, latest year on previous year							
1999	5.4	4.9	1.7	4.1	..	0.4	4.0
2000	5.7	6.5	3.0	5.1	2.4	1.3	2.3
2001	6.5	1.9	-5.1	4.2	2.6	3.8	7.1
2002	4.3	0.7	-0.3	-2.1	4.3	3.3	4.6
2003	4.1	3.1	-5.1	6.1	2.6	3.6	3.1
Quarterly results (not seasonally adjusted)							
1999 Q1	92.5	90.9	95.6	96.4	97.2	98.7	96.8
Q2	93.7	93.6	95.9	93.9	97.3	98.6	97.9
Q3	95.4	95.1	97.4	94.3	97.9	98.7	97.9
Q4	96.8	96.0	99.2	96.0	98.3	99.0	98.4
2000 Q1	98.0	98.5	100.1	96.6	99.7	99.3	99.3
Q2	99.3	99.7	100.5	100.8	100.0	99.6	99.9
Q3	100.6	100.6	100.0	101.7	100.5	100.0	100.1
Q4	102.2	101.3	99.4	100.9	99.8	101.1	100.7
2001 Q1	104.1	101.9	97.3	101.8	102.3	101.7	102.7
Q2	105.7	101.9	94.5	108.0	102.6	104.2	106.8
Q3	107.2	101.9	94.1	105.0	102.7	104.3	108.7
Q4	108.8	101.8	93.7	101.9	103.0	104.9	110.0
2002 Q1	109.6	101.5	94.1	100.3	106.4	106.0	111.6
Q2	110.7	102.0	94.3	101.4	106.5	106.3	111.9
Q3	111.3	103.0	94.5	102.9	106.9	107.6	112.4
Q4	112.5	103.8	95.5	103.3	108.3	108.9	112.2
2003 Q1	113.4	103.9	94.4	106.5	109.1	109.9	113.4
Q2	115.5	104.9	87.6	108.4	109.3	110.5	116.0
Q3	116.3	106.7	88.1	108.8	110.3	111.7	116.4
Q4	117.1	107.5	89.0	109.1	110.6	111.9	116.2
2004 Q1	118.3	110.1	90.9	107.0	111.2	111.9	116.0
Q2	119.4	113.4	91.1	107.9	111.6	111.8	116.9

Table 2 – *continued*

	Property rentals*	Real estate agency activities	Car contract hire*	Construction plant hire*	Market research	Technical testing	Employment agencies
SIC(2003)	70.2	70.3	71.10	71.32	74.13	74.30	74.50
Percentage change, latest quarter on previous quarter							
1999 Q1	1.5	0.3	0.5	6.3	3.0	0.3	1.4
Q2	1.3	3.0	0.3	-2.6	0.1	-0.1	1.1
Q3	1.8	1.6	1.6	0.5	0.6	0.1	0.1
Q4	1.5	0.9	1.9	1.8	0.4	0.3	0.5
2000 Q1	1.2	2.6	0.9	0.7	1.4	0.4	0.9
Q2	1.3	1.2	0.4	4.3	0.3	0.2	0.6
Q3	1.3	0.9	-0.5	0.8	0.5	0.5	0.2
Q4	1.6	0.7	-0.6	-0.7	-0.7	1.1	0.6
2001 Q1	1.9	0.6	-2.1	0.9	2.5	0.6	2.0
Q2	1.5	0.0	-2.9	6.1	0.3	2.5	4.0
Q3	1.4	0.0	-0.4	-2.7	0.0	0.1	1.8
Q4	1.5	-0.1	-0.5	-3.0	0.4	0.6	1.2
2002 Q1	0.8	-0.3	0.5	-1.5	3.2	1.0	1.4
Q2	1.0	0.5	0.2	1.0	0.1	0.3	0.3
Q3	0.5	0.9	0.2	1.5	0.4	1.2	0.4
Q4	1.1	0.8	1.1	0.4	1.2	1.3	-0.2
2003 Q1	0.8	0.1	-1.1	3.1	0.8	0.9	1.1
Q2	1.8	1.0	-7.3	1.9	0.2	0.6	2.3
Q3	0.7	1.7	0.6	0.3	0.9	1.1	0.3
Q4	0.7	0.8	1.1	0.3	0.2	0.2	-0.1
2004 Q1	1.0	2.4	2.0	-1.9	0.5	0.0	-0.2
Q2	1.0	3.0	0.2	0.8	0.3	-0.1	0.7
Percentage change, latest quarter on corresponding quarter of previous year							
1999 Q1	4.7	3.5	0.2	4.0	..	0.4	5.2
Q2	5.1	4.8	-0.3	2.8	..	0.3	4.6
Q3	5.8	5.2	2.7	4.0	4.4	0.3	3.4
Q4	6.2	5.9	4.2	5.9	4.2	0.6	3.0
2000 Q1	5.9	8.3	4.7	0.3	2.6	0.7	2.5
Q2	5.9	6.5	4.8	7.4	2.8	1.0	2.1
Q3	5.4	5.7	2.6	7.8	2.7	1.3	2.2
Q4	5.5	5.6	0.2	5.1	1.5	2.1	2.4
2001 Q1	6.3	3.5	-2.8	5.4	2.6	2.4	3.5
Q2	6.5	2.3	-6.0	7.1	2.6	4.7	7.0
Q3	6.6	1.4	-5.8	3.3	2.1	4.3	8.6
Q4	6.5	0.5	-5.8	1.0	3.3	3.8	9.3
2002 Q1	5.3	-0.4	-3.2	-1.4	4.0	4.2	8.6
Q2	4.7	0.1	-0.2	-6.1	3.8	2.0	4.8
Q3	3.8	1.0	0.3	-2.0	4.2	3.1	3.4
Q4	3.4	2.0	1.9	1.4	5.1	3.8	1.9
2003 Q1	3.5	2.4	0.3	6.1	2.6	3.7	1.6
Q2	4.3	2.8	-7.2	7.0	2.6	4.0	3.7
Q3	4.6	3.6	-6.8	5.7	3.2	3.8	3.6
Q4	4.1	3.6	-6.7	5.6	2.2	2.8	3.6
2004 Q1	4.3	5.9	-3.8	0.5	1.9	1.8	2.3
Q2	3.4	8.1	4.0	-0.5	2.1	1.2	0.8

Table 2 – continued

Corporate Services Price Indices (Experimental) (2000=100)

	Security services	Industrial cleaning	Commercial film processing	Contract packaging hire	Direct marketing & secretarial services	Translation & interpretation services
SIC(2003)	74.60/2	74.7	74.81/9	74.82	74.83(pt)	74.83(pt)
2000 weights (per cent)						
Gross sector	1.97	2.35	0.16	0.59	0.33	0.05
Net sector	2.48	2.36	0.20	1.33	0.34	0.05
Annual						
1999	97.9	99.3	99.8	98.8	98.7	100.2
2000	100.0	100.0	100.0	100.0	100.0	100.0
2001	104.4	101.1	99.9	101.8	101.2	99.6
2002	108.2	104.0	99.9	103.1	99.7	101.5
2003	113.8	106.9	103.4	109.3	100.4	102.6
Percentage change, latest year on previous year						
1999	1.7	1.0	0.2	..	0.3	0.8
2000	2.1	0.7	0.2	1.2	1.3	-0.2
2001	4.4	1.1	-0.1	1.8	1.2	-0.4
2002	3.6	2.9	0.0	1.3	-1.5	1.9
2003	5.2	2.7	3.5	6.0	0.7	1.1
Quarterly results (not seasonally adjusted)						
1999 Q1	97.3	98.8	99.8	98.9	97.8	100.2
Q2	97.7	99.1	99.9	98.8	99.4	100.2
Q3	98.1	99.5	99.9	98.8	98.9	100.2
Q4	98.6	99.7	99.9	98.8	98.8	100.2
2000 Q1	99.0	99.9	99.9	99.6	99.9	100.2
Q2	99.7	100.0	100.0	99.4	99.9	100.2
Q3	100.4	100.0	100.0	100.7	100.3	99.9
Q4	100.9	100.1	100.0	100.3	99.9	99.6
2001 Q1	102.1	99.9	100.0	101.1	100.6	99.7
Q2	103.8	100.6	100.1	101.3	101.5	99.7
Q3	105.4	100.9	99.8	102.3	101.3	99.4
Q4	106.3	103.1	99.8	102.4	101.5	99.5
2002 Q1	107.4	103.5	99.9	102.5	100.9	101.4
Q2	107.7	103.9	99.9	102.4	99.3	101.5
Q3	108.3	104.0	99.9	103.2	99.3	101.4
Q4	109.3	104.8	99.9	104.2	99.3	101.6
2003 Q1	111.8	105.6	100.1	105.0	99.7	102.3
Q2	113.0	105.8	99.5	109.7	99.6	102.7
Q3	114.2	107.8	105.4	110.9	100.9	102.7
Q4	116.2	108.3	108.8	111.6	101.5	102.7
2004 Q1	117.2	108.6	109.3	111.8	101.5	108.0
Q2	117.7	109.7	107.1	110.5	101.5	108.0

Table 2 – continued

	Security services	Industrial cleaning	Commercial film processing	Contract packaging hire	Direct marketing & secretarial services	Translation & interpretation services
SIC(2003)	74.60/2	74.7	74.81/9	74.82	74.83(pt)	74.83(pt)
Percentage change, latest quarter on previous quarter						
1999 Q1	0.1	0.3	0.1	..	0.3	0.5
Q2	0.4	0.3	0.1	-0.1	1.7	0.1
Q3	0.4	0.4	0.0	0.0	-0.5	0.0
Q4	0.5	0.2	0.0	0.0	-0.1	0.0
2000 Q1	0.4	0.2	0.1	0.8	1.1	0.0
Q2	0.7	0.2	0.1	-0.2	0.0	0.0
Q3	0.7	0.0	0.0	1.3	0.5	-0.4
Q4	0.5	0.1	0.0	-0.4	-0.4	-0.2
2001 Q1	1.2	-0.2	0.0	0.8	0.7	0.0
Q2	1.7	0.7	0.0	0.2	0.9	0.0
Q3	1.5	0.3	-0.3	1.0	-0.2	-0.3
Q4	0.9	2.2	0.0	0.1	0.2	0.2
2002 Q1	1.0	0.4	0.2	0.1	-0.6	1.8
Q2	0.3	0.4	0.0	0.0	-1.6	0.1
Q3	0.5	0.1	0.0	0.8	-0.1	0.0
Q4	0.9	0.8	0.0	0.9	0.0	0.2
2003 Q1	2.3	0.8	0.1	0.8	0.4	0.6
Q2	1.0	0.2	-0.6	4.5	-0.1	0.5
Q3	1.1	1.8	6.0	1.0	1.3	0.0
Q4	1.8	0.5	3.2	0.6	0.6	0.0
2004 Q1	0.8	0.3	0.5	0.2	0.0	5.2
Q2	0.4	1.0	-2.0	-1.2	-0.1	0.0
Percentage change, latest quarter on corresponding quarter of previous year						
1999 Q1	2.3	1.1	0.2	..	-0.6	0.9
Q2	2.0	1.0	0.2	..	0.1	0.9
Q3	1.3	1.0	0.1	..	0.3	0.8
Q4	1.4	1.1	0.1	..	1.4	0.6
2000 Q1	1.7	1.0	0.1	0.7	2.2	0.1
Q2	2.1	0.9	0.1	0.6	0.4	0.0
Q3	2.3	0.5	0.2	1.9	1.5	-0.3
Q4	2.3	0.4	0.2	1.5	1.1	-0.6
2001 Q1	3.1	0.0	0.1	1.5	0.7	-0.6
Q2	4.2	0.5	0.1	1.9	1.7	-0.6
Q3	5.0	0.8	-0.3	1.6	1.0	-0.5
Q4	5.3	3.0	-0.3	2.1	1.6	-0.1
2002 Q1	5.2	3.6	-0.1	1.4	0.3	1.7
Q2	3.8	3.3	-0.1	1.1	-2.1	1.8
Q3	2.8	3.1	0.2	0.9	-2.0	2.1
Q4	2.9	1.7	0.2	1.7	-2.2	2.1
2003 Q1	4.1	2.1	0.1	2.5	-1.2	0.9
Q2	4.8	1.9	-0.5	7.1	0.3	1.3
Q3	5.4	3.7	5.4	7.4	1.7	1.3
Q4	6.3	3.3	8.8	7.1	2.3	1.1
2004 Q1	4.8	2.8	9.2	6.4	1.8	5.6
Q2	4.2	3.7	7.7	0.7	1.8	5.2

Table 2 – continued

Corporate Services Price Indices (Experimental) (2000=100)

		Adult education	Sewerage services*	Waste disposal	Commercial washing & dry cleaning	TOP –LEVEL CSPI	
						Gross sector	Net sector
SIC(2003)		80.42	90.00/1	90.00/2	93.01		
2000 weights (per cent)							
Gross sector		1.53	2.27	1.43	0.67	100	
Net sector		1.54	3.99	2.52	0.68		100
Annual							
	1999	97.7	109.6	95.3	100.3	99.7	98.2
	2000	100.0	100.0	100.0	100.0	100.0	100.0
	2001	103.9	98.3	105.3	101.2	102.7	102.9
	2002	106.8	99.1	111.3	102.0	104.8	104.9
	2003	111.5	102.7	118.6	102.4	107.7	108.1
Percentage change, latest year on previous year							
	1999	2.0	3.2	2.6	0.9	-2.0	-0.1
	2000	2.3	-8.7	4.9	-0.3	0.3	1.8
	2001	3.9	-1.7	5.3	1.2	2.7	2.9
	2002	2.7	0.8	5.7	0.9	2.1	1.9
	2003	4.5	3.7	6.5	0.3	2.7	3.1
Quarterly results (not seasonally adjusted)							
	1999 Q1	97.3	107.1	93.1	100.0	100.4	98.1
	Q2	97.6	110.4	95.5	101.0	99.8	98.0
	Q3	97.8	110.4	96.3	101.1	99.3	98.1
	Q4	98.3	110.4	96.3	99.1	99.4	98.7
	2000 Q1	99.5	110.4	99.2	99.7	99.8	99.5
	Q2	99.5	96.5	100.4	100.2	99.6	99.5
	Q3	100.3	96.5	100.2	100.4	100.2	100.3
	Q4	100.8	96.5	100.2	99.8	100.3	100.7
	2001 Q1	101.4	96.5	101.8	100.3	101.3	101.6
	Q2	104.6	98.9	104.7	101.1	102.7	103.1
	Q3	104.6	98.9	106.8	101.2	103.2	103.3
	Q4	105.1	98.9	107.9	102.0	103.5	103.7
	2002 Q1	106.0	98.9	108.0	102.4	103.6	103.7
	Q2	106.3	99.1	110.9	102.1	104.5	104.6
	Q3	107.3	99.1	111.3	102.5	105.3	105.2
	Q4	107.4	99.1	115.0	101.1	105.8	106.0
	2003 Q1	108.1	99.1	115.7	102.4	106.3	106.8
	Q2	110.3	104.0	119.8	102.2	107.6	108.0
	Q3	112.9	104.0	119.4	102.2	108.2	108.6
	Q4	114.8	104.0	119.5	102.7	108.6	109.2
	2004 Q1	117.3	104.0	120.0	105.0	108.8	109.4
	Q2	117.3	110.4	125.5	105.0	110.0	110.6

Table 2 – continued

	Adult education	Sewerage services*	Waste disposal	Commercial washing & dry cleaning	TOP –LEVEL CSPI	
					Gross sector	Net sector
SIC(2003)	80.42	90.00/1	90.00/2	93.01		
Percentage change, latest quarter on previous quarter						
1999 Q1	1.0	0.0	0.2	0.8	-0.1	0.2
Q2	0.3	3.0	2.6	1.0	-0.6	-0.1
Q3	0.2	0.0	0.8	0.1	-0.4	0.1
Q4	0.5	0.0	0.0	-2.1	0.1	0.6
2000 Q1	1.2	0.0	3.0	0.6	0.4	0.8
Q2	0.1	-12.5	1.2	0.5	-0.2	0.1
Q3	0.8	0.0	-0.2	0.2	0.6	0.8
Q4	0.5	0.0	-0.1	-0.6	0.1	0.4
2001 Q1	0.7	0.0	1.6	0.5	0.9	1.0
Q2	3.1	2.5	2.9	0.8	1.4	1.4
Q3	0.0	0.0	2.0	0.1	0.5	0.2
Q4	0.5	0.0	1.0	0.8	0.3	0.4
2002 Q1	0.8	0.0	0.1	0.4	0.1	0.0
Q2	0.3	0.2	2.7	-0.2	0.9	0.8
Q3	0.9	0.0	0.3	0.4	0.8	0.6
Q4	0.1	0.0	3.3	-1.4	0.5	0.8
2003 Q1	0.6	0.0	0.6	1.3	0.4	0.7
Q2	2.1	4.9	3.6	-0.2	1.2	1.2
Q3	2.4	0.0	-0.3	0.0	0.6	0.5
Q4	1.6	0.0	0.1	0.5	0.4	0.5
2004 Q1	2.2	0.0	0.4	2.3	0.1	0.2
Q2	0.0	6.2	4.5	0.0	1.1	1.1
Percentage change, latest quarter on corresponding quarter of previous year						
1999 Q1	2.5	3.5	0.5	1.6	-2.0	-0.4
Q2	2.0	3.0	2.6	1.1	-2.0	-0.3
Q3	1.7	3.0	3.8	0.9	-2.7	-0.4
Q4	2.0	3.0	3.6	-0.1	-1.1	0.8
2000 Q1	2.2	3.0	6.5	-0.3	-0.5	1.4
Q2	2.0	-12.5	5.1	-0.8	-0.2	1.6
Q3	2.5	-12.5	4.1	-0.7	0.9	2.2
Q4	2.5	-12.5	4.0	0.7	0.9	2.0
2001 Q1	2.0	-12.5	2.6	0.6	1.4	2.2
Q2	5.1	2.5	4.3	0.9	3.1	3.6
Q3	4.3	2.5	6.6	0.9	3.0	3.0
Q4	4.3	2.5	7.7	2.2	3.2	3.0
2002 Q1	4.5	2.5	6.1	2.1	2.3	2.0
Q2	1.7	0.2	5.9	1.0	1.7	1.4
Q3	2.6	0.2	4.2	1.3	2.0	1.8
Q4	2.2	0.2	6.6	-0.9	2.2	2.2
2003 Q1	2.0	0.2	7.1	0.0	2.6	2.9
Q2	3.8	4.9	7.9	0.1	3.0	3.3
Q3	5.3	4.9	7.3	-0.3	2.8	3.2
Q4	6.8	4.9	3.9	1.5	2.7	3.0
2004 Q1	8.6	4.9	3.8	2.6	2.4	2.4
Q2	6.3	6.2	4.8	2.7	2.2	2.4

Research and experimental development (R&D) statistics, 2002

Julie Owens
Office for National Statistics

In 2002 Gross Domestic Expenditure on R&D (GERD) was 1.85 per cent of GDP, very similar to 2001. In terms of international comparisons in 2002 the UK was just below the EU average of 1.93 per cent.

Within the UK, net expenditure in real terms on R&D by government peaked in 1980/81. Since then there was a gradual downward trend until 1998/99, after which point the expenditure for subsequent years has slightly increased. The overall level of net government expenditure on defence R&D has fallen from 39 per cent in 1994 to 34 per cent in 2002.

Expenditure in real terms performed by the business sector has increased by three per cent on the 2001 total. Within the manufacturing sector, the chemicals broad product group has the largest share of R&D expenditure at 38 per cent. The services sector accounts for 20 per cent of total R&D expenditure.

Within the regions, spending is highest in the South East for both the business and government sectors.

Summary of trends

- Measuring expenditure and employment of R&D is difficult because of the subjective judgements that have to be made about the dividing line between R&D and other activities. There are discontinuities in the series arising from the interpretation of definitions, and because of changes in the actual or perceived status of organisations (Chapter 1 of *Science, Engineering and Technology Statistics* 2004,¹ details this). Some general conclusions can be drawn, but significance should not be given to small percentage changes between years.
- In 2002 Gross Domestic Expenditure on R&D (GERD) was 1.85 per cent of GDP, very similar to 2001 (see Table 2). In terms of international comparisons in 2002 the UK was just below the EU average of 1.93 per cent.⁵
- Within the UK, net expenditure in real terms on R&D by government peaked in 1980/81. Since then there was a gradual downward trend until 1998/99, after which point the expenditure for subsequent years has slightly increased (Table 4). The overall level of net government expenditure on defence R&D has fallen from 39 per cent in 1994 to 34 per cent in 2002 (see Table 6).
- Expenditure in real terms performed by the business sector has increased by three per cent on the 2001 total (see Table 7).
- Within the manufacturing sector, the chemicals broad product group has the largest share of R&D expenditure at 38 per cent. The services sector accounts for 20 per cent of total R&D expenditure (see Table 8).
- Within the regions, spending is highest in the South East for both the business and government sectors (Table 14).

Background

This article is the latest in an annual series; the previous article was published in the August 2003 edition of *Economic Trends*.⁸ Most of the figures have already been published by the Office for National Statistics (ONS), the Department of Trade and Industry (Office of Science and Technology) or the Organisation for Economic Co-operation and Development (OECD).^{1,2,4,5} The purpose of this report is to bring together a range of data produced and published by ONS in a single annual article and our aim is to continue to inform and stimulate debate within the R&D community.

The R&D statistics published here are consistent with OECD's *Frascati Manual*³ which defines Research and Experimental Development (R&D) and gives guidelines on how to measure expenditure and employment on R&D. The manual is applied throughout the OECD so it is possible to make comparisons between countries.^{5,6}

R&D is defined as creative work undertaken systematically to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this knowledge to devise new applications.

List of tables

UK Gross expenditure on R&D (GERD)

- Table 1. Gross expenditure on civil and defence R&D performed in the UK in 2002
 Table 2. GERD by performing sector, 1994 to 2002
 Table 3. GERD by source of funds, 1994 to 2002

Historical R&D

- Table 4. Total net Government expenditure on R&D, in cash and real terms, 1966/67 to 2002/03

Government R&D

- Table 5. Analysis of Government Intramural expenditure, 2002/03
 Table 6. Analysis of net Government R&D expenditure by Frascati type of research activity, 1994/95 to 2002/03

Business Enterprise R&D (BERD)

- Table 7. Business Enterprise R&D, in cash and real terms, 1966 to 2002
 Table 8. Expenditure on R&D performed by in UK businesses: broad product groups, in cash and real terms 1994 to 2002
 Table 9. Expenditure on civil and defence R&D performed by Business Enterprises in cash terms, 1995 to 2002
 Table 10. Sources of funds for Business Enterprise R&D, 1994 to 2002
 Table 11. Intramural expenditure on R&D performed by UK businesses, detailed product groups, 1994 to 2002
 Table 12. Current and capital expenditure, and as a percentage, on R&D performed in UK Businesses, detailed product groups, 2002

Personnel engaged in R&D

- Table 13. Government and Business Enterprise personnel engaged on R&D in the UK, 1994 to 2002

Regional R&D

- Table 14. Estimated GOR regional breakdown of expenditure on intramural R&D in the Business, Government and Higher Education sectors, 2002
 Table 15. Estimated regional breakdown of personnel engaged on R&D in the Business and Government sectors, 2002

International Comparisons of R&D

- Table 16. OECD Science & Technology indicators. Gross Expenditure on R&D: International Comparisons, 1994 to 2002; GDP £ billion at ppp's, GERD £ billion at ppp's, GERD, BERD, GOVERD and HERD as a percentage of GDP.
 Table 17. International comparisons of Gross Expenditure on R&D by sector of performance and source of funding, 2002
 Table 18. R&D performed in the Business Expenditure sector, 1994 to 2002
 Table 19. International comparisons of Government funding of R&D in 2002 by Socio-economic objective (percentage distribution)

Care should be exercised when using R&D statistics for economic analysis. R&D can lead to the technological inventions that are necessary for a successful, innovative economy. However, such inventions are not a sufficient condition for success – many other economic and social factors are important. Undue weight should not be given to the economic significance of R&D's role as a generator of inventions. On the other hand, the economic benefit of R&D is not limited to that role: R&D develops skills and techniques that are important for any economy.

Sources of information

Performers and funders of R&D are divided into four economic sectors: Government, Business, Higher Education Institutions (HEIs), and the Private Non-Profit (PNP) sector. Definitions are provided at the end of this article.

ONS conducts an annual survey of Central Government R&D, which is addressed to all Government departments. The survey collects data on expenditure and employment for outturn and planning years. The latest detailed results will be published in OST's *Science, Engineering and Technology Statistics 2004 (SET 2004)*.¹ This document will be available on OST's website at <http://www.dti.gov.uk/ost/>.

ONS also conducts an annual survey of R&D in businesses. As in previous years the 2002 survey used a sample survey to minimise burdens on contributors. The register of R&D performers is continually updated and results and detailed methodology notes can be found in the ONS publication *Research and development in UK businesses 2002 (MA14)*.²

Statistics on expenditure on and employment in R&D by Higher Education Institutions (HEIs) are based on

information collected by Higher Education Funding Councils and HESA (Higher Education Statistics Agency). In 1994 a new methodology was introduced to estimate expenditure on R&D by HEIs. This was based on the allocation of various Funding Council Grants. Full details of the new methodology will be contained in *SET 2004*.¹

The tables

Gross Domestic Expenditure on R&D (GERD) (Tables 1–3)

These tables show the performers and funders of R&D in the UK. Measuring expenditure on R&D performed within each sector avoids problems of omission and double counting that can arise when measuring funds provided for R&D. GERD is the sum of R&D performed in the four sectors. Tables 1 and 2 show that UK GERD in 2002 was £19.6 billion in cash terms. GERD is often quoted as a percentage of GDP when making international comparisons. In 2002 UK GERD was 1.85 per cent of GDP, similar to the previous year's figure, but below the provisional OECD estimate for the EU average of 1.93 per cent.

Table 1 shows the interaction between R&D funders and performers. For example £13.1 billion was spent on R&D in the business sector. Of this, £0.9 billion was provided by the government, £3.6 billion came from abroad and £8.7 billion was funded by businesses from their own sources. Funds from abroad include those from overseas parent companies, contracts for R&D projects, support for R&D provided through European Union schemes and international collaborative projects typically for aerospace or defence projects.

Figure 1 shows that the business sector is the most important sector of the economy in terms of providing funds for and carrying out R&D.

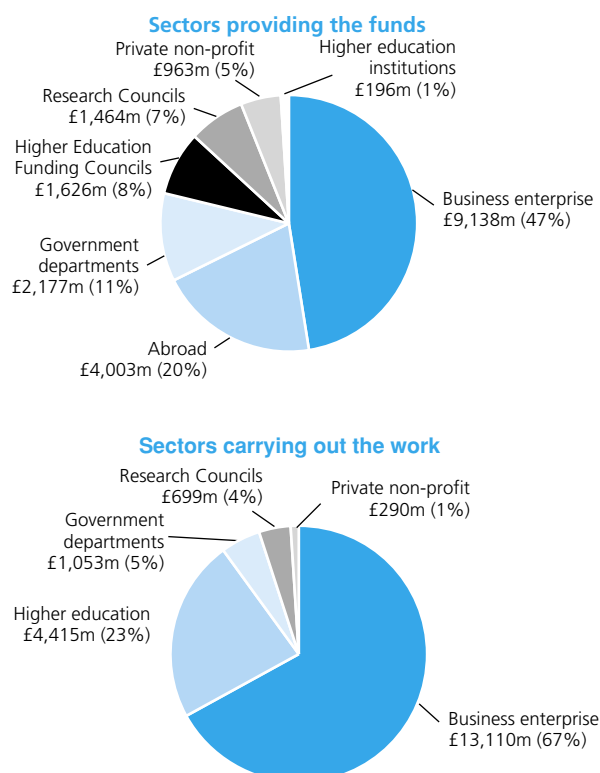
Government R&D expenditure (Tables 4–6, 17 and 19)

A department's net expenditure on R&D is its expenditure on R&D performed within the department (intramural), *plus* its expenditure on R&D outside the department (extramural), *minus* receipts for R&D.

The sum of a department's net expenditure is the R&D element of the government's budget expenditure. This is used for international comparisons of Government appropriations for R&D (for example, Table 17). The UK has a high proportion of Central Government expenditure devoted to R&D for defence purposes (see Table 19).

Figures in Tables 4 and 6 for Government's net expenditure on R&D differ from Government funding figures in Tables 1 and 3. This is because Tables 1 to 3 are based on information supplied by R&D (**performers**) whilst Tables 4 to 6 contain expenditure figures reported by Government departments (**funders**). The gap is mainly accounted for by differences in the reporting of Government contracts with businesses for certain types of defence R&D and R&D performed abroad but funded by the UK Government. In addition, the difference is

Figure 1
Gross expenditure on R&D in the UK, by sectors, 2002



also attributed to other factors such as time lag problems due to differences in accounting periods and not all monies given being used in that financial period, treatment of VAT and subcontracting of R&D work.

R&D in NHS hospitals previously included in Table 5 on the basis of the Culyer report⁷, are now reported as extramural expenditure. The figures for Central Government intramural R&D in Table 5 are lower than those performed by the government sector in Tables 1 and 2. This is because the latter includes estimates for a small amount of R&D not collected by the Government survey and R&D performed by local authorities.

Table 4 shows a time series dating back to 1966/67. This shows that in 2002/03 the net Government expenditure on R&D (by civil and defence departments) was £7.6 billion, a 16 per cent increase in cash terms on 2001/02. In real terms, spending on R&D was flat in the late sixties but rose in the seventies to a peak in 1980/81. Since then it has declined, although spending in 2002–03 was still greater than in 1966–67.

Table 5 shows the breakdown of departmental intramural expenditure (see Figure 2); the current (which is also shown by Frascati type of research) and capital expenditure. Figure 2 shows that 92 per cent (£1.2 billion) of intramural expenditure is current expenditure. Applied research accounts for 50 per cent of the total intramural expenditure. Total intramural expenditure is further broken down in Table 5 into Social Science & Humanities (SSH) and Natural Science & Engineering (NSE) research.

Figure 2
Analysis of Central Government intramural expenditure 2002–03

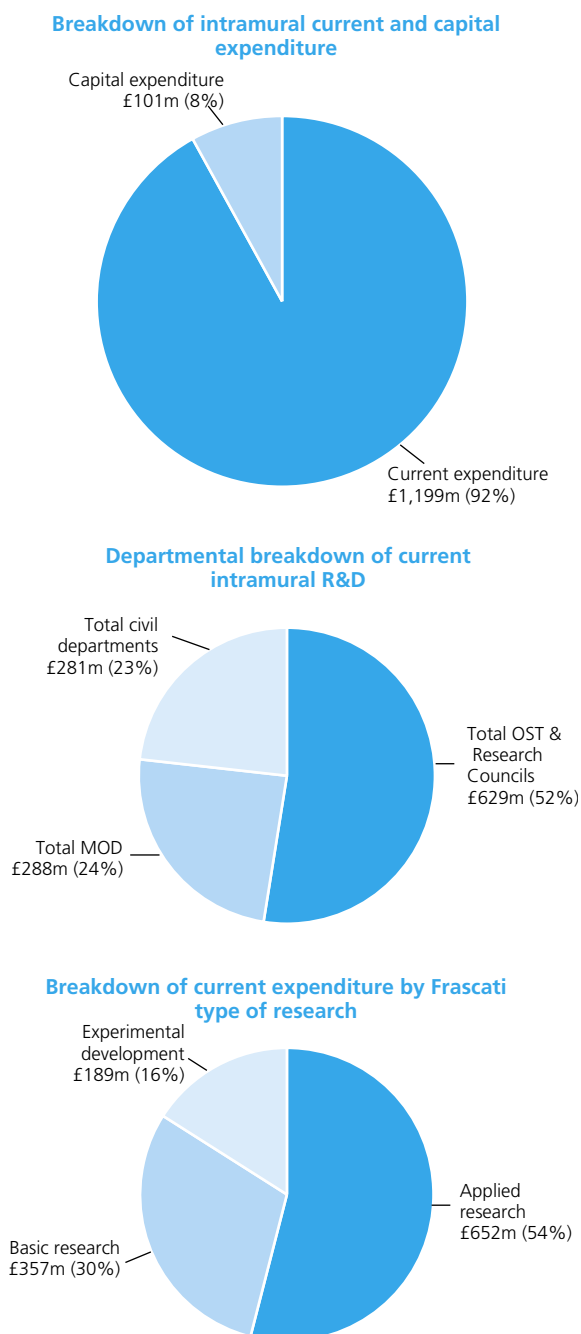


Table 6 provides an analysis of net government R&D expenditure by Frascati type of research activity for the period 1994/95 to 2002/03. There has been an 11 per cent increase in basic research and also an 11 per cent increase in applied research between 2001/02 and 2002/03. In 2002/03 defence expenditure accounted for 34 per cent of total expenditure.

R&D performed by the Business Sector (Tables 7–12)

Table 7 and Figure 3 show a time series dating back to 1966 for expenditure performed by the Business sector. They show that in 2002 R&D expenditure was £13.1 billion. Expenditure in real terms in the business sector has increased by 91 per cent on 1966 figures.

Figure 3
Net business enterprise expenditure on R&D, in cash and real terms, 1966–2002

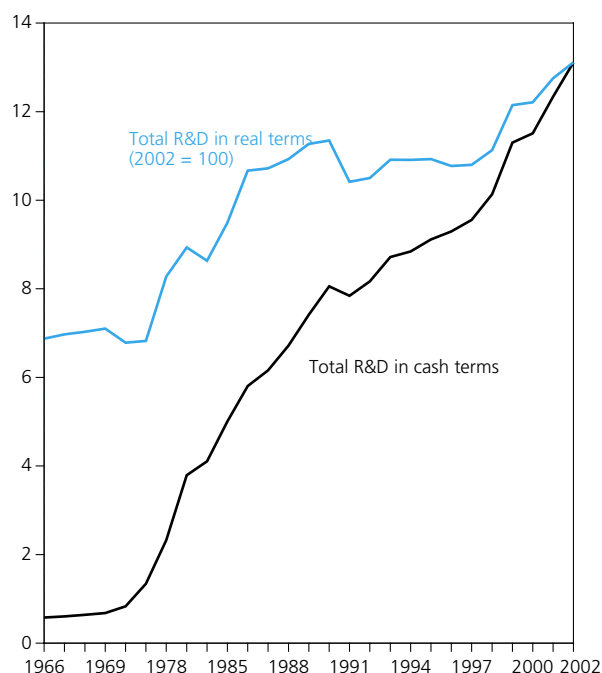


Table 8 shows that within the business sector, the services broad product group accounted for 20 per cent of the total expenditure in 2002, a rise of 2 per cent on 2001. In the manufacturing sector the pharmaceuticals and chemicals broad product group had the largest share of R&D expenditure at 30 per cent of total R&D expenditure.

Statistics for civil and defence R&D have been collected separately since 1989. Defence includes all R&D programmes undertaken primarily for defence reasons, regardless of their content or whether they have secondary civil applications.

In 2002, civil R&D represented 87 per cent of all R&D expenditure performed by business (see Table 9). Table 10 and Figure 4 show that, in 2002, 72 per cent of civil R&D performed by businesses was funded by businesses themselves. Government funded 2 per cent of civil R&D, whereas it funded 42 per cent of defence R&D.

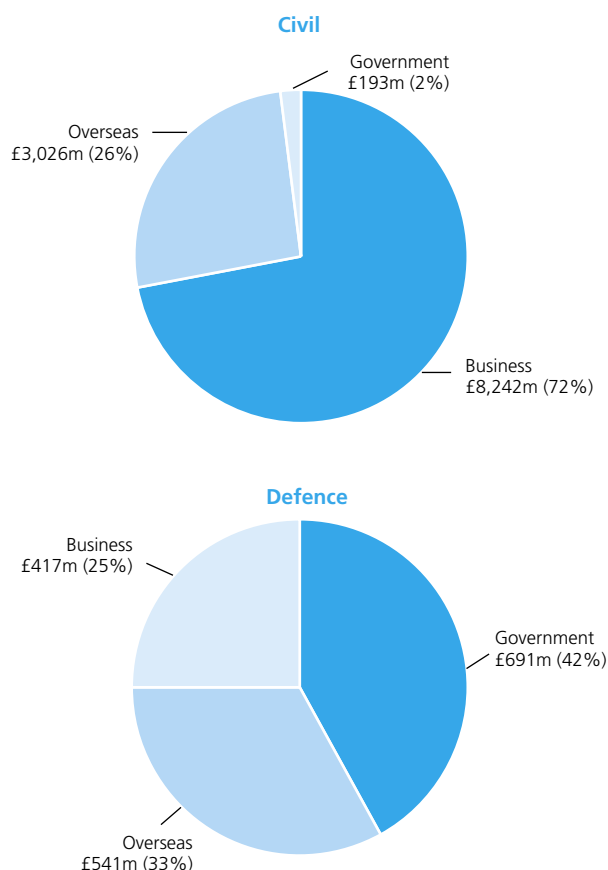
A breakdown into detailed product groups is shown in Tables 11 and 12. The product group with the largest expenditure is pharmaceuticals, medical chemicals and botanical products, which accounted for £3.3 billion in 2002, followed by Aerospace at £1.3 billion.

Table 12 shows the split of current and capital expenditure on R&D performed by UK businesses. Current expenditure is the sum of salaries and wages, basic and applied research and experimental development. Capital is the expenditure on land, buildings, plant and machinery.

R&D employment – Government and Business Enterprise (Table 13)

Between 2001 and 2002, employment rates have remained at similar levels.

Figure 4

Source of funds for Business Enterprise R&D, 2002**Regional R&D statistics (Tables 14–15)**

Regional estimates for the Government and Business sectors are derived from the ONS surveys of Government and Business Enterprises.

The Higher Education Institutions (HEI) regional R&D estimates are less reliable and should be treated with special caution. The expenditure estimates are obtained by allocating total R&D performed by HEIs (HERD) to individual HEIs in proportion to their income from research grants and contracts. An estimate of the labour force in Full Time Equivalents (FTE) is not available.

Estimates are given for UK Government Office Regions (GOR). Of the 12 GOR regions the South East of England has the highest number of R&D personnel and the largest expenditure on R&D. To adjust for this the R&D personnel estimates are shown as a percentage of the labour force (see Figure 6). Tables 14 and 15 show that, within the UK, the Eastern and South East have the highest concentration of R&D expenditure performed by business. For the Government sector the highest regions are the South East and the Eastern region, whilst for the Higher Education Sector, London, the South East and Scotland are prominent (see Figure 5). In terms of personnel estimates as a percentage of the labour force (see Figure 6), the Eastern and South East regions are prominent in both the Business sector and Government sector.

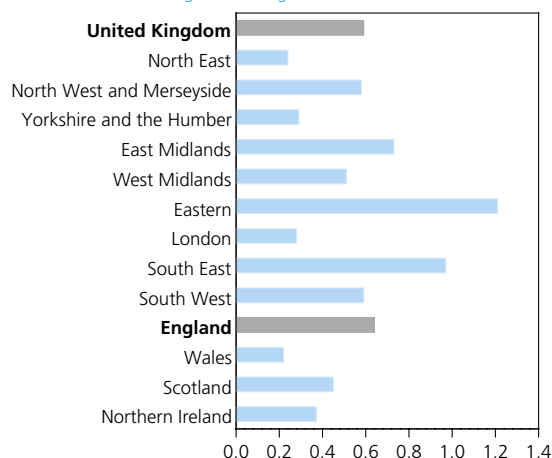
Figure 5

(i) Estimated regional (GOR) BERD in 2002**(ii) Estimated regional (GOR) GOVERD in 2002****(iii) Estimated regional (GOR) HERD in 2002**

Figure 6

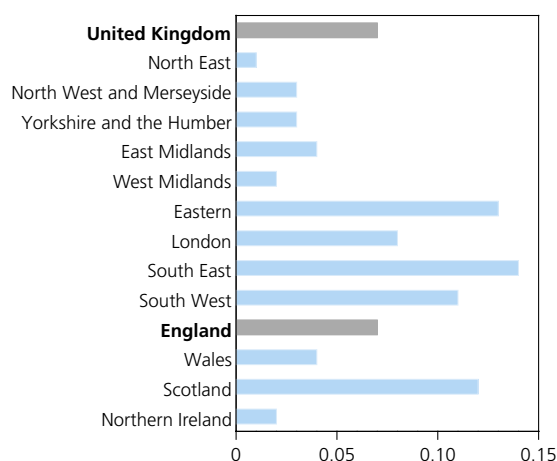
(i) Estimated regional (GOR) BERD in 2002

Percentage of the regional Labour Force



(ii) Estimated regional (GOR) Government R&D in 2002

Percentage of the regional Labour Force



International comparisons of R&D (Tables 16–19)

Although the guidelines in the Frascati Manual are generally followed, methods of collecting R&D data do vary from country to country (⁵ discusses national variations). Therefore small differences should not be treated as significant when making international comparisons.

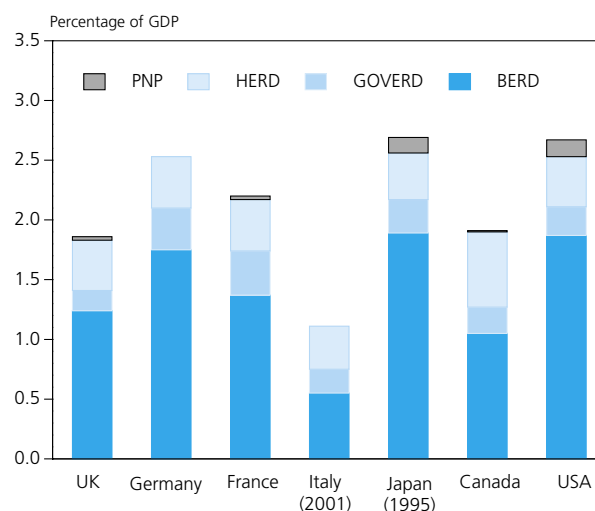
The figures shown for Japan in the tables are estimated by OECD.

Table 16 shows gross expenditure on R&D as a percentage of GDP for the G7 countries over the time period 1994 to 2002. The ratio for GERD has been fairly constant over this time for most of the countries. Figure 7 shows the position in 2002. The UK was ranked 6th. Table 16 also shows BERD and GOVERD as a percentage of GDP.

Table 17 shows the international comparisons of GERD by sector of performance and source of funding. Table 18 shows R&D performed in the business sector. Table 16 also shows this as a percentage of GDP; Japan and the USA spend most as a percentage of GDP. International comparison of

Figure 7

Comparison of BERD, GOVERD, HERD and PNP as a percentage of GDP, 2002



Government funding of R&D in 2002 by socio-economic objective is shown in Table 19. Of the G7 countries, the USA and the UK devoted the highest proportion of their total Government funding of R&D to defence. For Germany, Italy and Japan about half of their total Government funding of R&D was classified as the advancement of knowledge compared to approximately a third for the UK.

Definitions

Type of R&D

Basic or fundamental research is experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any particular application or use in view.

Applied research is research undertaken with either a general or a particular application in view.

Experimental Development is the use of the results of basic and applied research directed to the introduction of new materials, processes, products, devices and systems, or the improvement of existing ones. It should include the prototype or pilot plant stage, design and drawing required during R&D and innovative work done on contracts with outside organisations, government departments, and public bodies. Firms in the aerospace industry are asked to include expenditure on development batches.

Sectors of the Economy

The four sectors of the economy are defined in an ONS publication.⁴ However higher education is identified separately as recommended in the Frascati Manual.

Central Government includes the central government departments, research councils, higher education funding councils, NDPBs, and Executive Agencies.

Business Enterprises include private businesses, public corporations, and research associations serving businesses.

Higher Education includes the former polytechnics and central institutions in Scotland as well as the old universities.

Private Non-Profit sector makes up the remainder and includes medical research charities.

Regional data

Data are classified according to the Government Office Regions (GOR).

Rounding

Throughout the tables components of totals have been rounded independently of the totals. Therefore the rounded totals will not always be equal to the sums of the rounded components. Symbols follow the conventions used elsewhere in *Economic Trends*.

Revisions and Discontinuities

In the Government Tables, a new method for estimating Government-funded R&D in HE was introduced in 1994/95. Whilst it has been possible to adjust 1993/94 figures it has not been possible to revise the data for previous years because of structural changes in the HE sector.

Government figures in some tables (see Table footnotes) for 1995/96 onwards, now include NHS Hospital R&D estimates for the first time.

The 2001 Business Survey results have been revised where necessary to take account of company misreporting. Full details on the revisions were included in the ONS First Release published on 28 November 2003.⁹

Figures relating to gross expenditure on R&D published in the ONS First Release on 26 March 2004 have been revised slightly due to government department amendments.

Regional data are published using GOR regions and these should not be compared to Nomenclature of Units for Territorial Statistics (NUTS) regional data previously published in this annual article.

Data Analysis Service

ONS is now able to offer additional analyses on R&D statistics, for example, sizeband and regional breakdowns. The contact for this service is:

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Tel: 01633 812789

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For further information on:	ONS Contacts:
Business R&D ²	Julie Owens Tel. 01633 812789
Information on aggregated R&D data	Julie Owens Tel. 01633 812789
Definitions of R&D ³	Julie Owens Tel. 01633 812789
GERD ⁴	Julie Owens Tel. 01633 812789
General information on Science & Technology ¹	Steve Churchill Tel. 01633 812003
International comparisons ^{5, 6, 8}	Steve Churchill Tel. 01633 812003

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Abbreviations

BERD	Business Expenditure on R&D
EU	European Union
EUROSTAT	The Statistical Office of the European Communities
FTE	Full Time Equivalent
G7	Group of Seven countries, comprising: UK, Germany, France, Italy, Japan, Canada, USA
GDP	Gross Domestic Product
GERD	Gross (Domestic) Expenditure on R&D
GOVERD	Government Intramural Expenditure on R&D
GOR	Government Office Regions
HEFC	Higher Education Funding Council
HEIs	Higher Education Institutions
HERD	Higher Education Expenditure on R&D
HESA	Higher Education Statistics Agency
NDPB	Non-Departmental Public Body
NHS	National Health Service
NUTS	Nomenclature of Territorial Units for Statistics
OECD	Organisation for Economic Co-operation and Development
ONS	Office for National Statistics
OST	Office of Science and Technology (part of DTI since April 1996)
PPP	Purchasing Power Parities
PNP	Private Non-Profit
R&D	Research and (Experimental) Development

Table 1

Gross expenditure on civil and defence R&D performed in the UK in 2002¹

£ million

Sectors providing the funds ^{2,3}	Sectors carrying out the work ^{2,3}					Totals	Abroad
	Government departments ⁴	Research Councils	Higher education	Business enterprise	Private non-profit		
Government departments ⁴	871	150	252	876	29	2,177	179
Research Councils	7	398	1,036	8	15	1,464	149
Higher Education Funding Councils	–	–	1,626	–	–	1,626	
Higher education institutions	1	10	182	–	2	196	
Business enterprise	147	36	257	8,654	44	9,138	1,267
Private non-profit	11	61	714	4	174	963	
Abroad	17	44	348	3,567	26	4,003	
Total	1,053	699	4,415	13,110	290	19,567	n/a
Civil							
Government departments ⁴	621	144	244	185	29	1,222	162
Research Councils	7	398	1,036	8	15	1,464	149
Higher Education Funding Councils	–	–	1,626	–	–	1,626	
Higher education institutions	1	10	182	–	2	196	
Business enterprise	119	36	228	8,237	44	8,664	
Private non-profit	11	61	714	4	174	963	
Abroad	12	44	348	3,026	26	3,456	
Total	771	693	4,378	11,461	290	17,592	n/a
Defence							
Government departments ⁴	249	6	8	691	–	954	17
Research Councils	–	–	–	–	–	–	–
Higher Education Funding Councils	–	–	–	–	–	–	
Higher education institutions	0	–	–	–	–	0	
Business enterprise	28	–	29	417	–	474	
Private non-profit	–	–	–	–	–	–	
Abroad	6	–	–	541	–	547	
Total	283	6	37	1,649	–	1,975	n/a

General Note:

These estimates are derived from the ONS surveys of government and business enterprise R&D and from information from the HEFC. More details are in the ONS First Release Gross Domestic Expenditure on Research and Development, (GERD), published on 26 March 2004.

Notes:

1 Research in the social sciences and humanities is included.

2 The OECD terminology is used for describing the breakdown of GERD by sector.

3 Some of the numbers have been estimated.

4 The total for R&D performed by government includes estimates for a small amount of R&D not available from the Government Survey; R&D performed by local authorities. Since 1996 UK NHS figures have been obtained from the Department of Health and the Scottish Office on the basis of the Culyer report.

0 represents a value less than 0.5

– represents a nil value

Table 2

Gross expenditure on R&D in the UK by performing sector, 1994 to 2002¹

	£ million								
	1994	1995	1996	1997	1998	1999	2000	2001	2002
Expenditure in cash terms (£m):									
Performed by:									
Government	2,051	1,462	1,495	1,427	1,487	1,450	1,489	1,160	1,053
Research Councils	–	581	575	590	591	622	646	670	699
Business enterprise	8,842	9,116	9,297	9,556	10,133	11,302	11,510	12,336	13,110
Higher education	2,623	2,696	2,792	2,893	3,040	3,324	3,648	4,034	4,415
Private non-profit	168	177	177	190	203	231	255	269	290
Total	13,684	14,034	14,336	14,657	15,454	16,929	17,547	18,469	19,567
Expenditure in real terms (2002=100)² (£m):									
Performed by:									
Government	2,530	1,753	1,732	1,613	1,634	1,558	1,579	1,199	1,053
Research Councils	–	697	666	667	649	669	685	693	699
Business enterprise	10,909	10,929	10,774	10,800	11,131	12,147	12,212	12,755	13,110
Higher education	3,236	3,233	3,236	3,270	3,340	3,572	3,870	4,171	4,415
Private non-profit	208	213	205	215	223	248	271	278	290
Total	16,883	16,824	16,613	16,565	16,977	18,194	18,617	19,096	19,567
Total as percentage of GDP³	1.98	1.92	1.85	1.78	1.78	1.84	1.82	1.84	1.85

Notes:

1 See notes at Table 1.

2 GDP deflators are:

	1994	1995	1996	1997	1998	1999	2000	2001	2002
	81.1	83.4	86.3	88.5	91.0	93.0	94.3	96.7	100.0

3 Gross domestic product values are:

	£ million								
	1994	1995	1996	1997	1998	1999	2000	2001	2002
	690,575	729,389	774,140	823,599	869,275	919,696	963,508	1,005,150	1,055,190

Table 3

Gross expenditure on R&D in the UK by source of funds, 1994 to 2002^{1,2}

	£ million								
	1994	1995	1996	1997	1998	1999	2000	2001	2002
Sector providing funds									
Expenditure in cash terms (£m):									
Funded by:									
Government	4,479	2,514	2,402	2,332	2,535	2,601	2,547	2,440	2,177
Research Councils	—	1,078	1,092	1,135	1,117	1,185	1,250	1,358	1,464
Higher Education Funding Councils	—	1,018	1,027	1,033	1,085	1,157	1,276	1,474	1,626
Higher education	116	119	120	123	130	142	158	177	196
Business enterprise	6,886	6,765	6,817	7,321	7,356	8,213	8,648	8,740	9,138
Private non-profit	514	511	545	578	621	701	815	888	963
Abroad	1,689	2,029	2,331	2,136	2,610	2,929	2,854	3,392	4,003
Total	13,684	14,034	14,336	14,657	15,454	16,929	17,547	18,469	19,567
Expenditure in real terms (2002=100) (£m):									
Funded by:									
Government	5,526	3,014	2,783	2,635	2,784	2,795	2,702	2,523	2,177
Research Councils	—	1,292	1,266	1,282	1,227	1,274	1,326	1,404	1,464
Higher Education Funding Councils	—	1,220	1,191	1,167	1,192	1,244	1,354	1,523	1,626
Higher education	143	142	140	139	143	153	167	183	196
Business enterprise	8,496	8,110	7,900	8,274	8,081	8,827	9,175	9,037	9,138
Private non-profit	634	613	632	654	683	753	865	918	963
Abroad	2,084	2,433	2,702	2,414	2,867	3,147	3,028	3,507	4,003
Total	16,883	16,824	16,613	16,565	16,977	18,194	18,617	19,096	19,567
Total as percentage of GDP	1.98	1.92	1.85	1.78	1.78	1.84	1.82	1.84	1.85

Notes:

1 See notes at Table 1.

2 See notes at Table 2.

Table 4

Total net Government expenditure on R&D in cash terms and real terms, 1966/67 to 2002/03

Year	£ million	
	Total Net Government R&D	
	In cash terms excluding NHS figures	In real terms (2002=100) ¹
1966/67	486	5,760
1967/68	503	5,796
1968/69	531	5,842
1969/70	562	5,871
1970/71	606	5,843
1971/72	755	6,680
1972/73	847	6,916
1973/74	964	7,358
1974/75	1,169	7,464
1975/76	1,495	7,615
1976/77	1,647	7,396
1977/78	1,814	7,170
1978/79	2,097	7,467
1979/80	2,601	7,928
1980/81	3,184	8,214
1981/82	3,395	7,996
1982/83	3,519	7,741
1983/84	3,730	7,846
1984/85	3,964	7,924
1985/86	4,175	7,919
1986/87	4,255	7,820
1987/88	4,408	7,672
1988/89	4,497	7,316
1989/90	4,772	7,253
1990/91	4,955	6,981
1991/92	5,027	6,678
1992/93	5,078	6,530
1993/94	5,402	6,764
1994/95	5,200	6,416
1995/96 ²	5,295	6,348
1996/97 ²	5,351	6,202
1997/98 ²	5,504	6,221
1998/99 ²	5,304	5,827
1999/00 ²	5,782	6,214
2000/01 ²	6,166	6,542
2001/02 ²	6,329	6,544
2002/03 ²	7,617	7,617

Notes:

1 See note at Table 2.

2 Figures for NHS are available in SET 2003¹.

Table 5
Analysis of Government Intramural expenditure, 2002/03^{1,2}

£ million

	Current expenditure	Breakdown of current Frascati R&D expenditure			Capital expenditure	Total Intramural	SSH	NSE
		Basic	Applied	Experimental development				
OST – DTI	–	–	–	–	–	–	–	–
Research Councils								
BBSRC	151.0	51.2	99.8	–	19.4	170.4	–	170.4
ESRC	5.0	5.0	–	–	0.2	5.2	5.2	–
MRC	202.1	135.2	66.9	–	20.4	222.5	–	222.5
NERC	118.0	44.9	51.8	21.3	17.7	135.7	–	135.7
EPSRC	17.1	8.1	9.1	–	0.2	17.4	–	17.4
PPARC	33.7	30.3	3.4	–	4.4	38.1	–	38.1
CCLRC	102.1	25.3	76.8	–	24.4	126.5	–	126.5
Total OST & Research Councils	629.0	300.0	307.7	21.3	86.7	715.6	5.2	710.5
Higher Education Funding Councils	–	–	–	–	–	–	–	–
Total Higher Education Funding Councils	–	–	–	–	–	–	–	–
Civil departments								
DEFRA	92.4	20.4	71.0	1.1	6.0	98.4	0.8	97.6
DFES	6.8	–	1.6	5.2	–	6.8	6.8	–
ODPM	2.7	0.1	2.6	0.1	–	2.7	2.2	0.5
DFT	3.5	0.0	3.1	0.3	–	3.5	0.5	3.0
DH (includes NHS)	35.8	2.2	24.5	9.0	2.5	38.3	–	38.3
NHS ³	–	–	–	–	–	–	–	–
DWP (formerly DSS)	5.1	5.1	–	–	–	5.1	5.1	–
HSC	5.5	–	5.1	0.3	0.2	5.7	0.4	5.3
HO	25.0	–	21.4	3.6	2.0	27.0	13.7	13.3
DCMS (formerly DNH)	14.2	9.0	5.2	–	0.7	14.9	4.2	10.7
DFID (formerly ODA)	1.5	–	1.5	–	–	1.5	0.6	0.8
DTI (ex OST)	–	–	–	–	–	–	–	–
FSA	–	–	–	–	–	–	–	–
NI	6.3	0.3	5.8	0.2	0.5	6.8	0.6	6.2
SE (formerly SO)	56.1	18.7	36.2	1.2	0.2	56.3	2.2	54.0
NAW (formerly WO)	4.4	0.7	3.6	0.1	–	4.4	3.3	1.1
Other departments	22.2	0.9	17.8	3.5	2.6	24.8	5.7	19.0
Total civil departments	281.5	57.4	199.4	24.7	14.7	296.1	46.3	249.8
Total civil R&D	910.4	357.4	507.0	46.0	101.3	1,011.8	51.5	960.3
MoD	288.4	–	145.2	143.1	–	288.4	–	288.4
Total	1,198.8	357.4	652.3	189.1	101.3	1,300.1	51.5	1,248.6

Notes:

1 Excludes Research Councils' pensions/other costs.

2 Includes intramural R&D funded by other departments.

3 NHS expenditure figures are now reported as extramural.

4 Full departmental titles can be found under "Abbreviations" in the "Definitions" section.

Table 6

Analysis of net Government R&D expenditure by Frascati type of research activity, 1994/95 to 2002/03¹

	1994/95	1995/96 ²	1996/97 ²	1997/98 ²	1998/99 ²	1999/00 ²	2000/01 ²	2001/02 ²	2002/03 ²
£ million									
Total Government R&D									
Basic - pure	1,253	1,273	1,322	1,334	1,369	1,492	1,691	1,964	2,228
- orientated	472	504	524	523	535	566	620	683	718
Applied - strategic	879	1,004	1,109	1,079	1,020	1,153	1,257	1,308	1,394
- specific	1,075	1,322	1,224	1,198	1,178	1,059	1,029	1,156	1,350
Experimental development	1,492	1,530	1,570	1,757	1,592	1,902	1,966	1,638	2,362
Total (£m)	5,171	5,634	5,750	5,891	5,695	6,172	6,564	6,748	8,052
Civil R&D									
Basic - pure	1,253	1,273	1,322	1,334	1,369	1,467	1,666	1,964	2,228
- orientated	472	504	524	523	535	566	620	682	718
Applied - strategic	810	839	948	923	875	985	1,097	1,157	1,268
- specific	479	813	681	698	704	667	657	750	961
Experimental development	126	136	131	102	116	141	145	137	144
Total (£m)	3,140	3,565	3,606	3,580	3,599	3,827	4,185	4,691	5,318
Defence R&D									
Basic - pure	—	—	—	—	—	25	25	—	—
- orientated	—	—	—	—	—	—	—	0	—
Applied - strategic	69	166	160	156	145	167	161	151	127
- specific	596	510	544	500	475	392	372	406	389
Experimental development	1,366	1,394	1,439	1,655	1,476	1,761	1,821	1,500	2,218
Total (£m)	2,032	2,070	2,144	2,311	2,096	2,345	2,379	2,057	2,734

Notes:

¹ For the purpose of this analysis Research Councils expenditure for Pensions/Other costs have been excluded from 1994–95 onwards.² Includes NHS estimates.¹

Table 7
**Business Enterprise R&D, in cash terms and
 real terms, 1966 to 2002**

Year	£ million	
	Total Business Enterprise R&D	
	In cash terms	In real terms (2002=100) ¹
1966	580	6,875
1967	605	6,971
1968	639	7,030
1969	680	7,103
1970	N/S	N/S
1971	N/S	N/S
1972	831	6,785
1973	N/S	N/S
1974	N/S	N/S
1975	1,340	6,825
1976	N/S	N/S
1977	N/S	N/S
1978	2,324	8,275
1979	N/S	N/S
1980	N/S	N/S
1981	3,793	8,934
1982	N/S	N/S
1983	4,104	8,632
1984	N/S	N/S
1985	5,005	9,492
1986	5,804	10,667
1987	6,159	10,720
1988	6,717	10,929
1989	7,416	11,272
1990	8,054	11,346
1991	7,842	10,416
1992	8,166	10,502
1993	8,717	10,913
1994	8,842	10,909
1995	9,116	10,929
1996	9,297	10,774
1997	9,556	10,800
1998	10,133	11,131
1999	11,302	12,147
2000	11,510	12,212
2001	12,336	12,754
2002	13,110	13,110

Notes:

¹ See notes at Table 2.

(N/S) = No survey carried out

Table 8

Expenditure on R&D performed in UK businesses: broad product groups, in cash terms and real terms, 1994 to 2002

	£ million								
In cash terms	1994	1995	1996	1997	1998	1999	2000	2001	2002
Manufacturing: Total	7,051	7,134	7,264	7,608	8,142	8,995	9,231	9,788	10,140
Chemicals	2,509	2,515	2,479	2,831	2,926	3,253	3,528	3,562	3,887
Mechanical engineering	761	660	668	709	730	712	776	907	826
Electrical machinery	1,218	1,245	1,313	1,181	1,320	1,335	1,558	1,599	1,565
Transport equipment	710	833	977	990	1,020	1,235	1,094	1,189	1,244
Aerospace	860	886	812	893	1,039	1,237	1,091	1,260	1,347
Other manufacturing	993	994	1,016	1,004	1,108	1,222	1,183	1,271	1,272
Services	1,458	..	1,736	1,652	1,668	1,972	1,905	2,280	2,645
Other: Total	334	..	296	295	323	335	374	268	324
Agriculture, hunting & forestry; Fishing	80	..	76	84	102	115	135	96	122
Extractive industries	66	65	64	44	41	42	46	43	52
Electricity, gas & water supply	177	168	148	130	140	137	160	99	116
Construction	11	8	8	38	39	41	34	30	35
Total	8,842	9,116	9,297	9,556	10,133	11,302	11,510	12,336	13,110
In real terms (at 2002 prices)	1994	1995	1996	1997	1998	1999	2000	2001	2002
Manufacturing: Total	8,699	8,553	8,418	8,599	8,944	9,667	9,794	10,120	10,140
Chemicals	3,096	3,015	2,873	3,200	3,214	3,496	3,743	3,683	3,887
Mechanical engineering	939	791	774	801	802	765	823	938	826
Electrical machinery	1,503	1,493	1,522	1,335	1,450	1,435	1,653	1,653	1,565
Transport equipment	876	999	1,132	1,119	1,120	1,327	1,161	1,229	1,244
Aerospace	1,061	1,062	941	1,009	1,141	1,329	1,158	1,303	1,347
Other manufacturing	1,225	1,192	1,177	1,135	1,217	1,313	1,255	1,314	1,272
Services	1,799	..	2,012	1,867	1,832	2,119	2,021	2,357	2,645
Other: Total	412	..	343	333	355	360	397	277	324
Agriculture, hunting & forestry; Fishing	99	..	88	95	112	124	143	99	122
Extractive industries	81	78	74	50	45	45	49	45	52
Electricity, gas & water supply	218	201	172	147	154	147	170	102	116
Construction	14	10	9	43	43	44	36	31	35
Total	10,909	10,929	10,774	10,800	11,131	12,147	12,212	12,754	13,110

Notes:

1 .. denotes disclosive figures.

Table 9

Expenditure on civil and defence R&D performed by Business Enterprises, 1995 to 2002

(i) in cash terms (£m)

	Civil								Defence							
	1995	1996	1997	1998	1999	2000	2001	2002	1995	1996	1997	1998	1999	2000	2001	2002
All product groups	7,725	7,937	8,112	8,600	9,626	9,838	10,513	11,461	1,391	1,360	1,443	1,533	1,675	1,671	1,824	1,649
Manufacturing: Total	5,865	5,997	6,303	6,725	7,376	7,582	8,089	8,626	1,292	1,268	1,305	1,417	1,619	1,649	1,699	1,514
Chemicals	2,511	2,477	2,829	2,926	3,252	3,527	3,562	3,885	3	2	2	—	1	—	—	2
Mechanical engineering	418	395	407	455	434	463	470	524	266	273	302	276	279	314	437	302
Electrical machinery	823	896	803	916	1,013	1,163	1,200	1,204	423	417	377	404	322	395	399	361
Transport equipment	823	967	979	983	1,159	1,023	1,106	1,140	10	10	11	36	77	71	82	..
Aerospace	413	359	412	485	535	457	621	645	473	453	481	554	701	634	639	702
Other manufacturing	878	903	873	960	983	948	1,130	1,228	117	113	131	147	239	235	141	44
Services	..	1,644	1,513	1,552	1,915	1,883	2,155	2,511	99	92	139	116	57	22	125	135
Other: Total	..	296	295	322	335	374	268	324	—	—	—	—	—	—	—	—
Agriculture, hunting & forestry; Fishing	..	76	84	102	115	135	96	122	—	—	—	—	—	—	—	—
Extractive industries	65	64	44	41	42	46	43	52	—	—	—	—	—	—	—	—
Electricity, gas & water supply	168	148	130	140	137	160	99	116	—	—	—	—	—	—	—	—
Construction	8	8	38	39	41	34	30	35	—	—	—	—	—	—	—	—

(ii) in real terms (£m, 2002 prices)¹

	Civil								Defence							
	1995	1996	1997	1998	1999	2000	2001	2002	1995	1996	1997	1998	1999	2000	2001	2002
All product groups	9,261	9,198	9,168	9,447	10,345	10,438	10,869	11,461	1,668	1,576	1,631	1,684	1,800	1,773	1,886	1,649
Manufacturing: Total	7,031	6,950	7,124	7,388	7,927	8,044	8,363	8,626	1,549	1,469	1,475	1,557	1,740	1,750	1,757	1,514
Chemicals	3,010	2,870	3,197	3,214	3,495	3,742	3,683	3,885	4	2	2	—	1	—	—	2
Mechanical engineering	501	458	460	500	466	491	486	524	319	316	341	303	300	333	452	302
Electrical machinery	987	1,038	908	1,006	1,089	1,234	1,241	1,204	507	483	426	444	346	419	413	361
Transport equipment	987	1,121	1,106	1,080	1,246	1,085	1,143	1,140	12	12	12	40	83	75	85	..
Aerospace	495	416	466	533	575	485	642	645	567	525	544	609	753	673	661	702
Other manufacturing	1,053	1,046	987	1,055	1,056	1,006	1,168	1,228	140	131	148	161	257	249	146	44
Services	..	1,905	1,710	1,705	2,058	1,998	2,228	2,511	119	107	157	127	61	23	129	135
Other: Total	..	343	333	354	360	397	277	324	—	—	—	—	—	—	—	—
Agriculture, hunting & forestry; Fishing	..	88	95	112	124	143	99	122	—	—	—	—	—	—	—	—
Extractive industries	78	74	50	45	45	49	44	52	—	—	—	—	—	—	—	—
Electricity, gas & water supply	201	172	147	154	147	170	102	116	—	—	—	—	—	—	—	—
Construction	10	9	43	43	44	36	31	35	—	—	—	—	—	—	—	—

Notes:

¹ See Table 2 for deflators

Table 10

Sources of funds for Business Enterprise R&D in cash terms, 1994 to 2002

£ million, cash terms

		Government £m	Overseas £m	Mainly own resources ¹ £m	Total intramural R&D £m
1994		910	1,410	6,523	8,842
<i>of which:</i>	Civil	198	1,071	6,152	7,421
	Defence	713	338	370	1,420
1995		953	1,738	6,426	9,116
<i>of which:</i>	Civil	224	1,409	6,093	7,725
	Defence	729	329	333	1,391
1996		842	2,018	6,438	9,297
<i>of which:</i>	Civil	150	1,715	6,074	7,937
	Defence	693	303	364	1,360
1997		915	1,800	6,841	9,556
<i>of which:</i>	Civil	198	1,475	6,439	8,112
	Defence	717	325	401	1,443
1998		1,094	2,238	6,800	10,133
<i>of which:</i>	Civil	307	1,857	6,435	8,600
	Defence	787	381	365	1,533
1999		1,157	2,570	7,575	11,302
<i>of which:</i>	Civil	316	2,092	7,219	9,626
	Defence	841	478	356	1,675
2000		1,013	2,470	8,026	11,510
<i>of which:</i>	Civil	228	2,003	7,607	9,838
	Defence	785	467	419	1,671
2001		1,101	3,012	8,222	12,336
<i>of which:</i>	Civil	191	2,585	7,737	10,513
	Defence	911	427	486	1,824
2002		884	3,567	8,658	13,110
<i>of which:</i>	Civil	193	3,026	8,242	11,461
	Defence	691	541	417	1,649
		Per cent	Per cent	Per cent	Per cent
1994		10	16	74	100
<i>of which:</i>	Civil	3	14	83	100
	Defence	50	24	26	100
1995		10	19	70	100
<i>of which:</i>	Civil	3	18	79	100
	Defence	52	24	24	100
1996		9	22	69	100
<i>of which:</i>	Civil	2	22	77	100
	Defence	51	22	27	100
1997		10	19	72	100
<i>of which:</i>	Civil	2	18	79	100
	Defence	50	23	28	100
1998		11	22	67	100
<i>of which:</i>	Civil	4	22	75	100
	Defence	51	25	24	100
1999		10	23	67	100
<i>of which:</i>	Civil	3	22	75	100
	Defence	50	29	21	100
2000		9	21	70	100
<i>of which:</i>	Civil	2	20	77	100
	Defence	47	28	25	100
2001		9	24	67	100
<i>of which:</i>	Civil	2	25	74	100
	Defence	50	23	27	100
2002		7	27	66	100
<i>of which:</i>	Civil	2	26	72	100
	Defence	42	33	25	100

Notes:

1 Mainly own resources includes Other Private sector funds which is shown separately in ONS's First Release for Business Enterprise R&D.

2 See notes about revisions to past data.

Table 11

Intramural expenditure on R&D performed by UK businesses: detailed product groups, 1994 to 2002

	£ million								
	1994	1995	1996	1997	1998	1999	2000	2001	2002
Total	8,842	9,116	9,297	9,556	10,133	11,302	11,510	12,336	13,110
Agriculture, hunting and forestry; Fishing	80	..	76	84	102	115	135	96	122
Extractive Industries	66	..	64	44	41	42	46	43	52
Food products and beverages; Tobacco products	228	189	198	180	242	237	264	314	299
Textiles, clothing and leather products	22	23	27	33	33	28	29	17	19
Pulp, paper and paper products; printing and publishing;									
Wood and straw products	44	39	57	44	49	45	38	34	44
Refined petroleum products and coke oven products;									
Processing of nuclear fuel	203	239	230	225	234	212	182	250	258
Chemicals, man- made fibres	689	701	627	680	688	718	682	522	583
Pharmaceuticals, medical chemicals and botanical products	1,820	1,813	1,852	2,151	2,238	2,535	2,846	3,040	3,304
Rubber and plastic products	72	60	67	60	66	72	54	45	64
Other non-metallic mineral products	56	54	60	47	56	59	..	41	46
Casting of iron and steel	51	46	39	39	47	41	..	31	32
Non-ferrous metals	15	20	15	15	20	22	21	19	16
Fabricated metal products	72	100	91	88	90	70	73	64	59
Machinery and equipment	689	583	577	622	640	642	703	843	767
Office machinery and computers	134	150	161	102	125	111	113	105	146
Electrical machinery and apparatus	567	494	490	424	423	357	422	451	462
Radio, television and communication equipment	517	602	662	655	772	867	1,024	1,044	957
Precision instruments	273	303	307	336	340	473	480	488	442
Motor vehicles and parts	669	795	926	924	913	1,060	864	898	929
Other transport equipment	24	18	30	50	72	99	158	208	..
Shipbuilding and repairs	17	20	20	15	36	76	72	83	..
Aerospace	860	886	812	893	1,039	1,237	1,091	1,260	1,347
Furniture; Other manufactured goods	28	21	16	25	20	33	27	31	48
Recycling	1	..	1	-	-	1	1	1	3
Electricity, gas and water supply	177	168	148	130	140	137	160	99	116
Construction	11	8	8	38	39	41	34	30	35
Wholesale and retail trade	..	..	..	..	..	..	..	55	69
Transport and storage	..	..	..	..	..	..	..	12	10
Post and telecommunications	408	414	455	496	449	565	674	733	742
Miscellaneous business activities; Technical testing and analysis	104	..	141	142	157	196	131	242	360
Computer and related activities	744	675	749	680	688	713	611	725	888
Research and development services	178	247	369	313	346	448	428	495	558
Public administration	10	14	10	6	8	11	12	18	18

Notes:

1 .. denotes disclosive figures.

2 Zero denotes a value less than 0.5

3 See notes about revisions to past data.

Table 12

Current and capital expenditure, and as a percentage of the total, on R&D performed by UK Businesses: detailed product groups, 2002

	Total	Capital Total	Current Total	Salaries and wages	Other current	Total	Capital Total	Current Total	Salaries and wages	Other current
	£m	£m	£m	£m	£m	Per cent	Per cent	Per cent	Per cent	Per cent
Total	13,110	1,167	11,943	5,763	6,180	100	9	91	44	47
Agriculture, hunting and forestry; Fishing	122	26	95	51	45	100	22	78	42	37
Extractive Industries	52	3	49	26	23	100	5	95	50	45
Food products and beverages; Tobacco products	299	33	266	133	133	100	11	89	44	44
Textiles, clothing and leather products	19	4	15	10	5	100	20	80	54	25
Pulp, paper and paper products; Printing and publishing; Wood and straw products	44	5	38	14	25	100	12	88	31	56
Refined petroleum products and coke oven products; Processing of nuclear fuel	258	49	209	80	130	100	19	81	31	50
Chemicals, man-made fibres	583	56	527	285	241	100	10	90	49	41
Pharmaceuticals, medical chemicals and botanical products	3,304	496	2,807	1,240	1,567	100	15	85	38	47
Rubber and plastic products	64	21	43	20	22	100	33	67	32	35
Other non-metallic mineral products	46	7	39	23	17	100	15	85	49	36
Casting of iron and steel	32	1	31	19	12	100	4	96	59	38
Non-ferrous metals	16	1	16	8	7	100	3	97	52	45
Fabricated metal products	59	5	54	25	28	100	9	91	43	49
Machinery equipment	767	32	735	408	326	100	4	96	53	43
Office machinery and computers	146	8	138	55	83	100	5	95	38	57
Electrical machinery and apparatus	462	19	442	229	214	100	4	96	50	46
Radio, television and communication equipment	957	44	913	469	445	100	5	95	49	46
Precision instruments	442	36	407	188	219	100	8	92	42	50
Motor vehicles and parts	929	42	887	451	436	100	5	95	49	47
Other transport equipment	..	..	..	..	..	..	..	..	..	..
Shipbuilding and repairs	..	..	..	..	..	..	..	..	..	..
Aerospace	1,347	83	1,264	480	784	100	6	94	36	58
Furniture; Other manufactured goods	48	10	37	27	10	100	22	78	57	21
Recycling	3	0	3	2	1	100	6	94	62	32
Electricity, gas and water supply	116	6	110	66	44	100	5	95	57	38
Construction	35	2	33	20	13	100	6	94	57	38
Wholesale and retail trades	69	2	67	33	34	100	3	97	49	49
Transport and storage	10	0	10	7	4	100	0	100	64	36
Post and telecommunications	742	26	716	346	370	100	4	96	47	50
Miscellaneous business activities; Technical testing and analysis	360	54	306	218	88	100	15	85	61	24
Computer related activities	888	48	839	494	345	100	5	95	56	39
Research and development services	558	41	517	261	256	100	7	93	47	46
Public administration	18	4	13	3	11	100	24	76	15	61

Notes:

1 Zero denotes a value less than 0.5

2 .. denotes disclosive figures.

Table 13

Government and Business Enterprise personnel engaged on R&D in the UK, 1994 to 2002

Full time equivalents, thousands

	1994	1995	1996	1997	1998	1999	2000	2001	2002	Percentage change in 2002 from 2001
Personnel engaged on R&D										
- Business Enterprise	150	145	142	137	148	153	145	152	167	10
- Research Councils	12	12	12	11	11	11	11	12	11	-3
- Government Departments ¹	20	17	16	15	18	18	19	12	10	-16
Total Civil	148	143	141	135	145	149	144	147	158	8
Total Defence	35	31	29	28	32	33	31	29	30	4
Researchers										
- Business Enterprise	79	82	82	83	91	92	86	93	105	12
- Research Councils	6	6	5	5	5	5	5	5	5	-4
- Government Departments ¹	8	8	8	7	9	10	10	5	4	-11
Total Civil	75	78	78	78	87	87	82	85	94	11
Total Defence	18	17	17	17	19	20	19	19	20	6
Technicians										
- Business Enterprise	40	33	33	30	32	33	30	28	30	9
- Research Councils	2	2	3	3	3	3	3	3	3	9
- Government Departments ¹	4	4	3	3	4	4	4	3	3	-21
Total Civil	38	33	33	29	32	32	30	28	30	7
Total Defence	8	7	6	6	7	7	7	6	6	2
Admin & other staff										
- Business Enterprise	31	29	27	24	24	28	30	31	32	3
- Research Councils	4	4	4	3	3	3	3	4	3	-8
- Government Departments ¹	8	5	5	4	5	5	5	4	3	-17
Total Civil	34	33	29	27	27	30	33	34	34	0
Total Defence	9	7	6	5	6	6	5	4	4	-1

Note:

¹ Excludes NHS employment, as these figures were not available.

Table 14

Estimated GOR breakdown of expenditure on Intramural R&D in the Business, Government and Higher Education sectors, 2002¹

	£ million		
	R&D performed within business (BERD)	R&D performed within Government Establishments (GOVERD) ²	R&D performed within Higher Education Institutions (HERD)
United Kingdom	13,110	1,752	4,413
North East	128	6	159
North West and Merseyside	1,661	67	354
Yorkshire and the Humber	357	62	340
East Midlands	1,063	65	234
West Midlands	695	50	221
Eastern	2,741	286	402
London	950	235	1,059
South East	3,268	459	608
South West	1,274	228	191
England	12,138	1,459	3,568
Wales	182	41	180
Scotland	640	238	581
Northern Ireland	149	15	84

Note:

1. Regional GDP figures are not available at time of publication and therefore it is not possible to show R&D expenditure as a percentage of regional GDP.
2. Figures include estimates for those areas of Central Government not available from the Government Survey and local authorities.

Table 15

Estimated regional breakdown of personnel engaged on R&D in the Business and Government sectors, 2002¹

	R&D performed within business		R&D performed within Government establishments ²	
	Full time equivalents 000's	Percentage of the regional Labour Force ^{3,4}	Full time equivalents 000's	Percentage of the regional Labour Force ^{3,4}
United Kingdom	166.9	0.59	21.2	0.07
North East	2.6	0.24	0.1	0.01
North West and Merseyside	17.9	0.58	0.8	0.03
Yorkshire and the Humber	6.7	0.29	0.8	0.03
East Midlands	14.9	0.73	0.8	0.04
West Midlands	12.6	0.51	0.6	0.02
Eastern	32.3	1.21	3.5	0.13
London	10.1	0.28	2.9	0.08
South East	39.4	0.97	5.6	0.14
South West	14.1	0.59	2.8	0.11
England	150.5	0.64	17.7	0.07
Wales	2.9	0.22	0.5	0.04
Scotland	10.8	0.45	2.9	0.12
Northern Ireland	2.7	0.37	0.2	0.02

Notes:

1. Regional breakdown is based on the GOR (Government Office Region) classification.
2. Government sector covers Central Government only. Local Authorities, NHS and those areas of Central Government not available from the Government survey are excluded.
3. Labour Force figure used is a head count. An estimate of the Labour Force in full-time equivalents (FTE) is not available. Using the head count figure gives a lower percentage than a FTE would give. Labour Force figures relate to those in employment, rather than all those economically active.
4. Labour Force figures are for spring 2003.

Table 16

**OECD Science and Technology indicators Gross Expenditure on R&D:
International Comparisons, 1994 to 2002**

	Year	UK	Germany	France	Italy	Japan ¹	Canada	USA ²
Gross Domestic Product (GDP)³ (£ billion at ppp) ⁴	1994	690.6	1,048.2	736.4	702.5	1,677.0	386.1	4,342.5
	1995	729.4	1,094.5	768.5	742.1	1,754.2	407.3	4,577.4
	1996	774.1	1,140.2	801.1	775.9	1,863.2	425.0	4,870.0
	1997	823.6	1,160.0	837.1	793.0	1,920.5	448.5	5,151.0
	1998	869.3	1,215.6	891.2	847.9	1,952.0	479.8	5,522.5
	1999	919.7	1,269.5	940.5	881.8	2,014.7	522.9	5,929.6
	2000	963.5	1,308.4	981.7	913.3	2,104.9	559.5	6,253.6
	2001	1,005.2	1,325.5	1,022.8	928.4	2,137.4	576.3	6,336.5
	2002	1,055.2	1,347.3	1,050.3	936.6	2,156.7	600.0	6,544.0
Gross Expenditure on R&D (GERD) (£ billion at ppp) ⁴	1994	13.7	23.5(e)	17.2	7.4	43.2	6.8	105.3
	1995	14.0	24.6(e)	17.8	7.4	47.2	7.0	114.8
	1996	14.3	25.6(e)	18.4	7.8	-	7.1	124.2
	1997	14.7	26.6	18.6 (a)	8.3 (a)	-	7.6	132.7
	1998	15.5	28.1 (e)	19.3	9.0	-	8.6	143.6 (a)
	1999	16.9	30.9	20.5	9.2	-	9.5	157.1
	2000	17.5	32.6(e)	21.4 (a)	9.8	-	10.7	169.9
	2001	18.5	33.2	22.8	10.3	-	11.7	173.8
	2002	19.6	34.0(e)	23.1 (p)	-	-	11.4 (p)	174.6 (p)
GERD as a percentage of GDP	1994	1.98	2.24(e)	2.34	1.05	2.58	1.76	2.43
	1995	1.92	2.25(e)	2.31	1.00	2.69	1.72	2.51
	1996	1.85	2.25(e)	2.30	1.01	..	1.68	2.55
	1997	1.78	2.29	2.22 (a)	1.05 (a)	..	1.68	2.58
	1998	1.78	2.31(e)	2.17	1.07	..	1.79	2.60 (a)
	1999	1.84	2.44	2.18	1.04	..	1.82	2.65
	2000	1.82	2.49(e)	2.18 (a)	1.07	..	1.92	2.72
	2001	1.84	2.51	2.23	1.11	..	2.03	2.74
	2002	1.85	2.52(e)	2.20 (p)	..	..	1.91 (p)	2.67 (p)
BERD as a percentage of GDP	1994	1.28	1.49(e)	1.45	0.56	1.83	1.00	1.71
	1995	1.25	1.49	1.41	0.53	1.89	1.00	1.80
	1996	1.20	1.48(e)	1.41	0.54	..	0.97	1.87
	1997	1.16	1.54	1.39 (a)	0.52	..	1.01	1.91
	1998	1.17	1.57(e)	1.35	0.52	..	1.07	1.94
	1999	1.23	1.70	1.38	0.51	..	1.07	1.98
	2000	1.19	1.75(e)	1.36	0.53	..	1.15	2.04
	2001	1.23	1.75	1.41 (a)	0.55	..	1.21	2.00
	2002	1.24	1.75(e)	1.37 (p)	0.54 (p)	..	1.05 (p)	1.87 (p)
GOVERD as a percentage of GDP	1994	0.30	0.34	0.48	0.22	0.25	0.27	0.24
	1995	0.28	0.35	0.48	0.21	0.28	0.25	0.24
	1996	0.27	0.34	0.47	0.20	..	0.25	0.22
	1997	0.24	0.34	0.41 (a)	0.20	..	0.22	0.21
	1998	0.24	0.34	0.40	0.22	..	0.22	0.20
	1999	0.23	0.34	0.40	0.20	..	0.22	0.20
	2000	0.22	0.34	0.38 (a)	0.20	..	0.22	0.19
	2001	0.18	0.34	0.37	0.20	..	0.22	0.22
	2002	0.17	0.35(e)	0.37 (p)	0.23 (p)	..	0.22 (p)	0.24 (p)
HERD as a percentage of GDP	1994	0.38	0.41	0.38	0.27	0.36	0.48	0.38
	1995	0.37	0.41	0.39	0.25	0.39	0.46	0.38
	1996	0.36	0.42	0.39	0.27	..	0.45	0.38
	1997	0.35	0.41	0.39 (a)	0.32 (a)	..	0.45	0.37
	1998	0.35	0.40	0.38	0.34	..	0.49	0.36 (a)
	1999	0.36	0.40	0.37	0.33	..	0.53	0.37
	2000	0.38	0.40	0.41 (a)	0.33	..	0.55	0.37
	2001	0.40	0.41	0.42	0.36	..	0.59	0.40
	2002	0.42	0.43(e)	0.43 (p)	..	..	0.63 (p)	0.42 (p)

Source: OECD databank (June 2004)

Notes:

1 Data for Japan are adjusted by OECD.

2 Excludes most or all capital expenditure.

3 The measure of GDP used is at market prices.

4 Amounts are converted to £ sterling using the purchasing power parities (ppp) developed by the OECD.

(a) = break in series with previous year

(p) = provisional

(e) = estimate

Table 17

International comparison of Gross Expenditure on R&D by sector of performance and source of funding, 2002

	UK	Germany ¹	France (p) ²	Italy ³	Japan (e) ⁴	Canada (p)	Per cent USA (p) ⁵
Percentage by sector of performance							
Government	9.0	13.7	17.0	18.4	10.4	11.7	8.8
Business enterprise	67.0	69.4	62.2	49.1	70.3	55.2	70.2
Higher education	22.6	16.9	19.5	32.6	14.5	32.8	15.9
Other	1.5	..	1.4	..	4.8	0.2	5.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Percentage by source of funds							
Government	26.9	31.5	36.9	50.8	20.9	33.3	30.2
Business enterprise	46.7	65.6	54.2	43.0	72.3	45.3	64.4
Abroad	20.5	2.5	7.2	6.2	0.1	12.0	..
Other ⁶	5.9	0.4	1.7	..	6.7	9.4	5.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: OECD databank (June 2004)

Notes:

1 Data for "other" included elsewhere.

2 Source of funds data for France are for 2001.

3 For Italy, sector of performance data are for 2001 and source of funds data are for 1996.

4 Data for Japan are OECD estimates and are for 1995.

5 Excludes most or all capital expenditure.

6 For UK data, "Other" consists of Higher Education & Private Non-Profit expenditure. For the remaining countries, "Other" represents other national sources.

(p) = provisional

(e) = estimate

Table 18

R&D performed in the Business Enterprise sector (BERD), 1994 to 2002

	£ billion at ppp ¹						
Year	UK	Germany	France	Italy	Japan ²	Canada	USA ³
1994	8.8	15.6 (e)	10.7	3.9	30.7	3.8	74.3
1995	9.1	16.3	10.8	4.0	33.2	4.1	82.4
1996	9.3	16.9 (e)	11.3	4.2	-	4.1	90.9
1997	9.6	17.9	11.6 (a)	4.2	-	4.5	98.3
1998	10.1	19.1 (e)	12.0	4.4	-	5.2	107.1
1999	11.3	21.6	12.9	4.5	-	5.6	117.6
2000	11.5	22.9 (e)	13.4	4.9	-	6.4	127.8
2001	12.3	23.2	14.4 (a)	5.1	-	7.0	126.8
2002	13.1	23.6 (e)	14.4 (p)	5.1 (p)	-	6.3 (p)	122.7

Source: OECD databank (June 2004)

Notes:

1 Amounts are converted to £ sterling using the purchasing power parities (ppp) developed by the OECD.

2 Data for Japan are adjusted by OECD.

3 Excludes most or all capital expenditure.

(a) = break in series with previous year

(p) = provisional

(e) = estimate

Table 19

International comparison of Government funding of R&D in 2002 by socio-economic objective (percentage distribution)¹

							Per cent
	UK	Germany (p)	France (p)	Italy	Japan ²	Canada	USA ³
Agriculture, forestry and fishing	3.3	2.0	2.1	1.9	3.5	9.0	2.4
Industrial development	5.2	12.5	5.9	10.2	7.5	14.0	0.5
Energy	0.5	3.0	3.7	3.6	17.3	5.6	1.3
Infrastructure	1.2	1.8	0.6	0.4	4.1	3.3	1.9
Environmental protection	1.6	3.1	2.9	2.3	0.9	4.5	0.6
Health	13.1	4.1	5.8	7.0	3.9	13.3	24.0
Social development and services	3.6	4.7	0.9	4.4	0.8	2.7	0.8
Earth and atmosphere	1.7	1.7	0.7	1.9	1.8	3.0	1.0
Advancement of knowledge	33.4	56.6	42.8	57.0	50.2	32.9	6.4
Civil space	1.9	5.1	8.9	7.3	6.0	6.2	9.0
Defence	33.9	5.4	24.2	4.0	4.1	4.3	52.1
Not elsewhere classified	0.4	—	1.5	—	—	1.1	0.0
Per cent	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total £ million⁴	8,079	10,685	10,780	6,437	15,322	3,415	64,952

Source: OECD databank (June 2004)

Notes:

1 Data for Italy & Canada are for 2001.

2 Data for Japan are OECD estimates.

3 Excludes most or all capital expenditure.

4 Amounts are converted to £ sterling using the purchasing power parities (ppp) developed by the OECD.

(p) = provisional

Measuring health care output in the UK: a diagnosis based approach

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This article proposes a way of calculating health care output growth in real terms in the presence of innovation and treatment substitution. The methodology derives from the large US literature on health care price indices, applying some of the principles to UK data. A point of departure is the adaptation of the price index methods to volume data. This article argues that the proposed methodology would better measure innovation and treatment substitution. This is explored using an empirical study on coronary heart disease, an area where innovation in treatment is significant. The article shows measured health care output growth is sensitive to using a common cost weight for substitutable treatments. The article also includes suggestions for further work.

Introduction

Measuring government output correctly in National Accounts is a challenging task. The major difference between measuring output in the public and in the private sector is that prices are rarely available in non-market production. The absence of price information makes it difficult to estimate what proportion of expenditure growth is due to price change and what proportion is due to actual output growth. Without a market mechanism matching production costs and consumer preferences and therefore uncovering consumer marginal valuations, one is forced to proxy growth in the benefits from publicly provided goods and services.

In the past, government output growth in the UK was proxied by the change in the inputs used in production. In 1998, the Office for National Statistics (ONS) changed to measuring output directly, using information on activities performed in the context of different government services (see Pritchard, 2003). In December 2003, a National Statistics review of government output measurement in the UK – also known as the *Atkinson Review*² – was announced with the aim of continuing the work conducted in ONS and of making methodological advancements in the measurement of output and productivity. Recent improvements to the measures of health care output have followed from this review.

This article reports on some of the separate methodological work undertaken in the review. The work does not feed into the National Accounts, but is part of longer term work exploring new ways to calculate output in the UK health care sector. The article proposes a diagnosis-based approach that attempts to account for technological change and to adjust output for treatment innovation (i.e. by adjusting for the introduction of new interventions). The article presents the results of an empirical study on coronary heart disease, which shows that health care output measures are sensitive to the method used to construct the output index. The impact could be great in areas where innovation is important.

Measuring health care output

Recent UK developments

Before 1998, health care output measures for the UK were obtained by deflating current price expenditure with a composite health care deflator based on input prices, such as the wages of health care staff. This measure is only a proxy measure of output and implicitly assumes that there is no productivity change. This methodology currently meets the minimum requirements for national accounting, but increased interest in measures of government output has motivated more research.

