

# Economic Trends

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## In Brief

### Articles

This month we feature four articles.

Jane Morgan of ONS gives an account of expenditure on Research and Development statistics up to and including 1999. These statistics are consistent with the OECD's Frascati Manual that defines Research and Experimental Development. Performers and funders of Research and Development are divided into four economic sectors, which are defined: Government, Business, Higher Education Institutions and the Private Non-Profit sector.

Louise Morris and Tony Birch of ONS, discuss the introduction of a new estimator for the Producer Price Index. The article:

- outlines progress made since publication of the previous article in December 1998;
- considers the benefits of the new estimator and discusses the main differences between the current and new methods;
- discusses the practicalities of introducing the new estimator;
- provides a summary of the parallel run results;
- discusses progress in other areas of development work;
- outlines plans for introducing the new estimator.

Alex Clifton-Fearnside of ONS presents estimates of total and disposable household sector income by region for 1989 to 1999. The estimates are produced in accordance with the European System of Accounts 1995 (ESA95), and are consistent with the UK estimates published in the 2000 edition of *UK National Accounts - The Blue Book*. Due to the absence of key source data, estimates for 1997 to 1999 are presented as provisional. The revisions to the estimates included in this article result from revisions to national control totals and regional indicator data, a change to the methodology used to regionalise household rent, and corrections to minor errors in the accounts previously published.

Adam Douglas and David Lacey of ONS provide a description of the methodologies and data sources that are used to compile the regional household sector accounts. The geographic level of breakdown of the estimates is described and a summary of each income component is provided in this article. The article does not detail the methodology used to calculate sub-regional household sector income. This should be published in a later article in *Economic Trends*.

### Recent economic publications

#### Annual

*Share Ownership: a report on the ownership of shares as at 31 December 2000*. The Stationery Office, ISBN 0 11 621465 1. Price £39.50.

#### Quarterly

*Consumer Trends: 2001 quarter 1*. The Stationery Office, ISBN 0 11 621359 0. Price £45 (published 19th July).

*UK Economic Accounts: 2001 quarter 1*. The Stationery Office, ISBN 0 11 621401 5. Price £26.

*UK Trade in Goods analysed in terms of industries (MQ10): 2001 quarter 1*. The Stationery Office, ISBN 0 11 538141 4. Price £75 p.a.

#### Monthly

*Consumer Price Indices (MM23): May 2001*. The Stationery Office, ISBN 0 11 538085 X. Price £185 p.a.

*Financial Statistics: July 2001*. The Stationery Office, ISBN 0 11 621306 X. Price £23.50.

*Monthly Review of External Trade Statistics (MM24): April 2001*. The Stationery Office, ISBN 0 11 538096 5. Price £185 p.a.

All of these publications are available from The Stationery Office; telephone 0870 600 5522, fax 0870 600 5533, e-mail [bookorders@theso.co.uk](mailto:bookorders@theso.co.uk) or online at [www.clicktso.com](http://www.clicktso.com)



# Economic Update - August 2001

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## Overview

As concerns about the world economy increase, second quarter UK data shows GDP subdued for the third quarter in a row. The slower growth is particularly driven by the so-called high-tech industries, but other manufacturing industries are also declining and services activity was a little weaker in the latest quarter. Demand data shows a mixed, but perhaps, overall weakening picture. Household demand weakened over the last two quarters, although, as seen in retail sales, durable goods demand remains strong. The latest business investment figures now show a decline into the first quarter after an acceleration at the end of 2000, and forward looking indicators suggest further weakness. At the same time, company profits are showing some slowdown in the wake of increased profit warnings, and relatively speaking their indebtedness remains high. The latest trade figures also provide cause for concern, with declines in both imports and exports in the latest months, and medium term trends in the balance of payments continuing to illustrate a degree of imbalance. On the other hand, labour market information continues to show increases to employment and decreases to unemployment, with only limited evidence of a slowdown in improvements to employment. Lastly, earnings and consumer prices saw an acceleration into the latest months, but these may have been largely driven by erratic factors; at the factory gate, producer price inflation remains very subdued.

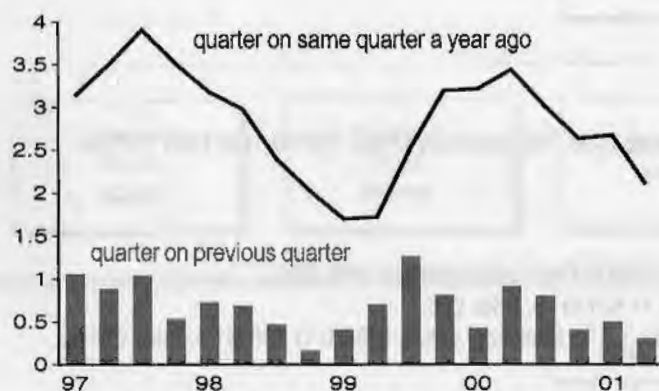
## GDP Activity

The preliminary estimate of GDP in the second quarter of 2001 showed quarterly growth of 0.3 per cent, down on 0.5 per cent in the first quarter (chart 1). Comparing with the same quarter a year ago, annual growth

Chart 1

Gross domestic product  
seasonally adjusted

percentage change



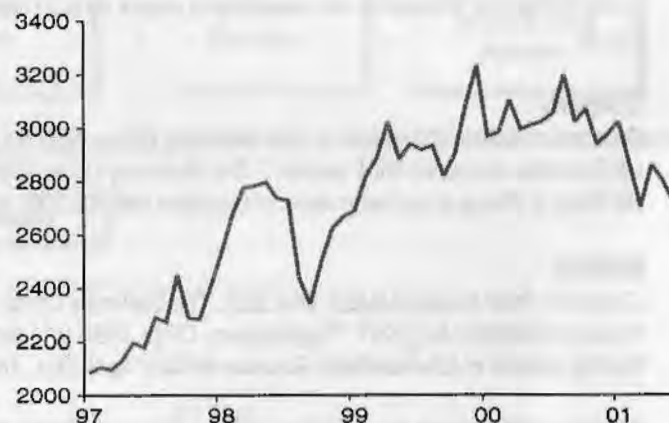
was 2.1 per cent in the second quarter, down on 2.7 per cent in the first. Underpinning the headline figures, the slower growth over these three quarters has been dominated by different factors. In the fourth quarter of 2000, the slowdown was mainly driven by erratic energy figures; the first quarter of 2001 saw weakness in manufacturing, while the second quarter saw further weakness in manufacturing with some evidence of weaker growth in the service sector.

The slower UK growth comes alongside a period of substantial concern over the condition of the global economy. While these concerns originated with slower GDP growth in the United States, weaker growth is now seen

in the EU economies, anxiety over the condition of the Japanese economy, in particular over bad debts, has re-emerged, and a number of developing economies have experienced some degree of financial stress. At the same time, corporate announcements have seen an increasing volume of profit warnings and redundancy announcements, and credit agencies are reporting a high level of debt default and market concern. These concerns are most obviously illustrated in stock exchange indices, which are declining all over the world (chart 2 shows the UK FTSE all share index to June).

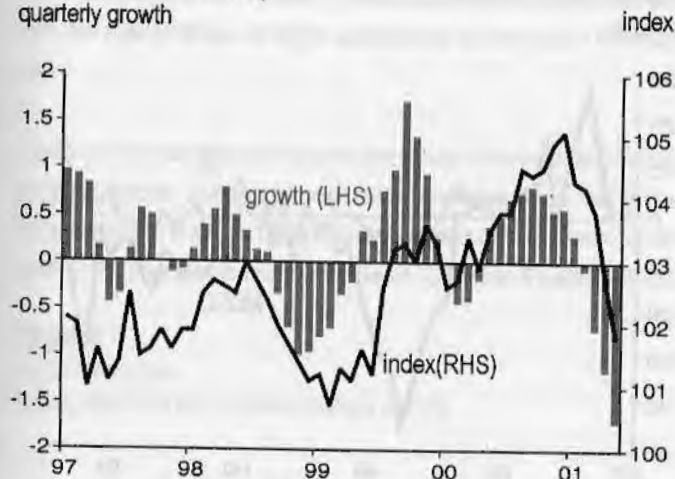
Chart 2

FTSE All-share index  
10 April 1962=100



Returning to the UK, the slower GDP growth is dominated by a sharp decline in manufacturing output. While the figure underlying the preliminary GDP aggregate is an unpublished forecast, the monthly index of manufacturing data to May saw the fifth consecutive decline, and a quarterly decline of 1.6 per cent in the three months to May (chart 3).

