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Editorial

Trust in statistics and business microdata access

Len Cook, Director
Office for National Statistics

Since 1953, *Economic Trends* has detailed the measurement of a changing UK economy. The UK has a long tradition at the forefront of economic statistics and *Economic Trends* has presented the work of numerous economic statisticians. This 600th issue of the journal pays tribute to this history and also highlights a growing and innovative direction for official statistics – the use of linked business microdata in measuring business performance.

Social researchers regard the use of microdata analysis to inform policy analysis and policy evaluation as common place. Such analysis using business surveys is still novel in economic research. We are committed to improving access to business microdata, viewing this as an important development in official statistics. The UK statistical system is innovating for such research: providing facilities such as a business microdata lab at ONS. In the longer term, the wider statistical use of these datasets will improve our understanding of the economy, increasing trust in the statistical system as well as making new analysis possible.

A common feature of the work is that information from individual businesses are linked across surveys and over time, by ONS staff and by teams of researchers seconded into ONS to undertake statistical work. Their analysis of these datasets has improved the evidence base for productivity using econometric analyses and producing new types of statistics. A second result of the work is that new datasets particularly suited to productivity analysis are now stored at ONS, which can be analysed by analysts both from ONS and seconded into the Office.

Benefits of microdata analysis

The articles later in this issue indicate the potential of using business microdata to tackle issues of productivity and business performance. There is a growing need to use the detail of our data sources to understand changes in the structure of the economy. Globalisation, innovation and new technologies are driving these changes. At the macroeconomic level, one can analyse the link between variables such as employment change and output. At the microdata level, the analyst can investigate this in a much more focussed way quantifying the marginal impact of these changes or particular policy.

There is huge benefit for the official statistical system from facilitating this detailed research work using the existing microdata. If the public see the outputs of such research as an enhancement of official statistics, and not different or separate, then trust in official statistics is likely to be enhanced. Part of this is because academic research often stretches microdata to its limits and this can feed back into improving the quality within the statistical system.

A second set of reasons recalls the period when Richard Stone was at the Central Statistical Office pioneering the national accounting system. Economic statistics explore complex issues relying on a range and depth of expertise that would be

very difficult to replicate within the official statistical system on its own. Both official statisticians and academic researchers are part of the same scientific community. ONS experience has indicated that access to microdata for statistical research purposes is instrumental in building the partnerships required within this community.

Business microdata access

Official statisticians will be cautious in allowing access to microdata. A sound ethical base for protecting confidentiality exists between the data provider and the statistical system. The National Statistician guarantees that contributors' microdata is used appropriately and all measures are taken to safeguard the confidentiality of data. At the same time, it is increasingly the case that public policy evidence is underpinned by microdata analysis and that this requires access to unit record data. The legislative framework, the UK's statistical structures and institutions, international experiences, all guide the balance between minimising any risk to confidentiality (or indeed the perception of any risk) and allowing research access to maximise the public benefits from the statistical information base.

A disclosure, particularly through a matched dataset, would disproportionately damage all this good work. In the end, it is the producers of official statistics who carry this risk, and it is not possible to transfer it to data analysts. Therefore, the question remains as to how producers of official statistics manage this risk – by process ('contracts' of trust with users of microdata), by the access setting (secure access where necessary) or by design (continuing use of statistical disclosure control techniques). Research access to ONS business microdata has been undertaken by combining all three of these. ONS provides secure access at the Office for National Statistics to researchers contracted into the Office, and with all outputs subject to disclosure control.

ONS also believes that one of the benefits of this work would be to reinforce the trust of contributors. Linking surveys has the potential of reducing the burden on businesses, by makes more use of existing data. Also, business microdata analysis is presenting new and interesting empirical results about business performance. Many microdata analyses are more readily accessible than aggregate measures and can easily be tailored to meet particular interests, for example a particular industry. As it becomes easier to publish results through the web, ONS would be able to quickly feed back to its contributors the interesting statistical results that flow from the data they provide. This would at least offer contributors an understanding of the use made of their information. It may also form the basis for positively engaging with businesses about statistics.

Final remarks

The Statistics of Trade Act of 1947 provided the legal basis for much of government collection of business microdata. The Act legislated government bodies such as the ONS to be allowed to survey business "to obtain more readily the information necessary for the appreciation of economic trends". It is clear that after fifty years, while the means and methods for this are changing in exciting and challenging ways, that mission still remains a central part of ONS and its journal, *Economic Trends*.

in brief

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

GDP growth in quarter 3

In the third quarter of 2003, real GDP increased by 0.6 per cent, maintaining a similar rate of growth to the second quarter.

The latest annual (four-quarter) rate of growth was 1.9 per cent.

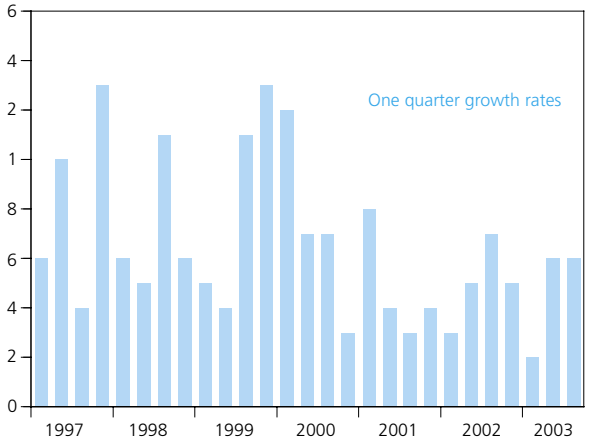
There was a small increase in manufacturing, but the Index of Production was flat as a result of a decline in mining and quarrying and energy supply.

Service industries grew more strongly than in the second quarter. Overall, the service sector grew by 0.7 per cent, compared with 0.2 per cent in the previous quarter.

Growth is strongest in the 'business services and finance' category, which rebounded after a weak second quarter. This rebound was also apparent in 'air transport' and 'transport support' (which includes travel agents).

The 'distribution, hotels and catering' category grew by 0.5 per cent, less strongly than in quarter two. The growth came from the motor and retail industries.

GDP Quarterly Growth (%) KP



Construction output increased in the third quarter, although less strongly than in quarter two.

Released: **24 October 2003**

Retail sales in quarter 3

Recent growth in the volume of retail sales has remained well above that of the first five months of 2003.

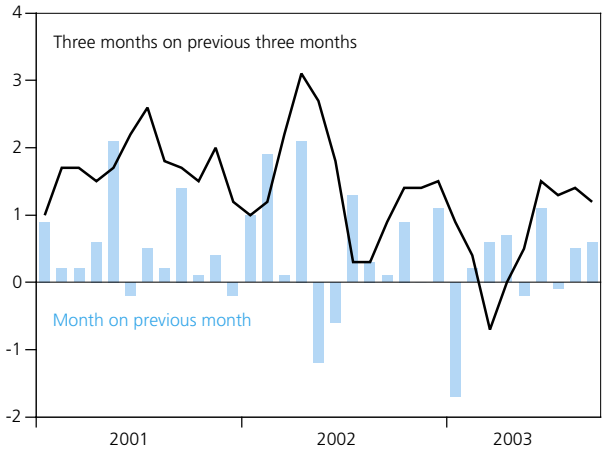
In the three months July to September, retail sales grew by 1.2 per cent compared with the previous three months. Three monthly growth rates into September decreased for most kinds of non-food stores, with household goods stores showing the largest decrease. The growth rate for supermarkets showed little change.

Growth in the three months to September was 3.5 per cent higher than the same period a year ago. Month-on-month results show that retail sales increased by 0.6 per cent in September.

In value terms and without seasonal adjustment, retail sales in September were 3.2 per cent higher than in September 2002.

Differences in this latest release of retail sales data compared to the First Release of 18 September arise from new methodology and the use of additional data. The 'headline' growth of the new RSI (three months on previous three months) is broadly similar to the previously published series, but is slightly more volatile. The annual growth rates show greater differences, i.e: from autumn 2001 to end 2002 the new RSI shows consistently stronger growth (by around 1 percentage point); growth in the first half of 2003 for the new RSI is around 1 percentage point lower than for the current series.

Retail sales growth



The differences are mainly due to treating fewer returns as outliers; updated deflators; and taking on late data not available at the time of publication of the old series.

Released: **24 October 2003**

Public sector: September

In September 2003 the public sector showed a deficit on current budget of £1.4 billion, compared with a deficit of £2.5 billion in September 2002.

Concentrating on one month in isolation can give a distorted picture as movements can be erratic. Focusing on the financial year to date generally provides a better overview. Between April and September of the 2003/04 financial year, the public sector recorded a deficit of £16.2 billion. At the same stage of the 2002/03 financial year, a deficit of £10.4 billion had been recorded.

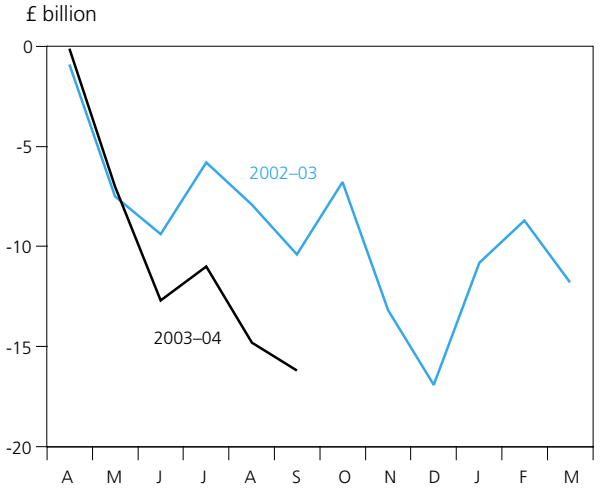
More generally the public sector recorded deficits between 1991/92 and 1997/98 before moving into surplus in 1998/99. The provisional deficit for 2002/03, at £11.8 billion, was the first deficit recorded since 1997/98. The Budget 2003 forecast for 2003/04 is a deficit of £8 billion.

An alternative measure of the public sector fiscal position is public sector net borrowing. This additionally takes account of capital investment. In September 2003 there was a deficit of £2.8 billion, which compares with a deficit of £3.2 billion in September 2002. Between April and September of the 2003/4 financial year, a deficit of £22.5 billion has been recorded. At the same stage of the 2002/03 financial year, a deficit of £13.5 billion had been recorded. The Budget 2003 forecast for 2003/04 is a deficit of £27 billion.

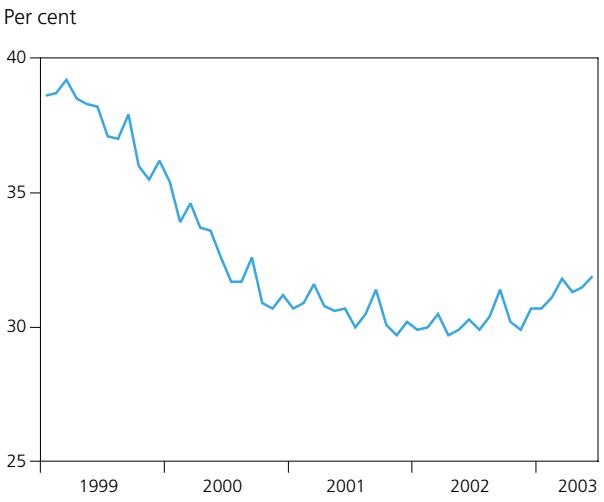
Public sector net debt, expressed as a percentage of gross domestic product (GDP), was 31.9 per cent at the end of September, compared with 30.3 per cent at end of September 2002. Debt peaked at 44.0 per cent of GDP in 1997, its highest since the mid 1980s. The debt ratio then fell steadily as public sector finances improved, reaching a low of 29.7 per cent in February 2002. Since then it has risen. The Budget 2003 forecast for the end of March 2004 is 32.2 per cent.

Net debt was £353.7 billion at the end of September, compared with £320.1 billion a year earlier. The Budget 2003 forecast for the end of March 2004 is £367 billion.

Cumulative public sector surplus on current budget



Net debt (as a percentage of GDP)



Released: 20 October 2003

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

Economic update
November 2003

Rhys Herbert
Office for National Statistics

Overview

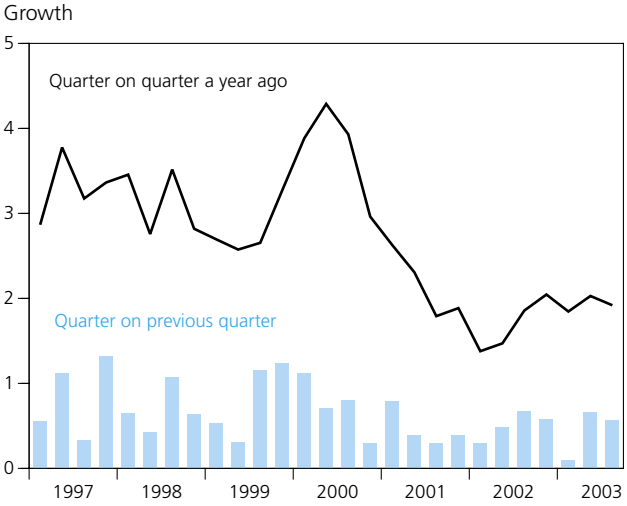
- The initial estimate for third quarter GDP growth at 0.6 per cent is the same as for the second quarter.
- Service sector output growth has picked up when compared with quarter two, while construction and manufacturing have slowed.
- Third quarter retail sales growth points to the total consumer spending increase being similar to the second quarter number of 0.7 per cent.
- Private investment demand was stronger in the second quarter but spending on new machinery and equipment remains weak.
- Government spending is currently a significant contributor to economic growth but the public sector finances are falling further into deficit.
- Exports weakened in quarter two after a strong start to the year but may have done better in the third quarter.
- Labour market aggregates remain largely stable, and private sector wage pressures are minimal.
- Producer prices have gone up slightly as the oil price has risen once again.
- The RPIX measure of consumer prices remains above target but is stable.

GDP activity – overview

Third quarter GDP growth is provisionally estimated to have been up by 0.6 per cent, this was the same as the rate in the second quarter. The annual rate of growth in the third quarter, at 1.9 per cent, is slightly below the 2.0 per cent of the previous quarter, although it should remembered that both these annual rates will have been distorted by the impact of last year's Jubilee celebrations (figure 1). This preliminary number is only based on partial data and so is sometimes revised, as new information becomes available. Analysis, however, shows that these revisions can be in either direction so it should not be assumed that the initial data is bound to be revised upward later.

The international background continues to be mixed. GDP grew quite strongly in the US in the second quarter and was up in Japan as well but it fell in the three biggest EMU economies, France, Germany and Italy. At the time of writing no country outside the UK had as yet published GDP data for the third quarter. However, the information that was available

Figure 1
GDP

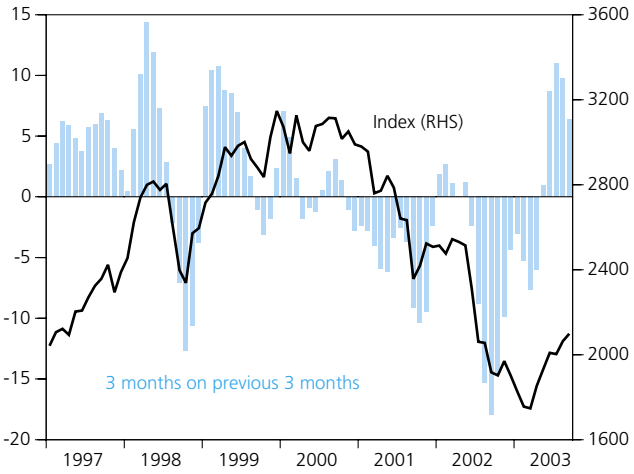


for the third quarter suggested the numbers would not be very different to those of the second quarter. US economic growth continues to primarily depend upon consumer spending although investment is also showing some positive signs. Japanese economic growth is also supported by consumer spending and by a rebound in investment. In contrast many European economies continued to suffer from stagnant domestic demand as well as sluggish exports. Some survey data for Europe suggests that growth has picked up during the third quarter but this has so far largely been driven by expectations of the future rather than by current conditions.

Financial market activity

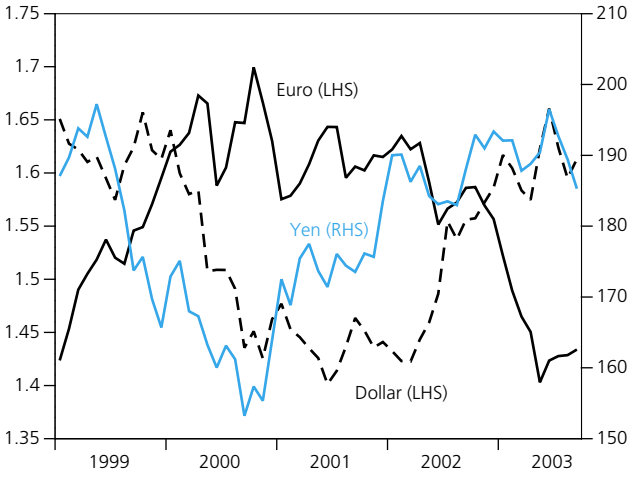
Recent months have seen an air of optimism return to the stock market. The worries that caused the market to fall in the first three months of the year has given way to the hope that after three years of negative returns the market has at last turned. Between the end of March and the end of September, the FTSE All Share Index rose by 17 per cent and at the time of writing had risen another 4 per cent in October, resulting in a rise of 12 per cent compared to its level at the start of 2003. This rebound might be seen as a sign of renewed confidence in the economy. However, on even a slightly longer perspective the recent gains look far less impressive. Even after the recent surge the FTSE All Share is still down by about 8 per cent compared to its level in the middle of last year and 15 per cent when compared with the beginning of 2002 (figure 2).

Figure 2
FTSE – all share price index, end month



2003 has also seen some significant moves in sterling. In the early part of the year the pound fell against the euro and strengthened against the US dollar, and as a result the effective exchange rate fell by 7.2 per cent between December 2002 and May 2003. The period since then has seen a partial reversal of these moves. Sterling has recovered some of its losses against the euro and through July and August gave back some of its gains against the dollar, although more recently the dollar has resumed its slide and sterling by the third week in October was at a five year high versus the American currency. As of late October the pound's effective exchange rate was still around 5 per cent below its level at the start of the year (figure 3).

Figure 3
Exchange rates
£1 =



Output

The first three-quarters of 2003 have seen significant fluctuations in the relative growth rates in the different output sectors. The main story for the last few years up until the beginning of 2003 was that what economic growth was down to construction and services, while industrial production and in particular manufacturing output had declined sharply. The experience for the first three-quarters of this year though has been more variable. In the first quarter the economy was dragged down by a fall in construction output and by a slowing in the service sector, while industrial production fell at the same rate as the last quarter of 2002. In contrast while output growth as a whole picked up in the second quarter service sector growth decelerated further. The negative growth effects of this, however, were more than offset by a modest rebound in industrial production and a much bigger turnaround in construction. The third quarter has seen another fluctuation in the main impetus of growth as service sector output has re-accelerated, whilst industrial production seems to have been flat and construction output grew much more slowly.

It is worth emphasising that these initial figures for the third quarter are based only on partial data. In particular the results of the quarterly survey of construction activity are not available at this point and so the initial estimates are derived form other sources such as construction orders and information from "Euroconstruct survey". These sources both suggest that third quarter growth in activity should be more modest than that of the second quarter, which saw a 4.4 per cent rise (figure 4).

The figures currently available for industrial production in the third quarter are on somewhat firmer ground. Here

Figure 4
Construction output

Growth

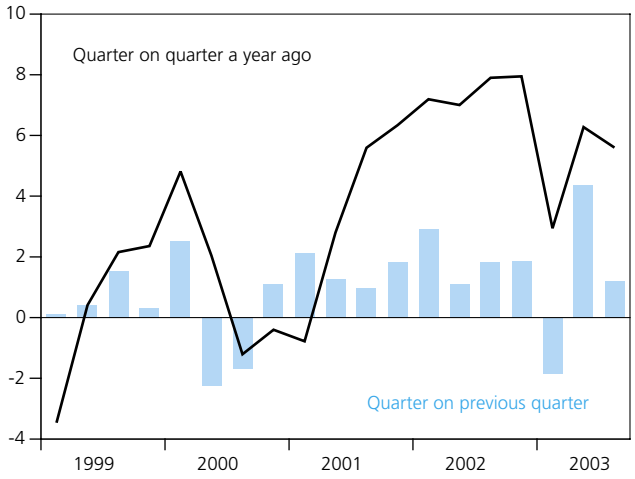


Figure 5
Manufacturing output

Growth

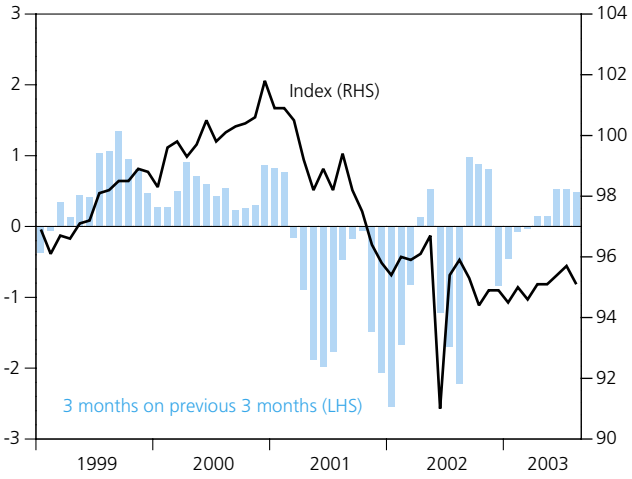


Figure 6
External manufacturing

CBI & CIPS

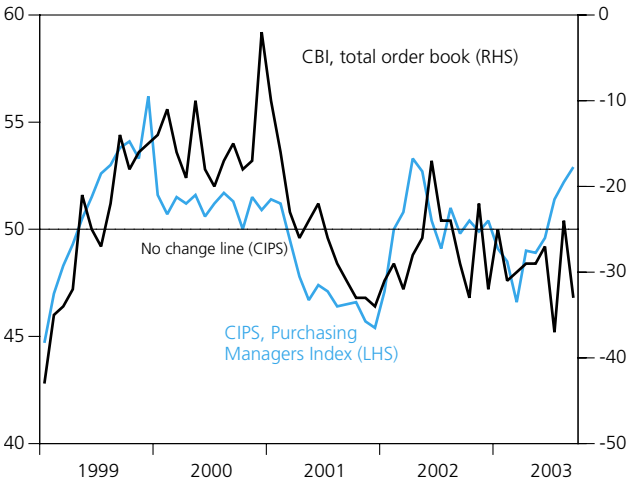
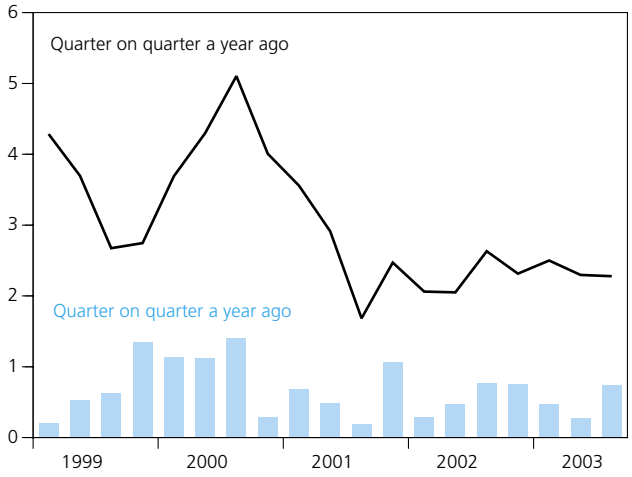


Figure 7
Services

Growth



data is available for the first two months of the quarter, as is more limited data for September. Industrial activity as a whole declined in the first two months of the third quarter and within this manufacturing output, after rising in July, fell back in August to a level that was below the average of the second quarter. Unless there was a quite unexpected surge in activity in September, the contribution of this area to output will inevitably be smaller than in the second quarter (figure 5). There has been nothing in recent survey sector data to fundamentally question this growth pattern. External surveys of manufacturing have if anything been weaker than official data so far this year and in general they do not point to a pick up in activity in the third quarter. Indeed both the CBI and BCC surveys have continued to be quite weak, although the CIPS survey has been stronger (figure 6).

Service sector quarterly growth was 0.2 per cent in the second quarter of 2003, a slowdown from the 0.5 per cent growth rate in the first quarter but it has subsequently rebounded back up to 0.7 per cent in the third quarter (figure 7). Again this third quarter estimate is only based on partial information. However, it does suggest that business services in particular rose strongly in the third quarter as did air transport and transport support. The acceleration seems to be largely confirmed by survey data. The CIPS survey of services, which historically seems to have had a close correlation with official data, has risen sharply in recent months. Other surveys, by the BCC and the CBI also show some improvement in activity although this was less pronounced and less widespread than the rise in the CIPS data.

Household demand

Consumer spending accelerated markedly in the second quarter though by less than the official indicators originally indicated. Quarterly growth in household final consumption was 0.7 per cent in the second quarter of 2003, up from the

Figure 8
Retail sales

Growth

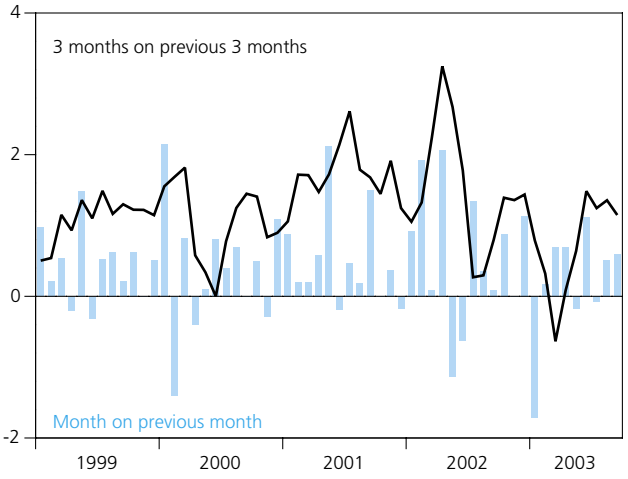


Figure 9
External retailing

Growth

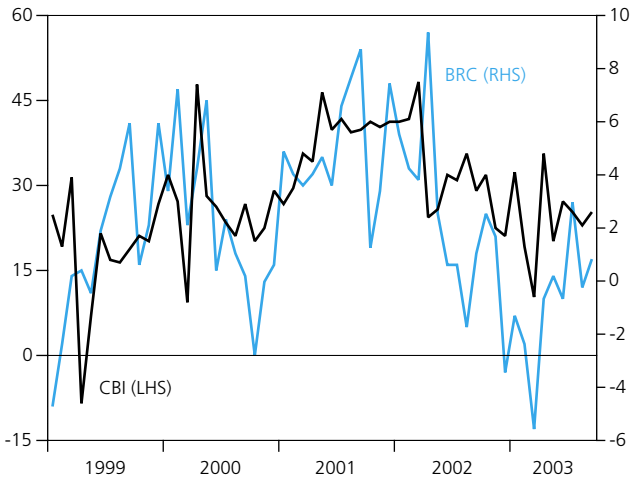


Figure 10
House prices

Growth, 3 months on previous months

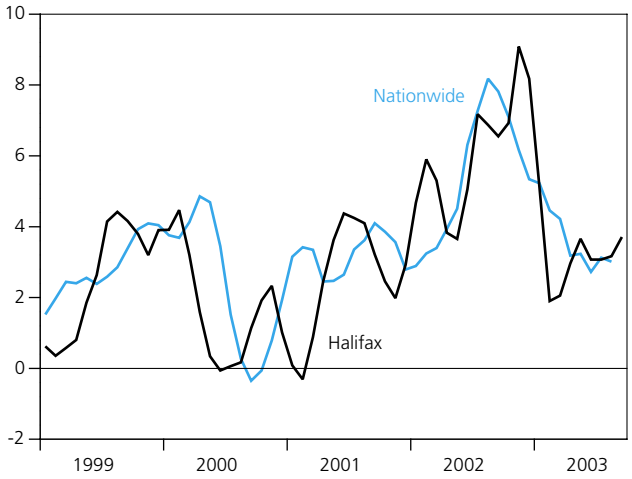
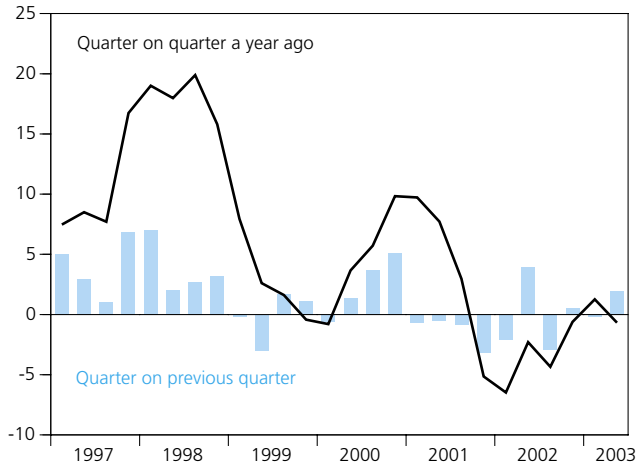


Figure 11
Business investment

Growth



small fall of 0.2 per cent seen in the previous quarter, which had been the weakest quarter for consumer spending for over five years. Growth compared with the same quarter a year ago was 2.4 per cent a deceleration from the 2.8 per cent of the previous quarter. Thus growth in consumer spending for the first half of 2003 as a whole was still moderate but well below the rapid rates of the last few years.

Figures for total consumer spending in the third quarter are not yet available but an indication of the likely outcome can be derived from retail sales. A new series for retail sales has just been released. This has been rebased to 2000 = 100 and is calculated using a somewhat different methodology from before. As a result of these changes the growth figures are not exactly the same as those reported before. The quarterly growth pattern for this year though is still very similar. Retails sales in volume terms rose by 1.6 per cent in the second quarter after falling by 0.7 per cent in the first quarter. In the third quarter retail sales rose by another 1.2 per cent, which suggests that consumer spending has slowed very little from its pace in the first half of the year.

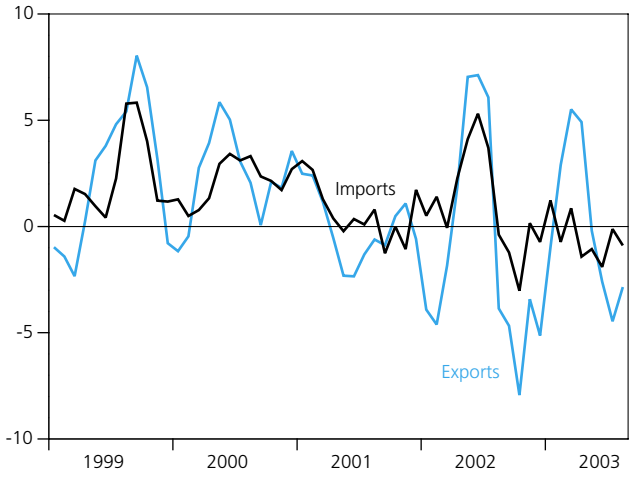
External figures provide a partial confirmation of this pattern of retail sales. Both the BRC and CBI retail surveys which on average have been volatile but quite strong over the last six months suggest that sales got off to a weak start in the third quarter but seemed to have picked up over the three months and ended on a high note (figure 10). It appears then that consumer expenditure is failing to slow significantly and the buoyancy of consumer confidence points to this slowdown being someway off as yet. There are a number of possible reasons for this continued high level of confidence. One is that house prices according to both the Halifax and Nationwide surveys are still up appreciably compared to a year ago (figure 11), while another is that unemployment has remained very low despite the economic growth slowdown.

Business demand

There is little in the way of official information on business investment for the third quarter as yet but the evidence from external surveys is that little has changed from the second quarter. Much of the weakness in investment over the last few years has been due to business investment, which fell sharply during 2001 before seeming to stabilise in 2002. The first quarter of 2003 saw business fixed investment flat when compared with the last quarter of 2002 but up by 1.3 per cent when compared with the same quarter a year ago (figure 12). Revised second quarter figures now show a rise in spending of 2.0 per cent. However, this was due to a rise in spending on buildings and structures, while investment spending on plant and equipment fell during the quarter.

Figure 12
UK trade

Volumes, 3 months on previous 3 months



The environment 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 some improvement in profitability. Gross trading profits of Non-financial corporations were up 8.8 per cent in the second quarter when compared with a year ago. Non-financial corporations have also been net lenders since the first quarter of 2001, a process that has allowed them to start to repair balance sheets. However, this process still has a long way to go. The financial balance sheet shows the sector having net liabilities of £1,109 billion in the second quarter of 2003, a slight rise when compared with the previous quarter. The total value of assets rose during the quarter but was more than matched by a rise in liabilities.

It is also unclear whether firms perceive this as a favourable environment in which to boost investment. They generally continue to report a lack of pricing power, and are reporting very low capacity utilisation. The combination of these makes it difficult to see why investment should pick up significantly without a sharp increase in demand and surveys of investment intentions continue to show no plans to increase spending.

Government demand

We have little evidence for the growth in real government spending in the third quarter. Government final consumption expenditure grew by 0.6 per cent in the second quarter of 2003, a much slower pace of growth than in the first quarter of the year. Much of this first quarter surge and the subsequent fallback was accounted for by a one-off rise in defence spending linked to the Iraqi conflict. However, some other areas of spending were also somewhat weaker. Second quarter growth compared with the same quarter a year ago was 2.0 per cent in real terms, a figure that is above the average annual growth rates of the last few years. Thus it seems as though the recent tendency, first seen in late 2001, for government spending to grow more quickly than GDP is still present

Figures that are available for the third quarter are those for government borrowing and these show a further rise over the last few months. Due to a combination of faster nominal spending alongside weaker revenues reflecting the more subdued economic activity, the public sector's finances have deteriorated sharply this year. The figure for the first six months of fiscal year 2003–04 show a public sector net borrowing figure of £22.5 billion. This compares with a figure for £13.5 billion for the equivalent period of the last fiscal year and a whole year total for 2002–03 of £22.5 billion.

Imports

Recently the detection of VAT fraud in the trading of certain products has lead to major revisions in import data. These revisions have lead to higher imports and a correspondingly more negative trade balance over the last five years. The revised import data have been incorporated into the monthly trade statistics for the last few months and as of September they were also included in the GDP figures. The second quarter saw a fall in imports of 2.5 per cent in real terms when compared with the first quarter and of 2.4 per cent when compared to a year ago. Imports of both goods and services fell. Imports of goods fell by 1.9 per cent when compared with quarter one, while imports of services fell by 4.7 per cent. The figures for imports of goods are likely to have been impacted by the customs crackdown. However, the weakness of service imports seems to be more genuine. It is noticeable that the numbers have been fairly erratic on a quarterly basis of late and the second quarter fall follows a first quarter rise of the same magnitude. The year on year rate of growth though has also come down, to –0.1 per cent, compared with 3.2 per cent in quarter one and 5 per cent in the last quarter of last year (figure 12).

Monthly goods figures are also available up to August. These show imports falling by 1.6 per cent in August when compared with the previous month and by 0.9 per cent on a rolling three month average. Imports from other EU countries were down by 1.2 per cent on the month, while imports from elsewhere were down by 2.0 per cent. Again its hard to know how much of the former is accounted for by the impact of VAT fraud but the fact that much of the recent

weakness has been in capital goods imports is an indication that this is a factor.

Overseas demand

Exports of goods also weakened in the second quarter after rising sharply in the first. Again looking at the numbers by area shows that the first quarter surge was largely due to trade outside the EU, while the second quarter decline was due to a fall in exports to other EU countries. It is likely that the latter is at least partly due to the clampdown on fraud and the weakness in exports of capital goods may be partially attributable to this. Export of goods figures for August show a large fall in exports to the EU and a smaller one to the rest of the world. The former will again by partly attributable to the clampdown on fraud but may also reflect weak EU domestic demand more than offsetting the positive effects of sterling's fall versus the euro. The fall in exports to the rest of the world is probably erratic as it follows on from a month in which such exports rose rapidly. These figures have been very erratic from month to month of late due to problems that customs have been having with their computer system. Consequently it is better to pay attention to the trend over a slightly longer period, which looks more favourable (figure 12).

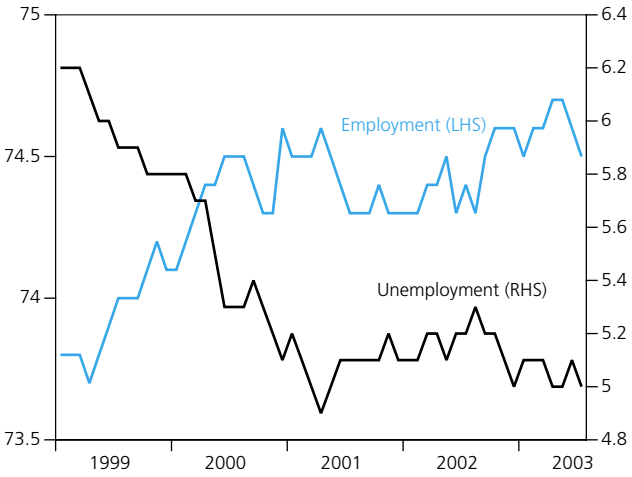
The UK current account was in substantial deficit in the second quarter of 2003 and the first quarter previously estimated to be in surplus was revised to also show a deficit. The deficit for the second quarter was £8.5 billion, compared with a deficit of £2.3 billion for the first quarter and £18.9 billion for 2002 as a whole. The first quarter number has been revised to show a deficit. This is partly attributable to the upward adjustment of imports for MTIC fraud but was also because income from foreign direct investment had previously been overestimated.

The rise in the deficit between the first and second quarter was primarily due to a fall in net investment income, both from direct and portfolio investment. The trade balance in both goods and services was roughly unchanged between the two quarters. The deficit in trade in goods improved significantly between the final quarter of last year and the first quarter of this, primarily due to rise in exports to countries outside the EU. The impact of this though was offset by a fall in the trade in services surplus.

Labour Market

Headline labour market statistics continue to be remarkably stable. Employment is high, with the labour force survey (LFS) employment rate at 74.5 per cent in the three months to August, down slightly over the previous three months, while the LFS count of employment increased by 27,904 over the same period. The ILO unemployment rate was 5.0 per cent in the three months to August (figure 13), unchanged from the previous three months and down slightly from a year ago. The claimant count unemployment rate, at 3.1 per cent in September, has not changed since the start of 2002 (figure 13).

Figure 13
Labour Force Survey



Full-time employment has been falling over the last year or so as most job gains have been in part-time work. However, recent figures may have begun to show at least a temporary reversal of this trend. In the three months to August, the number of full-time employees was up by 13,000, while the number working part time was down by 21,000. It is worth noting though that if we look just at employees and ignore the self-employed then both the numbers of full and part time workers fell and the former was down by more.

This illustrates the fact that the tendency for many recent job gains to be in self-employment remains very much intact. The number of self-employed workers in the three months to August was up 1.8 per cent compared with the previous three months and 6.8 per cent compared with a year ago. In comparison the number in employment was slightly down on a three month basis and flat on the year. The number of unpaid family workers was up by 6.1 per cent compared with a year ago but the number of people on government supported training and employment programmes was only up 2.7 per cent.

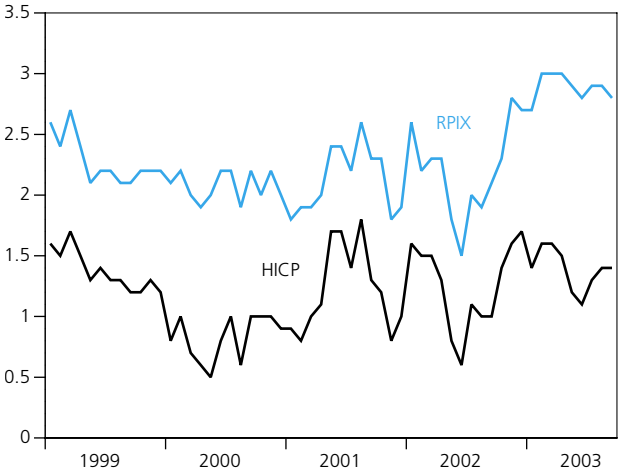
The average earnings index rose at a faster rate over the latest period, up by 3.4 per cent in the three months to August. This remains well below the 4.5 per cent figure that the Bank of England considers broadly consistent with their inflation target. The gap between public and private sector earnings growth widened further in August as public sector earnings rose by 5.6, while private sector earnings were up by 2.9 per cent compared with a year ago. Part of the large rise in the public sector number reflects backdated settlements and so is likely to prove temporary.

Prices

Producer output prices rose by 1.5 per cent annually in September, for the second month in a row. After falling back in the second quarter, output prices now seem to have resumed the upward trend that appeared to be underway earlier in the year. Much of the recent move has been due to

Figure 14
Prices

Growth, month on a year ago



fluctuations in the oil price but underlying inflation has also gone up. Output prices excluding food, beverages tobacco and petroleum products were up by 1.2 per cent in quarter 3, only slightly below the 1.4 per cent rate of the first quarter and well above the 0.3 per cent rate posted in the second quarter of last year. The figure for September was up 1.3 per cent. Input prices have been volatile in 2003. In the first quarter they rose by 1.7 per cent, then fell back by 0.5 per cent in the second quarter as the oil price waned but have since climbed once again rising 1.8 per cent in August but only by 0.4 per cent in September.

Consumer price inflation as measured by RPIX fell slightly to 2.8 per cent in September. while the all items RPI also fell from 2.9 per cent to 2.8 per cent. Until recently inflation has been a combination of falling goods prices and service price inflation in excess of 4 per cent. However, over the last few months the gap between the two has started to narrow as goods prices have stopped falling and the pace of service price rises has moderated. The HICP was also stable at 1.4 per cent (figure 14).

Forecasts for the UK economy

A comparison of independent forecasts, October 2003

The tables below are extracted from HM Treasury's Forecasts for the UK Economy and summarise the average and range of independent forecasts for 2003 and 2004, updated monthly.

Independent forecasts for 2003

	Average	Lowest	Highest
GDP growth (per cent)	1.9	1.6	2.1
Inflation rate (Q4 per cent)			
RPI	2.7	2.2	3.0
RPI excluding MIPs	2.7	2.2	3.0
Unemployment (Q4, million)	0.96	0.92	1.09
Current account (£billion)	–21.4	–39.8	-8.0
Public Sector Net Borrowing (2003–04, £billion)	32.5	24.3	38.0

Independent forecasts for 2004

	Average	Lowest	Highest
GDP growth (per cent)	2.5	0.3	3.5
Inflation rate (Q4 per cent)			
RPI	2.7	1.7	3.8
RPI excluding MIPs	2.4	1.7	3.3
Unemployment (Q4, million)	0.98	0.74	1.20
Current account (£billion)	–23.4	–48.9	–5.0
Public Sector Net Borrowing (2003-04, £ billion)	34.8	28.0	47.0

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 November 2003

Gladys Asogbon
Office for National Statistics

Overview

- Output growth was firmer in the non-EU major economies but low or negative in the EU area in the second quarter of 2003, contracting in Germany, France and Italy driven mainly by low or falling investment and negative contributions from trade.
- Consumer demand is still weak or falling in most EU economies, but made a considerable/modest contribution to quarterly GDP in 2003 quarter two in the US and Japan respectively.
- Trade has also slowed from a strong second half of 2002 and investment demand is still at best weak or in decline in most major economies.
- Industrial output contracted in all major economies in 2003 quarter two.
- Unemployment which in most countries has at best been broadly flat is now in some cases showing signs of falling, although it is too early to say if labour markets have turned.
- Inflationary pressures remain fairly subdued.

EU15

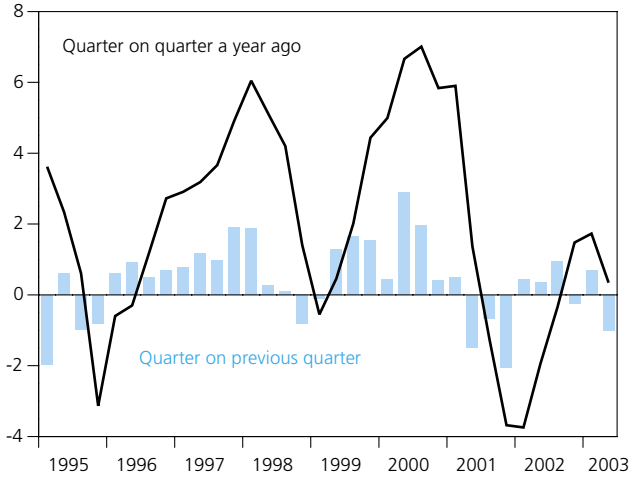
Table 1 European Union 15 is not available this month. We apologise for any inconvenience to our readers for this omission.

Germany

The German economy contracted for the second quarter in a row in 2003 quarter two, having posted no growth in 2002 quarter four. Overall GDP grew by just 0.2 per cent for 2002 as a whole compared with 1.0 per cent in 2001.

The fall in GDP in the first half of 2003 was mainly due to a net negative contribution from net exports partially offset by a modest increase in government consumption. Domestic private demand (household and investment) did not contribute to quarterly GDP growth. More generally there has been a lack of any appreciable domestic momentum in the German economy. Household consumption made a negative contribution of 0.6 percentage points to GDP in 2002 and investment expenditure has been in decline, showing contractions in annual growth in both 2001 and 2002. Government demand has made only small contributions in recent years. The impetus that came mainly from exports in 2002 quarters two and three has slowed considerably in the last three quarters. Germany's growth rate continued to be below the EU average in early 2003.

Figure 1
Germany: IOP
Growth



The IOP has also declined considerably in quarter two by 1.0 per cent after a rise of 0.7 per cent in the previous quarter (figure 1). Monthly changes show that this is principally due to large contractions in May and June, although there have also been fairly sizeable falls in two other months of this year. There has though been a significant rebound in July with monthly growth of 2.9 per cent. On the whole, growth in the index has been subdued since 2001, when it grew by only 0.5 per cent, compared to growth of 6.2 per cent in 2000. Overall in 2002, the index fell by 1.1 per cent.

The CPI shows consumer prices growing by 1.1 per cent in the year to August up slightly on the previous months growth rate of 0.9 per cent but still below the EU average of 2.2 per cent for the same period. Germany has the lowest consumer price inflation amongst the large Euro economies. Figures for the PPI for the same period also show prices at the factory gate increasing, by 2.1 per cent in the year to August, up from 1.9 per cent in the previous month, which could be due to the recent rise in the oil price.

Unemployment in Germany has been high but stable recently, with the rate in August at 9.4 per cent for the fifth month in a row. This is the highest rate since April 1998. There has been a gradual increase in the unemployment rate from the recent trough of 7.6 per cent in quarter one 2001. Employment in the second quarter of 2003 contracted for the seventh consecutive quarter as annual growth showed a decline of 1.8 per cent, compared with a decline of 1.7 per cent in the previous quarter.

Having hovered between 1.0 per cent and 1.1 per cent between 2001 quarter three and 2002 quarter two earnings growth has picked up in the year to the fourth quarter despite the increase in unemployment. It grew by 2.4 per cent, the largest growth in earnings since 2000 quarter four.

France

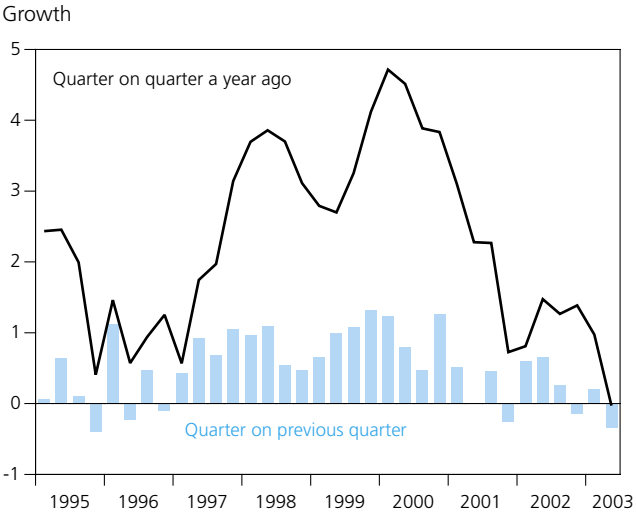
The French economy contracted by 0.3 per cent in the second quarter of 2003 having grown by 0.2 per cent in the previous quarter (figure 2). Overall in 2002, the economy grew by 1.2 per cent, the lowest growth rate since 1996 but still one of the highest rates amonst the major Euro economies for that year.

The French economy has slowed significantly over the last two years, in line with global trends, although it has generally outperformed the EU15. France's performance in the recent past had been helped by income tax cuts, which underpinned growth in disposable income and consumer spending. In quarter two, growth was negatively affected by a series of public sector strikes in May and June and all components of GDP were either weak or negative. Exports continued to fall, investment stalled and household demand slackened with the levelling off of income.

As was the case with Germany, industrial production in France contracted in quarter two, by 1.1 per cent due to a sizeable contraction in May, partially offset by a rebound in June. The index had previously contracted in 2002 by 1.0 per cent.

Consumer price inflation rose steadily over the second half of 2002 and this continued into the first quarter of 2003

Figure 2
France: GDP



reaching 2.6 per cent in February. However since then inflation has slowed to 1.8 per cent in July and August. Producer prices had also been rising since the second half of 2002, having fallen in the first half of the year. However, the rate of increase is now easing as PPI inflation slowed from 0.8 per cent in April to zero in August.

The French unemployment rate, like that in most major economies has been rising steadily over the past year. It rose from 9.1 per cent at the start of the year to 9.4 per cent in July and August, the highest rate since July 2000. Employment growth also continued to slow in the first half of 2003, with a contraction of 0.1 per cent in quarter two following no growth in the previous quarter and well down on growth of 2.3 per cent at the start of 2001.

Due to these the labour market conditions, annual earnings growth has eased from 4.1 per cent in year to the fourth quarter of 2001 to 2.6 per cent in the second quarter of 2003.

Italy

Data for 2003 quarter two shows the Italian economy contracting by 0.1 per cent, its second consecutive quarterly fall. Previously in 2002, the economy grew by 0.4 per cent after 1.7 per cent in the previous year and 3.3 per cent in 2000.

A breakdown of the components of second quarter GDP show modest contributions from household spending and exports although net trade still made a negative contribution to growth as imports grew considerably. Stocks also made a sizeable positive contribution. These were offset by a contraction in fixed investment and a zero contribution from government spending. More generally, Italy has had one of the lowest annual growth rates in the EU15 over the last few years.

The IOP contracted in the second quarter of 2003 by 0.8 per cent, making three consecutive quarters of contraction in the index. Industrial production had previously showed some signs of recovery in early 2002 after contracting for all four quarters of 2001. Annual figures show that for 2002 as a

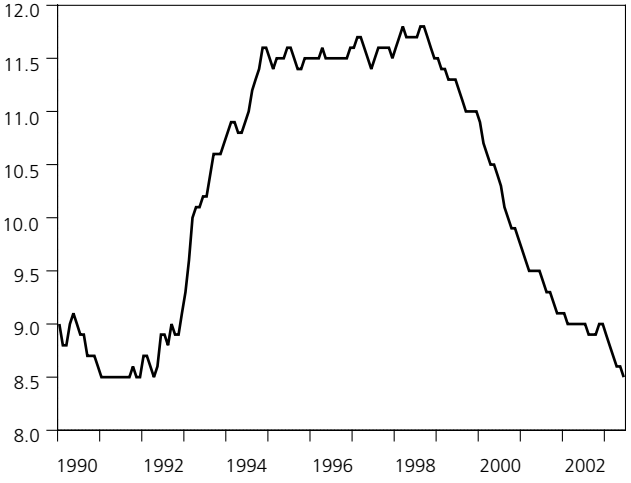
whole, the index declined by 1.3 per cent, following a fall of 1.1 per cent in the previous year.

Consumer price inflation in Italy increased to 2.8 per cent in August having been steady at 2.7 per cent for the previous five months. Italian inflation remains above the EU 15 average of 2.2 per cent. Producer prices increases however have slowed over the last five months with the rate falling from 2.8 per cent in February to 1.3 per cent in July and August.

Figures for the Italian labour market show that unemployment in 2002 was broadly flat at 9.0 per cent, an improvement on 9.5 per cent in 2001. Recently updated figures show further small falls in unemployment since February and by July, the rate had reached 8.5 per cent, a further small decline of a 0.1 percentage point from June's figure (figure 3). Employment growth was 1.3 per cent in the year to the second quarter of 2003 up from 0.8 per cent in the year to 2003 quarter one.

Figure 3
Italy: Unemployment

Percentage of the workforce



Earnings growth picked up to 2.9 per cent in the year to the fourth quarter of 2002, but had fallen back by the second quarter of 2003 to 1.8 per cent although the figures are volatile from quarter to quarter.

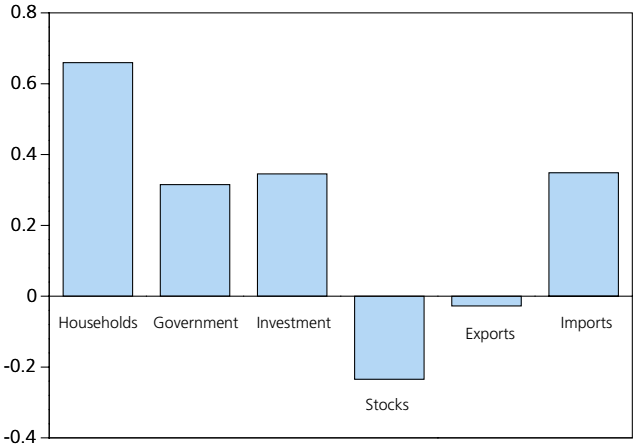
USA

The latest data for the US economy for 2003 quarter two show the economy growing by 0.8 per cent, following growth in the previous quarter of 0.4 per cent.

Personal consumption, the main driver throughout 2002 and the first quarter of 2003 continued to lead growth in 2003 quarter two and contributed 0.7 percentage points to quarterly GDP. Government demand and investment also made modest contributions both having failed to contribute to GDP growth in quarter one. These were offset by negative contributions from stocks and net trade (figure 4). Exports have not added to quarterly GDP in the last two quarters while imports have picked up substantially. More generally,

Figure 4
USA: Contributions to GDP

2003 quarter two



the quarterly rises in GDP in 2002 and so far in 2003 have been well below the growth rates of the late 1990s. Overall, growth in 2002 was 2.4 per cent compared to growth in the previous year of 0.3 per cent.

The index of production contracted in the second quarter having been up by 0.1 per cent in the first quarter. This was due mainly to a fall in April. In 2002, output had contracted by 0.7 per cent, itself an improvement over the previous year's 3.6 per cent decline.

Inflationary pressures, which had been subdued for most of 2002, started to slowly increase from October. This was particularly marked in the first quarter of 2003, when inflation rose from 2.6 per cent in January to 3.1 per cent in March, the highest rate since June 2001. However the inflation rate fell back considerably in April, to 2.2 per cent as the effect of earlier oil price hikes dropped out. The index has been at 2.1 per cent for the last three months to August. Similarly, producer prices growth has fallen substantially from 4.5 per cent in March (the highest rate since June 2000) although it did rebound by 0.3 percentage points to 2.5 per cent between July and August possibly due to another upward move in oil prices.

Unemployment rose to 6.0 per cent in December 2002, then fell slightly in the first three months of 2003 before rising once again to a new peak of 6.4 per cent in June. However, since then, the rate has been declining and is now down to 6.1 per cent of the workforce. Similarly, employment growth has picked up in the first half of 2003 following low or negative growth in 2002.

Average earnings growth in the year to the second quarter was 3.3 per cent, a small decrease of 0.2 percentage points over the previous quarter. Earnings growth had declined continuously in 2002.

Japan

The Japanese economy grew by 1.0 per cent in the second quarter of 2003. This followed growth of 0.6 per cent in the first quarter of last year .

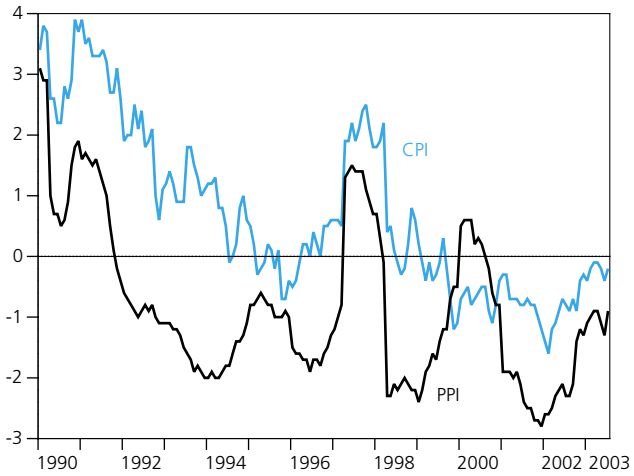
This performance was due to a considerable increase in investment spending and a positive contribution from net exports as imports fell. In contrast household consumption was flat over the quarter and government demand did not contribute to GDP. More generally, Japan has had low or negative GDP growth since 1997 (except in 2000 when growth was 2.7 per cent, although this was still below the growth rates of most major economies for that year). Annual figures for 2002 shows the economy growing by just 0.1 per cent. The stronger growth in the later quarters of 2002 had been driven by a combination of stronger consumer demand (although this fell back again in 2002 quarter four); substantial stockbuilding in quarters two and three and a fairly strong rebound in exports.

As with all the other major economies outside the UK, the index of production contracted in 2003 quarter two by 0.7 per cent having grown by 0.4 per cent in the previous quarter. Looking at the monthly changes shows that fairly large falls in April and June were offset by an increase in May. Overall in 2002, the index declined by 1.3 per cent, which, although negative, is a substantial improvement over the previous year's contraction of 6.2 per cent.

Consumer and producer price deflation that began in mid-1998, is still ongoing although the rate of price falls has slowed since the back end of 2002. Figures for the year to August show the consumer prices index down by 0.3 per cent and the producer prices by 0.7 per cent (figure 5).

Figure 5
Japan: Prices

Growth, month on a year ago



The unemployment rate in August was 5.1 per cent, an 0.2 percentage points fall on the previous two months and a further slight improvement over the March to May period when the rate was steady at 5.4 per cent. These recent rates of unemployment are very high by Japanese historical standards (unprecedented in fact since 1960 when OECD records began). On the other hand, the employment losses seen over the previous eight consecutive quarters has been reversed in the year to the second quarter with a small growth of 0.1 per cent.

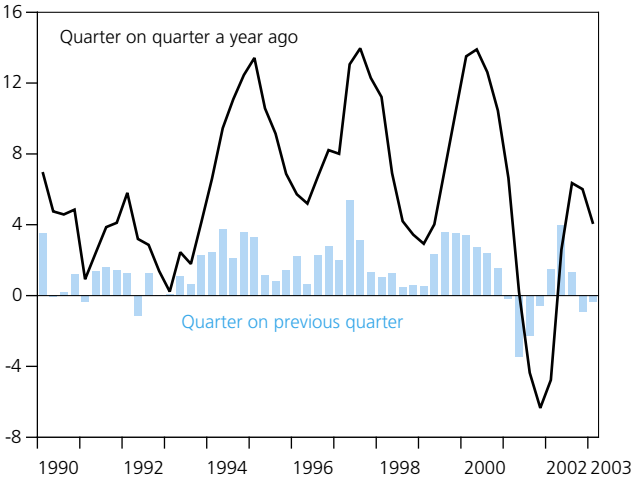
Despite the current weak labour market, earnings growth, which had been in decline until late 2002 has picked up over the latest three quarters. It now shows a reasonable annual increase in earnings of 2.6 per cent in the year to the second quarter following 1.8 per cent in the first quarter of 2003. This is a significant pick up from the third quarter of 2002 when earnings were 2.2 per cent lower than in the same quarter of the previous year.

World Trade

Some data for world trade for OECD countries now extends to the first quarter of 2003 and generally shows a fall back in trade from the levels seen in the first half of 2002.

Figure 6
OECD: Export of manufactures

Growth



Manufacturing exports of OECD countries contracted by 0.4 per cent a deceleration from the 0.9 per cent contraction in the previous quarter (figure 6). Overall in 2002, exports of manufactures grew by 2.5 per cent, a big gain over the previous year's fall of 1.0 per cent. Non – OECD exports grew by 8.1 per cent in the same period.

Imports of goods by OECD countries were also down , by 0.2 per cent in the first quarter having shown growth in all quarters of 2002. In 2002 as a whole, OECD goods imports were up 2.7 per cent compared to a contraction in the previous year of 1.1 per cent.

Notes

The series presented here are taken from the OECD's main economic indicators and are shown for each of the G7 (except the UK) economies and for the European Union (EU15) countries in aggregate. The definitions and methodologies used conform to SNA93.

Comparisons of indicators over the same period should be treated with caution, as the length and timing of the economic cycles vary across countries. For world trade, goods includes manufactures, along with food, beverages and tobacco, basic materials and fuels.

Data for EU15, France, Germany, Italy, the USA and Japan are all available on an SNA93 basis. Cross country comparisons are now more valid.

1 European Union 15

Data for this table are not available this month –
this table will return in the December edition

2 Germany

		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														
	ILFY	HUBW	HUBX	HUBY	HUBZ	HUCA	HUCB	ILGS	ILHM	HVLL	ILAF	ILAO	ILIG	GABD
1998	1.7	0.9	0.3	0.5	0.3	1.8	2.2	4.2	1.0	1.0	–0.4	1.8	1.5	9.1
1999	1.9	2.0	0.2	0.8	–0.3	1.5	2.3	1.5	0.4	0.6	–1.0	2.6	–0.1	8.4
2000	3.1	1.2	0.2	0.7	–0.2	4.4	3.2	6.2	1.4	1.5	3.4	2.7	0.6	7.8
2001	1.0	0.9	0.2	–0.9	–0.8	2.0	0.4	0.5	1.1	1.9	2.9	1.5	0.3	7.8
2002	0.2	–0.6	0.3	–1.4	0.1	1.2	–0.5	–1.1	–2.2	1.5	–0.4	1.7	–0.9	8.6
2000 Q1	3.0	0.7	0.2	0.8	–0.4	4.3	2.6	5.0	–0.2	1.5	2.3	2.8	0.3	7.9
Q2	4.5	2.1	0.3	0.9	–0.3	4.2	2.8	6.7	4.4	1.1	2.6	2.4	0.6	7.8
Q3	3.0	1.5	–	0.6	–	4.0	3.2	7.0	1.6	1.3	3.7	3.3	0.4	7.7
Q4	1.9	0.6	0.3	0.5	–	4.9	4.4	5.8	–0.1	1.8	4.5	2.4	0.8	7.6
2001 Q1	1.9	1.2	0.1	–0.2	–0.4	3.6	2.3	5.9	2.3	1.7	4.8	2.0	0.7	7.6
Q2	0.8	0.6	0.1	–0.7	–0.4	2.5	1.4	1.4	0.4	2.5	4.7	2.0	0.7	7.7
Q3	0.7	0.9	0.2	–1.3	–1.2	2.0	–0.1	–1.3	1.5	2.2	2.6	1.1	0.2	7.9
Q4	0.5	0.7	0.3	–1.4	–1.3	0.1	–2.1	–3.7	0.2	1.6	0.3	1.0	–0.3	8.1
2002 Q1	–0.1	–0.5	0.3	–1.4	–0.7	0.4	–1.9	–3.7	–4.1	1.9	–0.2	1.1	–0.5	8.3
Q2	0.1	–0.7	0.4	–1.7	0.2	1.0	–0.9	–1.9	–2.2	1.3	–0.9	1.0	–0.8	8.5
Q3	0.4	–0.7	0.6	–1.4	0.3	1.6	–	–0.3	–1.0	1.1	–1.0	2.1	–1.0	8.7
Q4	0.5	–0.4	–	–1.1	0.7	1.9	0.7	1.5	–1.6	1.2	0.5	2.4	–1.3	8.9
2003 Q1	0.1	0.4	–	–0.9	1.1	1.4	2.1	1.7	0.8	1.2	1.7	..	–1.7	9.2
Q2	–0.2	0.4	0.2	–0.2	0.3	–0.2	0.7	0.3	–0.3	0.8	1.4	..	–1.8	9.4
2002 Sep	..	..	..	..	..	..	..	–0.4	–0.1	1.1	–0.9	..	..	8.7
Oct	..	..	..	..	..	..	..	0.8	1.2	1.3	0.3	..	..	8.8
Nov	..	..	..	..	..	..	..	3.7	–3.3	1.2	0.4	..	..	8.9
Dec	..	..	..	..	..	..	..	0.1	–2.6	1.2	0.9	..	..	8.9
2003 Jan	..	..	..	..	..	..	..	1.6	1.3	1.1	1.6	..	..	9.1
Feb	..	..	..	..	..	..	..	2.4	1.2	1.2	1.9	..	..	9.2
Mar	..	..	..	..	..	..	..	1.3	–0.1	1.2	1.7	..	..	9.3
Apr	..	..	..	..	..	..	..	0.9	–0.5	0.9	1.6	..	..	9.4
May	..	..	..	..	..	..	..	1.5	–1.7	0.6	1.3	..	..	9.4
Jun	..	..	..	..	..	..	..	–1.4	1.2	0.9	1.3	..	..	9.4
Jul	..	..	..	..	..	..	..	1.9	–0.1	0.9	1.9	..	..	9.4
Aug	..	..	..	..	..	..	..	..	..	1.1	2.1	..	..	9.4

Percentage change on previous quarter														
	ILGI	HUCC	HUCD	HUCE	HUCF	HUCG	HUCH	ILHC	ILHW				ILIQ	
2000 Q1	0.8	0.1	0.2	0.3	–0.4	1.4	0.9	0.4	–				–1.9	
Q2	1.1	0.8	–0.1	0.2	–	1.2	0.9	2.9	1.2			1	.0	
Q3	–0.1	–0.2	–0.1	0.2	0.3	0.6	1.0	2.0	–1.4			0	.7	
Q4	–	–0.2	0.3	–0.2	–	1.7	1.6	0.4	0.2				1.0	
2001 Q1	0.9	0.7	–	–0.4	–0.7	–	–1.1	0.5	2.4				–1.9	
Q2	–	0.2	–0.1	–0.3	–	0.1	–	–1.5	–0.7			1	.0	
Q3	–0.2	0.1	–	–0.4	–0.5	0.1	–0.5	–0.7	–0.4			0	.2	
Q4	–0.1	–0.4	0.4	–0.3	–0.1	–0.2	–0.4	–2.0	–1.1			0	.5	
2002 Q1	0.2	–0.5	–	–0.4	–0.2	0.3	–0.9	0.4	–2.0				–2.2	
Q2	0.2	0.1	0.1	–0.6	0.9	0.8	1.0	0.3	1.4				0.7	
Q3	0.1	0.1	0.1	–	–0.4	0.7	0.3	0.9	0.8			–		
Q4	–	–	–0.1	–	0.3	–	0.3	–0.3	–1.8			0	.2	
2003 Q1	–0.2	0.3	–	–0.2	0.3	–0.1	0.5	0.7	0.4				–2.6	
Q2	–0.1	–	0.3	–	0.1	–0.8	–0.4	–1.0	0.2				0.6	

Percentage change on previous month		
	ILKC	ILKM
2002 Sep	–0.8	0.6
Oct	–0.3	–0.6
Nov	1.5	–2.4
Dec	–2.5	–0.7
2003 Jan	1.9	2.3
Feb	0.3	–0.1
Mar	–0.6	–1.4
Apr	–0.1	1.1
May	–0.7	–1.0
Jun	–0.8	2.2
Jul	2.9	–0.8
Aug	..	..

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
IoP = 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

1 Excludes members of armed forces

3 France

	GDP	Contribution to change in GDP: PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	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
1998	1.7	0.9	0.3	0.5	0.3	1.8	2.2	4.2	1.0	1.0	–0.4	1.8	1.5	9.1
1999	1.9	2.0	0.2	0.8	–0.3	1.5	2.3	1.5	0.4	0.6	–1.0	2.6	–0.1	8.4
2000	3.1	1.2	0.2	0.7	–0.2	4.4	3.2	6.2	1.4	1.5	3.4	2.7	0.6	7.8
2001	1.0	0.9	0.2	–0.9	–0.8	2.0	0.4	0.5	1.1	1.9	2.9	1.5	0.3	7.8
2002	0.2	–0.6	0.3	–1.4	0.1	1.2	–0.5	–1.1	–2.2	1.5	–0.4	1.7	–0.9	8.6
2000 Q1	3.0	0.7	0.2	0.8	–0.4	4.3	2.6	5.0	–0.2	1.5	2.3	2.8	0.3	7.9
Q2	4.5	2.1	0.3	0.9	–0.3	4.2	2.8	6.7	4.4	1.1	2.6	2.4	0.6	7.8
Q3	3.0	1.5	–	0.6	–	4.0	3.2	7.0	1.6	1.3	3.7	3.3	0.4	7.7
Q4	1.9	0.6	0.3	0.5	–	4.9	4.4	5.8	–0.1	1.8	4.5	2.4	0.8	7.6
2001 Q1	1.9	1.2	0.1	–0.2	–0.4	3.6	2.3	5.9	2.3	1.7	4.8	2.0	0.7	7.6
Q2	0.8	0.6	0.1	–0.7	–0.4	2.5	1.4	1.4	0.4	2.5	4.7	2.0	0.7	7.7
Q3	0.7	0.9	0.2	–1.3	–1.2	2.0	–0.1	–1.3	1.5	2.2	2.6	1.1	0.2	7.9
Q4	0.5	0.7	0.3	–1.4	–1.3	0.1	–2.1	–3.7	0.2	1.6	0.3	1.0	–0.3	8.1
2002 Q1	–0.1	–0.5	0.3	–1.4	–0.7	0.4	–1.9	–3.7	–4.1	1.9	–0.2	1.1	–0.5	8.3
Q2	0.1	–0.7	0.4	–1.7	0.2	1.0	–0.9	–1.9	–2.2	1.3	–0.9	1.0	–0.8	8.5
Q3	0.4	–0.7	0.6	–1.4	0.3	1.6	–	–0.3	–1.0	1.1	–1.0	2.1	–1.0	8.7
Q4	0.5	–0.4	–	–1.1	0.7	1.9	0.7	1.5	–1.6	1.2	0.5	2.4	–1.3	8.9
2003 Q1	0.1	0.4	–	–0.9	1.1	1.4	2.1	1.7	0.8	1.2	1.7	..	–1.7	9.2
Q2	–0.2	0.4	0.2	–0.2	0.3	–0.2	0.7	0.3	–0.3	0.8	1.4	..	–1.8	9.4
2002 Sep	..	..	..	..	..	..	..	–0.4	–0.1	1.1	–0.9	..	..	8.7
Oct	..	..	..	..	..	..	..	0.8	1.2	1.3	0.3	..	..	8.8
Nov	..	..	..	..	..	..	..	3.7	–3.3	1.2	0.4	..	..	8.9
Dec	..	..	..	..	..	..	..	0.1	–2.6	1.2	0.9	..	..	8.9
2003 Jan	..	..	..	..	..	..	..	1.6	1.3	1.1	1.6	..	..	9.1
Feb	..	..	..	..	..	..	..	2.4	1.2	1.2	1.9	..	..	9.2
Mar	..	..	..	..	..	..	..	1.3	–0.1	1.2	1.7	..	..	9.3
Apr	..	..	..	..	..	..	..	0.9	–0.5	0.9	1.6	..	..	9.4
May	..	..	..	..	..	..	..	1.5	–1.7	0.6	1.3	..	..	9.4
Jun	..	..	..	..	..	..	..	–1.4	1.2	0.9	1.3	..	..	9.4
Jul	..	..	..	..	..	..	..	1.9	–0.1	0.9	1.9	..	..	9.4
Aug	..	..	..	..	..	..	..	..	..	1.1	2.1	..	..	9.4

Percentage change on previous quarter														
	ILGI	HUCC	HUCD	HUCE	HUCF	HUCG	HUCH	ILHC	ILHW				ILIQ	
2000 Q1	0.8	0.1	0.2	0.3	–0.4	1.4	0.9	0.4	–				–1.9	
Q2	1.1	0.8	–0.1	0.2	–	1.2	0.9	2.9	1.2			1	.0	
Q3	–0.1	–0.2	–0.1	0.2	0.3	0.6	1.0	2.0	–1.4			0	.7	
Q4	–	–0.2	0.3	–0.2	–	1.7	1.6	0.4	0.2				1.0	
2001 Q1	0.9	0.7	–	–0.4	–0.7	–	–1.1	0.5	2.4				–1.9	
Q2	–	0.2	–0.1	–0.3	–	0.1	–	–1.5	–0.7			1	.0	
Q3	–0.2	0.1	–	–0.4	–0.5	0.1	–0.5	–0.7	–0.4			0	.2	
Q4	–0.1	–0.4	0.4	–0.3	–0.1	–0.2	–0.4	–2.0	–1.1			0	.5	
2002 Q1	0.2	–0.5	–	–0.4	–0.2	0.3	–0.9	0.4	–2.0				–2.2	
Q2	0.2	0.1	0.1	–0.6	0.9	0.8	1.0	0.3	1.4				0.7	
Q3	0.1	0.1	0.1	–	–0.4	0.7	0.3	0.9	0.8			–		
Q4	–	–	–0.1	–	0.3	–	0.3	–0.3	–1.8			0	.2	
2003 Q1	–0.2	0.3	–	–0.2	0.3	–0.1	0.5	0.7	0.4				–2.6	
Q2	–0.1	–	0.3	–	0.1	–0.8	–0.4	–1.0	0.2				0.6	

Percentage change on previous month		
	ILKC	ILKM
2002 Sep	–0.8	0.6
Oct	–0.3	–0.6
Nov	1.5	–2.4
Dec	–2.5	–0.7
2003 Jan	1.9	2.3
Feb	0.3	–0.1
Mar	–0.6	–1.4
Apr	–0.1	1.1
May	–0.7	–1.0
Jun	–0.8	2.2
Jul	2.9	–0.8
Aug	..	..

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
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IoP = 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

1 Excludes members of armed forces

Source: OECD - SNA93

4 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
1998	1.8	1.9	–	0.7	0.3	1.0	2.1	1.4	1.0	2.0	0.1	2.8	1.1	11.7
1999	1.7	1.6	0.2	0.9	0.3	–	1.4	–0.2	0.8	1.7	–0.3	2.3	1.2	11.3
2000	3.3	1.7	0.3	1.5	–1.1	3.3	2.4	4.2	–1.3	2.5	6.1	2.0	1.9	10.4
2001	1.7	0.7	0.6	0.5	–0.1	0.3	0.3	–1.1	0.4	2.7	1.9	1.8	2.0	9.4
2002	0.4	0.3	0.3	0.1	0.4	–0.3	0.4	–1.3	–0.6	2.5	0.2	2.8	1.4	9.0
2000 Q1	3.4	1.4	0.2	1.8	–1.2	4.1	2.8	3.6	–1.3	2.4	4.7	2.0	1.0	10.9
Q2	3.3	1.7	0.2	1.6	–0.4	3.0	2.7	5.6	–0.3	2.6	6.2	2.5	1.6	10.5
Q3	3.3	1.8	0.3	1.6	–1.2	3.6	2.8	3.6	–0.3	2.6	6.7	2.0	2.1	10.3
Q4	3.0	1.7	0.3	1.0	–1.3	2.6	1.4	3.8	–3.1	2.6	6.6	1.9	2.8	9.9
2001 Q1	2.7	1.5	0.6	0.9	–0.4	1.6	1.4	3.0	1.0	2.9	4.7	1.8	3.2	9.7
Q2	2.1	0.9	0.6	0.6	–0.5	1.3	0.9	–0.3	–	3.0	3.2	1.2	2.0	9.5
Q3	1.5	0.3	0.6	0.2	0.5	–0.7	–0.6	–1.9	0.6	2.8	1.1	2.2	1.8	9.4
Q4	0.7	–0.1	0.7	0.3	0.1	–0.9	–0.7	–5.0	–	2.5	–1.1	2.2	1.2	9.2
2002 Q1	–0.1	–0.5	0.4	–0.4	1.4	–2.8	–1.7	–3.9	–0.3	2.4	–1.0	2.4	1.7	9.1
Q2	0.3	–0.1	0.3	–0.3	0.7	–0.7	–0.3	–2.1	–1.0	2.2	–0.6	3.4	1.9	9.0
Q3	0.4	0.5	0.3	0.2	–	1.1	1.5	–0.4	–1.3	2.4	0.5	2.4	1.3	9.0
Q4	0.9	1.2	0.2	1.1	–0.5	1.2	2.3	0.9	–	2.7	1.7	2.9	0.9	8.9
2003 Q1	0.7	1.4	0.3	0.2	–0.6	0.3	0.9	–0.3	–0.6	2.7	2.6	2.5	0.8	8.9
Q2	0.3	1.2	0.2	–0.2	0.6	–0.8	0.7	–1.4	0.7	2.7	1.7	1.8	1.3	8.6
2002 Sep	..	..	..	..	..	..	..	0.2	–1.9	2.6	0.8	2.5	..	8.9
Oct	..	..	..	..	..	..	..	0.2	–	2.7	1.6	3.0	..	8.9
Nov	..	..	..	..	..	..	..	1.8	–	2.8	1.5	2.9	..	8.9
Dec	..	..	..	..	..	..	..	0.6	–	2.8	2.0	2.8	..	9.0
2003 Jan	..	..	..	..	..	..	..	0.4	–1.0	2.8	2.4	2.9	..	9.0
Feb	..	..	..	..	..	..	..	–0.5	–	2.6	2.8	3.0	..	8.9
Mar	..	..	..	..	..	..	..	–0.8	–1.0	2.7	2.8	1.7	..	8.8
Apr	..	..	..	..	..	..	..	0.3	2.9	2.7	2.0	1.8	..	8.7
May	..	..	..	..	..	..	..	–2.9	1.0	2.7	1.5	1.8	..	8.6
Jun	..	..	..	..	..	..	..	–1.8	–1.9	2.7	1.4	1.6	..	8.6
Jul	..	..	..	..	..	..	..	–0.9	–1.0	2.7	1.3	3.2	..	8.5
Aug	..	..	..	..	..	..	..	..	..	2.8	1.3	3.2	..	..

Percentage change on previous quarter

	ILGK	HUCO	HUCP	HUCQ	HUCR	HUCS	HUCT	ILHE	ILHY				ILIS
2000 Q1	1.1	0.6	–	0.7	–1.2	2.0	1.1	0.3	–3.4				–1.2
Q2	0.5	0.5	0.1	0.3	0.3	–0.6	–	1.7	1.3				1.6
Q3	0.6	0.4	0.1	0.2	–1.1	1.3	0.3	0.2	–0.6			1	.9
Q4	0.7	0.2	0.1	–0.2	0.7	–0.1	–	1.6	–0.3			0	.6
2001 Q1	0.7	0.4	0.3	0.5	–0.2	1.0	1.1	–0.5	0.7				–0.8
Q2	–	–	0.1	–	0.2	–0.8	–0.5	–1.6	0.3				0.4
Q3	–	–0.3	0.1	–0.2	–0.1	–0.7	–1.2	–1.4	–				1.7
Q4	–0.1	–0.2	0.2	–0.1	0.3	–0.3	–0.1	–1.7	–1.0			–	
2002 Q1	–	–	–	–0.2	1.1	–0.9	–	0.7	0.3				–0.4
Q2	0.3	0.4	–	–	–0.6	1.4	1.0	0.4	–0.3			0	.6
Q3	0.2	0.3	–	0.4	–0.8	1.0	0.6	0.3	–0.3			1	.1
Q4	0.4	0.6	–	0.8	–0.2	–0.2	0.7	–0.5	0.3				–0.4
2003 Q1	–0.2	0.1	0.2	–1.1	1.0	–1.8	–1.4	–0.5	–0.3				–0.5
Q2	–0.1	0.2	–	–0.3	0.6	0.2	0.8	–0.8	1.0				1.0

Percentage change on previous month

	ILKE	ILKO
2002 Sep	0.5	–1.0
Oct	–0.6	1.0
Nov	0.4	–
Dec	–0.4	–
2003 Jan	–0.3	–1.0
Feb	–	2.0
Mar	–0.2	–1.9
Apr	–	3.9
May	–1.3	–1.9
Jun	0.6	–2.9
Jul	1.5	1.0
Aug	..	..