The ONS Blue Book in 1998 introduced measures of government output for a number of government functions. These replaced the input based measures with ones that tracked the outputs directly. For health care, a cost-weighted activity index (CWAi) was used, compiled by the Department of Health, in which activities are grouped into administrative categories based on the provider of health care and the setting in which they are performed. Indices of the number of activities conducted in each category are then weighted together using the cost-share for each activity so that total health care output growth can be calculated (Pritchard, 2003). The index is constructed as follows:

$$\frac{\text{CWAi}(t)}{\text{CWAi}(t-1)} = \frac{\sum_i P_i(t-1) A_i(t)}{\sum_i P_i(t-1) A_i(t-1)} \quad (1)$$

This is a Laspeyres volume index where the counts of activities in each category, A_p , are weighted together according to their average costs, P_p , in the base year.

Originally, the index was based on a limited number of activities. In the most recent set of National Accounts, change in health care output is derived using a much larger number of individual activity series reflecting the availability of increased detail in activity and cost data from the NHS. This improvement is described in ONS (2004).

Measuring activities, however, is closer to the concept of 'throughputs'. For instance, consider a patient with a given diagnosis, which in year one is treated by an inpatient stay and three outpatient consultations and in year two, due to improvements, is treated by an inpatient stay and just one outpatient consultation, the health outcomes being the same. If the same number of patients are treated in both years, the CWAi will indicate that output from year one to year two has declined. The technological improvement in the form of less consultations needed to cure a patient will be picked up by the index as a decrease in output. This sort of problem appears when there is technological change in terms of increased technical efficiency (a given treatment getting better), when there is innovation (a new treatment being introduced) or when there is substitution between different treatments.

Another problem of this index (not fully developed in this article) is that it does not take into account quality changes in terms of mortality, morbidity, clinical outcomes and patient experience. Therefore, if a treatment gets better over time in that patients have a longer life expectancy after the intervention, this is not taken into account by these measures.

US work on measuring health care prices

Several studies investigate the development of health care prices in the United States. Health care expenditure represents a large proportion of US gross domestic product and a major question is whether increases in spending arise from increases in prices or increases in volumes. The studies answer this question by taking a micro-approach, largely by studying individual illnesses in detail. Frank *et al* (1999) focus on the price evolution of treating acute-phase major depression for which different substitutable treatments are available.

The main insight of the study is that we can get very different results if we price 'treating depression' as a whole rather than pricing the inputs of the treatments or even, at a more aggregate level, each type of treatment individually. This is due to changes in the input mix within each treatment and substitution between treatments.

The main treatments available to treat depression are psychotherapy, drug treatments and a mix of psychotherapy and drug treatment. The study covered a period when there was substitution occurring in the activities used to treat the illness, with the substitution putting downward pressure on costs/prices. For example, expensive psychotherapy was being replaced by cheaper drugs but with similar outcomes.

Cutler *et al* (2001) estimate price indices for heart attack treatment. As for depression, there are several treatments available for heart attack, the main ones being coronary heart bypass, angioplasty and medical management. Again, the authors find that price indexes for the disaggregated components making up heart treatments, i.e. pharmaceutical prices, room rental charges etc. were growing rapidly between 1983 and 1994. Once these inputs were aggregated into treatments – such as the course of activities involved in a bypass rather than the individual activities – treatment price indices actually grew much less rapidly, indicating a better use of resources. Cutler *et al* further develop this analysis. Once improvements in quality and length of life as well as changes in the probability of re-admission were taken into account, the price index for the treatment of heart attack actually fell over the period under study. Shapiro, Shapiro and Wilcox (2001) apply a similar type of analysis to cataract treatment. Treatment of cataract in the US in the past fifty years changed dramatically due to technological advances.

Application of such analyses to UK data is more difficult because there is less statistical information on prices and costs. However, the next sections explore whether the volume data available in the National Health Service, already used in official measures, could be used in a similar manner to the work undertaken by US researchers.

Output measures, treatment substitution and quality change

In this section, we add to the CWAi two alternative index measures of health care output which aggregate by patient and diagnosis respectively. Both allow the output measures to take more explicit account of health care processes allowing some of the issues described in the previous section to be resolved. Like the cost-weighted activity index, the indices use cost shares to weight together volumes of output. However, the two indices differ from an activity-based index in mapping together activities that refer to the same patient or diagnosis. To undertake such analysis, it will also be recognised that the data needed is more complex than counts of activities, which underpin the cost-weighted activity index.

Using counts of patients treated differs from activities because a patient may, during a particular course of treatment, undergo a number of different activities. It is possible that a hospital spell may be associated with some outpatient activity. Also, a course of drugs may accompany a particular

treatment. The cost-weighted patient index (CWPI) adjusts for this. Firstly, the weights reflect the average cost share of not just a single activity, but the total average cost of the treatments. At the same time, the volume measure appropriate for this measure is the number of patients that are treated using a particular treatment. As with the CWAI, the degree of accuracy of the index will depend primarily on the level of disaggregation available in the data sources. However, the CWPI is more complex as it introduces linking between activities by treatments.

The basis for the cost-weighted disease index (CWDI) acknowledges that a number of treatments may be used in a particular disease. Over a short period of time, this would not be an issue and the number of patients that undertake a treatment would be a good proxy for the number of cases of the disease treated. However, over time the substitution of treatments may be a significant source of output change. Under such conditions, counts of patient numbers undergoing a particular treatment would be unable to measure all output change, failing to adjust for the substitution of treatments observed over time.

The cost-weighted disease index makes some significant methodological departures from the CWAI and adds to the improvements made in the CWPI in requiring:

- The unit of output used to calculate growth in each diagnosis to be 'number of patients treated'. To obtain patients treated, we would need to link across all the activities involved in the course of a particular treatment³, as in the CWPI.
- The number of patients treated for each of the diagnoses will then be obtained by summing up the number of patients treated with each substitutable treatment available for the diagnosis (if there is more than one).
- The different treatments may have different outcomes on patient's health implying that the different treatments should be added together using quality adjustment weights. These quality adjustment weights could be constructed so as to incorporate effects on health outcomes and possibly taking into account patient experience factors or waiting times. These quality adjustment factors will be both time and treatment dependent so that changes in quality over time and across substitutable treatments will be taken into account.

The last point is perhaps the most challenging, requiring a significant understanding of the clinical outcomes of a particular set of treatments. This is discussed later. However, assuming some quality adjustment factors can be derived, the index construction can be written in the following way

$$\frac{CWDI(t)}{CWDI(t-1)} = \sum_n \left\{ \frac{\sum_{jn} Q_{jn}(t-1) P_{jn}(t-1)}{\sum_{jn} Q_{jn}(t) P_{jn}(t)} \frac{\sum_{jn} \square_{jn}(t) Q_{jn}(t)}{\sum_{jn} \square_{jn}(t-1) Q_{jn}(t-1)} \right\} \quad (2)$$

where the first element in the equation is the expenditure weight and the second element is the quality adjusted output growth for a given diagnosis. Specifically, 'n' indicates diagnoses with $n = 1, 2, \dots, N$; ' j_n ' stands for substitutable treatment j for diagnosis n with $j_n = 1, 2, \dots, j_n, \dots, J_n$ ⁴; t indicates year. $Q_{jn}(t)$ represents number of patients treated with treatment j_n for diagnosis n at time t and $P_{jn}(t)$ represents the average cost⁵ of treatment j_n for diagnosis n at time t . Finally, the ' $\square_{jn}(t)$ ' is the quality adjustment weight attached to treatment j_n for diagnosis n at time t . The index as a whole is an annual Laspeyres chain-linked volume index consistent with UK National Accounts. Other indexes, however, such as the Paasche, or the Fischer could be constructed retrospectively.

Quality of treatments

The quality adjustment weights – $\square_{jn}(t)$ in equation 2 – could potentially be constructed so as to include a lot of different aspects of quality. From a theoretical point of view, the quality adjustment weights could be a summary measure of quality change from health outcomes associated with the treatment, from patient experience (as found in patient experience surveys) or from the waiting times associated with the treatments in a given year. Clearly in practice the construction of such indexes would be very complex and extremely laborious given the number of illnesses and treatments available and often it will be convenient to just choose a simpler (not all-encompassing) adjustment.

One area of focus is quality improvements coming from increases in the length and quality of life. The quality adjustment weights could be calculated from outcome-linked data on patients undergoing different treatments in every period. Following this method Quality Adjusted Life Year (QALY) calculations could be conducted and quality adjusted growth rates obtained. Another method would involve using clinical studies on the relative effectiveness of different treatments in order to have rough estimates of the quality weights to use. This paper uses this approach to draw conclusions on the relative effectiveness of different treatments of coronary heart disease; although interesting, the estimation of QALYs is outside the scope of this paper. The last, possibly most subjective method, is to have a team of medical experts actually making qualitative considerations and assigning weights to the different treatments.

Data and analysis

This article studies coronary heart disease (CHD) to show how the use of different indexes may impact on health care output growth estimates. Coronary heart disease is a 'killer' in the UK and around the world more generally. Department of Health (2000) estimates that coronary heart disease kills more than 110,000 people a year in England and Wales. CHD is also a major part of expenditure for the National Health Service. A 1996 NHS Executive study estimating NHS expenditure by major disease categories found that circulatory diseases – of which CHD is part – accounted for 11.4 per cent of hospital expenditure and 18.4 per cent of primary care and pharmaceutical net expenditure in 1992/93 (Department of Health, 1996. Liu, Maniadakis, Gray and Rayner, 2002)

Box: Medical background on coronary heart disease

Defining the diagnosis

Coronary heart disease (CHD) is the condition that reduces the blood flow through the coronary arteries supplying blood directly to the heart muscle. Coronary arteries are placed to the left and to the right side of the aorta and supply the tissues of the heart itself. The reduced blood flow in the arteries can originate from the presence of a blood clot in the vessel –thrombosis –possibly due to the concentration of fat or from the arteries becoming thick and hard –sclerosis. Other names used for coronary heart disease are coronary disease, coronary artery disease or ischaemic heart disease.

This study is primarily concerned with coronary heart disease patients suffering from stable or unstable angina and who possibly have had a heart attack (otherwise called acute myocardial infarction or AMI). In terms of the ICD-10 International Classification of Diseases the diagnostic cases included are Angina pectoris (I20); Acute Myocardial Infarction (I21); Subsequent Myocardial Infarction (I22); and Other Acute Ischaemic Heart Diseases (I24). The study covers both elective (non-emergency) and non-elective (emergency) cases. Generally, non-elective cases are associated with patients who have had a heart attack or that suffer from acute coronary syndrome (otherwise called unstable angina). Elective cases are generally associated with stable angina. Given that these two types of patients need different types of care and follow different patient pathways, they are treated separately in the study.

Angina pectoris is the condition whereby a patient suffers attacks of chest pain caused by inadequate delivery of oxygen to the heart muscle. Acute myocardial infarction involves the sudden death of the heart muscle resulting frequently from coronary occlusion, typically preceded by symptoms such as chest pain, shortness of breath, nausea, and loss of consciousness.

Treating the diagnosis

There are different phases in the treatment of coronary heart disease, mainly preventive, diagnostic and curative (curative is to be intended as managing the chronic nature of CHD). Preventive activities can be provided in an ambulatory setting in the form of GP advice and drug prescription or in the form of collective health programmes such as anti-smoking campaigns. Diagnostic activities can be more or less invasive. Aside from general health checks and routine diagnostic activities, a popular diagnostic procedure for CHD is cardiac catheterisation (or otherwise called coronary angiography). Cardiac catheterisation is an invasive diagnostic imaging procedure that involves inserting a catheter into the blood vessel with the aim of finding out the level of artery occlusion and deciding the appropriate type of further intervention. Finally, there are procedures managing the chronic nature of CHD. The main types of revascularisation procedures available are coronary artery bypass grafting

(CABG), percutaneous transluminal coronary angioplasty (PTCA) and medical management (MM).

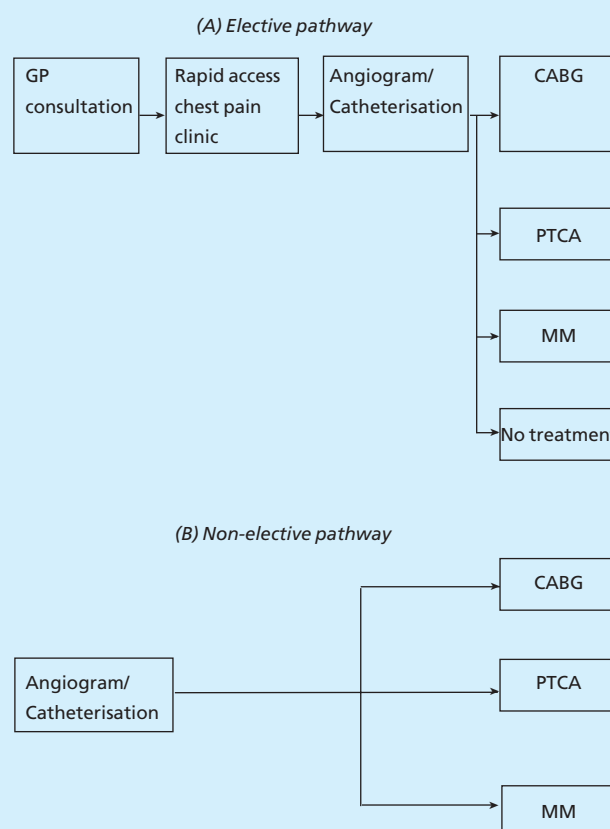
Coronary Artery Bypass Grafting (CABG) is a surgical procedure that involves replacing diseased (narrowed) coronary arteries with veins obtained from the patient's lower extremities and radial or mammary arteries.

Percutaneous Transluminal Coronary Angioplasty (PTCA) is an operation which involves inflating and deflating a balloon through the narrowed artery thereby enlarging it and allowing the blood flow to recover. Angioplasty can be applied with or without the use of stents and powerful anti-clotting drugs (Vella, 2003 and Nice, 2003). A stent is a tube made of metal or plastic that is inserted into the vessel to keep the lumen (interior of the artery) open and prevent closure due to stricture or external compression. Medical management is essentially drug treatment and involves mainly prescription of drugs that reduce the chance of blood clotting.

Figure 1 presents the treatment pathways that we are studying in a stylised manner. Elective cases normally start with a GP consultation, followed by a visit to a rapid access chest pain clinic. If after these two consultations the patient is suspected to be suffering from coronary heart disease needing acute care, a catheterisation will be carried out. Depending on the outcome of the catheterisation, the patient will then undergo CABG,

Figure 1
Typical patient pathways

Elective (A) and non-elective (B) cases



PTCA or MM or will be discharged without any further intervention. Non-elective cases still involve angiography as a diagnostic procedure but are not likely to go through GPs or rapid access chest pain clinics. Non-elective cases generally will need a treatment and therefore the no treatment option is excluded.

Substitutability between treatments

There has been growth in the share of patients treated with angioplasty since this treatment was introduced in the late 1970s, steadily replacing bypass in being the most popular intervention for treating coronary heart disease. Technical improvements in the delivery of angioplasty and medical management has made it possible to treat more and more patients with less invasive procedures and has led to substitution away from CABG in recent years. The popularity of PTCA over CABG is justified by its minimally invasive nature and the fact that it is much less resource intensive. Technological developments such as the increased use of stents and powerful anticlotting drugs in conjunction with angioplasty seem to have played a key role in this process. As for medical management, when possible, this tends to be chosen over bypass and angioplasty due to the risks associated with surgical interventions and to hospital capacity constraints. The focus of this study however is on CABG and PTCA rather than medical management, partly because of the limited information on patients treated with drug therapies and partly because of a less clear substitution relationship with surgical interventions.

There has been UK quantitative work exploring substitutability and health effects of bypass and angioplasty. Henderson *et al.* (1998) describe the results from the Randomised Intervention Treatment of Angina (RITA-1) trial, a clinical trial conducted on 1011 coronary heart disease patients in the UK, and present a careful study of the relative effectiveness of angioplasty and bypass. For this trial, the patients were randomly assigned to PTCA and CABG. The RITA-1 trial concludes that PTCA and CABG lead to very similar long term results in terms of survival rates and avoidance of myocardial infarction. This study also finds that, in terms of costs, bypass is more expensive initially with the initial intervention being more resource intensive than angioplasty but average PTCA costs tend to converge to CABG's in the long-term given PTCA's higher associated hospital re-admission rate. The study concludes that the choice of treatment rests on weighing the more invasive nature of CABG over the higher risk of recurrent angina and re-intervention in PTCA.

More recent evidence on the quality of different treatments of coronary heart disease can be found in Vella (2003). This paper explores the use of CABG and PTCA, extending the analysis to stents and anti-clotting drugs used in conjunction with PTCA. The results of this paper are based on the RITA-1 trial used in Henderson *et*

al. (1998) and on the EPISTENT trial, a similar randomised trial conducted in North America. The advantage of the EPISTENT trial is that it contains information on stents and drugs not considered in the RITA-1 trial. The author concludes that the introduction of anti-clotting drugs and stents in conjunction with PTCA is highly cost-effective. From this study we learn that re-admission rates after one year for PTCA fall from 28.1 per cent to 19.5 per cent when stents and anti-clotting drugs are both used (rates are two per cent for CABG). This indicates the potential health benefits from recent improvements to PTCA treatment.

Finally, in October 2003 the UK National Institute of Clinical Effectiveness (NICE) published a technology appraisal on the use of stents, commenting on the relative efficacy of angioplasty with and without the use of stents, bypass and to a limited extent medical management in the treatment of coronary heart disease. The key points of interest for this discussion are the following:

- Medical management should be used whenever possible. If surgical intervention is required, the choice between CABG and PTCA will depend largely on the number of coronary arteries occluded.
- The main disadvantage associated with PTCA is the higher risk of artery re-occlusion requiring further hospital admissions. This disadvantage has been greatly reduced by the use of stents, however, which has become widespread in recent years. In 2001, about 85 per cent of UK angioplasties used stents as opposed to below 10 per cent in 1993. There have also been advances in the stenting technology used and different types of stents are now available.
- In cases where both angioplasty with stents and bypass are suitable treatment options, angioplasty is generally the preferred option. This is because, even though the risk of re-occlusion is higher, angioplasty is less invasive, is associated with a lower probability of death during the operation and involves shorter and less painful recuperation time.
- In terms of QALY analysis, the NICE analysis is more mixed over a five-year horizon, but still suggests that there is no significant difference between PTCA with stents and CABG.

A final useful piece of evidence on substitution between CABG and PTCA is the analysis conducted by Cutler and Huckman (2003) on New York coronary heart disease patients. Cutler and Huckman analyse a panel dataset of CHD patients and try to establish whether the shift in treatments over time was actually due to substitution between treatments at the margin or a change in the medical characteristics of the population, the main one being the severity of the disease. They separate patients into different severity groups –low, medium and high severity of CHD –and find evidence of substitution in all groups supporting the hypothesis of substitution at the margin.

estimate the burden of coronary heart disease in the UK for 1999. They find it to have a financial cost of around £1.73bn and a total cost of £7.06bn once non-financial costs such as absence from work and forgone income are taken into account.

As well as the importance of coronary heart disease in UK health care, coronary heart disease is used in the present study because there has been considerable technological development over a number of years and for which there is substitution between different treatments. This is well documented in the literature (see box). The main treatments available for coronary heart disease are coronary artery bypass (CABG), percutaneous transluminal coronary angioplasty (PTCA) – which can be carried out with or without the use of stents and powerful anticlotting drugs – and medical management (MM). A discussion of the diagnosis, the treatments available and their relative substitutability can be found in the box. The analysis in this article will be limited to expenditure on CABG and PTCA, since data on MM are not available.

Costs and quantities for treatments

The data used in the case study is taken from the Hospital Episode Statistics (HES) and the Reference Cost datasets⁶. Hospital Episode Statistics (HES) provide counts and costs on admitted patient care delivered by NHS hospitals in England from 1995/96. Reference Cost data cover the years since 1997/98. In both sets of data we use information classified by Health Resource Groups (HRGs), which group treatment episodes which are expected to consume similar amounts of health care resources and are clinically similar in terms of diagnoses and/or medical technology employed. The HRGs are also disaggregated by the nature of the patient admission (elective inpatients and day cases are separated from non-elective inpatients). Records are stored according to the financial year in which the episode finished (i.e. the period 1st April to 31st March).

A count within both databases has the disadvantage that two records may relate to the same person. Unfortunately, it is not easy to adjust for this as records are held separately within

the database, with no link by patient (this is currently being addressed). Furthermore, for a small proportion of stays in hospital, there is more than one record. This happens when a patient is transferred from one consultant (senior doctor) to another.

Construction of cost shares and treatment weights

In this section, the HES and Reference Cost data are analysed to provide weights for the various treatments used in CHD. As detailed in the box, the focus of the current study is a part of CHD, the treatment of angina and acute myocardial infarction (AMI). This covers four activities in the dataset: CABG, PTCA and two forms of catheterisation, one with and one without complications. These activities can be performed in two settings: elective and non-elective.

Both the Reference Cost and HES data sources are primarily estimates of the number of interventions and average unit costs associated with the interventions. In calculating weights, it is necessary to calculate the total costs associated with the treatments to derive cost shares. By combining HES with Reference Cost data, estimates of expenditure for each of the financial years from 1995/96 can be made⁷. Table 1 shows the expenditure on the eight activities related to angina and acute myocardial infarction in 2002/03 based on the Reference Cost data.

Table 1 estimates the costs on three bases. The first is the activity basis, which estimates the costs of elective and non-elective CABG, PTCA and catheterisation. The middle panel measures the expenditures in terms of patients. Figure 1 and the box note that for a single patient, the two treatments – CABG and PTCA – are usually preceded by a catheterisation. This offers clinicians the information needed to identify the next course of treatment. In this middle panel, one catheterisation is associated with each of the CABG and PTCA interventions, giving a more accurate representation of the cost of the entire procedure a patient would face. The remaining catheterisation expenditure represents activities corresponding to the two remaining paths in Figure 1. In some cases, catheterisation indicates that no follow-up treatment is needed. Another course of action after catheterisation is medical management.

Table 1
Current price expenditure on AMI/Angina in 2002/03

	Activity	£mil	Patient	£mil	Disease	£mil
Elective	E04 CABG	96	CABG with catheterisation	108.1	AMI/Angina	167.1
	E13 CATH with complications	1.1	CATH: MM/no follow-up	41.4	CATH: MM/no follow-up	41.4
	E14 CATH no complications	65.5	PTCA with catheterisation	59.1		
	E15 PTCA	46				
Non-elective	E04 CABG	32.6	CABG with catheterisation	42.1	AMI/Angina	123.2
	E13 CATH with complications	2.3	CATH: MM/no follow-up	3.6	CATH: MM/no follow-up	3.6
	E14 CATH no complications	42.5	PTCA with catheterisation	81.1		
	E15 PTCA	49.4				
		335.4		335.4		335.4

The final panel calculates the expenditure by disease. At present, AMI/Angina treatment is assumed to have two interventions – PTCA and CABG – and so the costs of these two are summed. The distinction between elective and non-elective however is maintained, as the evidence presented in the box indicates that AMI/angina is different in the two circumstances.

One shortcoming of the data that cannot be addressed in this study should be noted. The total expenditure of £335mil includes hospital costs but does not at this stage include all the activities relating to AMI/angina. The expenditures in table 1 can be compared with estimates in studies such as Liu *et al* (2002), where expenditures on different parts of the treatment process for AMI/angina are given. The major cause for table 1 to underestimate total expenditure is the lack of data on drugs used in treating AMI/angina. Work remains to be done to reliably link the expenditures on drugs to the various activities.

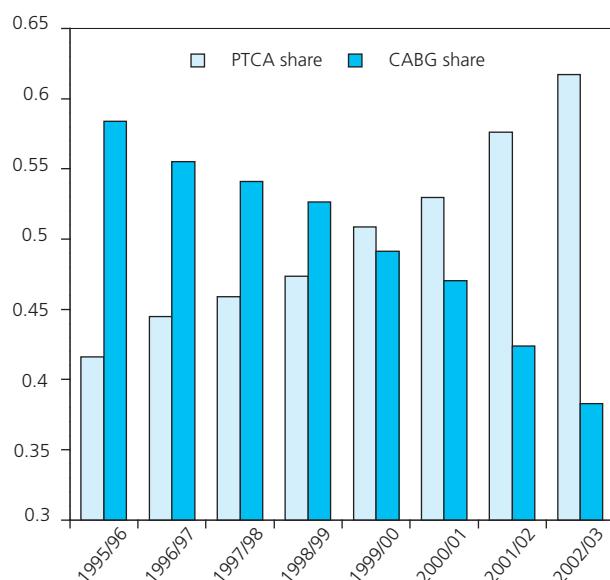
Figure 2 indicates the changes in the share of PTCA treatment and CABG in the total of the two. Overall, expenditure on AMI/angina in hospitals rose by just under 40 per cent over the eight years considered, in 2002/3 costs. However, the graph indicates the dramatic change in composition over the period, moving from CABG to the cheaper PTCA intervention.

Quality adjustment weights for treatments

Underpinning the current analysis are a number of data series for treatments which, as discussed previously, are substitutes to some extent. The quality adjustment weights in equation 2 reflect the degree of substitution. Ideally, these could reflect a wide range of quality factors such as health outcomes, patient satisfaction or waiting times. Here, the focus is on the first of these factors in that the estimates for the quality adjustment weights are based on clinical results of the health outcomes associated with the treatments for coronary heart disease.

Figure 2
Volume shares of CABG and PTCA

Proportion of the total CABG and PTCA treatments



Some implications result from the literature described in the box:

- From the RITA-1/EPISTENT trial, bypass and angioplasty seem to be associated with similar mortality rates and occurrence of non-fatal myocardial infarction in the long run.
- CABG tends to be associated with lower rates of recurrent angina and hospital re-admission, although stents and the use of new drugs have been changing this picture (NICE, 2003 and Vella, 2003).
- PTCA is less invasive and associated with lower risk of death during the surgical operation (NICE, 2003).

Broadly, angioplasty and bypass are associated with similar health outcomes, the choice between them relying on weighing invasiveness versus higher probability of re-admission. A simple assumption would be that there is no obvious preference between the two treatments leading to setting the quality adjustment weight equal to one for both treatments. This seems a sensible assumption, especially given the increased use of stents which have substantially improved the effectiveness of PTCAs. Quoting Cutler and Huckman (2003), “[...] despite its advantages in terms of cost and patient comfort, PTCA initially was considered less effective than CABG for patients with relatively severe [CHD]. Due to learning and technological improvements over time, however, PTCA began to be used on increasingly severe cases that were previously reserved for CABG. In short, PTCA appears to have become a stronger substitute for CABG over time”. The quality adjustment weights, α_{in} , will be therefore be set to one in the benchmark model, although the robustness of the results to the choice of quality adjustment weights will be checked.

Indices of AMI/angina output

Having calculated cost shares and quality adjustment weights, this section explores the indices of output that can be derived from the value and volume data. Each index uses costs to weight together the changes in the volumes observed over the period since financial year 1995/96. Only the final index – the cost-weighted disease index – uses the quality adjustment weights. Throughout, the elective and non-elective cases are treated separately.

The first index is the cost-weighted activity index, already used in measures of health care output though at a more aggregated level of detail. The CWAI aggregates data on the activities that form the basis of a course of treatment, such as angioplasty (PTCA) and catheterisation. When there is no substitution in the activities that make up a treatment, a volume growth in the number of activities provides a good proxy for output growth.

The second index measure – CWPI – assumes that the various activities are linked to form courses of treatments. So while catheterisation and PTCA form separate activities, as each PTCA has to be preceded by a catheterisation, the activity data needs to be adjusted to measure the number of patients treated. The number of PTCAs and CABGs are left unchanged and this implicitly assumes that the number of

these treatments per patient is stable. However, the volume of PTCA and CABGs conducted in a year is subtracted from the total number of catheterisations, so that the patients who undergo a catheterisation, but then have neither of the other treatments, is imputed as the residual.

The final index calculation – the cost-weighted disease index – takes account of substitution between CABG and PTCA. The previous sections indicate that AMI/angina treatment mixes have changed because new interventions offer cheaper, less intrusive alternatives to newer treatments. This means that a patient with AMI/angina is very likely to undergo a different (cheaper) course of treatment than a decade ago, but with similar outcomes. To take account of substitution, the volume measures for the two interventions we have data for – PTCA and CABG – are summed. This assumes the two interventions are perfect substitutes. The analysis later checks the sensitivity of the measure to alternative assumptions about the substitutability. The volume of the two interventions is then weighted together with catheterisations not related to PTCA/CABG to give an overall index.

Figure 3 represents output growth according to the three measures described above. All indexes are set at 100 for the financial year 1995/96 and the index evolution is tracked with respect to this year. The figure shows that the output of treating AMI/angina grows in all measures but it grows much faster when using a diagnosis-based approach (CWDI). The reason is that over the years there has been substitution from CABG to PTCA, i.e. from a more expensive to a cheaper treatment. In the CWAI, a bypass has a higher weight per activity than an angioplasty, because it is more expensive. A fall in the number of bypasses would have an overall negative impact even if every case was treated by the alternative and cheaper PTCA, a result which is counter-intuitive if the two treatments are substitutes in terms of outcomes. The CWDI gives a common weight to these alternative treatments

(therefore implicitly raising the weight given to PTCA, which grew more rapidly).

The CWAI and CWPI, meanwhile, are hardly distinguishable in the graph. The difference between them is that the CWPI incorporates catheterisation into the CHD patient cases rather than treating it as a separate activity. The fact that there is no difference between the CWAI and CWPI is not very surprising given that both PTCA and CABG are associated with one catheterisation and therefore a symmetric use of the resource. Further work to include other parts of the course of the treatment – such as the use of drugs, GP consultations, etc. – is necessary to fully explore this index.

Sensitivity of output indices

This section analyses the sensitivity of the growth rates of the cost-weighted activity index and the cost-weighted disease index to various assumptions about the substitutability of angioplasty and bypass. As can be expected, overall, the measures are sensitive to different assumptions but the effect of raising growth rates when using the CWDI as opposed to the CWAI is generally maintained.

Figure 4 represents the change in the CWDI growth rates with different quality adjustment weights as given in equation 2. In Figure 3, the assumed weight is one reflecting perfect substitution between PTCA and CABG. When it is assumed that PTCA is less effective than CABG, implying the quality adjustment weight is greater than one for CABG relative to PTCA, the growth of the CWDI decreases. This can be seen in equation 2 as resulting from the implicit lowering of the weight given to the high growth in PTCA. The figure shows that until the quality adjustment weight is assumed to be just

Figure 3
Output indices for AMI/angina

Volume index (1995/96=100)

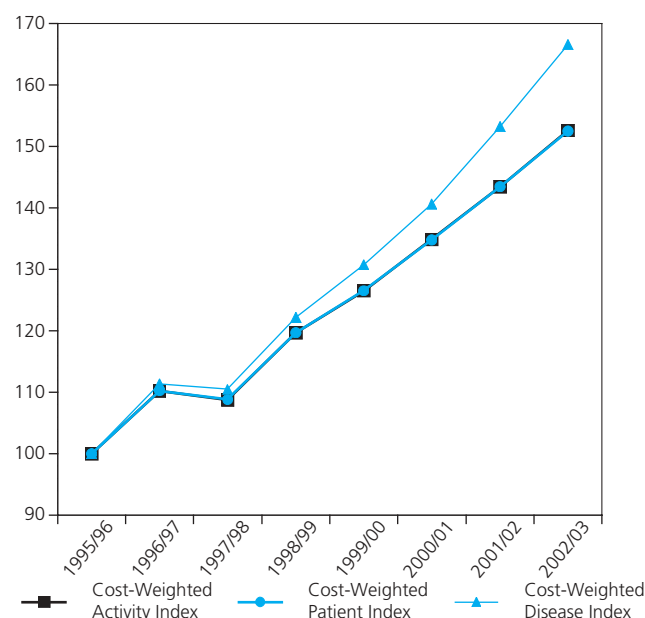
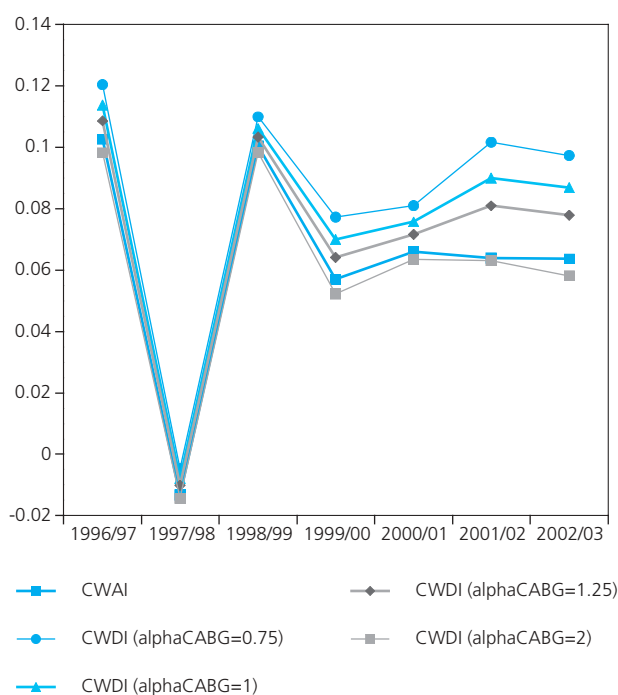


Figure 4
Sensitivity of indices to choice of quality adjustment (alpha)

Volume index net growth



below 2 in favour of CABG, however, the output effect of using the CWDI is positive on overall growth relative to the CWAI. This is a high differential in outcomes between the two treatments and the review of the clinical evidence presented does not suggest the clinical outcomes of the two treatments to be so different.

One notable feature in the Figure is that there is marked negative growth in 1997/98. This reflects the significant falls in the number of CABGs recorded in the HES data for that year. As this is a year before Reference Cost data became available, there is no alternative source of information for this year.

Further analysis was undertaken on a different way of adjusting for the re-admission rates of the two treatments. It was noted before that following an angioplasty, the number of cases where a second treatment proves necessary in the following year was about 20 per cent higher than in bypass. The data on the number of treatments in a particular year (Q_{jn}) have therefore been adjusted down by an estimate of the number of re-admissions of cases first treated in the year before. This reflects the findings in Vella (2003). The results of such an adjustment do not significantly change the growth rate of the CWDI and CWAI. When it is assumed that a quarter of PTCA activity would result in a re-admission, the following year, growth in the CWDI continues to be greater than the CWAI in terms of absolute growth rates. The year 1997/98 was an exception in that growth was negative in the index and so growth is lower in the CWDI than in the CWAI. Even when a high volume adjustment of a half is used, growth rates are generally affected very little, changing by approximately a tenth from the rates observed when no volume adjustment is made (for the most recent four years).

A final sensitivity test undertaken was the price base used in calculating weights. This proved to have little impact on growth rates.

Concluding remarks

This article reports on methodological work undertaken in developing new ways to calculate output in the UK health care sector. The health care sector represents roughly eight per cent of GDP in the UK and is the largest sector financed by the government. As with other public services, expenditure in nominal terms has been growing at a much faster pace than expenditure in real terms in recent years resulting in steeply rising implicit deflators. The article explores a different way of calculating health care output which takes account of treatment innovation and substitution. The proposed measure is based on US work on health care prices for different diagnoses.

This work highlights how innovation in treating some illnesses has meant that expensive treatments have gradually been replaced by lower cost substitutes with comparable clinical outcomes. When price indices explicitly take account of this, this tends to lower price growth so increasing the real growth rates associated with these particular illnesses. The article presents an application for UK data sources. The method proposed uses volume data aggregated using indices that reflect the substitution across treatments for particular

diseases. The method is then applied to new data sets made available to health analysts using the case of coronary heart disease to assess the measurement impact. This study is necessarily a limited one, focussing on one particular disease and on some aspects of treatment innovation. However, the impact of the method on output growth for the disease considered is significant and not very sensitive to different assumptions about treatment substitution.

In concluding, some areas of further work must be noted. First of all, the estimation of quality change in terms of different patient outcomes associated with different treatments over time could be conducted more rigorously with a QALY type analysis. This study uses clinical trials which, although authoritative for health policy, are limited in that they provide single time-specific estimates and they may be unrepresentative of the population if there are eligibility criteria for participating in a trial. Also, this study does not attempt to estimate changes in patient experience over time. Though interesting, these types of analyses are beyond the scope of this paper, which is primarily intended to demonstrate the sensitivity of index construction to innovation in disease treatment.

The methodology used is also selective in nature, dealing with a particular disease and its treatment. As with other similar studies, this is because disease-based output measures are resource intensive requiring both statistical and clinical evidence. The current study selected coronary heart disease as a disease where innovation in health care has led to substitution to more efficient treatments. However, it is important that analysis of the volume impact of treatment substitution should select diseases using a process that does not introduce bias. It would be a concern if only areas of intervention where output changes were in a particular direction were selected.

A final area for further work is in data collection. The methodology intensively uses the detail of the data available in health information systems. In areas where clinical change is fast, data systems often lag behind. In the current study, two particular shortcomings have been noted. Firstly, the information on the drugs used in treating CHD is not easily linked to the medical interventions. This would prove more of a constraint to applying the methodology in areas of health care where substitution is occurring between invasive treatments and medical management using drugs. A second data shortcoming is that the classifications used should quickly report new treatments and improvements to treatments. In the treatment of CHD, it is apparent that stents are improving the outcome of PTCA treatments but the current HRG codes do not distinguish where stents have and have not been used.

A longer-term data issue touched upon in this study is the use of treatment pathways in compiling volume and cost series. This would link health care interventions by patient and disease treatments. The HES data used in the current study was the finished consultation episodes series. Further work could make use of other datasets available such as the HES spells data and the Oxford Record Linkage Data Set, which begin to link spells of care by patient.

To conclude, it is worth remarking that the methodology outlined in this article has not yet been implemented in the UK National Accounts and therefore has not contributed to the recent Blue Book revisions to health care output figures. This approach is mentioned in the Atkinson Review as a potential long term approach for the measurement of health care output, although no definite recommendation on its adoption has been provided. Though theoretically sound, this approach is clearly data intensive and would require continuous medical input in the data compilation process. Extending this work to the whole of the NHS is currently ambitious; the availability of new data systems richer in patient-level data and disease-based accounts would greatly help this task.

Notes

- ¹ The author is grateful for the invaluable help provided by Prabhat Vaze throughout the writing of this article and for comments from Phillip Lee, Aileen Simkins, Joe Grice, Tony Atkinson, Mary O'Mahony, Alistair McGuire, Jack Triplett, Alwyn Pritchard, Peter Goldblatt, Alide Petri, Andrew Jackson, Andrew Marshall, Craig Richardson, Maree Barnett and Gavin Lerner.
- ² The review was announced on 4 December 2003 by the UK National Statistician Len Cook and is being undertaken by Sir Tony Atkinson, Professor of Economics and Warden of Nuffield College, Oxford. The review is to be published in two stages: a preliminary report accompanies this paper, released in July 2004, and a final report will be published in January 2005.
- ³ The boundaries of a course of treatment are generally unclear and it will be somewhat arbitrary to establish when the patient episode finishes. Cutler *et al* (2001) for example employ the cut-off point of 90 days after the occurrence of a heart attack to define the treatment episode.
- ⁴ Note that the set J_n may change over time i.e. $J_n(t_0) \neq J_n(t_1)$. This is due to the introduction of new treatments for given diagnoses.
- ⁵ Ideally we would want to use prices to construct weights but these are not available in the UK. Average costs will therefore be a viable proxy at this stage.
- ⁶ For further details about HES, see <http://www.dh.gov.uk/PublicationsAndStatistics/Statistics/HospitalEpisodeStatistics/fs/en>. For Reference Costs, see <http://www.dh.gov.uk/PolicyAndGuidance/OrganisationPolicy/FinanceAndPlanning/>
- ⁷ The use of rolling weights means that we update to reflect the importance of the most recent technologies used. The dataset available had no unit costs prior to 1998/99, so for the years before this volumes were combined with 1998/99 unit costs.

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Input-Output and GDP revisions analysis: 1992–2002

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This article presents a Revisions Analysis for 1992 to 2002 as published in the 2004 Edition of the *UK Input-Output Analyses* on 20 August 2004. This edition contains revised I-O Annual Supply and Use Tables for 1992–2001 and new tables for 2002. Also shown are revisions analyses and background to revisions since the 2003 edition, and in previous editions going back to 1992. These estimates are consistent with those published in the *Blue Book* and *Pink Book*.

Introduction

In 1992, the Office for National Statistics (ONS) introduced the compilation of annual Input-Output Supply and Use Tables through which the annual level of UK current price Gross Domestic Product was agreed. Since then various developments and improvements have been implemented which in turn have generated revisions to the National Accounts and these tables. This article presents background and details of revisions since the 2003 edition of *UK Input-Output Analyses*. In addition, also described are the different stages of the GDP compilation process, sources of revisions and analyses of revisions in previous editions.

Revisions since the 2003 edition of UK Input-Output Analyses

The revisions to the UK National Accounts and Balance of Payments for 1992–2002 affect both levels and growth rates to current (*nominal*) price data and constant (*real*) price data. The 2004 edition of the *United Kingdom Input-Output Analyses* publication contains revised I-O Annual Supply and Use Tables for 1992–2001 and new tables for 2002. Except for 1991, there are no revisions to the components of GDP to earlier years at current prices.

In summary, the main causes of these revisions are:

- methodological improvements affecting either *production*, *income*, or *expenditure* measures of Gross Domestic Product (GDP). Examples include the allocation of GFCF industry headings to I-O product groups, review of the effective VAT rates applied to products, and increased use of data from the Annual Business Inquiry (ABI) on margins by type of product
- impact of benchmarking various short-term based estimates onto annual inquiry sources or administrative based sources
- range of balancing investigations and reconciliation exercises affecting several time periods
- reconciliation of source data and results for 2001 and 2002 from the Monthly Production Inquiry (MPI) and the ABI, covering production industries only
- reclassification of NHS Trusts from the public non-financial corporation sector to the central government sector for all years since their introduction in 1991
- review of the public sector health industry estimates, which generated a number of reclassifications across industries
- stored/late data revisions not included in the 2003 ONS *Blue Book*, in line with National Accounts revisions policy.

Figure 1
Revisions to total GDP and GVA compared with the 2003 Blue Book, for 1992 to 2002

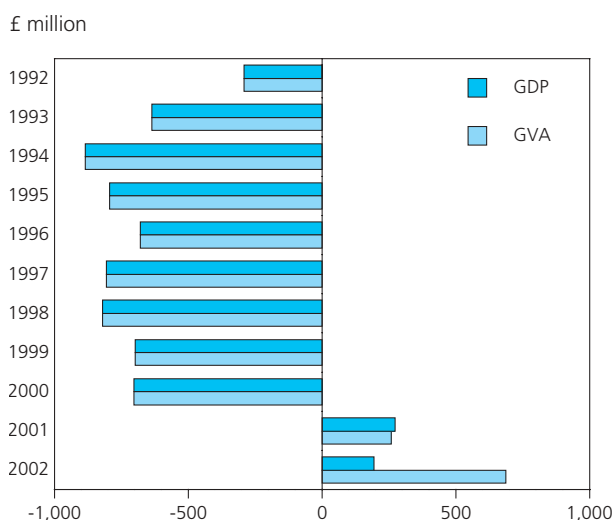


Figure 1 shows the revision to annual GDP at current market prices and Gross Value Added (GVA) at current basic prices for 1992 to 2002 compared with the 2003 edition of the ONS *Blue Book*.

Table 6 (at the end of this article) shows a summary of the revisions to the components of *income*, *expenditure* and *production* for 1992–2002 compared with the 2003 edition of the ONS *Blue Book*, in terms of changes to levels and growth rates.

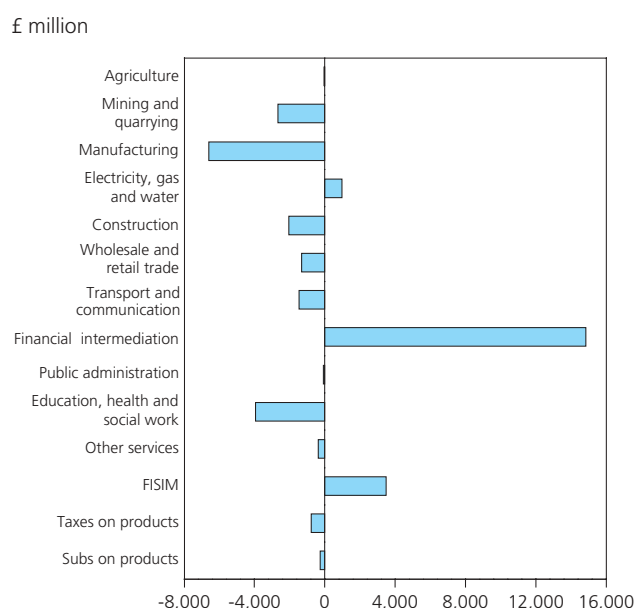
Figures 2 to 5 show the revisions to the components of the *production*, *income*, and *expenditure* measures of GDP for the year 2002. This is the first time GDP for this year has been balanced through the I-O Annual Supply and Use Table framework. Further background of the revisions to all years is provided in the next section.

Revisions to production measure of GDP

All revisions to the *income* and *expenditure* components of GDP affect the I-O Annual Supply and Use Tables. More specifically, since the 2003 edition of the ONS *Blue Book*, the main areas generating the revisions underlying the *production* components are:

- incorporation of results from the revised 2001 and new 2002 ONS Annual Business Inquiry (ABI) results
- incorporation of revised 1999–2001 and new 2002 PRODCOM Inquiry results
- incorporation of revised 2001 and new 2002 ITIS Inquiry results
- complete review of estimates of GFCF by product affecting data from 1992 to 2002. The data is now compiled at a lower level (47 industries) than the published level (NACE Rev.1 A31 level)
- revised income-based estimates for industries where only income-based estimates are available
- reconciliation of source data and results for 2001 and 2002 from the Monthly Production Inquiry (MPI) and the ABI, covering production industries only
- review of industry purchases structures reflecting data collected via the ABI, covering the construction, distribution and service industries
- reclassification of NHS Trusts from the public non-financial corporation sector to the central government sector for all years since they were introduced in 1991
- incorporation of Subjective Analyses Return results for 2001/2002 and 2002/2003
- review of the health industry, reclassifying healthcare provided in prisons, healthcare provided by the armed forces and training of nurses and other healthcare staff, all of which were from 1987
- inclusion of estimates to fully reflect toll processing activity
- updated estimates for smuggling of alcohol and tobacco
- reconciliation of oil and gas industry estimates from ONS (ABI) and DTI (PQ 1100) inquiries
- income earned-in-kind
- imputed insurance premium supplement
- actual and imputed rental income of owner-occupied dwellings
- non-market consumption of fixed capital from 1991, linked to the NHS Trusts reclassification
- taxes and subsidies on products and production
- FISIM
- stored data revisions covering a number of sources.

Figure 2
Revisions to production measure of GDP for 2002



Revisions to income measure of GDP

Since the 2003 edition of the ONS *Blue Book*, the main areas generating the revisions underlying the *income* components are:

- revised and new Inland Revenue annual benchmark data affecting wages and salaries, rental income, self-employment income and gross trading profits
- incorporation of results from the revised 2001 and new 2002 ONS ABI results, affecting holding gains, gross trading profits and compensation of employees
- employers' National Insurance contributions
- reclassification of NHS Trusts from the public non-financial corporation sector to the central government sector for all years since they were introduced in 1991
- review of the health industry, reclassifying healthcare provided in prisons, healthcare provided by the armed forces and training of nurses and other healthcare staff, all of which were from 1987
- incorporation of results from ONS Financial Inquiries covering industries like insurance and securities dealers
- income earned-in-kind
- updated estimates for smuggling of alcohol and tobacco
- reconciliation of oil and gas industry estimates from the ONS (ABI) and DTI (PQ1100) inquiries
- actual and imputed rental income of owner-occupied dwellings
- imputed insurance premium supplement
- non-market consumption of fixed capital from 1991 – linked to the NHS Trusts reclassification
- taxes and subsidies on products and production
- FISIM
- stored data revisions covering a number of sources.

Figure 3

Revisions to Income measure of GDP (Gross operating surplus by sector) for 2002

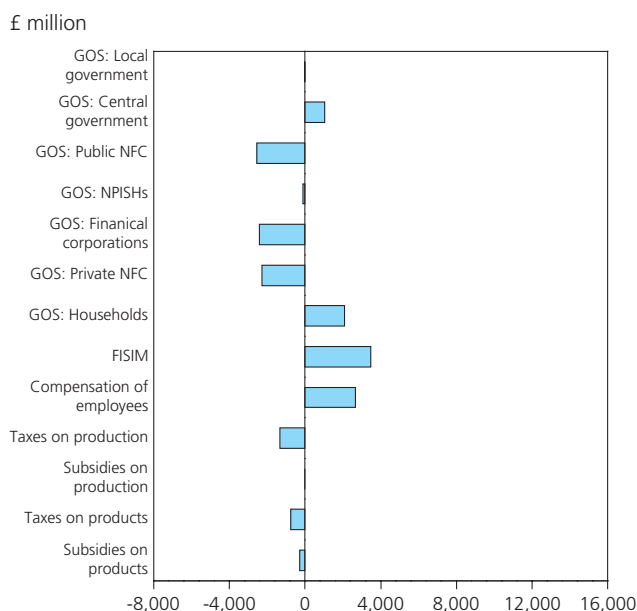
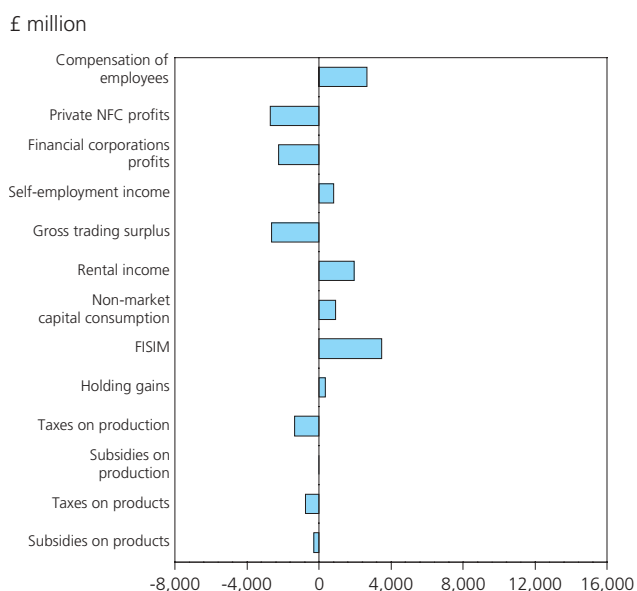


Figure 4

Revisions to Income measure of GDP (by factor incomes) for 2002

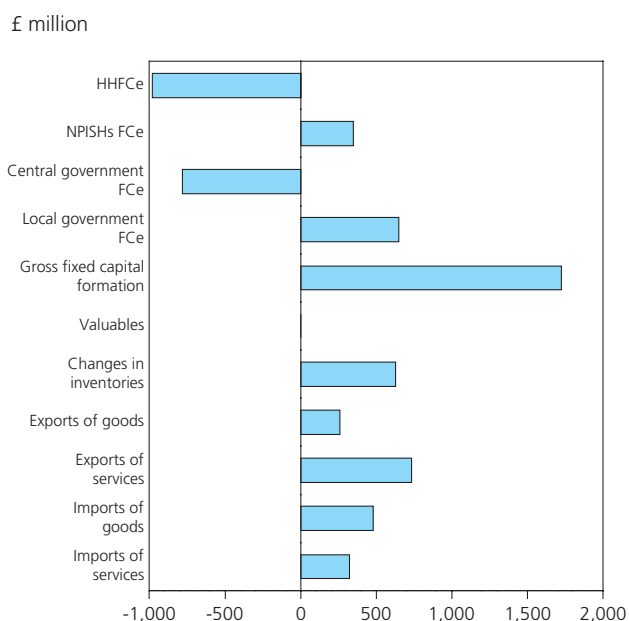


Revisions to expenditure measure of GDP

Since the 2003 edition of the ONS *Blue Book*, the main areas generating the revisions underlying the *expenditure* components are:

- incorporation of results from the revised 2001 and new 2002 ONS ABI results, affecting household final consumption expenditure, gross fixed capital formation, changes in inventories and trade in services
- incorporation of revised 2001 and new 2002 ITIS Inquiry results
- final government outturn data for 2001/2002 and 2002/2003
- inclusion of latest Expenditure and Food Survey (EFS) results
- inclusion of government final resource accounts for 2001/2002 and 2002/2003
- updated estimates for smuggling of alcohol and tobacco
- revised life assurance and pension fund data
- actual and imputed rental income of owner-occupied dwellings
- income earned-in-kind
- imputed insurance premium supplement
- non-market consumption of fixed capital from 1991 – linked to the NHS Trusts reclassification
- stored data revisions covering a number of sources.

Figure 5
Revisions to Expenditure measure of GDP (by component) for 2002



Revisions in previous editions

Publication of Blue Book and I-O Annual Supply and Use Tables

Table 1 shows the release dates for the ONS *Blue Book* dataset and for the quarterly data underpinning the annual datasets since the 1992 *Blue Book*, which contained the first I-O Annual Supply and Use Tables for the year 1989.

Since then, for each annual exercise, the I-O Annual Supply and Use Tables have always been consistent with, and published at the same time as, the corresponding ONS *Blue Book* and *Pink Book* datasets.

Table 1
Release of ONS annual Blue Book and consistent quarterly data

Blue Book year	Release of quarterly dataset	Release of Blue Book dataset
1992	Mid September	Mid August
1993	Mid September	Mid August
1994	Mid September	Mid August
1995	End June	Mid July
1996	End June	Mid July
1997	End June	Mid August
1998	End September	Early October
1999	End July	End August
2000	End June	Early August
2001	End September	End September
2002	End June	Mid July
2003	End September	Late October
2004	End June	Mid July

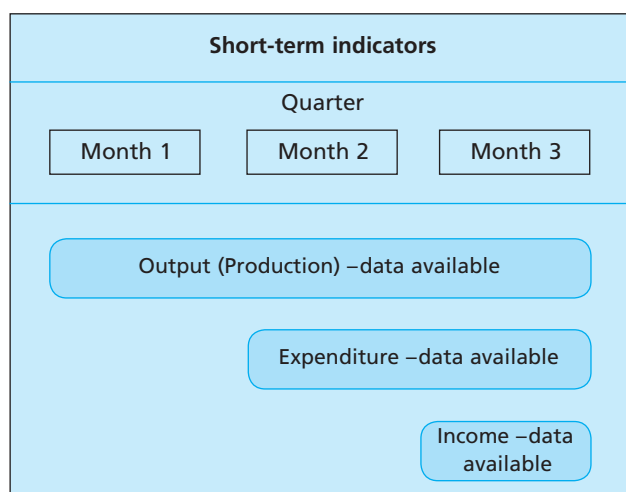
Different stages of the GDP compilation process

Data feeding into the compilation of GDP, like many economic statistics (Wroe, 1993 and Cook, 2004), are continually revised and these revisions occur at different stages of the GDP compilation process.

Figure 6 shows the evolution of the first GDP estimate through successive monthly and quarterly exercises through to the first *Blue Book* and second *Blue Book* exercises. Table 2 shows when the UK GDP estimate for 2002 Quarter 1 was first published in April 2002, and the timing of subsequent revisions to this period up to the annual benchmarking exercise through the I-O Annual Supply and Use Tables in June 2004.

The next section of this article briefly describes the short-term and annual processes, and the causes of revisions at each stage.

Figure 6
Life cycle of national accounts data – estimation timeframe



Letter 't' denotes the year of the Blue Book publication.

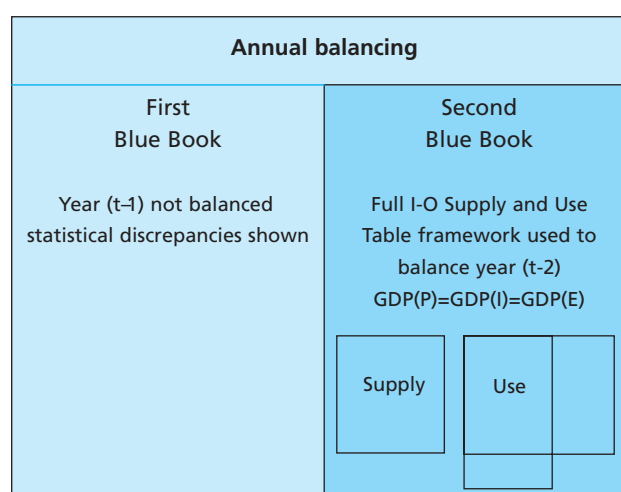


Table 2

2002 Quarter 1: initial estimates of GDP through to annual benchmarking

Month	Release
Apr-02	M1 Gross Domestic Product Preliminary Estimate (after 25 days)
May-02	M2 UK Output, Income and Expenditure (after 55 days)
Jun-02	M3 Quarterly National Accounts (after 85 days)
Sep-02	Quarterly round (M3)
Dec-02	Quarterly round (M3)
Mar-03	Quarterly round (M3)
Jun-03	Quarterly round (M3)
Sep-03	Blue Book One stage
Dec-03	Quarterly round (M3)
Mar-04	Quarterly round (M3)
Jun-04	Blue Book Two stage (balanced through I-O SUTs framework)

Quarterly GDP process

There are three successive monthly releases after the end of each quarter: the *Gross Domestic Product Preliminary Estimate*, the *UK Output, Income and Expenditure* release, and the *Quarterly National Accounts*; referred to as Month One (M1), Month Two (M2) and Month Three (M3) respectively.

Gross Domestic Product Preliminary Estimate is usually released around twenty-five days after the end of the reference quarter. The preliminary estimate for GDP provides estimates of the growth in the volume of GDP on the previous quarter. It is based on a limited amount of information:

- Index of Production for the first two months of the quarter
- Monthly Inquiry into Distribution and Service Sector (MIDSS) for two full months and partial data for the third month
- Retail Sales Inquiry estimates for the three months of the quarter
- limited information on the output of the rest of the economy.

Although at this stage estimates for most individual industry series are not sufficiently reliable for publication, the preliminary estimate provides a broad indication of the level of growth in quarterly GDP, which will become more firmly based at later stages in the process.

UK Output, Income and Expenditure is released around fifty-five days after the end of the reference quarter. A single estimate of GDP with its *income*, *output* (or *production*) and *expenditure* components is produced, replacing and revising the preliminary estimate. Revisions between M1 and M2 arise mostly from additional output data. At this stage, this quarterly GDP estimate is improved by the addition of, for example:

- Index of Production and MIDSS data for the third month of the quarter
- new information from the inventories and gross fixed capital formation inquiries
- Motor trades inquiry and HM Customs and Excise data
- early survey data covering the construction industry.

Quarterly National Accounts are released around eighty-five days after the end of the reference quarter. In this release, ONS produces a full set of quarterly economic accounts, revising and expanding the information made available in the earlier estimate and revising estimates for earlier quarters in the current and, normally, previous years. Fuller survey data for components of each of the *expenditure*, *output* (or *production*) and *income* measures are available. Revisions between M2 and M3 arise from:

- additional output data. For example, construction industry estimates are based on full survey results in M3, replacing forecasts used in M1 and M2
- newly received data for the *expenditure* and *income* measures of GDP
- additional detail and replacement of imputation. For example, Expenditure and Food Survey (EFS) data are available in M3, replacing forecasts for household final consumption of services
- availability of data from the ONS Quarterly Profits Inquiry, and revised estimates for inventories and gross fixed capital formation
- availability of some Balance of Payments data for the first time at this stage.

By this stage in the estimation process the full final employment figures (the employee jobs in the Workforce Jobs survey) are usually available. These feed into both the *income* and to a lesser extent the *output* (or *production*) measures of GDP.

Given the fully integrated nature of the accounts, any imbalance in the sector accounts is also part of the evidence considered in balancing GDP.

Annual GDP process including I-O Supply and Use Tables

Annual data sources, as they become available, provide more detail than the quarterly releases and are published and incorporated the following year. This is known as 'Blue Book One stage'. In this stage, the latest complete year is year (t-1), where t is the year of the ONS *Blue Book*. This provides an opportunity to use data from sources that had not been available earlier, such as information from the Inland Revenue and Government outturns for the fiscal year. It is likely at this stage that revisions will be made to the latest annual data and underlying quarterly data. This revision will take place six to eighteen months after the M3 estimate has been published. For the year (t-1) in this stage, the three measures of GDP are not fully balanced, and statistical discrepancies exist for the *expenditure* and *income* measures of GDP.

These estimates are again revised at the 'Blue Book Two stage', typically eighteen to thirty months after the preliminary GDP estimate is published. The first Input-Output Annual Supply and Use Tables are produced for the year (t-2) using annual sources such as the ONS ABI together with a range of other benchmark sources and revised data. So, for example, the 2004 *Blue Book* included the first I-O Annual Supply and Use Table for the year 2002, incorporating the first set of results from the ABI for that year. When balanced, the I-O Annual Supply and Use Tables have removed the need for any statistical discrepancies between the three measures of GDP. In the 'Blue Book Two stage' revisions can go back

several years and impact on the first estimate for the year (t-1) produced during the 'Blue Book One stage', as well as the underlying quarterly estimates.

Figure 7 shows the impact of the first Input-Output Annual Supply and Use Table on the year (t-2) GDP at current market prices, since the 1994 *Blue Book*.

Figure 8 shows the accumulative revision from the first Blue Book One stage estimate of annual GDP for each year balanced through the I-O Annual Supply and Use Tables process to the latest estimate published in this edition.

For fuller details and analyses of the revisions generated by the different stages of GDP compilation, see Akritidis, 2003a, 2003b and Richardson, 2002, 2003. For further details on the annual process, see Mahajan, 1997a.

Figure 7
Impact of 1st I-O SUTs balance on year (t-2)
GDP at current market prices

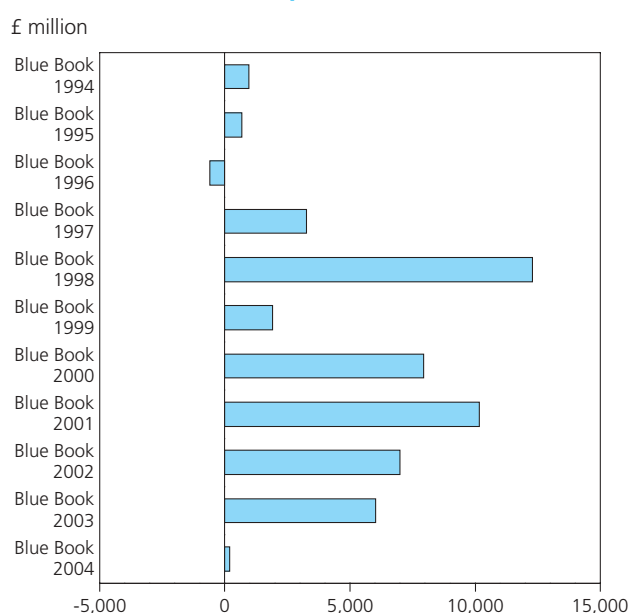


Figure 8
Accumulated revision to GDP from Blue Book One
stage to latest estimate

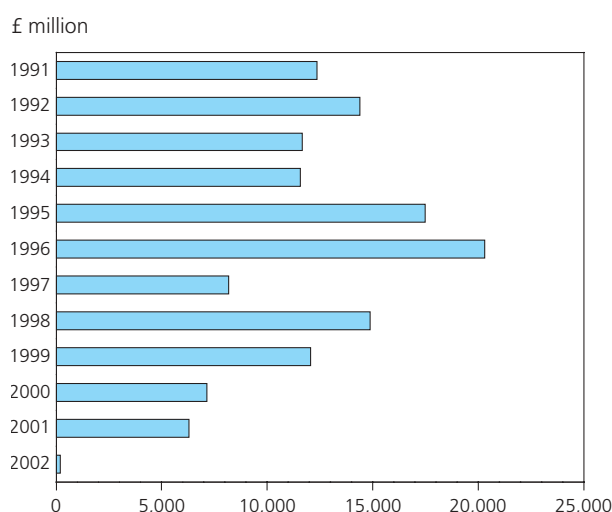


Table 3
Key changes affecting National Accounts and I-O Annual Supply and Use Tables in recent years

Blue Book year	Change
n/a	Implementation of Pickford Report Recommendations (Cabinet Office, 1989). Implementation of Chancellor's Initiatives (ONS, 1991) –two funded packages in May 1990 and November 1991.
1992	Introduction of annual GDP current price balancing through the Input-Output Annual Supply and Use Tables framework.
1993	Rebasing the National Accounts onto 1990=100.
1995	Conversion of estimates from SIC(80) to SIC(92).
1998	Use of ONS inquiry results based on the new Inter-Departmental Business Register. Rebasing the National Accounts onto 1995=100. Move to the European System of Accounts 1995.
2000	New capital stock estimates.
2001	Incorporation of the full impact of results from the new Annual Business Inquiry. Inclusion of estimates for alcohol and tobacco-smuggling.
2003	Incorporation of initial results from the new annual all-industry purchases data collected via the ABI. Inclusion of estimates for Missing Trader intra-community VAT fraud activity. Move to annual chain-linking of GDP with reference year 2000.
2004	Reclassification of NHS Trusts from the public non-financial corporation sector to the central government sector. Review of the public sector health industry estimates. Chain-linking of GDP with reference year 2001.

Sources of revisions

The scope for revisions to earlier years is determined by the National Accounts revisions policy applied for each annual exercise. The policy is based around the arrival of new data and its economic significance coupled with the need to be able to make methodological improvements. In general, revisions through the I-O Annual Supply and Use Tables framework are made due to:

- receipt of additional and/or more comprehensive data and the subsequent need to review any judgmental adjustments made in previous balancing exercises, see Mahajan and Penneck, 1999.
- update of institutional sector components to reflect final data
- annual benchmarking of short-term based data sources
- improvements and changes to methodology and classifications
- incorporation of new sources and improvements to existing sources
- specific data reconciliation exercises.

In principle, it should be noted that methodological and classification changes can cause time series to be revised all the way back to the year 1948, the earliest year of UK GDP at current market prices under the present system. Examples of recent cases that have generated substantial changes to the National Accounts and I-O Annual Supply and Use Tables are shown in Table 3. For a more complete list of changes in the 1990s, see Brand and Jenkinson, 2000.

Table 4
Earliest year revised: Annual current price GDP and I-O Supply and Use tables

Blue Book year	Earliest year revised	
	Annual current price GDP	I-O Annual Supply and Use Tables
1992	1984	1989
1993	1982	1989
1994	1983	1989
1995	1987	1989
1996	1987	1989
1997	1989	1989
1998	1948	1989
1999	1996	1996
2000	1948	1989
2001	1986	1989
2002	1997	1997
2003	1996	1992
2004	1991	1991

In addition, revisions can be generated through the process of balancing I-O Annual Supply and Use Tables. For each year, this process when complete, shows:

- for each of the 123 products, total supply **equals** total demand
- for each of the 123 industries, total inputs **equals** total outputs
- for each of the 123 industries, GVA from the *production* approach **equals** that from the *income* approach with consistent components of the income measure, and for each of the seven national accounts institutional sectors.

Although the above identities hold for each year, the balancing process also has to ensure consistency of the industry, product and institutional sector detail over time. For further details of the annual balancing process, see Mahajan, 1997a.

Changes to I-O Annual Supply and Use Tables

Table 4 shows for each ONS *Blue Book* since 1992, the earliest year for which revisions have been made to annual current price GDP and to I-O Annual Supply and Use Tables. Improvements to the quality of I-O Annual Supply and Use Tables have also been made without affecting total GDP. For example, the 2003 exercise incorporated revisions for years back to 1992, whereas annual current price GDP was only revised from the year 1996.

Table 5 shows for each annual exercise from 1992, the publication of new I-O Annual Supply and Use Tables and the years for which earlier tables have been revised. In addition, there is a brief summary reflecting key changes incorporated in the I-O Annual Supply and Use Tables in that year.

The I-O Annual Supply and Use Tables are based on a wide range of sources:

- In the main, these tables are based largely on returns from ONS statistical surveys such as the ABI, PRODCOM, ITIS, Financial Industry inquiries and the Expenditure and Food Survey as well as data from other government departments such as the Inland Revenue, Defra, DTI and HM Customs & Excise.
- Data from administrative systems are also used, such as the Government Expenditure Monitoring System, Subjective Analyses Returns covering local government expenditure and tax and employment-based data from the Inland Revenue.
- Models are also used, such as the Perpetual Inventory Model, to provide estimates for non-market bodies' consumption of fixed capital.
- Over time, ONS receives more complete information, for example as more survey returns come in, and this new information is incorporated within the National Accounts.

For further details covering sources and methods underlying the I-O Annual Supply and Use Tables, see Mahajan, 1997a, and the ONS *UK Gross National Income Inventory of Methods*.

Table 5
Input-Output Annual Supply and Use Tables published from 1992 to 2004

Year (t) published	Input-Output Supply and Use Tables												
1992	1989												
1993	1989r	1990											
1994	1989r	1990r	1991	1992									
1995	1989r	1990r	1991r	1992r	1993								
1996	1989r	1990r	1991r	1992r	1993r	1994							
1997	1989r	1990r	1991r	1992r	1993r	1994r	1995						
1998	1989r	1990r	1991r	1992r	1993r	1994r	1995r	1996					
1999								1996r	1997				
2000	1989r	1990r	1991r	1992r	1993r	1994r	1995r	1996r	1997r	1998			
2001	1989r	1990r	1991r	1992r	1993r	1994r	1995r	1996r	1997r	1998r	1999		
2002									1997r	1998r	1999r	2000	
2003				1992r	1993r	1994r	1995r	1996r	1997r	1998r	1999r	2000r	2001
2004			1991r	1992r	1993r	1994r	1995r	1996r	1997r	1998r	1999r	2000r	2001r 2002

Letter 'r' after a year denotes the I-O Annual Supply and Use tables have been revised.
Letter 't' denotes the year of publication.

Analyses of revisions

Table 6 shows a summary of revisions for 1992–2002 to the components of *income*, *expenditure* and production measures of GDP since the 2003 edition of *United Kingdom Input-Output Analyses*.

For the years 1991–2002, Table 7 shows the published estimates of GVA at current basic prices, at the eleven industry level and GDP at current market prices, from each ONS *Blue Book* since 1993. The ABI is the single largest data source used to populate the I-O Annual Supply and Use Tables. Therefore, for each industry group, the underlying ABI data used in producing these tables from 1997 is also shown. Note that 1997 was the first year covered by the ABI, replacing the previous range of separate annual inquiries.

Table 8 shows, at the eleven industry level, the revisions to GVA at current basic prices and to the ABI data as used in successive annual exercises.

For the years 1991 to 2002, Table 9 shows the published estimates of the components of the *expenditure* measure of GDP from each ONS *Blue Book* since 1993, and Table 10 shows the corresponding revision between successive annual publications.

Notable changes within each Annual Input-Output exercise

1992 Year (t-3) compiled using 102 I-O groups on SIC(80) classification. The first set of GVA estimates produced for 1989 using the I-O Annual Supply and Use framework. GVA estimates produced using the production approach differed from those produced using the income approach.

1993 1989 and 1990 compiled using 123 I-O groups on SIC(80) classification. GVA weights at factor cost for 1990 used for rebasing production measure of GDP onto 1990=100. At the eleven industry level, GVA estimates from the production and income approaches were brought into line.

1994 Timetable for I-O Annual Supply and Use Tables compilation accelerated and years (t-3) and (t-2) compiled together.

1995 1992 and 1993 compiled using 123 I-O groups on SIC(92) classification. 1989 to 1991 converted using correlator derived from dual run of 1992 data. I-O Annual Supply and Use Tables completed to further reduced timetable.

1996 Complete reconciliation of estimates of GVA at factor cost derived from the production and income approaches at the 123-industry level for the first time. Inclusion of results from the new Overseas Trade in Services Inquiry.

1997 I-O Annual Supply and Use Tables completed to a further reduced timetable.

1998 Major revisions package (1986–96) balanced through the I-O framework using inquiry results based on the new IDBR for the first time, and then all I-O Annual Supply and Use Tables (1989–96) converted on to an ESA95 basis. UK Production Accounts by sector for all sectors produced for the first time. GVA weights at basic prices for 1995 used for rebasing the production measure of GDP onto 1995=100.

1999 Partly incorporated results from the new Annual Business Inquiry (ABI) including extension of ABI to cover oil and gas extraction industry. I-O Annual Supply and Use Tables completed to a further reduced timetable.

- 2000 Publication of annual current price quality and coherence adjustments underlying the balanced I-O Annual Supply and Use Tables for the first time. Inclusion of new capital consumption estimates.
- 2001 Major revisions package (1986–97) balanced through the I-O framework incorporating the full impact of the new ABI results, using dual run of 1997 data to provide link factors for back data. Estimates for smuggling included for the first time. Range of new analyses based upon I-O Annual Supply and Use Tables produced for the first time, including ICT, Food sector, Creative sector and Import penetration.
- 2002 Inclusion of ABI results covering forestry and fishing for the first time. I-O Annual Supply and Use Tables completed to a further reduced timetable. Web-only UK Input-Output Analyses publication, including further new analyses, all of which were available free of charge for the first time.
- 2003 Inclusion of ABI results covering parts of the agriculture industry and the annual all-industry purchases data; move onto full HHFCe COICOP by I-O product analyses (from 1992); new International Trade In Services (ITIS) results; and inclusion of Missing Trader intra-community VAT fraud estimates. GVA weights at basic prices for years up to and including 2000 used for chain-linking the production measure of GDP, where 2000=100. Further new analyses produced covering Taxes and subsidies, Oil and gas sector and Revisions analysis.
- 2004 Reclassification of NHS Trusts from the public non-financial corporations sector to central government sector; Review of public sector health industry estimates; Review of GFCF industry headings to I-O product groups from 1992; Review of effective VAT rates applied by I-O product; GVA weights at basic prices for years up to and including 2001, used for chain-linking the production measure of GDP, where 2001=100.

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Table 6

Blue Book 2004: Revisions to GDP and GVA levels, and growth rates, 1992 to 2002

	Differences to levels (£ million) or proportions BB2004 /less BB2003										
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Income measure of GDP											
Gross operating surplus (by sector):											
Local government – non-market	–	–	–	–	–	–	–	–	–	–17	–12
Central government – non-market	274	551	855	1 032	1 106	1 183	1 213	1 282	1 421	1 278	1 045
Public non-financial corporations	–566	–1 187	–1 741	–1 825	–1 786	–1 989	–2 033	–1 980	–2 125	–2 298	–2 563
Non-profit institutions serving households	–	–	–	–	–	–	–	–	–	–53	–129
Financial corporations	–	–	–	–	–	–	–	–3 353	–4 290	–5 498	–2 404
Private non-financial corporations	–	–	–	–	–	–	–	–	200	–842	–2 293
Households (including mixed income)	–	–	–	–	–	–	–	–	–	87	2 071
FISIM	–	–	–	–	–	–	–	3 353	4 290	6 667	3 483
Total gross operating surplus	–292	–636	–886	–793	–680	–806	–820	–698	–504	–676	–802
Compensation of employees	–	–	–	–	–	–	–	–	–200	1 246	2 666
Taxes on production	–	–	–	–	–	–	–	–	–	–326	–1 343
less Subsidies on production	–	–	–	–	–	–	–	–	–	–15	–23
Gross value added at basic prices	–292	–636	–886	–793	–680	–806	–820	–698	–704	259	544
Taxes on products	–55	–117	–198	–311	–339	–345	–353	–405	–453	–590	–772
less Subsidies on products	–55	–117	–198	–311	–339	–345	–353	–405	–453	–603	–281
Income statistical discrepancy	–	–	–	–	–	–	–	–	–	–	147
Total GDP (income) at market prices	–292	–636	–886	–793	–680	–806	–820	–698	–704	272	200
Income measure of GDP (by factor incomes)											
Compensation of employees	–	–	–	–	–	–	–	–	–200	1 246	2 666
Private non-financial corporation profits	–	–	–	–	–	–	–	–	–	–2 356	–2 703
Private financial corporation profits	–	–	–	–	–	–	–	–3 353	–4 290	–5 579	–2 247
Self-employment income	–	–	–	–	–	–	–	–	200	–914	810
Gross trading surplus	–566	–1 187	–1 741	–1 825	–1 786	–1 989	–2 033	–1 980	–2 125	–2 451	–2 644
Rental income	–	–	–	–	–	–	–	–	–	667	1 930
Non-market capital consumption	274	551	855	1 032	1 106	1 183	1 213	1 282	1 421	1 208	905
FISIM	–	–	–	–	–	–	–	3 353	4 290	6 667	3 483
less Holding gains	–	–	–	–	–	–	–	–	–	–2 082	336
Taxes on production	–	–	–	–	–	–	–	–	–	–326	–1 343
less Subsidies on production	–	–	–	–	–	–	–	–	–	–15	–23
Gross value added at basic prices	–292	–636	–886	–793	–680	–806	–820	–698	–704	259	544
Taxes on products	–55	–117	–198	–311	–339	–345	–353	–405	–453	–590	–772
less Subsidies on products	–55	–117	–198	–311	–339	–345	–353	–405	–453	–603	–281
Income statistical discrepancy	–	–	–	–	–	–	–	–	–	–	147
Total GDP (income) at market prices	–292	–636	–886	–793	–680	–806	–820	–698	–704	272	200
Expenditure measure of GDP											
Household final consumption expenditure	–	–	–	–	–	–	–	–	–	–121	–981
Non-profit institutions serving households	–	–	–	–	–	–	–	–	–	–331	350
Central government final consumption	–292	–636	–886	–793	–680	–806	–820	–698	–704	–1 372	–781
Local government final consumption	–	–	–	–	–	–	–	–	–	–99	651
Gross fixed capital formation	–	–	–	–	–	–	–	–	–	–1 187	1 723
Valuables	–	–	–	–	–	–	–	–	–	–	1
Changes in inventories	–	–	–	–	–	–	–	–	–	3 194	629
Exports of goods	–	–	–	–	–	–	–	–	–	5	260
Exports of services	–	–	–	–	–	–	–	–	–	656	733
Total domestic final consumption expenditure	–292	–636	–886	–793	–680	–806	–820	–698	–704	745	2 585
less Imports of goods	–	–	–	–	–	–	–	–	–	33	480
less Imports of services	–	–	–	–	–	–	–	–	–	440	322
Expenditure statistical discrepancy	–	–	–	–	–	–	–	–	–	–	–1 583
Total GDP (expenditure) at market prices	–292	–636	–886	–793	–680	–806	–820	–698	–704	272	200

Table 6 continued

Blue Book 2004: Revisions to GDP and GVA levels, and growth rates, 1992 to 2002

Differences to levels (£ million) or proportions BB2004 /less BB2003											
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Production measure of GDP											
1 Agriculture [1–3]	–	–	–	–	–	–	–	–	–	69	–57
2 Mining and quarrying [4–7]	–	–	–	–	–	–	–	–	–1	425	–2 687
3 Manufacturing [8–84]	–	–	–	–	–	–	–	–2	–	–306	–6 589
4 Electricity, gas and water supply [85–87]	–	–	–	–	–	–	–	–	–	–190	959
5 Construction [88]	–	–	–	–	–	–	–	–	–	–216	–2 065
6 Wholesale & retail trade [89–92]	–	–	–	–	–	–	–	–	1	342	–1 310
7 Transport and communication [93–99]	–	–	–	–	–	–	–	–	–	–1 130	–1 469
8 Financial intermediation [100–114]	–	–1	–	–	–	–	–	–3 353	–4 290	–4 728	14 819
9 Public administration [115]	–949	–765	–1 453	–1 378	–339	–333	–332	–331	–328	348	–82
10 Education, health and social work [116–118]	643	40	455	599	–341	–473	–488	–367	–376	–813	–3 933
11 Other services [119–123]	14	90	112	–14	–	–	–	2	–	–209	–383
FISIM	–	–	–	–	–	–	–	3 353	4 290	6 667	3 483
Gross value added at basic prices	–292	–636	–886	–793	–680	–806	–820	–698	–704	259	686
Taxes on products	–55	–117	–198	–311	–339	–345	–353	–405	–453	–590	–772
/less Subsidies on products	–55	–117	–198	–311	–339	–345	–353	–405	–453	–603	–281
Total GDP (production) at market prices	–292	–636	–886	–793	–680	–806	–820	–698	–704	272	195
Production measure – industry weights parts per 1,000											
1 Agriculture [1–3]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	–0.1
2 Mining and quarrying [4–7]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	–2.9
3 Manufacturing [8–84]	0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	–0.4	–7.2
4 Electricity, gas and water supply [85–87]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	–0.2	1.0
5 Construction [88]	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	–0.3	–2.3
6 Wholesale & retail trade [89–92]	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.3	–1.5
7 Transport and communication [93–99]	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	–1.3	–1.6
8 Financial intermediation [100–114]	0.1	0.3	0.4	0.3	0.3	0.3	0.3	–4.0	–4.9	–5.5	15.8
9 Public administration [115]	–1.7	–1.3	–2.3	–2.1	–0.4	–0.4	–0.4	–0.4	–0.3	0.4	–0.1
10 Education, health and social work [116–118]	1.2	0.2	0.9	1.1	–0.4	–0.5	–0.5	–0.4	–0.3	–1.0	–4.3
11 Other services [119–123]	0.0	0.2	0.2	0.0	0.0	0.1	0.1	0.0	0.0	–0.3	–0.5
FISIM	0.0	0.0	–0.1	0.0	0.0	0.0	0.0	4.2	5.1	7.6	3.8
Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

See 'Notes for information' on the last page of this table.

Table 6 continued

Blue Book 2004: Revisions to GDP and GVA levels, and growth rates, 1992 to 2002

Differences to growth rates (per cent) BB2004 /less BB2003										
	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
Income measure of GDP										
Gross operating surplus (by sector):										
Local government –non-market	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	–0.4	0.0
Central government –non-market	7.2	7.4	2.8	0.6	1.1	–0.2	0.2	2.4	–2.9	0.0
Public non-financial corporations	–8.0	–6.0	3.7	0.2	–4.2	0.6	–1.1	–2.6	–0.7	0.0
Non-profit institutions serving households	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	–2.8	0.0
Financial corporations	0.0	0.0	0.0	0.0	0.0	0.0	–18.2	–7.9	–8.5	0.0
Private non-financial corporations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	–0.6	0.0
Households (including mixed income)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
FISIM	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total gross operating surplus	–0.2	–0.1	0.1	0.1	0.0	0.0	0.0	0.1	–0.1	0.0
Compensation of employees	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Taxes on production	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	–1.9	0.0
/less Subsidies on production	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	–1.6	0.0
Gross value added at basic prices	–0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Taxes on products	–0.1	–0.1	–0.1	0.0	0.0	0.0	0.0	0.0	–0.1	0.0
/less Subsidies on products	–1.0	–1.1	–1.6	0.1	–0.2	–0.7	–1.0	–0.4	–2.0	0.0
Income statistical discrepancy	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total GDP (income) at market prices	–0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Income measure of GDP (by factor incomes)										
Compensation of employees	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Private non-financial corporation profits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	–1.6	0.0
Private financial corporation profits	0.0	0.0	0.0	0.0	0.0	0.0	–31.3	–26.3	–35.4	0.0
Self-employment income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	–1.3	0.0
Gross trading surplus	–18.0	–12.9	30.4	0.5	–10.6	–3.6	–1.5	–4.7	–10.0	0.0
Rental income	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0
Non-market capital consumption	3.7	3.7	1.4	–0.7	0.5	–0.2	0.0	0.9	–2.3	0.0
FISIM	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
/less Holding gains	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Taxes on production	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	–1.9	0.0
/less Subsidies on production	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	–1.6	0.0
Gross value added at basic prices	–0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Taxes on products	–0.1	–0.1	–0.1	0.0	0.0	0.0	0.0	0.0	–0.1	0.0
/less Subsidies on products	–1.0	–1.1	–1.6	0.1	–0.2	–0.7	–1.0	–0.4	–2.0	0.0
Income statistical discrepancy	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total GDP (income) at market prices	–0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Expenditure measure of GDP										
Household final consumption expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-profit institutions serving households	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	–1.4	0.0
Central government final consumption	–0.4	–0.3	0.1	0.2	–0.1	0.0	0.2	0.0	–0.6	0.0
Local government final consumption	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	–0.1	0.0
Gross fixed capital formation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	–0.7	0.0
Valuables	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Changes in inventories	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Exports of goods	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Exports of services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0
Total domestic final consumption expenditure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
/less Imports of goods	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
/less Imports of services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0
Expenditure statistical discrepancy	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total GDP (expenditure) at market prices	–0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0

Table 6 continued

Blue Book 2004: Revisions to GDP and GVA levels, and growth rates, 1992 to 2002

	Differences to growth rates (per cent) BB2004 /less BB2003									
	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02
Production measure of GDP										
1 Agriculture [1-3]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0
2 Mining and quarrying [4-7]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0
3 Manufacturing [8-84]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0
4 Electricity, gas and water supply [85-87]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.2	0.0
5 Construction [88]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	0.0
6 Wholesale & retail trade [89-92]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0
7 Transport and communication [93-99]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.6	0.0
8 Financial intermediation [100-114]	0.0	0.0	0.0	0.0	0.0	0.0	-1.6	-0.3	0.0	0.0
9 Public administration [115]	0.5	-1.8	0.2	2.8	0.0	0.0	0.0	0.0	1.6	0.0
10 Education, health and social work [116-118]	-1.0	0.6	0.2	-1.3	-0.1	0.0	0.2	0.0	-0.4	0.0
11 Other services [119-123]	0.3	0.1	-0.5	0.1	0.0	0.0	0.0	0.0	-0.5	0.0
FISIM	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Gross value added at basic prices	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Taxes on products	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
less Subsidies on products	-1.0	-1.1	-1.6	0.1	-0.2	-0.7	-1.0	-0.4	-2.0	0.0
Total GDP (production) at market prices	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0

Note for information

For 2002, the total revision to the production measure does not equal that of the income and expenditure measures due to components not adding up to totals in 2003 Blue Book.

Table 7

Blue Book estimates: GVA by industry with underlying ABI data

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Gross value added (by industry)												
1 Agriculture [1-3]												
BB 1993	9 091	9 309										
BB 1994	8 964	9 282	10 373									
BB 1995	8 964	9 727	10 719	11 548								
BB 1996	8 965	9 739	10 094	10 334	11 896							
BB 1997	8 964	9 738	10 092	10 231	11 544	11 790						
BB 1998	9 376	10 349	10 765	10 776	11 713	11 963	10 820					
BB 1999	9 376	10 349	10 765	10 776	11 713	11 963	10 594	9 656				
BB 2000	9 376	10 349	10 765	10 776	11 713	11 963	10 594	9 731	9 332			
BB 2001	9 468	9 918	10 544	10 617	11 766	11 735	10 145	9 628	9 460	8 912		
BB 2002	9 468	9 918	10 544	10 617	11 766	11 735	10 145	9 628	9 478	8 801	8 241	
BB 2003	9 468	9 918	10 544	10 617	11 766	12 058	10 239	9 546	9 359	8 915	8 634	9 035
BB 2004	9 468	9 918	10 544	10 617	11 766	12 058	10 239	9 546	9 359	8 915	8 703	8 978
of which :												
ABI : BB 1999	**	**	**	**	**	**	**					
ABI : BB 2000	**	**	**	**	**	**	**	**				
ABI : BB 2001	**	**	**	**	**	**	**	**	**			
ABI : BB 2002	**	**	**	**	**	**	**	**	**	647		
ABI : BB 2003	**	**	**	**	**	**	**	**	**	670	1 894	
ABI : BB 2004	**	**	**	**	**	**	**	**	**	670	1 979	1 837
2 Mining and quarrying [4-7]												
BB 1993	10 073	9 842										
BB 1994	10 450	10 654	12 147									
BB 1995	11 203	11 578	12 542	13 078								
BB 1996	11 204	11 674	12 296	13 443	14 575							
BB 1997	11 203	11 674	12 261	13 591	14 986	18 068						
BB 1998	13 410	13 167	13 305	14 550	16 116	19 447	18 137					
BB 1999	13 410	13 167	13 305	14 550	16 116	19 447	17 643	12 748				
BB 2000	13 410	13 167	13 305	14 550	16 116	19 447	17 643	15 034	17 976			
BB 2001	13 629	13 418	13 526	14 788	16 369	19 768	18 115	15 679	17 090	24 244		
BB 2002	13 629	13 418	13 526	14 788	16 369	19 768	18 116	15 677	17 402	25 308	25 665	
BB 2003	13 629	13 418	13 526	14 788	16 369	19 768	18 118	15 666	17 403	25 240	24 027	25 531
BB 2004	13 629	13 418	13 526	14 788	16 369	19 768	18 118	15 666	17 403	25 239	24 452	22 844
of which :												
ABI : BB 1999	**	**	**	**	**	**	16 530					
ABI : BB 2000	**	**	**	**	**	**	16 530	14 596				
ABI : BB 2001	**	**	**	**	**	**	16 530	13 421	15 375			
ABI : BB 2002	**	**	**	**	**	**	16 530	13 421	15 245	23 013		
ABI : BB 2003	**	**	**	**	**	**	16 530	13 120	15 245	22 317	22 428	
ABI : BB 2004	**	**	**	**	**	**	16 530	13 120	15 245	22 289	22 560	19 097

See 'Notes for interpretation' on the last page of this table.

Table 7

Blue Book estimates: GVA by industry with underlying ABI data

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Gross value added (by industry)												
3 Manufacturing [8–84]												
BB 1993	112 743	114 698										
BB 1994	108 834	111 644	118 294									
BB 1995	106 896	109 071	113 940	121 272								
BB 1996	106 895	109 809	115 672	124 339	131 658							
BB 1997	106 896	109 811	115 719	123 941	131 701	137 006						
BB 1998	111 337	113 704	118 718	128 202	136 747	143 485	146 522					
BB 1999	111 337	113 704	118 718	128 202	136 747	143 485	148 619	147 306				
BB 2000	111 337	113 704	118 718	128 202	136 747	143 485	148 619	151 197	147 699			
BB 2001	113 322	115 891	120 989	130 767	139 789	146 079	152 305	153 272	152 653	155 531		
BB 2002	113 322	115 891	120 989	130 767	139 789	146 079	152 299	153 408	152 402	153 671	153 132	
BB 2003	113 322	115 891	120 989	130 767	139 789	146 071	152 658	153 844	153 073	152 147	151 553	154 051
BB 2004	113 322	115 891	120 989	130 767	139 789	146 071	152 658	153 844	153 071	152 147	151 247	147 462
of which :												
ABI : BB 1999	**	**	**	**	**	**	148 691					
ABI : BB 2000	**	**	**	**	**	**	148 691	151 801				
ABI : BB 2001	**	**	**	**	**	**	148 691	149 896	151 037			
ABI : BB 2002	**	**	**	**	**	**	148 691	149 896	150 313	151 096		
ABI : BB 2003	**	**	**	**	**	**	148 691	149 940	150 434	148 813	145 194	
ABI : BB 2004	**	**	**	**	**	**	148 691	149 940	150 449	148 882	145 230	144 227
4 Electricity, gas and water supply [85–87]												
BB 1993	13 498	13 717										
BB 1994	13 388	13 339	13 994									
BB 1995	13 388	13 375	14 404	15 458								
BB 1996	13 387	13 493	14 802	14 983	15 787							
BB 1997	13 388	13 558	14 902	14 815	14 092	13 606						
BB 1998	14 553	14 721	16 049	15 932	15 562	16 120	16 227					
BB 1999	14 553	14 721	16 049	15 932	15 562	16 120	16 230	16 737				
BB 2000	14 553	14 721	16 049	15 932	15 562	16 120	16 230	15 851	17 944			
BB 2001	14 527	14 928	16 271	16 158	15 586	16 280	16 141	15 960	16 009	15 677		
BB 2002	14 527	14 928	16 271	16 158	15 586	16 280	16 141	15 960	15 968	15 731	15 713	
BB 2003	14 527	14 928	16 271	16 158	15 586	16 280	16 141	16 087	15 968	16 112	16 234	15 181
BB 2004	14 527	14 928	16 271	16 158	15 586	16 280	16 141	16 087	15 968	16 112	16 044	16 140
of which :												
ABI : BB 1999	**	**	**	**	**	**	16 348					
ABI : BB 2000	**	**	**	**	**	**	16 348	15 648				
ABI : BB 2001	**	**	**	**	**	**	16 348	15 312	15 666			
ABI : BB 2002	**	**	**	**	**	**	16 348	15 312	15 496	13 935		
ABI : BB 2003	**	**	**	**	**	**	16 348	15 446	15 496	14 804	14 751	
ABI : BB 2004	**	**	**	**	**	**	16 348	15 446	15 496	15 106	14 453	15 737

See 'Notes for interpretation' on the last page of this table.