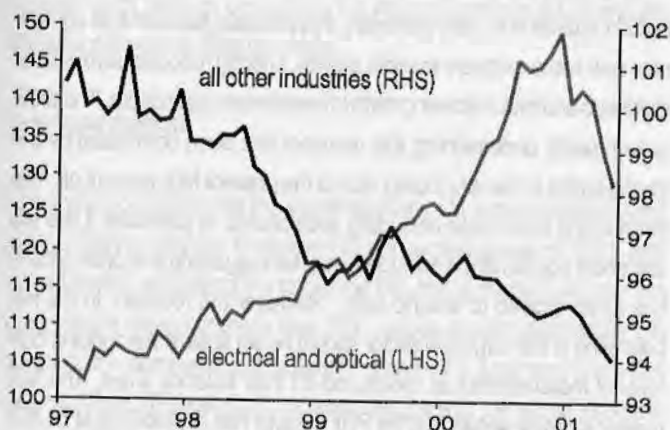


**Chart 3**Index of manufacturing  
quarterly growth

This decline constituted the largest quarterly fall since the recession of 1991, and is more substantial than the decline of 1998 in the wake of the South East Asian economic crises. The reason for this is that while output in most industries fell in 1998, the so called high-tech industries (proxied by the NS series, 'electrical and optical equipment') continued to grow at a very rapid pace; the decline of output into 2001 has seen both the high-tech series and other industries fall in tandem (chart 4). The decline in the high-tech series has been particularly sharp, with a fall of 13.7 per cent in the five months since the peak in December 2000.

**Chart 4**Manufacturing  
seasonally adjusted

indices, 1995=100



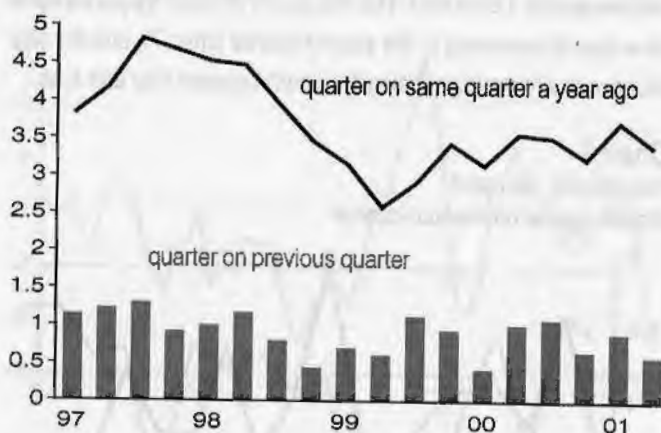
External manufacturing figures echo this decline in output, with the latest quarterly figures from the British Chambers of Commerce and Confederation of British Industry showing falls in orders and sales. The quarterly CBI survey showing particularly sharp declines for exports.

The preliminary estimate of quarterly growth in the service sector for the second quarter showed a slowdown to 0.6 per cent from 0.9 per cent in the first quarter (chart 5). Growth comparing with the same quarter a year

**Chart 5**

Service industries

percentage change, quarter on quarter a year ago



ago slowed to a still fairly robust 3.4 per cent in the second quarter from 3.7 per cent in the first quarter. While industrial detail is not published at this stage, the weaker growth was seen in a number of industries but was offset to some degree by increased wholesale and retail growth.

These figures are again echoed by the external service information, where the BCC sales and orders data showed the weakest position since 1998 (chart 6). Similarly the Chartered Institute of Purchasing and Supply figures also deteriorated fairly abruptly into the second quarter, with their release noting the sector was feeling a degree of contagion from

**Chart 6**BCC service data  
balance

other sectors of the economy: "Panel members widely blamed lower orders and fewer enquiries from clients on the general market slowdown, while the downturn in the telecommunications sector was particularly reported to have hit new contracts to business service providers."

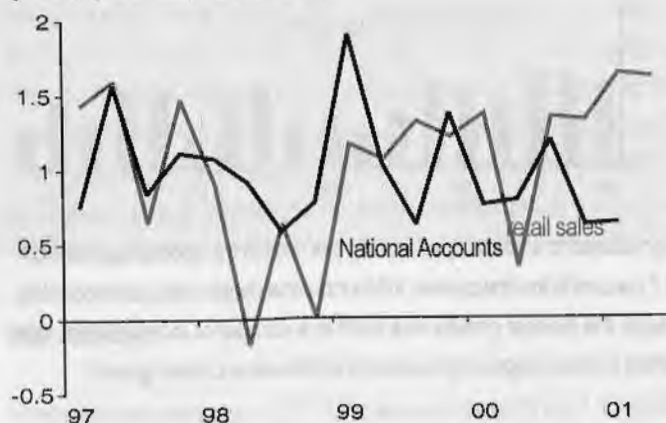
### Domestic demand

The household demand situation remains difficult to interpret. The main signal of slowdown remains National Accounts data, where quarterly

growth has been 0.6 per cent in both the first quarter of 2001 and the last quarter of 2000, with growth comparing with the same quarter a year ago at 3.3 per cent. These figures contrast with retail sales data, where sales volumes grew by 1.6 per cent in the first quarter and later figures show the same growth continuing in the second quarter (chart 7), and the only evidence of any weakness being flat growth between May and June.

**Chart 7**

Household demand growth, quarter on previous quarter



While the difference between the two sources can largely be explained by weaker services consumption in the fourth quarter, and weakness to a number of non-durables, in particular energy, in the first quarter, overall differences continue to mean that it remains difficult to assess the overall degree of household demand.

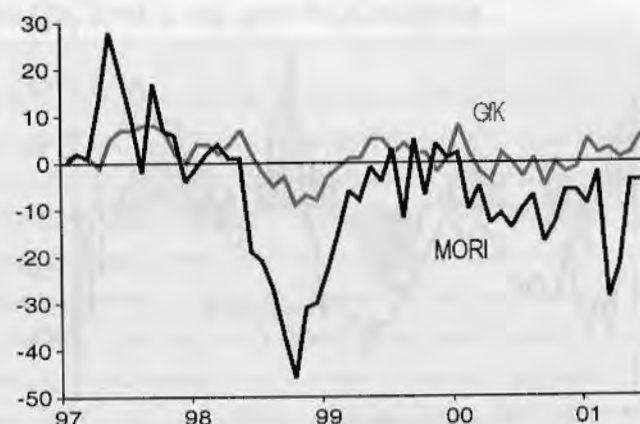
At the same time, very broadly, non-NS figures tend to suggest ongoing high household demand. Gross consumer credit data from the Bank of England, showed some slowdown in the third quarter of 2000, but a subsequent and substantial acceleration into the latest two quarters. Consumer confidence data was sending somewhat contrasting messages with GfK increasing and MORI weakening, but May and June figures show both series strong (chart 8). Lastly external retailing data from the CBI show retailing volumes and expectations high in both the first and second quarter of 2001, and the British Retail Consortium figures are showing a marked acceleration throughout 2001.

Aside from the latest movements, the medium term strength of consumer demand relative to income has led to a decline in the saving ratio over the past three years. Data for the first quarter of 2001 showed a ratio of 4.1 per cent, a figure comparable with the low figures seen during the boom of the late 1980s.

Turning to investment demand, National Accounts business investment data shows a decline of 5.0 per cent into the first quarter following growth of 4.3 per cent in the fourth quarter of 2000. This figure is difficult to interpret given the high growth in the previous quarter; the actual level of investment in the first quarter was close to the quarterly average for 2000

**Chart 8**

Consumer confidence balance



as a whole. Looking into the second quarter, external indices all point to deterioration, with BCC manufacturing and services investment intentions weakening over the latest quarters, and CBI manufacturing figures showing likewise. Similarly the index of manufacturing market sector disaggregation shows the declines in output mostly concentrated in the investment industries sector, with a decline of 2.7 per cent in the three months to May.

Alongside this potential slowdown in investment, the financial position of the corporate sector has been improving in the most recent quarters, although this improvement may have been partly driven by 'special' factors. Annual figures show the net borrowing of the private non-financial corporation sector was £9.6 billion in 2000 compared with £19.1 billion in 1999, and recovered further to modest net lending of £0.6 billion in 2001 quarter one. Very generally, this recovery has come as companies saw some recovery to profit growth, sharply reduced payments of dividends and much slower growth in investment expenditure. The profit growth partly underpinning this recovery has been dominated by the strong profits in the oil industry due to the present high price of oil. The trend in the latest data excluding such profits, in particular if the NS alignment adjustment is excluded, may be suggesting that profit growth has again slowed to around zero. However the recovery to the net borrowing of the corporate sector should be set against the ongoing high level of indebtedness as measured on their balance sheet. The first quarter estimate shows that the PNFC sector has net liabilities of £1,463 billion, around one and a half times annual GDP. As a share of GDP, recent estimates of net financial liabilities are unprecedented in relation to the period when data is available.

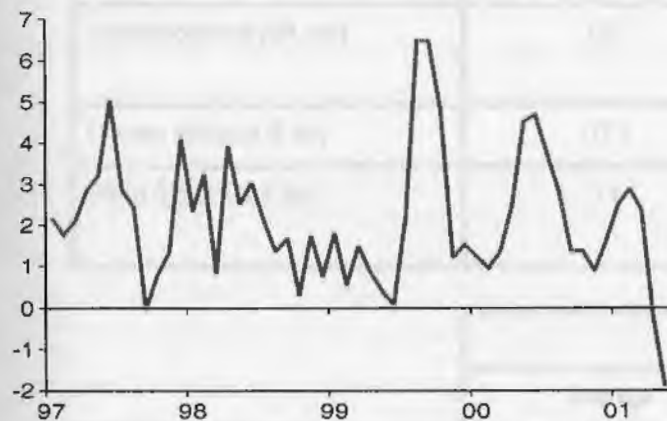
Government demand saw quarterly growth of 0.8 per cent into the first quarter, following a small fall of 0.4 per cent in the fourth quarter. Comparing with the first quarter of 2000, the latest estimate of annual growth remains a fairly robust 2.7 per cent. Public sector net borrowing figures shows that so far in 2001-02 the government had borrowed more than in the

same period of 2000-01. Net borrowing in April-June 2001 was at £6.3 billion compared with 0.6 billion in the previous financial year, with the increase mainly driven by higher expenditure in the current financial year.