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
IoP = Industrial Production
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 not seasonally adjusted

Source: OECD - SNA93

5 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
1998	4.3	3.2	0.2	2.0	0.2	0.3	1.6	5.7	7.1	1.6	–1.1	2.4	1.5	4.5
1999	4.1	3.3	0.4	1.6	–0.2	0.4	1.6	4.2	8.8	2.1	1.8	2.9	1.5	4.2
2000	3.8	2.9	0.4	1.2	–	1.1	2.0	4.7	5.5	3.4	4.1	3.4	2.5	4.0
2001	0.3	1.7	0.5	–0.6	–1.4	–0.7	–0.5	–3.6	4.8	2.8	0.7	3.3	–	4.8
2002	2.4	2.2	0.6	–0.4	0.7	–0.2	0.6	–0.7	5.3	1.5	–0.6	3.3	–0.3	5.8
2000 Q1	4.2	3.4	0.4	1.6	–0.4	1.0	2.0	5.3	7.8	3.2	4.6	3.9	2.8	4.0
Q2	4.9	3.0	0.6	1.4	0.7	1.3	2.2	6.0	5.8	3.3	4.4	3.3	2.8	4.0
Q3	3.7	2.9	0.4	1.0	0.2	1.4	2.2	4.8	5.2	3.5	3.9	3.2	2.3	4.1
Q4	2.3	2.4	0.3	0.7	–0.4	0.9	1.7	2.6	3.5	3.4	3.3	3.2	2.3	3.9
2001 Q1	1.5	1.9	0.5	0.1	–0.8	0.4	0.8	–0.2	2.9	3.4	2.1	2.9	0.8	4.2
Q2	–0.1	1.6	0.4	–0.5	–1.6	–0.4	–0.2	–3.5	4.5	3.4	2.1	3.2	0.1	4.5
Q3	–0.4	1.2	0.5	–0.9	–1.4	–1.3	–1.2	–4.6	3.8	2.7	0.6	3.4	–	4.8
Q4	0.1	1.9	0.7	–1.0	–1.7	–1.4	–1.4	–5.6	7.9	1.8	–1.5	3.7	–0.8	5.6
2002 Q1	1.4	2.0	0.7	–0.9	–	–1.1	–0.7	–3.8	5.9	1.2	–1.8	3.7	–1.2	5.6
Q2	2.2	2.1	0.7	–0.6	0.7	–0.4	0.4	–1.2	5.5	1.3	–1.7	3.4	–0.5	5.8
Q3	3.3	2.6	0.6	–0.2	0.9	0.3	1.1	0.7	7.0	1.5	–0.6	3.0	0.1	5.8
Q4	2.9	1.9	0.6	0.2	1.3	0.4	1.6	1.4	3.0	2.2	1.6	3.3	0.3	5.9
2003 Q1	2.0	1.7	0.5	0.1	0.4	0.3	1.0	1.1	4.4	2.9	3.9	3.5	1.0	5.8
Q2	2.5	2.0	0.6	0.5	–0.2	–0.1	0.5	–1.0	6.0	2.1	1.8	3.3	0.9	6.2
2002 Sep	..	..	..	..	..	..	..	1.2	7.6	1.5	–0.5	3.3	0.4	5.7
Oct	..	..	..	..	..	..	..	1.0	0.3	2.1	1.5	3.3	0.5	5.8
Nov	..	..	..	..	..	..	..	1.8	3.5	2.2	1.5	3.3	0.2	5.9
Dec	..	..	..	..	..	..	..	1.4	5.3	2.3	1.9	3.3	0.3	6.0
2003 Jan	..	..	..	..	..	..	..	1.6	5.5	2.6	3.0	3.3	1.3	5.7
Feb	..	..	..	..	..	..	..	1.4	2.6	3.0	4.2	4.1	0.7	5.8
Mar	..	..	..	..	..	..	..	0.4	5.2	3.1	4.5	3.3	0.9	5.8
Apr	..	..	..	..	..	..	..	–0.6	4.9	2.2	1.9	3.3	1.1	6.0
May	..	..	..	..	..	..	..	–0.9	6.9	2.0	1.7	3.3	0.7	6.1
Jun	..	..	..	..	..	..	..	–1.4	6.3	2.1	2.0	3.3	1.0	6.4
Jul	..	..	..	..	..	..	..	–1.3	6.4	2.1	2.2	3.3	0.7	6.2
Aug	..	..	..	..	..	..	..	–1.0	6.4	2.1	2.5	3.2	0.6	6.1
Percentage change on previous quarter														
	ILGM	HUDM	HUDN	HUDO	HUDP	HUDQ	HUDR	ILHG	ILIA				ILIU	
2000 Q1	0.6	0.9	–0.1	0.6	–0.5	0.2	0.5	1.3	2.2			0	.7	
Q2	1.2	0.5	0.3	0.2	0.5	0.4	0.7	1.7	–0.4			1	.2	
Q3	0.1	0.6	–	–	–0.3	0.3	0.5	0.1	1.3			0	.1	
Q4	0.3	0.3	0.1	–0.1	–	–0.1	–0.1	–0.5	0.4				0.3	
2001 Q1	–0.2	0.4	0.2	–	–0.9	–0.2	–0.3	–1.5	1.6				–0.7	
Q2	–0.4	0.2	0.1	–0.4	–0.3	–0.4	–0.3	–1.6	1.2				0.5	
Q3	–0.1	0.2	0.1	–0.4	–	–0.6	–0.5	–1.1	0.5				–	
Q4	0.7	1.0	0.3	–0.2	–0.4	–0.3	–0.2	–1.5	4.3				–0.5	
2002 Q1	1.2	0.5	0.1	0.1	0.8	0.1	0.3	0.4	–0.2				–1.1	
Q2	0.3	0.3	0.1	–0.1	0.4	0.4	0.8	1.1	0.8				1.1	
Q3	1.0	0.7	0.1	–	0.1	0.1	0.1	0.8	2.0			0	.6	
Q4	0.3	0.3	0.2	0.2	0.1	–0.2	0.3	–0.9	0.4				–0.4	
2003 Q1	0.4	0.3	–	–	–0.2	–	–0.3	0.1	1.1				–0.4	
Q2	0.8	0.7	0.3	0.3	–0.2	–	0.3	–1.0	2.4				1.0	
Percentage change on previous month														
								ILKG	ILKQ				ILLA	
2002 Sep								–	–1.5			0	.1	
Oct								–0.6	0.2				0.1	
Nov								0.2	0.8				–0.6	
Dec								–0.9	1.8				–	
2003 Jan								0.7	0.4				–0.5	
Feb								0.1	–2.1			0	.4	
Mar								–0.6	2.2				0.3	
Apr								–0.6	0.5				0.5	
May								–	1.2				0.1	
Jun								–0.2	1.1				0.7	
Jul								0.7	1.5				–	
Aug								0.1	0.4				–0.3	

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
IoP = 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

1 Excludes members of armed forces

Source: OECD - SNA93

6 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
1998	–1.2	–	0.3	–1.1	–0.6	–0.2	–0.6	–5.9	–6.0	0.7	–1.5	–0.9	–0.6	4.1
1999	0.2	0.1	0.7	–0.2	–0.3	0.1	0.2	0.6	–2.6	–0.3	–1.5	–0.7	–0.8	4.7
2000	2.7	0.5	0.7	0.7	0.3	1.3	0.7	5.1	–1.1	–0.7	0.1	1.7	–0.3	4.7
2001	0.4	1.0	0.4	–0.3	–	–0.7	–	–6.2	–1.2	–0.7	–2.3	–	–0.5	5.0
2002	0.1	0.7	0.4	–1.3	–0.4	0.9	0.2	–1.3	–3.1	–1.0	–2.0	–1.0	–1.3	5.4
1999 Q4	–0.5	–0.9	0.7	0.2	–0.2	0.7	0.8	4.4	–1.1	–1.0	–0.6	–0.3	–0.2	4.6
2000 Q1	1.3	0.3	0.6	–	–0.1	1.2	0.7	3.5	–2.2	–0.6	0.6	1.9	–0.5	4.8
Q2	1.9	0.2	0.9	0.2	0.1	1.4	0.8	6.3	–1.5	–0.7	0.4	2.1	–0.4	4.7
Q3	2.7	–	0.8	0.9	0.5	1.3	0.8	5.4	–0.4	–0.6	–	1.7	–0.4	4.7
Q4	5.1	1.5	0.8	1.8	0.6	1.2	0.8	5.1	–0.4	–0.8	–0.7	1.1	0.2	4.7
2001 Q1	3.5	1.1	0.7	1.3	1.0	0.2	0.7	1.5	2.3	–0.5	–1.9	0.3	0.5	4.7
Q2	1.1	1.1	0.4	0.3	0.1	–0.6	0.2	–4.4	–1.1	–0.7	–2.0	0.5	–0.4	4.9
Q3	–0.7	0.8	0.3	–0.5	–0.4	–1.0	–0.2	–9.1	–2.6	–0.8	–2.5	–0.2	–0.8	5.1
Q4	–2.4	0.8	0.4	–2.3	–0.6	–1.2	–0.6	–12.3	–3.4	–1.0	–2.8	–0.6	–1.3	5.4
2002 Q1	–2.8	0.5	0.4	–2.3	–1.6	–0.3	–0.5	–9.2	–4.4	–1.4	–2.6	–1.5	–1.5	5.3
Q2	–0.4	0.5	0.4	–1.7	–0.5	0.8	–	–3.6	–2.6	–0.9	–2.2	–0.8	–1.6	5.4
Q3	1.5	1.2	0.5	–1.2	0.3	1.1	0.5	2.7	–2.7	–0.8	–2.2	–2.2	–1.0	5.4
Q4	2.5	0.8	0.2	0.1	0.3	1.8	0.7	5.9	–2.7	–0.5	–1.3	0.1	–1.1	5.4
2003 Q1	2.9	0.7	0.2	0.5	0.9	1.3	0.7	5.7	–1.2	–0.2	–1.0	1.8	–0.8	5.4
Q2	3.0	0.8	0.2	1.3	0.3	0.7	0.3	2.2	–2.3	–0.3	–1.1	2.6	0.1	5.4
2002 Sep	..	..	..	..	..	..	..	5.1	–2.3	–0.7	–2.1	1.3	–0.7	5.4
Oct	..	..	..	..	..	..	..	5.2	–2.3	–0.9	–1.4	1.0	–0.8	5.5
Nov	..	..	..	..	..	..	..	6.8	–2.3	–0.4	–1.2	0.5	–1.3	5.3
Dec	..	..	..	..	..	..	..	5.4	–3.5	–0.3	–1.3	–1.3	–1.1	5.5
2003 Jan	..	..	..	..	..	..	..	8.0	–2.3	–0.4	–1.1	1.2	–1.0	5.5
Feb	..	..	..	..	..	..	..	4.9	–	–0.2	–1.0	1.7	–0.9	5.2
Mar	..	..	..	..	..	..	..	4.4	–1.2	–0.1	–0.9	2.5	–0.5	5.4
Apr	..	..	..	..	..	..	..	3.4	–3.5	–0.1	–0.9	1.5	–0.4	5.4
May	..	..	..	..	..	..	..	1.5	–2.3	–0.2	–1.1	2.2	0.1	5.4
Jun	..	..	..	..	..	..	..	1.6	–1.2	–0.4	–1.3	3.9	0.6	5.3
Jul	..	..	..	..	..	..	..	0.4	–2.4	–0.2	–0.9	2.9	0.1	5.3
Aug	..	..	..	..	..	..	..	–	..	–0.3	–0.7	..	–0.2	5.1
Percentage change on previous quarter														
	ILGN	HUDA	HUDB	HUDC	HUDD	HUDE	HUDF	ILHH	ILIB				ILIV	
1999 Q4	–1.0	–0.9	0.1	–	–	0.2	0.3	1.4	–0.7				–0.6	
2000 Q1	2.1	0.9	0.2	0.4	0.1	0.6	–	0.6	–0.7				–2.1	
Q2	1.0	0.1	0.4	0.1	0.3	0.3	0.3	2.6	0.4			2	.3	
Q3	0.6	–0.1	0.2	0.4	0.2	0.2	0.2	0.7	0.8				–	
Q4	1.3	0.5	0.1	0.9	0.1	–	0.3	1.1	–0.7			–		
2001 Q1	0.6	0.5	–	–0.1	0.5	–0.4	–0.1	–2.9	1.9				–1.8	
Q2	–1.5	0.1	0.1	–0.8	–0.6	–0.4	–0.2	–3.3	–2.9			1	.4	
Q3	–1.1	–0.3	0.1	–0.4	–0.4	–0.3	–0.2	–4.3	–0.8				–0.4	
Q4	–0.4	0.4	0.2	–1.0	–0.1	–0.2	–0.2	–2.5	–1.5				–0.5	
2002 Q1	0.2	0.3	0.1	–0.1	–0.5	0.5	0.1	0.5	0.8				–2.0	
Q2	0.9	0.1	–	–0.2	0.5	0.8	0.3	2.8	–1.2			1	.3	
Q3	0.8	0.4	0.1	0.1	0.4	–	0.2	2.0	–0.8			0	.2	
Q4	0.6	–	–	0.4	–0.2	0.5	0.1	0.5	–1.6				–0.6	
2003 Q1	0.6	0.2	0.1	0.2	0.1	0.1	0.1	0.4	2.4				–1.7	
Q2	1.0	0.2	–	0.7	–0.1	0.1	–0.1	–0.7	–2.3			2	.3	
Percentage change on previous month														
								ILKH	ILKR				ILLB	
2002 Sep								0.6	–1.2				–0.3	
Oct								0.1	–1.2			–		
Nov								–0.1	1.2				–0.1	
Dec								–0.2	–3.5				–0.9	
2003 Jan								1.7	3.7				–1.3	
Feb								–1.7	2.4				–0.2	
Mar								0.1	–2.3			1	.1	
Apr								–1.2	–2.4			0	.7	
May								2.0	1.2				0.8	
Jun								–1.0	–				0.8	
Jul								–0.2	–2.4				–0.5	
Aug								–0.1	..				–0.3	

GDP = Gross Domestic Product at constant market prices
PFC = Private Final Consumption at constant market prices
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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 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
2 Figures monthly and seasonally adjusted

Source: OECD - SNA93

7 World trade in goods[1]

	Export of manufactures			Import of manufactures			Export of goods			Import of goods			Total trade	
	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	manufactures	goods
Percentage change on a year earlier														
	ILIZ	ILJA	ILJB	ILJC	ILJD	ILJE	ILJF	ILJG	ILJH	ILJI	ILJJ	ILJK	ILJL	ILJM
1992	4.3	3.3	9.4	5.6	4.2	8.7	4.5	3.6	6.3	5.3	4.2	9.8	5.0	4.8
1993	3.7	2.1	12.1	3.8	0.8	11.0	4.1	2.2	8.1	3.3	0.7	12.8	4.0	3.5
1994	10.3	9.9	17.3	11.9	10.9	10.7	11.4	9.3	12.9	10.9	12.2	11.3	11.7	10.6
1995	9.4	10.0	11.4	10.8	9.1	12.4	10.3	9.4	9.2	10.0	10.3	12.0	10.5	9.6
1996	6.8	6.4	6.9	8.0	7.2	6.6	6.6	6.5	7.6	7.1	8.0	7.9	7.3	6.9
1997	11.2	11.9	12.9	11.7	9.7	11.9	12.1	11.0	11.7	10.3	11.3	12.8	11.9	10.8
1998	4.8	6.4	1.3	6.2	8.2	–1.1	5.2	5.8	2.3	5.6	9.6	–2.4	5.7	5.2
1999	5.6	6.1	7.2	7.9	9.0	–0.4	6.4	5.7	5.4	6.5	10.8	–0.2	7.2	6.1
2000	12.6	12.6	20.6	14.8	12.2	13.9	14.4	12.1	13.9	12.6	14.0	17.3	14.6	12.6
2001	–0.3	–1.0	–2.1	–0.1	–0.6	3.8	–1.3	–0.3	–0.1	0.5	–1.1	2.9	–0.6	0.2
2002	..	2.5	8.1	..	2.4	..	3.8	2.4	..	..	2.7	..	..	..
1996 Q3	7.1	6.7	7.3	8.1	7.7	4.6	6.9	6.6	8.3	6.8	8.8	6.3	7.5	6.9
Q4	9.2	8.2	9.7	9.0	8.5	7.8	8.5	8.9	9.9	8.3	8.9	9.4	8.8	8.7
1997 Q1	8.8	8.0	12.3	9.3	7.3	10.8	9.0	7.6	11.7	8.3	8.2	12.2	9.2	8.5
Q2	12.6	13.1	14.5	12.8	10.5	13.3	13.4	12.4	13.0	11.3	12.2	14.3	13.1	11.9
Q3	12.6	14.0	13.6	12.9	10.5	13.3	13.9	12.9	11.9	11.3	12.4	14.0	13.4	12.0
Q4	10.8	12.3	11.4	11.8	10.4	10.3	12.1	11.1	10.2	10.4	12.3	10.6	11.9	10.6
1998 Q1	9.5	11.2	6.4	10.0	11.0	4.1	10.1	10.8	6.0	9.0	12.6	3.6	10.0	9.2
Q2	5.2	6.9	1.7	6.7	8.2	0.1	5.7	6.2	2.4	6.0	9.7	–1.1	6.2	5.6
Q3	2.5	4.2	–1.3	4.2	6.9	–3.5	2.9	3.3	0.4	4.0	8.0	–5.2	3.6	3.2
Q4	2.0	3.4	–1.8	3.7	6.6	–5.2	2.2	2.7	0.2	3.3	8.0	–7.0	3.0	2.7
1999 Q1	1.7	2.9	–1.2	3.9	6.2	–4.2	2.0	1.9	1.3	3.4	7.7	–6.3	3.0	2.6
Q2	3.7	4.0	3.3	6.2	7.9	–2.5	3.9	3.7	3.7	5.2	9.6	–3.3	5.0	4.4
Q3	7.2	7.2	11.0	9.1	9.7	0.4	8.0	7.1	7.3	7.3	11.6	1.9	8.6	7.2
Q4	9.8	10.4	15.8	12.4	12.1	4.6	11.6	10.0	9.4	10.2	14.3	7.0	12.0	10.0
2000 Q1	13.5	13.5	22.5	14.7	13.3	10.2	15.5	13.4	13.7	12.5	15.0	13.7	15.1	13.0
Q2	13.8	13.9	24.2	15.7	13.2	14.0	16.2	13.1	15.7	13.4	15.1	17.8	16.0	13.6
Q3	12.7	12.6	20.3	16.1	12.9	16.9	14.3	12.0	14.6	13.9	14.7	20.3	15.2	13.3
Q4	10.5	10.4	15.3	12.6	9.5	14.7	11.5	10.1	11.6	10.8	11.1	17.4	12.1	10.6
2001 Q1	6.2	6.6	6.6	7.3	5.7	9.5	6.6	6.3	5.9	6.7	6.2	10.8	7.0	6.4
Q2	0.7	0.2	–1.0	1.0	0.2	4.9	–0.1	0.7	0.5	1.4	–0.1	4.2	0.5	1.0
Q3	–3.0	–4.4	–6.3	–3.7	–3.6	1.0	–4.8	–3.0	–2.9	–2.5	–4.5	–1.2	–4.2	–2.7
Q4	–4.9	–6.3	–7.8	–5.0	–4.5	–0.4	–6.7	–5.2	–4.0	–3.4	–5.8	–2.3	–5.8	–4.1
2002 Q1	–2.8	–4.8	–1.3	–2.6	–3.2	1.9	–4.0	–3.9	0.4	–1.9	–3.8	1.0	–3.3	–2.4
Q2	3.3	2.6	6.1	2.8	1.9	4.6	3.4	2.4	5.7	2.6	2.1	5.0	3.1	2.9
Q3	6.6	6.4	11.7	6.1	5.0	6.3	7.6	5.5	9.6	5.3	5.8	7.2	6.9	6.0
Q4	..	6.0	15.7	..	6.0	..	8.3	5.5	..	..	6.6	..	..	..
2003 Q1	..	4.0	..	..	..	..	..	..	..	..	6.1	..	..	..
Percentage change on previous quarter														
	ILJN	ILJO	ILJP	ILJQ	ILJR	ILJS	ILJT	ILJU	ILJV	ILJW	ILJX	ILJY	ILJZ	ILKA
1996 Q3	2.6	2.3	3.4	2.7	2.5	2.1	2.5	2.3	3.4	2.4	2.8	2.3	2.6	2.5
Q4	2.9	2.8	3.2	2.6	2.0	3.7	2.9	3.0	2.9	2.5	2.1	3.9	2.8	2.7
1997 Q1	1.7	2.0	3.8	2.8	1.2	4.2	2.4	1.1	3.2	2.0	2.0	4.6	2.6	1.8
Q2	4.8	5.4	3.5	4.1	4.5	2.7	4.9	5.5	3.0	4.0	4.7	2.7	4.5	4.4
Q3	2.7	3.1	2.5	2.8	2.5	2.1	3.0	2.8	2.3	2.3	3.0	2.1	2.9	2.5
Q4	1.3	1.3	1.2	1.7	2.0	0.9	1.3	1.3	1.3	1.7	2.0	0.8	1.5	1.5
1998 Q1	0.4	1.0	–0.9	1.1	1.7	–1.6	0.6	0.9	–0.7	0.8	2.3	–2.0	0.9	0.6
Q2	0.7	1.3	–1.1	1.0	1.9	–1.2	0.8	1.1	–0.5	1.1	2.0	–1.8	0.9	0.9
Q3	0.1	0.5	–0.5	0.4	1.2	–1.6	0.3	–	0.3	0.4	1.4	–2.2	0.4	0.3
Q4	0.8	0.6	0.6	1.2	1.7	–0.9	0.6	0.7	1.1	1.0	2.0	–1.2	0.9	0.9
1999 Q1	0.2	0.5	–0.2	1.3	1.3	–0.6	0.4	0.1	0.4	0.8	2.1	–1.2	0.8	0.5
Q2	2.7	2.4	3.4	3.2	3.6	0.5	2.6	3.0	1.8	2.8	3.8	1.3	2.9	2.7
Q3	3.4	3.6	7.0	3.2	2.9	1.3	4.3	3.3	3.8	2.5	3.2	3.0	3.7	2.9
Q4	3.3	3.5	4.9	4.3	3.9	3.3	3.8	3.3	3.1	3.7	4.4	3.8	4.1	3.5
2000 Q1	3.5	3.4	5.6	3.3	2.4	4.7	3.9	3.2	4.3	2.9	2.8	5.0	3.6	3.2
Q2	3.0	2.7	4.8	4.1	3.5	4.0	3.2	2.7	3.7	3.6	3.9	4.9	3.7	3.3
Q3	2.4	2.4	3.7	3.4	2.6	3.9	2.7	2.2	2.7	2.9	2.9	5.2	3.1	2.6
Q4	1.3	1.5	0.5	1.2	0.8	1.4	1.3	1.6	0.5	0.9	1.2	1.3	1.2	1.1
2001 Q1	–0.5	–0.2	–2.4	–1.6	–1.2	–	–0.7	–0.3	–1.0	–0.9	–1.8	–0.9	–1.1	–0.7
Q2	–2.4	–3.5	–2.7	–2.0	–1.9	–0.4	–3.3	–2.7	–1.6	–1.5	–2.3	–1.3	–2.6	–2.0
Q3	–1.4	–2.3	–1.8	–1.3	–1.3	–	–2.2	–1.6	–0.8	–1.0	–1.7	–0.3	–1.7	–1.2
Q4	–0.7	–0.6	–1.1	–0.1	–0.1	–	–0.7	–0.7	–0.6	–0.1	–0.2	0.2	–0.4	–0.4
2002 Q1	1.7	1.5	4.5	0.9	0.1	2.3	2.2	1.0	3.4	0.7	0.3	2.5	1.5	1.2
Q2	3.7	4.0	4.6	3.4	3.2	2.3	4.1	3.7	3.7	3.0	3.7	2.5	3.8	3.3
Q3	1.8	1.3	3.4	1.9	1.7	1.6	1.8	1.3	2.9	1.7	1.9	1.8	1.8	1.7
Q4	..	–0.9	2.4	..	0.9	..	–0.1	–0.7	..	..	0.6	..	..	..
2003 Q1	..	–0.4	..	..	..	..	..	..	..	..	–0.2	..	..	..

1 Data used in the World and OECD aggregates refer to Germany after unification

Source: OECD - SNA93

Regional economic indicators November 2003

Gladys Asogbon
Office for National Statistics

Overview

- Recently updated GVA figures shows London grew by the fastest rate amongst the regions between 2000 and 2001 and also had the highest GVA per head in 2001, the highest disposable income per head and the highest individual consumption expenditure per head in 1999.
- Employment broadly showed growth across most regions especially on the employee jobs survey. Most regions also saw decreases in their unemployment rates.
- Annual industrial production figures for all the countries of the UK show falls in output in 2002.
- Construction output on the other hand went up in most countries in recent quarters.
- Businesses in most regions were generally less pessimistic in the July CBI survey.
- House price inflation was high in 2003 quarter two in all regions with some increases in double figures.

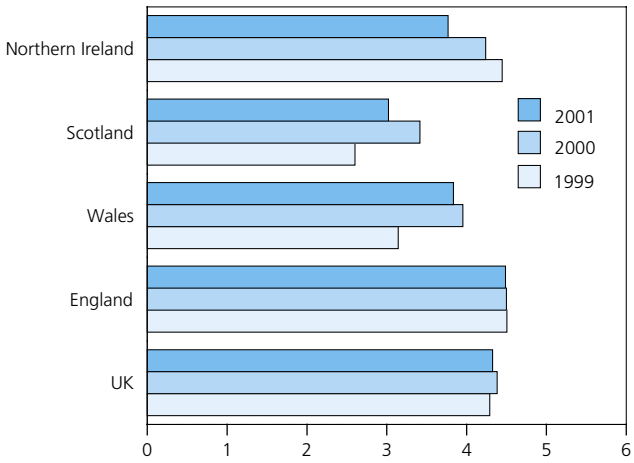
GDP at basic prices

Tables 1 to 4 concern National Accounts statistics for the regions.

In the recently updated table 1, figures for Headline Gross value added (GVA) at basic prices show that London grew by the fastest rate amongst the regions between 2000 and 2001 of 5.4 per cent followed by the South East's 5.1 per cent. Both were significantly quicker than the UK average of 4.3 per cent. Together, they also accounted for 32.8 per cent of the UK's total GVA in 2001 with contributions of 16.5 per cent and 16.3 per cent respectively. The North East had the lowest rate of GVA growth in 2001 of 3.7 per cent. Other regions where annual growth between 2000 and 2001 was close to or above the UK average include the North West at 4.2 per cent, the East at 5.0 per cent and the South West at 4.0 per cent. Figure 1 shows GVA growth for the countries over the past three years.

Looking at the recently updated table 2, which compares GVA per head by region shows London had the highest GVA per head in 2001 of £19, 526, well above the UK average, while the

Figure 1
GVA: UK, England, Wales, Scotland and Northern Ireland
Growth, year on previous year percentage change, 1999 to 2001



North East has the lowest of £11,019. Other regions with GVA per head above the UK average were the East and the South East. In terms of annual growth rates in 2001, the South East had the highest at 4.8 per cent while the East Midlands had the lowest at 2.9 per cent. Other regions with growth rates above the UK average were the North East, the North West, the East and London.

Table 3 shows that household disposable income per head increased in the UK in 1999 by 4.6 per cent compared to an increase of 1.9 per cent in 1998. London recorded the highest value in 1999 of £12,207 followed by the South East with £11,055, which continues medium term trends. Looking at annual percentage changes, Scotland recorded the largest rise of 7.8 per cent in 1999, while Yorkshire and the Humber was the slowest growing region, with growth of 2.4 per cent in 1999. Other slower growing regions were the South East, with 3.3 per cent, London, with 3.4 per cent, and the South West with growth of 3.6 per cent in 1999. Significant accelerations in the rates of activity in 1999 compared to 1998, of more than 4.5 per cent, were seen in the North East and Scotland, whilst growth slowed in the Yorkshire and Humber region.

Table 4, shows individual consumption expenditure per head, with London again recording the highest monetary value of £12,250 in 1999, followed by the South East with £11,392 while the North East had the lowest expenditure. Looking at annual percentage changes, London also recorded the largest rise in consumption with growth of 8.8 per cent in 1999, while the North East recorded a decline of 1.0 per cent in the same period, compared to an increase of 4.4 per cent in 1998.

The Labour Market

Tables 5 to 11 concern the labour market. Tables 6, 8 and 9 are seasonally adjusted; while tables 5, 7, 10 and 11 are unadjusted.

The **total in employment** (from the Labour Force Survey), table 9, in the UK grew by 0.2 per cent in 2003 quarter two, the same as in the previous quarter. This however masks a quite varied performance at the regional level with employment falling in the East Midlands, the West Midlands (which had the highest fall over the quarter of 0.5 per cent), the South East and the South West. All the other English regions showed growth above the UK average, with the single exception of Yorkshire and the Humber. The highest growth rate of 1.2 per cent occurred in the East. One of the largest quarterly fluctuations in employment was in Northern Ireland, which went from growth of 3.1 per cent in 2003 quarter one to a fall of 2.1 per cent in 2003 quarter two. Comparing 2003 quarter two with the same period a year ago shows the North West with the highest annual growth rate of 2.3 per cent while the West Midlands had the largest fall of 0.9 per cent . The UK as a whole showed growth over the period of 0.8 per cent.

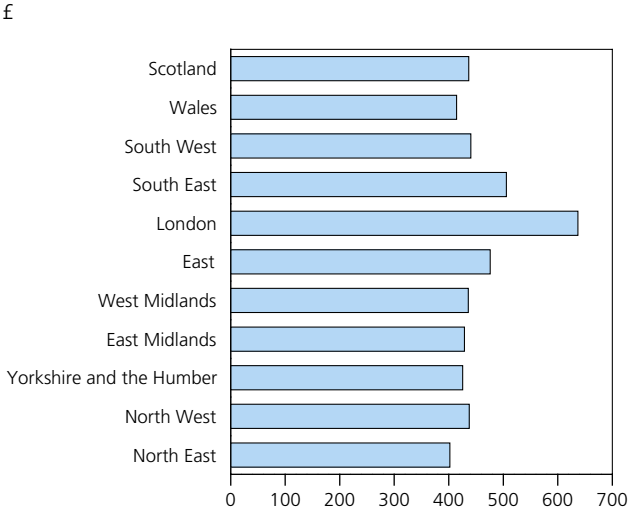
Employee jobs (from the Employers Survey – workforce jobs), in table 11 shows a more uniform picture of growth across regions in June 2003 with most regions growing above the UK average of 0.5 per cent. The highest growth of 1.1 per cent was in Yorkshire and the Humber while the lowest was 0.2 in the East. The previous period had seen falls in employee jobs in every region, as growth contracted in the UK as a whole by 1.0 per cent, with the largest contraction of 1.8 per cent occurring in the East Midlands. Comparing June 2003 with the same period a year ago shows the highest growth in the North East and the largest fall in the East Midlands. It should be noted that the survey does not take into account the self employed.

The UK **claimant count rate**, table 8, was 3.1 per cent of the workforce in the UK in 2002 and is still at that rate as of l September 2003. This national rate masks large variations between regions with the North East having the highest claimant count in September 2003 at 4.7 per cent. This region has had the highest count in every year since 1999. The North East is followed closely by Northern Ireland with a rate of 4.3 per cent.

Table 6 shows the rate of **unemployment (according to the internationally consistent ILO definition)**. The rate stabilised at 5.1 per cent for most of 2002, except in quarter three when there was a slight increase to 5.3 per cent. The second quarter of 2003 saw the rate fall slightly to 5.0 per cent from 5.1 per cent in quarter one. There was a high degree of volatility in the latest quarter at the regional level and the differences in their rates are also fairly marked. However, most areas saw decreases in their unemployment rate except for the East Midlands, London and Northern Ireland. The largest decline in the unemployment rate of 0.7 percentage points was in the East and the highest rate of 7.1 per cent in the second quarter was in London.

The **Long-term claimant count as a percentage of total unemployment**, table 7, for the UK as a whole was 15.4 per cent in September a 0.4 percentage points rise over the previous month. Between August and September, there were increases, mostly small in nature, in all regions, except for the North East where the ratio was stable. The East Midlands had the highest increase amongst the English regions over this period of 0.7 percentage points. Comparing September 2003

Figure 2
Total average gross weekly pay, April 2003



with September 2002 shows that the ratio fell in all regions over the year, in some cases quite significantly except for the East, London and the South East. Northern Ireland has the highest level of long-term to total claimants at 21.5 per cent (although this has fallen from 26.2 per cent in June 2002) followed by London with 19.6 per cent. The South West has the lowest rate at 11.9 per cent.

Table 10 shows **redundancy rates** in the government office regions. In the UK there was a small reduction in the redundancy rate between Summer 2002 and Summer 2003. There were reductions across some areas: North West, the East, London, the South West and Scotland.

Total average gross weekly pay (from the annual New Earnings Survey), in table 5, shows London having the highest rate of pay at £637 a week in April 2003, up from £624 a year ago, an increase of 2.1 per cent (figure 2). Growth rates in the latest period are generally lower than in April 2002 when some regions pay grew by 5.0 per cent or more (e.g. the South East, the North East and the East Midlands). The highest rate of growth of 4.5 per cent was in the South West, the only region where gross weekly pay grew by more than 4.0 per cent. The lowest was in the North East, 0.7 per cent.

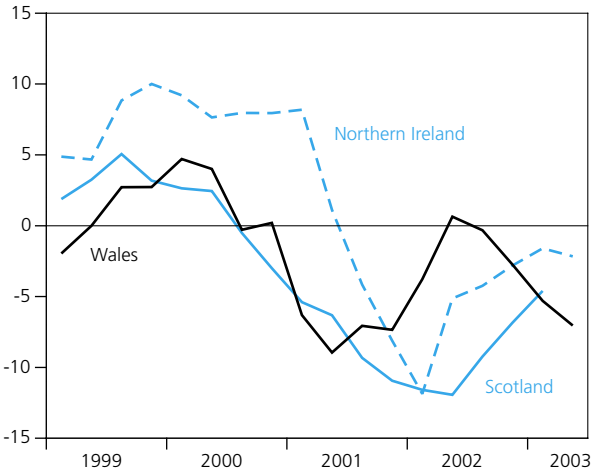
Industrial production and construction

For UK industrial production output, table 12, figures for the UK, Northern Ireland and Wales extend to 2003 quarter two, while data for Scotland is available up to 2003 quarter one. The figures for the UK as a whole are calculated using the new method of chain linking and so are not directly comparable with the breakdowns for the component countries of the UK. The latest data shows production expanding by 0.2 per cent in the UK compared to a fall of 0.3 per cent in the previous quarter. This is the first increase since 2000 quarter four. Overall in 2002 the index contracted by 2.6 per cent in the UK following a decline of 1.6 per cent in 2001. Looking at the countries shows an expansion in 2003 quarter two of 0.6 per cent in Northern Ireland, while industrial production in Wales fell by 0.9 per cent. Annual figures for 2002 also show falls in Northern Ireland, Scotland and Wales. Figure 3 shows industrial production growth for countries, quarter on a year ago.

UK construction output, table 13, rose by 4.4 per cent in 2002 quarter two having contracted by 1.8 per cent in the previous quarter. The figures for the UK as a whole are calculated using the new method of chain linking and so are not directly comparable with the breakdowns for the component countries of the UK. Growth in this sector has been strong in recent years. In 2002, for instance, output for the UK as a whole rose by 7.5 per cent. Data for Scotland only extends to 2002 quarter three and data for Northern Ireland is only available to 2003 quarter one. It is only for Wales then that data is published to 2003 quarter two and shows growth of 4.2 per cent. The figures generally show an expansion in most areas in recent quarters, with the exception of Northern Ireland.

Figure 3
Index of production

Growth, quarter on a year ago



Manufacturing

Almost all CBI data is presented on the basis of government office regions. However, London and the South East are combined.

Tables 14 to 17 show that CBI/BSL balances reveal a fairly consistent picture across regions regarding both business optimism and the volumes of new orders in its June survey. Results for the October survey were not available at the time of writing.

Table 14 shows that businesses in many regions were substantially more **optimistic about the business situation** in the July 2003 survey than in the April and January surveys. The regions where optimism increased significantly were the East Midlands, London and the South East, Yorkshire and the Humber and the North West (figure 4).

Figure 4
Manufacturing industry

Business optimism (balance)

UK manufacturing output, as measured by CBI/BSL balances for **volume of output** in table 15, shows a more mixed picture. Four areas report increases in output in July when compared with four months ago, another two report falling output but at a slower rate to the April survey, while the rest show output falling more quickly than in April. Looking ahead, in June most areas reported that firms expected output to rise over the next few months and only firms in the West Midlands anticipated that output would fall significantly.

The overall CBI/BSL April 2003 balance for **volume of new orders**, table 16, generally shows on balance that more firms had a decrease in orders between the April and July surveys. The figures are volatile across regions and those areas that show small recent increases generally have had large falls in earlier surveys. Looking ahead to the next four months, shows the balance of opinion across regions differing with the North East, the North West, the East Midlands and both Wales and Northern Ireland expecting an increase in the volume of new orders and the other regions expecting a decrease.

Volume of new export orders, table 17, for both the last and next four months also show a mixed picture between the April and July surveys across regions with some expecting deterioration and other expecting an improvement. Generally the figures show continuing decline, although there has been reductions in the extent of the deterioration in most cases. Only in the North East and Northern Ireland was the balance of opinion positive about the volume of orders in the past four months. Looking ahead, the picture on new export orders across the regions is more positive with the majority expecting an improvement. The exceptions are the North East, the West Midlands, the South West and Scotland.

In line with the somewhat mixed picture of reports regarding output and expected workflow, the percentages of **firms working below capacity**, table 18, also shows variation across regions. In the UK as a whole, the number of firms working below capacity decreased from 70 per cent in April to 68 per cent in July. Areas showing reductions in the percentage of firms working below capacity were the East Midlands, the East and all the non-English parts of the UK. All other areas showed an increase with the North West showing the highest increase of 6 percentage points.

The housing market

In Table 20, UK **house prices** (not seasonally adjusted) increased in quarter two by 6.1 per cent having fallen in the previous quarter by 0.2 per cent. In some regions, prices grew by well above the UK average. The North East, the North West and Yorkshire and the Humber all saw double digit price increases over the quarter and unlike the previous quarter no regions had price falls.

Annual data shows house prices increased significantly in the UK in 2002 by 17.0 per cent. Most regions saw growth in double figures, the highest being in the East Midlands where prices grew by 25.0 per cent. Other regions with high increases were the West Midlands (21.6 per cent), the East (22.0 per cent) and Yorkshire and the Humber (21.0 per cent).

In Table 19 the number of **permanent dwellings started** fluctuates quite widely from quarter to quarter with a significant seasonal factor involved. Year-on-year growth to quarter two shows a mixed picture across the regions, some showing an increase in the number of permanent dwelling started and others showing a decrease.

Business start-ups

VAT registrations and de-registrations, table 21, shows de-registrations outnumbering registrations by 200 for the calendar year 2002 which is the first net loss since 1994 when there were a net 5,800 de-registrations. In 2002 de-registrations outnumbered registrations in most regions, except the North East, the East Midlands, the West Midlands, the East and the South East where there were net gains. The largest net loss was in London (2,100 businesses).

1 Gross Domestic product[1] at basic prices

Government Office Regions

£ million

	United Kingdom[3]	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Northern Ireland
	TMPV	TMPW	TMPX	TMPY	TMPZ	TMQA	TMQB	TMQC	TMQD	TMQE	TMQF	TMQG	TMQH	TMQI
1989	452 049	17 232	49 434	35 349	30 355	38 355	44 035	69 218	65 851	34 316	384 145	19 136	39 363	9 405
1995	626 703	23 229	66 887	47 970	41 793	52 800	60 974	96 310	93 376	47 632	530 971	26 028	55 431	14 273
1996	663 148	23 963	69 905	50 612	44 575	55 596	64 726	102 802	99 855	50 635	562 669	27 217	58 079	15 182
1997	705 851	24 762	73 670	53 501	47 552	58 904	69 137	111 117	108 091	53 740	600 474	28 492	60 828	16 057
1998	749 688	25 497	77 698	56 099	50 102	62 140	73 927	120 271	117 440	56 598	639 772	29 718	63 285	16 913
1999	781 847	25 910	80 836	57 706	51 743	64 103	77 562	127 124	124 875	58 739	668 598	30 652	64 932	17 665
2000	816 111	26 740	84 058	59 675	53 588	66 498	81 713	133 179	132 147	61 085	698 684	31 864	67 150	18 414
2001	851 408	27 729	87 584	61 929	55 394	68 839	85 775	140 354	138 877	63 554	730 036	33 086	69 179	19 108

1 Based on the European System of Accounts 1995 (ESA95).
2 Data are consistent with the headline series published on 20 August 2003.
3 UK *less* Extra-Regio and statistical discrepancy.

Source: National Statistics

2 Gross Domestic product[1] at basic prices: £ per head

Government Office Regions

£

	United Kingdom[3]	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Northern Ireland
	TMQJ	TMQK	TMQL	TMQM	TMQN	TMQO	TMQP	TMQQ	TMQR	TMQS	TMQT	TMQU	TMQV	TMQW
1989	7 920	6 673	7 243	7 196	7 634	7 357	8 685	10 252	8 701	7 374	8 078	6 702	7 751	5 913
1995	10 819	9 027	9 823	9 678	10 221	10 047	11 714	14 040	12 026	9 970	10 996	9 020	10 861	8 655
1996	11 425	9 344	10 300	10 216	10 860	10 569	12 361	14 896	12 794	10 572	11 625	9 427	11 406	9 136
1997	12 135	9 696	10 884	10 807	11 554	11 197	13 120	16 039	13 757	11 152	12 375	9 860	11 966	9 608
1998	12 858	10 021	11 490	11 334	12 145	11 799	13 933	17 259	14 882	11 686	13 148	10 273	12 465	10 081
1999	13 369	10 235	11 997	11 666	12 486	12 175	14 522	18 054	15 698	12 053	13 691	10 593	12 802	10 521
2000	13 917	10 600	12 477	12 057	12 890	12 642	15 203	18 746	16 555	12 443	14 260	10 987	13 263	10 941
2001	14 470	11 019	13 011	12 468	13 268	13 070	15 899	19 526	17 345	12 880	14 844	11 396	13 660	11 311

1 Based on the European System of Accounts 1995 (ESA95).
2 Data are consistent with the headline series published on 20 August 2003.
3 UK *less* Extra-Regio and statistical discrepancy.

Source: National Statistics

3 Household disposable income[1]: £ per head

Government Office Regions

£

	United Kingdom[2]	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Northern Ireland
	DEPZ	LRCG	LRCH	DEQB	DEQC	DEQH	LRCI	DEQE	LRCJ	DEQG	LREV	DEQJ	DEQK	DEQL
1989	5 560	4 908	5 239	5 208	5 280	4 934	6 097	6 549	6 110	5 638	5 643	4 994	5 355	4 729
1993	7 771	7 053	7 313	7 232	7 214	7 112	8 248	9 311	8 519	7 608	7 867	6 986	7 704	6 540
1994	8 019	7 095	7 536	7 417	7 569	7 391	8 540	9 612	8 873	7 767	8 127	7 235	7 773	6 959
1995	8 497	7 522	7 874	7 780	7 869	7 939	9 011	10 102	9 282	8 606	8 592	7 742	8 287	7 678
1996	8 938	7 972	8 334	8 323	8 401	8 313	9 484	10 650	9 814	8 915	9 070	8 056	8 541	7 834
1997	9 513	8 554	8 900	8 776	8 835	8 748	10 025	11 485	10 579	9 511	9 674	8 389	8 977	8 365
1998	9 696	8 585	9 008	9 106	8 935	8 981	10 147	11 811	10 698	9 725	9 862	8 529	9 154	8 500
1999	10 142	9 018	9 501	9 325	9 409	9 541	10 638	12 207	11 055	10 073	10 284	8 870	9 870	8 998

1 Based on the European System of Accounts 1995 (ESA95).
2 UK *less* Extra-Regio

Source: National Statistics

4 Individual consumption expenditure[1]: £ per head

Government Office Regions

£

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Northern Ireland
	TLZI	TLZJ	TLZK	TLZL	TLZM	TLZN	TLZO	TLZP	TLZQ	TLZR	TLZS	TLZT	TLZU	THZZ
1994	7 441	6 676	7 082	7 081	7 180	6 920	7 380	8 799	8 424	7 045	7 539	6 563	7 334	6 427
1995	7 762	6 973	7 336	7 306	7 583	7 364	7 915	9 011	8 697	7 408	7 865	6 997	7 537	6 775
1996	8 268	7 391	7 798	7 758	7 939	7 705	8 514	9 485	9 333	8 049	8 365	7 722	8 007	7 188
1997	8 776	7 744	8 331	8 177	8 370	8 128	8 963	10 248	9 938	8 584	8 895	8 041	8 488	7 463
1998	9 316	8 086	8 662	8 763	8 695	8 640	9 740	11 264	10 656	8 961	9 488	8 079	8 874	7 749
1999	9 864	8 003	9 321	8 907	9 057	9 262	10 077	12 250	11 392	9 600	10 057	8 206	9 459	8 281

1 Based on the European System of Accounts 1995 (ESA95).

Source: National Statistics

5 Total average gross weekly pay[1]

Government Office Regions

£

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
	DEOG	LRCO	LSHZ	DCQI	DCQH	DCQG	LRCQ	DCPI	LRCR	DCQF	DCQL	DCQM	DCQN
1994 Apr	324.7	294.6	307.7	297.0	292.5	300.1	322.8	420.6	339.4	306.9	290.5	301.9	286.5
1995 Apr	336.7	299.2	317.7	306.0	306.4	311.3	331.5	441.5	348.1	313.9	302.1	313.4	300.2
1996 Apr	350.2	315.2	329.5	316.8	318.5	323.9	347.7	455.0	367.1	325.3	313.3	325.2	306.2
1997 Apr	366.3	327.4	345.6	330.6	333.1	337.3	362.2	480.1	382.6	342.6	330.2	336.9	319.7
1998 Apr	383.1	338.7	363.3	345.2	350.3	359.8	380.3	504.5	406.3	354.6	342.8	350.0	332.6
1999 Apr	399.8	349.7	373.7	360.7	362.5	375.8	397.3	524.7	423.6	365.4	354.1	370.1	344.9
2000 Apr	418.1	368.0	389.0	375.1	374.4	387.2	416.2	561.7	443.3	380.6	368.4	383.0	360.4
2001 Apr	442.3	379.7	408.2	391.7	393.4	417.4	438.0	595.6	472.5	408.3	381.6	404.8	375.0
2002 Apr	462.6	399.3	426.8	409.9	413.0	427.3	459.6	624.1	496.7	421.7	399.7	427.0	390.1
2003 Apr	..	402.1	437.6	425.5	428.7	435.8	475.9	636.9	505.6	440.6	414.5	436.8	..

1 Average gross weekly earnings of full-time employees on adult rates whose pay for the survey pay-period was not affected by absence.

Sources: New Earnings Survey, National Statistics; Department of Economic Development, Northern Ireland

6 Unemployed as a percentage of the economically active population[1], seasonally adjusted

Government Office Regions

Percentages

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Northern Ireland
	MGSX	YCNC	YCND	YCNE	YCNF	YCNG	YCNH	YCNI	YCNJ	YCNK	YCNL	YCNM	YCNN	MGXW
2000 Q2	5.5	8.8	5.4	6.1	4.8	6.1	3.6	7.3	3.3	4.3	5.3	6.1	7.0	6.6
Q3	5.3	8.8	5.4	5.9	4.8	5.8	3.7	6.9	3.1	4.1	5.1	6.6	6.7	5.6
Q4	5.2	7.9	5.3	6.1	4.7	5.9	3.6	6.7	3.4	3.9	5.1	5.8	6.3	6.2
2001 Q1	5.1	7.7	5.3	5.4	4.7	5.6	3.6	6.5	3.3	3.9	4.9	6.1	6.0	6.1
Q2	5.0	7.3	5.4	5.4	5.0	5.4	3.5	6.1	3.2	3.6	4.8	6.1	6.2	5.9
Q3	5.1	6.9	5.2	5.4	4.6	5.6	4.0	6.5	3.4	3.6	4.9	5.5	6.7	6.1
Q4	5.2	7.3	5.3	5.1	4.7	5.5	3.9	7.2	3.3	3.6	5.0	5.9	6.7	6.0
2002 Q1	5.1	7.3	5.4	5.0	4.8	5.6	3.7	6.8	3.5	3.4	4.9	5.7	6.6	6.0
Q2	5.1	6.3	5.6	5.2	4.5	5.5	3.7	6.7	3.9	3.7	4.9	5.7	6.4	5.4
Q3	5.3	6.2	5.5	5.5	4.7	6.0	3.8	7.0	4.0	3.9	5.1	5.2	6.4	6.3
Q4	5.1	7.5	5.0	5.1	4.8	5.6	3.9	6.5	4.0	4.0	5.0	5.3	6.2	5.7
2003 Q1	5.1	6.4	5.0	5.1	4.1	6.0	4.7	6.8	3.9	3.8	5.0	4.9	5.9	5.1
Q2	5.0	6.0	4.9	5.1	4.3	5.6	4.0	7.1	3.9	3.6	4.9	4.6	5.5	5.2

1 Periods are calendar quarters.
2 Data has been adjusted to reflect the 2001 Census Population data. For further details please see the National Statistics website: www.statistics.gov.uk/cci/nugget.asp?id=207

Source: Labour Force Survey, National Statistics

7 Long-term claimant count as a percentage of the unemployed[1] (those out of work for 12 months or more)

Government Office Regions

Percentages

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
	LRFN	LRFO	LSIA	LRFR	LRFS	LRFT	LRFU	LRFV	LRFW	LRFX	LRFY	LRFZ	LRGA
2002 Aug	*15.9*	*17.7*	15.9	*14.9*	*15.2*	*17.6*	*12.1*	*19.2*	*11.4*	*12.3*	*15.1*	*13.4*	*23.3*
Sep	*16.1*	*18.1*	16.3	*14.9*	*15.4*	*17.7*	*12.3*	*19.2*	*11.7*	*12.6*	*15.2*	*14.2*	*23.3*
Oct	*16.3*	*18.2*	16.6	*15.2*	*15.6*	*17.9*	*12.5*	*19.3*	*12.0*	*12.6*	*15.6*	*14.4*	*23.9*
Nov	*16.0*	*17.6*	16.3	*14.8*	*15.1*	*17.6*	*12.3*	*19.3*	*11.8*	*12.3*	*15.3*	*14.2*	*23.2*
Dec	*15.7*	*17.0*	15.8	*14.3*	*14.5*	*17.1*	*12.2*	*19.3*	*11.9*	*11.7*	*14.8*	*14.1*	*22.8*
2003 Jan	*14.8*	*15.6*	14.6	*13.4*	*13.4*	*16.1*	*11.5*	*19.3*	*11.3*	*10.9*	*13.8*	*12.9*	*22.1*
Feb	*14.4*	*15.2*	14.4	*13.0*	*12.9*	*15.6*	*10.9*	*18.9*	*10.9*	*10.5*	*13.3*	*12.6*	*21.9*
Mar	*14.6*	*15.1*	14.6	*13.0*	*13.1*	*15.6*	*11.1*	*18.9*	*11.0*	*10.8*	*13.5*	*13.0*	*22.0*
Apr	*14.8*	*15.0*	14.7	*13.3*	*13.1*	*15.7*	*11.4*	*19.0*	*11.3*	*11.2*	*13.7*	*13.1*	*22.3*
May	*15.0*	*14.9*	15.0	*13.5*	*13.2*	*15.8*	*11.6*	*19.3*	*11.7*	*11.6*	*14.1*	*13.2*	*22.3*
Jun	*15.2*	*15.2*	15.1	*13.7*	*13.6*	*15.9*	*12.0*	*19.3*	*12.2*	*11.8*	*14.5*	*13.2*	*21.8*
Jul	*15.0*	*14.9*	14.9	*13.5*	*13.6*	*15.7*	*12.2*	*19.4*	*12.3*	*11.8*	*13.9*	*12.8*	*20.8*
Aug	*15.0*	*14.5*	14.8	*13.4*	*13.8*	*15.6*	*12.4*	*19.3*	*12.4*	*11.8*	*13.9*	*13.0*	*20.5*
Sep	*15.4*	*14.5*	15.3	*13.7*	*14.5*	*16.0*	*12.7*	*19.6*	*12.5*	*11.9*	*14.3*	*13.7*	*21.5*

1 Computerised claims only.

Source: National Statistics

8 Claimant count rates as a percentage of total workforce

Government Office Regions

Seasonally adjusted

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
	BCJE	DPDM	IBWC	DPBI	DPBJ	DPBN	DPDP	DPDQ	DPDR	DPBM	DPBP	DPBQ	DPBR
1999	*4.2*	*7.1*	4.6	*5.0*	*3.7*	*4.5*	*2.9*	*4.5*	*2.3*	*3.1*	*5.0*	*5.1*	*6.4*
2000	*3.6*	*6.3*	4.1	*4.4*	*3.4*	*4.0*	*2.4*	*3.7*	*1.9*	*2.5*	*4.4*	*4.6*	*5.3*
2001	*3.2*	*5.7*	3.7	*4.0*	*3.1*	*3.7*	*2.1*	*3.3*	*1.6*	*2.1*	*4.0*	*4.0*	*4.9*
2002	*3.1*	*5.2*	3.6	*3.7*	*2.9*	*3.5*	*2.1*	*3.6*	*1.7*	*2.0*	*3.6*	*3.9*	*4.5*
2002 Sep	*3.1*	*5.2*	3.5	*3.7*	*2.9*	*3.5*	*2.1*	*3.6*	*1.7*	*1.9*	*3.7*	*3.8*	*4.4*
Oct	*3.1*	*5.1*	3.5	*3.6*	*2.9*	*3.5*	*2.1*	*3.6*	*1.7*	*1.9*	*3.6*	*3.8*	*4.4*
Nov	*3.1*	*5.0*	3.5	*3.6*	*2.9*	*3.5*	*2.1*	*3.6*	*1.7*	*1.9*	*3.6*	*3.8*	*4.4*
Dec	*3.1*	*4.9*	3.5	*3.6*	*2.8*	*3.5*	*2.1*	*3.6*	*1.7*	*1.9*	*3.6*	*3.8*	*4.4*
2003 Jan	*3.1*	*4.9*	3.5	*3.6*	*2.8*	*3.5*	*2.1*	*3.6*	*1.7*	*1.9*	*3.6*	*3.8*	*4.4*
Feb	*3.1*	*4.9*	3.5	*3.6*	*2.8*	*3.6*	*2.2*	*3.6*	*1.7*	*1.9*	*3.5*	*3.8*	*4.3*
Mar	*3.1*	*4.9*	3.4	*3.5*	*2.9*	*3.6*	*2.2*	*3.7*	*1.7*	*1.9*	*3.5*	*3.8*	*4.3*
Apr	*3.1*	*4.8*	3.4	*3.5*	*2.9*	*3.6*	*2.2*	*3.7*	*1.8*	*1.9*	*3.5*	*3.8*	*4.3*
May	*3.1*	*4.9*	3.4	*3.6*	*2.9*	*3.6*	*2.2*	*3.7*	*1.8*	*1.9*	*3.6*	*3.8*	*4.4*
Jun	*3.1*	*4.8*	3.4	*3.5*	*3.0*	*3.6*	*2.2*	*3.7*	*1.8*	*2.0*	*3.6*	*3.8*	*4.3*
Jul	*3.1*	*4.7*	3.4	*3.5*	*2.9*	*3.6*	*2.2*	*3.7*	*1.8*	*1.9*	*3.5*	*3.8*	*4.2*
Aug	*3.1*	*4.7*	3.4	*3.4*	*2.9*	*3.6*	*2.2*	*3.7*	*1.8*	*1.9*	*3.4*	*3.8*	*4.3*
Sep	*3.1*	*4.7*	3.3	*3.4*	*2.9*	*3.6*	*2.1*	*3.7*	*1.8*	*1.9*	*3.4*	*3.8*	*4.3*

Source: National Statistics

9 Total in employment[1,2], seasonally adjusted

Government Office Regions

Thousands

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Northern Ireland
	MGRZ	YCJP	YCJQ	YCJR	YCJS	YCJT	YCJU	YCJV	YCJW	YCJX	YCJY	YCJZ	YCKA	YCPT
2000 Q2	27 294	1 069	3 019	2 270	1 997	2 397	2 637	3 311	4 030	2 345	23 075	1 228	2 321	680
Q3	27 350	1 066	2 998	2 272	1 979	2 398	2 658	3 323	4 017	2 384	23 096	1 234	2 338	691
Q4	27 336	1 059	3 002	2 269	1 970	2 390	2 680	3 320	4 011	2 356	23 057	1 233	2 353	697
2001 Q1	27 428	1 062	3 016	2 263	1 965	2 409	2 695	3 365	4 019	2 361	23 155	1 229	2 348	699
Q2	27 512	1 065	3 032	2 256	1 971	2 409	2 680	3 404	4 030	2 380	23 228	1 221	2 357	708
Q3	27 487	1 067	2 982	2 263	1 990	2 412	2 668	3 409	4 038	2 386	23 217	1 219	2 343	714
Q4	27 559	1 066	3 016	2 261	1 993	2 439	2 684	3 405	4 050	2 393	23 308	1 219	2 338	700
2002 Q1	27 576	1 070	3 011	2 274	1 991	2 435	2 688	3 393	4 065	2 393	23 320	1 221	2 335	707
Q2	27 698	1 069	3 006	2 275	2 013	2 448	2 690	3 425	4 059	2 410	23 396	1 238	2 352	720
Q3	27 662	1 070	3 003	2 273	2 027	2 430	2 687	3 404	4 042	2 410	23 347	1 252	2 355	718
Q4	27 812	1 053	3 064	2 276	2 018	2 444	2 678	3 432	4 061	2 412	23 436	1 277	2 377	731
2003 Q1	27 859	1 060	3 062	2 298	2 025	2 438	2 658	3 406	4 063	2 422	23 432	1 288	2 390	754
Q2	27 922	1 065	3 076	2 301	2 023	2 425	2 690	3 415	4 053	2 421	23 470	1 310	2 403	738

1 Includes employees, the self-employed, participants on Government-supported employment and training schemes and unpaid family-workers.
2 Periods are calendar quarters.
3 Data have been adjusted to reflect the 2001 Census population data. For further details please see the National Statistics website: www.statistics.gov.uk/cci/nugget.asp?id=207

Source: Labour Force Survey, National Statistics

10 Redundancies, not seasonally adjusted[1]

Government Office Regions

Rates[2]

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
	DITA	LRDH	LRDI	DCXF	DCXG	DCXL	LRDJ	DCXI	LRDK	DCXK	DCXN	DCXO	DITB
Spring 1999	8	–[3]	9	9	–[3]	11	8	6	7	7	10	10	–[3]
Summer 1999	7	–[3]	9	9	8	8	7	4	6	7	–[3]	8	–[3]
Autumn 1999	7	–[3]	10	6	9	6	6	6	7	8	–[3]	6	–[3]
Winter 1999	8	11	8	7	11	10	6	7	7	6	15	9	–[3]
Spring 2000	7	10	7	9	8	8	4	7	6	8	–[3]	10	–[3]
Summer 2000	6	–[3]	7	5	9	7	5	4	7	8	–[3]	6	–[3]
Autumn 2000	7	–[3]	8	7	7	8	6	6	6	6	–[3]	7	–[3]
Winter 2000	7	–[3]	9	6	7	9	5	6	6	8	9	6	–[3]
Spring 2001	7	–[3]	8	5	8	8	6	7	5	7	–[3]	10	–[3]
Summer 2001	7	–[3]	8	7	7	8	9	5	7	5	–[3]	8	–[3]
Autumn 2001	8	10	9	10	7	6	7	8	9	6	–[3]	7	–[3]
Winter 2001	9	12	10	5	8	9	8	8	10	8	10	10	–[3]
Spring 2002	8	–[3]	8	5	8	11	10	7	8	7	–[3]	8	–[3]
Summer 2002	7	–[3]	7	8	7	10	7	7	6	8	–[3]	8	–[3]
Autumn 2002	7	–[3]	6	6	9	6	7	6	8	7	–[3]	7	–[3]
Winter 2002	8	10	7	6	7	10	7	7	7	5	12	8	–[3]
Spring 2003	6	–[3]	8	7	7	8	6	4	8	5	–[3]	6	–[3]
Summer 2003	6	–[3]	6	–[3]	9	10	5	6	8	5	–[3]	6	–[3]

1 The method of calculating redundancy estimates back to spring 1995 has changed from that used to calculate data previously published in this table. Thus the data in this table are not comparable to those previously published. See pp225-229 of the May 2000 Labour Market Trends for more information.
2 Redundancies per 1,000 employees.
3 Sample size too small to provide a reliable estimate.

Source: Labour Force Survey, National Statistics

11 Employee jobs (all industries)

Government Office Regions

June 1996 = 100

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
	YEKA	YEKB	YEKJ	YEKC	YEKD	YEKI	YEKE	YEKF	YEKG	YEKH	YEKK	YEKL	YEKM
1999	105.3	100.1	106.5	104.0	103.7	101.9	106.2	111.9	107.7	104.7	104.8	102.0	106.3
2000	107.2	116.5	102.7	110.6	108.2	106.9	106.5	102.0	104.0	105.3	106.0	103.5	108.7
2001	108.2	117.2	100.7	110.0	112.1	108.1	109.5	102.1	104.1	105.1	106.1	106.4	110.4
2002	108.1	115.7	102.3	110.3	110.4	108.4	110.8	102.6	103.6	105.0	105.7	106.5	112.2
2001 Dec	108.8	102.4	108.9	105.7	104.9	102.9	111.1	117.1	111.5	110.7	106.1	107.4	112.1
2002 Mar	107.8	101.3	107.7	104.3	103.8	102.4	110.4	115.7	110.5	110.1	105.0	106.6	111.5
Jun	107.9	101.7	108.0	104.1	103.6	102.2	110.4	115.4	110.5	110.9	105.9	106.5	111.9
Sep	108.1	102.6	108.6	105.3	103.5	102.7	110.3	115.4	110.0	111.1	105.9	106.4	111.9
Dec	108.5	103.5	109.3	106.2	103.7	103.3	110.6	116.5	110.1	110.9	105.9	106.3	113.6
2003 Mar	107.4	103.0	108.1	104.9	101.8	102.0	109.7	115.1	109.7	109.0	104.9	105.4	112.5
Jun	107.9	103.9	108.5	106.0	102.3	102.5	109.9	115.5	109.9	109.6	105.4	105.9	112.8

Source: National Statistics

12 Index of industrial production[1]

Seasonally adjusted 1995 = 100

	United Kingdom[1]	Scotland	Northern Ireland	Wales
	CKYW	LRFK	LRFL	TMQX
1999	98.1	115.3	118.3	100.9
2000	100.0	115.8	128.0	103.1
2001	98.4	106.5	126.9	95.4
2002	95.8	95.9	119.1	93.9
2000 Q2	100.2	117.1	125.3	103.8
Q3	99.9	115.8	130.2	101.9
Q4	100.3	113.3	131.8	102.0
2001 Q1	100.1	110.5	134.8	97.9
Q2	98.7	109.7	126.7	94.5
Q3	98.3	105.0	124.8	94.7
Q4	96.5	100.9	121.1	94.5
2002 Q1	96.0	97.7	118.8	94.2
Q2	96.0	96.6	120.2	95.1
Q3	95.7	95.3	119.5	94.4
Q4	95.4	94.0	117.7	91.9
2003 Q1	95.1	93.2	116.9	89.2
Q2	95.3	. .	117.6	88.4

1 The index of industrial production for the United Kingdom has been rebased from 1995=100 to 2000=100. Figures on the 1995=100 base are not being continued

Sources: National Statistics; Scottish Executive; Department of Enterprise, Trade & Investment Northern Ireland;

13 Index of construction[1]

Seasonally adjusted 1995 = 100

	United Kingdom[1]	Scotland	Northern Ireland	Wales
	GDQB	LRZR	LRFM	TMQY
1999	98.7	101.6	. .	93.0
2000	100.0	109.3	. .	86.3
2001	103.4	106.4	. .	80.5
2002	111.2	. .	. .	90.2
2000 Q2	100.0	105.3	121.2	91.4
Q3	98.3	107.5	114.9	86.8
Q4	99.4	109.5	113.2	81.3
2001 Q1	101.5	110.4	119.2	82.2
Q2	102.8	108.4	118.7	74.4
Q3	103.8	104.7	118.1	82.2
Q4	105.7	102.0	116.5	83.4
2002 Q1	108.8	101.5	112.4	86.5
Q2	110.0	103.5	117.9	89.3
Q3	112.0	106.1	114.2	90.8
Q4	114.1	. .	113.4[2]	94.2
2003 Q1	112.0	. .	111.6[3]	96.3
Q2	116.9	. .	. .	100.3

1 The Index of construction for United Kingdom has been rebased from 1995=100 to 2000=100. Figures on the 1995=100 base are not being continued

2 Revised.

3 Provisional.

Sources: National Statistics; Scottish Executive; Department of Finance and Personnel, Northern Ireland

14 Manufacturing industry: optimism about business situation

Government Office Regions (London and the South East is still on an SSR basis)

Balance[1]

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London and the South East	South West	Wales	Scotland	Northern Ireland
	DCMO	LRYS	LRYT	DCMU	DCMT	DCMS	LRYU	DCMP	DCMR	DCMX	DCMY	DCMZ
2002 Oct	–19	–11	–18	–9	3	–20	–20	–18	–37	–15	–18	–7
2003 Jan	–19	–4	–26	–13	–28	–27	–29	–19	–10	–20	–26	–4
Apr	–27	–14	–39	–23	–44	–38	–23	–31	–27	–22	–15	–8
Jul	–13	–19	–20	–2	–8	–24	–6	3	–17	–38	–16	1

1 Balance in percentage of firms reporting rises *less* those reporting falls.

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

15 Manufacturing industry: volume of output

Government Office Regions (London and the South East is still on an SSR basis)

Balance[1]

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London and the South East	South West	Wales	Scotland	Northern Ireland
Past 4 months												
	DCLQ	LRYV	LRYW	DCLW	DCLV	DCLU	LRYX	DCLR	DCLT	DCLZ	DCMA	DCMB
2002 Oct	–12	–17	–2	–20	6	–8	–26	–19	–17	12	1	24
2003 Jan	–7	13	–25	–23	–10	–26	–7	–11	22	9	–7	–
Apr	–12	3	–26	–25	–18	–5	–6	–	–13	–14	3	10
Jul	–9	19	9	–20	–24	–18	–13	–20	–15	16	–12	19
Next 4 months												
	DCMC	LRYY	LRYZ	DCMI	DCMH	DCME	LRZA	DCMD	DCMF	DCML	DCMM	DCMN
2003 Jul	–4	–1	3	9	14	–33	–2	–9	1	3	–15	24

1 Balance in percentage of firms reporting rises *less* those reporting falls.

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

16 Manufacturing industry: volume of new orders

Government Office Regions (London and the South East is still on an SSR basis)

Balance[1]

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London and the South East	South West	Wales	Scotland	Northern Ireland
Past 4 months												
	DCNA	LRZB	LRZC	DCNG	DCNF	DCNE	LRZD	DCNB	DCND	DCNJ	DCNK	DCNL
2002 Oct	–16	7	1	–20	3	–6	–28	–20	–35	–8	–2	8
2003 Jan	–9	22	–18	–2	–13	–12	–12	–6	–5	–24	–19	38
Apr	–21	–2	–32	–10	–26	–14	–25	–12	–21	–23	–5	1
Jul	–18	29	–1	–9	–23	–22	–33	–28	–23	4	–26	24
Next 4 months												
	DCNM	LRZE	LRZF	DCNS	DCNR	DCNQ	LRZG	DCNN	DCNP	DCNV	DCNW	DCNX
2003 Jul	–8	14	5	–	6	–27	–8	–8	–13	4	–24	3

1 Balance in percentage of firms reporting rises *less* those reporting falls.

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

17 Manufacturing industry: volume of new export orders

Government Office Regions (London and the South East is still on an SSR basis)

Balance[1]

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London and the South East	South West	Wales	Scotland	Northern Ireland
Past 4 months												
	DCNY	LRZH	LRZI	DCOE	DCOD	DCOC	LRZJ	DCNZ	DCOB	DCOH	DCOI	DCOJ
2002 Oct	–19	6	–	2	13	–4	–29	–25	–26	–9	–23	13
2003 Jan	–21	15	–14	–16	–18	–8	–20	–17	–22	–34	–24	–5
Apr	–21	–15	–30	2	–16	–26	–14	–3	–37	–29	–28	–2
Jul	–23	17	–3	–8	–16	–21	–31	–11	–25	–	–15	33
Next 4 months												
	DCOK	LRZK	LRZL	DCOQ	DCOP	DCOO	LRZM	DCOL	DCON	DCOT	DCOU	DCOV
2003 Jul	–13	–2	18	10	10	–28	1	6	–17	14	–25	7

1 Balance in percentage of firms reporting rises *less* those reporting falls.

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

18 Manufacturing industry: firms working below capacity

Government Office Regions (London and the South East is still on an SSR basis)

Percentages

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London and the South East	South West	Wales	Scotland	Northern Ireland
	DCOW	LRZN	LRZO	DCPC	DCPB	DCPA	LRZP	DCOX	DCOZ	DCPF	DCPG	DCPH
2002 Oct	*67*	*74*	*63*	*81*	*53*	*63*	*66*	*66*	*67*	*52*	*47*	*70*
2003 Jan	*74*	*76*	*64*	*79*	*72*	*73*	*65*	*72*	*70*	*54*	*59*	*51*
Apr	*70*	*77*	*79*	*74*	*69*	*66*	*66*	*64*	*64*	*67*	*58*	*79*
Jul	*68*	*81*	*85*	*79*	*67*	*71*	*65*	*68*	*66*	*58*	*52*	*66*

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

19 Permanent dwellings started

Government Office Regions

Numbers

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland[1]	Northern Ireland
	DEOI	LRDP	LRZQ	DCRX	DCRW	DCRV	LRDR	DCRR	LRDS	DCRU	BLIA	BLFA	BLGA
2001	193 053	6 308	19 265	14 741	14 993	14 643	18 995	16 734	25 537	16 464	9 141	23 088	13 245
2002	..	6 387	19 112	14 615	16 004	14 659	19 315	16 914	25 303	16 918	9 419	22 665	11 977
2000 Q2	50 641	1 793	4 804	3 661	3 992	4 464	5 074	4 466	6 776	4 595	2 749	5 464	2 803
Q3	48 140	1 712	4 554	3 594	3 890	3 663	4 871	4 119	6 078	4 258	2 781	6 130	2 490
Q4	37 971	1 518	3 779	2 987	3 087	3 087	3 391	3 475	4 270	3 200	1 617	5 291	2 269
2001 Q1	48 861	1 926	4 788	3 879	3 757	4 026	4 521	3 446	6 043	4 082	2 206	6 391	3 764
Q2	51 617	1 704	4 979	3 788	3 764	4 136	5 620	4 447	6 982	4 445	2 705	5 455	3 847
Q3	49 735	1 581	4 804	3 639	3 972	3 310	4 800	5 764	6 462	4 152	2 452	5 787	2 889
Q4	42 840	1 097	4 694	3 435	3 500	3 171	4 054	3 077	6 050	3 785	1 778	5 445	2 745
2002 Q1	50 629	1 743	5 323	3 333	3 586	4 081	4 857	4 795	6 400	4 710	2 161	6 337	3 381
Q2	50 559	1 712	5 132	3 768	4 435	3 615	4 408	3 856	7 084	4 387	2 809	5 284	3 381
Q3	..	1 603	4 740	4 178	4 263	3 880	5 957	4 040	6 262	4 487	2 628	5 406	3 107
Q4	..	1 329	3 917	3 336	3 720	3 083	4 093	4 223	5 557	3 334	1 846	5 638	2 108
2003 Q1	..	1 669	5 382	4 348	4 757	4 356	5 320	3 615	6 882	4 399	2 119	7 133	3 646[3]
Q2[2]	..	1 860	6 012	3 902	4 333	4 256	5 471	4 509	7 410	4 388	2 469	..	3 251[3]

1 Includes estimates for outstanding returns for private sector.
2 Estimates for 2003 Q2 for the English regions are provisional.
3 Estimates for 2003 Q1 and Q2 for Northern Ireland are provisional.

Sources: Office of the Deputy Prime Minister; National Assembly for Wales; Scottish Executive; Department for Social Development, Northern Ireland

20 House prices[1]

Government Office Regions

1993 = 100

	United Kingdom	North East	North West[2]	Mersey-side	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
	LRBH	LRDX	LRDY	LREN	LRBJ	LRBK	LRBP	LRDZ	LRBM	LREA	LRBO	LRBR	LRBS	LRBT
2001	179.2	132.1	143.5	141.9	132.5	157.1	160.5	192.9	231.8	207.5	191.3	146.4	129.3	207.8
2002	209.6	156.3	168.7	152.0	160.2	196.3	195.2	235.4	254.8	241.7	236.2	176.3	146.0	229.3
2000 Q2	164.5	131.9	135.8	120.0	119.9	140.8	146.9	170.6	215.7	184.5	163.8	129.2	123.6	184.3
Q3	167.6	122.4	134.8	121.2	127.4	144.6	151.0	178.0	204.1	192.4	176.9	131.8	124.4	186.0
Q4	172.6	126.2	129.3	134.8	125.7	144.7	153.1	181.4	219.2	202.1	177.7	133.2	124.2	201.9
2001 Q1	171.7	122.7	135.4	150.5	129.0	146.3	152.2	188.1	225.5	192.0	182.0	137.7	130.2	221.9
Q2	177.9	132.9	138.0	132.0	128.8	154.5	157.9	187.9	234.4	211.3	183.8	154.6	126.9	204.4
Q3	184.3	132.7	153.5	141.5	135.9	162.6	166.6	196.3	236.4	214.3	200.2	148.1	130.5	215.0
Q4	180.6	141.3	142.0	140.7	135.7	163.6	162.1	196.2	228.2	207.9	197.9	145.1	131.5	196.2
2002 Q1	186.5	141.7	144.5	119.8	138.9	173.9	168.9	222.8	228.1	210.6	201.2	166.2	134.3	210.7
Q2	202.3	143.2	169.8	158.2	156.0	190.5	184.3	227.7	253.1	228.1	226.8	170.2	141.0	222.1
Q3	219.1	152.7	172.3	153.9	164.2	202.4	209.6	239.4	268.5	254.1	255.9	192.5	145.3	237.9
Q4	223.8	181.7	185.1	163.4	176.4	216.2	210.5	247.9	261.5	263.5	253.1	174.6	154.7	233.8
2003 Q1	223.4	159.5	173.6	171.2	169.6	209.9	204.9	252.0	262.6	259.9	258.9	189.7	146.4	228.7
Q2	237.0	182.9	191.5	178.3	190.4	219.2	222.4	267.3	265.8	269.1	280.0	194.1	155.9	247.0

1 These indices adjust for the mix of dwellings (by size and type, whether new or second-hand) and exclude those bought at non-market prices and are based on a sample of mortgage completions by all lenders.
2 Excludes Merseyside.

Source: Office of the Deputy Prime Minister

21 VAT registrations and deregistrations[1]: net change[2]

Government Office Regions

Thousands

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
	DCYQ	LREB	LRZS	DCYT	DCYU	DCYY	LRED	DEON	LREE	DCYX	DCZA	DCZB	DCZC
1999	21.0	0.3	1.5	0.6	1.0	1.4	2.4	7.2	5.2	1.6	–0.4	0.2	–
2000	18.6	0.4	1.6	0.6	1.3	1.6	2.6	5.2	4.1	1.1	0.1	0.2	–0.3
2001	7.4	–0.3	0.9	–0.4	0.6	0.6	0.4	1.8	3.1	0.4	–	0.2	0.1
2002	–0.2	0.1	–0.2	–0.2	1.0	0.1	0.5	–2.1	1.1	–0.3	–0.7	0.2	0.3

1 This series replaces the previously published dataset
2 Net gain or loss in the stock of registered enterprises each year – equal to registrations < de-registrations

Source: Department of Trade and Industry

Economic Trends – the first fifty years

Rhys Herbert
Office for National Statistics

Economic Trends is fifty years old this November, having been published continuously, first for the Central Statistical Office and, more latterly, the Office for National Statistics since 1953. This article has been written to mark the 600th issue. It looks at the evolution of *Economic Trends* over the decades and the role it has played in the dissemination of economic information by government statisticians. An appendix on pages 154 –163 lists by date of issue all of the articles that have appeared in *Economic Trends*.

The development of *Economic Trends*[1]

Strictly speaking it is incorrect to describe the issue that appeared on November 1953 as the first edition of *Economic Trends* (ET). In fact, the Central Statistical Office (CSO) first issued a publication bearing that name in November 1950. The copy in the archives is marked 'Secret' and appears to have had only a limited circulation around Whitehall. Another issue of ET was circulated in September 1951 and after this it was produced monthly. It is unclear at this point how widely it was circulated and whether it was used outside official circles. Sometime in 1953 the decision was made to offer it up for more general use by publishing it through the HMSO. The first edition in this new format was published in November of that year and was officially designated Issue 1.

The years after the Second World War saw an expansion in the published output of the CSO and ET is not the oldest regular publication to be produced by the Office. That was the *Monthly Digest of Statistics*, first issued in January 1946. The first post war *Annual Abstract of Statistics* was issued by the CSO in 1948 and the first *Blue Book* followed in September 1952.

The new publications reflected the growing interest in economic statistics that had emerged over the previous decade or so. While some economic statistics had been published by government for a hundred years or more (an annual *Statistical Abstract of the United Kingdom* was first produced in 1854), it was only with the onset of the Second World War that economic statistics really came into their own. The need for more detailed knowledge of the economy for planning purposes led to the setting up of a central statistical section within the Prime Minister's Office. After January 1941 this became a new Central Statistical Office. Among its staff in these early years were a number of very distinguished names, including two future Nobel prize winners for Economics in James Meade and Richard Stone.

The post-war years brought changing but still pressing demands for economic statistics. This built on plans laid out during wartime for economic policy to be more active in future and this was a line that was followed by the new government and its successors. Such policy goals required more detailed knowledge of the economy and it was with this in mind that the CSO was encouraged to develop and enhance a wide range of economic statistics including the development of Stone's pioneering work on the National Accounts. Some means of disseminating this information was also now required. This was to meet a growing demand for information not only from the government, its various departments and from MPs but also an audience of businesses and individuals beyond Westminster and Whitehall. It was with this in mind that the CSO began to develop its portfolio of publications and ET amongst others first came into being.

It was made clear from the start that ET should be seen as a complement to some of these other publications. Toward the back of the first issue of ET, the *Monthly Digest of Statistics* (MDS) was described as its companion publication. MDS would contain

longer and more detailed tables, whilst ET would "show by charts and key statistics economic trends in the United Kingdom".

That first publication was less than 30 pages long, whilst the ET of today can sometimes be longer than 200 pages. That first edition as well consisted solely of tables and charts – text would follow in later years, and by the standards of today these inevitably look primitive. Nevertheless within the context of its own time and place it must have been an impressive and very useful document.

Over time ET developed into something more recognisable to today's readers. It became clear that ET had three main functions: to present key UK economic data; to use this to analyse what was going on in the economy and to explain new developments in official statistics.

At first ET was solely devoted to the first of these and as the range of statistics available expanded, so did the length of the publication. The National Accounts were first included in their annual form in 1954; then in January1957 the first set of quarterly National Income tables appeared. From now on these would appear on a regular basis and would grow over time, so much so, that in 1993 they were published separately in their own quarterly supplement, *UK Economic Accounts*. Other statistics followed a similar pattern: the quarterly balance of payments statistics, the more detailed personal income and expenditure numbers and input output tables.

The development of new series can be followed in the articles introducing statistical developments that continue to appear regularly in ET. At first, statistical developments were reported *en masse*, with the first selection of "Recent developments in official statistics" presented in May 1957. From then on, what can be described, as methodological articles have become a regular feature of the journal (see later section "ET and development of government statistics").

The other function of ET – analysis of the data – has appeared in various forms during the lifetime of the publication. Annual articles looking at key topics started to appear at a fairly early date. An early example of this was the paper on "Employment in the public and private sectors". This first appeared in November 1960, while the latest update came out in September 2003. Other examples of long standing analytical articles are "The incidence of tax and benefits on income" (November 1962) and the annual article on research and development (March 1974). Various one-off articles on areas of interest have also appeared from time to time. An early example is an August 1967 piece "A note on contractual saving in the UK", while a more recent example from 2003 is "E-commerce adoption and business impact: a progress report".

The approach to commenting upon recent data and putting these into context has varied over the years. For the first decade and a half of its existence, ET provided no commentary. Then in January 1967, an assessment of the economy entitled "The Economic Situation" was launched. This was usually provided by HM Treasury economists and ran for a number of years until it was discontinued in 1974. After that point there was at best only a very brief section on "Latest Developments" until more recently when the regular monthly "Economic Update" was launched written by the ONS's own in-house analysts.

While ET has always been very much a journal of the CSO and later the ONS, it has also been used by other government departments to publish statistical and economic analysis. One contribution from the Treasury has already been mentioned and many others have come from other departments over the years. For many years, the announcements and analysis accompanying that year's Budget was subsequently summarised in ET, before this was finally discontinued after 1998. In more recent years, as the division between the CSO and the Treasury possibly became clearer cut after the launch of the former as a separate government department in July 1989, contributions from the Treasury have become less frequent. However, even as late as March 1993 the then Permanent Secretary, Sir Terence Burns, used ET as a forum to discuss "Managing the Nation's Economy – The conduct of Monetary and Fiscal Policy".

A number of other government departments have also contributed articles to ET. These include the Department of Trade and Industry in its various guises, the Department for Environment, Food and Rural Affairs (aka Ministry of Agriculture, Fisheries and Food), the Department for International Development (aka Overseas Development Administration), the old Department of Energy and the various different departments that managed health and social security. In recent years, contributions from outside the ONS have been less frequent than before but this is as much a reflection of the greater degree of statistical work that was at one time carried out in other government departments and is now undertaken within the ONS.

ET has often been the forum in which various changes to the organisational structure of government statistical production has been announced or explained. In November 1991 the then Chancellor, Norman Lamont, announced that CSO would become an executive agency and that month's ET contained an article explaining this decision and another that outlined the Chancellor's initiative to improve national statistics in response to criticisms over the previous few years. Confirmation that CSO was to merge with OPCS to form the ONS was announced within these pages. Finally new heads of the Government Statistical Service have also in the past used ET as a means to publicise their vision of the future.

The role of ET then has changed over the years but a couple of things have remained constant. ET has always been a forum for showing the current state of the economy as illustrated by official statistics and for explaining changes in these statistics.

ET and the changing nature of the UK economy

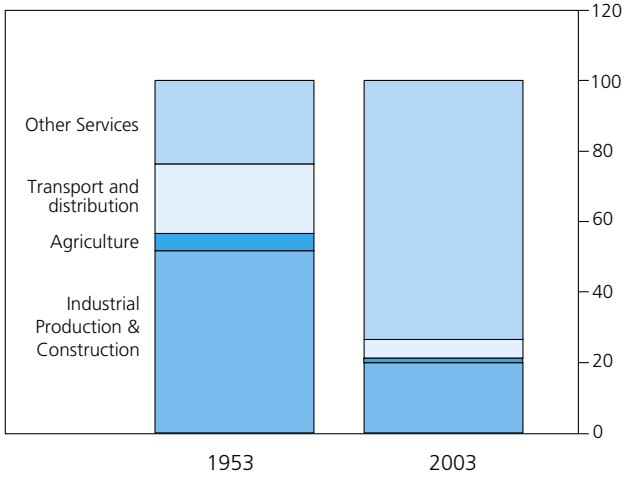
Comparing the data series in the first *Economic Trends* with the current edition show both how the economy has changed over that period and how what the ONS measures has altered in response.

The data section in the first ET was less than half the size of that in the present edition and was considerably different in coverage. The contents of the journal issued in November 1953 was split into six sections – manpower, production, raw materials, external trade and the balance of payments, finance and prices, earnings and personal expenditure.

A few things are immediately noticeable. Firstly, some very familiar data series are found to be missing when compared with the tables of today. The most obvious omission is GDP, quarterly estimates of which only began to appear in ET from 1957. It is also apparent how little expenditure data was available. Secondly, ET provided data on an economy that looks rather different from that of today. At that time ET was primarily focused on the industrial sector, as that was still the dominant part of the economy. Eight pages were devoted just to the output of that sector and a further two to its raw material inputs. We cannot disaggregate total output of the economy down by industry at that stage as ET did not carry figures outside the industrial sector but we can use the figures for employment as a proxy for the composition of the economy. Figure 1 shows that over half of the workforce were still employed in industrial production, while only half that number would have been working in the service sector outside transport. In contrast, similar figures for the current year show that less than 13 per cent work in production industries.

Figure 1
Composition of employment 1953 and 2003 (Mid year)

Per cent

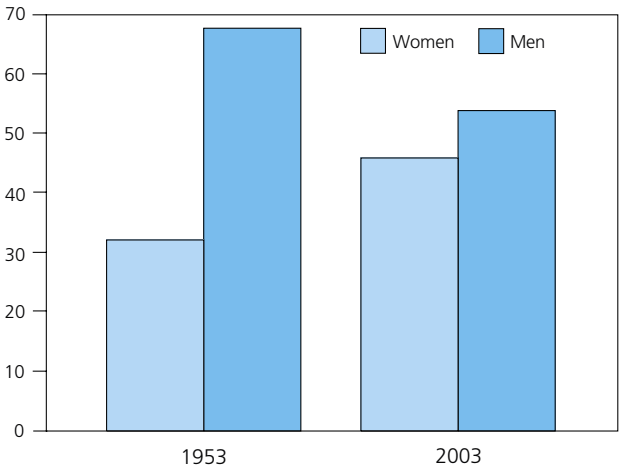


Note: Due to classification changes some are completely equivalent in the two years.

There were many other differences, for example the gender split of the measured workforce. In 1953 roughly only one in three members of the workforce as measured by official statistics was female, while today there are almost as many female workers. In 1953 ET managed to include two pages on raw materials and a further two pages on world commodity prices without even mentioning oil. The UK was still a massive producer and even exporter of coal and it also had major steel, textile, car and shipbuilding industries.

Figure 2
Gender breakdown of the workforce

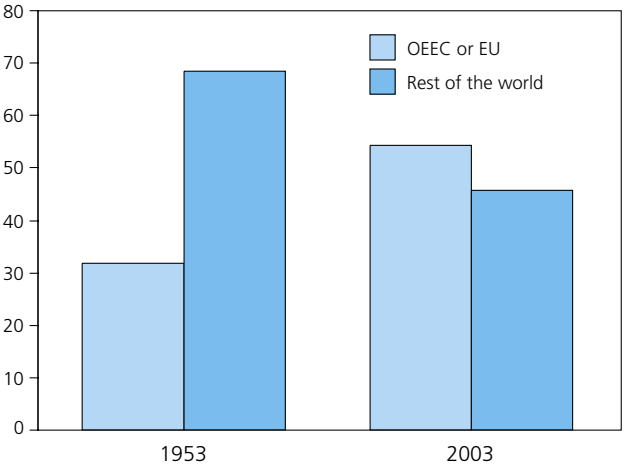
Per cent



One thing that has not changed is that 1953 as in 2003 the visible trade balance was in deficit but only to the extent of £140 million in the first six months of 1953. The geographical composition of trade though was very different. In 1953, only 23.8 per cent of the UK's exports came from and 27.9 per cent of its exports went to the OEEC area (this area consists of today's EU members plus Iceland, Switzerland and Turkey). At that time UK's trade with the sterling area was still roughly twice as large as its trade with Europe. The equivalent figures for the first half of 2003 show that 54 percent of the UK's exports now go to the EU and 55 per cent of its imports come from there.

Figure 3
Geographical composition of exports in current prices

Per cent



ET and development of government statistics[2]

Official economic statistics have changed markedly in the last 50 years and much of this development can be followed within the pages of ET. An article in one of the early issues

summarised the position as it was in the 1950s. It cited the 1944 *White Paper on Employment Policy* as laying down the broad lines for development of official statistics and the subsequent decade had seen many new series come into being. By 1957 there was a monthly index of production; monthly or quarterly figures of output and expenditure of a much wider range of commodities; quarterly statistics of stocks and capital expenditure; monthly figures of employment and half yearly earnings enquiries and more comprehensive figures of retail sales. Readers will recognise that these still form the backbone of our economic statistics today.

The near 50 years since the publication of that first essay has seen both the development of new statistics and the improvement of the existing ones. Not all of these changes were recorded in ET. For example notes on changes to labour market data can usually be found in *Labour Market Trends* and in its predecessor *Employment Gazette*. It is impossible to do full justice to all the developments that have taken place in the last fifty years but a few key articles are worth mentioning.

The National Accounts have of course always formed the backbone of our statistics and their evolution down the years can be followed in ET. The early period witnessed the extension and refinement of these statistics. Detail increased – the first input-output table appeared in ET in 1958 and was then published in ET's pages until the mid-1990s. Also, National Accounts methodological improvements were detailed in ET, such as changing base years and changes of classification.

An article in the May 2000 edition (Jenkinson and Brand, 2000) provides a summary of many of the recent changes to national accounts but two changes of relatively recent vintage are worth highlighting. In 1993 in response to comments over the timeliness and quality of its GDP data the CSO launched its preliminary estimate of GDP. This is usually published only a few weeks after the ending of the quarter to which it refers, making it one of the earliest estimates of GDP available anywhere in the world. A number of articles have explained the development and subsequent refinement of this index. Even more recently much effort within ONS has been spent in moving to a chain-linked approach to reflect the best international practice. The progress on this work and its implications have been explored in a number of ET articles.