Table 7 continued

Blue Book estimates: GVA by industry with underlying ABI data

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Gross value added (by industry)												
5 Construction [88]												
BB 1993	32 748	32 002										
BB 1994	31 470	29 760	29 221									
BB 1995	31 506	29 796	28 851	31 035								
BB 1996	31 505	29 796	28 930	30 156	31 815							
BB 1997	31 506	29 797	29 030	30 902	32 241	33 746						
BB 1998	31 995	29 965	29 144	31 347	32 948	34 563	36 491					
BB 1999	31 995	29 965	29 144	31 347	32 948	34 563	36 927	39 262				
BB 2000	31 995	29 965	29 144	31 347	32 948	34 563	36 927	38 945	41 273			
BB 2001	32 084	30 020	29 166	31 216	33 005	34 587	36 879	39 017	41 142	43 287		
BB 2002	32 084	30 020	29 166	31 216	33 005	34 587	36 879	39 097	41 516	44 047	47 327	
BB 2003	32 084	30 020	29 166	31 216	33 005	34 643	36 933	39 001	41 721	45 474	50 218	57 555
BB 2004	32 084	30 020	29 166	31 216	33 005	34 643	36 933	39 001	41 721	45 474	50 002	55 490
<i>of which :</i>												
ABI : BB 1999	**	**	**	**	**	**	29 566					
ABI : BB 2000	**	**	**	**	**	**	29 566	36 906				
ABI : BB 2001	**	**	**	**	**	**	29 566	34 598	39 173			
ABI : BB 2002	**	**	**	**	**	**	29 566	34 598	39 320	41 145		
ABI : BB 2003	**	**	**	**	**	**	29 566	34 598	39 320	42 462	48 086	
ABI : BB 2004	**	**	**	**	**	**	29 566	34 598	39 320	42 462	47 647	50 764
6 Wholesale & retail trade [89-92]												
BB 1993	71 865	72 549										
BB 1994	71 558	74 536	78 348									
BB 1995	71 755	74 795	78 924	83 472								
BB 1996	71 756	74 266	78 687	82 060	84 706							
BB 1997	71 755	74 742	78 860	83 212	87 633	93 091						
BB 1998	75 349	79 652	83 823	88 224	92 557	99 170	106 068					
BB 1999	75 349	79 652	83 823	88 224	92 557	99 170	108 450	113 070				
BB 2000	75 349	79 652	83 823	88 224	92 557	99 170	108 450	115 650	117 554			
BB 2001	75 231	79 606	84 063	88 391	92 865	99 806	109 155	117 683	125 641	130 782		
BB 2002	75 231	79 606	84 063	88 391	92 865	99 806	109 130	117 834	125 243	130 629	136 125	
BB 2003	75 231	79 606	84 063	88 391	92 865	99 596	108 441	117 336	125 393	131 506	139 527	147 847
BB 2004	75 231	79 606	84 063	88 391	92 865	99 596	108 441	117 336	125 393	131 507	139 869	146 537
<i>of which :</i>												
ABI : BB 1999	**	**	**	**	**	**	121 004					
ABI : BB 2000	**	**	**	**	**	**	121 004	128 118				
ABI : BB 2001	**	**	**	**	**	**	121 004	127 426	136 797			
ABI : BB 2002	**	**	**	**	**	**	121 004	128 044	137 624	138 844		
ABI : BB 2003	**	**	**	**	**	**	120 152	126 657	137 715	139 541	150 790	
ABI : BB 2004	**	**	**	**	**	**	120 152	126 657	137 723	139 515	149 677	154 347

See 'Notes for interpretation' on the last page of this table.

Table 7 continued

Blue Book estimates: GVA by industry with underlying ABI data

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Gross value added (by industry)												
7 Transport and communication [93–99]												
BB 1993	40 387	41 613										
BB 1994	42 051	43 905	46 263									
BB 1995	42 191	43 651	45 990	49 039								
BB 1996	42 190	43 777	46 321	49 255	50 835							
BB 1997	42 191	43 782	46 327	49 042	50 837	54 056						
BB 1998	43 909	45 714	47 294	50 708	52 297	53 994	59 694					
BB 1999	43 909	45 714	47 294	50 708	52 297	53 994	57 916	63 340				
BB 2000	43 909	45 714	47 294	50 708	52 297	53 994	57 916	62 200	69 208			
BB 2001	43 730	45 108	46 408	49 572	51 340	53 473	57 393	62 134	65 910	68 195		
BB 2002	43 730	45 108	46 408	49 572	51 340	53 473	57 412	62 230	65 096	68 842	70 252	
BB 2003	43 731	45 108	46 408	49 572	51 340	53 705	57 424	62 361	64 996	70 055	72 543	75 661
BB 2004	43 731	45 108	46 408	49 572	51 340	53 705	57 424	62 361	64 996	70 055	71 413	74 192
of which :												
ABI : BB 1999	**	**	**	**	**	**	39 264					
ABI : BB 2000	**	**	**	**	**	**	39 264	42 330				
ABI : BB 2001	**	**	**	**	**	**	39 264	44 614	48 503			
ABI : BB 2002	**	**	**	**	**	**	39 264	44 614	47 419	51 595		
ABI : BB 2003	**	**	**	**	**	**	40 270	44 604	47 288	52 511	50 378	
ABI : BB 2004	**	**	**	**	**	**	40 270	44 604	46 907	51 581	52 961	56 280
8 Financial intermediation [100–114]												
BB 1993	113 114	121 704										
BB 1994	116 277	124 456	133 956									
BB 1995	120 212	131 264	140 248	154 550								
BB 1996	119 199	130 128	139 209	152 101	158 224							
BB 1997	118 813	129 179	138 481	152 350	156 164	164 282						
BB 1998	121 850	133 501	141 698	154 498	159 069	168 448	185 851					
BB 1999	121 850	133 501	141 698	154 498	159 069	168 448	184 163	206 347				
BB 2000	121 861	133 501	141 698	154 498	159 069	168 448	184 163	205 549	220 601			
BB 2001	120 319	131 127	142 004	152 854	159 141	169 690	183 883	208 055	220 625	234 379		
BB 2002	120 319	131 127	142 004	152 854	159 141	169 690	183 870	208 590	221 507	239 748	255 871	
BB 2003	120 319	131 127	142 004	152 854	159 141	169 974	183 955	208 966	221 541	238 108	257 391	267 531
BB 2004	120 319	131 127	142 003	152 854	159 141	169 974	183 955	208 966	218 188	233 818	252 663	282 350
of which :												
ABI : BB 1999	**	**	**	**	**	**	88 773					
ABI : BB 2000	**	**	**	**	**	**	88 773	103 435				
ABI : BB 2001	**	**	**	**	**	**	88 773	104 066	113 350			
ABI : BB 2002	**	**	**	**	**	**	88 773	104 066	114 278	127 413		
ABI : BB 2003	**	**	**	**	**	**	88 498	104 010	114 254	127 071	135 386	
ABI : BB 2004	**	**	**	**	**	**	88 498	104 010	113 891	126 728	132 655	135 827

See 'Notes for interpretation' on the last page of this table.

Table 7 continued

Blue Book estimates: GVA by industry with underlying ABI data

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Gross value added (by industry)												
9 Public administration [115]												
BB 1993	34 430	36 605										
BB 1994	34 257	37 260	38 199									
BB 1995	34 257	36 747	38 140	38 797								
BB 1996	34 257	36 774	38 377	38 502	39 510							
BB 1997	34 257	36 774	37 925	37 273	37 123	38 244						
BB 1998	35 561	38 537	39 352	38 894	39 196	39 181	38 940					
BB 1999	35 561	38 537	39 352	38 894	39 196	39 181	39 020	40 495				
BB 2000	36 617	39 416	40 189	39 713	39 869	39 835	39 646	39 651	40 199			
BB 2001	36 426	39 210	39 988	39 597	39 756	39 709	39 659	39 751	39 786	42 091		
BB 2002	36 426	39 210	39 988	39 597	39 756	39 709	39 659	39 751	39 372	40 848	42 096	
BB 2003	36 426	39 210	39 988	39 597	39 756	40 673	40 721	40 692	42 155	44 061	45 768	48 554
BB 2004	36 426	38 261	39 223	38 144	38 378	40 334	40 388	40 360	41 824	43 733	46 116	48 472
of which :												
ABI : BB 1999	**	**	**	**	**	**	**					
ABI : BB 2000	**	**	**	**	**	**	**	**				
ABI : BB 2001	**	**	**	**	**	**	**	**	**			
ABI : BB 2002	**	**	**	**	**	**	**	**	**	**		
ABI : BB 2003	**	**	**	**	**	**	**	**	**	**	**	
ABI : BB 2004	**	**	**	**	**	**	**	**	**	**	**	**
10 Education, health and social work [116-118]												
BB 1993	48 010	52 509										
BB 1994	50 757	55 062	57 457									
BB 1995	58 371	62 827	66 523	69 116								
BB 1996	58 371	63 001	66 437	70 829	72 972							
BB 1997	58 371	62 998	66 601	72 082	77 199	81 876						
BB 1998	60 169	64 566	68 621	72 193	76 130	81 291	85 129					
BB 1999	60 169	64 566	68 621	72 193	76 130	81 291	85 162	89 041				
BB 2000	60 740	65 087	69 132	72 734	76 693	81 886	85 825	91 105	93 241			
BB 2001	60 449	64 237	68 536	72 265	76 259	81 107	85 671	90 924	97 777	102 489		
BB 2002	60 449	64 237	68 536	72 265	76 259	81 107	85 694	90 925	98 201	105 658	114 069	
BB 2003	60 449	64 237	68 536	72 265	76 259	80 010	84 383	89 553	96 119	103 005	110 126	120 550
BB 2004	60 300	64 880	68 576	72 720	76 858	79 669	83 910	89 065	95 752	102 629	109 313	116 617
of which :												
ABI : BB 1999	**	**	**	**	**	**	5 132					
ABI : BB 2000	**	**	**	**	**	**	5 132	4 583				
ABI : BB 2001	**	**	**	**	**	**	5 132	4 584	4 933			
ABI : BB 2002	**	**	**	**	**	**	5 132	4 584	4 923	5 506		
ABI : BB 2003	**	**	**	**	**	**	5 132	4 584	4 923	5 023	5 277	
ABI : BB 2004	**	**	**	**	**	**	5 132	4 584	4 919	5 024	5 301	6 075

See 'Notes for interpretation' on the last page of this table.

Table 7 continued

Blue Book estimates: GVA by industry with underlying ABI data

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Gross value added (by industry)												
11 Other services [119–123]												
BB 1993	30 142	32 892										
BB 1994	28 676	29 455	31 292									
BB 1995	18 387	19 448	20 876	22 044								
BB 1996	18 387	19 219	20 502	22 089	23 255							
BB 1997	18 387	19 221	20 482	21 969	23 379	24 713						
BB 1998	19 866	21 026	23 096	25 248	27 229	30 467	33 955					
BB 1999	19 866	21 026	23 096	25 248	27 229	30 467	34 567	38 912				
BB 2000	19 819	21 204	23 280	25 439	27 422	30 670	34 786	38 116	41 498			
BB 2001	20 049	22 057	23 535	25 634	27 247	29 966	33 742	37 213	39 751	42 560		
BB 2002	20 049	22 057	23 535	25 634	27 247	29 966	33 743	37 261	40 209	42 731	45 101	
BB 2003	20 049	22 057	23 535	25 634	27 247	30 008	33 754	37 305	40 207	42 520	45 125	48 304
BB 2004	20 049	22 071	23 625	25 746	27 233	30 008	33 754	37 305	40 209	42 520	44 916	47 921
of which :												
ABI : BB 1999	**	**	**	**	**	**	23 685					
ABI : BB 2000	**	**	**	**	**	**	23 685	22 980				
ABI : BB 2001	**	**	**	**	**	**	23 685	22 957	26 805			
ABI : BB 2002	**	**	**	**	**	**	23 685	22 957	27 160	29 016		
ABI : BB 2003	**	**	**	**	**	**	23 514	22 957	27 160	28 453	31 801	
ABI : BB 2004	**	**	**	**	**	**	23 514	22 957	27 102	28 388	31 603	33 176
FISIM												
BB 1993	-21 267	-23 058										
BB 1994	-20 782	-23 326	-23 741									
BB 1995	-21 230	-25 821	-24 423	-29 828								
BB 1996	-19 864	-23 543	-23 299	-28 912	-30 794							
BB 1997	-19 478	-23 143	-22 811	-29 271	-28 809	-26 968						
BB 1998	-15 828	-20 997	-20 025	-26 410	-25 499	-25 557	-26 564					
BB 1999	-15 828	-20 997	-20 025	-26 410	-25 499	-25 557	-25 678	-29 370				
BB 2000	-15 828	-20 997	-20 025	-26 410	-25 499	-25 557	-25 678	-27 732	-30 411			
BB 2001	-15 301	-19 086	-19 569	-23 119	-23 215	-22 580	-22 396	-27 998	-30 819	-37 091		
BB 2002	-15 301	-19 086	-19 569	-23 119	-23 215	-22 580	-22 396	-27 998	-30 121	-37 949	-39 367	
BB 2003	-15 301	-19 086	-19 569	-23 119	-23 215	-22 580	-22 396	-27 998	-30 121	-37 949	-40 242	-44 211
BB 2004	-15 301	-19 086	-19 569	-23 119	-23 215	-22 580	-22 396	-27 998	-26 768	-33 659	-33 575	-40 728

See 'Notes for interpretation' on the last page of this table.

Table 7 continued

Blue Book estimates: GVA by industry with underlying ABI data

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Gross value added (by industry)												
Total GVA (including FISIM)												
BB 1993	494 824	514 594										
BB 1994	495 900	516 027	546 120									
BB 1995	495 900	516 458	546 733	579 140								
BB 1996	496 253	518 132	548 025	579 177	604 259							
BB 1997	496 253	518 132	547 870	580 135	608 090	642 916						
BB 1998	521 547	543 904	571 838	604 162	634 066	672 572	711 270					
BB 1999	521 547	543 904	571 838	604 162	634 066	672 572	713 614	747 544				
BB 2000	523 137	545 487	573 377	605 720	635 498	674 029	715 127	755 297	787 386			
BB 2001	523 935	546 434	575 461	608 740	639 908	679 620	720 692	761 318	795 025	831 053		
BB 2002	523 935	546 434	575 461	608 740	639 908	679 620	720 692	762 363	796 273	838 065	874 227	
BB 2003	523 935	546 434	575 461	608 740	639 908	680 206	720 371	762 359	797 814	839 194	880 904	925 584
BB 2004	523 786	546 142	574 825	607 854	639 115	679 526	719 565	761 539	797 116	838 490	881 163	926 275
of which :												
ABI : BB 1999	**	**	**	**	**	**	488 993					
ABI : BB 2000	**	**	**	**	**	**	488 993	520 397				
ABI : BB 2001	**	**	**	**	**	**	488 993	516 874	551 639			
ABI : BB 2002	**	**	**	**	**	**	488 993	517 492	551 777	582 210		
ABI : BB 2003	**	**	**	**	**	**	488 701	515 916	551 835	581 665	605 985	
ABI : BB 2004	**	**	**	**	**	**	488 701	515 916	551 051	580 645	604 066	617 367
GDP at market prices												
BB 1993	573 645	596 165										
BB 1994	575 321	597 121	630 023									
BB 1995	575 321	597 242	630 707	668 866								
BB 1996	575 674	598 916	631 158	668 255	700 890							
BB 1997	575 674	598 916	631 003	669 069	704 156	742 300						
BB 1998	582 946	606 582	637 817	676 036	712 548	754 601	801 972					
BB 1999	582 946	606 582	637 817	676 036	712 548	754 601	803 889	843 725				
BB 2000	584 536	608 165	639 356	677 594	713 980	756 058	805 402	851 654	891 106			
BB 2001	586 149	610 854	642 327	681 327	719 176	762 214	811 067	859 805	901 269	943 412		
BB 2002	586 149	610 854	642 327	681 327	719 176	762 214	811 067	859 384	902 459	950 415	988 014	
BB 2003	586 149	610 854	642 327	681 327	719 176	763 290	810 944	859 436	903 865	951 265	994 037	1 043 945
BB 2004	586 000	610 562	641 691	680 441	718 383	762 610	810 138	858 616	903 167	950 561	994 309	1 044 145

Notes for interpretation

Discontinuities: (1) From the 1998 *Blue Book*, the National Accounts were compiled on an ESA95 basis and these estimates are not directly comparable with those for earlier *Blue Books*. For example, GVA is now shown at basic price but was previously shown at factor cost (which excludes all taxes (less subsidies) on production and products). A full description of these changes can be found in the 1998 *Blue Book*. (2) The 1995 *Blue Book* incorporated industry estimates based on the *Standard Industrial Classification* 1992 (SIC(92)), which were previously based on the SIC(80). (3) In the 2004 *Blue Book*, the treatment of the ABI work-in-progress data for the construction, distribution and service industries was brought into line generating minor changes.

Agriculture: The coverage of the ABI has been extended from the year 2001 to cover SIC(92) industries 014, animal husbandry, and 015, hunting. The ABI covered the forestry and fishing industries from the year 2000.

Financial intermediation: The ABI does not cover I-O industry groups 100 to 105, 115, 120 and 123. GVA for these industries is estimated using the *income* approach.

Non-ABI data sources: For a number of industries, for example I-O industry groups 96 and 118, ABI data are supplemented using data from a wide range of other sources.

For BB2003 and earlier, components do not sum to totals for some years, for example the removal of the statistical discrepancy in years where no I-O balancing of GDP has taken place.

Table 8

Successive Blue Book revisions: GVA by industry with underlying ABI data

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Gross value added (by industry)												
1 Agriculture [1–3]												
BB 1993	**											
BB 1994	-127	-27										
BB 1995	–	445	346									
BB 1996	1	12	-625	-1 214								
BB 1997	-1	-1	-2	-103	-352							
BB 1998	412	611	673	545	169	173						
BB 1999	–	–	–	–	–	–	-226					
BB 2000	–	–	–	–	–	–	–	75				
BB 2001	92	-431	-221	-159	53	-228	-449	-103	128			
BB 2002	–	–	–	–	–	–	–	–	18	-111		
BB 2003	–	–	–	–	–	323	94	-82	-119	114	393	
BB 2004	–	–	–	0	–	–	–	–	–	–	69	-57
of which :												
ABI : BB 1999	**	**	**	**	**	**						
ABI : BB 2000	**	**	**	**	**	**	**					
ABI : BB 2001	**	**	**	**	**	**	**	**				
ABI : BB 2002	**	**	**	**	**	**	**	**	**			
ABI : BB 2003	**	**	**	**	**	**	**	**	**	**	23	
ABI : BB 2004	**	**	**	**	**	**	**	**	**	**	–	85 **
2 Mining and quarrying [4–7]												
BB 1993	**											
BB 1994	377	812										
BB 1995	753	924	395									
BB 1996	1	96	-246	365								
BB 1997	-1	–	-35	148	411							
BB 1998	2 207	1 493	1 044	959	1 130	1 379						
BB 1999	–	–	–	–	–	–	-494					
BB 2000	–	–	–	–	–	–	–	2 286				
BB 2001	219	251	221	238	253	321	472	645	-886			
BB 2002	–	–	–	–	–	–	1	-2	312	1 064		
BB 2003	–	–	–	–	–	–	2	-11	1	-68	-1 638	
BB 2004	–	–	–	–	–	–	–	–	–	-1	425	-2 687
of which :												
ABI : BB 1999	**	**	**	**	**	**						
ABI : BB 2000	**	**	**	**	**	**	0					
ABI : BB 2001	**	**	**	**	**	**	–	-1 175				
ABI : BB 2002	**	**	**	**	**	**	–	–	-131			
ABI : BB 2003	**	**	**	**	**	**	–	-301	–	-695		
ABI : BB 2004	**	**	**	**	**	**	–	–	-0	-28	133	**

See 'Notes for interpretation' on the last page of this table.

Table 8 continued

Successive Blue Book revisions: GVA by industry with underlying ABI data

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Gross value added (by industry)												
3 Manufacturing [8-84]												
BB 1993	**											
BB 1994	-3 909	-3 054										
BB 1995	-1 938	-2 573	-4 354									
BB 1996	-1	738	1 732	3 067								
BB 1997	1	2	47	-398	43							
BB 1998	4 441	3 893	2 999	4 261	5 046	6 479						
BB 1999	-	-	-	-	-	-	2 097					
BB 2000	-	-	-	-	-	-	-	3 891				
BB 2001	1 985	2 187	2 271	2 565	3 042	2 594	3 686	2 075	4 954			
BB 2002	-	-	-	-	-	-	-6	136	-251	-1 860		
BB 2003	-	-	-	-	-	-8	359	436	671	-1 524	-1 579	
BB 2004	-	-	-	-	-	-	-	-	-2	-	-306	-6 589
of which :												
ABI : BB 1999	**	**	**	**	**	**						
ABI : BB 2000	**	**	**	**	**	**	-					
ABI : BB 2001	**	**	**	**	**	**	-	-1 905				
ABI : BB 2002	**	**	**	**	**	**	-	-	-725			
ABI : BB 2003	**	**	**	**	**	**	-	44	122	-2 284		
ABI : BB 2004	**	**	**	**	**	**	-	-	14	70	36	**
4 Electricity, gas and water supply [85-87]												
BB 1993	**											
BB 1994	-110	-378										
BB 1995	-	36	410									
BB 1996	-1	118	398	-475								
BB 1997	1	65	100	-168	-1 695							
BB 1998	1 165	1 163	1 147	1 117	1 470	2 514						
BB 1999	-	-	-	-	-	-	3					
BB 2000	-	-	-	-	-	-	-	-886				
BB 2001	-26	207	222	226	24	160	-89	109	-1 935			
BB 2002	-	-	-	-	-	-	-	-	-41	54		
BB 2003	-	-	-	-	-	-	-	127	-	381	521	
BB 2004	-	-	-	-	-	-	-	-	-	-	-190	959
of which :												
ABI : BB 1999	**	**	**	**	**	**						
ABI : BB 2000	**	**	**	**	**	**	-					
ABI : BB 2001	**	**	**	**	**	**	-	-337				
ABI : BB 2002	**	**	**	**	**	**	-	-	-170			
ABI : BB 2003	**	**	**	**	**	**	-	134	-	869		
ABI : BB 2004	**	**	**	**	**	**	-	-	0	302	-299	**

See 'Notes for interpretation' on the last page of this table.

Table 8 continued

Successive Blue Book revisions: GVA by industry with underlying ABI data

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Gross value added (by industry)												
5 Construction [88]												
BB 1993	**											
BB 1994	-1 278	-2 242										
BB 1995	36	36	-370									
BB 1996	-1	-	79	-879								
BB 1997	1	1	100	746	426							
BB 1998	489	168	114	445	707	817						
BB 1999	-	-	-	-	-	-	436					
BB 2000	-	-	-	-	-	-	-	-317				
BB 2001	89	55	22	-131	57	24	-48	72	-131			
BB 2002	-	-	-	-	-	-	-	80	374	760		
BB 2003	-	-	-	-	-	56	54	-96	205	1 427	2 891	
BB 2004	-	-	-	-	-	-	-	-	-	-	-216	-2 065
<i>of which :</i>												
ABI : BB 1999	**	**	**	**	**	**						
ABI : BB 2000	**	**	**	**	**	**	-					
ABI : BB 2001	**	**	**	**	**	**	-	-2 308				
ABI : BB 2002	**	**	**	**	**	**	-	-	147			
ABI : BB 2003	**	**	**	**	**	**	-	-	-	1 317		
ABI : BB 2004	**	**	**	**	**	**	-	-	-	-	-439	**
6 Wholesale & retail trade [89-92]												
BB 1993	**											
BB 1994	-307	1 987										
BB 1995	197	259	576									
BB 1996	1	-529	-237	-1 412								
BB 1997	-1	476	173	1 152	2 927							
BB 1998	3 594	4 910	4 963	5 012	4 924	6 079						
BB 1999	-	-	-	-	-	-	2 382					
BB 2000	-	-	-	-	-	-	-	2 580				
BB 2001	-118	-46	240	167	308	636	705	2 033	8 087			
BB 2002	-	-	-	-	-	-	-25	151	-398	-153		
BB 2003	-	-	-	-	-	-210	-689	-498	150	877	3 402	
BB 2004	-	-	-	-	-	-	-	-	-	1	342	-1 310
<i>of which :</i>												
ABI : BB 1999	**	**	**	**	**	**						
ABI : BB 2000	**	**	**	**	**	**	-					
ABI : BB 2001	**	**	**	**	**	**	-	-692				
ABI : BB 2002	**	**	**	**	**	**	-	618	827			
ABI : BB 2003	**	**	**	**	**	**	-852	-1 387	91	697		
ABI : BB 2004	**	**	**	**	**	**	-	-	8	-26	-1 113	**

See 'Notes for interpretation' on the last page of this table.

Table 8 continued

Successive Blue Book revisions: GVA by industry with underlying ABI data

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Gross value added (by industry)												
7 Transport and communication [93-99]												
BB 1993	**											
BB 1994	1 664	2 292										
BB 1995	140	-254	-273									
BB 1996	-1	126	331	216								
BB 1997	1	5	6	-213	2							
BB 1998	1 718	1 932	967	1 666	1 460	-62						
BB 1999	-	-	-	-	-	-	-1 778					
BB 2000	-	-	-	-	-	-	-	-1 140				
BB 2001	-179	-606	-886	-1 136	-957	-521	-523	-66	-3 298			
BB 2002	-	-	-	-	-	-	19	96	-814	647		
BB 2003	1	-	-	-	-	232	12	131	-100	1 213	2 291	
BB 2004	-	-	-	-	-	-	-	-	-	-	-1 130	-1 469
of which :												
ABI : BB 1999	**	**	**	**	**	**						
ABI : BB 2000	**	**	**	**	**	**	-					
ABI : BB 2001	**	**	**	**	**	**	-	2 284				
ABI : BB 2002	**	**	**	**	**	**	-	-	-1 084			
ABI : BB 2003	**	**	**	**	**	**	1 006	-10	-131	916		
ABI : BB 2004	**	**	**	**	**	**	-	-	-381	-930	2 583	**
8 Financial intermediation [100-114]												
BB 1993	**											
BB 1994	3 163	2 752										
BB 1995	3 935	6 808	6 292									
BB 1996	-1 013	-1 136	-1 039	-2 449								
BB 1997	-386	-949	-728	249	-2 060							
BB 1998	3 037	4 322	3 217	2 148	2 905	4 166						
BB 1999	-	-	-	-	-	-	-1 688					
BB 2000	11	-	-	-	-	-	-	-798				
BB 2001	-1 542	-2 374	306	-1 644	72	1 242	-280	2 506	24			
BB 2002	-	-	-	-	-	-	-13	535	882	5 369		
BB 2003	-	-	-	-	-	284	85	376	34	-1 640	1 520	
BB 2004	-	-	-1	-	-	-	-	-	-3 353	-4 290	-4 728	14 819
of which :												
ABI : BB 1999	**	**	**	**	**	**						
ABI : BB 2000	**	**	**	**	**	**	-					
ABI : BB 2001	**	**	**	**	**	**	-	631				
ABI : BB 2002	**	**	**	**	**	**	-	-	928			
ABI : BB 2003	**	**	**	**	**	**	-275	-56	-24	-342		
ABI : BB 2004	**	**	**	**	**	**	-	-	-363	-343	-2 731	**

See 'Notes for interpretation' on the last page of this table.

Table 8 continued

Successive Blue Book revisions: GVA by industry with underlying ABI data

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Gross value added (by industry)												
9 Public administration [115]												
BB 1993	**											
BB 1994	-173	655										
BB 1995	-	-513	-59									
BB 1996	-	27	237	-295								
BB 1997	-	-	-452	-1 229	-2 387							
BB 1998	1 304	1 763	1 427	1 621	2 073	937						
BB 1999	-	-	-	-	-	-	80					
BB 2000	1 056	879	837	819	673	654	626	-844				
BB 2001	-191	-206	-201	-116	-113	-126	13	100	-413			
BB 2002	-	-	-	-	-	-	-	-	-414	-1 243		
BB 2003	-	-	-	-	-	964	1 062	941	2 783	3 213	3 672	
BB 2004	-	-949	-765	-1 453	-1 378	-339	-333	-332	-331	-328	348	-82
of which :												
ABI : BB 1999	**	**	**	**	**	**						
ABI : BB 2000	**	**	**	**	**	**	**					
ABI : BB 2001	**	**	**	**	**	**	**	**				
ABI : BB 2002	**	**	**	**	**	**	**	**	**			
ABI : BB 2003	**	**	**	**	**	**	**	**	**	**		
ABI : BB 2004	**	**	**	**	**	**	**	**	**	**	**	**
10 Education, health and social work [116-118]												
BB 1993	**											
BB 1994	2 747	2 553										
BB 1995	7 614	7 765	9 066									
BB 1996	-	174	-86	1 713								
BB 1997	-	-3	164	1 253	4 227							
BB 1998	1 798	1 568	2 020	111	-1 069	-585						
BB 1999	-	-	-	-	-	-	33					
BB 2000	571	521	511	541	563	595	663	2 064				
BB 2001	-291	-850	-596	-469	-434	-779	-154	-181	4 536			
BB 2002	-	-	-	-	-	-	23	1	424	3 169		
BB 2003	-	-	-	-	-	-1 097	-1 311	-1 372	-2 082	-2 653	-3 943	
BB 2004	-149	643	40	455	599	-341	-473	-488	-367	-376	-813	-3 933
of which :												
ABI : BB 1999	**	**	**	**	**	**						
ABI : BB 2000	**	**	**	**	**	**	-					
ABI : BB 2001	**	**	**	**	**	**	-	1				
ABI : BB 2002	**	**	**	**	**	**	-	-	-10			
ABI : BB 2003	**	**	**	**	**	**	-	-	-	-483		
ABI : BB 2004	**	**	**	**	**	**	-	-	-4	1	24	**

See 'Notes for interpretation' on the last page of this table.

Table 8 continued

Successive Blue Book revisions: GVA by industry with underlying ABI data

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Gross value added (by industry)												
11 Other services [119-123]												
BB 1993	**											
BB 1994	-1 466	-3 437										
BB 1995	-10 289	-10 007	-10 416									
BB 1996	-	-229	-374	45								
BB 1997	-	2	-20	-120	124							
BB 1998	1 479	1 805	2 614	3 279	3 850	5 754						
BB 1999	-	-	-	-	-	-	612					
BB 2000	-47	178	184	191	193	203	219	-796				
BB 2001	230	853	255	195	-175	-704	-1 044	-903	-1 747			
BB 2002	-	-	-	-	-	-	1	48	458	171		
BB 2003	-	-	-	-	-	42	11	44	-2	-211	24	
BB 2004	-	14	90	112	-14	-	-	-	2	-	-209	-383
of which :												
ABI : BB 1999	**	**	**	**	**	**						
ABI : BB 2000	**	**	**	**	**	**	-					
ABI : BB 2001	**	**	**	**	**	**	-	-23				
ABI : BB 2002	**	**	**	**	**	**	-	-	355			
ABI : BB 2003	**	**	**	**	**	**	-171	-	-	-563		
ABI : BB 2004	**	**	**	**	**	**	-	-	-58	-65	-198	**
FISIM												
BB 1993	**											
BB 1994	485	-268										
BB 1995	-448	-2 495	-682									
BB 1996	1 366	2 278	1 124	916								
BB 1997	386	400	488	-359	1 985							
BB 1998	3 650	2 146	2 786	2 861	3 310	1 411						
BB 1999	-	-	-	-	-	-	886					
BB 2000	-	-	-	-	-	-	-	1 638				
BB 2001	527	1 911	456	3 291	2 284	2 977	3 282	-266	-408			
BB 2002	-	-	-	-	-	-	-	-	698	-858		
BB 2003	-	-	-	-	-	-	-	-	-	-	-875	
BB 2004	-	-	-	-	-	-	-	-	3 353	4 290	6 667	3 483

See 'Notes for interpretation' on the last page of this table.

Table 8 continued

Successive Blue Book revisions: GVA by industry with underlying ABI data

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Gross value added (by industry)												
Total GVA (including FISIM)												
BB 1993	**											
BB 1994	1 076	1 433										
BB 1995	—	431	613									
BB 1996	353	1 674	1 292	37								
BB 1997	—	—	-155	958	3 831							
BB 1998	25 294	25 772	23 968	24 027	25 976	29 656						
BB 1999	—	—	—	—	—	—	2 344					
BB 2000	1 590	1 583	1 539	1 558	1 432	1 457	1 513	7 753				
BB 2001	798	947	2 084	3 020	4 410	5 591	5 565	6 021	7 639			
BB 2002	—	—	—	—	—	—	—	1 045	1 248	7 012		
BB 2003	—	—	—	—	—	586	-321	-4	1 541	1 129	6 677	
BB 2004	-149	-292	-636	-886	-793	-680	-806	-820	-698	-704	259	691
of which :												
ABI : BB 1999	**	**	**	**	**	**						
ABI : BB 2000	**	**	**	**	**	**	—					
ABI : BB 2001	**	**	**	**	**	**	—	-3 524				
ABI : BB 2002	**	**	**	**	**	**	—	618	138			
ABI : BB 2003	**	**	**	**	**	**	-292	-1 576	58	-545		
ABI : BB 2004	**	**	**	**	**	**	—	—	-784	-1 020	-1 919	**
GDP at market prices												
BB 1993	**											
BB 1994	1 676	956										
BB 1995	—	121	684									
BB 1996	353	1 674	451	-611								
BB 1997	—	—	-155	814	3 266							
BB 1998	7 272	7 666	6 814	6 967	8 392	12 301						
BB 1999	—	—	—	—	—	—	1 917					
BB 2000	1 590	1 583	1 539	1 558	1 432	1 457	1 513	7 929				
BB 2001	1 613	2 689	2 971	3 733	5 196	6 156	5 665	8 151	10 163			
BB 2002	—	—	—	—	—	—	—	-421	1 190	7 003		
BB 2003	—	—	—	—	—	1 076	-123	52	1 406	850	6 023	
BB 2004	-149	-292	-636	-886	-793	-680	-806	-820	-698	-704	272	200

Notes for interpretation

Discontinuities: (1) From the 1998 *Blue Book*, the National Accounts were compiled on an ESA95 basis and these estimates are not directly comparable with those for earlier *Blue Books*. For example, GVA is now shown at basic price but was previously shown at factor cost (which excludes all taxes (less subsidies) on production and products). A full description of these changes can be found in the 1998 *Blue Book*. (2) The 1995 *Blue Book* incorporated industry estimates based on the *Standard Industrial Classification* 1992 (SIC(92)), which were previously based on the SIC(80). (3) In the 2004 *Blue Book*, the treatment of the ABI work-in-progress data for the construction, distribution and service industries was brought into line generating minor changes.

Agriculture: The coverage of the ABI has been extended from the year 2001 to cover SIC(92) industries 014, animal husbandry, and 015, hunting. The ABI covered the forestry and fishing industries from the year 2000.

Financial intermediation: The ABI does not cover I-O industry groups 100 to 105, 115, 120 and 123. GVA for these industries is estimated using the *income* approach.

Non-ABI data sources: For a number of industries, for example I-O industry groups 96 and 118, ABI data are supplemented using data from a wide range of other sources.

For BB2003 and earlier, components do not sum to totals for some years, for example the removal of the statistical discrepancy in years where no I-O balancing of GDP has taken place.

Table 9

Blue Book estimates: Expenditure measure of GDP

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Expenditure measure of GDP												
Household final consumption expenditure												
BB 1993	356 819	374 492										
BB 1994	357 036	374 433	397 790									
BB 1995	357 036	373 908	397 662	420 358								
BB 1996	357 533	375 683	398 599	419 550	439 427							
BB 1997	357 533	375 683	398 599	419 016	437 076	464 098						
BB 1998	357 785	377 147	399 108	419 262	438 453	467 841	500 616					
BB 1999	357 785	377 147	399 108	419 262	438 453	467 841	498 307	525 463				
BB 2000	357 785	377 147	399 108	419 262	438 453	467 841	498 307	530 851	564 369			
BB 2001	359 616	379 758	401 970	422 397	443 367	473 800	503 374	536 525	567 555	594 782		
BB 2002	359 616	379 758	401 970	422 397	443 367	473 800	503 374	536 235	569 481	603 557	631 010	
BB 2003	359 616	379 758	401 970	422 397	443 367	474 311	503 813	536 933	570 440	603 349	635 704	666 877
BB 2004	359 616	379 758	401 970	422 397	443 367	474 311	503 813	536 933	570 440	603 349	635 583	665 896
NPISHs final consumption expenditure												
BB 1993	8 237	8 206										
BB 1994	7 936	7 807	7 850									
BB 1995	7 936	7 807	7 800	7 726								
BB 1996	7 936	7 807	7 800	7 726	7 820							
BB 1997	7 936	7 807	7 970	8 378	9 093	9 411						
BB 1998	10 447	10 165	13 290	14 567	15 718	17 577	18 484					
BB 1999	10 447	10 165	13 290	14 567	15 718	17 577	18 725	19 661				
BB 2000	11 096	10 806	13 981	15 287	16 481	18 385	19 602	20 972	22 537			
BB 2001	11 096	10 806	13 981	15 287	16 481	18 385	19 602	21 117	22 671	22 866		
BB 2002	11 096	10 806	13 981	15 287	16 481	18 385	19 602	21 117	22 150	23 027	24 255	
BB 2003	11 096	10 806	13 981	15 287	16 481	18 338	19 509	21 053	22 069	23 188	24 676	26 009
BB 2004	11 096	10 806	13 981	15 287	16 481	18 338	19 509	21 053	22 069	23 188	24 345	26 359
Central government final consumption expenditure												
BB 1993	77 085	82 477										
BB 1994	76 985	82 148	88 226									
BB 1995	76 985	82 259	89 118	93 414								
BB 1996	76 985	82 259	89 398	93 601	96 663							
BB 1997	76 985	82 259	89 074	93 190	96 027	101 140						
BB 1998	72 292	77 374	80 606	83 728	86 142	89 692	90 560					
BB 1999	72 292	77 374	80 606	83 728	86 142	89 692	90 784	94 338				
BB 2000	73 171	78 245	81 425	84 523	86 861	90 388	91 481	95 798	98 807			
BB 2001	73 028	78 275	81 566	84 385	86 791	90 396	92 190	95 298	100 647	105 464		
BB 2002	73 028	78 275	81 566	84 385	86 791	90 396	92 190	95 298	100 422	106 808	114 718	
BB 2003	73 028	78 275	81 566	84 385	86 791	89 935	91 429	94 559	100 220	106 620	115 174	127 252
BB 2004	72 879	77 983	80 930	83 499	85 998	89 255	90 623	93 739	99 522	105 916	113 802	126 471

See 'Notes for interpretation' on the last page of this table.

Table 9 continued

Blue Book estimates: Expenditure measure of GDP

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Expenditure measure of GDP												
Local government final consumption expenditure												
BB 1993	47 120	49 901										
BB 1994	47 120	49 738	49 998									
BB 1995	47 120	49 616	48 847	50 670								
BB 1996	47 120	49 616	48 683	50 513	52 811							
BB 1997	47 120	49 616	48 682	50 878	53 181	54 592						
BB 1998	48 507	50 895	49 959	51 808	54 264	56 419	56 846					
BB 1999	48 507	50 895	49 959	51 808	54 264	56 419	56 989	59 226				
BB 2000	48 569	50 966	49 988	51 851	54 214	56 372	56 928	58 969	64 314			
BB 2001	48 375	50 920	49 968	51 870	54 240	56 383	56 957	59 583	65 647	69 327		
BB 2002	48 375	50 920	49 968	51 870	54 240	56 383	56 957	59 583	66 192	70 993	75 945	
BB 2003	48 375	50 920	49 968	51 870	54 240	56 254	56 747	59 400	66 117	71 174	76 021	81 744
BB 2004	48 375	50 920	49 968	51 870	54 240	56 254	56 747	59 400	66 117	71 174	75 922	82 395
Gross fixed capital formation												
BB 1993	96 534	92 892										
BB 1994	97 747	93 942	94 715									
BB 1995	97 747	93 642	94 644	100 075								
BB 1996	97 747	93 642	94 293	99 217	105 385							
BB 1997	97 747	93 642	94 293	100 252	108 736	114 623						
BB 1998	104 680	100 278	101 230	107 390	116 360	125 675	133 710					
BB 1999	104 680	100 278	101 230	107 390	116 360	125 675	134 153	147 629				
BB 2000	104 680	100 278	101 230	107 390	116 360	125 675	134 153	148 071	158 372			
BB 2001	105 179	100 583	101 027	108 314	117 448	125 762	134 396	151 539	155 408	165 247		
BB 2002	105 179	100 583	101 027	108 314	117 448	125 762	134 163	150 842	153 501	158 918	162 244	
BB 2003	105 179	100 583	101 027	108 314	117 448	126 291	133 776	150 540	154 647	161 210	166 691	169 972
BB 2004	105 179	100 583	101 027	108 314	117 448	126 291	133 776	150 540	154 647	161 210	165 504	171 695
Valuables												
BB 1993	**	**										
BB 1994	**	**	**									
BB 1995	**	**	**	**								
BB 1996	**	**	**	**	**							
BB 1997	**	**	**	**	**	**						
BB 1998	-86	36	-9	136	-92	-185	-219					
BB 1999	-86	36	-9	136	-92	-185	39	573				
BB 2000	-86	36	-9	136	-92	-185	39	487	346			
BB 2001	-97	17	-29	113	-121	-158	-26	430	230	-3		
BB 2002	-97	17	-29	113	-121	-158	-26	430	231	5	363	
BB 2003	-97	17	-29	113	-121	-160	-27	429	229	3	396	213
BB 2004	-97	17	-29	113	-121	-160	-27	429	229	3	396	214

See 'Notes for interpretation' on the last page of this table.

Table 9 continued

Blue Book estimates: Expenditure measure of GDP

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Expenditure measure of GDP												
Changes in inventories												
BB 1993	-5 069	-1 992										
BB 1994	-4 927	-1 932	-197									
BB 1995	-4 927	-1 937	329	3 303								
BB 1996	-4 927	-1 937	329	3 732	3 851							
BB 1997	-4 927	-1 937	329	3 708	4 748	2 917						
BB 1998	-4 927	-1 937	329	3 708	4 512	1 771	3 101					
BB 1999	-4 927	-1 937	329	3 708	4 512	1 771	4 388	3 621				
BB 2000	-4 927	-1 937	329	3 708	4 512	1 771	4 388	4 461	-1 946			
BB 2001	-4 927	-1 937	329	3 708	4 512	1 771	4 388	4 460	4 975	1 855		
BB 2002	-4 927	-1 937	329	3 708	4 512	1 771	4 621	5 026	6 060	5 595	1 441	
BB 2003	-4 927	-1 937	329	3 708	4 512	1 771	4 621	5 026	6 060	5 271	2 995	1 584
BB 2004	-4 927	-1 937	329	3 708	4 512	1 771	4 621	5 026	6 060	5 271	6 189	2 213
Exports of goods												
BB 1993	103 413	107 047										
BB 1994	103 413	107 343	121 414									
BB 1995	103 413	107 343	121 409	134 465								
BB 1996	103 413	107 343	121 398	134 666	152 346							
BB 1997	103 413	107 343	121 398	134 664	153 077	166 340						
BB 1998	103 939	107 863	122 039	135 260	153 725	167 403	171 798					
BB 1999	103 939	107 863	122 039	135 260	153 725	167 403	171 783	164 132				
BB 2000	103 939	107 863	122 039	135 260	153 725	167 403	171 783	164 092	165 667			
BB 2001	103 939	107 863	122 229	135 143	153 577	167 196	171 923	164 056	166 198	187 656		
BB 2002	103 939	107 863	122 229	135 143	153 577	167 196	171 923	164 056	166 166	187 936	191 644	
BB 2003	103 939	107 863	122 229	135 143	153 577	167 196	171 923	164 056	166 166	187 936	190 050	186 257
BB 2004	103 939	107 863	122 229	135 143	153 577	167 196	171 923	164 056	166 166	187 936	190 055	186 517
Exports of services												
BB 1993	30 735	32 780										
BB 1994	30 821	33 134	36 585									
BB 1995	30 821	34 473	37 978	39 460								
BB 1996	30 876	34 771	38 599	41 399	45 254							
BB 1997	30 876	35 154	39 066	41 938	46 598	50 807						
BB 1998	31 426	35 428	40 039	43 507	48 687	52 900	56 904					
BB 1999	31 426	35 428	40 039	43 507	48 687	52 900	57 543	60 070				
BB 2000	31 426	35 428	40 039	43 507	48 687	52 900	57 543	61 382	63 982			
BB 2001	32 001	36 228	41 411	45 365	49 932	55 895	59 699	64 745	70 522	77 649		
BB 2002	32 001	36 228	41 411	45 365	49 932	55 895	59 699	64 745	70 443	77 199	76 807	
BB 2003	32 001	36 228	41 411	45 365	49 932	56 773	61 104	66 278	72 628	79 071	81 658	86 470
BB 2004	32 001	36 228	41 411	45 365	49 932	56 773	61 104	66 278	72 628	79 071	82 314	87 203

See 'Notes for interpretation' on the last page of this table.

Table 9 continued

Blue Book estimates: Expenditure measure of GDP

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Expenditure measure of GDP												
Total domestic final consumption expenditure												
BB 1993	714 874	745 803										
BB 1994	716 131	746 613	796 381									
BB 1995	716 131	747 111	797 787	849 471								
BB 1996	716 683	749 184	799 099	850 404	903 557							
BB 1997	716 683	749 567	799 411	852 024	908 536	963 928						
BB 1998	724 063	757 249	806 591	859 366	917 769	979 093	1 031 800					
BB 1999	724 063	757 249	806 591	859 366	917 769	979 093	1 032 711	1 074 713				
BB 2000	725 653	758 832	808 130	860 924	919 201	980 550	1 034 224	1 085 083	1 136 448			
BB 2001	728 210	762 513	812 452	866 582	926 227	989 430	1 042 503	1 097 753	1 153 853	1 224 843		
BB 2002	728 210	762 513	812 452	866 582	926 227	989 430	1 042 503	1 097 332	1 154 646	1 234 038	1 278 427	
BB 2003	728 210	762 513	812 452	866 582	926 227	990 709	1 042 895	1 098 274	1 158 576	1 237 822	1 293 365	1 346 378
BB 2004	728 062	762 221	811 816	865 696	925 434	990 029	1 042 089	1 097 454	1 157 878	1 237 118	1 294 110	1 348 963
Imports of goods												
BB 1993	113 697	120 453										
BB 1994	113 697	120 447	134 623									
BB 1995	113 697	120 447	134 787	145 059								
BB 1996	113 697	120 447	134 858	145 497	163 974							
BB 1997	113 697	120 447	134 858	145 793	164 659	178 938						
BB 1998	114 162	120 913	135 358	146 351	165 449	180 489	183 590					
BB 1999	114 162	120 913	135 358	146 351	165 449	180 489	183 693	184 897				
BB 2000	114 162	120 913	135 358	146 351	165 449	180 489	183 693	184 629	192 434			
BB 2001	114 162	120 913	135 295	146 269	165 600	180 918	184 265	185 869	193 722	218 036		
BB 2002	114 162	120 913	135 295	146 269	165 600	180 918	184 265	185 869	193 538	218 262	225 178	
BB 2003	114 162	120 913	135 295	146 269	165 600	180 918	184 265	185 869	195 217	220 912	230 670	232 712
BB 2004	114 162	120 913	135 295	146 269	165 600	180 918	184 265	185 869	195 217	220 912	230 703	233 192
Imports of services												
BB 1993	27 078	28 711										
BB 1994	27 113	29 045	31 643									
BB 1995	27 113	29 422	32 293	35 670								
BB 1996	27 312	29 821	33 083	36 652	39 112							
BB 1997	27 312	30 204	33 550	37 162	39 721	43 665						
BB 1998	26 955	29 754	33 416	36 979	39 772	44 003	45 744					
BB 1999	26 955	29 754	33 416	36 979	39 772	44 003	45 129	47 817				
BB 2000	26 955	29 754	33 416	36 979	39 772	44 003	45 129	48 800	52 444			
BB 2001	27 899	30 746	34 830	38 986	41 451	46 298	47 171	52 079	58 862	62 988		
BB 2002	27 899	30 746	34 830	38 986	41 451	46 298	47 171	52 079	58 649	65 361	65 734	
BB 2003	27 899	30 746	34 830	38 986	41 451	46 501	47 686	52 969	59 494	65 645	68 658	71 304
BB 2004	27 899	30 746	34 830	38 986	41 451	46 501	47 686	52 969	59 494	65 645	69 098	71 626

See 'Notes for interpretation' on the last page of this table.

Table 9 continued

Blue Book estimates: Expenditure measure of GDP

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Expenditure measure of GDP												
Statistical discrepancy												
BB 1993	-455	-472										
BB 1994	-	-	-91									
BB 1995	-	-	-	124								
BB 1996	-	-	-	-	419							
BB 1997	-	-	-	-	-	975						
BB 1998	-	-	-	-	-	-	-494					
BB 1999	-	-	-	-	-	-	-	1 726				
BB 2000	-	-	-	-	-	-	-	-	-464			
BB 2001	-	-	-	-	-	-	-	-	-	-407		
BB 2002	-	-	-	-	-	-	-	-	-	-	499	
BB 2003	-	-	-	-	-	-	-	-	-	-	-	1 583
BB 2004	-	-	-	-	-	-	-	-	-	-	-	-
GDP (Expenditure) at market prices												
BB 1993	573 645	596 165										
BB 1994	575 321	597 121	630 023									
BB 1995	575 321	597 242	630 707	668 866								
BB 1996	575 674	598 916	631 158	668 255	700 890							
BB 1997	575 674	598 916	631 003	669 069	704 156	742 300						
BB 1998	582 946	606 582	637 817	676 036	712 548	754 601	801 972					
BB 1999	582 946	606 582	637 817	676 036	712 548	754 601	803 889	843 725				
BB 2000	584 536	608 165	639 356	677 594	713 980	756 058	805 402	851 654	891 106			
BB 2001	586 149	610 854	642 327	681 327	719 176	762 214	811 067	859 805	901 269	943 412		
BB 2002	586 149	610 854	642 327	681 327	719 176	762 214	811 067	859 384	902 459	950 415	988 014	
BB 2003	586 149	610 854	642 327	681 327	719 176	763 290	810 944	859 436	903 865	951 265	994 037	1 043 945
BB 2004	586 000	610 562	641 691	680 441	718 383	762 610	810 138	858 616	903 167	950 561	994 309	1 044 145

Notes for interpretation

NPISHs represents Non-Profit Institutions Serving Households.

Discontinuities: (1) From the 1998 *Blue Book*, the National Accounts were compiled on an ESA95 basis and these estimates are not directly comparable with those for earlier *Blue Books*. For example, GDP is now shown at market price but was previously shown at factor cost (which excludes all taxes (less subsidies) on production and products). A full description of these changes can be found in the 1998 *Blue Book*. In particular, valuables is not shown separately for the 1993 *Blue Book* to the 1997 *Blue Book* period.

For the 1993 *Blue Book* and 1994 *Blue Book*, components do not sum to totals due to rounding.

Table 10

Successive Blue Book revisions: Expenditure measure of GDP

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Expenditure measure of GDP												
Household final consumption expenditure												
BB 1993	**											
BB 1994	217	-59										
BB 1995	-	-525	-128									
BB 1996	497	1 775	937	-808								
BB 1997	-	-	-	-534	-2 351							
BB 1998	252	1 464	509	246	1 377	3 743						
BB 1999	-	-	-	-	-	-	-2 309					
BB 2000	-	-	-	-	-	-	-	5 388				
BB 2001	1 831	2 611	2 862	3 135	4 914	5 959	5 067	5 674	3 186			
BB 2002	-	-	-	-	-	-	-	-290	1 926	8 775		
BB 2003	-	-	-	-	-	511	439	698	959	-208	4 694	
BB 2004	-	-	-	-	-	-	-	-	-	-	-121	-981
NPISHs final consumption expenditure												
BB 1993	**											
BB 1994	-301	-399										
BB 1995	-	-	-50									
BB 1996	-	-	-	-								
BB 1997	-	-	170	652	1 273							
BB 1998	2 511	2 358	5 320	6 189	6 625	8 166						
BB 1999	-	-	-	-	-	-	241					
BB 2000	649	641	691	720	763	808	877	1 311				
BB 2001	-	-	-	-	-	-	-	145	134			
BB 2002	-	-	-	-	-	-	-	-	-521	161		
BB 2003	-	-	-	-	-	-47	-93	-64	-81	161	421	
BB 2004	-	-	-	-	-	-	-	-	-	-	-331	350
Central government final consumption expenditure												
BB 1993	**											
BB 1994	-100	-329										
BB 1995	-	111	892									
BB 1996	-	-	280	187								
BB 1997	-	-	-324	-411	-636							
BB 1998	-4 693	-4 885	-8 468	-9 462	-9 885	-11 448						
BB 1999	-	-	-	-	-	-	224					
BB 2000	879	871	819	795	719	696	697	1 460				
BB 2001	-143	30	141	-138	-70	8	709	-500	1 840			
BB 2002	-	-	-	-	-	-	-	-	-225	1 344		
BB 2003	-	-	-	-	-	-461	-761	-739	-202	-188	456	
BB 2004	-149	-292	-636	-886	-793	-680	-806	-820	-698	-704	-1 372	-781

See 'Notes for interpretation' on the last page of this table.

Table 10 continued

Successive Blue Book revisions: Expenditure measure of GDP

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Expenditure measure of GDP												
Local government final consumption expenditure												
BB 1993	**											
BB 1994	—	-163										
BB 1995	—	-122	-1 151									
BB 1996	—	—	-164	-157								
BB 1997	—	—	-1	365	370							
BB 1998	1 387	1 279	1 277	930	1 083	1 827						
BB 1999	—	—	—	—	—	—	143					
BB 2000	62	71	29	43	-50	-47	-61	-257				
BB 2001	-194	-46	-20	19	26	11	29	614	1 333			
BB 2002	—	—	—	—	—	—	—	—	545	1 666		
BB 2003	—	—	—	—	—	-129	-210	-183	-75	181	76	
BB 2004	—	—	—	—	—	—	—	—	—	—	-99	651
Gross fixed capital formation												
BB 1993	**											
BB 1994	1 213	1 050										
BB 1995	—	-300	-71									
BB 1996	—	—	-351	-858								
BB 1997	—	—	—	1 035	3 351							
BB 1998	6 933	6 636	6 937	7 138	7 624	11 052						
BB 1999	—	—	—	—	—	—	443					
BB 2000	—	—	—	—	—	—	—	442				
BB 2001	499	305	-203	924	1 088	87	243	3 468	-2 964			
BB 2002	—	—	—	—	—	—	-233	-697	-1 907	-6 329		
BB 2003	—	—	—	—	—	529	-387	-302	1 146	2 292	4 447	
BB 2004	—	—	—	—	—	—	—	—	—	—	-1 187	1 723
Valuables												
BB 1993	**											
BB 1994	**	**										
BB 1995	**	**	**									
BB 1996	**	**	**	**								
BB 1997	**	**	**	**	**							
BB 1998	**	**	**	**	**	**						
BB 1999	—	—	—	—	—	—	258					
BB 2000	—	—	—	—	—	—	—	-86				
BB 2001	-11	-19	-20	-23	-29	27	-65	-57	-116			
BB 2002	—	—	—	—	—	—	—	—	1	8		
BB 2003	—	—	—	—	—	-2	-1	-1	-2	-2	33	
BB 2004	—	—	—	—	—	—	—	—	—	—	—	1

See 'Notes for interpretation' on the last page of this table.

Table 10 continued

Successive Blue Book revisions: Expenditure measure of GDP

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Expenditure measure of GDP												
Changes in inventories												
BB 1993	**											
BB 1994	142	60										
BB 1995	—	-5	526									
BB 1996	—	—	—	429								
BB 1997	—	—	—	-24	897							
BB 1998	—	—	—	—	-236	-1 146						
BB 1999	—	—	—	—	—	—	1 287					
BB 2000	—	—	—	—	—	—	—	840				
BB 2001	—	—	—	—	—	—	—	-1	6 921			
BB 2002	—	—	—	—	—	—	233	566	1 085	3 740		
BB 2003	—	—	—	—	—	—	—	—	—	-324	1 554	
BB 2004	—	—	—	—	—	—	—	—	—	—	3 194	629
Exports of goods												
BB 1993	**											
BB 1994	—	296										
BB 1995	—	—	-5									
BB 1996	—	—	-11	201								
BB 1997	—	—	—	-2	731							
BB 1998	526	520	641	596	648	1 063						
BB 1999	—	—	—	—	—	—	-15					
BB 2000	—	—	—	—	—	—	—	-40				
BB 2001	—	—	190	-117	-148	-207	140	-36	531			
BB 2002	—	—	—	—	—	—	—	—	-32	280		
BB 2003	—	—	—	—	—	—	—	—	—	—	-1 594	
BB 2004	—	—	—	—	—	—	—	—	—	—	5	260
Exports of services												
BB 1993	**											
BB 1994	86	354										
BB 1995	—	1 339	1 393									
BB 1996	55	298	621	1 939								
BB 1997	—	383	467	539	1 344							
BB 1998	550	274	973	1 569	2 089	2 093						
BB 1999	—	—	—	—	—	—	639					
BB 2000	—	—	—	—	—	—	—	1 312				
BB 2001	575	800	1 372	1 858	1 245	2 995	2 156	3 363	6 540			
BB 2002	—	—	—	—	—	—	—	—	-79	-450		
BB 2003	—	—	—	—	—	878	1 405	1 533	2 185	1 872	4 851	
BB 2004	—	—	—	—	—	—	—	—	—	—	656	733

See 'Notes for interpretation' on the last page of this table.

Table 10 continued

Successive Blue Book revisions: Expenditure measure of GDP

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Expenditure measure of GDP												
Total domestic final consumption expenditure												
BB 1993	**											
BB 1994	1 257	810										
BB 1995	—	498	1 406									
BB 1996	552	2 073	1 312	933								
BB 1997	—	383	312	1 620	4 979							
BB 1998	7 380	7 682	7 180	7 342	9 233	15 165						
BB 1999	—	—	—	—	—	—	911					
BB 2000	1 590	1 583	1 539	1 558	1 432	1 457	1 513	10 370				
BB 2001	2 557	3 681	4 322	5 658	7 026	8 880	8 279	12 670	17 405			
BB 2002	—	—	—	—	—	—	—	-421	793	9 195		
BB 2003	—	—	—	—	—	1 279	392	942	3 930	3 784	14 938	
BB 2004	-148	-292	-636	-886	-793	-680	-806	-820	-698	-704	745	2 585
Imports of goods												
BB 1993	**											
BB 1994	—	-6										
BB 1995	—	—	164									
BB 1996	—	—	71	438								
BB 1997	—	—	—	296	685							
BB 1998	465	466	500	558	790	1 551						
BB 1999	—	—	—	—	—	—	103					
BB 2000	—	—	—	—	—	—	—	-268				
BB 2001	—	—	-63	-82	151	429	572	1 240	1 288			
BB 2002	—	—	—	—	—	—	—	—	-184	226		
BB 2003	—	—	—	—	—	—	—	—	1 679	2 650	5 492	
BB 2004	—	—	—	—	—	—	—	—	—	—	33	480
Imports of services												
BB 1993	**											
BB 1994	35	334										
BB 1995	—	377	650									
BB 1996	199	399	790	982								
BB 1997	—	383	467	510	609							
BB 1998	-357	-450	-134	-183	51	338						
BB 1999	—	—	—	—	—	—	-615					
BB 2000	—	—	—	—	—	—	—	983				
BB 2001	944	992	1 414	2 007	1 679	2 295	2 042	3 279	6 418			
BB 2002	—	—	—	—	—	—	—	—	-213	2 373		
BB 2003	—	—	—	—	—	203	515	890	845	284	2 924	
BB 2004	—	—	—	—	—	—	—	—	—	—	440	322

See 'Notes for interpretation' on the last page of this table.

Table 10 continued

Successive Blue Book revisions: Expenditure measure of GDP

All estimates are in current prices (£ million)												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Expenditure measure of GDP												
Statistical discrepancy												
BB 1993	**											
BB 1994	455	472										
BB 1995	–	–	91									
BB 1996	–	–	–	-124								
BB 1997	–	–	–	–	-419							
BB 1998	–	–	–	–	–	-975						
BB 1999	–	–	–	–	–	–	494					
BB 2000	–	–	–	–	–	–	–	-1 726				
BB 2001	–	–	–	–	–	–	–	–	464			
BB 2002	–	–	–	–	–	–	–	–	–	407		
BB 2003	–	–	–	–	–	–	–	–	–	–	-499	
BB 2004	–	–	–	–	–	–	–	–	–	–	–	-1 583
GDP (Expenditure) at market prices												
BB 1993	**											
BB 1994	1 676	956										
BB 1995	–	121	684									
BB 1996	353	1 674	451	-611								
BB 1997	–	–	-155	814	3 266							
BB 1998	7 272	7 666	6 814	6 967	8 392	12 301						
BB 1999	–	–	–	–	–	–	1 917					
BB 2000	1 590	1 583	1 539	1 558	1 432	1 457	1 513	7 929				
BB 2001	1 613	2 689	2 971	3 733	5 196	6 156	5 665	8 151	10 163			
BB 2002	–	–	–	–	–	–	–	-421	1 190	7 003		
BB 2003	–	–	–	–	–	1 076	-123	52	1 406	850	6 023	
BB 2004	-149	-292	-636	-886	-793	-680	-806	-820	-698	-704	272	200

Notes for interpretation

NPISHs represents Non-Profit Institutions Serving Households.

Discontinuities: (1) From the 1998 *Blue Book*, the National Accounts were compiled on an ESA95 basis and these estimates are not directly comparable with those for earlier Blue Books. For example, GDP is now shown at market price but was previously shown at factor cost (which excludes all taxes (less subsidies) on production and products). A full description of these changes can be found in the 1998 *Blue Book*. In particular, valuables is not shown separately for the 1993 *Blue Book* to the 1997 *Blue Book* period.

For the 1993 *Blue Book* and 1994 *Blue Book*, components do not sum to totals due to rounding.

UK official productivity estimates: review of methodology

**Matthew Barnes and
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Office for National Statistics

In the Productivity First Release on 1 July 2004, the Office for National Statistics (ONS) announced changes in the methodology used in the compilation of the UK official productivity estimates, such as output per filled job. This article explains these changes and also reports on the investigation into the recent divergence between the measures of self-employment that prompted the methodological improvement.

Executive summary

This article describes changes in the compilation of UK official productivity estimates. It assesses the impact of the change which was implemented in the Labour Market First Release on 11 August 2004 and will be included in the Productivity First Release on 30 September 2004. The new method leaves the output numerator unchanged in all measures but replaces the combination of sources used in compiling the productivity jobs series at whole economy level by a single source, the Labour Force Survey (LFS). This is more consistent with the methodology used in calculating the productivity hours measure. The LFS allows a new measure of GVA per worker to be compiled which will be the new main whole economy measure in future releases. International guidance notes this to be a better measure of productivity for the whole economy than output per job. The GVA per worker measure will also be more consistent with ONS international comparisons of productivity, which are on a per worker basis.

An output per job series will also continue to be published. Business surveys of jobs continue to provide a more precise allocation of the share of jobs to surveyed industries. Measuring changes in employment in these industries through the same business surveys that provide the source information for industry value added gives a measure of employment that is more consistent with the output measures used in the calculation of productivity. However, although the new method will continue to use the results of business surveys, from now on, for coherence, total employment as measured by jobs will be constrained to equal the whole economy LFS jobs total.

Using the new methodology, the new headline whole economy productivity series (output per worker) grew by 1.9 per cent in the year up to the first quarter of 2004. The growth in the output per job measure using the new methodology is 2.0 per cent. The whole economy output per job measure using the old methodology grew by half a per cent higher at 2.5 per cent in the year up to the first quarter of 2004. These downward revisions largely reflect differences in the growth of self-employment as measured in the new and old methodology. Other than in the last two years, the overall picture for whole economy productivity is very close to that from the old methodology.

Manufacturing productivity growth in the first quarter of 2004 is revised up using the new methodology from 4.9 per cent to 5.1 per cent. The picture over time for manufacturing is very similar to that using the old methodology.

Measures of output per hour for the whole economy are not affected by this change. There are revisions to the industrial detail of the output per hour measure. Measures of unit wage costs have been revised as a consequence of adopting the new methodology.

The number of jobs is largely derived by adding the number of employee jobs and the number of self-employed jobs. For the self-employed, the old methodology used the number of working proprietors (WP) entering and leaving the Inter-Departmental Business Register (IDBR) to measure short term changes in self-employment. In the old methodology, this measure was benchmarked annually to the level of self-employment reported in the LFS. In recent years there has been a marked rise in the number of self-employed jobs reported in the LFS that has not been observed in the IDBR WP series. Investigations into this divergence suggest that the old method of summing together business and household sources for employee and self employed jobs respectively does not provide reliable estimates of labour input growth.

The new methodology provides some distinct advantages:

- it uses the preferred measure of labour market activity at the whole economy level (LFS) combining this with industrial detail most consistent with the output numerator in the productivity measures (business surveys)
- for employment counts, the method does not rely on combining business and household sources, which may at times lead to double counting or missing employment
- there is more consistency with both the official hourly productivity measures and the international comparisons of productivity which both use the LFS for labour input measures
- it enables a series for output per worker to be estimated, at the whole economy level, consistent with other productivity measures, but having different statistical properties.

Introduction

In the Productivity First Release on 1 July 2004, ONS announced a change in the methodology used in the compilation of the UK official productivity estimates, such as output per filled job. This article describes both the old and new methodology. The impact of the new methodology is then assessed. Finally, the reasons for the change in methodology are discussed. Full results using the new methodology are presented in Tables 1 to 8 and full times series are available on the National Statistics website under the series identifiers given in the tables.

Productivity measurement: old methodology

Using the old methodology, ONS produced two measures of UK labour productivity: Output per filled job and Output per hour worked. They were constructed as ratios of output and labour input indicators and themselves published as indices. The introduction of these measures is described in detail in Daffin (2001). (International comparisons of productivity levels are also produced by ONS for the UK relative to a selection of the major economies. These are unaffected by the changes described in this article.)

In the old methodology, UK Output per filled job was the ratio of Gross Value Added (GVA) at basic prices and a measure called productivity jobs both expressed as indices.

The productivity jobs measure was the sum of employee jobs at the reporting unit level,¹ HM Forces, government-supported trainees and the self employed. At the whole economy aggregate level these components would be the same as those used in the local unit based workforce jobs series with the exception of self-employment.

$$\begin{aligned} \text{Productivity jobs} = & \text{Reporting Unit employees} \\ & + \text{HM Forces} \\ & + \text{Government Support Trainees} \\ & + \text{Self-employed} \end{aligned}$$

However for the employee jobs component the industry detail differs from workforce jobs, as an enterprise with local units in a number of sectors will take the industrial classification of the reporting unit whereas workforce jobs would use the classification of the local units. As is the case with the workforce jobs series, the employee component of productivity jobs is benchmarked to the Annual Business Inquiry (ABI) annually. The latest release on 1 July took on ABI results up to the fourth quarter of 2002.

In the old methodology, productivity jobs and workforce jobs differed in the source used for self-employment. The workforce jobs series uses the self-employed jobs measure from the household based Labour Force Survey (LFS). However in most industries, the national accounts output measure is business survey based. In the last methodological review, completed in 2001, the need for consistency between the output measure and labour input measure led to using working proprietors from the ONS Inter-Departmental Business Register (IDBR) for the quarterly change in self employment. The level was then benchmarked to the LFS self-employed measure each year. This benchmarking was last carried out up to the fourth quarter of 2001, timed to coincide with the ABI benchmarking for the employee jobs component.

In some industries, the labour input measure most consistent with the output index is considered to be the LFS. In the old methodology, LFS self-employed jobs was therefore used for agriculture and construction rather than working proprietors. This decision was taken because the output measures for these industries, which have traditionally had a large element of self-employment, adjust for the output of the self-employed using LFS data. The additional LFS self-employed are assumed to have the same productivity as the measured average for small businesses in the relevant industry.

The productivity measure for output per hour worked is the ratio of GVA and productivity hours worked. Productivity hours worked measures the total actual hours worked in a week, including overtime and unpaid hours. The average actual hours worked per job from the LFS are multiplied by the productivity jobs measure for each industry. At the whole economy level, the total is constrained to equal LFS total actual hours worked.

Unit wage costs are the ratio of total wages and salaries for employees from the National Accounts per employee job divided by productivity. Whereas the numerator in this ratio covers employees only, the productivity denominator covered

the whole economy. The productivity series used was the headline output per job series, with unit wage costs being published for the whole economy and for manufacturing.

In addition, experimental productivity breakdowns have been produced for total services and for the service sub-sector distribution, hotels and catering. These use the same methodology as the main whole economy and manufacturing estimates and have been published on the National Statistics website at the same time as the quarterly First Release.

New productivity methodology

Summary

The new method replaces the combination of sources used in compiling the productivity jobs series at whole economy level by a single source, the Labour Force Survey (LFS). This is more consistent with the methodology used in calculating the hours measure.

The use of the LFS in this way allows a new measure of GVA per worker to be compiled which will be the new main whole economy measure in future releases. However, business surveys of jobs still provide a better measure of employment by industry consistent with output measures used in the calculation of productivity. The new method continues to use the results of business surveys to provide industry detail. For coherence, the method constrains the whole economy total implied by the sectoral productivity measures to equal the corresponding LFS jobs total.

Measures of output per hour for the whole economy will not be affected by this change. There will, however, be revisions to the industrial detail of the output per hour measure. Measures of unit wage costs will be revised as a consequence of adopting the new methodology.

New productivity methodology: details

The headline whole economy productivity measures under the new methodology will be GVA at basic prices per worker and GVA at basic prices per hour worked. Industry-level hourly productivity figures will continue to be compiled consistently with the whole economy measure. However, a worker-based measure cannot be defined at the industry level as splitting workers with multiple jobs between industries requires additional assumptions on the split to be made. Therefore the industry measures will continue to be based on jobs. At the whole economy level, output per job will continue to be published with the difference between this measure and the headline per worker measure reflecting changes in the multiple job ratio, the second job adjustment factor.

The new headline measure, output per worker, is defined as an index of GVA at basic prices divided by an index of workers from the LFS (LFS total employment).

$$\text{Output per worker} = \frac{\text{Index of GVA}_{\text{at basic prices}}}{\text{Index of LFS}_{\text{Workers}}}$$

Where LFS workers is:

$$\begin{aligned} \text{LFS}_{\text{Workers}} = & \text{Employees} \\ & + \text{Self-employed} \\ & + \text{Unpaid Family Workers} \\ & + \text{Government Supported Trainees} \\ & + \text{HM Forces} \end{aligned}$$

At the industry level output per job is an index of GVA at basic prices in industry *i* divided by an index of jobs in industry *i*.

$$\text{Output per job}_{\text{industry } i} = \frac{\text{Index of GVA}_{\text{at basic prices, industry } i}}{\text{Index of jobs}_{\text{industry } i}}$$

Jobs in industry *i* are defined as:

$$\begin{aligned} \text{Jobs}_{\text{Industry } i} = & \text{Employee Jobs}_{\text{Industry } i, \text{RU based}} \times \text{Scaling Factor} \\ & + \text{Self-employed}_{\text{Industry } i, \text{LFS}} \\ & + \text{Second Jobs (Self-employed)}_{\text{Industry } i, \text{LFS}} \\ & + \text{Government Supported Trainees}_{\text{Industry } i} \\ & + \text{HM Forces}_{\text{Industry } i} \end{aligned}$$

where

$$\text{Scaling factor} = \frac{\text{Employees}_{\text{All industries LFS}} + \text{Second Jobs (Employee)}_{\text{All industries LFS}}}{\text{Employee Jobs}_{\text{All industries, RU based}}}$$

At the whole economy level the Second Job Adjustment factor represents the correspondence between the worker and jobs based productivity measures. This is defined as:

$$\text{Second Job Adjustment} = \frac{\text{Output per worker}}{\text{Output per job}_{\text{all industries}}}$$

The use of a scaling factor to constrain the industry breakdowns to the LFS total may have some impact on the growth path of the sectoral productivity figures over time. It is possible that the constraint may mean increasing the labour input series in one quarter and decreasing it the following quarter, for example, if the reporting unit employee jobs and LFS employee jobs series move in different directions. We will continue to analyse this effect to confirm that it does not have a material impact on the interpretation that can be made of the sectoral series.

The methodology for unit wages costs uses LFS employee jobs in calculating the average wages and salaries estimate used in its numerator. The denominator is the new headline GVA per worker productivity measure.

Impact of new methodology

Results using the new methodology are presented in Tables 1 to 7. These along with Table 8 on regional productivity (which is unaffected by this change in methodology) will be the tables released in future productivity first releases. Table R1 presents the revisions to the series in Table 1. The main impact of the new methodology to the picture of UK productivity is in the period after 2001:

- in the most recent quarters, because of faster growth rates in labour market activity as measured in the LFS and the business sources, productivity growth is revised downwards
- the old methodology relied on annual benchmarking. In the periods prior to the last benchmark – fourth quarter of 2001 – the revisions are modest as the labour market activity measures from the old and new methodology are more similar.

Impact of new headline measure: Output per worker

Figure 1 shows the new headline output per worker measure along with the old and new output per job measures.

The overall pattern for output per worker is similar to that for output per job. Comparing the output per job measures by the old and new methodology quantifies the revision due to the methodological change. The notable exception is the eight most recent quarters when the new output per job series falls below the old output per job series. Figure 2 shows the quarter on quarter a year ago growth rates for the output per worker and output per job series shown in Figure 1. The headline productivity annual growth rate for 2004 quarter one for the whole economy is 1.9 per cent using the new output per worker measure. The new output per job measure grows at 2.0 per cent in the same period, compared with 2.5 per cent for the output per job measure published on 1 July.

The old output per job growth rate and the new output per job growth rate are generally similar. The main periods of difference are 1995 when the IDBR was first introduced and the last two years where the LFS self-employment measure has grown more strongly than that used in the old measure. The new output per job and output per worker growth rates deviate mostly around peaks and troughs of growth. The two series are for the most part within 0.5 per cent of each other. The difference in the growth seen in these two series reflects changes in the second job adjustment and this can be seen to be generally quite small.

Output per job

Figure 3 shows the old and new output per job measures. With the exception of 1995 when the IDBR was first introduced and the last two years, the two series are within one index point of each other. The two measures show a similar overall pattern. Revisions to recent years are shown in Table R1.

Figure 4 shows the growth rates and the difference in growth rates for the new and old output per job series. The growth

Figure 1
Output per Job (old and new) and Output per Worker, whole economy

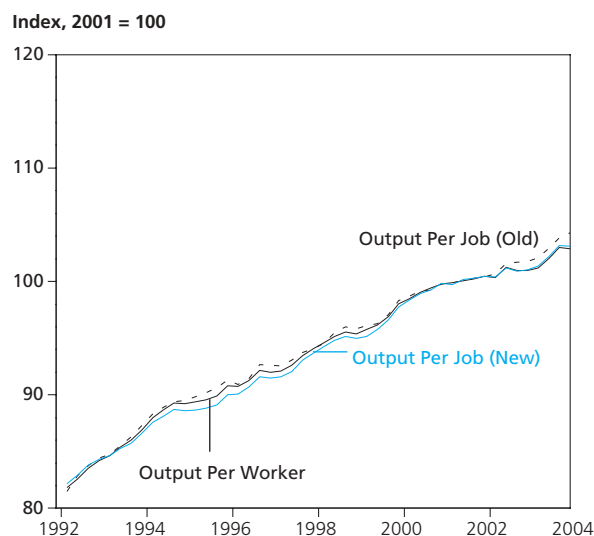
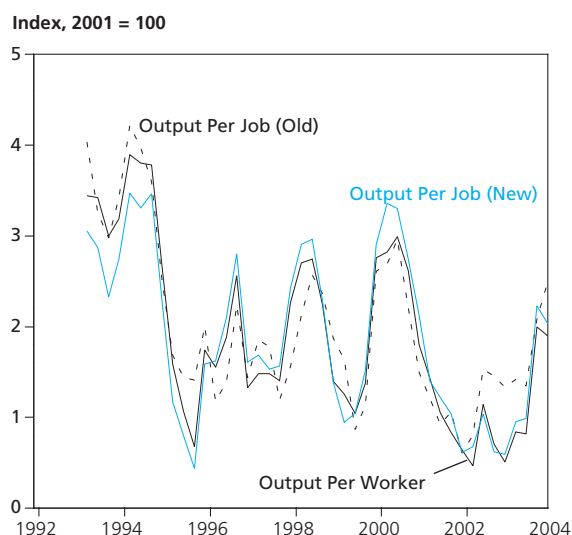


Figure 2
Output per Job (old and new) and Output per Worker, whole economy, growth



rates are within one percentage point of each other in all periods. With the exception of 1995 and the most recent two years the series show a very similar pattern. The quarter on quarter a year ago productivity growth rate for the whole economy is 2.0 per cent on the new measure in the first quarter of 2004 relative to the growth rate for this period published on 1 July using the old methodology of 2.5 per cent.

The old and new output per job series for manufacturing are generally very close together. The main difference is in 1995. There is less of a divergence in this measure in the most recent two years than at the whole economy level, reflecting the more limited role of self-employment in manufacturing. Figure 5 shows the quarter on quarter a year ago output per job growth rates for manufacturing. Using the new methodology the manufacturing productivity growth is revised up from 4.9 per cent to 5.1 per cent in the first quarter of 2004 on a year before. The overall pattern of the series is very similar.

Figure 3
Output per Job, whole economy – old and new methodologies

Index, 2001 = 100

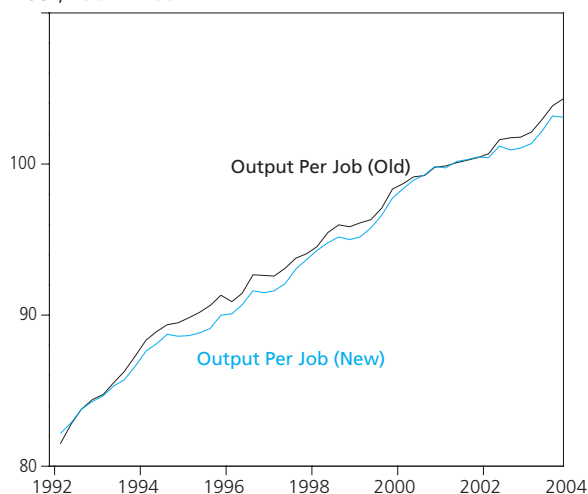
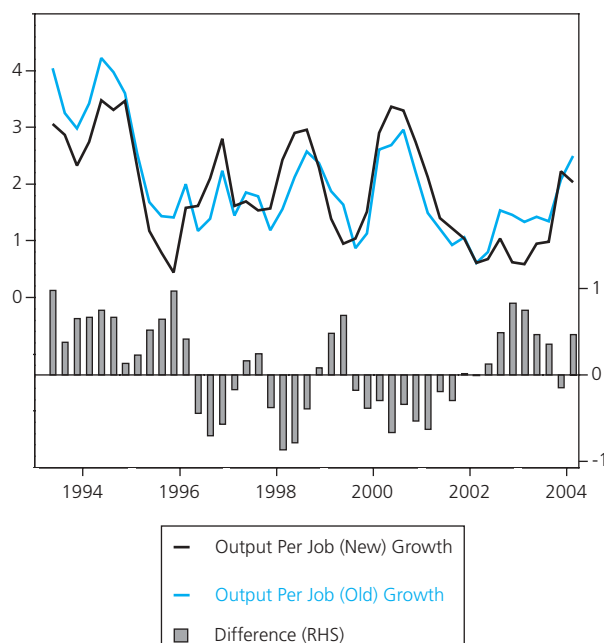


Figure 4
Output per Job, whole economy – old and new growth rates

Growth, quarter on quarter year ago

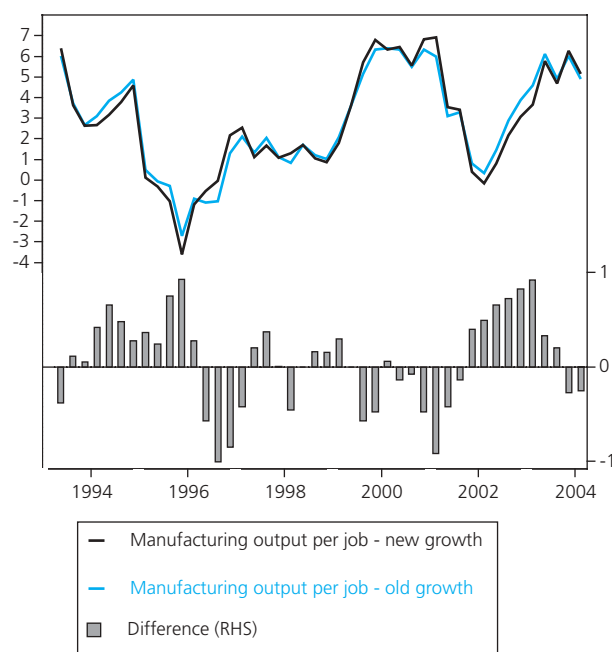


Output per hour

At the whole economy level, the hourly measure of productivity is unaffected by the methodological change. At the industry level, however, the changes to the jobs series do have an impact, revising all series by small amounts. In manufacturing the old and new output per hour series follow broadly similar patterns. The main difference is in the last two years where the impact of self-employment can be seen. This means that in the first quarter of 2004 the growth rate of output per hour falls by 2.1 per cent to 5.1 per cent from 7.2 per cent compared with the first quarter of 2003. This revision to manufacturing hourly productivity is relatively large and derives from the allocation of the total LFS hours to non-manufacturing being too great in earlier estimates for the first quarter in 2004. Constraining to the LFS total jobs corrects

Figure 5
Output per Job, manufacturing – old and new growth rates

Growth, quarter on quarter year ago



this by bringing the hourly measure more into line with the output per job measure for manufacturing.

Unit wage costs

Unit wage costs using the new methodology track results from the old methodology closely at the whole economy with the exception of the last two years. The deviation is due to movements in the LFS from employee to self-employment associated with the increase in self-employment in the LFS. The whole economy unit wage costs grew at 2.7 per cent in the first quarter of 2004 compared to the first quarter of 2003. This is an upward revision of 0.8 per cent compared with the 1.9 per cent growth rate published on 1 July. In manufacturing the old and new series are also very close together. The divergence in the most recent years is less pronounced, but there is a difference in 1995.

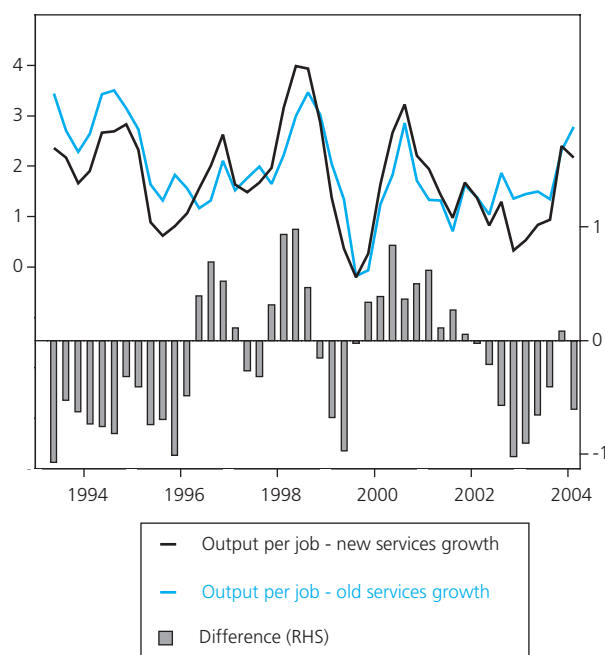
Experimental service sector measures

The new and old experimental measures for services productivity track each other quite closely and the overall picture is unchanged. Figure 6 shows the growth rate of the new output per job measure compared with the old experimental services output per job series. Again the overall picture is very similar, though there is a divergence in the most recent two years: the effect of the self-employed can be seen with the relatively large gap in recent years. As in the past, the new experimental series is available only from the National Statistics website and not in the tables in the First Release (or in the tables attached to this article).

The experimental output per hour series for services shows a similar pattern to output per job. The series are closer together up to the last quarter. In contrast to the jobs measure, the hourly productivity measure using the new methodology shows a rise in growth while the old methodology shows a fall for the last quarter.

Figure 6
Output per Job, services – old and new growth rates

Growth, quarter on quarter year ago



Back series and productivity trends

The new methodology has been applied from the second quarter of 1992. Prior to this existing series have been spliced on, maintaining the growth rates. This date was chosen because it is the start of the quarterly Labour Force Survey used in the new methodology. Full back series are available from the National Statistics website.

The importance of productivity in policy analysis is often in terms of long-term trends to productivity growth. OECD (2001) identifies the main purpose of productivity indices as measuring the drivers of economic growth, such as technology and efficiency. While some of the impact of these factors may be derived in the short-term, the back series helps to identify the long-term trends in the determinants of output growth. An important question in changing the methodology is whether the long-term trends are changed. To indicate the changes to trend growth, the average growth in whole economy output per job over four years is estimated using the old and new methodology. The absolute differences of annualised growth rates over these longer periods is modest, reaching a peak in the 1995 period of half a percentage point.

Reasons for change in methodology

The previous sections outline the old and new methodologies and the impact of the move to the new methodology. The number of jobs is largely derived by adding the number of employee jobs and the number of self-employed jobs. For the self-employed, the old methodology used the number of working proprietors (WP) entering and leaving the Inter Departmental Business Register (IDBR) to measure short term changes in self-employment. In the old methodology, this measure was benchmarked annually to the level of self-employment reported in the LFS. In the new methodology, the LFS will be used for the whole economy jobs series, with the business data sources used only to provide industry detail.

The new methodology provides some distinct advantages:

- it uses the best measure of labour market activity at the whole economy level (LFS); however, for the industrial detail business sources are still more suitable. The methodology then draws on the strengths of each
- it does not rely on combining business and household sources, which may at times lead to double counting or missing employment
- there is more consistency with both the official hourly productivity measures and the international comparisons of productivity which both use the LFS for labour input measures
- it allows a new measure – output per worker – to be introduced at the whole economy level.

These advantages are explained in the next sections, drawing on the results of an investigation undertaken by ONS over the last few months into the productivity measures. The investigations into productivity were wide-ranging, including a survey of other national statistical offices.

Preferred measure of labour input

The old methodology used the best measure of labour input at the industry level by using business sources. However, the preferred measure at the whole economy level – the Labour Force Survey – was used only for the hourly measure, with the output per job measure combining the LFS and business surveys. The new methodology uses the ONS preferred measure at the whole economy level for the output per job measure.

A concern in combining measures of output with measures of input is that the coverage of the output (numerator) and input (denominator) may be different and changes in productivity may arise because of an imbalance in coverage. Productivity estimates are more reliable if there is consistency between the output and input series. There is also a similar consistency balance to strike between the best series to use in the whole economy productivity measure and the most consistent industry output and input series. For example, when the whole economy measure is disaggregated by industry, ensuring consistency between the numerator and denominator becomes more problematic if classification is undertaken in a different manner between the two series.

The output measure used in productivity series is the measure of Gross Value Added (GVA) at basic prices from the Quarterly National Accounts. This is used at both the industry and whole economy levels. In terms of coverage and sources, this GVA estimate is based on more information than just business surveys. In some industries, particularly where self-employment is significant such as in agriculture and construction, the LFS is used in the GVA estimates so that proper account is taken of the parts of the industry where output derives from self-employment. However, most notable is that data from the output and expenditure approaches are confronted to arrive at a balanced GVA measure and adjustments are also incorporated into annual balancing (see Akritidis, 2003, for a description of the stages of the

GDP compilation process). In addition, data on the income side of the economy are taken into account. This includes information on trends observed in other series, including the LFS.

At the whole economy level, the ONS preferred measure of labour market activity is whole economy workers and hours derived from the Labour Force Survey. It is based on a large random sample, which covers the whole economy. As with the output measure, effort is taken to make levels and growth estimates complete in coverage. One shortcoming of the LFS however is the poor quality of the industrial breakdown (see ONS, 2002). The industry that a respondent is classified to in the LFS is currently self-reported and this does not necessarily correspond to industry classifications in output measures. Research is underway looking at the possibility of linking the LFS to the IDBR, which may improve the quality of LFS industry data in the future. Currently, the business surveys, because they are based on the business register which has an authoritative industry classification of all businesses, still provide the most reliable measures of labour input by industry and are consistent with the business surveys used in the output measures.

Coverage and consistency issues: labour input from the self-employed

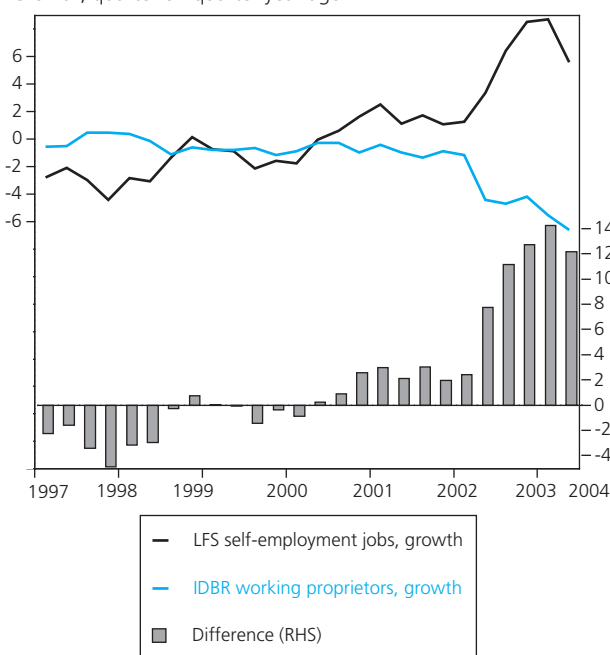
The Productivity First Release in March flagged one of the main areas of concern that has emerged since the last methodological review of productivity (Daffin, 2001). The jobs series in the old methodology uses working proprietors (WP) from the Inter Departmental Business Register (IDBR) to measure short-term changes in self-employment. This measure is benchmarked annually to the level of self-employment reported in the LFS, most recently to the LFS level in December 2001. In recent years, there has been a marked rise in the number of self-employed jobs reported in the LFS that has not been observed in the IDBR WP series, suggesting that the short-term proxy has been a poor predictor of the final estimate. This is shown in Figure 7.