Finally on domestic demand, import data is now showing a decline into the latest months. Goods import volumes declined by 1.9 per cent in the three months to May 2001, this follows overall quarterly goods import growth of 2.3 per cent in the first quarter of 2001 (chart 9), with both EU

**Chart 9**

Import volumes  
growth, three months on previous three months



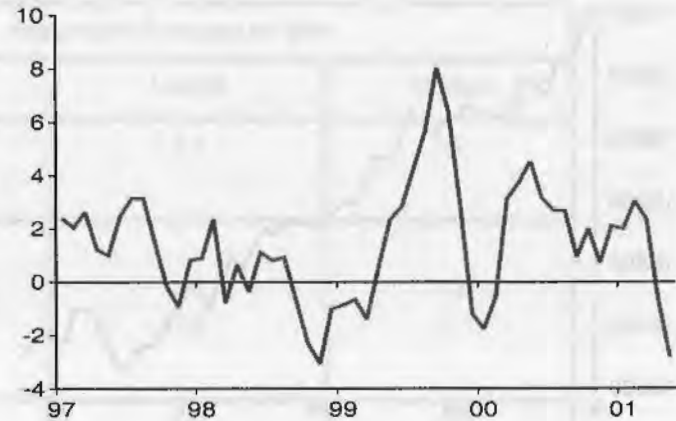
and non-EU imports declining alike. For goods, this latest growth is the largest quarterly decline since 1993. More generally import growth is back to the levels seen prior to the period of strong import growth from the second half of 1999, as concerns in the wake of South East Asia and the Russian debt crises were put aside.

### Overseas demand

Echoing the concerns over the global economy, UK export growth slowed substantially and began to decline into the second quarter of 2001, with sales slowing and falling not to just the US, but to markets all over the world. In the three months to May 2001, goods exports declined by 2.8 per cent, this compares with quarterly growth of 2.3 per cent in the first quarter. Chart 10 shows that the latest decline was the worse since the end of 1998 (and prior to that the recession of 1991). Disaggregated data shows that exports are declining both to EU and non-EU economies. In the three months to May exports to the EU declined by 1.3 per cent, and in the three months to June exports to non-EU countries by 5.0 per cent. While, as noted, exports to various markets are declining, the main contributor to the decline in UK non-EU exports remained the United States, where exports saw a decline into the second quarter of 7.1 per cent in value terms.

**Chart 10**

Export volumes  
growth, three months on previous three months



Lastly on trade, the medium term movements of imports and exports are such that the balance of trade has been on a widening trend since 1997, leading to a deficit of £7.4 billion in the first quarter with monthly figures into the second quarter generally showing no improvement. At the same time, the first quarter of 2001 apart, the UK balance of payments has been persistently in deficit over this period.

### Labour Market

The labour market data continues to show employment increasing and unemployment falling, with little evidence of change to the rate of improvement in unemployment figures, and evidence of employment growth slowing in Employer Survey data, but only in a very limited way in LFS data.

The ILO measure of unemployment shows the rate falling to 4.9 per cent in March - May 2001 from 5.2 per cent in December 2000 - February 2000. The claimant count data shows the employment rate was stable at 3.2 per cent in April, May and June 2001, having fallen from 3.3 per cent in the first three months of the year. The latest figure is the lowest rate since the third quarter of 1975.

However, it is notable that recent falls in unemployment and increases in employment have been accompanied by sharp increases in the number of people registering themselves as inactive. Over the year to March-May 2001 267,000 people found new jobs, 208,000 people fell of the ILO unemployment measure, but 192,000 additional people moved into inactivity. Taking ILO unemployment and inactivity as a measure of those who are not working, the figures show a steady improvement throughout most of the decade, but evidence in recent months of a slowdown to that rate of improvement (chart 11). The measure may suggest a degree of slowing in the labour market.

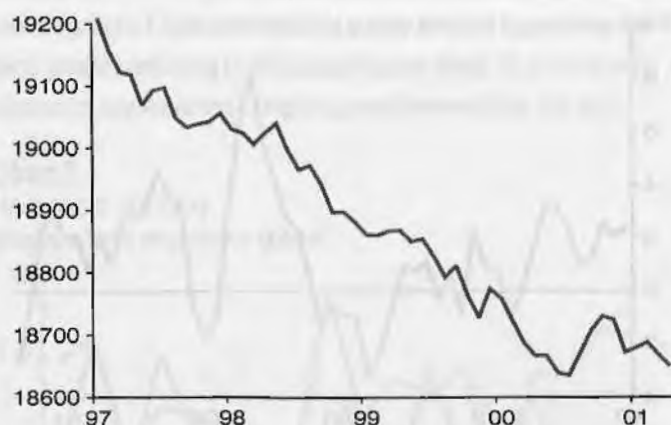
The most prominent slowdown is seen in the workforce jobs employer



### Chart 11

Total inactivity and unemployment  
seasonally adjusted

thousands



survey data, where annual growth into the first quarter of 2001 was only 0.4 per cent (comparing with the same quarter a year ago), the same as annual growth in the previous quarter, and only little above 0.3 per cent in the third quarter. Taken together, these annual rates constitute the lowest period of low growth seen since the economy emerged from recession in 1993. The same figures show growth flat between the fourth quarter of 2000 and the first quarter of 2001. On the other hand the LFS figures record higher growth of 1.0 per cent in the year to March – May 2001, and quarterly growth of 0.3 per cent, down only slightly from growth of 0.4 per cent between the previous three month periods.

### Wages and Prices

Prices data continues to show inflation relatively subdued despite some monthly figures that have shown an increase (chart 12).

The average earnings index rose quite sharply into February 2001 and held the higher rate for three months, however May 2001 data shows the headline rate falling back to 4.5 per cent. While the measure excluding

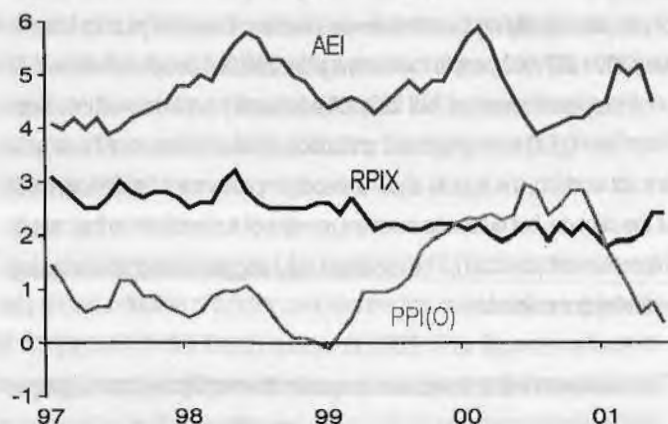
bonuses fell only to 5.1 per cent in May following 5.3 per cent in April, it may be that evidence of an ongoing acceleration in wage inflation is limited. Consumer price inflation, as measured by RPIX, also showed a relatively sharp increase to 2.4 per cent in May following 2.0 per cent in April; the June figure remained at 2.4 per cent. This increase into May was been mainly driven by increases to the price of seasonal food and to petrol and might therefore be regarded as largely erratic, although petrol prices did fall back into June. Lastly, at the start of the prices chain, producer prices continue to remain very subdued. The chart shows output price inflation continuing to decelerate, with an annual increase of 0.4 per cent, down from 0.7 per cent in the previous month. Similarly, monthly index numbers for both input and output prices show a fairly flat picture since the start of 2001.

### Chart 12

Prices and wages

annual growth month compared with year ago

per cent



# Forecasts for the UK Economy

## A comparison of independent forecasts, July 2001

The tables below are extracted from HM Treasury's "FORECASTS FOR THE UK ECONOMY" and summarise the average and range of independent forecasts for 2001 and 2002, updated monthly.

	Independent Forecasts for 2001		
	Average	Lowest	Highest
GDP growth (per cent)	2.2	1.6	2.9
Inflation rate (Q4: per cent)			
- RPI	1.8	0.9	2.9
- RPI excl MIPs	2.1	1.3	2.7
Unemployment (Q4, mn)	1.00	0.89	1.10
Current Account (£ bn)	-17.9	-31.0	-12.4
PSNB *(2001-02, £ bn)	-7.8	-28.8	0.9

	Independent Forecasts for 2002		
	Average	Lowest	Highest
GDP growth (per cent)	2.6	0.4	3.3
Inflation rate (Q4: per cent)			
- RPI	2.5	1.1	3.9
- RPI excl MIPs	2.4	1.4	3.4
Unemployment (Q4, mn)	1.01	0.76	1.18
Current Account (£ bn)	-20.5	-29.2	-10.5
PSNB* (2002-03, £ bn)	-1.9	-29.1	10.0

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 Miss C T Coast-Smith, Public Enquiry Unit, HM Treasury, Room 110/2, Parliament Street, London SW1P 3AG (Tel: 0171-270 4558). It is also available at the Treasury's internet site: <http://www.hm-treasury.gov.uk>.