As the 1957 article made clear, the CSO was already at that time well equipped to monitor what was going on in manufacturing and production industries as whole. Since then further progress has been in improving these industries. However, the composition of the supply side of the economy has changed markedly from that of the 1950s. The ONS has responded to this by improving its statistics for the output of the service sector, an area of output that in some ways is much harder to measure than manufacturing. This is an area in which work is still ongoing and an article in ET in October 2003 looked at the latest developments.

Finally prices were hardly mentioned in that 1957 article, possibly because inflation was not seen to be an issue of much concern at the time. Until fairly recently the RPI was calculated outside the ONS, firstly by the Ministry of Labour and then by its successor the Department of Employment but updates on developments have regularly appeared within the pages of ET. It was noted that an interim index of retail prices that had first been published in June 1947 had given way to a new Index of Retail Prices from January 1956. However, that apart, little was said about future development. This was made up for though in subsequent years. In May 1960 a report was given on the first four years of this new RPI index. Since then a number of articles have highlighted improvements to the index. Recent years has also seen much work done on the development and refinement of a measure of the harmonised index of consumer prices (HICP), the European measure of consumer price inflation that is favoured by the European Central Bank.

The future of ET

A changing world inevitably means that the needs of our customers change. As producers and disseminators of information we have to keep up with these changes and make sure that we reflect them in our publications. Looking ahead, one key issue for *Economic Trends* is how should it, and indeed all paper publications, be best used in the electronic age. ONS is currently undertaking a comprehensive review of all of its paper publications and there is a case that at least some of their functions can now be better served through the web. Certainly there seems to be less need for paper publication of long tables of data and the National Statistics website offers a timely place to have commentary. Longer articles on more detailed methodological or analytical issues remain a core part of the journal, but the widening of the publication options is apparent.

ET then is likely to change over the next few years. One change has come in this issue with publication on the web first. Over the coming months, the views of readers would be greatly appreciated as we hope to make further improvements to the journal in the spring of next year.

Notes

1. Ward and Doggett (1991) provides a full history of the CSO.

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Building the evidence base for productivity policy using business data linking

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Much government policy is aimed at raising productivity. Much of the work that has guided this policy is based on macro data of, for example, industries or countries. This article reports on recent work by the Centre for Research into Business Activity (CeRiBA), using ONS data, to use micro data to inform policy. We describe the construction of an establishment-level manufacturing productivity panel dataset, its use and its combination with other datasets.

Introduction

Raising national productivity is a key aim of the government. But the evidence concerning productivity trends used in successive Budgets and Pre-Budget Reports (PBR) has been largely macroeconomic in nature, most notably in international comparisons of productivity and TFP (see, for example, the 2002 PBR). Some important insights have arisen from these data. For example, O'Mahony and De Boer (2002) argue that much of the productivity gap with the US is due to capital and technology and much of the gap with Germany is due to capital and skills. In an industry study Basu *et al* (2003) show that differences in UK and US productivity growth in retailing explain around two-thirds of the difference between the UK and US productivity accelerations in the late 1990s.

If all firms or plants in an industry or economy had like productivity, there would be no need for a more micro study. However, recent work suggests that productivity differs substantially between businesses. For example, Disney *et al* (2003) show that exiting plants have about 4 per cent lower productivity than survivors. Griffith (1999) shows that foreign-owned plants in the UK car industry have a substantial labour productivity advantage over the set of all UK-owned plants.

These studies above are all based on early attempts to match successive years of *Census of Production* data to form a longitudinal plant-level data set (the Annual Respondents to the Census of Production Database).[1] This data set has been described in two previous *Economic Trends* articles, Oulton (1997) and Barnes and Martin (2002). Recent work at the business data linking project (BDL) has attempted to take this work further by:

- updating the manufacturing part of the ARD to as recent a year as possible;
- including services;
- matching in other data sets to expand knowledge on variables not well measured by the ARD (such as skills and innovation).

This article sets out some of the work that has been carried out in creating these data sets and highlights some of the findings.

Creating the ARD

The Interdepartmental Business Register

Enterprises, enterprise groups and local units

To compile a data set on businesses, the first step is to obtain a list of businesses in the UK. This is the role of the Interdepartmental Business Register (IDBR), where addresses of businesses are compiled using a combination of tax records on VAT

and PAYE, information lodged at Companies House, Dun and Bradstreet data and data from other surveys. The IDBR has been operating since 1994. The IDBR tries to capture the structure of ownership and control of firms and plants or business sites that make up the UK economy using three aggregation categories: local units, enterprises and enterprise groups. Their meaning is best illustrated by means of an example which is also laid out in Figure 1.

Let us suppose that *Brown* is a single firm, operating in a single location, producing goods for a single industry. Suppose now that *Smith and Jones Holdings* are a holding company, registered in London. In turn, they own two firms, *Smith* and *Jones*, who produce in separate plants. *Smith* has four plants, *Smith North*, *Smith South*, *Smith East* and *Smith West*. *Jones* has a plant, *Jones North* and an R&D lab, *Jones R&D*.

Brown, being a firm responsible for a single business activity, is a single plant 'enterprise'. *Smith and Jones Holdings*, being responsible for firms with distinct business activities, is called an "enterprise group".[2] *Smith and Jones* are also enterprises. All plants are called 'local units'. To qualify as a local unit a business entity must only consist of one site at a single mailing address. Consequently if *Jones R&D* is located at a different site than *Jones North* the enterprise *Jones* would consist of two local units. If *Jones R&D* was located at the same site as *Jones North* the two would form one local unit for the IDBR.[3]

Maintaining information on enterprise groups, enterprises and local units

A major advantage of the IDBR and related datasets such as the ARD is that information is available at many disaggregated levels (whereas company accounts would only be at the enterprise or enterprise group level for example). This is very useful in some cases. For example, job creation by an enterprise that opens a local unit of 100 and closes one of 100 is zero at the enterprise level but 100 at the local unit level. As another example, regional employment data would be unreliable if employment was only recorded at the enterprise level but the enterprise consisted of local units in different regions. It is therefore critical that the IDBR maintains as accurate a record as possible at the different levels.

The Annual Register Inquiry (ARI) maintains this information (Jones, 2000, p.51). It began operation in July 1999 and is sent to large enterprises (over 100 employees) every year, to enterprises with 20–99 employees every four years and to smaller enterprises on an *ad hoc* basis. The ARI currently covers around 68,000 enterprises, consisting of about 400,000 local units. It asks each enterprise for employment, industry activity and the structure of the enterprise. For the *Brown* enterprise in our example this is straightforward. A multi-site enterprise such as *Smith* receives a form and is asked to report on its overall activity and employment. It will also be sent four extra forms to report the same for each local unit. If *Smith* has closed a local unit it must report this on the form. If a local unit has opened, it has to fill out extra forms (which are obtained from ONS by an automated procedure). Returns from the ARI update the IDBR in the summer of each year.

Maintaining information on employment, turnover and other data

As well as structure of business information, the IDBR holds other data, such as address and SIC code. For productivity we will require independent output, employment and (possibly) other input information. Output information on the IDBR comes from VAT records if the original source of business information was VAT data. Employment information comes from PAYE data if that is the source of the original inclusion. Thus as long as the single-local unit enterprise Brown is large enough to pay VAT ((the threshold was £52,000 in 2000–01) it would have turnover information at the enterprise and local unit level. On the other hand, if *Brown* does not operate a PAYE scheme, it will have no employment information. However, employment data is required to construct sampling frames and hence it will be interpolated from turnover data. For the multi-local unit enterprise *Smith*, no turnover information will be available for *Smith's* local units, since most multi-local unit enterprises do not pay VAT at the local unit level, If the PAYE scheme is operated at the local unit level, it would have independent employment data.

There are two other ways in which employment and output data are gathered. The first is if the business is included in the ARI and the second if it is included in the Annual Business Inquiry (ABI), see below.

The ABI and the ARD

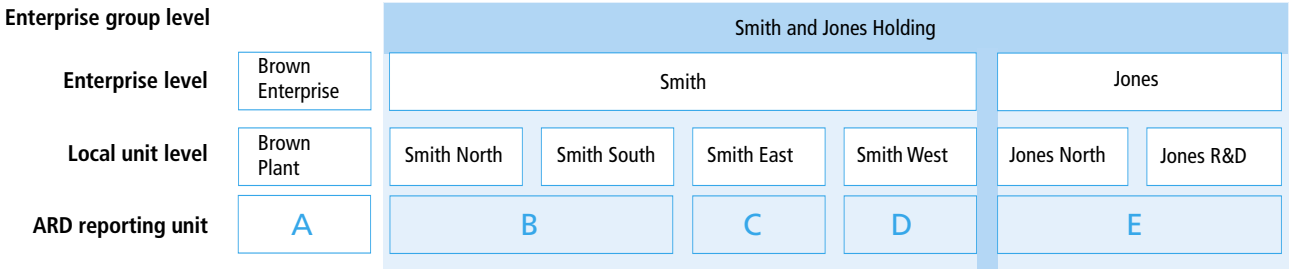
Whilst the IDBR holds much useful information, more data is required on outputs and other inputs, in order to calculate GDP. Thus the ONS conducts a business survey, based on the IDBR. This is the Annual Business Inquiry (ABI) and the ARD consists of the panel micro-level information obtained from successive cross-sections of the ABI. The ABI covers production, construction and some service sectors, but not public services, defence and agriculture.[4]

Reporting units, selected and non-selected data

To reduce compliance costs, the ABI is not a Census of all local units. This is in two regards. First, enterprises normally report on all their local units jointly unless the enterprise has local units in both Britain and Northern Ireland. There is a legal requirement for the ONS to keep data for these two areas separately and therefore enterprises are required to report separately as well. Another reason for separate reporting is if a business explicitly requests such a split. So for example, *Smith* may decide to report on *North* and *South* combined and *East* and *West* separately. This creates a somewhat different structure of 'reporting units', as opposed to the structure of enterprises and local units, and this reporting unit structure is shown for our example at the bottom of Figure 1. *Brown* forms one reporting unit (A) only whereas *Smith* reports on three mutually exclusive parts of its enterprise, B, C and D. These reporting units are consequently the fundamental unit on the ARD.

Second, only reporting units above a certain employment threshold (currently 250[5]) are sent an ABI form every year.

Figure 1
Plants and firms in the IDBR



Smaller reporting units are sampled by size-region-industry bands.[6] In the ARD, all data returned from reporting units is held on what is called the 'selected' file. Other data is held on the 'non-selected file'. Since the non-selected RUs are not sent a form, the non-selected data is of course the IDBR data.

Table 1 and Table 2 give an overview of the structure of business units as well as the relation between the selected sample for which ABI returns are available and the total population of businesses as captured in the IDBR for 1998. Consider Table 1 first. The top left cell shows that in 1998 there were 162,477 enterprise groups. Reading diagonally down the top panel, there are 171,271 reporting units and 196,355 local units. Reading down the first column, each enterprise group consists of, on average, 1.43 reporting units and 8.9 local units. Each reporting unit consists of, on average, 4.15 local units. Thus it would seem that the ABI consists of very many multi-unit businesses. The second panel explores this in more detail. The top line shows there are 158,399 enterprise groups with only one RU. The rest of the rows document the disposition of the rest of the sample: LUs in an enterprise group with 2–3 RUs, 7,342 have between 2 and 3 RUs. The lower panel shows a similar picture for local units in enterprise groups and RUs. The vast majority of enterprise groups and RUs consist of just one local unit (149,326 and 158,727 respectively).

The second part of the table shows the same descriptive statistics for selected businesses. The first panel shows that in the 1998 selected file there were 11,088 enterprise groups, 13,264 RUs and 28,765 LUs. Since selected data consist mainly of larger reporting units, the prevalence of multi-unit businesses is greater (2.54 RUs per enterprise for example). The second panel shows the distribution of RUs per enterprise group. Finally, the bottom panel shows how local units are distributed across reporting units and enterprise groups. 9,279 LUs belong to RUs that consist of only this single LU.

Table 2 focuses on RUs and sets out the number of RUs that consist of different numbers of LUs (Table 1 among other things showed the distribution of LUs that belonged to RUs of different size). The top panel of Table 2 refers to the population whereas the lower panel to the selected sample. The top row of the top panel shows that in all our data (again for 1998), the average RU has 15 employees. The final column shows the fraction of total employment accounted for by a particular type of RU, in this case 57 per cent of total employment. Looking at the far right bottom cell of

Table 1
Structure of enterprises reporting units (RUs) and local units (LUs) in the ARD 1998

(Number of RUs by enterprise groups and number of LUs by enterprise group reporting units)

Population of all businesses (IDBR) 1998			Numbers
By	Enterprise groups	RUs	LUs
Enterprise group	162,477		
RUs	1.43	171,271	
LUs	8.91	4.15	196,355
1 RU	158,399		
2–3 RUs	7,342		
4–5 RUs	1,729		
6–10 RUs	1,575		
11 plus RUs	2,226		
1 LU	149,326	158,727	
2–3 LUs	19,237	17,632	
4–5 LUs	5,167	4,346	
6–10 LUs	5,214	4,209	
11 plus LUs	17,411	11,441	
Selected sample (ABI) 1998			
By	Enterprises groups	RUs	LUs
Enterprise group	11,088		
RUs	2.54	13,264	
LUs	36.55	18.13	28,765
1 RU	10,311		
2–3 RUs	1,238		
4–5 RUs	461		
6–10 RUs	567		
11 plus RUs	687		
1 LU	7,674	9,279	
2–3 LUs	4,482	5,498	
4–5 LUs	2,139	2,392	
6–10 LUs	2,780	2,795	
11 plus LUs	11,690	8,801	

Notes: RU = ARD reporting unit; LU = IDBR local unit.

Source: Author's calculations based on ARD.

Table 2
Number of RUs by number of LUs

	Number of RUs	Average size of RUs	Row share of total emp
RUs with		*all*	
1 LU	158,727	15.14	*57%*
2–3 LUs	6,091	149.65	*22%*
4–5 LUs	641	486.73	*8%*
6–10 LUs	320	889.89	*7%*
11 plus LUs	206	1,197.31	*6%*
		selected	
1 LU	9,279	109.49	*42%*
2–3 LUs	1,993	329.73	*29%*
4–5 LUs	368	658.46	*11%*
6–10 LUs	225	997.52	*10%*
11 plus LUs	147	1,389.86	*9%*

this top panel, we see that 6 per cent of total employment is in RUs with 11 or more plants. The bottom panel shows the analogous data for the selected sample. For the selected sample we find that 42 per cent of employment is in RUs that have only 1 LU and 29 per cent in RUs with two or three LUs. Thus 71 per cent (42 per cent + 29 per cent) of employment is in RUs with between one and three LUs.

Because the RU level is the most disaggregated level for which extensive data on production inputs and outputs and other data is available, much productivity analysis using the ARD is conducted at this level. One argument in favour for this practice can be made on the basis of Table 2: 77 per cent of RUs (9,279 out of the total RU number, 12,012) representing almost half (42 per cent) of selected employment consist of one LU. Hence for these RUs analysis at the reporting unit level is analysis at the local unit level. Finally, note that many studies have, to simplify discussion, referred to reporting units as 'plants' and enterprise groups as 'firms'.

Besides the ABI, the ONS runs a large number of surveys based on the IDBR. It is important to bear in mind that the boundaries of a reporting unit might vary from survey to survey. For example, the Annual Inquiry into Foreign Direct Investment (AFDI) asks about FDI. FDI activities can typically not be attributed to a particular LU or RU but are decided upon at the level of the holding company. For the purposes of the AFDI survey therefore the RU would be the holding company. Similarly information about R&D activities is gathered at R&D enterprises which are separate from the establishments reporting on production activity of a large enterprise group (compare with the case of *Jones R&D* in our example). This implies that one has to be careful when matching other surveys to the ABI.

Information quality of the non-selected data

Non-selected data is the IDBR data. Selected data consists of the responses from firms to the ABI. Non-selected data comes either from the IDBR administrative sources, i.e. the VAT or PAYE, or other data that brought the business onto the register in the first place, or the ARI. Not all of this data is equally reliable especially for smaller business units that are typically not included in the ARI. The quality of this data is important in a number of areas including the construction of sample weights for the selected data and studies conducted at the local unit level. The following points are worth noting.

First, since some of the input data is interpolated from sales data and vice versa, one cannot do productivity studies. Second, there is a specific problem with employment data on the IDBR. According to ONS (2001), when a business first arrives on the register, its employment, if present, is frozen at its first reported point until updated. Turnover is updated however. Thus productivity for these businesses is unreliable unless their employment is updated. Updating is done from the results of the ARI, or before the ARI was introduced, if the firm was in one of the Annual Employment Surveys (AES). We can get some impression of the problem by considering Table 3. The table shows when the employment data of enterprises in the IDBR in year 2000 were last updated. The first 4 columns of Table 3 refer to different size bands. The final column shows that 8.5 per cent of total employment had not been updated since 1993. 1993 is the year when there was last a Census of Employment. Looking at columns 1 and 2 we see that the updating problem is concentrated in the smallest enterprises. 28.7 per cent of employment in enterprises of size 0–9 and 40.2 per cent of employment in enterprises of size 10–19 had not been updated since 1993. Indeed row 11 of Table 3 also reports that 56.9 per cent and 21.8 per cent of enterprises of size 0–9 and 10–19 have *never* been sent an ARI form or included in the AES. By contrast, larger enterprises are updated more frequently. An additional problem is that the ONS (2001) also states that even larger enterprises in the ARI or AES, may not have fully reported on their local units (see also Partington, 2001).[7] This suggests that the employment and therefore productivity data on these smaller enterprises, who are overwhelmingly in the non-selected sample, is likely to be very unreliable.

Timing, types of forms and processing

The IDBR is updated using ARI data in the summer. The ABI sample is drawn in the autumn and the forms are sent out at the end of the year. The ABI consists of two sets of forms. The ABI1 form asks for employment information for December and is collected by March. The ABI2 form asks for accounting information and is collected by September to allow firms to use their accounting information (the accounting year ends 5 April).[8]

RUs sent an ABI form might receive a short or a long form. This is again in the interest of reducing compliance costs. A short ABI1 form is for businesses who have already provided employment information on the ARI or for the 4th quarter of the quarterly employment survey. A short ABI2 form is sent to a proportion of businesses. The short form asks for the main aggregates, but does not ask for breakdowns of some of the variables. For example, it asks for data on intermediates, but not on components of intermediates such as electricity

etc. Finally, forms also differ slightly between sectors. There are three basic form types for ABI1 and 21 for ABI2.

When data is received from reporting units it is checked for consistency relative to previous responses. If it is not consistent, the contributor is phoned to check the data. Contact with contributors is recorded on a separate database. Non-responders are contacted with two reminders and phone calls. If persistent non-responders have provided data to other inquiries their data is imputed from these sources.

For the RUs sent short forms, the more detailed data asked on the long forms is imputed using the ratios from the long-form responses of RUs in similar industry-region-size cells (this imputation process is called expansion). Table 4 sets out the main variables available and their source.

Before the IDBR

The IDBR was introduced between 1994 and 1995. Before that sampling was on the basis of a business register

Table 3
Percentage distribution of employment by date and enterprise size

	Enterprise size				
Year of update	0–9	10–19	20–99	100 or more	All enter-prises
1991	*0.3*	*0.6*	*0.1*	*0.0*	*0.1*
1992	*0.0*	*0.1*	*0.0*	*0.0*	*0.0*
1993	*28.7*	*40.2*	*9.3*	*0.2*	*8.5*
1994	*0.2*	*0.4*	*0.1*	*0.0*	*0.1*
1995	*1.9*	*3.8*	*2.7*	*0.4*	*1.1*
1996	*1.6*	*4.7*	*4.7*	*1.0*	*1.8*
1997	*3.8*	*8.4*	*12.2*	*5.5*	*6.2*
1998	*3.0*	*8.2*	*32.6*	*12.7*	*13.2*
1999	*3.2*	*10.8*	*34.8*	*47.8*	*36.6*
2000	*0.4*	*1.1*	*3.4*	*32.4*	*21.7*
Unproven enterprises	*56.9*	*21.8*	*0.0*	*0.0*	*10.7*
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*

Source: ARI, referring to the 2000 IDBR, cited in ONS (2001, Table 10, p.53).

Table 4
Main ARD variables available and their source

IDBR	Comment	Core questions on ABI1 (by RU)	Comment	Core questions on ABI2 (by RU)	Comment
Business structure	Number of LUs, country of ownership, legal status				
Region	NUTS hierarchy				
Industry					
Employment by local unit	Relates to summer	Employment by reporting unit	For December. Breakdown by male, female, full- and part-time, working proprietors/partners and unpaid workers (e.g. family)		
Turnover by enterprise	May be interpolated for LUs			Turnover	
				Materials costs	Additional breakdown may be available to fuel, electricity etc.
				Inventories	
				Investment	
				Wages cost	Additional breakdown may be available to wages and salaries, pension contributions, social security contributions and redundancy payments.

Legal status means company, partnership, single proprietor business, public corporation, non-profit making body, central or local government.
NUTS hierarchy is region (NUTS1), group of counties or unitary authorities (NUTS2), country or unitary authority (NUTS3), district or unitary authority (NUTS4) and ward (NUTS5).

Source: Jones (2000).

maintained by the ONS (then the Central Statistical Office). The maintenance of the register was generally regarded as being less reliable than the ARI and indeed before 1983 no VAT information was available for this purpose (in 1984 around 30,000 LUs appeared on the register when VAT information was first made available). The structure of the inquiry was the same, in that the basic surveyed unit was the RU, large firms were all sampled, smaller ones were sampled proportionately and the returned data was held on the selected file. Concerning employment, before 1994, employment, if not known, was interpolated using turnover data, using a turnover to employment ratio where turnover and employment were independently observed. The ONS did check employment for plants with imputed employment of over 11, but this was done only for around 20 per cent of the non-selected sample and as for the imputed data due to time lags in the provision of tax data and processing of imputations, such information typically refers to data from two years earlier (Perry, 1985).

As well as these data quality issues, in building up a historical database the following issues arise. First, all data before 1970 appears to have been destroyed. Second, the non-selected data for 1970–79 is missing. Third, the unique RU and LU identification numbers have been changed in 1994 following the introduction of the IDBR. An ONS lookup table relates the two numbers for the selected data and the CeRiBA team have built up a lookup table for the other data using a combination of data from Richard Harris and matching observations by postcode and industry. Fourth, the ARD before 1998 includes only manufacturing.

Issues in using the data

Level of aggregation

A number of issues arise in using the data. The first question is the level of aggregation at which to work. In principle, the ARD panel can be configured for local units, reporting units, or enterprise groups. Which is 'correct' depends on what question one is trying to answer. The spatial pattern of employment for example is likely best investigated at local unit level, since reporting units might report on several local units that are located in different regions.

The correct unit for productivity analysis is more difficult. Production functions describe output-input relations for like technologies. Technology might vary across local units, across reporting units or indeed within local or reporting units, so there is no clear answer here.

Most productivity analysis involving the ARD is done at the RU level simply because it is the most disaggregated level at which all necessary data is actually reported. Some studies have tried to conduct productivity analysis at the local unit level (see, for example, Harris, 2002). This requires distributing the RU level information on a pro rata basis to local units based on the employment information in the IDBR. In order to do this one has to assume that factor proportions are the same for the various local units belonging to a RU and that local unit employment data are reliable.

Weighting

With selected and non-selected data, we can construct sampling weights. If we wish to report sample averages as conveying information about the population then we must weight observations beforehand. A more difficult issue is whether to weight *regressions* that are run on the selected sample. The answer seems to depend upon what coefficient one is trying to estimate. DuMouchel and Duncan (1983) consider the following. Suppose one is trying to estimate a marginal effect β from the model $Y= X\beta + u$, where Y is the outcome variable and X the set of forcing variables, where the data has been sampled and weights w_i are assigned to the ith observation. The OLS estimator of β is $\beta_{OLS}=(X' X)^{-1}X' Y$. The weighted least squares estimator is given by $\beta_{WLS}=(X' WX)^{-1}X' WY$ where W is a diagonal matrix whose ith diagonal element is w_i. If β is constant across size strata, then there is no need to weight to estimate it. In our sample, for example, we observe all large RUs and a sample of smaller ones. Suppose indeed we only observed the large ones and not the small ones. As long as β is constant across large and small RUs, then we do not need the smaller RUs to estimate β nor do we need to weight the larger ones: we can estimate β solely on the large RUs.[9]

The more complicated case is when β varies across size strata so that the model is $Y=X\beta(j) + \varepsilon$. A marginal effect of interest might be the weighted 'average marginal' effect, namely $\beta_{AVG}=\Sigma w_i\beta(j)/\Sigma w_i$ where the summation is over strata. DuMouchel and Duncan (1983) show that β_{WLS} is a biased estimate of β_{AVG} (unless all the regressors are constant), and so there is no reason to prefer weighting. In fact β_{OLS} is also biased, but there is no general result that one is less biased than another (indeed in this case it would be preferable to estimate using different size strata). Note that in this case it would be preferable to estimate different βs for different size classes, a procedure also recommended by Carrington *et al* (2001).

A final problem occurs if the sampling weights are measured with error, in which case weighted least squares can yield biased coefficient estimates. This is a real concern, because employment in the non-selected data from which weights can be approximated seems to be unreliable.

Data cleaning

There are a host of data cleaning issues in assembling the ARD panel from the raw cross-section data. Some of the more important are as follows. First, as mentioned above, in 1994 all the LU identifiers changed. Second, in 1984 and again in 1997 the enterprise group reference numbers changed.[10] Third, coding numbers of the variables changes from time to time (i.e. question 406 is gross output one year and inventories in another year) and hence one must be careful to use consistent questions.

Prices and capital

To measure total factor productivity (TFP) we require price deflators and capital stocks. Price deflators are derived from

the ONS PPI inquiries at as disaggregated a level as possible. Capital stock is problematic. There is data on the ABI on investment but not on the capital stocks. With an assumption about starting values, capital stocks may be created using perpetual inventory methods (see Martin 2002). In turn there are a number of issues here.

First, there is clearly some doubt about the allocation of initial values. Martin's approach is to allocate on the basis of RU level material shares. To check the reliability of this, one can look at exit rates from different parts of the TFP distribution. Interestingly, the use of materials to generate initial values is quite important for obtaining plausible results. Allocation of initial values on the basis of an RU's average share in aggregate investment (instead of materials) lead to exit rates that were higher for the top firms in the TFP distribution than for bottom firms.

Second as Harris and Drinkwater (2000) point out, capital stocks based on reporting units suffer from the problem that in multi-plant establishments plant closures could lead to an overestimation of the capital stock with the perpetual inventory method. The reason is that the perpetual inventory method assumes a constant depreciation rate which does not account for the discrete drop in an RU's capital stock with plant closure. The problem however is that to work at the LU level, we need initial values and investment at the LU level. As pointed out above, for multi-plant RUs the only data available at the LU level is employment. Thus to allocate investment and capital we have to assume a constant investment labour ratio across the LUs of an RU and there are worries, as above, about the quality of the small LU employment data.[11]

Measures of productivity

Our first measure of productivity is simply labour productivity.

$$\ln LP_{it} = \ln (Y_{it} / L_{it}) - \ln (Y_{It} / L_{It}) \qquad (1)$$

where i denotes the RU, t time and I industry. We have normalised labour productivity on the industry median for compatibility with TFP. To ensure that we calculate TFP in a way that is comparable across RUs we follow Caves, Christensen and Diewert (1981) and calculate the TFP of RU i relative to the TFP of the median RU in the industry

$$\ln TFP_{it} = \ln Y_{it} - \ln Y_{It} - \bar{\alpha}_K (\ln K_{it} - \ln K_{It}) - \bar{\alpha}_L (\ln L_{it} - \ln L_{It}) - \bar{\alpha}_M (\ln M_{it} - \ln M_{It}) \qquad (2)$$

where I denotes industry and the factor shares are calculated as the average of the RU and industry median RU factor shares.

As regards output we have gross output and value added. The relative merits of each measure have been discussed by, for example, OECD and Oulton and O'Mahony (1994, pp. 33–36) and following that literature, also at the plant or RU level we prefer to use gross output. For employment we would ideally like to adjust our input measures for human capital and hours (full and part-timers for example). For the period as a whole we have total employment. For 1980–95 total employment is broken down into administrative, technical and clerical workers and operatives. For 1996–2000, total employment is not broken down this way, but into males, full-time and part time and females, full-time and part time. Thus to have a measure consistent over time we use total employment. Capital is as defined above.

Results

Dispersion levels

Table 5 presents our dispersion results (for two digit industries for ease of reading and to avoid disclosure problems). All columns refer to 2000 data. Tobacco, fuel and recycling are omitted.[12] Column 1 shows the standard deviation of labour productivity (LP), with LP measured by the exponent of (1) using gross output. The numbers vary between 2.00 (radio and TV) and 0.60 (motors). Column 5 shows the standard deviation of the exponent of lnTFP, with lnTFP measured by (2) using gross output data. If other inputs explain part of the productivity distribution we should expect the TFP distribution to be less dispersed than the LP distribution and indeed it is in all cases.

Columns 2 and 6 repeat this analysis using the 90–10 ratios (the ratio of the RU at the 90th percentile of the log productivity distribution and the RU at the 10th percentile), computed for gross output based on lnLP and ln TFP. The LP differential varies between 13.31 (office machinery) and 3.22 (wood). Once again the TFP differential is less than the LP differential. Thus, on average the 'top' manufacturing RU is around five times more productive in labour productivity terms and 1.5 times in terms of TFP.

To examine the dispersion further, the remaining columns show the 90/50 and 50/10 ratios using gross output TFP and LP. The LP90/50 dispersions are sometimes larger and sometimes smaller than the 50/10, but the TFP90/50 dispersions are mostly somewhat bigger than the TFP50/10 measures. This latter finding suggests a left skewed productivity distribution.

How do plants move in the productivity distribution?

A way of examining the persistence of plant productivity follows Oulton (1998) in using Galton-Markov regressions. The basic regression is

$$p_{it} = \alpha + \beta p_{it-1} + \varepsilon_{it} \qquad (3)$$

which, if $\beta<1$, implies convergence of plants to a mean industry productivity level α. Equation (3) implies that convergence is symmetric because convergence speed is the same above and below the mean. A more general version of (3) is therefore

$$p_{it} = \alpha + \beta_1 p_{it-1} + D\beta_2 p_{it-1} + \varepsilon_{;t} \qquad D = 1 \text{ if } p_{it-1} > \bar{p}_{it-1} \qquad (4)$$

which has the following interpretation. The term $D\beta_{2I}$ allows for a different convergence speed if the establishment has

Table 5
Productivity Spread in 2000

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Gross output/employment				Total Factor Productivity			
	sd	p90/10	p50/10	p90/50	sd	p90/10	p50/10	p90/50
Food	0.89	4.96	2.35	2.04	0.17	1.52	1.19	1.27
Textile	0.64	3.64	1.60	2.20	0.14	1.41	1.17	1.20
Apparel	1.11	5.99	2.10	2.78	0.19	1.54	1.23	1.25
Leather	0.76	10.95	4.43	2.18	0.17	1.55	1.34	1.15
Wood	0.51	3.22	1.68	1.89	0.12	1.44	1.16	1.23
Paper	0.75	3.75	1.85	2.02	0.14	1.39	1.15	1.21
Publishing	1.05	5.81	1.90	2.81	0.22	1.72	1.25	1.38
Chemicals	1.46	6.46	2.46	2.56	0.20	1.64	1.23	1.33
Rubber	0.47	2.98	1.72	1.75	0.17	1.50	1.22	1.23
Minerals	0.56	3.21	1.86	1.77	0.17	1.54	1.22	1.26
Basic metals	0.74	4.40	2.14	2.03	0.14	1.45	1.21	1.19
Fabricated metals	0.64	3.83	1.85	1.96	0.18	1.52	1.24	1.23
Machinery	1.00	3.53	1.78	1.96	0.17	1.52	1.22	1.24
Office	1.68	13.31	2.68	4.99	0.22	1.85	1.42	1.30
Electrical	0.64	4.29	2.03	2.03	0.23	1.75	1.29	1.35
Radio TV	2.00	7.51	1.86	3.93	0.22	1.61	1.21	1.33
Precision	0.64	3.58	1.97	1.81	0.21	1.69	1.24	1.36
Motor	0.60	4.33	2.25	1.87	0.16	1.46	1.23	1.18
Transport	0.62	3.38	1.68	1.99	0.21	1.63	1.29	1.26
NEC	0.64	4.99	2.55	1.90	0.19	1.64	1.30	1.25
Average	0.87	5.21	2.14	2.32	0.18	1.57	1.24	1.26

Source: Author's calculations based on ARD

Table 6
Galton Markov Regression for TFP

	(1)	(2)	(3)	(4)
Dependant variable:	TFP		GVA/emp	
Lag	0.520	0.485	0.704	0.527
	*(0.007)****	*(0.016)****	*(0.005)****	*(0.010)****
Lag >mean		0.074		0.371
		*(0.024)****		*(0.014)****
Time dummies	yes	yes	yes	yes
Observations	112290	112290	110874	110874
R-squared	0.32	0.32	0.50	0.51

Robust standard errors in parentheses
** significant at 10%; ** significant at 5%; *** significant at 1%*

previous productivity above its industry average. This is to allow establishments below the mean to have a different convergence speed to those above the mean. If competition is important Oulton has argued that we expect convergence to be faster for plants below the mean and hence D should be positive.

The results of estimating these equations are set out in Table 6. Column 1 estimates (3) with the dependent variable lnTFP, finding a coefficient on the lagged dependent variable of 0.52. Column 2 estimates (4) . The estimate of the β_2 is positive, indicating that convergence is indeed faster for plants with below mean industry productivity. Column 3 repeats column 1 using value added (to be compatible with Oulton, 1998). The coefficient on the lagged dependent variable is 0.704, which compares very closely with Oulton's 0.74 for independent plants and 0.77 for subsidiaries. Column 4 shows results for the value added version of equation 4. Again the β_2 coefficient is positive and with a value of 0.371 somewhat higher than Oulton's 0.17. Thus in both this and Oulton's study, on different data sets, we can conclude that firms or – respectively – plants with productivity below the mean for their industry converge quicker to mean productivity levels.

Working with matched data

The above is an example of what can be done with the ARD by itself. Here we present some results using matched data with the Community Innovation Survey (CIS).

The Community Innovation Survey (CIS)

Innovation is seen as an important source of productivity growth. However, whilst the ARD has good data to measure productivity growth, it has no innovation data. A body of work has therefore matched the ARD with R&D data. The great advantage of R&D data is that measures of R&D are reasonably well codified, but R&D is an input to the innovation process and not an output (also, firms might generate technological advance outside formal R&D laboratories which R&D expenditure might not capture). To attempt to overcome these problems, the OECD developed company surveys that measure innovations directly. Such

Table 7
CIS 3 and ARD

		CIS 3	Successfully merged with ARD
1	Number of Reporting Units	8,172	3,397
2	Number of Reporting Units in distribution and Services	3,605	98
3	Number of Reporting Units in production (Mining, manufacturing and Construction)	4,567	3,299
4	Number of Reporting Units in Manufacturing excluding sector 23	3,425	3,277
5	Number of Reporting Units in Manufacturing (exc. sec23) after cleaning+ the CIS3	2,389	
6	Number of Reporting Units in Manufacturing (exc. sec23) selected* in 2000	1,593	
7	Number of Reporting Units in Manufacturing (exc. sec23) selected* in 1996 or 1997 or 1998 and in 2000	827	
8	Number of Reporting Units in Manufacturing (exc. sec23) after cleaning† the ARD	716	
9	Number of Reporting Units in Manufacturing (exc. sec23) in the final sample	520	

+ cleaning means excluding missings and implausible observations.
** selected means that the reporting units are in the ARD sample with full Census information.*
† cleaning means excluding implausible productivity growth values.
§ final is the sample obtained after excluding outliers and missing observations from both the CIS3 and the ARD data sets.

surveys set out a definition of innovations and ask companies to report the output of the innovation process (introduction of innovative new products, new processes, percentage of sales arising from new and improved products, and 'soft' innovations, such as organisational change), the inputs to innovations (R&D, scientists, sources of knowledge) and the obstacles to innovation (finance, bad luck etc.). The Oslo manual (1992) codifies such survey models and the Community Innovation Survey (CIS), carried out in EU countries in the early, mid and late 1990s, implemented the questions. For the UK there have been three CIS surveys, CIS1 (covering the period 1991–93), CIS2 (1994–96) and CIS3 (1998–2000).

The problem is that the CIS data does not contain labour productivity[13] or TFP information. However the UK CIS is carried out using the IDBR as the same sampling frame. We have therefore matched the CIS data with the ARD and here we report our results using CIS3.[14]

The UK CIS is a voluntary postal survey carried out by ONS on behalf of the DTI. ONS randomly selects a stratified sample of reporting units with more than 10 employees drawn from the IDBR. CIS3 covers innovations between 1998–2000. Of the total 19,625 enterprises to which the survey was sent, 8,172 responded (Table 7, row 1), achieving a response rate of 42 per cent.[15] The results of the matching of these 8,172 RUs are set out in Table 7. Of the 8,172 RUs which responded to the survey, 3,397 were successfully matched with the ARD manufacturing data. In 98 cases there was a discrepancy between the industrial classification in the Innovation survey and that of the Production survey. In these ambiguous cases, since the innovation survey is the same for both sectors, we decided to include these RUs in the sample, using also the direct information from the RUs available in CIS3.[16]

The number of reporting units that are in the manufacturing sector excluding sector 23 (nuclear fuel) according to the ARD are 3,277 as shown in the second column of row 4. Row 5 shows that 1,593 were surveyed in 2000. Since we need longitudinal information to be able to draw growth profiles, we report in rows 6 the number of reporting units that are selected in 2000 and in previous years. In row 7 we report the number of firms for which we can construct an average annual growth rate after having cleaned the ARD dataset from outliers in productivity growth. In the last row we report the number of firms after having dropped missing values and 'problematic' observations in CIS3. This leaves us with a cleaned sample of 520 enterprises. In the productivity growth analysis we choose to use this sample.

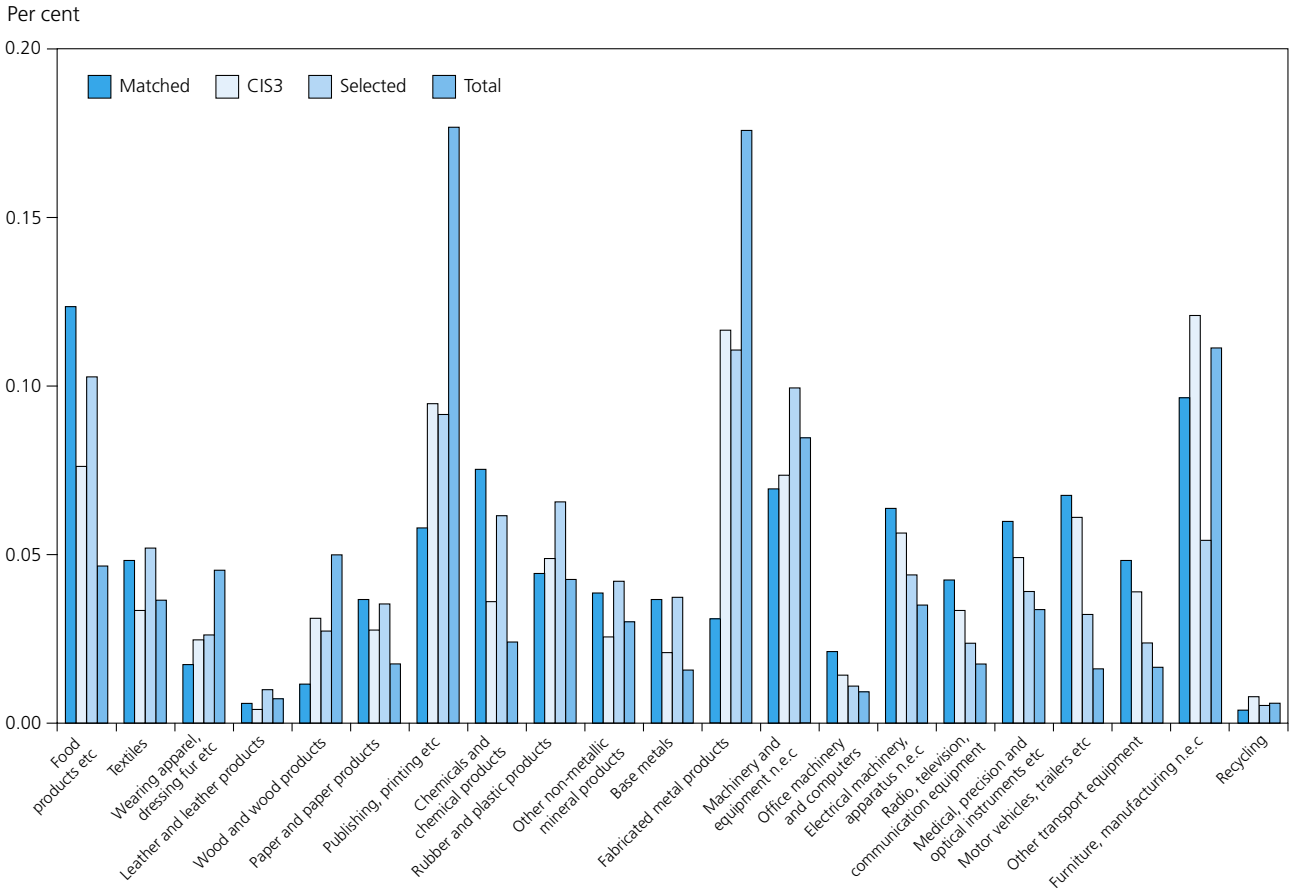
The samples: how representative are they of the whole population?

When using matched data sets, one might be concerned about the fact that the characteristics of the matched sample differ from the full data sets from which the matched sample derives. We look at how two key characteristics of the reporting units in the matched sample, size – measured as number of employees – and sector, compare with those of the overall population of firms in the manufacturing sectors, in the ARD data and in the CIS3 sample.

Figure 2 compares the sectoral composition of CIS3, the ARD selected sample, the IDBR population and the CIS3–ARD matched sample (for which we can construct productivity growth profiles). The food sector (15) appears to be overrepresented and the publishing and media, and the metal products sectors (22 and 28, respectively) underrepresented in our sample. The graph does not report any statistics on the coke, refined petroleum products and nuclear fuel (SIC 23) and the tobacco (SIC 16) industries, since we exclude them from the analysis.

Figure 3 describes the size distribution of firms in the four samples according to five size categories: 10 to 49 employees; 50 to 249; 250 to 499; 500 to 999 and 1,000 or more employees. The graph shows that our matched sample

Figure 2
Differences in sectoral compostion: matched sample, CIS3, Selected ARD, IDBR by sector of manufacturing



overrepresents medium size enterprises. Also the graph shows that in our samples we do not have firms smaller than 10 employees because these were not surveyed in the CIS3.

We finally consider how the key innovation variables in the matched data set compare with that in the 'cleaned' CIS3.[17] Table 8 shows that our matched sample is more innovative than the whole CIS3 according to process innovation (row 5, columns 2 and 5) and the patents[18] (row1, columns 2 and 5) variables but does not appear to present significantly different characteristics from the 'cleaned' CIS3 sample, for all the other innovation indicators.

In sum, we have the following concerns about our matched sample. First, it is more skewed to medium sized firms. Second it is more 'innovative'. Third, in respect to the whole population, it overrepresents medium-tech sectors.

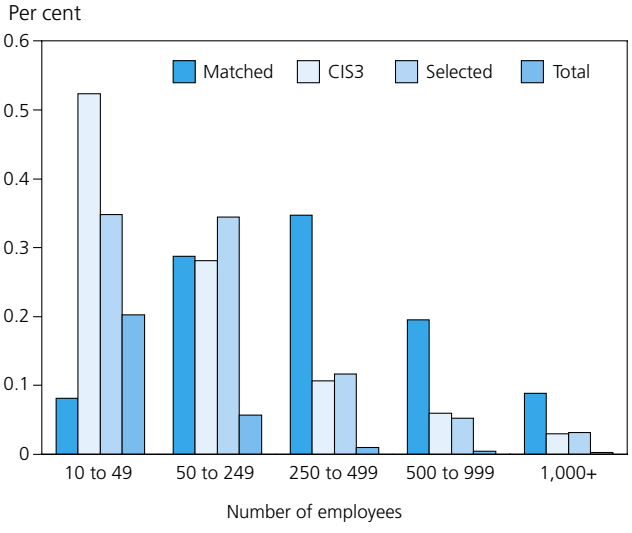
Innovation and productivity growth

Using the matched CIS3-ARD sample we are in a position to investigate the impact of innovation on productivity growth. To investigate this we construct TFP-growth as (Criscuolo and Haskel, 2003)

$$\Delta \ln TFP_{it} = \Delta \ln Y_{it} - \sum_{j=1}^{n} \bar{s}_{ji} \Delta \ln X_{jit} \qquad (5)$$

the bar over the s denotes the time average share of input X in total output and the j inputs X are K, L and M from (2).

Figure 3
Size composition of the matched dataset, CIS3, selected ARD and IDBR



Firms are asked if innovations are new to the industry or new to the firm. We take this as a measure of whether firms are novel innovators (i.e. an innovation new to the industry) or innovation imitators (i.e. an innovation not new to the industry but to the firm). Thus we can estimate

$$\Delta \ln TFP_{it} = a_1 \Delta \ln K_{it} + a_{21} Proc\_novel_{it} + a_{22} Proc\_imitate_{it} \\ a_{31} Prod\_novel_{it} + a_{32} Prod\_imitate_{it} + a_4 \Delta y_l + v_{it} \qquad (6)$$

Table 8
Characteristics of innovation measures in the regression samples

		CIS3–ARD matched sample			CIS3 clean		
		1 Median in sample	2 Mean in sample	3 Mean for prod. inn.	4 Median in sample	5 Mean in sample	6 Mean for prod. inn.
1	Number of patents	0	3	6	0	1	3
2	R&D intensity (per cent)	*0*	*0.63*	*1.32*	*0*	*0.45*	*1.23*
3	Total innovation expenditure (per cent)	*0.86*	*2.78*	*4.77*	*0.55*	*2.87*	*5.89*
4	Percentage sales new products	*0*	*10.51*	*25.31*	*0*	*8.41*	*28.72*
5	Process innovator (per cent)	*0*	*39.42*	*59.26*	*0*	*25.41*	*52.57*
	Observations		520			2,389	

Source: Authors' calculations.

Table 9
Output production function, CIS 3

	Product innovations measured as % turnover	
	(1) 1998-2000	(2) 1998-2001
Process innovation	0.0084	0.0039
	(0.0127)	*(0.0076)*
Novel process innovation	-0.037	-0.0269
	*(0.0189)***	*(0.0108)***
Product innovation	0.0647	0.017
	*(0.0328)***	*-0.0207*
Novel product innovation	0.0347	0.0667
	(0.0519)	*(0.0379)**
$\Delta \ln k_{it}$	-0.1211	-0.1141
	*(0.0697)**	*(0.0436)****
Observations	480	631
R-squared	0.1	0.11

where Proc_novel and Prod_novel denote innovations-process and product respectively- new to the industry and Proc_imitate and Prod_imitate denote innovations not new to the industry but to the firm and ΔlnK is included to control for non-constant returns and/or imperfect competition.

The results of estimating are set out in Table 9. Column 1 measures TFP between 1998–2000 and column 2 from 1998 to the average of 2000 and 2001. Consider first process innovation. Column 1 shows that novel process innovation has a negative effect on productivity growth with a positive (but insignificant) effect of imitative process innovation. Column 2 sheds some light on this; as the post survey period is extended the negative coefficient falls (in absolute value). This suggests that novel process innovations take time to be implemented, leading to a fall in measured TFP growth initially. Such a preliminary dip is the basis of the macro work by Basu et al (2003). The results for product innovation are set out in rows 3 and 4. The effects are positive and sometimes significant for CIS3.

Conclusions

This article draws from our experience in working with the firm and plant level micro data provided by the ONS. It provides an overview of the main issues in making this rich data source usable for economic research. The article focused on definitions and concepts of the Interdepartmental Business Register which is the sampling frame for the Annual Business Inquiry (ABI) – the main source for input and output information – as well as most of other Business level surveys run by the ONS including the Annual Inquiry into Foreign Direct Investment (AFDI), the Community Innovation Survey (CIS).

The article also provides some examples of economic analysis using the ARD and the ARD matched with the CIS. The CeRiBA team has conducted more research using the ARD in conjunction with other micro level datasets. The results of this work can be found on the CeRiBA web page (http://www.ceriba.org.uk). The richness of the data and the possibilities for matching new datasets suggest that there will be much more research in the future which will be informative for policy-makers and academic audiences.

Notes

1. ARD: Annual Respondents to the Census of Production Database; ABI: Annual Business Inquiry.
2. A holding company responsible for a number of enterprise groups is called an 'apex enterprise'.
3. The two could nevertheless be separate local units if, for example, an R&D survey which collects data just for the R&D part of the business would identify them as distinct.
4. The ABI replaces Annual Employment Survey, Annual Census of Production and Construction (ACOP/ACOC) and the six following Annual Inquiries: wholesale, retail, motor trades, catering, property and service trades.
5. The threshold was lower in the past. See Barnes and Martin (2002) for more details.

6. The employment size bands are 1–9, 10–19, 20–49, 50–99, 100–249. The regions are England and Wales combined, Scotland and Northern Ireland. Within England and Wales, industries are stratified at 4 digit level, NI is at two digit level and Scotland is at a hybrid 2/3/4 digit level (oversampling in Scotland and NI is by arrangement with local executives). See Partington (2001).

7. Partington (2001) states that the AES sent x LU forms to each multi-LU enterprise with x based on the expected number of LUs according to administrative sources. Enterprises with less LUs disposed of excess forms, but since there was no systematic method of obtaining more forms, RUs with more LUs than expected simply did not report on these 'excess' LUs.

8. The ABI1 is sent to 78,500 enterprises (in 1998) and ABI2 sent to 75,000 businesses (since it covers slightly fewer sectors; relative to the ABI1 it omits forestry, fishing, financial services, public administration, education, health and social work, doctors and dentists.

9. This relates to what Deaton (1997, p701) calls the fundamental argument used by econometricians against weighting. Weighting gives consistent estimators of the parameters that one would have estimated using census data. If the true problem is population heterogeneity, weighting will not solve the problem; neither would indeed the availability of population data. But if the population is homogeneous, unweighted LS gives the 'best' estimates (BLUE) and therefore must be preferred to WLS.

10. We have created a lookup table to deal with this.

11. An interesting study by Harris (2002) sheds some light on this. He calculates capital stock at the local unit level, thereby taking account of plant closures when calculating the RU capital stock. He finds that his results on the productivity difference between two foreign owned and domestic firms differ from a similar study by Griffith (1999) who worked on the RU level. Comparison of his Tables 2 and A2 suggests that the differences were mainly driven by using weighted regressions rather than local unit data. In Table A2 for example, the coefficients from unweighted regressions of log output on log employment, materials and capital are very similar. In Table 2 using unweighted regressions they are rather different.

12. Fuel and tobacco are hard to measure with tax distortions and recycling is a recently recoded sector in the SIC system which is small and presents some disclosure problems.

13. Measured as value added per employee.

14. Harris (2001) has matched the UK CIS2 with the UK Census of Production. Examples of matched CIS/Census data are, for France, Crepon, Duguet, Mairesse (1998); for Holland, Klomp and van Leeuwen (2002); for Sweden, Lööf and Heshmati (2001); and for Finland, Leiponen (2002).

15. An interesting question is how representative the responses are of the underlying population, see Criscuolo and Haskel (2003). We confine ourselves here to the matched sample.

16. The relevant question in the CIS survey reads as follows: "please briefly describe your enterprise's main product".

17. 'Cleaned' defines the sample of 2,389 observations.

18. The number of patents in the matched sample is on average double that in the cleaned CIS3 sample. Such a difference for this particular measure of innovation is probably due to the strong skewness of this variable.

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E-commerce and productivity

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New analysis of firm level data from ONS surveys shows how use of e-commerce is changing the performance of firms, and the behaviour of markets. Data from the Annual Respondents' Database (ARD) indicates that significant productivity gains are associated with the use of electronic procurement systems.

Introduction

In the February 2003 *Economic Trends*, we published initial results of firm level analysis on the adoption of e-commerce by UK firms using information from the e-Commerce Surveys for 2000 and 2001 (Clayton and Waldron, 2003). We also indicated that the next step in this work was to link data on the use of e-commerce by firms to their output and productivity data.

Our original aim was to link detailed information on e-commerce use from the e-Commerce Survey to the Annual Respondents' Database (ARD), which contains data from each year of the Annual Business Inquiry (ABI). Details of the ARD are in Barnes and Martin 2002. Work reported here benefits from and contributes to work co-ordinated by the Organisation for Economic Co-operation and Development (OECD) on the effect of information and communication technology (ICT) on productivity (OECD, 2003).

International methodologies for estimating ICT effects

Micro-level data is now being used to study the relationship between ICT and company performance in a number of countries. These studies draw on both official and private data sources and use different methodologies. Recent examples of some of the different approaches include:

- ICT capital stock at firm level as a separately identified capital input in labour productivity or total factor productivity (TFP) analysis (cf Brynjolfsson and Hitt, 2001; Hempell, 2002);
- ICT capital alongside other measures of ICT use, such as internet use or number of employees using ICT (Maliranta and Rouvinen, 2003);
- ICT capital stock with measures on innovation and/or organisation change (van Leeuwen and van der Wiel 2003; Brynjolfsson and Hitt, 2003);
- measures of computer network use (behaviour) as an additional determinant of labour productivity or TFP in a productivity regression equation (e.g. Atrostic and Nguyen, 2002).

UK data on investment expenditure to calculate ICT capital stock at the firm level is still under development, and we are not yet able to study the effect of ICT capital on firm productivity. This led us to adopt the methodology outlined by Atrostic and Nguyen.

Atrostic and Nguyen use the US 1999 manufacturing census combined with the US Computer Network Use Survey (CNUS), a large-scale supplementary survey on computer network use. The CNUS asks more than 38,000 firms about the use of networks both inside and outside their operations. The information consists mainly

of yes/no measures of how computer networks are used for buying and selling, logistics, operations, and other steps in the business's value chain. Of the firms reporting use of computer networks, only half were using them to buy or sell.

Using this data set, Atrostic and Nguyen use regression analysis to test whether the presence of computer networks in 1999 was associated with increased total factor productivity (TFP). They conclude that the use of computer networks increased TFP by about five per cent, and that this result is robust to different model specifications and to selection.

UK data on e-commerce use and business performance

For the United Kingdom the largest source of information comparable to that available in the US is provided by the qualitative questions added to the Annual Business Inquiry (ABI) from 2000 onwards. These ask firms to indicate whether they use electronic networks to place orders for goods and services, or to receive orders. This covers Internet transactions, or buying and selling over closed networks, and so is in line with the OECD's 'broad definition' of e-commerce use.

Figure 1
ABI questions on e-commerce

e-Commerce	
If you use the Internet, Electronic Data Interchange or any other electronic network to:	
(a) Place orders for goods or services, please enter '1' in the box provided. If not, please enter '2'	
(b) Receive orders for goods or services, please enter '1' in the box provided. If not, please enter '2'	

Responses to these questions are available for over 6,000 manufacturing reporting units in 2000 and 5,500 in 2001, and for each of these we have employment and output data which permits productivity to be calculated. This compares to an overlap of only 650 manufacturing firms between the ARD and the e-Commerce survey in 2000 and 1,600 in 2001. Having attempted to use the e-Commerce survey for linked statistical analysis, it became clear that the 'turbulence' in e-commerce statistics, with large numbers of firms entering and leaving electronic markets during 2000–01, made it necessary to use larger samples to see statistically significant effects. Thus we decided to use the ARD to conduct our analysis.

What the data shows

Unlike US data, the ABI survey does not identify reporting units that use computer networks generally, only those using them for buying and selling. However, unlike Atrostic and Nguyen, we are able to separate the two.

There is interest in looking at the effect of e-commerce as a means of procurement or of supply-chain management separately from its other applications. So far this has been driven by evidence from case studies. Adoption of electronic procurement systems by firms has been claimed to improve efficiency by:

- cutting internal administration costs
- speeding up purchasing processes,
- improving price transparency
- reducing search costs.

From such case evidence, we would expect e-procurement to have a positive effect on productivity.

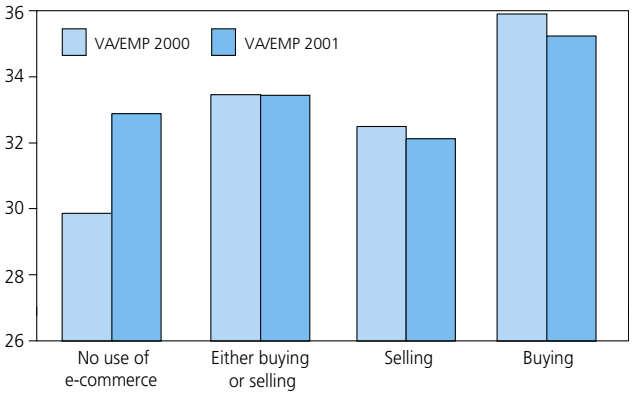
Figure 2 below shows that reporting unit level data supports this. Value-added per employee is shown for UK firms, under four headings:

- firms which do not use e-commerce at all;
- firms which use it for either buying or selling;
- firms using e-commerce only for selling;
- firms using e-commerce only for buying.

Data for 2000 is taken from the final ABI, that for 2001 from provisional ABI data.

Figure 2
Productivity in UK manufacturing firms

Value-added per employee – UK firms (£ thousands, 1995 prices)



Source: ARD 2000/2001

The group with the highest value-added per employee – in both 2000 and 2001 – is that which uses e-commerce for buying, and the lowest that of firms who do not use e-commerce at all in 2000 and that of firms who use e-commerce for selling in 2001. While this might suggest efficiency effects associated with e-procurement, the differences may be driven by compositional effects (size, capital intensity, or industry). Indeed, reporting units that do e-buying are larger and more capital intensive than reporting units who do not, besides having higher labour productivity (Tables 1 and 2). To control for the role of these other factors we conduct regression analysis.

Table 1
Characteristics for 2000, by type of use of e-commerce

	No use of e-commerce	Either buying or selling	Selling	Buying	Selling only (no buying)	Buying only (no selling)	Buying and selling
Observations (number)	3365	1771	2310	2812	1269	502	1041
Employment (number)	184	350	349	378	302	354	387
	(414)	*(852)*	*(776)*	*(992)*	*(533)*	*(1138)*	*(928)*
Gross Output per employee (£ thousands, 1995 prices)	97.34	108.91	108.69	117.64	94.06	109.95	120.69
	(128.86)	*(160.41)*	*(168.43)*	*(188.44)*	*(93.63)*	*(116.74)*	*(210.12)*
Value-added per employee (£ thousands, 1995 prices)	30.47	33.68	32.82	35.87	29.95	37.61	35.18
	(34.60)	*(34.32)*	*(31.93)*	*(38.92)*	*(24.17)*	*(43.49)*	*(36.95)*
Real Capital stock per employee	55.28	55.79	55.20	57.86	52.28	58.53	57.60
	(85.32)	*(73.74)*	*(74.66)*	*(79.73)*	*(62.12)*	*(69.37)*	*(83.49)*

Table 2
Characteristics for 2001, by type of use of e-commerce

	No use of e-commerce	Either buying or selling	Selling	Buying	Selling only (no buying)	Buying only (no selling)	Buying and selling
Observations (number)	2622	1978	2398	2964	1412	566	986
Employment (number)	192	337	350	359	292	282	390
	(467)	*(729)*	*(772)*	*(809)*	*(529)*	*(502)*	*(902)*
Gross Output per employee (£ thousands, 1995 prices)	109.18	111.50	108.21	118.19	98.07	125.42	115.29
	(200.77)	*(121.87)*	*(117.38)*	*(136.47)*	*(83.80)*	*(138.52)*	*(135.59)*
Value-added per employee (£ thousands, 1995 prices)	33.17	33.66	32.50	35.28	30.43	38.61	33.94
	(53.79)	*(32.08)*	*(28.23)*	*(34.72)*	*(25.69)*	*(44.56)*	*(29.79)*
Real Capital stock per employee	57.92	60.16	58.20	62.99	54.48	68.49	60.79
	(99.56)	*(73.69)*	*(70.56)*	*(79.95)*	*(58.80)*	*(85.26)*	*(77.64)*

Figures reported are unweighted averages. Standard deviations in parentheses.

Source: authors' own calculation using ARD 2000 and 2001 and capital stock series estimates using perpetual inventory method

To examine the effects of e-commerce on productivity we regress output per employee on inputs per employee and e-commerce measures. In this framework, there are at least three ways in which e-commerce might affect measured productivity, in addition to a simple additive effect to the productive potential of firms.

First, e-commerce might allow the cheaper and more efficient sourcing of materials. This raises labour productivity, either by raising value-added directly or improving the materials contribution in gross output.

Second, e-commerce might allow different prices to be charged for firm output. If it allows firms to raise (or lower) prices relative to the industry, then measured productivity increases (or decreases), since we deflate our output by prices for the whole industry (as this is the only data available).

Third, e-commerce might be correlated with other unmeasured aspects of a firm's quality, for example able management. Again, to the extent this is unmeasured this raises productivity.

Distinguishing between all these effects needs better data than is currently available, so at this stage we will need to draw conclusions from correlations observed with care.

Regression analysis

Our analysis using UK ARD data sets out to take account of all the factors in Atrostic and Nguyen's work in the US, plus multinational effects which earlier studies have shown to be important (Criscuolo and Martin, 2003). It is restricted to the manufacturing sector, because firm level-capital stock data is not yet available for services.

The regression model is a Cobb-Douglas production function of the form:

$$Q = AK^{\alpha}L^{\beta}M^{\gamma}$$

Where K, L and M are capital, labour and materials inputs (where labour and materials are available from the ARD and capital is calculated from the ARD panel using perpetual inventory methods). A is a technology term which shifts the production function, and is a function of the use of computer/electronic networks for buying or selling, of the form:

$$A = exp(\delta_0 + \delta_1 eActivity)$$

and where *eActivity* has the value *1* if a reporting unit uses an electronic network for buying or selling, as appropriate, and zero if it does not. Taking logarithms and expressing the variables in per employee terms our estimating equation is:

$$ln\left(\frac{Q}{L}\right) = \delta_0 = \delta_1 eActivity = \alpha\, ln\left(\frac{K}{L}\right) = \gamma\, ln\left(\frac{M}{L}\right) - (\alpha + \beta + \gamma - 1)\, ln\, L + u$$

The *eActivity* term in the analysis is split into a number of dimensions for different specifications of the model, to show separately the effects for firms using:

- computer networks for selling;
- computer networks for buying;
- networks for either buying or selling;
- networks for both buying and selling.

The reason for investigating selling and buying separately is to distinguish between 'market effects' and internal effects. 'Market effects' from e-selling could be positive for a firm due to increased market size or additional value-added service provision, or negative due to tougher competition or price transparency. The positive expected market effect of e-procurement might be due to greater choice of sources of supply, or to the competition and price effects which potentially disadvantage suppliers.

The analysis controls for:

- reporting unit size, as represented by number of employees;
- industry sector and region;
- ownership structure (multi-nationality and foreign ownership);
- age of reporting unit;
- macroeconomic shocks, and changes over time, as measured by year dummies.

Regression results

Table 3 reports the results of this analysis. The first three columns report results for labour productivity, measured as value-added per employee. Columns 4 to 9 report results for total factor productivity. In columns 4 to 6 the dependent variable is gross output per employee; in columns 7 to 9 the dependent variable is value-added per employee. All show positive statistically significant correlations between e-procurement and productivity.

As shown in columns 2 and 8, negative correlation exists in the value-added specifications between the use of computer networks for selling and labour productivity, as well as for total factor productivity (TFP).

In unreported results we take account of possible endogeneity effects on the *eActivity* variable. Using a two-stage estimation procedure, we assume that use of e-commerce is correlated with computer-related expenditure in prior periods; a similar check has been carried out in Atrostic and Nguyen's work. Like them, we conclude that productivity effects remain significant after allowing for possible effects of unobserved factors.

Interpreting the regression results

Buying vs. Selling

The regression results show an overall positive correlation between the use of computer networks for trading and firm productivity – on all the three measures listed above. However, a comparison of the gross output results with the value-added results suggests that pricing effects play a large part in the differences. Results shown in column 5 indicate a total factor productivity gain associated with e-procurement of 2.3 per cent measured in terms of gross output. However, column 8 shows that when output is measured by value-added gains associated with e-procurement are estimated at seven per cent and loss of value-added associated with e-selling is over four per cent.

The most likely explanation for the loss to sellers appears to be due to pricing effects. Industry sources suggest that at least part of the gain from investment in electronic procurement by firms comes from the ability to use better price transparency to secure more competitive deals. Part of this comes from efficiency gains, but part is likely to be at the expense of suppliers. A well documented example of case evidence was provided by Siemens to the DG Enterprise e-business watch workshop in November 2002, emphasising that procurement savings to the company came from both internal and external sources.

Table 3
Regression results 2000/2001

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Labour productivity			**Total factor productivity**			**Total factor productivity**		
	Dependent variable: value added			**Dependent variable: gross output**			**Dependent variable: value added**		
Buy or sell	0.020			0.001			0.009		
	(0.013)			*(0.007)*			*(0.012)*		
E-sell		–0.045			–0.012			–0.048	
		*(0.015)***			*(0.008)*			*(0.014)***	
E-buy		0.078			0.023			0.070	
		*(0.015)***			*(0.008)***			*(0.014)***	
Sell, no buy			–0.036			–0.021			–0.046
			(0.018)*			(0.009)**			(0.017)***
Buy, no sell			0.093			0.008			0.074
			*(0.022)***			*(0.014)*			*(0.021)***
Buy & sell		0.031			0.014			0.021	
		*(0.016)**			*(0.008)**			*(0.015)*	
Observations		11,497			11,656			11,433	

Robust standard errors in parentheses. Unreported regressors are for columns 1–3: ln employment; columns 4–6: ln employment, ln (capital/employment), ln (materials/employment); columns 7–9: ln employment, ln (capital/employment). All regressions also control for age of firm, ownership (multinational, foreign dummies), industry, region and year.

Larger vs. smaller firms

A hypothesis advanced on the basis of case evidence is that the 'price effect' which appears to benefit firms through e-procurement is partly due to large firms using electronic markets to strengthen their position at the expense of smaller ones. For example, if a large multinational firm has a procurement system which enables it to put all its purchasing requirements out to international tender, and buy in a global market, while its smaller suppliers tend to be local, unable to access wider markets, then smaller firms could be disadvantaged. Alternatively, smaller buyers could find it difficult to buy electronically in international markets, and therefore unable to secure gains available to larger firms.

To test this hypothesis, the productivity analysis for 2000 and 2001 has been split between:

- reporting units which are smaller than the median reporting unit in their four-digit sector, as measured by employment (and likely to include firms with low market share);
- reporting units that are larger than or equal to the median reporting unit in their four-digit sector, as measured by employment (and likely to include firms with high market share).

Results of this analysis indicate that the productivity effects associated with e-buying and with e-selling are almost equally strong in large and small firms. Both show value-added productivity loss associated with e-selling, and coefficients are up to twice as large for large firms. Both groups of firms show value-added productivity gains associated with e-procurement, with coefficients for the large firms only marginally bigger than for the small.

Integration

We have tested the hypothesis that firms which both buy and sell are likely to be more 'integrated' in terms of their network use, and therefore more efficient but this does not seem to be strongly supported by our results. Units which both buy and sell electronically appear to have a productivity advantage in only two of the six specifications of the regression model tested.

Conclusions

Comparing our results with Atrostic and Nguyen suggests consistent effects, but with e-procurement, as opposed to general computer network use, having a measurable positive impact on firm level productivity. However, it seems possible that both approaches may understate the productivity impact of ICT at firm level. Our analysis, because it does not account for the role of e-business processes which are unrelated to buying or selling and which Atrostic and Nguyen found to be an important part of overall network use; in our data firms using networks only in this way are categorised as 'non users'. Atrostic and Nguyen, because their data does not distinguish

e-commerce between buying and selling, and their analysis may therefore be unable to separate out the partly offsetting effects on both sides of transactions.

In order to overcome these and other analytical difficulties, the 'ideal' data set for analysing computer-network use effects should have a longitudinal dimension and would include:

- distinction of network use for buying and selling;
- records of network use for other purposes, and for integration within and between firms (as included in the latest e-commerce survey);
- access to price indices for individual firms, to enable us to show productivity in 'real' terms at firm level, and investigate how electronic markets influence prices.

Work on these possible approaches is ongoing, and will be reported in future *Economic Trends* articles.

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Estimates of the volume of capital services

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This article presents estimates of the volume of capital services for the United Kingdom as a whole as well as by industry. This experimental measure complements the wealth measures presented in the National Accounts and builds on the work done to improve these measures. The volume index of capital services weights together the growth in the net stock of assets using shares that reflect the relative productivity of the different assets that make up the capital stock. The article describes the method used to do this and explores the impact of treating ICT goods separately. Data related to current work and results are available at the National Statistics website: http://www.statistics.gov.uk.

Introduction

The Office for National Statistics (ONS) recently published improved estimates of the wealth measures of the capital stock and associated series such as capital consumption. Apart from chain-linking the volume estimates of capital stock, ONS's work provides greater industrial detail in the measures and also includes a long time-series of capital formation by industry and broad asset group (see Vaze, Hill, *et al.*, 2003). These data can be used when calculating new measures of the capital stock, including those that take account of different productivity of different asset types.

How the capital stock impacts on growth has become a topic of much interest. The link between productivity growth and investment has been discussed with particular reference to the recent large investments in assets related to the new economy, such as computers. While discussion and analysis continues, there has been a parallel debate about the measurement of capital. ONS wealth measures of capital value the replacement cost of the stock of capital as if new (gross capital stock) or taking account of the loss of value due to depreciation (net capital stock). However while these measures are useful for productivity work, there is a growing body of work proposing alternative measures that quantify the flow of input from the capital stock into production. Using these measures for capital input, analysts have 'accounted' for growth quantifying that part attributable to the input of capital. For the United Kingdom, recent examples of research in this area have been Oulton (2001) and O'Mahony and de Boer (2002).

Defining and measuring the contribution of capital to production has been a controversial issue, but a measure of international agreement has been reached in recent years. The issues involved and ways forward have been detailed in a recent manual by the Organisation of Economic Co-operation and Development (OECD, 2001). One suggested development is to disaggregate capital formation into a number of asset types. Research has indicated the sensitivity of UK capital stock measures to the separate treatment of assets with a short life-length, such as computers (Oulton and Srinivasan, 2003). Currently, the ONS quarterly-published investment series separates the main tangible assets as new building work, plant and machinery, and vehicles in both current and chain-linked volume measures. More detail in terms of assets is available in current prices in ONS supply-use tables and in capital formation surveys.

This article gives the results of the ONS work on an index of capital services to provide a measure of capital input into production and to complement the current wealth measures. The raw data for this is identical to ONS net and gross capital stock measures: long time-series of capital formation by asset, deflators by asset and defined assumptions about the asset decay and retirement pattern. The model employed owes much to work undertaken at the Bank of England, using the methodology described in Oulton and Srinivasan (2003).

Measuring capital input

The methodology to calculate a Volume Index of Capital Services (VICS) is described by Oulton and Srinivasan (2003) and the OECD Capital Stock manual also provides an invaluable resource (OECD, 2001). In summary, the stages are:

- aggregating the history of each asset's capital formation by industry over time with the different vintages of assets added together in a manner reflecting decay;
- pricing asset's services using the estimated rental for each asset;
- aggregating across assets, weighting the stocks in an index reflecting their input into production.

Generally, there is a decline in the productive potential of an asset as it decays over time. So it is better to add together the assets using weights that reflect this decay with newer assets having a higher weight. The decay of an asset over time is approximated by its age-efficiency profile. A function such as straight-line decay has sometimes been used, but a 'smooth' function used here is the infinite geometric decay function. This has some elegant mathematical properties, which greatly simplify the analysis of the capital services – the box indicates two of the implications. But most of the decay occurs at the start of the asset's life, which can be questioned.

Given a decay function, it is possible to convert time-series data about the volume of purchases of assets into a stock measure. The stock measure reflects the sum of the assets, weighted together to reflect the different efficiencies of the various vintages of the assets. For example, if the selected age-efficiency profile is geometric with 10 per cent decay per annum, then 90 per cent of the asset will remain after the first year, 81 per cent in two years and so on. In calculating decay rates, we use the average life-length in years assumed for each asset and each vintage in the ONS national accounts stock models, converted into a rate using a method explained in the annex.

A second area is the pricing of an asset's services over time, given by the rental. Rentals are the payments made for the year's service of a capital good. An efficient firm would equate the marginal returns of the services of an asset in a period to the rental of the asset. In some circumstances, there is a rental market and the rentals may be directly observed. For example, this is the case in office space and some machinery. However, for many goods, the rentals are not observed and a model is used to impute the asset's rental. The basis for this is asking the question what would the owner of an asset expect to be paid for a year's use of the asset?

There are three costs associated with renting an asset and an adjustment reflecting the taxes and subsidies that accompany an investment. Firstly, over the year, the asset loses value due to decay or ageing and some part of the rental will reflect this. To model the value of this component, the decay rate used in calculating the stock measure is used. A second part of the rental is due to changes in the price of a new asset. These are the holding gains or losses reflecting the value change of an asset in the year due to aspects other than ageing, such as capital gains in property. A final cost is the cost of capital.

Consistency issue 1:
Linking price of a capital asset with the decay of capital

The decay model geometric, light bulb, straight-line and so on – allows us to model the future volume of an asset's capital services over its lifetime. That model allows the analyst to predict the future productive behaviour of the asset. We can link that with the price of the capital services (the rentals) to calculate a series for the future values of capital services. The present value of the future stream of the asset's capital services could be calculated, taking the decay of the asset into account. This present value would equal a measure of the net stock of the asset. Changes in the present value as assets age would be depreciation. In some statistical systems, such as that in Australia, the net stock measures and depreciation are consistent with the decay function that is used in asset modelling. Here, the net stock used in the volume index of capital services is consistent with the rentals measure, but the measures used in the UK wealth measures, published in the national accounts, uses straight-line depreciation.

Consistency issue 2:
Rates of return and operating surplus

The sum of the value of capital services is a measure of the operating surplus. If the rentals are calculated assuming a rate of return on capital – such as a government bond rate – it is unlikely that the total value of the capital services will equal the observed operating surplus. However, it is possible to calculate an ex post rate of return such that the rate of return to exhaust the operating surplus in the economy. The rate of return is then calculated endogenously. Here dwellings are not modelled as part of the productive capital stock and the part of operating surplus attributable to dwellings has been deducted from the total gross UK operating surplus, as measured by owner-occupier imputed rents and the depreciation of the stock of dwellings. It would be possible to calculate industry-specific rates of return using industry operating surpluses. But this has not been done in the present analysis and instead one rate is assumed across all industries.

The owner of the asset could have sold the asset and put the monies into an alternative interest-bearing financial asset. The rental ought to compensate the owner for this opportunity cost. The sum of these three costs is adjusted for taxes or subsidies available on investments.

Having calculated the stock of an asset and the rental for that asset, it is now possible to multiply the rentals by the stock of capital to give the value of capital services provided by an asset over a year. This is done for each of the assets and then added together. The sum of the value of capital services is a measure of the total value added by capital goods in the production process. It would be a current price gross measure rather than net, as it would include the depreciation of the capital stock and could be compared with the gross operating surplus given in the production accounts of the national accounts.

The volume of capital services is the volume or real measure of these capital services and is calculated by an index aggregating the growth in the stock of individual asset (volumes) using appropriate weights. The index used here – the chain-linked Laspeyres – has not been found to give significantly different results to the Tornqvist (for example, used in Oulton (2001)) and is consistent with the current UK chain-linked macroeconomic aggregates. The weights used in the index are the shares of the assets in the value of capital services in the previous year. Under an assumption of profit maximisation and market competitiveness, it can be shown that these shares approximate the elasticity of output to the volume of capital services inputting into the production process.

ONS work on capital services has some particular features. Firstly, the model estimates stocks and rentals at a very disaggregated industrial and asset level. For each asset and industry, a long time-series of investment is used to derive stocks and these are weighted together using shares based on rentals modelled for each asset. Thirty-five industries and between one and six assets for each industry have been modelled. This very disaggregated modelling is also a feature of O'Mahony and de Boer (2002), which provides some comparison.

The ONS model allows the depreciation rate of the assets to vary over vintage, that is, the life-length of an asset will vary depending on the year of purchase. Although changes across time are infrequent, a general observation is that life-lengths of assets have lessened over time. This reflects both shortening in the life-length of assets due to reviews of the assumptions made by ONS and also a shift to short-lived assets.

Investment in computers

The heightened interest in measuring capital has particularly focused on the role of investment in information and communication technology (ICT) goods and services in recent years. The level and growth in ICT investment has to be seen in the light of two key features of ICT capital. Firstly, ICT assets have shorter life-lengths than the other main asset types. (For example, in the United Kingdom, the vehicles asset type has one of the shortest assumed life-lengths, but computers and software typically last less than half this length of time at about five years.) A second feature common to ICT goods and services is large annual falls in prices due largely to improvements in quality.

The shorter life-lengths and the rapid falls in prices have led to analysts separating out the ICT assets in their capital stock models (Oulton, 2001; O'Mahony and de Boer, 2002; OECD, 2001). ONS is also moving in this direction – ONS introduced into its wealth measures of the capital stock a new category of numerically controlled machinery in the 1990s and computers are modelled separately in these measures. In modelling capital stock, long time-series of investment data by asset is needed. Estimates of computer investment have been improved as part of the current work. This has been achieved through using the detailed product breakdown available in the investment tables included in the supply-use tables, produced by ONS. The supply-use tables accompanying *Blue Book 2002* provide annual data from 1992 onwards giving the 123-product breakdown and 35 industries.

For the years before 1992, there are a number of measurement issues surrounding the long time-series history of capital formation in computers that is needed. Suitable Input-Output data is available from 1979. But different industrial classification systems were used over the period and the tables were produced infrequently prior to 1989. Information to convert between different vintages of the standard industrial classification (SIC) was used to make a consistent SIC92 series for computers. Where input-output tables are not available, the share of computers in plant and machinery was interpolated and this was then applied to the annual data available in national accounts on plant and machinery investment.

Computer prices have been falling much faster than other assets. This partly reflects the improvements in quality measured using an option-cost method since the late 1990s and a hedonic regression since the start of 2003 (Ball and Allen, 2003). To measure the productive capital stock, some account of these prices falls must be taken and to allow this the current work has separately deflated the investment in computers using the price index (ONS code PQEK). The current work has also then removed this PPI from the industry-specific deflators for plant and machinery having a positive effect on asset price growth. This has been done for all years after 1995.

Technology assets such as computers largely motivate the need for measures of the capital stock that take account of the different productivity of assets. The rationale can be seen by comparing computers with a long-lived asset such as buildings. A similar value of investment in the two assets would both provide different patterns of services to a business for a period beyond the year the investment takes place. In the case of computers, the life-length being shorter and falling prices both mean that current price investment would need higher returns for computers and the VICS recognises this by attributing a higher productivity for computers.

A second significant impact of the price falls seen in computers is observed in the growth in the stock of

computers. As old vintages of computers are being retired, new, more powerful computers are replacing them. The growth in the net stock for this asset reflects the increasing current price expenditures on computers. However, even in years where the current price growth is modest or falling, an upward impact on the constant price net stock of computers occurs due to the replacement of old computers with new more powerful ones.

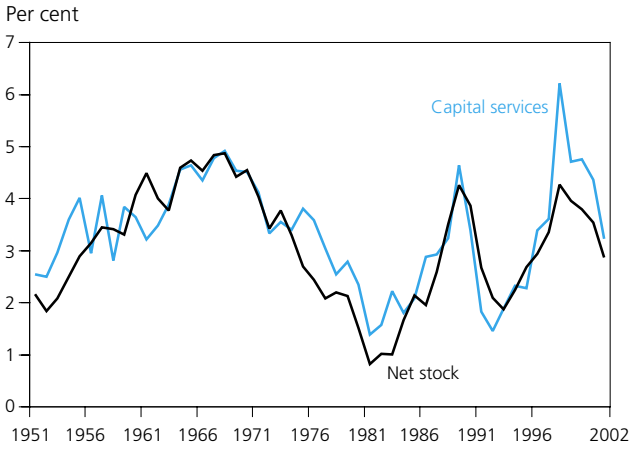
Analysing capital services

Table 1 presents a series for the volume index of capital services for UK whole economy and by industry. The results currently cover the period up to 2002. Figure 1 indicates the growth rates of volume index of capital services for the whole economy during the period 1950–2002. The early periods show strong and sustained growth in the input of capital goods into production, particularly in the second half of the 1960s. However, this early period suffers from one notable measurement issue – quantifying the one-off loss of capital stock due to the Second World War (Dean, 1964, provided the official estimates of this, which is used here). The period of the 1970s however saw more modest growth reaching a low in 1982, a period when investment in many industries was below replacement levels. The 1980s and 1990s have similar patterns in both decades beginning with low growth rates, but the second half of each decade seeing strong investment and so strong growth rates for the VICS.

Also included on the figure is the change in the net capital stock excluding dwellings. The close fit is to be expected given both measures weight together the changes in the net stock. Net stock measures are underpinned by the same datasets, namely the long time-series investment by asset, price indices and assumed life-lengths. However, some differences are expected due to the different construction of the indices, particularly the weighting of asset growth by their profit shares in the VICS, rather than in asset value terms in the net stock. The most pronounced differences occur when this effect would be high – primarily, in the late 1990s. During this period, investment in computers was growing fast and the price of computers falling markedly. The latter would make the share of computers in the index high. This combines with growth in computer investment to raise the VICS above the net stock measure. In 1998, the VICS grew by 6.2 per cent, higher than the net stock growth of 4.3 per cent. The slowdown of investment in computers in the first years of this decade would reverse the growth in VICS as the weight of computers would remain high, but this being associated with slower growth in the net stock.

The VICS model endogenously generates the rate of return that exhausts the operating surplus. This methodology is noted in the box and is identical to that used in Oulton (2001). Comparisons between the current estimates of rate of return with Oulton (2001) indicate that there is little difference even though there has been a disaggregation into more industries and other differences in the two models. The estimated rate of return, which is a nominal measure, is then used in calculation of the rentals. It is common in such modelling that the estimated rentals sometimes are

Figure 1
Annual growth in measure of capital stock, 1950–2002



negative, and some assumption has to be made to remove such anomalies. In the current work, where negative rentals are estimated, the previous positive rental is used instead.

Capital services by industry

Figures 2 and 3 give the volume index of capital services by industry, indicating the average chained (Laspeyres) volume of capital services input for each industry. Also, for most industries, the minimum and maximum growth rates observed are also given, though for some industries these have been suppressed. Table 1 gives the time series of VICS for whole economy and by industry.

In the manufacturing industries displayed in Figure 2, over the period all have average growth below five per cent. There is some similarity in the growth rates observed in the output of industries and in the VICS. Industries that have seen a marked decline over the period – such as Basic metal products or Textiles – have also seen low growth in the volume of capital services used. Industries related to the oil and chemicals sector have shown stronger growth, as have those industries associated to information technologies, Electrical and optical equipment and Pulp, paper, printing and publishing, for example.

Figure 3 shows the contrast with services industry: all but six of the industries have VICS growth rates above five per cent. The picture is of generally high growth in capital services, reflecting strong investment over the period. All the major service industries where output is primarily provided by private businesses – retail, finance and other business services being the largest – indicate strong growth in capital services during the period. Table 1 shows when the maximum and minimum growth rates from Figures 2 and 3 occur. It can be noted that the strong annual rises in the VICS in the late 1980s were associated with strong growth in finance. The late 1990s growth in the VICS has a strong contribution from this industry. However, it is the growth in the post and telecommunications industry that is most pronounced with the VICS for this industry reaching 18 per cent growth in 1998.