Further analysis of the LFS shows that the recent strong growth in self-employment has been broadly-based across industries. Macaulay (2003) indicates that in the year to September 2003, there was an 8.9 per cent or 282,000 increase in the self-employment level, compared to a 0.1 per cent increase in employees. This was a general increase, affecting both men and women, full and part-time workers; and was also spread across all regions. The recent rise in LFS self-employment is not unprecedented. Similar levels and growth rates were observed in the annual LFS in the late 1980s. Additionally, the Bank of England suggested in their February Inflation Report that 'self-employment may simply be more feasible than in the past, as sharp rises in house prices have increased the collateral at workers' disposal and so reduced the credit constraints they face'.

There were increases in most sectors. The total increase in the 2003 study was 282,000 jobs, of which 120,000 were in 'finance and other business services'; 53,000 were in 'construction'; 35,000 were in 'public administration, education & health'. Recently, the LFS has been reweighted,

Figure 7
LFS self-employed jobs and IDBR working proprietors, growth rates

Growth, quarter on quarter year ago



revising some of the data, but the picture remains the same. Self-employment in construction is a relatively well-understood phenomenon and, as noted above, there is explicit recognition that the LFS provides a better measure of the level of self-employment in the construction industry's output measure than business sources. However, the large increases seen in self-employment in 'finance and other business services' and 'public administration, education and health' indicate a shift. In the same period, working proprietors shows a small rise in 'other business services' of at most 31,000 over the period 1996 to 2004.

The ILO International Classification of Status in Employment 1993 revision defines self-employment jobs as those jobs where the remuneration is directly dependent upon the profits (or the potential for profits) derived from the goods and services produced (where own consumption is considered to be part of profits). The incumbents make the operational decisions affecting the enterprise, or delegate such decisions while retaining responsibility for the welfare of the enterprise. (In this context 'enterprise' includes one-person operations.)

The LFS, in line with International Labour Organisation guidance, uses the respondent's own response to classify a job to self-employment so that anyone who considers that they are working on their own account is classified as self-employed. Respondents can then choose up to four sub-categories relating to their self-employment such as paid a salary or wage by an agency or a sole director of your own limited company.

In contrast, the number of working proprietors recorded on the ONS Inter-Departmental Business Register reflects the taxation system rather than this ILO definition. A working proprietor is regarded as a person who owns or part owns and manages a business as a sole proprietorship or a partnership.

Businesses enter, leave or change their status on the register according to their record on two administrative sources: the Value Added Tax (VAT) system at HM Customs and Excise and the Pay As You Earn (PAYE) income tax system at Inland Revenue. These sources identify whether an entry is a sole trader, a partnership or an incorporated business. Each of the first two types would have working proprietors associated with them.

As a register based largely on administrative tax data, changes to tax rules will feed through to the register. Two particular rules are the VAT and PAYE thresholds, which determine whether a business has to file a tax return to either of the two systems. A second factor, which affects how quickly a business appears or any changes to a business is recorded, is the timing of reporting to the tax authorities. Small businesses, such as those run by the self-employed, are affected by these two rules, because they are typically close to the thresholds. Also, tax reporting arrangements have been developed to minimise the administrative burden placed on small businesses.

ONS has looked carefully at the borderline between employee and self-employment for business sources and for the LFS. It is apparent that the divide is set differently between business sources and LFS. Thus, adding employee results from business sources to LFS results on self-employment – as is the case with the old productivity methodology during benchmarking – risks double counting or missing some jobs/workers. This was not a major issue at the time of the previous productivity methodology review, but has become more significant recently. Some scenarios explaining the divergence are as follows.

- A recognised problem for smaller businesses is that the tax thresholds are too high for the activity to be registered to the tax system. Self-employment – especially a sole trader – may be part-time and not have large enough turnover for the individual to register for VAT and so enter the IDBR. Department of Trade and Industry's Small Business Service regularly produce analyses accounting for this effect (see DTI, 2003).
- Over the past years, there has been a large increase in the number of companies being registered. Setting up a new company has become progressively easier over the past few years – such as Internet sites dedicated to this lowering the effort needed. The number of new companies registered at Companies house rose from 227,800 in 2001/2002 to 321,700 in 2002/2003 and 394,200 in 2003/2004. The reduction in IDBR working proprietors may reflect this to the extent that these new incorporations were due to self-employed people changing status and being recorded as employees of their newly formed company. Examination of LFS responses indicates that such changes have not in contrast had a major impact on the self-classification to self-employment reported to the LFS.
- When such changes in status occur, there is a lag before the entry in the tax system is updated. It is expected that following incorporation, the individual becomes an employee and then registers for PAYE. It is quite possible that this obligation is not actually progressed until the individual visits an accountant to file a corporation tax

return, which can be anything up to nine months after the end of the first accounting year.

The different impact of such scenarios on the IDBR and LFS shows that definition may be inconsistent between sources. In the old productivity methodology this is potentially a problem as the employer survey-based employee numbers are added to a self-employment number that is benchmarked to the LFS. It is likely that some workers counted as employees in the business survey are counted as self-employed in the LFS and *vice versa* and combining sources becomes a concern.

Overall, it is impossible to rule out double counting issues or missing some jobs in the old methodology. Equally it is not possible to quantify any such problems to allow specific adjustments to be made. The solution chosen in the new methodology is to use labour input data from a single source that covers the entire economy.

Consistency of official productivity measures

The suite of UK official productivity measures currently includes: output per hour, international comparisons of output per worker levels, international comparisons of output per hour levels, as well as the measures where ONS is introducing a methodological change. The labour input measures used in these productivity calculations are in terms of jobs, workers or hours. One of the major benefits of the new method is that it brings the labour input component of the output per job measure and the unit wage costs series on the same basis as the other official measures for the UK. This consistency has the very important benefit that the various series can be reconciled and any differences attributed to changes in labour market activity. For example, the difference between the hourly productivity measure and the output per job measure would be entirely explained by changes in the hours worked per job, rather than methodological differences.

The measurement issues around labour input are set out in the Organisation for Economic Co-operation and Development's (OECD) productivity manual (OECD, 2001). The conceptually preferred measure of labour input is hours worked. The output measures used reflect best estimates of total output and therefore so should the labour input measure. Using hours as the unit for labour input ensures changes in working practices, full versus part time working and changes in average hours worked are reflected. However, it is generally acknowledged that in practice actual hours worked series are not measured with sufficient reliability to provide more than a long-term picture of the changes to working patterns. Given these practical limitations to the hours measure, the second best measure conceptually is used: the number of workers at whole economy level and the number of jobs at industry.

In assessing the industrial breakdown of labour input, the jobs series is used. This is because jobs can be associated with businesses and thus with industries, whereas a worker can be associated with more than one industry as the same person can have a number of jobs. At the whole economy level, this advantage is less significant. Also, in terms of productivity analysis, workers have some key analytical advantages. For example, skills are generally associated with the individual

worker, as are other characteristics such as age and gender. While these characteristics can be associated with the person doing a job, at whole economy level it becomes more satisfactory to use the worker measure.

Table A1 sets out some advantages and disadvantages of a number of labour input measures, including the measure used in the old methodology. It can be seen that the new methodology's shift to the LFS allows all the first and second best measures to be calculated in a fully consistent manner. It will also draw upon the strengths of the business sources in classifying the total labour input to industry. This will mean that the consistency of the labour input series to the industry output measures is maintained improving the reliability of industry productivity estimates.

International practice also supports a methodological change. During 2003, ONS conducted an international survey of other national statistical institutes. The survey covered a range of compilation and conceptual issues. One of the main findings is that many countries make use of the results of their LFS across the whole economy and not just for the self-employed. Some countries fully reconcile the business and household sources on labour market activity in labour accounts; some countries follow a methodology equivalent to the new UK methodology.

One area of development for labour input measures will benefit from the increased use of the LFS in the productivity series. LFS has greater detail on worker characteristics and this is used in producing measures that are adjusted for labour quality, where hours worked by differently skilled and experienced workers are differentiated through weights which better reflect the marginal productivity of the different labour input type. ONS is currently developing such a series which it is hoped will be launched experimentally before the end of this year.

Output per worker: a new headline productivity measure

The new methodology allows the compilation of a new headline whole economy productivity series: output per worker. International guidance also supports this change and additionally supports a move to a worker-based whole economy measure. The OECD Productivity Manual (OECD, 2001) describes jobs-based measures as the least preferred option at the whole economy level and suggests moving to a worker measure. As noted above, the worker has characteristics associated with it – such as skills, gender, age – where such detail is important in various aspects of productivity measurement. At the whole economy level, such additional characteristics can be readily mapped to the worker concept.

Productivity measures used in international comparisons make use of the LFS at the whole economy level, for example comparisons produced by the OECD and the Eurostat Structural Indicators. Such measures use output per worker as the main measure for comparisons of levels – the alternative hourly measure is often published but work is on-going to improve the international comparability of total hours worked series.

Future revisions

The productivity series will use the most up-to-date versions of source data available. This will ensure consistency with other measures is maintained and that the current productivity measures are the best available. Patterns in source data will be analysed to ensure they are well understood and new developments will be considered with respect to productivity as they become available. All planned revisions will be pre-announced and will be carried out in accordance with the National Statistics Code of Practice and the Protocol on Revisions.

On 8 July 2004, ONS announced that results from studies designed to improve population estimates in areas that proved hardest to count in 2001 confirmed the census-based figures in all but 15 local authority areas. Sixty thousand people across these 15 local authorities have been added to population estimates for 2001. These results fed into mid-year population estimates for 2001 to 2003 published on 9 September 2004 and subsequently into revised population estimates for 1992–2000 later in 2004.

Future revised population estimates, when accompanied by consistent historical series, will be incorporated as swiftly as possible into revised LFS series using the interim LFS adjustment procedure. These revised estimates will then be used in subsequent productivity releases.

Note

1. ONS business surveys are conducted at the 'reporting unit' level. This represents either an entire enterprise or a major activity within a business. Each reporting unit consists of one or more local units, in general corresponding to a site such as a factory or a shop. Each local unit has an industry associated with it. The reporting unit takes the industry associated with the most employment in the local units. The National Accounts are produced based on reporting unit level data.

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List of tables

Table A1: Labour input measures

Table 1: Key productivity measures

Table 2: Output per job, manufacturing subsections

Table 3: Manufacturing output per job

Table 4: Output per hour worked

Table 5: Output per hour worked, manufacturing subsections

Table 6: Productivity jobs and hours worked

Table 7: Unit wage costs

Table 8: Productivity measures by region [no changes]

Tables R1: Revisions analysis of content of Table 1

Table A1:
Labour input measures

	Actual hours worked	Total workers	Total jobs (LFS)
Primary sources	Labour Force Survey	Labour Force Survey	Labour Force Survey
Advantages	Reflects changes in working hours/patterns	Reflects number of people producing output	Consistent with total employment and hours measures
Disadvantages	<p>Industry breakdown may be unreliable on LFS</p> <p>Units of observation not consistent with output measures</p> <p>Difficult to measure – subject to recall error, proxy reporting</p>	<p>Industry breakdown may be unreliable on LFS</p> <p>Industry breakdown difficult due to multiple jobs in different industries</p> <p>Units of observation not consistent with output measures</p>	<p>Industry breakdown may be unreliable on LFS</p> <p>Reflects number of jobs – hence will mean lower productivity levels and when multiple job holding increases also lower productivity growth</p> <p>Does not reflect changes in hours, full and part time working, holidays, sick absence, etc.</p>
	Total workforce jobs	Productivity jobs–old methodology	Productivity jobs–new methodology
Primary sources	Workforce Jobs (benchmarked to ABI) plus LFS for self employment	Reporting Unit employees (benchmarked to ABI), constrained to whole economy workforce jobs employees, plus movements in IDBR working proprietors applied to LFS self-employed benchmark.	Reporting Unit employees (benchmarked to ABI), constrained to whole economy employees part of LFS jobs plus LFS self-employed.
Advantages	<p>Industry breakdown available</p> <p>Units of observation more consistent with output measures</p>	<p>Industry breakdown available</p> <p>Units of observation consistent with output measures</p>	<p>Industry breakdown available</p> <p>Units of observation consistent with output measures</p>
Disadvantages	<p>Reflects number of jobs – hence will mean lower productivity levels when multiple job holding increases also lower productivity growth</p> <p>Subject to double counting problems, differences in definitions, etc due to the use of multiple sources</p> <p>Does not reflect changes in hours, full and part time working, holidays, sick absence, etc.</p>	<p>Reflects number of jobs – hence will mean lower productivity levels and when multiple job holding increases also lower productivity growth</p> <p>Subject to double counting problems, differences in definitions, etc due to the use of multiple sources</p> <p>Does not reflect changes in hours, full and part time working, holidays, sick absence, etc.</p> <p>IDBR working proprietors is not a comprehensive measure of self employment and is not designed to be used in this way</p>	<p>Reflects number of jobs – hence will mean lower productivity levels and when multiple job holding increases also lower productivity growth</p> <p>Does not reflect changes in hours, full and part time working, holidays, sick absence, etc.</p>

Table 1
Key productivity measures – quarterly indices

		Seasonally adjusted, 2001=100					
United Kingdom		Whole Economy				Total production industries	Total manufacturing
		Output per Worker	Output per Job	Output per Hour	Unit Wage Costs	Output per Job	Output per Job
Section		A-Q	A-Q	A-Q	A-Q	C,D,E	D
		A4YM	LNNN	LZVB	LNNK	LNNW	LNNX
2000	Q2	98.5	98.3	98.5	95.3	96.7	95.8
	Q3	99.0	98.9	99.3	96.3	97.4	97.2
	Q4	99.4	99.3	98.9	97.5	99.3	99.3
2001	Q1	99.8	99.8	99.7	99.1	100.1	100.6
	Q2	99.9	99.7	99.5	99.6	99.5	99.2
	Q3	100.1	100.1	100.0	100.3	100.7	100.5
	Q4	100.3	100.3	100.7	100.9	99.7	99.7
2002	Q1	100.4	100.4	100.9	101.7	100.7	100.4
	Q2	100.3	100.4	101.8	102.7	101.2	100.0
	Q3	101.2	101.2	102.1	102.2	102.9	102.7
	Q4	101.0	100.9	102.4	103.1	103.2	102.7
2003	Q1	100.9	101.0	102.3	103.7	104.6	104.1
	Q2	101.2	101.4	102.7	104.4	105.7	105.8
	Q3	102.0	102.2	103.6	105.3	107.0	107.5
	Q4	103.0	103.2	105.2	105.5	108.4	109.2
2004	Q1	102.9	103.1	104.8	106.5	108.4	109.5

Table 1 continued

Key productivity measures – change between period and period a year earlier

Seasonally adjusted, 2001=100							
United Kingdom		Whole Economy				Total production industries	Total manu- facturing
		Output per Worker	Output per Job	Output per Hour	Unit Wage Costs	Output per Job	Output per Job
Section		A-Q	A-Q	A-Q	A-Q	C,D,E	D
		A4YN	LNNP	LZVD	LOJE	LNNT	LNNU
2000	Q2	2.8	3.4	3.7	1.8	6.2	6.5
	Q3	3.0	3.3	4.1	2.3	4.6	5.6
	Q4	2.6	2.7	2.8	3.1	5.8	6.8
2001	Q1	1.8	2.1	0.9	4.5	5.4	6.9
	Q2	1.4	1.4	1.1	4.6	2.9	3.5
	Q3	1.1	1.2	0.7	4.2	3.3	3.4
	Q4	0.8	1.0	1.9	3.5	0.4	0.4
2002	Q1	0.6	0.6	1.2	2.6	0.6	−0.2
	Q2	0.5	0.7	2.3	3.2	1.7	0.8
	Q3	1.1	1.0	2.1	1.8	2.2	2.2
	Q4	0.7	0.6	1.6	2.1	3.5	3.1
2003	Q1	0.5	0.6	1.4	2.0	3.8	3.7
	Q2	0.8	1.0	0.8	1.6	4.4	5.8
	Q3	0.8	1.0	1.5	3.0	4.0	4.7
	Q4	2.0	2.2	2.8	2.3	5.1	6.3
2004	Q1	1.9	2.0	2.4	2.7	3.7	5.1

Table 1 continued

Key productivity measures – change between period and previous period

Seasonally adjusted, 2001=100							
United Kingdom		Whole Economy				Total production industries	Total manu- facturing
		Output per Worker	Output per Job	Output per Hour	Unit Wage Costs	Output per Job	Output per Job
Section		A-Q	A-Q	A-Q	A-Q	C,D,E	D
		A4YM	DMWR	TXBB	DMWL	DMWS	DMWV
2000	Q2	0.5	0.6	−0.3	0.4	1.7	1.9
	Q3	0.6	0.6	0.8	1.1	0.8	1.4
	Q4	0.4	0.3	−0.4	1.2	1.9	2.2
2001	Q1	0.4	0.6	0.8	1.7	0.9	1.3
	Q2	0.1	−0.1	−0.2	0.5	−0.6	−1.4
	Q3	0.2	0.4	0.5	0.7	1.2	1.3
	Q4	0.2	0.2	0.7	0.6	−1.0	−0.8
2002	Q1	0.2	0.1	0.2	0.8	1.0	0.7
	Q2	−0.1	0.0	0.9	1.0	0.5	−0.4
	Q3	0.9	0.8	0.3	−0.6	1.7	2.7
	Q4	−0.3	−0.3	0.3	0.9	0.2	0.1
2003	Q1	0.0	0.1	−0.1	0.6	1.3	1.3
	Q2	0.2	0.3	0.4	0.7	1.1	1.6
	Q3	0.8	0.8	0.9	0.8	1.3	1.6
	Q4	0.9	1.0	1.5	0.2	1.3	1.6
2004	Q1	−0.1	−0.1	−0.4	1.0	0.0	0.2

Table 2

Output per job, manufacturing subsections – quarterly indices

Seasonally adjusted, 2001=100

United Kingdom		Manufacturing industries										
		Food drink and tobacco	Textiles, footwear, clothing and leather	Pulp, paper, paper products, printing and publishing	Chemicals and man-made fibres	Rubber and Plastics	Other non-metallic mineral products	Basic metals and fabricated metal products	Machinery and equipment	Electrical and optical equipment	Transport equipment	Wood, coke, petroleum, nuclear fuel, other nec
Section		DA	DB,DC	DE	DG	DH	DI	DJ	DK	DL	DM	DD,DF,DN
		LNNY	LNOG	LNOA	LNOB	LNOC	LZYM	LZYQ	LNOD	LNOE	LNOF	LOJC
2000	Q2	96.1	93.5	96.8	89.6	97.7	96.2	96.1	93.2	99.2	102.2	96.8
	Q3	96.8	97.2	95.6	90.8	97.9	97.1	98.4	95.2	105.4	98.5	96.2
	Q4	96.4	96.9	97.1	94.9	101.5	96.3	100.9	97.8	108.5	100.5	102.3
2001	Q1	98.8	98.1	101.6	98.2	100.1	97.9	101.1	101.4	105.0	100.3	99.4
	Q2	99.4	99.4	99.6	100.2	99.4	98.7	102.1	99.8	99.9	97.3	94.5
	Q3	101.0	100.3	99.8	101.9	99.8	101.3	100.6	101.0	97.5	103.1	102.5
	Q4	100.7	102.2	99.0	99.7	100.7	102.1	96.2	97.9	97.6	99.3	103.6
2002	Q1	102.5	103.8	101.2	99.8	99.4	103.1	99.8	97.4	94.7	99.0	104.8
	Q2	102.7	102.4	99.2	99.6	97.7	101.8	97.1	99.1	95.5	99.4	101.9
	Q3	104.9	104.6	103.1	99.8	99.5	105.3	101.3	102.5	99.2	103.8	102.5
	Q4	103.9	104.4	101.2	97.6	96.2	104.0	103.5	100.5	100.7	103.9	103.4
2003	Q1	105.8	110.7	100.4	99.5	97.5	109.6	101.2	102.9	105.9	106.2	103.0
	Q2	106.9	114.9	99.5	102.9	95.9	110.9	101.6	107.9	107.5	111.2	103.2
	Q3	108.4	121.4	99.2	103.2	101.1	113.3	103.4	109.4	109.0	113.0	103.6
	Q4	107.6	123.5	101.8	105.2	103.3	114.5	104.8	113.1	109.0	118.1	102.9
2004	Q1	106.0	113.8	103.9	109.2	101.9	114.0	105.7	111.6	108.4	120.0	101.4

Table 2 continued

Output per job, manufacturing subsections – change between period and period a year earlier

Seasonally adjusted, 2001=100

United Kingdom		Manufacturing industries										
		Food drink and tobacco	Textiles, footwear, clothing and leather	Pulp, paper, paper products, printing and publishing	Chemicals and man-made fibres	Rubber and Plastics	Other non metallic mineral products	Basic metals and fabricated metal products	Machinery and equipment	Electrical and optical equipment	Transport equipment	Wood, coke, petroleum, nuclear fuel, other nec
Section		DA	DB,DC	DE	DG	DH	DI	DJ	DK	DL	DM	DD,DF,DN
		LUAD	LUAE	LUAF	LUAG	LUAH	LUI	LUAJ	LZYO	LZYS	LZVI	LXAG
2000	Q2	0.7	9.1	5.3	11.9	3.6	5.7	8.0	2.5	16.6	2.3	0.1
	Q3	2.1	11.1	2.5	8.8	0.6	4.9	8.2	0.9	18.2	-2.7	-2.0
	Q4	1.9	10.8	1.9	10.1	6.4	3.4	9.0	3.9	20.6	-1.1	5.5
2001	Q1	3.8	7.0	6.9	10.7	2.9	2.5	7.1	10.2	13.0	-2.7	2.5
	Q2	3.5	6.4	2.9	11.8	1.8	2.6	6.2	7.1	0.8	-4.8	-2.4
	Q3	4.4	3.3	4.3	12.3	2.0	4.3	2.3	6.0	-7.4	4.6	6.6
	Q4	4.5	5.4	2.0	5.0	-0.8	6.1	-4.6	0.1	-10.1	-1.2	1.2
2002	Q1	3.8	5.9	-0.4	1.6	-0.7	5.3	-1.3	-4.0	-9.7	-1.4	5.4
	Q2	3.3	3.0	-0.4	-0.6	-1.7	3.1	-4.9	-0.7	-4.4	2.2	7.8
	Q3	3.8	4.3	3.4	-2.1	-0.3	4.0	0.7	1.5	1.7	0.7	0.0
	Q4	3.2	2.2	2.2	-2.1	-4.5	1.9	7.5	2.7	3.2	4.7	-0.1
2003	Q1	3.2	6.6	-0.8	-0.3	-1.9	6.3	1.5	5.7	11.8	7.3	-1.7
	Q2	4.1	12.2	0.3	3.3	-1.8	9.0	4.6	8.9	12.5	11.9	1.3
	Q3	3.4	16.0	-3.8	3.4	1.7	7.6	2.1	6.8	9.8	8.9	1.1
	Q4	3.5	18.3	0.5	7.8	7.4	10.1	1.3	12.5	8.3	13.6	-0.6
2004	Q1	0.2	2.8	3.5	9.8	4.5	4.0	4.4	8.4	2.3	13.0	-1.5

Table 2 continued

Output per job, manufacturing subsections – change between period and previous period

Seasonally adjusted, 2001=100

United Kingdom		Manufacturing industries										
		Food drink and tobacco	Textiles, footwear, clothing and leather	Pulp, paper, paper products, printing and publishing	Chemicals and man-made fibres	Rubber and Plastics	Other non metallic mineral products	Basic metals and fabricated metal products	Machinery and equipment	Electrical and optical equipment	Transport equipment	Wood, coke, petroleum, nuclear fuel, other nec
Section		DA	DB,DC	DE	DG	DH	DI	DJ	DK	DL	DM	DD,DF,DN
		DNAG	LMMA	LNKV	LNNV	LNNZ	LOIL	LOIV	LOIX	LOJB	LOJG	LOUX
2000	Q2	1.0	2.0	1.8	1.1	0.4	0.7	1.9	1.3	6.7	-0.8	-0.2
	Q3	0.7	3.9	-1.2	1.3	0.2	0.9	2.3	2.2	6.3	-3.6	-0.7
	Q4	-0.4	-0.3	1.5	4.6	3.7	-0.8	2.6	2.8	2.9	2.0	6.4
2001	Q1	2.5	1.2	4.6	3.4	-1.4	1.7	0.1	3.7	-3.3	-0.2	-2.9
	Q2	0.6	1.4	-2.0	2.0	-0.7	0.8	1.1	-1.6	-4.8	-3.0	-4.9
	Q3	1.6	0.9	0.2	1.8	0.4	2.6	-1.5	1.2	-2.4	6.0	8.4
	Q4	-0.3	1.8	-0.7	-2.2	0.9	0.9	-4.4	-3.0	0.0	-3.7	1.1
2002	Q1	1.8	1.6	2.2	0.1	-1.3	0.9	3.7	-0.5	-2.9	-0.3	1.1
	Q2	0.2	-1.4	-2.0	-0.2	-1.7	-1.3	-2.6	1.7	0.8	0.4	-2.7
	Q3	2.1	2.2	3.9	0.2	1.8	3.5	4.3	3.4	3.9	4.4	0.5
	Q4	-0.9	-0.3	-1.8	-2.2	-3.3	-1.2	2.2	-1.9	1.5	0.2	1.0
2003	Q1	1.8	6.0	-0.8	2.0	1.4	5.3	-2.2	2.4	5.2	2.2	-0.5
	Q2	1.1	3.8	-0.8	3.4	-1.6	1.3	0.4	4.8	1.5	4.7	0.3
	Q3	1.4	5.7	-0.3	0.3	5.4	2.2	1.7	1.4	1.4	1.6	0.4
	Q4	-0.8	1.7	2.6	1.9	2.1	1.0	1.4	3.4	0.1	4.6	-0.8
2004	Q1	-1.5	-7.8	2.1	3.8	-1.3	-0.5	0.8	-1.4	-0.6	1.6	-1.4

Table 3
Manufacturing output per job

Seasonally adjusted, 2001=100

United Kingdom		Manufacturing				United Kingdom		Manufacturing			
		Per cent change						Per cent change			
		month on month a year earlier	3 months on 3 months year earlier	3 months on previous 3 months				month on month a year earlier	3 months on 3 months year earlier	3 months on previous 3 months	
Section	D	LNNX	LNNU	LOUV	DMWW	Section	D	LNNX	LNNU	LOUV	DMWW
2000	Jul	96.5	5.4	6.2	1.8	2003	Jan	103.2	3.6	3.7	0.4
	Aug	97.3	5.7	6.0	1.7		Feb	104.3	3.6	3.7	0.9
	Sep	97.7	5.6	5.6	1.4		Mar	104.8	3.8	3.7	1.3
	Oct	98.3	6.1	5.8	1.4		Apr	105.3	3.8	3.7	1.6
	Nov	98.9	6.2	5.9	1.5		May	105.7	3.6	3.7	1.6
	Dec	100.7	8.2	6.8	2.2		Jun	106.3	10.2	5.8	1.6
2001	Jan	100.4	7.9	7.4	2.3		Jul	107.3	5.6	6.4	1.5
	Feb	100.8	6.9	7.7	2.4		Aug	107.2	3.9	6.5	1.6
	Mar	100.6	5.9	6.9	1.3		Sep	107.9	4.6	4.7	1.6
	Apr	99.4	4.7	5.8	0.2		Oct	109.0	6.9	5.1	1.5
	May	98.8	3.1	4.6	-1.0		Nov	109.0	5.8	5.8	1.6
	Jun	99.4	2.7	3.5	-1.4		Dec	109.6	6.1	6.3	1.6
	Jul	99.4	3.0	2.9	-1.0	2004	Jan	109.8	6.4	6.1	1.3
	Aug	101.2	4.0	3.2	0.4		Feb	109.2	4.7	5.7	0.8
	Sep	100.9	3.3	3.4	1.3		Mar	109.4	4.4	5.1	0.2
	Oct	100.1	1.8	3.0	1.5		Apr	110.7	5.1	4.7	0.3
	Nov	99.5	0.6	1.9	0.2		May	111.5	5.5	5.0	1.0
	Dec	99.5	-1.2	0.4	-0.8						
2002	Jan	99.6	-0.9	-0.5	-1.2						
	Feb	100.7	0.0	-0.7	-0.2						
	Mar	101.0	0.4	-0.2	0.7						
	Apr	101.5	2.1	0.8	1.5						
	May	102.1	3.3	1.9	1.6						
	Jun	96.4	-3.0	0.8	-0.4						
	Jul	101.6	2.3	0.9	-1.0						
	Aug	103.2	2.0	0.4	-1.1						
	Sep	103.2	2.2	2.2	2.7						
	Oct	101.9	1.9	2.0	2.7						
	Nov	103.0	3.5	2.5	2.3						
	Dec	103.3	3.8	3.1	0.1						

Table 4

Output per hour worked – quarterly indices

Seasonally adjusted, 2001=100			
United Kingdom	Whole economy	Total production industries	Total manufacturing
Section	A–Q	C,D,E	D
	LZVB	LZVK	LZVF
2000 Q2	98.5	96.3	95.4
Q3	99.3	97.6	97.3
Q4	98.9	99.8	100.0
2001 Q1	99.7	100.8	101.0
Q2	99.5	99.2	99.0
Q3	100.0	100.2	100.2
Q4	100.7	99.8	99.8
2002 Q1	100.9	100.5	100.4
Q2	101.8	102.7	101.5
Q3	102.1	103.6	103.7
Q4	102.4	103.7	103.2
2003 Q1	102.3	105.3	104.9
Q2	102.7	107.0	107.1
Q3	103.6	107.6	108.1
Q4	105.2	110.6	111.4
2004 Q1	104.8	109.5	110.3

Change between period and period a year earlier

United Kingdom	Whole economy	Total production industries	Total manufacturing
Section	A–Q	C,D,E	D
	LZVD	LZVM	LZVH
2000 Q2	3.7	5.5	5.8
Q3	4.1	5.6	6.4
Q4	2.8	6.1	7.5
2001 Q1	0.9	5.6	7.0
Q2	1.1	3.1	3.7
Q3	0.7	2.7	3.0
Q4	1.9	0.0	–0.2
2002 Q1	1.2	–0.3	–0.7
Q2	2.3	3.5	2.6
Q3	2.1	3.4	3.5
Q4	1.6	3.9	3.4
2003 Q1	1.4	4.8	4.6
Q2	0.8	4.2	5.4
Q3	1.5	3.8	4.2
Q4	2.8	6.7	7.9
2004 Q1	2.4	4.0	5.1

Change between period and previous period

Seasonally adjusted, 2001=100			
United Kingdom	Whole economy	Total production industries	Total manufacturing
Section	A–Q	C,D,E	D
	TXBB	TXBD	TXBP
2000 Q2	–0.3	0.9	1.1
Q3	0.8	1.4	1.9
Q4	–0.4	2.3	2.8
2001 Q1	0.8	0.9	1.0
Q2	–0.2	–1.5	–2.0
Q3	0.5	0.9	1.2
Q4	0.7	–0.4	–0.4
2002 Q1	0.2	0.7	0.6
Q2	0.9	2.3	1.2
Q3	0.3	0.9	2.1
Q4	0.3	0.1	–0.5
2003 Q1	–0.1	1.5	1.7
Q2	0.4	1.6	2.0
Q3	0.9	0.5	1.0
Q4	1.5	2.9	3.0
2004 Q1	–0.4	–1.0	–0.9

Table 5

Output per hour worked, manufacturing subsections – quarterly indices

Seasonally adjusted, 2001=100

United Kingdom	Manufacturing industries										
	Food, drink and tobacco	Textiles, footwear, clothing and leather	Pulp, paper, paper products, printing and publishing	Chemicals and man-made fibres	Rubber and Plastics	Other non metallic mineral products	Basic metals and fabricated metal products	Machinery and equipment	Electrical and optical equipment	Transport equipment	Wood, coke, petroleum, nuclear fuel, other nec
Section	DA	DB,DC	DE	DG	DH	DI	DJ	DK	DL	DM	DD,DF,DN
	LZWQ	LZVW	LZWY	LZXC	LZXG	LZWA	LZWU	LZXK	LZXO	LZXS	LZWI
2000 Q2	91.9	96.0	96.7	89.8	97.5	93.5	96.6	94.0	99.6	101.4	96.0
Q3	96.2	99.5	97.6	91.9	99.8	96.7	99.2	95.0	102.2	98.2	95.5
Q4	98.1	100.8	98.5	94.6	100.9	97.0	99.8	97.7	108.6	100.5	102.6
2001 Q1	101.5	99.0	101.3	96.0	101.9	98.9	101.7	100.3	105.4	102.1	99.0
Q2	98.8	100.3	99.8	101.2	100.3	101.6	101.3	99.0	97.8	96.7	94.8
Q3	99.5	97.5	99.4	100.5	99.5	96.5	100.3	100.7	99.3	103.4	102.4
Q4	100.2	103.2	99.5	102.3	98.3	103.0	96.6	100.0	97.4	97.9	103.8
2002 Q1	101.5	100.3	99.7	103.2	98.8	97.0	100.2	97.9	95.6	99.4	105.9
Q2	103.6	103.3	103.3	102.3	97.3	100.6	99.3	99.4	97.8	100.0	103.7
Q3	106.9	105.0	103.7	100.5	99.5	106.4	102.7	100.0	100.3	104.6	103.8
Q4	101.9	105.3	105.9	98.0	97.5	103.6	102.6	100.2	100.3	105.4	105.2
2003 Q1	105.7	111.8	102.3	100.4	96.8	107.0	101.7	105.6	104.8	108.4	104.2
Q2	107.1	116.8	102.6	101.8	98.4	107.1	102.7	109.5	108.8	112.7	104.9
Q3	106.4	120.3	103.3	106.0	99.4	106.1	104.7	111.9	107.7	113.3	106.8
Q4	107.6	125.3	106.0	108.1	104.2	112.2	108.3	114.9	112.5	118.6	105.2
2004 Q1	104.9	123.4	107.8	108.5	100.8	113.5	106.0	112.3	110.0	117.2	105.9

Table 5 continued

Output per hour worked, manufacturing subsections – change between period and period a year earlier

Seasonally adjusted, 2001=100

United Kingdom	Manufacturing industries										
	Food drink and tobacco	Textiles, footwear, clothing and leather	Pulp, paper, paper products, printing and publishing	Chemicals and man-made fibres	Rubber and Plastics	Other non metallic mineral products	Base metals and fabricated metal products	Machinery and equipment	Electrical and optical equipment	Transport equipment	Wood, coke, petroleum, nuclear fuel, other nec
Section	DA	DB,DC	DE	DG	DH	DI	DJ	DK	DL	DM	DD,DF,DN
	LZWS	LZVY	LZXA	LZXE	LZXI	LZWC	LZWW	LZXM	LZXQ	LZXU	LZWK
2000 Q2	-3.6	8.8	7.1	14.1	1.7	1.1	6.0	3.4	16.8	2.4	0.7
Q3	5.7	10.6	4.8	12.3	1.5	9.0	8.2	-0.9	14.1	-1.2	1.2
Q4	4.7	9.7	6.7	10.4	3.0	8.9	6.5	2.0	17.6	0.4	6.5
2001 Q1	9.6	5.0	5.8	10.2	-0.1	2.7	7.2	7.1	11.8	1.4	1.9
Q2	7.6	4.5	3.2	12.7	2.9	8.6	4.9	5.3	-1.8	-4.6	-1.3
Q3	3.5	-2.0	1.8	9.3	-0.2	-0.1	1.1	6.0	-2.9	5.2	7.3
Q4	2.2	2.4	1.0	8.1	-2.6	6.2	-3.2	2.3	-10.3	-2.6	1.2
2002 Q1	0.0	1.3	-1.5	7.5	-3.1	-1.9	-1.5	-2.4	-9.3	-2.7	7.1
Q2	4.9	2.9	3.4	1.1	-3.0	-1.0	-2.0	0.4	-0.1	3.5	9.4
Q3	7.4	7.7	4.3	0.0	-0.1	10.3	2.3	-0.7	1.1	1.1	1.4
Q4	1.7	2.0	6.5	-4.2	-0.8	0.6	6.2	0.2	2.9	7.7	1.3
2003 Q1	4.2	11.5	2.6	-2.7	-2.0	10.3	1.5	7.9	9.6	9.1	-1.7
Q2	3.3	13.1	-0.6	-0.5	1.2	6.5	3.3	10.2	11.3	12.7	1.2
Q3	-0.5	14.6	-0.4	5.5	-0.1	-0.3	2.0	11.9	7.4	8.4	2.9
Q4	5.7	19.1	0.1	10.4	6.9	8.2	5.6	14.7	12.2	12.5	-0.1
2004 Q1	-0.8	10.4	5.4	8.1	4.1	6.0	4.2	6.4	5.0	8.1	1.7

Table 5 continued

Output per hour worked, manufacturing subsections – change between period and previous period

Seasonally adjusted, 2001=100

United Kingdom	Manufacturing industries										
	Food drink and tobacco	Textiles, footwear, clothing and leather	Pulp, paper, paper products, printing and publishing	Chemicals and man-made fibres	Rubber and Plastics	Other non metallic mineral products	Base metals and fabricated metal products	Machinery and equipment	Electrical and optical equipment	Transport equipment	Wood, coke, petroleum, nuclear fuel, other nec
Section	DA	DB,DC	DE	DG	DH	DI	DJ	DK	DL	DM	DD,DF,DN
	TXBG	TXBH	TXBI	TXBJ	TXBK	TXBL	TXBM	TXBN	TXBP	TXBQ	TXBR
2000 Q2	-0.7	1.9	1.1	3.0	-4.4	-2.9	1.8	0.4	5.7	0.7	-1.1
Q3	4.7	3.6	0.9	2.4	2.4	3.4	2.8	1.1	2.6	-3.1	-0.6
Q4	1.9	1.4	1.0	2.9	1.1	0.3	0.6	2.8	6.2	2.3	7.5
2001 Q1	3.5	-1.8	2.8	1.5	1.0	2.0	1.9	2.6	-2.9	1.6	-3.6
Q2	-2.6	1.4	-1.4	5.4	-1.6	2.7	-0.4	-1.3	-7.2	-5.3	-4.2
Q3	0.7	-2.9	-0.4	-0.7	-0.7	-5.0	-1.0	1.8	1.5	7.0	8.0
Q4	0.6	5.9	0.1	1.8	-1.3	6.7	-3.7	-0.7	-1.8	-5.3	1.4
2002 Q1	1.3	-2.8	0.2	0.9	0.5	-5.8	3.7	-2.1	-1.9	1.6	2.0
Q2	2.1	3.0	3.5	-0.9	-1.5	3.7	-0.8	1.6	2.2	0.6	-2.1
Q3	3.1	1.6	0.4	-1.7	2.2	5.8	3.3	0.6	2.6	4.5	0.1
Q4	-4.7	0.3	2.1	-2.5	-2.0	-2.6	-0.1	0.2	0.0	0.8	1.3
2003 Q1	3.8	6.2	-3.4	2.5	-0.7	3.3	-0.8	5.4	4.5	2.9	-1.0
Q2	1.3	4.5	0.2	1.3	1.7	0.1	0.9	3.7	3.9	3.9	0.7
Q3	-0.7	3.0	0.7	4.1	1.0	-1.0	1.9	2.2	-1.0	0.5	1.8
Q4	1.2	4.2	2.7	2.0	4.9	5.7	3.5	2.7	4.5	4.7	-1.5
2004 Q1	-2.5	-1.6	1.7	0.3	-3.3	1.2	-2.2	-2.3	-2.3	-1.2	0.7

Table 6
Labour input indices

Seasonally adjusted, 2001=100					
United Kingdom	Whole economy workers	Whole economy jobs	Ratio of jobs to workers	Total production industries jobs	Total manufacturing jobs
Section	A-Q	A-Q	A-Q	C,D,E	D
	TXEL	LNNM	TXET	LNOJ	LNOK
1999 Q2	97.9	98.5	100.7	108.8	109.1
Q3	98.3	98.7	100.4	107.8	108.2
Q4	98.6	98.9	100.3	107.4	107.6
2000 Q1	98.8	99.1	100.3	106.5	106.9
Q2	99.2	99.3	100.1	105.2	105.6
Q3	99.5	99.6	100.1	104.2	104.4
Q4	99.4	99.5	100.2	102.7	103.0
2001 Q1	99.8	99.7	100.0	101.8	101.7
Q2	100.0	100.1	100.2	100.8	100.8
Q3	100.0	99.9	99.9	99.2	99.4
Q4	100.2	100.2	99.9	98.2	98.1
2002 Q1	100.4	100.4	100.0	97.1	97.1
Q2	100.7	100.6	99.9	96.5	96.3
Q3	100.6	100.7	100.0	94.7	94.9
Q4	101.2	101.2	100.0	94.1	93.9
2003 Q1	101.4	101.3	99.9	93.0	92.9
Q2	101.6	101.4	99.8	91.9	91.7
Q3	101.7	101.5	99.9	91.0	90.8
Q4	101.8	101.6	99.8	90.0	89.8
2004 Q1	102.5	102.2	99.8	89.5	89.3

Table 6 continued
Labour input indices

Seasonally adjusted, 2001=100				
United Kingdom		Whole economy hours	Total production industries hours	Total manufacturing hours
Section		A-Q	C,D,E	D
		LZVA	LZVJ	LZVE
1999	Q2	98.7	108.6	109.0
	Q3	99.1	108.6	108.9
	Q4	99.4	107.0	107.6
2000	Q1	98.0	106.1	106.5
	Q2	99.2	105.7	106.0
	Q3	99.2	104.0	104.3
	Q4	99.9	102.1	102.2
2001	Q1	99.8	101.1	101.2
	Q2	100.3	101.1	101.0
	Q3	100.1	99.7	99.7
	Q4	99.7	98.1	98.0
2002	Q1	99.8	97.4	97.2
	Q2	99.2	95.0	94.9
	Q3	99.8	94.0	93.9
	Q4	99.8	93.6	93.5
2003	Q1	100.0	92.4	92.2
	Q2	100.1	90.8	90.6
	Q3	100.1	90.6	90.2
	Q4	99.6	88.2	88.1
2004	Q1	100.5	88.7	88.6

Table 7
Unit wage costs and unit labour costs – quarterly

Seasonally adjusted, 2001=100

United Kingdom		Whole economy unit wage costs			Whole economy unit labour costs			Manufacturing unit wage costs		
		Per cent change from year earlier		Per cent change from previous quarter	Per cent change from year earlier		Per cent change from previous quarter	Per cent change from year earlier		Per cent change 3 months on previous 3 months
Section		A–Q			A–Q			D		
		LNNK	LOJE	DMWL	LNNL	DMWN	DMWO	LNNQ	LOUW	DMWB
Unit Wage Costs										
2000	Q2	95.3	1.8	0.4	95.4	2.3	1.1	95.8	–1.7	–1.2
	Q3	96.3	2.3	1.1	96.8	3.0	1.5	96.2	–1.2	–0.2
	Q4	97.5	3.1	1.2	98.2	4.8	1.5	96.4	–2.0	–0.4
2001	Q1	99.1	4.5	1.7	99.5	5.5	1.4	98.0	–2.0	–0.2
	Q2	99.6	4.6	0.5	99.5	4.4	0.0	98.3	1.4	2.3
	Q3	100.3	4.2	0.7	100.1	3.4	0.5	99.5	1.0	–0.6
	Q4	100.9	3.5	0.6	100.9	2.7	0.8	99.9	2.7	1.3
2002	Q1	101.7	2.6	0.8	102.0	2.5	1.1	101.0	3.0	0.1
	Q2	102.7	3.2	1.0	102.8	3.3	0.8	101.8	2.8	2.0
	Q3	102.2	1.8	–0.6	103.2	3.1	0.4	102.3	1.5	–1.9
	Q4	103.1	2.1	0.9	103.5	2.6	0.3	101.7	1.0	0.8
2003	Q1	103.7	2.0	0.6	104.5	2.4	1.0	100.9	1.0	0.1
	Q2	104.4	1.6	0.7	105.8	2.9	1.3	100.1	–2.8	–1.8
	Q3	105.3	3.0	0.8	106.5	3.2	0.7	100.5	–1.4	–0.5
	Q4	105.5	2.3	0.2	106.9	3.3	0.3	100.3	–2.7	–0.6
2004	Q1	106.5	2.7	1.0	108.2	3.6	1.3	99.2	–1.6	1.3

Table 7

Unit wage costs and unit labour costs – monthly manufacturing unit wage costs

Seasonally adjusted, 2001=100

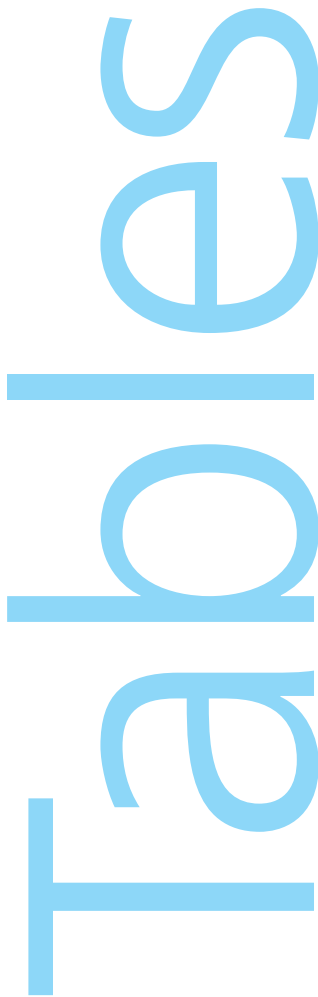
United Kingdom		Manufacturing				United Kingdom		Manufacturing			
		Per cent change						Per cent change			
			month on month a year earlier	3 months on 3 months year earlier	3 months on previous 3 months				month on month a year earlier	3 months on 3 months year earlier	3 months on previous 3 months
Section		D				Section		D			
		LNNQ	LOUW	LOJF	DMWB			LNNQ	LOUW	LOJF	DMWB
2001	May	101.0	1.5	0.4	1.9	2004	Jan	99.6	-2.6	-2.5	-0.2
	Jun	100.5	2.2	1.4	2.3		Feb	100.7	-1.0	-2.1	0.3
							Mar	101.6	-1.1	-1.6	1.3
	Jul	100.7	1.5	1.7	1.7						
	Aug	99.3	0.6	1.4	0.2		Apr	100.1	-0.3	-0.8	1.3
	Sep	99.9	0.9	1.0	-0.6		May	99.6	-1.1	-0.9	0.6
	Oct	100.8	2.1	1.2	-0.8						
2002	Nov	101.3	2.3	1.8	0.5						
	Dec	101.5	3.8	2.7	1.3						
	Jan	102.0	4.0	3.4	1.6						
	Feb	100.9	2.6	3.5	0.8						
	Mar	101.0	2.4	3.0	0.1						
	Apr	101.5	1.3	2.1	-0.5						
	May	101.1	0.1	1.3	-0.3						
	Jun	107.4	6.9	2.8	2.0						
	Jul	102.1	1.4	2.8	2.4						
	Aug	101.0	1.8	3.4	2.3						
Sep	101.0	1.2	1.5	-1.9							
2003											
	Oct	102.8	2.0	1.6	-1.9						
	Nov	101.8	0.5	1.2	-1.6						
	Dec	102.0	0.4	1.0	0.8						
	Jan	102.3	0.3	0.4	0.4						
	Feb	101.7	0.8	0.5	0.1						
	Mar	102.8	1.8	1.0	0.1						
	Apr	100.3	-1.1	0.5	-0.4						
	May	100.7	-0.4	0.1	-0.7						
	Jun	100.4	-6.6	-2.8	-1.8						
Jul	99.9	-2.2	-3.1	-1.3							
Aug	100.1	-1.0	-3.3	-1.2							
Sep	99.9	-1.1	-1.4	-0.5							
Oct	99.2	-3.5	-1.9	-0.6							
Nov	99.6	-2.1	-2.3	-0.5							
Dec	99.4	-2.6	-2.7	-0.6							

Table 8
Productivity measures by region, 1996–2002

		UK =100						
		1996	1997	1998	1999	2000	2001	2002
GVA per filled job								
United Kingdom		100.0	100.0	100.0	100	100.0	100.0	100.0
North East	DJDO	95.9	93.7	89.6	90.8	90.6	91.2	90.0
North West	DJDP	95.7	95.5	95.3	93.8	95.0	94.6	93.4
Yorkshire and the Humber	DMBC	91.6	92.1	91.8	92.7	91.8	92.3	91.5
East Midlands	DMBE	97.7	97.3	97.0	95.7	96.7	96.7	96.9
West Midlands	DMDN	91.5	92.4	91.8	92.2	93.0	93.2	92.8
East	DMDQ	98.6	98.8	99.8	98.3	98.2	99.4	100.2
London	DMGH	124.2	124.7	124.1	123.8	122.5	123.0	122.1
South East	DMGJ	100.4	100.6	102.9	104.9	104.9	105.7	106.0
South West	DMGK	90.9	89.5	89.4	90.5	91.2	90.7	91.0
England	DMGL	100.5	100.5	100.7	100.8	100.9	101.2	101.2
Wales	DMGM	94.5	95.0	94.3	92.5	92.1	92.5	92.1
Scotland	DMGX	100.1	100.4	99.0	98.8	98.1	95.2	95.6
Northern Ireland	DMOA	92.0	90.1	89.3	89.3	88.3	87.4	88.2
GVA per total hour worked								
United Kingdom		100.0	100.0	100.0	100.0	100.0	100.0	100.0
North East	DMOB	99.9	95.8	93.4	94.0	92.5	95.0	92.6
North West	DMOH	96.8	97.6	97.0	95.9	96.2	96.2	95.3
Yorkshire and the Humber	DMOK	94.0	94.1	93.0	94.1	93.7	94.5	92.2
East Midlands	DMOL	100.2	98.5	97.9	96.9	97.3	97.9	97.8
West Midlands	DMON	91.7	91.8	91.0	93.4	93.0	93.8	93.3
East	DMOO	98.7	99.1	101.0	99.1	98.9	99.1	101.4
London	DMOR	120.3	122.5	121.2	118.6	118.9	118.2	117.2
South East	DMOS	100.0	99.5	102.6	104.8	105.1	106.0	106.1
South West	DMOT	89.7	88.9	88.8	90.5	92.2	90.7	91.3
England	DMOV	100.6	100.6	100.8	100.9	101.1	101.3	101.2
Wales	DMOW	94.4	95.2	94.0	94.4	94.6	93.0	93.6
Scotland	DMOY	101.4	101.3	99.6	98.9	97.7	95.7	95.9
Northern Ireland	DMWA	86.2	84.1	84.7	83.4	82.3	84.4	84.4
GVA per head								
United Kingdom		100	100	100	100	100	100	100
North East	IGAX	81.8	80.0	77.9	76.6	76.3	76.4	77.0
North West	IGAY	90.1	89.6	89.1	89.5	89.5	89.7	90.1
Yorkshire and the Humber	IGAZ	89.5	89.2	88.3	87.6	86.9	86.5	86.4
East Midlands	IGBA	95.0	95.3	94.2	93.4	92.8	92.2	91.8
West Midlands	IGBB	92.6	92.5	91.8	91.2	90.8	90.4	90.1
East	IGBC	108.3	108.2	108.3	108.4	109.1	109.8	110.0
London	IGBD	130.1	131.9	134.9	135.3	134.5	132.3	130.9
South East	IGBE	111.8	113.2	115.5	117.2	118.9	120.3	120.5
South West	IGBF	92.7	92.0	90.8	90.2	89.9	90.7	91.4
England	IGBG	101.7	102.0	102.3	102.4	102.5	102.5	102.5
Wales	IGBH	82.7	81.6	80.0	79.3	78.8	78.7	78.8
Scotland	IGBI	99.8	98.6	96.8	95.8	95.2	94.4	94.6
Northern Ireland	IGBJ	80.3	79.2	78.9	78.9	78.9	78.9	79.2

Table R1
Revisions to key productivity measures – quarterly indices

		Seasonally adjusted, 2001=100					
United Kingdom		Whole Economy				Total production industries	Total manufacturing
		Output per Worker	Output per Job	Output per Hour	Unit Wage Costs	Output per Job	Output per Job
Section		A-Q	A-Q	A-Q	A-Q	C,D,E	D
		A4YM	LNNN	LZVB	LNNK	LNNW	LNNX
2000	Q2	–	–0.4	0.0	–0.2	–0.5	–0.4
	Q3	–	–0.2	0.0	–0.2	–0.4	–0.2
	Q4	–	0.1	0.0	–0.3	0.3	0.2
2001	Q1	–	0.0	0.0	–0.1	0.1	0.3
	Q2	–	–0.2	0.0	–0.1	0.0	0.0
	Q3	–	0.0	0.0	0.0	0.2	–0.1
	Q4	–	0.0	0.0	0.1	–0.2	–0.2
2002	Q1	–	0.0	0.0	0.0	–0.3	–0.3
	Q2	–	–0.3	0.0	–0.1	–0.7	–0.6
	Q3	–	–0.4	0.0	–0.1	–0.3	–0.8
	Q4	–	–0.8	0.0	–0.1	–1.1	–1.1
2003	Q1	–	–0.8	0.0	0.0	–1.1	–1.2
	Q2	–	–0.7	0.0	0.4	–0.9	–1.0
	Q3	–	–0.8	0.0	0.8	–1.1	–1.0
	Q4	–	–0.6	0.0	1.0	–0.9	–0.8
2004	Q1	–	–1.2	0.0	0.8	–1.3	–0.9



1. Summary

1.1	Selected monthly indicators	141
-----	-----------------------------	-----

2. UK Economic Accounts

2.1	National accounts aggregates	142
2.2	Gross domestic product: by category of expenditure	144
2.3	Gross domestic product and shares of income and expenditure	146
2.4	Income, product and spending per head	146
2.5	Households' disposable income and consumption	148
2.6	Households' final consumption expenditure, chained volume measures	148
2.7	Gross fixed capital formation	150
2.8	Gross value added, chained volume indices at basic prices, by category of output	152
2.9	Gross value added chained volume indices at basic prices, by category of output service industries	154
2.10	Summary capital accounts and net lending/net borrowing	156
2.11	Private non-financial corporations: allocation of primary income account	158
2.12	Private non-financial corporations: secondary distribution of income account and capital account	160
2.13	Balance of payments: current account	162
2.14	Trade in goods (on a balance of payments basis)	164
2.15	Measures of UK competitiveness in trade in manufactures	166

3. Prices

3.1	Prices	168
-----	--------	-----

4. Labour market

4.1	Labour market activity: seasonally adjusted	170
4.2	Labour market activity: not seasonally adjusted	172
	Labour market activity by age: seasonally adjusted	176
4.4	Jobs and claimant count	178
4.5	Regional claimant count rates	180
4.5A	Unemployment rates	182
4.6	Average earnings (including bonuses)	184
4.7	Productivity and unit wage costs	186

5. Selected output and demand indicators

5.1	Output of production industries	188
5.2	Engineering and construction: output and orders	190
5.3	Motor vehicle and steel production	192
5.4	Indicators of fixed investment in dwellings	194
5.5	Number of property transactions	196
5.6	Change in inventories: chained volume measures	198
5.7	Inventory ratios	198
5.8	Retail sales, new registrations of cars and credit business (Great Britain)	200
5.9	Inland energy consumption: primary fuel input basis	202

6. Selected financial statistics

6.1	Sterling exchange rates and UK reserves	204
6.2	Monetary aggregates	206
6.3	Counterparts to changes in money stock M4	208
6.4	Public sector receipts and expenditure	210
6.5	Public sector key fiscal indicators	210
6.6	Consumer credit and other household sector borrowing	212
6.7	Analysis of bank lending to UK residents, amounts outstanding	214
6.8	Interest rates, security prices and yields	216
6.9	A selection of asset prices	218

	Measures of variability of selected economic series	219
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Notes to tables

Identification codes

The four-letter identification code at the top of each data column is the ONS reference for this series of data on our database. Please quote the relevant code if you contact us requiring any further information about the data.

Currency of data

All data in the tables and accompanying charts are current, as far as possible, to 3 September 2004.

Some data, particularly for the latest time period, are provisional and may be subject to revision in later editions.

Geographic coverage

Statistics relate mainly to the United Kingdom. Where figures are for Great Britain only, this is shown on the table.

Seasonal adjustments

Almost all quarterly data are seasonally adjusted; those not seasonally adjusted are indicated by the abbreviation NSA.

Money

There is no single correct definition of money. The most widely used measures are:

M0

This is the narrowest measure and consists of notes and coins in circulation outside the Bank of England and bankers' operational deposits at the Bank.

M4

This comprises notes and coin in circulation with the public, together with all sterling deposits (including certificates of deposit) held with UK banks and building societies by the rest of the private sector.

The Bank of England also publish data for liquid assets outside M4.

Conventions

Rounding may lead to inconsistencies between the constituent parts and the total in some tables.

A horizontal line between two consecutive figures indicates that the figures above and below the line have been compiled on different bases and are not strictly comparable. Footnotes explain the differences.

Billion denotes one thousand million.

Symbols used

- .. not available
- nil or less than half the final digit shown
- + a series for which measures of variability are given on page 219
- † data have been revised since the last edition; the period marked is the earliest in the table to have been revised
- average (or total) of five weeks

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Users can download time series, cross-sectional data and metadata from across the Government Statistical Service (GSS), using the site search and index functions from the homepage. Many datasets can be downloaded, in whole or in part, and directory information for all GSS statistical resources can be consulted, including censuses, surveys, journals and enquiry services. Information is posted as PDF electronic documents, or in XLS and CSV formats, compatible with most spreadsheet packages.

Time Series Data

The time series data facility on the website provide access to around 40,000 time series, of primarily macro-economic data, drawn from the main tables in our major economic and labour market publications. Users can download complete releases or view and download customised selections of individual time series.

Complete copies of *Economic Trends* can be downloaded from the following webpage:

<http://www.statistics.gov.uk/statbase/product.asp?vlnk=308>

1.1 Selected monthly indicators

seasonally adjusted unless otherwise stated

		2002	2003	2003 Q4	2004 Q1	2004 Q2	2004 May	2004 Jun	2004 Jul	%Change Latest 3 months avg over previous 3 months
Output -chained volume measures (CVM) (2001 = 100 unless otherwise stated)										
Gross value added at basic prices	CGCE	101.5	103.4	104.8	105.4	106.4	..	..	..	0.9
Industrial production	CKYW	97.5	97.4	97.6	97.1	98.0	98.2	97.9	..	0.9
Oil and gas extraction	CKZO	98.8	93.2	88.7	88.4	90.6	89.9	91.9	..	2.4
Manufacturing	CKYY	96.9	97.3	98.1	97.7	98.6	99.0	98.3	..	0.9
Construction	GDQB	103.8	108.9	112.4	112.8	113.9	..	..	..	0.9
Car production (thousands)	FFAO	135.8	138.1	138.2	135.4	137.9	141.1	136.5	143.2	3.2
Domestic demand										
Retail sales volume (2000 = 100)	EAPS	112.7	116.4	119.3	121.6	123.8	123.5	124.7	124.3	1.8
GB new registrations of cars ('000s) ¹	BCGT	2 682.0	2 646.2	523.1	762.2	629.8	197.6	241.1	..	-17.4
Manufacturing: change in inventories (£m, CVM, reference year 2001)	DHBM	-924	-440	-939	363	-355	..	..	..	..
Prices (12 monthly % change) and earnings (3 month average)										
Consumer prices index ¹	CJYR	1.3	1.4	1.3	1.3	1.4	1.5	1.6	1.4	..
Retail prices index ¹	CZBH	1.7	2.9	2.6	2.6	2.8	2.8	3.0	3.0	..
Retail prices index ¹ (less MIPS) ²	CDKH	2.2	2.8	2.6	2.3	2.2	2.3	2.3	2.2	..
Producer output prices (less FBTP) ³	EUAA	-0.1	1.3	1.4	1.4	1.4	1.4	1.5	1.6	..
Producer input prices ⁴	EUAB	-4.5	1.3	2.9	-0.3	3.8	5.4	3.5	3.0	..
GB average earnings -whole economy ⁵	LNNC	..	..	3.4	5.2	4.4	4.4	4.4	..	..
Foreign trade⁶ (2001 = 100 volumes unless otherwise stated)										
UK balance on trade in goods (£ million)	BOKI	-46 675	-47 290	-12 978	-13 947	-14 645	-4 825	-4 973	..	..
Non EU balance on trade in goods (£ million)	LGDT	-25 010	-21 735	-5 478	-7 021	-7 123	-2 304	-2 640	..	6.1
Non EU exports of goods (excl oil & erratics)	SHDJ	94.0	102.5	106.8	97.9	103.9	101.4	104.5	..	3.2
Non EU imports of goods (excl oil & erratics)	SHED	97.6	102.7	107.7	108.8	112.2	110.8	114.4	..	..
Non EU import & price index (excl oil) ⁷	LKWQ	94.3	91.1	90.1	87.7	89.2	89.8	88.7	..	..
Non EU export & price index (excl oil) ⁷	LKVX	99.8	96.8	96.1	95.1	96.5	96.7	96.1	..	..
Labour market and productivity (2001 = 100 unless otherwise stated)										
UK claimant unemployment (thousands)	BCJD	946.7	933.2	915.2	886.8	861.1	860.5	848.9	835.2	-3.7
UK employees in manufacturing (thousands)	YEJA	3 602	3 458	3 413	3 379	3 362	3 366	3 362	..	-0.6
Whole economy productivity ⁸	LNNN	100.7	101.9	103.2	103.1	..	..	..	..	-0.1
Manufacturing productivity ⁸	LNNX	101.5	106.6	109.2	109.5	111.1	111.6	111.0	..	1.5
Unit wage costs - whole economy	LNNK	102.4	104.7	105.5	106.5	..	..	..	..	0.9
Unit wage costs - manufacturing	LNNQ	102.0	100.5	99.4	100.6	99.9	99.5	100.1	..	-0.8
Financial markets¹										
Sterling ERI (1990=100)	AGBG	106.0	100.2	100.2	104.1	105.2	104.6	105.8	105.9	0.4
Average exchange rate /US \$	AUSS	1.50	1.63	1.71	1.84	1.81	1.79	1.83	1.84	-0.7
Average exchange rate /Euro ⁹	THAP	1.59	1.45	1.43	1.47	1.50	1.49	1.51	1.50	0.7
3 month inter-bank rate ¹⁰	HSAJ	3.94	3.95	3.95	4.30	4.77	4.56	4.77	4.86	..
3 month interest on US Treasury bills ¹¹	LUST	1.20	0.93	0.93	0.93	1.31	1.06	1.31	1.42	..
Monetary conditions/government finances										
M0 (year on year percentage growth)	VQMX	7.9	7.3	7.5	7.2	5.8	5.3	6.4	5.6	..
M4 (year on year percentage growth)	VQJW	6.3	7.2	7.1	7.6	7.7	7.9	7.7	8.8	..
Public sector net borrowing (£ million) ^{1,12}	ANNX	-25 190	-33 999	-13 490	925	-14 415	-7 358	-4 853	953	..
Net lending to consumers (£ million)(broader)	RLMH	21 087	18 698	3 953	5 387	5 110	1 575	2 169	1 760	15.2

		2003 Jul	2003 Aug	2003 Sep	2003 Oct	2003 Nov	2003 Dec	2004 Jan	2004 Feb	2004 Mar	2004 Apr	2004 May	2004 Jun	2004 Jul	2004 Aug
Activity and expectations															
CBI output expectations balance ¹	ETCU	-4	-3	-3	-4	-2	5	21	14	15	12	22	15	6	19
CBI optimism balance ¹	ETBV	-13	..	..	-7	..	..	17	..	..	12	..	..	7	..
CBI price expectations balance	ETDQ	-13	-15	-9	-9	-10	-4	-1	-2	-3	-	1	5	6	10
New engineering orders (2000 = 100)	JIQH	83.9	79.5	78.3	84.1	88.8	73.9	85.2	68.1	82.0	72.7	83.1	80.2	..	..

1 Not seasonally adjusted

2 MIPS: mortgage interest payments

3 FBTP : food, beverages, tobacco and petroleum

4 See footnote 2 on Table 3.1.

5 See footnote 2 on Table 4.6

6 All Non EU figures exclude Austria, Finland & Sweden

7 12 monthly percentage change

8 Output per filled job.

9 Prior to January 1999, a synthetic Euro has been calculated by geometrically averaging the bilateral exchange rate of the 11 Euro-area countries using "internal weights" based on each country's share of the extra Euro-area trade

10 Last Friday of the period

11 Last working day

12 Annual figures are for the financial years 2002/03 and 2003/04.

2.1 National accounts aggregates

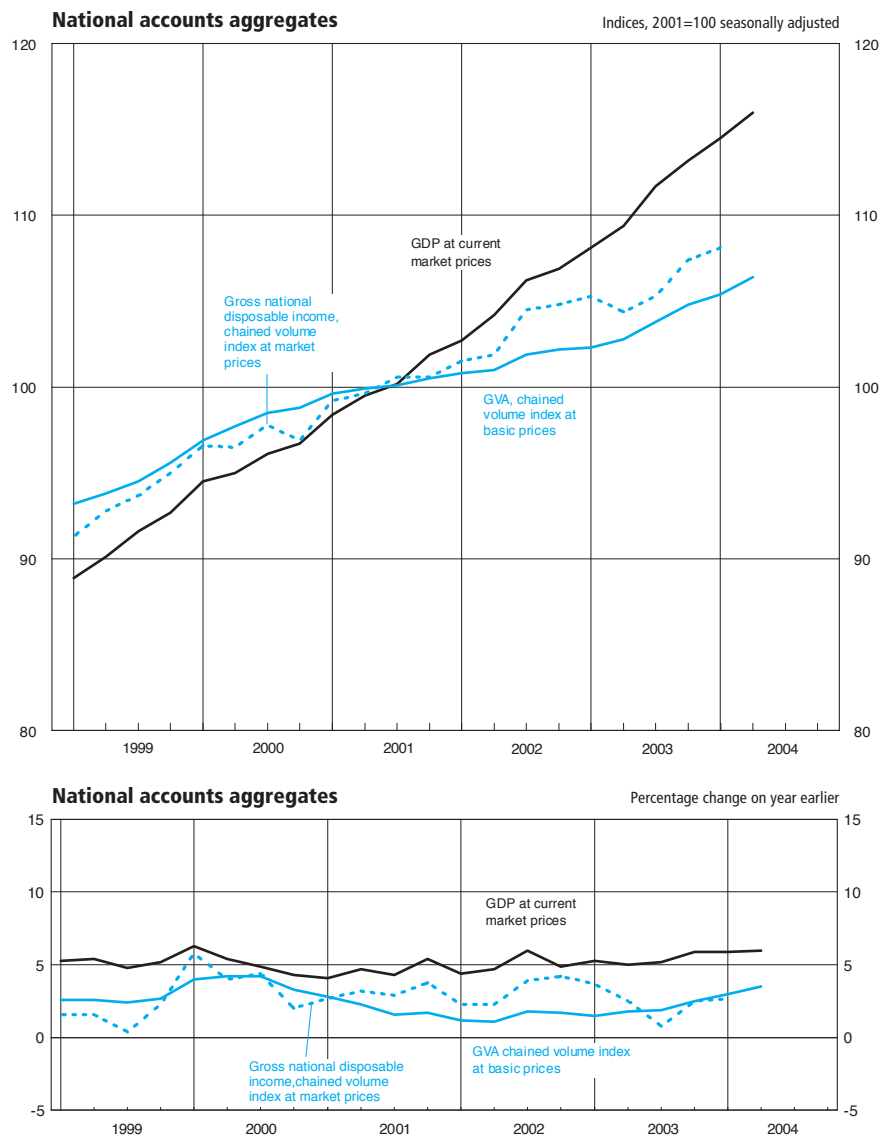
	£ million		Indices (2001 = 100)						
	At current prices		Value indices at current prices		Chained volume indices			Implied deflators ²	
	Gross domestic product at market prices	Gross value added (GVA) at basic prices	Gross domestic product at market prices ¹	Gross Value added (GVA) at basic prices	Gross national disposable income at market prices	Gross domestic product at market prices	Gross value added (GVA) at basic prices+	GDP at market prices	GVA at basic prices
Annual	YBHA	ABML	YBEU	YBEX	YBFP	YBEZ	CGCE	YBGB	CGBV
1999	903 167	797 116	90.8	90.5	93.2	94.1	94.3	96.5	96.0
2000	950 561	838 490	95.6	95.2	96.9	97.8	98.0	97.8	97.1
2001	994 309	881 163	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2002	1 044 145	926 275	105.0	105.1	103.2	101.8	101.5	103.2	103.6
2003	1 099 896	976 148	110.6	110.8	105.6	104.1	103.4	106.3	107.1
Quarterly									
1999 Q1	220 923	195 097	88.9	88.6	91.3	93.0	93.2	95.6	95.0
Q2	224 058	198 308	90.1	90.0	92.8	93.4	93.8	96.5	96.0
Q3	227 712	200 887	91.6	91.2	93.7	94.4	94.5	97.0	96.5
Q4	230 474	202 824	92.7	92.1	95.0	95.6	95.6	96.9	96.4
2000 Q1	235 014	207 303	94.5	94.1	96.6	96.8	96.9	97.7	97.1
Q2	236 157	207 965	95.0	94.4	96.5	97.5	97.7	97.4	96.7
Q3	238 933	210 886	96.1	95.7	97.8	98.2	98.5	97.9	97.2
Q4	240 457	212 336	96.7	96.4	96.9	98.5	98.8	98.2	97.6
2001 Q1	244 608	216 540	98.4	98.3	99.2	99.3	99.6	99.1	98.7
Q2	247 391	219 070	99.5	99.4	99.6	99.8	99.9	99.7	99.6
Q3	249 071	220 704	100.2	100.2	100.6	100.3	100.1	99.9	100.1
Q4	253 239	224 849	101.9	102.1	100.6	100.6	100.5	101.2	101.6
2002 Q1	255 307	226 473	102.7	102.8	101.5	100.9	100.8	101.7	102.0
Q2	258 981	229 701	104.2	104.3	101.9	101.3	101.0	102.8	103.2
Q3	264 015	234 331	106.2	106.4	104.5	102.2	101.9	103.9	104.4
Q4	265 842	235 770	106.9	107.0	104.8	102.6	102.2	104.3	104.8
2003 Q1	268 739	238 633	108.1	108.3	105.3	102.8	102.3	105.2	105.8
Q2	272 003	241 386	109.4	109.6	104.4	103.5	102.8	105.8	106.6
Q3	277 662	246 366	111.7	111.8	105.3	104.4	103.8	107.0	107.8
Q4	281 492	249 763	113.2	113.4	107.4	105.5	104.8	107.3	108.2
2004 Q1	284 692	252 491	114.5	114.6	108.1	106.3	105.4	107.7	108.8
Q2	288 325	255 820	116.0	116.1	..	107.3	106.4	108.1	109.2
Percentage change, quarter on corresponding quarter of previous year ³									
Quarterly									
1999 Q1	5.4	4.8	5.4	4.8	1.6	2.8	2.7	2.6	2.0
Q2	5.4	5.0	5.4	5.0	1.6	2.6	2.6	2.7	2.3
Q3	4.9	4.3	4.9	4.3	0.4	2.6	2.4	2.1	1.9
Q4	5.2	4.5	5.2	4.5	2.3	3.2	2.7	1.8	1.8
2000 Q1	6.4	6.3	6.4	6.3	5.8	4.1	3.9	2.2	2.2
Q2	5.4	4.9	5.4	4.9	4.0	4.4	4.2	0.9	0.7
Q3	4.9	5.0	4.9	5.0	4.4	4.0	4.2	0.9	0.7
Q4	4.3	4.7	4.3	4.7	2.0	3.0	3.4	1.3	1.2
2001 Q1	4.1	4.5	4.1	4.5	2.7	2.6	2.8	1.4	1.6
Q2	4.8	5.3	4.8	5.3	3.2	2.4	2.2	2.4	3.0
Q3	4.2	4.7	4.2	4.7	2.9	2.1	1.6	2.0	3.0
Q4	5.3	5.9	5.3	5.9	3.8	2.1	1.7	3.1	4.1
2002 Q1	4.4	4.6	4.4	4.6	2.3	1.6	1.2	2.6	3.3
Q2	4.7	4.9	4.7	4.9	2.3	1.5	1.2	3.1	3.6
Q3	6.0	6.2	6.0	6.2	3.9	1.9	1.8	4.0	4.3
Q4	5.0	4.9	5.0	4.9	4.2	2.0	1.7	3.1	3.1
2003 Q1	5.3	5.4	5.3	5.4	3.7	1.9	1.5	3.4	3.7
Q2	5.0	5.1	5.0	5.1	2.5	2.2	1.8	2.9	3.3
Q3	5.2	5.1	5.2	5.1	0.8	2.2	1.8	3.0	3.3
Q4	5.9	5.9	5.9	5.9	2.5	2.8	2.5	2.9	3.2
2004 Q1	5.9	5.8	5.9	5.8	2.7	3.4	3.0	2.4	2.8
Q2	6.0	6.0	6.0	6.0	..	3.7	3.5	2.2	2.4

1 "Money GDP."

2 Based on chained volume measures and current price estimates of expenditure components of GDP.

3 These estimates of change are based in some cases on less rounded figures than in the table.

Source: Office for National Statistics; Enquiries 020 7533 6031



2.2 Gross domestic product : by category of expenditure

Chained volume measures

Reference year 2001, £ million

	Domestic expenditure on goods and services at market prices											
	Final consumption expenditure			Gross capital formation				Exports of goods and services+	Gross final expenditure	Imports of goods and services+	Statistical discrepancy (expenditure)	Gross domestic product at market prices
	Households	Non-profit institutions ²	General government	Gross fixed capital formation+	Changes in inventories ³	Acquisitions less disposals of valuables	Total					
Annual	ABJR	HAYO	NMRY	NPQT	CAFU	NPJR	YBIM	IKBK	ABMG	IKBL	GIXS	ABMI
1999	590 275	23 095	180 683	155 631	6 416	28	955 837	241 978	1 197 551	261 942	—	935 818
2000	616 515	24 875	184 929	161 267	5 262	3	992 822	264 810	1 257 636	285 837	—	971 937
2001	635 583	24 345	189 724	165 504	6 189	396	1 021 741	272 369	1 294 110	299 801	—	994 309
2002	655 865	25 818	196 862	169 928	2 513	226	1 051 212	272 635	1 323 847	311 955	—	1 011 892
2003	671 013	26 593	203 674	173 623	2 467	9	1 077 379	272 949	1 350 328	315 911	201	1 034 618
Quarterly												
1999 Q1	145 317	5 816	44 724	38 921	2 570	5	237 008	57 566	294 410	63 356	—	231 135
Q2	146 761	5 717	45 357	38 345	555	24	236 623	59 480	296 012	63 864	—	232 242
Q3	147 771	5 741	45 353	38 688	1 706	-15	239 115	62 065	301 186	66 511	—	234 698
Q4	150 426	5 821	45 249	39 677	1 585	14	243 091	62 867	305 943	68 211	—	237 743
2000 Q1	153 400	6 074	45 726	39 312	753	1	245 348	63 738	309 063	68 489	—	240 609
Q2	153 749	6 186	46 540	39 485	1 329	—	247 229	65 997	313 231	70 889	—	242 381
Q3	154 701	6 286	46 513	40 431	1 906	-3	249 778	66 551	316 321	72 284	—	244 077
Q4	154 665	6 329	46 150	42 039	1 274	5	250 467	68 524	319 021	74 175	—	244 870
2001 Q1	156 398	6 172	46 996	41 493	1 080	-19	252 091	69 713	321 845	75 041	—	246 817
Q2	157 861	6 066	46 800	41 535	1 579	230	254 109	68 978	323 110	75 031	—	248 080
Q3	160 046	6 037	47 621	41 617	1 989	41	257 365	66 823	324 152	74 879	—	249 268
Q4	161 278	6 070	48 307	40 859	1 541	144	258 176	66 855	325 003	74 850	—	250 144
2002 Q1	162 043	6 366	49 414	41 138	994	66	260 021	67 177	327 198	76 265	—	250 933
Q2	163 505	6 399	48 756	42 179	-624	58	260 273	70 272	330 545	78 700	—	251 846
Q3	164 392	6 485	49 236	42 991	696	85	263 885	69 257	333 142	79 019	—	254 123
Q4	165 925	6 568	49 456	43 620	1 447	17	267 033	65 929	332 962	77 971	—	254 990
2003 Q1	165 680	6 656	49 986	42 675	1 212	6	266 215	69 030	335 244	79 801	39	255 482
Q2	167 189	6 629	50 345	43 054	-514	104	266 807	67 503	334 310	77 154	48	257 204
Q3	168 531	6 647	51 137	43 528	371	-54	270 159	67 658	337 817	78 258	55	259 615
Q4	169 613	6 661	52 206	44 366	1 398	-47	274 198	68 758	342 957	80 698	59	262 317
2004 Q1	170 665	6 710	52 840	45 105	659	42	276 021	68 163	344 184	80 014	51	264 222
Q2	172 550	6 734	53 368	45 750	171	-79	278 495	69 666	348 161	81 524	52	266 689 [†]
<i>Percentage change, latest quarter on corresponding quarter of previous year</i>												
1999 Q1	4.3	0.9	4.6	4.4			4.9	-0.3	3.8	7.4		2.7
Q2	4.5	-1.9	4.0	0.8			3.7	1.7	3.2	5.2		2.7
Q3	4.3	-2.3	3.0	0.1			3.1	7.1	4.0	8.6		2.7
Q4	5.3	-0.2	2.5	1.1			3.8	8.6	4.8	10.3		3.3
2000 Q1	5.6	4.4	2.2	1.0			3.5	10.7	5.0	8.1		4.1
Q2	4.8	8.2	2.6	3.0			4.5	11.0	5.8	11.0		4.4
Q3	4.7	9.5	2.6	4.5			4.5	7.2	5.0	8.7		4.0
Q4	2.8	8.7	2.0	6.0			3.0	9.0	4.3	8.7		3.0
2001 Q1	2.0	1.6	2.8	5.5			2.7	9.4	4.1	9.6		2.6
Q2	2.7	-1.9	0.6	5.2			2.8	4.5	3.2	5.8		2.4
Q3	3.5	-4.0	2.4	2.9			3.0	0.4	2.5	3.6		2.1
Q4	4.3	-4.1	4.7	-2.8			3.1	-2.4	1.9	0.9		2.2
2002 Q1	3.6	3.1	5.1	-0.9			3.1	-3.6	1.7	1.6		1.7
Q2	3.6	5.5	4.2	1.6			2.4	1.9	2.3	4.9		1.5
Q3	2.7	7.4	3.4	3.3			2.5	3.6	2.8	5.5		1.9
Q4	2.9	8.2	2.4	6.8			3.4	-1.4	2.4	4.2		1.9
2003 Q1	2.2	4.6	1.2	3.7			2.4	2.8	2.5	4.6		1.8
Q2	2.3	3.6	3.3	2.1			2.5	-3.9	1.1	-2.0		2.1
Q3	2.5	2.5	3.9	1.2			2.4	-2.3	1.4	-1.0		2.2
Q4	2.2	1.4	5.6	1.7			2.7	4.3	3.0	3.5		2.9
2004 Q1	3.0	0.8	5.7	5.7			3.7	-1.3	2.7	0.3		3.4
Q2	3.2	1.6	6.0	6.3			4.4	3.2	4.1	5.7		3.7

1 Estimates given to nearest million but cannot be regarded as accurate to the degree.

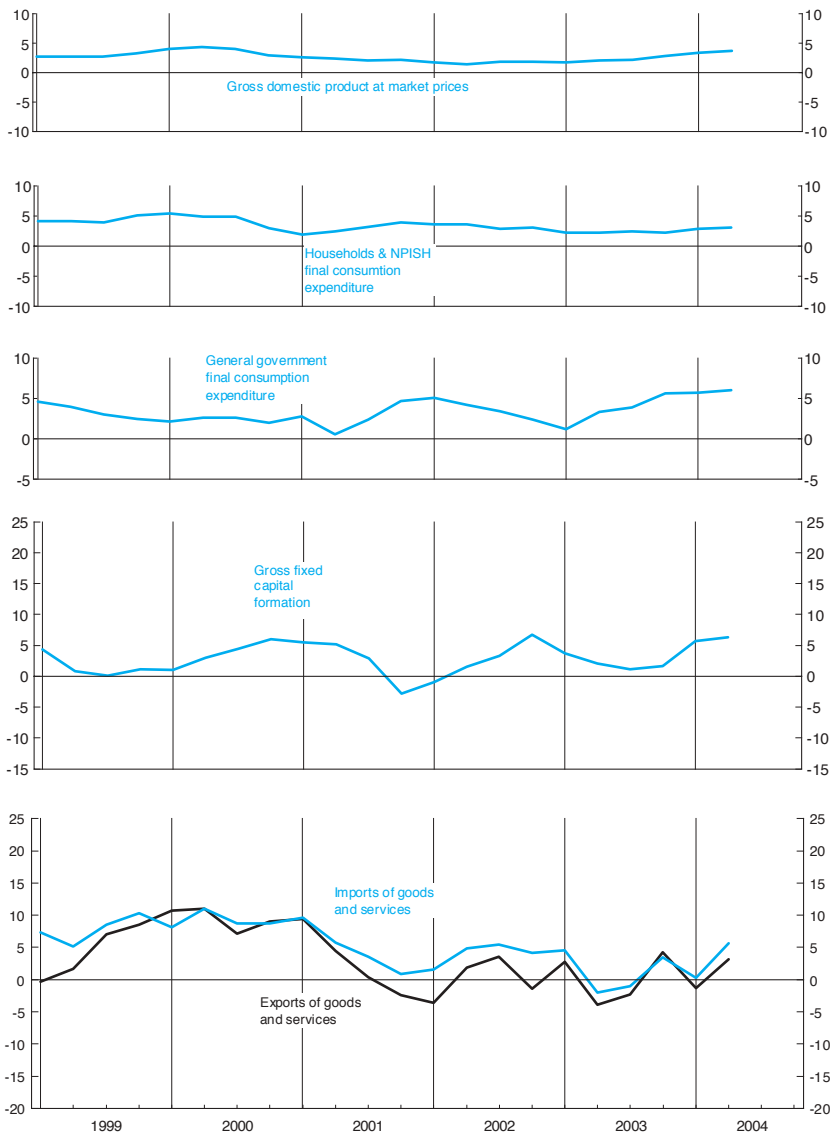
2 Non-profit making institutions serving households(NPISH).

3 Quarterly alignment adjustment included in this series.

Source: Office for National Statistics; Enquiries 020 7533 6031

Gross Domestic Product : by category of expenditure

chained volume measures
reference year 2001
percentage change on year earlier



2.3 Gross domestic product and shares of income and expenditure

	Percentage share of gross final expenditure						Percentage share of GDP by category of income				
	Gross domestic product at market prices	Gross final expenditure	Final consumption expenditure		Gross capital formation	Exports of goods and services	Gross operating surplus			Mixed income	Taxes on production and imports
			Household and NPISH	General government			Corporations ¹	Other ²	Compensation of employees		
Annual	YBHA	ABMF	IHXI	IHXJ	IHXK	IHXL	IHXM	IHXO	IHXP	IHXQ	IHXR
2001	994 309	1 294 110	51.0	14.6	13.3	21.1	20.4	3.6	56.8	6.1	13.1
2002	1 044 145	1 348 963	51.3	15.5	12.9	20.3	21.2	3.2	56.5	6.2	12.9
2003	1 099 896	1 409 894	51.2	16.3	12.9	19.7	22.1	3.0	55.9	6.2	12.7
Quarterly											
2001 Q1	244 608	320 862	50.2	14.3	13.3	22.2	20.0	3.6	57.2	6.1	13.1
Q2	247 391	323 583	50.6	14.4	13.4	21.7	19.7	4.3	56.8	6.1	13.1
Q3	249 071	323 475	51.5	14.7	13.6	20.1	20.6	3.3	56.8	6.2	13.1
Q4	253 239	326 190	51.6	15.2	13.0	20.2	21.1	3.3	56.6	6.2	12.9
2002 Q1	255 307	330 346	51.5	15.4	12.7	20.4	20.9	3.0	56.9	6.3	13.0
Q2	258 981	336 321	51.2	15.3	12.5	21.0	20.5	3.7	56.7	6.2	12.9
Q3	264 015	340 800	50.9	15.5	13.1	20.4	21.6	3.1	56.3	6.2	12.8
Q4	265 842	341 496	51.6	15.7	13.4	19.4	21.8	2.9	56.2	6.2	12.9
2003 Q1	268 739	346 642	51.0	16.0	12.7	20.2	22.1	2.7	56.2	6.2	12.8
Q2	272 003	347 750	51.5	16.3	12.5	19.7	21.8	3.0	56.2	6.3	12.7
Q3	277 662	354 920	51.2	16.3	13.0	19.5	22.4	2.9	55.7	6.2	12.7
Q4	281 492	360 582	50.9	16.6	13.2	19.3	22.0	3.4	55.6	6.2	12.7
2004 Q1	284 692	362 021	51.2	16.6	13.3	18.8	21.4	3.4	56.2	6.3	12.7
Q2	288 325	367 760	..	..	..	..	..	..	..	..	..

1 Non-financial and financial corporations.

2 Gross operating surplus of General government, and Households and NPISH plus the adjustment for financial services.

Source: Office for National Statistics; Enquiries 020 7533 6031

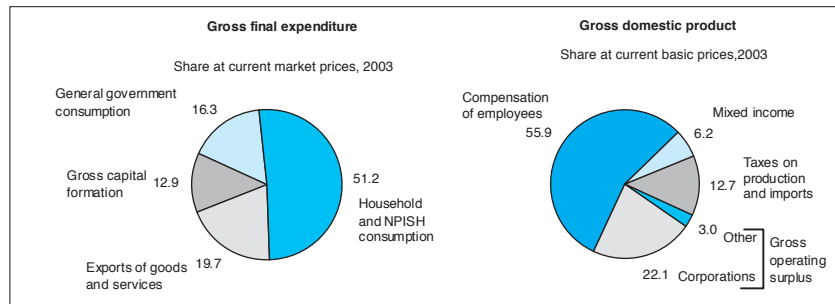
2.4 Income, product and spending per head

£

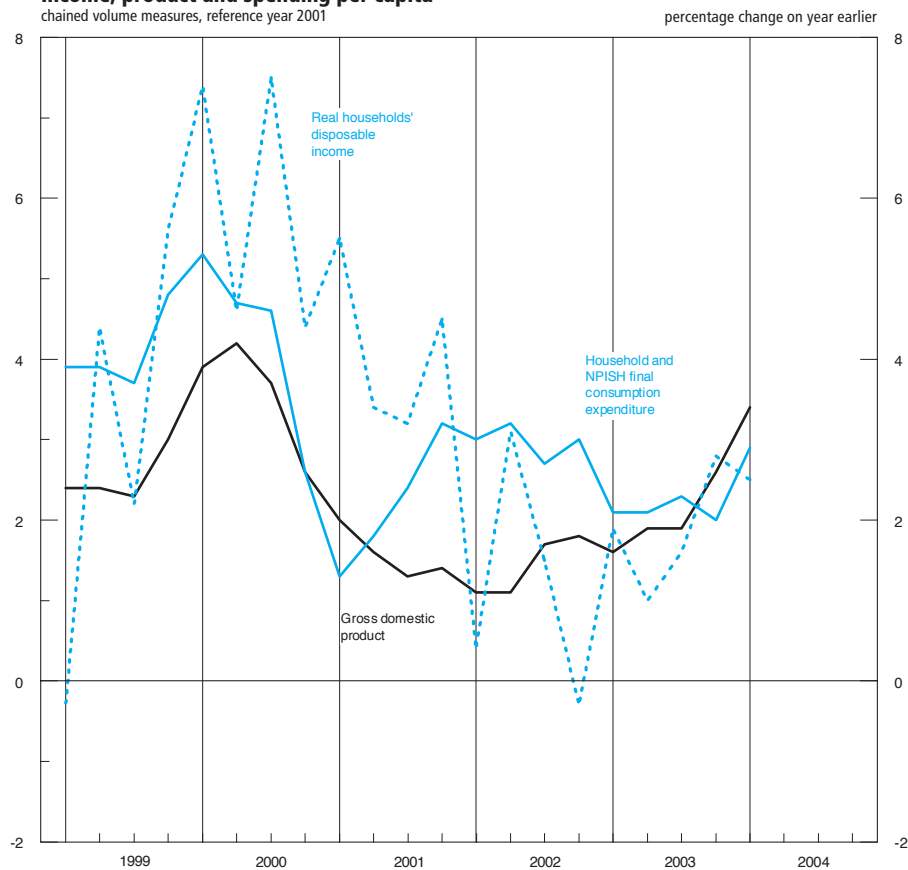
	At current prices				Chained volume measures (reference year 2001)		
	Gross national income at market prices	Gross domestic product at market prices	Household and NPISH final consumption expenditure	Households' gross disposable income	Gross domestic product at market prices	Household and NPISH final consumption expenditure	Real households' disposable income
Annual	IHXS	IHXT	IHXU	IHXV	IHXW	IHXX	IHXZ
2000	16 239	16 210	10 683	11 164	16 574	10 938	11 427
2001	16 981	16 837	11 175	11 901	16 839	11 176	11 900
2002	17 960	17 628	11 687	12 228	17 084	11 509	12 042
2003	18 868	18 524	12 146	12 676	17 426	11 750	12 262
Quarterly							
2000 Q1	4 033	4 014	2 649	2 724	4 109	2 724	2 801
Q2	4 027	4 031	2 661	2 775	4 137	2 730	2 846
Q3	4 096	4 073	2 682	2 820	4 161	2 744	2 885
Q4	4 083	4 092	2 691	2 845	4 167	2 740	2 895
2001 Q1	4 181	4 153	2 735	2 929	4 191	2 760	2 955
Q2	4 232	4 192	2 775	2 941	4 204	2 778	2 944
Q3	4 262	4 213	2 820	2 988	4 217	2 810	2 976
Q4	4 306	4 279	2 845	3 043	4 227	2 828	3 025
2002 Q1	4 361	4 311	2 875	2 999	4 237	2 844	2 967
Q2	4 420	4 372	2 908	3 078	4 252	2 868	3 036
Q3	4 571	4 457	2 931	3 070	4 290	2 885	3 022
Q4	4 608	4 488	2 973	3 081	4 305	2 912	3 017
2003 Q1	4 648	4 526	2 978	3 103	4 303	2 903	3 024
Q2	4 642	4 581	3 018	3 162	4 332	2 928	3 067
Q3	4 733	4 676	3 059	3 184	4 373	2 950	3 071
Q4	4 845	4 741	3 091	3 227	4 418	2 969	3 100
2004 Q1	4 903	4 795	3 121	3 239	4 450	2 987	3 100

Source: Office for National Statistics; Enquiries 020 7533 6031

Shares of income and expenditure



Income, product and spending per capita



2.5 Households' disposable income and consumption

	£ million, current prices						£ million, chained volume measures, reference year 2001			
	Households' income before tax		Gross households' disposable income ²	Adjustment for the change in net equity of households in pension funds	Households' Total resources	Households' final consumption expenditure	Households' saving ratio ³ (percentage)+	Real households' disposable income+ ⁴	Household final consumption expenditure+	Real households' disposable income (index 2001=100)
	Total	of which: Wages and salaries								
Annual										
2001	RPHP	ROYJ	RPHQ	RPQJ	RPQK	RPQM	NRJS	NRJR	NPSP	OSXS
2001	1 016 062	486 302	702 774	6 606	709 380	659 928	7.0	702 774	659 928	100.0
2002	1 051 382	505 659	724 296	10 871	735 167	692 255	5.8	713 235	681 683	101.5
2003	1 096 890	523 192	752 592	14 276	766 868	721 083	6.0	728 089	697 606	103.6
Quarterly										
2001 Q1	251 642	119 880	172 476	2 220	174 696	161 094	7.8	174 047	162 563	99.1
Q2	251 594	121 030	173 553	1 469	175 022	163 740	6.4	173 749	163 926	98.9
Q3	253 384	122 127	176 628	1 280	177 908	166 724	6.3	175 952	166 087	100.1
Q4	259 442	123 265	180 117	1 637	181 754	168 370	7.4	179 026	167 352	101.9
2002 Q1	258 628	124 658	177 621	2 950	180 571	170 240	5.7	175 708	168 409	100.0
Q2	263 224	126 270	182 312	1 935	184 247	172 263	6.5	179 813	169 904	102.3
Q3	264 769	126 629	181 881	3 133	185 014	173 634	6.2	178 990	170 877	101.9
Q4	264 761	128 102	182 482	2 853	185 335	176 118	5.0	178 724	172 493	101.7
2003 Q1	269 097	128 951	184 211	4 142	188 353	176 789	6.1	179 571	172 336	102.2
Q2	272 305	129 852	187 711	2 310	190 021	179 187	5.7	182 087	173 818	103.6
Q3	276 192	131 476	189 063	3 463	192 526	181 611	5.7	182 366	175 178	103.8
Q4	279 296	132 913	191 607	4 361	195 968	183 496	6.4	184 065	176 274	104.8
2004 Q1	282 061	135 426	192 299	5 133	197 432	185 303	6.1	184 072	177 375	104.8
Q2	..	..	..	..	..	187 534	..	..	179 284	..