\* PSNB: Public Sector Net Borrowing.

# International Economic Indicators - August 2001

Cedrik Schurich, Macroeconomic Assessment - National Statistics

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## Overview

EU15 Quarterly GDP growth further slowed in the first quarter of 2001, mainly due to falling contributions of consumption and investment. Growth in the labour market remained, however, reasonably robust. Inflation remained stable and low in all major EU economies. Within the EU, German GDP slowed quite substantially since 2000 quarter three. French GDP growth started slowing more significantly only in 2001 quarter one, in line with earlier signals of weakness in industrial production. In contrast, Italian GDP growth remained overall strong. Outside the EU, GDP growth in the US remained weak in 2001 quarter one while unemployment started to pick up strongly and industrial production to fall sharply. Meanwhile, inflation remained low. In Japan, GDP growth was again negative and industrial production fell sharply, while the economy continued to suffer from deflationary pressures.

## EU15

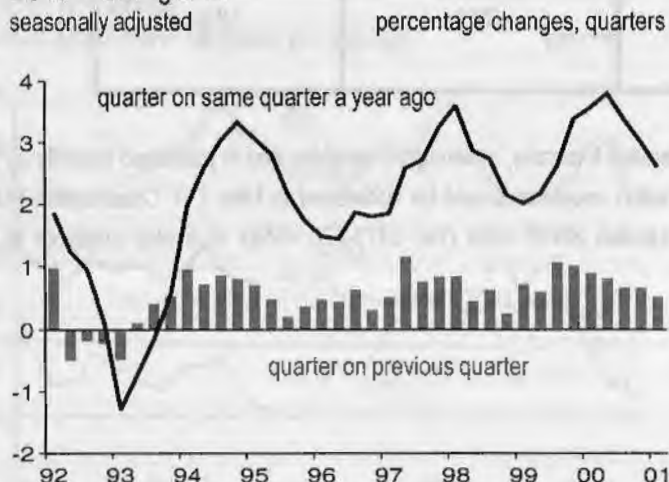
Following strong growth of 3.4 per cent in 2000, EU GDP growth appears to have slowed somewhat and was 0.5 per cent in the first quarter of 2001 (chart 1). While demand movements underpinning the first quarter are not yet available, 2000 saw the contributions of households, government and investment weakening a little.

Index of Production data shows the potential source of the slowdown, with quarterly growth declining to 0.2 per cent in 2001 quarter one, following 0.5 and 1.0 per cent in the two previous quarters. Furthermore, monthly figures for March and April are now suggesting declines in output.

EU Employment data continues to show growth but at a slightly reduced rate, with annual growth in the year to the first quarter at 1.6 per cent following 1.8 per cent in the previous quarter. Unemployment continues to decline. Despite a fairly prolonged and robust spell of employment growth over the past three years, EU average earnings, while accelerating, have remained reasonably subdued.

### Chart 1

EU15 - GDP growth  
seasonally adjusted



Furthermore growth slowed to 2.6 per cent into the first quarter of 2001, following 3.5 per cent in the fourth quarter of 2000.

Price data has shown an acceleration in producer and consumer figures following the increases to the price of oil. The first quarter of 2001 however saw producer prices falling back to 3.3 per cent from 5.0 per cent in the fourth quarter of 2000, and consumer prices slowing slightly to 2.7 per cent following 2.8 per cent in the previous quarter.

## Germany

After having slowed quite substantially in 2000 quarter three and four, quarterly GDP growth picked up only a little in 2001 quarter one, growing by 0.4 per cent. This is much lower than the peak growth of 1.2 per cent seen in 2000 quarter two.

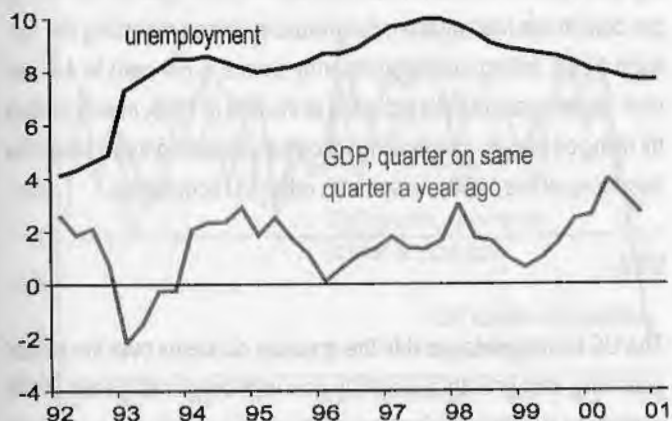
Continued weak GDP growth in 2001 quarter one came from zero growth in the contribution of consumption (for the second consecutive quarter) and a large negative contribution from investment of 0.5 per cent. The investment decline was the worst since the first quarter of 1997. The zero contribution from consumption contrasts with the pick up in retail sales, from minus 1.1 per cent in 2000 quarter four to 1.2 per cent in 2001 quarter one, although the annual rate of 1.1 per cent is more subdued. The contribution from exports fell by 0.3 per cent but the net contribution from trade was however positive as imports fell by 1.2 per cent.

Quarterly growth in production recovered by 1.4 per cent in the first quarter of 2001 following a decline of 0.4 per cent in the previous quarter. However, monthly figures within the quarter show a steep decline of 1.7 in March. It then fell by 1.5 per cent in April. This suggests that industrial production might be heading for a slowdown, which would be in line with recent GDP trends.



## Chart 2

Germany - GDP growth and unemployment  
seasonally adjusted percentage changes, quarters



Despite the slowdown in GDP in 2000 quarter three and four, employment growth remained strong. As a result, unemployment continued to decline, to 7.7 per cent in 2000 quarter four and 2001 quarter one, after having peaked at 10.0 per cent in 1997 quarter four (chart 2).

Quarterly annual earnings growth moderated somewhat, from 2.4 per cent in 2000 quarter three to 2.0 per cent in 2000 quarter four. The slowdown in 2000 quarter four halts a period of expansion in earnings growth, from 1.3 per cent in 1998 quarter one to 3.3 per cent in 2000 quarter three.

While wages slowed, both producer and consumer prices continued growing in 2001, with April figures showing consumer price inflation at 2.9 per cent and producer price inflation at 5.0 per cent. The acceleration may continue to be driven by the price of oil.

## France

In the first quarter of 2001, the French economy may have caught up with the general slowdown in the world economy. After three years of fairly vigorous expansion, quarterly GDP growth in 2001 quarter one slowed to 0.5 per cent, down from 0.8 per cent in the previous two quarters.

The 2001 quarter one slowdown was dominated by declines in the contribution of investment and sharp destocking. Investment growth made the weakest contribution to GDP growth since 1997 quarter one. The contribution of consumption, however, picked up strongly, relative to the lower figures in previous quarters. Exceptionally strong quarterly retail sales growth of 3.4 per cent echoed this movement in consumption in 2001 quarter one, following very robust growth in

## Chart 3

France - GDP growth  
seasonally adjusted percentage changes, quarters



January. Retail sales, however, fell by 4.7 per cent in April. As with Germany, French GDP in the first quarter of 2001 was also supported by a substantial fall in import growth, while exports also declined. France's trade balance has been rather weak and often negative in recent years.

Growth in quarterly industrial production remained weak in 2001 quarter one, at 0.4 per cent, only slightly higher than the 0.3 per cent growth recorded in the previous quarter. Growth has been weak since 2000 quarter one, except for a blip of 1.4 per cent in 2000 quarter three.

The robust expansion in GDP since 1997 has generated strong growth in employment. Employment grew strongly by an annual rate of 2.5 per cent in 2001 quarter one, one of the highest rates for a number of decades. As a result, unemployment, although it remains high, has been continuously falling in recent years, from a peak of 12.5 per cent in 1994 quarter two to 8.6 per cent in 2001 quarter one.

Annual earnings growth slowed to 4.3 per cent in 2001 quarter one, down from 5 per cent in the previous quarter. This represents the first significant decline in growth after about three years of an acceleration in earnings growth.

Producer and consumer prices have seen an acceleration since the increases in oil prices. 2001 quarter one, however, saw a sharp slowdown in consumer price inflation to 1.2 per cent, from 1.9 per cent in 2000 quarter four.

## Italy

Unlike other EU economies, data shows Italian quarterly GDP growth

accelerating, growing by a robust 0.9 per cent in 2001 quarter one. Overall, GDP growth has been strong and following an upward trend since 1999 quarter one, except for some weakness in the second and third quarters of 2000. Overall, growth in 2000 was significantly up on 1999, 2.9 per cent compared with 1.6 per cent.

However, the main factor for the stronger growth in the first quarter of 2001 was a recovery in the contribution of stockbuilding, which increased by 0.8 per cent in 2001 quarter one, up from 0.1 per cent in the previous quarter. Perhaps more importantly, the contributions of consumption, government and investment were all very subdued while the impact of the balance of trade was neutral. While overall the contribution to GDP growth by consumption increased from 1.4 per cent in 1999 to 1.8 per cent in 2000, this was not reflected in retail sales, which fell by 0.6 per cent in 2000, down from growth of 1.1 per cent. The 1.0 per cent fall in the growth of quarterly retail sales may, however, be more in line.