Figure 2
VICS growth rates by production industry, 1950–2002

Per cent

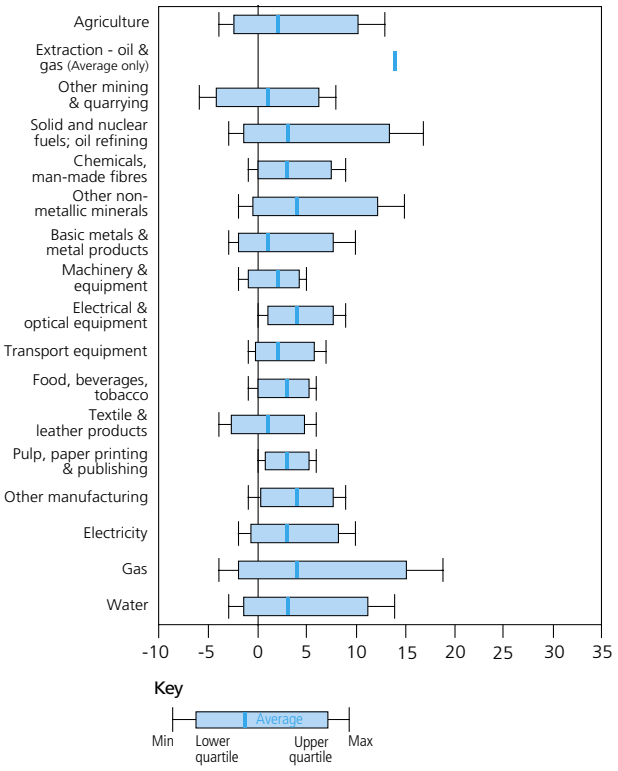
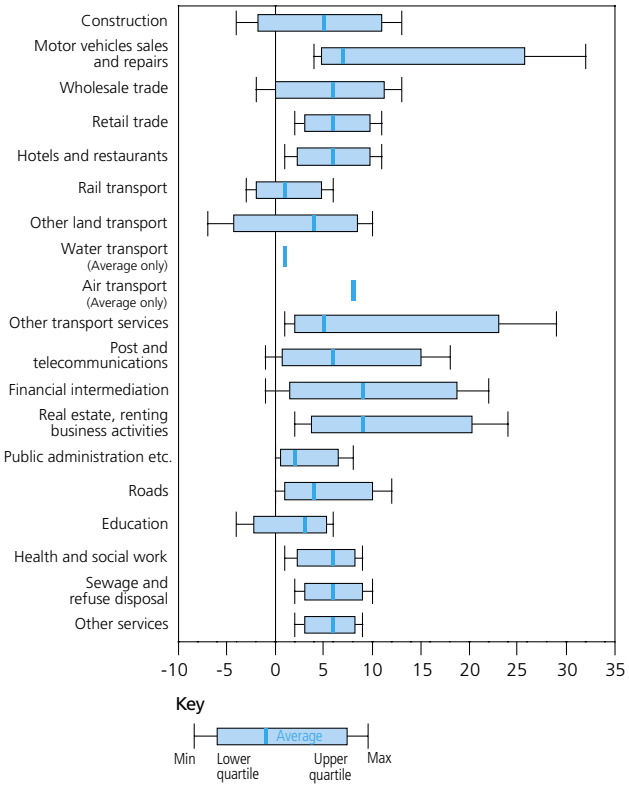


Figure 3
VICS growth rates by services industry, 1950–2002

Per cent



Profit shares by asset

The weight of each asset in the volume index of capital services is the share of the total gross operating surplus attributable to each asset. These profit shares reflect a business's need to cover the decay of the asset (higher for short-lived assets such as computers) and to make a rate of return on finance tied up in the asset stock. Also, the business may gain from capital gains reducing the need for profits (as is sometimes the case in buildings), but may also see asset value lowered by factors other than depreciation.

Figure 4 and Table 2 indicate a change in the composition of the profit shares. Broadly over the period, the weight of buildings has declined as the share of plant has increased. The increase in the importance of plant and machinery – in its broadest senses including ICT – has motivated the breakdown of this asset into more categories. Since the mid-1980s the profit share attributable to computers has risen to approximately six per cent. The asset 'intangibles' is dominated by own-account software and contributes approximately 3 per cent of profits. However, this underestimates the importance of software as plant and machinery includes purchased software. The share of profits attributable to buildings has declined over the period, though it can be seen that the first half of the 1990s saw a steep rise in the share of this asset in profits. This reflects the positive impact on rentals of the modest growth and – in some years – decline in the price of buildings.

Computer investment and capital services

The investment in computers and other ICT assets observed in the 1990s motivates the modelling of the productive capital stock. To indicate the importance of this in the current analysis, the VICS model was run aggregating computers with plant and machinery. The combined asset of plant and machinery and computers was modelled with a set of life-lengths and price indices for each industry, which weighted together the measures for the two assets appropriately. The effect was to create an asset with a life-length between that of plant and machinery and computers. The price index of computers used in the VICS is identical to that for the rest of plant and machinery for the period to 1995. However, after this, a separate price measure is used for computers, which falls faster than the prices seen in plant without computers. These two indices were combined for each industry to give a plant deflator including computers.

Figure 5 compares the VICS with one calculated without computers as a separate asset (VICS ex computers). The period when investment in computers has been separated from other plant and machinery is 1980 onwards and the period until 1995 reflects the effect of having different life-lengths but the same price index for both assets. The indices track each other quite closely. However, after 1995, with a separate price index for computers being used to deflate the current price investment in this asset, the VICS diverges from the VICS modelling computers with plant. The third section gives some of the reasons why the VICS is greater if

Figure 4
Profit shares by asset, 1950–2002

Per cent

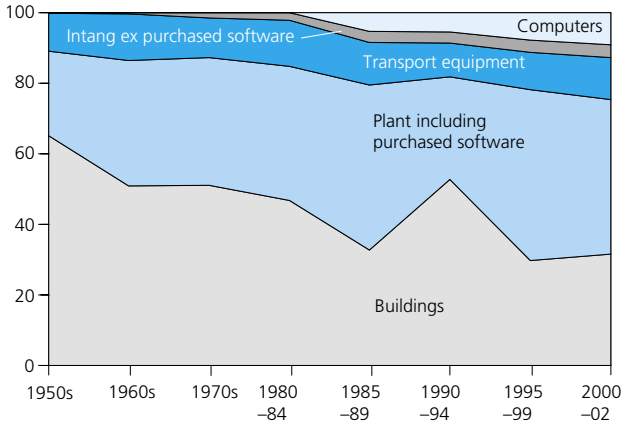
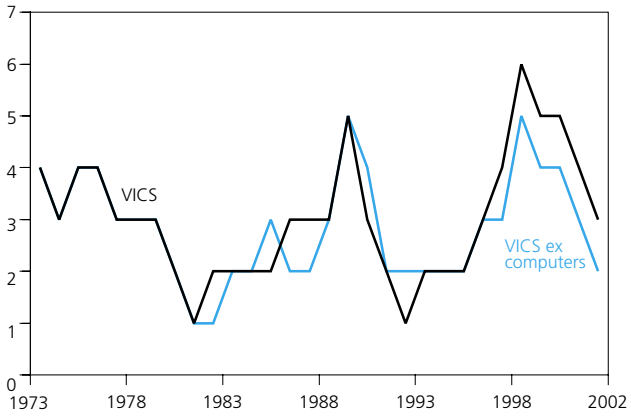


Figure 5
Impact of computers on VICS annual growth, 1972–2002

Per cent



computers are modelled separately and so it is unsurprising that this proves the case.

Conclusions

This article accompanies the release of a volume index of capital services for the United Kingdom. The release is experimental and builds on continuing work improving ONS measures of the capital stock. This article has described some of the steps in measuring capital services and comments are welcome. While the VICS measure is related to the existing ONS capital stock measures, it should be noted that they are not a replacement. There is on-going work on the wealth measures of capital stock – net stock and gross stock – which will be reported on separately.

The results on capital services in this article show the importance of the correct treatment of the new economy assets in measures of the productive capital stock. Such results indicate the sensitivity of stock measures to the assumed life-lengths and to the deflators. Life-length assumptions and the deflator associated with an asset form the basis of weighting the stock of a particular asset in the capital services measure. Both these variables behave very differently in the new economy assets and the capital services measure is therefore sensitive to these assets.

Recently, ONS has reviewed the stock measures it produces. This is associated with two initiatives. Firstly, the completion of a new system to be used in the calculation of wealth measures of the capital stock has allowed much easier analysis and development. Capital services measures are a new product that this work has allowed. Building on this, ONS is reviewing other aspects of the model, such as the appropriate asset breakdown and the level at which modelling should take place. Secondly, the *Blue Book* in 2003 uses annual chain-linked volume indices. Volume measures are sensitive to the index used in construction, particularly to the timeliness of weights and particularly where sub-aggregates are changing rapidly, such as in ICT assets. Annually updating weights allow the chain-linked volume measures of capital services to be merged with the output measures and other input measures to calculate multi/total factor productivity.

Acknowledgement

This work has greatly benefitted from comments and guidance provided by Graham Jenkinson, Ian Hill, Nuru Giritli, Craig Richardson, Nick Oulton, Sally Srinivasan and Eunice Lau. These are gratefully acknowledged.

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Table 1:
Growth in Volume Index of Capital Services, 1980–2002

Description	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
						Annual change (%)						
By production industry												
Agriculture, forestry and fishing	–0.2	0.2	0.4	0.6	–0.4	0.1	–0.7	–2.4	–4.0	–3.2	–4.5	–2.9
Extraction – oil and gas	6.5	6.0	3.5	–2.2	–0.4	–1.2	0.2	–1.7	–4.7	–6.4	–3.1	–2.4
Other mining and quarrying	–5.5	–4.6	–4.3	–2.4	–4.9	–4.0	–4.6	–4.5	–3.7	–4.2	–3.2	–3.6
Solid and nuclear fuels; oil refining	–0.6	–2.1	0.1	10.1	2.3	–1.1	–0.1	–0.2	–0.1	–0.7	2.2	2.2
Chemicals, man–made fibres	1.2	0.4	0.1	1.2	0.5	1.5	1.4	3.6	1.2	–0.2	–0.3	–0.7
Other non-metallic minerals	–1.7	–2.1	–1.4	–1.2	1.1	2.6	0.4	1.4	2.4	–0.3	–0.3	0.1
Basic metals and metal products	–2.4	–2.9	–1.1	–1.0	–0.9	–0.1	0.4	2.0	–1.9	–3.0	–1.8	–1.4
Machinery and equipment	–0.2	–1.6	–2.3	–0.7	–0.1	–0.4	0.4	2.6	–0.8	–1.6	–0.9	–0.9
Electrical and optical equipment	–0.4	–0.5	1.6	4.0	6.4	4.7	8.9	5.3	2.0	5.4	3.6	0.1
Transport equipment	1.7	–0.5	–1.4	–0.5	1.2	1.7	6.1	3.1	2.7	0.2	2.5	0.4
Food, beverages, tobacco	1.0	0.4	0.2	–1.3	0.0	0.2	0.7	2.0	1.9	0.4	0.0	–0.2
Textile and leather products	–2.3	–1.9	–1.8	0.0	–0.8	0.6	–0.8	1.1	–1.8	–2.8	–2.9	–3.6
Pulp, paper, printing and publishing	2.8	0.4	1.7	2.7	2.8	1.0	1.5	2.9	1.7	2.6	1.9	0.7
Other manufacturing	–0.6	0.9	0.3	0.3	2.0	4.8	2.8	2.0	1.9	1.3	0.0	–0.4
Electricity	2.7	3.9	2.8	2.2	–0.5	–1.6	–0.4	–0.2	0.5	0.1	–0.2	–1.1
Gas	4.7	5.3	2.1	0.2	1.9	–3.7	–3.4	0.6	–0.4	10.2	8.1	3.5
Water	11.9	9.7	8.8	7.0	7.2	11.2	14.0	7.5	6.3	2.7	5.5	–0.6
Construction	–3.6	–3.0	0.4	4.9	1.1	–1.1	5.4	4.2	6.5	6.6	1.2	9.0
By service industry												
Motor vehicles sales and repairs	5.7	3.8	3.7	4.2	5.2	3.7	5.6	9.0	6.4	9.3	10.2	9.4
Wholesale trade	–1.8	–0.8	1.3	1.5	3.1	1.2	8.8	12.6	6.6	2.8	4.7	2.3
Retail trade	1.6	2.2	3.2	3.1	4.9	2.5	3.1	10.7	5.3	5.4	5.9	5.4
Hotels and restaurants	2.2	2.9	1.3	1.1	4.1	5.5	4.3	5.1	5.7	5.7	6.9	4.3
Rail transport	3.1	6.2	4.6	1.7	–1.2	–2.6	–3.4	–0.8	–1.0	–1.4	–0.8	–1.7
Other land transport	–6.8	–1.6	3.0	7.0	4.3	–1.6	0.9	2.2	3.7	1.5	1.9	0.7
Water transport	–2.5	–3.2	0.0	2.8	3.6	1.1	–2.5	–2.2	–0.3	8.7	–0.7	–1.0
Air transport	–2.8	8.0	22.3	33.6	–10.1	8.2	47.1	19.1	11.7	15.8	15.6	19.1
Other transport services	3.6	3.1	1.9	5.4	5.5	8.3	29.1	7.4	7.7	12.2	11.9	9.0
Post and telecommunications	0.8	–0.6	0.0	2.1	6.7	10.9	11.6	17.9	13.8	16.2	13.8	5.6
Financial intermediation	3.0	0.1	–1.3	0.8	5.1	14.3	2.3	14.1	6.5	8.6	6.4	5.9
Real estate, renting, business activities.	6.8	1.8	2.0	3.7	5.1	9.8	6.3	24.0	17.0	12.0	12.7	7.7
Public administration, etc.	1.7	1.4	2.1	1.8	1.6	0.4	0.4	0.9	1.3	0.9	1.7	2.0
Roads	3.0	4.0	4.5	4.5	3.3	2.0	0.1	1.1	0.4	0.7	0.7	1.1
Education	–3.8	0.6	1.5	1.6	1.3	1.0	2.0	2.7	1.5	1.9	3.7	3.4
Health and social work	8.5	6.3	4.1	3.8	4.1	3.1	1.1	3.1	4.5	4.2	3.0	4.4
Sewage and refuse disposal	3.7	3.2	1.7	2.0	3.9	6.1	9.8	8.7	8.5	6.7	6.0	3.4
Other services	3.6	2.4	3.1	4.7	4.4	6.3	7.2	7.3	8.3	7.7	2.5	4.7
By type of asset												
Buildings	3.3	3.4	3.1	2.7	2.3	2.4	2.4	2.4	2.3	2.7	2.3	2.2
Plant including purchased software	1.6	1.0	0.5	0.7	1.6	2.6	2.2	3.4	3.9	3.7	2.4	0.7
Computers	3.6	–4.5	–3.2	4.0	10.3	17.2	18.7	38.4	23.5	23.9	24.3	15.7
Vehicles	–3.1	–3.4	–1.2	1.6	0.2	1.5	3.1	7.5	3.0	–0.4	2.6	3.4
Intangibles excluding purchased software	1.9	1.2	1.8	3.0	2.3	1.6	1.7	4.2	1.7	2.7	0.6	3.2
Whole economy	1.8	1.5	1.9	2.3	2.3	3.4	3.6	6.2	4.7	4.8	4.4	3.2

Table 2:
Profit shares, 1990–2002

Description	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
						Parts per thousand							
By production industry													
Agriculture, forestry and fishing	41	44	32	20	37	30	33	26	27	24	36	34	56
Extraction – oil and gas	53	66	53	40	48	46	61	47	36	39	46	45	34
Other mining and quarrying	17	12	9	8	12	10	14	11	7	8	9	7	7
Solid and nuclear fuels; oil refining	8	8	15	3	6	10	9	8	7	8	8	8	6
Chemicals, man-made fibres	32	20	17	12	32	40	33	34	35	34	33	30	27
Other non-metallic minerals	8	6	5	5	7	8	7	7	6	7	7	7	6
Basic metals and metal products	29	20	9	11	24	29	30	25	23	22	21	23	18
Machinery and equipment	18	13	11	11	17	21	17	17	17	16	14	13	12
Electrical and optical equipment	18	15	13	13	20	27	23	23	23	23	20	21	18
Transport equipment	27	20	17	60	53	31	24	26	27	27	25	24	26
Food, beverages, tobacco	29	24	17	14	28	29	25	30	29	27	29	27	26
Textile and leather products	10	11	9	7	12	13	14	12	14	13	9	8	8
Pulp, paper, printing and publishing	25	18	16	18	19	27	27	21	22	27	24	21	20
Other manufacturing	15	13	12	8	14	18	54	48	44	19	15	13	22
Electricity	48	43	37	23	59	70	63	54	59	55	55	48	41
Gas	11	11	10	11	11	10	7	11	9	7	10	10	9
Water	7	8	7	9	9	6	5	11	10	7	13	11	8
Construction	14	10	7	8	11	14	15	14	13	15	14	15	17
By service industry													
Motor vehicles sales and repairs	5	5	6	4	5	7	6	6	6	7	6	7	8
Wholesale trade	31	30	28	25	27	33	28	27	28	32	27	29	31
Retail trade	41	41	40	42	44	47	42	38	41	45	37	43	54
Hotels and restaurants	20	23	22	23	21	17	19	17	19	19	19	25	30
Rail transport	20	14	15	23	16	12	10	17	11	8	13	15	13
Other land transport	21	16	16	16	15	21	18	17	16	16	21	18	20
Water transport	9	22	5	5	7	10	6	4	4	1	5	2	4
Air transport	6	4	2	7	8	9	8	10	11	15	17	18	21
Other transport services	14	13	12	15	13	12	11	16	14	12	19	18	17
Post and telecommunications	49	60	24	38	28	67	61	64	67	79	71	88	94
Financial intermediation	60	63	50	61	52	50	52	53	51	76	80	51	61
Real estate, renting, business activities	85	103	102	105	86	92	82	77	105	114	108	138	112
Public administration, etc.	80	67	162	131	104	60	66	84	74	66	53	46	39
Roads	51	27	69	70	29	32	39	49	42	33	26	20	16
Education	26	64	69	69	45	27	28	28	29	27	30	28	35
Health and social work	12	30	30	25	27	18	19	17	18	18	20	22	22
Sewage and refuse disposal	24	18	17	21	18	11	9	19	17	14	23	18	17
Other services	36	36	34	39	35	36	36	31	36	40	37	44	45
By type of asset													
Buildings	389	515	639	653	441	206	315	375	334	257	312	315	322
Plant including purchased software	388	306	205	167	390	572	457	407	471	513	444	412	457
Computers	66	64	39	52	50	68	77	78	76	89	92	108	73
Vehicles	125	94	89	92	80	117	112	108	91	104	116	126	113
Intangibles excluding purchased software	32	21	28	36	38	37	39	32	28	36	37	39	34
Whole economy	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

Annex

The volume index of capital services combines the long time-series of capital formation data and asset life-lengths underpinning the ONS wealth measures of capital stock with an alternative model taking the different productivity of the assets into account. Here, some background to the data and more detail regarding the VICS model is given. Data related to current work and results are available at the National Statistics website: http://www.statistics.gov.uk.

Data used to calculate VICS

The dataset consists of long back history of the volume of investment, current price investment, assumed life-lengths, and implicit price indices. The series were taken from the ONS Perpetual Inventory Method (PIM) model system, which calculates capital stock and capital consumption for the National Accounts. The PIM works at a more disaggregated level than the present series, but it is not possible to publish this microdata, as it would disclose the investments of individual businesses. The current data aggregates these series, both in current and constant prices so that the industrial disaggregation is identical to that in the ONS Supply Use Tables giving a breakdown of 36 industries.

The asset breakdown is: buildings, plant (including purchased software but excluding computers), computers, vehicles and intangibles (excluding purchased software). The five assets expand on the series currently published in the quarterly capital expenditure surveys. Series are disaggregated to the supply-use table level of 36 industries found in the annual capital formation tables. The current price datasets are calculated for 1948 onwards, consistent with published national accounts 2003. The implicit deflator, which is calculated using the current price series and the volume series, is a derived series but for some assets – for example, computers after 1995 – take the value of a published dataset.

To calculate the stock of some assets, such as buildings, several decades of investment in volume terms is necessary. Because the microdata underpinning the PIM is at a very disaggregated level, a constant price (KP) summation is used to calculate the more aggregated KP series in the spreadsheet. It is well known that constant price series are additive only in the years after the base year. Constant price summation is used in almost all areas of the national accounts, so that long time-series of constant price data stretching over several base years can be aggregated taking account of the different prices in which the series have been compiled. Table 1 in ONS (2002) gives the base years and the periods they were used.

The life-lengths assumed in the ONS wealth measures provide the average years that the assets would last for the United Kingdom. To convert these into depreciation rates, the method employed by Oulton and Srinivasan (2003, p. 77) was used for buildings, plant and machinery and vehicles. The US Bureau of Economic Analysis (Fraumeni, 1997) has done considerable work to integrate geometric decay rates into their national income and product accounts, using Hulten and Wykoff's 1981 analysis of second-hand asset prices. In computers and intangibles, the method of double-declining balance is used.

In calculating rentals, the rate-of-return is set such that the total current price capital services equals the whole economy operating surplus less that operating surplus attributable to housing, owner-occupier imputed rent and capital consumption on dwellings. HM Treasury provided the results of their work on tax-subsidy ratios – providing a time-series for each asset.

Indices of capital services

The method used in the calculation of the volume index of capital services is based largely on Oulton and Srinivasan (2003), whose paper provides an excellent analysis of the sensitivity of the index to the assumptions underlying its calculation. The first of the three steps outlined in section 2 was to aggregate the history of investments to provide a net stock. In terms of terminology, the vintage of an investment is the year of purchase of an asset.

The calculation of the net stock uses a geometric PIM.

$$(1) \quad K^i_{a,t} = I^i_{a,t} + (1-\delta^i_{a,t-1}) \cdot I^i_{a,t-1} + (1-\delta^i_{a,t-2})^2 \cdot I^i_{a,t-2} + \ldots$$

In equation 1, K is the volume of net stock for a particular asset a, in an industry i, t is the year under consideration, I is the investment in a year and δ is the rate of decay for the asset purchased in a particular year. It should be noted that the assumed rate of decay for an industry/asset could vary over vintages.

The rental, r, for an asset is modelled using equation 2, the Hall-Jorgenson equation (Hall and Jorgenson, 1967), where p is the price of the asset, R is a rate-of-return and TS is the tax subsidy ratio, assumed the same across industries.

$$(2) \quad r^i_{a,t} = TS_a\left[\delta^i_a \cdot p^i_{a,t} + R_t \cdot p^i_{a,t-1} - (p^i_{a,t} - p^i_{a,t-1})\right]$$

The rentals are combined with the net capital stocks to give the value-added attributable to the stock of each asset in a particular industry. The value-added shares are used as weights, w, for the VICS. In equation 3, the weights in an industry VICS is defined, though it can be generalised for any aggregate (whole economy for example, or a particular asset).

$$(3) \quad w^i_{a,t} = \frac{r^i_{a,t-1} \cdot K^i_{a,t-1}}{\sum_a r^i_{a,t-1} \cdot K^i_{a,t-1}}$$

The weights can be seen to be base period shares so that a Laspeyres VICS can be calculated, here for a particular industry, i.

$$(4) \quad VICS^i_t = \sum_a w^i_{a,t-1} \cdot \frac{K^i_{a,t}}{K^i_{a,t-1}}$$

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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 29 October 2003.

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 Kingdon. Where figures are for Great Britain only, this is shown on the table.

Seasonal adjustments

Almost all quarterly data are seaonally 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, togther 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 147

† data have been revised since the last edition; the period marked is the earliest in the table to have been revsied

* average (or total) of five weeks

Data Online

Free access to the tables in this section along with other National Statistics is available online at www.statistics.gov.uk

Time Series Data

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StatBase

Web-based access to time series, cross-sectional data and metadata from across the Government Statistical Service (GSS), organised by theme and subject. You can download many datasets, in whole or in part, or consult directory information for all GSS statistical resources, 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.

1.1 Selected monthly indicators

seasonally adjusted unless otherwise stated

		2001	2002	2002 Q4	2003 Q1	2003 Q2	2003 Q3	2003 Jul	2003 Aug	2003 Sep	% Change Latest 3 months avg over previous 3 months
Output -chained volume measures (CVM) (2000 = 100 unless otherwise stated)											
Gross value added at basic prices	CGCE	101.9	103.3	104.1	104.3	104.8	..	..	..	..	*0.6*
Industrial production	CKYW	98.4	95.8	95.4	95.1	95.3	95.3	95.7	94.9	..	*0.5*
Oil and gas extraction	CKZO	94.4	93.3	92.8	92.5	90.1	..	91.2	87.8	..	*-1.4*
Manufacturing	CKYY	98.7	95.2	94.8	94.7	95.2	..	95.7	95.1	..	*0.5*
Construction	GDQB	103.4	111.2	114.1	112.0	116.9	..	..	..	..	*4.4*
Car production (thousands)	FFAO	124.4	135.7	127.9	130.2	137.8	143.9	144.5	143.5	143.8	*4.5*
GB housing completions (thousands)	CTPA	162.0	170.4	45.0	43.3	..	..	..	..	..	*-3.3*
Domestic demand											
Retail sales volume (2000 = 100)	EAPS	106.1	112.7	115.4	114.6	116.4	117.7	117.0	117.6	118.3	*1.2*
GB new registrations of cars ('000s)[1]	BCGT	2 577.5	2 682.0	528.7	737.6	642.7	..	204.7	..	..	*-12.1*
Manufacturing:change in inventories (£m,CVM, reference year 2000)	DHBM	–496	–1 967	–489	–171	–234	..	..	..	..	
Prices (12 monthly % change) and earnings (headline rate)											
Retail prices index[1]	CZBH	1.8	1.7	2.5	3.0	3.0	2.9	3.1	2.9	2.8	
Retail prices index[1] (less MIPS)[2]	CDKQ	2.1	2.2	2.6	2.9	2.9	2.8	2.9	2.9	2.8	
Producer output prices (less FBTP)[3]	EUAA	–0.6	–0.1	0.4	1.2	1.2	1.2	1.2	1.2	1.3	
Producer input prices[4]	EUAB	–1.2	–4.5	–0.1	1.6	–0.6	1.1	0.7	1.7	0.5	
GB average earnings -whole economy[5]	LNNC	..	..	3.8	3.5	3.0	..	3.3	3.4	..	
Foreign trade[6] (2000 = 100 volumes unless otherwise stated)											
UK balance on trade in goods (£ million)	BOKI	–40 620	–46 455	–13 256	–10 772	–10 920	..	–3 007	–3 592	..	
Non EU balance on trade in goods (£ million)	ENRX	–28 945	–26 208	–7 604	–5 432	–5 525	..	–1 676	–1 586	..	
Non EU exports of goods (excl oil & erratics)	ENUA	102.1	96.2	92.1	102.2	103.2	..	104.8	103.5	..	*–5.5*
Non EU imports of goods (excl oil & erratics)	ENTS	100.2	98.5	99.3	101.5	103.7	..	100.8	101.7	..	*0.1*
Non EU import & price index (excl oil)[7]	ENXR	–	–5.8	–4.7	–6.4	–4.9	..	–1.7	–0.8	..	
Non EU export & price index (excl oil)[7]	ENXS	0.1	0.7	0.7	–4.0	–3.2	..	–0.6	–0.3	..	
Labour market and productivity (2000 = 100 unless otherwise stated)											
UK claimant unemployment (thousands)	BCJD	970.1	946.8	938.6	936.5	946.5	933.1	937.7	931.7	929.8	*-1.4*
UK vacancies (thousands)[8]	DPCB	..	..	..	..	..	..	..	..	..	*2.4*
UK employees in manufacturing (thousands)	YEJA	3 808	3 628	3 561	3 536	3 502	..	3 492	3 481	..	*–0.9*
Whole economy productivity[9]	LNNN	101.1	102.5	103.5	103.6	104.0	..	..	..	..	*0.4*
Manufacturing productivity[9]	LNNX	103.3	104.9	106.3	107.3	109.6	..	111.1	110.9	..	*1.9*
Unit wage costs - whole economy	LNNK	103.8	106.2	106.6	107.5	107.6	..	..	..	..	*0.1*
Unit wage costs - manufacturing	LNNQ	101.0	102.9	103.1	103.7	101.1	..	100.5	100.8	..	*–1.8*
Financial markets[1]											
Sterling ERI (1990=100)	AGBG	105.8	106.0	106.0	102.3	99.1	99.2	99.4	99.0	99.2	*0.1*
Average exchange rate /US $	AUSS	1.44	1.50	1.57	1.60	1.62	1.61	1.62	1.60	1.61	*–0.4*
Average exchange rate /Euro[10]	THAP	1.61	1.59	1.57	1.49	1.43	1.43	1.43	1.43	1.43	*0.5*
FTSE (100 share)	AJNO	5 558.5	4 595.2	4 006.6	3 689.5	3 990.9	4 164.6	4 079.1	4 179.7	4 235.0	*4.4*
3 month inter-bank rate[11]	HSAJ	4.03	3.94	3.94	3.57	3.55	3.66	3.36	3.54	3.66	
3 month interest on US Treasury bills[12]	LUST	1.71	1.20	1.20	1.12	0.89	0.94	0.94	0.97	0.94	
Monetary conditions/government finances											
M0 (year on year percentage growth)	VQMX	7.1	7.9	7.0	6.0	7.8	7.9	8.2	7.9	7.7	
M4 (year on year percentage growth)	VQJW	8.0	5.9	6.2	6.7	8.1	7.5	7.9	7.2	7.4	
Public sector net borrowing (£ million)[1,13]	ANNX	–700	–22 524	–8 487	–501	–15 431	–7 103	732	–5 023	–2 812	
Net lending to consumers (£ million)(broader)	RLMH	17 501	20 878	4 988	4 984	5 363	4 911	1 509	1 571	1 830	*–8.4*

		2002 Sep	2002 Oct	2002 Nov	2002 Dec	2003 Jan	2003 Feb	2003 Mar	2003 Apr	2003 May	2003 Jun	2003 Jul	2003 Aug	2003 Sep	2003 Oct
Activity and expectations															
CBI output expectations balance[1]	ETCU	7	8	2	–1	2	–1	–5	–10	–3	–6	–4	–3	–3	–4
CBI optimism balance[1]	ETBV	..	–19	..	..	–19	..	..	–27	..	..	–13	..	..	–7
CBI price expectations balance	ETDQ	–10	–10	–11	–12	–14	–15	–17	–8	–12	–14	–14	–14	–9	–9
GB housing starts (thousands)	CTOZ	17.1	15.5	15.1	15.8	16.1	17.5	15.8	..	..	..	..	..	..	..
New engineering orders (2000 = 100)	JIQH	78.9	81.7	70.4	82.1	79.5	81.9	75.3	93.7	76.8	76.3	86.0	79.0	..	..

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 Publication of the jobcentre vacancy statistics has been deferred. Data is only available up to April 2001. See footnote 10 on Table 4.4
9 Output per filled job.
10 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
11 Last Friday of the period
12 Last working day
13 Annual figures are for the financial years 2001/2002 and 2002/2003

2.1 National accounts aggregates

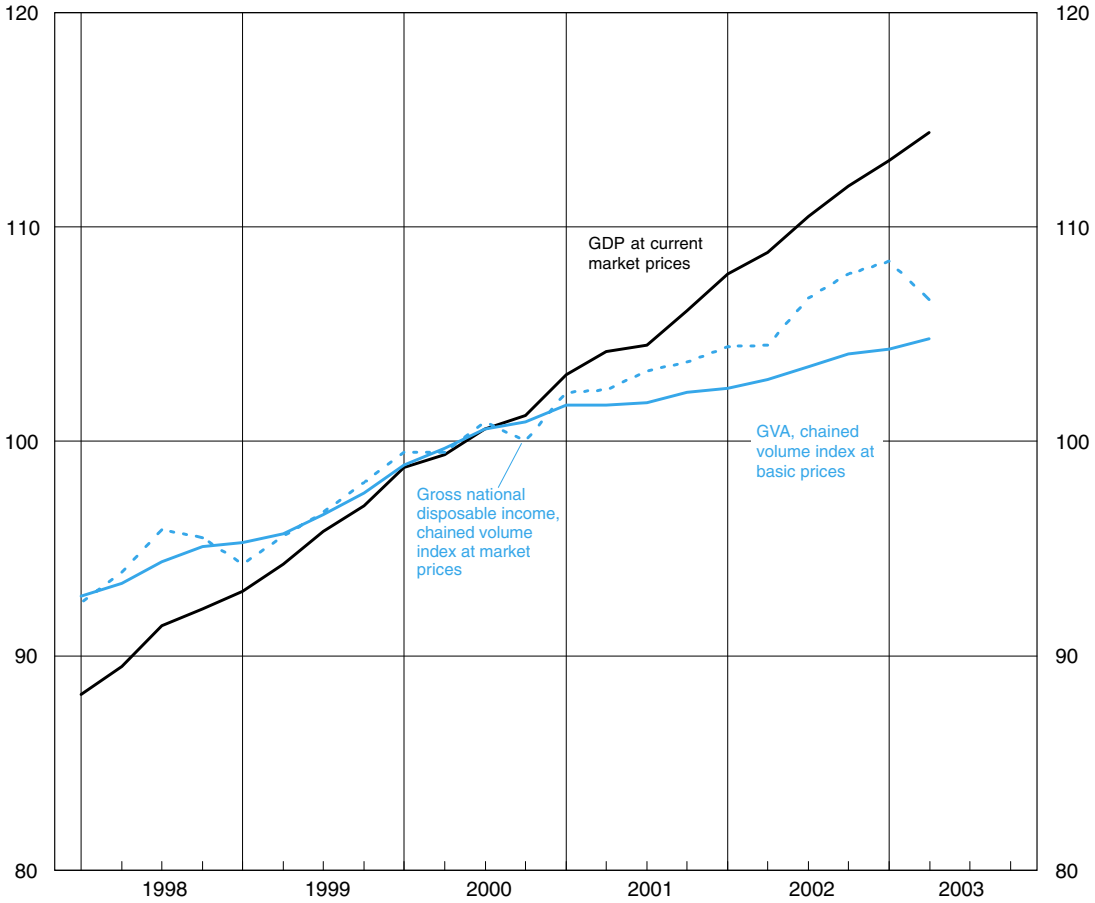
	£ million		Indices (2000 = 100)						
	At current prices		Value indices at current prices		Chained volume indices (2000=100)			Implied deflators[2]	
	Gross domestic product at market prices	Gross value added (GVA)at basic prices	Gross domestic product at market prices[1]	Gross Value added (GVA) at basic 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
1998	859 436	762 359	90.3	90.8	94.5	93.7	93.9	96.4	96.7
1999	903 865	797 814	95.0	95.1	96.2	96.4	96.3	98.6	98.7
2000	951 265	839 194	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2001	994 037	880 904	104.5	105.0	102.9	102.1	101.9	102.3	103.0
2002	1 043 945	925 584	109.7	110.3	105.9	103.9	103.3	105.6	106.8
Quarterly									
1998 Q1	209 840	186 227	88.2	88.8	92.5	92.8	92.8	95.1	95.6
Q2	212 891	189 021	89.5	90.1	93.9	93.2	93.4	96.1	96.5
Q3	217 418	192 771	91.4	91.9	95.9	94.2	94.4	97.0	97.4
Q4	219 287	194 340	92.2	92.6	95.5	94.8	95.1	97.3	97.4
1999 Q1	221 178	195 352	93.0	93.1	94.3	95.3	95.3	97.6	97.7
Q2	224 190	198 440	94.3	94.6	95.6	95.6	95.7	98.6	98.8
Q3	227 870	201 045	95.8	95.8	96.7	96.7	96.6	99.1	99.2
Q4	230 627	202 977	97.0	96.7	98.1	97.9	97.6	99.1	99.1
2000 Q1	235 050	207 339	98.8	98.8	99.5	99.0	98.9	99.8	99.9
Q2	236 352	208 160	99.4	99.2	99.5	99.7	99.7	99.7	99.6
Q3	239 182	211 135	100.6	100.6	100.9	100.5	100.6	100.1	100.1
Q4	240 681	212 560	101.2	101.3	100.0	100.8	100.9	100.4	100.5
2001 Q1	245 227	217 171	103.1	103.5	102.3	101.6	101.7	101.5	101.8
Q2	247 908	219 657	104.2	104.7	102.4	102.0	101.7	102.2	102.9
Q3	248 578	220 099	104.5	104.9	103.3	102.3	101.8	102.2	103.1
Q4	252 324	223 977	106.1	106.8	103.7	102.7	102.3	103.3	104.4
2002 Q1	256 374	227 237	107.8	108.3	104.4	103.0	102.5	104.6	105.6
Q2	258 728	229 137	108.8	109.2	104.5	103.5	102.9	105.1	106.1
Q3	262 783	233 442	110.5	111.3	106.7	104.2	103.5	106.0	107.5
Q4	266 060	235 768	111.9	112.4	107.8	104.8	104.1	106.8	107.9
2003 Q1	268 874	238 980	113.1	113.9	108.4	104.9	104.3	107.7	109.2
Q2	272 032	242 126	114.4	115.4	106.6	105.6	104.8	108.3	110.1
Q3	..	..	..	..	..	106.2	..	..	..
Percentage change, quarter on corresponding quarter of previous year[3]									
Quarterly									
1998 Q1	*5.6*	*4.9*	*5.6*	*4.9*	*4.2*	*3.5*	*3.5*	*2.1*	*1.4*
Q2	*5.6*	*5.5*	*5.6*	*5.5*	*3.4*	*2.8*	*3.5*	*2.8*	*1.9*
Q3	*6.9*	*6.9*	*6.9*	*6.9*	*5.6*	*3.5*	*3.8*	*3.2*	*3.1*
Q4	*5.8*	*5.9*	*5.8*	*5.9*	*4.4*	*2.8*	*3.4*	*3.0*	*2.5*
1999 Q1	*5.4*	*4.9*	*5.4*	*4.9*	*1.9*	*2.7*	*2.7*	*2.6*	*2.2*
Q2	*5.3*	*5.0*	*5.3*	*5.0*	*1.8*	*2.6*	*2.5*	*2.6*	*2.4*
Q3	*4.8*	*4.3*	*4.8*	*4.3*	*0.8*	*2.7*	*2.3*	*2.2*	*1.8*
Q4	*5.2*	*4.4*	*5.2*	*4.4*	*2.7*	*3.3*	*2.6*	*1.8*	*1.7*
2000 Q1	*6.3*	*6.1*	*6.3*	*6.1*	*5.5*	*3.9*	*3.8*	*2.3*	*2.3*
Q2	*5.4*	*4.9*	*5.4*	*4.9*	*4.1*	*4.3*	*4.1*	*1.1*	*0.8*
Q3	*5.0*	*5.0*	*5.0*	*5.0*	*4.3*	*3.9*	*4.1*	*1.0*	*0.9*
Q4	*4.4*	*4.7*	*4.4*	*4.7*	*1.9*	*3.0*	*3.3*	*1.3*	*1.4*
2001 Q1	*4.3*	*4.7*	*4.3*	*4.7*	*2.8*	*2.6*	*2.8*	*1.7*	*1.9*
Q2	*4.9*	*5.5*	*4.9*	*5.5*	*2.9*	*2.3*	*2.1*	*2.5*	*3.3*
Q3	*3.9*	*4.2*	*3.9*	*4.2*	*2.4*	*1.8*	*1.2*	*2.1*	*3.0*
Q4	*4.8*	*5.4*	*4.8*	*5.4*	*3.7*	*1.9*	*1.4*	*2.9*	*3.9*
2002 Q1	*4.5*	*4.6*	*4.5*	*4.6*	*2.1*	*1.4*	*0.8*	*3.1*	*3.7*
Q2	*4.4*	*4.3*	*4.4*	*4.3*	*2.1*	*1.5*	*1.2*	*2.8*	*3.1*
Q3	*5.7*	*6.1*	*5.7*	*6.1*	*3.3*	*1.9*	*1.7*	*3.7*	*4.3*
Q4	*5.4*	*5.3*	*5.4*	*5.3*	*4.0*	*2.0*	*1.8*	*3.4*	*3.4*
2003 Q1	*4.9*	*5.2*	*4.9*	*5.2*	*3.8*	*1.8*	*1.7*	*3.0*	*3.4*
Q2	*5.1*	*5.7*	*5.1*	*5.7*	*2.0*	*2.0*	*1.8*	*3.0*	*3.8*
Q3	..	..	..	..	..	*1.9*	..	..	..

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

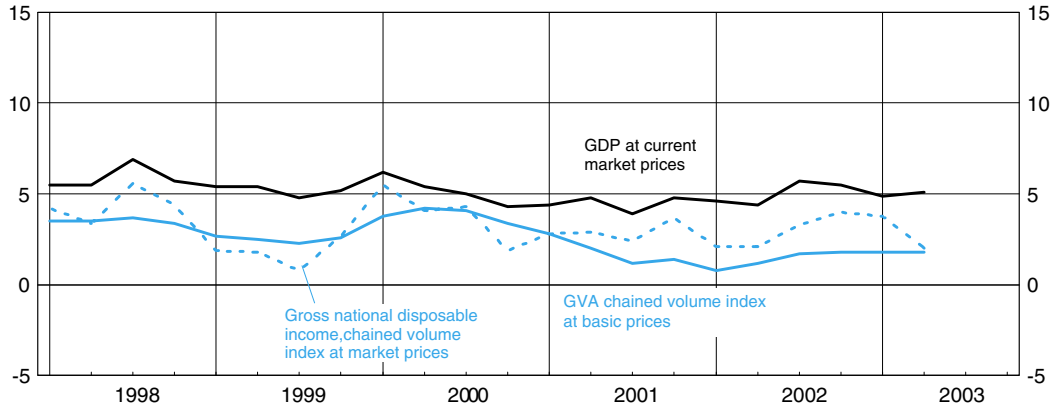
National accounts aggregates

Indices, 2000=100 seasonally adjusted



National accounts aggregates

Percentage change on year earlier



2.2 Gross domestic product : by category of expenditure
Chained volume measures

Reference year 2000, £ million

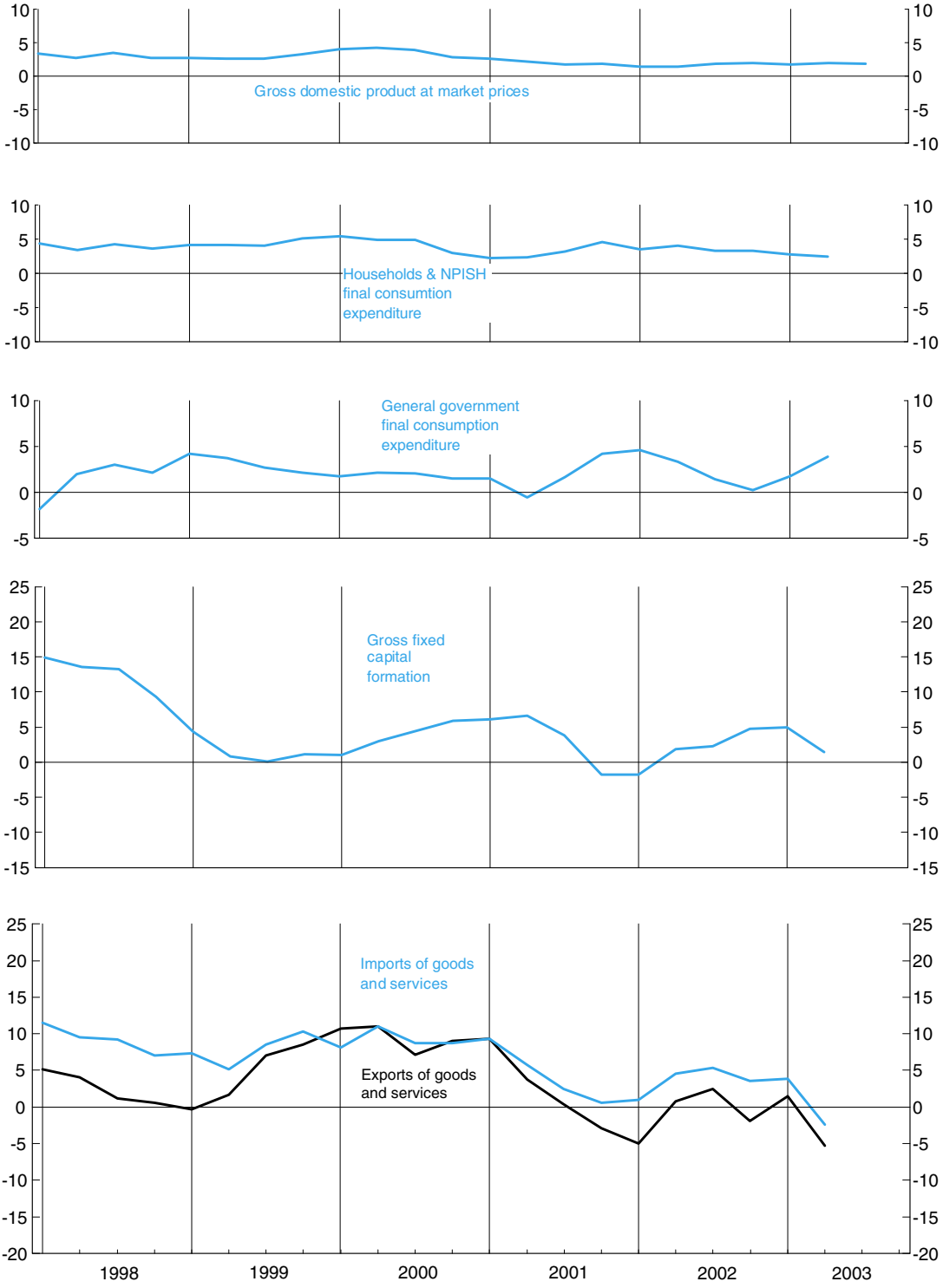
	Domestic expenditure on goods and services at market prices											
	Final consumption expenditure			Gross capital formation								
	Households	Non-profit institutions [2]	General government	Gross fixed capital formation+	Changes in inventories[3]	Acquisitions less disposals of valuables	Total	Exports of goods and services+	Gross final expenditure	*less* Imports of goods and services+	Statistical discrepancy (expenditure)	Gross domestic product at market prices
Annual												
	ABJR	HAYO	NMRY	NPQT	CAFU	NPJR	YBIM	IKBK	ABMG	IKBL	GIXS	ABMI
1998	552 186	21 713	169 085	153 148	4 913	57	901 069	233 982	1 135 080	243 400	–	891 684
1999	577 665	21 543	174 445	155 576	6 426	28	935 377	243 985	1 179 410	262 601	–	916 639
2000	603 349	23 188	177 794	161 210	5 271	3	970 815	267 007	1 237 822	286 557	–	951 265
2001	622 136	23 845	180 875	167 032	2 938	362	997 188	273 724	1 270 912	299 347	–	971 565
2002	644 441	24 553	185 185	170 002	1 496	193	1 025 869	271 186	1 297 055	310 214	1 497	988 338
Quarterly												
1998 Q1	136 298	5 368	41 431	37 275	427	31	221 423	58 221	279 669	59 146	–	220 584
Q2	137 464	5 433	42 245	38 029	230	7	223 461	58 967	282 474	60 854	–	221 598
Q3	138 653	5 476	42 646	38 621	1 990	9	227 037	58 413	285 441	61 377	–	224 047
Q4	139 771	5 436	42 763	39 223	2 266	10	229 148	58 381	287 496	62 023	–	225 455
1999 Q1	142 213	5 415	43 184	38 907	2 742	5	232 122	58 044	290 132	63 516	–	226 585
Q2	143 625	5 336	43 789	38 331	476	24	231 457	59 973	291 433	64 024	–	227 382
Q3	144 613	5 358	43 787	38 674	1 677	–15	233 974	62 579	296 598	66 678	–	229 864
Q4	147 214	5 434	43 685	39 664	1 531	14	237 824	63 389	301 247	68 383	–	232 808
2000 Q1	150 128	5 666	43 969	39 298	819	1	239 970	64 272	304 263	68 664	–	235 554
Q2	150 469	5 766	44 748	39 471	1 262	–	241 682	66 551	308 235	71 071	–	237 160
Q3	151 397	5 858	44 716	40 417	1 941	–3	244 269	67 103	311 366	72 467	–	238 914
Q4	151 355	5 898	44 361	42 024	1 249	5	244 894	69 081	313 958	74 355	–	239 637
2001 Q1	153 291	6 005	44 635	41 707	795	–34	246 399	70 235	316 634	75 053	–	241 581
Q2	153 965	5 964	44 541	42 069	1 806	251	248 596	69 074	317 670	75 211	–	242 459
Q3	156 368	5 945	45 489	41 974	355	33	250 164	67 340	317 504	74 287	–	243 218
Q4	158 512	5 931	46 210	41 282	–18	112	252 029	67 075	319 104	74 796	–	244 307
2002 Q1	158 843	6 065	46 702	40 937	1 244	59	253 849	66 715	320 564	75 795	290	245 060
Q2	160 430	6 088	46 003	42 863	–590	50	254 844	69 659	324 503	78 652	361	246 211
Q3	161 550	6 167	46 127	42 923	–71	75	256 771	68 994	325 765	78 275	410	247 901
Q4	163 618	6 233	46 353	43 279	913	9	260 405	65 818	326 223	77 492	436	249 166
2003 Q1	163 230	6 370	47 549	42 974	132	–1	260 254	67 725	327 979	78 783	379	249 574
Q2	164 308	6 432	47 796	43 510	–625	98	261 519	65 981	327 500	76 795	381	251 086
Q3	..	..	..	..	..	..	..	..	..	..	..	252 593
Percentage change, latest quarter on corresponding quarter of previous year												
1998 Q1	*4.2*	*11.4*	*–1.8*	*14.9*			*5.2*	*5.2*	*5.2*	*11.5*		*3.4*
Q2	*3.4*	*5.2*	*2.0*	*13.6*			*4.3*	*4.1*	*4.3*	*9.5*		*2.8*
Q3	*4.2*	*8.1*	*3.0*	*13.3*			*5.8*	*1.2*	*4.8*	*9.2*		*3.5*
Q4	*3.6*	*3.8*	*2.2*	*9.3*			*4.6*	*0.6*	*3.7*	*7.0*		*2.8*
1999 Q1	*4.3*	*0.9*	*4.2*	*4.4*			*4.8*	*–0.3*	*3.7*	*7.4*		*2.7*
Q2	*4.5*	*–1.8*	*3.7*	*0.8*			*3.6*	*1.7*	*3.2*	*5.2*		*2.6*
Q3	*4.3*	*–2.2*	*2.7*	*0.1*			*3.1*	*7.1*	*3.9*	*8.6*		*2.6*
Q4	*5.3*	*0.0*	*2.2*	*1.1*			*3.8*	*8.6*	*4.8*	*10.3*		*3.3*
2000 Q1	*5.6*	*4.6*	*1.8*	*1.0*			*3.4*	*10.7*	*4.9*	*8.1*		*4.0*
Q2	*4.8*	*8.1*	*2.2*	*3.0*			*4.4*	*11.0*	*5.8*	*11.0*		*4.3*
Q3	*4.7*	*9.3*	*2.1*	*4.5*			*4.4*	*7.2*	*5.0*	*8.7*		*3.9*
Q4	*2.8*	*8.5*	*1.5*	*5.9*			*3.0*	*9.0*	*4.2*	*8.7*		*2.9*
2001 Q1	*2.1*	*6.0*	*1.5*	*6.1*			*2.7*	*9.3*	*4.1*	*9.3*		*2.6*
Q2	*2.3*	*3.4*	*–0.5*	*6.6*			*2.9*	*3.8*	*3.1*	*5.8*		*2.2*
Q3	*3.3*	*1.5*	*1.7*	*3.9*			*2.4*	*0.4*	*2.0*	*2.5*		*1.8*
Q4	*4.7*	*0.6*	*4.2*	*–1.8*			*2.9*	*–2.9*	*1.6*	*0.6*		*1.9*
2002 Q1	*3.6*	*1.0*	*4.6*	*–1.8*			*3.0*	*–5.0*	*1.2*	*1.0*		*1.4*
Q2	*4.2*	*2.1*	*3.3*	*1.9*			*2.5*	*0.8*	*2.2*	*4.6*		*1.5*
Q3	*3.3*	*3.7*	*1.4*	*2.3*			*2.6*	*2.5*	*2.6*	*5.4*		*1.9*
Q4	*3.2*	*5.1*	*0.3*	*4.8*			*3.3*	*–1.9*	*2.2*	*3.6*		*2.0*
2003 Q1	*2.8*	*5.0*	*1.8*	*5.0*			*2.5*	*1.5*	*2.3*	*3.9*		*1.8*
Q2	*2.4*	*5.7*	*3.9*	*1.5*			*2.6*	*–5.3*	*0.9*	*–2.4*		*2.0*
Q3	..	..	..	..			..	..	..	..		*1.9*

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 2000
percentage change on year earlier



2.3 Gross domestic product and shares of income and expenditure

	Gross domestic product at market prices	Gross final expenditure	Percentage share of gross final expenditure: Final consumption expenditure: Household and NPISH	Final consumption expenditure: General government	Gross capital formation	Exports of goods and services	Percentage share of GDP by category of income: Gross operating surplus: Corporations[1]	Gross operating surplus: Other[2]	Compensation of employees	Mixed income	Taxes on production and imports
Annual	YBHA	ABMF	IHXI	IHXJ	IHXK	IHXL	IHXM	IHXO	IHXP	IHXQ	IHXR
1999	903 865	1 158 576	51.2	14.4	13.9	20.6	22.5	3.3	54.8	6.0	13.4
2000	951 265	1 237 822	50.6	14.4	13.4	21.5	21.9	2.6	56.0	6.0	13.5
2001	994 037	1 293 365	51.1	14.8	13.2	21.0	21.2	2.8	56.8	6.1	13.1
2002	1 043 945	1 346 378	51.4	15.5	12.8	20.3	21.9	2.6	56.3	6.1	13.1
Quarterly											
1999 Q1	221 178	282 661	51.4	14.3	14.3	20.1	21.4	4.3	55.0	5.9	13.4
Q2	224 190	285 936	51.4	14.6	13.5	20.5	22.8	3.2	54.8	6.0	13.2
Q3	227 870	292 622	50.8	14.4	13.9	20.9	22.9	2.7	54.9	6.0	13.5
Q4	230 627	297 357	51.0	14.2	13.8	20.9	22.7	3.0	54.6	6.0	13.7
2000 Q1	235 050	302 357	51.3	14.2	13.6	20.9	23.1	2.6	54.9	6.0	13.5
Q2	236 352	306 817	50.8	14.4	13.2	21.5	22.4	2.4	55.7	5.9	13.6
Q3	239 182	312 187	50.4	14.5	13.5	21.7	21.5	2.7	56.3	6.1	13.4
Q4	240 681	316 461	50.0	14.4	13.5	22.1	20.7	2.8	57.1	6.0	13.4
2001 Q1	245 227	321 527	50.2	14.4	13.4	22.1	21.2	2.7	56.9	6.0	13.1
Q2	247 908	324 212	50.4	14.5	13.6	21.5	21.0	3.4	56.5	6.1	13.1
Q3	248 578	322 409	51.7	14.9	13.2	20.2	21.3	2.5	56.8	6.2	13.2
Q4	252 324	325 217	52.0	15.3	12.5	20.3	21.3	2.8	56.8	6.2	12.9
2002 Q1	256 374	330 684	51.5	15.5	12.7	20.3	21.7	2.5	56.4	6.2	13.1
Q2	258 728	335 846	51.2	15.4	12.5	20.9	21.3	2.9	56.4	6.1	13.2
Q3	262 783	338 860	51.2	15.5	12.8	20.4	22.2	2.6	56.3	6.1	12.8
Q4	266 060	340 988	51.8	15.7	13.1	19.4	22.3	2.5	56.0	6.1	13.1
2003 Q1	268 874	345 157	51.3	16.3	12.5	19.9	22.4	2.5	56.1	6.1	12.8
Q2	272 032	346 896	51.5	16.7	12.5	19.3	22.5	2.7	55.9	6.1	12.7

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

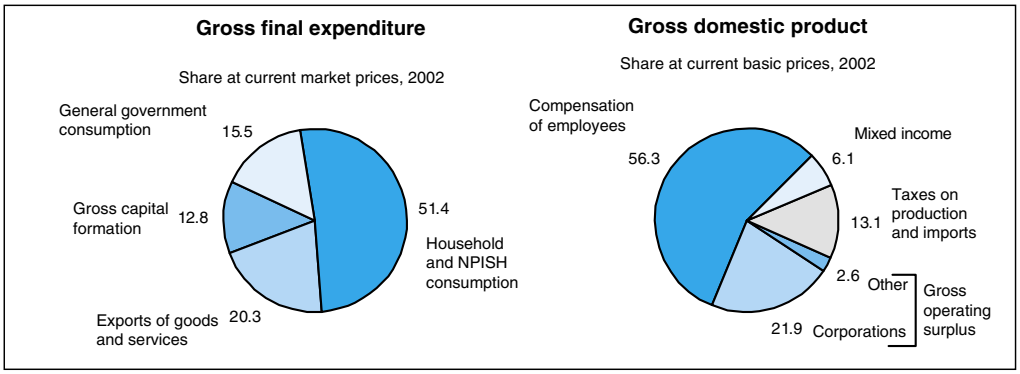
2.4 Income, product and spending per head

£

	At current prices: Gross national income at market prices	Gross domestic product at market prices	Household and NPISH final consumption expenditure	Households' gross disposable income	Chained volume measures (reference year 2000): 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	16 327	16 221	10 684	11 162	16 221	10 684	11 163
2001	17 059	16 839	11 188	11 867	16 459	10 943	11 609
2002	17 955	17 632	11 703	12 160	16 693	11 299	11 742
Quarterly							
2000 Q1	4 048	4 014	2 649	2 726	4 023	2 661	2 739
Q2	4 050	4 034	2 661	2 771	4 048	2 666	2 777
Q3	4 120	4 077	2 682	2 821	4 073	2 681	2 819
Q4	4 109	4 096	2 692	2 844	4 077	2 676	2 828
2001 Q1	4 217	4 165	2 740	2 925	4 103	2 705	2 889
Q2	4 253	4 202	2 771	2 923	4 110	2 711	2 860
Q3	4 272	4 207	2 820	2 974	4 116	2 747	2 897
Q4	4 317	4 265	2 857	3 045	4 130	2 780	2 963
2002 Q1	4 388	4 331	2 879	2 976	4 140	2 786	2 880
Q2	4 410	4 370	2 907	3 050	4 158	2 812	2 951
Q3	4 543	4 438	2 932	3 066	4 187	2 832	2 962
Q4	4 614	4 493	2 985	3 068	4 208	2 869	2 949
2003 Q1	4 660	4 528	2 981	3 075	4 203	2 856	2 947
Q2	4 624	4 582	3 010	3 129	4 229	2 876	2 989

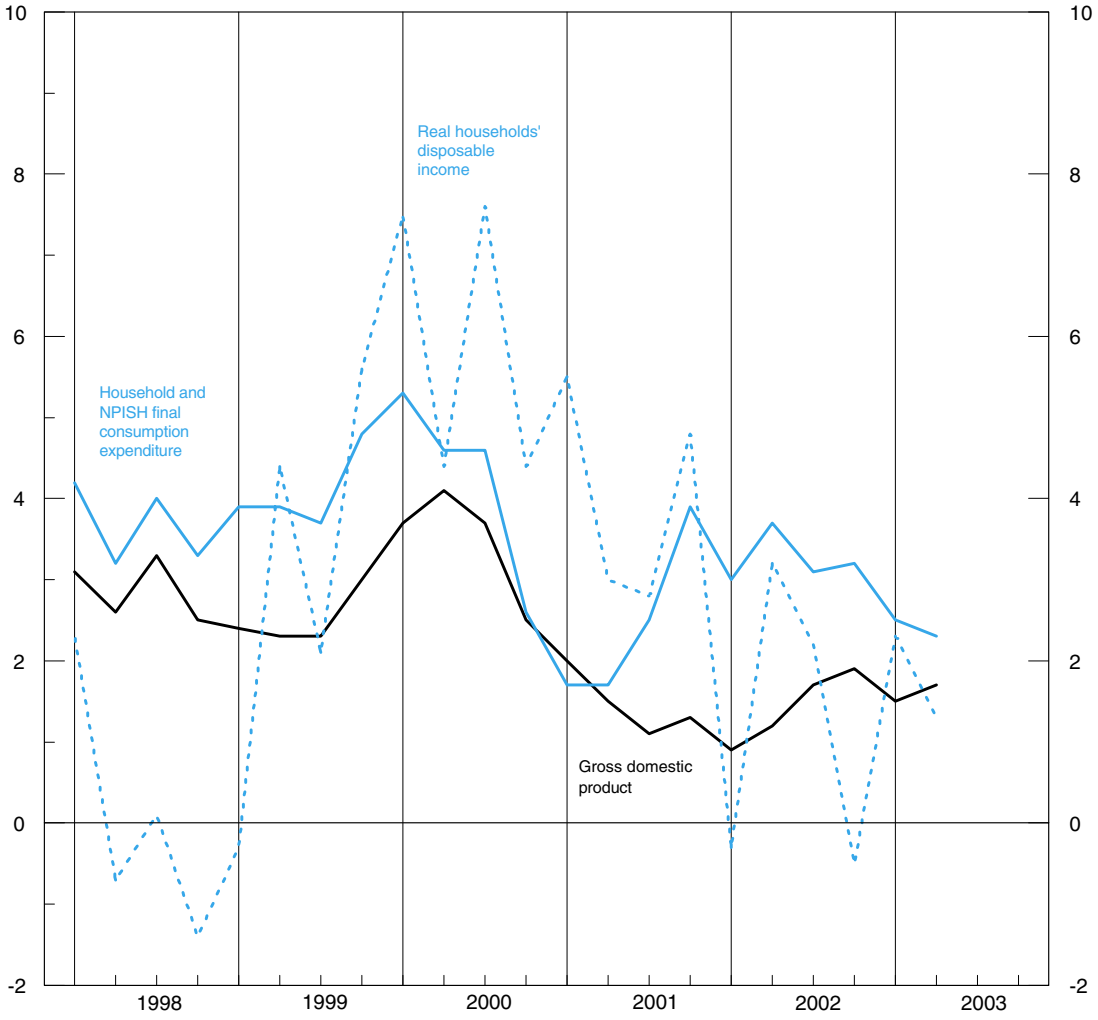
Source: Office for National Statistics; Enquiries 020 7533 6031

Shares of income and expenditure



Income, product and spending per capita

chained volume measures
reference year 2000
percentage change on year earlier



2.5 Households[1] disposable income and consumption

	£ million, current prices							£ million, chained vol. measures, ref year 2000		
	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 2000=100)
	Total	of which: Wages and salaries								
Annual										
	RPHP	ROYJ	RPHQ	RPQJ	RPQK	RPQM	NRJS	NRJR	NPSP	OSXS
2000	958 450	457 473	654 649	8 620	663 269	626 537	5.5	654 649	626 537	100.0
2001	1 011 310	484 906	700 538	7 453	707 991	660 380	6.7	685 263	645 981	104.7
2002	1 040 534	502 958	720 010	11 499	731 509	692 886	5.3	695 183	668 994	106.2
Quarterly										
2000 Q1	230 709	111 597	159 633	2 296	161 929	155 089	4.2	160 361	155 791	98.0
Q2	237 914	113 150	162 386	1 022	163 408	155 917	4.6	162 723	156 235	99.4
Q3	242 642	115 371	165 497	2 120	167 617	157 366	6.1	165 388	157 257	101.1
Q4	247 185	117 355	167 133	3 182	170 315	158 165	7.1	166 177	157 254	101.5
2001 Q1	250 922	119 480	172 249	2 583	174 832	161 306	7.7	170 100	159 296	103.9
Q2	249 616	120 487	172 430	1 628	174 058	163 458	6.1	168 705	159 929	103.1
Q3	252 003	121 788	175 733	1 550	177 283	166 625	6.0	171 183	162 313	104.6
Q4	258 769	123 151	180 126	1 692	181 818	168 991	7.1	175 275	164 443	107.1
2002 Q1	255 736	124 031	176 182	3 304	179 486	170 416	5.1	170 484	164 907	104.2
Q2	260 529	125 428	180 600	2 201	182 801	172 100	5.9	174 740	166 518	106.8
Q3	262 666	126 158	181 550	2 920	184 470	173 629	5.9	175 366	167 717	107.2
Q4	261 603	127 341	181 678	3 074	184 752	176 741	4.3	174 593	169 852	106.7
2003 Q1	267 474	128 402	182 578	3 751	186 329	176 991	5.0	174 954	169 600	106.9
Q2	270 198	129 075	185 754	1 953	187 707	178 690	4.8	177 490	170 740	108.4

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 2000, £ million

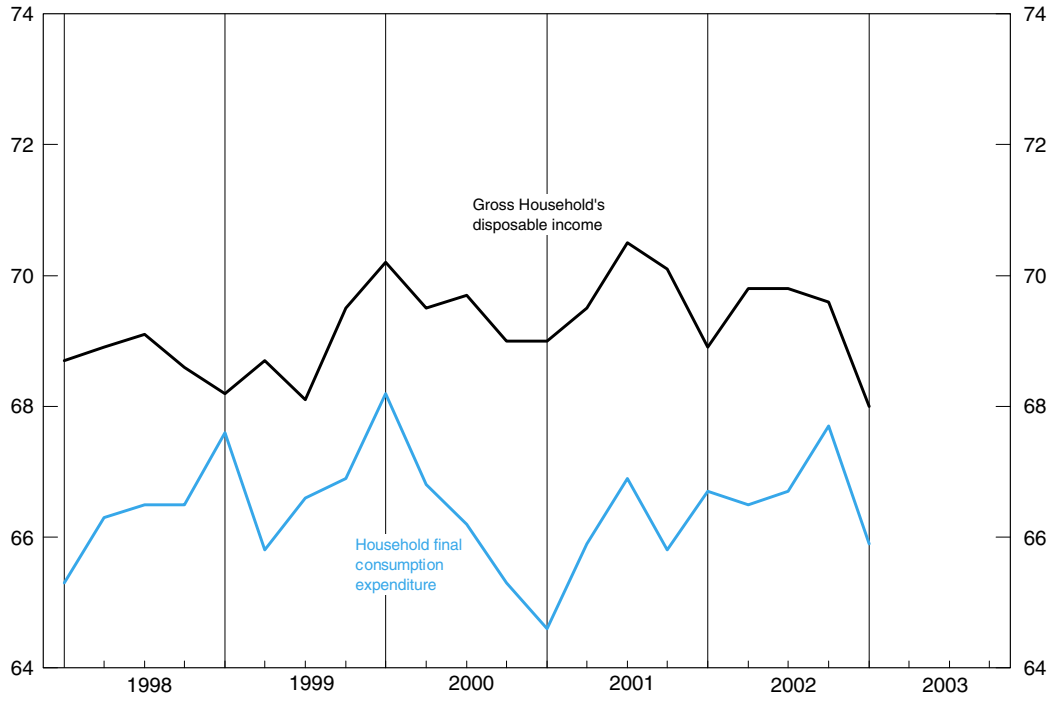
	UK National[4]														
			UK Domestic[5]												
	Total	Net tourism	Total	Food & drink	Alcohol & tobacco	Clothing & footwear	Housing	Household goods & services	Health	Transport	Communication	Recreation & culture	Education	Restaurants & hotels	Miscellaneous
COICOP[3]	-	-	0	01	02	03	04	05	06	07	08	09	10	11	12
Annual															
	ABJR	ABTH	ZAKW	ZWUN	ZAKY	ZALA	ZAVO	ZAVW	ZAWC	ZAWM	ZAWW	ZAXA	ZWUT	ZAXS	ZAYG
2000	603 349	6 941	596 408	58 563	24 617	35 479	105 654	35 667	8 987	89 656	13 356	72 217	9 634	68 424	74 154
2001	622 136	9 317	612 819	57 919	24 588	38 103	107 220	38 524	8 961	92 791	15 195	76 835	8 607	68 694	75 382
2002	644 441	10 328	634 113	58 356	25 197	41 607	108 675	42 613	9 173	96 033	15 933	80 446	7 517	70 500	78 063
Quarters															
2000 Q1	150 128	1 538	148 571	14 637	6 220	8 590	26 315	8 897	2 224	22 077	3 195	18 212	2 535	17 093	18 591
Q2	150 469	1 641	148 825	14 607	6 155	8 840	26 431	8 947	2 253	22 104	3 305	17 952	2 439	17 036	18 766
Q3	151 397	1 770	149 639	14 717	6 131	9 064	26 393	9 000	2 257	22 541	3 368	18 200	2 363	17 095	18 490
Q4	151 355	1 992	149 373	14 602	6 111	8 985	26 515	8 823	2 253	22 934	3 488	17 853	2 297	17 200	18 307
2001 Q1	153 291	1 944	151 347	14 612	6 059	9 119	26 691	9 297	2 337	22 840	3 712	18 605	2 274	17 162	18 639
Q2	153 965	2 391	151 574	14 146	6 137	9 379	26 757	9 439	2 226	22 840	3 784	19 072	2 209	17 003	18 582
Q3	156 368	2 484	153 884	14 328	6 193	9 675	26 868	9 725	2 188	23 453	3 802	19 393	2 128	17 310	18 821
Q4	158 512	2 498	156 014	14 833	6 199	9 930	26 904	10 063	2 210	23 658	3 897	19 765	1 996	17 219	19 340
2002 Q1	158 843	2 664	156 179	14 244	6 218	10 172	26 993	10 306	2 207	23 651	3 927	19 849	2 004	17 609	18 999
Q2	160 430	2 349	158 081	14 448	6 300	10 322	27 100	10 542	2 249	24 120	3 971	19 908	1 903	17 733	19 485
Q3	161 550	2 741	158 809	14 654	6 308	10 474	27 235	10 752	2 319	24 058	4 013	20 155	1 850	17 503	19 488
Q4	163 618	2 574	161 044	15 010	6 371	10 639	27 347	11 013	2 398	24 204	4 022	20 534	1 760	17 655	20 091
2003 Q1	163 230	3 057	160 173	15 104	6 351	10 720	27 437	10 482	2 449	24 476	4 062	20 632	1 830	17 362	19 268
Q2	164 308	2 599	161 709	15 173	6 374	10 963	27 418	10 729	2 451	24 428	4 119	21 011	1 940	17 361	19 742

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

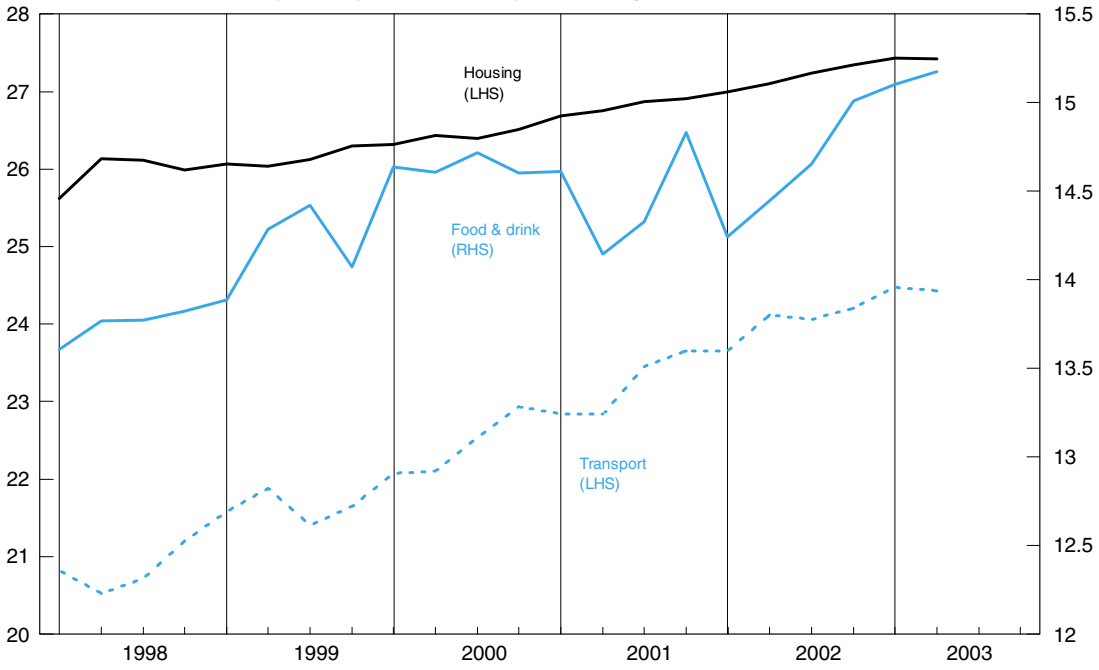
Household's Disposable Income and Consumption

Proportion of **Households' Income before tax**
(Current Prices), per cent



Household final consumption expenditure - component categories

chained volume measures
reference year 2000, £ thousand million



2.7 Gross fixed capital formation
Chained volume measures

Reference year 2000, £ million

	Analysis by sector							Analysis by asset				
			Public corporations[2]		Private sector							
	Business investment[1]	General government	NHS trusts	Transfer costs of non-produced assets	Dwellings	Transfer costs of non-produced assets	Total+	Transport equipment	Other machinery and equipment	Dwellings	Other building and structures[3]	Intangible fixed assets
Annual												
	NPEL	DLWF	DFTI	DLWH	DFEA	DLWI	NPQT	DLWL	DLWO	DFEG	DLWT	EQDO
1998	104 385	10 086	1 522	–278	26 377	10 510	153 148	16 455	53 491	28 490	50 677	4 782
1999	107 359	9 935	1 441	4	25 508	11 485	155 576	15 128	56 849	27 372	51 760	4 758
2000	112 302	10 412	1 680	6	25 604	11 206	161 210	13 444	62 698	27 394	52 708	4 966
2001	116 337	11 744	1 862	–55	25 937	11 207	167 032	15 296	65 290	27 999	53 524	4 923
2002	112 306	13 013	1 557	–14	30 914	12 226	170 002	16 053	61 461	32 973	54 169	5 346
Quarterly												
1998 Q1	25 149	2 501	413	–78	6 574	2 448	37 275	4 036	12 808	7 085	12 517	1 103
Q2	25 667	2 291	385	–82	6 824	2 955	38 029	4 017	12 987	7 374	12 780	1 178
Q3	26 360	2 576	354	–76	6 532	2 772	38 621	4 137	13 352	7 125	12 886	1 264
Q4	27 209	2 718	370	–42	6 447	2 335	39 223	4 265	14 344	6 906	12 494	1 237
1999 Q1	27 146	2 512	363	–10	6 345	2 481	38 907	3 986	13 909	6 735	13 162	1 152
Q2	26 336	2 516	322	2	6 536	2 662	38 331	3 592	13 991	7 181	12 477	1 183
Q3	26 785	2 467	379	5	6 053	3 019	38 674	3 763	14 558	6 423	12 763	1 196
Q4	27 092	2 440	377	7	6 574	3 323	39 664	3 787	14 391	7 033	13 358	1 227
2000 Q1	26 931	2 243	457	6	6 638	3 126	39 298	3 364	14 508	7 016	13 301	1 203
Q2	27 299	2 607	366	2	6 511	2 684	39 471	3 276	15 163	6 970	12 826	1 253
Q3	28 317	2 555	409	–1	6 389	2 722	40 417	3 290	16 038	6 819	12 985	1 246
Q4	29 755	3 007	448	–1	6 066	2 674	42 024	3 514	16 989	6 589	13 596	1 264
2001 Q1	29 551	2 321	482	15	6 499	2 839	41 707	3 463	16 565	7 044	13 403	1 232
Q2	29 407	2 989	545	–13	6 327	2 814	42 069	3 911	16 257	6 769	13 910	1 222
Q3	29 156	3 129	414	–25	6 617	2 683	41 974	4 037	16 268	7 142	13 293	1 234
Q4	28 223	3 305	421	–32	6 494	2 871	41 282	3 885	16 200	7 044	12 918	1 235
2002 Q1	27 636	3 154	172	13	6 939	3 023	40 937	3 882	15 364	7 446	12 998	1 247
Q2	28 731	3 165	449	16	7 431	3 071	42 863	4 025	16 147	7 910	13 446	1 335
Q3	27 890	3 366	505	–20	8 014	3 168	42 923	4 048	15 077	8 553	13 894	1 351
Q4	28 049	3 328	431	–23	8 530	2 964	43 279	4 098	14 873	9 064	13 831	1 413
2003 Q1	27 986	3 905	364	–26	7 632	3 113	42 974	4 079	15 268	8 185	14 053	1 389
Q2	28 537	3 764	426	–28	8 147	2 664	43 510	3 910	15 080	8 562	14 552	1 406
Percentage change, latest quarter on corresponding quarter of previous year												
1998 Q1	*19.0*	*6.8*	*29.1*		*–0.2*	*3.2*	*14.9*	*16.2*	*28.0*	*–2.6*	*11.7*	*–5.4*
Q2	*18.0*	*21.5*	*11.9*		*10.4*	*–30.9*	*13.6*	*25.7*	*16.0*	*9.8*	*11.0*	*–6.1*
Q3	*19.9*	*4.1*	*–6.6*		*0.7*	*–8.9*	*13.3*	*22.9*	*22.6*	*1.9*	*5.4*	*7.4*
Q4	*15.8*	*10.0*	*3.9*		*–5.6*	*–16.3*	*9.3*	*25.7*	*24.3*	*–5.3*	*–4.8*	*7.2*
1999 Q1	*7.9*	*0.4*	*–12.1*		*–3.5*	*1.3*	*4.4*	*–1.2*	*8.6*	*–4.9*	*5.2*	*4.4*
Q2	*2.6*	*9.8*	*–16.4*		*–4.2*	*–9.9*	*0.8*	*–10.6*	*7.7*	*–2.6*	*–2.4*	*0.4*
Q3	*1.6*	*–4.2*	*7.1*		*–7.3*	*8.9*	*0.1*	*–9.0*	*9.0*	*–9.9*	*–1.0*	*–5.4*
Q4	*–0.4*	*–10.2*	*1.9*		*2.0*	*42.3*	*1.1*	*–11.2*	*0.3*	*1.8*	*6.9*	*–0.8*
2000 Q1	*–0.8*	*–10.7*	*25.9*		*4.6*	*26.0*	*1.0*	*–15.6*	*4.3*	*4.2*	*1.1*	*4.4*
Q2	*3.7*	*3.6*	*13.7*		*–0.4*	*0.8*	*3.0*	*–8.8*	*8.4*	*–2.9*	*2.8*	*5.9*
Q3	*5.7*	*3.6*	*7.9*		*5.6*	*–9.8*	*4.5*	*–12.6*	*10.2*	*6.2*	*1.7*	*4.2*
Q4	*9.8*	*23.2*	*18.8*		*–7.7*	*–19.5*	*5.9*	*–7.2*	*18.1*	*–6.3*	*1.8*	*3.0*
2001 Q1	*9.7*	*3.5*	*5.5*		*–2.1*	*–9.2*	*6.1*	*2.9*	*14.2*	*0.4*	*0.8*	*2.4*
Q2	*7.7*	*14.7*	*48.9*		*–2.8*	*4.8*	*6.6*	*19.4*	*7.2*	*–2.9*	*8.5*	*–2.5*
Q3	*3.0*	*22.5*	*1.2*		*3.6*	*–1.4*	*3.9*	*22.7*	*1.4*	*4.7*	*2.4*	*–1.0*
Q4	*–5.1*	*9.9*	*–6.0*		*7.1*	*7.4*	*–1.8*	*10.6*	*–4.6*	*6.9*	*–5.0*	*–2.3*
2002 Q1	*–6.5*	*35.9*	*–64.3*		*6.8*	*6.5*	*–1.8*	*12.1*	*–7.3*	*5.7*	*–3.0*	*1.2*
Q2	*–2.3*	*5.9*	*–17.6*		*17.4*	*9.1*	*1.9*	*2.9*	*–0.7*	*16.9*	*–3.3*	*9.2*
Q3	*–4.3*	*7.6*	*22.0*		*21.1*	*18.1*	*2.3*	*0.3*	*–7.3*	*19.8*	*4.5*	*9.5*
Q4	*–0.6*	*0.7*	*2.4*		*31.4*	*3.2*	*4.8*	*5.5*	*–8.2*	*28.7*	*7.1*	*14.4*
2003 Q1	*1.3*	*23.8*	+		*10.0*	*3.0*	*5.0*	*5.1*	*–0.6*	*9.9*	*8.1*	*11.4*
Q2	*–0.7*	*18.9*	*–5.1*		*9.6*	*–13.3*	*1.5*	*–2.9*	*–6.6*	*8.2*	*8.2*	*5.3*

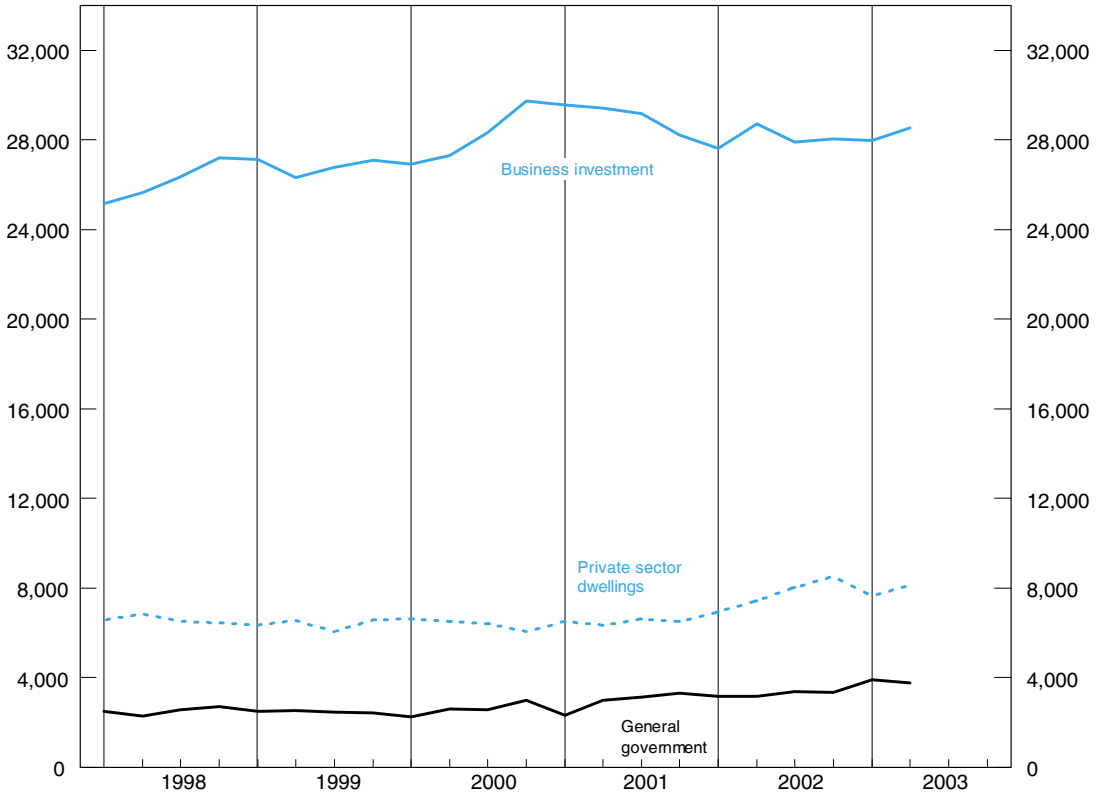
1 Not including dwellings and costs associated with the transfer of ownership of non-produced assets.

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

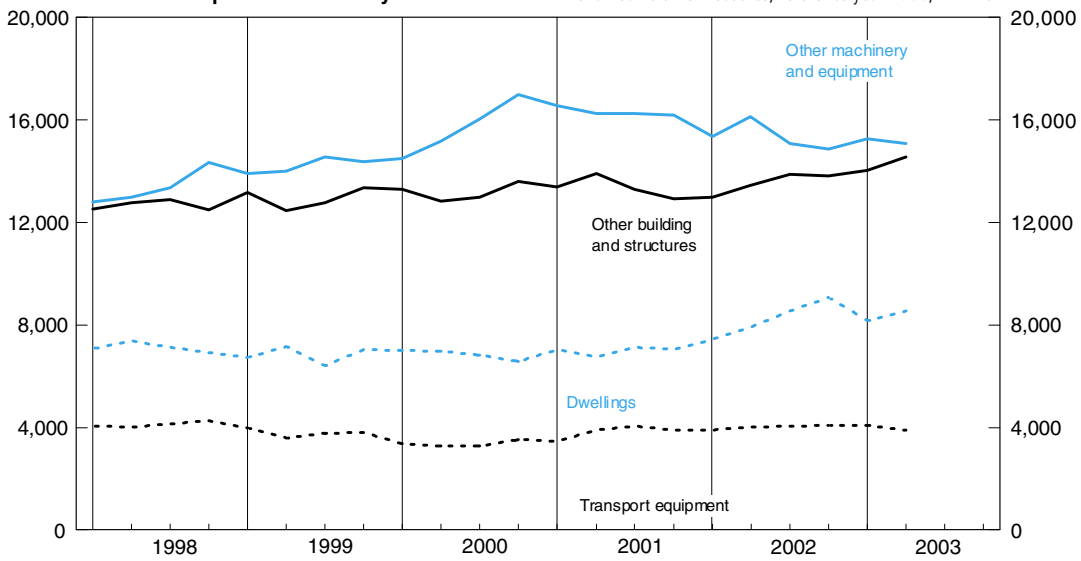
3 Including costs associated with transfer of ownership of non-produced assets.