1 All households series include also Non-Profit Institutions Serving Households (NPISH).

2 Total household income less payments of income tax and other taxes, social contributions and other current transfers.

3 Households saving as a percentage of Total resources; this is the sum

of Gross household disposable income and the Adjustment for the change in net equity of households in pension funds (D.8).

4 Gross household disposable income revalued by the implied Household and NPISH final consumption expenditure deflator (2000 = 100).

Sources: Office for National Statistics; Enquiries Column 1 020 7533 6005; Columns 2-5,7,8,10 020 7533 6027; Columns 6,9 020 7533 5999

2.6 Household final consumption expenditure^{1,2}

Chained volume measures

Reference year 2001, £ million

	UK National ⁴														
	UK Domestic ⁵														
	Total	Net tourism	Total	Food & drink	Alcohol & tobacco	Clothing & footwear	Housing	House- hold goods & services	Health	Trans- port	Communi- cation	Recreat- ion & culture	Educac- ion	Restaur- ants & hotels	Miscell- aneous
COICOP ³	-	-	0	01	02	03	04	05	06	07	08	09	10	11	12
Annual															
	ABJR	ABTH	ZAKW	ZWUN	ZAKY	ZALA	ZAVO	ZAVW	ZAWC	ZAWM	ZAWW	ZAXA	ZWUT	ZAXS	ZAYG
2001	635 583	9 524	626 059	59 974	25 158	37 042	113 467	37 974	9 786	92 560	14 157	76 005	9 239	71 493	79 204
2002	655 865	10 764	645 101	60 724	25 517	41 316	114 710	39 768	10 232	94 145	14 501	81 183	8 167	73 656	81 182
2003	671 013	10 993	660 020	61 777	25 978	43 979	116 657	38 812	11 135	95 934	15 168	84 466	8 482	76 116	81 516
Quarters															
2001 Q1	156 398	1 828	154 567	15 140	6 239	8 822	28 187	9 365	2 465	22 902	3 483	18 274	2 391	17 982	19 374
Q2	157 861	2 431	155 430	14 661	6 329	9 128	28 356	9 441	2 411	22 957	3 517	18 842	2 345	17 805	19 644
Q3	160 046	2 686	157 361	14 856	6 325	9 444	28 517	9 600	2 427	23 337	3 556	19 238	2 287	17 906	19 846
Q4	161 278	2 579	158 701	15 317	6 265	9 648	28 407	9 568	2 483	23 364	3 601	19 651	2 216	17 800	20 340
2002 Q1	162 043	2 763	159 280	14 908	6 322	10 051	28 523	9 790	2 491	23 368	3 582	20 066	2 116	18 167	19 896
Q2	163 505	2 629	160 876	14 899	6 380	10 241	28 652	10 028	2 538	23 690	3 631	20 177	2 049	18 331	20 260
Q3	164 392	2 679	161 713	15 202	6 385	10 430	28 744	10 022	2 572	23 545	3 645	20 257	2 027	18 563	20 321
Q4	165 925	2 693	163 232	15 715	6 430	10 594	28 791	9 928	2 631	23 542	3 643	20 683	1 975	18 595	20 705
2003 Q1	165 680	3 156	162 524	15 224	6 443	10 639	29 031	9 421	2 682	23 937	3 692	20 480	2 014	18 617	20 344
Q2	167 189	2 716	164 473	15 686	6 463	10 967	28 984	9 992	2 756	23 895	3 760	20 912	2 078	18 758	20 222
Q3	168 531	2 607	165 924	15 396	6 518	11 061	29 159	9 730	2 822	23 971	3 841	21 455	2 160	19 282	20 529
Q4	169 613	2 514	167 099	15 471	6 554	11 312	29 483	9 669	2 875	24 131	3 875	21 619	2 230	19 459	20 421
2004 Q1	170 665	2 264	168 401	15 886	6 571	11 700	29 532	9 650	2 844	23 932	3 965	22 457	2 290	18 977	20 597
Q2	172 550	..	..	..	..	..	..	..	..	..	..	..	..	..	..

1 Estimates are given to the nearest £million but cannot be regarded as accurate to this degree.

2 More detailed estimates of Household Final Consumption Expenditure, expressed in both current prices and chained volume measures

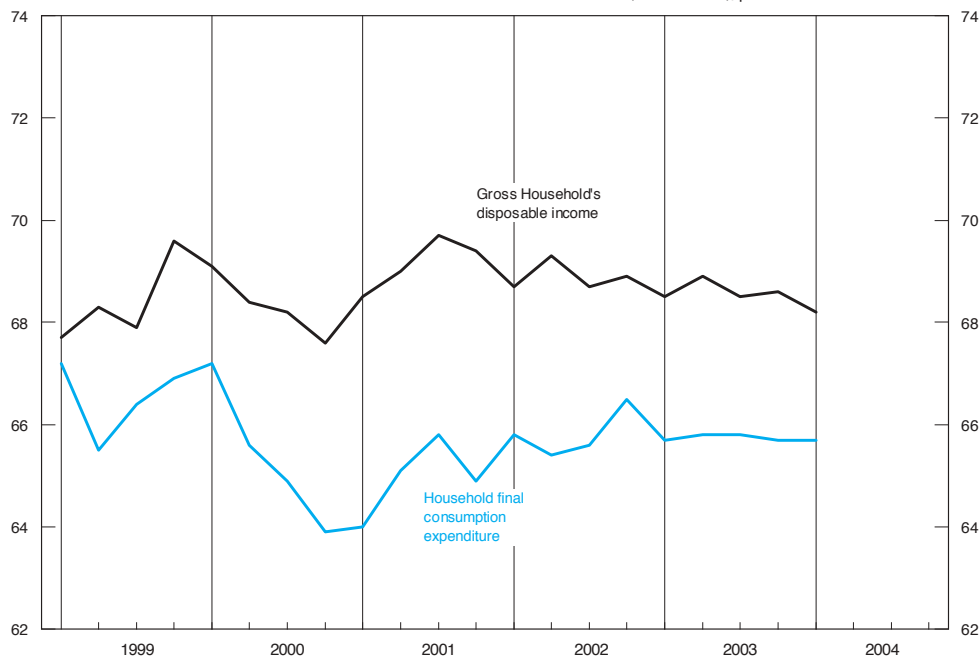
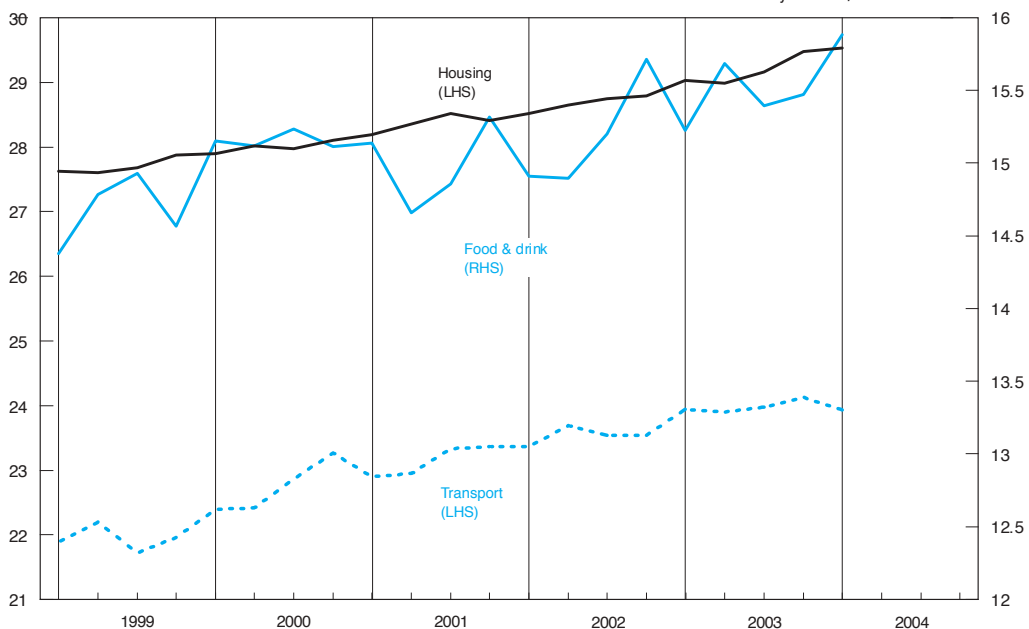
and both unadjusted and seasonally adjusted appear in the ONS publication *Consumer Trends*.

3 ESA 95 Classification of Individual Consumption by Purpose

4 Final consumption expenditure by UK households in the UK & abroad

5 Final consumption expenditure in the UK by UK & foreign households

Source: Office for National Statistics; Enquiries 020 7533 5999

Household's Disposable Income and ConsumptionProportion of Households' Income before tax
(Current Prices), per cent**Household final consumption expenditure – component categories**chained volume measures
reference year 2001, £ thousand million

2.7 Gross fixed capital formation

Chained volume measures

Reference year 2001, £ million

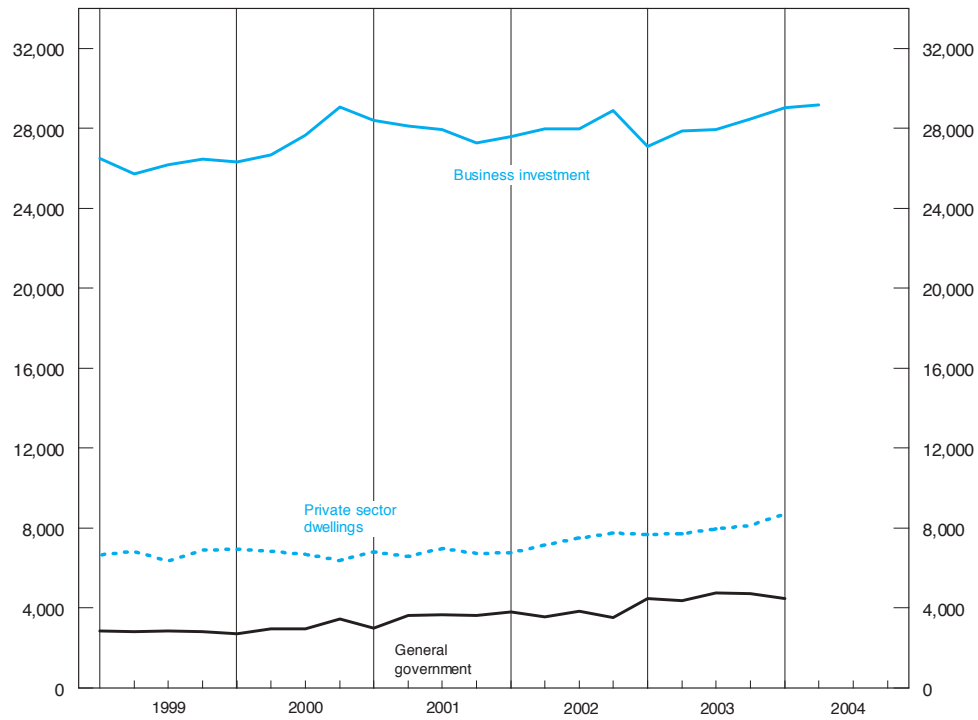
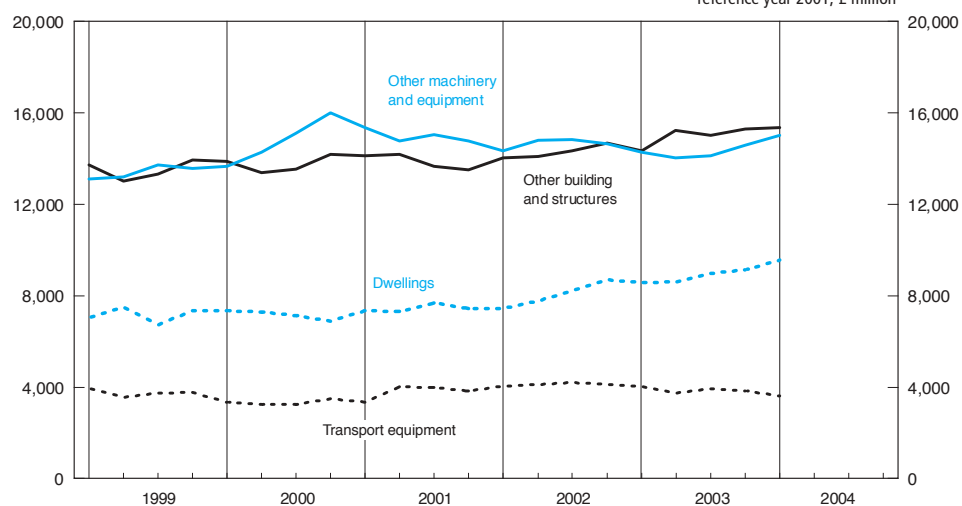
	Analysis by sector						Analysis by asset				
	Business investment ¹	General government	Public corporations ²	Private sector		Total+	Transport equipment	Other machinery and equipment	Dwellings	Other building and structures ³	Intangible fixed assets
			Transfer costs of non-produced assets	Dwellings	Transfer costs of non-produced assets						
Annual	NPEL	DLWF	DLWH	DFEA	DLWI	NPQT	DLWL	DLWO	DFEG	DLWT	EQDO
1999	104 865	11 332	4	26 729	13 133	155 631	15 020	53 617	28 649	54 062	4 846
2000	109 693	12 051	6	26 830	12 814	161 267	13 348	59 133	28 672	55 052	5 058
2001	111 739	13 925	59	27 085	12 696	165 504	15 194	59 975	29 806	55 513	5 016
2002	112 435	14 711	-37	29 176	13 643	169 928	16 487	58 623	32 139	57 176	5 503
2003	111 376	18 297	-186	31 477	12 659	173 623	15 552	57 067	35 324	59 912	5 768
Quarterly											
1999 Q1	26 515	2 864	-10	6 649	2 837	38 921	3 958	13 118	7 049	13 747	1 173
Q2	25 724	2 826	2	6 849	3 044	38 345	3 566	13 195	7 516	13 032	1 205
Q3	26 163	2 835	5	6 343	3 452	38 688	3 736	13 730	6 723	13 331	1 218
Q4	26 463	2 807	7	6 888	3 800	39 677	3 760	13 574	7 361	13 952	1 250
2000 Q1	26 305	2 694	6	6 956	3 575	39 312	3 340	13 683	7 343	13 893	1 225
Q2	26 665	2 961	2	6 823	3 069	39 485	3 253	14 301	7 295	13 396	1 276
Q3	27 659	2 954	-1	6 695	3 113	40 431	3 267	15 126	7 137	13 562	1 269
Q4	29 064	3 442	-1	6 356	3 057	42 039	3 488	16 023	6 897	14 201	1 288
2001 Q1	28 407	2 988	-6	6 787	3 262	41 493	3 354	15 347	7 365	14 143	1 253
Q2	28 109	3 640	30	6 597	3 150	41 535	4 035	14 785	7 305	14 182	1 244
Q3	27 946	3 666	30	6 968	3 030	41 617	3 971	15 053	7 680	13 662	1 257
Q4	27 277	3 631	5	6 733	3 254	40 859	3 834	14 790	7 456	13 526	1 262
2002 Q1	27 574	3 810	11	6 759	2 984	41 138	4 054	14 334	7 435	14 030	1 285
Q2	27 974	3 541	13	7 153	3 498	42 179	4 105	14 808	7 781	14 104	1 381
Q3	27 983	3 843	-30	7 506	3 689	42 991	4 201	14 826	8 222	14 353	1 389
Q4	28 904	3 517	-31	7 758	3 472	43 620	4 127	14 655	8 701	14 689	1 448
2003 Q1	27 082	4 470	-13	7 666	3 470	42 675	4 034	14 291	8 588	14 351	1 411
Q2	27 869	4 353	-32	7 721	3 143	43 054	3 751	14 035	8 615	15 228	1 425
Q3	27 936	4 744	-81	7 942	2 987	43 528	3 924	14 143	8 983	15 028	1 450
Q4	28 489	4 730	-60	8 148	3 059	44 366	3 843	14 598	9 138	15 305	1 482
2004 Q1	29 019	4 486	-38	8 688	2 950	45 105	3 611	15 036	9 567	15 380	1 511
Q2	29 168	..	..	..	..	45 750	..	..	..	..	..
Percentage change, latest quarter on corresponding quarter of previous year											
1999 Q1	7.9	-1.4		-3.5	1.4	4.4	-1.2	8.6	-4.9	5.1	4.5
Q2	2.6	6.0		-4.2	-9.9	0.8	-10.6	7.7	-2.6	-2.4	0.4
Q3	1.6	-2.8		-7.3	8.9	0.1	-9.0	9.0	-9.8	-1.0	-5.4
Q4	-0.4	-8.7		2.0	42.3	1.1	-11.2	0.3	1.8	6.9	-0.9
2000 Q1	-0.8	-5.9		4.6	26.0	1.0	-15.6	4.3	4.2	1.1	4.4
Q2	3.7	4.8		-0.4	0.8	3.0	-8.8	8.4	-2.9	2.8	5.9
Q3	5.7	4.2		5.5	-9.8	4.5	-12.6	10.2	6.2	1.7	4.2
Q4	9.8	22.6		-7.7	-19.6	6.0	-7.2	18.0	-6.3	1.8	3.0
2001 Q1	8.0	10.9		-2.4	-8.8	5.5	0.4	12.2	0.3	1.8	2.3
Q2	5.4	22.9		-3.3	2.6	5.2	24.0	3.4	0.1	5.9	-2.5
Q3	1.0	24.1		4.1	-2.7	2.9	21.5	-0.5	7.6	0.7	-0.9
Q4	-6.1	5.5		5.9	6.4	-2.8	9.9	-7.7	8.1	-4.8	-2.0
2002 Q1	-2.9	27.5		-0.4	-8.5	-0.9	20.9	-6.6	1.0	-0.8	2.6
Q2	-0.5	-2.7		8.4	11.0	1.6	1.7	0.2	6.5	-0.5	11.0
Q3	0.1	4.8		7.7	21.7	3.3	5.8	-1.5	7.1	5.1	10.5
Q4	6.0	-3.1		15.2	6.7	6.8	7.6	-0.9	16.7	8.6	14.7
2003 Q1	-1.8	17.3		13.4	16.3	3.7	-0.5	-0.3	15.5	2.3	9.8
Q2	-0.4	22.9		7.9	-10.1	2.1	-8.6	-5.2	10.7	8.0	3.2
Q3	-0.2	23.4		5.8	-19.0	1.2	-6.6	-4.6	9.3	4.7	4.4
Q4	-1.4	34.5		5.0	-11.9	1.7	-6.9	-0.4	5.0	4.2	2.3
2004 Q1	7.2	0.4		13.3	-15.0	5.7	-10.5	5.2	11.4	7.2	7.1
Q2	4.7	..		..	..	6.3	..	..	..	..	..

1 Not including dwellings and costs associated with the transfer of ownership of non-produced assets.

2 Remaining investment by public non-financial corporations is included within business investment.

3 Including costs associated with transfer of ownership of non-produced assets.

Source: Office for National Statistics; Enquiries 020 7533 6010

Gross fixed capital formation-by sectorChained volume measures,
reference year 2001, £ million**Gross fixed capital formation – by asset**Chained volume measures,
reference year 2001, £ million

2.8 Gross value added, chained volume indices at basic prices, by category of output^{1,3}

2001 = 100

	Production						Service industries					Gross value added at basic prices	Gross value added excluding oil
	Agriculture, forestry, and fishing	Mining and quarrying including oil and gas extraction	Manufacturing	Electricity gas and water supply	Total	Construction	Distribution hotels and catering; repairs	Transport storage and communication	Business services and finance	Government and other services	Total		
<i>2001 Weights¹</i>	10	28	172	18	218	57	159	81	249	227	716	1000	975
	GDQA	CKYX	CKYY	CKYZ	CKYW	GDQB	GDQE	GDQH	GDQN	GDQU	GDQS	CGCE	JUNT
1999	110.7	109.3	98.9	95.6	99.7	97.0	95.1	87.8	91.4	94.7	92.8	94.3	93.9
2000	110.0	105.8	101.4	97.7	101.6	98.2	97.7	96.2	95.6	97.7	96.8	98.0	97.8
2001	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2002	111.9	99.7	96.9	99.5	97.5	103.8	104.7	101.3	102.0	102.6	102.7	101.5	101.5
2003	109.0	94.3	97.3	101.7	97.4	108.9	107.7	102.8	105.6	104.1	105.3	103.4	103.7
Quarterly													
1999 Q1	111.4	108.2	97.9	94.7	98.7	95.9	94.1	85.7	90.7	93.5	91.7	93.2	92.9
Q2	110.2	109.3	98.3	94.8	99.1	96.2	94.6	87.1	90.8	94.5	92.3	93.8	93.4
Q3	110.0	110.6	99.6	96.1	100.4	97.7	95.4	87.9	91.0	95.2	92.9	94.5	94.2
Q4	111.2	109.0	100.1	96.9	100.7	98.1	96.1	90.4	93.0	95.6	94.2	95.6	95.2
2000 Q1	110.8	109.9	100.6	96.4	101.2	100.5	96.8	93.3	93.7	96.6	95.2	96.9	96.6
Q2	110.1	108.3	101.2	98.7	101.8	98.2	97.4	95.4	94.8	97.6	96.3	97.7	97.4
Q3	111.5	104.6	101.4	97.6	101.5	96.5	98.6	97.6	96.5	98.4	97.7	98.5	98.3
Q4	107.6	100.4	102.3	98.0	101.9	97.6	98.3	98.5	97.4	98.2	98.0	98.8	98.7
2001 Q1	100.8	99.0	102.3	101.7	101.9	99.2	99.1	99.9	98.3	98.9	98.8	99.6	99.6
Q2	99.1	101.6	100.0	100.6	100.3	99.5	99.4	100.2	100.0	99.6	99.8	99.9	99.8
Q3	98.8	100.5	99.9	99.4	99.9	100.1	100.1	99.6	100.3	100.3	100.2	100.1	100.1
Q4	101.3	98.8	97.8	98.3	97.9	101.3	101.4	100.2	101.5	101.2	101.2	100.5	100.6
2002 Q1	110.4	99.5	97.5	98.0	97.8	102.9	103.1	100.8	101.0	102.0	101.7	100.8	100.9
Q2	112.9	104.7	96.3	98.9	97.6	102.6	104.1	100.2	101.4	102.3	102.1	101.0	100.9
Q3	112.8	95.2	97.4	100.8	97.4	104.2	105.3	101.5	102.8	103.0	103.3	101.9	102.1
Q4	111.4	99.3	96.4	100.4	97.1	105.6	106.4	102.5	102.9	103.2	103.7	102.2	102.3
2003 Q1	108.5	98.9	96.7	100.2	97.3	104.4	105.7	102.3	104.3	103.4	104.1	102.3	102.5
Q2	108.6	95.5	97.0	100.4	97.1	108.0	107.1	102.6	104.2	103.9	104.6	102.8	103.1
Q3	109.3	93.0	97.6	102.5	97.4	111.0	108.3	102.7	105.8	104.4	105.5	103.8	104.1
Q4	109.6	90.0	98.1	103.8	97.6	112.4	109.5	103.4	107.9	104.9	106.8	104.8	105.2
2004 Q1	108.4	89.3	97.7	102.5	97.1	112.8	111.4	103.7	109.1	105.4	107.8	105.4	105.9
Q2	107.7	91.6	98.6	101.9	98.0	113.9	112.7 [†]	104.4	110.0	106.4	108.8	106.4	106.8
<i>Percentage change, latest quarter on corresponding quarter of last year</i>													
1999 Q1	4.8	4.4	-0.7	3.5	0.2	-3.4	3.2	7.9	5.7	2.1	4.2	2.6	2.7
Q2	1.5	4.4	-0.3	1.9	0.3	0.3	3.4	7.1	4.5	2.2	3.7	2.6	2.5
Q3	2.9	5.3	1.3	2.7	1.8	2.1	3.0	5.4	2.4	2.1	2.8	2.4	2.4
Q4	4.4	2.5	2.7	2.6	2.5	2.5	2.3	6.0	2.3	2.4	2.8	2.7	2.6
2000 Q1	-0.5	1.6	2.8	1.8	2.5	4.8	2.9	8.9	3.3	3.3	3.8	4.0	4.0
Q2	-0.1	-0.9	3.0	4.1	2.7	2.1	3.0	9.5	4.4	3.3	4.3	4.2	4.3
Q3	1.4	-5.4	1.8	1.6	1.1	-1.2	3.4	11.0	6.0	3.4	5.2	4.2	4.4
Q4	-3.2	-7.9	2.2	1.1	1.2	-0.5	2.3	9.0	4.7	2.7	4.0	3.3	3.7
2001 Q1	-9.0	-9.9	1.7	5.5	0.7	-1.3	2.4	7.1	4.9	2.4	3.8	2.8	3.1
Q2	-10.0	-6.2	-1.2	1.9	-1.5	1.3	2.1	5.0	5.5	2.0	3.6	2.3	2.5
Q3	-11.4	-3.9	-1.5	1.8	-1.6	3.7	1.5	2.0	3.9	1.9	2.6	1.6	1.8
Q4	-5.9	-1.6	-4.4	0.3	-3.9	3.8	3.2	1.7	4.2	3.1	3.3	1.7	1.9
2002 Q1	9.5	0.5	-4.7	-3.6	-4.0	3.7	4.0	0.9	2.7	3.1	2.9	1.2	1.3
Q2	13.9	3.1	-3.7	-1.7	-2.7	3.1	4.7	0.0	1.4	2.7	2.3	1.1	1.1
Q3	14.2	-5.3	-2.5	1.4	-2.5	4.1	5.2	1.9	2.5	2.7	3.1	1.8	2.0
Q4	10.0	0.5	-1.4	2.1	-0.8	4.2	4.9	2.3	1.4	2.0	2.5	1.7	1.7
2003 Q1	-1.7	-0.6	-0.8	2.2	-0.5	1.5	2.5	1.5	3.3	1.4	2.4	1.5	1.6
Q2	-3.8	-8.8	0.7	1.5	-0.5	5.3	2.9	2.4	2.8	1.6	2.4	1.8	2.2
Q3	-3.1	-2.3	0.2	1.7	0.0	6.5	2.8	1.2	2.9	1.4	2.1	1.9	2.0
Q4	-1.6	-9.4	1.8	3.4	0.5	6.4	2.9	0.9	4.9	1.6	3.0	2.5	2.8
2004 Q1	-0.1	-9.7	1.0	2.3	-0.2	8.0	5.4	1.4	4.6	1.9	3.6	3.0	3.3
Q2	-0.8	-4.1	1.6	1.5	0.9	5.5	5.2 [†]	1.8	5.6	2.4	4.0	3.5	3.6

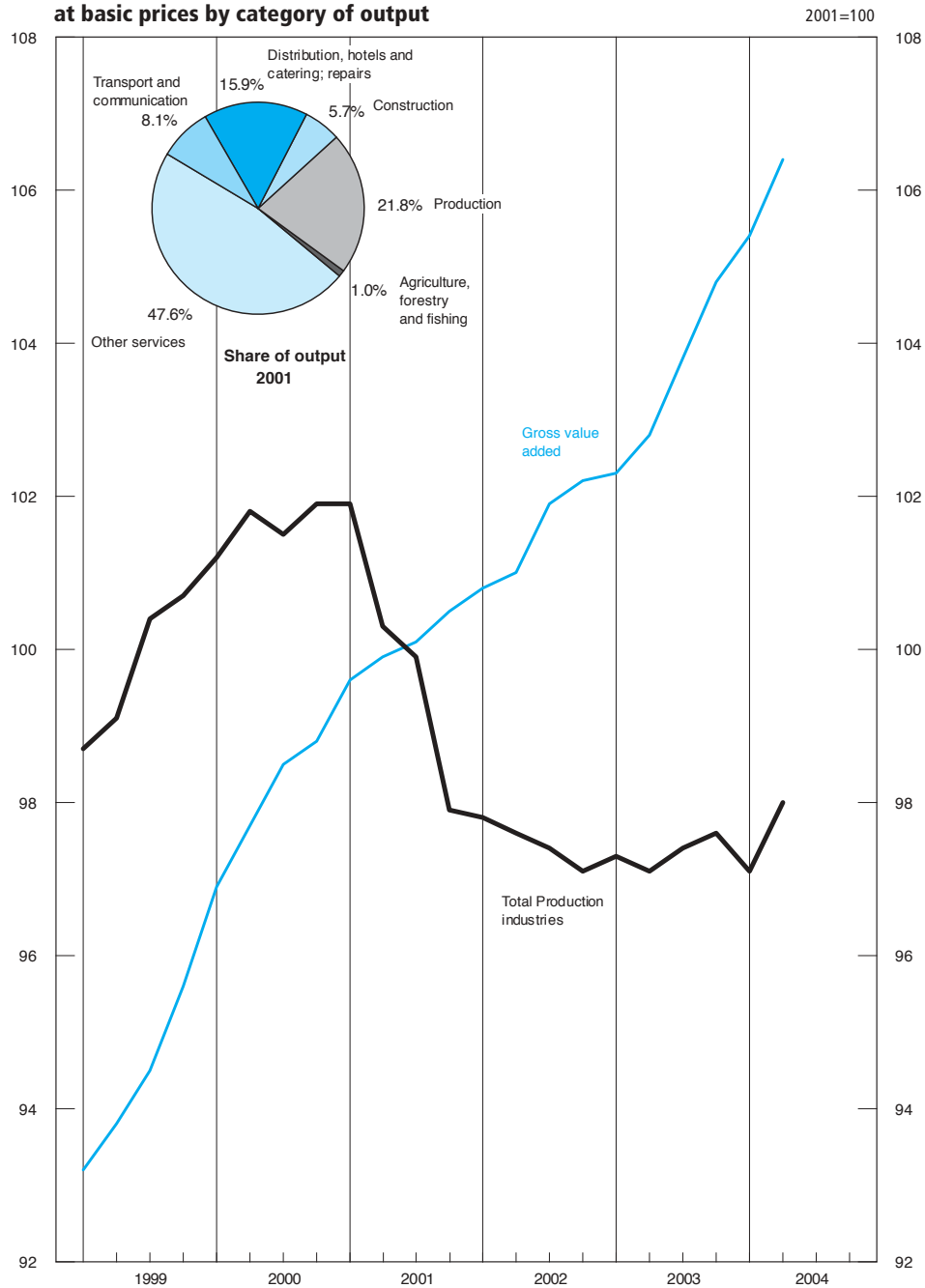
1 Estimates cannot be regarded as accurate to the last digit shown.

2 Weights may not sum to the totals due to rounding. The weights shown are in proportion to total gross value added (GVA) in 2001, and are used to combine the industry output indices to calculate the totals for 2002 and 2003. For 2001 and earlier, totals are calculated using the equivalent weights for the previous year (e.g. totals for 2001 use 2000 weights).

3 Components of output are valued at basic prices, which excludes taxes and subsidies on production

Sources: Office for National Statistics;
Enquiries Columns 1-11 020 7533 5969;
Column 12 020 7533 6031

**Gross value added chained volume measures
at basic prices by category of output**



2.9 Gross value added chained volume indices at basic prices, by category of output: Service industries

2001 = 100

	Distribution hotels and catering; repairs		Transport, storage and communication		Business services and finance			Government and other services					
	Motor trades; wholesale and retail trade; repairs	Hotels and restaurants	Transport and storage	Post and telecommunication	Financial intermediation ³	Real estate, renting and business activities	Lettings of dwellings	PAD ¹	Education	Health and social work	Other services ²	Adjustment for financial services ⁴	Total services
2001 weights	125	33	50	31	48	160	78	56	59	62	51	-38	716
Annual	GDQC	GDQD	GDQF	GDQG	GDQI	GDQK	GDQL	GDQO	GDQP	GDQQ	GDQR	GDQJ	GDQS
1999	94.0	99.2	92.3	81.0	90.2	88.0	98.3	96.1	97.9	92.0	93.2	88.6	92.8
2000	97.0	100.5	98.3	93.1	94.9	94.8	97.7	98.3	99.5	96.4	96.7	95.4	96.8
2001	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2002	105.0	103.7	101.3	101.2	98.8	103.3	101.7	102.7	101.2	103.8	102.8	102.9	102.7
2003	107.3	109.2	100.8	105.9	100.6	110.2	103.3	104.8	101.6	107.7	101.9	114.1	105.3
Quarterly													
2000 Q1	95.4	102.1	96.5	88.5	93.7	91.7	96.9	97.6	98.7	94.4	95.9	91.8	95.2
Q2	96.6	100.2	98.6	90.8	94.7	94.1	96.6	98.2	99.7	96.4	96.2	95.5	96.3
Q3	98.0	100.9	99.9	94.2	95.3	96.1	97.9	98.8	100.1	97.3	97.4	95.9	97.7
Q4	98.0	99.0	98.4	98.8	96.1	97.1	99.5	98.7	99.5	97.6	97.2	98.2	98.0
2001 Q1	98.9	99.5	99.5	100.6	98.3	98.2	99.5	99.2	99.5	98.4	98.6	100.6	98.8
Q2	99.3	99.6	100.3	100.2	100.3	99.8	99.8	99.7	99.7	99.9	98.9	99.3	99.8
Q3	100.0	100.5	100.1	98.9	99.8	100.4	100.2	100.2	100.2	100.3	100.7	99.9	100.2
Q4	101.7	100.4	100.2	100.3	101.5	101.5	100.6	100.9	100.7	101.3	101.8	100.3	101.2
2002 Q1	103.7	101.1	100.8	100.8	98.4	101.4	101.3	101.5	101.1	102.0	103.6	100.0	101.7
Q2	104.6	102.2	100.8	99.2	97.1	102.8	101.3	102.4	101.2	103.3	102.2	101.8	102.1
Q3	105.6	104.3	101.7	101.3	99.7	104.3	102.0	103.0	101.2	104.7	103.0	103.4	103.3
Q4	106.2	107.1	102.0	103.4	100.2	104.8	102.2	103.9	101.4	105.0	102.5	106.4	103.7
2003 Q1	105.1	107.8	100.6	105.1	99.2	107.6	102.8	104.3	101.4	106.4	101.1	108.4	104.1
Q2	106.5	109.4	100.1	106.5	99.7	108.3	103.0	104.7	101.7	106.9	101.7	113.4	104.6
Q3	108.0	109.4	100.9	105.6	100.8	110.7	103.4	104.9	101.8	108.1	102.3	115.3	105.5
Q4	109.4	110.1	101.6	106.4	102.8	114.1	104.1	105.2	101.7	109.5	102.7	119.2	106.8
2004 Q1	111.2	112.5	103.0	104.6	105.0	115.7	104.4	105.5	101.7	110.8	102.8	122.5	107.8
Q2	..	..	..	..	..	..	..	..	..	..	..	..	108.8
Percentage change, quarter on corresponding quarter of previous year													
Quarterly													
2000 Q1	2.3	4.8	5.0	15.4	6.0	5.2	-1.8	2.2	2.0	4.3	4.8	4.8	3.8
Q2	3.2	1.4	7.8	12.9	4.6	8.7	-2.6	2.4	1.9	4.8	4.0	7.3	4.3
Q3	3.9	1.1	8.9	14.9	6.4	9.5	-0.4	2.5	1.2	5.6	3.9	7.4	5.2
Q4	3.3	-1.8	4.8	16.2	4.3	7.4	2.7	2.4	1.4	4.5	2.3	10.6	4.0
2001 Q1	3.7	-2.5	3.1	13.7	4.9	7.1	2.7	1.6	0.8	4.2	2.8	9.6	3.8
Q2	2.8	-0.6	1.7	10.4	5.9	6.1	3.3	1.5	0.0	3.6	2.8	4.0	3.6
Q3	2.0	-0.4	0.2	5.0	4.7	4.5	2.3	1.4	0.1	3.1	3.4	4.2	2.6
Q4	3.8	1.4	1.8	1.5	5.6	4.5	1.1	2.2	1.2	3.8	4.7	2.1	3.3
2002 Q1	4.9	1.6	1.3	0.2	0.1	3.3	1.8	2.3	1.6	3.7	5.1	-0.6	2.9
Q2	5.3	2.6	0.5	-1.0	-3.2	3.0	1.5	2.7	1.5	3.4	3.3	2.5	2.3
Q3	5.6	3.8	1.6	2.4	-0.1	3.9	1.8	2.8	1.0	4.4	2.3	3.5	3.1
Q4	4.4	6.7	1.8	3.1	-1.3	3.3	1.6	3.0	0.7	3.7	0.7	6.1	2.5
2003 Q1	1.4	6.6	-0.2	4.3	0.8	6.1	1.5	2.8	0.3	4.3	-2.4	8.4	2.4
Q2	1.8	7.0	-0.7	7.4	2.7	5.4	1.7	2.2	0.5	3.5	-0.5	11.4	2.4
Q3	2.3	4.9	-0.8	4.2	1.1	6.1	1.4	1.8	0.6	3.2	-0.7	11.5	2.1
Q4	3.0	2.8	-0.4	2.9	2.6	8.9	1.9	1.3	0.3	4.3	0.2	12.0	3.0
2004 Q1	5.8	4.4	2.4	-0.5	5.8	7.5	1.6	1.2	0.3	4.1	1.7	13.0	3.6
Q2	..	..	..	..	..	..	..	..	..	..	..	..	4.0

1 Public administration and national defence; compulsory social security.

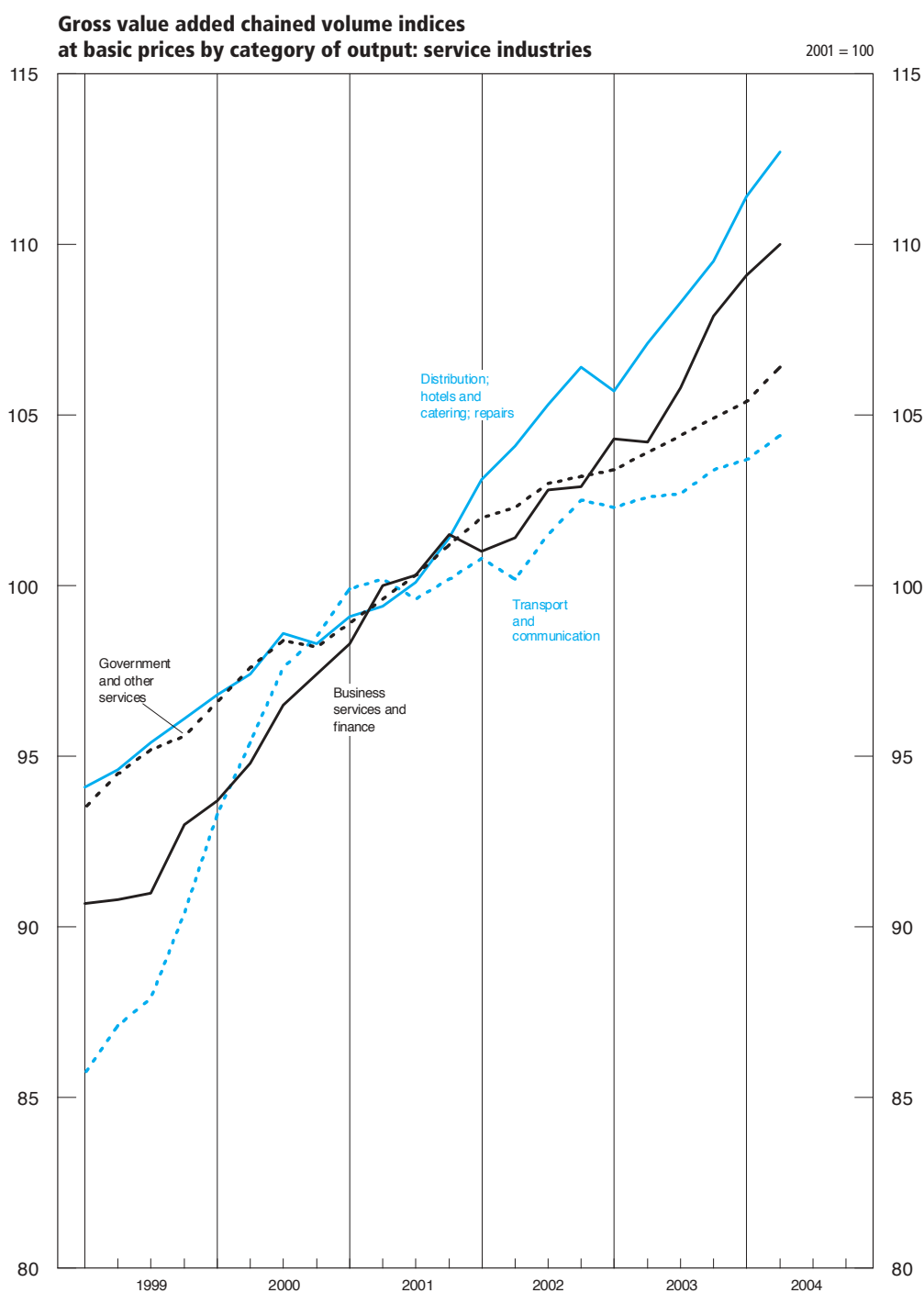
2 Comprising sections O, and P of the SIC(92).

3 Comprises section J of the SIC(92). This covers activities of institutions such as banks, building societies, securities dealers, insurance companies and pension funds. It also covers institutions whose activities are closely related to financial intermediation : for example fund managers and insurance brokers.

4 The weight and proxy series for financial intermediation are calculated before the deduction of interest receipts and payments to provide a better indication of the underlying activity for this section (see note 3). However, this overstates the contribution to GDP because interest flows should be treated as transfer payments rather than final consumption. The financial services adjustment, which has a negative weight, corrects for this.

5 See footnote 2 on Table 2.8

Source: Office for National Statistics; Enquiries 020 7533 5969



Source : see data on Table 2.8

2.10 Summary capital accounts and net lending/net borrowing

£ million

	Non-financial corporations				Financial corporations				General Government			
	Gross saving ¹	Capital transfers (net receipts)	Gross capital formation ²	Net acquisition of non-financial assets	Gross saving ¹	Capital transfers (net receipts)	Gross capital formation ²	Net acquisition of non-financial assets	Gross saving ¹	Capital transfers (net receipts)	Gross capital formation ²	Net acquisition of non-financial assets
Annual												
	RPJV	GZQW	RQBZ	RQAX	RPPS	GZQE	RPYP	RPYO	RPQC	GZQU	RPZF	RPZE
2000	94 282	1 638	101 766	856	-16 357	-	10 739	-37	27 728	-2 204	11 965	-776
2001	89 361	2 661	103 892	1 139	-14 072	-	7 232	25	24 957	-4 081	13 929	-915
2002	101 297	3 277	99 072	1 431	10 189	-	6 837	-36	1 502	-5 076	14 781	-1 087
2003	113 668	4 608	98 950	1 300	14 375	-	6 022	-9	-13 157	-7 052	18 448	-957
Quarterly												
2000 Q1	22 589	588	25 277	208	185	-	2 151	-16	7 599	-922	2 611	-185
Q2	24 275	324	24 744	185	-4 952	-	2 416	-13	7 716	-139	2 917	-189
Q3	23 606	359	25 612	185	-4 063	-	3 170	-7	6 647	-575	2 974	-196
Q4	23 812	367	26 133	278	-7 527	-	3 002	-1	5 766	-568	3 463	-206
2001 Q1	23 181	599	25 610	255	-6 805	-	2 363	5	8 217	-768	2 923	-220
Q2	21 798	627	26 143	285	-1 983	-	2 203	8	6 833	-1 204	3 700	-220
Q3	23 440	719	26 573	314	-3 222	-	1 306	8	6 593	-1 140	3 682	-236
Q4	20 942	716	25 566	285	-2 062	-	1 360	4	3 314	-969	3 624	-239
2002 Q1	22 211	747	24 751	368	1 786	-	914	-3	1 498	-1 241	3 807	-281
Q2	23 155	631	23 601	329	748	-	1 136	-9	630	-1 010	3 689	-233
Q3	27 580	814	24 879	363	2 651	-	3 090	-12	789	-1 336	3 832	-240
Q4	28 351	1 085	25 841	371	5 004	-	1 697	-12	-1 415	-1 489	3 453	-333
2003 Q1	27 815	1 133	23 344	285	4 623	-	2 132	-8	-2 408	-1 926	4 222	-197
Q2	25 482	2 374	23 808	343	2 992	-	884	-3	-1 860	-3 008	4 548	-259
Q3	28 003	631	25 403	362	3 503	-	1 178	1	-3 100	-1 167	4 819	-255
Q4	32 368	470	26 395	310	3 257	-	1 828	1	-5 789	-951	4 859	-246
2004 Q1	33 541	1 134	26 666	331	705	-	1 365	3	-3 513	-1 488	4 295	-236
Households & NPISH					Net lending(+)/net borrowing(-) ³							
	Gross saving ¹	Capital transfers (net receipts)	Gross capital formation ²	Net acquisition of non-financial assets	Non-financial corporations	Financial corporations	General government	Households & NPISH	Rest of the world ⁴	Statistical Discrepancy		
Annual												
	RPQL	GZQI	RPZV	RPZU	RQAW	RPYN	RPZD	RPZT	RQCH	RVFE		
2000	36 737	2 300	39 249	-67	-9 698	-27 059	14 335	-145	22 567	-		
2001	49 452	3 023	43 985	-152	-16 360	-21 329	7 862	8 642	21 185	-		
2002	42 912	3 099	49 958	-176	297	3 388	-17 268	-3 771	17 354	-		
2003	45 785	4 111	54 838	-210	14 604	8 362	-37 700	-4 732	19 187	279		
Quarterly												
2000 Q1	6 608	553	10 410	-24	-2 913	-1 950	4 251	-3 225	3 837	-1 988		
Q2	7 620	473	9 842	-16	-1 152	-7 355	4 849	-1 733	5 391	-2 588		
Q3	10 215	616	9 585	-12	-2 619	-7 226	3 294	1 258	5 293	1 811		
Q4	12 294	658	9 412	-15	-3 014	-10 528	1 941	3 555	8 046	2 765		
2001 Q1	13 602	418	10 891	-25	-3 021	-9 173	4 746	3 154	4 294	-5 248		
Q2	11 282	1 266	10 380	-36	-4 859	-4 194	2 149	2 204	4 700	-3 324		
Q3	11 184	747	11 672	-44	-3 476	-4 536	2 007	303	5 702	1 888		
Q4	13 384	592	11 042	-47	-5 004	-3 426	-1 040	2 981	6 489	6 684		
2002 Q1	10 331	720	11 832	-47	-2 924	875	-3 269	-734	6 052	-6 300		
Q2	11 984	664	12 809	-45	-876	-379	-3 836	-116	5 207	-3 098		
Q3	11 380	823	12 204	-43	2 486	-427	-4 139	42	2 038	6 212		
Q4	9 217	892	13 113	-41	1 611	3 319	-6 024	-2 963	4 057	3 186		
2003 Q1	11 564	1 085	13 239	-46	4 034	2 499	-8 359	-544	2 317	-3 527		
Q2	10 834	921	13 373	-49	2 920	2 111	-9 157	-1 569	5 629	-3 483		
Q3	10 915	964	14 160	-55	2 169	2 324	-8 831	-2 226	6 487	3 868		
Q4	12 472	1 141	14 066	-60	5 481	1 428	-11 353	-393	4 754	3 421		
2004 Q1	12 129	1 125	15 283	-65	6 958	-663	-9 060	-1 964	4 657	-8 194		

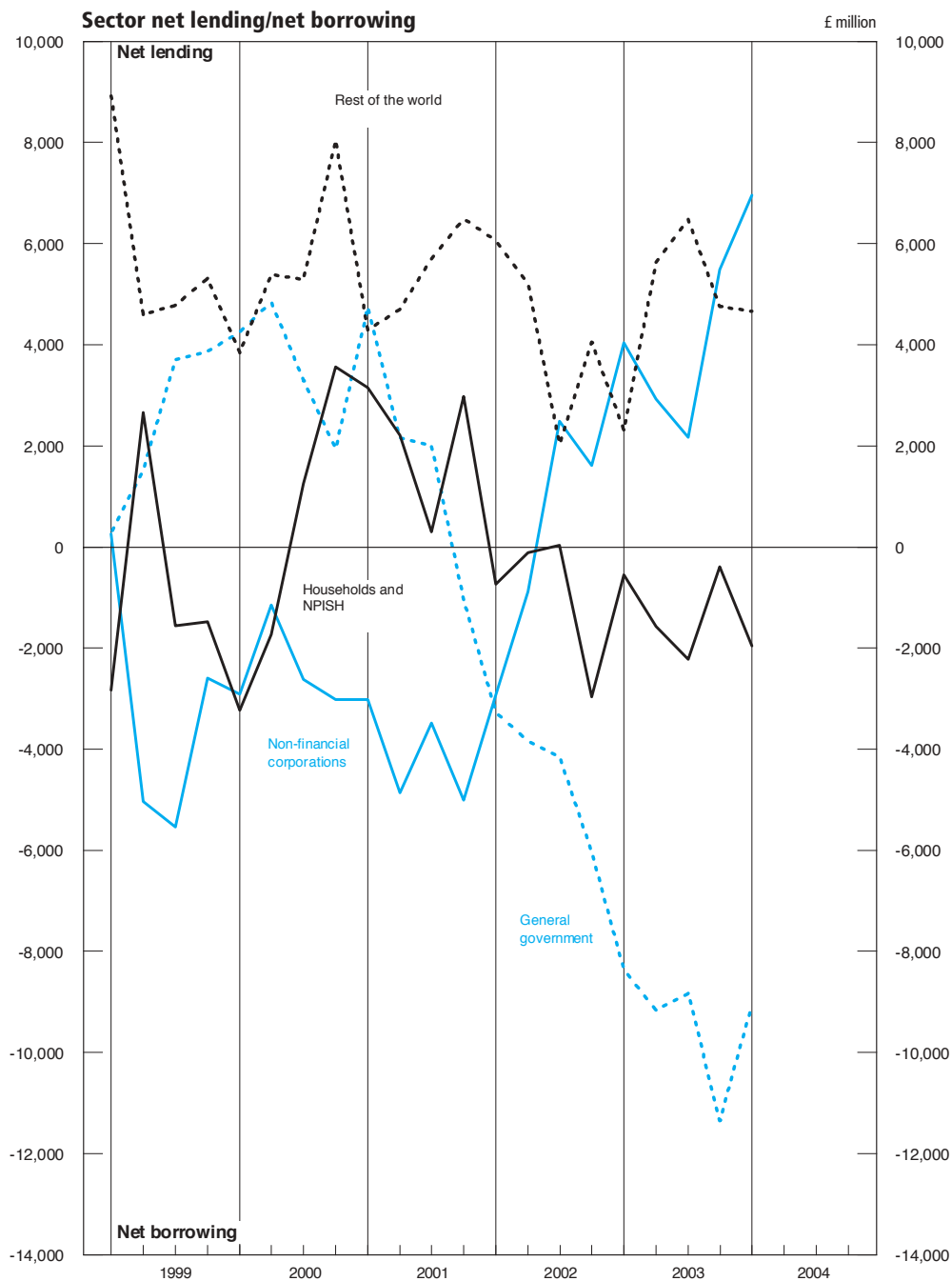
1 Before providing for depreciation, inventory holding gains.

2 Comprises gross fixed capital formation and changes in inventories and acquisitions less disposals of valuables.

3 This balance is equal to gross saving plus capital transfers less gross fixed capital formation, less Net acquisition of non-financial assets, less changes in inventories.

4 Equals, the current balance of payments accounts, plus capital transfers.

Sources: Office for National Statistics;
 Enquiries Part 1 (Upper) Columns 1,3-5,7-9,11,12 020 7533 6031;
 Columns 2,6,10 020 7533 5985;
 Part2 (Lower) Columns 1, 3-10 020 7533 6031; Column 2 020 7533 5985



2.11 Private Non-Financial Corporations : Allocation of Primary Income Account

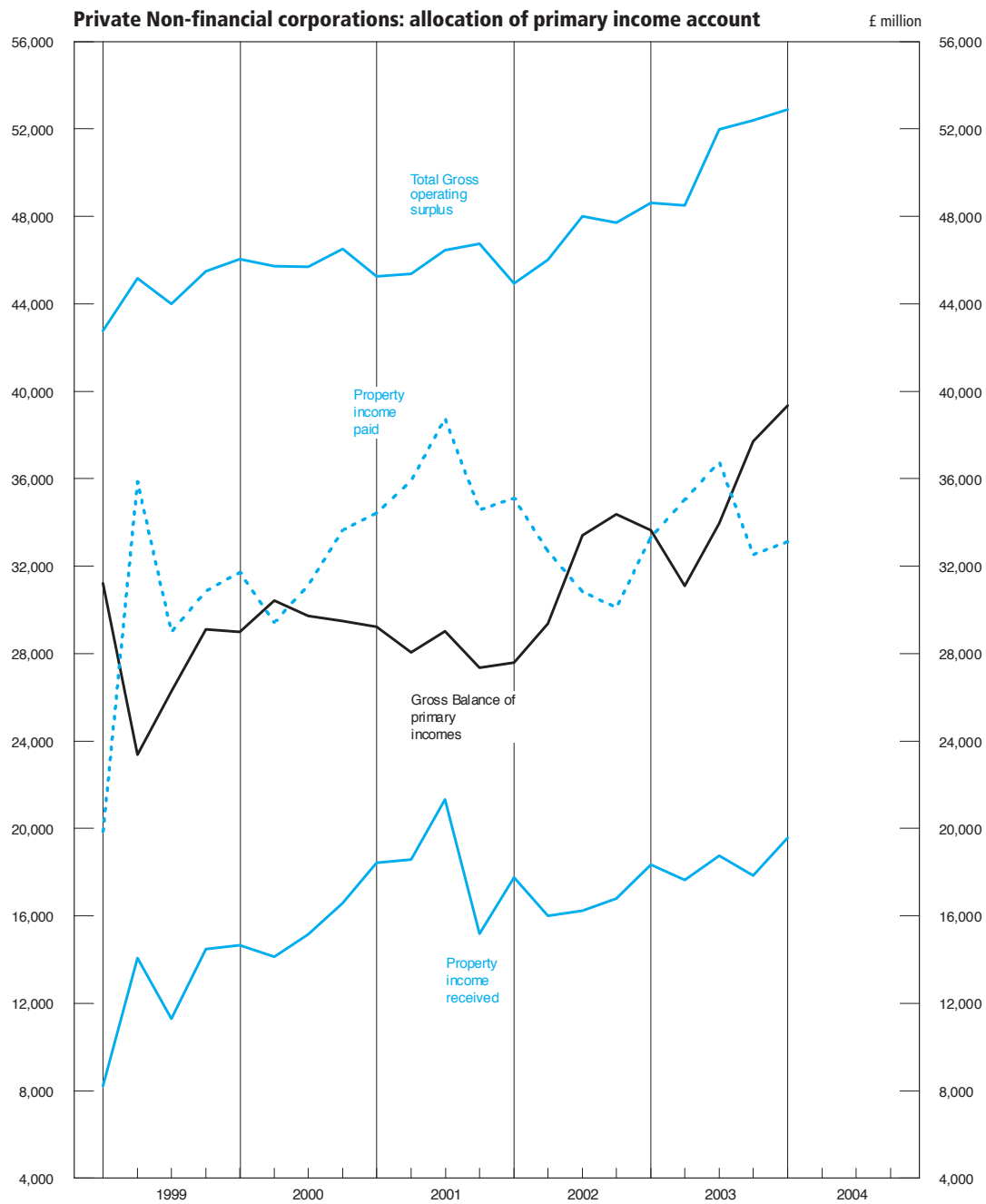
£ million

	Resources							Uses					
	Gross operating surplus							Property income payments					
	Gross trading profits												
	Continental shelf companies	Others ¹	Rental of buildings	less Inventory holding gains	Gross operating surplus ¹	Property income receipts	Total resources ^{1,2}	Total payments	of which Dividends	of which Interest	Gross balance of primary incomes ¹	Share of gross national income ¹ (%)	
Annual													
	CAGD	CAED	FCBW	-DLRA	CAER	RPBM	RPBN	RPBP	RVFT	ROCG	RPBO	NRJL	
1994	10 776	117 450	8 641	-3 830	133 037	36 090	169 127	80 872	36 365	21 057	88 255	12.9	
1995	12 124	125 151	9 379	-4 489	142 165	42 948	185 113	95 631	46 218	24 098	89 482	12.5	
1996	15 702	133 508	9 493	-958	157 745	45 708	203 453	101 133	51 595	23 512	102 320	13.4	
1997	13 978	145 693	9 561	-361	168 871	47 988	216 859	107 605	56 274	25 783	109 254	13.5	
1998	11 696	150 975	10 837	753	174 261	49 714	223 975	107 276	51 588	30 659	116 699	13.4	
1999	13 864	153 954	11 435	-1 801	177 452	48 100	225 552	115 547	61 104	30 673	110 005	12.3	
2000	21 333	153 342	12 271	-2 941	184 005	60 555	244 560	125 894	55 846	37 355	118 666	12.5	
2001	20 287	149 885	13 263	434	183 869	73 508	257 377	143 696	77 516	39 724	113 681	11.3	
2002	19 260	156 800	13 904	-3 295	186 669	66 820	253 489	128 730	62 591	36 253	124 759	11.7	
2003	18 956	169 657	14 539	-1 630	201 522	72 611	274 133	137 679	70 564	37 404	136 454	12.2	
Quarterly													
1994 Q1	2 292	28 014	2 201	-443	32 064	9 242	41 306	19 077	8 562	5 275	22 229	13.3	
Q2	3 050	29 521	2 148	-919	33 800	8 769	42 569	19 994	8 202	5 301	22 575	13.4	
Q3	2 701	29 218	2 132	-1 109	32 942	8 426	41 368	20 986	9 433	5 162	20 382	11.9	
Q4	2 733	30 697	2 160	-1 359	34 231	9 653	43 884	20 815	10 168	5 319	23 069	13.2	
1995 Q1	2 966	31 353	2 264	-1 738	34 845	9 360	44 205	22 432	9 993	5 663	21 773	12.4	
Q2	3 113	30 798	2 336	-1 588	34 659	9 952	44 611	22 152	9 218	6 054	22 459	12.7	
Q3	2 934	31 504	2 379	-1 181	35 636	11 012	46 648	25 003	12 614	6 062	21 645	12.0	
Q4	3 111	31 496	2 400	18	37 025	12 624	49 649	26 044	14 393	6 319	23 605	12.9	
1996 Q1	3 523	32 928	2 386	-800	38 037	11 194	49 231	25 831	13 265	5 962	23 400	12.5	
Q2	3 929	32 984	2 366	-102	39 177	12 410	51 587	23 965	12 121	5 760	27 622	14.5	
Q3	4 081	33 737	2 362	-208	39 972	10 611	50 583	25 148	12 567	5 885	25 435	13.3	
Q4	4 169	33 859	2 379	152	40 559	11 493	52 052	26 189	13 642	5 905	25 863	13.4	
1997 Q1	3 885	37 026	2 337	-23	43 225	11 014	54 239	24 925	12 504	5 962	29 314	14.8	
Q2	3 288	36 781	2 381	239	42 689	11 908	54 597	27 586	15 390	6 380	27 011	13.3	
Q3	3 448	36 040	2 414	-506	41 396	14 048	55 444	27 612	15 469	6 487	27 832	13.6	
Q4	3 357	35 846	2 429	-71	41 561	11 018	52 579	27 482	12 911	6 954	25 097	12.2	
1998 Q1	3 160	36 848	2 629	107	42 744	13 996	56 740	29 484	15 369	7 405	27 256	13.0	
Q2	3 103	36 707	2 670	53	42 533	11 758	54 291	25 862	11 859	7 509	28 429	13.3	
Q3	2 779	39 052	2 727	315	44 873	11 677	56 550	25 945	11 550	7 919	30 605	13.8	
Q4	2 654	38 368	2 811	278	44 111	12 283	56 394	25 985	12 810	7 826	30 409	13.7	
1999 Q1	2 519	37 733	2 819	-302	42 769	8 229	50 998	19 787	8 977	7 484	31 211	14.4	
Q2	3 293	39 498	2 832	-440	45 183	14 083	59 266	35 876	23 055	7 288	23 390	10.5	
Q3	4 056	37 724	2 865	-645	44 000	11 296	55 296	29 007	14 340	7 718	26 289	11.6	
Q4	3 996	38 999	2 919	-414	45 500	14 492	59 992	30 877	14 732	8 183	29 115	12.6	
2000 Q1	4 695	39 150	2 914	-702	46 057	14 660	60 717	31 720	15 242	8 703	28 997	12.3	
Q2	5 252	38 289	3 015	-830	45 726	14 136	59 862	29 424	12 044	9 242	30 438	12.9	
Q3	5 580	37 775	3 135	-799	45 691	15 154	60 845	31 120	12 757	9 502	29 725	12.4	
Q4	5 806	38 128	3 207	-610	46 531	16 605	63 136	33 630	15 803	9 908	29 506	12.3	
2001 Q1	5 531	36 259	3 154	329	45 273	18 417	63 690	34 447	16 090	10 239	29 243	11.9	
Q2	5 548	36 566	3 270	5	45 389	18 565	63 954	35 895	19 285	10 047	28 059	11.2	
Q3	4 927	38 200	3 379	-52	46 454	21 332	67 786	38 760	22 112	10 138	29 026	11.5	
Q4	4 281	38 860	3 460	152	46 753	15 194	61 947	34 594	20 029	9 300	27 353	10.7	
2002 Q1	4 387	37 777	3 499	-735	44 928	17 773	62 701	35 104	18 644	8 962	27 597	10.7	
Q2	4 786	38 487	3 506	-763	46 016	16 020	62 036	32 669	16 052	9 105	29 367	11.2	
Q3	4 793	40 568	3 480	-822	48 019	16 228	64 247	30 838	14 965	9 005	33 409	12.3	
Q4	5 294	39 968	3 419	-975	47 706	16 799	64 505	30 119	12 930	9 181	34 386	12.6	
2003 Q1	5 299	40 503	3 567	-750	48 619	18 361	66 980	33 318	16 598	9 485	33 662	12.2	
Q2	4 013	41 220	3 614	-350	48 497	17 645	66 142	35 049	17 968	9 295	31 093	11.3	
Q3	5 049	43 646	3 659	-350	52 004	18 746	70 750	36 768	19 972	9 307	33 982	12.1	
Q4	4 595	44 288	3 699	-180	52 402	17 859	70 261	32 544	16 026	9 317	37 717	13.1	
2004 Q1	4 719	44 614	3 737	-165	52 905	19 568	72 473	33 106	17 047	9 395	39 367	13.5	

1 Quarterly alignment adjustment included in this series.

2 Total resources equals total uses.

Source: Office for National Statistics; Enquiries 020 7533 6014



2.12 Private Non-financial Corporations : Secondary Distribution of Income Account and Capital Account

£ million

	Secondary Distribution of Income Account						Capital Account					
	Resources			Uses			Changes in liabilities & net worth		Changes in assets			Net lending (+) or borrowing (-) ^{1,7}
	Gross balance of primary incomes ¹	Other resources ²	Total ^{1,3}	Taxes on income	Other uses ⁴	Gross disposable income ^{1,5}	Net capital transfer receipts	Total ¹	Gross fixed capital formation	Changes in inventories ¹	Other changes in assets ⁶	
Annual												
	RPBO	NROQ	RPKY	RPLA	NROO	RPKZ	NROP	RPXH	ROAW	DLQY	NRON	RQBV
1994	88 255	6 553	94 808	15 085	6 917	72 806	409	73 215	55 867	3 904	530	12 914
1995	89 482	7 704	97 186	18 953	8 104	70 129	433	70 562	64 444	4 542	388	1 188
1996	102 320	8 420	110 740	23 080	9 938	77 722	428	78 150	72 854	1 672	263	3 361
1997	109 254	7 097	116 351	28 558	7 576	80 217	671	80 888	81 317	3 949	401	-4 779
1998	116 699	8 390	125 089	26 877	8 834	89 378	1 081	90 459	89 848	4 533	1 287	-5 209
1999	110 005	7 875	117 880	22 608	8 444	86 828	958	87 786	93 756	6 174	1 036	-13 180
2000	118 666	9 990	128 656	26 188	10 403	92 065	405	92 470	96 329	5 512	768	-10 139
2001	113 681	9 229	122 910	26 061	9 640	87 209	1 621	88 830	97 951	5 941	1 069	-16 131
2002	124 759	10 428	135 187	24 487	10 850	99 850	1 718	101 568	97 108	2 007	1 212	1 241
2003	136 454	10 764	147 218	24 089	11 194	111 935	3 009	114 944	96 659	2 388	921	14 976
Quarterly												
1994 Q1	22 229	1 673	23 902	3 206	1 759	18 937	82	19 019	13 699	157	136	5 027
Q2	22 575	1 686	24 261	3 887	1 778	18 596	96	18 692	13 120	2 009	119	3 444
Q3	20 382	1 498	21 880	4 076	1 591	16 213	120	16 333	14 130	191	124	1 888
Q4	23 069	1 696	24 765	3 916	1 789	19 060	111	19 171	14 918	1 547	151	2 555
1995 Q1	21 773	1 825	23 598	4 252	1 922	17 424	127	17 551	14 794	-428	121	3 064
Q2	22 459	1 936	24 395	5 420	2 032	16 943	98	17 041	16 117	2 164	125	-1 365
Q3	21 645	1 953	23 598	4 368	2 049	17 181	102	17 283	16 460	1 713	87	-977
Q4	23 605	1 990	25 595	4 913	2 101	18 581	106	18 687	17 073	1 093	55	466
1996 Q1	23 400	2 238	25 638	5 419	3 336	16 883	125	17 008	17 261	1 115	63	-1 431
Q2	27 622	2 219	29 841	5 148	2 369	22 324	102	22 426	17 599	794	71	3 962
Q3	25 435	1 994	27 429	6 334	2 124	18 971	96	19 067	18 566	82	57	362
Q4	25 863	1 969	27 832	6 179	2 109	19 544	105	19 649	19 428	-319	72	468
1997 Q1	29 314	1 771	31 085	6 642	1 888	22 555	233	22 788	19 359	1 330	64	2 035
Q2	27 011	1 757	28 768	7 363	1 901	19 504	164	19 668	20 439	1 045	94	-1 910
Q3	27 832	1 739	29 571	7 240	1 848	20 483	131	20 614	20 133	1 005	103	-627
Q4	25 097	1 830	26 927	7 313	1 939	17 675	143	17 818	21 386	569	140	-4 277
1998 Q1	27 256	2 225	29 481	6 607	2 336	20 538	343	20 881	22 016	377	256	-1 768
Q2	28 429	2 166	30 595	6 715	2 277	21 603	220	21 823	22 319	-158	380	-718
Q3	30 605	1 959	32 564	6 847	2 070	23 647	248	23 895	23 218	1 985	379	-1 687
Q4	30 409	2 040	32 449	6 708	2 151	23 590	270	23 860	22 295	2 329	272	-1 036
1999 Q1	31 211	2 037	33 248	5 484	2 264	25 500	344	25 844	23 139	2 181	301	223
Q2	23 390	1 925	25 315	4 846	2 038	18 431	199	18 630	22 928	505	314	-5 117
Q3	26 289	1 608	27 897	5 938	1 722	20 237	216	20 453	23 882	1 867	191	-5 487
Q4	29 115	2 305	31 420	6 340	2 420	22 660	199	22 859	23 807	1 621	230	-2 799
2000 Q1	28 997	2 474	31 471	6 998	2 591	21 882	315	22 197	23 685	1 597	193	-3 278
Q2	30 438	2 426	32 864	6 508	2 523	23 833	20	23 853	23 494	1 273	158	-1 072
Q3	29 725	2 733	32 458	6 572	2 832	23 054	34	23 088	24 044	1 597	156	-2 709
Q4	29 506	2 357	31 863	6 110	2 457	23 296	36	23 332	25 106	1 045	261	-3 080
2001 Q1	29 243	2 255	31 498	6 449	2 356	22 693	200	22 893	24 876	762	222	-2 967
Q2	28 059	2 378	30 437	6 713	2 481	21 243	439	21 682	24 481	1 628	306	-4 733
Q3	29 026	2 262	31 288	6 077	2 365	22 846	485	23 331	24 647	1 938	280	-3 534
Q4	27 353	2 334	29 687	6 822	2 438	20 427	497	20 924	23 947	1 613	261	-4 897
2002 Q1	27 597	2 601	30 198	5 741	2 705	21 752	577	22 329	24 073	686	325	-2 755
Q2	29 367	2 520	31 887	6 446	2 625	22 816	441	23 257	24 192	-584	281	-632
Q3	33 409	2 658	36 067	6 085	2 764	27 218	504	27 722	24 230	654	311	2 527
Q4	34 386	2 649	37 035	6 215	2 756	28 064	196	28 260	24 613	1 251	295	2 101
2003 Q1	33 662	2 564	36 226	6 134	2 671	27 421	619	28 040	22 595	772	201	4 472
Q2	31 093	2 682	33 775	5 916	2 789	25 070	1 509	26 579	24 683	-875	275	2 496
Q3	33 982	2 730	36 712	6 338	2 838	27 536	474	28 010	24 496	944	251	2 319
Q4	37 717	2 788	40 505	5 701	2 896	31 908	407	32 315	24 885	1 547	194	5 689
2004 Q1	39 367	2 617	41 984	6 015	2 725	33 244	959	34 203	25 616	1 067	232	7 288

1 Quarterly alignment adjustment included in this series.

2 Social contributions and other current transfers.

3 Total resources equals total uses.

4 Social benefits and other current transfers.

5 Also known as gross saving.

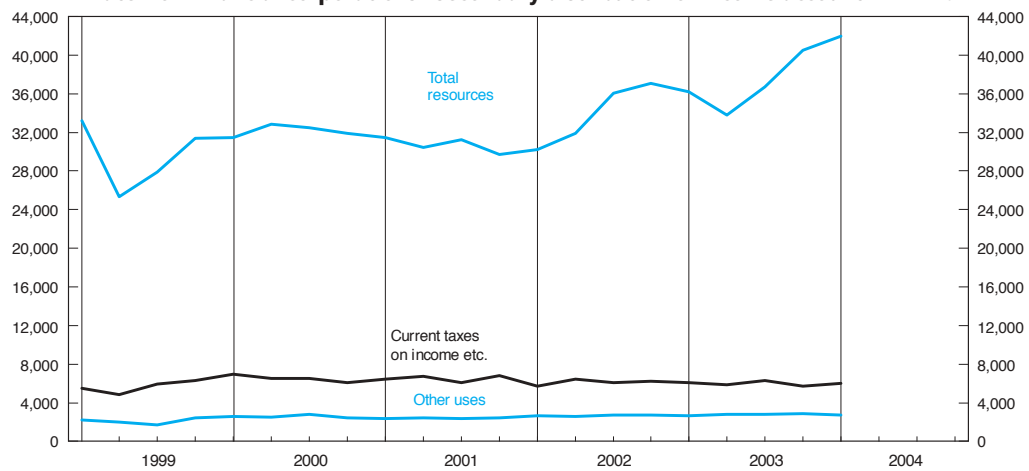
6 Acquisitions less disposals of valuables and non-produced non-financial assets.

7 Gross of fixed capital consumption.

Source: Office for National Statistics; Enquiries 020 7533 6014

Private Non-financial corporations : secondary distribution of income account

£ million

**Private Non-financial corporations : capital account**

£ million



2.13 Balance of payments: current account

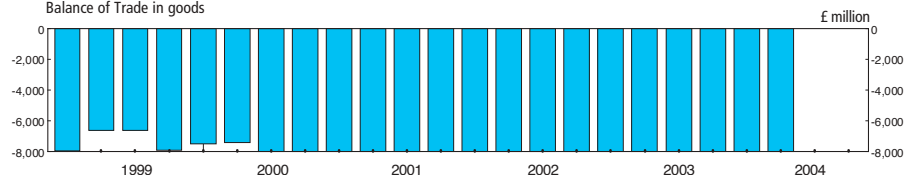
£ million

	Trade in goods and services						Income balance	Current transfers balance	Current balance
	Exports of goods+	Imports of goods+	Balance of trade in goods	Exports of services	Imports of services	Services balance			
Annual	BOKG	BOKH	BOKI	IKBB	IKBC	IKBD	HBOJ	IKBP	HBOP
1999	166 166	195 217	-29 051	72 628	59 494	13 134	-1 116	-7 383	-24 416
2000	187 936	220 912	-32 976	79 071	65 645	13 426	5 208	-9 752	-24 094
2001	190 055	230 703	-40 648	82 314	69 098	13 216	11 652	-6 611	-22 391
2002	186 517	233 192	-46 675	87 203	71 626	15 577	21 475	-8 599	-18 222
2003	187 846	235 136	-47 290	89 693	75 076	14 617	22 097	-9 854	-20 430
Quarterly									
1999 Q1	38 959	46 893	-7 934	17 769	14 590	3 179	-2 256	-1 916	-8 927
Q2	40 378	46 976	-6 598	18 229	14 770	3 459	-155	-1 538	-4 832
Q3	43 582	50 180	-6 598	17 586	14 572	3 014	626	-2 087	-5 045
Q4	43 247	51 168	-7 921	19 044	15 562	3 482	669	-1 842	-5 612
2000 Q1	44 374	51 854	-7 480	18 914	15 453	3 461	1 983	-2 049	-4 085
Q2	46 851	54 256	-7 405	19 257	16 209	3 048	370	-2 020	-6 007
Q3	47 445	56 289	-8 844	20 166	16 716	3 450	2 410	-2 662	-5 646
Q4	49 266	58 513	-9 247	20 734	17 267	3 467	445	-3 021	-8 356
2001 Q1	49 523	58 884	-9 361	21 623	17 370	4 253	2 504	-1 847	-4 451
Q2	48 329	58 774	-10 445	21 765	17 418	4 347	3 313	-2 496	-5 281
Q3	46 561	56 911	-10 350	18 597	17 493	1 104	3 431	-95	-5 910
Q4	45 642	56 134	-10 492	20 329	16 817	3 512	2 404	-2 173	-6 749
2002 Q1	45 873	57 274	-11 401	21 476	17 765	3 711	3 920	-2 395	-6 165
Q2	49 416	59 495	-10 079	21 189	17 845	3 344	3 614	-2 255	-5 376
Q3	46 862	58 706	-11 844	22 784	18 079	4 705	6 396	-1 452	-2 195
Q4	44 366	57 717	-13 351	21 754	17 937	3 817	7 545	-2 497	-4 486
2003 Q1	48 084	59 285	-11 201	22 033	18 659	3 374	7 728	-2 403	-2 502
Q2	46 406	57 493	-11 087	22 235	18 305	3 930	4 131	-2 782	-5 808
Q3	46 377	58 401	-12 024	22 750	18 916	3 834	3 894	-2 490	-6 786
Q4	46 979	59 957	-12 978	22 675	19 196	3 479	6 344	-2 179	-5 334
2004 Q1	44 715	58 662	-13 947	23 505	18 722	4 783	6 783	-2 942	-5 323
Q2	46 185	60 830	-14 645	23 994	18 661	5 333	..	..	..
Monthly									
2001 Jul	15 617	19 037	-3 420	6 932	5 805	1 127	..	..	..
Aug	15 412	19 461	-4 049	6 978	5 952	1 026	..	..	..
Sep	15 532	18 413	-2 881	4 687	5 736	-1 049	..	..	..
Oct	15 791	18 900	-3 109	6 312	5 597	715	..	..	..
Nov	15 215	18 532	-3 317	6 888	5 650	1 238	..	..	..
Dec	14 636	18 702	-4 066	7 129	5 570	1 559	..	..	..
2002 Jan	15 393	19 138	-3 745	7 354	5 809	1 545	..	..	..
Feb	15 268	19 018	-3 750	7 184	5 975	1 209	..	..	..
Mar	15 212	19 118	-3 906	6 938	5 981	957	..	..	..
Apr	16 341	19 964	-3 623	6 946	6 047	899	..	..	..
May	17 423	20 279	-2 856	7 000	5 827	1 173	..	..	..
Jun	15 652	19 252	-3 600	7 243	5 971	1 272	..	..	..
Jul	16 302	20 314	-4 012	7 507	5 971	1 536	..	..	..
Aug	14 880	19 076	-4 196	7 638	6 067	1 571	..	..	..
Sep	15 680	19 316	-3 636	7 639	6 041	1 598	..	..	..
Oct	15 121	19 516	-4 395	7 359	6 067	1 292	..	..	..
Nov	14 402	19 484	-5 082	7 167	5 802	1 365	..	..	..
Dec	14 843	18 717	-3 874	7 228	6 068	1 160	..	..	..
2003 Jan	16 137	19 836	-3 699	7 235	6 223	1 012	..	..	..
Feb	16 243	19 571	-3 328	7 365	6 239	1 126	..	..	..
Mar	15 704	19 878	-4 174	7 433	6 197	1 236	..	..	..
Apr	16 388	18 995	-2 607	7 339	6 045	1 294	..	..	..
May	15 435	19 300	-3 865	7 441	6 134	1 307	..	..	..
Jun	14 583	19 198	-4 615	7 455	6 126	1 329	..	..	..
Jul	15 781	19 319	-3 538	7 533	6 292	1 241	..	..	..
Aug	15 411	19 099	-3 688	7 655	6 324	1 331	..	..	..
Sep	15 185	19 983	-4 798	7 562	6 300	1 262	..	..	..
Oct	15 750	20 093	-4 343	7 456	6 326	1 130	..	..	..
Nov	15 251	19 805	-4 554	7 501	6 288	1 213	..	..	..
Dec	15 978	20 059	-4 081	7 718	6 582	1 136	..	..	..
2004 Jan	14 520	20 129	-5 609	7 803	6 358	1 445	..	..	..
Feb	14 970	19 157	-4 187	7 917	6 284	1 633	..	..	..
Mar	15 225	19 376	-4 151	7 785	6 080	1 705	..	..	..
Apr	15 499 [†]	20 346 [†]	-4 847 [†]	7 625	6 162	1 463	..	..	..
May	15 265	20 090	-4 825	7 302	6 099	1 203	..	..	..
Jun	15 421	20 394	-4 973	7 315	6 160	1 155	..	..	..

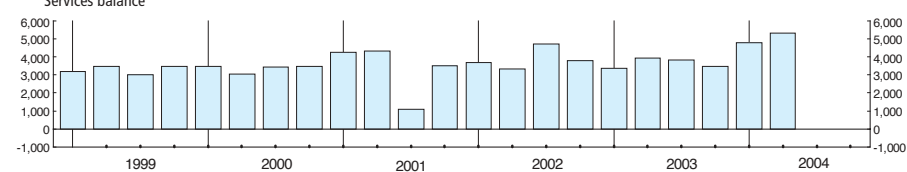
Sources: Office for National Statistics;
 Enquiries Columns 1-3 020 7533 6064; Columns 4-6 & 8 020 7533 6090;
 Columns 7 & 9 020 7533 6078.

Balance of Payments : Current account

Balance of Trade in goods

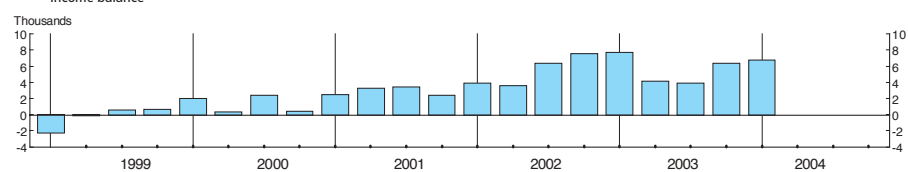


Services balance

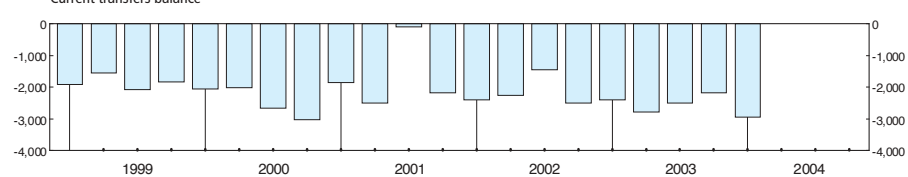


Income balance

Thousands

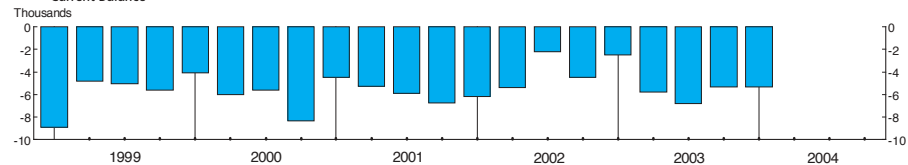


Current transfers balance



Current Balance

Thousands



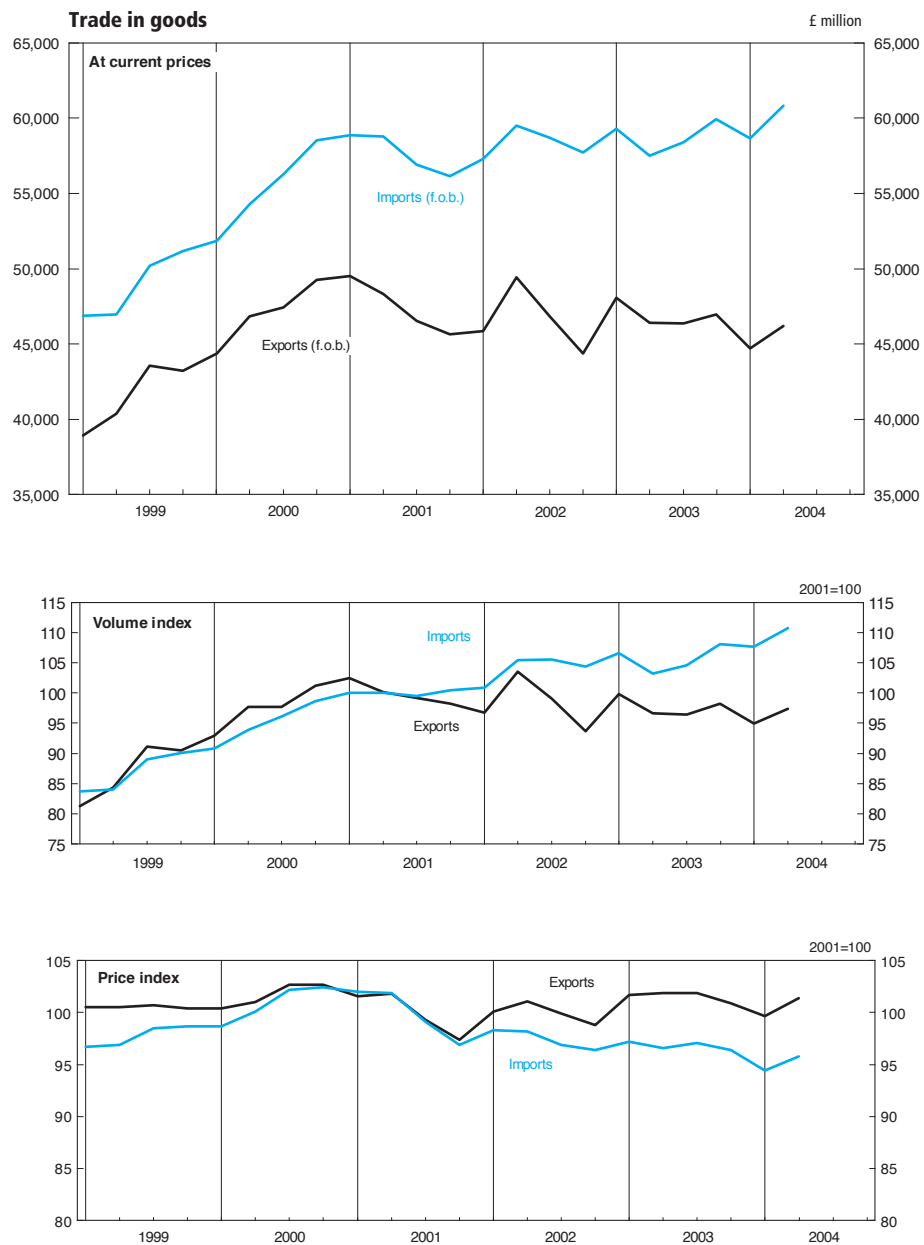
2.14 Trade in goods (on a balance of payments basis)

2001 = 100

	Volume indices (SA)		Price indices (NSA)		
	Exports	Imports	Exports	Imports	Terms of trade ¹
Annual					
	BQKU	BQKV	BQKR	BQKS	BQKT
1999	86.8	86.7	100.5	97.7	102.9
2000	97.4	94.8	101.7	100.9	100.8
2001	100.0	100.0	100.0	100.0	100.0
2002	98.3	104.1	100.0	97.5	102.6
2003	97.8	105.6	101.6	96.8	105.0
Quarterly					
1999 Q1	81.3	83.7	100.5	96.7	103.9
Q2	84.4	84.1	100.5	96.9	103.7
Q3	91.2	89.0	100.7	98.5	102.2
Q4	90.5	90.1	100.4	98.7	101.7
2000 Q1	93.0	90.8	100.4	98.7	101.7
Q2	97.7	93.9	101.0	100.1	100.9
Q3	97.7	96.1	102.7	102.2	100.5
Q4	101.2	98.7	102.7	102.4	100.3
2001 Q1	102.5	100.0	101.6	102.0	99.6
Q2	100.1	100.0	101.8	101.9	99.9
Q3	99.2	99.5	99.3	99.1	100.2
Q4	98.3	100.5	97.4	96.9	100.5
2002 Q1	96.8	100.9	100.1	98.3	101.8
Q2	103.6	105.5	101.1	98.2	103.0
Q3	99.1	105.6	99.9	96.9	103.1
Q4	93.7	104.4	98.8	96.4	102.5
2003 Q1	99.8	106.6	101.7	97.2	104.6
Q2	96.7	103.2	101.9	96.6	105.5
Q3	96.5	104.6	101.9	97.1	104.9
Q4	98.3	108.1	100.9	96.4	104.7
2004 Q1	95.0	107.7	99.7	94.4	105.6
Q2	97.4	110.7	101.4	95.8	105.8
Monthly					
2001 Jul	98.7	98.9	100.2	100.1	100.1
Aug	98.4	102.2	99.5	99.0	100.5
Sep	100.4	97.3	98.1	98.2	99.9
Oct	102.8	101.5	97.1	97.2	99.9
Nov	99.0	99.7	96.7	97.2	99.5
Dec	93.1	100.4	98.5	96.4	102.2
2002 Jan	97.5	101.0	98.9	98.0	100.9
Feb	97.0	100.7	99.9	98.0	101.9
Mar	95.8	101.1	101.5	98.8	102.7
Apr	102.3	106.1	101.8	98.5	103.4
May	109.8	107.9	100.8	98.1	102.8
Jun	98.8	102.5	100.6	98.1	102.5
Jul	103.4	109.7	100.1	96.8	103.4
Aug	93.9	103.0	100.4	97.0	103.5
Sep	100.0	104.2	99.2	97.0	102.3
Oct	95.7	105.5	98.9	96.8	102.2
Nov	91.6	106.2	98.3	96.1	102.3
Dec	93.7	101.4	99.3	96.4	103.0
2003 Jan	101.8	107.2	100.5	96.4	104.3
Feb	100.7	106.1	101.6	96.9	104.9
Mar	96.9	106.5	103.0	98.2	104.9
Apr	102.4	101.6	101.7	97.2	104.6
May	96.2	104.1	102.6	96.7	106.1
Jun	91.6	103.9	101.5	96.0	105.7
Jul	98.8	103.8	101.6	96.6	105.2
Aug	95.9	102.6	102.5	97.4	105.2
Sep	94.9	107.4	101.7	97.2	104.6
Oct	98.8	108.0	101.4	96.8	104.8
Nov	95.6	107.3	100.7	96.5	104.4
Dec	100.5	109.1	100.6	95.8	105.0
2004 Jan	92.3	110.7	99.8	94.6	105.5
Feb	95.7	106.0	98.8	93.5	105.7
Mar	97.1	106.5	100.4	95.2	105.5
Apr	97.9 [†]	111.8 [†]	101.1 [†]	95.4	106.0 [†]
May	96.1	108.7	102.1	96.5 [†]	105.8
Jun	98.1	111.5	101.0	95.4	105.9

¹ Price index for exports expressed as a percentage of price index for imports.