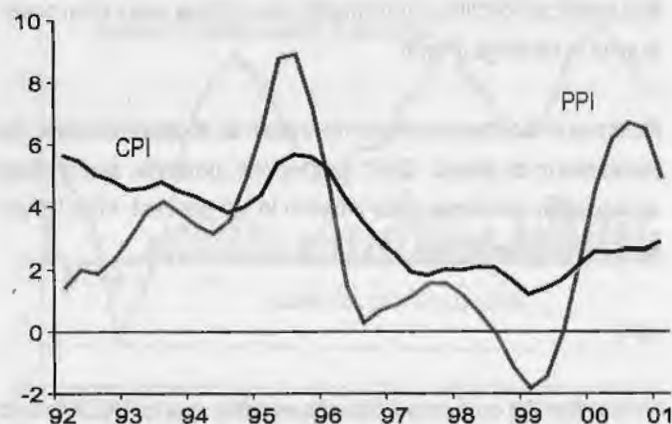
In contrast with sustained quarterly GDP growth in 2001 quarter one, growth in industrial production fell by 0.1 per cent. In previous quarters, however, growth in industrial production has been mostly strong, in line with GDP growth.

Sustained GDP growth has led to a strong acceleration in annual employment growth since 2000 quarter one, reaching 3.1 per cent in 2001 quarter one, up from a period in 1998 and 1999 characterised by rates of about 1.2 per cent. However, despite relatively strong growth in annual employment in recent years, the fall in unemployment has been more modest, from 11.7 per cent in 1998 quarter one to 10.0 per cent in 2000 quarter four.

Perhaps reflecting persisting high unemployment, annual earnings growth has remained subdued and is now showing a fairly sharp slowdown in April and May 2001.

#### Chart 4

Italy - Producer and consumer price inflation  
seasonally adjusted percentage changes, quarters



Inflation signals from the consumer and producer price indices were mixed in 2001 quarter one (chart 4), with consumer prices continuing their upward trend, from 2.6 per cent in 2000 quarter four to 2.9 per cent in the next quarter, but producer prices reversing the upward trend, falling quite significantly from 6.5 per cent to 4.9 per cent. Both measures started rising at the end of 1999, mainly fuelled by rising oil prices, after having followed a declining trend since the beginning of the 1990s, in line with other EU economies.

#### USA

The US continues to provide the greatest concerns over the global economy, with growth apparently now well below rates seen in the expansion over the last five years. Quarterly growth slowed sharply in 2000 quarter three, falling to 0.5 per cent, down from 1.4 per cent in 2000 quarter two. It then further fell to 0.3 per cent in 2000 quarter four and 2001 quarter one.

The slowdown in GDP growth has come from a number of sources. The contribution of consumption declined, but only moderately so. The fall in the contribution from investment, however, was much sharper, with contributions of only 0.1 per cent to GDP over the last three quarters. At the same time, the slack seems to have been taken up somewhat by an increase in government consumption, from a fall of 0.1 per cent in 2000 quarter four to an increase of 0.2 per cent in 2001 quarter one. In addition, as with Germany and France, exports are beginning to decline but the trade balance still made a 0.2 per cent contribution to GDP growth. As a result, outside investment low GDP growth in 2001 quarter one came from a large fall in the contribution of stock building, which fell by 0.8 per cent. This would continue to lend some support to the proposition that the current downturn in the US represents some form of inventory adjustment.

On the other hand, the decline in quarterly industrial production has been unambiguous (chart 5), from an increase of 0.9 per cent in 2000 quarter three, to a fall of 0.2 per cent in 2000 quarter four and 1.7 per cent in 2001 quarter one and ongoing declines in April and May. This represents the first period of declining industrial production since 1991 quarter one. On a monthly basis, industrial production has declined in every month since October 2000.

In contrast to European economies, the US labour market has responded fast to the GDP slowdown. Annual employment growth slowed to 0.7 per cent in 2001 quarter one, down from growth of 1.0 per cent in 2000 quarter four. Until 2000 quarter two, annual employment growth had been significantly above 1.0 per cent in most quarters in recent years. Monthly figures in April and May showed

**Chart 5**

USA - GDP and index of production

seasonally adjusted

percentage changes, quarters



growth coming to a virtual standstill, with annual growth of minus 0.1 per cent and 0.1 per cent respectively. Reflecting this slowdown in employment growth, unemployment picked up to 4.2 per cent in 2001 quarter one, after a long period of falling unemployment and the rate stabilising at 4.0 per cent in each quarter of 2000. In April 2001, unemployment increased by 0.2 percentage points to 4.5 per cent but then fell back a little to 4.4 per cent in May.

More generally, considering the low rate of unemployment, earnings growth has remained quite subdued. The recent increases to unemployment may have contributed to the quite significant slowdown in earnings growth in the first quarter of 2001, to 2.6 per cent, compared with 3.5 per cent in the previous quarter. That said, May 2001 data showed a pick up in earnings.

There has been some indication from consumer and producer price index data of a fall in already low inflation. While annual consumer prices fell a little from 3.4 per cent to 3.2 per cent in 2001 quarter one, producer prices fell from 3.4 per cent to 2.1 per cent over the same period. This perhaps reflects low earnings growth as well as lower oil prices.

## Japan

Despite the rebound of 0.7 per cent in GDP growth in 2000 quarter four, from a fall of 0.7 per cent in the previous quarter, GDP fell again by 0.2 per cent in the first quarter of 2001. This latest movement in GDP growth represents a continuation of the overall weak and volatile growth pattern since early 1999, when growth in the Japanese economy resumed.

The standstill in GDP growth in 2001 quarter one came as all com-

ponents made a zero contribution except trade, which made a net negative contribution as exports fell faster than imports.

General trends in the contributions of demand components have been for a subdued and deteriorating contribution from consumption, a fairly steady and positive contribution from government and volatile but overall weak investment. On the trade side, in 2000 exports supported GDP, but these weakened substantially over the second half of the year, while imports remained higher.

Broadly, quarterly growth in industrial production had recovered strongly since 1999 quarter three but has shown renewed weakness in the latest periods (chart 6); quarterly growth in production slowed sharply to 0.3 per cent in 2000 quarter four and then fell by 3.1 per cent in 2001 quarter one. This deterioration continued with further falls of 2.0 per cent in both April and May, suggesting that GDP growth in 2001 quarter two might be weak or even negative.

Annual employment growth has hardly responded to the pick up in GDP growth over the last two years, remaining mostly negative or zero. As a result, unemployment remained unchanged at 4.7 per cent in both 1999 and 2000 as a whole, with little information so far in the quarterly figures.

Despite no improvements to unemployment, but in line with rises in GDP, earnings growth picked up in 2000 to 1.7 per cent, after having been falling in the two previous years, by 0.7 per cent and 0.8 per cent respectively.

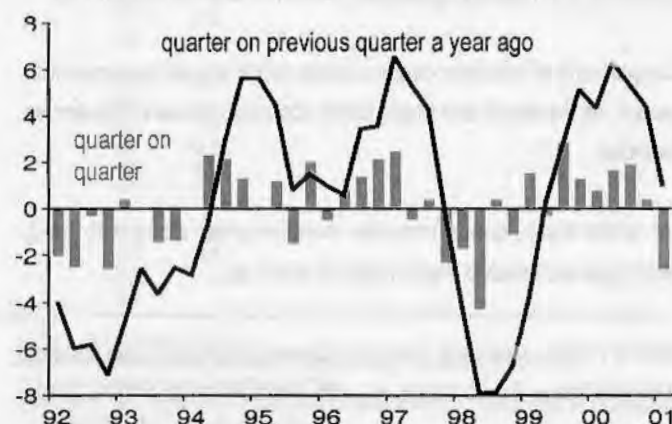
This contrasts with consumer and producer prices having continued to fall in 2000. Japan has suffered from consumer and producer price deflation since mid-1998. This deflation has occurred in Japan despite rising oil prices and the slight recovery in earnings growth.

**Chart 6**

Japan - Index of production

seasonally adjusted

percentage changes, quarters





## World Trade

Echoing the national figures, world trade data showed signs of some slowdown in the global economy. OECD exports and imports of goods, which include both manufactures and raw materials, slowed significantly in the last quarter of 2000. Quarterly exports of goods slowed to 1.3 per cent, from 2.7 per cent in the preceding quarter, while quarterly imports of goods slowed to 1.1 per cent in 2000 quarter four, from 2.8 per cent in the preceding quarter. This slowdown in OECD trade comes after a strong period of expansion since 1999 quarter two. As a result, annual growth in OECD exports and imports of goods in 2000 remain very high, at 11.8 per cent and 12.5 per cent respectively (chart 7 shows OECD trade in goods, quarter on same quarter a year ago). Trade of non-OECD countries was also very robust in 1999 and 2000, after a poor performance in 1998, in the wake of the financial crisis in south-east Asia, and has shown no sign of weakening in the latest period.