Source: Office for National Statistics; Enquiries 020 7533 6010

Gross fixed capital formation-by sector Chained volume measures, reference year 2000, £ million



Gross fixed capital formation-by asset Chained volume measures, reference year 2000, £ million



2.8 Gross value added, chained volume indices at basic prices, by category of output,[1,3]

2000 = 100

	Production						Service industries					
	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	Gross value added at basic prices
2000 Weights[2]	*11*	*30*	*181*	*19*	*231*	*54*	*157*	*83*	*239*	*226*	*705*	*1000*
	GDQA	CKYX	CKYY	CKYZ	CKYW	GDQB	GDQE	GDQH	GDQN	GDQU	GDQS	CGCE
1998	97.4	99.1	96.9	95.3	97.0	98.4	94.4	85.6	92.2	95.1	92.8	93.9
1999	100.6	103.3	97.6	97.9	98.1	98.7	97.3	91.2	95.6	97.1	95.9	96.3
2000	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2001	89.9	94.5	98.7	102.4	98.4	103.4	101.8	104.0	103.9	101.4	102.6	101.9
2002	99.7	94.3	95.2	103.7	95.8	111.2	106.1	105.4	105.8	103.1	105.0	103.3
Quarterly												
1998 Q1	96.7	97.9	97.3	93.6	97.0	101.1	93.3	82.6	89.7	94.2	91.0	92.8
Q2	98.7	98.9	97.2	95.2	97.2	97.6	93.6	84.5	91.0	94.8	92.0	93.4
Q3	97.2	99.2	97.0	95.8	97.1	97.4	94.7	86.7	93.1	95.7	93.5	94.4
Q4	96.8	100.4	96.2	96.6	96.6	97.5	96.0	88.7	95.1	95.8	94.7	95.1
1999 Q1	101.2	102.2	96.6	96.9	97.1	97.6	96.3	89.1	94.9	96.2	94.9	95.3
Q2	100.2	103.3	96.9	97.1	97.5	98.0	96.8	90.5	95.0	96.7	95.4	95.7
Q3	100.0	104.5	98.3	98.4	98.8	99.5	97.6	91.3	95.3	97.6	96.0	96.6
Q4	101.1	103.0	98.7	99.1	99.1	99.8	98.3	93.9	97.3	98.0	97.3	97.6
2000 Q1	100.7	103.8	99.2	98.7	99.6	102.3	99.0	97.0	98.0	99.0	98.4	98.9
Q2	100.1	102.4	99.8	101.0	100.2	100.0	99.6	99.2	99.2	99.8	99.5	99.7
Q3	101.4	98.9	100.0	99.9	99.9	98.3	100.9	101.4	100.9	100.7	100.9	100.6
Q4	97.8	94.9	100.9	100.3	100.3	99.4	100.5	102.4	101.9	100.5	101.2	100.9
2001 Q1	90.4	93.3	100.8	104.5	100.1	101.5	101.2	104.1	102.9	100.7	101.9	101.7
Q2	88.7	96.3	98.7	102.8	98.7	102.8	101.4	104.6	103.5	101.0	102.4	101.7
Q3	89.0	95.0	98.6	101.0	98.3	103.8	101.7	103.9	104.0	101.2	102.6	101.8
Q4	91.4	93.4	96.6	101.2	96.5	105.7	103.2	103.6	105.2	102.4	103.7	102.3
2002 Q1	98.5	94.1	95.8	101.4	96.0	108.8	104.6	104.4	104.6	102.7	104.0	102.5
Q2	99.4	99.1	94.6	104.2	96.0	110.0	105.7	104.4	105.3	102.9	104.5	102.9
Q3	100.4	90.1	95.6	105.7	95.7	112.0	106.6	105.8	106.3	103.0	105.3	103.5
Q4	100.7	93.9	94.8	103.6	95.4	114.1	107.6	107.0	107.1	103.8	106.1	104.1
2003 Q1	98.8	93.2	94.7	101.6	95.1	112.0	107.1	106.0	108.7	104.4	106.6	104.3
Q2	99.3	91.2	95.2	102.8	95.3	116.9	108.0	105.4	108.4	105.0	106.9	104.8
Q3	..	..	..	..	95.3	..	108.5	..	..	..	107.7	..
Percentage change, latest quarter on corresponding quarter of last year												
1998 Q1	*3.2*	*0.3*	*1.1*	*3.9*	*1.3*	*5.0*	*4.9*	*5.4*	*6.2*	*1.9*	*4.4*	*3.5*
Q2	*4.2*	*2.2*	*1.2*	*2.5*	*1.5*	*0.4*	*3.8*	*8.5*	*6.3*	*2.3*	*4.8*	*3.5*
Q3	*1.9*	*1.3*	*0.5*	*2.6*	*0.8*	*0.3*	*3.8*	*9.2*	*7.3*	*3.2*	*5.4*	*3.7*
Q4	*2.0*	*4.4*	*–0.3*	*3.9*	*0.5*	*–1.2*	*3.3*	*8.4*	*6.7*	*3.1*	*5.0*	*3.4*
1999 Q1	*4.7*	*4.4*	*–0.7*	*3.5*	*0.1*	*–3.5*	*3.2*	*7.9*	*5.8*	*2.1*	*4.3*	*2.7*
Q2	*1.5*	*4.4*	*–0.3*	*2.0*	*0.3*	*0.4*	*3.4*	*7.1*	*4.4*	*2.0*	*3.7*	*2.5*
Q3	*2.9*	*5.3*	*1.3*	*2.7*	*1.8*	*2.2*	*3.1*	*5.3*	*2.4*	*2.0*	*2.7*	*2.3*
Q4	*4.4*	*2.6*	*2.6*	*2.6*	*2.6*	*2.4*	*2.4*	*5.9*	*2.3*	*2.3*	*2.7*	*2.6*
2000 Q1	*–0.5*	*1.6*	*2.7*	*1.9*	*2.6*	*4.8*	*2.8*	*8.9*	*3.3*	*2.9*	*3.7*	*3.8*
Q2	*–0.1*	*–0.9*	*3.0*	*4.0*	*2.8*	*2.0*	*2.9*	*9.6*	*4.4*	*3.2*	*4.3*	*4.2*
Q3	*1.4*	*–5.4*	*1.7*	*1.5*	*1.1*	*–1.2*	*3.4*	*11.1*	*5.9*	*3.2*	*5.1*	*4.1*
Q4	*–3.3*	*–7.9*	*2.2*	*1.2*	*1.2*	*–0.4*	*2.2*	*9.1*	*4.7*	*2.6*	*4.0*	*3.4*
2001 Q1	*–10.2*	*–10.1*	*1.6*	*5.9*	*0.5*	*–0.8*	*2.2*	*7.3*	*5.0*	*1.7*	*3.6*	*2.8*
Q2	*–11.4*	*–6.0*	*–1.1*	*1.8*	*–1.5*	*2.8*	*1.8*	*5.4*	*4.3*	*1.2*	*2.9*	*2.0*
Q3	*–12.2*	*–3.9*	*–1.4*	*1.1*	*–1.6*	*5.6*	*0.8*	*2.5*	*3.1*	*0.5*	*1.7*	*1.2*
Q4	*–6.5*	*–1.6*	*–4.3*	*0.9*	*–3.8*	*6.3*	*2.7*	*1.2*	*3.2*	*1.9*	*2.5*	*1.4*
2002 Q1	*9.0*	*0.9*	*–5.0*	*–3.0*	*–4.1*	*7.2*	*3.4*	*0.3*	*1.7*	*2.0*	*2.1*	*0.8*
Q2	*12.1*	*2.9*	*–4.2*	*1.4*	*–2.7*	*7.0*	*4.2*	*–0.2*	*1.7*	*1.9*	*2.1*	*1.2*
Q3	*12.8*	*–5.2*	*–3.0*	*4.7*	*–2.6*	*7.9*	*4.8*	*1.8*	*2.2*	*1.8*	*2.6*	*1.7*
Q4	*10.2*	*0.5*	*–1.9*	*2.4*	*–1.1*	*7.9*	*4.3*	*3.3*	*1.8*	*1.4*	*2.3*	*1.8*
2003 Q1	*0.3*	*–1.0*	*–1.1*	*0.2*	*–0.9*	*2.9*	*2.4*	*1.5*	*3.9*	*1.7*	*2.5*	*1.8*
Q2	*–0.1*	*–8.0*	*0.6*	*–1.3*	*–0.7*	*6.3*	*2.2*	*1.0*	*2.9*	*2.0*	*2.3*	*1.8*
Q3	..	..	..	..	*–0.4*	..	*1.8*	..	..	..	*2.3*	..

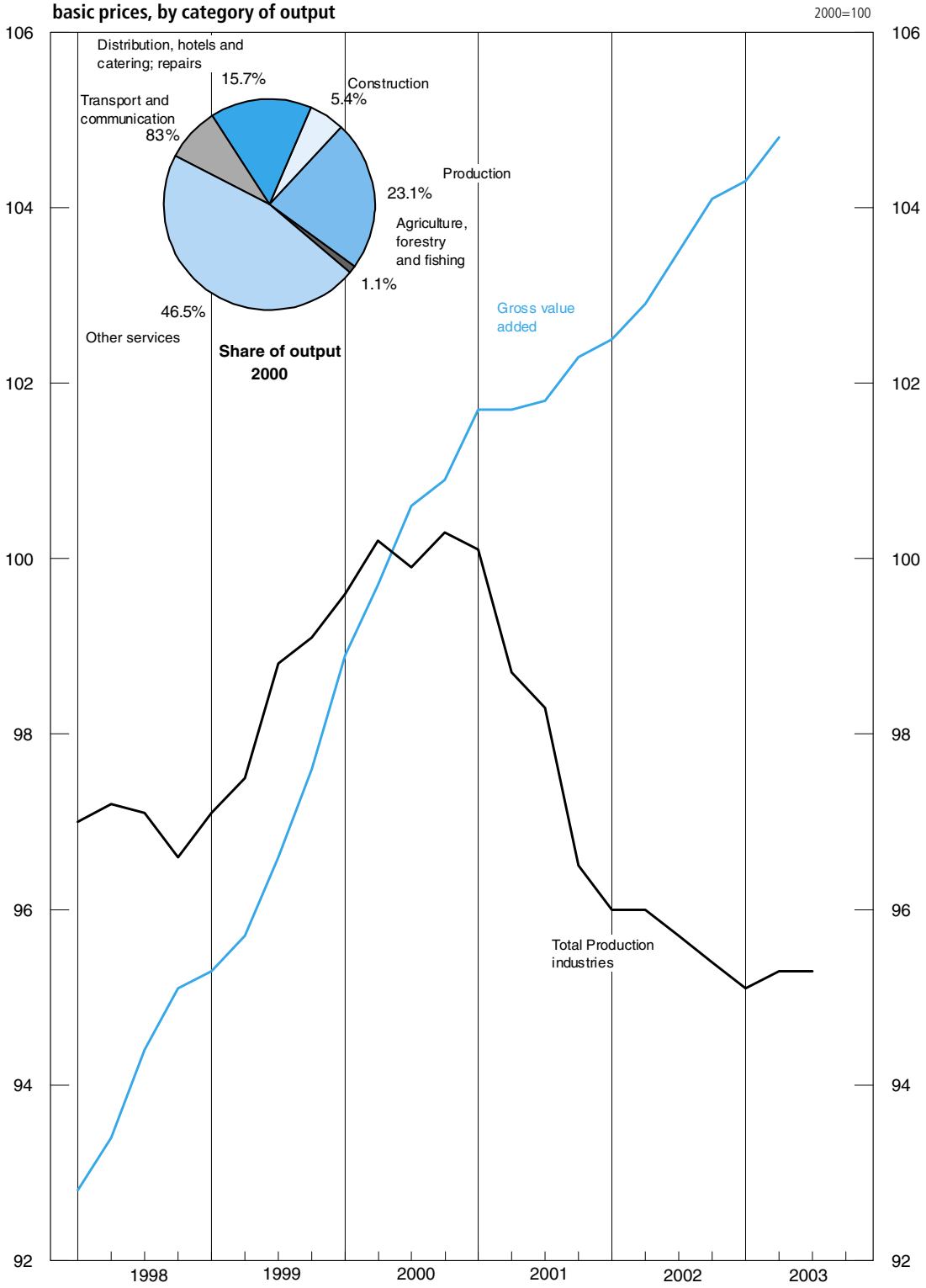
1 Estimates cannot be regarded as accurate to the last digit shown.

2 Weights may not sum to the totals due to rounding. The weights shown are in proportion to total gross value added (GVA) in 2000, and are used to combine the industry output indices to calculate the totals for 2001 and 2002. For 2000 and earlier, totals are calculated using the equivalent weights for the previous year (e.g. totals for 2000 use 1999 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

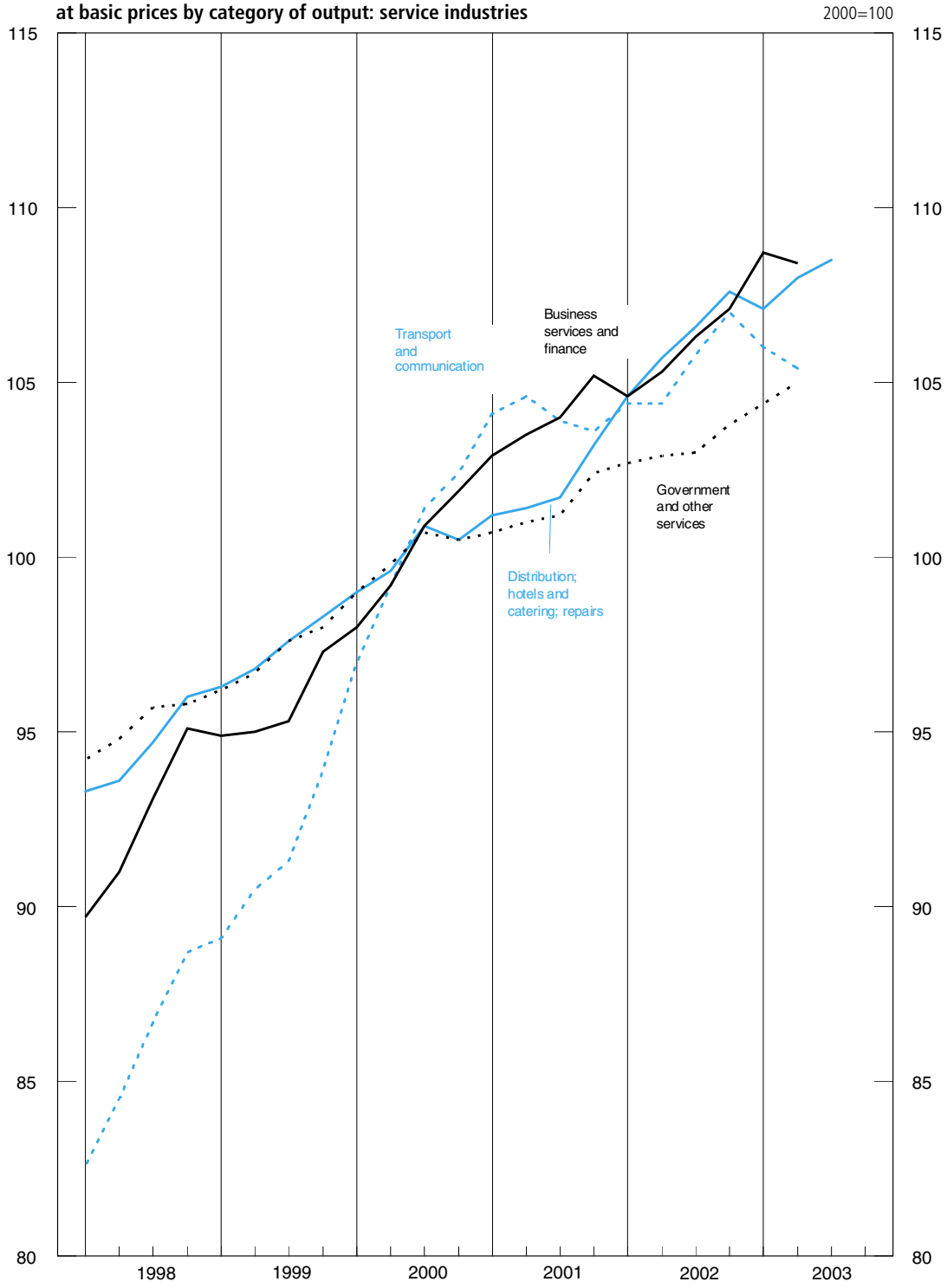
2000 = 100

	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
2000 weights	*123*	*33*	*51*	*32*	*55*	*154*	*75*	*56*	*57*	*62*	*51*	*-45*	*705*
Annual													
	GDQC	GDQD	GDQF	GDQG	GDQI	GDQK	GDQL	GDQO	GDQP	GDQQ	GDQR	GDQJ	GDQS
1999	96.9	98.7	93.8	87.1	95.0	92.9	100.6	97.7	98.4	96.1	96.3	92.9	95.9
2000	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
2001	102.3	100.2	101.6	107.9	105.2	104.5	102.3	100.5	99.5	103.3	102.0	104.8	102.6
2002	107.3	101.9	102.8	109.4	106.5	107.3	104.3	102.0	99.8	107.8	102.4	109.2	105.0
Quarterly													
1999 Q1	96.2	96.9	93.5	82.4	93.1	92.0	101.0	97.1	97.3	95.8	94.6	91.8	94.9
Q2	96.5	98.2	93.1	86.4	95.4	91.4	101.5	97.5	98.3	95.4	95.6	93.3	95.4
Q3	97.2	99.3	93.3	88.1	94.4	92.7	100.6	98.1	99.4	96.1	96.9	93.6	96.0
Q4	97.8	100.2	95.5	91.4	97.0	95.4	99.2	98.0	98.6	97.1	98.2	93.1	97.3
2000 Q1	98.3	101.6	98.1	95.1	98.7	96.8	99.2	99.3	99.3	98.2	99.2	96.3	98.4
Q2	99.6	99.6	100.2	97.6	99.8	99.4	98.8	99.9	100.2	99.5	99.5	100.2	99.5
Q3	101.0	100.3	101.6	101.2	100.3	101.4	100.2	100.5	100.6	101.1	100.7	100.5	100.9
Q4	101.1	98.5	100.1	106.1	101.2	102.4	101.8	100.4	100.0	101.2	100.5	103.0	101.2
2001 Q1	101.5	99.8	101.2	108.5	104.1	103.6	101.8	100.1	99.7	101.7	101.3	105.3	101.9
Q2	101.7	100.0	101.7	109.0	104.3	103.9	102.1	100.2	99.1	102.8	101.9	103.5	102.4
Q3	102.0	100.5	101.8	107.4	105.1	104.5	102.5	100.4	99.2	103.4	101.8	104.7	102.6
Q4	104.0	100.4	101.7	106.5	107.3	105.7	103.0	101.2	100.1	105.2	103.1	105.8	103.7
2002 Q1	105.6	100.8	102.2	107.9	104.1	105.3	103.5	101.5	99.9	105.9	103.5	104.8	104.0
Q2	106.8	101.8	102.1	108.0	105.5	106.9	103.6	101.8	99.8	107.4	102.1	108.3	104.5
Q3	108.0	101.7	102.8	110.4	106.9	108.1	104.6	101.9	99.5	108.2	102.0	110.1	105.3
Q4	108.7	103.2	104.2	111.5	109.6	109.0	105.3	102.7	100.0	109.5	102.1	113.6	106.1
2003 Q1	108.2	103.3	102.6	111.3	110.1	111.7	105.5	102.7	100.7	111.1	102.0	115.4	106.6
Q2	108.9	104.6	101.1	112.2	112.8	111.8	105.8	102.8	101.2	111.3	103.8	121.0	106.9
Q3	..	..	..	..	..	..	..	..	..	..	..	..	107.7
Percentage change, quarter on corresponding quarter of previous year													
Quarterly													
1999 Q1	*3.6*	*1.9*	*2.6*	*17.5*	*1.7*	*7.6*	*5.4*	*0.2*	*3.6*	*2.1*	*2.9*	*5.5*	*4.3*
Q2	*3.2*	*4.2*	*0.6*	*18.5*	*4.0*	*4.3*	*4.9*	*–0.2*	*4.1*	*1.8*	*2.4*	*4.1*	*3.7*
Q3	*2.4*	*6.0*	*–1.0*	*16.4*	*1.6*	*2.2*	*2.4*	*–0.2*	*4.0*	*2.0*	*2.0*	*0.3*	*2.7*
Q4	*2.0*	*3.8*	*0.7*	*14.7*	*6.4*	*1.8*	*–0.9*	*0.4*	*2.1*	*3.3*	*3.0*	*0.4*	*2.7*
2000 Q1	*2.2*	*4.9*	*4.9*	*15.4*	*6.0*	*5.2*	*–1.8*	*2.3*	*2.1*	*2.5*	*4.9*	*4.9*	*3.7*
Q2	*3.2*	*1.4*	*7.6*	*13.0*	*4.6*	*8.8*	*–2.7*	*2.5*	*1.9*	*4.3*	*4.1*	*7.4*	*4.3*
Q3	*3.9*	*1.0*	*8.9*	*14.9*	*6.3*	*9.4*	*–0.4*	*2.4*	*1.2*	*5.2*	*3.9*	*7.4*	*5.1*
Q4	*3.4*	*–1.7*	*4.8*	*16.1*	*4.3*	*7.3*	*2.6*	*2.4*	*1.4*	*4.2*	*2.3*	*10.6*	*4.0*
2001 Q1	*3.3*	*–1.8*	*3.2*	*14.1*	*5.5*	*7.0*	*2.6*	*0.8*	*0.4*	*3.6*	*2.1*	*9.3*	*3.6*
Q2	*2.1*	*0.4*	*1.5*	*11.7*	*4.5*	*4.5*	*3.3*	*0.3*	*–1.1*	*3.3*	*2.4*	*3.3*	*2.9*
Q3	*1.0*	*0.2*	*0.2*	*6.1*	*4.8*	*3.1*	*2.3*	*–0.1*	*–1.4*	*2.3*	*1.1*	*4.2*	*1.7*
Q4	*2.9*	*1.9*	*1.6*	*0.4*	*6.0*	*3.2*	*1.2*	*0.8*	*0.1*	*4.0*	*2.6*	*2.7*	*2.5*
2002 Q1	*4.0*	*1.0*	*1.0*	*–0.6*	*0.0*	*1.6*	*1.7*	*1.4*	*0.2*	*4.1*	*2.2*	*–0.5*	*2.1*
Q2	*5.0*	*1.8*	*0.4*	*–0.9*	*1.2*	*2.9*	*1.5*	*1.6*	*0.7*	*4.5*	*0.2*	*4.6*	*2.1*
Q3	*5.9*	*1.2*	*1.0*	*2.8*	*1.7*	*3.4*	*2.0*	*1.5*	*0.3*	*4.6*	*0.2*	*5.2*	*2.6*
Q4	*4.5*	*2.8*	*2.5*	*4.7*	*2.1*	*3.1*	*2.2*	*1.5*	*–0.1*	*4.1*	*–1.0*	*7.4*	*2.3*
2003 Q1	*2.5*	*2.5*	*0.4*	*3.2*	*5.8*	*6.1*	*1.9*	*1.2*	*0.8*	*4.9*	*–1.4*	*10.1*	*2.5*
Q2	*2.0*	*2.8*	*–1.0*	*3.9*	*6.9*	*4.6*	*2.1*	*1.0*	*1.4*	*3.6*	*1.7*	*11.7*	*2.3*
Q3	..	..	..	..	..	..	..	..	..	..	..	..	*2.3*

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

Gross value added chained volume indices
at basic prices by category of output: service industries



Source : see data on Table 2.8

2.10 Summary captital accounts and net lending/net borrowing

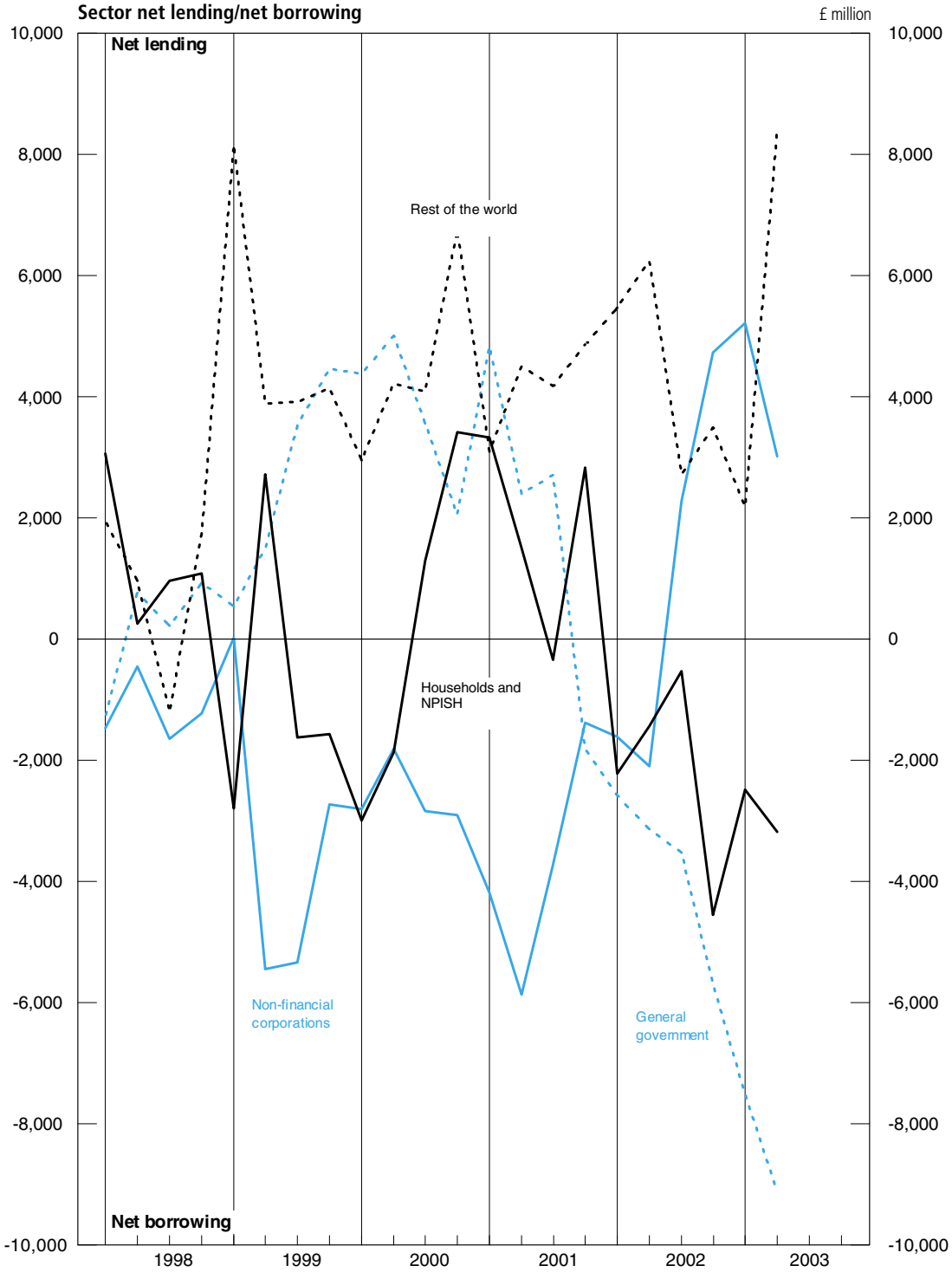
£ million

	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
1999	89 423	2 415	99 913	1 051	–5 325	–	8 073	–37	23 013	–4 014	9 867	–888
2000	95 286	1 638	101 766	856	–11 801	–	10 739	–37	26 728	–2 204	10 284	–776
2001	90 384	3 304	101 935	1 139	–9 603	–	7 255	25	23 652	–4 791	11 659	–915
2002	102 182	3 440	95 846	1 416	11 278	–	7 109	–36	2 451	–5 368	13 112	–1 087
Quarterly												
1999 Q1	26 333	685	25 503	284	–4 839	–	1 080	–2	4 270	–1 312	2 675	–256
Q2	18 713	483	23 343	299	–68	–	2 613	–8	4 528	–708	2 546	–224
Q3	21 034	676	25 692	233	1 776	–	2 265	–13	6 692	–1 005	2 368	–202
Q4	23 343	571	25 375	235	–2 194	–	2 115	–14	7 523	–989	2 278	–206
2000 Q1	23 189	588	25 326	208	609	–	2 151	–16	7 280	–922	2 161	–185
Q2	23 907	324	24 673	185	–3 154	–	2 416	–13	7 515	–139	2 554	–189
Q3	23 829	359	25 644	185	–2 947	–	3 170	–7	6 505	–575	2 563	–196
Q4	24 361	367	26 123	278	–6 309	–	3 002	–1	5 428	–568	3 006	–206
2001 Q1	23 318	599	26 317	253	–4 700	–	2 342	5	7 632	–776	2 251	–218
Q2	22 137	627	26 810	285	–290	–	2 232	8	6 426	–1 276	2 969	–220
Q3	22 334	719	25 159	314	–1 564	–	1 240	8	6 721	–1 142	3 112	–236
Q4	22 595	1 359	23 649	287	–3 049	–	1 441	4	2 873	–1 597	3 327	–241
2002 Q1	23 815	784	24 774	362	2 216	–	944	–3	1 581	–1 259	3 180	–278
Q2	22 093	708	23 216	327	2 054	–	1 214	–9	993	–1 074	3 295	–234
Q3	26 457	864	23 381	359	2 626	–	3 100	–12	1 029	–1 434	3 360	–239
Q4	29 817	1 084	24 475	368	4 382	–	1 851	–12	–1 152	–1 601	3 277	–336
2003 Q1	28 835	1 224	23 588	324	5 139	–	2 114	–8	–1 864	–2 107	3 739	–200
Q2	27 192	1 643	24 072	374	2 403	–	1 057	–3	–3 324	–2 381	3 651	–245

	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
1999	32 947	2 383	38 740	–138	–13 492	–13 361	10 020	–3 272	20 105	–
2000	36 732	2 300	39 249	–67	–10 375	–22 503	15 016	–150	18 012	–
2001	47 611	3 295	43 755	–152	–15 164	–16 883	8 117	7 303	16 627	–
2002	38 623	3 390	50 919	–176	3 277	4 205	–14 942	–8 730	17 920	–1 730
Quarterly										
1999 Q1	6 492	604	9 920	–27	17	–5 917	539	–2 797	8 158	–3 998
Q2	11 301	499	9 112	–36	–5 442	–2 673	1 498	2 724	3 893	–138
Q3	7 103	575	9 343	–40	–5 336	–476	3 521	–1 625	3 916	1 348
Q4	8 051	705	10 365	–35	–2 731	–4 295	4 462	–1 574	4 138	2 788
2000 Q1	6 840	553	10 410	–24	–2 812	–1 526	4 382	–2 993	2 949	–1 988
Q2	7 491	473	9 842	–16	–1 812	–5 557	5 011	–1 862	4 220	–2 588
Q3	10 251	616	9 585	–12	–2 839	–6 110	3 563	1 294	4 092	1 811
Q4	12 150	658	9 412	–15	–2 912	–9 310	2 060	3 411	6 751	2 765
2001 Q1	13 526	331	10 556	–25	–4 193	–7 047	4 823	3 326	3 091	–6 553
Q2	10 600	1 363	10 502	–36	–5 866	–2 530	2 401	1 497	4 498	–1 517
Q3	10 658	891	11 937	–44	–3 721	–2 812	2 703	–344	4 174	2 830
Q4	12 827	710	10 760	–47	–1 384	–4 494	–1 810	2 824	4 864	5 240
2002 Q1	9 070	639	11 971	–47	–1 618	1 275	–2 580	–2 215	5 469	–7 473
Q2	10 701	675	12 856	–45	–2 104	849	–3 142	–1 435	6 247	–5 638
Q3	10 841	984	12 395	–43	2 275	–462	–3 526	–527	2 716	8 335
Q4	8 011	1 092	13 697	–41	4 724	2 543	–5 694	–4 553	3 488	3 046
2003 Q1	9 338	1 136	13 006	–46	5 219	3 033	–7 510	–2 486	2 190	–1 080
Q2	9 017	1 118	13 367	–49	3 014	1 349	–9 111	–3 183	8 382	–2 251

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


Sector net lending/net borrowing
£ million
Net lending
Net borrowing
Rest of the world
Households and NPISH
Non-financial corporations
General government
10,000
8,000
6,000
4,000
2,000
0
-2,000
-4,000
-6,000
-8,000
-10,000
1998
1999
2000
2001
2002
2003

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
1993	9 375	100 167	9 132	–2 392	116 282	29 773	146 055	72 847	32 250	21 755	73 208	11.4
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	45 695	203 440	101 125	51 609	23 490	102 315	13.4
1997	13 978	145 693	9 561	–361	168 871	47 954	216 825	107 623	56 253	25 822	109 202	13.4
1998	11 696	150 975	10 837	753	174 261	49 713	223 974	107 266	51 578	30 659	116 708	13.4
1999	13 864	153 954	11 435	–1 801	177 452	48 118	225 570	115 547	61 104	30 673	110 023	12.2
2000	21 333	153 142	12 271	–2 941	183 805	60 554	244 359	125 694	55 846	37 355	118 665	12.4
2001	19 822	153 445	12 999	–1 555	184 711	73 575	258 286	145 661	75 867	39 578	112 625	11.2
2002	18 742	160 050	13 284	–3 114	188 962	64 517	253 479	130 271	61 362	35 576	123 208	11.6
Quarterly												
1993 Q1	2 171	25 292	2 259	–974	28 748	7 297	36 045	17 848	7 439	5 758	18 197	11.7
Q2	2 116	23 632	2 300	–359	27 689	7 190	34 879	18 617	9 185	5 385	16 262	10.3
Q3	2 456	25 593	2 305	–561	29 793	7 086	36 879	17 820	7 431	5 388	19 059	11.8
Q4	2 632	25 650	2 268	–498	30 052	8 200	38 252	18 562	8 195	5 224	19 690	12.0
1994 Q1	2 292	27 870	2 201	–443	31 920	9 245	41 165	19 053	8 537	5 276	22 112	13.2
Q2	3 050	29 556	2 148	–919	33 835	8 772	42 607	20 021	8 228	5 302	22 586	13.4
Q3	2 701	29 269	2 132	–1 109	32 993	8 423	41 416	21 013	9 459	5 163	20 403	11.9
Q4	2 733	30 755	2 160	–1 359	34 289	9 650	43 939	20 785	10 141	5 316	23 154	13.2
1995 Q1	2 966	31 234	2 264	–1 738	34 726	9 371	44 097	22 405	9 966	5 663	21 692	12.3
Q2	3 113	30 812	2 336	–1 588	34 673	9 963	44 636	22 201	9 264	6 057	22 435	12.7
Q3	2 934	31 531	2 379	–1 181	35 663	11 011	46 674	25 045	12 656	6 062	21 629	12.0
Q4	3 111	31 574	2 400	18	37 103	12 603	49 706	25 980	14 332	6 316	23 726	12.9
1996 Q1	3 523	32 645	2 386	–800	37 754	11 196	48 950	25 790	13 234	5 952	23 160	12.4
Q2	3 929	33 047	2 366	–102	39 240	12 391	51 631	23 978	12 135	5 759	27 653	14.5
Q3	4 081	33 895	2 362	–208	40 130	10 633	50 763	25 201	12 624	5 881	25 562	13.3
Q4	4 169	33 921	2 379	152	40 621	11 475	52 096	26 156	13 616	5 898	25 940	13.4
1997 Q1	3 885	36 710	2 337	–23	42 909	10 999	53 908	24 839	12 414	5 966	29 069	14.7
Q2	3 288	36 897	2 381	239	42 805	11 864	54 669	27 598	15 386	6 396	27 071	13.3
Q3	3 448	36 127	2 414	–506	41 483	14 105	55 588	27 741	15 588	6 497	27 847	13.6
Q4	3 357	35 959	2 429	–71	41 674	10 986	52 660	27 445	12 865	6 963	25 215	12.2
1998 Q1	3 160	36 913	2 629	107	42 809	13 933	56 742	29 295	15 180	7 405	27 447	13.1
Q2	3 103	36 759	2 670	53	42 585	11 731	54 316	25 942	11 931	7 517	28 374	13.2
Q3	2 779	39 114	2 727	315	44 935	11 776	56 711	26 104	11 712	7 916	30 607	13.8
Q4	2 654	38 189	2 811	278	43 932	12 273	56 205	25 925	12 755	7 821	30 280	13.6
1999 Q1	2 519	37 823	2 819	–302	42 859	8 167	51 026	19 666	8 842	7 488	31 360	14.4
Q2	3 293	39 464	2 832	–440	45 149	14 207	59 356	36 389	23 607	7 302	22 967	10.2
Q3	4 056	37 706	2 865	–645	43 982	11 327	55 309	28 899	14 177	7 718	26 410	11.6
Q4	3 996	38 961	2 919	–414	45 462	14 417	59 879	30 593	14 478	8 165	29 286	12.6
2000 Q1	4 695	39 079	2 914	–702	45 986	14 693	60 679	31 227	14 708	8 722	29 452	12.4
Q2	5 252	38 226	3 015	–830	45 663	14 349	60 012	30 367	13 071	9 265	29 645	12.5
Q3	5 580	37 789	3 135	–799	45 705	15 258	60 963	31 061	12 573	9 504	29 902	12.4
Q4	5 806	38 048	3 207	–610	46 451	16 254	62 705	33 039	15 494	9 864	29 666	12.3
2001 Q1	5 446	38 175	3 234	–1 070	45 785	18 874	64 659	35 754	16 047	10 322	28 905	11.6
Q2	5 407	38 252	3 250	–486	46 423	18 453	64 876	36 875	19 638	9 980	28 001	11.2
Q3	4 816	38 277	3 261	–97	46 257	21 365	67 622	40 074	22 883	10 091	27 548	10.9
Q4	4 153	38 741	3 254	98	46 246	14 883	61 129	32 958	17 299	9 185	28 171	11.0
2002 Q1	4 346	39 812	3 272	–669	46 761	17 546	64 307	35 610	18 902	8 987	28 697	11.0
Q2	4 652	39 025	3 298	–713	46 262	15 656	61 918	34 258	16 742	8 941	27 660	10.6
Q3	4 618	41 042	3 339	–800	48 199	15 793	63 992	32 061	15 403	8 790	31 931	11.9
Q4	5 126	40 171	3 375	–932	47 740	15 522	63 262	28 342	10 315	8 858	34 920	12.8
2003 Q1	5 261	40 674	3 420	–581	48 774	18 874	67 648	33 684	16 638	8 631	33 964	12.3
Q2	4 080	42 453	3 451	292	50 276	18 331	68 607	36 599	19 257	8 768	32 008	11.7

1 Quarterly alignment adjustment included in this series.
2 Total resources equals total uses.

Source: Office for National Statistics; Enquiries 020 7533 6014

Private Non-fictional corporations: allocation of primary income account

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

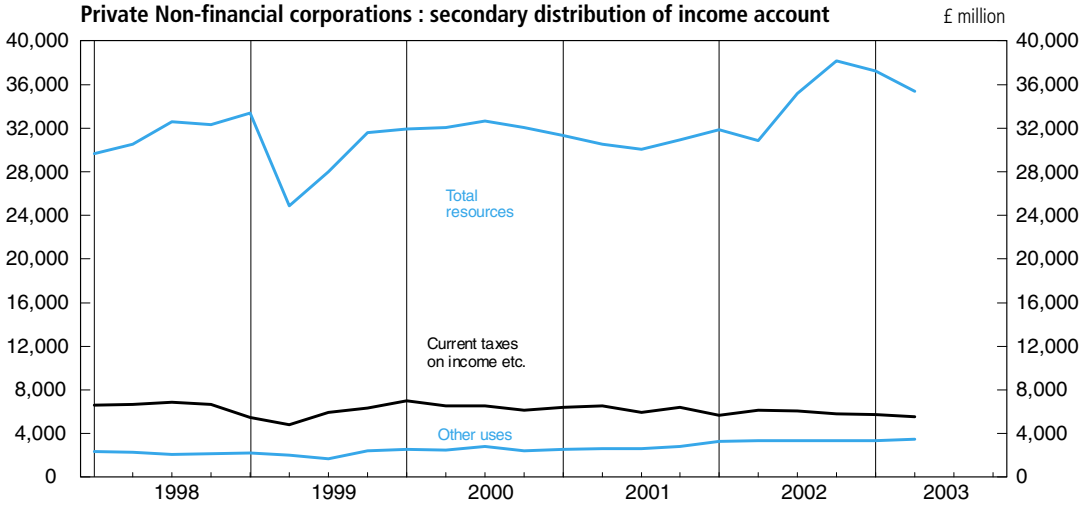
£ million

	Secondary Distribution of Income Account						Capital Account					
	Resources			Uses			Changes in liabilities & net worth		Changes in assets			
	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]	Net lending (+) or borrowing (-) [1,7]
Annual												
	RPBO	NROQ	RPKY	RPLA	NROO	RPKZ	NROP	RPXH	ROAW	DLQY	NRON	RQBV
1993	73 208	8 749	81 957	13 150	9 056	59 751	224	59 975	54 931	238	521	4 285
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	102 315	8 420	110 735	23 080	9 938	77 717	428	78 145	72 854	1 672	263	3 356
1997	109 202	7 097	116 299	28 558	7 576	80 165	671	80 836	81 317	3 949	401	–4 831
1998	116 708	8 390	125 098	26 877	8 834	89 387	1 081	90 468	89 848	4 533	1 287	–5 200
1999	110 023	7 875	117 898	22 608	8 444	86 846	958	87 804	93 756	6 174	1 036	–13 162
2000	118 665	9 990	128 655	26 188	10 403	92 064	405	92 469	96 329	5 512	768	–10 140
2001	112 625	10 218	122 843	25 367	10 629	86 847	1 633	88 480	99 045	2 890	1 069	–14 524
2002	123 208	12 841	136 049	23 752	13 263	99 034	2 292	101 326	94 330	1 559	1 197	4 240
Quarterly												
1993 Q1	18 197	2 300	20 497	3 577	2 376	14 544	71	14 615	13 622	–308	118	1 183
Q2	16 262	2 203	18 465	3 159	2 280	13 026	82	13 108	13 481	76	134	–583
Q3	19 059	2 102	21 161	3 366	2 179	15 616	74	15 690	13 510	388	139	1 653
Q4	19 690	2 144	21 834	3 048	2 221	16 565	–3	16 562	14 318	82	130	2 032
1994 Q1	22 112	1 673	23 785	3 206	1 759	18 820	82	18 902	13 699	160	136	4 907
Q2	22 586	1 686	24 272	3 887	1 778	18 607	96	18 703	13 120	2 024	119	3 440
Q3	20 403	1 498	21 901	4 076	1 591	16 234	120	16 354	14 130	193	124	1 907
Q4	23 154	1 696	24 850	3 916	1 789	19 145	111	19 256	14 918	1 527	151	2 660
1995 Q1	21 692	1 825	23 517	4 252	1 922	17 343	127	17 470	14 794	–496	121	3 051
Q2	22 435	1 936	24 371	5 420	2 032	16 919	98	17 017	16 117	2 111	125	–1 336
Q3	21 629	1 953	23 582	4 368	2 049	17 165	102	17 267	16 460	1 714	87	–994
Q4	23 726	1 990	25 716	4 913	2 101	18 702	106	18 808	17 073	1 213	55	467
1996 Q1	23 160	2 238	25 398	5 419	3 336	16 643	125	16 768	17 261	1 095	63	–1 651
Q2	27 653	2 219	29 872	5 148	2 369	22 355	102	22 457	17 599	837	71	3 950
Q3	25 562	1 994	27 556	6 334	2 124	19 098	96	19 194	18 566	127	57	444
Q4	25 940	1 969	27 909	6 179	2 109	19 621	105	19 726	19 428	–387	72	613
1997 Q1	29 069	1 771	30 840	6 642	1 888	22 310	233	22 543	19 359	1 357	64	1 763
Q2	27 071	1 757	28 828	7 363	1 901	19 564	164	19 728	20 439	1 046	94	–1 851
Q3	27 847	1 739	29 586	7 240	1 848	20 498	131	20 629	20 133	952	103	–559
Q4	25 215	1 830	27 045	7 313	1 939	17 793	143	17 936	21 386	594	140	–4 184
1998 Q1	27 447	2 225	29 672	6 607	2 336	20 729	343	21 072	22 016	468	256	–1 668
Q2	28 374	2 166	30 540	6 715	2 277	21 548	220	21 768	22 319	–187	380	–744
Q3	30 607	1 959	32 566	6 847	2 070	23 649	248	23 897	23 218	1 985	379	–1 685
Q4	30 280	2 040	32 320	6 708	2 151	23 461	270	23 731	22 295	2 267	272	–1 103
1999 Q1	31 360	2 037	33 397	5 484	2 264	25 649	344	25 993	23 139	2 370	301	183
Q2	22 967	1 925	24 892	4 846	2 038	18 008	199	18 207	22 928	403	314	–5 438
Q3	26 410	1 608	28 018	5 938	1 722	20 358	216	20 574	23 882	1 842	191	–5 341
Q4	29 286	2 305	31 591	6 340	2 420	22 831	199	23 030	23 807	1 559	230	–2 566
2000 Q1	29 452	2 472	31 924	6 998	2 589	22 337	315	22 652	23 685	1 646	193	–2 872
Q2	29 645	2 429	32 074	6 508	2 526	23 040	20	23 060	23 494	1 202	158	–1 794
Q3	29 902	2 735	32 637	6 572	2 834	23 231	34	23 265	24 044	1 629	156	–2 564
Q4	29 666	2 354	32 020	6 110	2 454	23 456	36	23 492	25 106	1 035	261	–2 910
2001 Q1	28 905	2 436	31 341	6 399	2 537	22 405	200	22 605	25 188	1 157	220	–3 960
Q2	28 001	2 529	30 530	6 560	2 632	21 338	443	21 781	24 969	1 807	306	–5 301
Q3	27 548	2 518	30 066	5 983	2 621	21 462	489	21 951	24 982	189	280	–3 500
Q4	28 171	2 735	30 906	6 425	2 839	21 642	501	22 143	23 906	–263	263	–1 763
2002 Q1	28 697	3 160	31 857	5 679	3 264	22 914	618	23 532	23 477	1 305	319	–1 569
Q2	27 660	3 229	30 889	6 168	3 334	21 387	517	21 904	23 940	–717	279	–1 598
Q3	31 931	3 220	35 151	6 095	3 326	25 730	553	26 283	23 278	109	306	2 590
Q4	34 920	3 232	38 152	5 810	3 339	29 003	604	29 607	23 635	862	293	4 817
2003 Q1	33 964	3 289	37 253	5 738	3 396	28 119	844	28 963	23 366	245	240	5 112
Q2	32 008	3 369	35 377	5 554	3 476	26 347	1 603	27 950	24 546	–474	306	3 572

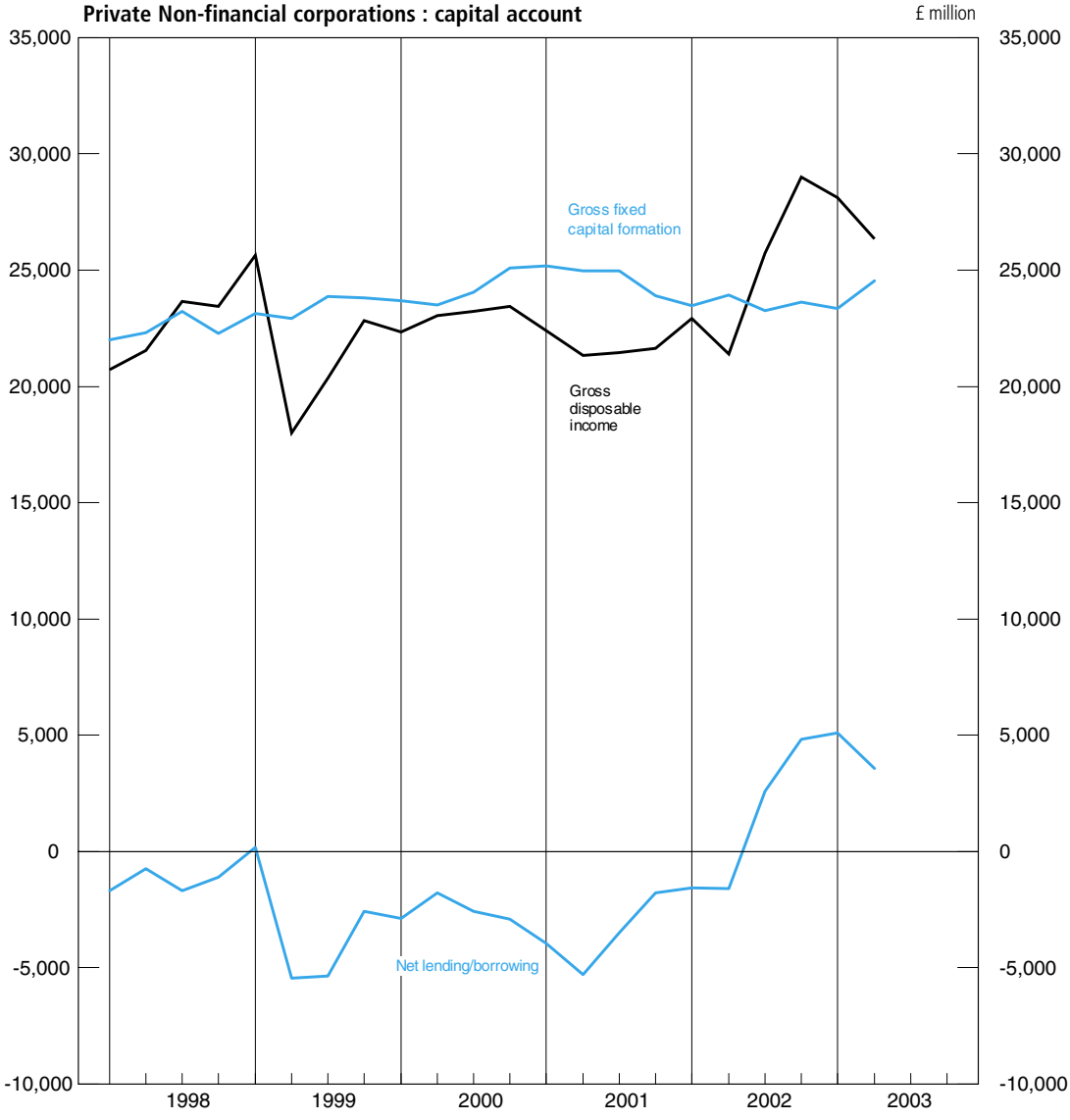
1 Quarterly alignment adjustment included in this series.
2 Social contributions and other current transfers.
3 Total resources equals total uses.
4 Social benefits and other current transfers.
5 Also known as gross saving.
6 Acquisitions less disposals of valuables and non-produced non-financial assets.
7 Gross of fixed capital consumption.

Source: Office for National Statistics; Enquiries 020 7533 6014

Private Non-financial corporations : secondary distribution of income account



Private Non-financial corporations : capital account



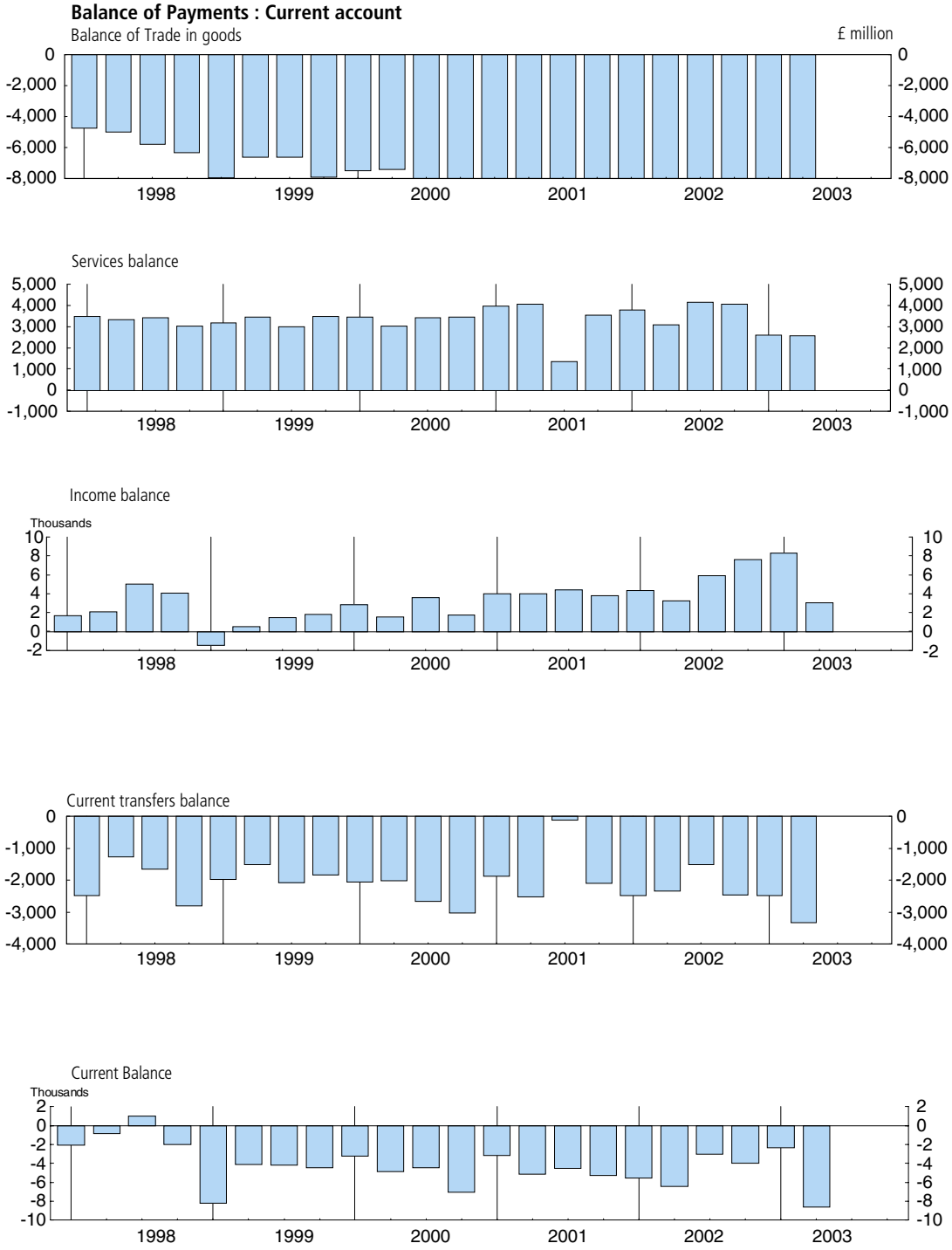
2.13 Balance of payments : current account

£ million

	Trade in goods and services								
	Exports of goods+	Imports of goods+	Balance of trade in goods	Exports of services	Imports of services	Services balance	Income balance	Current transfers balance	Current balance
Annual	BOKG	BOKH	BOKI	IKBB	IKBC	IKBD	HBOJ	IKBP	HBOP
1998	164 056	185 869	–21 813	66 278	52 969	13 309	12 906	–8 198	–3 796
1999	166 166	195 217	–29 051	72 628	59 494	13 134	2 422	–7 383	–20 878
2000	187 936	220 912	–32 976	79 071	65 645	13 426	9 763	–9 752	–19 539
2001	190 050	230 670	–40 620	81 658	68 658	13 000	16 188	–6 606	–18 038
2002	186 257	232 712	–46 455	86 470	71 304	15 166	21 119	–8 795	–18 965
Quarterly									
1998 Q1	41 585	46 319	–4 734	16 131	12 634	3 497	1 685	–2 483	–2 035
Q2	41 703	46 680	–4 977	16 415	13 072	3 343	2 076	–1 271	–829
Q3	40 593	46 375	–5 782	16 660	13 229	3 431	5 051	–1 644	1 056
Q4	40 175	46 495	–6 320	17 072	14 034	3 038	4 094	–2 800	–1 988
1999 Q1	38 959	46 893	–7 934	17 769	14 590	3 179	–1 459	–1 976	–8 190
Q2	40 378	46 976	–6 598	18 229	14 770	3 459	547	–1 504	–4 096
Q3	43 582	50 180	–6 598	17 586	14 572	3 014	1 493	–2 064	–4 155
Q4	43 247	51 168	–7 921	19 044	15 562	3 482	1 841	–1 839	–4 437
2000 Q1	44 374	51 854	–7 480	18 914	15 453	3 461	2 871	–2 049	–3 197
Q2	46 851	54 256	–7 405	19 257	16 209	3 048	1 541	–2 020	–4 836
Q3	47 445	56 289	–8 844	20 166	16 716	3 450	3 611	–2 662	–4 445
Q4	49 266	58 513	–9 247	20 734	17 267	3 467	1 740	–3 021	–7 061
2001 Q1	49 554	58 824	–9 270	21 453	17 476	3 977	3 996	–1 875	–3 172
Q2	48 256	58 890	–10 634	21 497	17 414	4 083	3 970	–2 519	–5 100
Q3	46 539	56 715	–10 176	18 488	17 116	1 372	4 400	–119	–4 523
Q4	45 701	56 241	–10 540	20 220	16 652	3 568	3 822	–2 093	–5 243
2002 Q1	45 803	56 990	–11 187	21 427	17 623	3 804	4 317	–2 478	–5 544
Q2	49 300	59 763	–10 463	20 846	17 734	3 112	3 246	–2 337	–6 442
Q3	46 770	58 319	–11 549	22 369	18 193	4 176	5 901	–1 516	–2 988
Q4	44 384	57 640	–13 256	21 828	17 754	4 074	7 655	–2 464	–3 991
2003 Q1	47 486	58 258	–10 772	21 051	18 433	2 618	8 306	–2 471	–2 319
Q2	46 386	57 306	–10 920	20 560	17 971	2 589	3 038	–3 318	–8 611
Monthly									
2001 Jan	16 507	19 563	–3 056	7 010†	5 751†	1 259†	..	..	..
Feb	16 819	19 722	–2 903	7 104	5 768	1 336	..	..	..
Mar	16 228	19 539	–3 311	7 339	5 957	1 382	..	..	..
Apr	15 880	19 468	–3 588	7 316	5 842	1 474	..	..	..
May	16 193	19 610	–3 417	7 197	5 832	1 365	..	..	..
Jun	16 183	19 812	–3 629	6 984	5 740	1 244	..	..	..
Jul	15 676	18 998	–3 322	6 400	5 726	674	..	..	..
Aug	15 403	19 353	–3 950	6 048	5 820	228	..	..	..
Sep	15 460	18 364	–2 904	6 040	5 570	470	..	..	..
Oct	15 832	18 934	–3 102	6 278	5 514	764	..	..	..
Nov	15 208	18 620	–3 412	6 844	5 595	1 249	..	..	..
Dec	14 661	18 687	–4 026	7 098	5 543	1 555	..	..	..
2002 Jan	15 348	19 120	–3 772	7 229	5 734	1 495	..	..	..
Feb	15 248	19 035	–3 787	7 225	5 998	1 227	..	..	..
Mar	15 207	18 835	–3 628	6 973	5 891	1 082	..	..	..
Apr	16 368	20 174	–3 806	6 922	5 939	983	..	..	..
May	17 365	20 275	–2 910	6 840	5 820	1 020	..	..	..
Jun	15 567	19 314	–3 747	7 084	5 975	1 109	..	..	..
Jul	16 419	20 158	–3 739	7 333	6 016	1 317	..	..	..
Aug	14 848	18 994	–4 146	7 477	6 113	1 364	..	..	..
Sep	15 503	19 167	–3 664	7 559	6 064	1 495	..	..	..
Oct	15 160	19 510	–4 350	7 383	5 994	1 389	..	..	..
Nov	14 368	19 508	–5 140	7 203	5 740	1 463	..	..	..
Dec	14 856	18 622	–3 766	7 242	6 020	1 222	..	..	..
2003 Jan	15 853	19 764	–3 911	7 026	6 122	904	..	..	..
Feb	16 045	19 225	–3 180	7 023	6 176	847	..	..	..
Mar	15 588	19 269	–3 681	7 002	6 135	867	..	..	..
Apr	16 583	19 023	–2 440	6 835	5 998	837	..	..	..
May	15 298	19 314	–4 016	6 896	6 032	864	..	..	..
Jun	14 505	18 969	–4 464	6 829	5 941	888	..	..	..
Jul	16 003†	19 010†	–3 007†	6 761	6 096	665	..	..	..
Aug	15 167	18 759	–3 592	6 835	6 036	799	..	..	..

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



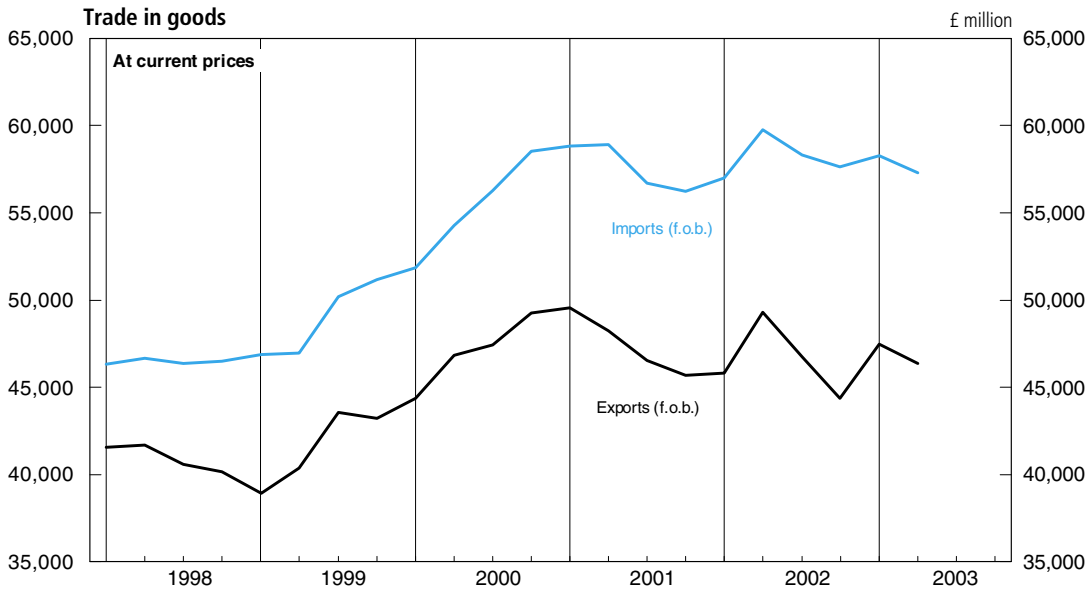
2.14 Trade in goods (on a balance of payments basis)

1995 = 100

	Volume indices (SA)		Price indices (NSA)		
	Exports	Imports	Exports	Imports	Terms of trade[1]
Annual					
	BQKU	BQKV	BQKR	BQKS	BQKT
1998	86.4	85.7	101.0	97.3	103.8
1999	89.2	91.5	98.9	96.8	102.2
2000	100.0	100.0	100.0	100.0	100.0
2001	102.7	105.4	98.3	99.1	99.2
2002	100.8	109.5	98.9	96.4	102.6
Quarterly					
1998 Q1	86.5	83.5	102.4	99.1	103.3
Q2	87.5	85.9	101.7	97.7	104.1
Q3	86.2	86.7	100.5	96.3	104.4
Q4	85.5	86.8	99.5	95.9	103.8
1999 Q1	83.5	88.3	98.9	95.8	103.2
Q2	86.7	88.7	98.9	96.1	102.9
Q3	93.6	93.9	99.0	97.7	101.3
Q4	92.9	95.0	98.8	97.8	101.0
2000 Q1	95.5	95.7	98.7	97.9	100.8
Q2	100.3	99.0	99.3	99.3	100.0
Q3	100.3	101.3	101.0	101.3	99.7
Q4	103.9	104.0	100.9	101.6	99.3
2001 Q1	105.1	105.4	99.8	101.2	98.6
Q2	102.6	105.7	100.1	101.1	99.0
Q3	101.7	104.4	97.6	98.2	99.4
Q4	101.1	106.2	95.8	96.0	99.8
2002 Q1	99.3	106.1	99.1	97.4	101.7
Q2	106.3	111.8	100.0	97.2	102.9
Q3	101.4	110.4	98.9	95.8	103.2
Q4	96.2	109.6	97.8	95.3	102.6
2003 Q1	101.5	110.5	100.1	96.0	104.3
Q2	98.8	108.4	100.7	95.3	105.7
Monthly					
2001 Jan	104.9	105.1	99.9	100.8	99.1
Feb	106.4	105.6	100.3	101.6	98.7
Mar	104.0	105.4	99.3	101.2	98.1
Apr	101.6	105.0	99.7	101.0	98.7
May	102.7	105.2	100.1	101.1	99.0
Jun	103.6	107.0	100.4	101.2	99.2
Jul	101.6	104.1	98.5	99.3	99.2
Aug	101.2	107.0	97.8	98.1	99.7
Sep	102.4	102.1	96.4	97.3	99.1
Oct	105.8	107.2	95.5	96.3	99.2
Nov	101.5	105.4	95.1	96.3	98.8
Dec	96.1	106.0	96.9	95.5	101.5
2002 Jan	99.7	106.5	98.0	97.1	100.9
Feb	99.6	106.6	98.9	97.1	101.9
Mar	98.5	105.3	100.4	97.9	102.6
Apr	104.7	113.2	100.7	97.5	103.3
May	113.0	113.7	99.7	97.0	102.8
Jun	101.3	108.4	99.5	97.1	102.5
Jul	106.9	115.0	99.1	95.7	103.6
Aug	95.8	107.5	99.3	95.9	103.5
Sep	101.4	108.7	98.2	95.8	102.5
Oct	98.5	110.7	97.9	95.6	102.4
Nov	93.7	112.0	97.3	95.0	102.4
Dec	96.3	106.1	98.3	95.2	103.3
2003 Jan	102.8	112.8	98.7	95.2	103.7
Feb	103.0	110.1	99.8	95.7	104.3
Mar	98.6	108.7	101.7	97.0	104.8
Apr	105.6	107.4	100.5	96.0	104.7
May	97.3	109.4	101.4	95.4	106.3
Jun	93.6	108.5	100.3	94.6	106.0
Jul	102.6†	107.9†	100.3†	95.3†	105.2†
Aug	96.7	106.2	101.0	95.9	105.3

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

Source: Office for National Statistics; Enquiries 020 7533 6064


Trade in goods
£ million
At current prices
Imports (f.o.b.)
Exports (f.o.b.)
65,000
60,000
55,000
50,000
45,000
40,000
35,000
1998
1999
2000
2001
2002
2003


2000=100
Volume
Imports
Exports
115
110
105
100
95
90
85
80
1998
1999
2000
2001
2002
2003


2000=100
Price index
Exports
Imports
105
100
95
90
85
80
1998
1999
2000
2001
2002
2003

2.15 Measures of UK competitiveness in trade in manufactures

1995 = 100

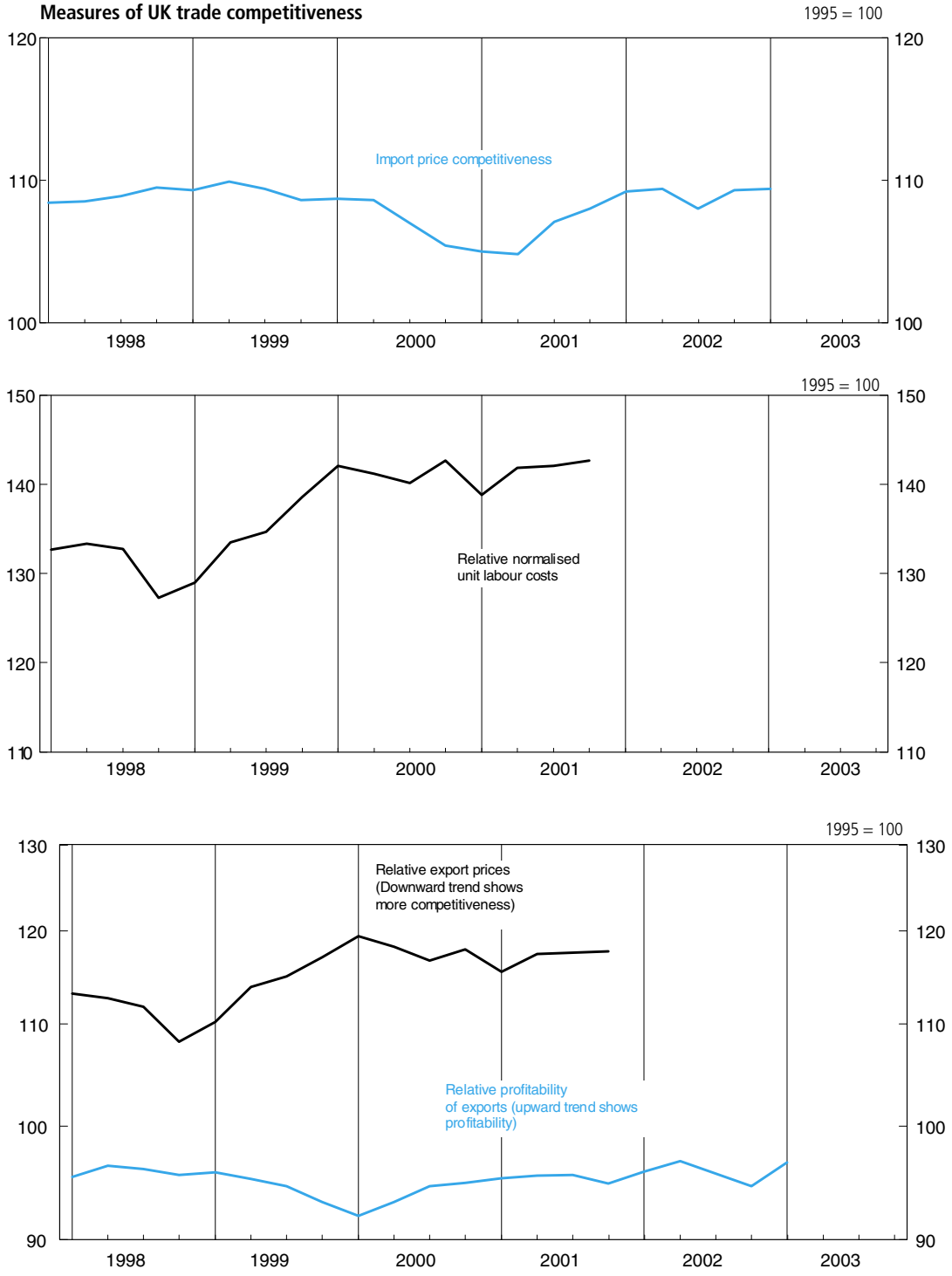
	Summary measures						Export unit value index[1,6]				
	Relative export prices[6]	Relative wholesale prices[5] (1990=100)	IMF index of relative unit labour costs[6] Actual	IMF index of relative unit labour costs[6] Normalised	Import price competitiveness[2,4]	Relative profitability of exports[2,4]	United Kingdom	United States	Japan	France	Germany[3]
	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)		Retail prices index (January 13, 1987=100)						Harmonised index of consumer prices[4] (1996=100)		Pensioner price index[5] (January 13, 1987=100)		
	Materials and fuel purchased by manufacturing industry (SA)[1,2]	Output: all manufactured products: home sales	All items (RPI)		All items excluding mortgage interest payments (RPIX)		All items excluding mortgage interest payments & indirect taxes (RPIY)[3]		All items		1-person household	2-person household	Purchasing power of the pound[6] (NSA) (1985=100)
			Index	Percentage change on a year earlier	Index	Percentage change on a year earlier	Index	Percentage change on a year earlier	Index	Percentage change on a year earlier			
Annual													
	RNPE	PLLU	CHAW	CZBH	CHMK	CDKQ	CBZW	CBZX	CHVJ	CJYR	CZIF	CZIU	FJAK
1999	93.1†	98.5†	165.4	*1.5*	164.3	*2.3*	157.1	*1.7*	104.8	1.3	149.6	154.2	57
2000	100.0	100.0	170.3	*3.0*	167.7	*2.1*	159.9	*1.8*	105.6	0.8	150.8	156.1	56
2001	98.8	99.7	173.3	*1.8*	171.3	*2.1*	163.7	*2.4*	106.9	1.2	152.7	158.5	55
2002	94.4	99.8	176.2	*1.7*	175.1	*2.2*	167.5	*2.3*	108.3	1.3	155.3	160.9	54
Quarterly													
1999 Q1	91.1†	97.8†	163.7	*2.2*	162.4	*2.5*	155.6	*1.8*	104.0	1.6	148.9	153.3	57
Q2	91.7	98.7	165.5	*1.4*	164.6	*2.3*	157.2	*1.6*	105.1	1.4	149.9	154.5	57
Q3	94.2	98.6	165.6	*1.2*	164.6	*2.2*	157.2	*1.4*	104.8	1.2	149.5	154.2	57
Q4	95.5	98.9	166.8	*1.5*	165.6	*2.2*	158.3	*1.7*	105.3	1.2	150.1	154.9	57
2000 Q1	97.1	99.2	167.5	*2.3*	165.8	*2.1*	158.6	*1.9*	104.8	0.8	150.0	154.9	57
Q2	97.9	100.1	170.6	*3.1*	168.0	*2.1*	159.9	*1.7*	105.7	0.6	151.0	156.2	55
Q3	101.9	100.3	170.9	*3.2*	168.1	*2.1*	160.1	*1.8*	105.7	0.8	151.1	156.5	56
Q4	103.2	100.4	172.0	*3.1*	169.1	*2.1*	161.1	*1.8*	106.3	0.9	151.2	156.9	55
2001 Q1	100.8	99.7	171.8	*2.6*	168.9	*1.9*	161.1	*1.6*	105.7	0.9	150.6	156.5	55
Q2	101.6	100.1	173.9	*1.9*	171.8	*2.3*	164.1	*2.6*	107.3	1.5	153.3	159.3	54
Q3	98.3	99.8	174.0	*1.8*	172.1	*2.4*	164.6	*2.8*	107.3	1.5	153.0	158.9	54
Q4	94.4	99.3	173.8	*1.0*	172.4	*2.0*	165.0	*2.4*	107.4	1.0	153.9	159.3	55
2002 Q1	94.1	99.2	173.9	*1.2*	172.9	*2.4*	165.5	*2.7*	107.4	1.5	154.7	160.1	54
Q2	94.8	99.8	176.0	*1.2*	175.0	*1.9*	167.1	*1.8*	108.3	0.9	155.3	161.0	54
Q3	94.4	99.9	176.6	*1.5*	175.5	*2.0*	167.8	*1.9*	108.4	1.1	155.0	160.7	54
Q4	94.3	100.1	178.2	*2.5*	176.9	*2.6*	169.5	*2.7*	109.0	1.6	156.1	161.7	53
2003 Q1	95.6	100.9	179.2	*3.0*	177.9	*2.9*	170.6	*3.1*	109.0	1.5	156.7	162.6	53
Q2	94.2	101.1	181.3	*3.0*	180.1	*2.9*	171.8	*2.8*	109.7	1.3	157.9	163.7	52
Q3	95.4p	101.4p	181.8	*2.9*	180.5	*2.8*	172.3	*2.7*	109.9	1.4	158.3	164.0	52
Monthly													
2002 Jan	93.9†	99.2†	173.3	*1.3*	172.4	*2.6*	165.0	*3.0*	107.1	1.6	..	..	55
Feb	93.5	99.2	173.8	*1.0*	172.8	*2.2*	165.4	*2.7*	107.3	1.5	..	..	54
Mar	94.8	99.3	174.5	*1.3*	173.5	*2.3*	166.1	*2.5*	107.7	1.5	..	..	54
Apr	95.6	99.7	175.7	*1.5*	174.7	*2.3*	166.9	*2.5*	108.1	1.3	..	..	54
May	94.6	99.9	176.2	*1.1*	175.2	*1.8*	167.3	*1.8*	108.4	0.8	..	..	54
Jun	94.2	99.9	176.2	*1.0*	175.1	*1.5*	167.2	*1.4*	108.4	0.6	..	..	54
Jul	94.4	99.9	175.9	*1.5*	174.8	*2.0*	167.0	*1.9*	108.1	1.1	..	..	54
Aug	94.5	99.9	176.4	*1.4*	175.3	*1.9*	167.6	*1.8*	108.4	1.0	..	..	54
Sep	94.4	100.0	177.6	*1.7*	176.4	*2.1*	168.7	*2.0*	108.7	1.0	..	..	53
Oct	95.0	100.1	177.9	*2.1*	176.6	*2.3*	169.1	*2.4*	108.9	1.4	..	..	53
Nov	93.0	100.0	178.2	*2.6*	177.0	*2.8*	169.6	*2.9*	108.9	1.6	..	..	53
Dec	94.8	100.1	178.5	*2.9*	177.2	*2.7*	169.8	*2.9*	109.3	1.7	..	..	53
2003 Jan	95.5	100.5	178.4	*2.9*	177.1	*2.7*	169.8	*2.9*	108.6	1.4	..	..	53
Feb	95.8	100.7	179.3	*3.2*	177.9	*3.0*	170.6	*3.1*	109.0	1.6	..	..	53
Mar	95.6	101.4	179.9	*3.1*	178.7	*3.0*	171.4	*3.2*	109.4	1.6	..	..	53
Apr	94.6	101.3	181.2	*3.1*	180.0	*3.0*	171.8	*2.9*	109.7	1.5	..	..	52
May	94.1	101.0	181.5	*3.0*	180.2	*2.9*	171.9	*2.7*	109.7	1.2	..	..	52
Jun	94.0	101.0	181.3	*2.9*	180.0	*2.8*	171.7	*2.7*	109.6	1.1	..	..	52
Jul	95.1	101.2	181.3	*3.1*	179.9	*2.9*	171.6	*2.8*	109.5	1.3	..	..	52
Aug	96.1p	101.4p	181.6	*2.9*	180.4	*2.9*	172.2	*2.7*	109.9	1.4	..	..	52
Sep	94.9p	101.5p	182.5	*2.8*	181.3	*2.8*	173.2	*2.7*	110.2	1.4	..	..	52

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.

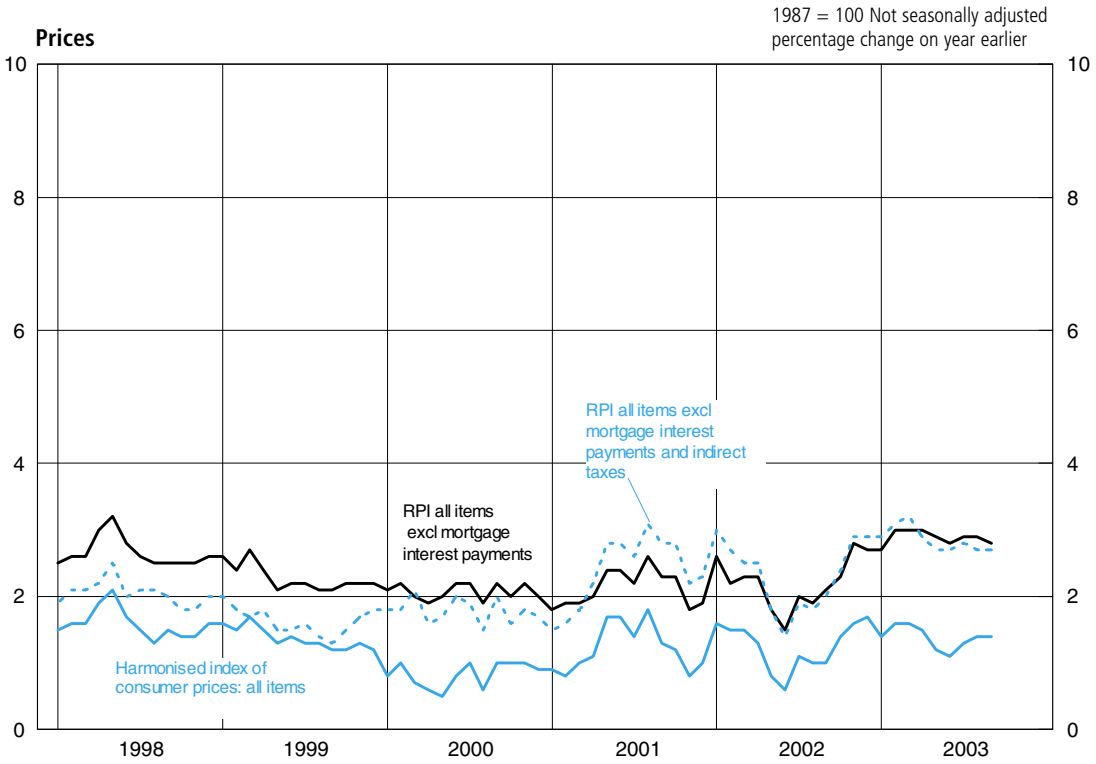
3 The taxes excluded are council tax, VAT, duties, car purchase tax and vehicle excise duty, insurance tax and airport tax.

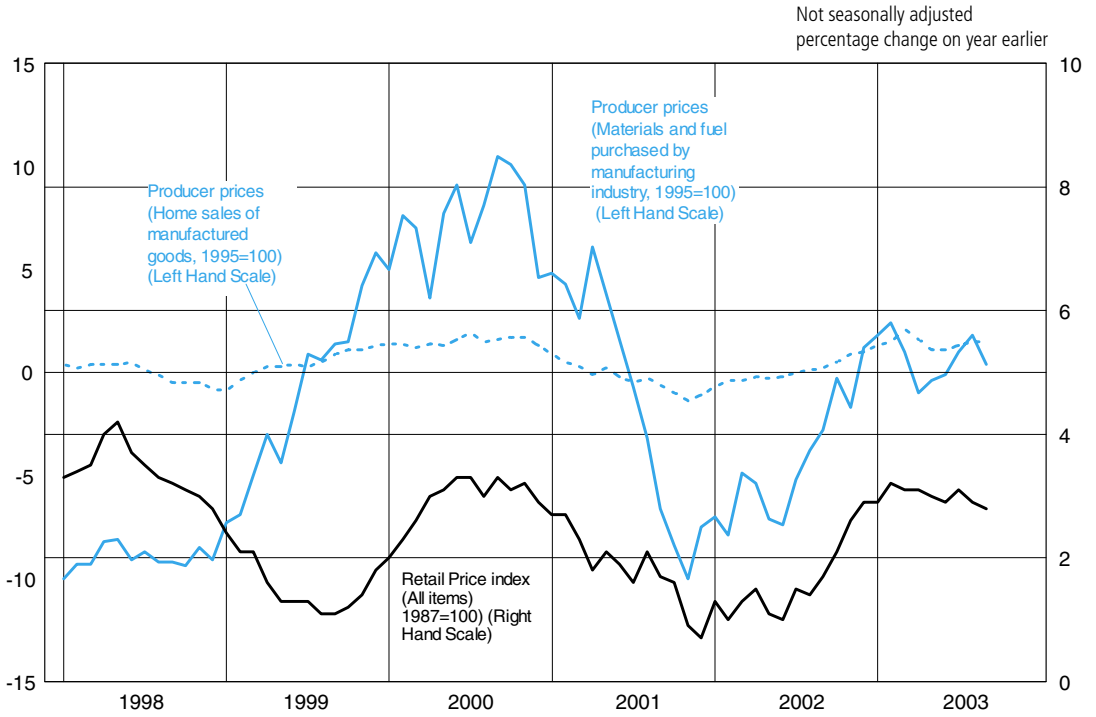
4 Inflation rates prior to 1997 and index levels prior to 1996 are estimated. Further details are given in *Economic Trends* No.541 December 1998.