Source: Office for National Statistics; Enquiries 020 7533 6064



2.15 Measures of UK competitiveness in trade in manufactures

1995=100

	Summary measures						Export unit value index ^{1,6}				
	Relative export prices ⁶	Relative wholesale prices ⁵ (1990=100)	IMF index of relative unit labour costs ⁶		Import price competitiveness ^{2,4}	Relative profitability of exports ^{2,4}	United Kingdom	United States	Japan	France	Germany ³
			Actual	Normalised							
	CTPC	CTPD	CTPE	CTPF	BBKM	BBKN	CTPI	CTPJ	CTPK	CTPL	CTPM
1997	111.4	114.7	130.4	123.6	105.9	97.4	98.7	101.2	83.8	86.0	80.3
1998	111.4	..	141.2	131.5	109.2	95.8	97.7	101.2	78.1	86.0	80.5
1999	114.2	..	141.7	133.9	109.7	94.4	97.4	101.1	82.7	81.4	76.7
2000	118.2	..	147.8	141.6	106.9	93.7	94.9	102.3	86.5	71.3	66.7
2001	117.0	..	143.9	141.4	105.6	95.8	90.7	102.3	78.3	69.5	64.7
2002	..	..	..	..	109.0	96.0	..	..	..	..	..
2000 Q1	119.4	..	149.4	142.1	108.7	92.0	99.3	102.1	86.2	76.0	71.5
Q2	118.2	..	148.9	141.2	108.6	93.2	95.8	102.5	86.2	72.1	67.5
Q3	116.7	..	146.2	140.2	107.0	94.6	93.0	102.6	87.2	70.1	65.4
Q4	117.9	..	146.8	142.7	105.4	94.9	91.4	102.3	86.5	67.6	62.8
2001 Q1	115.5	..	142.2	138.8	105.0	95.3	92.6	102.0	84.4	72.2	66.7
Q2	117.4	..	144.3	141.9	104.8	95.5	90.7	101.9	82.4	68.5	63.0
Q3	117.6	..	144.2	142.1	107.1	95.6	92.3	101.8	84.2	70.1	64.2
Q4	117.7	..	144.8	142.7	108.0	94.8	92.9	101.7	84.2	70.8	64.7
2002 Q1	..	..	..	..	109.2	95.9	..	..	..	..	..
Q2	..	..	..	..	109.4	96.8	..	..	..	..	..
Q3	..	..	..	..	108.0	95.7	..	..	..	..	..
Q4	..	..	..	..	109.3	94.6	..	..	..	..	..
2003 Q1	..	..	..	..	109.4	96.7	..	..	..	..	..
Percentage change, quarter on corresponding quarter of previous year											
2001 Q2	-0.7	..	-3.1	0.5	-3.5	2.5	-5.3	-0.6	-4.4	-5.0	-6.7
Q3	0.8	..	-1.4	1.4	0.1	1.1	-0.8	-0.8	-3.4	0.0	-1.8
Q4	-0.2	..	-1.4	0.0	2.5	-0.1	1.6	-0.6	-2.7	4.7	3.0
2002 Q1	..	..	..	..	4.0	0.6	..	..	..	..	..
Q2	..	..	..	..	4.4	1.4	..	..	..	..	..
Q3	..	..	..	..	0.8	0.1	..	..	..	..	..
Q4	..	..	..	..	1.2	-0.2	..	..	..	..	..
2003 Q1	..	..	..	..	0.2	0.8	..	..	..	..	..
	Wholesale price index ¹ (1990=100)					Unit labour costs index ^{1,6}					
	United Kingdom	United States	Japan	France	Germany ³	United Kingdom	United States	Japan	France	Germany ³	
	CTPN	CTPO	CTPP	CTPQ	CTPR	CTPS	CTPT	CTPU	CTPV	CTPW	
1998	116.5	106.8	102.7	..	..	118.6	95.6	70.5	82.8	77.1	
1999	115.1	108.4	114.1	..	..	116.2	95.1	77.9	79.3	73.7	
2000	..	..	..	..	..	108.0	94.9	77.5	68.2	61.6	
2001	..	..	..	..	..	103.3	100.8	71.1	66.4	59.5	
1999 Q4	116.8	109.7	123.4	..	..	116.8	94.6	82.2	77.1	70.5	
2000 Q1	..	..	..	..	..	115.6	94.0	81.3	73.1	67.2	
Q2	..	..	..	..	..	109.8	94.1	78.8	69.0	62.9	
Q3	..	..	..	..	..	104.6	94.9	76.1	66.8	59.5	
Q4	..	..	..	..	..	102.2	96.5	74.0	64.3	57.5	
2001 Q1	..	..	..	..	..	104.3	99.2	72.5	68.5	61.5	
Q2	..	..	..	..	..	101.6	100.8	70.7	64.8	58.0	
Q3	..	..	..	..	..	103.2	101.4	71.3	66.1	59.1	
Q4	..	..	..	..	..	104.2	101.7	70.1	66.4	59.5	
Percentage change, quarter on corresponding quarter of previous year											
1999 Q4	-0.6	2.7	12.2	..	..	-3.6	-1.0	5.8	-12.0	-15.3	
2000 Q1	..	..	..	..	..	-2.3	-1.1	3.4	-12.6	-14.8	
Q2	..	..	..	..	..	-5.3	-1.3	5.8	-12.3	-17.2	
Q3	..	..	..	..	..	-8.3	-0.7	-0.8	-14.4	-16.8	
Q4	..	..	..	..	..	-12.5	2.0	-10.0	-16.6	-18.4	
2001 Q1	..	..	..	..	..	-9.8	5.5	-10.8	-6.3	-8.5	
Q2	..	..	..	..	..	-7.5	7.1	-10.3	-6.1	-7.8	
Q3	..	..	..	..	..	-1.3	6.8	-6.3	-1.0	-0.7	
Q4	..	..	..	..	..	2.0	5.4	-5.3	3.3	3.5	

1 All the indices are based on data expressed in US dollars.

2 Excludes erratics (ships, North sea installations, aircraft, precious stones and silver bullion).

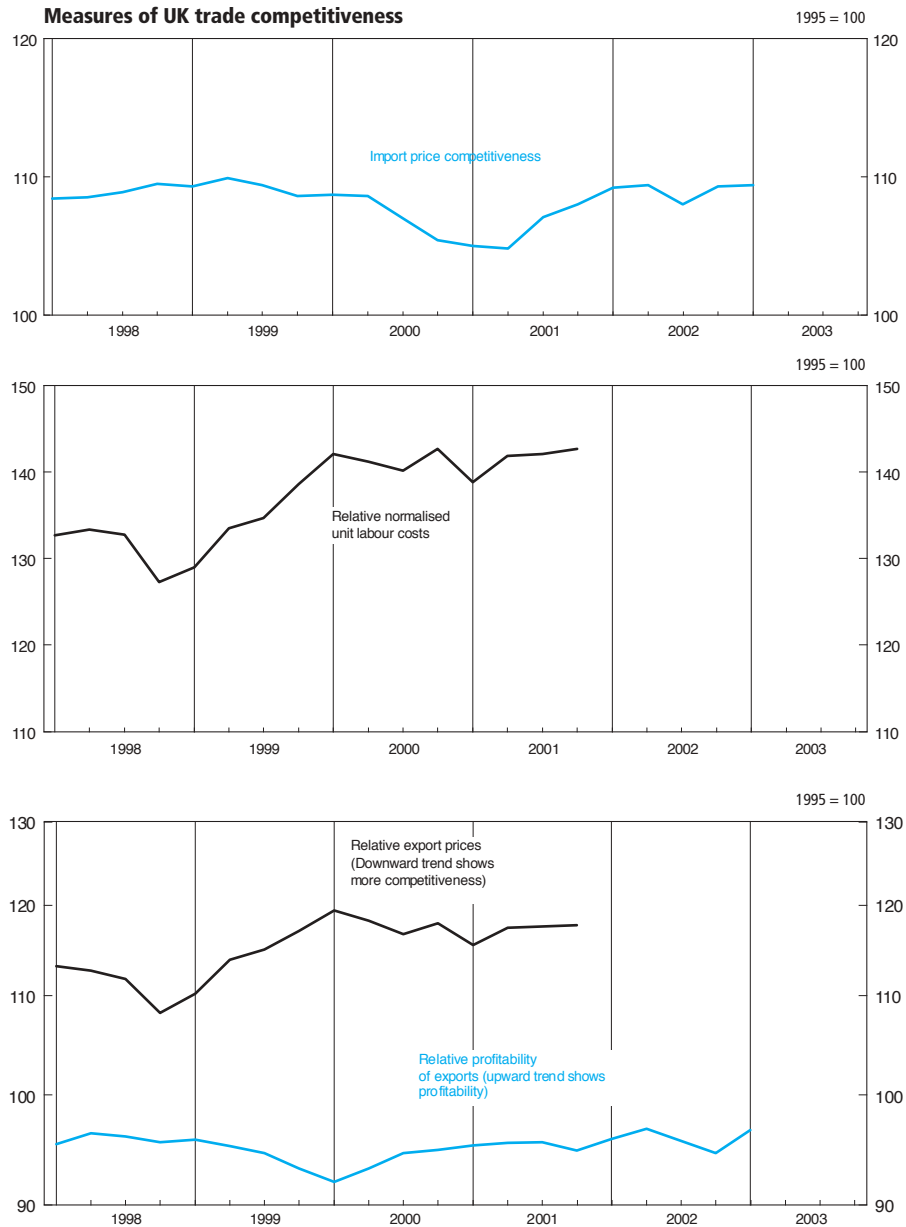
3 Includes the former German Democratic Republic as from 1991 Q1.

4 These series are on a SIC 92 basis.

5 This series is calculated using UK producer prices. All other country indices are wholesale price indices.

6 Quarterly data have been obtained by interpolating the annuals.

Sources: International Monetary Fund; Office for National Statistics; Enquiries 020 7533 5914

Measures of UK trade competitiveness

3.1 Prices

Not seasonally adjusted except series RNPE

	Producer price index (2000=100)		Consumer prices index ^{3,4} (1996=100)		Retail prices index (January 13, 1987=100)						Pensioner price index ⁶ (January 13, 1987=100)		
	Materials and fuel purchased by manu- facturing industry (SA) ^{1,2}	Output: all manufac- tured products: home sales	All items		All items (RPI)		All items excluding mortgage interest payments (RPIX)		All items excluding mortgage interest payments & indirect taxes (RPIY) ⁵		1-person household	2-person household	Purchasing power of the pound/ ⁷ (NSA) (1985=100)
			Percentage change on a year earlier	Percentage change on a year earlier	Percentage change on a year earlier	Percentage change on a year earlier	Percentage change on a year earlier						
			Index	Index	Index	Index	Index	Index					
Annual	RNPE	PLLU	CHVJ	CJYR	CHAW	CZBH	CHMK	CDKQ	CBZW	CBZX	CZIF	CZIU	FJAK
2000	100.0	100.0	105.6	0.8	170.3	3.0	167.7	2.1	159.9	1.8	150.8	156.1	56
2001	98.8	99.7	106.9	1.2	173.3	1.8	171.3	2.1	163.7	2.4	152.7	158.5	55
2002	94.4	99.8	108.3	1.3	176.2	1.7	175.1	2.2	167.5	2.3	155.3	160.9	54
2003	95.6	101.3	109.8	1.4	181.3	2.9	180.0	2.8	172.0	2.7	158.1	163.8	52
Quarterly													
2000 Q1	97.1	99.2	104.8	0.8	167.5	2.3	165.8	2.1	158.6	1.9	150.0	154.9	57
Q2	97.9	100.1	105.7	0.6	170.6	3.1	168.0	2.1	159.9	1.7	151.0	156.2	55
Q3	101.9	100.3	105.7	0.8	170.9	3.2	168.1	2.1	160.1	1.8	151.1	156.5	56
Q4	103.2	100.4	106.3	0.9	172.0	3.1	169.1	2.1	161.1	1.8	151.2	156.9	55
2001 Q1	100.8	99.7	105.7	0.9	171.8	2.6	168.9	1.9	161.1	1.6	150.6	156.5	55
Q2	101.6	100.1	107.3	1.5	173.9	1.9	171.8	2.3	164.1	2.6	153.3	159.3	54
Q3	98.3	99.8	107.3	1.5	174.0	1.8	172.1	2.4	164.6	2.8	153.0	158.9	54
Q4	94.4	99.3	107.4	1.0	173.8	1.0	172.4	2.0	165.0	2.4	153.9	159.3	55
2002 Q1	94.1	99.2	107.4	1.5	173.9	1.2	172.9	2.4	165.5	2.7	154.7	160.1	54
Q2	94.8	99.8	108.3	0.9	176.0	1.2	175.0	1.9	167.1	1.8	155.3	161.0	54
Q3	94.4	99.9	108.4	1.1	176.6	1.5	175.5	2.0	167.8	1.9	155.0	160.7	54
Q4	94.3	100.1	109.0	1.6	178.2	2.5	176.9	2.6	169.5	2.7	156.1	161.7	53
2003 Q1	95.8	100.9	109.0	1.5	179.2	3.0	177.9	2.9	170.6	3.1	156.7	162.6	53
Q2	94.2	101.1	109.7	1.3	181.3	3.0	180.1	2.9	171.8	2.8	157.9	163.7	52
Q3	95.5r	101.3	109.9	1.4	181.8	2.9	180.5	2.8	172.3	2.7	158.3	164.0	52
Q4	97.0	101.7	110.5	1.3	182.9	2.6	181.5	2.6	173.2	2.2	159.4	165.0	52
2004 Q1	95.5r	102.4	110.4	1.3	183.8	2.6	182.0	2.3	173.8	1.9	159.7	165.4	51
Q2	97.9#†	103.4p	111.2	1.4	186.3	2.8	184.0	2.2	175.4	2.1	160.9	166.6	51
Monthly													
2002 Jul	94.4	99.9	108.1	1.1	175.9	1.5	174.8	2.0	167.0	1.9	..	..	54
Aug	94.5	99.9	108.4	1.0	176.4	1.4	175.3	1.9	167.6	1.8	..	..	54
Sep	94.4	100.0	108.7	1.0	177.6	1.7	176.4	2.1	168.7	2.0	..	..	53
Oct	94.9	100.1	108.9	1.4	177.9	2.1	176.6	2.3	169.1	2.4	..	..	53
Nov	93.0	100.0	108.9	1.6	178.2	2.6	177.0	2.8	169.6	2.9	..	..	53
Dec	94.9	100.1	109.3	1.7	178.5	2.9	177.2	2.7	169.8	2.9	..	..	53
2003 Jan	95.7	100.5	108.6	1.4	178.4	2.9	177.1	2.7	169.8	2.9	..	..	53
Feb	96.0	100.7	109.0	1.6	179.3	3.2	177.9	3.0	170.6	3.1	..	..	53
Mar	95.6	101.4	109.4	1.6	179.9	3.1	178.7	3.0	171.4	3.2	..	..	53
Apr	94.3	101.3	109.7	1.5	181.2	3.1	180.0	3.0	171.8	2.9	..	..	52
May	94.0	101.0	109.7	1.2	181.5	3.0	180.2	2.9	171.9	2.7	..	..	52
Jun	94.2	101.0	109.6	1.1	181.3	2.9	180.0	2.8	171.7	2.7	..	..	52
Jul	95.2r†	101.2	109.5	1.3	181.3	3.1	179.9	2.9	171.6	2.8	..	..	52
Aug	96.2	101.4	109.9	1.4	181.6	2.9	180.4	2.9	172.2	2.7	..	..	52
Sep	95.1	101.4	110.2	1.4	182.5	2.8	181.3	2.8	173.2	2.7	..	..	52
Oct	96.9	101.6	110.4	1.4	182.6	2.6	181.3	2.7	173.1	2.4	..	..	52
Nov	97.1	101.7	110.3	1.3	182.7	2.5	181.4	2.5	173.1	2.1	..	..	52
Dec	96.9	101.9	110.7	1.3	183.5	2.8	181.8	2.6	173.5	2.2	..	..	52
2004 Jan	95.6	102.1	110.1	1.4	183.1	2.6	181.4	2.4	173.2	2.0	..	..	52
Feb	94.6	102.3	110.4	1.3	183.8	2.5	182.0	2.3	173.9	1.9	..	..	51
Mar	96.4r	102.8	110.6	1.1	184.6	2.6	182.5	2.1	174.3	1.7	..	..	51
Apr	97.0r	103.1	111.0	1.2	185.7	2.5	183.6	2.0	174.9	1.8	..	..	51
May	99.1	103.5	111.4	1.5	186.5	2.8	184.3	2.3	175.6	2.2	..	..	51
Jun	97.5p	103.6p	111.3	1.6	186.8	3.0	184.2	2.3	175.6	2.3	..	..	51
Jul	98.1p	103.7p	111.0	1.4	186.8	3.0	183.8	2.2	175.1	2.0	..	..	51

Note: Figures marked with a 'p' are provisional.

1 Minor revisions have been made to seasonally adjusted figures previously published. These reflect the routine updating of the seasonal adjustment factor.

2 Data now include the Climate Change Levy introduced in April 2001 and the Aggregates Levy introduced in April 2002.

3 Inflation rates prior to 1997 and index levels prior to 1996 are estimated. Further details are given in *Economic Trends* No.541 December 1998.

4 Prior to 10 December 2003, the consumer prices index (CPI) was published in the UK as the harmonised index of consumer prices (HICP).

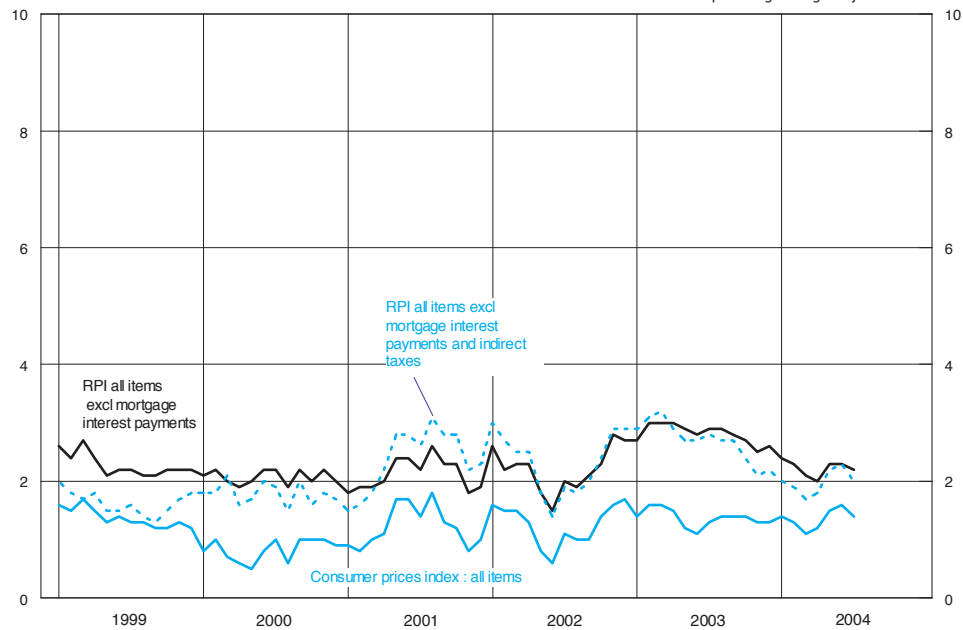
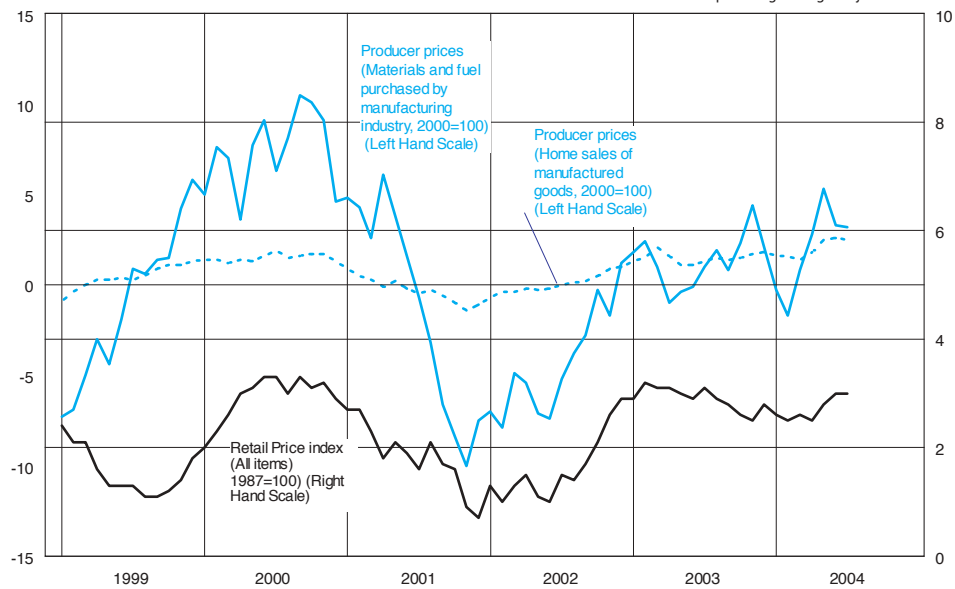
5 The taxes excluded are council tax, VAT, duties, car purchase tax and vehicle excise duty, insurance tax and airport tax.

6 Pensioner price indices exclude housing costs, as these are often atypical for a pensioner household, based on RPI.

7 Movements in the purchasing power of the pound are based on movements in the retail prices index.

Sources: Office for National Statistics;
Enquiries Columns 1-2 01633 812106; Columns 3-13 020 7533 5853.

Prices

1987 = 100 Not seasonally adjusted
percentage change on year earlierNot seasonally adjusted
percentage change on year earlier

4.1 Labour Market Activity^{1,2}

United Kingdom

Thousands, seasonally adjusted³

	Employment categories					Unemployment	Total economically active	Economically inactive	Total aged 16 and over	Employment rate: age 16-59/64 ⁴
	Employees	Self-employed	Unpaid family workers	Government training and employment programmes	Total employment					
TOTAL										
	MGRN	MGRQ	MGRS	MGRW	MGRZ	MGSC	MGSF	MGSI	MGSL	MGSU
2002 Q1	24 237	3 317	99	112	27 765	1 497	29 262	17 321	46 584	74.4
Q2	24 318	3 329	98	105	27 850	1 522	29 373	17 277	46 650	74.5
Q3	24 314	3 343	91	98	27 846	1 550	29 396	17 321	46 717	74.4
Q4	24 448	3 366	92	95	28 000	1 517	29 518	17 269	46 787	74.7
2003 Q1	24 440	3 428	87	94	28 049	1 504	29 554	17 303	46 857	74.7
Q2	24 388	3 543	90	91	28 112	1 473	29 586	17 341	46 927	74.7
Q3	24 290	3 628	104	108	28 130	1 484	29 614	17 383	46 997	74.6
Q4	24 291	3 659	96	105	28 152	1 462	29 613	17 454	47 067	74.5
2004 Q1	24 507	3 619	107	113	28 346	1 413	29 760	17 378	47 137	74.9
Q2	24 419	3 651	101	122	28 293	1 440	29 734	17 474	47 207	74.6
Percentage change on quarter 2004q1 to 2004q2	-0.4	0.9	-5.0	7.1	-0.2	1.9	-0.1	0.6	0.1	
Percentage change on year 2003q2 to 2004q2	0.1	3.0	13.0	33.3	0.6	-2.3	0.5	0.8	0.6	
MALE										
	MGRO	MGRR	MGRU	MGRX	MGSA	MGSD	MGSG	MGSJ	MGSM	MGSV
2002 Q1	12 463	2 445	32	70	15 009	910	15 919	6 567	22 487	79.0
Q2	12 506	2 437	32	61	15 036	912	15 948	6 575	22 523	79.0
Q3	12 487	2 449	35	61	15 032	940	15 971	6 589	22 560	78.8
Q4	12 628	2 462	32	60	15 182	894	16 076	6 522	22 598	79.5
2003 Q1	12 581	2 496	28	56	15 162	913	16 075	6 561	22 636	79.2
Q2	12 552	2 596	33	54	15 235	889	16 124	6 550	22 674	79.4
Q3	12 463	2 658	39	61	15 221	887	16 108	6 603	22 711	79.3
Q4	12 417	2 679	36	59	15 192	883	16 075	6 675	22 750	79.0
2004 Q1	12 549	2 645	44	65	15 304	829	16 133	6 655	22 788	79.5
Q2	12 471	2 680	42	72	15 265	843	16 108	6 717	22 826	79.1
Percentage change on quarter 2004q1 to 2004q2	-0.6	1.3	-4.8	10.4	-0.3	1.7	-0.2	0.9	0.2	
Percentage change on year 2003q2 to 2004q2	-0.6	3.2	27.9	34.6	0.2	-5.2	-0.1	2.6	0.7	
FEMALE										
	MGRP	MGRS	MGRV	MGRY	MGSB	MGSE	MGSB	MGSK	MGSN	MGSW
2002 Q1	11 774	872	67	42	12 756	587	13 343	10 754	24 097	69.5
Q2	11 812	892	66	44	12 814	610	13 424	10 702	24 126	69.7
Q3	11 826	894	56	37	12 814	610	13 425	10 732	24 157	69.6
Q4	11 820	903	60	34	12 818	624	13 441	10 747	24 189	69.6
2003 Q1	11 859	932	59	38	12 887	591	13 479	10 742	24 221	69.9
Q2	11 836	948	57	38	12 878	584	13 462	10 791	24 253	69.7
Q3	11 827	971	65	46	12 909	597	13 505	10 780	24 285	69.6
Q4	11 874	980	60	46	12 960	578	13 538	10 779	24 317	69.8
2004 Q1	11 958	974	62	48	13 043	584	13 627	10 723	24 350	70.1
Q2	11 948	972	59	50	13 028	597	13 625	10 757	24 382	69.8
Percentage change on quarter 2004q1 to 2004q2	-0.1	-0.2	-5.1	2.8	-0.1	2.2	0.0	0.3	0.1	
Percentage change on year 2003q2 to 2004q2	0.9	2.5	4.3	31.5	1.2	2.2	1.2	-0.3	0.5	

1 The data in this table have been adjusted to reflect the 2001 Census population data.

2 Data are from the Labour Force Survey which uses the definitions recommended by the International Labour Organisation (ILO), an agency of the United Nations. For details see the *Guide to Labour Market Statistics Releases*.

3 Seasonally adjusted estimates are revised in April each year.

4 The employment rate equals those in employment aged 16-64 (male) and 16-59 (female), as a percentage of all in these age groups. The underlying data are available on request.

Source: Office for National Statistics; Enquiries 020 7533 6094

4.2 Labour Market Activity^{1,2}

United Kingdom

Thousands, not seasonally adjusted

	Employment categories					Unemployment	Total economically active	Economically inactive	Total aged 16 and over	Employment rate: age 16-59/64 ³
	Employees	Self-employed	Unpaid family workers	Government training and employment programmes	Total employment					
TOTAL										
	MGTA	MGTD	MGTG	MGTJ	MGTM	MGTP	MGTS	MGTV	MGSL	MGUH
2002 Q1	24 109	3 310	95	116	27 630	1 513	29 144	17 440	46 584	74.0
Q2	24 280	3 321	95	105	27 801	1 465	29 266	17 384	46 650	74.4
Q3	24 414	3 370	96	90	27 971	1 630	29 601	17 116	46 717	74.7
Q4	24 527	3 356	95	99	28 077	1 472	29 549	17 238	46 787	74.9
2003 Q1	24 312	3 418	83	99	27 912	1 521	29 432	17 424	46 857	74.3
Q2	24 357	3 536	86	90	28 069	1 412	29 481	17 445	46 927	74.6
Q3	24 381	3 659	110	100	28 250	1 566	29 817	17 180	46 997	74.9
Q4	24 371	3 649	100	110	28 229	1 416	29 645	17 422	47 067	74.7
2004 Q1	24 397	3 603	104	120	28 224	1 423	29 647	17 490	47 137	74.6
Q2	24 386	3 646	95	121	28 248	1 381	29 629	17 579	47 207	74.5
Percentage change on year 2003q2 to 2004q2	0.1	3.1	10.5	34.4	0.6	-2.2	0.5	0.8	0.6	
MALE										
	MGTB	MGTE	MGTH	MGTK	MGTN	MGTQ	MGTT	MGTW	MGSM	MGUI
2002 Q1	12 371	2 443	31	73	14 917	930	15 847	6 640	22 487	78.5
Q2	12 487	2 427	30	60	15 004	886	15 891	6 633	22 523	78.8
Q3	12 572	2 464	36	57	15 130	968	16 098	6 462	22 560	79.4
Q4	12 666	2 461	34	63	15 224	864	16 088	6 510	22 598	79.7
2003 Q1	12 487	2 492	27	59	15 066	935	16 001	6 635	22 636	78.7
Q2	12 538	2 586	31	52	15 206	860	16 066	6 607	22 674	79.3
Q3	12 544	2 676	41	58	15 318	917	16 235	6 477	22 711	79.8
Q4	12 456	2 679	38	62	15 234	851	16 085	6 664	22 750	79.2
2004 Q1	12 461	2 637	44	70	15 211	846	16 057	6 730	22 788	79.0
Q2	12 455	2 673	40	71	15 238	814	16 052	6 773	22 826	79.0
Percentage change on year 2003q2 to 2004q2	-0.7	3.4	29.0	36.5	0.2	-5.3	-0.1	2.5	0.7	
FEMALE										
	MGTC	MGTF	MGTI	MGTL	MGTO	MGTR	MGTU	MGTX	MGSN	MGUJ
2002 Q1	11 738	867	64	44	12 713	584	13 296	10 800	24 097	69.2
Q2	11 793	894	64	45	12 797	579	13 375	10 751	24 126	69.6
Q3	11 842	906	60	33	12 841	661	13 503	10 654	24 157	69.8
Q4	11 861	894	61	36	12 853	608	13 461	10 728	24 189	69.8
2003 Q1	11 825	926	55	40	12 846	586	13 432	10 789	24 221	69.6
Q2	11 819	951	55	39	12 863	552	13 415	10 838	24 253	69.6
Q3	11 838	983	69	43	12 932	649	13 582	10 703	24 285	69.7
Q4	11 915	970	62	48	12 994	566	13 560	10 757	24 317	70.0
2004 Q1	11 937	966	60	50	13 013	577	13 590	10 760	24 350	69.9
Q2	11 930	973	56	50	13 010	567	13 576	10 805	24 382	69.7
Percentage change on year 2003q2 to 2004q2	0.9	2.3	1.8	28.2	1.1	2.7	1.2	-0.3	0.5	

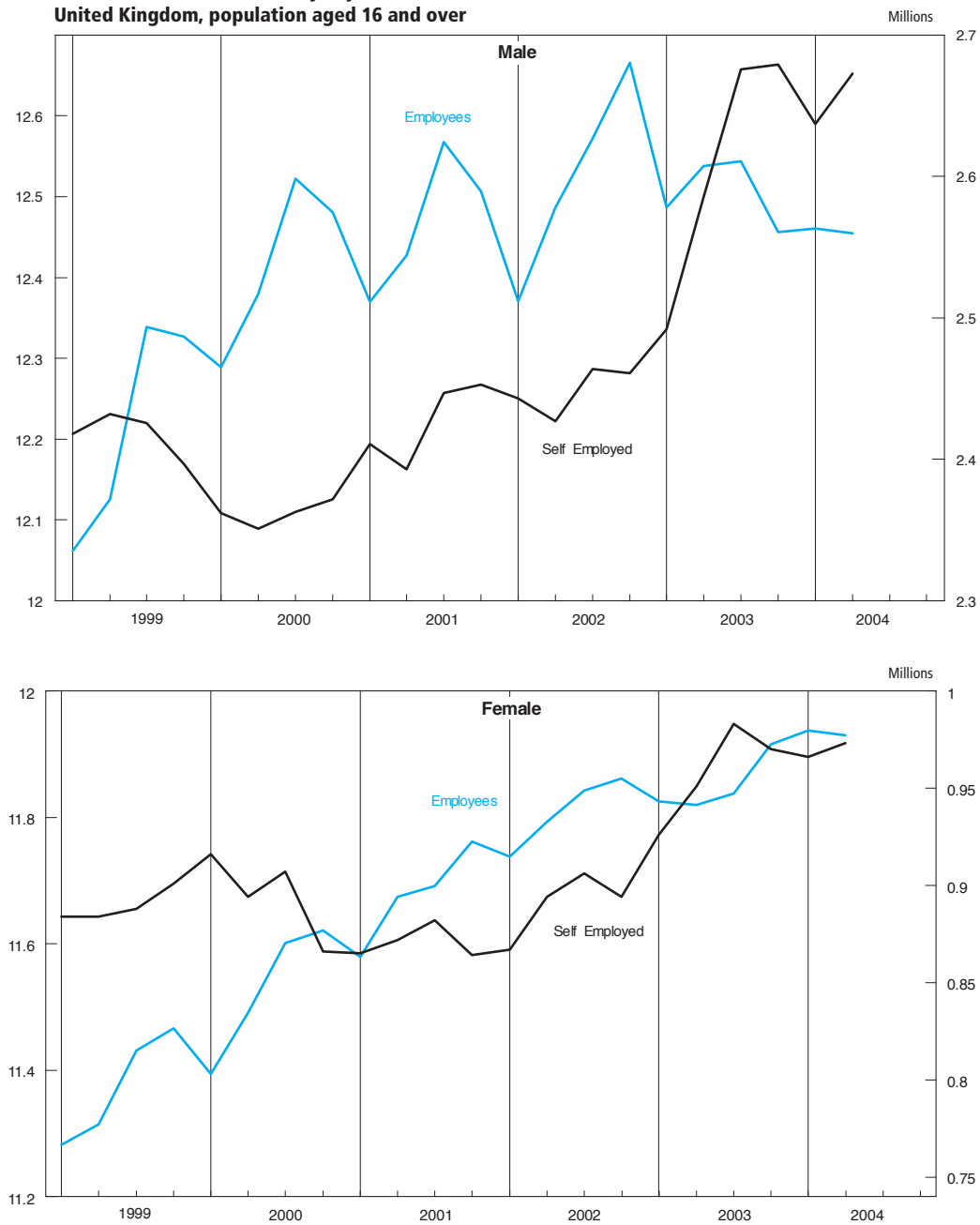
1 The data in this table have been adjusted to reflect the 2001 Census population data.

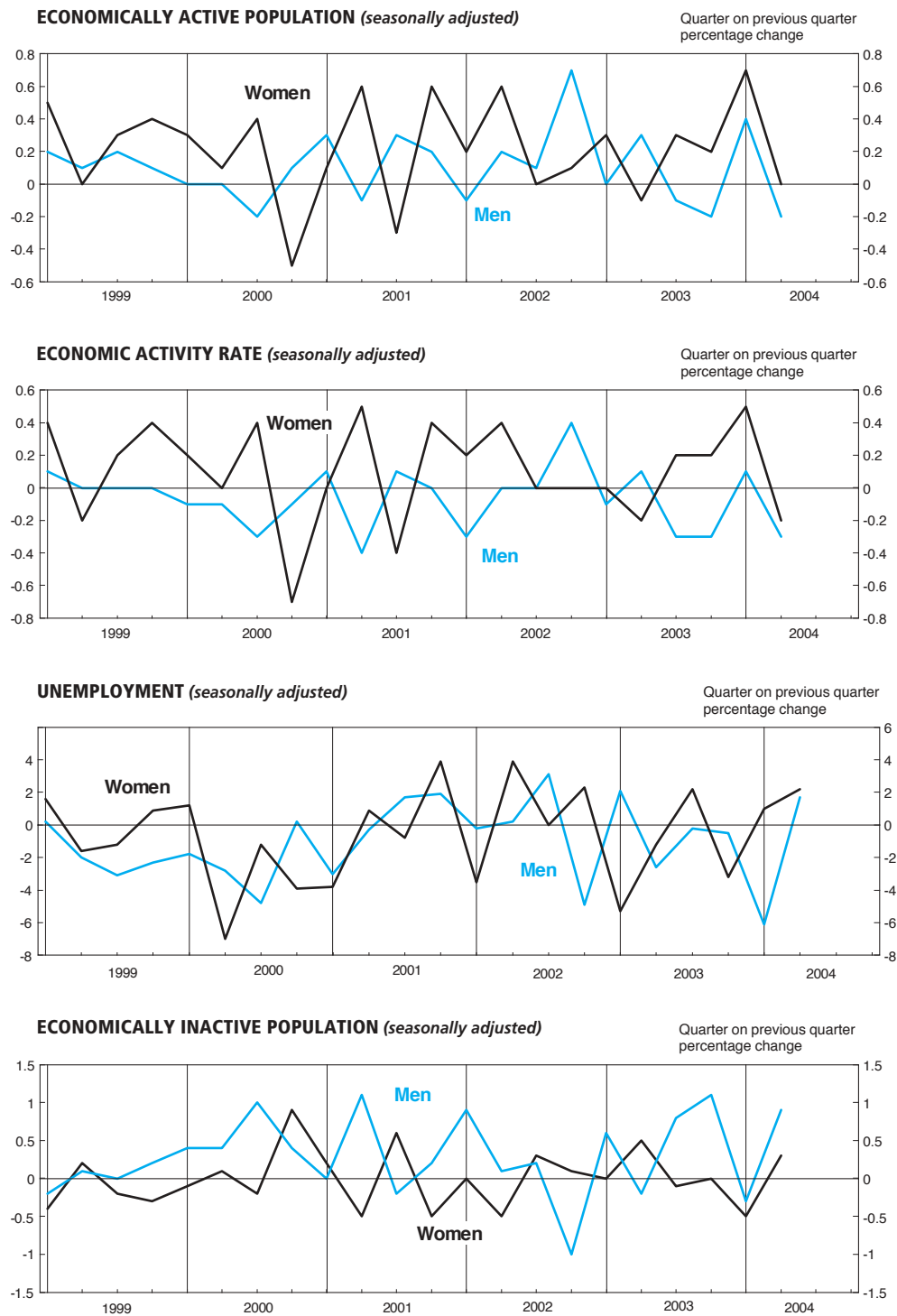
2 Data are from the Labour Force Survey which uses the definitions recommended by the International Labour Organisation (ILO), an agency of the United Nations. For details see the *Guide to Labour market Statistics Releases*.

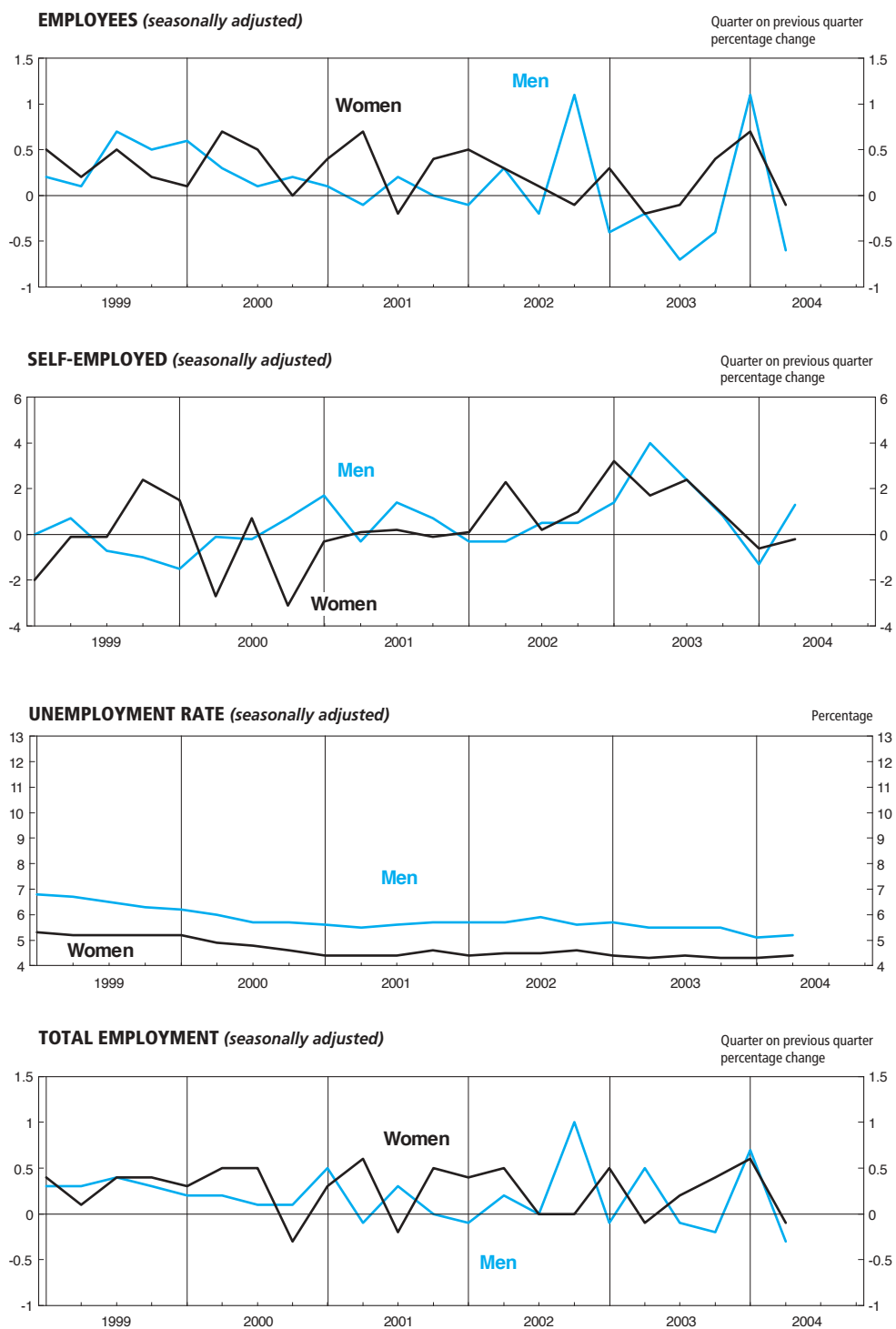
3 The employment rate equals those in employment aged 16-64 (male) and 16-59 (female), as a percentage of all in these age groups. The underlying data are available on request.

Source: Office for National Statistics; Enquiries 020 7533 6094

**EMPLOYMENT Not seasonally adjusted-
United Kingdom, population aged 16 and over**







4.3 Labour Market Activity by age^{1,2}

United Kingdom

Thousands, seasonally adjusted³

	Total aged 16 and over			Age groups ⁴							
	Total	Male	Female	16 - 24		25 - 49		50 - 59/64		60/65 and over	
				Male	Female	Male	Female	Male	Female	Male	Female
In employment											
	MGRZ	MGSA	MGSB	MGUR	MGUS	MGUU	MGUV	MGUX	MGUY	MGVA	MGVB
2002 Q1	27 765	15 009	12 756	2 066	1 929	9 117	7 797	3 542	2 437	284	593
Q2	27 850	15 036	12 814	2 071	1 942	9 123	7 821	3 550	2 459	292	591
Q3	27 846	15 032	12 814	2 050	1 953	9 104	7 794	3 578	2 481	300	586
Q4	28 000	15 182	12 818	2 099	1 945	9 139	7 796	3 633	2 496	312	581
2003 Q1	28 049	15 162	12 887	2 083	1 947	9 101	7 828	3 649	2 521	329	592
Q2	28 112	15 235	12 878	2 088	1 924	9 117	7 810	3 698	2 542	331	601
Q3	28 130	15 221	12 909	2 097	1 934	9 113	7 791	3 677	2 556	334	628
Q4	28 152	15 192	12 960	2 097	1 973	9 076	7 816	3 687	2 535	331	635
2004 Q1	28 346	15 304	13 043	2 126	2 004	9 120	7 824	3 721	2 561	336	654
Q2	28 293	15 265	13 028	2 134	1 972	9 076	7 837	3 716	2 548	340	672
Unemployed											
	MGSC	MGSD	MGSE	MGVG	MGVH	MGVJ	MGVK	MGVM	MGVN	MGVP	MGVQ
2002 Q1	1 497	910	587	332	220	432	293	136	66	..	..
Q2	1 522	912	610	333	216	419	312	151	70	..	12
Q3	1 550	940	610	338	222	428	308	165	68	10	12
Q4	1 517	894	624	341	228	396	311	151	72	..	14
2003 Q1	1 504	913	591	346	232	402	285	158	65	..	..
Q2	1 473	889	584	340	237	394	272	147	67	..	..
Q3	1 484	887	597	339	238	398	282	142	70	..	..
Q4	1 462	883	578	331	221	402	282	139	66	11	10
2004 Q1	1 413	829	584	322	229	365	282	132	64	10	..
Q2	1 440	843	597	326	246	372	285	137	58	..	..
Economically inactive											
	MGSI	MGSJ	MGSK	MGVV	MGVW	MGVY	MGVZ	MGWB	MGWC	MGWE	MGWF
2002 Q1	17 321	6 567	10 754	824	1 058	798	2 461	1 391	1 248	3 554	5 987
Q2	17 277	6 575	10 702	838	1 062	799	2 416	1 380	1 234	3 558	5 989
Q3	17 321	6 589	10 732	873	1 061	802	2 446	1 351	1 226	3 563	6 000
Q4	17 269	6 522	10 747	840	1 078	792	2 441	1 321	1 213	3 568	6 015
2003 Q1	17 303	6 561	10 742	869	1 088	817	2 433	1 310	1 201	3 565	6 019
Q2	17 341	6 550	10 791	889	1 121	801	2 463	1 284	1 185	3 575	6 022
Q3	17 383	6 603	10 780	900	1 125	795	2 473	1 321	1 173	3 586	6 008
Q4	17 454	6 675	10 779	924	1 116	825	2 450	1 326	1 202	3 599	6 011
2004 Q1	17 378	6 655	10 723	920	1 088	816	2 446	1 312	1 183	3 607	6 006
Q2	17 474	6 717	10 757	924	1 116	849	2 432	1 325	1 205	3 618	6 003
Economic activity rate (per cent) ⁵											
	MGWG	MGWH	MGWI	MGWK	MGWL	MGWN	MGWO	MGWQ	MGWR	MGWT	MGWU
2002 Q1	62.8	70.8	55.4	74.4	67.0	92.3	76.7	72.6	66.7	7.6	9.1
Q2	63.0	70.8	55.6	74.2	67.0	92.3	77.1	72.8	67.2	7.8	9.2
Q3	62.9	70.8	55.6	73.2	67.2	92.2	76.8	73.5	67.5	8.0	9.1
Q4	63.1	71.1	55.6	74.4	66.8	92.3	76.9	74.1	67.9	8.2	9.0
2003 Q1	63.1	71.0	55.6	73.7	66.7	92.1	76.9	74.4	68.3	8.6	9.1
Q2	63.0	71.1	55.5	73.2	65.8	92.2	76.6	75.0	68.8	8.7	9.2
Q3	63.0	70.9	55.6	73.0	65.9	92.3	76.6	74.3	69.1	8.7	9.5
Q4	62.9	70.7	55.7	72.4	66.3	92.0	76.8	74.3	68.4	8.7	9.7
2004 Q1	63.1	70.8	56.0	72.7	67.3	92.1	76.8	74.6	68.9	8.8	9.9
Q2	63.0	70.6	55.9	72.7	66.5	91.8	77.0	74.4	68.4	8.8	10.2
Unemployment rate (per cent) ⁶											
	MGSX	MGSY	MGSZ	MGWZ	MGXA	MGXC	MGXD	MGXF	MGXG	MGXI	MGXJ
2002 Q1	5.1	5.7	4.4	13.8	10.2	4.5	3.6	3.7	2.6	..	..
Q2	5.2	5.7	4.5	13.8	10.0	4.4	3.8	4.1	2.8	..	2.0
Q3	5.3	5.9	4.5	14.1	10.2	4.5	3.8	4.4	2.7	3.2	2.1
Q4	5.1	5.6	4.6	14.0	10.5	4.1	3.8	4.0	2.8	..	2.3
2003 Q1	5.1	5.7	4.4	14.2	10.6	4.2	3.5	4.2	2.5	..	..
Q2	5.0	5.5	4.3	14.0	10.9	4.1	3.4	3.8	2.6	..	..
Q3	5.0	5.5	4.4	13.9	11.0	4.2	3.5	3.7	2.7	..	..
Q4	4.9	5.5	4.3	13.6	10.1	4.2	3.5	3.6	2.5	3.2	1.6
2004 Q1	4.7	5.1	4.3	13.2	10.3	3.8	3.5	3.4	2.4	2.8	..
Q2	4.8	5.2	4.4	13.3	11.1	3.9	3.5	3.5	2.2	..	..

1 The data in this table have been adjusted to reflect the 2001 Census population data.

2 Data are from the Labour Force Survey which uses the definitions recommended by the International Labour Organisation (ILO), an agency of the United Nations. For details see the *Guide to Labour Market Statistics Releases*.

3 Seasonally adjusted estimates are revised in April each year.

4 Data for more detailed age groups are published in *Labour Market Trends*.

5 The activity rate is the percentage of people in each age group who are economically active.

6 Unemployment rate is the percentage of economically active people who are unemployed on the ILO measure.

Source: Office for National Statistics; Enquiries 020 7533 6094

4.4 Jobs and claimant count

United Kingdom

Thousands

	Jobs ¹					Claimant count ^{5,6,9}			
	Workforce jobs ^{2,3,4}	Employee jobs ^{3,4}				Total	Percentage of workforce jobs and claimant count ⁷	Total Not seasonally adjusted	Job Centre vacancies ^{8,10}
		All industries	Manufacturing industry	Production industry	Service industries				
Annual									
	DYDC	BCAJ	YEJA	YEJF	YEJC	BCJD	BCJE	BCJA	DPCB
2001	29 728	25 905	3 803	4 012	20 441	969.9	3	983.0	..
2002	29 847	25 975	3 602	3 806	20 756	946.7	3	958.8	..
2003	30 125	26 033	3 458	3 655	20 957	933.2	3	945.9	..
2004	..	..	3 362	3 553	..	..	..	..	..
Quarterly									
2000 Q1	29 290	25 438	3 988	4 185	19 767	1 153.0	3.8	1 219.2	342.2
Q2	29 428	25 588	3 951	4 152	19 932	1 103.9	3.6	1 109.2	355.7
Q3	29 497	25 683	3 923	4 124	20 094	1 060.0	3.5	1 073.6	363.4
Q4	29 600	25 781	3 891	4 098	20 236	1 036.7	3.4	1 007.1	371.8
2001 Q1	29 640	25 817	3 858	4 065	20 322	999.7	3.3	1 064.1	394.1
Q2	29 728	25 905	3 803	4 012	20 441	970.7	3.2	978.4	..
Q3	29 717	25 914	3 753	3 960	20 502	949.7	3.1	958.5	..
Q4	29 829	25 999	3 700	3 906	20 643	959.7	3.1	931.0	..
2002 Q1	29 831	26 018	3 649	3 856	20 714	952.9	3.1	1 014.6	..
Q2	29 847	25 975	3 602	3 806	20 756	950.9	3.1	958.1	..
Q3	29 850	25 942	3 555	3 754	20 794	945.0	3.1	951.8	..
Q4	29 939	26 003	3 514	3 709	20 893	937.8	3.0	910.6	..
2003 Q1	30 006	25 984	3 489	3 684	20 891	939.7	3.0	1 001.1	..
Q2	30 125	26 033	3 458	3 655	20 957	945.6	3.0	954.3	..
Q3	30 192	26 008	3 431	3 625	20 931	932.3	3.0	939.0	..
Q4	30 310	26 115	3 413	3 605	21 040	915.2	2.9	889.2	..
2004 Q1	30 325	26 138	3 379	3 572	21 085	886.8	2.9	947.2	..
Q2	..	..	3 362	3 553	..	861.1 [†]	2.7 [†]	871.8	..
Monthly									
2003 Jan	..	..	3 506	3 702	..	935.9	3.0	998.0	..
Feb	..	..	3 498	3 693	..	940.9	3.0	1 012.8	..
Mar	..	25 984	3 489	3 684	20 891	942.3	3.0	992.3	..
Apr	..	..	3 477	3 671	..	939.9	3.0	966.1	..
May	..	..	3 468	3 663	..	948.5	3.1	957.8	..
Jun	..	26 033	3 458	3 655	20 957	948.4	3.1	939.2	..
Jul	..	..	3 442	3 637	..	937.6	3.0	946.3	..
Aug	..	..	3 435	3 630	..	930.2	3.0	948.6	..
Sep	..	26 008	3 431	3 625	20 931	929.1	3.0	922.1	..
Oct	..	..	3 427	3 620	..	924.6	3.0	893.2	..
Nov	..	..	3 418	3 611	..	915.5	2.9	884.6	..
Dec	..	26 115	3 413	3 605	21 040	905.5	2.9	889.7	..
2004 Jan	..	..	3 396	3 589	..	891.7	2.9	952.4	..
Feb	..	..	3 388	3 581	..	886.4	2.9	957.0	..
Mar	..	26 138	3 379	3 572	21 085	882.3	2.8	932.0	..
Apr	..	..	3 371	3 563	..	874.0	2.8	905.2	..
May	..	..	3 366	3 558	..	860.5	2.8	869.7	..
Jun	..	..	3 362	3 553	..	848.9 [†]	2.7	840.5	..
Jul	..	..	..	..	..	835.2	2.7	841.5	..

1 Estimates of employee jobs and workforce jobs for Great Britain now use the Annual Business Inquiry as a benchmark on which quarterly movements are based. For further information see Labour Market Statistics First Release, April 2001 which is held on the National Statistics website www.statistics.gov.uk. The Northern Ireland component of workforce jobs and employee jobs has not changed.

2 Workforce jobs comprise employee jobs, self-employed jobs, HM Forces and participants in work-related government supported training, which includes the Project Work Plan.

3 For all dates, individuals with two jobs as employees of different employers are counted twice.

4 Annual estimates relate to mid-year. Figures for the four quarters relate to March, June, September and December. For claimant count, unlike employment and workforce figures, the annual figure is an annual average.

5 Unadjusted claimant count figures have been affected by changes in the coverage. The seasonally adjusted figures however, as given in this table are estimated on the current basis, allowing for the discontinuities, except for the effect of the Jobseeker's Allowance introduced in October 1996 (see also below).

The seasonally adjusted figures now relate only to claimants aged 18 or over in order to maintain the consistent series, available back to 1971 (1974 for the regions), allowing for the effect of the change in benefit regulations for under 18 year olds from September 1988. (See pages 398-400 of November 1995 *Labour Market Trends*.)

6 Claimant count figures do not include students claiming benefit during a vacation who intend to return to full-time education.

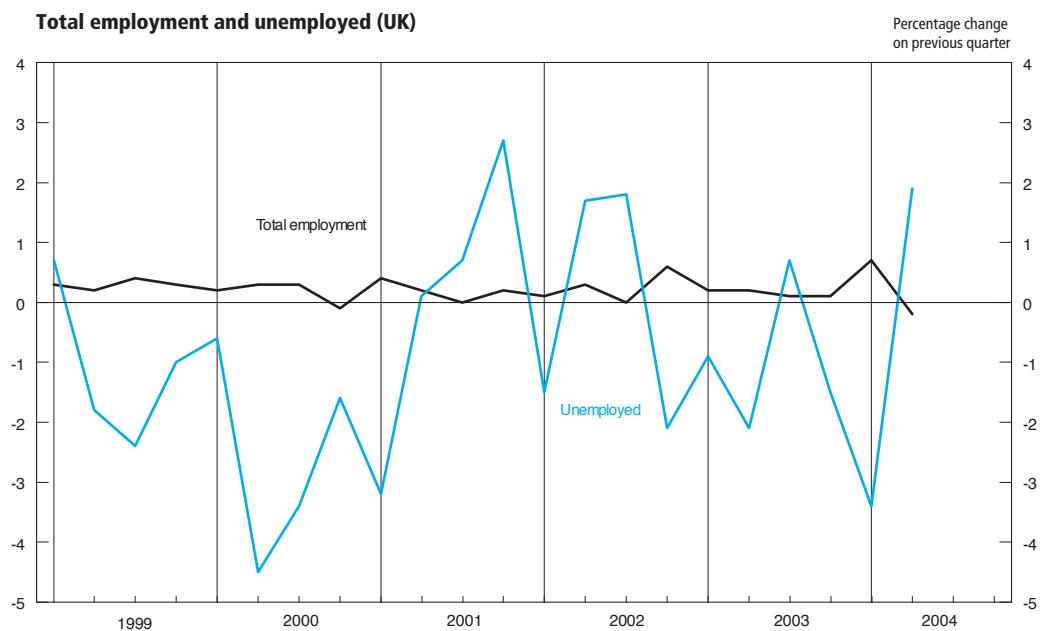
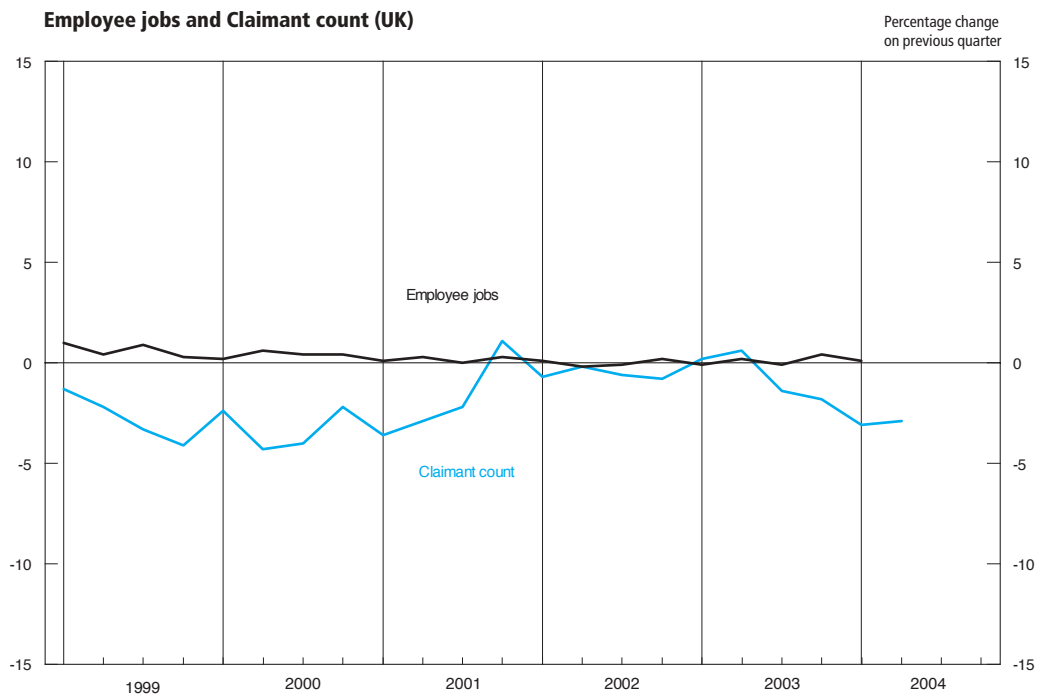
7 The denominator used to calculate claimant count unemployment rates is comprised of the workforce jobs plus the claimant count.

8 Vacancies notified to Jobcentres and remaining unfilled. Jobcentre vacancies only account for approximately one third of all vacancies in the economy. Note: Quarter figures relate to the average for the three months in the quarter.

9 Quarterly and annual values are now the mean of the monthly and quarterly data respectively.

10 Publication of the job centre vacancy statistics has been deferred. Figures from May 2001 are affected by the introduction of Employer Direct. This major change involves transferring the vacancy taking process from job centres to regional Customer Service Centres, as part of Modernising the Employment Service. ONS and the Employment Service will continue to monitor and review the data with the aim of publishing the series fairly soon, as it is possible to produce a consistent measure.

Sources: Office for National Statistics;
Enquiries Columns 1-5 01633 812079; Columns 6,9 020 7533 6094;
also 24 hour recorded headline service on 020 7533 6176



4.5 Regional claimant count rates^{1,2}

by Government Office Region

Percentages

	North East	North West ³	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East
Quarterly								
	DPDM	IBWC	DPBI	DPBJ	DPBN	DPDP	DPDQ	DPDR
1998 Q1	7.3	5.2	5.5	4.0	4.6	3.3	5.3	2.7
Q2	7.0	5.1	5.4	3.9	4.5	3.2	5.2	2.6
Q3	6.9	5.0	5.4	3.9	4.5	3.2	5.1	2.5
Q4	7.0	5.0	5.3	3.9	4.5	3.1	4.9	2.5
1999 Q1	7.3	4.7	5.3	3.8	4.6	3.0	4.7	2.4
Q2	7.2	4.7	5.1	3.7	4.5	3.0	4.6	2.3
Q3	7.0	4.6	5.0	3.6	4.4	2.9	4.4	2.2
Q4	6.7	4.4	4.8	3.5	4.2	2.7	4.3	2.1
2000 Q1	6.6	4.4	4.6	3.5	4.1	2.6	4.0	2.0
Q2	6.4	4.2	4.4	3.4	4.0	2.4	3.8	1.9
Q3	6.2	4.0	4.2	3.3	4.0	2.3	3.6	1.8
Q4	6.0	3.9	4.1	3.3	3.9	2.2	3.5	1.7
2001 Q1	5.9	3.8	4.1	3.2	3.9	2.1	3.3	1.6
Q2	5.6	3.7	4.0	3.1	3.8	2.0	3.2	1.5
Q3	5.5	3.6	3.9	3.0	3.6	2.0	3.2	1.5
Q4	5.5	3.6	3.8	3.0	3.6	2.0	3.4	1.6
2002 Q1	5.3	3.5	3.7	2.9	3.5	2.0	3.5	1.6
Q2	5.2	3.5	3.6	2.8	3.5	2.1	3.6	1.6
Q3	5.1	3.5	3.6	2.8	3.5	2.1	3.6	1.6
Q4	4.9	3.4	3.6	2.8	3.5	2.1	3.6	1.7
2003 Q1	4.7	3.3	3.5	2.8	3.5	2.1	3.6	1.7
Q2	4.6	3.3	3.4	2.9	3.5	2.2	3.7	1.7
Q3	4.5	3.2	3.3	2.9	3.5	2.1	3.6	1.7
Q4	4.4	3.1	3.2	2.8	3.5	2.1	3.6	1.7
2004 Q1	4.2	3.0	3.1	2.6	3.4	2.1	3.5	1.7
Q2	3.9 [†]	2.9	2.9 [†]	2.5	3.3	2.0	3.5	1.6
	South West	England	Wales	Scotland	Great Britain	Northern Ireland	United Kingdom	
Quarterly								
	DPBM	VASQ	DPBP	DPBQ	DPAJ	DPBR	BCJE	
1998 Q1	3.5	4.4	5.5	5.4	4.5	7.6	4.6	
Q2	3.4	4.3	5.4	5.4	4.4	7.4	4.5	
Q3	3.3	4.2	5.4	5.4	4.4	7.3	4.5	
Q4	3.3	4.2	5.4	5.3	4.3	7.2	4.4	
1999 Q1	3.2	4.1	5.3	5.2	4.2	7.0	4.3	
Q2	3.1	4.0	5.1	5.2	4.1	6.7	4.2	
Q3	2.9	3.9	4.9	5.0	4.0	6.2	4.1	
Q4	2.8	3.7	4.7	4.8	3.9	5.8	3.9	
2000 Q1	2.7	3.6	4.5	4.8	3.7	5.5	3.8	
Q2	2.5	3.4	4.4	4.6	3.6	5.3	3.6	
Q3	2.4	3.3	4.3	4.4	3.4	5.2	3.5	
Q4	2.3	3.2	4.3	4.3	3.4	5.3	3.4	
2001 Q1	2.1	3.1	4.2	4.1	3.2	5.1	3.3	
Q2	2.1	3.0	4.0	4.0	3.1	5.0	3.2	
Q3	2.0	2.9	3.8	3.9	3.1	4.9	3.1	
Q4	2.0	3.0	3.8	4.0	3.1	4.8	3.1	
2002 Q1	2.0	2.9	3.7	3.9	3.1	4.7	3.1	
Q2	2.0	2.9	3.6	3.9	3.0	4.6	3.1	
Q3	1.9	2.9	3.6	3.9	3.0	4.4	3.1	
Q4	1.9	2.9	3.6	3.8	3.0	4.3	3.0	
2003 Q1	1.9	2.9	3.5	3.8	3.0	4.3	3.0	
Q2	1.9	2.9	3.4	3.8	3.0	4.3	3.0	
Q3	1.9	2.9	3.4	3.8	3.0	4.2	3.0	
Q4	1.8	2.8	3.2	3.8	2.9	4.2	2.9	
2004 Q1	1.7	2.7	3.1	3.7	2.8	4.0	2.9	
Q2	1.6	2.6 [†]	3.0 [†]	3.5	2.7	3.7 [†]	2.7 [†]	

Note: Quarterly claimant count figures relate to the average of the three months in each quarter.

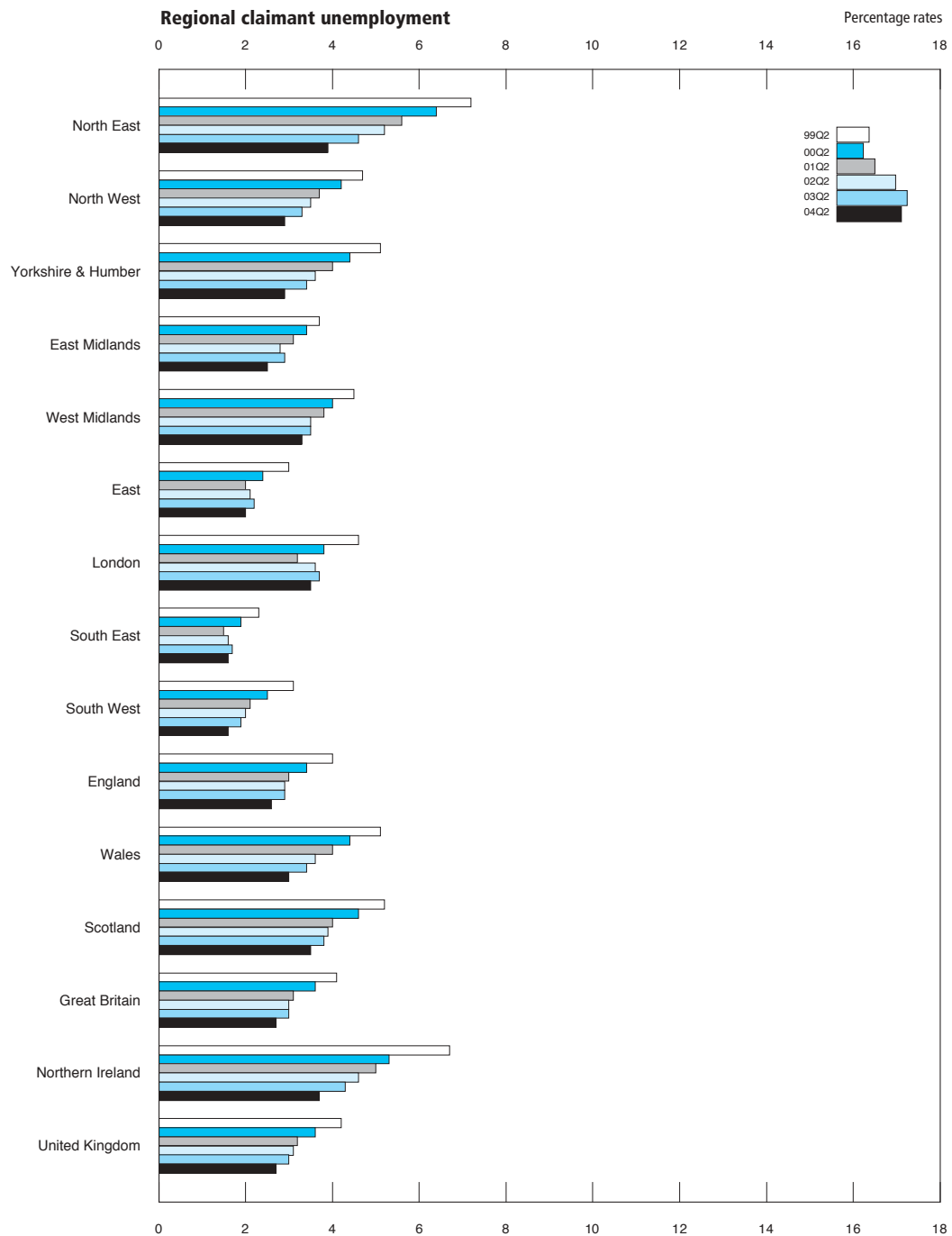
1 Government Office Regions came into effect in April 1994. It was decided that from May 1997 sub-national data should be published for these areas rather than standard statistical regions (SSRs). Data by standard statistical regions are available on request.

2 The seasonally adjusted figures now relate only to claimants aged 18 or over in order to maintain the consistent series, available back to 1971 for Great Britain, Northern Ireland and the United Kingdom (1974 for Wales and Scotland; 1986 for the Government Office Regions), allowing for

the effect of the change in benefit regulations for under 18 year olds from September 1988. (See pages 398 - 400 of the November 1995 *Labour Market Trends*.) The denominators used to calculate claimant count rates are the sum of the appropriate mid-year estimates of employee jobs, the self-employed, Government-supported trainees, HM Forces and claimants of unemployment-related benefits. The 2002 and 2003 rates are based on mid-2002 estimates and earlier years are based on the corresponding mid-year estimates.

3 Includes Merseyside.

Source: Office for National Statistics; Enquiries 020 7533 6094



4.5A

Unemployment rates^{1,2} by Government Office Region

Percentages, seasonally adjusted ⁴

	North East	North West ³	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East
Quarterly								
	YCNC	YCND	YCNE	YCNF	YCNG	YCNH	YCNI	YCNJ
1998 Q1	8.4	6.7	7.1	5.2	6.2	5.4	8.2	4.4
Q2	8.2	6.9	7.3	4.9	5.9	4.9	8.5	4.4
Q3	8.3	6.6	7.1	5.4	6.0	4.5	7.7	4.5
Q4	9.6	7.0	7.0	4.8	6.5	4.3	7.6	3.9
1999 Q1	9.5	6.6	6.7	5.1	7.0	4.2	7.6	3.9
Q2	9.5	6.2	6.3	5.3	6.9	4.3	7.4	4.0
Q3	9.7	6.2	6.0	5.6	6.3	3.9	7.4	3.9
Q4	8.4	6.0	6.0	5.4	6.7	4.2	7.0	4.0
2000 Q1	8.8	6.0	6.4	5.1	6.1	3.9	7.6	3.5
Q2	8.9	5.3	6.1	4.8	6.1	3.7	7.3	3.3
Q3	8.9	5.4	5.9	4.8	5.7	3.7	6.8	3.1
Q4	7.7	5.3	6.1	4.7	6.0	3.6	6.8	3.4
2001 Q1	7.6	5.2	5.4	4.7	5.6	3.5	6.5	3.4
Q2	7.4	5.3	5.5	5.0	5.5	3.6	6.2	3.2
Q3	7.1	5.1	5.3	4.6	5.4	4.0	6.6	3.4
Q4	7.2	5.4	5.1	4.5	5.5	3.9	7.3	3.4
2002 Q1	7.2	5.4	5.0	4.8	5.6	3.6	6.9	3.6
Q2	6.5	5.5	5.3	4.6	5.7	3.7	6.8	3.9
Q3	6.2	5.5	5.6	4.6	5.9	3.8	7.0	4.0
Q4	7.5	5.0	5.1	4.7	5.7	4.1	6.6	4.0
2003 Q1	6.4	5.0	5.2	4.1	6.0	4.6	7.0	3.9
Q2	6.0	4.9	5.1	4.4	5.6	4.0	7.2	4.0
Q3	6.7	4.8	4.9	4.5	5.9	3.9	7.2	3.9
Q4	6.4	4.8	5.1	4.4	5.8	3.5	7.1	3.8
2004 Q1	5.3	4.6	4.7	4.7	5.5	3.4	6.9	3.9
Q2	5.5	4.4	4.6	4.4	5.5	3.8	7.0	3.7
	South West	England	Wales	Scotland		Great Britain	Northern Ireland	United Kingdom
Quarterly								
	YCNK	YCNL	YCNM	YCNN		YCNO	ZSFB	MGSX
1998 Q1	4.6	6.1	7.2	7.6		6.3	8.5	6.3
Q2	4.7	6.1	7.0	7.4		6.2	6.9	6.3
Q3	4.9	6.0	7.4	7.6		6.2	7.9	6.2
Q4	4.5	5.9	7.1	7.7		6.1	6.9	6.1
1999 Q1	4.9	5.9	7.2	7.4		6.1	7.2	6.1
Q2	4.5	5.8	7.5	7.1		6.0	7.6	6.0
Q3	4.4	5.7	7.2	6.9		5.8	7.1	5.9
Q4	4.1	5.6	7.2	7.1		5.8	6.7	5.8
2000 Q1	4.3	5.5	6.7	7.5		5.7	6.5	5.8
Q2	4.3	5.3	6.1	7.1		5.5	6.7	5.5
Q3	4.0	5.1	6.7	6.6		5.3	5.6	5.3
Q4	3.9	5.1	5.8	6.2		5.2	6.1	5.2
2001 Q1	3.9	4.9	6.0	5.9		5.0	6.2	5.1
Q2	3.6	4.8	6.1	6.3		5.0	6.1	5.0
Q3	3.6	4.9	5.5	6.6		5.0	6.0	5.1
Q4	3.6	5.0	5.8	6.7		5.2	5.9	5.2
2002 Q1	3.4	4.9	5.7	6.5		5.1	6.1	5.1
Q2	3.7	5.0	5.7	6.5		5.2	5.6	5.2
Q3	4.0	5.1	5.2	6.3		5.3	6.2	5.3
Q4	4.1	5.0	5.1	6.1		5.1	5.5	5.1
2003 Q1	3.7	5.0	4.8	5.8		5.1	5.2	5.1
Q2	3.5	4.9	4.6	5.6		5.0	5.2	5.0
Q3	3.2	4.9	4.7	5.8		5.0	5.6	5.0
Q4	3.1	4.8	4.8	5.8		4.9	6.3	4.9
2004 Q1	2.9	4.7	4.5	5.7		4.7	5.2	4.7
Q2	3.7	4.7	4.4	6.2		4.8	5.3	4.8

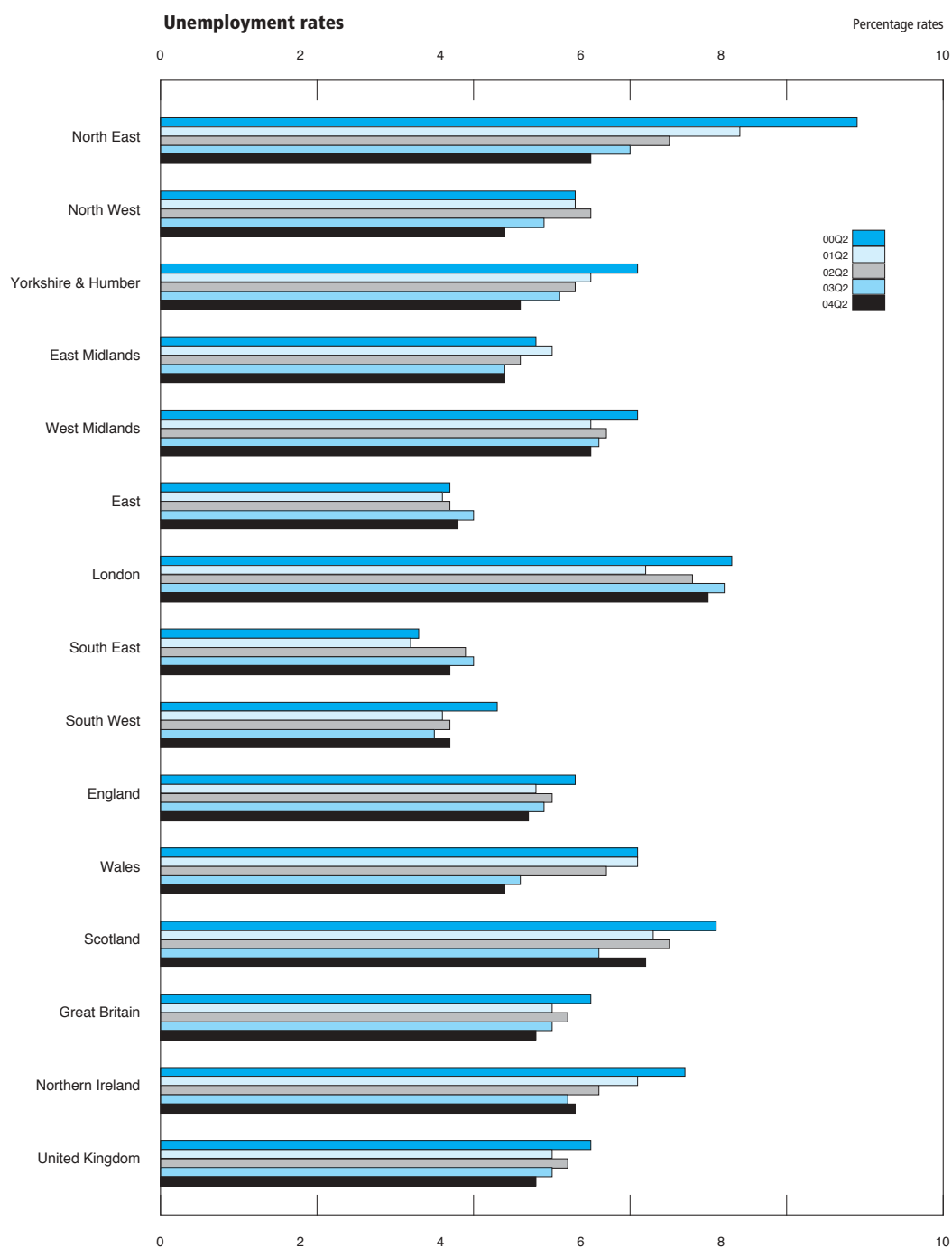
1 The data in this table have been adjusted to reflect the 2001 Census population data.

2 Data are from the Labour Force Survey. Unemployment rate is the percentage of economically active people who are unemployed on the ILO measure.

3 Includes Merseyside.

4 Seasonally adjusted estimates are revised in April each year.

Source: Office for National Statistics; Enquiries 020 7533 6094



4.6 Average earnings (including bonuses)

Great Britain

2000 = 100

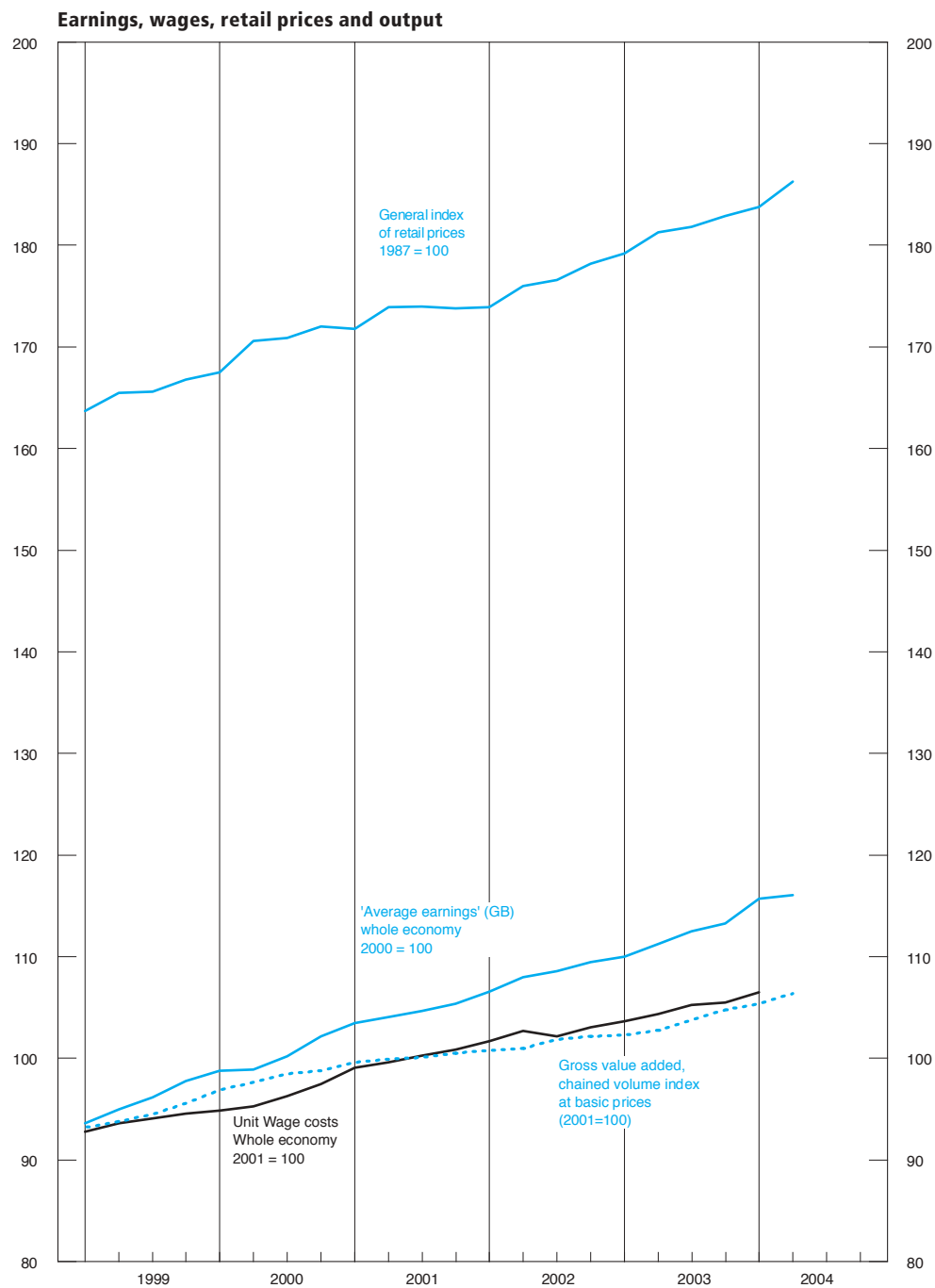
		Whole economy+	3 month average ²	Private sector	3 month average ²	Public sector	3 month average ²	Manufacturing industries ³	3 month average ^{2,3}	Production industries	3 month average ²	Service industries	3 month average ²	Private sector services	3 month average ²
Annual															
		LNMQ		LNKY		LNNJ		LNMR		LNMS		LNMT		JJGH	
2000		100.0		100.0		100.0		100.0		100.0		100.0		100.0	
2001		104.4		104.3		105.0		104.3		104.2		104.4		104.2	
2002		108.2		107.9		109.3		108.0		107.9		108.2		107.8	
2003		111.8		111.1 [†]		114.8		111.8		111.7		111.8		110.7	
Monthly															
			LNNC		LNND		LNNE		LNNG		LNNF		LNNH		JJGJ
2000	Jan	98.8	5.8	98.8	6.3	98.9	4.0	98.9	5.4	99.2	5.1	98.9	6.1	99.0	6.7
	Feb	98.7	5.9	98.7	6.3	99.5	4.3	98.2	5.3	98.5	5.1	98.9	6.1	98.9	6.8
	Mar	98.9	5.5	98.9	5.9	98.9	4.2	98.4	4.9	98.4	4.7	98.9	5.7	99.0	6.3
	Apr	98.7	5.0	98.5	5.2	99.2	4.1	98.7	4.5	98.6	4.1	98.6	5.1	98.4	5.4
	May	98.8	4.5	98.6	4.7	99.2	3.7	99.5	4.6	99.5	4.2	98.6	4.4	98.4	4.7
	Jun	99.2	4.1	99.0	4.2	100.0	3.6	99.3	4.6	99.3	4.2	99.0	3.9	98.8	4.0
	Jul	99.5	3.9	99.4	4.0	99.8	3.4	99.9	4.6	99.8	4.3	99.4	3.5	99.2	3.6
	Aug	100.3	4.0	100.3	4.1	100.1	3.4	100.1	4.3	100.1	4.0	100.4	3.8	100.4	3.9
	Sep	100.7	4.1	100.8	4.3	100.4	3.4	100.9	4.3	100.8	4.0	100.7	4.0	100.7	4.3
	Oct	101.3	4.2	101.4	4.4	100.8	3.4	101.3	4.3	101.2	4.0	101.4	4.2	101.4	4.5
	Nov	101.9	4.3	101.9	4.4	101.4	3.6	102.2	4.6	102.1	4.3	101.9	4.2	101.9	4.4
	Dec	103.3	4.5	103.7	4.6	101.7	3.9	102.7	4.7	102.6	4.4	103.4	4.5	103.9	4.7
2001	Jan	103.2	4.6	103.4	4.7	102.2	3.8	102.7	4.5	102.7	4.2	103.3	4.6	103.6	4.7
	Feb	103.6	4.8	103.7	4.9	102.6	3.6	103.4	4.7	103.7	4.5	103.8	4.8	104.0	5.0
	Mar	103.7	4.8	103.7	4.8	103.3	3.6	103.5	4.8	103.3	4.6	103.8	4.8	103.8	4.9
	Apr	103.9	5.1	103.9	5.1	104.6	4.3	103.9	5.2	103.7	5.1	103.9	5.1	103.8	5.1
	May	104.0	5.2	103.8	5.2	105.0	5.2	104.1	5.0	104.0	4.9	103.9	5.2	103.6	5.2
	Jun	104.3	5.3	104.1	5.3	105.3	5.5	104.3	5.0	104.1	4.8	104.2	5.3	103.9	5.3
	Jul	104.4	5.1	104.2	5.1	105.6	5.6	104.4	4.7	104.3	4.6	104.3	5.2	103.9	5.1
	Aug	104.8	4.9	104.6	4.8	106.0	5.6	104.8	4.7	104.6	4.6	104.8	4.9	104.4	4.6
	Sep	105.0	4.6	104.8	4.4	106.0	5.7	105.2	4.5	105.0	4.4	104.9	4.5	104.5	4.2
	Oct	105.1	4.2	104.9	3.9	106.4	5.7	105.2	4.3	105.1	4.2	105.0	4.1	104.7	3.6
	Nov	105.2	3.8	105.0	3.5	106.4	5.4	105.2	3.7	105.0	3.6	105.1	3.7	104.7	3.2
	Dec	105.8	3.1	105.6	2.8	106.8	5.2	105.4	3.1	105.2	3.1	105.7	3.0	105.3	2.4
2002	Jan	106.3	2.9	106.1	2.5	107.0	4.9	105.9	2.9	105.8	2.8	106.3	2.7	106.0	2.1
	Feb	106.9	2.8	106.7	2.4	107.2	4.7	106.0	2.8	106.0	2.6	107.1	2.8	107.0	2.2
	Mar	106.7	3.0	106.4	2.7	107.9	4.5	106.4	2.8	106.5	2.8	106.6	2.9	105.9	2.4
	Apr	108.0	3.3	108.1	3.2	108.3	4.1	107.4	2.9	107.2	2.9	108.0	3.3	108.1	3.0
	May	107.9	3.5	107.8	3.5	108.7	3.8	107.7	3.2	107.6	3.3	107.9	3.5	107.7	3.4
	Jun	108.2	3.8	108.0	3.9	109.0	3.5	108.1	3.5	108.0	3.5	108.2	3.9	108.0	4.0
	Jul	108.4	3.8	108.2	3.8	109.6	3.6	108.3	3.6	108.2	3.7	108.3	3.9	108.0	3.9
	Aug	108.6	3.7	108.5	3.8	109.1	3.4	108.8	3.7	108.7	3.8	108.5	3.7	108.2	3.8
	Sep	108.8	3.7	108.5	3.7	110.1	3.5	108.8	3.6	108.7	3.7	108.7	3.7	108.2	3.7
	Oct	109.0	3.6	108.6	3.6	110.9	3.7	109.3	3.7	109.2	3.8	108.9	3.6	108.3	3.5
	Nov	110.0	4.0	109.6	3.8	111.7	4.4	109.4	3.8	109.3	3.9	110.2	4.0	109.6	3.9
	Dec	109.5	3.9	108.9	3.7	112.1	4.7	109.9	4.1	109.8	4.1	109.2	3.9	108.3	3.6
2003	Jan	109.1	3.6	108.4	3.2	112.6	5.1	110.1	4.1	110.1	4.2	109.4	3.7	107.5	3.0
	Feb	110.0	3.0	109.3	2.6	112.8	5.1	110.7	4.2	110.4	4.2	109.7	2.9	108.7	1.9
	Mar	110.9	3.2	110.2	2.7	113.3	5.2	112.4	4.7	112.3	4.5	110.4	3.0	109.4	2.1
	Apr	110.7	3.1	110.0 [†]	2.6	113.9	5.1 [†]	110.3	4.2	110.2	4.1	110.8	2.9	109.8	2.1
	May	111.4	3.2	110.8	2.8	113.8 [†]	5.0 [†]	111.1	3.8	111.0	3.8	111.6	3.2	110.8 [†]	2.6
	Jun	111.7 [†]	3.0	111.0	2.5 [†]	114.7	5.0	111.4 [†]	3.0 [†]	111.4 [†]	3.0	111.8	3.1	110.8	2.3
	Jul	112.3	3.4 [†]	111.7	2.9	115.4	5.1	111.8	3.1	111.6	3.2 [†]	112.5	3.5	111.6	2.9
	Aug	112.4	3.4	111.5	2.9	115.6	5.5	111.9	3.1	111.8	3.1	112.6	3.6 [†]	111.5	3.0
	Sep	112.8	3.6	112.0	3.1	116.1	5.6	112.5	3.2	112.3	3.1	112.9	3.8	111.8	3.2
	Oct	113.0	3.6	112.3	3.2	116.1	5.4	112.8	3.2	112.6	3.1	113.0	3.8	111.9	3.2
	Nov	113.7	3.6	113.0	3.2	116.4	4.8	113.3	3.4	113.1	3.3	113.8	3.6	112.7	3.2
	Dec	113.2	3.4	112.3	3.2	116.9	4.4	113.6	3.4	113.4	3.3	112.7	3.4	111.4	3.0
2004	Jan	117.1	4.7	117.2	4.8	117.1	4.2	114.0	3.5	114.0	3.4	118.8	5.0	118.2	5.2
	Feb	114.3	4.9	113.6	5.0	117.8	4.3	114.7	3.5	114.8	3.6	113.7	5.2	112.5	5.4
	Mar	115.7	5.2	115.1	5.5	118.2	4.3	116.1	3.5	115.8	3.5	115.7	5.7	114.9	6.1
	Apr	115.8	4.3	115.2	4.3	118.6	4.3	115.5	3.9	115.4	3.9	115.7	4.3	114.7	4.3
	May	116.1	4.4	115.3	4.4	119.0	4.3	115.9	4.1	115.7	4.0	115.8	4.3	114.7	4.3
	Jun ¹	116.5	4.4	115.7	4.3	119.8	4.4	116.0	4.4	115.8	4.3	116.4	4.1	115.2	4.0

1 Provisional.

2 The 3 month average is the change in the average seasonally adjusted index values for the last 3 months compared with the same period a year ago.