Trends in exports and imports of manufactures (which exclude raw materials) were very similar to trends in goods trade; OECD quarterly exports growth fell to 1.5 per cent in 2000 quarter four, down from 2.7 per cent in the previous quarter, while the equivalent figures for imports were 1.4 per cent and 3.1 per cent. Manufactures trade for non-OECD countries was similar to trends observed for goods trade.

In general, the slowdown in trade for both OECD and non-OECD countries in 2000 quarter four is likely to reflect the sharp slowdown of the US economy, weak growth in Japan and increasing signs of a slowdown in Europe.

## 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 SNA 68 and SNA 93.

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

For world trade, goods includes manufactures, along with food, beverages and tobacco, basic materials and fuels.

Data for France, Germany, Italy, the USA and Japan has been updated to SNA93 basis, EU 15 tables are only available on an SNA68 basis.

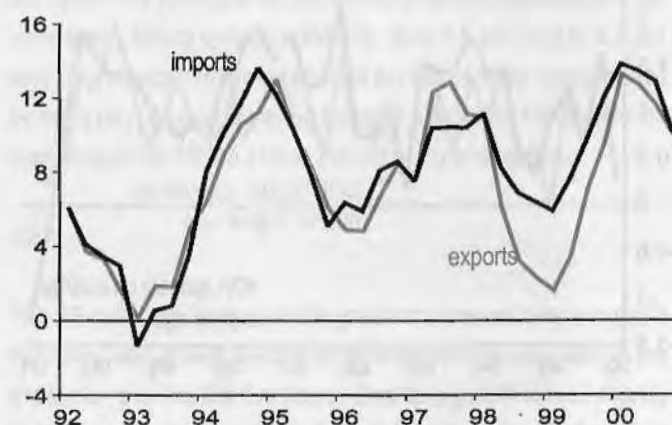
## Chart 7

### OECD exports and imports of goods

seasonally adjusted

percentage changes, quarters

quarter on quarter a year ago



The two bases are not directly comparable meaning that cross-country comparisons with countries on different bases are less valid. All the European data is likely to be put on the SNA93 basis in OECD data very soon.

# 1 European Union 15

## Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk <sup>1</sup>	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl	Unempl
<b>Percentage change on a year earlier</b>														
	ILGB	HUDS	HUDT	HUDU	HUDV	HUDW	HUDX	ILGV	ILHP	HYAB	ILAI	ILAR	ILIJ	GADR
1995	2.4	1.1	0.2	0.6	0.2	2.3	2.0	3.6	-0.3	3.1	4.5	3.4	0.6	10.7
1996	1.7	1.1	0.3	0.4	-0.5	1.4	1.2	0.6	0.6	2.5	0.7	3.8	0.5	10.8
1997	2.6	1.3	0.1	0.7	0.2	3.1	2.7	3.9	1.5	2.0	0.9	3.1	1.0	10.6
1998	2.8	1.9	0.2	1.2	0.4	2.0	2.9	3.7	2.9	1.8	-0.4	2.6	1.8	9.9
1999	2.6	1.9	0.4	1.1	-0.2	1.6	2.2	1.8	2.0	1.2	-	3.0	1.5	9.2
2000	3.4	1.7	0.4	1.0	-0.1	4.0	3.6	4.6	2.2	2.5	4.7	3.5	1.6	8.2
1998 Q1	3.6	1.9	0.2	1.4	0.6	3.4	3.8	5.7	2.6	1.8	0.7	2.9	1.7	10.2
Q2	2.9	1.8	0.2	1.1	0.5	2.5	3.2	4.7	2.6	2.2	0.2	2.8	1.7	10.0
Q3	2.7	2.1	0.2	1.3	0.2	1.5	2.7	3.3	3.3	1.6	-0.8	2.8	1.7	9.8
Q4	2.1	2.0	0.3	1.0	0.2	0.7	2.2	1.5	2.9	1.4	-1.7	1.8	1.8	9.6
1999 Q1	2.0	2.0	0.4	1.0	-	0.3	1.7	0.5	2.3	1.1	-1.8	2.8	1.5	9.5
Q2	2.2	1.8	0.4	1.1	-0.2	0.8	1.7	0.6	1.2	1.1	-1.0	2.8	1.4	9.3
Q3	2.6	1.9	0.4	1.1	-0.2	1.9	2.4	2.0	1.9	1.2	0.5	2.7	1.6	9.1
Q4	3.4	1.9	0.4	1.2	-0.2	3.1	3.0	4.0	2.8	1.5	2.4	3.6	1.5	8.8
2000 Q1	3.6	1.7	0.4	1.2	-0.3	3.9	3.4	4.2	2.4	2.2	4.1	3.6	1.4	8.6
Q2	3.8	2.0	0.4	1.1	0.2	4.1	3.9	5.6	3.2	2.3	4.9	3.6	1.6	8.3
Q3	3.4	1.7	0.4	1.0	0.1	4.0	3.7	4.8	2.1	2.7	5.1	3.5	1.5	8.1
Q4	3.0	1.4	0.3	0.9	-0.2	4.0	3.5	4.0	0.9	2.8	5.0	3.5	1.8	7.9
2001 Q1	2.6	..	..	..	..	..	..	3.6	1.8	2.7	3.3	2.6	1.6	7.7
2000 Apr	..	..	..	..	..	..	..	5.5	3.8	2.1	4.4	..	..	8.4
May	..	..	..	..	..	..	..	6.5	3.7	2.2	4.9	..	..	8.3
Jun	..	..	..	..	..	..	..	4.7	1.9	2.6	5.2	..	..	8.2
Jul	..	..	..	..	..	..	..	4.8	1.9	2.5	5.0	..	..	8.1
Aug	..	..	..	..	..	..	..	5.1	1.9	2.5	4.8	..	..	8.1
Sep	..	..	..	..	..	..	..	4.4	2.8	2.9	5.4	..	..	8.0
Oct	..	..	..	..	..	..	..	3.5	-	2.8	5.5	..	..	7.9
Nov	..	..	..	..	..	..	..	3.6	0.9	2.9	5.3	..	..	7.9
Dec	..	..	..	..	..	..	..	4.7	1.8	2.7	4.4	..	..	7.8
2001 Jan	..	..	..	..	..	..	..	4.7	2.8	2.7	3.7	..	..	7.8
Feb	..	..	..	..	..	..	..	3.7	0.9	2.7	3.3	..	..	7.7
Mar	..	..	..	..	..	..	..	2.5	1.8	2.6	2.8	..	..	7.7
Apr	..	..	..	..	..	..	..	1.0	..	2.8	2.9	..	..	7.6
<b>Percentage change on previous quarter</b>														
	ILGL	HUDY	HUDZ	HUEA	HUEB	HUEC	HUED	ILHF	ILHZ					ILIT
1998 Q1	0.9	0.7	0.1	0.4	0.2	0.6	1.0	1.3	1.3					-0.3
Q2	0.4	0.4	0.1	0.1	-0.1	0.4	0.5	0.6	0.7					1.1
Q3	0.6	0.5	0.1	0.4	-0.1	0.1	0.3	0.3	0.7					0.7
Q4	0.2	0.5	0.1	0.2	0.2	-0.3	0.3	-0.6	0.3					0.3
1999 Q1	0.7	0.6	0.2	0.3	-	0.2	0.5	0.3	0.7					-0.6
Q2	0.6	0.3	-	0.3	-0.3	0.8	0.5	0.6	-0.4					1.0
Q3	1.0	0.5	0.1	0.3	-0.1	1.1	1.0	1.7	1.3					1.0
Q4	1.0	0.5	0.1	0.3	0.2	0.9	1.0	1.3	1.2					0.2
2000 Q1	0.9	0.4	0.1	0.3	-0.1	1.0	0.9	0.5	0.3					-0.7
Q2	0.8	0.5	0.1	0.2	0.1	1.0	1.0	1.9	0.4					1.1
Q3	0.6	0.2	0.1	0.2	-0.2	1.0	0.8	1.0	0.3					0.8
Q4	0.6	0.2	0.1	0.1	-	1.0	0.8	0.5	-					0.5
2001 Q1	0.5	..	..	..	..	..	..	0.2	1.2					-0.6
<b>Percentage change on previous month</b>														
								ILKF	ILKP					
2000 Apr								0.7	-					
May								1.1	1.8					
Jun								-0.9	-1.8					
Jul								0.9	0.9					
Aug								0.8	-					
Sep								-0.5	-					
Oct								-0.3	-0.9					
Nov								0.9	0.9					
Dec								0.8	0.9					
2001 Jan								-0.8	0.9					
Feb								0.6	-0.9					
Mar								-0.8	-					
Apr								-0.8	..					