5 Pensioner price indices exclude housing costs, as these are often atypical for a pensioner household.

6 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 earlier
10
8
6
4
2
0
RPI all items excl mortgage interest payments and indirect taxes
RPI all items excl mortgage interest payments
Harmonised index of consumer prices: all items
1998
1999
2000
2001
2002
2003


Not seasonally adjusted
percentage change on year earlier
15
10
5
0
-5
-10
-15
10
8
6
4
2
0
Producer prices (Materials and fuel purchased by manufacturing industry, 1995=100) (Left Hand Scale)
Producer prices (Home sales of manufactured goods, 1995=100) (Left Hand Scale)
Retail Price index (All items) 1987=100) (Right Hand Scale)
1998
1999
2000
2001
2002
2003

4.1 Labour Market Activity[1,2]

United Kingdom

Thousands, seasonally adjusted[3]

	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	MGRT	MGRW	MGRZ	MGSC	MGSF	MGSI	MGSL	MGSU
2001 Q1	24 105	3 081	97	146	27 428	1 468	28 896	17 175	46 071	74.5
Q2	24 204	3 074	95	140	27 512	1 454	28 966	17 178	46 144	74.5
Q3	24 168	3 104	95	121	27 487	1 480	28 968	17 246	46 213	74.3
Q4	24 245	3 092	103	118	27 559	1 509	29 068	17 209	46 277	74.3
2002 Q1	24 279	3 089	97	110	27 576	1 489	29 065	17 275	46 340	74.3
Q2	24 380	3 121	97	100	27 698	1 497	29 195	17 209	46 404	74.5
Q3	24 328	3 145	91	98	27 662	1 541	29 204	17 261	46 465	74.3
Q4	24 472	3 154	91	94	27 812	1 506	29 318	17 204	46 522	74.6
2003 Q1	24 465	3 217	86	91	27 859	1 500	29 359	17 221	46 580	74.6
Q2	24 413	3 337	87	85	27 922	1 458	29 380	17 256	46 637	74.7
Percentage change on quarter										
2003q1 to 2003q2	*-0.2*	*3.7*	*0.9*	*-5.9*	*0.2*	*-2.8*	*0.1*	*0.2*	*0.1*	
Percentage change on year										
2002q2 to 2003q2	*0.1*	*6.9*	*-10.2*	*-14.4*	*0.8*	*-2.6*	*0.6*	*0.3*	*0.5*	
MALE										
	MGRO	MGRR	MGRU	MGRX	MGSA	MGSD	MGSG	MGSJ	MGSM	MGSV
2001 Q1	12 458	2 257	35	94	14 844	884	15 728	6 415	22 143	79.4
Q2	12 472	2 245	33	92	14 842	871	15 713	6 472	22 185	79.2
Q3	12 482	2 277	30	79	14 867	892	15 759	6 466	22 225	79.2
Q4	12 503	2 278	33	73	14 887	899	15 787	6 475	22 261	79.1
2002 Q1	12 472	2 275	29	69	14 846	908	15 754	6 544	22 298	78.8
Q2	12 531	2 284	30	57	14 902	898	15 800	6 534	22 334	79.0
Q3	12 483	2 304	35	59	14 880	928	15 808	6 560	22 368	78.8
Q4	12 628	2 299	31	60	15 019	885	15 904	6 495	22 398	79.4
2003 Q1	12 584	2 332	28	53	14 997	909	15 906	6 523	22 428	79.1
Q2	12 565	2 436	31	50	15 082	879	15 960	6 498	22 458	79.4
Percentage change on quarter										
2003q1 to 2003q2	*-0.2*	*4.5*	*-12.4*	*-6.6*	*0.6*	*-3.3*	*0.3*	*-0.4*	*0.1*	
Percentage change on year										
2002q2 to 2003q2	*0.3*	*6.6*	*3.4*	*-12.8*	*1.2*	*-2.1*	*1.0*	*-0.6*	*0.6*	
FEMALE										
	MGRP	MGRS	MGRV	MGRY	MGSB	MGSE	MGSH	MGSK	MGSN	MGSW
2001 Q1	11 647	823	62	52	12 585	583	13 168	10 760	23 928	69.3
Q2	11 732	829	62	47	12 670	583	13 253	10 706	23 959	69.6
Q3	11 686	827	65	42	12 620	589	13 209	10 780	23 988	69.1
Q4	11 742	814	71	45	12 672	609	13 281	10 734	24 015	69.2
2002 Q1	11 807	814	68	42	12 730	581	13 311	10 731	24 043	69.4
Q2	11 850	837	67	43	12 796	599	13 395	10 675	24 070	69.7
Q3	11 844	842	56	39	12 782	614	13 396	10 701	24 097	69.6
Q4	11 844	855	60	34	12 793	621	13 414	10 710	24 124	69.6
2003 Q1	11 880	886	58	37	12 862	592	13 453	10 698	24 151	69.9
Q2	11 848	901	56	36	12 841	579	13 420	10 758	24 178	69.6
Percentage change on quarter										
2003q1 to 2003q2	*-0.3*	*1.7*	*-4.5*	*-4.8*	*-0.2*	*-2.1*	*-0.2*	*0.6*	*0.1*	
Percentage change on year										
2002q2 to 2003q2	*0.0*	*7.6*	*-16.4*	*-16.7*	*0.3*	*-3.3*	*0.2*	*0.8*	*0.5*	

1 Due to published final population estimates for 1991-2000, the data have been revised, replacing the interim population estimates published in Octtober 2002. For further details, please see **www.statistics.gov.uk/cci/nugget.asp?id=207**

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

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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
2001 Q1	23 982	3 079	94	149	27 305	1 481	28 785	17 286	46 071	74.2
Q2	24 138	3 061	92	143	27 434	1 411	28 845	17 298	46 144	74.3
Q3	24 304	3 114	99	111	27 628	1 550	29 179	17 034	46 213	74.7
Q4	24 312	3 100	104	120	27 637	1 467	29 103	17 173	46 277	74.5
2002 Q1	24 156	3 091	93	114	27 454	1 502	28 957	17 384	46 340	73.9
Q2	24 318	3 112	94	103	27 628	1 456	29 083	17 320	46 404	74.3
Q3	24 448	3 164	95	88	27 795	1 620	29 415	17 050	46 465	74.7
Q4	24 542	3 161	94	97	27 894	1 464	29 358	17 165	46 522	74.8
2003 Q1	24 326	3 219	82	96	27 724	1 510	29 233	17 346	46 580	74.2
Q2	24 364	3 336	85	89	27 874	1 401	29 275	17 362	46 637	74.5
Percentage change on year										
2002q2 to 2003q2	*0.2*	*7.2*	*-9.6*	*-13.6*	*0.9*	*-3.8*	*0.7*	*0.2*	*0.5*	
MALE										
	MGTB	MGTE	MGTH	MGTK	MGTN	MGTQ	MGTT	MGTW	MGSM	MGUI
2001 Q1	12 377	2 259	35	96	14 767	897	15 663	6 479	22 143	79.0
Q2	12 440	2 232	32	94	14 798	852	15 650	6 535	22 185	79.0
Q3	12 585	2 281	29	75	14 970	920	15 890	6 335	22 225	79.7
Q4	12 524	2 288	34	72	14 918	876	15 794	6 468	22 261	79.3
2002 Q1	12 387	2 279	30	71	14 766	922	15 688	6 609	22 298	78.4
Q2	12 497	2 271	30	59	14 856	878	15 734	6 600	22 334	78.8
Q3	12 578	2 312	35	55	14 980	960	15 940	6 428	22 368	79.3
Q4	12 668	2 309	33	61	15 070	858	15 928	6 470	22 398	79.6
2003 Q1	12 488	2 337	27	57	14 909	926	15 835	6 593	22 428	78.6
Q2	12 537	2 428	30	50	15 045	851	15 896	6 562	22 458	79.2
Percentage change on year										
2002q2 to 2003q2	*0.3*	*6.9*	*0.0*	*-15.3*	*1.3*	*-3.1*	*1.0*	*-0.6*	*0.6*	
FEMALE										
	MGTC	MGTF	MGTI	MGTL	MGTO	MGTR	MGTU	MGTX	MGSN	MGUJ
2001 Q1	11 605	821	59	53	12 538	584	13 122	10 806	23 928	69.0
Q2	11 698	829	60	49	12 636	559	13 195	10 764	23 959	69.4
Q3	11 718	833	70	37	12 658	630	13 289	10 699	23 988	69.3
Q4	11 788	812	71	48	12 718	591	13 310	10 706	24 015	69.5
2002 Q1	11 769	812	64	43	12 688	580	13 268	10 774	24 043	69.2
Q2	11 821	841	65	45	12 772	577	13 349	10 721	24 070	69.6
Q3	11 869	852	60	33	12 814	660	13 475	10 622	24 097	69.8
Q4	11 874	852	61	36	12 824	606	13 430	10 694	24 124	69.8
2003 Q1	11 838	882	55	39	12 815	584	13 398	10 753	24 151	69.6
Q2	11 828	908	55	39	12 829	550	13 379	10 800	24 178	69.6
Percentage change on year										
2002q2 to 2003q2	*0.1*	*8.0*	*-15.4*	*-13.3*	*0.4*	*-4.7*	*0.2*	*0.7*	*0.4*	

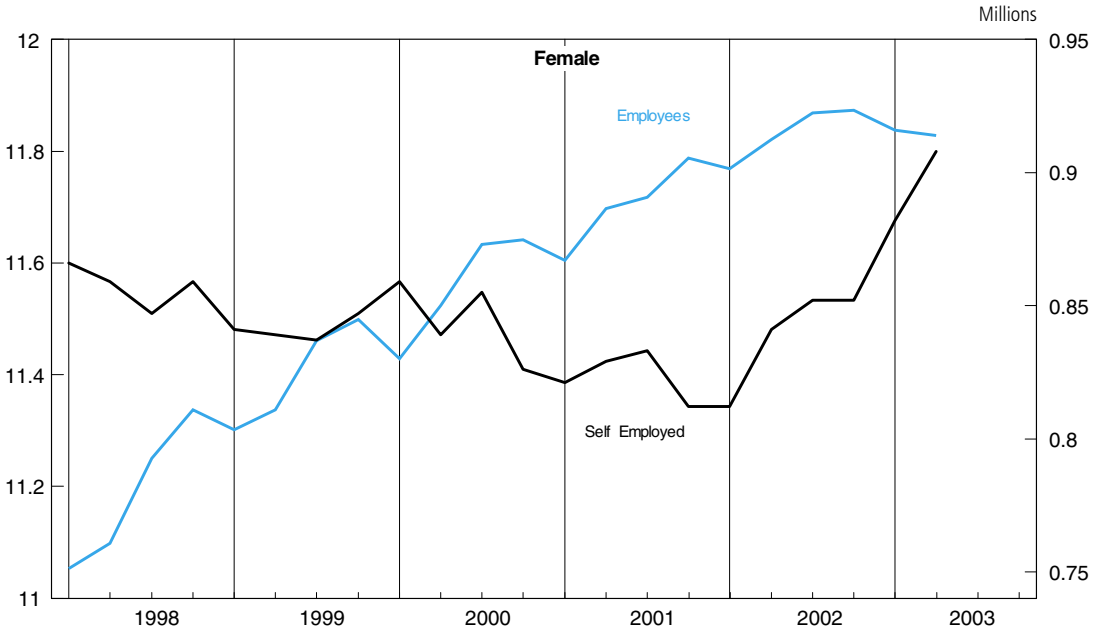
1 Due to published final population estimates for 1991-2000, the data have been revised, replacing the interim population estimates published in October 2002. For further details, please see **www.statistics.gov.uk/cci/nugget.asp?id=207**

2 Data are from the Labour Force Survey which uses the de nitions 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.

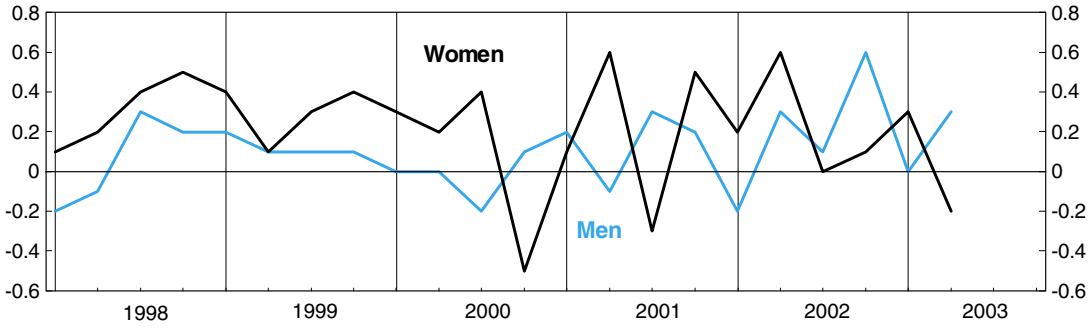
Source: Office for National Statistics; Enquiries 020 7533 6094

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



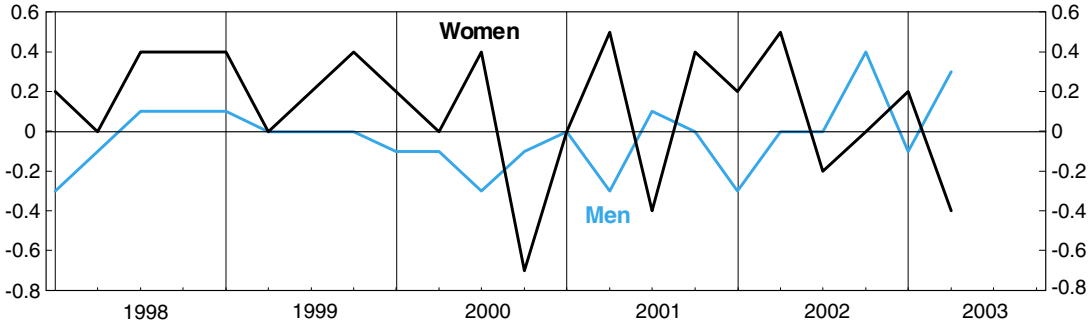
ECONOMICALLY ACTIVE POPULATION *(seasonally adjusted)*

Quarter on previous quarter percentage change



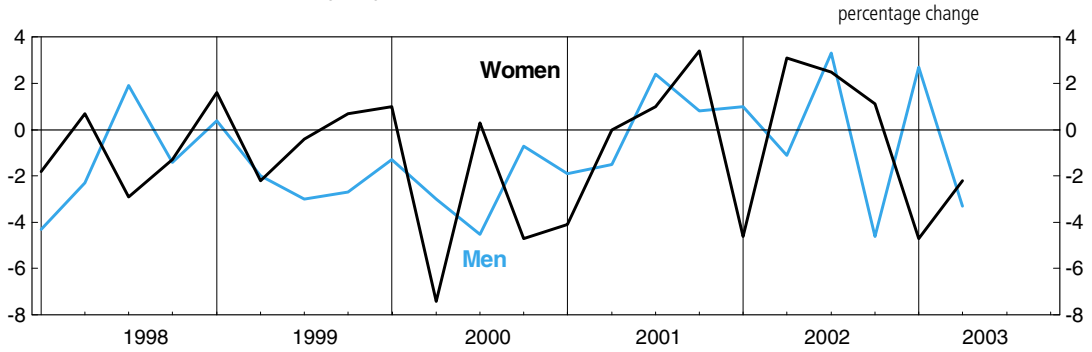
ECONOMIC ACTIVITY RATE *(seasonally adjusted)*

Quarter on previous quarter percentage change



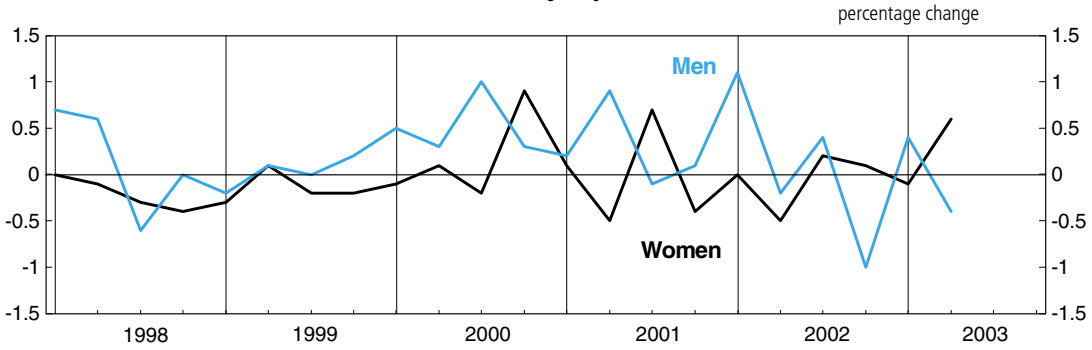
UNEMPLOYMENT *(seasonally adjusted)*

Quarter on previous quarter percentage change

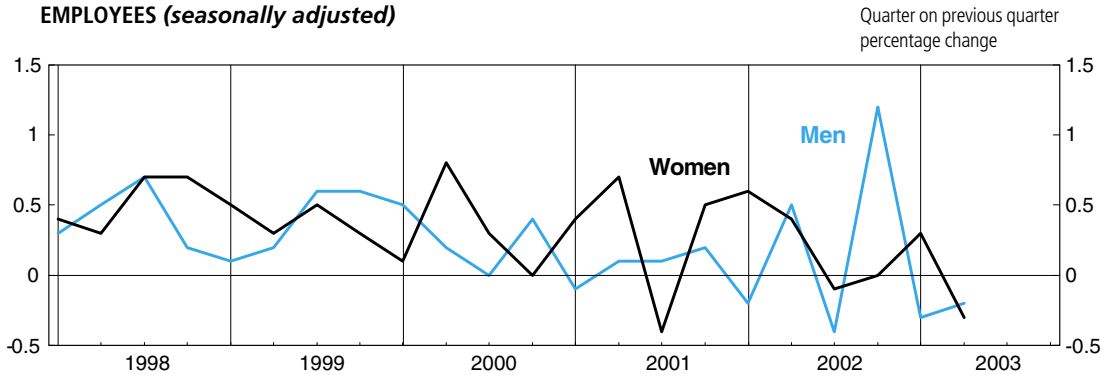


ECONOMICALLY INACTIVE POPULATION *(seasonally adjusted)*

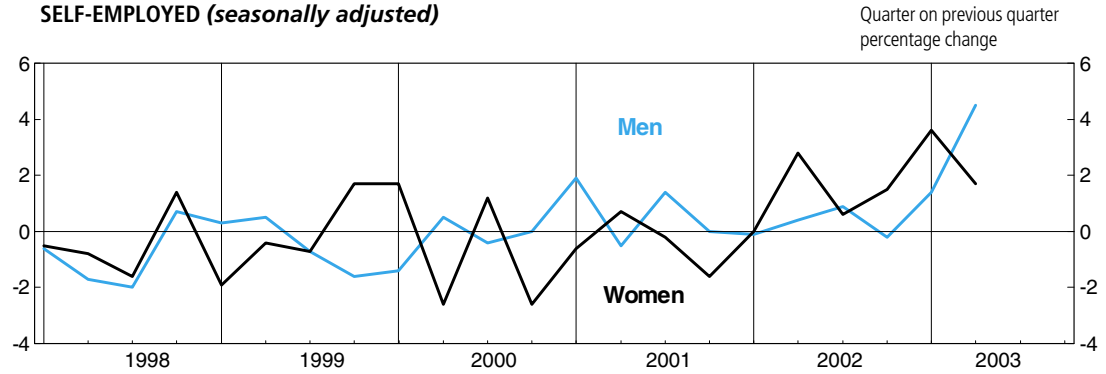
Quarter on previous quarter percentage change



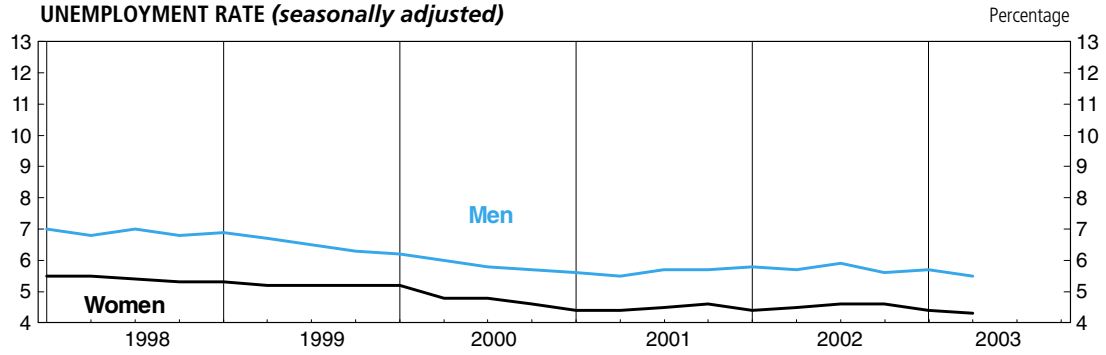
EMPLOYEES *(seasonally adjusted)*



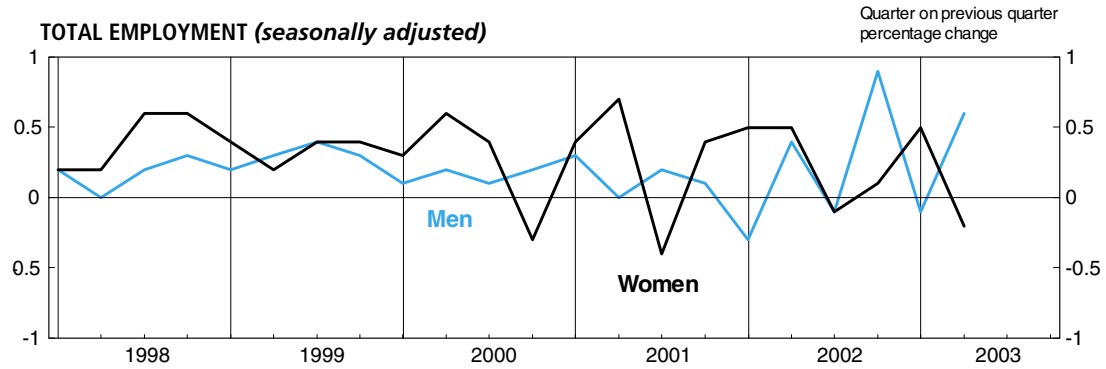
SELF-EMPLOYED *(seasonally adjusted)*



UNEMPLOYMENT RATE *(seasonally adjusted)*



TOTAL EMPLOYMENT *(seasonally adjusted)*



4.3 Labour Market Activity by age[1,2]

United Kingdom

Thousands, seasonally adjusted[3]

	Total aged 16 and over			Age groups[4]							
				16 - 24		25 - 49		50 - 59/64		60/65 and over	
	Total	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
In employment											
	MGRZ	MGSA	MGSB	MGUR	MGUS	MGUU	MGUV	MGUX	MGUY	MGVA	MGVB
2001 Q2	27 512	14 842	12 670	2 065	1 909	8 984	7 805	3 519	2 402	273	554
Q3	27 487	14 867	12 620	2 064	1 880	8 987	7 764	3 533	2 397	283	578
Q4	27 559	14 887	12 672	2 083	1 916	8 960	7 742	3 548	2 425	296	588
2002 Q1	27 576	14 846	12 730	2 069	1 918	8 955	7 787	3 536	2 431	285	595
Q2	27 698	14 902	12 796	2 081	1 935	8 974	7 811	3 553	2 459	293	591
Q3	27 662	14 880	12 782	2 047	1 938	8 962	7 773	3 574	2 481	297	591
Q4	27 812	15 019	12 793	2 100	1 947	8 985	7 776	3 625	2 488	309	583
2003 Q1	27 859	14 997	12 862	2 079	1 944	8 949	7 813	3 641	2 513	327	592
Q2	27 922	15 082	12 841	2 081	1 921	8 966	7 789	3 702	2 535	332	597
Unemployed											
	MGSC	MGSD	MGSE	MGVG	MGVH	MGVJ	MGVK	MGVM	MGVN	MGVP	MGVQ
2001 Q2	1 454	871	583	304	214	413	308	148	54	..	..
Q3	1 480	892	589	325	219	406	299	154	63	..	..
Q4	1 509	899	609	335	231	420	307	138	63	..	..
2002 Q1	1 489	908	581	339	221	423	288	138	65	..	..
Q2	1 497	898	599	327	215	412	304	149	69	..	12
Q3	1 541	928	614	336	224	422	309	160	68	10	13
Q4	1 506	885	621	338	223	389	313	151	72	..	13
2003 Q1	1 500	909	592	348	230	392	287	162	66	..	..
Q2	1 458	879	579	338	235	386	269	147	66	..	..
Economically inactive											
	MGSI	MGSJ	MGSK	MGVV	MGVW	MGVY	MGVZ	MGWB	MGWC	MGWE	MGWF
2001 Q2	17 178	6 472	10 706	808	1 034	795	2 432	1 355	1 249	3 514	5 991
Q3	17 246	6 466	10 780	807	1 072	794	2 480	1 348	1 259	3 517	5 969
Q4	17 209	6 475	10 734	795	1 038	803	2 490	1 361	1 245	3 516	5 962
2002 Q1	17 275	6 544	10 731	822	1 060	798	2 461	1 386	1 250	3 538	5 960
Q2	17 209	6 534	10 675	838	1 064	786	2 417	1 369	1 231	3 542	5 963
Q3	17 261	6 560	10 701	880	1 065	782	2 448	1 348	1 221	3 549	5 968
Q4	17 204	6 495	10 710	839	1 073	784	2 437	1 318	1 216	3 553	5 983
2003 Q1	17 221	6 523	10 698	864	1 084	808	2 423	1 304	1 204	3 547	5 987
Q2	17 256	6 498	10 758	887	1 118	788	2 461	1 269	1 188	3 553	5 991
Economic activity rate (per cent) [5]											
	MGWG	MGWH	MGWI	MGWK	MGWL	MGWN	MGWO	MGWQ	MGWR	MGWT	MGWU
2001 Q2	62.8	70.8	55.3	74.6	67.2	92.2	76.9	73.0	66.3	7.4	8.6
Q3	62.7	70.9	55.1	74.8	66.2	92.2	76.5	73.2	66.2	7.6	8.9
Q4	62.8	70.9	55.3	75.3	67.4	92.1	76.4	73.0	66.7	7.9	9.1
2002 Q1	62.7	70.7	55.4	74.5	66.9	92.2	76.6	72.6	66.6	7.7	9.2
Q2	62.9	70.7	55.7	74.2	66.9	92.3	77.1	73.0	67.2	7.9	9.2
Q3	62.9	70.7	55.6	73.0	67.0	92.3	76.8	73.5	67.6	8.0	9.2
Q4	63.0	71.0	55.6	74.4	66.9	92.3	76.8	74.1	67.8	8.2	9.1
2003 Q1	63.0	70.9	55.7	73.7	66.7	92.0	77.0	74.5	68.2	8.6	9.1
Q2	63.0	71.1	55.5	73.2	65.8	92.2	76.6	75.2	68.6	8.7	9.2
Unemployment rate (per cent) [6]											
	MGSX	MGSY	MGSZ	MGWZ	MGXA	MGXC	MGXD	MGXF	MGXG	MGXI	MGXJ
2001 Q2	5.0	5.5	4.4	12.8	10.1	4.4	3.8	4.0	2.2	..	..
Q3	5.1	5.7	4.5	13.6	10.5	4.3	3.7	4.2	2.6	..	..
Q4	5.2	5.7	4.6	13.8	10.8	4.5	3.8	3.7	2.5	..	..
2002 Q1	5.1	5.8	4.4	14.1	10.3	4.5	3.6	3.8	2.6	..	..
Q2	5.1	5.7	4.5	13.6	10.0	4.4	3.7	4.0	2.7	..	2.0
Q3	5.3	5.9	4.6	14.1	10.4	4.5	3.8	4.3	2.7	3.2	2.1
Q4	5.1	5.6	4.6	13.9	10.3	4.1	3.9	4.0	2.8	..	2.2
2003 Q1	5.1	5.7	4.4	14.3	10.6	4.2	3.5	4.2	2.6	..	..
Q2	5.0	5.5	4.3	14.0	10.9	4.1	3.3	3.8	2.6	..	..

1 Due to published final population estimates for 1991-2000, the data have been revised, replacing the interim population estimates published in October 2002. For further details, please see **www.statistics.gov.uk/cci/nugget.asp?id=207**

2 Data are from the Labour Force Survey which uses the de nitions 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

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4.4 Jobs and claimant count
United Kingdom

Thousands

	Jobs[1]					Claimant count[5,6,9]			
		Employee jobs[3,4]							
	Workforce jobs[2,3,4]	All industries	Manufacturing industry	Production industry	Service industries	Total	Percentage of workforce jobs and claimant count[7]	Total Not seasonally adjusted	Job Centre vacancies+[8,10]
Annual									
	DYDC	BCAJ	YEJA	YEJF	YEJC	BCJD	BCJE	BCJA	DPCB
2000	29 271	25 626	3 960	4 159	19 962	1 088.4	*3.6*	1 102.3	358.3
2001	29 495	25 882	3 808	4 017	20 420	970.1	*3.2*	983.0	..
2002	29 492	25 829	3 628	3 836	20 614	946.8	*3.1*	958.8	..
2003	29 695	25 825	3 502	3 706	20 747	..	..	..	..
Quarterly									
2000 Q1	29 104	25 453	3 990	4 187	19 784	1 153.0	*3.8*	1 219.2	342.2
Q2	29 271	25 626	3 960	4 159	19 962	1 103.9	*3.6*	1 109.2	355.7
Q3	29 314	25 692	3 918	4 119	20 105	1 060.0	*3.5*	1 073.6	363.4
Q4	29 390	25 774	3 889	4 096	20 230	1 036.7	*3.4*	1 007.1	371.8
2001 Q1	29 429	25 816	3 860	4 068	20 321	998.5	*3.3*	1 064.1	394.1
Q2	29 495	25 882	3 808	4 017	20 420	971.5	*3.2*	978.4	..
Q3	29 459	25 864	3 755	3 965	20 456	949.9	*3.1*	958.5	..
Q4	29 509	25 898	3 705	3 914	20 537	960.4	*3.2*	931.0	..
2002 Q1	29 525	25 919	3 666	3 876	20 613	951.0	*3.1*	1 014.6	..
Q2	29 492	25 829	3 628	3 836	20 614	952.3	*3.1*	958.1	..
Q3	29 518	25 807	3 593	3 797	20 657	945.3	*3.1*	951.8	..
Q4	29 565	25 826	3 561	3 765	20 698	938.6	*3.1*	910.6	..
2003 Q1	29 648	25 816	3 536	3 738	20 709	936.5	*3.1*	1 001.1	..
Q2	29 695	25 825	3 502	3 706	20 747	946.5	*3.1*	954.3	..
Q3	..	..	..	..	..	933.1	*3.1*	939.0	..
Monthly									
2002 Jan	..	..	3 693	3 903	..	955.2	*3.1*	1 021.5	..
Feb	..	..	3 679	3 889	..	950.1	*3.1*	1 024.0	..
Mar	..	25 919	3 666	3 876	20 613	947.6	*3.1*	998.2	..
Apr	..	..	3 655	3 864	..	954.7	*3.1*	982.7	..
May	..	..	3 640	3 848	..	950.5	*3.1*	954.5	..
Jun	..	25 829	3 628	3 836	20 614	951.8	*3.1*	937.0	..
Jul	..	..	3 616	3 823	..	948.5	*3.1*	956.4	..
Aug	..	..	3 605	3 810	..	942.7	*3.1*	962.7	..
Sep	..	25 807	3 593	3 797	20 657	944.6	*3.1*	936.2	..
Oct	..	..	3 584	3 789	..	942.2	*3.1*	907.2	..
Nov	..	..	3 574	3 778	..	938.6	*3.1*	905.6	..
Dec	..	25 826	3 561	3 765	20 698	935.1	*3.1*	919.1	..
2003 Jan	..	..	3 554	3 756	..	932.4	*3.1*	998.0	..
Feb	..	..	3 546	3 748	..	938.1	*3.1*	1 012.8	..
Mar	..	25 816	3 536	3 738	20 709	939.0	*3.1*	992.3	..
Apr	..	..	3 523	3 725	..	941.1	*3.1*	966.1	..
May	..	..	3 515	3 717	..	950.3	*3.1*	957.8	..
Jun	..	25 825	3 502	3 706	20 747	948.0	*3.1*	939.2	..
Jul	..	..	3 492	3 695	..	937.7	*3.1*	946.3	..
Aug	..	..	3 481	3 684	..	931.7†	*3.1*	948.6	..
Sep	..	..	..	..	..	929.8	*3.1*	922.1	..

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 gures, 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 gures do not include students claiming benefit during a vacation who intend to return to full-time education.

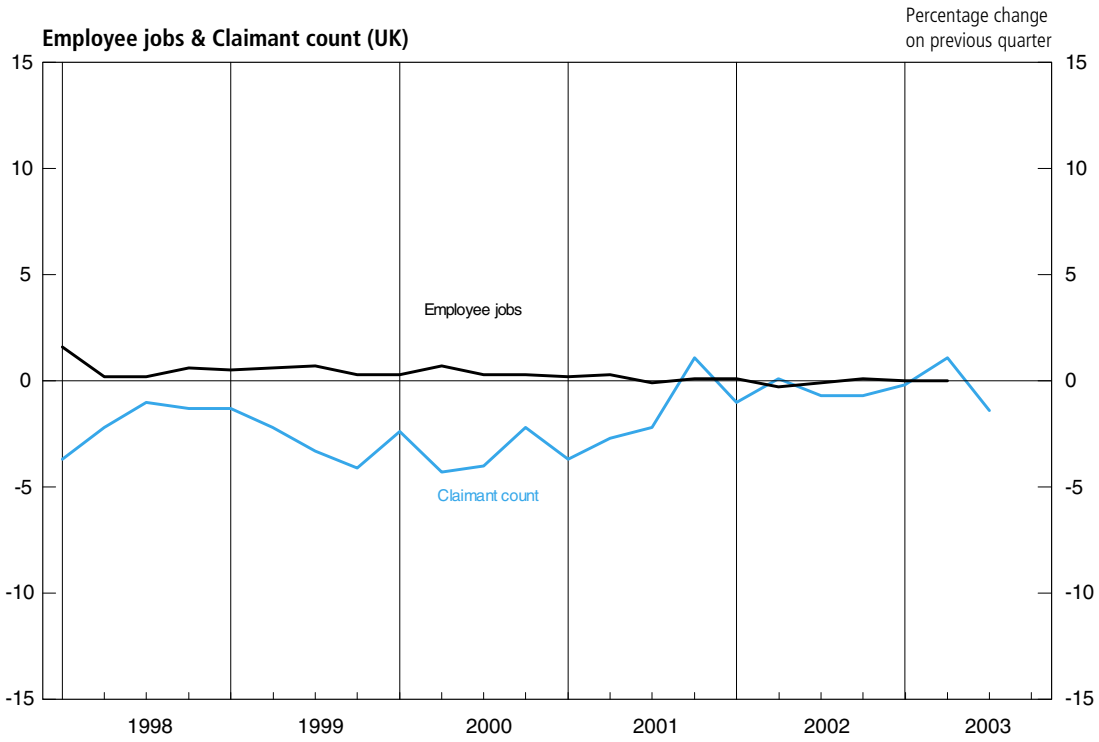
7 The denominator used to calculate claimant count unemployment rates is comprised of the workforce jobs plus the claimant count.

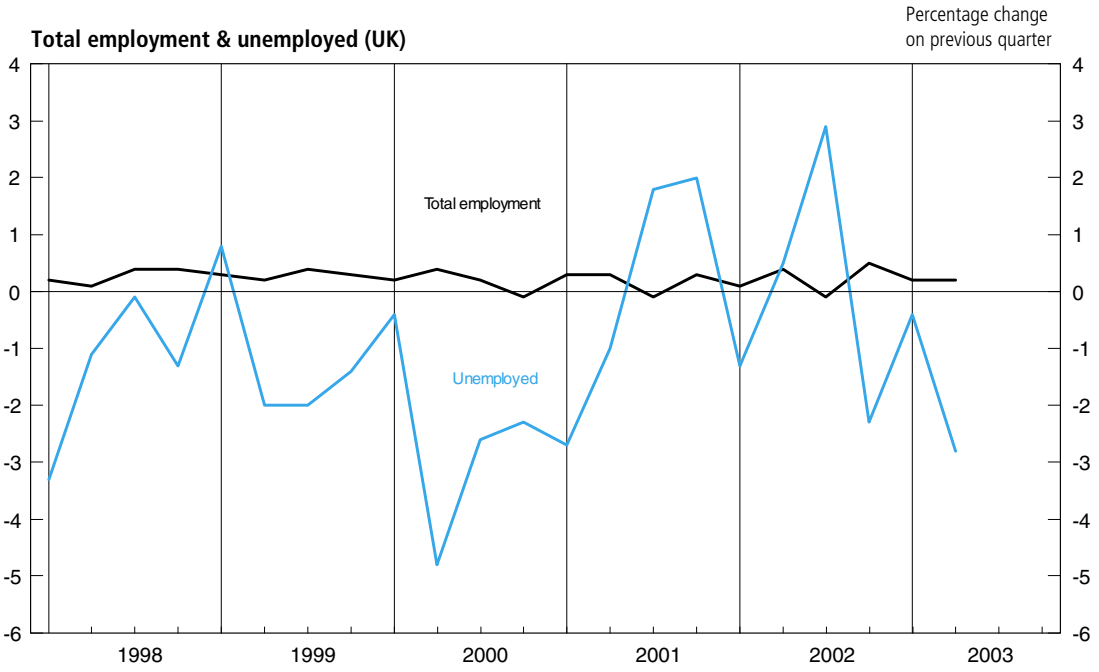
8 Vacancies noticed to Jobcentres and remaining unfilled. Jobcentre vacancies only account for *approximately* one third of all vacancies in the economy. *Note:* Quarter figures relate to the average for the three months in the quarter.

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


Employee jobs & Claimant count (UK)
Percentage change on previous quarter
15
10
5
0
-5
-10
-15
Employee jobs
Claimant count
1998
1999
2000
2001
2002
2003


Total employment & unemployed (UK)
Percentage change on previous quarter
4
3
2
1
0
-1
-2
-3
-4
-5
-6
Total employment
Unemployed
1998
1999
2000
2001
2002
2003

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	3.4	5.3	2.7
Q2	7.0	5.1	5.4	3.9	4.5	3.3	5.2	2.7
Q3	7.0	5.1	5.4	3.9	4.5	3.2	5.1	2.6
Q4	7.0	5.0	5.3	3.9	4.5	3.2	5.0	2.5
1999 Q1	7.4	4.8	5.3	3.8	4.6	3.0	4.7	2.4
Q2	7.3	4.7	5.1	3.7	4.6	3.0	4.6	2.3
Q3	7.1	4.6	5.0	3.6	4.5	2.9	4.5	2.2
Q4	6.7	4.4	4.8	3.5	4.3	2.7	4.3	2.1
2000 Q1	6.6	4.4	4.7	3.5	4.2	2.6	4.0	2.0
Q2	6.4	4.2	4.4	3.4	4.1	2.5	3.8	1.9
Q3	6.1	4.0	4.2	3.3	4.0	2.3	3.6	1.8
Q4	6.0	3.9	4.1	3.3	4.0	2.3	3.5	1.7
2001 Q1	5.9	3.8	4.1	3.2	3.9	2.1	3.3	1.6
Q2	5.7	3.8	4.0	3.2	3.8	2.1	3.2	1.5
Q3	5.5	3.7	3.9	3.0	3.7	2.0	3.2	1.5
Q4	5.6	3.7	3.8	3.0	3.6	2.1	3.4	1.6
2002 Q1	5.4	3.6	3.7	2.9	3.6	2.1	3.5	1.6
Q2	5.3	3.6	3.7	2.9	3.5	2.1	3.6	1.7
Q3	5.2	3.5	3.7	2.9	3.5	2.1	3.6	1.7
Q4	5.0	3.5	3.6	2.9	3.5	2.1	3.6	1.7
2003 Q1	4.9	3.5	3.6	2.8	3.6	2.1	3.6	1.7
Q2	4.8	3.4	3.5	2.9	3.6	2.2	3.7	1.8
Q3	4.7	3.4	3.4	2.9	3.6	2.2	3.7	1.8

	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	*5.6*	*5.5*	*4.6*	*7.6*	*4.7*
Q2	3.4	4.3	*5.5*	*5.4*	*4.5*	*7.4*	*4.6*
Q3	3.4	4.3	*5.4*	*5.5*	*4.4*	*7.3*	*4.5*
Q4	3.3	4.2	*5.4*	*5.4*	*4.4*	*7.2*	*4.5*
1999 Q1	3.3	4.1	*5.3*	*5.2*	*4.3*	*7.0*	*4.3*
Q2	3.2	4.0	*5.2*	*5.2*	*4.2*	*6.7*	*4.2*
Q3	3.0	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*	*3.8*	*5.5*	*3.8*
Q2	2.6	3.5	*4.4*	*4.6*	*3.6*	*5.3*	*3.6*
Q3	2.4	3.3	*4.4*	*4.4*	*3.5*	*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	2.1	3.0	*3.9*	*3.9*	*3.1*	*4.9*	*3.1*
Q4	2.0	3.0	*3.8*	*4.0*	*3.1*	*4.8*	*3.2*
2002 Q1	2.0	3.0	*3.7*	*3.9*	*3.1*	*4.7*	*3.1*
Q2	2.0	3.0	*3.7*	*3.9*	*3.1*	*4.6*	*3.1*
Q3	2.0	3.0	*3.6*	*3.8*	*3.1*	*4.4*	*3.1*
Q4	1.9	2.9	*3.6*	*3.8*	*3.0*	*4.4*	*3.1*
2003 Q1	1.9	2.9	*3.5*	*3.8*	*3.0*	*4.3*	*3.1*
Q2	1.9	3.0	*3.5*	*3.8*	*3.1*	*4.3*	*3.1*
Q3	1.9	2.9	*3.4*	*3.8*	*3.0*	*4.3*	*3.1*

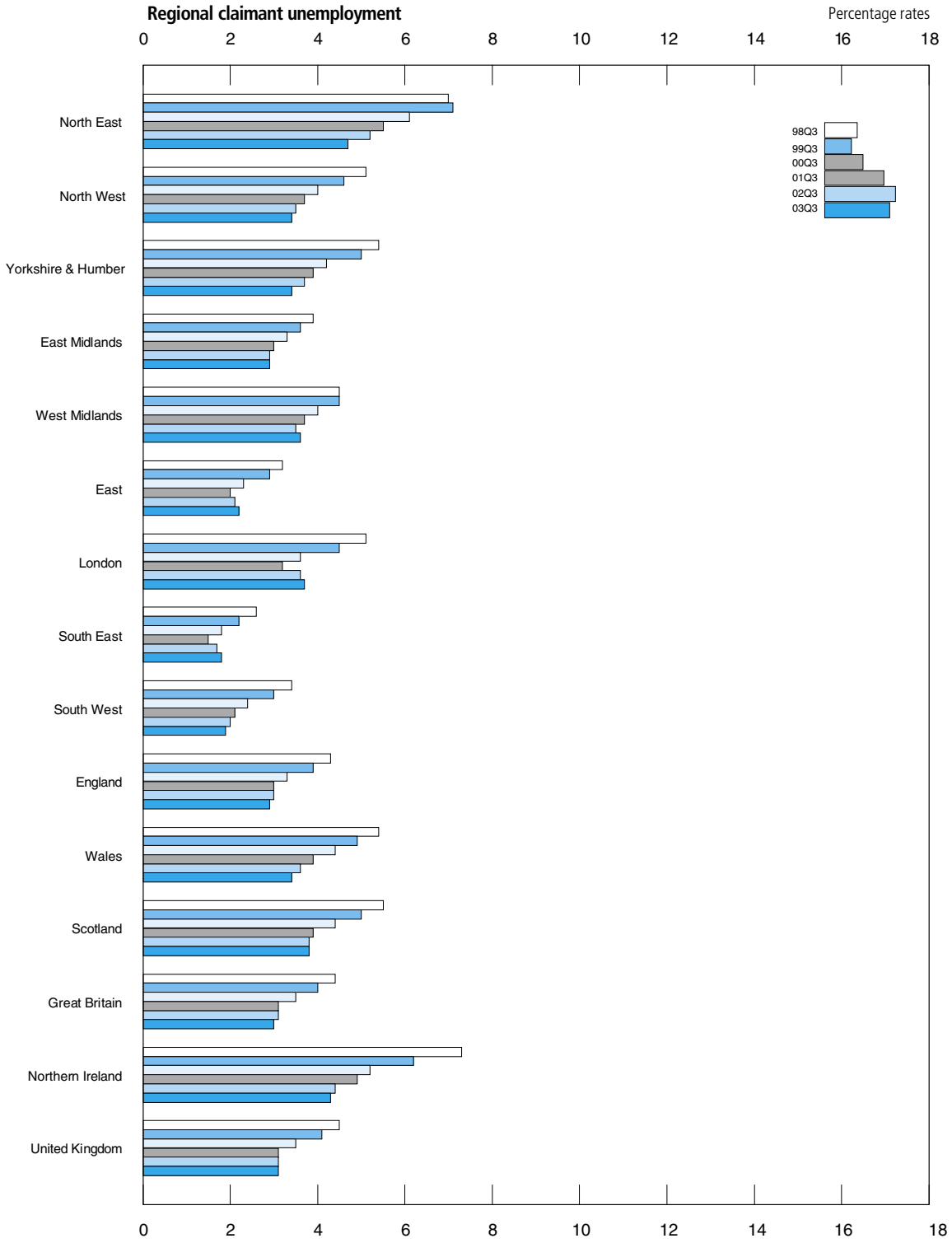
Note: Quarterly claimant count figures relate to the average of the three months in each quarter.

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 2001 and 2002 rates are based on mid-2001 estimates and earlier years are based on the corresponding mid-year estimates.

3 Includes Merseyside.

Source: Office for National Statistics; Enquiries 020 7533 6094


Regional claimant unemployment
Percentage rates
0
2
4
6
8
10
12
14
16
18
North East
North West
Yorkshire & Humber
East Midlands
West Midlands
East
London
South East
South West
England
Wales
Scotland
Great Britain
Northern Ireland
United Kingdom
98Q3
99Q3
00Q3
01Q3
02Q3
03Q3

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
1997 Q1	9.8	7.0	7.9	6.1	7.1	6.1	10.2	5.2
Q2	9.8	7.1	7.5	5.9	6.8	6.3	9.2	5.3
Q3	8.7	7.2	7.3	5.1	7.2	5.6	9.1	4.8
Q4	8.4	6.9	7.1	5.3	6.5	5.3	9.1	4.5
1998 Q1	8.4	6.7	7.1	5.2	6.2	5.4	8.1	4.4
Q2	8.3	6.9	7.3	4.9	5.9	4.9	8.4	4.4
Q3	8.3	6.7	7.1	5.4	6.1	4.5	7.7	4.5
Q4	9.7	7.0	7.0	4.9	6.5	4.3	7.5	3.9
1999 Q1	9.5	6.7	6.7	5.1	7.0	4.2	7.7	3.9
Q2	9.5	6.3	6.3	5.4	6.9	4.3	7.4	4.0
Q3	9.6	6.3	6.0	5.6	6.5	3.9	7.4	3.9
Q4	8.5	6.0	6.0	5.5	6.7	4.2	6.9	4.0
2000 Q1	8.9	6.1	6.4	5.1	6.1	3.9	7.5	3.5
Q2	8.8	5.4	6.1	4.8	6.1	3.6	7.3	3.3
Q3	8.8	5.4	5.9	4.8	5.8	3.7	6.9	3.1
Q4	7.9	5.3	6.1	4.7	5.9	3.6	6.7	3.4
2001 Q1	7.7	5.3	5.4	4.7	5.6	3.6	6.5	3.3
Q2	7.3	5.4	5.4	5.0	5.4	3.5	6.1	3.2
Q3	6.9	5.2	5.4	4.6	5.6	4.0	6.5	3.4
Q4	7.3	5.3	5.1	4.7	5.5	3.9	7.2	3.3
2002 Q1	7.3	5.4	5.0	4.8	5.6	3.7	6.8	3.5
Q2	6.3	5.6	5.2	4.5	5.5	3.7	6.7	3.9
Q3	6.2	5.5	5.5	4.7	6.0	3.8	7.0	4.0
Q4	7.5	5.0	5.1	4.8	5.6	3.9	6.5	4.0
2003 Q1	6.4	5.0	5.1	4.1	6.0	4.7	6.8	3.9
Q2	6.0	4.9	5.1	4.3	5.6	4.0	7.1	3.9

	South West	England	Wales	Scotland	Great Britain	Northern Ireland	United Kingdom
Quarterly							
	YCNK	YCNL	YCNM	YCNN	YCNO	ZSFB	MGSX
1997 Q1	5.7	7.1	7.8	8.5	7.3	8.7	7.3
Q2	5.8	6.9	8.3	8.6	7.1	8.0	7.2
Q3	5.1	6.6	7.4	8.1	6.8	8.4	6.8
Q4	5.1	6.4	6.9	7.4	6.5	8.8	6.5
1998 Q1	4.6	6.1	7.2	7.6	6.3	8.5	6.3
Q2	4.8	6.1	7.1	7.4	6.2	6.8	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	4.8	5.9	7.2	7.4	6.1	7.1	6.2
Q2	4.5	5.8	7.5	7.1	6.0	7.5	6.0
Q3	4.4	5.7	7.2	6.9	5.8	7.1	5.9
Q4	4.2	5.5	7.2	7.1	5.8	6.8	5.8
2000 Q1	4.2	5.5	6.7	7.6	5.7	6.5	5.8
Q2	4.3	5.3	6.1	7.0	5.5	6.6	5.5
Q3	4.1	5.1	6.6	6.7	5.3	5.6	5.3
Q4	3.9	5.1	5.8	6.3	5.2	6.2	5.2
2001 Q1	3.9	4.9	6.1	6.0	5.0	6.1	5.1
Q2	3.6	4.8	6.1	6.2	5.0	5.9	5.0
Q3	3.6	4.9	5.5	6.7	5.1	6.1	5.1
Q4	3.6	5.0	5.9	6.7	5.2	6.0	5.2
2002 Q1	3.4	4.9	5.7	6.6	5.1	6.0	5.1
Q2	3.7	4.9	5.7	6.4	5.1	5.4	5.1
Q3	3.9	5.1	5.2	6.4	5.2	6.3	5.3
Q4	4.0	5.0	5.3	6.2	5.1	5.7	5.1
2003 Q1	3.8	5.0	4.9	5.9	5.1	5.1	5.1
Q2	3.6	4.9	4.6	5.5	5.0	5.2	5.0

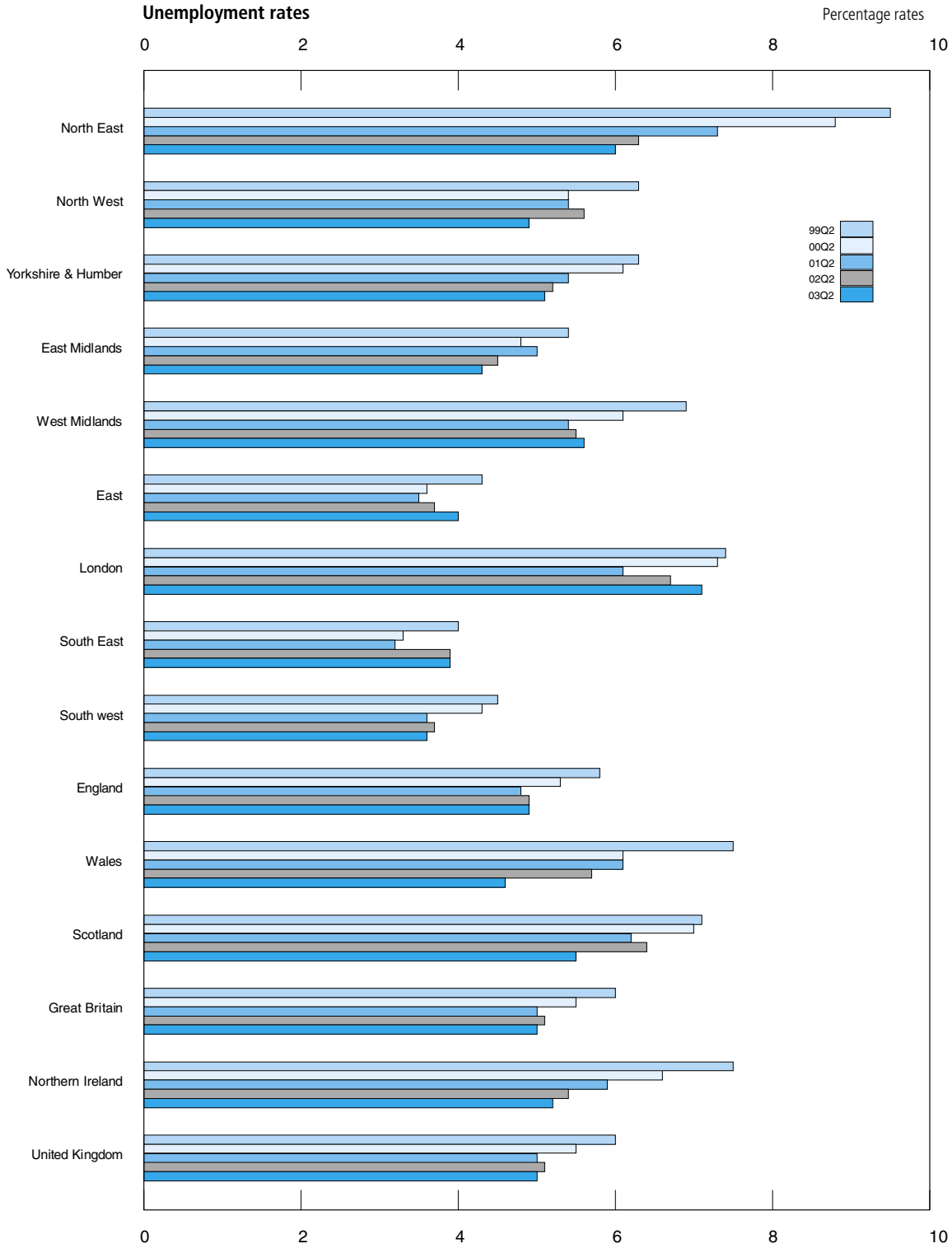
1 Due to published final population estimates for 1991-2000, the data have been revised, replacing the interim population estimates published in October 2002. For further details, please see:
www.statistics.gov.uk/cci/nugget.asp?id=207

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


Unemployment rates
Percentage rates
0
2
4
6
8
10
North East
North West
Yorkshire & Humber
East Midlands
West Midlands
East
London
South East
South west
England
Wales
Scotland
Great Britain
Northern Ireland
United Kingdom
99Q2
00Q2
01Q2
02Q2
03Q2

4.6 Average earnings
Great Britain

2000 = 100

	Whole economy+	headline rate[2]	Private sector	headline rate[2]	Public sector	headline rate[2]	Manufacturing industries[3]	headline rate[2,3]	Production industries	headline rate[2]	Service industries	headline rate[2]	Private sector services	headline rate[2]
Annual														
	LNMQ		LNKY		LNNJ		LNMR		LNMS		LNMT		JJGH	
1999	95.7†		95.5†		96.4†		95.6†		95.9†		95.7†		95.4†	
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		108.1		107.7	
Monthly														
		LNNC		LNND		LNNE		LNNG		LNNF		LNNH		JJGJ
1999 Jan	93.1†	4.4†	92.7†	4.6†	94.6†	3.7	93.7†	3.5	94.1†	3.5	92.9†	4.5†	92.3†	4.8†
Feb	93.7	4.4	93.5	4.6	95.2	3.9	93.8	3.5	94.2	3.4	93.7	4.6	93.4	4.9
Mar	94.1	4.5	93.8	4.7	95.4	4.2†	94.2	3.6	94.6	3.5	94.1	4.7	93.7	4.9
Apr	94.4	4.5	94.2	4.5	95.2	4.4	94.5	3.5†	95.0	3.4†	94.2	4.6	93.9	4.7
May	95.0	4.2	94.7	4.2	96.1	4.5	94.7	3.5	95.1	3.4	95.3	4.3	95.0	4.3
Jun	95.5	4.5	95.3	4.5	96.6	4.7	95.2	3.5	95.4	3.4	95.7	4.8	95.5	4.8
Jul	95.8	4.6	95.6	4.7	96.5	4.5	95.7	3.5	95.9	3.4	95.9	5.1	95.7	5.3
Aug	96.2	4.9	96.1	5.1	96.8	4.2	96.2	3.7	96.5	3.5	96.2	5.4	96.0	5.8
Sep	96.6	4.7	96.4	4.9	97.2	3.9	96.5	4.0	96.7	3.8	96.7	5.1	96.4	5.4
Oct	97.3	4.9	97.2	5.2	97.4	3.9	97.1	4.3	97.3	4.0	97.3	5.2	97.1	5.6
Nov	97.6	5.0	97.5	5.2	97.6	3.9	97.5	4.5	97.6	4.2	97.7	5.2	97.6	5.6
Dec	98.6	5.5	98.8	5.9	97.6	3.8	98.0	5.0	98.1	4.7	98.6	5.7	98.8	6.3
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	109.7	3.6	108.3	3.6	108.2	3.6	108.3	3.9	108.0	3.9
Aug	108.6	3.7	108.4	3.7	109.2	3.5	108.7	3.7	108.6	3.8	108.5	3.7	108.2	3.8
Sep	108.8	3.7	108.5	3.7	110.1	3.6	108.8	3.6	108.8	3.7	108.8	3.7	108.3	3.7
Oct	109.1	3.7	108.8	3.6	110.9	3.7	109.3	3.7	109.2	3.8	109.0	3.7	108.5	3.6
Nov	109.5	3.8	109.1	3.7	111.6	4.3	109.5	3.8	109.4	3.9	109.5	3.9	108.8	3.7
Dec	109.4	3.8	108.7	3.5	112.1	4.7	109.9	4.1	109.8	4.1	108.9	3.7	107.8	3.3
2003 Jan	109.8	3.6	109.2	3.3	112.4	5.0	109.9	4.0	109.8	4.1	109.6	3.4	108.6	2.9
Feb	109.9	3.2	109.3	2.8	112.8	5.1	110.7	4.1	110.6	4.1	109.8	2.9	108.7	2.2
Mar	111.4	3.5	110.8	3.2	113.4	5.1	113.3	4.9	113.1	4.8	110.9	3.2	109.8	2.6
Apr	110.8	3.3	110.2	2.8	113.9	5.1	110.2	4.5	110.2	4.5	110.9	3.1	110.0	2.3
May	111.3	3.4	110.7	3.0	113.7	4.9	111.1	4.1	111.0	4.1	111.5	3.3	110.7	2.7
Jun	111.6	3.0	110.9	2.4	114.8	5.1	111.3	2.9	111.3	3.0	111.8	3.1	110.8	2.4
Jul	112.3	3.3	111.7	2.9	115.5	5.1	111.7	3.1	111.5	3.1	112.5	3.5	111.6	2.9
Aug[1]	112.3	3.4	111.4	2.9	115.8	5.6	111.8	3.0	111.7	3.0	112.6	3.7	111.5	3.0

Note: The index has been reclassified from SIC 1980 to SIC 1992 in common with other economic series in the national accounts.

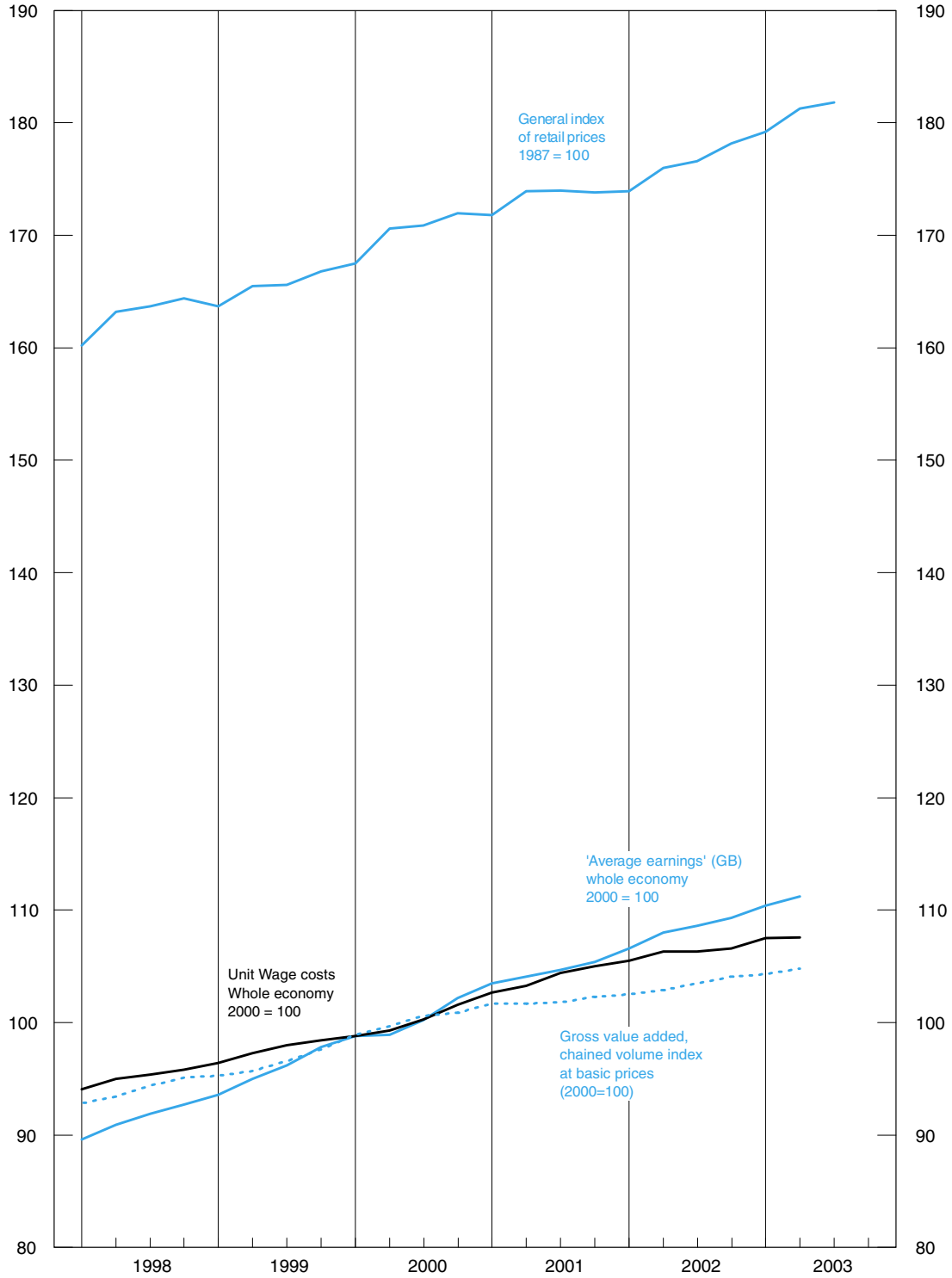
1 Provisional.

2 The headline rate is the change in the average seasonally adjusted index values for the last 3 months compared with the same period a year ago. Previously, the headline rate was centred on the middle month of the three under consideration. The new presentation aligns the average with the last month of the three.

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 816002

Earnings, wages, retail prices and output



4.7 Productivity and Unit Wage costs[1]

United Kingdom

2000 = 100

	Productivity jobs			Output per filled job[2]			Output per hour worked[3]			Unit wage costs	
	Whole economy	Total production industries	Manufact-uring industries	Whole economy	Total production industries	Manufact-uring industries	Whole economy	Total production industries	Manufact-uring industries	Whole economy	Manufact-uring industries
Annual											
	LNNM	LNOJ	LNOK	LNNN	LNNW	LNNX	LZVB	LZVK	LZVF	LNNK	LNNQ
2000	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2001	100.8	96.0	95.5	101.1	102.5	103.3	100.9	103.1	103.7	103.8	101.0
2002	100.7	91.6	90.7	102.5	104.5	104.9	102.6	104.8	104.7	106.2	102.9
Quarterly											
2000 Q1	99.4	101.3	101.5	99.4	98.3	97.8	99.9	98.1	97.5	98.8	100.7
Q2	99.9	100.5	100.5	99.8	99.6	99.3	99.6	99.2	98.9	99.3	99.8†
Q3	100.2	99.6	99.5	100.3	100.4	100.5	100.5	100.2	100.4	100.3	99.8
Q4	100.4	98.6	98.5	100.4	101.7	102.4	100.1	102.5	103.2	101.6	99.7
2001 Q1	100.6	97.6	97.3	101.1	102.5	103.5	100.8	103.2	104.1	102.7	99.7
Q2	100.8	96.6	96.2	100.8	102.2	102.6	100.4	102.2	102.5	103.3	101.5
Q3	100.8	95.3	94.8	101.0	103.1	104.0	100.8	102.8	103.4	104.4	100.7
Q4	100.9	94.4	93.8	101.4	102.2	102.9	101.8	104.4	104.7	105.0	102.3
2002 Q1	100.9	93.2	92.3	101.6	103.0	103.8	101.5	103.2	103.4	105.5	102.3
Q2	100.7	92.2	91.4	102.1	104.1	103.5	102.6	105.3	104.3	106.3	104.1
Q3	100.6	91.0	90.0	102.9	105.1	106.1	102.8	105.8	106.1	106.3	102.3
Q4	100.5	90.0	89.1	103.5	105.9	106.3	103.5	105.0	104.9	106.6	103.1
2003 Q1	100.7	89.2	88.2	103.6	106.6	107.3	103.3	105.6	105.7	107.5	103.7
Q2	100.8	88.0	86.8	104.0	108.2	109.6	103.8	109.1	109.5	107.6	101.1
Monthly											
2002 Jan	..	..	92.6	..	..	103.0	..	..	..	..	102.8†
Feb	..	..	92.3	..	..	104.0	..	..	..	..	102.0
Mar	..	..	91.9	..	..	104.3	..	..	..	..	102.0
Apr	..	..	91.7	..	..	104.7	..	..	..	..	102.6
May	..	..	91.4	..	..	105.8	..	..	..	..	101.8
Jun	..	..	90.9	..	..	100.0	..	..	..	..	108.1
Jul	..	..	90.5	..	..	105.4	..	..	..	..	102.7
Aug	..	..	90.0	..	..	106.5†	..	..	..	..	102.0
Sep	..	..	89.5	..	..	106.4	..	..	..	..	102.2
Oct	..	..	89.4	..	..	105.6	..	..	..	..	103.5
Nov	..	..	89.1	..	..	106.5	..	..	..	..	102.8
Dec	..	..	88.9	..	..	106.8	..	..	..	..	102.9
2003 Jan	..	..	88.6	..	..	106.7	..	..	..	..	103.0
Feb	..	..	88.2	..	..	107.7	..	..	..	..	102.8
Mar	..	..	87.9	..	..	107.5	..	..	..	..	105.3
Apr	..	..	87.3	..	..	108.9	..	..	..	..	101.1
May	..	..	86.8	..	..	109.5	..	..	..	..	101.4
Jun	..	..	86.4	..	..	110.3	..	..	..	..	100.8
Jul	..	..	86.1†	..	..	111.1	..	..	..	..	100.5
Aug	..	..	85.8	..	..	110.9	..	..	..	..	100.8

Percentage change, quarter on corresponding quarter of previous year

Quarterly											
	LNNO	LNNR	LNNS	LNNP	LNNT	LNNU	LZVD	LZVM	LZVH	LOJE	LOJF
2001 Q1	1.2	–3.6	–4.1	1.7	4.3	5.9	0.9	5.2	6.7	3.9	–1.1†
Q2	0.9	–3.9	–4.2	1.1	2.6	3.3	0.9	3.0	3.7	4.1	1.6
Q3	0.6	–4.3	–4.8	0.6	2.8	3.5	0.3	2.6	2.9	4.0	1.0
Q4	0.4	–4.2	–4.8	1.0	0.5	0.5	1.7	1.8	1.5	3.3	2.6
2002 Q1	0.3	–4.5	–5.2	0.5	0.4	0.2	0.8	–	–0.6	2.8	2.6
Q2	–0.1	–4.6	–5.1	1.3	1.9	0.9	2.2	3.0	1.8	2.9	2.6
Q3	–0.3	–4.5	–5.0	1.9	1.9	2.0†	2.0	2.9	2.7	1.9	1.6
Q4	–0.3	–4.7	–5.0	2.1	3.6	3.3	1.7	0.6	0.1	1.5	0.8
2003 Q1	–0.2	–4.3	–4.4	2.0	3.5	3.4	1.7	2.4	2.2	1.9	1.4
Q2	–	–4.5	–5.0	1.8	3.9	5.9	1.1	3.6	5.0	1.2	–2.9

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.

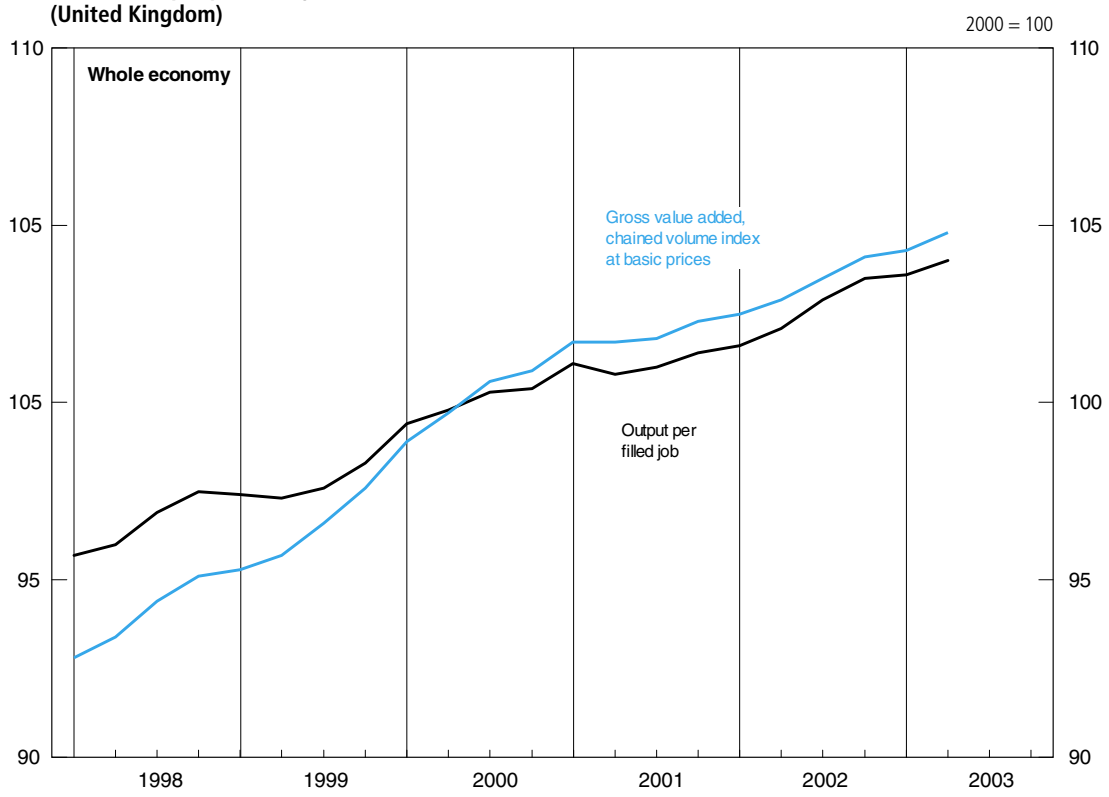
2 The data in this table contain indices referenced to 2000=100. Along with the UK national accounts, productivity has moved to using gross value added measures that are based on annually weighted and chained estimates of volume measures as recommended in the System of National Accounts 1993, with effect from the Quarterly National Accounts First release and the United Kingdom Economic Accounts (UKEA) dataset published on 30 September 2003.
An article explaining the effects of annual chain linking on the Blue Book 2002 national accounts dataset was published in April 2003 *Economic Trends*.

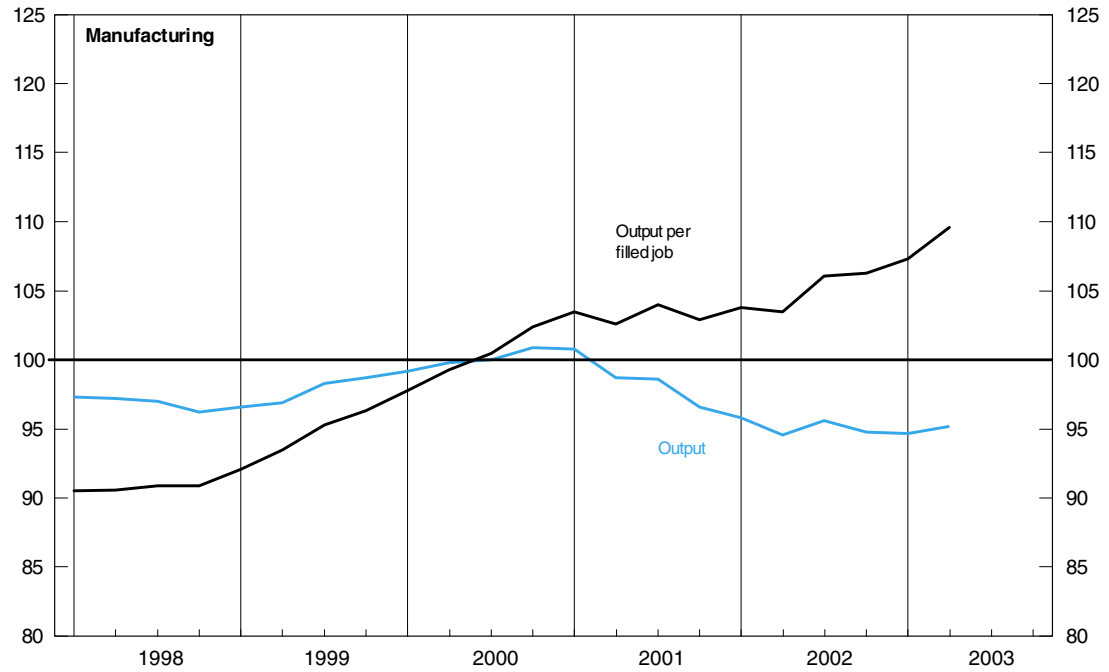
3 Output per filled job is the ratio of Gross value added at basic prices to productivity jobs.

4 Output per hour worked is the ratio of Gross value added at basic prices to productivity hours.

Source: Office for National Statistics; Enquiries 01633 812766

Index of Output per filled job
(United Kingdom)





5.1 Output of production industries[1]

2000 = 100

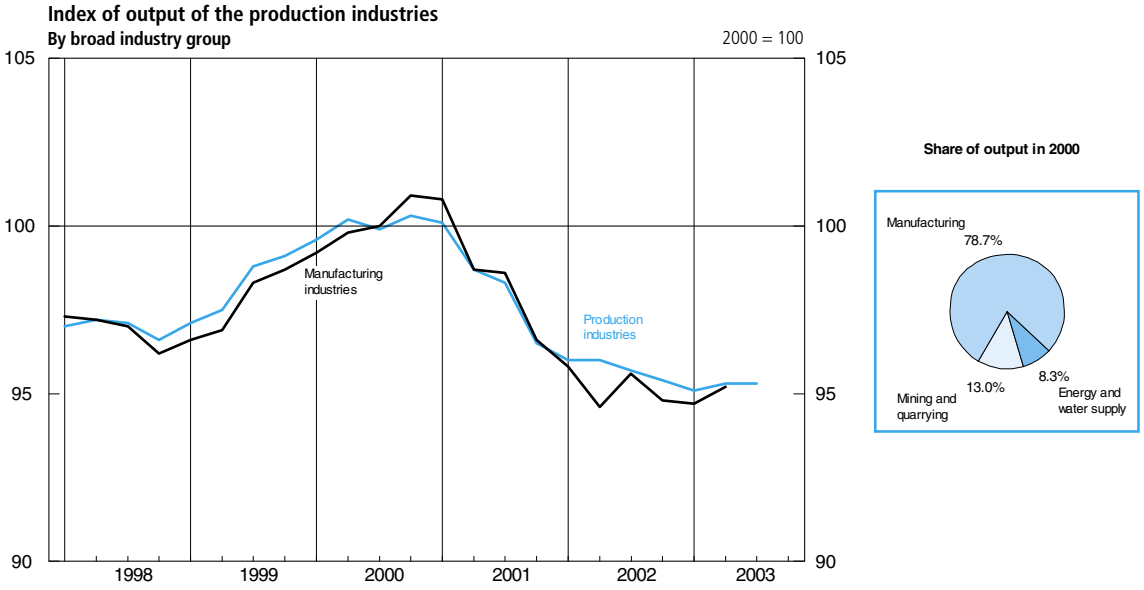
	Broad industry groups				By main industrial groupings			
	Total production industries+	Mining and quarrying	Electricity, gas and water supply	Total manufacturing industries+	Consumer durables	Consumer non-durables	Capital goods	Intermediate goods and energy
2000 weights	*1 000*	*130*	*83*	*786*	*37*	*258*	*221*	*485*
Annual								
	CKYW	CKYX	CKYZ	CKYY	UFIU	UFJS	UFIL	JMOH
1998	97.0	99.1	95.3	96.9	95.4	100.3	91.6	98.2
1999	98.1	103.3	97.9	97.6	98.4	99.6	96.5	98.2
2000	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2001	98.4	94.5	102.4	98.7	102.5	101.2	98.4	96.6
2002	95.8	94.3	103.7	95.2	103.8	101.0	90.1	94.9
Quarterly								
1998 Q1	97.0	97.9	93.6	97.3	93.6	100.6	90.9	98.5
Q2	97.2	98.9	95.2	97.2	95.2	101.0	91.1	98.6
Q3	97.1	99.2	95.8	97.0	96.6	100.3	92.0	98.1
Q4	96.6	100.4	96.6	96.2	96.5	99.4	92.3	97.4
1999 Q1	97.1	102.2	96.9	96.6	96.3	98.5	94.7	97.7
Q2	97.5	103.3	97.1	96.9	97.3	99.4	95.4	97.6
Q3	98.8	104.5	98.4	98.3	99.5	100.2	97.6	98.6
Q4	99.1	103.0	99.1	98.7	100.4	100.3	98.3	98.8
2000 Q1	99.6	103.8	98.7	99.2	100.3	100.3	98.2	99.9
Q2	100.2	102.4	101.0	99.8	99.9	100.4	99.5	100.4
Q3	99.9	98.9	99.9	100.0	99.8	99.8	100.1	100.0
Q4	100.3	94.9	100.3	100.9	100.0	99.5	102.2	99.8
2001 Q1	100.1	93.3	104.5	100.8	102.8	101.2	103.2	97.9
Q2	98.7	96.3	102.8	98.7	101.9	100.8	98.5	97.5
Q3	98.3	95.0	101.0	98.6	102.3	101.4	98.1	96.5
Q4	96.5	93.4	101.2	96.6	103.2	101.4	93.8	94.7
2002 Q1	96.0	94.1	101.4	95.8	104.9	101.4	90.5	94.9
Q2	96.0	99.1	104.2	94.6	102.8	101.2	89.2	95.7
Q3	95.7	90.1	105.7	95.6	103.3	101.6	90.5	94.3
Q4	95.4	93.9	103.6	94.8	104.2	99.9	90.0	94.7
2003 Q1	95.1	93.2	101.6	94.7	99.7	99.7	90.9	94.2
Q2	95.3	91.2	102.8	95.2	101.6	99.7	92.8	93.6
Q3	95.3	..	..	..	..	..	..	..
Monthly								
2001 Jul	97.9	95.4	99.8	98.2	102.7	100.7	97.5	96.4
Aug	98.8	95.0	99.4	99.4	102.2	102.5	99.5	96.3
Sep	98.2	94.7	103.7	98.2	101.9	101.1	97.3	96.7
Oct	96.9	92.8	98.1	97.5	104.4	101.9	95.4	94.4
Nov	96.4	93.0	102.2	96.4	103.6	101.5	93.5	94.6
Dec	96.2	94.3	103.2	95.8	101.6	101.0	92.5	95.0
2002 Jan	96.0	95.3	102.3	95.4	104.2	100.5	90.6	95.3
Feb	95.8	92.8	99.6	96.0	104.5	102.6	90.0	94.2
Mar	96.2	94.2	102.5	95.9	106.0	101.2	91.0	95.2
Apr	96.6	96.3	102.6	96.1	105.5	102.7	90.2	95.7
May	98.1	101.1	105.7	96.7	105.4	102.3	92.7	97.7
Jun	93.3	100.0	104.2	91.0	97.6	98.7	84.8	93.9
Jul	95.6	88.7	107.8	95.4	101.7	101.9	89.9	94.3
Aug	95.7	87.6	106.5	95.9	103.8	101.5	91.6	93.9
Sep	95.8	93.9	102.9	95.3	104.3	101.5	89.9	94.7
Oct	95.3	95.4	104.2	94.4	103.6	100.1	89.1	95.0
Nov	95.2	93.0	101.8	94.9	104.5	99.8	90.2	94.4
Dec	95.5	93.3	104.8	94.9	104.5	99.6	90.8	94.8
2003 Jan	94.7	92.7	99.3	94.5	101.5	99.5	90.2	93.7
Feb	95.5	93.6	103.7	95.0	99.8	99.9	91.5	94.7
Mar	95.0	93.4	101.8	94.6	97.9	99.8	91.0	94.1
Apr	95.0	90.7	100.7	95.1	101.1	99.1	93.4	93.1
May	95.1	91.5	100.7	95.1	100.9	100.4	91.9	93.3
Jun	95.8	91.3	107.0	95.4	102.8	99.8	93.1	94.4
Jul	95.7†	91.9†	102.2†	95.7†	103.8†	100.7†	92.9†	93.7
Aug	94.9	88.6	102.5	95.1	101.9	100.7	91.1	93.0

1 The figures contain, where appropriate, an adjustment for stock changes.

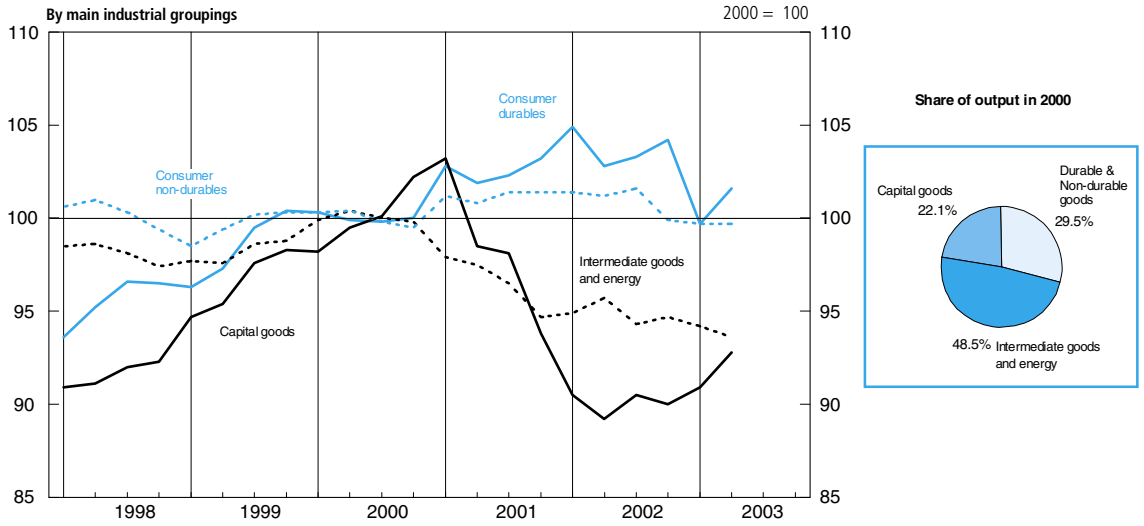
Source: Office for National Statistics; Enquiries 01633 812786

Index of output of the production industries

By broad industry group



By main industrial groupings



5.2 Engineering and construction: ouput and orders

Seasonally adjusted Index numbers at constant prices[1]

	Engineering (2000 =100)									Construction (GB)(1995=100)	
	Total			Home			Export				
	Orders[2] on Hand	New[3] Orders	Turnover	Orders[2] on Hand	New[3] Orders	Turnover	Orders[2] on Hand	New[3] Orders	Turnover	Gross output+[4]	Orders received
Annual											
	JIQI	JIQH	JIQJ	JIQC	JIQB	JIQD	JIQF	JIQE	JIQG	FEAQ	FEAZ
1998	81.9	84.2	87.8	79.1	82.5	88.3	86.7	86.4	87.3	107.1	112.9
1999	92.0	91.8	91.9	92.8	94.2	93.5	90.7	88.6	89.9	108.6	102.4
2000	103.4	100.0	100.0	104.9	100.0	100.0	100.8	100.0	100.0	110.3	106.8
2001	94.4	89.6	95.3	104.6	94.5	98.5	77.2	82.9	91.2	114.2	109.2
2002	91.5	80.4	84.0	103.9	87.2	90.9	70.5	71.3	74.9	123.3	118.8
Quarterly											
1998 Q1	87.2	88.8	88.7	86.9	87.3	90.2	87.7	90.9	86.6	109.7	112.2
Q2	87.8	85.7	87.9	86.8	84.2	87.7	89.5	87.8	88.2	106.1	106.4
Q3	84.9	80.7	86.9	81.2	77.0	87.7	91.2	85.5	86.0	106.1	119.0
Q4	81.9	81.6	87.9	79.1	81.6	87.6	86.7	81.5	88.3	106.4	113.9
1999 Q1	83.1	88.6	90.2	79.9	88.6	91.1	88.5	88.5	89.0	107.2	103.5
Q2	82.4	86.8	90.6	80.6	88.7	91.3	85.3	84.2	89.8	107.7	104.4
Q3	86.7	95.0	93.0	85.2	98.0	95.9	89.3	90.9	89.1	109.4	99.7
Q4	92.0	96.9	93.9	92.8	101.5	95.6	90.7	90.8	91.7	110.3	102.3
2000 Q1	96.2	95.9	94.1	96.6	96.3	95.1	95.7	95.4	92.7	112.9	104.0
Q2	100.6	101.6	99.9	100.2	101.1	100.4	101.2	102.4	99.2	110.1	113.5
Q3	102.7	100.7	101.6	101.7	99.0	101.0	104.4	102.9	102.3	108.2	109.0
Q4	103.4	101.8	104.5	104.9	103.6	103.6	100.8	99.4	105.7	109.9	100.8
2001 Q1	104.4	102.2	104.5	106.2	102.3	104.8	101.3	102.0	104.1	111.9	117.3
Q2	102.0	91.1	97.1	108.3	97.9	99.1	91.3	81.9	94.4	113.4	103.8
Q3	99.9	86.5	92.0	107.6	91.4	96.0	86.9	80.0	86.7	114.5	114.5
Q4	94.4	78.5	87.8	104.6	86.4	93.9	77.2	67.8	79.6	116.9	101.1
2002 Q1	95.0	82.0	84.1	105.2	87.6	90.4	77.7	74.3	75.8	120.4	124.3
Q2	93.9	80.2	84.3	105.7	88.2	91.1	73.8	69.4	75.2	121.9	103.5
Q3	93.7	81.5	84.4	106.1	88.3	91.3	72.7	72.3	75.4	124.1	128.3
Q4	91.5	78.1	83.4	103.9	84.6	90.9	70.5	69.3	73.4	126.7	119.2
2003 Q1	90.1	78.9	83.3	102.9	89.7	94.7	68.6	64.4	68.1	123.4	121.9
Q2	91.4	82.3	83.6	104.9	92.8	93.9	68.5	68.1	69.9	129.9	110.9†
Monthly											
2001 Jul	101.6	86.8	91.2	107.9	89.8	95.2	91.0	82.8	85.9	..	105.9
Aug	100.2	85.8	93.7	106.7	89.2	97.3	89.2	81.2	88.9	..	131.2
Sep	99.9	86.9	91.2	107.6	95.1	95.6	86.9	76.0	85.3	..	106.4
Oct	98.2	80.5	89.2	105.5	82.7	94.4	86.0	77.5	82.4	..	105.3
Nov	93.6	69.2	88.4	99.7	69.0	94.7	83.1	69.4	80.1	..	106.2
Dec	94.4	85.8	85.7	104.6	107.6	92.7	77.2	56.4	76.4	..	91.8
2002 Jan	94.4	81.5	84.2	104.1	84.7	90.1	78.1	77.0	76.3	..	105.8
Feb	96.0	86.8	84.1	105.5	92.2	90.4	79.9	79.5	75.8	..	120.9
Mar	95.0	77.7	84.0	105.2	86.0	90.6	77.7	66.5	75.3	..	146.1
Apr	94.8	81.9	85.5	105.3	89.9	93.2	76.9	71.1	75.3	..	93.8
May	94.3	82.6	87.0	105.9	92.5	93.9	74.8	69.3	77.7	..	111.8
Jun	93.9	76.0	80.4	105.7	82.2	86.2	73.8	67.7	72.6	..	105.1
Jul	94.4	83.9	84.8	106.1	88.9	90.9	74.6	77.1	76.6	..	132.9
Aug	94.7	81.6	83.3	107.8	94.2	91.1	72.5	64.6	73.1	..	116.2
Sep	93.7	78.9	85.2	106.1	81.8	91.8	72.7	75.1	76.4	..	135.9
Oct	94.1	81.7	83.3	105.6	84.6	90.1	74.5	77.9	74.2	..	107.7
Nov	91.2	70.4	83.3	102.4	74.8	90.4	72.1	64.6	73.9	..	107.2
Dec	91.5	82.1	83.5	103.9	94.4	92.1	70.5	65.5	72.1	..	142.8
2003 Jan	91.2	79.5	83.5	102.0	83.9	95.0	72.9	73.6	68.2	..	128.5
Feb	91.2	81.9	84.5	103.3	98.4	97.1	70.7	59.6	67.8	..	131.8
Mar	90.1	75.3	81.9	102.9	86.7	92.1	68.6	60.0	68.3	..	105.2
Apr	93.7	93.7	84.0	108.3	111.6	94.6	69.0	69.6	69.9	..	129.5
May	92.4	76.8	84.0	106.2	83.9	95.3	69.0	67.2	69.0	..	103.5
Jun	91.4	76.3	82.7	104.9	83.0	91.7	68.5	67.4	70.7	..	99.7†
Jul	92.2	86.0	86.0	105.2	94.6	97.1	70.2	74.5	71.1	..	120.7
Aug	91.9	79.0	82.7	106.4	93.5	92.5	67.4	59.5	69.8	..	87.2

1 The gures shown represent the output of United Kingdom based manufacturers classi ed 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.