3 ONS regrets that the series have been withdrawn for the period 1963-1982, owing to an irregularity.

Source: Office for National Statistics; Enquiries 01633 816024



4.7 Productivity and Unit Wage costs¹

United Kingdom

2001 = 100

	Productivity jobs			Output per worker ²	Output per filled job ³			Output per hour worked ⁴			Unit wage costs ⁵	
	Whole economy	Total production industries	Manufacturing industries		Whole economy	Total production industries	Manufacturing industries	Whole economy	Total production industries	Manufacturing industries	Whole economy	Manufacturing industries
Annual	LNNM	LNOJ	LNOK	A4YM	LNNN	LNNW	LNNX	LZVB	LZVK	LZVF	LNNK	LNNQ
2001	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2002	100.7 [†]	95.6 [†]	95.6 [†]	100.7	100.7 [†]	102.0 [†]	101.5 [†]	101.8	102.6 [†]	102.2 [†]	102.4 [†]	102.0 [†]
2003	101.5	91.5	91.3	101.8	101.9	106.4	106.6	103.5	107.6	107.9	104.7	100.5
Quarterly												
2001 Q1	99.7 [†]	101.8 [†]	101.7 [†]	99.8	99.8	100.1 [†]	100.6 [†]	99.7	100.8 [†]	101.0 [†]	99.1 [†]	98.3 [†]
Q2	100.1	100.8	100.8	99.9	99.7 [†]	99.5	99.2	99.5	99.2	99.0	99.6	100.5
Q3	99.9	99.2	99.4	100.1	100.1	100.7	100.5	100.0	100.2	100.2	100.3	99.9
Q4	100.2	98.2	98.1	100.3	100.3	99.7	99.7	100.7	99.8	99.8	100.9	101.2
2002 Q1	100.4	97.1	97.1	100.4	100.4	100.7	100.4	100.9	100.5	100.4	101.7	101.3
Q2	100.6	96.5	96.3	100.3	100.4	101.2	100.0	101.8	102.7	101.5	102.7	103.3
Q3	100.7	94.7	94.9	101.2	101.2	102.9	102.7	102.1	103.6	103.7	102.2	101.4
Q4	101.2	94.1	93.9	101.0	100.9	103.2	102.7	102.4	103.7	103.2	103.1	102.2
2003 Q1	101.3	93.0	92.9	100.9	101.0	104.6	104.1	102.3	105.3	104.9	103.7	102.3
Q2	101.4	91.9	91.7	101.2	101.4	105.7	105.8	102.7	107.0	107.1	104.4	100.5
Q3	101.5	91.0	90.8	102.0	102.2	107.0	107.5	103.6	107.6	108.1	105.3	99.9
Q4	101.6	90.0	89.8	103.0	103.2	108.4	109.2	105.2	110.6	111.4	105.5	99.4
2004 Q1	102.2	89.5	89.3	102.9	103.1	108.4	109.5	104.8	109.5	110.3	106.5	100.6
Q2	..	..	88.7	..	..	..	111.1	..	..	..	..	99.9
Monthly												
2003 Jan	..	..	93.4 [†]	103.2 [†]	102.3 [†]
Feb	..	..	92.9	..	..	..	104.3	..	..	..	..	101.7
Mar	..	..	92.5	..	..	..	104.8	..	..	..	..	102.8
Apr	..	..	92.1	..	..	..	105.3	..	..	..	..	100.3
May	..	..	91.7	..	..	..	105.7	..	..	..	..	100.7
Jun	..	..	91.3	..	..	..	106.3	..	..	..	..	100.4
Jul	..	..	91.1	..	..	..	107.3	..	..	..	..	99.8
Aug	..	..	90.7	..	..	..	107.2	..	..	..	..	100.0
Sep	..	..	90.5	..	..	..	107.9	..	..	..	..	99.9
Oct	..	..	90.2	..	..	..	109.0	..	..	..	..	99.2
Nov	..	..	89.8	..	..	..	109.0	..	..	..	..	99.6
Dec	..	..	89.5	..	..	..	109.6	..	..	..	..	99.3
2004 Jan	..	..	89.4	..	..	..	109.8	..	..	..	..	99.6
Feb	..	..	89.3	..	..	..	109.2	..	..	..	..	100.7
Mar	..	..	89.2	..	..	..	109.4	..	..	..	..	101.6
Apr	..	..	88.9	..	..	..	110.8	..	..	..	..	100.0
May	..	..	88.7	..	..	..	111.6	..	..	..	..	99.5
Jun	..	..	88.5	..	..	..	111.0	..	..	..	..	100.1

Percentage change, quarter on corresponding quarter of previous year

Quarterly	LNNQ	LNNR	LNNJ	A4YN	LNNP	LNNI	LNNU	LZVD	LZVM	LZVH	LOJE	LOJF
	LNNQ	LNNR	LNNJ	A4YN	LNNP	LNNI	LNNU	LZVD	LZVM	LZVH	LOJE	LOJF
2001 Q1	0.6 [†]	-4.4 [†]	-4.9 [†]	1.8	2.1 [†]	5.4 [†]	6.9 [†]	0.9	5.6	7.0	4.5 [†]	-2.0 [†]
Q2	0.8	-4.2	-4.5	1.4	1.4	2.9	3.5	1.1	3.1 [†]	3.7 [†]	4.6	1.4
Q3	0.4	-4.8	-4.8	1.1	1.2	3.3	3.4	0.7	2.7	3.0	4.2	1.0
Q4	0.7	-4.3	-4.7	0.8	1.0	0.4	0.4	1.9	-	-0.2	3.5	2.7
2002 Q1	0.6	-4.6	-4.5	0.6	0.6	0.6	-0.2	1.2	-0.3	-0.7	2.6	3.0
Q2	0.5	-4.3	-4.4	0.5	0.7	1.7	0.8	2.3	3.5	2.6	3.2	2.8
Q3	0.7	-4.6	-4.5	1.1	1.0	2.2	2.2	2.1	3.4	3.5	1.8	1.5
Q4	1.0	-4.2	-4.3	0.7	0.6	3.5	3.1	1.6	3.9	3.4	2.1	1.0
2003 Q1	0.9	-4.2	-4.3	0.5	0.6	3.8	3.7	1.4	4.8	4.6	2.0	1.0
Q2	0.8	-4.7	-4.8	0.8	1.0	4.4	5.8	0.8	4.2	5.4	1.6	-2.7
Q3	0.8	-3.9	-4.3	0.8	1.0	4.0	4.7	1.5	3.8	4.2	3.0	-1.4
Q4	0.3	-4.4	-4.3	2.0	2.2	5.1	6.3	2.8	6.7	7.9	2.3	-2.7
2004 Q1	0.9	-3.7	-3.9	1.9	2.0	3.7	5.1	2.4	4.0	5.1	2.7	-1.6
Q2	..	..	-3.3	..	..	..	5.0	..	..	..	..	-0.6

1 The full productivity and unit wage costs data sets with associated articles can be found on the National Statistics web site at www.statistics.gov.uk/productivity

Contact the Labour Market Statistics helpline (020 7533 6094) for further information.

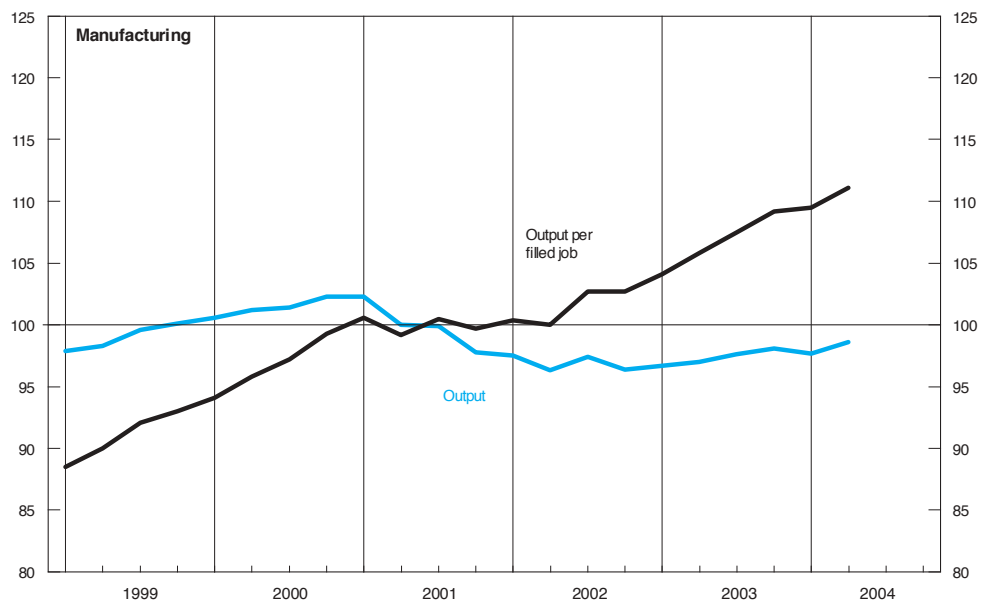
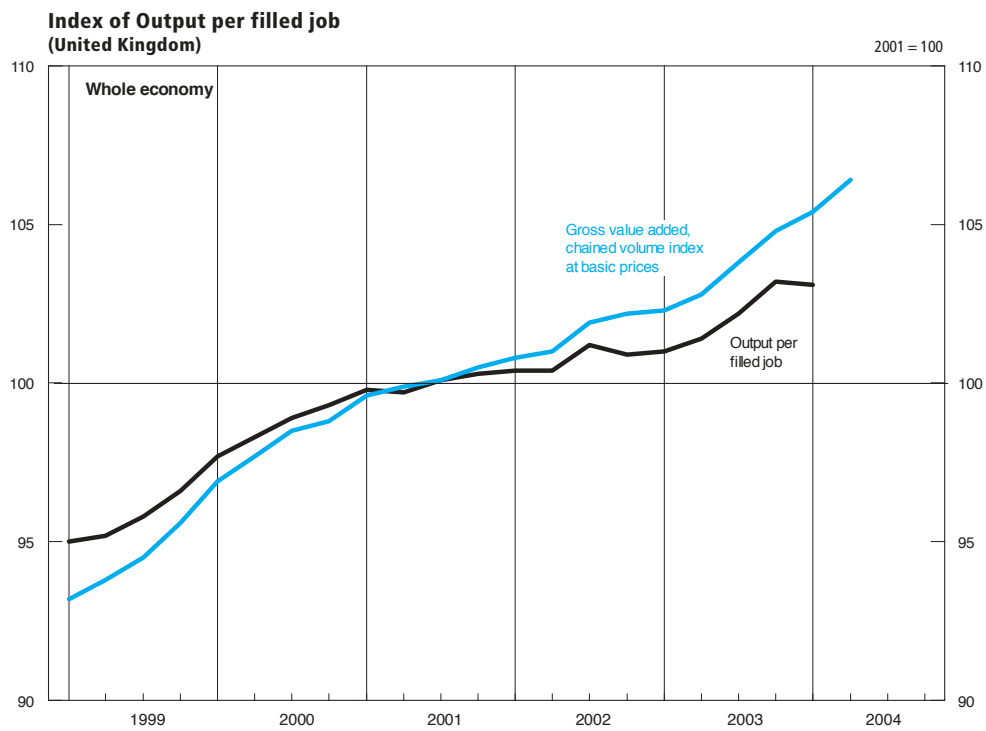
2 Output per worker is the ratio of Gross value Added (GVA) at basic prices to LFS Total Employment. On 29 July, ONS published details on the National Statistics website of a change in productivity methodology. Output per worker is the new headline measure.

3 Output per filled job is the ratio of Gross value added at basic prices to productivity jobs.

4 Output per hour worked is the ratio of Gross value added at basic prices to productivity hours.

5 Unit wage costs are calculated as total wages and salaries per job divided by output per job.

Source: Office for National Statistics; Enquiries 01633 812766



5.1 Output of production industries¹

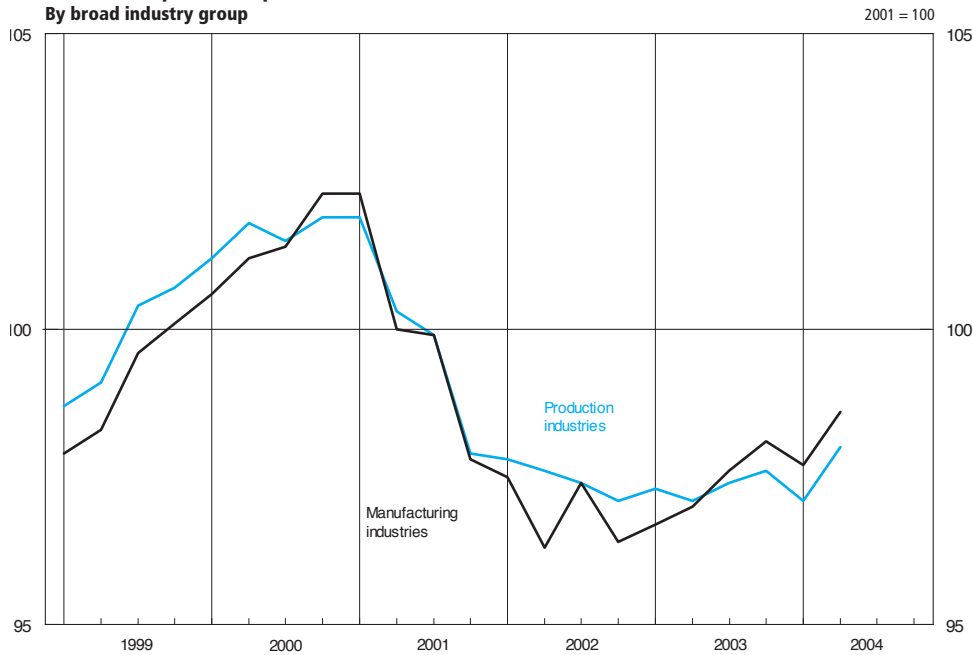
2001 = 100

	Broad industry groups				By main industrial groupings			
	Total production industries+	Mining and quarrying	Electricity, gas and water supply	Total manufacturing industries+	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods and energy
<i>2001 weights</i>	<i>1 000</i>	<i>122</i>	<i>87</i>	<i>791</i>	<i>37</i>	<i>274</i>	<i>211</i>	<i>478</i>
Annual	CKYW	CKYX	CKYZ	CKYY	UFIU	UFJS	UFIL	JMOH
1999	99.7	109.3	95.6	98.9	96.0	98.4	98.1	101.6
2000	101.6	105.8	97.7	101.4	97.5	98.8	101.6	103.5
2001	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2002	97.5	99.7	99.5	96.9	101.3	100.0	92.2	98.1
2003	97.4	94.3	101.7	97.3	99.6	100.0	95.0	96.7
Quarterly								
1999 Q1	98.7	108.2	94.7	97.9	93.9	97.3	96.2	101.1
Q2	99.1	109.3	94.8	98.3	94.9	98.2	96.9	101.0
Q3	100.4	110.6	96.1	99.6	97.1	99.0	99.2	102.0
Q4	100.7	109.0	96.9	100.1	98.0	99.1	99.9	102.2
2000 Q1	101.2	109.9	96.4	100.6	97.9	99.1	99.8	103.3
Q2	101.8	108.3	98.7	101.2	97.5	99.2	101.1	103.9
Q3	101.5	104.6	97.6	101.4	97.3	98.6	101.7	103.5
Q4	101.9	100.4	98.0	102.3	97.5	98.3	103.9	103.3
2001 Q1	101.9	99.0	101.7	102.3	100.9	100.0	105.0	101.6
Q2	100.3	101.6	100.6	100.0	99.5	99.6	100.0	100.8
Q3	99.9	100.5	99.4	99.9	99.3	100.3	99.6	99.8
Q4	97.9	98.8	98.3	97.8	100.2	100.1	95.4	97.8
2002 Q1	97.8	99.5	98.0	97.5	102.5	100.6	92.8	98.1
Q2	97.6	104.7	98.9	96.3	100.8	100.0	91.5	98.7
Q3	97.4	95.2	100.8	97.4	100.5	100.7	92.7	97.4
Q4	97.1	99.3	100.4	96.4	101.4	98.8	92.0	98.1
2003 Q1	97.3	98.9	100.2	96.7	98.5	99.4	93.3	97.7
Q2	97.1	95.5	100.4	97.0	99.2	99.6	94.7	96.6
Q3	97.4	93.0	102.5	97.6	100.2	100.5	95.5	96.3
Q4	97.6	90.0	103.8	98.1	100.3	100.5	96.4	96.3
2004 Q1	97.1	89.3	102.5	97.7	100.8	100.0	94.6	96.3
Q2	98.0	91.6	101.9	98.6	103.2	99.8	97.4	96.8
Monthly								
2002 Jan	97.9	101.3	99.8	97.2	101.9	99.3	93.0	98.9
Feb	97.7	98.4	95.0	97.8	102.3	101.7	92.4	97.3
Mar	97.9	98.9	99.1	97.6	103.3	100.6	93.1	98.0
Apr	98.3	101.1	97.4	98.0	103.9	101.3	93.0	98.6
May	99.6	106.9	100.7	98.4	102.7	100.9	94.9	100.7
Jun	94.8	106.0	98.8	92.6	95.7	97.7	86.6	96.7
Jul	97.1	93.1	103.0	97.0	99.1	100.7	91.5	97.3
Aug	97.6	92.6	101.4	98.0	101.4	100.9	94.4	96.9
Sep	97.7	100.0	98.1	97.2	101.0	100.6	92.1	98.1
Oct	96.7	99.9	99.3	95.9	100.4	98.7	90.9	97.9
Nov	97.1	98.6	98.6	96.7	102.1	99.1	91.9	97.8
Dec	97.6	99.4	103.1	96.7	101.8	98.6	93.2	98.7
2003 Jan	96.9	98.2	100.0	96.3	100.0	98.7	92.7	97.4
Feb	97.7	99.9	102.1	96.9	98.0	99.6	93.6	98.4
Mar	97.2	98.5	98.4	96.9	97.4	100.0	93.5	97.3
Apr	96.9	95.0	99.2	97.0	98.9	98.9	95.7	96.2
May	97.1	95.4	100.2	97.0	98.4	100.2	93.9	96.6
Jun	97.4	96.1	101.9	97.1	100.2	99.5	94.6	97.2
Jul	97.9	96.4	101.2	97.8	101.4	100.5	95.8	97.1
Aug	97.1	92.0	102.6	97.3	99.4	100.5	94.4	96.2
Sep	97.3	90.5	103.6	97.6	99.9	100.4	96.2	95.7
Oct	98.1	91.3	105.3	98.3	100.1	101.3	96.5	96.8
Nov	97.3	89.9	102.6	97.9	101.4	99.8	96.6	95.9
Dec	97.4	89.0	103.5	98.1	99.5	100.3	96.2	96.2
2004 Jan	97.3	89.6	101.7	98.1	100.2	100.1	95.1	96.5
Feb	96.8	88.0	103.0	97.5	101.1	99.7	94.3	95.9
Mar	97.1	90.4	102.8	97.6	100.9	100.1	94.6	96.3
Apr	97.9 [†]	90.7 [†]	102.7 [†]	98.5 [†]	103.5 [†]	100.5 [†]	96.0 [†]	96.8
May	98.2	90.9	101.8	99.0	103.9	99.5	98.5	97.0 [†]
Jun	97.9	93.1	101.2	98.3	102.3	99.6	97.8	96.7

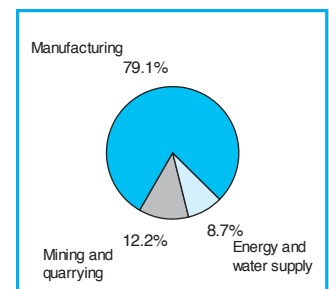
1 The figures contain, where appropriate, an adjustment for stock changes.

Source: Office for National Statistics; Enquiries 01633 812059

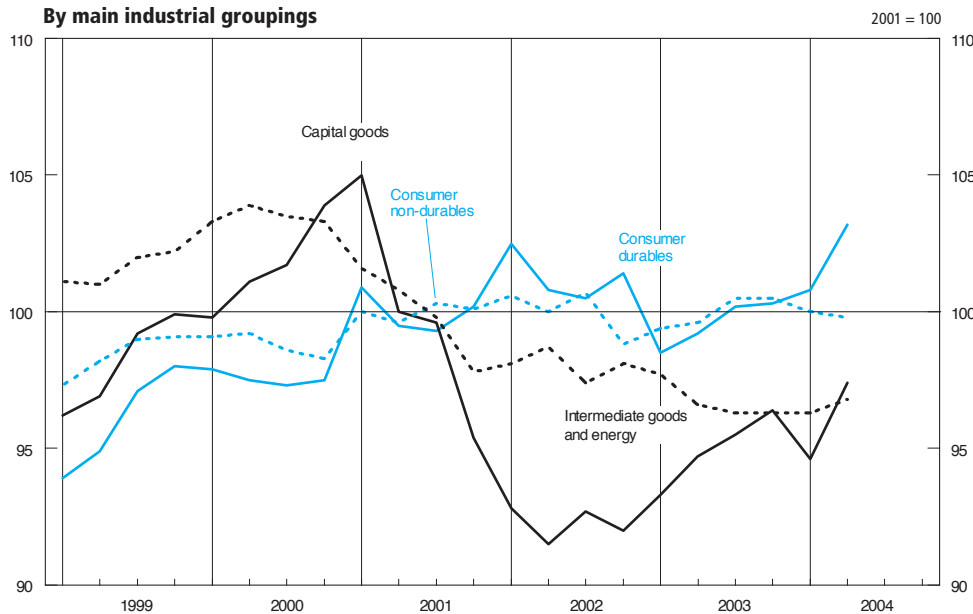
Index of output of the production industries
By broad industry group



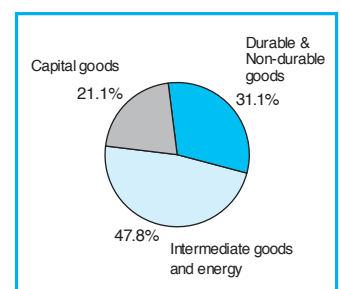
Share of output in 2001



By main industrial groupings



Share of output in 2001



5.2 Engineering and construction : output and orders

Seasonally adjusted Index numbers at constant prices¹

	Engineering (2000 =100)									Construction(GB) ⁵ (2000=100)	
	Total			Home			Export			Gross output+ ⁴	Orders received
	Orders ² on Hand	New ³ Orders	Turnover	Orders ² on Hand	New ³ Orders	Turnover	Orders ² on Hand	New ³ Orders	Turnover		
Annual	JIQI	JIQH	JIQJ	JIQC	JIQB	JIQD	JIQF	JIQE	JIQG	SFZX	SGAA
1999	92.0	91.8	91.9	92.8	94.2	93.5	90.8	88.6	89.9	99.5	98.4
2000	103.4	100.0	100.0	104.9	100.0	100.0	100.8	100.0	100.0	100.0	100.0
2001	94.4	89.5	95.3	104.6	94.5	98.4	77.2	82.9	91.2	102.0	99.5
2002	91.7	80.4	84.1	104.2	87.3	91.1	70.5	71.2	74.8	106.3	102.5
2003	92.4	80.8	83.5	109.2	91.2	93.7	63.9	66.7	70.1	111.0	97.8
Quarterly											
1999 Q1	83.1	88.6	90.2	79.9	88.5	91.1	88.5	88.6	89.0	99.5	100.8
Q2	82.4	86.8	90.6	80.6	88.7	91.3	85.3	84.2	89.8	97.9	100.4
Q3	86.8	95.0	93.0	85.3	98.1	95.9	89.3	90.8	89.0	100.3	95.9
Q4	92.0	96.9	93.9	92.8	101.5	95.6	90.8	90.8	91.7	100.1	96.4
2000 Q1	96.2	95.9	94.1	96.6	96.2	95.1	95.7	95.5	92.8	102.4	97.5
Q2	100.6	101.6	99.9	100.2	101.0	100.3	101.3	102.4	99.3	99.4	106.9
Q3	102.7	100.7	101.5	101.8	99.2	101.0	104.4	102.8	102.2	98.3	102.1
Q4	103.4	101.8	104.5	104.9	103.6	103.6	100.8	99.4	105.7	99.9	93.5
2001 Q1	104.4	102.1	104.4	106.2	102.2	104.7	101.3	102.0	104.2	101.2	108.4
Q2	102.0	91.0	97.1	108.2	97.8	99.0	91.3	81.9	94.5	101.3	95.6
Q3	99.9	86.6	92.0	107.6	91.5	96.0	86.9	79.9	86.6	102.1	103.6
Q4	94.4	78.5	87.8	104.6	86.4	93.9	77.2	67.8	79.6	103.5	90.5
2002 Q1	95.1	82.1	84.4	105.5	87.9	90.8	77.4	74.2	76.0	105.3	107.6
Q2	93.9	80.2	84.4	105.8	88.1	91.3	73.8	69.6	75.1	104.7	90.7
Q3	93.7	81.5	84.6	106.2	88.5	91.7	72.6	72.2	75.2	106.8	109.2
Q4	91.7	77.9	83.0	104.2	84.5	90.7	70.5	69.0	72.9	108.5	102.5
2003 Q1	90.4	77.9	82.9	102.8	87.3	94.1	69.4	65.4	68.1	105.6	104.7
Q2	91.7	82.2	83.5	104.8	92.4	93.5	69.5	68.5	70.2	110.4	95.8
Q3	91.6	80.6	83.5	105.9	90.9	93.3	67.4	66.6	70.5	113.3	98.0
Q4	92.4	82.3	84.2	109.2	94.1	93.7	63.9	66.3	71.7	114.9	92.7
2004 Q1	92.5	78.4	81.0	108.4	84.0	88.2	65.5	71.1	71.4	115.1	107.4 [†]
Q2	91.7	78.7	82.4	106.1	83.8	89.7	67.2	71.8	72.6	..	109.0
Monthly											
2002 Jan	94.7	81.5	84.1	104.3	84.2	90.0	78.5	78.0	76.3	..	94.1
Feb	95.9	85.7	84.3	105.6	92.1	90.7	79.5	77.2	75.9	..	104.3
Mar	95.1	79.0	84.8	105.5	87.5	91.6	77.4	67.5	75.7	..	124.4
Apr	94.7	81.4	85.6	105.4	89.1	93.3	76.7	71.2	75.3	..	82.5
May	94.3	82.5	87.0	105.9	92.5	94.1	74.6	69.2	77.5	..	96.0
Jun	93.9	76.6	80.6	105.8	82.8	86.6	73.8	68.3	72.6	..	93.6
Jul	94.4	83.8	84.8	106.0	88.3	91.0	74.8	77.8	76.6	..	113.1
Aug	94.8	81.9	83.6	107.9	95.2	91.6	72.5	64.1	73.0	..	100.2
Sep	93.7	78.8	85.4	106.2	82.0	92.4	72.6	74.6	76.1	..	114.4
Oct	93.9	80.5	82.5	105.5	83.5	89.8	74.4	76.5	72.9	..	93.2
Nov	91.3	71.1	83.0	102.7	76.1	90.2	71.9	64.4	73.6	..	92.5
Dec	91.7	82.0	83.4	104.2	94.0	92.0	70.5	66.0	72.1	..	121.9
2003 Jan	91.6	78.8	84.0	102.5	81.9	95.9	73.1	74.5	68.3	..	110.6
Feb	91.2	79.1	83.3	103.1	93.9	95.2	70.9	59.3	67.5	..	112.9
Mar	90.4	75.9	81.5	102.8	86.1	91.2	69.4	62.4	68.6	..	90.5
Apr	93.9	93.4	83.9	108.0	110.5	94.2	70.0	70.4	70.4	..	111.7
May	92.6	76.5	83.9	106.0	83.4	95.0	69.9	67.3	69.3	..	89.5
Jun	91.7	76.8	82.6	104.8	83.4	91.4	69.5	67.8	70.9	..	86.2
Jul	92.3	83.9	84.8	104.8	90.9	95.1	71.1	74.4	71.3	..	111.1
Aug	92.2	79.5	82.3	106.4	94.2	91.8	68.3	59.7	69.8	..	80.7
Sep	91.6	78.3	83.3	105.9	87.5	93.0	67.4	65.8	70.4	..	102.3
Oct	92.2	84.1	85.1	106.9	95.7	95.6	67.1	68.5	71.1	..	87.3
Nov	94.5	88.8	83.5	111.0	105.4	93.5	66.4	66.4	70.2	..	102.7
Dec	92.4	73.9	84.1	109.2	81.2	91.9	63.9	64.1	73.8	..	88.2
2004 Jan	94.1	85.2	81.6	109.8	89.2	89.5	67.4	79.9	71.1	..	90.2
Feb	91.3	68.1	80.7	106.9	72.6	87.2	64.8	62.1	72.1	..	122.4
Mar	92.5	82.0	80.6	108.4	90.1	87.9	65.5	71.3	71.0	..	109.8
Apr	90.8 [†]	72.7 [†]	81.4 [†]	104.7	72.1 [†]	87.9 [†]	67.1	73.6 [†]	72.8 [†]	..	106.1 [†]
May	91.6	83.1	83.0	105.3 [†]	88.9	90.1	68.3 [†]	75.2	73.4	..	114.6
Jun	91.7	80.2	82.7	106.1	90.4	91.1	67.2	66.6	71.7	..	106.2

1 The figures shown represent the output of United Kingdom based manufacturers classified to Subsections DK and DL of the Standard Industrial Classification (2003).

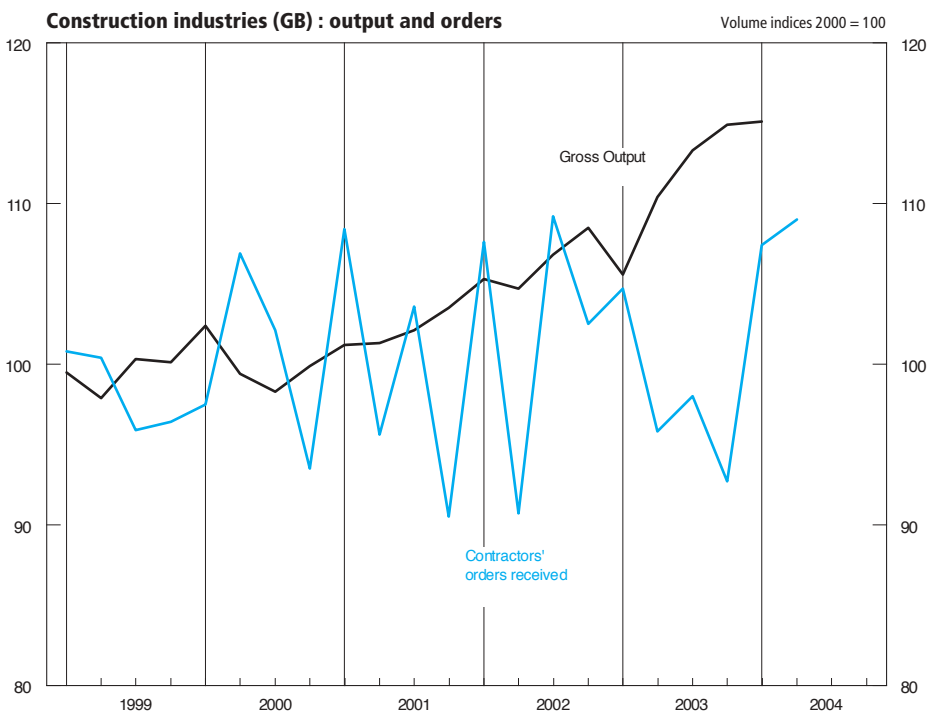
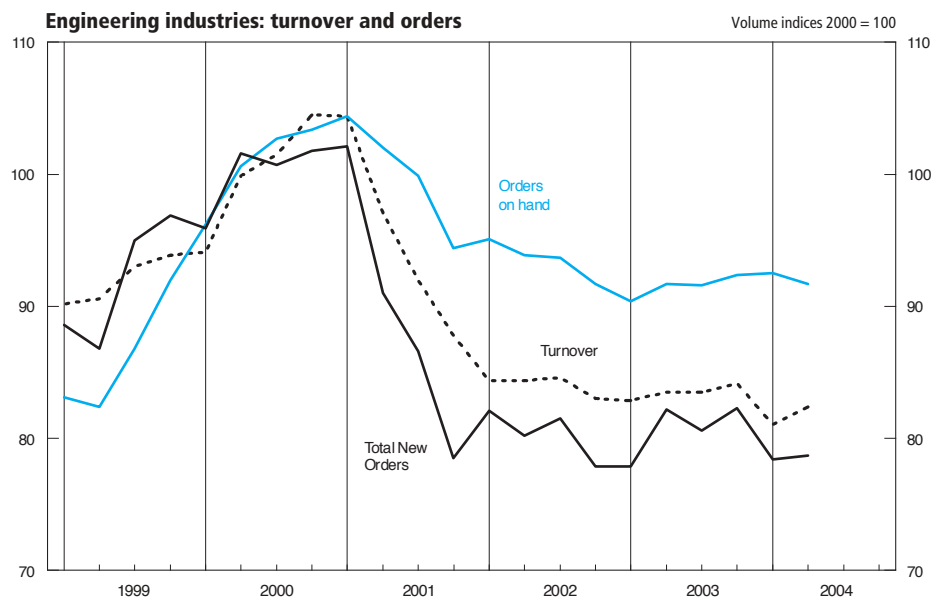
2 For Orders on Hand, the annual and quarterly index values represent the value at the end of the period in question, rather than the average value for that period, so the annual value shown for 2000 may not equal 100.

3 Net of cancellations.

4 This index is based upon a gross output series which includes repair and maintenance estimates, unrecorded output by self-employed workers and small firms and output by the direct labour departments of the public sector.

5 Data are subject to revisions following changes to the deflation methodology.

Sources: Office for National Statistics; Enquiries Columns 1-9 01633 812540; Department of Trade and Industry; Enquiries Columns 10-11 020 7944 5583



5.3 Motor vehicle and steel production

	Passenger cars ¹				Commercial vehicles ¹				Crude steel production (NSA) ² (thousand tonnes)
	Not seasonally adjusted		Seasonally adjusted ⁴		Not seasonally adjusted		Seasonally adjusted ⁴		
	Total production (thousands)	<i>of which</i> for export (thousands)	Total production (thousands)	<i>of which</i> for export (thousands)	Total production (thousands)	<i>of which</i> for export (thousands)	Total production (thousands)	<i>of which</i> for export (thousands)	
Annual	FFAA	FFAB	FFAO	FFAP	FFAC	FFAD	FFAQ	FFAR	BCBS
1999	148.9	94.9	148.9	94.9	15.5	6.2	15.5	6.2	16 283.8
2000	136.8	88.6	136.8	88.6	14.3	6.3	14.4	6.3	15 154.6
2001	124.4	74.5	124.4	74.5	16.1	8.0	16.1	8.0	13 542.7
2002	135.7	87.3	135.8	87.3	15.9	9.5	15.9	9.5	11 667.1
2003	138.1	95.3	138.1	95.3	15.7	8.6	15.7	8.6	13 128.4
Quarterly									
1999 Q1	153.5	97.6	142.8	93.6	17.8	7.5	16.7	6.9	4 126.5
Q2	149.6	97.7	144.8	91.7	16.8	6.6	16.0	6.3	4 376.9
Q3	135.9	76.7	149.7	94.6	12.1	4.4	14.3	5.5	4 054.9
Q4	156.5	107.5	158.3	99.6	15.3	6.4	15.0	6.2	3 725.5
2000 Q1	164.8	105.0	151.8	100.4	16.7	8.4	15.3	7.8	4 442.5
Q2	144.4	97.6	140.9	91.5	17.3	8.2	16.7	7.9	4 019.8
Q3	111.7	63.2	126.2	79.1	9.5	3.5	11.9	4.6	3 288.7
Q4	126.3	88.6	128.2	83.3	13.7	5.2	13.6	5.0	3 403.6
2001 Q1	129.0	75.5	119.8	73.0	17.2	6.6	15.6	6.0	3 651.7
Q2	124.1	76.5	119.5	70.9	16.6	7.7	15.4	7.2	3 729.6
Q3	111.9	61.0	125.2	75.3	14.5	7.4	17.9	9.3	3 205.5
Q4	132.4	85.1	133.0	78.9	16.1	10.3	15.4	9.5	2 955.9
2002 Q1	149.9	85.0	138.8	82.0	16.7	8.4	15.2	7.9	3 046.3
Q2	133.5	94.0	128.3	85.4	14.8	9.4	14.2	9.0	3 060.0
Q3	130.6	80.7	146.8	98.2	14.9	9.3	17.6	11.1	2 801.9
Q4	128.7	89.3	129.4	83.5	17.3	10.9	16.8	10.1	2 758.9
2003 Q1	141.4	91.5	131.7	88.3	16.5	9.3	15.1	8.9	3 081.0
Q2	144.4	101.3	138.9	93.5	15.5	8.3	14.8	8.0	3 258.7
Q3	130.4	85.8	143.6	102.0	13.4	6.9	15.6	8.1	3 264.3
Q4	136.2	102.7	138.2	97.4	17.6	9.7	17.4	9.2	3 524.4
2004 Q1	148.5	101.2	135.4	96.5	19.3	10.4	17.8	9.9	3 380.7
Q2	142.7	102.3	137.9 [†]	96.1 [†]	16.9	11.2	16.6	11.0 [†]	3 681.4 [†]
Monthly									
2002 Jul	134.5	84.9	134.9	89.9	15.2	9.9	16.2	10.7	1 082.0*
Aug	112.8	67.0	170.4	118.5	9.8	6.1	17.8	11.1	805.4
Sep	144.5	90.3	135.1	86.3	19.8	11.9	18.7	11.5	914.5
Oct	149.7	98.0	133.8	84.4	19.8	12.5	17.9	11.2	1 116.5*
Nov	138.8	98.7	129.3	84.0	18.8	11.2	17.0	9.7	846.0
Dec	97.5	71.2	125.2	82.2	13.4	9.0	15.6	9.4	796.4
2003 Jan	136.1	85.8	127.4	82.2	15.8	8.3	14.8	8.7	1 095.5*
Feb	136.3	86.2	130.6	89.4	16.3	8.9	15.0	8.8	983.0
Mar	151.9	102.4	137.1	93.2	17.3	10.7	15.5	9.2	1 002.5
Apr	144.8	100.8	148.9	96.3	14.6	8.0	14.7	8.1	1 218.8*
May	133.1	97.6	127.8	86.8	14.0	7.5	14.4	7.6	1 023.3
Jun	155.4	105.6	140.1	97.3	18.0	9.5	15.4	8.4	1 016.6
Jul	146.3	93.1	144.5	100.7	15.2	7.6	16.1	8.6	1 245.8*
Aug	91.4	57.5	143.9	103.6	7.8	3.8	15.2	7.3	977.8
Sep	153.5	106.8	142.4	101.8	17.1	9.2	15.6	8.5	1 040.7
Oct	153.4	113.8	137.0	96.6	16.8	9.5	15.6	8.6	1 198.0*
Nov	142.9	110.5	137.9	100.7	19.0	9.8	17.6	9.0	1 117.8
Dec	112.4	83.8	139.7	94.8	17.0	9.9	18.9	10.1	1 208.6*
2004 Jan	141.3	96.4	134.6	97.2	20.5	9.6	19.7	9.8	1 009.3
Feb	141.1	93.0	132.3	94.8	17.3	10.0	16.2	9.7	1 024.9
Mar	163.1	114.3	139.3	97.4	20.2	11.7	17.5	10.1	1 346.5*
Apr	129.6	95.7	136.0	93.1	15.7	10.1	16.2	10.5	1 155.5
May	143.1	102.3	141.1 [†]	96.2 [†]	16.9	11.9	17.7	11.8 [†]	1 160.7 [†]
Jun	155.5	109.0	136.5	98.9	18.2	11.6	15.9	10.6	1 365.2* [†]
Jul	140.8	101.1	143.2	110.1	14.8	10.1	16.3	11.3	1 027.0 ³

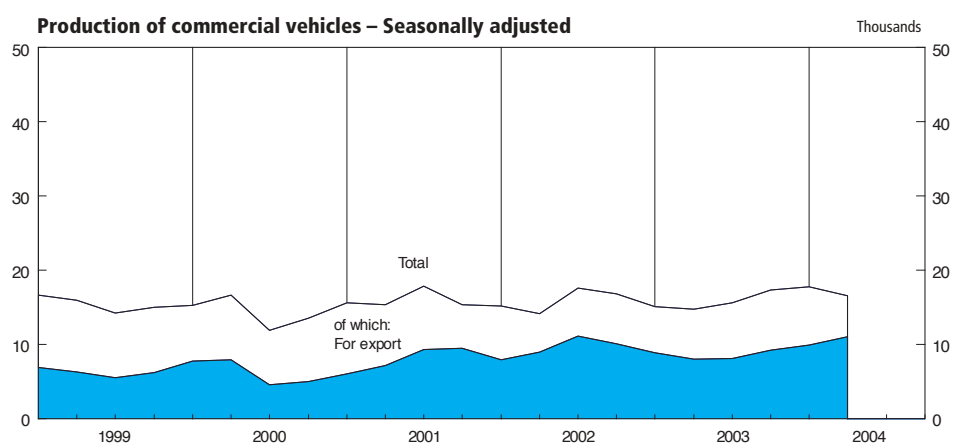
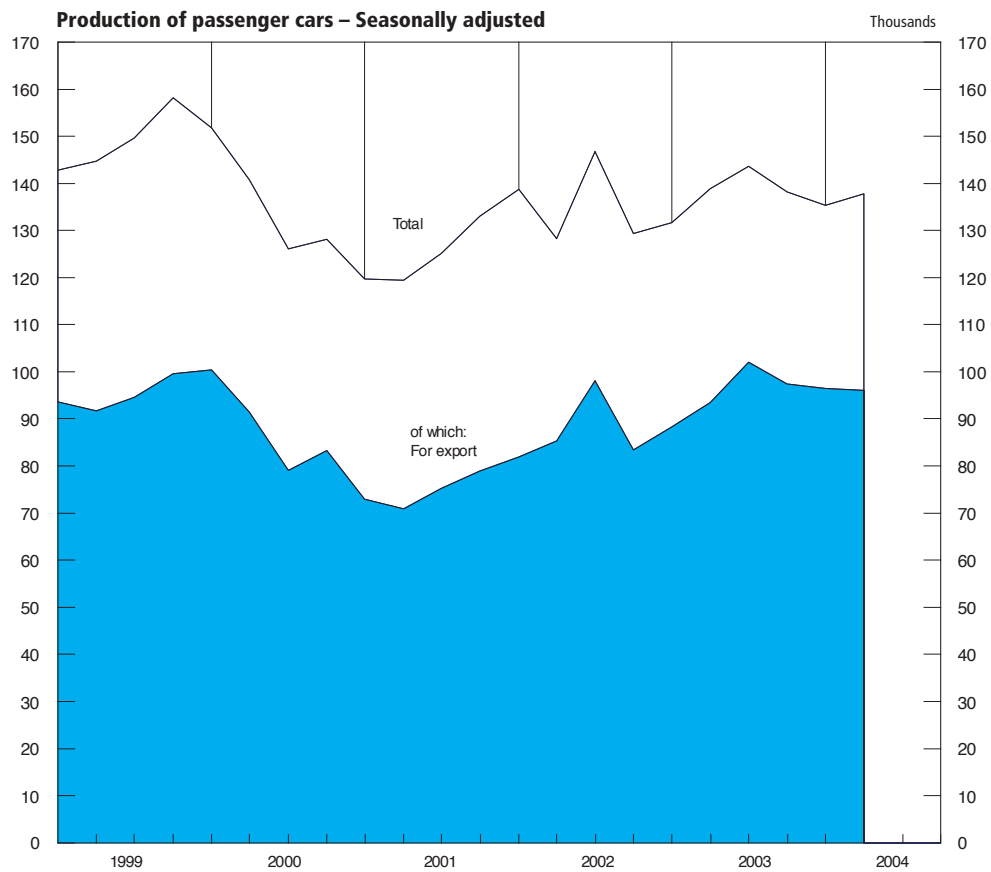
1 Annual and quarterly figures are monthly averages.

2 The totals are for 'usable steel' in accordance with the system used by the EC and the IISI, but in a change from previous publications, figures are actual production totals based on a four or five week period (not seasonally adjusted).

3 Provisional.

4 A seasonally adjusted series, based on the seasonal patterns of production from January 1999, has now been re-introduced. This affects the series from January 1999 only. Earlier data is based on previous production patterns.

Sources: Office for National Statistics; Enquiries Columns 1-8 01633 812810; ISSB Ltd; Enquiries Column 9 020 7343 3900



5.4 Indicators of fixed investment in dwellings

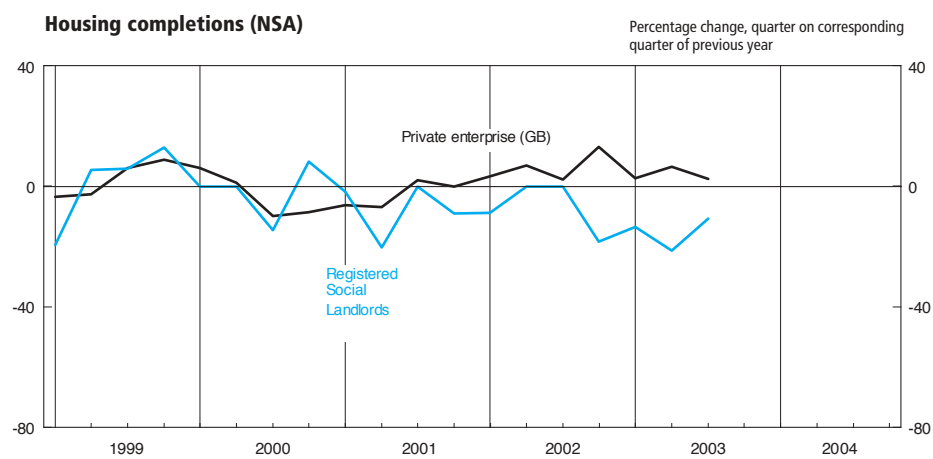
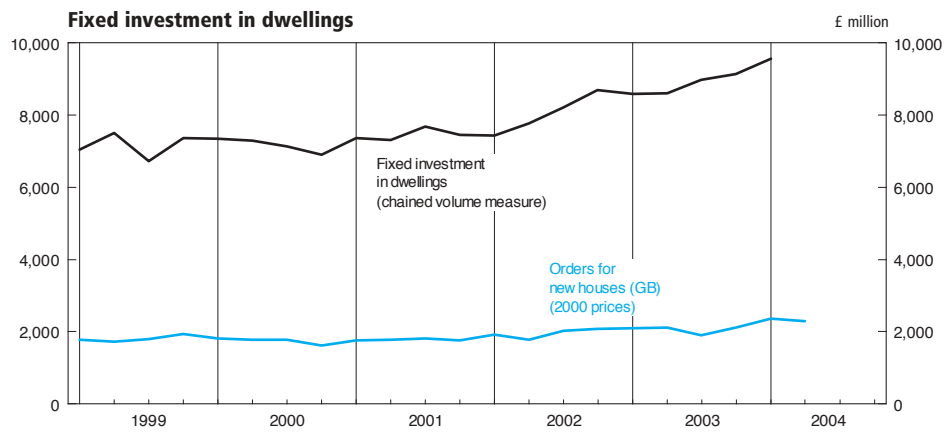
	Fixed investment in dwellings (£ million, chained volume measures, reference year 2001)	Orders received by contractors for new houses (GB) (£ million, 2000 prices)	Housing starts (NSA) ¹ (GB)+			Housing completions (NSA) ¹ (GB)+			Mix-adjusted price of new dwellings at mortgage completion stage (NSA) ³ (£)
			Private enterprise (thousands)	Registered Social Landlords ² (thousands)	Local Authorities (thousands)	Private enterprise (thousands)	Registered Social Landlords ² (thousands)	Local Authorities (thousands)	
Annual	DFEG	SGAB	FCAB	CTOR	CTOV	FCAD	CTOT	CTOX	WMPS
1999	28 649	7 247	156.8	21.5	0.4	149.2	23.3	0.2	114 279
2000	28 672	6 995	158.3	18.9	0.3	144.3	22.9	0.3	127 728
2001	29 806	7 122	162.7	16.9	0.3	140.4	21.1	0.5	134 234
2002	32 139	7 805	164.8	16.3	0.2	149.5	19.5	0.3	161 533
2003	35 324	8 219	..	..	..	..	..	..	186 485
Quarterly									
1999 Q1	7 049	1 787	40.4	5.7	0.1	32.7	5.8	—	107 241
Q2	7 516	1 734	41.2	5.8	0.1	36.6	5.9	0.1	112 711
Q3	6 723	1 792	39.7	5.4	0.1	38.9	5.5	—	115 789
Q4	7 361	1 933	35.4	4.7	0.1	41.0	6.1	0.1	118 699
2000 Q1	7 343	1 822	43.2	5.2	0.1	34.7	5.8	—	118 944
Q2	7 295	1 787	42.8	4.9	0.1	37.0	5.9	0.1	125 917
Q3	7 137	1 773	41.2	4.3	0.1	35.1	4.7	0.1	130 215
Q4	6 897	1 614	31.1	4.5	0.1	37.5	6.6	0.1	135 936
2001 Q1	7 365	1 767	39.2	5.7	0.2	32.5	5.7	0.3	130 771
Q2	7 305	1 772	43.8	4.3	—	34.5	4.7	0.1	130 774
Q3	7 680	1 822	43.4	3.3	—	35.8	4.7	0.1	135 507
Q4	7 456	1 761	36.3	3.7	0.1	37.5	6.0	0.1	137 368
2002 Q1	7 435	1 916	41.7	5.5	0.1	33.6	5.2	—	143 996
Q2	7 781	1 782	42.6	3.8	0.1	36.9	4.7	0.2	157 646
Q3	8 222	2 031	44.0	3.4	—	36.6	4.7	—	164 293
Q4	8 701	2 075	36.4	3.6	—	42.4	4.9	—	173 254
2003 Q1	8 588	2 095	44.1	5.0	0.1	34.5	4.5	0.1	175 947
Q2	8 615	2 108	46.7	4.2	0.1	39.3	3.7	0.1	187 676
Q3	8 983	1 894	44.7	3.8	—	37.5	4.2	—	193 373
Q4	9 138	2 123	..	..	..	..	..	..	194 276
2004 Q1	9 567	2 357	..	..	..	..	..	..	194 276 [†]
Q2	..	2 294	..	..	..	..	..	..	204 679
Monthly									
2002 Jul	..	684	..	..	..	..	..	..	156 787
Aug	..	725	..	..	..	..	..	..	165 201
Sep	..	623	..	..	..	..	..	..	170 891
Oct	..	669	..	..	..	..	..	..	168 194
Nov	..	671	..	..	..	..	..	..	171 984
Dec	..	735	..	..	..	..	..	..	179 585
2003 Jan	..	789	..	..	..	..	..	..	175 758
Feb	..	650	..	..	..	..	..	..	174 039
Mar	..	655	..	..	..	..	..	..	178 045
Apr	..	757	..	..	..	..	..	..	188 126
May	..	698	..	..	..	..	..	..	187 498
Jun	..	653	..	..	..	..	..	..	187 403
Jul	..	692	..	..	..	..	..	..	186 807
Aug	..	597	..	..	..	..	..	..	191 100
Sep	..	605	..	..	..	..	..	..	188 227
Oct	..	724	..	..	..	..	..	..	195 551
Nov	..	743	..	..	..	..	..	..	189 913
Dec	..	656	..	..	..	..	..	..	194 655
2004 Jan	..	800	..	..	..	..	..	..	195 238
Feb	..	757	..	..	..	..	..	..	192 165
Mar	..	800 [†]	195 426
Apr	..	886	..	..	..	..	..	..	201 796
May	..	693	..	..	..	..	..	..	203 015
Jun	..	715	..	..	..	..	..	..	209 225

1 Monthly data collection ceased after March 2003. Great Britain seasonally adjusted data are no longer updated. Seasonally adjusted data for England are available from the website of the Office of the Deputy Prime Minister: www.odpm.gov.uk

2 Includes registered and non-registered social landlords.

3 Series based on mortgage lending by all financial institutions rather than building societies only, as previously published. This change has been made necessary because of the mergers, takeovers and conversions to plc status affecting the building society sector. The series is based on the Office of the Deputy Prime Ministers' 5% Survey of Mortgage Lenders (at completion stage) up to 2003q2. From 2003q3, quarterly data are based on monthly data from the significantly enlarged Survey of Mortgage Lenders.

Sources: Office for National Statistics; Enquiries Column 1 01633 812537; Department of Trade and Industry; Column 2 020 7944 5583; Office of the Deputy Prime Minister; Columns 3-8 0117 372 8055; Column 9 020 7944 3325



5.5 Number of property transactions¹

Thousands

	Number of property transactions				Number of property transactions		
	Not seasonally adjusted England & Wales	Seasonally adjusted England & Wales ^{4,5}	Not seasonally adjusted England, Wales & N. Ireland		Not seasonally adjusted England & Wales	Seasonally adjusted England & Wales ^{4,5}	Not seasonally adjusted England, Wales & N. Ireland
	FTAP		FTAR	Jul	127	117	130
1999	1 469		1 511	Aug	134	117	137
2000	1 433		1 471	Sep	117	112	121
2001	1 458		1 497	Oct	123	112	127
2002	1 586		1 627	Nov	117	111	121
2003	1 345		1 397	Dec	98	114	101
		FAQ		2001 Jan	123	113	127
1999 Q1	316	345	325	Feb	99	117	102
Q2	342	358	354	Mar	105	116	108
Q3	414	379	425	Apr	101	115	105
Q4	397	388	407	May	121	122	126
				Jun	125	125	128
2000 Q1	367	392	379	Jul	132	120	135
Q2	348	356	356	Aug	140	125	143
Q3	379	346	388	Sep	124	124	127
Q4	339	338	349	Oct	140	125	143
2001 Q1	327	346	337	Nov	137	131	141
Q2	347	363	360	Dec	110	123	112
Q3	396	369	405	2002 Jan	131	120	134
Q4	387	379	396	Feb	108	127	110
2002 Q1	342	374	351	Mar	104	127	106
Q2	395	410	404	Apr	129	135	132
Q3	457	417	468	May	137	140	140
Q4	392	385	404	Jun	129	135	132
2003 Q1	340	361	359	Jul	152	134	154
Q2	306	323	320	Aug	166	149	171
Q3	358	327	369	Sep	139	134	144
Q4	340	333	349	Oct	147	131	151
2004 Q1	447	448	457	Nov	127	124	131
Q2	452	462	463	Dec	118	131	122
1999 Jan	112	115	116	2003 Jan	131	121	137
Feb	96	116	99	Feb	103	120	109
Mar	108	115	110	Mar	106	119	113
Apr	110	122	114	Apr	101	113	108
May	106	117	110	May	101	106	105
Jun	126	119	130	Jun	103	105	107
Jul	140	129	144	Jul	132	115	135
Aug	134	125	137	Aug	112	106	116
Sep	140	125	145	Sep	114	106	118
Oct	134	130	137	Oct	120	108	124
Nov	141	129	144	Nov	110	109	113
Dec	122	128	125	Dec	111	116	113
2000 Jan	137	136	140	2004 Jan	157	142	160
Feb	112	128	116	Feb	148	164	152
Mar	118	128	122	Mar	142	142	145
Apr	97	114	100	Apr	140	150	143
May	122	120	126	May	145	152	148
Jun	129	122	130	Jun	167	161	172
				Jul	173	157	177

1 The figures are based on counts of the relevant administrative forms successfully processed each month. For completions up to and including November 2003 the relevant form was the Particulars Delivered form. Since December 2003 the relevant form is the Land Transaction Return associated with the introduction of Stamp Duty Land Tax (although in December 2003 most forms processed were still Particulars Delivered forms). The count of Land Transaction Return forms is based on the month when the Stamp Duty Land Tax certificate is issued. The figures for the latest two months include estimates for returns where a certificate has been issued but the form was not captured on the database at the time the count was taken. The figures are therefore subject to revision next month.

2 Because of the change in administrative arrangements associated with the introduction of Stamp Duty Land Tax, the figures from December 2003 onwards may not be comparable with the earlier series. In particular Land Transaction Returns in respect of transactions subject to Stamp Duty Land Tax are being submitted more promptly by conveyancers than Particulars Delivered forms in respect of transactions subject to stamp duty. The overhang of particulars delivered forms into the first quarter of 2004 has boosted the total property transactions processed figures in that quarter.

Other reasons for higher figures since the introduction of Stamp Duty Land Tax include (1) there are some types of transaction which require a Land Transaction Return which did not require a Particulars Delivered form and (2) there are higher numbers of registering commercial transactions.

3 Because of the time lags involved, the series above should be lagged by one month to give a broad representation of transactions completed in the month. However this relationship was weaker in the second quarter of 2002, because of the operational pressures in the network of Stamp Offices which delayed the processing of a proportion of property transactions.

4 The Jubilee celebrations meant that the late May bank holiday was taken in June 2002. Seasonal features in the data arising from the May Bank holiday will therefore not automatically be removed by the process of seasonal adjustment. Caution should therefore be taken when interpreting monthly movements involving May or June 2002 data.

5 The sum of seasonally adjusted components does not exactly match the unadjusted (definitive) annual total.

Source: Board of Inland Revenue; Enquiries 020 7438 6314

5.6 Change in inventories

Chained volume measures¹

Reference year 2001, £ million

	Mining and quarrying	Manufacturing industries				Electricity, gas and water supply	Distributive trades			Change in inventories
		Materials and fuel	Work in progress	Finished goods	Total		Wholesale ²	Retail ²	Other industries ³	
Level of inventories at end-December 2003	1115	18 779	16 768	18 827	54 374	754	26 989	25 075	43 256	151 563
Quarterly	FAEA	FBNF	FBNG	FBNH	DHBM	FAEB	FAJX	FBYN	DLWX	CAFU
2000 Q1	-52	123	387	92	586	58	573	651	-549	753
Q2	2	332	-88	103	365	31	407	395	-106	1 329
Q3	-49	259	-77	61	258	64	694	348	364	1 906
Q4	-155	-66	281	169	367	82	86	-14	601	1 274
2001 Q1	63	-651	325	-133	-459	-214	565	-130	1 255	1 080
Q2	-45	-200	330	224	354	190	-76	-160	1 316	1 579
Q3	93	352	271	32	655	88	519	229	405	1 989
Q4	-15	93	-413	45	-275	-15	-299	1 075	1 070	1 541
2002 Q1	19	84	-92	17	9	-65	-119	316	834	994
Q2	-50	2	-323	-41	-362	111	625	414	-1 362	-624
Q3	14	22	274	-75	221	-77	290	471	-223	696
Q4	-13	-203	-181	-408	-792	-192	-133	393	2 184	1 447
2003 Q1	-41	-68	-78	44	-102	2	98	224	1 031	1 212
Q2	42	-74	-62	178	42	-42	-28	630	-1 158	-514
Q3	-95	44	12	503	559	-51	139	499	-680	371
Q4	-19	-209	-415	-315	-939	-2	260	238	1 860	1 398
2004 Q1	36	30	517	-184	363	162	-228	459	-133	659
Q2	-38	-66	-420	131	-355	-184	655	-263	356	171

1 Estimates are given to the nearest £ million but cannot be regarded as accurate to this degree.

2 Wholesaling and retailing estimates exclude the motor trades.

3 Quarterly alignment adjustment included in this series. For description see notes to the *Economic Trends Annual Supplement*. For details of adjustments, see notes section in the Sector and Financial Accounts article in *UK Economic Accounts*.

Sources: Office for National Statistics; Enquiries Columns 1-8 01633 812351; Columns 9-10 020 7533 5949

5.7 Inventory ratios

	Manufacturers' inventories ¹ to manufacturing production				Retail inventories ¹ to retail sales ²	Total inventories ^{1,3} to gross value added
	Materials and fuel	Work in progress	Finished goods	Total inventories		
Quarterly	FAPG	FAPH	FAPI	FAPF	FAPC	FDCA
2000 Q1	100.0	100.0	100.0	100.0	100.0	99
Q2	101.1	98.9	100.0	100.0	101.9	99
Q3	102.3	98.2	100.1	100.3	102.1	99
Q4	101.0	99.0	100.1	100.1	101.2	100
2001 Q1	97.8	101.0	99.5	99.3	98.9	100
Q2	98.8	105.1	102.8	102.1	96.0	101
Q3	100.7	106.8	103.1	103.4	95.3	101
Q4	103.3	106.5	105.5	105.0	99.0	102
2002 Q1	104.7	106.8	106.5	105.9	98.5	103
Q2	106.0	106.2	107.6	106.6	98.5	102
Q3	105.1	106.9	106.1	106.0	99.5	101
Q4	105.1	106.9	104.9	105.6	99.8	102
2003 Q1	104.6	106.3	105.1	105.3	101.9	103
Q2	103.6	105.2	105.4	104.7	103.2	102
Q3	103.5	105.0	107.9	105.4	104.0	101
Q4	102.1	102.2	105.9	103.4	103.3	101
2004 Q1	102.5	105.6	105.1	104.3	103.2	101
Q2	..	..	..	..	..	100

1 Chained volume measure: reference year 2001.

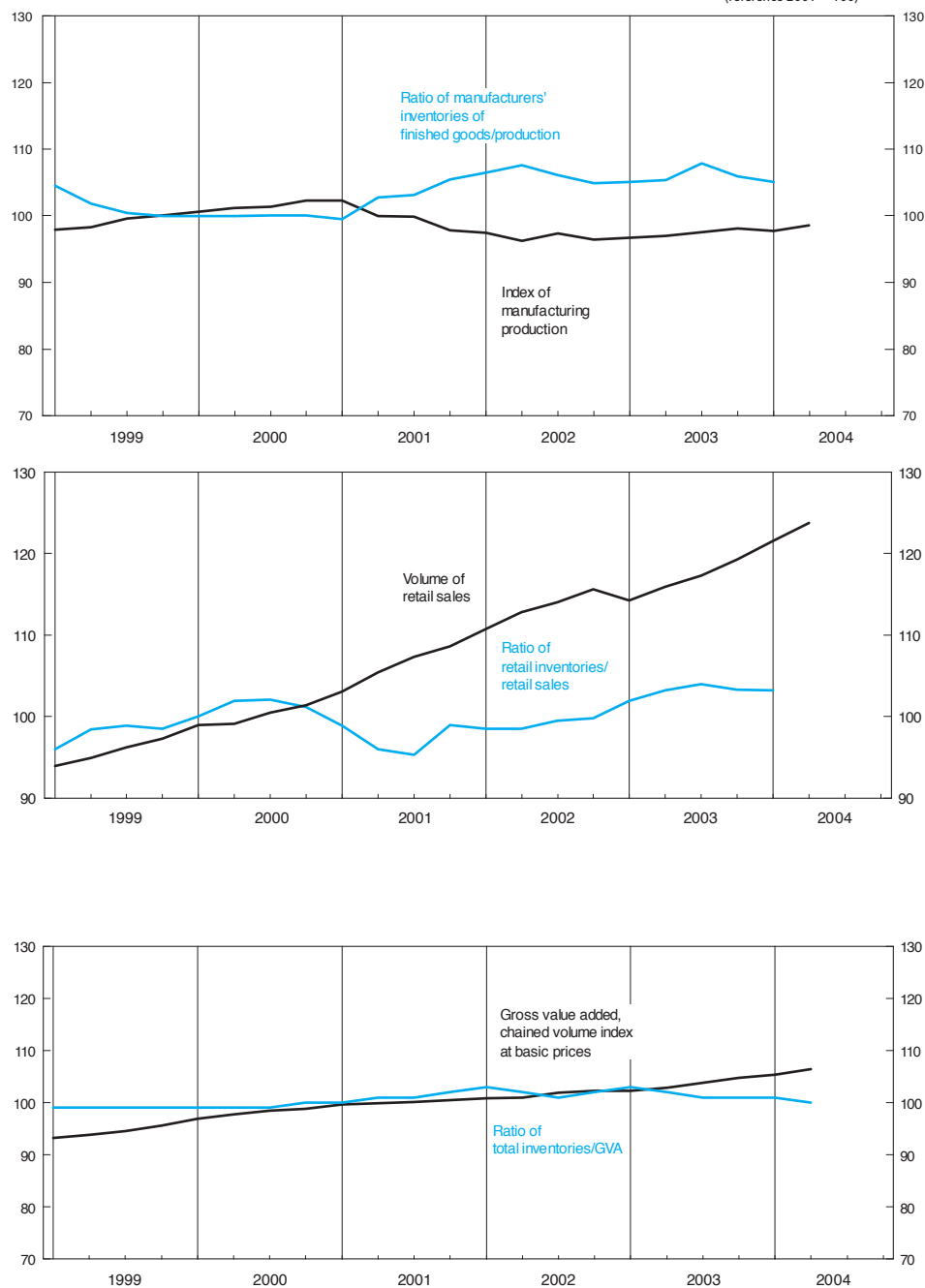
2 Classes 64-65 excluding activity headings 6510 and 6520, retail distribution of motor vehicles and parts, and filling stations.

3 Including quarterly alignment adjustment. For details of adjustments see notes section in the Sector and Financial Accounts article in *UK Economic Accounts*.

Source: Office for National Statistics; Enquiries Columns 1-6 01633 812351

Inventory ratios

chained volume measures,
seasonally adjusted
(reference 2001 = 100)



5.8 Retail sales, new registrations of cars and credit business (Great Britain)

	Volume of retail sales per week+(average 2000=100) ^{1,2}									New regi- strations of cars (NSA) thousands ⁵	Total consumer credit: Net lending (£ million) ^{3,4}	of which	
	Value of retail sales per week: total (average 2000=100) ^{1,2}	All retailers	Predomin- antly food stores	Predominantly non-food stores								Credit cards ⁶	Other ⁶
				Total	Non- specialist stores	Textile, clothing and footwear	Household goods stores	Other stores	Non-store and repair				
<i>Sales in 2000 £ million</i>	<i>207 149</i>	<i>207 149</i>	<i>89 041</i>	<i>106 359</i>	<i>18 781</i>	<i>27 880</i>	<i>27 699</i>	<i>31 999</i>	<i>11 749</i>				
Annual	EAQV	EAPS	EAPT	EAPV	EAPU	EAPX	EAPY	EAPW	EAPZ	BCGT	RLMH	VZQX	VZQY
2000	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	2 337.3	14 164	6 621	7 539 [†]
2001	105.9	106.1	104.1	107.7	105.9	109.4	110.9	104.6	106.1	2 577.5	17 639 [†]	6 253 [†]	11 469
2002	111.1	112.7	108.1	116.5	110.8	120.9	120.8	112.1	113.4	2 682.0	21 087	7 576	13 560
2003	113.8	116.4	111.8	121.2	113.6	129.0	126.2	114.5	107.8	2 646.2	18 698	8 179	10 525
Quarterly													
2000 Q1	99.0	99.0	99.3	98.6	100.6	96.1	99.6	98.8	100.3	682.4	4 118	1 742	2 530 [†]
Q2	99.1	99.1	99.4	98.8	98.4	98.3	99.0	99.5	99.2	581.4	3 511 [†]	1 797	1 705
Q3	100.3	100.5	100.3	100.8	99.4	101.5	100.5	101.1	99.5	612.5	2 942	1 539	1 413
Q4	101.6	101.4	101.0	101.8	101.7	104.1	100.9	100.6	101.0	461.0	3 593	1 543	1 891
2001 Q1	102.9	103.1	102.9	103.8	105.2	104.4	107.4	99.2	99.0	704.2	3 295	1 351	2 122
Q2	105.6	105.4	104.0	106.7	107.2	106.7	110.9	102.8	104.7	617.7	4 586	1 746 [†]	2 813
Q3	107.2	107.3	104.8	109.3	108.1	110.6	111.7	106.7	108.3	725.6	4 181	1 221	2 951
Q4	108.1	108.6	105.7	111.2	107.9	113.6	114.2	108.4	106.9	530.0	5 577	1 935	3 583
2002 Q1	110.1	110.8	106.9	114.7	110.2	117.5	118.0	112.2	104.1	758.7	5 064	1 986	3 151
Q2	111.3	112.8	108.3	116.8	110.8	120.3	120.0	114.6	110.7	650.0	4 767	1 749	3 029
Q3	112.1	114.0	109.3	117.6	113.5	122.1	121.9	112.4	116.4	744.6	6 014	2 000	3 931
Q4	113.5	115.6	110.9	119.2	114.6	123.2	124.6	113.9	118.6	528.7	5 242	1 841	3 449
2003 Q1	112.3	114.3	110.0	118.7	112.7	125.8	121.9	113.1	106.9	737.6	4 868	2 209	2 690
Q2	113.3	115.9	112.0	120.2	113.4	127.7	125.6	113.0	106.2	642.7	5 166	2 364	2 800
Q3	114.7	117.3	112.8	122.4	115.5	130.3	127.7	115.0	105.0	742.8	4 711	2 010	2 591
Q4	116.2	119.3	113.7	125.2	117.6	131.5	130.8	119.3	107.9	523.1	3 953	1 596	2 444
2004 Q1	118.1	121.6	114.9	128.1	117.6	136.6	132.2	123.3	113.9	762.2	5 387	2 232	3 187
Q2	119.8 [†]	123.8 [†]	116.2	130.8 [†]	119.7 [†]	139.6 [†]	134.8 [†]	126.1 [†]	117.7 [†]	629.8	5 110	2 013	3 082
Monthly													
2002 Jul	112.0	113.6	109.3	117.4	114.4	121.7	121.1	112.2	112.6	204.7	1 913 [†]	640 [†]	1 273 [†]
Aug	112.3	114.3	109.2	118.0	112.5	125.7	120.8	112.0	120.3	93.0	2 006	768	1 238
Sep	112.0	113.9	109.3	117.5	113.6	119.4	123.4	112.9	116.2	446.9	1 904	709	1 194
Oct	113.1	115.0	110.2	118.8	114.2	122.8	124.1	113.5	117.3	193.0	2 084	488	1 596
Nov	113.2	115.4	110.7	119.3	115.1	119.9	127.2	114.6	114.7	182.9	1 284	614	670
Dec	114.1	116.3	111.6	119.5	114.6	126.1	123.0	113.7	122.7	152.8	1 697	603	1 094
2003 Jan	111.5	113.7	108.7	118.5	113.1	124.6	121.8	113.5	108.6	193.4	1 531	816	715
Feb	112.4	114.3	110.2	118.6	112.0	125.8	122.2	113.2	106.5	92.2	1 751	811	940
Mar	112.8	114.7	110.9	118.8	113.0	126.7	121.8	112.8	105.9	452.0	1 700	661	1 039
Apr	113.4	115.8	112.3	119.5	112.3	126.9	125.0	112.7	108.5	196.3	1 506	691	815
May	112.6	115.1	111.4	119.3	112.7	124.8	126.2	112.4	104.9	202.6	2 057	866	1 191
Jun	113.7	116.6	112.2	121.5	114.8	130.8	125.6	113.8	105.3	243.8	1 579	723	857
Jul	114.0	116.6	112.2	121.4	114.9	129.2	126.7	113.8	105.7	201.1	1 691	629	1 062
Aug	114.8	117.2	113.3	121.9	115.6	128.6	127.6	114.8	104.2	94.2	1 489	727	762
Sep	115.2	118.0	113.0	123.6	116.0	132.4	128.7	116.1	105.0	447.5	1 585	815	770
Oct	115.8	118.7	113.4	124.5	118.4	132.0	129.2	117.3	106.3	186.6	1 602	683	919
Nov	115.9	119.0	113.4	124.8	116.6	131.0	130.4	119.5	108.8	175.7	1 422	504	919
Dec	116.6	119.9	114.2	126.0	117.6	131.4	132.5	120.6	108.5	160.8	831	208	623
2004 Jan	118.1	121.2	114.6	127.7	117.0	135.5	132.6	123.0	112.9	199.6	2 026	774	1 252
Feb	117.8	121.2	114.9	127.3	117.7	135.8	131.4	122.1	113.7	92.3	1 682	554	1 128
Mar	118.3	122.2	115.1	129.0	118.0	138.2	132.5	124.4	114.9	470.3	1 781	1 016	765
Apr	118.9 [†]	122.7 [†]	115.3	129.7	118.8 [†]	139.4 [†]	132.9	124.7 [†]	115.7 [†]	191.1	1 314	439	875
May	119.5	123.5	116.1	130.4 [†]	120.1	140.2	134.1 [†]	124.8	117.6	197.6	1 575	748	827
Jun	120.6	124.7	116.9	131.9	120.1	139.3	136.9	128.2	119.4	241.1	2 169	739	1 430
Jul	120.1	124.3	116.7	131.3	118.2	135.4	138.3	129.4	118.3	..	1 760	801	959

1 Great Britain only. The motor trades are excluded. Information for periods earlier than those shown is available from ONS Newport (tel 01633 812509).

2 The retail sales index has been rebased using detailed information from the 2000 Annual Business inquiry. Further information is available via the National Statistics website: www.statistics.gov.uk

3 Net lending equals changes in amounts outstanding adjusted to remove distortions arising from revaluations of debt such as write-offs.

4 Covers all institutions providing finance for consumers; including loans by banks on personal accounts and on bank credit cards and charge cards, by insurance companies, retailers and other specialist lenders, but excluding loans for house purchase.

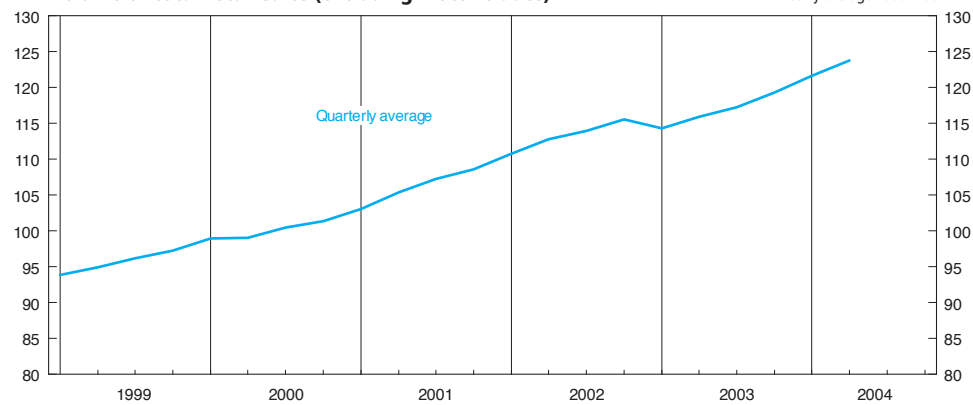
5 Seasonally adjusted data are not published in *Economic Trends* at present. Series DKBY ends in 1998 because seasonal adjustment has ceased; the existing model is not applicable to the new bi-annual registration system. It is published in the *Economic Trends Annual Supplement*.

6 See Table 6.6, note 2.

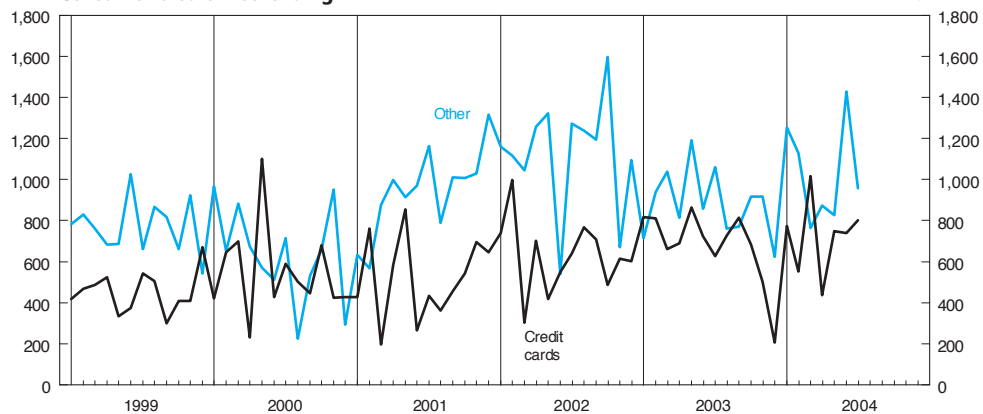
Sources: Office for National Statistics;
Enquiries Columns 1-9 01633 812713; Columns 12-14 01633 812782;
Department of Transport;
Enquiries Column 10,11 020 7944 3077.

Volume of total retail sales (excluding motor trades)

Weekly average 2000=100

**Consumer credit: Net lending**

£ million



5.9 Inland energy consumption: primary fuel input basis

Million tonnes of oil equivalent

Seasonally adjusted and temperature corrected ⁷ (annualised rates)							
	Coal ¹	Petroleum ²	Natural gas ³	Nuclear	Primary electricity ⁵		Total
					Natural flow Hydro ⁴	Net imports ⁶	
Annual	FDAI	FDAJ	FDAK	FDAL	FDAM	FDAW	FDAH
1998	43.6	76.8	90.4	23.4	0.5	1.1	235.8
1999	38.2	77.8	95.8	22.3	0.5	1.2	235.7
2000	40.0	77.8	98.7	19.7	0.5	1.2	237.9
2001	43.1	76.6 [†]	96.8	20.8	0.4	0.9	238.7
2002	40.0	75.4	99.3	20.0	0.5	0.7	236.0
2003	43.2 [†]	74.9	97.7	20.0 [†]	0.4	0.2	236.3 [†]
Quarterly							
1999 Q1	37.4	81.5	105.1	23.3	0.5	1.2	249.1
Q2	37.7	78.3	90.4	23.2	0.6	1.3	231.5
Q3	38.3	75.2	84.3	21.5	0.5	1.1	220.9
Q4	39.2	76.1	103.3	21.0	0.5	1.2	241.4
2000 Q1	38.9	81.3	110.8	20.1	0.6	1.1	252.9
Q2	40.6	74.4	95.3	19.8	0.4	1.3	231.9
Q3	40.2	77.8	85.4	19.4	0.5	1.3	224.5
Q4	40.5	77.6	103.1	19.4	0.5	1.2	242.3
2001 Q1	45.6	75.8 [†]	108.7	19.9	0.3	1.1	251.5
Q2	44.6	73.3	93.1	19.0	0.4	0.9	231.3
Q3	42.5	79.4	84.7	21.8	0.5	0.9	229.8
Q4	39.8	77.8	100.5	22.6	0.5	0.7	242.0
2002 Q1	42.1	78.0	108.6	21.2	0.6	0.6	251.2
Q2	35.8	76.4	96.5	20.0	0.7	1.0	230.4
Q3	38.4	76.3	89.0	19.9	0.5	0.2	224.3
Q4	43.6	71.0	103.1	18.9	0.4	1.1	238.1
2003 Q1	43.1 [†]	72.6	108.1	21.0	0.3	0.3	245.4
Q2	45.1	78.5	92.6	20.6	0.5	0.1	237.4
Q3	42.0	73.7	85.6	19.7	0.5	-0.1	221.5
Q4	42.5	74.6	104.4	18.6	0.4	0.4	240.9
2004 Q1	43.3	71.8	111.2 [†]	20.1	0.5	0.6	247.4 [†]
Percentage change, quarter on corresponding quarter of previous year							
Quarterly	FDAP	FDAQ	FDAR	FDAS	FDAT	FDAX	FDAO
1999 Q1	-14.3	8.6	7.6	-0.3	0.5	-14.1	3.0
Q2	-18.2	-1.3	2.7	3.7	21.5	-6.8	-2.6
Q3	-14.4	-0.7	6.0	-6.6	-10.6	-	-1.3
Q4	1.1	0.3	7.1	-15.3	4.6	5.6	1.6
2000 Q1	3.9	-0.2	5.5	-13.8	12.1	-10.6	1.5
Q2	7.7	-5.0	5.5	-14.6	-25.9	1.9	0.2
Q3	5.1	3.5	1.4	-9.9	-12.3	12.9	1.6
Q4	3.1	2.0	-0.2	-7.7	6.2	-5.1	0.4
2001 Q1	17.2	-6.7	-1.9	-1.0	-43.8	-	-0.5
Q2	9.9	-1.5	-2.3	-4.2	-9.6	-30.3	-0.2
Q3	5.7	2.1	-0.9	12.8	4.7	-29.0	2.4
Q4	-1.6	0.3	-2.5	16.6	6.1	-45.0	-0.1
2002 Q1	-7.7	2.9	-0.1	6.8	73.8	-43.7	-0.1 [†]
Q2	-19.8	4.3	3.6	5.6	73.5	5.5	-0.4
Q3	-9.6	-4.0	5.1	-8.8	11.4	-75.5	-2.4
Q4	9.4	-8.8	2.6	-16.3	-32.7	67.6	-1.6
2003 Q1	2.4	-6.9	-0.5	-1.3	-42.4	-56.2	-2.3
Q2	26.0	2.7	-4.0	2.9	-29.6	-89.0	3.1
Q3	9.5	-3.3	-3.8	-0.9	-13.6	-	-1.3
Q4	-2.6	5.1	1.3	-1.6	-2.7	-59.6	1.2
2004 Q1	0.4 [†]	-1.1 [†]	2.9 [†]	-4.3	42.8	-	0.8

1 Includes solid renewable sources (wood, straw, waste), and net foreign trade and stock changes in other solid fuels.

2 Excludes non-energy use.

3 Includes gas used during production, colliery methane, landfill gas and sewage gas. Excludes gas flared or re-injected and non energy-use of gas.

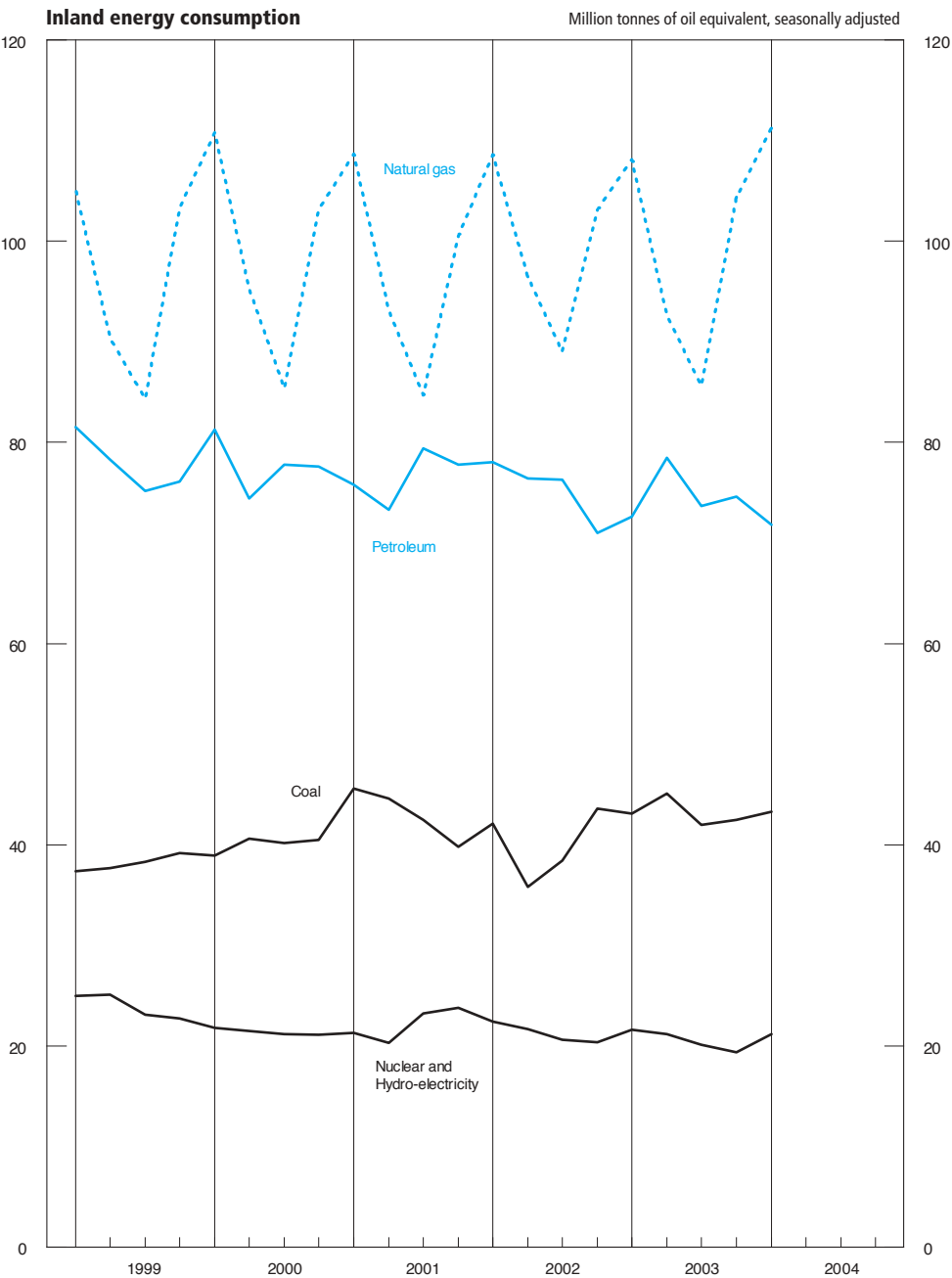
4 Includes generations at wind stations. Excludes generation from pumped storage stations.

5 Not temperature corrected.

6 Not seasonally adjusted.

7 For details of temperature correction see DTI energy statistics website at www.dti.gov.uk/energy/inform/dukes/dukes2002/01longterm.pdf

Source: Department of Trade and Industry; Enquiries 020 7215 2698



6.1 Sterling exchange rates and UK reserves⁴

Not seasonally adjusted

	Sterling exchange rate against major currencies ¹								UK inter-national reserves ³ at end of period (£ million)	Sterling exchange rate index 1990 = 100
	Japanese yen	US dollar	Swiss franc	Euro ²	Danish kroner	Norwegian kroner	Swedish kronor	Hong Kong dollar		
Annual	AJFO	AUSS	AJFD	THAP	AJFK	AJFJ	AJFI	AJFU	THFE	AGBG
1999	184.01	1.6183	2.430	1.5192	11.296	12.619	13.373	12.5541	25 938	103.8
2000	163.40	1.5162	2.558	1.6422	12.240	13.324	13.870	11.8057	32 227	107.5
2001	174.90	1.4400	2.430	1.6087	11.987	12.944	14.886	11.2312	27 773	105.8
2002	187.84	1.5026	2.334	1.5909	11.821	11.953	14.570	11.7265	26 566	106.0
2003	189.34	1.6346	2.197	1.4456	10.742	11.562	13.189	12.7337	25 677	100.2
Quarterly										
1999 Q1	190.19	1.6335	2.328	1.4574	10.8368	12.514	13.059	12.6531	..	101.1
Q2	194.13	1.6070	2.432	1.5209	11.3044	12.527	13.539	12.4547	–	104.1
Q3	181.35	1.6021	2.446	1.5271	11.3547	12.561	13.304	12.4369	21 447	103.8
Q4	170.35	1.6306	2.515	1.5712	11.6851	12.874	13.588	12.6721	25 938	105.9
2000 Q1	171.99	1.6067	2.617	1.6286	12.1257	13.206	13.835	12.4926	22 090	108.4
Q2	163.52	1.5334	2.568	1.6398	12.2271	13.466	13.584	11.9236	26 898	107.7
Q3	159.19	1.4784	2.522	1.6336	12.1862	13.232	13.726	11.5304	28 818	106.4
Q4	158.89	1.4464	2.523	1.6670	12.4250	13.394	14.333	11.2735	32 227	107.6
2001 Q1	172.26	1.4584	2.424	1.5814	11.7988	12.965	14.230	11.3765	30 457	104.5
Q2	174.19	1.4208	2.487	1.6280	12.1436	13.039	14.847	11.0866	30 632	106.4
Q3	174.67	1.4380	2.432	1.6152	12.0231	12.928	15.203	11.2092	29 662	106.1
Q4	178.45	1.4428	2.375	1.6111	11.9887	12.845	15.264	11.2548	27 773	106.1
2002 Q1	188.79	1.4260	2.396	1.6263	12.0863	12.700	14.895	11.1230	28 053	106.9
Q2	185.29	1.4630	2.329	1.5923	11.8379	11.956	14.564	11.4015	28 623	105.3
Q3	184.85	1.5495	2.305	1.5747	11.6973	11.662	14.538	12.0871	27 950	105.7
Q4	192.42	1.5720	2.304	1.5716	11.6733	11.494	14.285	12.2547	26 566	106.0
2003 Q1	190.67	1.6017	2.189	1.4937	11.0987	11.313	13.709	12.5030	26 349	102.3
Q2	191.90	1.6194	2.163	1.4256	10.5851	11.344	13.032	12.6352	25 147	99.1
Q3	189.14	1.6108 [†]	2.209	1.4300	10.6264	11.794	13.103	12.5605	26 909	99.2
Q4	185.64	1.7065	2.228	1.4334	10.6591	11.796	12.913	13.2305	25 677	100.2
2004 Q1	197.07	1.8391	2.306	1.4708	10.9571	12.703	13.507	14.2983	25 231	104.1
Q2	198.21	1.8052	2.305	1.4992	11.1529	12.387	13.712	14.0831	25 142	105.2
Monthly										
2002 Jan	190.01	1.4323	2.392	1.6222	12.057	12.844	14.972	11.1705	27 089	106.9
Feb	190.11	1.4231	2.415	1.6348	12.146	12.731	15.013	11.0993	27 940	107.4
Mar	186.26	1.4225	2.381	1.6224	12.059	12.525	14.700	11.0946	28 053	106.5
Apr	188.50	1.4434	2.386	1.6282	12.104	12.415	14.878	11.2581	28 191	107.1
May	184.26	1.4593	2.318	1.5914	11.833	11.963	14.676	11.3814	28 055	105.3
Jun	183.10	1.4863	2.284	1.5515	11.532	11.491	14.137	11.5934	28 623	103.6
Jul	183.50	1.5546	2.290	1.5665	11.640	11.615	14.528	12.1261	27 649	105.3
Aug	182.97	1.5377	2.302	1.5723	11.677	11.698	14.550	11.9944	28 208	105.4
Sep	188.07	1.5561	2.323	1.5861	11.780	11.672	14.537	12.1370	27 950	106.5
Oct	192.90	1.5574	2.325	1.5868	11.790	11.645	14.450	12.1464	28 322	106.7
Nov	190.99	1.5723	2.303	1.5694	11.654	11.484	14.237	12.2624	28 972	105.9
Dec	193.36	1.5863	2.284	1.5566	11.560	11.354	14.167	12.3711	26 566	105.5
2003 Jan	192.07	1.6169	2.226	1.5222	11.314	11.172	13.964	12.6105	24 708	104.0
Feb	192.12	1.6046	2.189	1.4893	11.091	11.262	13.652	12.5450	26 140	102.4
Mar	187.82	1.5836	2.152	1.4649	10.880	11.506	13.511	12.3503	26 349	100.6
Apr	188.79	1.5747	2.170	1.4505	10.771	11.347	13.279	12.2817	25 232	99.8
May	190.42	1.6230	2.125	1.4030	10.417	11.047	12.840	12.6579	25 371	97.9
Jun	196.49	1.6606	2.193	1.4234	10.569	11.638	12.978	12.9502	25 147	99.6
Jul	192.72	1.6242	2.209	1.4277	10.613	11.828	13.130	12.6671	25 736	99.4
Aug	189.42	1.5950	2.200	1.4286	10.617	11.800	13.186	12.4395	26 511	99.0
Sep	185.29	1.6131	2.219	1.4338	10.649	11.755	12.994	12.5590	26 909	99.2
Oct	183.76	1.6787	2.220	1.4334	10.651	11.807	12.917	12.9962	26 092	99.8
Nov	184.47	1.6901	2.250	1.4426	10.729	11.832	12.973	13.1201	26 572	100.4
Dec	188.70	1.7507	2.214	1.4246	10.602	11.749	12.850	13.5923	25 677	100.3
2004 Jan	193.82	1.8234	2.262	1.4447	10.760	12.425	13.203	14.1598	25 288	102.4
Feb	199.16	1.8673	2.324	1.4774	11.008	12.983	13.566	14.5165	24 645	104.8
Mar	198.22	1.8267	2.332	1.4890	11.092	12.701	13.752	14.2349	25 231	105.0
Apr	194.04	1.8005	2.337	1.5022	11.182	12.458	13.775	14.0381	25 339	105.2
May	200.69	1.7876	2.293	1.4894	11.082	12.222	13.594	13.9374	24 779	104.6
Jun	199.91	1.8275	2.285	1.5050	11.189	12.482	13.767	14.2499	25 142	105.8
Jul	201.66	1.8429	2.294	1.5023	11.170	12.730	13.818	14.3740	..	105.9

1 Average of daily Telegraphic Transfer rates in London.

2 Prior to January 1999, a synthetic Euro has been calculated by geometrically averaging the bilateral exchange rates of the 11 Euro-area countries using "internal weights" based on each country's share of the extra Euro-area trade.

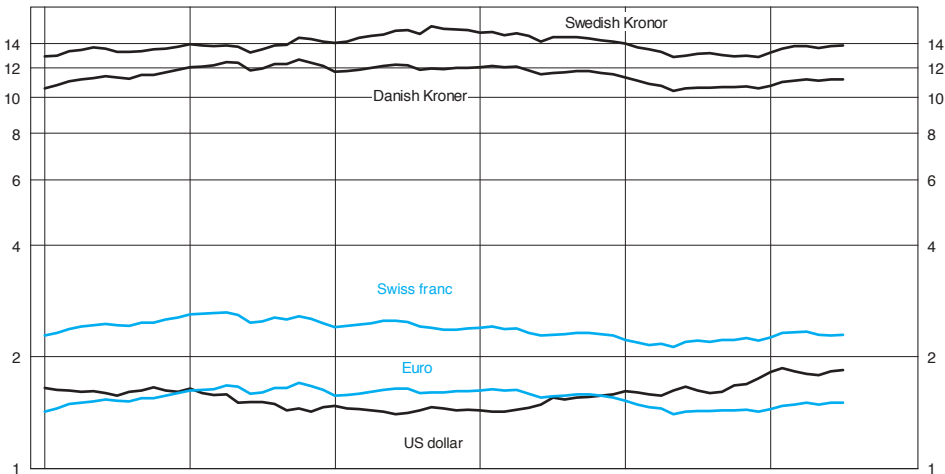
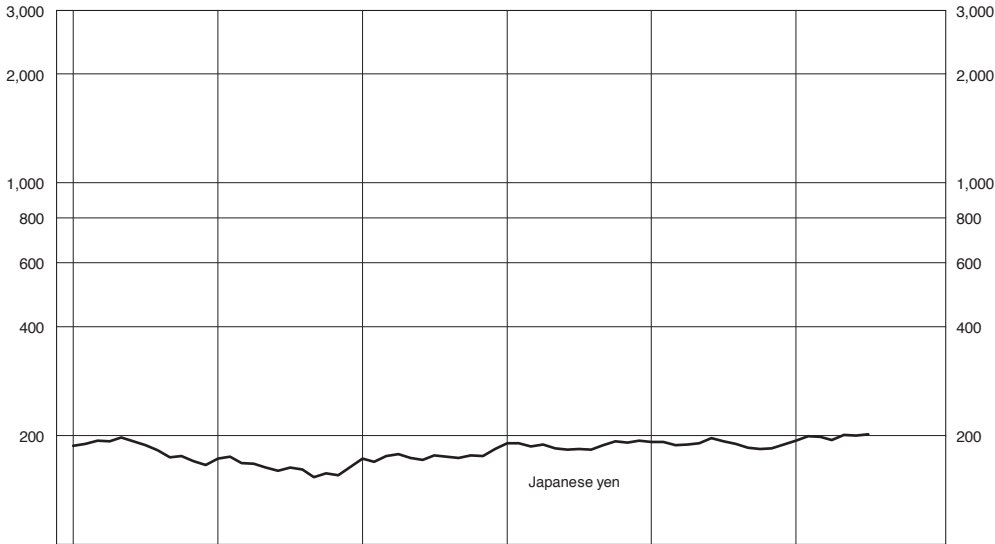
3 International reserves data are all valued at end-period market prices and exchange rates. They additionally include other reserve assets such as repos (sale and purchase agreements) and derivatives. Full details are shown in Table 1.21 of *Financial Statistics*.

4 These figures fall outside the scope of National Statistics.

Source: Bank of England: Enquiries 020 7601 4342

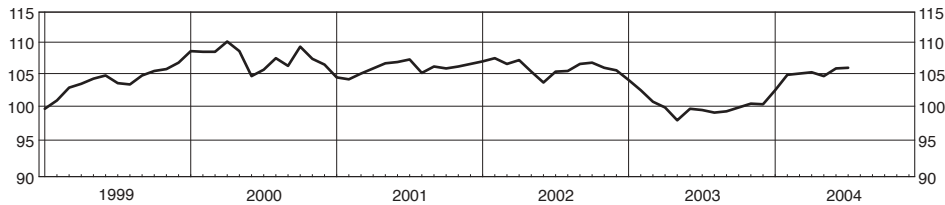
Sterling exchange rates

Relates to the £
log scale



Sterling exchange rate index

Average 1990=100



6.2 Monetary aggregates^{1,3}

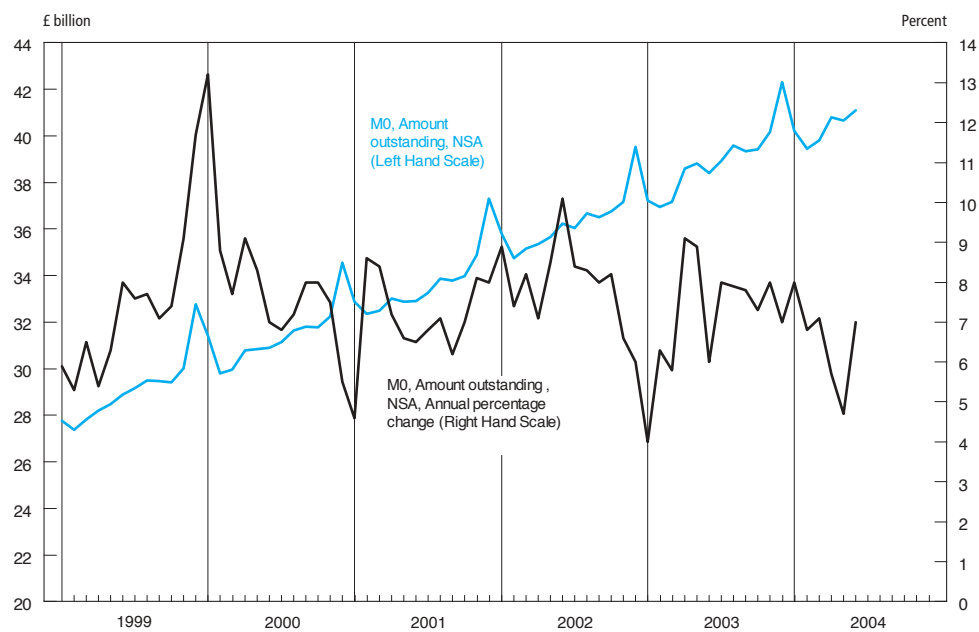
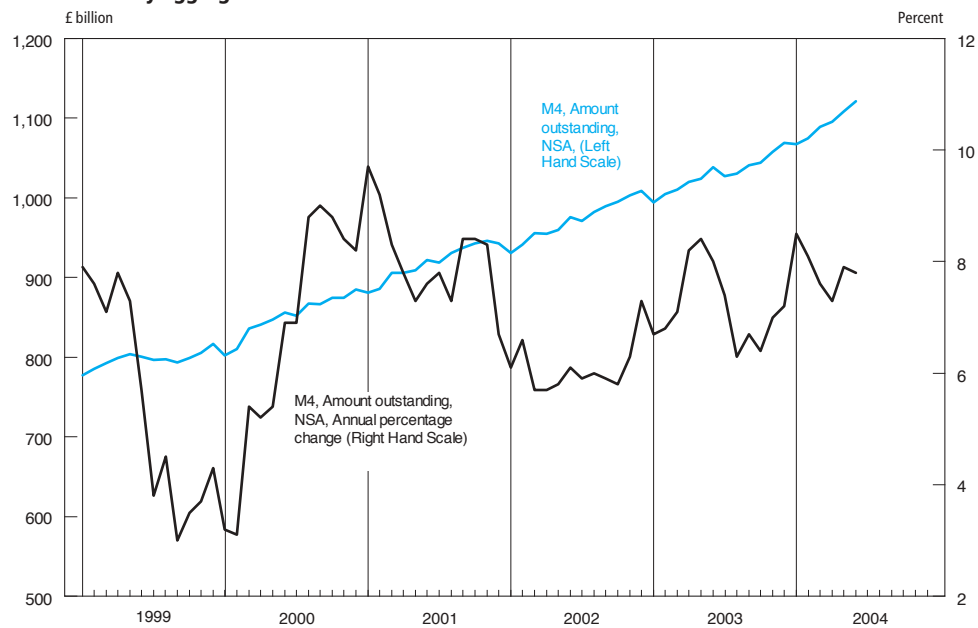
	M0				M4			
	Amount outstanding ² (NSA)		Amount outstanding (£ million) +	Velocity of circulation: ratio	Amount outstanding (NSA)		Amount outstanding (£ million) +	Velocity of circulation: ratio
	£ million	Annual percentage change			£ million	Annual percentage change		
Annual								
	AVAD	VQNB	AVAE [†]	AVAM	AUYM	VQLC	AUYN [†]	AUYU
1999	32 768	11.7	31 095 [†]	31.20	816 545	4.3	813 277 [†]	1.13
2000	34 566	5.5	32 486	30.34	884 839	8.2	881 497	1.12
2001	37 319	8.0	35 091	29.67	942 433	6.7	939 877	1.09
2002	39 540	6.0	37 216	28.85 [†]	1 008 683	7.3	1 005 604	1.08
2003	42 317	7.0	39 903	28.34	1 069 184 [†]	7.2 [†]	1 066 095	1.07
Quarterly								
						VQRY		
1999 Q1	27 830	6.5	28 181 [†]	31.61	792 903	7.1	788 341 [†]	1.12
Q2	28 884	8.0	29 002	31.35 [†]	800 698	5.7	796 349	1.13
Q3	29 477	7.1	29 481	31.10	793 684	3.0	794 046	1.14
Q4	32 768	11.7	31 095	30.76	816 545	4.3	813 277	1.15
2000 Q1	29 968	7.7	30 566	30.46	836 240	5.4	830 160	1.15
Q2	30 896	7.0	31 218	30.58	856 220	6.9	849 282	1.12
Q3	31 821	8.0	31 886	30.39	866 379	9.0	865 554	1.11
Q4	34 566	5.5	32 486	29.93	884 839	8.2	881 497	1.10
2001 Q1	32 489	8.4	33 121	29.79	905 800	8.3	900 415	1.10
Q2	32 896	6.5	33 277	29.91	921 571	7.6	913 660	1.09
Q3	33 797	6.2	33 946	29.65	937 071	8.4	935 789	1.08
Q4	37 319	8.0	35 091	29.35	942 433	6.7	939 877	1.08
2002 Q1	35 157	8.2	35 557	28.86	955 196	5.7	950 953	1.08
Q2	36 225	10.1	36 627	28.88	975 696	6.1	966 807	1.08
Q3	36 511	8.0	36 673	28.94	989 473	5.9	988 691	1.08
Q4	39 540	6.0	37 216	28.74	1 008 683	7.3	1 005 604	1.07
2003 Q1	37 184	5.8	37 906	28.63	1 010 269	7.1	1 008 251	1.07
Q2	38 403	6.0	38 881	28.15	1 038 431 [†]	8.0	1 029 513	1.07
Q3	39 348	7.8	39 512	28.29	1 041 111	6.6	1 039 393	1.08
Q4	42 317	7.0	39 903	28.30	1 069 184	7.2	1 066 095	1.07
2004 Q1	39 812	7.1	40 597	28.29	1 088 594	7.6	1 087 518	1.05 [†]
Q2	41 109	7.0	41 386	..	1 120 813	7.8	1 110 816	..
Monthly								
						VQLC		
2002 Jan	35 799	8.9	35 354 [†]	..	930 915	6.1	942 294 [†]	..
Feb	34 750	7.4	35 462	..	941 288	6.6	948 912	..
Mar	35 157	8.2	35 557	..	955 196	5.7	950 953	..
Apr	35 369	7.1	35 657	..	955 049	5.7	953 951	..
May	35 661	8.5	35 851	..	959 171	5.8	956 311	..
Jun	36 225	10.1	36 627	..	975 696	6.1	966 807	..
Jul	36 052	8.4	36 290	..	970 925	5.9	974 595	..
Aug	36 690	8.3	36 518	..	982 365	6.0	981 980	..
Sep	36 511	8.0	36 673	..	989 473	5.9	988 691	..
Oct	36 751	8.2	37 043	..	994 696	5.8	994 290	..
Nov	37 167	6.6	37 008	..	1 002 660	6.3	999 552	..
Dec	39 540	6.0	37 216	..	1 008 683	7.3	1 005 604	..
2003 Jan	37 230	4.0	37 361	..	994 385	6.7	1 005 092	..
Feb	36 946	6.3	37 717	..	1 004 797	6.8	1 011 975	..
Mar	37 184	5.8	37 906	..	1 010 269	7.1	1 008 251	..
Apr	38 590	9.1	38 596	..	1 019 654	8.2	1 019 413	..
May	38 827	8.9	38 980	..	1 024 161	8.4	1 021 772	..
Jun	38 403	6.0	38 881	..	1 038 431 [†]	8.0	1 029 513	..
Jul	38 938	8.0	39 201	..	1 027 109	7.4	1 030 020	..
Aug	39 579	7.9	39 397	..	1 030 624	6.3	1 030 984	..
Sep	39 348	7.8	39 512	..	1 041 111	6.7 [†]	1 039 393	..
Oct	39 416	7.3	39 704	..	1 043 966	6.4	1 042 423	..
Nov	40 149	8.0	39 966	..	1 057 784	7.0	1 054 396	..
Dec	42 317	7.0	39 903	..	1 069 184	7.2	1 066 095	..
2004 Jan	40 222	8.0	40 211	..	1 066 959	8.5	1 078 520	..
Feb	39 448	6.8	40 291	..	1 074 668	8.1	1 083 292	..
Mar	39 812	7.1	40 597	..	1 088 594	7.6	1 087 518	..
Apr	40 799	5.7	40 792	..	1 095 681	7.3	1 093 342	..
May	40 668	4.7	41 037	..	1 108 128	7.9	1 106 009	..
Jun	41 109	7.0	41 386	..	1 120 813	7.8	1 110 816	..

1 A fuller range of monetary aggregates is published monthly in the ONS publication *Financial Statistics*.

2 The monthly figures for M0 give the average of the amounts outstanding each Wednesday during the calendar month.

3 These figures fall outside the scope of National Statistics.

Source: Bank of England; Enquiries 020 7601 5467

Monetary aggregates

6.3 Counterparts to changes in money stock M4^{1,4}

£ million, not seasonally adjusted

	Public Sector Net Cash Requirement ⁺³	Purchases by the M4 ² private sector of:			External and foreign currency financing of public sector		Banks' and Building Societies' sterling lending to the M4 private sector	External and foreign currency transactions of UK banks and building societies	Net non-deposit sterling liabilities of UK banks and building societies	Domestic counterparts	External and foreign currency counterparts	M4
		Central government debt			Purchase of British government stocks by overseas sector	Other						
		British government stocks	Other	Other public sector debt								
1	2	3	4	5	6	7	8	9	10	11	12	
Annual												
	RURQ	AVBY	AVBU	AVBV	AVBZ	AQGA	AVBS	AVBW	AVBX	AVBN	VQLP	AUZI
2000	-37 525	11 388	1 773 [†]	375	4 040	7 657	111 229 [†]	7 076 [†]	-30 950	87 480	10 689	67 220
2001	-2 891	10 009	-2 453	192 [†]	318	4 194 [†]	82 446	-21 637	-10 786	87 414	-17 760 [†]	58 867 [†]
2002	18 734	-8 383	-637	-581	-897	1 588	107 655	-24 961	-25 295 [†]	116 711	-22 474	68 939
2003	39 230	-22 409	-9 736	-703	10 377	-3 065	126 462	-27 370	-20 473	132 800 [†]	-40 810	71 517
Quarterly												
2000 Q1	-12 877	5 013	-1 279 [†]	-336	2 141	2 577	36 676 [†]	-2 567 [†]	-5 927	27 432	-2 133	19 371 [†]
Q2	-11 822	-4 104	6 720	147	-1 017	3 301	25 255	279	-1 472	16 198	4 596	19 323
Q3	-16 489	5 653	-190	269	540	1 281	27 254	5 374	-13 189	16 491	6 115	9 417
Q4	3 663	4 826	-3 478	295	2 376	498	22 044	3 990	-10 362	27 359	2 111	19 109
2001 Q1	-12 566	4 488	-1 100	-268	-2 356	3 734	31 075	-7 736	1 271	21 643	-1 646 [†]	21 266
Q2	6 325	3 472	-483	233	4 549	1 000	21 194	-7 294	-4 293	30 821	-10 843	15 685
Q3	-6 128	1 046	3 398	96 [†]	-2 931	1 287 [†]	15 710	7 254	-8 869	14 140	11 472	16 744
Q4	9 478	1 003	-4 268	131	1 056	-1 827	14 467	-13 861	1 105	20 810	-16 743	5 172
2002 Q1	-6 323	-679	3 699	-260	-1 045	2 398	24 732	-7 112	-3 149	21 165	-3 669	14 346
Q2	7 069	-1 330	-2 963	102	-266	-1 001	24 507	1 722	-8 180	27 429	988	20 235
Q3	678	-2 432	342	-175	-1 960	208	34 214	-8 565	-11 055	32 586	-6 397	15 134
Q4	17 310	-3 942	-1 715	-248	2 374	-17	24 202	-11 006	-2 911 [†]	35 531	-13 396	19 224
2003 Q1	-268	-3 092	-1 089	-109	1 934	431	21 282	2 869	-4 478	16 747	1 367	13 636
Q2	16 244	-4 087	-4 369	-152	2 855	-2 098	34 559	-714	-7 011	42 188	-5 666	29 510
Q3	6 018	-11 653	1 093	-281	979	-1 222	30 342	-2 504	-17 747	25 486 [†]	-4 706	3 034
Q4	17 236	-3 577	-5 371	-161	4 609	-176	40 279	-27 021	8 763	48 379	-31 805	25 337
2004 Q1	170 [†]	-10 790	-984	-581	978	1 670	34 149	28 906	-32 379	21 935	29 598	19 153
Q2	11 482	-2 025	168	-157	2 204	-132	37 013	5 482	-15 752	46 417	3 145	33 809
Monthly												
2002 Jan	-11 994	-1 443	1 203 [†]	-295	-2 433	2 210	9 432	-1 145	-8 736	-3 101	3 498	-8 339
Feb	-2 107	105	2 862	-116	60	897	5 446	1 920	330	6 188	2 757	9 275
Mar	7 778	659	-366	151	1 328	-709	9 854	-7 887	5 257	18 078	-9 924	13 410
Apr	-3 035	725	-375	102	-1 098	-560	-1 380	2 453	857	-3 989	2 992	-141
May	2 749	-1 438	-398	21	573	-49	14 719	-9 707	-1 235	15 691	-10 329	4 126
Jun	7 355	-617	-2 190	-21	259	-392	11 168	8 976	-7 802	15 727	8 325	16 250
Jul	-6 804	-3 287	2 772	-63	-460	-267	-1 554	13 250	-9 461	-8 964	13 443	-4 982
Aug	2 136	3 647	-845	58	902	548	14 719	-11 247	5 200	19 699	-11 601	13 298
Sep	5 346	-2 793	-1 585	-170	-2 402	-73	21 049	-10 568	-6 794	21 851	-8 239	6 818
Oct	-1 820	-1 713	1 875	-178	339	-154	14 738	-8 666	1 515	12 873	-9 159	5 228
Nov	7 063	-2 217	-1 010	24	570	731	10 941	-1 257	-5 692	14 757	-1 096	7 969
Dec	12 067	-12	-2 580	-94	1 465	-594	-1 477	-1 083 [†]	1 267 [†]	7 901	-3 141 [†]	6 027
2003 Jan	-11 607	-4 053	1 610	-199	1 138	761	4 743	10 447	-15 024	-9 529	10 070	-14 483
Feb	76	-870	271	189	-1 402	-245	11 024	-12 274	10 831	10 674	-11 117	10 389
Mar	11 263	1 831	-2 970	-99	2 198	-85	5 515	4 696	-285	15 602	2 414	17 730
Apr	263	-5 478	1 608	-217	-1 322	-939	10 969	2 233	-23	7 152	2 616	9 744
May	5 825	4 670	-4 981	122	4 784	-233	10 537	5 673	-10 802	16 155	657	6 010
Jun	10 156	-3 279	-996	-57	-607	-926	13 053	-8 620	3 814	18 881	-8 939	13 756
Jul	-6 155	-5 674	3 288	-232	-1 339	880	7 476 [†]	-611	-11 340	-1 297 [†]	1 607	-11 030 [†]
Aug	3 634	-4 140	-1 654	22	227	-771	5 310	-10 071	11 450	3 141	-11 069	3 523
Sep	8 539	-1 839	-541	-71	2 091	-1 331	17 556	8 178	-17 857	23 642	4 756	10 541
Oct	-1 643	-7 308	2 059	-89	-1 161	3 016	23 106	-22 658	5 455	16 154	-18 481	3 128
Nov	5 809	6 269	-5 420	-61	7 050	-49	9 428	8 471	-3 004	15 977	1 372	14 345
Dec	13 070	-2 537	-2 010	-11	-1 280	-3 143	7 745	-12 834	6 312	16 248	-14 696	7 864
2004 Jan	-14 451	-3 206	3 791	-308 [†]	-786	3 019	20 947	5 675	-18 898	6 771	9 480	-2 648
Feb	-138	-4 064	-541	221	1 267	225	4 701	12 197	-3 566	204	11 155	7 793
Mar	14 759 [†]	-3 521	-4 234	-494	497	-1 574	8 501	11 034	-9 914	14 960	8 963	14 008
Apr	-2 352	-5 080 [†]	2 977	-108	-1 908 [†]	80 [†]	10 415	6 450	-7 230	5 890	8 438	7 097
May	3 198	-2 483	916	76	1 168	-68	8 543	3 805	280	10 099	2 569	12 948
Jun	10 636	5 537	-3 725	-125	2 944	-144	18 055	-4 773	-8 802	30 428	-7 862	13 764
Jul	-6 834	..	..	..	..	..	..	..	..	..	..	..

For most periods the relationships between the columns are as follows:
 11 = 5 + 6 + 8; 12 = 9 + 10 + 11. Due to the inclusion of Public Sector Net Cash Requirement (PSNCR) information on a ESA95 basis, 10 = 1 + 2 + 3 + 4 + 7 from 1994/95 only. Because the latest available PSNCR information is included figures for more recent periods may not add exactly.

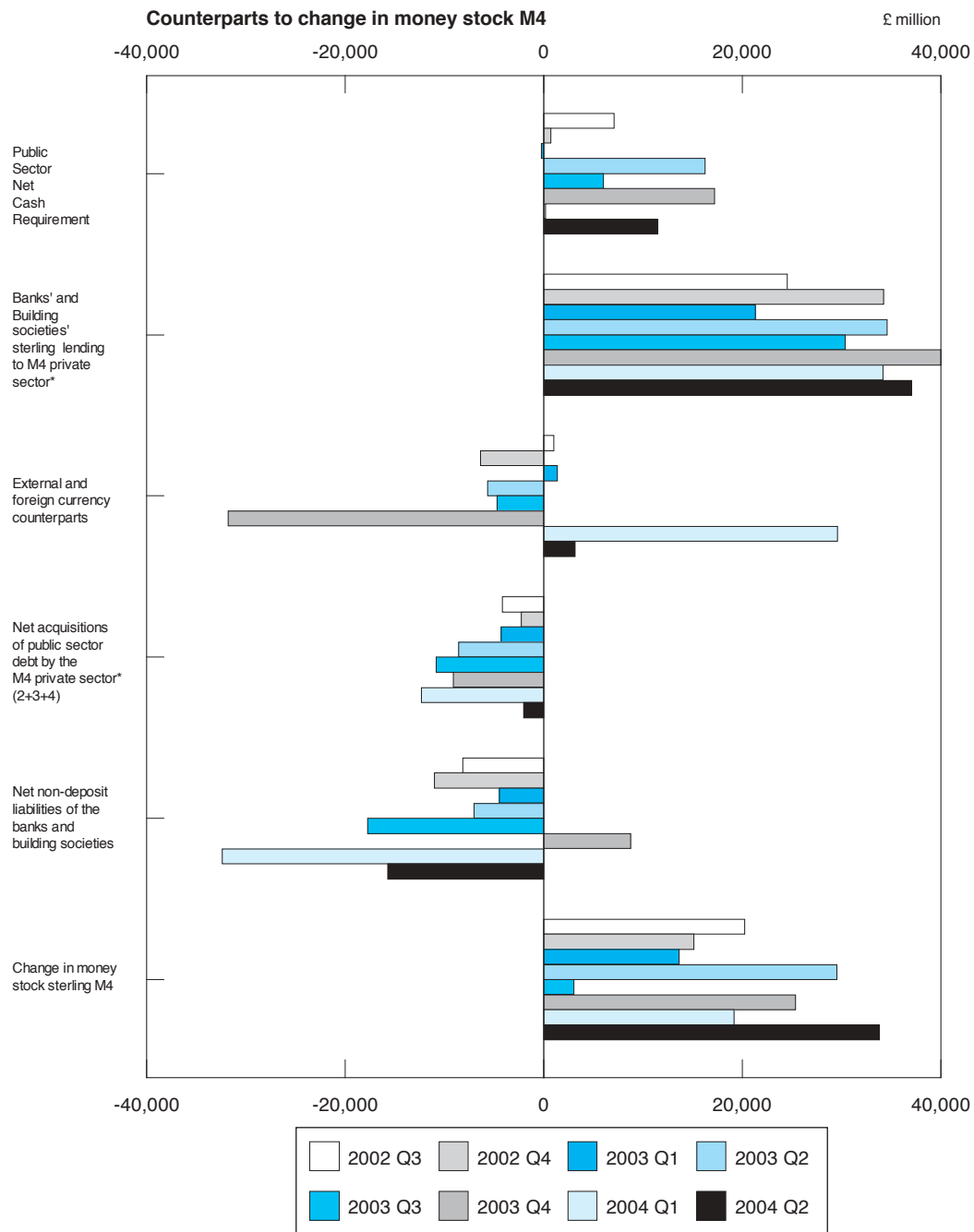
1 A wider range of figures is published monthly in *Financial Statistics*.

2 The M4 private sector comprises all UK residents other than the public sector, banks and building societies.

3 Formerly called the Public Sector Borrowing Requirement.

4 Columns 2-12 do not contain National Statistics data.

Sources: Office for National Statistics; Enquiries Column 1 020 7533 5984;



*Private sector other than banks and building societies

6.4 Public sector receipts and expenditure

£ million, not seasonally adjusted

	Public sector current expenditure										Public sector current receipts							
	Current expenditure on goods and services	Subsidies	Net Social Bene ts	Net current grants abroad	Other current grants	Interest paid to private sector and RoW	Total current expenditure	Operating surplus	Taxes on production	Taxes on income and wealth	Taxes on capital	Other Current taxes	Compulsory social contributions	Interest/divide from private-/RoW	Rent and other current transfers	Total current receipts		
Annual																		
	GZSN	NMRL	ANLY	GZSI	NNAI	ANLO	ANLT	ANBP	NMYE	ANSO	NMGI	NVCM	ANBO	ANBQ	ANBS	ANBT		
2001	189 191	5 787	123 865	-2 134	18 749	23 599	359 057	17 135	132 195	147 575	2 396	19 626	62 887	5 390	2 260	388 562		
2002	208 582	5 760	127 395	-539	22 793	21 417	385 408	16 857	138 513	142 402	2 381	21 236	63 520	4 409	2 199	390 641		
2003	228 955	7 377	133 599	-855	26 484	22 604	418 164	17 550	145 883	145 616	2 416	23 428	70 920	4 352	1 798	411 121		
Quarterly																		
2001 Q1	45 649	1 305	29 293	-261	4 785	6 313	87 084	4 088	31 498	47 192	569	4 504	17 957	1 700	753	108 046		
Q2	46 761	1 511	30 011	-259	4 761	5 991	88 776	4 201	32 820	29 131	612	5 099	14 518	1 283	406	87 841		
Q3	47 615	1 543	31 164	-1 294	4 314	5 328	88 670	4 222	33 815	35 513	617	5 068	15 064	1 275	698	96 043		
Q4	49 166	1 428	33 397	-320	4 889	5 967	94 527	4 624	34 062	35 739	598	4 955	15 348	1 132	403	96 632		
2002 Q1	50 534	1 177	30 325	12	5 520	5 214	92 782	4 279	32 710	44 764	556	5 043	18 231	1 027	654	107 033		
Q2	52 154	1 468	31 292	-126	5 622	5 423	95 833	4 130	33 954	28 730	607	5 387	14 624	1 085	442	88 744		
Q3	52 672	1 476	31 939	-375	6 253	4 617	96 582	4 231	35 840	35 760	619	5 436	14 972	1 126	672	98 441		
Q4	53 222	1 639	33 839	-50	5 398	6 163	100 211	4 217	36 009	33 148	599	5 370	15 693	1 171	431	96 423		
2003 Q1	55 550	1 734	31 892	-75	6 021	5 284	100 406	4 260	34 082	45 523	545	5 416	18 239	1 127	598	109 578		
Q2	57 556	1 902	32 499	-185	7 075	5 808	104 655	4 254	36 472	30 139	607	5 901	17 087	1 045	397	95 692		
Q3	56 944	1 928	33 412	-295	6 324	5 343	103 656	4 360	36 527	36 944	631	6 046	17 508	1 054	403	103 263		
Q4	58 905	1 813	35 796	-300	7 064	6 169	109 447	4 676	38 802	33 010	633	6 065	18 086	1 126	400	102 588		
2004 Q1	59 488	1 566	33 494	-137	7 802	5 424	107 637	4 253	37 029	45 881	647	6 075	22 629	1 154	396	117 854		

Sources: Office for National Statistics;
Enquiries 020 7533 5987

6.5 Public sector key fiscal indicators¹

£ million⁵, not seasonally adjusted

	Surplus on current budget ²		Net investment ³		Net borrowing ⁴		Net cash requirement		Public sector net debt	
	General Government	Public Sector	General Government	Public Sector	General Government	Public Sector	General Government	Public Sector	£ billion ⁶	% of GDP ⁷
Annual										
	ANLW	ANMU	-ANNV	-ANNW	NNBK	ANNX	RUUS	RURQ	RUTN	RUTO
2001	17 699	16 267	9 837	8 634	7 862	7 633	-3 768	-2 891	319.1	31.4
2002	-6 190	-8 640	11 078	9 669	-17 268	-18 309	16 821	18 734	344.4	32.2
2003	-19 080	-21 352	16 060	14 257	-35 140	-35 609	37 794	39 230	375.1	33.1
Quarterly										
2001 Q1	18 287	17 693	3 747	3 403	14 540	14 290	-13 094	-12 566	307.2	31.3
Q2	-3 848	-4 227	1 195	952	-5 043	-5 179	6 246	6 325	314.7	31.6
Q3	4 385	4 052	2 100	1 731	2 285	2 321	-6 322	-6 128	308.5	30.7
Q4	-1 125	-1 251	2 795	2 548	-3 920	-3 799	9 402	9 478	319.1	31.4
2002 Q1	11 449	10 856	4 861	4 660	6 588	6 196	-6 383	-6 323	311.6	30.2
Q2	-9 938	-10 523	1 279	885	-11 217	-11 408	7 126	7 069	318.6	30.5
Q3	-1 164	-1 611	2 430	1 846	-3 594	-3 457	82	678	320.7	30.3
Q4	-6 537	-7 362	2 508	2 278	-9 045	-9 640	15 996	17 310	344.4	32.2
2003 Q1	6 517	5 570	6 193	6 255	324	-685	-1 705	-268	341.7	31.5
Q2	-11 915	-12 513	3 456	2 380	-15 371	-14 893	16 402	16 244	350.2	31.8
Q3	-3 508	-3 962	3 039	2 579	-6 547	-6 541	6 121	6 018	355.5	31.9
Q4	-10 174	-10 447	3 372	3 043	-13 546	-13 490	16 976	17 236	375.1	33.1
2004 Q1	7 440	6 584	5 937	5 659	1 503	925	494	170 [†]	375.2	32.7
Q2	..	-12 697 [†]	..	1 718 [†]	-14 219 [†]	-14 415 [†]	..	11 482	387.7 [†]	33.4 [†]

1 National accounts entities as defined under the European System of Accounts 1995 (ESA95).

2 Net saving, plus capital taxes.

3 Gross capital formation, plus payments less receipts, of investment grants less depreciation.

4 Net borrowing = surplus on current budget minus net investment.

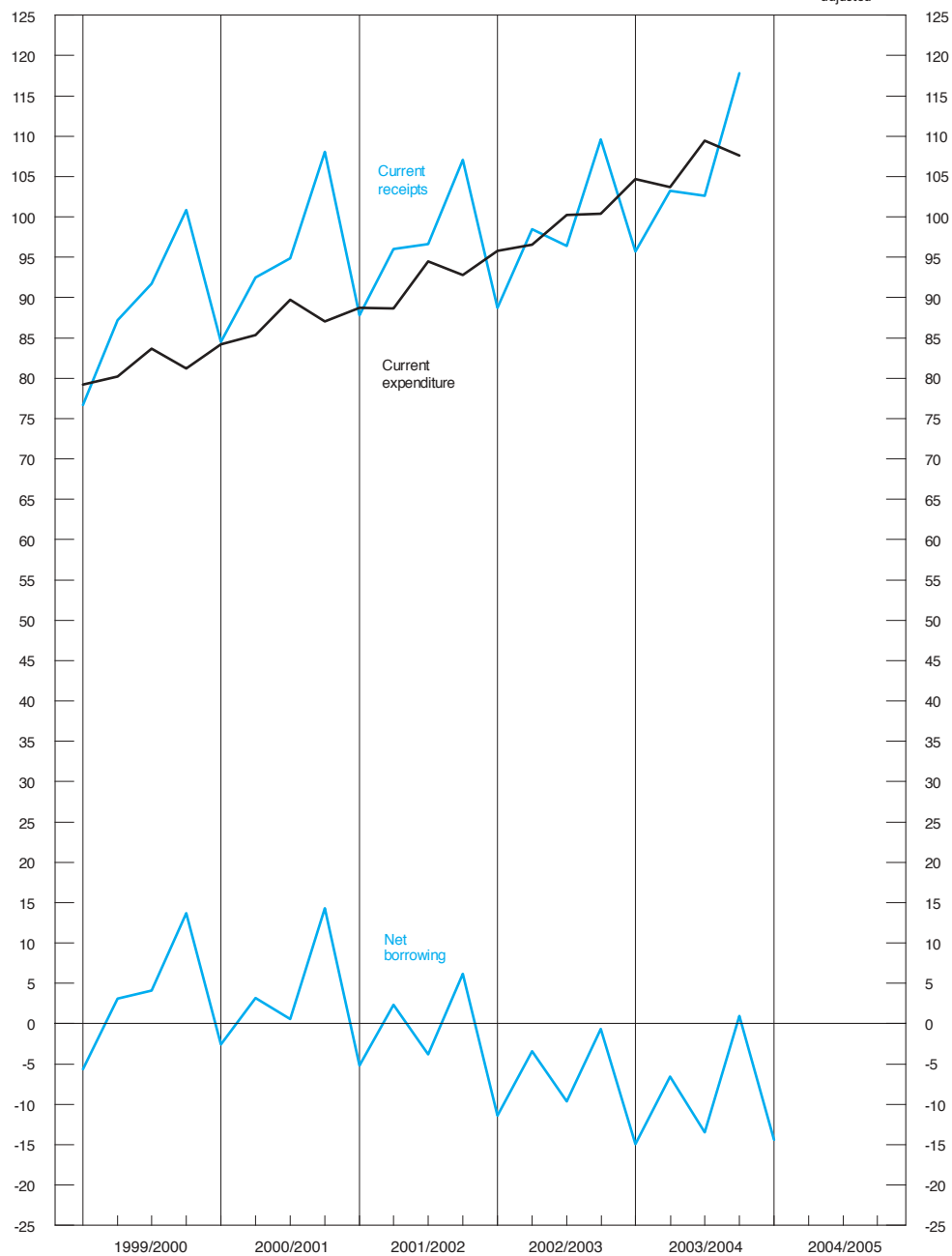
5 Unless otherwise stated

6 Net amount outstanding at end of period.

7 Net debt at end of the month, Gross domestic product at market prices for 12 months centred on the end of the month.

Sources: Office for National Statistics;
Enquiries 020 7533 5984

Public sector finances

£ billion
not seasonally
adjusted

6.6 Consumer credit and other household sector borrowing

£ million

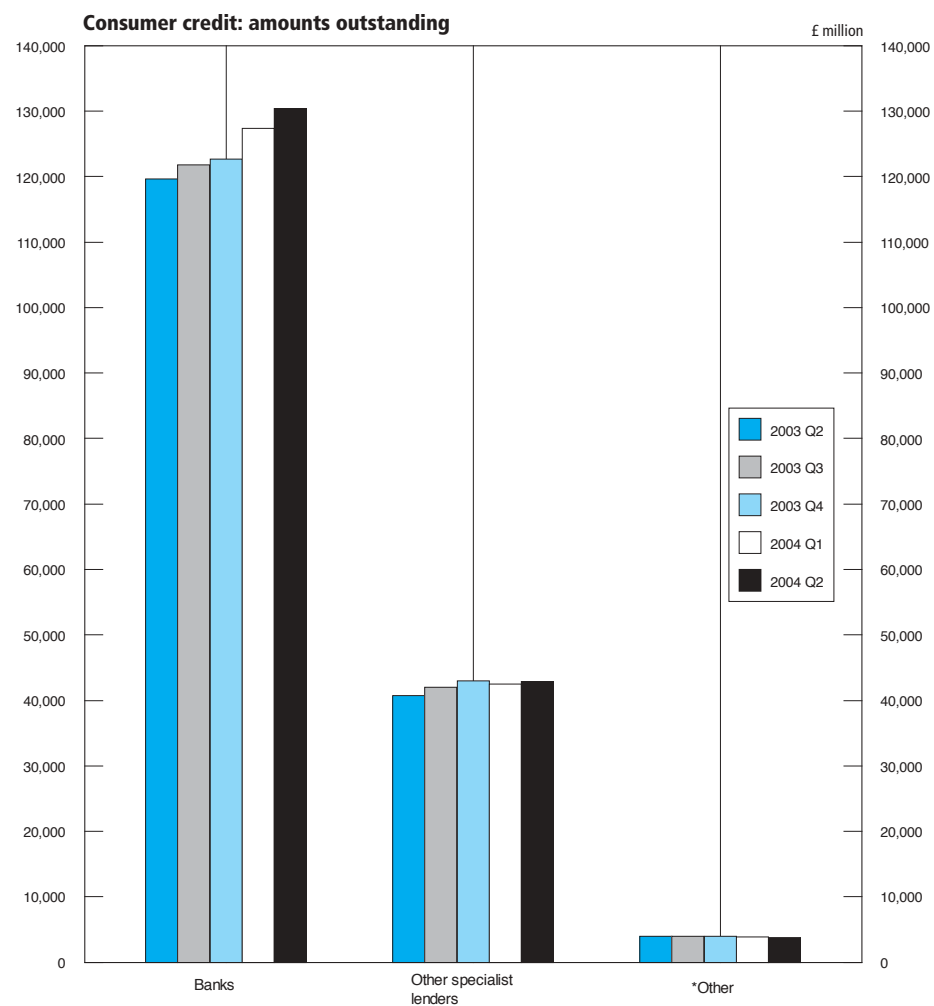
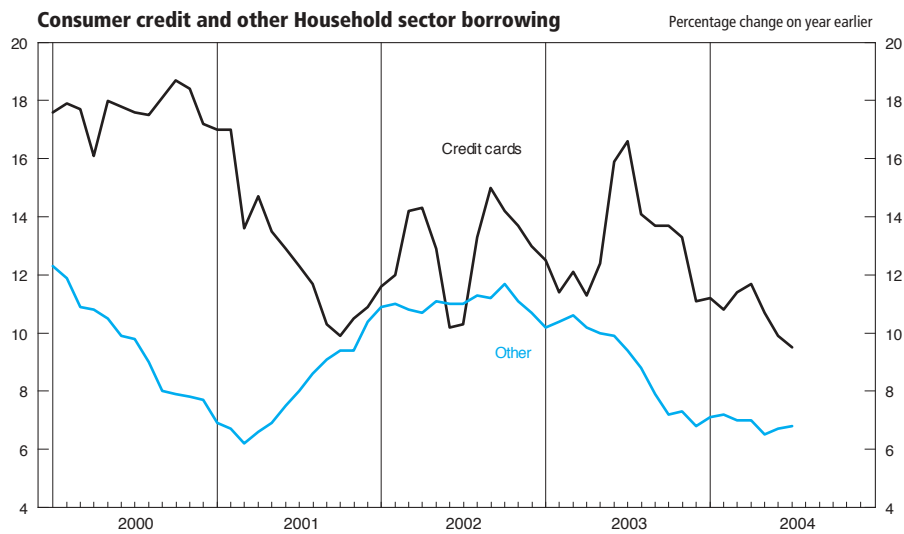
Consumer credit									
	Total consumer credit ¹	of which		Banks ¹	Building Societies' Class 3 Loans ¹	Other specialist lenders	Retailers	Insurance companies	Loans secured on dwellings (NSA ¹)
		credit cards ^{1,2}	other ^{1,2}						
Amounts outstanding: quarterly									
	VZRI	VZRJ	VZRK	VRVV	VZRG	VZRH	RLBO	VZQZ	AMWT
1998 Q1	92 268	19 416	72 803	66 896	213	21 240	2 660	1 246	435 546
Q2	95 641	20 581	75 065	69 740	185	21 718	2 688	1 240	442 028
Q3	98 748	21 553	77 199	72 359	176	22 347	2 683	1 242	449 691
Q4	101 618	22 468	79 201	73 137	295	24 305	2 669	1 238	456 803
1999 Q1	105 891	28 431	77 502 [†]	75 725 [†]	298	25 846	2 698	1 319	463 305
Q2	109 037	29 672 [†]	79 395	77 794	312	26 773	2 692	1 383	472 731
Q3	112 317 [†]	30 759	81 602	80 468	329	27 496	2 655	1 400	484 271
Q4	115 478	32 085	83 283	82 697	297	28 304	2 775	1 462	494 201
2000 Q1	119 262	33 442	85 858	86 056	315	28 832	2 664	1 415	503 561
Q2	122 019	34 941	87 106	88 718	315	28 944	2 612	1 310	514 841
Q3	124 341	36 304	88 075	91 035	349	29 145	2 554	1 273	525 844
Q4	127 295	37 603	89 573	94 270	392	29 011	2 504 [†]	1 197	535 753
2001 Q1	129 059	37 990	91 116	95 875	412	29 081	2 525	1 229	546 467
Q2	132 972	39 445	93 547	100 283	424	28 354	2 507	1 221	561 434
Q3	136 063	40 023	96 050	103 434	447	28 495	2 520	1 206	577 456
Q4	140 888	41 711	99 129	107 759	436	29 106	2 481	1 178	591 573
2002 Q1	144 286	43 384	100 931	111 117	463	29 106	2 506	1 183	606 729
Q2	147 268	43 487	103 815	113 141	460	29 702	2 571	1 193	626 121
Q3	153 010	45 968	106 993	118 333	523	30 448	2 559	1 196	653 083
Q4	156 943	47 155	109 794	120 861	610	31 816	2 536	1 182	675 769
2003 Q1	160 460	48 630	111 860	116 933	625	39 319	2 522	1 120	696 146
Q2	164 684	50 378	114 332	119 684	672	40 802	2 218	1 107	718 817
Q3	167 783	52 218	115 482	121 858	736	41 990	2 165	1 085	746 874
Q4	169 609	52 432	117 198	122 699	766	43 035	2 148	1 053	775 155
2004 Q1	173 715	54 170	119 595	127 354	751	42 539	2 074	1 043	799 408
Q2	177 308	55 358	121 982	130 409	777	42 895	2 045	1 024	..
Amounts outstanding: monthly									
2002 Jan	142 129	42 170 [†]	99 960 [†]	109 024 [†]	428	29 232	2 482	1 174	..
Feb	143 562 [†]	43 093	100 469	110 174	438	29 198	2 482	1 177	..
Mar	144 247	43 275	100 972	111 242	469	29 037	2 494	1 183	..
Apr	145 757	43 870	101 887	112 496	471	29 213	2 492 [†]	1 188	..
May	147 239	44 177	103 062	113 421	471	29 217	2 548	1 191	..
Jun	147 252	43 304	103 948	113 438	471 [†]	29 672	2 565	1 193	..
Jul	148 720	43 715	105 004	114 563	483	29 732	2 550	1 194	..
Aug	151 208	45 182	106 027	116 997	497	29 701	2 528	1 195	..
Sep	152 799	45 899	106 900	118 158	516	30 408	2 545	1 196	..
Oct	154 417	46 126	108 291	118 693	532	31 684	2 539	1 196	..
Nov	155 364	46 611	108 753	119 472	539	31 795	2 546	1 192	..
Dec	156 556	46 942	109 614	120 814	587	31 938	2 537	1 182	..
2003 Jan	157 606	47 460	110 146	121 109	601	32 033	2 545	1 163	..
Feb	158 895	48 006	110 890	119 632	616	34 501	2 541	1 140	..
Mar	160 191	48 507	111 685	116 635	633	39 261	2 509	1 120	..
Apr	161 171	48 848	112 323	116 878	655	40 034	2 482	1 109	..
May	162 970	49 633	113 337	118 469	659	40 039	2 470	1 106	..
Jun	164 389	50 171	114 218	119 530	689	40 748	2 213	1 107	..
Jul	165 815	50 966	114 849	120 815	701	41 016	2 200	1 104	..
Aug	166 930	51 546	115 384	121 707	716	40 972	2 193	1 096	..
Sep	167 544	52 173	115 371	121 832	725	41 979	2 154	1 085	..
Oct	168 554	52 455	116 099	121 825	730	42 720	2 159	1 072	..
Nov	169 465	52 803	116 662	122 553	730	43 344	2 156	1 061	..
Dec	169 282	52 176	117 106	122 621	735	43 139	2 146	1 053	..
2004 Jan	170 723	52 777	117 947	125 247	747	41 500	2 092	1 048	..
Feb	172 066	53 173	118 892	126 549	752	41 419	2 042	1 045	..
Mar	173 493	54 033	119 460	127 155	758	42 516	2 062	1 043	..
Apr	174 707	54 574	120 133	128 505	765	42 222	2 059	1 039	..
May	175 676	54 919	120 757	128 997	785	42 550	2 042	1 033	..
Jun	177 034	55 136	121 898	130 324	795	42 811	2 040	1 024	..
Jul	178 438	55 783	122 655	131 713	808	42 666	2 024	1 015	..

1 These figures fall outside the scope of National Statistics.

2 From January 1999 onwards, a more accurate breakdown between credit card and 'other lending' is available.

Credit card lending by other specialist lenders can now be separately identified and is included for the first time within the credit card component. Hence, data from January 1999 onwards are not directly comparable with earlier periods.

Sources: Bank of England; Enquiries Columns 1-5, 9 020 7601 5468; Office for National Statistics; Enquiries Columns 6-8 020 7 533 6046



*Other is the sum of Retailers, Insurance companies and Building society class 3 loans

6.7 Analysis of bank lending to UK residents^{1,3}

Amounts outstanding

£ million, not seasonally adjusted

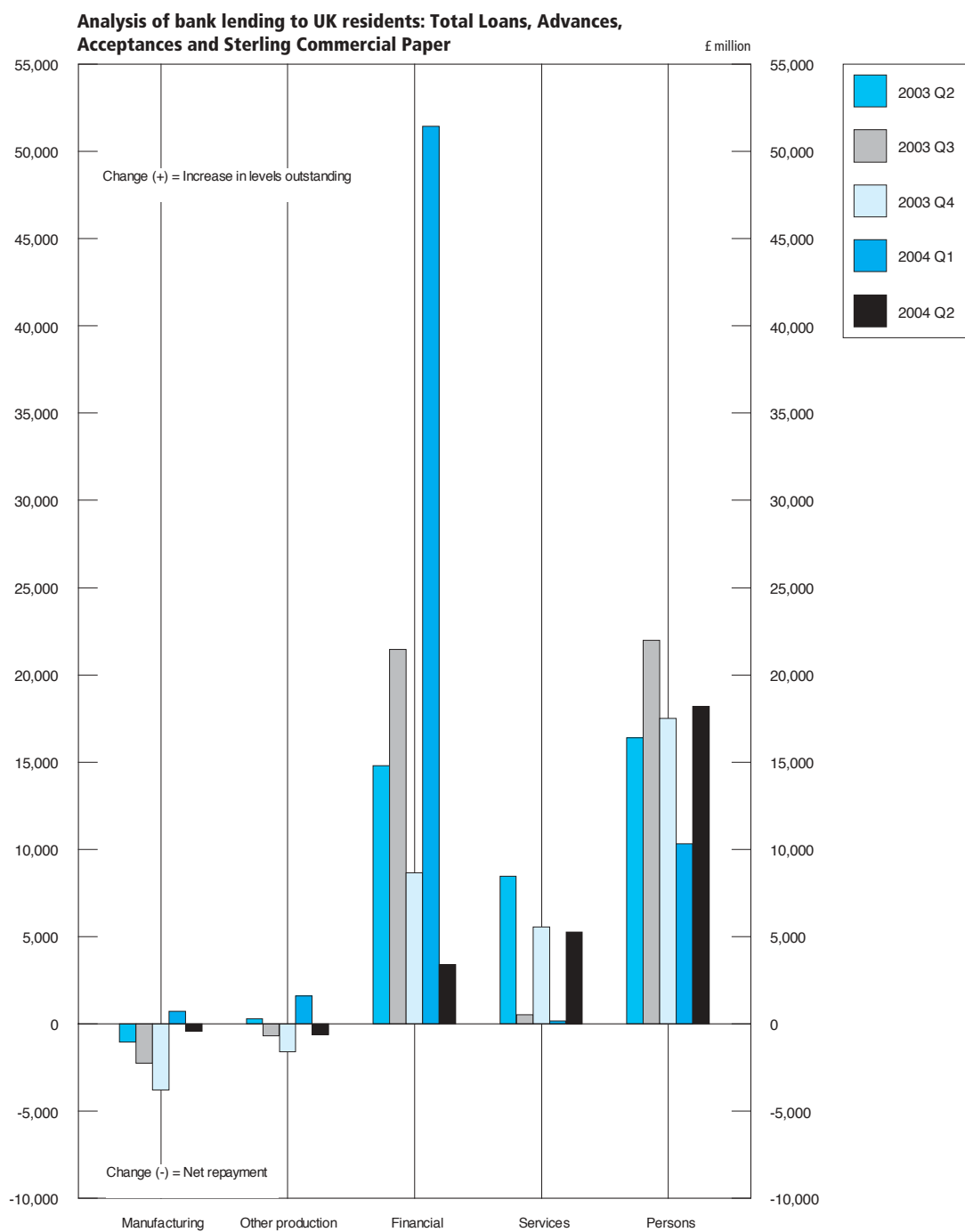
	Manufacturing ²	Other production	Financial	Services	Persons	Total loans, advances and acceptances
Total Loans, Advances, Acceptances and Sterling Commercial paper						
	TBSF	BCEX	BCFH	BCFR	TBTW	TBSA
2003 Q2	49 483	35 355	359 648	248 530	588 463	1 281 479
Q3	47 320	34 662	382 383 [†]	247 501	606 819	1 318 915
Q4	43 055	32 944	400 174	251 746 [†]	620 815	1 346 985
2004 Q1	43 291	34 468 [†]	442 522	251 272	631 534	1 402 307
Q2	42 892	33 923	446 871	256 600	647 662	1 427 948
Of which in sterling						
	TBUF	BCEY	BCFI	BCFS	TBVW	TBUA
2003 Q2	32 436	31 862	181 888	226 681	587 926	1 060 794
Q3	30 839	31 411	192 626 [†]	226 445	606 197	1 087 748
Q4	29 850	30 196 [†]	197 253	233 122 [†]	620 255	1 108 927
2004 Q1	30 487	32 206	205 289	234 922	630 968	1 133 091
Q2	30 745	31 141	212 583	240 365	647 017	1 161 851
Changes in total lending (sterling)						
	TBWF	BCEZ	BCFJ	BCFT	TBXW	TBWA
2003 Q2	-61	224	2 543	7 110	16 380	26 195
Q3	-1 589	-444	10 762 [†]	330	21 899	31 188
Q4	-989	-1 215	3 991	7 316 [†]	17 532	25 655
2004 Q1	637	2 009 [†]	8 956	1 831	10 300	24 702
Q2	288	-1 110	7 678	5 488	18 124	30 468
Changes in total lending (foreign currencies)						
	TBYF	BCFA	BCFK	BCFU	TBZW	TBYA
2003 Q2	-967	76	12 243	1 356	21	12 729
Q3	-649	-253	10 714	193	86	10 091
Q4	-2 808	-381	4 685	-1 763	-36	-304
2004 Q1	98	-391	42 495	-1 669	31	40 565
Q2	-713	508	-4 268	-216	75	-4 614
Facilities granted						
	TCAF	BCFB	BCFL	BCFV	TCBW	TCAA
2003 Q2	93 241	65 964	406 835	343 473	661 318	1 570 830
Q3	91 556	65 423	431 330	345 907	681 360	1 615 575
Q4	84 990	63 718	448 861 [†]	350 411 [†]	700 354	1 646 620
2004 Q1	86 661	65 661 [†]	495 903	356 273	715 332	1 719 337
Q2	81 946	63 365	503 099	359 120	736 146	1 743 676
Of which in sterling						
	TCCF	BCFC	BCFM	BCFW	TCDW	TCCA
2003 Q2	54 711	50 685	214 104	301 435	660 540	1 281 475
Q3	54 779	50 738	226 632	303 029	680 456	1 315 633
Q4	52 609	50 156 [†]	232 427 [†]	311 497 [†]	699 570	1 344 545
2004 Q1	54 540	52 601	241 841	318 441	714 560	1 381 489
Q2	53 139	49 987	250 041	321 039	735 297	1 409 504
Changes in sterling (facilities granted)						
	TCEF	BCFD	BCFN	BCFX	TCFW	TCEA
2003 Q2	-2 183	1 474	4 099	6 461	23 685	33 536
Q3	75	59	12 551 [†]	2 161 [†]	23 545	38 391
Q4	-2 170	-581	5 159 [†]	9 107 [†]	22 588	33 388
2004 Q1	1 941	2 442 [†]	10 363	6 971	14 576	37 514
Q2	-1 370	-2 700	8 584	2 684	22 813	30 011
Changes in foreign currencies (facilities granted)						
	TCGF	BCFE	BCFO	BCFY	TCHW	TCGA
2003 Q2	-1 321	697	11 051	100	37	10 565
Q3	-1 891	-636	10 643	1 820	128	10 064
Q4	-2 837	-341	4 000	-2 090	-85	-1 353
2004 Q1	868	-158	47 412	105	22	48 250
Q2	-3 520	230	-2 449	-13	70	-5 682

1 Comprises loans advances (including under reverse repos), finance leasing, acceptances, facilities and holdings of sterling commercial paper issued by UK residents, provided by reporting banks to their UK resident non-bank and non-building society customers. This analysis is based on Standard Industrial Classification of 1992 and excludes lending to residents in the Channel Islands and the Isle of Man which are classified as non-residents for statistical purposes from end-September 1997. Holdings of investments and bills and adjustments for transit items are no longer included. For a more detailed breakdown of these data, see *Financial Statistics* Table 4.5B.

2 Includes lending under DTI special scheme for domestic shipbuilding.

3 These figures fall outside the scope of National Statistics.

Source: Bank of England; Enquiries 020 7601 5360



6.8 Interest rates, security prices and yields⁵

Percentage rate

	Last Friday						Last working day	Average of working days	
	Treasury bill yield ¹	Deposits with local authorities - 3 months ²	Inter-bank 3 months bid rate ³	Inter-bank 3 months offer rate ³	Sterling certificates of deposit 3 months bid rate	Sterling certificates of deposit 3 months offer rate		Euro-dollar 3 month rate	British government securities: long dated ⁴ - 20 years
Annual	AJRP	AJOI	HSAJ	HSAM	HSAL	HSAM	ZCMG	AJIB	AJLX
2000	5.69	5.84	5.81	5.84	5.75	5.81	..	6.35	4.68
2001	3.87	4.00	4.03	4.06	3.98	4.02	..	1.83	4.78
2002	3.92	..	3.94	3.96	3.90	3.94	..	1.35	4.83
2003	3.90	..	3.95	3.98	3.95	3.98	..	1.10	4.64
Monthly									
2000 Jan	5.85	6.25	6.09	6.16	6.03	6.09	5.75	6.05	4.82
Feb	5.93	6.06	6.16	6.22	6.09	6.16	6.00	6.08	4.71
Mar	5.93	6.13	6.16	6.22	6.13	6.16	6.00	6.29	4.56
Apr	6.05	6.22	6.25	6.31	6.22	6.25	6.00	6.44	4.63
May	6.04	6.13	6.19	6.22	6.13	6.16	6.00	6.82	4.69
Jun	5.93	6.06	6.13	6.16	6.06	6.13	6.00	6.76	4.63
Jul	5.93	6.03	6.16	6.19	6.13	6.16	6.00	6.71	4.64
Aug	5.95	6.06	6.16	6.19	6.09	6.13	6.00	6.64	4.74
Sep	5.85	6.03	6.09	6.13	6.03	6.09	6.00	6.74	4.86
Oct	5.81	6.00	6.03	6.06	6.00	6.03	6.00	6.71	4.81
Nov	5.72	5.88	5.94	5.97	5.91	5.97	6.00	6.64	4.59
Dec	5.69	5.84	5.81	5.84	5.75	5.81	6.00	6.35	4.49
2001 Jan	5.57	5.63	5.69	5.72	5.66	5.72	6.00	5.35	4.51
Feb	5.46	5.53	5.53	5.56	5.50	5.53	5.75	5.01	4.57
Mar	5.29	5.38	5.44	5.47	5.40	5.43	5.75	4.86	4.56
Apr	5.11	5.13	5.25	5.28	5.23	5.25	5.50	4.27	4.86
May	5.02	5.13	5.16	5.19	5.16	5.17	5.25	3.95	4.99
Jun	5.10	5.06	5.19	5.25	5.18	5.18	5.25	3.80	5.07
Jul	5.04	5.13	5.16	5.22	5.16	5.17	5.25	3.60	5.03
Aug	4.71	4.75	4.84	4.88	4.83	4.84	5.00	3.43	4.81
Sep	4.33	4.38	4.41	4.47	4.41	4.51	4.75	2.52	4.93
Oct	4.16	4.06	4.13	4.19	4.10	4.13	4.50	2.15	4.80
Nov	3.81	3.94	3.94	4.00	3.92	3.96	4.00	2.00	4.51
Dec	3.87	4.00	4.03	4.06	3.98	4.02	4.00	1.83	4.75
2002 Jan	3.90	3.94	3.97	4.03	3.97	3.99	4.00	1.86	4.81
Feb	3.91	3.88	3.97	4.00	3.91	3.95	4.00	1.85	4.83
Mar	4.04	4.09	4.09	4.16	4.09	4.11	4.00	2.00	5.11
Apr	3.98	4.00	4.06	4.13	4.05	4.06	4.00	1.86	5.13
May	4.04	4.03	4.09	4.13	4.09	4.11	4.00	1.82	5.18
Jun	3.97	4.03	4.06	4.09	4.05	4.07	4.00	1.83	5.02
Jul	3.75	..	3.94	3.97	3.92	3.94	4.00	1.75	4.90
Aug	3.86	..	3.91	3.97	3.91	3.93	4.00	1.80	4.64
Sep	3.81	..	3.88	3.91	3.85	3.86	4.00	1.74	4.45
Oct	3.73	..	3.88	3.91	3.85	3.87	4.00	1.64	4.59
Nov	3.86	..	3.94	3.98	3.94	3.95	4.00	1.42	4.64
Dec	3.92	..	3.94	3.96	3.90	3.94	4.00	1.35	4.62
2003 Jan	3.79	..	3.88	3.91	3.88	3.89	4.00	1.29	4.44
Feb	3.49	..	3.59	3.64	3.60	3.62	3.75	1.30	4.39
Mar	3.51	..	3.57	3.61	3.57	3.59	3.75	1.25	4.54
Apr	3.47	..	3.55	3.58	3.54	3.56	3.75	1.28	4.67
May	3.44	..	3.54	3.57	3.55	3.55	3.75	1.22	4.46
Jun	3.50	..	3.55	3.59	3.55	3.56	3.75	1.09	4.39
Jul	3.32	..	3.36	3.40	3.36	3.38	3.50	1.06	4.65
Aug	3.53	..	3.54	3.57	3.54	3.56	3.50	1.11	4.68
Sep	3.59	..	3.66	3.67	3.63	3.65	3.50	1.13	4.76
Oct	3.81	..	3.86	3.90	3.85	3.87	3.50	1.13	4.88
Nov	3.86	..	3.90	3.94	3.90	3.92	3.75	1.12	4.95
Dec	3.90	..	3.95	3.98	3.95	3.98	3.75	1.10	4.83
2004 Jan	4.00	..	4.05	4.10	4.06	4.08	3.75	1.08	4.75
Feb	4.11	..	4.11	4.16	4.12	4.14	4.00	1.07	4.78
Mar	4.24	..	4.30	4.33	4.30	4.32	4.00	1.05	4.67
Apr	4.31	..	4.35	4.39	4.35	4.37	4.00	1.11	4.87
May	4.54 _U	..	4.56	4.59	4.55	4.59	4.25	1.24	4.98
Jun	4.65 _U	..	4.77	4.79	4.74	4.78	4.50	1.56	5.00
Jul	4.77	..	4.86	4.89	4.87	4.88	4.50	1.64	4.92

1 Average discount rate expressed as the rate at which interest is earned during the life of the bills.

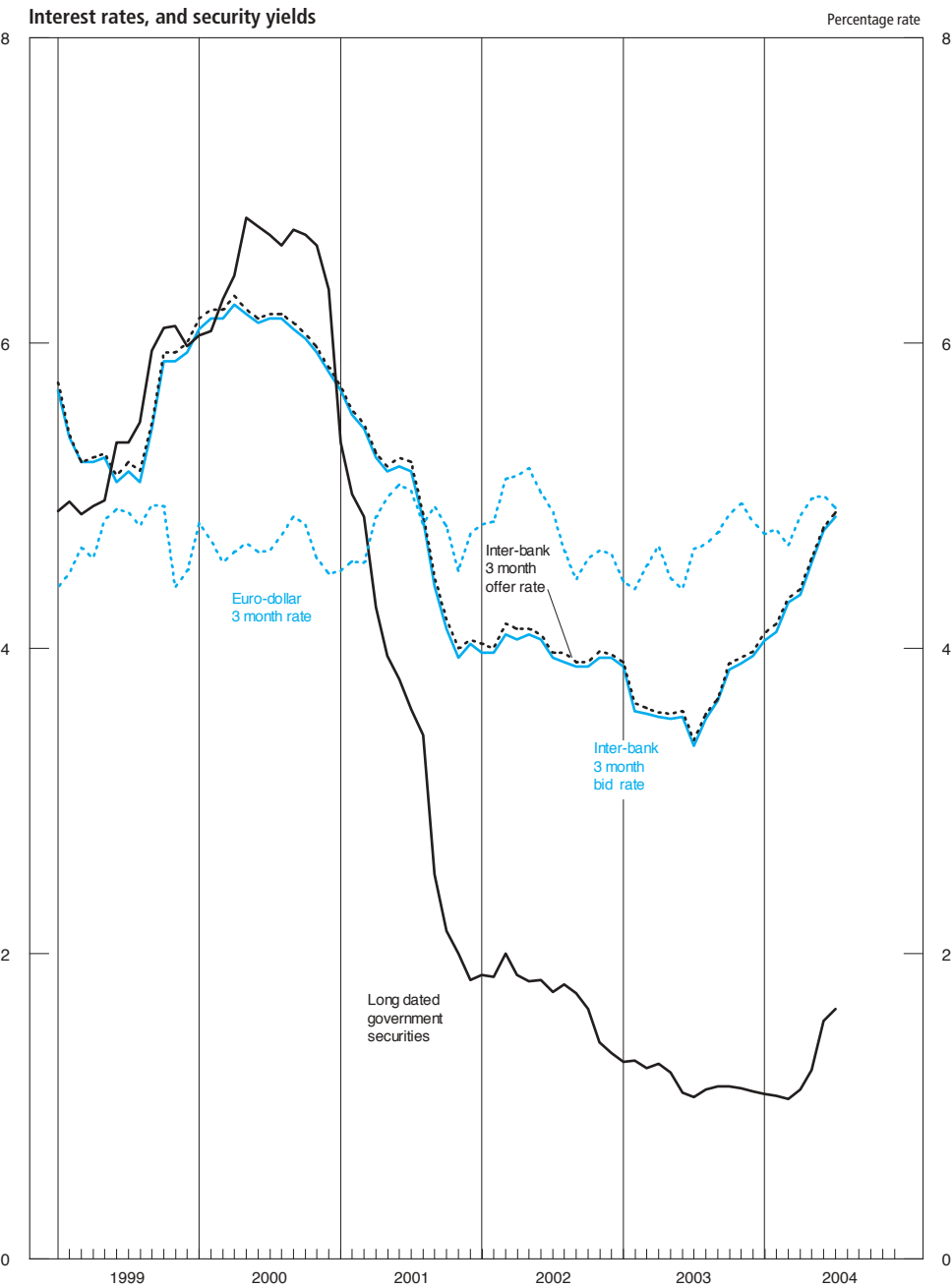
2 For a minimum term of 3 months and thereafter at 7 days' notice.

3 Spread of rates over the day in the inter-bank sterling market; from June 1982 rates are the spread at 10.30 am.

4 Averages of Wednesdays until February 1980; from March 1980 figures are the average of all observations (3 a week); from January 1982 average of working days. Calculated gross redemption yields - see *Financial Statistics Explanatory Handbook*.

5 These figures fall outside the scope of National Statistics.

Sources: Bank of England; Enquiries 020 7601 4342.



6.9 A selection of asset prices

	Producer price indices (NSA) (2000 = 100)		Housing:ODPM all lenders mix adjusted house price index (NSA) (2002 = 100)			Average price of agricultural land in England (NSA) (1995 = 100) ²
	Plant and machinery bought as fixed assets by	Manufactured output	New dwellings ¹	Secondhand dwellings ¹	All dwellings ¹	
Annual	PVJL	PQIR	WMPN	WMPP	WMPQ	BAJI
2000	100.0	100.0	84.6	88.0	87.7	..
2001	102.0	95.4	90.3	95.7	95.1	..
2002	100.2	95.2	108.7	111.6	111.2	..
2003	99.5	94.6	126.4	129.0	128.7	..
Quarterly						
2000 Q1	99.0	102.0	81.3	83.9	83.6	142 ³
Q2	99.4	101.8	86.0	88.5	88.2	143 ³
Q3	100.1	99.9	89.0	89.9	89.9	159 ³
Q4	101.4	96.3	92.9	92.3	92.5	146 ³
2001 Q1	102.9	95.4	90.8	92.1	92.1	155 ³
Q2	103.1	95.5	90.8	96.0	95.4	148 ³
Q3	101.2	95.4	94.1	99.4	98.8	162 ³
Q4	101.1	95.4	95.4	96.9	96.8	154 ³
2002 Q1	101.0	95.6	100.0	100.0	100.0	129 ³
Q2	100.5	95.5	106.5	108.4	108.2	139 ³
Q3	100.0	94.9	111.0	116.1	115.5	150 ³
Q4	99.2	94.9	117.1	121.8	121.3	150 ³
2003 Q1	99.1	94.6	119.3	124.0	123.4	131 ³
Q2	99.7	94.1	127.2	127.3	127.2	147 ³
Q3	99.9	94.5	127.9	131.1	130.7	167 ³
Q4	99.5	95.1	131.8	133.7	133.4	..
2004 Q1	99.2	95.5	130.8	135.2	134.6	..
Q2	99.9p	96.2p	137.8	143.1	142.5	..
Monthly						
2002 Jul	100.2	94.9	105.9	113.8	112.9	..
Aug	100.4	94.9	111.6	115.9	115.4	..
Sep	99.4	94.9	115.5	118.6	118.2	..
Oct	99.2	94.9	113.7	119.9	119.1	..
Nov	99.2	95.0	116.2	120.9	120.3	..
Dec	99.1	94.9	121.4	124.7	124.3	..
2003 Jan	98.5	94.7	119.2	124.0	123.4	..
Feb	99.0	94.6	118.0	122.7	122.1	..
Mar	99.7	94.6	120.7	125.2	124.7	..
Apr	99.9	94.2	127.5	127.8	127.7	..
May	99.9	93.9	127.1	126.8	126.8	..
Jun	99.4	94.2	127.1	127.2	127.1	..
Jul	99.7	94.2	126.6	129.7	129.3	..
Aug	100.0	94.5	129.6	131.9	131.6	..
Sep	100.0	94.7	127.6	131.7	131.2	..
Oct	99.6	95.1	132.6	133.7	133.5	..
Nov	99.6	95.1	128.8	132.4	132.0	..
Dec	99.3	95.1	132.0	135.0	134.6	..
2004 Jan	99.2	95.0	131.5	136.0	135.4	..
Feb	98.6	95.4	129.4	134.7	134.1	..
Mar	99.7	96.2	131.6	134.8	134.4	..
Apr	99.6p	96.3	135.9	141.1	140.5	..
May	100.0p	96.3	136.7	142.9	142.2	..
Jun	100.1p	95.9p	140.9	145.3	144.7	..
Jul	99.8p	96.1p	..	..	..	..

¹ Series based on mortgage lending by all financial institutions rather than building societies only, as previously published. This change has been made necessary because of the mergers, takeovers and conversions to plc status affecting the building society sector. The series is based on the Office of the Deputy Prime Ministers' 5% survey of mortgage lenders (at completion stage), but now includes all mortgage lenders rather than building societies only. From February 2002, monthly data has been obtained from the enlarged survey and quarterly data from 2002q2 are based on monthly indices.

² Please note that because of some changes in coverage, the revised series from Q1 1993 is not directly comparable with the old series. From Q1 1993 prices of all sales of agricultural land exclude some transfers in order to come closer to estimates of market determined prices. However the new series does not represent exactly competitive open market values. Sales are now analysed and recorded on the basis of when the transactions actually took place. Further information is available on the DEFRA Website (www.statistics.defra.gov.uk/esg/default.htm) accessible through the Internet. Data prior to 1993 remains on the previous basis.

³ Provisional estimates.

Sources: Office for National Statistics, Enquiries Columns 1-2 01633 812106 or 813390;
Office of the Deputy Prime Minister, Enquiries Columns 3-5 020 7944 3325;
Department of Environment, Food and Rural Affairs;
Enquiries Column 6 01904 455326

Measures of variability of selected economic series¹

	Table	Period covered	Average percentage changes			I / C for MCD (or QCD)	I / C for MCD (or QCD) span	
			CI	I	C			
Quarterly series								
National income and components: chained volume measures, reference year 2001								
Gross Value Added (GVA) at Basic Prices	2.1	Q1 1985 to Q1 2004	0.7	0.2	0.7	0.3	1	0.3
Households' Final Consumption Expenditure	2.5	Q1 1985 to Q1 2004	0.9	0.3	0.9	0.4	1	0.4
Gross fixed capital formation	2.2, 2.7	Q1 1985 to Q1 2004	2.1	1.2	1.5	0.8	1	0.8
Exports: goods and services	2.2	Q1 1985 to Q1 2004	2.0	1.2	1.4	0.8	1	0.8
Imports: goods and services	2.2	Q1 1985 to Q1 2004	2.1	1.0	1.8	0.6	1	0.6
Real Households' disposable income	2.5	Q1 1985 to Q1 2004	1.1	0.9	0.8	1.1	2	0.3
Gross operating surplus of private non-financial corporations	2.11	Q1 1985 to Q1 2004	3.2	2.2	2.1	1.1	2	0.4
Other quarterly series								
Households' saving ratio ³	2.5	Q1 1985 to Q1 2004	1.0	0.9	0.4	2.2	2	0.7
Monthly series								
Retail sales (volume per week)								
Predominantly food stores	5.8	Jan 1986 to Mar 2004	0.6	0.6	0.2	2.4	3	0.8
Predominantly non-food stores	5.8	Jan 1986 to Mar 2004	1.1	1.0	0.4	2.4	3	0.7
Non-store and repair	5.8	Jan 1986 to Mar 2004	1.8	1.7	0.5	3.5	4	0.9
Index of industrial production								
Production industries	5.1	Jan 1985 to Mar 2004	0.7	0.7	0.2	3.1	4	0.8
Manufacturing industries	5.1	Jan 1985 to Mar 2004	0.7	0.6	0.3	2.5	3	0.8
Average earnings: whole economy	4.6	Jan 1990 to Mar 2004	0.5	0.3	0.4	0.8	1	0.8
Exports: value, f.o.b. ⁴	2.13	Jan 1985 to Mar 2004	2.9	2.7	0.8	3.5	4	0.8
Imports: value, f.o.b. ⁴	2.13	Jan 1985 to Mar 2004	2.3	2.1	0.8	2.8	3	0.8
Money stock - M0 ⁵	6.2	Jan 1985 to Mar 2004	0.6	0.3	0.5	0.7	1	0.7
Money stock - M4 ⁵	6.2	Jan 1985 to Mar 2004	0.8	0.3	0.7	0.4	1	0.4

1 For a fuller description of these measures see article 'Measuring variability in economic time series' in *Economic Trends*, No 226, August 1972.

The following are brief definitions of the measures.

\overline{CI} is the average month to month (quarter to quarter for quarterly series) percentage change without regard to sign in the seasonally adjusted series.

\overline{C} is the same for the trend component.

\overline{I} is the same for the irregular component, obtained by dividing the trend component into the seasonally adjusted series, except for those series which are seasonally adjusted using an additive model, see footnotes 3 and 5.

$\overline{I/C}$ is therefore a measure of the size of the relative irregularity of the seasonally adjusted series.

The average changes \overline{I} and \overline{C} can also be computed successively over spans of increasing numbers of months (quarters). MCD (QCD), months (quarters) for cyclical dominance, is the shortest span of months (quarters) for which $\overline{I/C}$ is less than 1 and therefore represents the minimum period over which changes in the trend, on average, exceed the irregular movement.

MCD cannot exceed 6 even if $\overline{I/C}$ exceeds 1 for 6-month periods.

2 Series relate to Great Britain.

3 The figures in the tables were obtained from an additive analysis of the households' saving ratio so \overline{CI} , \overline{I} and \overline{C} are differences in percentage points.

4 The figures have been updated as described in an article in *Economic Trends*, No 320, June 1980.

5 As the irregular component for M0 and M4 is obtained by subtraction of the trend rather than by division, the figures for \overline{CI} , \overline{I} and \overline{C} are expressed as percentages of the trend level in the preceding month.

Source: Office for National Statistics: Enquiries 020 7533 6243

Index of sources

Abbreviations

DEFRA – Department for Environment, Food and Rural Affairs.

ODPM – Office of the Deputy Prime Minister.

	Table	Source	Further statistics (where available)
Asset prices	6.9	Office for National Statistics DEFRA ODPM Bank of England	Financial Statistics (for financial assets)
Average earnings	1.1, 4.6	Office for National Statistics	First Release Labour Market Trends Monthly Digest of Statistics
Balance of payments (current account)	2.13	Office for National Statistics	First Release Financial Statistics UK Economic Accounts
Banking		Bank of England	Financial Statistics
Banking loans, advances and acceptances	6.7		
British government securities (long dated) 20 years yield	6.8	Bank of England	
Building societies			Financial Statistics
Advances on new dwellings	5.4	Building Societies Association	
Average prices of new dwellings on mortgage completion (see also Housing)	5.4	ODPM Housing Statistics	
Commitments on new dwellings	5.4	Building Societies Association	
Capital account summary, analysis by sector	2.10	Office for National Statistics	
Cars (see also Motor Vehicles)			
Production	1.1, 5.3	Office for National Statistics	News Release
Registration	5.8	Department of Transport	
Change in inventories			
By industry	5.6	Office for National Statistics	First Release
Manufacturing	1.1		Monthly Digest of Statistics
Ratios	5.7		
Total	2.2		
Claimant count (see Unemployment)			
Coal (see also Energy)	5.9	Department of Trade and Industry	Energy Trends
Consumer prices index	1.1, 3.1	Office for National Statistics	First Release Focus on consumer price indices Labour Market Trends
Commercial vehicles, production (see also Motor vehicles)	5.3	Office for National Statistics	News Release
Construction industry			
Index of output (see also Industrial production)	1.1, 2.8	Office for National Statistics	
Orders received	5.2, 5.4	Department of Trade and Industry	Construction Statistics
Output	5.2	Department of Trade and Industry	
Corporations		Office for National Statistics	
Financial corporations			Financial Statistics UK Economic Accounts
Capital transfers	2.10		
Gross saving	2.10		
In relation to gross domestic product	2.3		Monthly Digest of Statistics
Non-financial corporations			First Release Financial Statistics UK Economic Accounts
Allocation of primary income account	2.11		
Capital account, net lending/net borrowing	2.12		
Gross operating surplus	2.11		
Gross saving	2.10		
Property income received/paid	2.11		
Resources	2.11, 2.12		
Secondary distribution of income account	2.12		
Uses	2.11, 2.12	Office for National Statistics	

Consumer credit	5.8, 6.6	Office for National Statistics	Consumer Trends Financial Statistics
Counterparts to changes in money stock M4	6.3	Bank of England	Financial Statistics Press Notice
Credit business (see also Hire purchase)	5.8	Office for National Statistics	Financial Statistics
Current balance (see also Balance of payments)	2.13	Office for National Statistics	First Release Financial Statistics UK Economic Accounts
Dwellings (see also Housing)	5.4	Office for National Statistics ODPM	
Earnings (average)	1.1, 4.6	Office for National Statistics	First Release Labour Market Trends Monthly Digest of Statistics
Economic activity (Labour Force Survey)	4.1, 4.2, 4.3	Office for National Statistics	First Release Labour Market Trends
Electricity (see also Energy)	5.9	Department of Trade and Industry	Energy Trends
Employees in employment	4.1, 4.2, 4.3, 4.4	Office for National Statistics	First Release Labour Market Trends Monthly Digest of Statistics
Energy	5.9	Department of Trade and Industry	Energy Trends UK Energy Statistics
Household final consumption expenditure on energy products	2.6	Office for National Statistics	Monthly Digest of Statistics
Output index for energy and water supply	5.1		Monthly Digest of Statistics
Primary fuel input: total, coal, petroleum, natural gas and primary electricity	5.9	Department of Trade and Industry	Energy Trends
Engineering industries		Office for National Statistics	News Release
Sales and orders: total, home market and export	1.1, 5.2		Monthly Digest of Statistics
Eurodollar-3-month rate (see also Interest rates)	6.8	Bank of England	Financial Statistics
Exchange rates	1.1, 6.1	Bank of England	First Release Financial Statistics
Expenditure (see also Total final expenditure)	2.2, 2.3	Office for National Statistics	Monthly Digest of Statistics UK Economic Accounts
Exports		Office for National Statistics	
Of goods	1.1, 2.13		First Release Monthly Digest of Statistics
Price index	1.1, 2.14		First Release UK Economic Accounts
Volume indices	2.14		First Release UK Economic Accounts
Of goods and services	2.2, 2.3		First Release UK Economic Accounts
Of passenger cars, commercial vehicles	5.3		News Release
Orders; engineering industries	5.2		News Release
Price indices	2.14		First Release UK Economic Accounts
Price index for manufactures (international comparisons)	2.15	International Monetary Fund	
Relative prices (as measure of trade competitiveness)	2.15		
Relative profitability (as measure of trade competitiveness)	2.15	International Financial Statistics	
Unit value index	2.15		
Final expenditure (see also Total final expenditure)	2.2, 2.3	Office for National Statistics	First Release Monthly Digest of Statistics UK Economic Accounts
Financial corporations (see also corporations)	2.10	Office for National Statistics	Financial Statistics UK Economic Accounts
Fixed investment			
By sector and by type of asset	2.7	Monthly Digest of Statistics	
Dwellings (see also Housing)	2.7, 5.4	Office for National Statistics	
Gas (see also Energy)	5.9	Department of Trade and Industry	Energy Trends
General government final consumption expenditure	2.2, 2.3	Office for National Statistics	Financial Statistics Monthly Digest of Statistics UK Economic Accounts

Gross disposable income: non-financial corporations	2.12	Office for National Statistics	First Release Financial Statistics
Gross domestic product	2.1	Office for National Statistics	First Release Monthly Digest of Statistics UK Economic Accounts
At basic prices	1.1, 2.1, 2.3, 2.4		
At market prices	2.1, 2.2		
By category of expenditure	2.2		
In relation to output	2.8		
In relation to stocks	5.7		
Per head	2.4		UK Economic Accounts
Gross fixed capital formation (see also Fixed investment)	2.2	Office for National Statistics	First Release Monthly Digest of Statistics UK Economic Accounts
By sector and type of asset	2.7		
Dwellings	2.7		
Gross household disposable income	2.4, 2.5	Office for National Statistics	First Release Monthly Digest of Statistics UK Economic Accounts
Gross national income (per head)	2.4	Office for National Statistics	
Gross operating surplus of non-financial corporations	2.11	Office for National Statistics	First Release Financial Statistics UK Economic Accounts
Gross saving (corporations)	2.10	Office for National Statistics	First Release Financial Statistics UK Economic Accounts
Household final consumption expenditure		Office for National Statistics	First Release Consumer Trends Monthly Digest of Statistics
Component categories	2.6		
In relation to personal income	2.5		
In relation to total final expenditure	2.3		
Per head	2.4		
Households' income before tax	2.4, 2.5	Office for National Statistics	Monthly Digest of Statistics
Housing			
Average price of new dwellings at mortgage completion stage	5.4	ODPM	Housing Statistics
Fixed investment in dwellings	2.7, 5.4	Office for National Statistics	
Orders received by contractors for new houses	5.4	Department of Trade and Industry	Monthly Digest of Statistics Press Notice Housing Statistics
Starts and completions	1.1, 5.4	ODPM The Scottish Executive National Assembly for Wales	
Imports			
Of goods	1.1, 2.13	Office for National Statistics	First Release Monthly Digest of Statistics
Price index	1.1, 2.14		
Volume indices	2.14		
Of goods and services	2.2		First Release Monthly Digest of Statistics UK Economic Accounts
Price competitiveness (manufactures)	2.15	Office for National Statistics	
Incomes		Office for National Statistics	
Households' gross disposable income	2.5		First Release Monthly Digest of Statistics UK Economic Accounts
Households' income before tax	2.5		First Release Monthly Digest of Statistics UK Economic Accounts
Income from employment as a percentage of gross domestic product (see also Wages: Earnings)	2.3		Monthly Digest of Statistics
Inventory holding gains (non-financial corporations)	2.11	Office for National Statistics	First Release Financial Statistics UK Economic Accounts

Industrial production: index of output	5.1	Office for National Statistics	First Release Monthly Digest of Statistics
By main industrial groupings	5.1		
By selected industries	5.1		
In relation to output (gross domestic product)	2.8		
In relation to stocks (manufacturing industries)	5.7		
Inter-bank 3-month rate (see also Interest rates)	6.8	Bank of England	Monetary and Financial Statistics
Interest rates	6.8	Bank of England	Financial Statistics
Eurodollar 3-month rate			
Inter-bank 3-month bid and offer rates			Bank of England
Local authorities 3-month deposit rate			
Selected retail banks base rate			
Sterling certificates of deposit 3-month bid and offer rates			
Treasury bill yield			
International Reserves	6.1	Bank of England	Financial Statistics
Key fiscal indicators	6.5	Office for National Statistics	
Labour Force Survey	4.1, 4.2, 4.3, 4.5a	Office for National Statistics	First Release Labour Market Trends
Local authorities 3-month deposit rate (see also Interest rates)	6.8	Bank of England	
Housing starts and completions (see also Housing)	5.4	ODPM	Housing Statistics Press Notice
Manufacturing industries		Office for National Statistics	Monthly Digest of Statistics
Change in inventories	1.1, 5.6		First Release
Inventory ratios	5.7		
Output (constant prices)	5.1		
in constant prices	1.1		
per filled job, per hour worked	4.7		
Money stock	1.1, 6.2	Bank of England	Financial Statistics Press Notice
Motor vehicles			
New car registrations	1.1, 5.8	Department of Transport	
Production of passenger cars and commercial vehicles: total and for export	1.1, 5.3	Office for National Statistics	News Release Monthly Digest of Statistics
National accounts	2.1 - 2.15	Office for National Statistics	First Release Financial Statistics UK Economic Accounts
National disposable income at market prices	2.1	Office for National Statistics	
Non-financial corporations (see also Corporations)	2.10, 2.11, 2.12	Office for National Statistics	First Release Financial Statistics UK Economic Accounts
Operating surplus (see also Corporations)	2.3, 2.11	Office for National Statistics	First Release Financial Statistics UK Economic Accounts
Orders received			
By construction industry (see also Construction)	5.2	Department of Trade and Industry	Construction Statistics
By engineering industries (see also Engineering)	5.2	Office for National Statistics	News Release Monthly Digest of Statistics
Output			
By construction industry (see also Construction)	1.1, 2.8, 5.2	Office for National Statistics Department of Trade and Industry	Construction Statistics
By engineering industries (see also Engineering)	5.2	Office for National Statistics	News Release Monthly Digest of Statistics
Gross value added by category of	2.8		First Release Monthly Digest of Statistics
Gross value added at basic prices service inds.	2.9		
Per filled job (see also Productivity)	4.7		
Overseas trade (see Exports; Imports; Trade in goods)			
Petroleum (see also Energy)	5.9	Department of Trade and Industry	Energy Trends
Population			
Estimates per capita, income, product and spending	2.4	Office for National Statistics	

Prices			
Asset prices	6.9	Office for National Statistics DEFRA ODPM	Financial Statistics (for financial assets)
Average price of new dwellings at mortgage completion (see also Housing)	5.4	ODPM	Housing Statistics
Consumer prices index	1.1, 3.1	Office for National Statistics	First Release Focus on Consumer price indices Labour Market Trends Labour Market Trends
Pensioner price index	3.1	Office for National Statistics	First Release
Producer input and output prices	1.1		Monthly Digest of Statistics
Producer price index	3.1	Office for National Statistics	First Release
Retail prices index	1.1, 3.1		First Release Labour Market Trends Focus on Consumer price indices Monthly Digest of Statistics
Productivity (see Output per filled job)	4.7		First Release Labour Market Trends Monthly Digest of Statistics
Private sector			
Capital account, net lending/net borrowing	2.10	Office for National Statistics	Financial Statistics
Gross fixed investment	2.3, 2.7		Monthly Digest of Statistics
Housing starts and completions (see also Housing)	5.4	ODPM	Housing Statistics Press Notice
Producer price index (see also Prices)	3.1	Office for National Statistics	First Release Monthly Digest of Statistics
Production (see Industrial production; Motor vehicles; Output; Steel)		Office for National Statistics	
Productivity	1.1, 4.7	Office for National Statistics	Monthly Digest of Statistics
Profits (see also Companies)	2.3, 2.11	Office for National Statistics	First Release Financial Statistics UK Economic Accounts
Property income received/paid; non-financial corporations	2.11	Office for National Statistics	First Release Financial Statistics UK Economic Accounts
Property transactions	5.5	Board of Inland Revenue	
Public sector			
Expenditure and receipts	6.4	Office for National Statistics	
Fiscal indicators	6.5	Office for National Statistics	
Gross fixed capital formation	2.7		
Index numbers of output	2.9	Office for National Statistics	
Net cash requirement (PSNCR)	6.3, 6.5		First Release
Net borrowing	1.1, 6.5		Financial Statistics
Purchasing power of the pound	3.1	Office for National Statistics	
Regional claimant unemployment rates (see also Unemployment)	4.5	Office for National Statistics	First Release Labour Market Trends
Retail prices index (see also Prices)	1.1, 3.1	Office for National Statistics	First Release Monthly Digest of Statistics Focus on consumer prices indices Labour Market Trends
Retail sales			
Value index numbers	5.8	Office for National Statistics	First Release Monthly Digest of Statistics
Volume index numbers	1.1, 5.8		
Ratio of distributors' stocks to retail sales	5.7		
Savings ratio, household	2.5	Office for National Statistics	First Release Financial Statistics Monthly Digest of Statistics UK Economic Accounts
Selected retail banks' rates (see also Interest rates)	6.8	Bank of England	
Service industries			
Gross value added	2.8, 2.9	Office for National Statistics	First Release

Steel, production	5.3	Iron and Steel Statistics Bureau Ltd.	Monthly Digest of Statistics
Sterling certificates of deposit (see also Interest rates)	6.8	Bank of England	Financial Statistics
Sterling			
Exchange rate index	1.1, 6.1	Bank of England	Financial Statistics
Exchange rates against major currencies	6.1		
Taxes		Office for National Statistics	Financial Statistics
Public sector receipts of	6.4		First Release
Payment of taxes by non-financial corporations	2.12		Financial Statistics UK Economic Accounts
Total final expenditure on goods and services	2.2	Office for National Statistics	First Release Monthly Digest of Statistics UK Economic Accounts
Trade competitiveness measures	2.15	Office for National Statistics International Monetary Fund	International Financial Statistics
Trade in goods	1.1, 2.13, 2.14	Office for National Statistics	First Release Monthly Digest of Statistics UK Economic Accounts
Transfers (see also Balance of payments)	2.13	Office for National Statistics	First Release UK Economic Accounts
Treasury bill yield (see also Interest rates)	6.8	Bank of England	Financial Statistics
Unemployed (ILO)	4.1, 4.2, 4.3		First Release
Unemployment		Office for National Statistics	First Release Labour Market Trends Monthly Digest of Statistics
Regional claimant count	4.5		
Total claimant count	1.1, 4.4		
Unit labour costs index (international comparisons)	2.15	International Monetary Fund	International Financial Statistics
Unit wage costs	4.7	Office for National Statistics	First Release
Vacancies	4.4	Office for National Statistics	First Release Labour Market Trends Monthly Digest of Statistics
Wages and salaries			
Unit costs - manufacturing	1.1, 4.7	Office for National Statistics	First Release Labour Market Trends Monthly Digest of Statistics
Unit costs - whole economy	1.1, 4.7		
In relation to gross household disposable income	2.5	Office for National Statistics	Monthly Digest of Statistics
Per unit of output (see Unit wage costs)			First Release Labour Market Trends
Wholesale price index for manufactures (international comparisons)	2.15	International Monetary Fund	International Financial Statistics
Workforce Jobs	4.4	Office for National Statistics	First Release Labour Market Trends Monthly Digest of Statistics

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