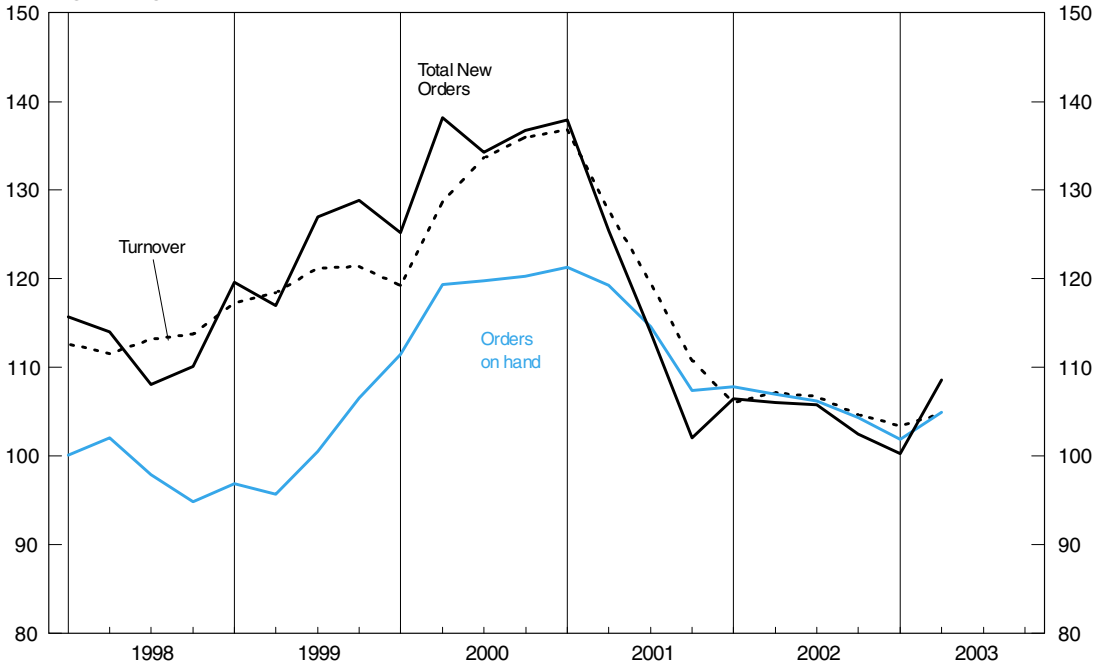
3 Net of cancellations.

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.

Sources: Office for National Statistics; Enquiries Columns 1-9 01633 812540; Department of Trade and Industry; Enquiries Columns 10-11 020 7890 5583

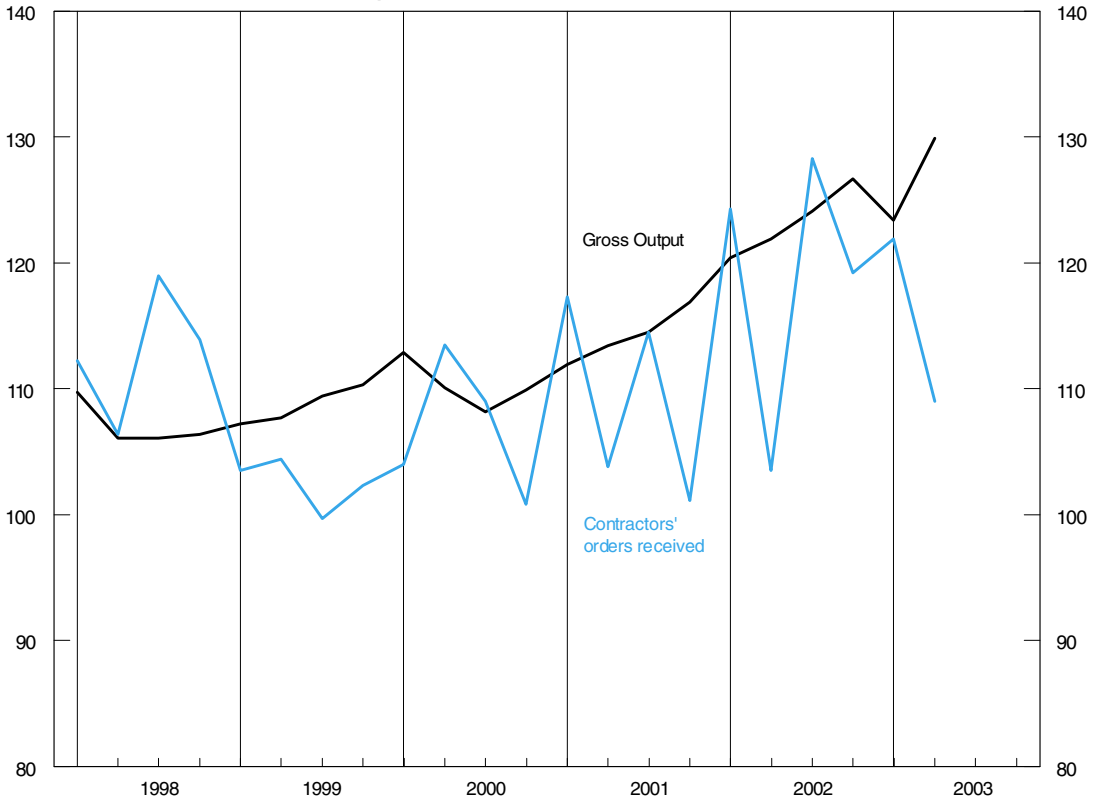
Engineering industries: turnover and orders

Volume indices 1995 = 100



Construction industries (GB) : output and orders

Volume indices 1995 = 100

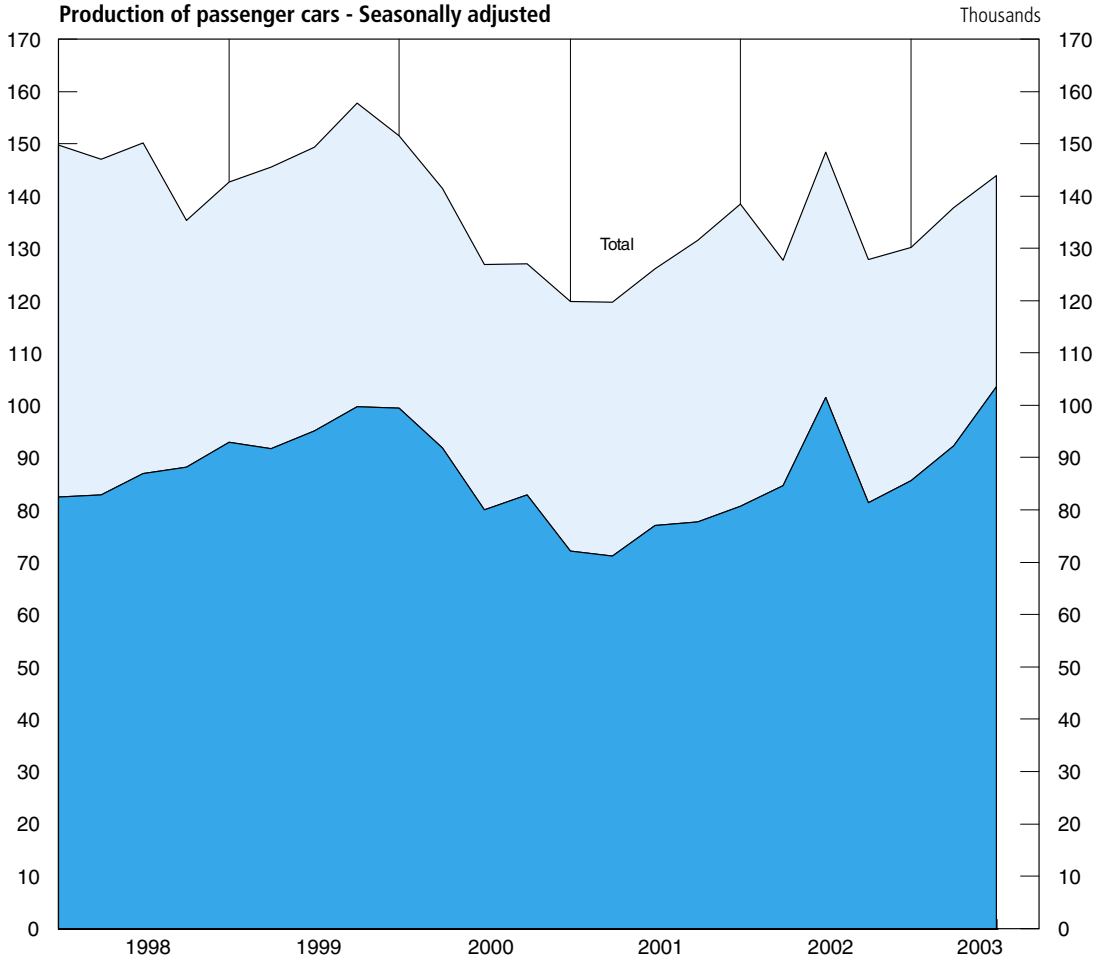


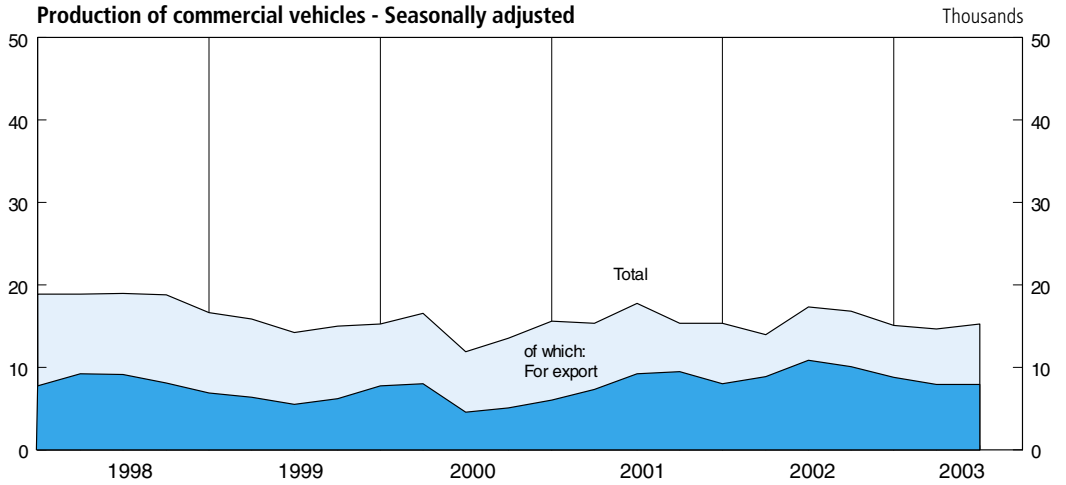
5.3 Motor vehicle and steel production

	Passenger cars[1]				Commercial vehicles[1]				
	Not seasonally adjusted		Seasonally adjusted[4]		Not seasonally adjusted		Seasonally adjusted[4]		Crude steel production (NSA)[2]
	Total production (thousands)	*of which* for export (thousands)	Total production (thousands)	*of which* for export (thousands)	Total production (thousands)	*of which* for export (thousands)	Total production (thousands)	*of which* for export (thousands)	(thousand tonnes)
Annual									
	FFAA	FFAB	FFAO	FFAP	FFAC	FFAD	FFAQ	FFAR	BCBS
1998	145.7	85.1	145.6	85.1	18.9	8.6	18.9	8.5	17 318.1
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	6.4	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	87.2	135.7	87.1	15.9	9.5	15.9	9.5	11 667.1
Quarterly									
1998 Q1	154.1	89.0	149.8	82.5	20.0	8.8	18.9	7.8	4 498.7
Q2	156.0	81.7	147.1	82.9	20.0	9.7	18.9	9.2	4 660.0
Q3	134.6	75.1	150.2	86.9	16.5	7.4	19.0	9.1	4 502.0
Q4	138.0	94.6	135.4	88.2	19.3	8.3	18.8	8.1	3 657.4
1999 Q1	153.5	97.6	142.8	93.0	17.8	7.5	16.7	6.9	4 126.5
Q2	149.6	97.7	145.6	91.7	16.8	6.6	15.9	6.4	4 376.9
Q3	135.9	76.7	149.4	95.1	12.1	4.4	14.3	5.5	4 054.9
Q4	156.5	107.5	157.8	99.7	15.3	6.4	15.0	6.2	3 725.5
2000 Q1	164.8	105.0	151.6	99.5	16.7	8.4	15.3	7.8	4 442.5
Q2	144.4	97.6	141.5	91.9	17.3	8.2	16.6	8.0	4 019.8
Q3	111.7	63.2	127.0	80.1	9.5	3.5	11.9	4.6	3 288.7
Q4	126.3	88.6	127.1	82.9	13.7	5.2	13.6	5.1	3 403.6
2001 Q1	129.0	75.5	119.9	72.1	17.2	6.6	15.6	6.0	3 651.7
Q2	124.1	76.5	119.8	71.2	16.6	7.7	15.4	7.3	3 729.6
Q3	111.9	61.0	126.1	77.0	14.5	7.4	17.8	9.2	3 205.5
Q4	132.4	85.1	131.6	77.8	16.1	10.3	15.4	9.5	2 955.9
2002 Q1	149.9	85.0	138.6	80.7	16.7	8.4	15.4	8.0	3 046.3
Q2	133.5	93.8	127.8	84.7	14.8	9.4	14.0	8.9	3 060.0
Q3	130.6	80.7	148.4	101.5	14.9	9.3	17.4	10.9	2 801.9
Q4	128.7	89.3	127.9	81.4	17.3	10.9	16.8	10.1	2 758.9
2003 Q1	141.5	91.3	130.2	85.6	16.5	9.3	15.1	8.8	3 111.6
Q2	144.4	101.3	137.8	92.2	15.5	8.3	14.7	7.9	3 246.5
Q3	130.4	85.8	143.9	103.6	13.4	6.9	15.3	7.9	3 203.5
Monthly									
2001 Jul	114.9	63.9	122.2	74.8	14.1	7.6	15.6	8.8	985.5
Aug	89.3	45.5	129.1	80.4	12.0	6.0	21.3	9.8	1 165.3*
Sep	131.6	73.6	127.0	75.9	17.3	8.7	16.6	9.0	1 054.7
Oct	146.0	92.8	133.3	78.3	17.6	10.9	15.6	9.5	1 231.8*
Nov	145.0	93.1	124.4	77.0	17.6	11.5	15.2	9.7	913.5
Dec	106.1	69.3	137.1	78.0	13.0	8.5	15.4	9.4	810.6
2002 Jan	154.4	84.9	145.1	82.3	16.7	8.4	15.6	8.5	1 119.7*
Feb	147.6	81.8	139.5	83.0	17.4	7.4	15.9	7.0	960.5
Mar	147.8	88.4	131.1	76.8	15.9	9.5	14.6	8.5	966.1
Apr	129.5	93.5	137.8	90.0	16.5	11.1	16.0	10.1	1 003.4
May	158.2	109.0	142.7	89.5	15.8	9.9	15.6	9.7	1 204.9*
Jun	112.8	78.9	103.0	74.7	12.2	7.3	10.5	7.0	851.7
Jul	134.5	84.9	137.3	92.9	15.2	9.9	16.4	10.9	1 082.0*
Aug	112.8	67.0	173.3	124.1	9.8	6.1	17.5	10.3	805.4
Sep	144.5	90.3	134.6	87.5	19.8	11.9	18.4	11.5	914.5
Oct	149.7	98.0	132.6	83.6	19.8	12.5	17.6	11.1	1 116.5*
Nov	138.8	98.7	126.7	82.5	18.8	11.2	16.9	9.7	846.0
Dec	97.5	71.2	124.4	78.2	13.4	9.0	16.0	9.6	796.4
2003 Jan	136.1	85.2	125.6	78.7	15.8	8.3	15.0	8.4	1 107.1*
Feb	136.4	86.2	129.0	86.9	16.3	8.9	15.0	8.7	994.6
Mar	151.9	102.4	136.0	91.2	17.3	10.7	15.3	9.4	1 009.9
Apr	144.8	100.8	149.2	95.0	14.6	8.0	14.6	8.0	1 213.4*
May	133.1	97.6	125.8	84.7	14.0	7.5	14.2	7.6	1 018.4
Jun	155.4	105.6	138.3	97.0	18.0	9.5	15.2	8.1	1 014.7
Jul	146.3†	93.1†	144.5†	102.9†	15.2	7.6	16.0†	8.4†	1 237.8*
Aug	91.4	57.5	143.5	104.7	7.8	3.8	14.8	7.0	953.9†
Sep	153.5	106.8	143.8	103.2	17.1	9.2	15.2	8.2	1 011.8[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 812963; ISSB Ltd; Enquiries Column 9 020 7343 3900


Production of passenger cars - Seasonally adjusted
Thousands
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
Total
1998
1999
2000
2001
2002
2003


Production of commercial vehicles - Seasonally adjusted
Thousands
50
40
30
20
10
0
Total
of which:
For export
1998
1999
2000
2001
2002
2003

5.4 Indicators of fixed investment in dwellings

	Fixed investment in dwellings (£ million, chained volume measures, reference year 2000))	Orders received by contractors for new houses (GB) (£ million, 1995 prices)	Housing starts[1,2,3] (GB)+			Housing completions[1,2,3] (GB)+			Quarterly average price of new dwellings at mortgage completion stage[6] (£)
			Private enterprise (thousands)	Registered Social Landlords[4,5] (thousands)	Local Authorities (NSA) (thousands)	Private enterprise (thousands)	Registered Social Landlords[4,5] (thousands)	Local Authorities (NSA) (thousands)	
Annual									
	DFEG	FCAS	FCAT	CTOQ	CTOU	FCAV	CTOS	CTOW	BBJV
1998	28 490	5 986	154.2	22.3	0.2	145.9	23.3	0.4	96 674
1999	27 372	5 426	156.8	21.5	0.4	149.2	23.3	0.2	112 088
2000	27 394	5 228	158.3	18.9	0.3	144.1	22.9	0.3	122 400
2001	27 999	5 310	162.9	16.9	0.3	140.3	21.2	0.5	132 133
2002	32 973	5 776	165.1	17.6	0.3	150.3	19.7	0.4	157 529
Quarterly									
1998 Q1	7 085	1 753	40.3	6.0	0.1	36.7	6.9	0.1	94 401
Q2	7 374	1 465	38.0	5.4	–	37.9	5.8	0.1	96 669
Q3	7 125	1 509	38.6	5.5	–	36.2	5.4	0.1	94 050
Q4	6 906	1 258	37.4	5.3	0.1	35.1	5.2	0.1	101 809
1999 Q1	6 735	1 338	38.6	5.6	0.1	35.5	5.6	–	106 469
Q2	7 181	1 292	38.7	5.2	0.1	36.3	6.1	0.1	112 110
Q3	6 423	1 339	38.2	5.4	0.1	38.6	5.8	–	112 616
Q4	7 033	1 456	41.3	5.2	0.1	38.6	5.8	0.1	116 114
2000 Q1	7 016	1 360	41.6	5.1	0.1	37.7	5.6	–	121 017
Q2	6 970	1 323	39.5	4.9	–	36.8	5.9	0.1	120 507
Q3	6 819	1 324	40.0	4.3	0.1	35.3	4.7	0.1	121 866
Q4	6 589	1 220	36.7	4.5	0.1	35.5	6.6	0.1	126 260
2001 Q1	7 044	1 313	38.3	5.7	0.2	34.7	5.7	0.3	131 248
Q2	6 769	1 317	40.4	4.2	–	34.6	4.7	–	128 342
Q3	7 142	1 365	41.9	3.3	–	36.0	4.7	0.1	136 620
Q4	7 044	1 314	42.9	3.8	0.1	35.0	6.2	0.1	133 938
2002 Q1	7 446	1 431	41.0	5.5	0.1	36.4	5.2	–	144 766
Q2	7 910	1 314	39.6	4.2	0.1	38.1	4.6	0.2	153 349
Q3	8 553	1 508	42.7	4.3	–	36.3	4.5	–	162 951
Q4	9 064	1 523	42.6	3.7	0.1	39.4	5.5	0.1	163 688
2003 Q1	8 185	1 546	44.6	4.6	0.1	38.2	5.0	0.2	161 373
Q2	8 562	1 569†	..	..	..	..	..	..	179 293
Monthly									
2001 Jul	..	392	13.3	1.2	–	11.7	1.8	–	..
Aug	..	568	13.6	1.0	–	11.6	1.6	–	..
Sep	..	405	14.9	1.1	–	12.7	1.3	–	..
Oct	..	396	14.8	1.3	–	11.8	2.5	–	..
Nov	..	422	13.8	1.4	–	11.4	1.9	–	..
Dec	..	496	14.3	1.1	–	11.7	1.7	0.1	..
2002 Jan	..	550	13.4	1.6	0.1	12.2	1.7	–	..
Feb	..	416	13.4	1.7	–	12.4	1.7	–	..
Mar	..	464	14.2	2.1	–	11.8	1.7	–	..
Apr	..	461	15.6	1.7	–	12.3	1.7	0.1	..
May	..	409	12.6	1.4	–	13.4	1.3	0.1	..
Jun	..	444	11.4	1.0	0.1	12.4	1.7	–	..
Jul	..	509	13.6	1.1	–	11.3	1.4	–	..
Aug	..	534	13.5	1.7	–	12.2	1.3	–	..
Sep	..	465	15.6	1.5	–	12.8	1.8	–	..
Oct	..	489	13.9	1.5	–	12.5	1.8	–	..
Nov	..	490	13.9	1.2	–	13.0	1.8	–	..
Dec	..	545	14.7	1.1	–	14.0	1.8	–	..
2003 Jan	..	580	14.6	1.4	–	11.4	1.5	–	..
Feb	..	473	16.0	1.5	–	13.7	1.6	–	..
Mar	..	493	14.0	1.8	0.1	13.1	1.9	0.1	..
Apr	..	561	..	..	..	..	..	..	..
May	..	525	..	..	..	..	..	..	..
Jun	..	484†	..	..	..	..	..	..	..
Jul	..	523	..	..	..	..	..	..	..
Aug	..	401	..	..	..	..	..	..	..

1 Monthly data collection ceased after March 2003. Only quarterly data is now collected. Great Britain data for Q2 2003 is not yet available. Data for England, Scotland and Wales is available from the website of the Office of the Deputy Prime Minister: **www.odpm.gov.uk**

2 Data includes estimates for Scotland monthly, quarterly from Q4 2002, and annually from 2002.

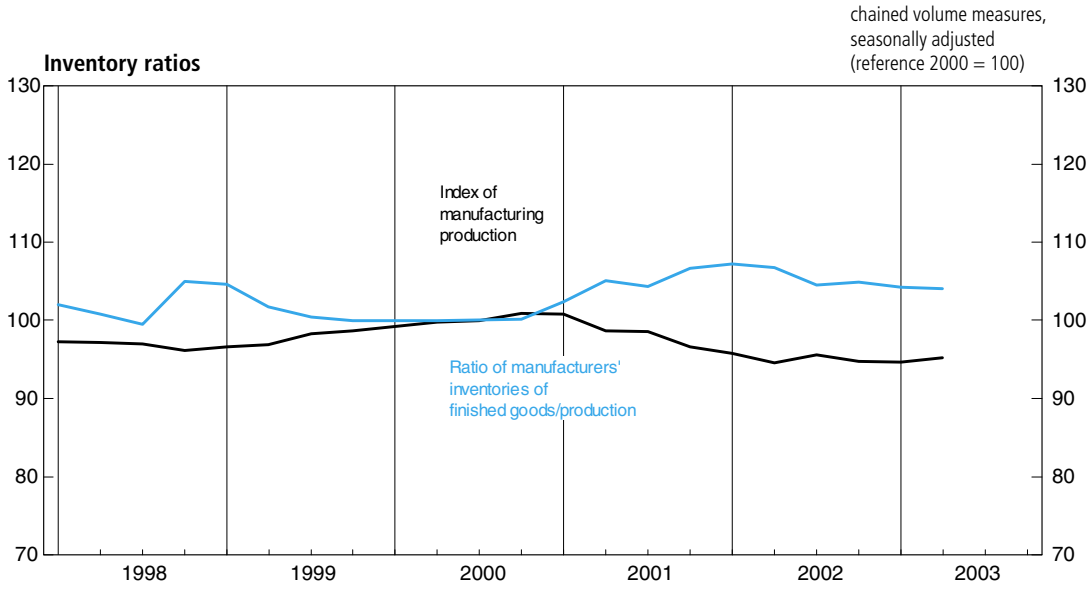
3 The annual totals shown do not equal the equivalent non-seasonally adjusted annual totals because the adjustment was based on financial years.

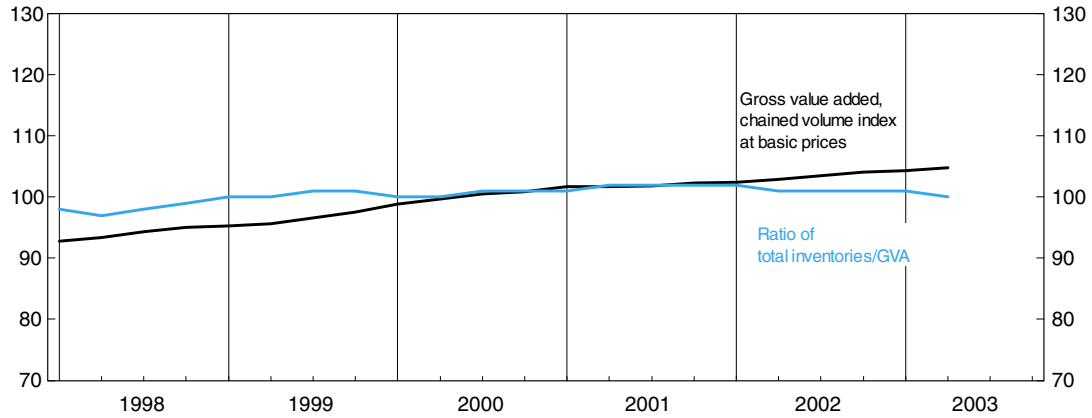
4 Includes registered and non-registered social landlords.

5 The Registered social landlords series is seasonally adjusted to March 2000 only for England, to December 1996 only for Scotland, and unadjusted for Wales.

6 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) which now includes all mortgage lenders rather than building societies only.

Sources: Office for National Statistics;
Enquiries Column 1 020 7533 6010; Columns 9-10 020 7533 6046;
Department of Trade and Industry ; Column 2 020 7944 5583;
Office of the Deputy Prime Minister;


Inventory ratios
chained volume measures,
seasonally adjusted
(reference 2000 = 100)
130
120
110
100
90
80
70
Index of
manufacturing
production
Ratio of manufacturers'
inventories of
finished goods/production
1998
1999
2000
2001
2002
2003


130
120
110
100
90
80
70
Gross value added,
chained volume index
at basic prices
Ratio of
total inventories/GVA
1998
1999
2000
2001
2002
2003

5.5 Number of property transactions[1]

Thousands

	Number of property transactions				Number of property transactions		
	Not seasonally adjusted England & Wales	Seasonally adjusted England & Wales[2,3]	Not seasonally adjusted England, Wales & N. Ireland		Not seasonally adjusted England & Wales	Seasonally adjusted England & Wales[2,3]	Not seasonally adjusted England, Wales & N. Ireland
	FTAP		FTAR	Aug	134	125	137
1998	1 347		1 384	Sep	140	125	145
1999	1 469		1 511	Oct	134	130	137
2000	1 433		1 471	Nov	141	129	144
2001	1 458		1 497	Dec	122	128	125
2002	1 586		1 627				
		FTAQ		2000 Jan	137	136	140
1998 Q1	317	344	327	Feb	112	128	116
Q2	317	332	327	Mar	118	128	122
Q3	377	345	386	Apr	97	114	100
Q4	335	326	345	May	122	120	126
				Jun	129	122	130
1999 Q1	316	345	325	Jul	127	117	130
Q2	342	358	354	Aug	134	117	137
Q3	414	379	425	Sep	117	112	121
Q4	397	388	407	Oct	123	112	127
				Nov	117	111	121
2000 Q1	367	392	379	Dec	98	114	101
Q2	348	356	356				
Q3	379	346	388	2001 Jan	123	115	127
Q4	339	338	349	Feb	99	119	102
				Mar	105	117	108
2001 Q1	327	351	337	Apr	101	115	105
Q2	347	357	360	May	121	120	126
Q3	396	366	405	Jun	125	122	128
Q4	387	383	396				
				Jul	132	119	135
2002 Q1	342	383	351	Aug	140	123	143
Q2	395	400	404	Sep	124	124	127
Q3	457	412	468	Oct	140	125	143
Q4	392	391	404	Nov	137	134	141
				Dec	110	124	112
2003 Q1	340	372	359				
Q2	306	323	320	2002 Jan	131	125	134
Q3	358	326	369	Feb	108	129	110
				Mar	104	129	106
1998 Jan	119	114	122	Apr	129	134	132
Feb	94	114	97	May	137	136	140
Mar	104	116	108	Jun	129	130	132
Apr	103	110	106				
May	96	109	99	Jul	152	133	154
Jun	119	113	122	Aug	166	146	171
				Sep	139	132	144
Jul	129	113	132	Oct	147	131	151
Aug	119	116	121	Nov	127	129	131
Sep	129	116	133	Dec	118	131	122
Oct	119	109	122				
Nov	110	106	113	2003 Jan	131	127	137
Dec	107	111	110	Feb	103	124	109
				Mar	106	121	113
1999 Jan	112	115	116	Apr	101	114	108
Feb	96	116	99	May	101	105	105
Mar	108	115	110	Jun	103	103	107
Apr	110	122	114				
May	106	117	110	Jul	132	115	135
Jun	126	119	130	Aug	112	105	116
				Sep	114	105	118
Jul	140	129	144				

1 The figures are based on counts of the relevant administrative forms processed each month. Normally the Stamp Offices are able to process the transactions they receive immediately, but high volumes handled in the second quarter of 2002 created some delays, which were partly addressed in July and fully addressed by August. The high volumes manifest itself in a time lag and the later processing of a proportion of the PD forms, which will boost the transactions in the later month. Furthermore because of the time lags involved between completion of transaction and receipt in the Stamp Office, the series above should normally be lagged one month to give a broad representation of transactions occurring in the month (details are given in the June 1991 edition of *Economic Trends*). This relationship will be weaker when Stamp Offices are not able to quickly process the transactions they receive.

2 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.

3 The sum of seasonally adjusted components does not exactly match the unadjusted (definitive) annual total.

Source: Board of Inland Revenue; Enquiries 020 7438 6314

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5.6 Change in inventories
Chained volume measures[1]

Reference year 2000, £ million

	Mining and quarrying	Manufacturing industries: Materials and fuel	Manufacturing industries: Work in progress	Manufacturing industries: Finished goods	Manufacturing industries: Total	Electricity, gas and water supply	Distributive trades: Wholesale[2]	Distributive trades: Retail[2]	Other industries[3]	Change in inventories
Level of inventories at end-December 2002	930	20 845	16 155	19 806	56 806	1 219	27 064	22 024	37 223	145 266
Quarterly	FAEA	FBNF	FBNG	FBNH	DHBM	FAEB	FAJX	FBYN	DLWX	CAFU
1999 Q1	22	216	–230	–4	–16	–36	156	442	2 176	2 742
Q2	–86	–29	–32	–481	–541	–3	407	600	105	476
Q3	–94	158	257	22	437	–101	387	321	729	1 677
Q4	–62	344	–113	–2	231	–23	742	129	506	1 531
2000 Q1	–36	139	400	102	640	71	620	599	–1 069	819
Q2	1	375	–91	114	399	37	440	363	17	1 262
Q3	–34	293	–80	67	282	78	750	320	538	1 941
Q4	–108	–76	291	188	401	99	93	–13	783	1 249
2001 Q1	–3	150	2	426	578	–355	266	235	74	795
Q2	–5	–241	–84	110	–215	164	458	118	1 286	1 806
Q3	32	–409	43	–172	–538	80	339	152	290	355
Q4	–3	–104	–264	47	–321	30	–584	9	851	–18
2002 Q1	236	538	99	–90	547	–276	–1 670	521	1 886	1 244
Q2	–74	–507	–476	–334	–1 317	51	712	848	–810	–590
Q3	–84	–436	–60	–212	–708	84	212	397	28	–71
Q4	–87	–252	–145	–92	–489	103	543	92	751	913
2003 Q1	–30	–42	20	–149	–171	–203	–153	–4	693	132
Q2	60	–380	64	82	–234	82	–52	247	–728	–625

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*.

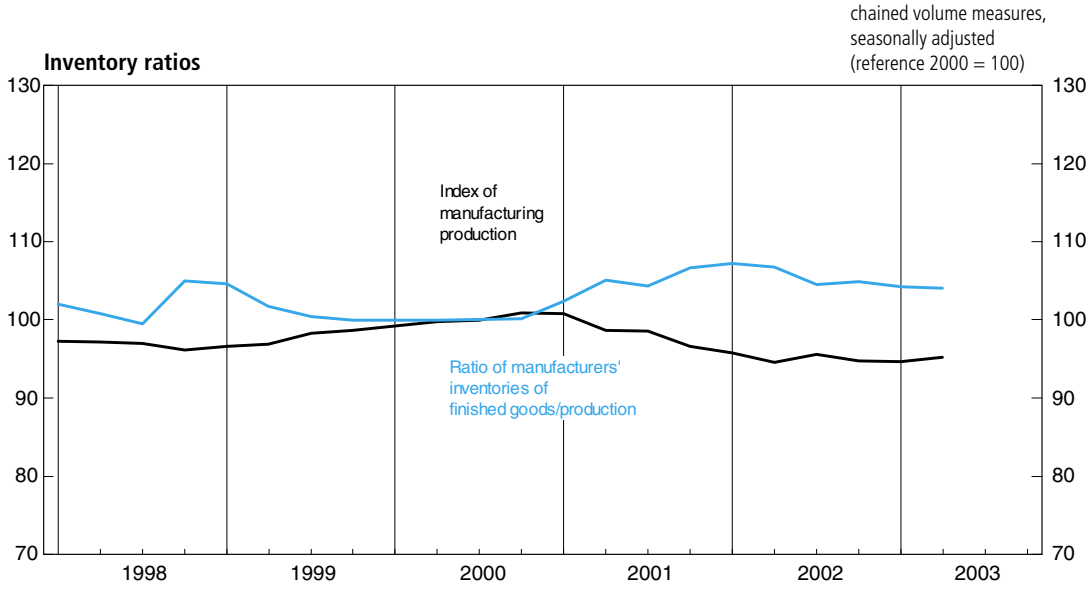
Sources: Office for National Statistics; Enquiries Columns 1-8 01633 812351; Columns 9-10 020 7533 5949

5.7 Inventory ratios

	Manufacturersí inventories[1] to manufacturing production: Materials and fuel	Manufacturersí inventories[1] to manufacturing production: Work in progress	Manufacturersí inventories[1] to manufacturing production: Finished goods	Manufacturersí inventories[1] to manufacturing production: Total inventories	Retail inventories[1] to retail sales[2]	Total inventories[1,3] to gross value added
Quarterly	FAPG	FAPH	FAPI	FAPF	FAPC	FDCA
1999 Q1	99.8	99.6	104.6	101.3	..	100
Q2	99.3	99.1	101.7	100.1	..	100
Q3	98.6	99.2	100.4	99.4	..	101
Q4	99.9	98.1	100.0	99.4	..	101
2000 Q1	100.0	100.0	100.0	100.0	..	100
Q2	101.1	98.9	100.0	100.1	..	100
Q3	102.3	98.2	100.1	100.4	..	101
Q4	101.0	99.0	100.2	100.1	..	101
2001 Q1	101.8	99.1	102.4	101.2	..	101
Q2	102.8	100.7	105.1	103.0	..	102
Q3	101.0	101.1	104.3	102.2	..	102
Q4	102.6	101.6	106.7	103.7	..	102
2002 Q1	106.1	103.0	107.2	105.6	..	102
Q2	105.0	101.4	106.8	104.5	..	101
Q3	101.8	100.0	104.5	102.2	..	101
Q4	101.4	99.9	104.9	102.2	..	101
2003 Q1	101.3	100.1	104.2	102.0	..	101
Q2	98.9	100.0	104.1	101.0	..	100

1 Chained volume measure: reference year 2000
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 EconomicAccounts*.

Source: Office for National Statistics; Enquiries Columns 1-6 01633 812351


Inventory ratios
chained volume measures,
seasonally adjusted
(reference 2000 = 100)
130
120
110
100
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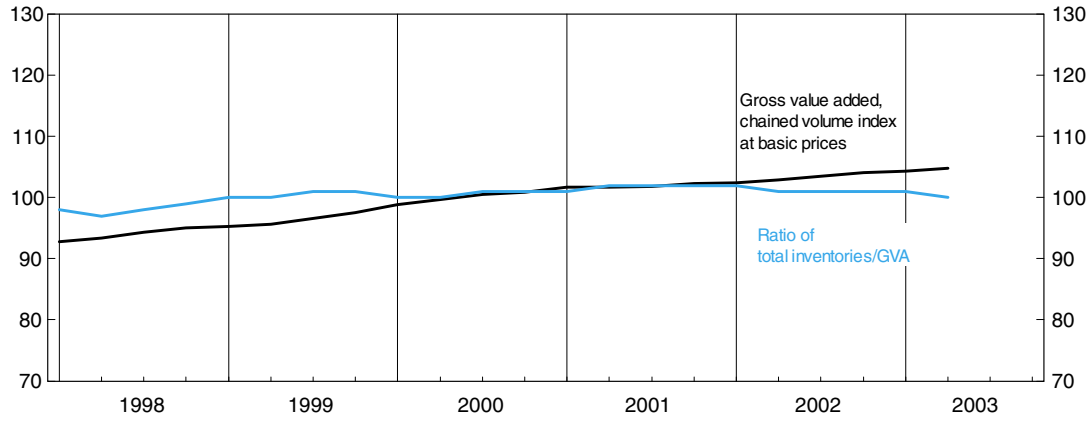
70
Index of
manufacturing
production
Ratio of manufacturers'
inventories of
finished goods/production
1998
1999
2000
2001
2002
2003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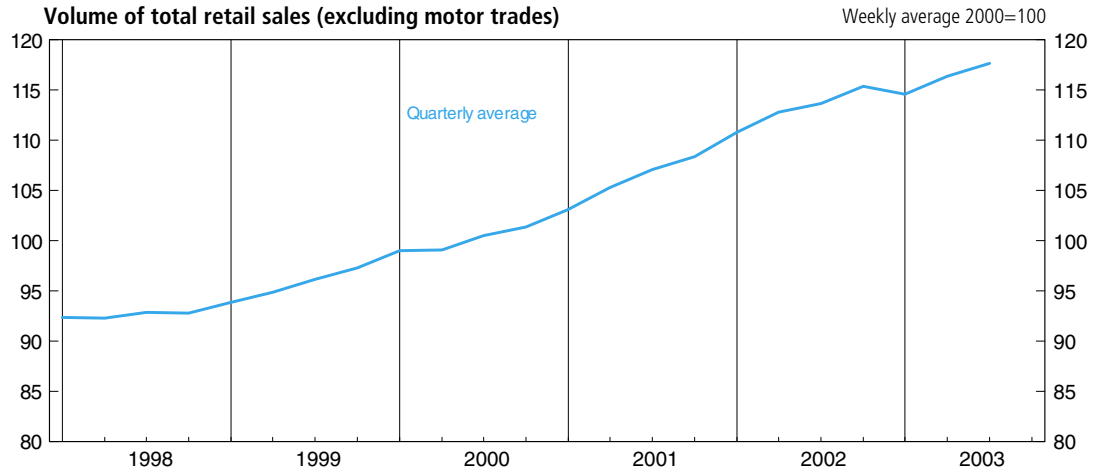
Gross value added,
chained volume index
at basic prices
Ratio of
total inventories/GVA
1998
1999
2000
2001
2002
2003

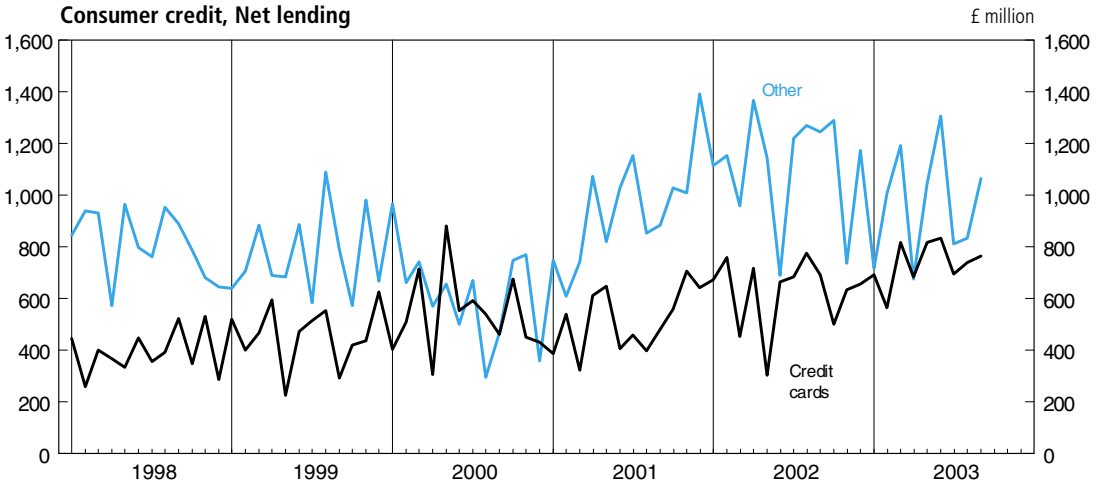
5.8 Retail sales, new registrations of cars and credit business (Great Britain)

	Value of retail sales per week: total (average 2000=100)[1,2]	Volume of retail sales per week+(average 2000=100)[1,2]								New registrations of cars (NSA, thousands)[5]	Total consumer credit: Net lending (£ million)[3,4]	of which	
				Predominantly non-food stores									
		All retailers	Predominantly food stores	Total	Non-specialist stores	Textile, clothing and footwear	Household goods stores	Other stores	Non-store and repair			Credit cards[6]	Other[6]
Sales in 2000 £ million	*207 149*	*207 149*	*89 041*	*106 359*	*18 781*	*27 880*	*27 699*	*31 999*	*11 749*				
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	13 925†	6 517†	7 408†
2001	105.9	106.1	104.1	107.7	105.9	109.4	110.9	104.6	106.1	2 577.5	17 501	6 164	11 338
2002	111.2	112.7	108.2	116.4	110.4	120.9	120.9	112.2	113.4	2 682.0	20 878	7 519	13 360
Quarterly													
2000 Q1	99.0†	99.0†	99.3†	98.6†	100.6†	96.1†	99.6†	98.8†	100.3†	682.4	3 998	1 626	2 372
Q2	99.1	99.1	99.4	98.8	98.4	98.3	99.0	99.5	99.2	581.4	3 467†	1 741†	1 726†
Q3	100.3	100.5	100.3	100.8	99.4	101.5	100.5	101.1	99.5	612.5	3 026	1 593	1 433
Q4	101.6	101.4	101.0	101.8	101.7	104.1	100.9	100.6	101.0	461.0	3 434	1 557	1 877
2001 Q1	102.8	103.1	102.8	103.7	104.1	104.9	107.1	99.3	100.5	704.2	3 349	1 249	2 100
Q2	105.5	105.3	103.7	106.6	106.0	107.4	110.6	102.6	106.8	617.7	4 586	1 668	2 919
Q3	107.0	107.1	104.6	109.0	106.8	111.0	111.5	106.2	109.6	725.6	4 229	1 340	2 889
Q4	108.0	108.4	105.6	110.9	107.3	113.3	113.8	108.3	107.7	530.0	5 337	1 907	3 430
2002 Q1	110.1	110.8	106.7	114.7	108.9	118.2	117.7	112.5	106.1	758.7	5 113	1 888	3 226
Q2	111.2	112.8	108.0	116.7	109.7	121.2	119.6	114.4	113.2	650.0	4 888	1 686	3 202
Q3	111.9	113.7	109.1	117.2	112.2	122.4	121.6	111.6	117.5	744.6	5 889	2 153	3 736
Q4	113.3	115.4	110.8	118.9	113.3	122.7	124.3	114.1	119.1	528.7	4 988	1 792	3 196
2003 Q1	112.6	114.6	109.9	119.2	111.3	126.7	122.3	114.6	109.6	737.6	4 984	2 072	2 912
Q2	113.7	116.4	111.7	121.1	112.3	129.0	126.5	114.6	109.1	642.7	5 363	2 336	3 027
Q3	115.0	117.7	112.7	123.0	114.4	130.8	128.8	116.3	107.1	..	4 911	2 200	2 712
Monthly													
2001 Jul	106.2†	106.4†	104.4†	107.5†	105.7†	108.1†	110.4†	105.5†	110.8†	179.7	1 612†	460†	1 152†
Aug	106.6	106.6	104.4	108.4	107.2	107.9	112.2	106.1	107.7	81.4	1 251	398	853
Sep	107.9	108.2	105.0	110.6	107.3	115.8	111.7	106.9	110.3	464.5	1 366	482	884
Oct	107.8	108.2	105.5	110.5	106.8	111.5	116.2	107.0	108.5	195.8	1 588	560	1 028
Nov	108.1	108.6	106.0	110.7	108.6	115.3	110.7	107.9	110.1	197.3	1 715	706	1 009
Dec	108.0	108.4	105.4	111.3	106.7	113.2	114.3	109.7	105.2	136.9	2 034	641	1 393
2002 Jan	109.1	109.4	106.3	112.4	108.4	114.4	114.9	110.7	106.8	213.5	1 788	673	1 115
Feb	110.6	111.5	107.0	115.7	109.6	119.6	118.0	113.8	107.4	98.9	1 911	759	1 152
Mar	110.9	111.6	106.9	116.3	108.7	120.8	120.2	113.3	104.3	446.3	1 414	455	959
Apr	112.7	113.9	107.3	119.6	111.3	126.6	119.4	118.5	112.8	214.0	2 085	717	1 368
May	111.2	112.6	108.2	116.5	111.2	117.7	120.9	114.6	111.2	219.0	1 448	304	1 144
Jun	110.2	111.9	108.3	114.6	107.2	119.7	118.8	110.9	115.2	217.0	1 355	665	689
Jul	111.7	113.4	109.1	116.8	112.7	122.2	120.6	111.1	116.0	204.7	1 906	685	1 220
Aug	111.8	113.8	109.2	117.0	111.3	124.0	120.4	111.3	119.1	93.0	2 046	776	1 270
Sep	112.0	113.9	109.1	117.6	112.4	121.4	123.3	112.3	117.5	446.9	1 938	692	1 246
Oct	113.1	114.9	110.0	118.6	113.5	123.2	123.9	113.0	119.0	193.0	1 788	500	1 288
Nov	112.8	114.9	110.4	118.4	113.7	118.6	125.6	114.9	117.6	182.9	1 371	634	736
Dec	113.9	116.2	111.8	119.5	112.8	125.6	123.7	114.3	120.5	152.8	1 829	657	1 172
2003 Jan	112.0	114.2	108.6	119.1	111.6	125.5	122.6	114.9	112.1	193.4	1 408	691	717
Feb	112.5	114.4	110.0	118.9	110.7	126.3	122.4	114.3	107.2	92.2	1 569	564	1 005
Mar	113.1	115.2	110.7	119.5	111.6	127.9	122.0	114.7	109.6	452.0	2 008	817	1 191
Apr	113.6	116.0	111.6	120.3	111.2	128.2	125.3	114.3	110.6	196.3	1 359	683	675
May	113.2	115.8	111.3	120.4	111.9	126.6	127.4	113.9	108.5	202.6	1 864	818	1 046
Jun	114.2	117.1	112.0	122.3	113.6	131.5	126.8	115.5	108.3	243.8	2 140	834	1 305
Jul	114.4	117.0	112.1	122.1	113.6	129.9	127.9	115.3	107.8	204.7	1 509	696	813
Aug	115.0	117.6	113.1	122.6	114.3	129.2	128.8	116.3	106.1	..	1 571	738	833
Sep	115.5	118.3	112.9	124.1	115.2	132.6	129.4	117.2	107.4	..	1 830	765	1 065

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 7890 3077.





Please note: data from January 1999 are not directly comparable with earlier periods

5.9 Inland energy consumption: primary fuel input basis

Million tonnes of oil equivalent

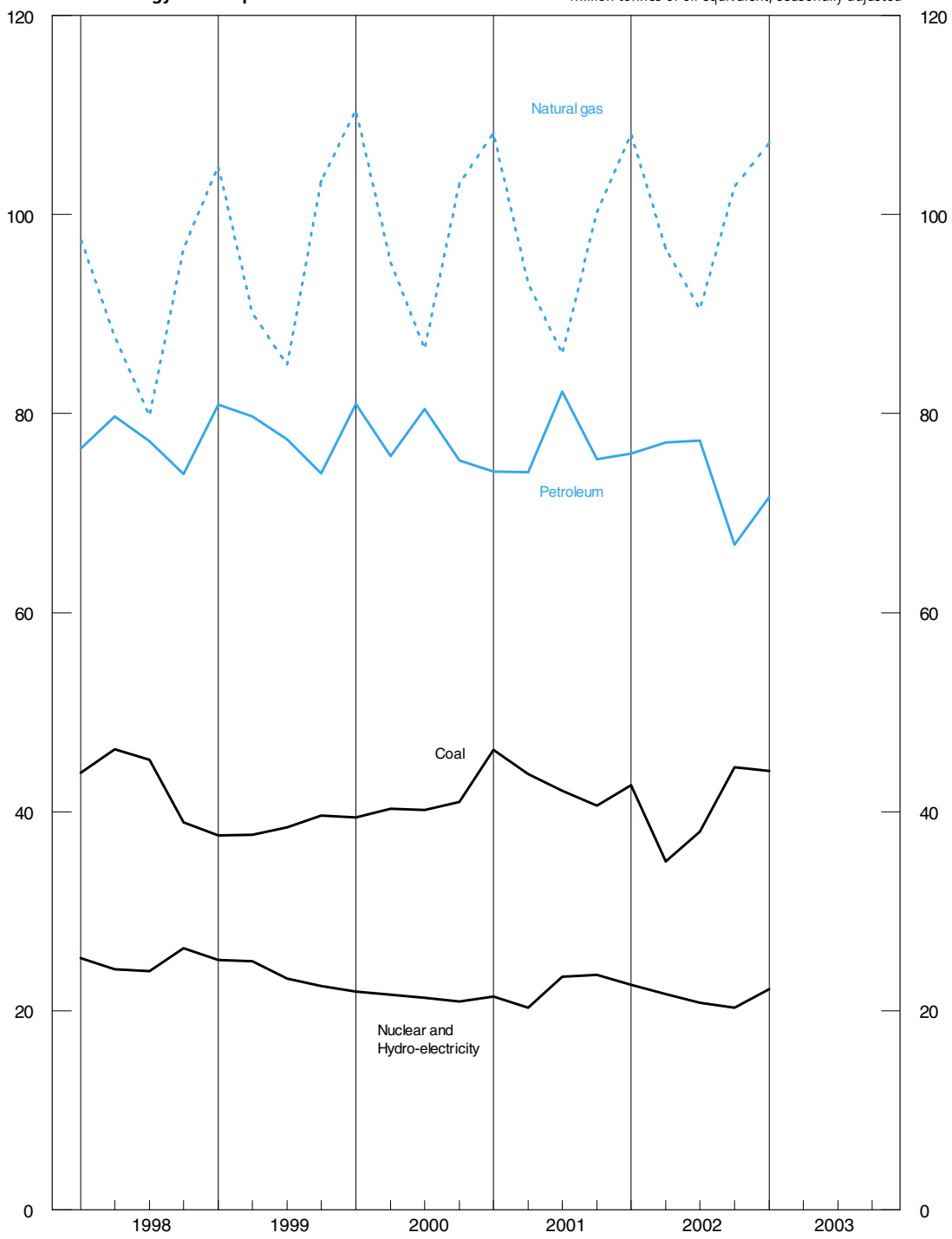
	Seasonally adjusted and temperature corrected[7] (annualised rates)						
				Primary electricity[5]			
	Coal[1]	Petroleum[2]	Natural gas[3]	Nuclear	Natural flow Hydro[4]	Net imports[6]	Total
Annual							
	FDAI	FDAJ	FDAK	FDAL	FDAM	FDAW	FDAH
1998	43.6	76.8	90.4	23.4	0.5	1.1	235.8
1999	38.3	78.0	95.8	22.2	0.5	1.2	236.2
2000	40.2	78.1	98.8	19.7	0.5	1.2	238.5
2001	43.2	76.5	96.9	20.8	0.4	0.9	238.8
2002	40.1	74.3	99.5	20.1	0.6	0.7	235.2
Quarterly							
1998 Q1	43.9	76.5	97.6	23.4	0.5	1.4	243.4
Q2	46.3	79.7	87.7	22.3	0.5	1.4	237.9
Q3	45.2	77.2	79.8	23.1	0.6	0.3	226.2
Q4	38.9	73.9	96.6	24.7	0.4	1.2	235.7
1999 Q1	37.6	80.9	104.9	23.4	0.5	1.2	248.6
Q2	37.7	79.7	90.1	23.1	0.6	1.3	232.5
Q3	38.4	77.4	84.9	21.6	0.5	1.1	224.0
Q4	39.6	74.0	103.4	20.8	0.5	1.2	239.5
2000 Q1	39.4	81.0	110.5	20.2	0.6	1.1	252.7
Q2	40.3	75.7	95.2	19.8	0.5	1.3	232.7
Q3	40.2	80.5	86.5	19.5	0.5	1.3	228.3
Q4	41.0	75.3	103.1	19.2	0.5	1.2	240.3
2001 Q1	46.2	74.2	108.2	20.0	0.3	1.1	250.1
Q2	43.8	74.1	93.1	19.0	0.4	0.9	231.3
Q3	42.1	82.2	86.0	22.0	0.5	0.9	233.8
Q4	40.6	75.4	100.3	22.4	0.5	0.7	239.8
2002 Q1	42.7	76.0	108.1	21.4	0.6	0.6	249.5
Q2	35.0	77.1	96.6	20.0	0.7	1.0	230.4
Q3	38.0	77.3	90.5	20.1	0.5	0.2	226.7
Q4	44.5	66.8	102.8	18.8	0.4	1.1	234.3
2003 Q1	44.1	71.6	107.2	21.6	0.3	0.3	245.1
Percentage change, quarter on corresponding quarter of previous year							
Quarterly							
	FDAP	FDAQ	FDAR	FDAS	FDAT	FDAX	FDAO
1998 Q1	*–3.6*	*1.7*	*4.7*	*2.9*	..	*–1.3*	*2.2*
Q2	*15.7*	*4.3*	*4.3*	*–2.7*	..	*–2.0*	*5.8*
Q3	*3.9*	*5.8*	*–0.5*	*5.8*	..	*–78.8*	*–1.7*
Q4	*–13.6*	*–2.3*	*5.3*	*20.3*	..	*–19.4*	*–1.6*
1999 Q1	*–14.3*	*5.8*	*7.5*	*–0.2*	*–0.1*	*–14.1*	*2.1*
Q2	*–18.6*	*–*	*2.8*	*3.6*	*22.2*	*–6.8*	*–2.2*
Q3	*–14.9*	*0.2*	*6.4*	*–6.5*	*–9.8*	*–*	*–0.9*
Q4	*1.6*	*0.3*	*7.0*	*–15.6*	*4.7*	*5.6*	*1.6*
2000 Q1	*4.6*	*0.1*	*5.3*	*–13.7*	*11.7*	*–10.6*	*1.6*
Q2	*7.0*	*–5.0*	*5.6*	*–14.5*	*–25.2*	*1.9*	*0.1*
Q3	*4.4*	*4.0*	*1.8*	*–9.8*	*–13.0*	*12.9*	*1.9*
Q4	*3.7*	*1.7*	*–0.3*	*–7.8*	*5.9*	*–5.1*	*0.3*
2001 Q1	*17.4*	*–8.4*	*–2.0*	*–0.9*	*–43.9*	*–*	*–1.0*
Q2	*8.8*	*–2.1*	*–2.2*	*–4.0*	*–9.2*	*–30.3*	*–0.6*
Q3	*5.0*	*2.1*†	*–0.5*	*13.0*	*5.0*	*–29.0*	*2.4*
Q4	*–1.2*	*0.1*	*–2.7*	*16.4*	*6.1*	*–45.0*	*–0.2*
2002 Q1	*–7.5*	*2.5*	*–0.1*	*7.0*	*74.1*	*–43.7*	*–0.3*
Q2	*–20.1*	*4.1*	*3.8*	*5.6*	*73.7*	*5.5*	*–0.4*
Q3	*–9.8*	*–5.9*	*5.1*	*–8.7*	*12.2*	*–75.5*	*–3.0*
Q4	*9.7*	*–11.5*	*2.4*	*–15.9*	*–32.1*	*67.6*	*–2.3*
2003 Q1	*3.3*	*–5.8*	*–0.8*	*0.7*	*–42.4*	*–56.2*	*–1.8*

1 Includes solid renewable sources (wood, straw, waste), a small amount of renewable primary heat sources (solar, geothermal, etc.) and net foreign trade and stock changes in other solid fuels.
2 Excludes non-energy use.
3 Includes gas used during production, colliery methane, land ll 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

Inland energy consumption

Million tonnes of oil equivalent, seasonally adjusted



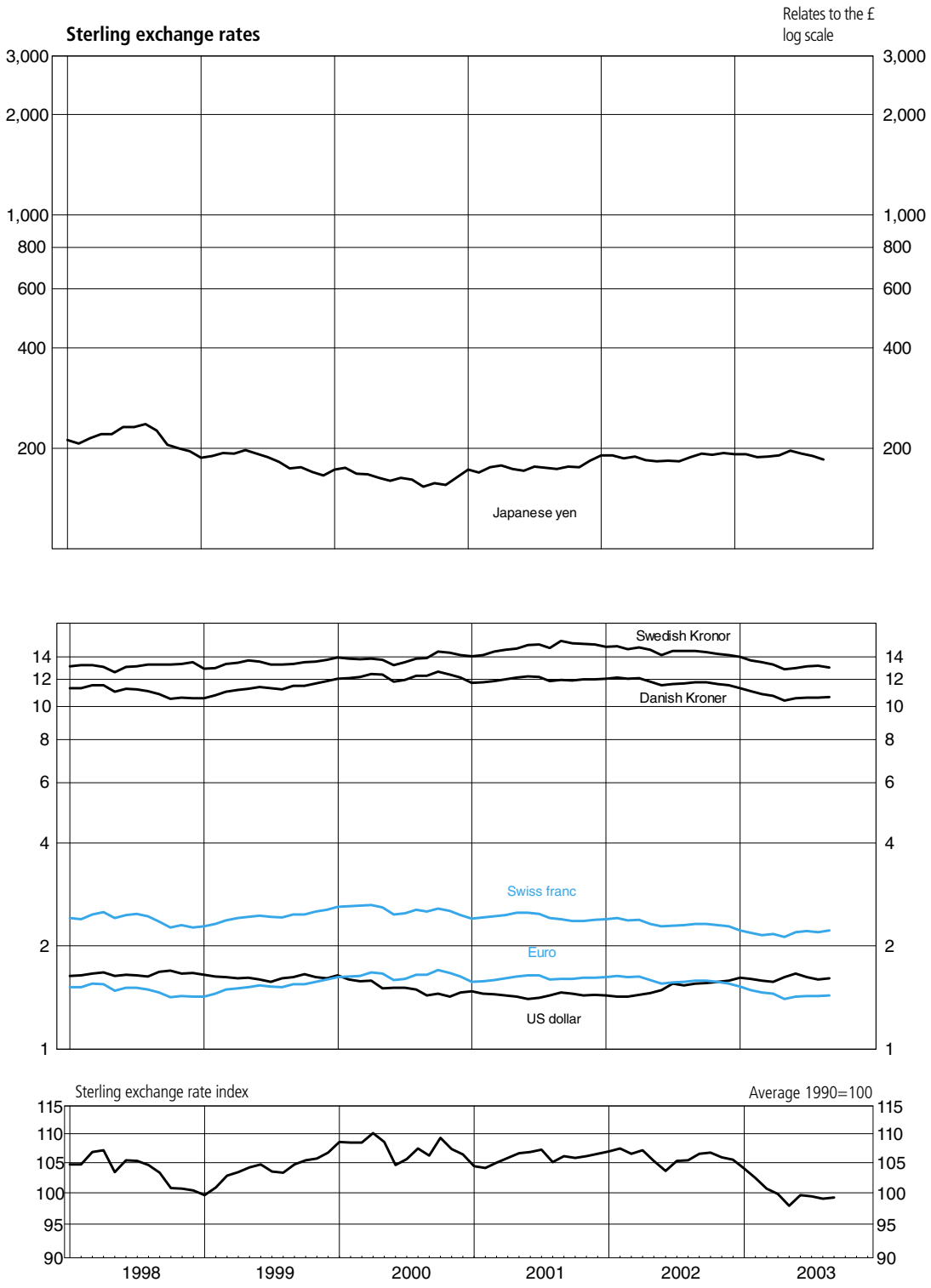
6.1 Sterling exchange rates and UK reserves[4]

Not seasonally adjusted

	Sterling exchange rate against major currencies[1]								UK international 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
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	..	99.2
Monthly										
2001 Jan	172.49	1.4769	2.408	1.5753	11.759	12.969	14.017	11.5197	31 232	104.4
Feb	168.85	1.4529	2.423	1.5786	11.780	12.957	14.164	11.3321	29 117	104.1
Mar	175.44	1.4454	2.441	1.5901	11.856	12.969	14.509	11.2736	30 457	105.0
Apr	177.49	1.4350	2.460	1.6084	12.004	13.047	14.647	11.1913	30 446	105.8
May	173.68	1.4259	2.500	1.6304	12.165	13.033	14.766	11.1483	30 651	106.6
Jun	171.41	1.4014	2.502	1.6434	12.249	13.036	15.127	10.9302	30 632	106.8
Jul	176.07	1.4139	2.487	1.6433	12.234	13.095	15.225	11.0279	29 187	107.2
Aug	174.42	1.4365	2.416	1.5955	11.878	12.853	14.844	11.2038	29 669	105.1
Sep	173.53	1.4635	2.394	1.6060	11.951	12.837	15.540	11.4144	29 662	106.1
Oct	176.14	1.4517	2.371	1.6024	11.917	12.813	15.338	11.3230	28 090	105.8
Nov	175.67	1.4358	2.370	1.6166	12.036	12.813	15.233	11.1984	28 733	106.1
Dec	183.55	1.4409	2.384	1.6151	12.021	12.908	15.220	11.2375	27 773	106.5
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	..	99.2

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 1.2l of *Financial Statistics.*
4 These gures fall outside the scope of National Statistics.

Source: Bank of England: Enquiries 020 7601 4342


Sterling exchange rates
Relates to the £
log scale
3,000
2,000
1,000
800
600
400
200
Japanese yen
Swedish Kronor
Danish Kroner
14
12
10
8
6
4
2
1
Swiss franc
Euro
US dollar
Sterling exchange rate index
Average 1990=100
115
110
105
100
95
90
1998
1999
2000
2001
2002
2003

6.2 Monetary aggregates[1,3]

	M0				M4			
	Amount outstanding[2] (NSA)				Amount outstanding (NSA)			
	£ million	Annual percentage change	Amount outstanding (£ million) +	Velocity of circulation: ratio	£ million	Annual percentage change	Amount outstanding (£ million) +	Velocity of circulation: ratio
Annual								
	AVAD	VQNB	AVAE	AVAM	AUYM	VQLC	AUYN	AUYU
1998	29 346	5.8	27 705	31.85	783 240	8.3	781 205†	1.14
1999	32 768	11.7	30 915	31.30†	816 545	4.3	814 212	1.14†
2000	34 566	5.5	32 304†	30.42	884 850	8.2	882 974	1.12
2001	37 319	8.0	34 969	29.72	942 461	6.7	940 811	1.09
2002	39 546	6.0	36 965	28.91	1 007 287	7.2	1 005 771	1.08
Quarterly								
1999 Q1	27 830	6.5	28 159	31.67†	792 903	7.1	788 040	1.12
Q2	28 884	8.0	28 932	31.44	800 698	5.7	794 996†	1.13†
Q3	29 477	7.1	29 399†	31.20	793 684	3.0	796 319	1.15
Q4	32 768	11.7	30 915	30.87	816 545	4.3	814 212	1.15
2000 Q1	29 968	7.7	30 461	30.53	836 240	5.4	830 993	1.15
Q2	30 896	7.0	31 158	30.65	856 220	6.9	849 538	1.12
Q3	31 821	8.0	31 941	30.46	866 384	9.0	867 097	1.11
Q4	34 566	5.5	32 304	30.04	884 850	8.2	882 974	1.10
2001 Q1	32 489	8.4	32 981	30.00	905 811	8.3	901 024	1.10
Q2	32 896	6.5	33 246	30.00	921 582	7.6	913 470	1.09
Q3	33 797	6.2	33 968	29.57	937 085	8.4	935 688	1.08
Q4	37 319	8.0	34 969	29.32	942 461	6.7	940 811	1.07
2002 Q1	35 157	8.2	35 479	29.06	954 564	5.7	950 506	1.08
Q2	36 222	10.1	36 333	28.91	973 884	5.9	963 981	1.08
Q3	36 510	8.0	36 746	28.86	987 108	5.6	984 708	1.08
Q4	39 546	6.0	36 965	28.81	1 007 287	7.2	1 005 771	1.07
2003 Q1	37 192	5.8	37 753	28.79	1 017 233†	7.1	1 013 686	1.06
Q2	38 411	6.0	38 793	28.21	1 047 414	8.2†	1 035 393	1.06
Monthly								
2001 Jan	32 870	4.6	32 574†	..	880 996	9.7	893 126†	..
Feb	32 348	8.6	32 868	..	885 705	9.2	895 260	..
Mar	32 489	8.4	32 981	..	905 811	8.3	901 024	..
Apr	33 013	7.2	33 027	..	905 644	7.8	904 130	..
May	32 881	6.6	33 019	..	909 499	7.3	907 962	..
Jun	32 896	6.5	33 246	..	921 582	7.6	913 470	..
Jul	33 272	6.8	33 505	..	918 700	7.8	919 716	..
Aug	33 881	7.1	33 770	..	930 386	7.3	928 074	..
Sep	33 797	6.2	33 968	..	937 085	8.4	935 688	..
Oct	33 978	7.0	34 158	..	942 407	8.4	940 989	..
Nov	34 883	8.1	34 647	..	946 019	8.3	942 954	..
Dec	37 319	8.0	34 969	..	942 461	6.7	940 811	..
2002 Jan	35 799	8.9	35 308	..	930 799	6.1	944 146	..
Feb	34 750	7.4	35 335	..	941 027	6.6	951 783	..
Mar	35 157	8.2	35 479	..	954 564	5.7	950 506	..
Apr	35 369	7.1	35 603	..	954 166	5.6	953 658	..
May	35 661	8.5	35 897	..	957 895	5.6	957 484	..
Jun	36 222	10.1	36 333	..	973 884	5.9	963 981	..
Jul	36 050	8.4	36 236	..	969 039	5.7	970 329	..
Aug	36 689	8.3	36 502	..	980 172	5.7	978 369	..
Sep	36 510	8.0	36 746	..	987 108	5.6	984 708	..
Oct	36 749	8.2	36 978	..	992 410	5.6	990 731	..
Nov	37 167	6.6	36 989	..	1 000 772	6.1	996 856	..
Dec	39 546	6.0	36 965	..	1 007 287	7.2	1 005 771	..
2003 Jan	37 236	4.0	37 161	..	993 056†	6.6	1 006 878	..
Feb	36 952	6.3	37 563	..	1 003 425	6.7	1 014 533	..
Mar	37 192	5.8	37 753	..	1 017 233	7.1	1 013 686	..
Apr	38 599	9.1	38 684	..	1 026 155	8.1†	1 025 142	..
May	38 833	8.9	38 765	..	1 032 422	8.3	1 031 180	..
Jun	38 411	6.0	38 793	..	1 047 414	8.2	1 035 393	..
Jul	38 946†	8.0	39 182	..	1 037 581	7.8	1 038 232	..
Aug	39 587	7.9	39 389	..	1 039 546	6.5	1 038 445	..

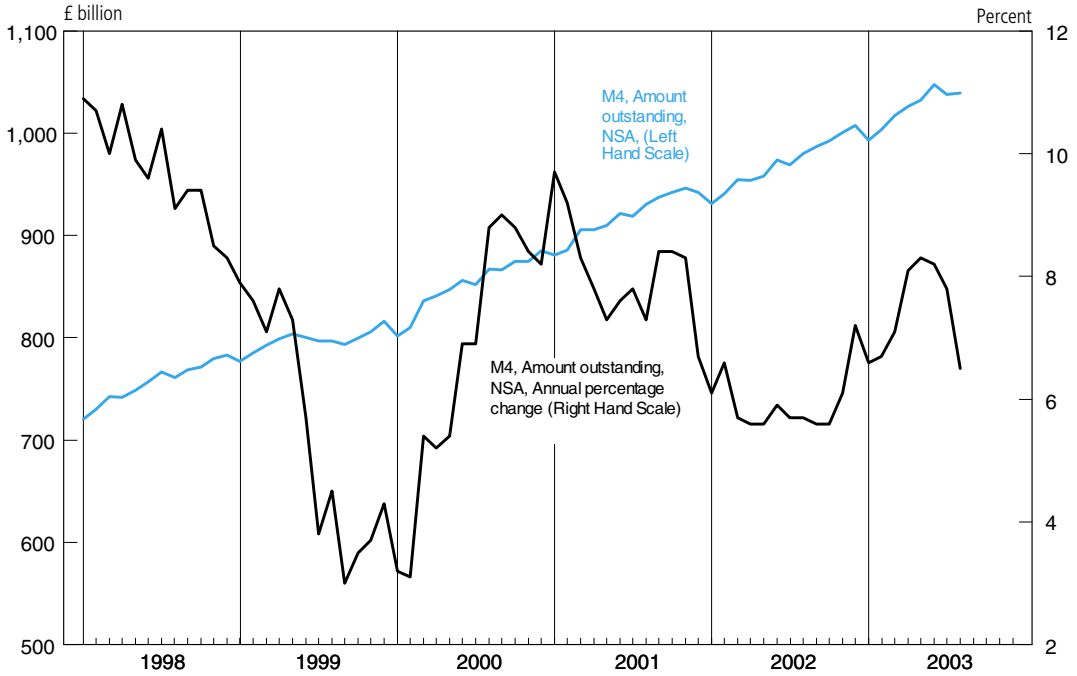
1 A fuller range of monetary aggregates is published monthly in the ONS publication *Financial Statistics*.

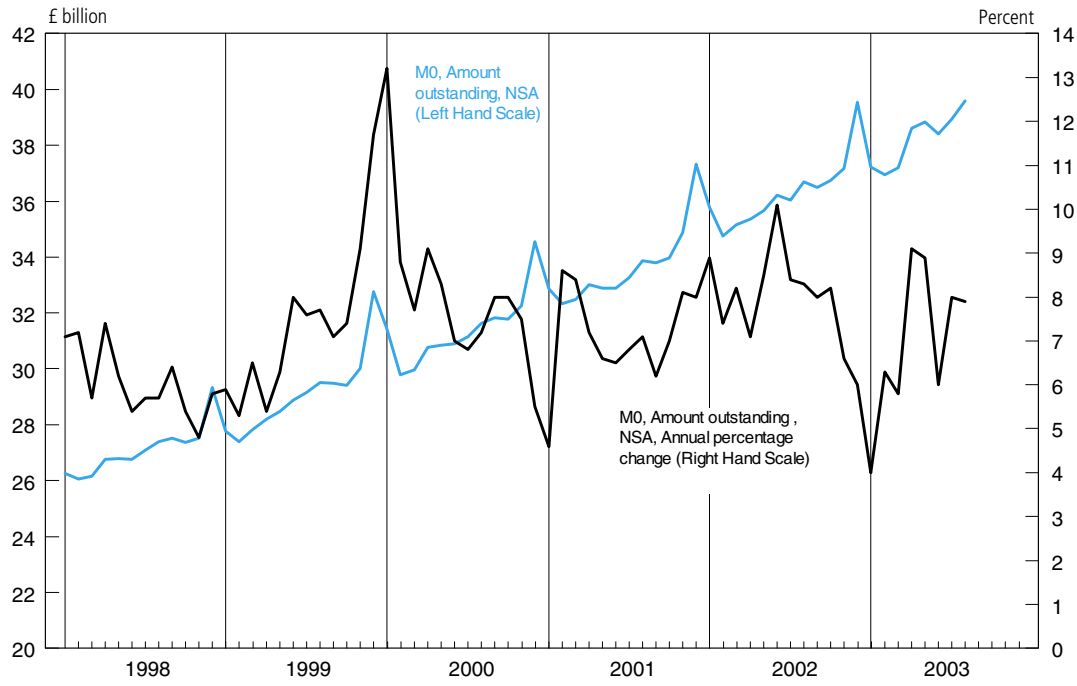
2 The monthly figures for M0 give the average of the amounts outstanding each Wednesday during the calendar month.

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]

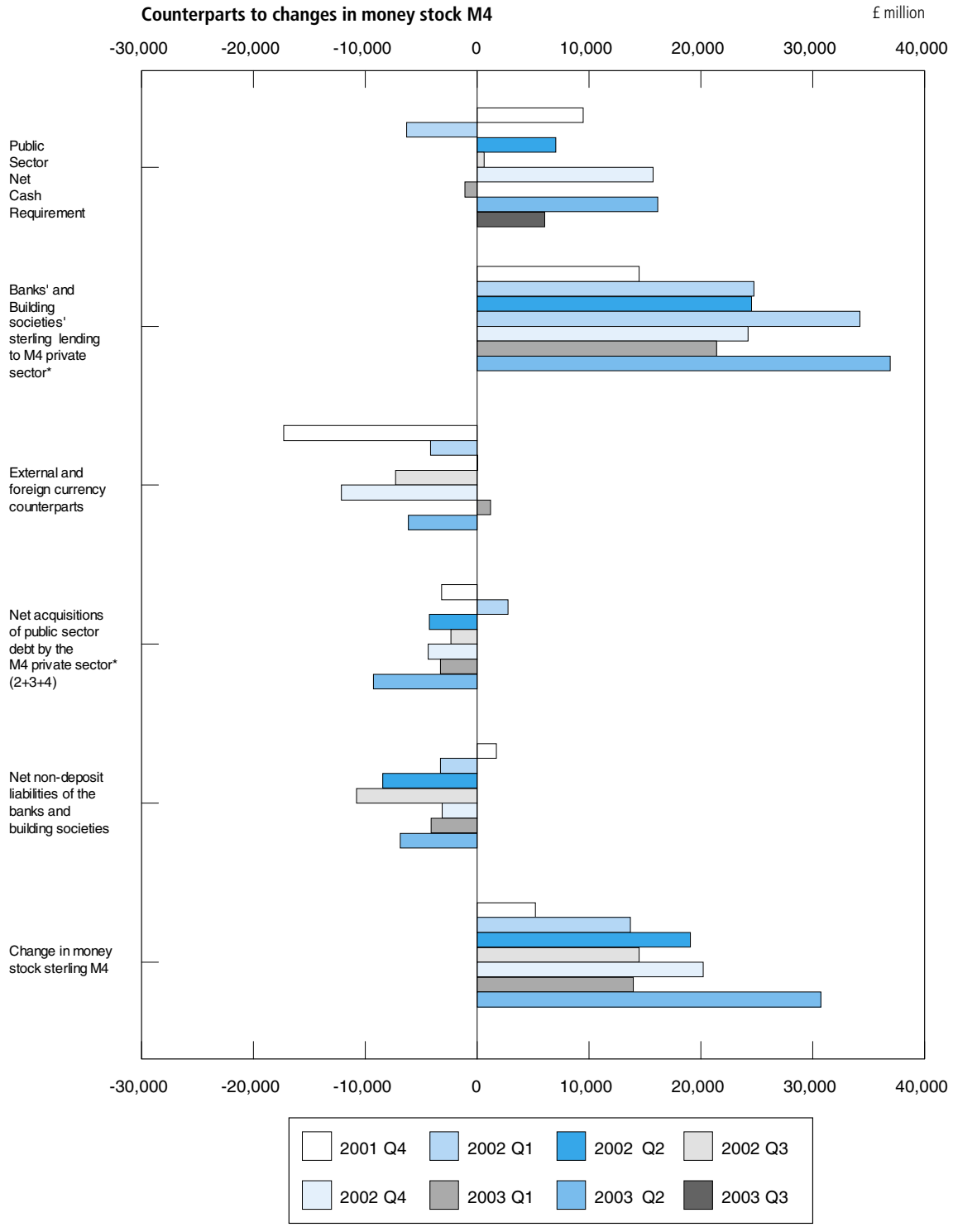
£ million, not seasonally adjusted

	Public Sector Net Cash Requirement+[3]	Purchases by the M4[2] private sector of: Central government debt: British government stocks	Central government debt: Other	Other public sector debt	External and foreign currency nancing of public sector: Purchase of British government stocks by overseas sector	External and foreign currency nancing of public sector: Other	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
	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
1999	–1 296	–3 981	1 803	1 115	–4 906	1 294	78 088	–46 243†	–1 602†	75 033	–40 046†	33 386
2000	–37 562	11 388	1 915	285	4 040	7 657	111 230	6 705	–30 570	87 480	10 321	67 231
2001	–2 921	–9 671	–2 481†	250	–19 361	4 195	82 446	–21 488	–10 916	67 732	2 069	58 885
2002	17 097	–8 383	765	–619†	–897	1 589	107 654	–26 092	–25 696	116 711†	–23 606	67 411
Quarterly												
1999 Q1	–5 641	4 338	–478	341	8	419	21 386	–9 294†	–952†	19 550	–8 884†	9 714
Q2	5 334	–4 967	157	226	790	511	18 342	–9 628	–1 844	19 110	–9 908	7 358
Q3	–3 185	–2 685	1 658	–92	–5 497	108	12 703	–12 809	–8 419	8 386	–7 205	–7 237
Q4	2 196	–667	466	640	–207	256	25 657	–14 512	9 613	27 987	–14 049	23 551
2000 Q1	–12 886	5 013	–1 257	–336	2 141	2 577	36 677	–2 132	–6 363	27 432	–1 697	19 372
Q2	–11 831	–4 104	6 729	147	–1 017	3 301	25 254	358	–1 552	16 198	4 676	19 323
Q3	–16 499	5 653	–91	183	540	1 281	27 255	4 862	–12 672	16 491	5 603	9 422
Q4	3 654	4 826	–3 466	291	2 376	498	22 044	3 617	–9 983	27 359	1 739	19 114
2001 Q1	–12 573	163	–1 183†	–178	–6 682	3 734	31 075	–7 612	1 146	17 317	2 804	21 267
Q2	6 317	–12 059	–424†	183	–10 982	1 000	21 194	–6 840	–4 746	15 289	5 142	15 685
Q3	–6 138	1 267	3 393	110	–2 709	1 288	15 710	7 438	–9 050	14 361	11 436	16 747
Q4	9 473	958	–4 267	135	1 012	–1 827	14 467	–14 474	1 734	20 765	–17 313	5 186
2002 Q1	–6 334	–679	3 700	–230	–1 045	2 399	24 732	–7 624	–3 298	21 165†	–4 181	13 687
Q2	7 055	–1 330	–3 024	81†	–266	–1 001	24 507	794	–8 433	27 429	60	19 056
Q3	660	–2 432	287	–210	–1 960	208	34 214	–9 476	–10 816	32 586	–7 308	14 463
Q4	15 716	–3 942	–198	–260	2 374	–17	24 201	–9 786	–3 149	35 531	–12 177	20 205
2003 Q1	–1 099†	–3 092	–141	–81	1 934	431	21 413	2 701	–4 121	16 878	1 199	13 955†
Q2	16 170	–4 802	–4 390	–117	2 142	–2 072	36 918	–1 932	–6 913	43 810	–6 146	30 750
Q3	6 014	..	..	..	..	..	..	..	..	..	..	..
Monthly												
2001 Jul	–9 464	–1 678	3 101	–192	–3 570	51	–1 800	6 530†	–3 043†	–10 034	10 152†	–2 926
Aug	–295	–1 671	236†	167	–1 921	1 693	16 044	–3 355	–2 420	14 492	260	12 333
Sep	3 621	4 616	56	136	2 782	–457	1 466	4 263	–3 588	9 903	1 024	7 340
Oct	–5 900	–75	1 389	–81	–1 317	312	12 444	–10 089	6 008	7 780	–8 461	5 328
Nov	5 964	5 909	–3 962	54	2 180	–571	5 335	–1 901	–5 188	13 298	–4 651	3 459
Dec	9 409	–4 876	–1 694	162	149	–1 568	–3 312	–2 484	913	–313	–4 202	–3 601
2002 Jan	–11 995	–1 443	1 209	–317	–2 433	2 210	9 432	–1 308	–8 718	–3 101†	3 335	–8 483
Feb	–2 108	105	2 792	–63	60	897	5 446	1 896	210	6 188	2 733	9 130
Mar	7 769	659	–301	150	1 328	–709	9 854	–8 211	5 210	18 078	–10 248	13 040
Apr	–3 038	725	–416	61	–1 098	–560	–1 380	2 316	683	–3 989	2 854	–452
May	2 748	–1 438	–435	58†	573	–49	14 719	–10 188	–1 148	15 691	–10 809	3 733
Jun	7 345	–617	–2 173	–37	259	–392	11 168	8 666	–7 967	15 727	8 014	15 774
Jul	–6 807	–3 287	2 728	–96	–460	–267	–1 554	13 436	–9 900	–8 964	13 629	–5 235
Aug	2 134	3 647	–876	43	902	548	14 719	–11 879	5 609	19 699	–12 233	13 075
Sep	5 333	–2 793	–1 565	–157	–2 402	–73	21 049	–11 033	–6 525	21 851	–8 703	6 623
Oct	–2 448	–1 713	2 438	–202	339	–154	14 738	–8 580	1 597	12 873	–9 073	5 397
Nov	6 552	–2 217	–569	38	570	731	10 941	–678	–5 950	14 757	–517	8 289
Dec	11 612	–12	–2 067	–97	1 465	–594	–1 477	–528	1 204	7 901	–2 586	6 519
2003 Jan	–11 862†	–4 053	1 884	–187	1 138	761	4 708	10 862	–15 337	–9 564	10 485	–14 416†
Feb	–182	–870	572	150	–1 402	–245	10 987	–12 175	10 834	10 637	–11 017	10 454
Mar	10 945	1 831	–2 597	–43	2 198	–85	5 718	4 014	381	15 805	1 731	17 917
Apr	252	–6 125	1 672	–220	–1 969	–961	10 965	1 185	229	6 523	2 193	8 944
May	5 772	4 496	–5 169	150	4 611	–50	10 684	6 051	–11 041	15 946	1 391	6 295
Jun	10 146	–3 173	–893	–47	–500	–1 061	15 270	–9 168	3 899	21 341	–9 729	15 511
Jul	–6 079	–5 745†	3 064	–207	–1 339†	999	6 054†	2 311	–11 362	–2 831	4 648	–9 544
Aug	3 461	–4 109	–1 577	53	255	–739	5 561	–12 457	12 048	3 396	–13 450	1 994
Sep	8 632	..	..	..	..	..	..	..	..	..	..	..

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; Bank of England; Columns 2-12 020 7601 5467



* 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 Benefits	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/dividends 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
2000	177 740	5 058	114 986	334	18 638	26 122	342 878	17 814	129 716	140 088	2 215	18 223	60 284	5 433	2 130	375 043
2001	191 171	6 405	123 574	–2 134	18 899	23 618	361 533	18 681	133 111	147 521	2 396	19 168	62 887	5 395	2 879	391 118
2002	208 966	6 202	127 138	–539	22 849	21 324	385 940	18 649	140 628	142 444	2 386	20 286	63 372	4 383	2 717	393 925
Quarterly																
2000 Q1	42 447	1 283	27 452	219	4 230	6 047	81 678	4 378	31 319	43 124	548	4 350	16 173	1 091	540	101 306
Q2	44 496	1 213	28 054	–163	4 575	6 700	84 875	4 363	32 830	26 834	566	4 605	14 588	1 263	363	85 198
Q3	45 285	1 208	28 369	73	4 695	6 359	85 989	4 345	32 368	34 721	579	4 692	14 337	1 532	716	93 075
Q4	45 512	1 354	31 111	205	5 138	7 016	90 336	4 728	33 199	35 409	522	4 576	15 186	1 547	511	95 464
2001 Q1	45 932	1 410	29 293	–261	4 945	6 331	87 650	4 473	31 508	47 192	569	4 620	17 957	1 699	909	108 712
Q2	47 201	1 685	29 913	–259	4 757	5 990	89 287	4 497	33 134	29 131	612	4 907	14 518	1 283	560	88 407
Q3	48 218	1 704	31 068	–1 294	4 312	5 329	89 337	4 616	34 098	35 513	617	4 865	15 064	1 276	853	96 667
Q4	49 820	1 606	33 300	–320	4 885	5 968	95 259	5 095	34 371	35 685	598	4 776	15 348	1 137	557	97 332
2002 Q1	51 300	1 225	30 224	12	5 518	5 237	93 516	4 654	33 097	44 693	556	4 806	18 226	1 020	808	107 625
Q2	51 830	1 579	31 226	–126	5 641	5 430	95 580	4 519	34 648	28 753	609	5 158	14 581	1 078	564	89 675
Q3	52 411	1 648	31 876	–375	6 273	4 642	96 475	4 560	36 325	35 770	620	5 185	14 960	1 120	792	99 097
Q4	53 425	1 750	33 812	–50	5 417	6 015	100 369	4 916	36 558	33 228	601	5 137	15 605	1 165	553	97 528
2003 Q1	56 716	1 810	31 837	–75	6 038	5 241	101 567	4 528	34 644	45 439	546	5 131	18 349	1 120	718	110 240
Q2	58 144	1 961	33 640	334	5 932	5 870	105 881	4 721	37 452	30 120	607	5 672	17 005	1 074	400	96 814

Sources: Office for National Statistics;
Enquiries 020 7533 5987

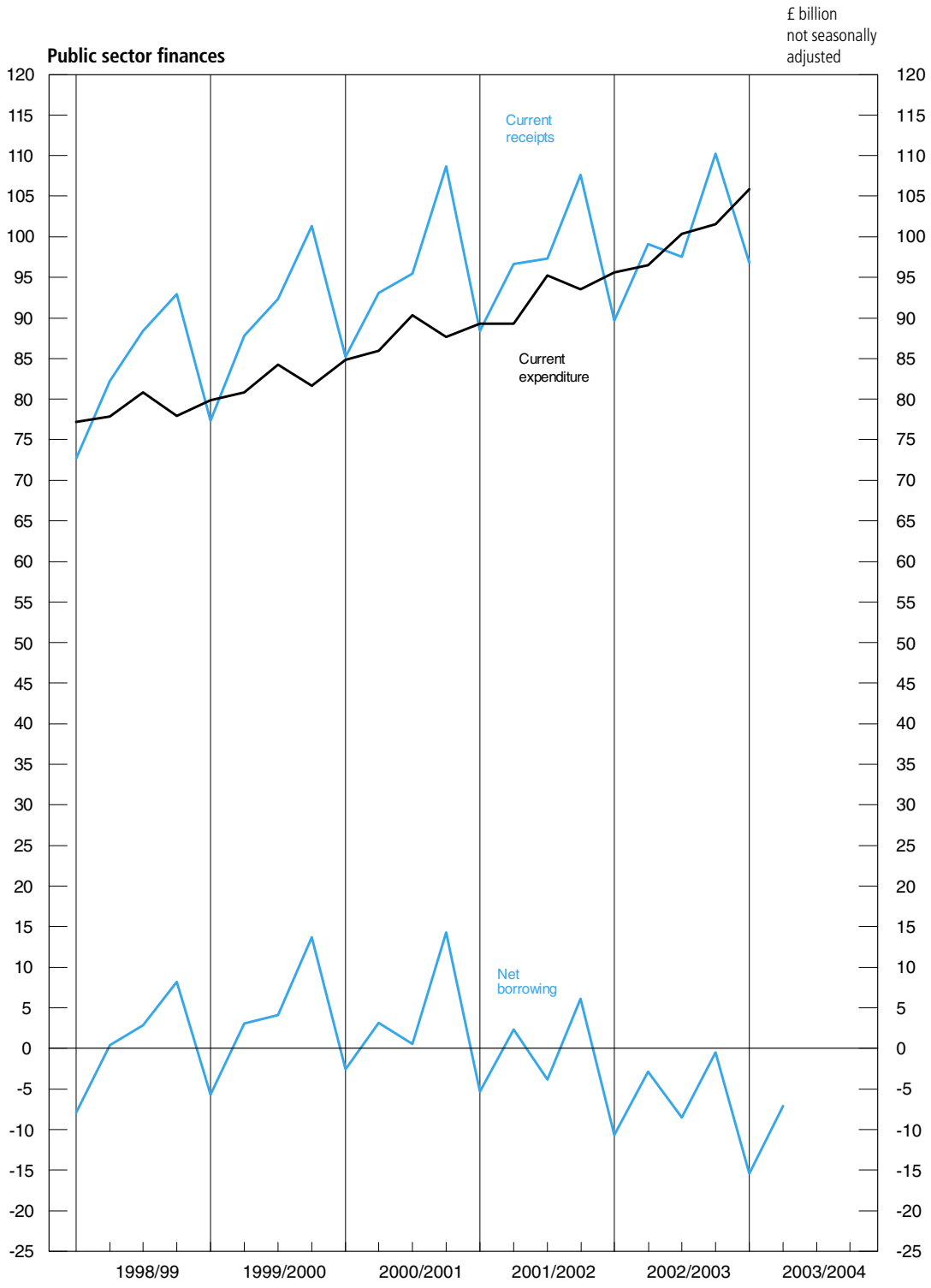
6.5 Public sector key fiscal indicators[1]

£ million[5], 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
2000	20 377	19 086	5 361	4 305	15 016	14 781	–38 192	–37 562	317.4	32.6
2001	17 146	15 948	9 029	8 471	8 117	7 477	–3 521	–2 921	318.8	31.4
2002	–4 465	–6 247	10 477	9 658	–14 942	–15 905	16 419	17 097	336.1	31.4
Quarterly										
2000 Q1	17 443	16 405	2 958	2 722	14 485	13 683	–14 336	–12 886	340.9	36.2
Q2	–3 023	–2 931	–1	–344	–3 022	–2 587	–11 602	–11 831	329.1	34.6
Q3	4 456	3 802	910	655	3 546	3 147	–16 827	–16 499	313.6	32.6
Q4	1 501	1 810	1 494	1 272	7	538	4 573	3 654	317.4	32.6
2001 Q1	18 688	17 706	3 310	3 411	15 378	14 295	–13 916	–12 573	306.9	31.2
Q2	–4 259	–4 266	951	1 018	–5 210	–5 284	6 686	6 317	314.3	31.6
Q3	4 533	3 910	1 725	1 589	2 808	2 321	–6 553	–6 138	308.2	30.7
Q4	–1 816	–1 402	3 043	2 453	–4 859	–3 855	10 262	9 473	318.8	31.4
2002 Q1	11 554	10 607	4 636	4 489	6 918	6 118	–6 958	–6 334	311.3	30.2
Q2	–9 284	–9 449	1 321	1 224	–10 605	–10 673	7 434	7 055	318.1	30.5
Q3	–175	–956	2 171	1 907	–2 346	–2 863	–261	660	320.1	30.3
Q4	–6 560	–6 449	2 349	2 038	–8 909	–8 487	16 204	15 716	336.1	31.4
2003 Q1	6 267	5 051	6 103	5 552	164	–501	–1 893	–1 099†	332.8	30.7
Q2	–12 535	–12 713	2 641	2 718	–15 176	–15 431	16 729	16 170	348.8†	31.8
Q3	..	–3 494	..	3 609	–6 782	–7 103	..	6 014	353.7	31.9

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
Current
receipts
Current
expenditure
Net
borrowing
120
115
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
-5
-10
-15
-20
-25
1998/99
1999/2000
2000/2001
2001/2002
2002/2003
2003/2004

6.6 Consumer credit and other household sector borrowing

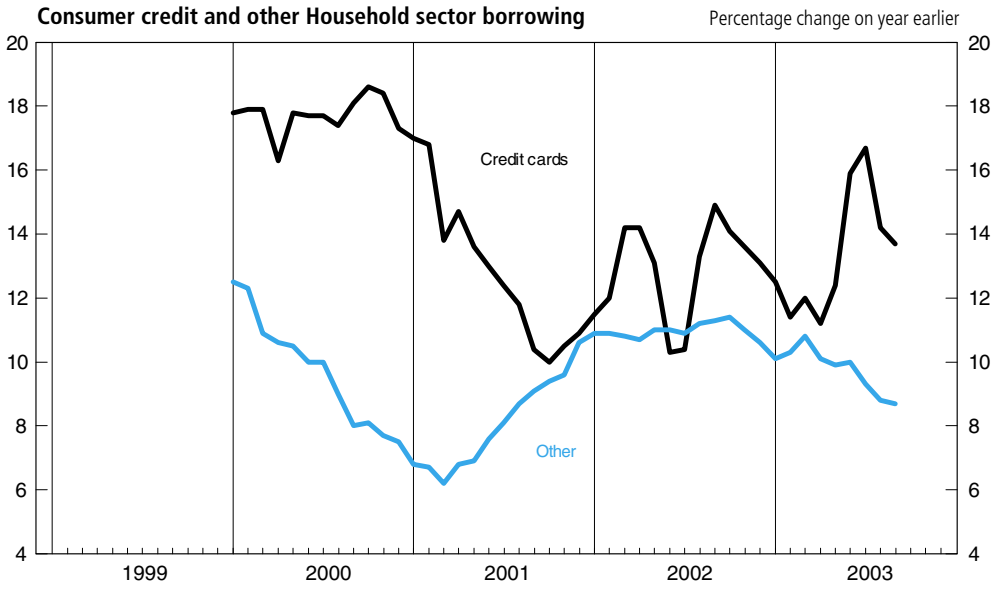
£ million

	Consumer credit								
	Total consumer credit[1]	of which: credit cards[1,2]	of which: other[1,2]	Banks[1]	Building Societiesí Class 3 Loans[1]	Other specialist lenders	Retailers	Insurance companies	Loans secured on dwellings (NSA[†])
Amounts outstanding: quarterly									
	VZRI	VZRJ	VZRK	VRVV	VZRG	VZRH	RLBO	VZQZ	AMWT
1998 Q1	91 964	19 327	72 637	66 696	205	21 180	2 639	1 244	435 542
Q2	95 241	20 483	74 758	69 605	191	21 535	2 666	1 243	442 027
Q3	98 535	21 470	77 065	72 210	178	22 229	2 677	1 242	449 691
Q4	101 416	22 319	79 097	72 923	289	24 330	2 630	1 244	456 802[†]
1999 Q1	105 512	28 229	77 283	75 517	290	25 719	2 673	1 313	463 303
Q2	108 569	29 518	79 052	77 692	315	26 506	2 671	1 385	472 729
Q3	112 113[†]	30 645	81 468	80 455[†]	324	27 273	2 655[†]	1 405	484 269
Q4	115 252	31 988[†]	83 264[†]	82 497	293	28 257	2 741	1 464[†]	494 199
2000 Q1	118 973	33 270	85 703	85 880	307	28 738[†]	2 644	1 406	503 559
Q2	121 746	34 749	86 996	88 729	320	28 789	2 595	1 313	514 840
Q3	124 202	36 198	88 004	91 063	343	28 967	2 553	1 276	525 842
Q4	127 035	37 530	89 505	93 993	384	28 964	2 487	1 206	535 751
2001 Q1	128 894	37 855	91 038	95 762	405	28 998	2 507	1 222	546 485
Q2	132 838	39 252	93 586	100 362	430[†]	28 328	2 498	1 220	561 443
Q3	135 997	39 964	96 033	103 453	439	28 389	2 513	1 203	577 424
Q4	140 596	41 632	98 964	107 478	425	29 035	2 473	1 185	591 466
2002 Q1	144 072	43 227	100 845	110 947	457	29 016	2 493	1 159	606 483
Q2	147 194	43 290	103 904	113 292	470	29 719	2 565	1 148	625 966
Q3	152 826	45 938	106 889	118 276	519	30 368	2 541	1 123	648 656
Q4	156 510	47 071	109 439	120 532	591	31 739	2 546	1 102	670 925
2003 Q1	160 157	48 433	111 724	116 754	619	39 229	2 506	1 050	690 752
Q2	164 497	50 164	114 333	119 822	682	40 771	2 205	1 016	713 054
Q3	168 401	52 219	116 182	122 575	736	41 922	2 187	981	..
Amounts outstanding: monthly									
2001 Jan	127 925[†]	37 834[†]	90 091[†]	94 959[†]	394	28 773[†]	2 596	1 202[†]	..
Feb	128 853	38 288	90 564	95 969	399	28 758	2 517[†]	1 210	..
Mar	128 894	37 855	91 038	95 762	405	28 998	2 507	1 222	..
Apr	130 366	38 379	91 987	98 043	408	28 162	2 526	1 228	..
May	131 602	38 935	92 667	99 190	427	28 259	2 499	1 227	..
Jun	132 838	39 252	93 586	100 362	430[†]	28 328	2 498	1 220	..
Jul	134 177	39 618	94 559	101 634	439	28 377	2 514	1 213	..
Aug	135 229	39 920	95 309	102 645	441	28 432	2 503	1 208	..
Sep	135 997	39 964	96 033	103 453	439	28 389	2 513	1 203	..
Oct	137 378	40 483	96 895	104 909	452	28 320	2 498	1 199	..
Nov	138 831	41 091	97 741	106 241	426	28 483	2 489	1 193	..
Dec	140 596	41 632	98 964	107 478	425	29 035	2 473	1 185	..
2002 Jan	142 075	42 195	99 880	108 899	432	29 112	2 458	1 176	..
Feb	143 312	42 885	100 427	110 067	440	29 156	2 482	1 166	..
Mar	144 072	43 227	100 845	110 947	457	29 016	2 493	1 159	..
Apr	145 714	43 841	101 873	112 461	467	29 133	2 500	1 154	..
May	146 908	44 039	102 869	113 587	475	29 148	2 547	1 152	..
Jun	147 194	43 290	103 904	113 292	470	29 719	2 565	1 148	..
Jul	148 660	43 751	104 908	114 716	483	29 769	2 551	1 141	..
Aug	151 197	45 234	105 964	117 232	498	29 813	2 522	1 133	..
Sep	152 826	45 938	106 889	118 276	519	30 368	2 541	1 123	..
Oct	154 154	46 182	107 972	118 347	530	31 621	2 540	1 116	..
Nov	155 189	46 690	108 499	119 356	555	31 607	2 561	1 110	..
Dec	156 510	47 071	109 439	120 532	591	31 739	2 546	1 102	..
2003 Jan	157 437	47 466	109 971	121 316	601	31 914	2 519	1 088	..
Feb	158 550	47 770	110 779	119 866	612	34 466	2 536	1 069	..
Mar	160 157	48 433	111 724	116 754	619	39 229	2 506	1 050	..
Apr	160 964	48 772	112 192	116 857	645	39 939	2 488	1 035	..
May	162 544	49 513	113 031	118 447	660	39 963	2 450	1 024	..
Jun	164 497	50 164	114 333	119 822	682	40 771	2 205	1 016	..
Jul	165 747	51 041	114 706	120 807	697	41 035	2 202	1 006	..
Aug	166 950	51 645	115 305	121 963	717	41 053	2 223	994	..
Sep	168 401	52 219	116 182	122 575	736	41 922	2 187	981	..

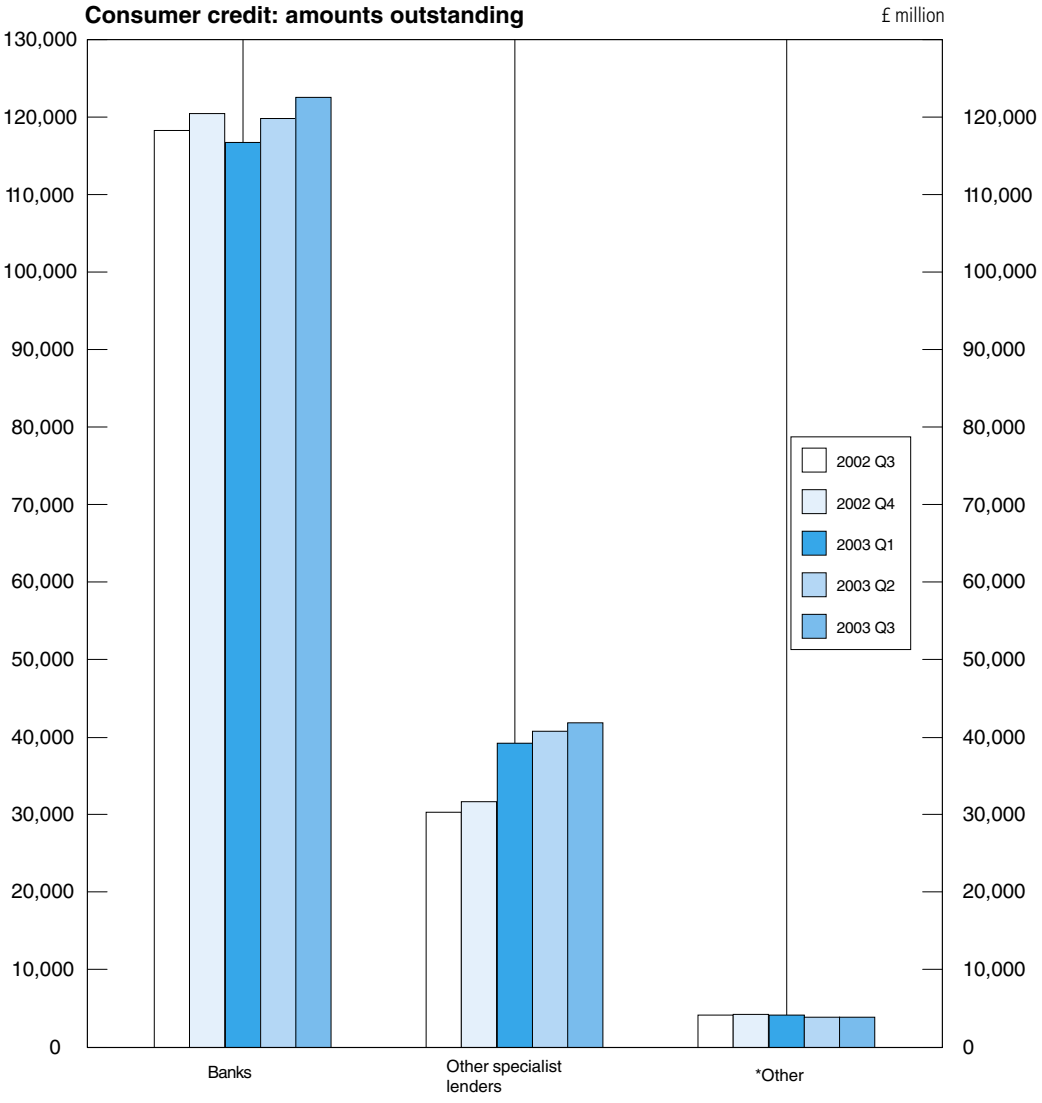
1 These figures fall outside the scope of National Statistics.
2 From January 1999 onwards, a more accurate breakdown between credit card and íother lendingí is available.

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



No charges have been plotted for earlier periods as data before 1999 is not directly comparable.



*Other is the sum of Retailers, Insurance companies and Building society class 3 loans

6.7 Analysis of bank lending to UK residents[1,2,4,5,6] Amounts outstanding

£ million, not seasonally adjusted

	Manufacturing[3]	Other production	Financial	Services	Persons	Total loans, advances and acceptances
Total Loans, Advances, Acceptances and Sterling Commercial paper						
	TBSF	BCEX	BCFH	BCFR	TBTW	TBSA
2002 Q1	56 274	34 790	322 369	210 706	526 103	1 150 242
Q2	53 564	35 237	345 953	216 067	541 069	1 191 891
Q3	53 142	34 454	338 483	223 171	560 584	1 209 833
Q4	51 708	35 004	338 353	236 069	576 315	1 237 449
2003 Q1	50 870	35 250	360 738	240 265	573 859	1 261 042
Q2	49 491	35 424	372 950	248 384	588 445	1 294 818
Of which in sterling						
	TBUF	BCEY	BCFI	BCFS	TBVW	TBUA
2002 Q1	35 449	30 824	173 270	188 500	525 653	953 697
Q2	34 674	31 151	175 075	195 901	540 597	977 399
Q3	34 462	30 937	180 673	204 287	560 146	1 010 505
Q4	34 231	31 477	174 298	215 949	575 819	1 031 774
2003 Q1	32 527	31 746	181 687	219 322	573 326	1 038 608
Q2	32 444	31 931	185 958	226 536	587 908	1 064 778
Changes in total lending (sterling)						
	TBWF	BCEZ	BCFJ	BCFT	TBXW	TBWA
2002 Q1	–1 984	626	3 399	1 745	12 108	15 894
Q2	–736	362	1 618	7 120	16 259	24 624
Q3	–211	–213	6 714	7 745	19 662	33 697
Q4	–249	540	–6 357	11 638	16 832	22 404
2003 Q1	–1 457	366	2 556	4 381	4 981	10 828
Q2	–48	208	4 888	7 099	16 393	28 540
Changes in total lending (foreign currencies)						
	TBYF	BCFA	BCFK	BCFU	TBZW	TBYA
2002 Q1	–782	–162	1 204	1 190	42	1 492
Q2	–1 647	231	20 287	–1 733	34	17 173
Q3	376	–450	–8 385	–675	–13	–9 147
Q4	–1 359	17	4 462	1 181	60	4 361
2003 Q1	214	–134	10 441	116	22	10 659
Q2	–967	76	10 476	1 356	21	10 961
Facilities granted						
	TCAF	BCFB	BCFL	BCFV	TCBW	TCAA
2002 Q1	105 941	68 212	374 150	305 742	578 757	1 432 801
Q2	97 755	69 070	396 177	312 469	602 724	1 478 195
Q3	95 975	65 006	387 612	321 029	620 172	1 489 793
Q4	96 946	63 765	384 484	330 529	631 881	1 507 605
2003 Q1	97 850	64 413	408 134	338 248	639 407	1 548 053
Q2	93 719	65 543	420 255	343 718	661 296	1 584 531
Of which in sterling						
	TCCF	BCFC	BCFM	BCFW	TCDW	TCCA
2002 Q2	59 078	50 970	206 372	269 322	602 078	1 187 821
Q3	57 928	49 216	212 141	276 475	619 516	1 215 275
Q4	57 848	49 349	205 087	287 157	631 178	1 230 620
2003 Q1	56 935	49 326	212 362	295 112	638 643	1 252 379
Q2	55 190	50 264	218 168	301 680	660 518	1 285 820
Changes in sterling (facilities granted)						
	TCEF	BCFD	BCFN	BCFX	TCFW	TCEA
2002 Q2	–1 814	1 586	936	12 488	25 225	38 420
Q3	–1 148	–1 752	6 977	6 315	17 551	27 944
Q4	–97	133	–7 036	10 521	12 821	16 342
2003 Q1	–666	73	2 442	8 967	15 051	25 868
Q2	–1 695	971	6 443	6 500	23 697	35 916
Changes in foreign currencies (facilities granted)						
	TCGF	BCFE	BCFO	BCFY	TCHW	TCGA
2002 Q2	–5 164	–344	20 273	–4 834	74	10 005
Q3	595	–1 758	–9 040	2 793	37	–7 373
Q4	989	–1 225	2 274	–895	51	1 193
2003 Q1	575	287	11 315	–1 513	39	10 703
Q2	–1 321	697	9 284	100	37	8 797

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 Changes in the reporting population in the quarter to end-December 1997, including the entry of Northern rock plc, account for an increase of £12.8bn in total sterling lending. Other currency lending was unchanged. Changes data have been adjusted to reflect only the new business undertaken by Northern Rock plc during the quarter.

3 Includes lending under DTI special scheme for domestic shipbuilding.

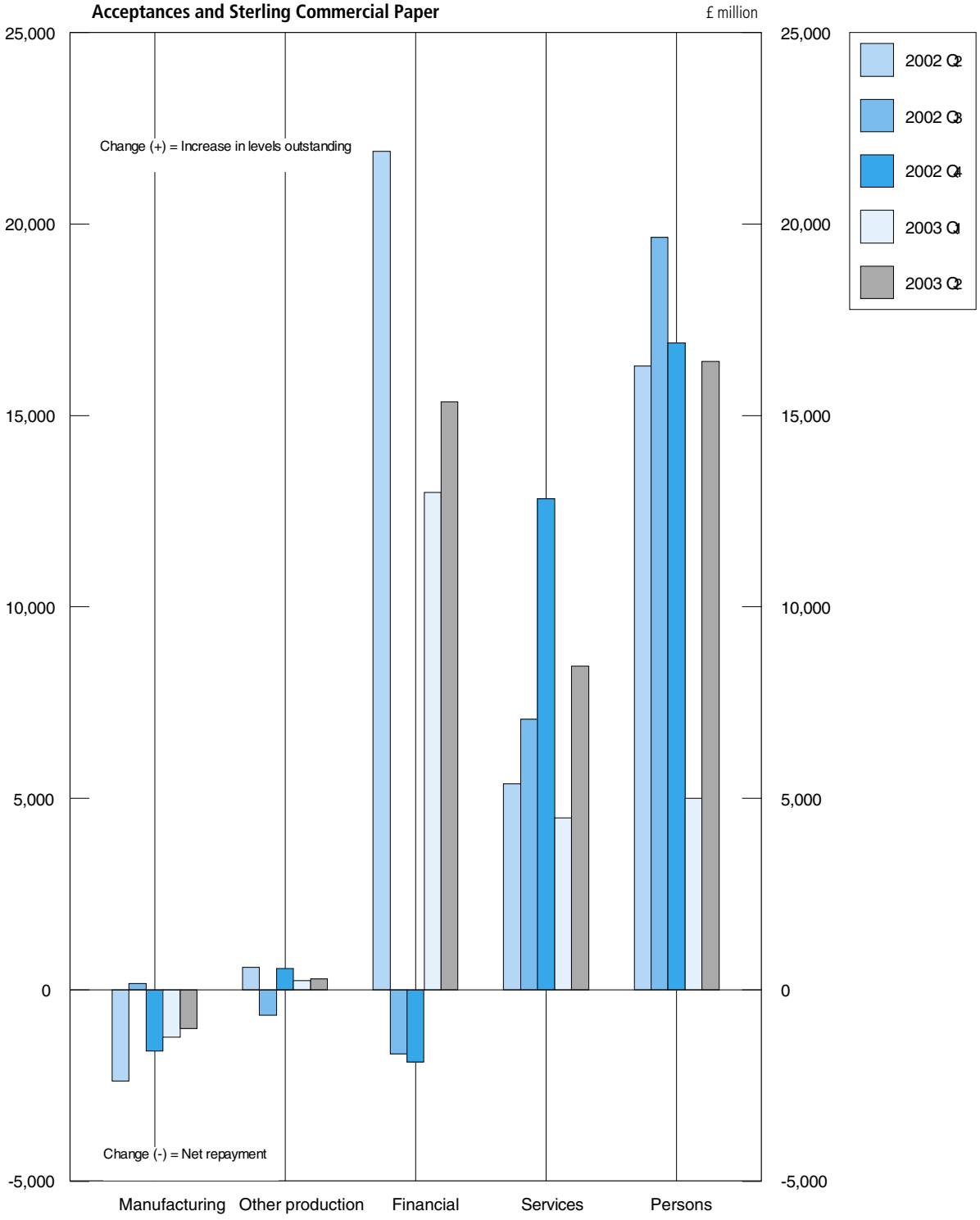
4 Data for amounts outstanding at end-Q2 1999, reflect the acquisition of Birmingham mid-shires Building Society by Halifax plc in April 1999. Changes data have been adjusted to reflect only the net business undertaken by Bradford and Bingley plc during December.

5 Data for amounts outstanding to end-Q4, 2000 reflect the entry of Bradford and Bingley plc to the banking sector in December 2000. Changes data have been adjusted to reflect only the net business undertaken by Bradford and Bingley plc during December.

6 These figures fall outside the scope of National Statistics.

Source: Bank of England; Enquiries 020 7601 5360

Analysis of bank lending to UK residents: Total Loans, Advances, Acceptances and Sterling Commercial Paper



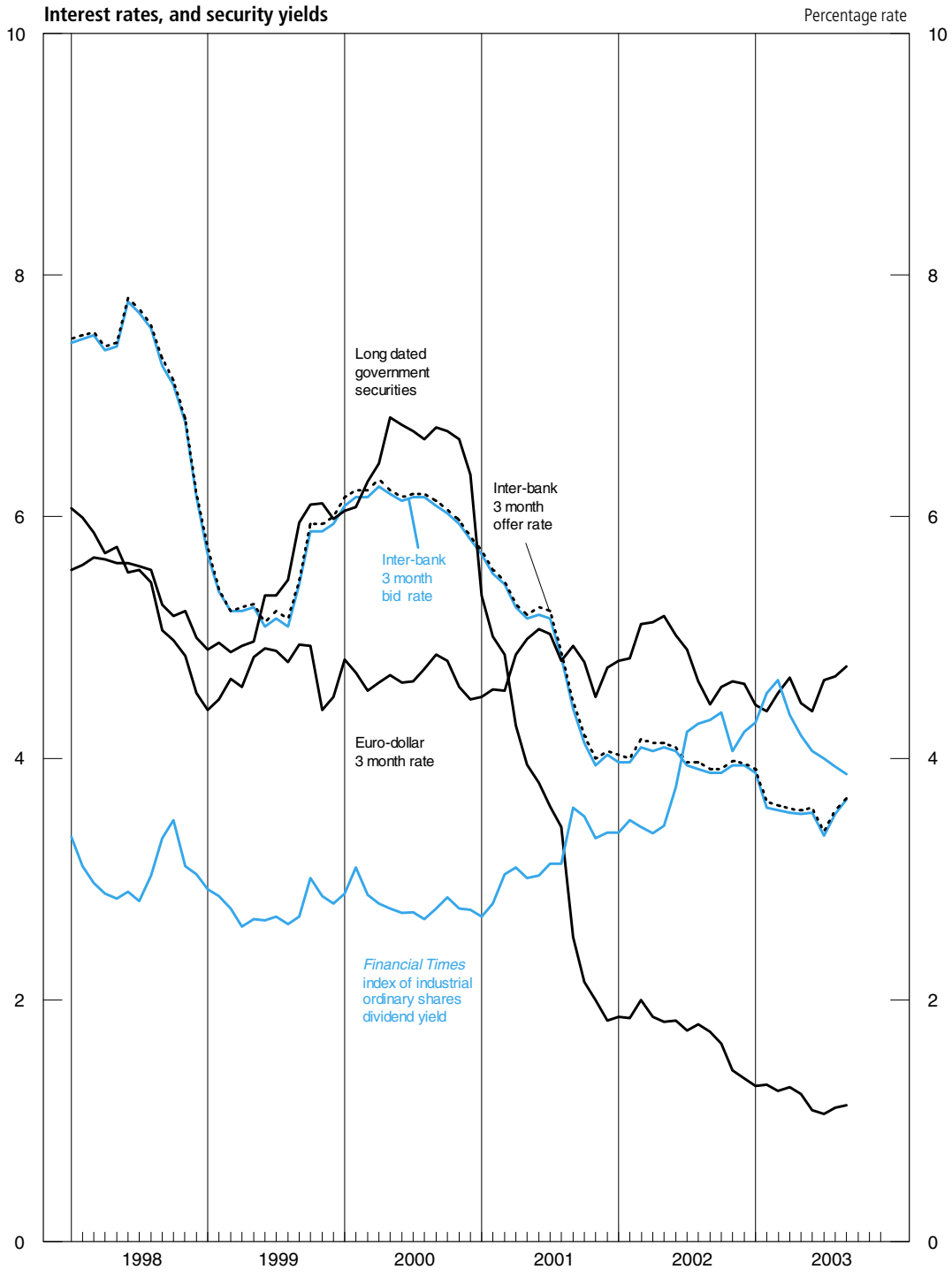
6.8 Interest rates, security prices and yields[5]

Percentage rate

	Last Friday						Last working day	Average of working days		
									Financial Times index of industrial ordinary shares 1 July 1935 = 100	
	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	Selected retail banks: base rate	Euro-dollar 3 month rate	British government securities: long dated[4] - 20 years	Price index	Dividend yield
Annual											
	AJRP	AJOI	HSAJ	HSAK	HSAL	HSAM	ZCMG	AJIB	AJLX	AJMT	AJMU
2000	5.69	5.84	5.81	5.84	5.75	5.81	..	6.35	4.68	3 631.60	2.80
2001	3.87	4.00	4.03	4.06	3.98	4.02	..	1.83	4.78	3 020.66	3.15
2002	3.92	..	3.94	3.96	3.90	3.94	..	1.35	4.83	2 175.75	3.87
Monthly											
2000 Jan	5.85	6.25	6.09	6.16	6.03	6.09	5.75	6.05	4.82	3 894.87	2.88
Feb	5.93	6.06	6.16	6.22	6.09	6.16	6.00	6.08	4.71	3 583.41	3.10
Mar	5.93	6.13	6.16	6.22	6.13	6.16	6.00	6.29	4.56	3 667.74	2.87
Apr	6.05	6.22	6.25	6.31	6.22	6.25	6.00	6.44	4.63	3 638.75	2.80
May	6.04	6.13	6.19	6.22	6.13	6.16	6.00	6.82	4.69	3 634.60	2.76
Jun	5.93	6.06	6.13	6.16	6.06	6.13	6.00	6.76	4.63	3 705.09	2.72
Jul	5.93	6.03	6.16	6.19	6.13	6.16	6.00	6.71	4.64	3 702.08	2.73
Aug	5.95	6.06	6.16	6.19	6.09	6.13	6.00	6.64	4.74	3 688.48	2.67
Sep	5.85	6.03	6.09	6.13	6.03	6.09	6.00	6.74	4.86	3 483.90	2.76
Oct	5.81	6.00	6.03	6.06	6.00	6.03	6.00	6.71	4.81	3 395.04	2.85
Nov	5.72	5.88	5.94	5.97	5.91	5.97	6.00	6.64	4.59	3 595.55	2.76
Dec	5.69	5.84	5.81	5.84	5.75	5.81	6.00	6.35	4.49	3 589.67	2.75
2001 Jan	5.57	5.63	5.69	5.72	5.66	5.72	6.00	5.35	4.51	3 550.35	2.69
Feb	5.46	5.53	5.53	5.56	5.50	5.53	5.75	5.01	4.57	3 488.73	2.80
Mar	5.29	5.38	5.44	5.47	5.40	5.43	5.75	4.86	4.56	3 258.51	3.04
Apr	5.11	5.13	5.25	5.28	5.23	5.25	5.50	4.27	4.86	3 200.29	3.10
May	5.02	5.13	5.16	5.19	5.16	5.17	5.25	3.95	4.99	3 275.60	3.01
Jun	5.10	5.06	5.19	5.25	5.18	5.18	5.25	3.80	5.07	3 233.31	3.03
Jul	5.04	5.13	5.16	5.22	5.16	5.17	5.25	3.60	5.03	2 997.61	3.13
Aug	4.71	4.75	4.84	4.88	4.83	4.84	5.00	3.43	4.81	2 946.34	3.13
Sep	4.33	4.38	4.41	4.47	4.41	4.51	4.75	2.52	4.93	2 481.82	3.59
Oct	4.16	4.06	4.13	4.19	4.10	4.13	4.50	2.15	4.80	2 444.83	3.52
Nov	3.81	3.94	3.94	4.00	3.92	3.96	4.00	2.00	4.51	2 670.72	3.34
Dec	3.87	4.00	4.03	4.06	3.98	4.02	4.00	1.83	4.75	2 699.78	3.39
2002 Jan	3.90	3.94	3.97	4.03	3.97	3.99	4.00	1.86	4.81	2 706.04	3.39
Feb	3.91	3.88	3.97	4.00	3.91	3.95	4.00	1.85	4.83	2 556.21	3.49
Mar	4.04	4.09	4.09	4.16	4.09	4.11	4.00	2.00	5.11	2 624.81	3.43
Apr	3.98	4.00	4.06	4.13	4.05	4.06	4.00	1.86	5.13	2 568.64	3.38
May	4.04	4.03	4.09	4.13	4.09	4.11	4.00	1.82	5.18	2 518.05	3.44
Jun	3.97	4.03	4.06	4.09	4.05	4.07	4.00	1.83	5.02	2 273.42	3.76
Jul	3.75	..	3.94	3.97	3.92	3.94	4.00	1.75	4.90	2 015.27	4.22
Aug	3.86	..	3.91	3.97	3.91	3.93	4.00	1.80	4.64	1 919.40	4.29
Sep	3.81	..	3.88	3.91	3.85	3.86	4.00	1.74	4.45	1 766.29	4.32
Oct	3.73	..	3.88	3.91	3.85	3.87	4.00	1.64	4.59	1 696.27	4.38
Nov	3.86	..	3.94	3.98	3.94	3.95	4.00	1.42	4.64	1 761.45	4.06
Dec	3.92	..	3.94	3.96	3.90	3.94	4.00	1.35	4.62	1 703.20	4.22
2003 Jan	3.79	..	3.88	3.91	3.88	3.89	4.00	1.29	4.44	1 611.55	4.30
Feb	3.49	..	3.59	3.64	3.60	3.62	3.75	1.30	4.39	1 425.31	4.54
Mar	3.51	..	3.57	3.61	3.57	3.59	3.75	1.25	4.54	1 276.68	4.65
Apr	3.47	..	3.55	3.58	3.54	3.56	3.75	1.28	4.67	1 412.52	4.36
May	3.44	..	3.54	3.57	3.55	3.55	3.75	1.22	4.46	1 523.44	4.19
Jun	3.50	..	3.55	3.59	3.55	3.56	3.75	1.09	4.39	1 615.51	4.06
Jul	3.32	..	3.36	3.40	3.36	3.38	3.50	1.06	4.65	1 658.51	4.00
Aug	3.53	..	3.54	3.57	3.54	3.56	3.50	1.11	4.68	1 742.37	3.93
Sep	3.59	..	3.66	3.67	3.63	3.65	3.50	1.13	4.76	1 779.79	3.87

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; Financial Times; Enquiries Columns 1-2, 4-9, 11-12 020 7601 4342.


Interest rates, and security yields
Percentage rate
10
8
6
4
2
0
Long dated government securities
Inter-bank 3 month offer rate
Inter-bank 3 month bid rate
Euro-dollar 3 month rate
Financial Times index of industrial ordinary shares dividend yield
1998
1999
2000
2001
2002
2003

6.9 A selection of asset prices

	Physical assets						Financial assets[5]		
	Producer price indices (2000 = 100)		Housing: ODPM all lenders mix adjusted house price index (1993 = 100)				British government stocks		
	Plant and machinery bought as fixed assets by Motor vehicle industry[2]	Manufactured output Motor vehicle industry[2]	New dwellings[3]	Secondhand dwellings[3]	All dwellings[3]	Average price of agricultural land in England (1995 = 100)[1]	Fixed interest (Dec 1975 =100)	Index linked (April 1982= 100)	Company securities: FT-Actuaries all ordinary shares (10 April 1962 = 100)
Annual									
	PVJL	PQIR	BBKO	BBKP	BBKQ	BAJI	AJJY	AJJZ	AJMA
1994	96.2	92.1†	100.1	102.9	102.5	..	140.59	176.25	1 574.48
1995	100.0	95.8	104.7	103.0	103.2	..	139.69	182.74	1 647.07
1996	102.9	98.8	109.7	106.5	106.9	..	142.86	189.71	1 894.73
1997	101.5†	100.0	120.7	116.3	116.9	..	147.42	166.54	2 235.79
1998	99.8	102.3	128.3	129.9	129.7	..	158.30	231.01	2 626.22
1999	99.3	102.8	147.9	144.1	144.6	..	160.35	252.41	2 918.22
2000	100.0	100.0	165.4	165.3	165.3	..	156.43	257.68	3 045.80
2001	102.0	95.4	176.6	179.7	179.2	..	155.37	254.63	2 681.19
2002	100.2	95.2	212.5	209.5	209.6	..	153.96	259.41	2 224.50
Quarterly									
1994 Q1	95.2	91.3†	99.9	100.9	100.7	81	150.02	183.63	1 679.75
Q2	95.9	91.7	98.7	102.6	102.1	85	139.41	174.41	1 546.26
Q3	97.0	92.4	99.5	104.4	103.8	85	136.04	172.54	1 554.39
Q4	96.8	93.0	102.6	103.2	103.1	99	136.88	174.40	1 517.51
1995 Q1	98.8	94.7	100.8	102.4	102.2	80	136.42	175.28	1 506.36
Q2	99.6	95.1	105.0	103.0	103.3	91	139.07	182.67	1 608.42
Q3	100.7	96.2	107.9	103.6	104.2	104	139.97	185.48	1 714.06
Q4	100.9	97.1	106.1	102.2	102.8	114	143.31	187.53	1 759.44
1996 Q1	103.1	98.1	107.7	103.8	104.3	104	142.89	187.01	1 831.51
Q2	104.1	98.5	108.7	103.7	104.4	117	141.22	186.54	1 885.83
Q3	102.6	99.0	109.7	108.3	108.5	136	142.60	189.37	1 894.17
Q4	101.9	99.4	119.4	109.0	110.4	135	144.72	195.90	1 967.42
1997 Q1	101.9†	99.8	124.5	109.8	111.9	111	144.72	196.52	2 089.90
Q2	101.6	99.8	118.5	113.5	114.2	140[4]	145.26	195.98	2 167.79
Q3	101.5	100.2	120.5	119.9	120.0	157[4]	148.80	202.28	2 317.34
Q4	101.2	100.4	120.5	118.9	119.1	128[4]	150.88	71.39	2 368.12
1998 Q1	100.4	101.3	123.2	121.9	122.1	121[4]	153.46	217.63	2 606.58
Q2	99.9	102.3	127.5	128.7	128.6	116[4]	155.49	227.44	2 796.69
Q3	99.4	102.6	129.9	134.8	134.2	151[4]	159.30	234.28	2 599.90
Q4	99.5	103.1	136.1	133.2	133.6	129[4]	164.94	244.69	2 501.69
1999 Q1	100.1	103.4	138.8	133.7	134.4	116[4]	166.57	252.85	2 771.59
Q2	99.6	103.3	145.9	139.2	140.1	128[4]	160.86	254.10	2 964.95
Q3	99.0	102.2	149.9	148.1	148.3	155[4]	157.17	248.40	2 934.06
Q4	98.5	102.3	153.7	151.9	152.1	149[4]	156.78	254.31	3 002.30
2000 Q1	99.0	102.0	154.0	156.3	156.0	142[4]	155.48	253.52	3 048.44
Q2	99.4	101.8	163.0	164.8	164.5	143[4]	156.95	259.28	3 011.87
Q3	100.1	99.9	168.6	167.5	167.6	159[4]	155.79	257.15	3 104.27
Q4	101.4	96.3	176.0	172.0	172.6	144[4]	157.52	260.77	3 018.63
2001 Q1	102.9	95.4	172.1	171.6	171.7	156[4]	157.93	258.54	2 898.29
Q2	103.1	95.5	172.1	178.9	177.9	143[4]	152.56	249.15	2 799.91
Q3	101.2	95.4	178.3	185.2	184.3	158[4]	155.21	254.14	2 543.42
Q4	101.1	95.4	180.7	180.6	180.6	154[4]	155.78	256.69	2 483.13
2002 Q1	101.0	95.6	189.5	186.3	186.5	131[4]	153.17	253.43	2 511.03
Q2	100.5	95.5	205.6	202.2	202.3	141[4]	151.26	259.02	2 451.46
Q3	100.0	94.9	217.6	219.6	219.1	151[4]	156.22	262.42	2 011.14
Q4	99.2	94.9	221.6	224.4	223.8	154[4]	155.20	262.75	1 924.37
2003 Q1	99.0	94.6	225.4	223.1	223.4	..	157.51	272.75	1 776.83
Q2	99.7p	94.0r	252.1	235.1	237.0	..	157.22	278.01	1 931.81
Q3	99.3p	94.2p	..	..	..	..	153.61	273.58	2 055.03

1 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 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.defra.gov.uk/esg/statnot) accessible through the Internet and by a faxback facility (Fax No 0906 711 0396 charged at 50 pence per minute). Data prior to 1993 remains on the previous basis.

2 These indices are now published under SIC 1992 classi cation.

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 Ministersí 5% survey of mortgage lenders (at completion stage), but now includes all mortgage lenders rather than building societies only.

4 Provisional estimates.

5 These figures fall outside the scope of National Statistics.

Sources: Office for National Statistics;
Enquiries Columns 1-3 01633 812106 or 813390;
Office of the Deputy Prime Minister;
Enquiries Columns 4-6 020 7944 3325;
Department of Environment, Food and Rural Affairs;
Enquiries Column 7 01904 455083;

Measures of variability of selected economic series[1]

	Table	Period covered	Average percentage changes $\overline{CI}$	$\overline{I}$	$\overline{C}$	$\overline{I}/\overline{C}$	MCD or QCD	$\overline{I}/\overline{C}$ for MCD (or QCD) span
Quarterly series								
National income and components :chained volume measures, reference year 2000								
Gross Value Added (GVA) at Basic Prices	2.1	Q1 1985 to Q2 2003	*0.7*	*0.2*	*0.7*	0.3	1	0.3
Households' Final Consumption Expenditure	2.5	Q1 1985 to Q2 2003	*0.9*	*0.3*	*0.9*	0.4	1	0.4
Gross fixed capital formation	2.2, 2.7	Q1 1985 to Q2 2003	*2.1*	*1.2*	*1.5*	0.8	1	0.8
Exports: goods and services	2.2	Q1 1985 to Q2 2003	*2.0*	*1.0*	*1.4*	0.8	1	0.8
Imports: goods and services	2.2	Q1 1985 to Q2 2003	*2.1*	*1.0*	*1.8*	0.6	1	0.6
Real Households' disposable income	2.5	Q1 1985 to Q2 2003	*1.2*	*1.0*	*0.8*	1.1	2	0.3
Gross operating surplus of private non-financial corporations	2.11	Q1 1985 to Q2 2003	*3.1*	*2.2*	*2.0*	1.1	2	0.4
Other quarterly series								
Construction output[2]	5.2	Q1 1985 to Q2 2003	*1.6*	*0.9*	*1.2*	0.8	1	0.8
Households' saving ratio[3]	2.5	Q1 1985 to Q2 2003	*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 Jun 2003	*0.6*	*0.6*	*0.2*	2.5	3	0.8
Predominantly non-food stores	5.8	Jan 1986 to Jun 2003	*1.1*	*1.0*	*0.4*	2.5	3	0.7
Non-store and repair	5.8	Jan 1986 to Jun 2003	*1.7*	*1.6*	*0.4*	4.3	5	1.0
Housing starts[2]:								
Private enterprise	5.4	Jan 1985 to Mar 2003	*7.0*	*6.8*	*1.5*	4.4	5	0.9
Registered Social Landlords	5.4	Jan 1985 to Mar 2003	*14.9*	*14.8*	*1.6*	9.1	6	1.0
Housing completions[2]								
Private enterprise	5.4	Jan 1985 to Mar 2003	*5.7*	*5.7*	*0.7*	8.6	6	1.0
Registered Social Landlords	5.4	Jan 1985 to Mar 2003	*14.1*	*14.0*	*1.6*	8.8	6	1.0
Index of industrial production								
Production industries	5.1	Jan 1985 to Jun 2003	*0.7*	*0.7*	*0.2*	3.1	4	0.9
Manufacturing industries	5.1	Jan 1985 to Jun 2003	*0.7*	*0.7*	*0.3*	2.5	3	0.8
Average earnings: whole economy	4.6	Jan 1990 to Jun 2003	*0.4*	*0.3*	*0.4*	0.7	1	0.7
Exports: value, f.o.b.[4]	2.13	Jan 1985 to Jun 2003	*2.9*	*2.7*	*0.9*	3.1	3	1.0
Imports: value, f.o.b.[4]	2.13	Jan 1985 to Jun 2003	*2.3*	*2.1*	*0.8*	2.8	3	0.8
Money stock - M0[5]	6.2	Jan 1985 to Jun 2003	*0.5*	*0.3*	*0.5*	0.6	1	0.6
Money stock - M4[5]	6.2	Jan 1985 to Jun 2003	*0.8*	*0.3*	*0.8*	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 de nitions of the measures.
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.
$\overline{I}/\overline{C}$ 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 $\overline{I}/\overline{C}$ 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 $\overline{I}/\overline{C}$ exceeds 1 for 6-month periods.

2 Series relate to Great Britain.
3 The gures in the tables were obtained from an additive analysis of the households' saving ratio so CI, I and C are differences in percentage points.
4 The gures 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 gures 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

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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	Financial Statistics (for financial assets)
		DEFRA	
		ODPM	
		Bank of England	
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May Recent developments in official statistics
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A calendar of economic events
Apr Summary input–output tables for 1971
May Private non–profit–making banks serving persons (*J Moyle Dept. of Applied Economics, Cambridge University & D J Reid*)
Further estimates of regional gross domestic product (*D Kent–Smith & A Pritchard*)
An additional series of agricultural price indices (*R G Carter & E T Richards, MAFF*)
June Private non–profit–making banks serving persons; balance sheets for 1969 and 1970 (*J Moyle, Dept. of Applied Economics, University of Cambridge & A Cowley*)
Aug Distribution of income statistics for the UK 1972/73; sources and Methods (*D Ramprakash*)
Sept Structure of company financing (*J L Walker, DI*)
Movements in the retail prices index April 1973–April 1975 (*Mrs A J Crawford, PC*)
Oct Revised estimates of the consumption and stock of fixed capital (*T Griffin*)
Nov International comparisons on the basis of purchasing power parities (*J Hibbert*)
Dec International comparisons of taxes and social security contributions 1969–73
The effect of changes in household composition on the distribution of income 1961–73 (*M Semple*)

1976 Jan Developments in methods of estimating manufactuers' stock changes
Feb Effects of taxes and benefits on household income 1979 (*M Nissel*)
Employment in the public and private sectors 1959–74
Mar New supply of persons qualified in engineering, technology and science and first employment of those who were university graduates 1958–74 (*DI*)
Apr Summary input–output tables for 1972
May International comparisons of public sector financial balances (*HM Treasury*)
June Estimates of the distribution of personal incomes for UK 1973/74
Estimates of GDP for England, Scotland, Wales and Northern Ireland
Aug The energy coefficient and the energy ratio (*R I G Allen, Dept. of Energy*)
The importance of the "Top 100" manufacturing companies (*DI*)
Sept Conveyancing since 1973 (*A T Dunn, Inland Revenue*)
Oct The stock of fixed assets in the UK: how to make best use of the Statistics
Nov UK regional accounts (*D Kent–Smith & E Hartley*)
Trends in UK energy prices (*M Lock, Dept. of Energy*)
International comparisons of taxes and social security contributions, 1969–74
Dec Effects of taxes and benefits on household income 1975
Economic prospects to end–1977 (*HM Treasury*)

1977 Jan A review of the effects of taxes and benefits on household incomes 1961–75 (*R Harris*)
Feb Employment in the public and private sectors 1971–75
Mar Government income and expenditure in the national income accounts: a change of presentation
Budget 29 March 1977
Apr Income distribution in the United Kingdom 1974–75
May Improvements in the engineering series for the index of production (*DI*)
Department of industry survey of company liquidity: comparison with the financial accounts (*J C D Alexander, DI*)
Public sector debt (*D J Read*)
June Regional accounts – preliminary estimates for 1975
Interest, profits and dividends in the balance of payments (*J E Kidgell*)
July Developments in national accounts (*J Hibbert & J W S Walton*)
Aug The home and export performance of UK industries (*J D Wells & J C Imber, DI*)
Sept Ownership of company shares: a new survey (*M J Erritt & J C D Alexander, DI*)
Oct Economic measures: 26 October 1977 (*HM Treasury*)
Economic prospects to the end of 1978 (*HM Treasury*)
Nov Regional accounts. Further estimates for 1975, including regional fixed investment (*J W Gardener & J E Dougharty*)
The redistributive effect of subsidies in households (*G A Stephenson & P P Harris, CSO*)
Dec Development in the statistics of the distribution of income
International comparisons of taxes and social security contributions 1969/75
Employment analysed by sector and industry, 1971–76

1978 Jan Personal sector balance sheets – Evidence submitted to the Royal Commission on the distribution of income and wealth by the CSO
UK official and private flows to developing countries in 1976 (*R M Allen & M C Walmsley, Ministry of Overseas Development*)
Feb The effects of taxes and benefits on household income, 1976 (*G A Stephenson*)
Recent trends in sales of land and buildings (*A T Dunn & A Gangally, Inland Revenue*)
Mar The changing problems of economic management (*Sir D Wass, HM Treasury*)
Rebasing the national accounts – why and how and the effects (*J A Rushbrook*)
The stock of consumer durables in the UK (*J R Calder*)
Apr The nations food – 40 years of change (*L J Angel & G E Hurdle, MAFF*)
The Budget: 11 April 1978 (*HM Treasury*)
The economic outlook to mid–1979 (*HM Treasury*)
May Trends in the distribution of income
The distribution of income in the UK 1975/76
June Regional accounts: preliminary estimates for 1976
Summary input–output tables for 1973
July New price indices for construction output statistics (*A D Butler, Dept. of Environment*)
Aug Some problems in assessing unemployment trends (*A E Radford & C I Webb*)
Sept Progress report on the construction and use of commodity balances within the national accounts

Nov Regional accounts further estimates for 1976
The distribution of personal wealth (*A L Dunn & P D R B Hoffman, Board of Inland Revenue*)
The economic situation and prospects for 1979 (*HM Treasury*)
Dec International comparisons of taxes and social security contributions 1970–76
Financial balances of industrial and commercial companies (*C W Pettigrew*)

1979 Jan The effects of taxes and benefits on household income 1977
Employment analysed by sector and industry, 1972–77
Feb Aspects of United Kingdom trade competitiveness (*E A Doggett & J C Cresswell*)
The distribution of income in the United Kingdom 1976/77
Articles published in *Economic Trends*, 1957–1978
Mar Trends in sales of land and buildings, 1973–77 (*A T Dunn & G C White, Inland Revenue*)
May The effects of rebasing the expenditure based measure of GDP (*J A Rushbrook*)
The rebased estimates of the output–based measure of GDP (*J V Carter*)
The rebased estimates of the index of industrial production (*D C K Stirling*)
June Regional accounts: preliminary estimates for 1977
The Budget: 12 June 1979
The economic outlook to 1980
July Research and development: expenditure and employment (*R Arrundale*)
Capital gains: a survey of holding periods (*J A Astin & J R King, Board of Inland Revenue*)
Aug The tax and price index – sources and methods
The UK's economic performance: comparisons with other countries of the European Community (*J W Gardner*)
Development of methods for forecasting car ownership and use (*G E Giles & T E Worsley, Dept. of Transport*)
Revisions to invisibles in the BoP statistics
Sept Consumer credit (*P J Stibbard*)
UK overseas trade: technical note on the unit value and volume index numbers and the terms of trade, 1975 series (*A R Hewer, DIT*)
Oct Agricultural price indices for the UK (*L J Angel, MAFF*)
UK self–sufficiency in food, 1970–78 (*R Murdue & J Parrett, MAFF*)
Nov Recent trends in local authority borrowing (*T Butler, Dept. of Environment*)
Employment in the public and private sectors 1961–78 (*M Semple*)
Regional accounts: further estimates for 1977 including current accounts for local authorities
Dec Agricultural land: its ownership, price and rent (*P J Lund & J Slater, MAFF*)
International comparisons of taxes and social security contributions (*K J Newman*)

1980 Jan The effects of taxes and benefits on household income, 1978
Feb A glimpse of the hidden economy in the national accounts *(K Macatee)*
Local authority expenditure in England and Wales since 1974/75 *(P Stewart, Dept. of Environment)*
The distribution of income in the UK 1977/78
Mar The change in revenue from an indirect tax change (*HM Treasury*)
Trends in sales of land and buildings 1973–79 (*A T Dunn & G C White, Board of the Inland Revenue*)
Apr The Budget: 26 March 1980 *(HM Treasury)*
Economic prospects to mid–1981 *(HM Treasury)*
May Cyclical indicators: some developments and an assessment of Performance (*V Ward*)
Revised measures of UK trade competitiveness measures in manufactures: technical note
June Manufacturing industry in the seventies: an assessment of import penetration and export performance (*A Hewer, DIT*)
Measures of variability in economic time series
July Research and development: expenditure and employment, 1978 (*R Arrundale*)
Aug Measuring the public sector borrowing requirement (*J Alexander & S Toland*)
Sept Skill shortages (*A Oliver, MSC*)
Oct UK visible trade in the post war years (*K Mansell, Dept. of Trade*)
Nov National and sector balance sheets for the UK (*C W Pettigrew*)
Employment in the public and private sectors 1974–1980 (*E Lomas*)
Regional accounts: estimates for 1978 and 1979
Dec A comparison of public services employment in the UK with 5 other European countries (*E Lomas*)
International comparisons of taxes and social security contributions,1971–78 (*K J Newman*)

1981 Jan Revisions to index numbers of production (*J Perry*)
The effects of taxes and benefits in household income, 1979
Feb The distribution of income in the UK, 1978/79
Exports and imports of services analysed by industry (*A Pritchard*)
Seasonal adjustment of the overseas trade figures (*D Ellis–Williams, DIT*)
Mar The effective exchange rate for sterling *(HM Treasury)*
May Revisions to estimates of economic growth *(J Hibbert)*
The energy coefficient revisited (*M Hull, Dept. of Energy*)
July A new output enquiry for the construction industry (*A Wheatcroft, Dept. of Environment*)
Financial wealth of the non–bank private sector (*HM Treasury and CSO*)
Aug Movements in UK costs and prices 1973–79 (*A Hickling*)
Research and development: expenditure and employment in the Seventies (*J R Bowles, DI*)
Sept Recent developments in economic accounts for agriculture (*J E Outlaw & G Croft, MAFF*)
The household sector (*T Jones*)
Nov Regional accounts, 1980
Committed and discretionary saving (*S Toland*)
Dec Employment in the public and private sectors, 1975–81 (*S Briscoe*)
Agricultural incomes: a review of the data and recent trends (*P J Land & J M Watson, MAFF*)
International comparisons of taxes and social security contributions, 1970–79 (*K J Newman*)

1982 Jan The effects of taxes and benefits on household income, 1980
Labour productivity: output per person hour in manufacturing (*M H Small*)
Feb Quarterly survey of UK company sources and uses of funds: summary of results 1977–80 (*M O'Connor, DIT*)
Effects of leasing on statistics of manufacturing capital expenditure (*S Penneck & R Woods, DIT*)
Mar The Budget: 9 March 1982 (*HM Treasury*)
The economy: recent developments and prospects to mid–1983 (*HM Treasury*)
Apr International comparisons of gross domestic product
Aug Central government expenditure on research and development (*J R Bowles, DIT*)
Oct A new index of average house prices (*Dept. of Environment*)
Nov Regional accounts, 1981
Dec The effects of taxes and benefits on household income, 1981
International comparisons of taxes and social security contributions in 18 OECD countries, 1970–80 (*K J Newman*)

1983 Feb Employment in the public and private sectors, 1976 to 1982 (*H Morrison*)
Capital expenditure by the UK shipping industry, 1977–81 (*J Walker & D Ruffles, DIT*)
Mar Introduction of the revised standard industrial classification, 1980
Index of industrial production – rebasing and reclassification (*J Perry*)
Rebasing and reclassifying the national accounts: the reasons and the likely effects (*M J C Lockyer*)
The Budget: 15 March 1983 (*HM Treasury*)
The economy: recent developments and prospects mid–1984 (*HM Treasury*)
May Trends in sales of land and buildings, 1977–81 (*A T Dunn & U M Rizki, Board of Inland Revenue*)
June The reconciliation of personal sector transactions and wealth (*M Marland*)
Sept Consumers' expenditure (*T Jones*)
Research and development: preliminary estimates of expenditure in the UK in 1981 (*J R Bowles, DTI*)
Oct The rebased estimates of the index of the output of the production industries (*J A Perry*)
Cyclical indicators: some recent developments and an assessment of Performance (*E Lomas*)
Nov Effects of taxes and benefits in household income 1982
Regional accounts 1971–1981: new industrial classification
Public expenditure: definitions and trends (*V Imber & P Todd, HM Treasury*)
Monthly estimates of the public sector borrowing requirement (*P Luke*)
Dec The effects of rebasing in the measure of GDP (*T J Kavangh & M J Clary*)
International comparisons of taxes and social security contributions in 20 OECD countries, 1971–81 (*K J Newman*)

1984 Feb The national accounts treatment of index–linked bonds (*M J C Lockyer*)
Public sector bank deposits: redefinition of the PSBR and money stock (*P Luke*)
Mar Employment in the public and private sectors 1977 to 1983 (*E A Doggett*)
The Budget: 13 March 1984 *(HM Treasury)*
The economy: recent developments and prospects to mid–1985 (*HM Treasury*)
May Estimating capital consumption for fixed assets employed in Northern Ireland agriculture (*T F Skinner & J R Templeton, Dept. of Agriculture for NI*)
June Regional accounts, 1982
July The distribution of income in the UK, 1981/82
Aug Research and development in the UK in 1981 (*J R Bowles, DTI*)
Industrial and commercial companies' real rates of return: difference between figures derived from national accounts and company accounts *(HM Treasury, DTI and BoE)*
Sept A note on the personal sector saving ratio (*T Jones*)
Oct Analysis of Pay As You Earn (PAYE) statistics (*R Staton, Board of Inland Revenue*)
Nov Regional accounts, 1983
Dec The effect of taxes and benefits in household income 1983

1985 Feb International comparisons of taxes and social security contributions in 20 OECD countries 1972–82 (*K J Newman*)
Mar Employment in the public and private sectors 1978–84 (*I G Richardson*)
The Budget: 19 March 1985 (*HM Treasury*)
The economy: recent developments and prospects to mid–1986 (*HM Treasury*)
Apr Revisions to quarterly estimates of GDP (*P B Kenny*)
Aug Research and development in the UK in 1983 (*J R Bowles, DTI*)
Measuring public expenditure (*P Stibbard, HM Treasury*)
Nov Regional accounts, 1984
Dec Employment in the public and private sectors 1979–85 (*I G Richardson*)
The effects of taxes and benefits in household income 1984

1986 Mar The Budget: 18 March 1986 (*HM Treasury*)
The economy: recent developments and prospects to mid–1987
May International comparisons of taxes and social security contributions in 20 OECD countries 1973–83 (*F J Hackman*)
July The effects of taxes and benefits on household income 1984
Aug Central government expenditure on research and development in 1984 (*J R Bowles, DTI*)
Nov Regional accounts 1985
The effects of taxes and benefits on household income, 1985
Dec The monthly invisibles balance
Employment in the public and private sectors 1980–86 (*M Camley*)

1987 Feb A new UK definition of the high Technology Industries (*R L Butchart, DTI*)
Mar The Budget: 17 March 1987 *(HM Treasury)*
The economy: recent developments and prospects to mid 1988
May International comparisons of taxes and social security contributions in 20 OECD countries 1973–84 (*F J P Hackman*)
National and sector balance sheets 1957–1985 (*C G Bryant*)
June International comparisons of real value added, productivity and energy intensity in 1980 (*D J Roy, CEGB*)
July The effects of taxes and benefits on household income 1985
Aug Revisions to quarterly estimates of GDP (*P B Kenny*)
Oct Long term trends in public expenditure (*G White & H Chapman, HM Treasury*)
Nov Regional accounts 1986
The distribution of income in the UK, 1984/85
Dec International comparisons of taxes and social security contributions in 20 OECD countries 1975–85
Employment in the public and private sectors 1981–1987 *(M Camley)*

1988 Jan Regional accounts 1986
Mar The Budget: 15 March 1988 (*HM Treasury*)
The economy: recent developments and prospects to mid–1989 *(HM Treasury)*
Rebasing the national accounts: the reasons and the likely effects (*E Lomas*)
July PSBR: new data on notes and coins
Aug Research and development in the UK in 1986 (*DTI*)
Nov Regional accounts 1987
Dec The effects of taxes and benefits in household income 1986
Employment in the public and private sectors 1982–1988 (*A Fleming*)

1989 Jan International comparisons of taxes and social security contributions in 20 OECD countries 1976–86
The effects of rebasing on the estimates of GDP (*C G E Bryant & D L Daniel*)
Feb An investigation into balancing the UK national and financial accounts 1985–87
The rebased index of production (*S D Kingaby*)
Mar The Budget: 14 March 1989 (*HM Treasury*)
The economy: recent developments and prospects to mid–1990 (*HM Treasury*)
May Energy consumption in the UK
July Regional accounts 1987 Part 2: Household income by county
Aug A technical note on the treatment of the community charge and non–domestic rates in the national accounts
Research and development in the UK in 1987
Nov Regional accounts 1988. Part 1
Dec Employment in the public and private sectors *(A Fleming)*

1990 Mar The Budget: 20 March 1990 (*HM Treasury*)
The economy: recent developments and prospects to mid–1991 *(HM Treasury)*
Apr Regional accounts 1988. Part 2
International comparisons of taxes and contributions in 20 OECD countries 1977–87
May The effects of taxes and benefits on household income 1987
Jun The Welsh index of production and construction
Sept Research and development in the United Kingdom in 1988
Oct Estimates of the distribution of personal wealth (*F J Good, Board of Inland Revenue*)
Nov International comparisons of taxes and social security contributions in 20 OECD countries 1978–88
Regional accounts 1989. Part 1
Dec Employment in the public and private sectors

1991 Jan The 1989 share register survey (*T Doggett*)
Feb Cyclical indicators for the UK economy (*New quarterly article*)
Improving economic statistics – The Chancellor's initiative
Mar The Budget: 19 March 1991
The economy: recent developments and proposals to mid–1992
The effects of taxes and benefits in household income 1988
Apr Regional accounts 1989. Part 2
Jun Number of property transactions in England and Wales (*P Hoggs, Inland Revenue & A Holmes, Dept. of Environment*)
Aug Research and development in the UK in 1989 (*W M Lister*)
Oct The 1991 share register survey
National and sector balance sheets
Assets on finance leases – a switch in recording
Nov CSO – becomes Executive Agency
Chancellor announces further improvements to economic statistics
Regional Accounts 1990. Part 1
Estimates of the distribution of personal wealth: marketable wealth and pension rights of individuals 1976–89 (*I Stewart, Board of Inland Revenue*)
Dec The use of supply side estimates in the national accounts (*R Lynch & D Caplan*)
Employment in the public and private sectors

1992 Jan New Director for CSO
International comparisons of taxes and social security contributions in 20 OECD countries 1979–89
The effects of taxes and benefits on household income, 1989
Feb Improving economic statistics (*D Caplan & D Daniel*)
Mar Sectoral analysis of banking statistics – a joint Bank of England & CSO study
Articles published in *Economic Trends* 1979–88
Apr Regional accounts 1990. Part 2
The Budget: 10 March 1992
The economy: recent developments and prospects to mid–1993
Changes in the structure of manufacturing industry 1973–1989 as measured by the annual census of production (*D Baskerville*)
The Inter–Departmental Business Register
May Testing for bias in initial estimates of economic indicators (*P B Kenny & U M Rizki*)
Figures for Europe (*Eurostat*)
June Investigating the domestic inter bank difference (*D Dooks & G Finbow, BBA Statistics Unit*)
Sir Richard Stone and the national accounts (*T Barker, Dept. of Applied Economics, University of Cambridge*)
July Producer price indices – present practice, future developments and international comparisons (*C Walker & D Richards*)
Property transactions in England and Wales 1991 (*A Mackay, Inland Revenue*)
Aug Research and development in the UK in 1990 (*E Hayman*)
The 1992 Share Register Survey
Sept Input–output balance for the UK 1989 (*K Hayes & D Hughes*)
Trade credit (*I Begg & M Weale, Dept. of Applied Economics, University of Cambridge*)
Oct Sector allocation of dividend and interest flows – a new framework
Sources and methods in the measurement of personal sector income and expenditure
The new UK standard industrial classification of economy activities – SIC(92)
Nov The production of fully reconciled UK national and sector accounts for 1988–91 (*M Baxter*)
Environmental issues and the national accounts (*C Bryant & P Cook*)
Dec International comparisons of taxes and social security benefits in 20 OECD countries 1980–1990
Regional accounts 1991. Part 1
Developments in balance of payments statistics: problems and some solutions 1987–1992 (*B Buckingham*)

1993 Jan Employment in the public and private sectors
The treatment of council tax in the national accounts (*I Macleay*)
The effects of taxes and benefits in household income, 1990
Intrastat (*G Jenkinson*)
Improving macro–economic statistics (*D Wroe*)
International economic indicators
Feb Transition to the new Standard Industrial Classification (SIC(92)) (*C Walker*)
Rebasing the national accounts – The reasons and the likely effects (*D Caplan*)
Testing for bias in initial estimates of the components of GDP (*U M Rizki*)
Mar Prodcom (*R Lynch*)
Articles published in *Economic Trends* 1980–1991
Apr The Budget: 16 March 1993 (*HM Treasury*)
The economy: recent developments and prospects to mid–1994 *(HM Treasury)*
May New arrangements for the release of CSO data
The effects of taxes and benefits on household income, 1991
Regional accounts 1991. Part 2
Measuring the contribution of financial institutions to GDP (*I Begg, M Weale & S Wright, Dept. of Applied Economics, University of Cambridge*)
Testing for bias in initial estimates of key economic indicators (*U M Rizki*)
June CSO's success in meeting national accounts targets in 1992–93 (*I Cope*)
July Integrating the builders address file with the CSO business register (*J Perry*)
A review of CSO cyclical indicators (*B Moore*)
Regional economic indicators (*New quarterly article)*
Aug Research and development in the UK in 1991 (*W Lister & J Golland*)
Sept The UK sector accounts (*P Turnbull*)
Statistical indicators of innovation (*M Doudeyns & E Hayman*)
The definition of the PSBR (*A Ritchie & D Lawton, HM Treasury)*
Oct Input–output balance for the UK 1990 (*K Hayes & D Hughes*)
Handling revisions in the national accounts (*D Wroe*)
The 1993 Share Register Survey (*E Hoffman & S Lambert*)
Nov Fully reconciled UK national and sector accounts for 1989–1992 (*M Baxter*)
The Retail Sales index and its use in Consumers' Expenditure (*P Gooding*)
Inheritance of house property (*M Frosztega & A Holmans*)
A survey of expenditure in residential and nursing homes (*R Clare & P West*)
Dec Regional accounts 1992. Part 1
The Budget: 30 November 1992 *(HM Treasury)*
The economy: recent developments and prospects *(HM Treasury)*

Charities' contribution to gross domestic product (*R Clare & M Scott*)

1994 Jan International economic indicators (*New monthly article*)
Employment in the public and private sectors (*N Pearson*)
The effects of taxes and benefits on household income, 1992
Improvements to economic statistics (*P Cook*)
Improvements to the DoE construction industry statistics (*R Job, Construction Market Intelligence, Department of the Environment*)
Feb Taxes and social security contributions an international comparison 1981–1991
Testing for bias in initial estimates of the components of GDP (*U M Rizki*)
Seasonal adjustment of the number of property transactions in England and Wales (*F Kane & M Wardell*)
Mar Regional economic indicators
Developments in sources and methods of measuring overseas trade in non–financial markets
May Regional accounts 1992: Part 2 (*J S Virdee*)
June Geographical analysis of the overseas invisibles account
National accounts chain weighted price indicators (*J C Cresswell*)
July Input–output tables for the UK, 1990 (*D Millard*)
Testing for bias in initial estimates of the components of GDP (*U M Rizki*)
Rich or poor? Purchasing power parities and international comparisons (*I Davis*)
Aug Research and experimental development (R&D) statistics 1992 (*J Golland*)
UK visible trade statistics – the intrastat system (*K Williamson & F Porters, HM Customs & Excise*)
Sept Recent trends in overseas direct investment (*R Hay*)
Oct Capital gains: surveys of tax computations for individuals and companies (*E Ko & S Whellams*)
Input–output balance for the UK, 1991 (*M Anstis & D Hughes*)
Nov Fully reconciled UK National Accounts for 1990–1993 (*U M Rizki*)
Dec Regional accounts 1993, part 1 (*J S Virdee*)
The effects of taxes and benefits on household income, 1993
The Budget: 29 November 1994
The economy: recent development and prospects

1995 Jan Employment in the public and private sectors (*A Hughes*)
The number of coins in circulation (*P B Kenny*)
Taxes and social security contributions: an international comparison 1982–1992
Feb Measuring the pulse of the market: the prodcom initiative (*B Shankar*)
Mar Geographical analysis of the current account of the balance of payments
Apr Testing for bias in initial estimates of key economic indicators (*U M Rizki*)
Quarterly national accounts in the UK: overview of UK approach (*I Cope*)
May Regional accounts 1993, part 2 (*J S Virdee*)
Changing the *Blue Book*, 1993 (*S Humphries*)
July Testing for bias in initial estimates of the components of GDP (*U M Rizki*)
The National Lottery in the National Accounts (*T Doggett*)
Aug Research and experimental development (R&D) statistics 1993 (*P Jones*)
Sept Fully reconciled UK national and sector accounts for 1991–94 (*U M Rizki*)
Oct Geographical analysis of the current account of the balance of payments
Quarterly GDP–process and issues (*D Caplan & S Lambert*)
Nov Taxes and social security contributions: an international comparison 1983–95
The Inter–Departmental Business Register (*J Perry*)
Dec The effects of taxes and benefits on household income, 1994–95
Regional accounts 1994, part 1 (*J S Virdee*)

1996 Jan Announcement of merger of CSO & OPCS to form the ONS (1 April)
The Budget – 28 November 1995
The economy: recent developments and prospects
Feb Employment in the public and private sectors (*A Hughes*)
Mar A vision of the Office for National Statistics (*T Holt*)
Managing the nation's economy: the conduct of monetary and fiscal policy (*T Burns*)
A monthly indicator of GDP (*C Yeend & A Pottier*)
Cyclical indicators for the UK economy (*C Yeend*)
Regional accounts 1994: part 2 (*P A Lee*)
Apr Geographical analysis of the current account of the balance of payments
Testing for bias in initial estimates of key economic indicators (*U M Rizki*)
Environmental accounts – valuing the depletion of oil and gas reserves (*P Vaze*)
May Regional accounts 1994: part 3 (*J S Virdee*)
June Measuring real growth – index numbers and chain–linking (*R Lynch*)
The United Kingdom's input–output balances (*J Tse*)
July Producer prices for services: development of a new price index (*J Price*)
Time use from a national accounts perspective (*H Neuburger*)
Aug Research and experimental development (R&D) statistics 1994 (*P Jones*)
The pilot UK environmental accounts (*P Vaze & S Balchin*)
Testing for bias in initial estimates of the components of GDP (*U M Rizki*)
Sept A framework for Social Accounting Matrices (*D Hughes*)
Oct The use of quarterly current price output data in the national accounts (*D Daniel*)
Innovation in small and medium sized enterprises, 1995 survey (*R Marsh, DTI*)
Geographical breakdown of the BoP current account (*D Townsend*)
Nov An international comparison of taxes and social security contributions 1984–94 (*A Richards & K Madden*)
Overseas trade in services: development of monthly estimates (*J Bailey*)
Charities' contribution to GDP: the results of the 1996 ONS survey of charities (*R Ward & J Penn (ONS) and L Harris & A Passey (NCVO)*)
Dec Revisions to the UK balance of payments (*S Brown & T Jones*)
Developments in the UK company securities statistics (*J O'Donoghue*)
How far should economic theory and economic policy affect the design of national accounts? (*H Neuburger*)

1997 Jan/Feb Regional accounts 1995, part 1 (*R Cameron*)
Balancing GDP: UK annual input–output balances (*S Mahajan*)
The Budget – 26 November 1996
The economy: recent developments and prospects
ONS plans to extend publication of service sector statistics (*D Baskerville*)
The President's task force on service sector statistics (*B Cave*)
Mar Employment in the public and private sectors
The effects of taxes and benefits upon household income, 1995–96
Quarterly integrated economic accounts the UK approach (*G Jenkinson*)
International comparisons of GDP per head over time (*G Tily*)
Apr Methodology series for UK national accounts

Deflation of trade in goods statistics – derivation of price and volume measures from current price values (*K Williamson & D Ruffles*)
May Competitiveness in manufactures (*M Bryne, Z Chaudri & H Neuburger*)
June Regional accounts 1995, part 2 (*J S Virdee*)
Competitiveness in manufactures (*M Bryne, Z Chaudri & H Neuburger*)
Aug Research and experimental development (R&D) statistics 1995 (*P Jones*)
The Budget – 2 July 1997
The economy: developments and prospects
Sept Geographical breakdown of the BoP current account (*R Clegg*)
Development of a final expenditure price index (*D Wall*)
Overseas trade in services: publication of monthly estimates (*S Kyte & J Bailey*)
Oct Environmental input–output tables for the UK (*P Vaze*)
Implications of the US Boskin report for the UK retail prices index (*M Baxter*)
A household satellite account for the UK (*L Murgatroyd & H Neuburger*)
Nov Quarterly alignment adjustments in the UK national accounts (*T Snowdon*)
Globalisation: scope, issues, statistics (*G Duffins, DTI & P Gooding, ONS*)
The ABI respondents database: a new resource for industrial economics research (*N Oulton, NIESR*)
Dec How should economic statistics respond to information technology? (*H Neuburger & T Holt*)

1998 Jan Regional accounts 1996: part 1 (*J S Virdee*)
Geographical breakdown of exports and imports of UK trade in services by component (*S Humphries*)
International comparisons of productivity and wages (*E Harley & J Owen, DTI*)
Feb Improvements to business inquiries through the introduction of the new inter-departmental business register (*O Black*)
The measurement of real public sector output in the national accounts (*H Neuburger, DETR & D Caplan*)
Mar Employment in the public and private sectors (*J Safford & D MacGregor*)
Harmonised indices of consumer prices (*J O'Donoghue & C Wilkie*)
Apr The effects of taxes and benefits on household income, 1996–97 (*N Stuttard*)
May The Budget – 17 March 1998
The economy: developments and prospects
June Regional accounts 1996: part 2 (*J S Virdee*)
Rebasing the national accounts (*F Jones*)
July Developing a methodology for measuring illegal activity for the UK national accounts (*C Groom & T Davies*)
New format for public finances (*J Golland, N Lough & C Hill*)
Aug PPI/RPI comparisons (*I Richardson & M Baxter*)
Forthcoming changes to the national accounts (*A Brueton*)
Research and experimental development (R&D) statistics 1996 (*P Jones*)
Sept Development of the corporate services price index: a review of progress (*H Skipper*)
Estimating and presenting short term trends (*S Compton*)
Oct Environmental taxes in the UK (*D Schweisguth*)
Measuring the output of non–market services (*D Caplan*)
UK results from the community innovation survey (*A Craggs, DTI & P Jones*)
Nov Improving the non–financial balance sheets (*P West*)
Developing the public sector balance sheet (*A Holder, HMT*)
Dec Geographical breakdown of the BoP current account (*W Kerry*)
Harmonised index of consumer prices: historical estimates (*J O'Donoghue*)

The development of a land registry based national house price index (*D Wall*)
Improving the quality of the producer price index (*I Cope & D Freeman*)

1999 Feb Three year research programme on RPI methodology (*M Baxter & D Camus*)
Ownership of UK quoted companies at the end of 1997 *(I Hill*)
Mar Regional accounts 1997; part 1 (*J S Virdee*)
The capital stock of the UK – some new developments in coverage and methodology (*P West & A Clifton–Fearnside*)
An international comparison of taxes and social security contributions 1986–96 (*D Fugeman*)
Productivity measurement in the UK (*S Holloway*)
Apr The effects of taxes and benefits on household income 1997–98 (*T Harris*)
May The seasonal adjustment of RPIY (*M Baxter*)
June Employment in the public and private sectors (*D MacGregor*)
July ONS plans for the 1999 and 2000 *Blue and Pink Books* (*A Brueton*)
Experimental constant price input–output supply–use balances: an approach to improving the quality of the national accounts (*N Ahmad*)
Financial market data for international financial stability (*R Heath, Centre for Central Banking Studies*)
Aug Research and experimental development (R&D) statistics 1997 (*P Jones*)
Sept New estimates of dividend payments (*C Duggan & R Walton*)
Oct Annual coherence adjustments in the national accounts (*S Penneck & S Mahajan*)
Plans for the development of a monthly index of services (*H Skipper & I Cope*)
Regional accounts 1997: part 2 (*J S Virdee*)
Nov The development of chain–linked and harmonised estimates of GDP at constant prices (*A Brueton*)
Geographical breakdown of income in the BoP (*C Yeend & W Kerry*)
Improving the non–financial balance sheets and capital stocks estimates (*P West & A Clifton–Fearnside*)
Publishing sampling errors for business surveys (*P Davies*)
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Company profitability and finance (R Walton)
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Note

Authors are CSO (Central Statistical Office) and then later ONS (Office for National Statistics) unless otherwise stated.

Abbreviations

BBA	British Bankers Association
BoE	Bank of England
CEGB	Central Electricity Generating Board
DETR	Department of the Environment, Transport and the Regions
DHSS	Department of Health and Social Security
DI	Department of Industry
DIT	Departments of Industry and Trade
DTI	Department of Trade and Industry
DWP	Department of Work and Pensions
LSE	London School of Economics
MAFF	Ministry of Agriculture, Fisheries and Food
MHLG	Ministry of Housing and Local Government
MSC	Manpower Services Commission
NCVO	National Council for Voluntary Organisations
NIESR	National Institute of Economic and Social Research
ODA	Overseas Development Administration
OPCS	Office of Population Censuses and Surveys
PC	Price Commission

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