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  
ChnStk = Change in Stocks at constant market prices

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

# 2 Germany

Contribution to change in GDP															
	GDP	PFC	GFC	GFCF	ChgStk	Exports	Imports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl <sup>1</sup>	Unempl
Percentage change on a year earlier															
	ILFY	HUBW	HUBX	HUBY	HUBZ	HUCA	HUCB	ILGS	ILHM	HVLL	ILAF	ILAO	ILIG	GABD	
1995	1.8	1.3	0.3	-0.1	0.2	1.4	1.3	1.0	0.8	1.7	1.9	4.0	0.1	8.2	
1996	0.8	0.5	0.4	-0.2	-0.4	1.3	0.8	0.7	-1.1	1.4	-1.2	3.5	-0.4	8.9	
1997	1.5	0.4	-0.2	0.2	0.2	2.9	2.1	3.7	-1.6	1.9	1.1	1.5	-0.3	9.9	
1998	1.8	1.1	0.1	0.5	0.5	1.8	2.1	4.2	1.0	1.0	-0.4	1.8	1.4	9.3	
1999	1.4	1.4	-	0.6	0.2	1.4	2.2	1.5	0.4	0.6	-1.0	2.6	0.6	8.6	
2000	3.1	1.0	0.3	0.7	0.1	4.2	3.2	6.3	1.0	1.9	3.4	2.7	0.4	7.9	
1998 Q1	3.0	0.9	-	1.0	0.5	3.0	2.4	6.1	0.8	1.2	0.7	1.3	1.1	9.8	
Q2	1.7	0.5	-	0.4	0.5	2.8	2.5	4.8	-0.9	1.4	0.2	1.8	1.7	9.5	
Q3	1.6	1.4	0.1	0.5	0.2	1.3	1.9	4.4	2.4	0.7	-0.8	2.1	1.0	9.1	
Q4	1.0	1.5	0.3	0.1	0.7	-	1.6	1.4	1.9	0.4	-1.7	2.2	1.8	8.9	
1999 Q1	0.6	1.4	-	0.2	0.7	-0.1	1.5	-0.6	1.6	0.3	-2.4	2.5	0.8	8.8	
Q2	1.0	1.5	-0.1	0.6	0.3	0.6	1.9	0.5	-0.2	0.5	-1.7	2.4	0.1	8.7	
Q3	1.6	1.3	0.1	0.8	-0.1	1.9	2.4	1.8	-0.2	0.7	-0.7	2.7	1.1	8.6	
Q4	2.5	1.3	-	0.9	-0.1	3.1	2.8	4.4	0.6	1.0	0.6	3.0	0.4	8.4	
2000 Q1	2.6	0.5	0.3	0.9	-0.7	4.3	2.7	5.4	-1.1	1.7	2.3	2.8	0.2	8.1	
Q2	4.0	1.6	0.4	0.8	-	4.0	2.8	6.9	4.1	1.6	2.6	2.4	0.4	7.9	
Q3	3.3	1.0	0.1	0.5	0.7	3.9	2.9	7.1	1.7	2.0	3.7	3.3	0.4	7.8	
Q4	2.6	0.8	0.3	0.5	0.5	4.8	4.2	5.5	-0.6	2.4	4.5	2.4	0.8	7.7	
2001 Q1	2.0	0.7	-	-0.4	0.9	3.1	2.3	5.6	1.1	2.5	4.8	2.0	0.7	7.7	
2000 Apr	..	..	..	..	..	..	..	6.6	6.2	1.5	2.1	..	..	8.0	
May	..	..	..	..	..	..	..	8.8	7.3	1.4	2.7	..	..	7.9	
Jun	..	..	..	..	..	..	..	5.2	-1.2	1.9	2.9	..	..	7.9	
Jul	..	..	..	..	..	..	..	7.6	-0.5	1.9	3.3	..	..	7.9	
Aug	..	..	..	..	..	..	..	6.8	1.8	1.8	3.5	..	..	7.8	
Sep	..	..	..	..	..	..	..	6.9	3.9	2.5	4.3	..	..	7.8	
Oct	..	..	..	..	..	..	..	5.2	-2.3	2.4	4.6	..	..	7.7	
Nov	..	..	..	..	..	..	..	5.6	-0.3	2.4	4.7	..	..	7.7	
Dec	..	..	..	..	..	..	..	5.8	0.7	2.2	4.2	..	..	7.7	
2001 Jan	..	..	..	..	..	..	..	7.6	2.0	2.4	4.6	..	..	7.7	
Feb	..	..	..	..	..	..	..	5.8	-1.0	2.6	4.7	..	..	7.7	
Mar	..	..	..	..	..	..	..	3.6	2.2	2.5	4.9	..	..	7.7	
Apr	..	..	..	..	..	..	..	1.1	-0.4	2.9	5.0	..	..	7.7	
Percentage change on previous quarter															
	ILGI	HUCC	HUCD	HUCE	HUCF	HUCG	HUCH	ILHC	ILHW					ILIQ	
1998 Q1	1.1	0.9	0.3	0.3	0.1	0.3	0.8	2.3	1.5					-0.7	
Q2	-0.5	-0.3	-	-0.3	0.1	0.5	0.5	-	-0.7					1.5	
Q3	0.3	0.5	-	0.3	0.1	-0.3	0.2	0.5	0.8					-0.1	
Q4	-	0.3	0.1	-0.2	0.4	-0.5	0.1	-1.4	0.4					1.1	
1999 Q1	0.8	0.9	-	0.4	0.1	0.2	0.7	0.4	1.2					-1.7	
Q2	-0.1	-0.2	-0.1	0.1	-0.2	1.2	0.9	1.0	-2.6					0.8	
Q3	0.9	0.4	0.1	0.5	-0.4	1.0	0.7	1.8	0.8					0.9	
Q4	0.9	0.3	-	-0.1	0.5	0.7	0.5	1.1	1.3					0.4	
2000 Q1	1.0	0.1	0.3	0.4	-0.6	1.4	0.6	1.3	-0.5					-1.9	
Q2	1.2	0.8	-	-	0.4	0.9	1.0	2.5	2.5					1.0	
Q3	0.3	-0.2	-0.1	0.2	0.3	0.9	0.8	2.1	-1.5					0.9	
Q4	0.2	-	0.1	-	0.3	1.5	1.8	-0.4	-1.1					0.8	
2001 Q1	0.4	-	0.1	-0.5	-0.2	-0.3	-1.2	1.4	1.2					-1.9	
Percentage change on previous month															
								ILKC	ILKM						
2000 Apr								0.9	2.8						
May								2.3	4.5						
Jun								-2.5	-7.6						
Jul								2.8	1.4						
Aug								0.7	1.6						
Sep								-0.5	-0.5						
Oct								-0.8	-2.4						
Nov								0.6	0.7						
Dec								0.2	2.0						
2001 Jan								1.6	-0.3						
Feb								0.1	-0.6						
Mar								-1.7	0.9						
Apr								-1.5	0.2						

GDP = Gross Domestic Product at constant market prices  
PFC = Private Final Consumption at constant market prices

Sales = Retail Sales volume  
CPI = Consumer Prices measurement not uniform among countries



## Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	Imports	less	IoP	Sales	CPI	PPI <sup>1</sup>	Earnings	Empl <sup>2</sup>	Unempl
Percentage change on a year earlier															
	ILFZ	HUBK	HUBL	HUBM	HUBN	HUBO	HUBP	ILGT	ILHN	HXAA	ILAG	ILAP	ILIH	GABC	
1995	1.9	0.8	—	0.4	0.5	1.7	1.5	2.5	—	1.7	5.2	2.4	0.9	11.7	
1996	1.1	0.7	0.5	—	-0.6	0.7	0.3	0.9	-0.3	2.0	-2.7	2.6	0.2	12.3	
1997	1.9	0.1	0.5	—	0.1	2.8	1.5	3.8	1.0	1.2	-0.6	2.6	0.7	12.3	
1998	3.5	1.9	—	1.3	0.8	2.1	2.6	5.2	2.6	0.8	-0.9	2.2	1.5	11.8	
1999	3.0	1.7	0.5	1.2	-0.3	1.0	1.0	2.1	2.4	0.5	-1.6	2.5	2.0	11.2	
2000	3.3	1.5	0.5	1.3	0.1	3.6	3.7	3.2	0.6	1.7	2.1	5.2	2.5	9.5	
1998 Q1	3.6	1.6	—	1.1	0.8	3.3	3.2	7.8	2.3	0.9	0.5	2.4	1.2	11.9	
Q2	3.8	2.1	—	1.4	1.2	2.6	3.4	6.6	3.2	1.1	-0.3	2.0	1.4	11.8	
Q3	3.5	2.1	-0.1	1.4	0.5	1.8	2.3	3.7	2.4	0.7	-1.4	2.1	1.7	11.8	
Q4	3.0	2.0	—	1.3	0.7	0.7	1.7	2.7	2.7	0.4	-2.3	2.0	1.9	11.7	
1999 Q1	2.7	1.8	0.3	1.3	—	0.1	0.8	1.1	3.3	0.2	-2.7	2.0	1.9	11.6	
Q2	2.5	1.4	0.4	1.1	-0.4	0.4	0.5	0.6	1.8	0.4	-2.3	2.0	1.9	11.4	
Q3	3.1	1.8	0.5	1.1	-0.7	1.4	1.0	2.5	2.3	0.5	-1.6	2.7	1.9	11.0	
Q4	3.8	1.7	0.6	1.2	-0.2	2.2	1.8	4.2	2.0	1.0	—	3.4	2.1	10.6	
2000 Q1	3.7	1.9	0.5	1.1	—	3.1	2.9	4.0	2.1	1.5	1.2	5.2	2.3	10.1	
Q2	3.5	1.7	0.5	1.2	-0.1	3.8	3.6	3.4	1.4	1.5	2.1	5.4	2.5	9.6	
Q3	3.2	1.4	0.6	1.4	0.6	3.4	4.2	3.5	—	1.9	2.7	5.2	2.5	9.3	
Q4	2.9	1.1	0.5	1.5	—	4.0	4.2	2.1	-1.4	1.9	2.4	5.0	2.6	9.0	
2001 Q1	2.7	1.4	0.6	1.3	-0.8	2.7	2.5	2.3	1.4	1.2	2.5	4.3	2.5	8.6	
2000 Apr	..	..	..	..	..	..	..	4.0	-0.9	1.3	1.9	..	..	9.8	
May	..	..	..	..	..	..	..	3.0	4.1	1.5	2.1	..	..	9.6	
Jun	..	..	..	..	..	..	..	3.2	1.1	1.7	2.2	..	..	9.5	
Jul	..	..	..	..	..	..	..	3.9	-1.6	1.7	2.6	..	..	9.4	
Aug	..	..	..	..	..	..	..	3.9	1.7	1.8	2.7	..	..	9.3	
Sep	..	..	..	..	..	..	..	2.5	0.1	2.2	2.7	..	..	9.2	
Oct	..	..	..	..	..	..	..	2.1	-1.2	1.9	2.5	..	..	9.1	
Nov	..	..	..	..	..	..	..	1.3	-1.4	2.2	2.4	..	..	8.9	
Dec	..	..	..	..	..	..	..	3.0	-1.4	1.5	2.5	..	..	8.9	
2001 Jan	..	..	..	..	..	..	..	3.1	2.1	1.1	2.6	..	..	8.7	
Feb	..	..	..	..	..	..	..	2.3	0.3	1.3	2.6	..	..	8.6	
Mar	..	..	..	..	..	..	..	1.7	1.8	1.2	2.3	..	..	8.6	
Apr	..	..	..	..	..	..	..	1.9	-0.5	1.8	2.0	..	..	8.5	
Percentage change on previous quarter															
	ILGJ	HUBQ	HUBR	HUBS	HUBT	HUBU	HUBV	ILHD	ILHX						
1998 Q1	1.1	0.4	-0.1	0.4	0.5	0.8	0.9	2.0	-0.1					0.5	
Q2	1.0	0.8	—	0.5	0.2	0.2	0.7	1.2	1.1					0.5	
Q3	0.5	0.3	—	0.2	-0.1	0.1	—	-0.5	0.7					0.5	
Q4	0.4	0.4	0.1	0.2	0.1	-0.4	0.1	0.1	1.1					0.4	
1999 Q1	0.8	0.2	0.2	0.4	-0.2	0.2	—	0.4	0.5					0.5	
Q2	0.9	0.5	0.1	0.3	-0.2	0.6	0.4	0.7	-0.4					0.5	
Q3	1.0	0.7	0.1	0.2	-0.4	1.1	0.6	1.3	1.1					0.6	
Q4	1.1	0.4	0.2	0.4	0.6	0.4	0.8	1.7	0.8					0.6	
2000 Q1	0.6	0.4	0.1	0.3	—	1.1	1.2	0.2	0.6					0.7	
Q2	0.7	0.2	0.2	0.4	-0.3	1.3	1.1	0.2	-1.0					0.7	
Q3	0.8	0.4	0.1	0.3	0.3	0.7	1.1	1.4	-0.3					0.6	
Q4	0.8	—	0.1	0.5	—	0.9	0.8	0.3	-0.7					0.7	
2001 Q1	0.5	0.7	0.1	0.1	-0.8	-0.2	-0.5	0.4	3.4					0.6	
Percentage change on previous month															
								ILKD	ILKN						
2000 Apr								-0.4	-2.6						
May								0.2	2.5						
Jun								0.1	-1.0						
Jul								1.5	-0.2						
Aug								—	-0.1						
Sep								-0.6	-0.3						
Oct								0.4	-0.9						
Nov								0.3	0.9						
Dec								0.3	-0.2						
2001 Jan								0.1	3.4						
Feb								0.2	-1.0						
Mar								-0.3	1.5						
Apr								-0.3	-4.7						

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

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

## 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
1995	2.9	1.0	-0.4	1.1	0.2	3.1	2.1	5.8	0.4	5.3	7.9	3.1	-0.6	11.6
1996	1.1	0.7	0.2	0.7	-0.7	0.2	-0.1	-1.6	1.3	4.0	1.8	3.1	0.5	11.7
1997	2.0	1.9	-	0.4	0.3	1.7	2.3	3.9	0.9	2.0	1.3	3.6	0.4	11.7
1998	1.8	1.8	0.1	0.8	0.3	1.0	2.2	1.4	1.1	2.0	0.1	2.8	1.2	11.8
1999	1.6	1.4	0.3	0.9	0.4	-	1.3	-0.1	1.1	1.7	-0.2	2.3	1.2	11.4
2000	2.9	1.8	0.3	1.2	-1.0	2.9	2.2	4.0	-0.6	2.5	5.9	2.1	1.9	10.5
1998 Q1	3.0	1.8	-	1.3	1.1	2.8	4.0	5.3	0.7	2.0	1.2	2.2	1.0	11.7
Q2	1.7	1.7	-	1.0	-0.5	1.4	2.0	2.5	1.6	2.1	0.6	3.1	0.9	11.9
Q3	1.9	1.8	0.1	0.8	0.2	0.4	1.4	0.3	1.0	2.1	-0.1	2.8	1.1	11.9
Q4	0.7	2.0	0.1	0.2	0.4	-0.6	1.5	-2.3	1.0	1.7	-1.2	3.0	1.5	11.7
1999 Q1	1.1	1.7	0.2	0.5	0.8	-1.2	1.0	-1.3	1.3	1.2	-1.8	3.0	1.2	11.6
Q2	1.3	1.2	0.2	0.6	1.2	-0.9	1.1	-2.3	0.3	1.4	-1.4	2.1	1.3	11.5
Q3	1.3	1.4	0.3	1.0	-0.2	0.1	1.2	0.5	0.3	2.0	-	2.3	1.2	11.3
Q4	2.8	1.3	0.3	1.5	-0.3	2.1	2.0	2.9	2.3	2.1	2.2	1.8	1.4	11.1
2000 Q1	3.3	1.5	0.3	1.4	-0.7	2.1	1.4	3.4	-0.6	2.6	4.6	1.9	1.2	11.0
Q2	3.0	2.1	0.3	1.5	-0.5	2.3	2.7	5.8	-0.3	2.6	6.2	2.5	1.5	10.6
Q3	2.7	1.8	0.2	1.2	-1.3	3.9	3.1	3.6	-	2.3	6.7	2.0	2.1	10.3
Q4	2.6	1.7	0.2	0.7	-1.4	3.2	1.7	3.3	-1.3	2.6	6.5	1.9	2.8	10.0
2001 Q1	2.4	1.0	0.2	0.5	-0.8	3.6	2.1	2.5	-0.3	2.9	4.9	2.0	3.1	..
2000 May	..	..	..	..	..	..	..	7.8	-	2.5	6.4	2.7	..	10.6
Jun	..	..	..	..	..	..	..	5.0	-1.0	2.7	6.9	2.9	..	10.6
Jul	..	..	..	..	..	..	..	2.9	1.0	1.7	6.6	2.0	..	10.4
Aug	..	..	..	..	..	..	..	3.6	-1.9	2.6	6.5	2.0	..	10.3
Sep	..	..	..	..	..	..	..	4.0	1.0	2.6	6.8	2.0	..	10.2
Oct	..	..	..	..	..	..	..	2.3	-1.0	2.6	6.8	1.9	..	10.0
Nov	..	..	..	..	..	..	..	2.5	-1.9	2.7	6.7	1.9	..	10.0
Dec	..	..	..	..	..	..	..	5.2	-1.0	2.7	6.2	1.9	..	9.9
2001 Jan	..	..	..	..	..	..	..	3.6	-1.0	3.0	5.4	1.9	..	9.8
Feb	..	..	..	..	..	..	..	1.8	-	3.0	5.0	2.0	..	..
Mar	..	..	..	..	..	..	..	2.2	-	2.8	4.3	2.1	..	..
Apr	..	..	..	..	..	..	..	-	-1.0	3.1	4.4	1.6	..	..
May	..	..	..	..	..	..	..	..	..	3.0	2.9	1.1	..	..
Percentage change on previous quarter														
	ILGK	HUCO	HUCP	HUCQ	HUCR	HUCS	HUCT	ILHE	ILHY					ILIS
1998 Q1	0.1	0.6	-	0.1	0.2	0.5	1.2	-0.8	0.7					-0.7
Q2	0.4	0.6	0.1	0.1	-0.6	0.1	-0.2	0.5	1.0					1.1
Q3	0.6	0.3	-	0.1	0.5	-0.5	-0.2	-0.8	-					1.4
Q4	-0.5	0.5	0.1	-	0.4	-0.7	0.7	-1.3	-0.6					-0.3
1999 Q1	0.5	0.3	0.1	0.4	0.6	-0.1	0.7	0.2	1.0					-1.0
Q2	0.6	0.1	0.1	0.2	-0.2	0.4	-0.1	-0.5	-					1.2
Q3	0.7	0.4	0.1	0.4	-0.9	0.6	-0.1	2.1	-					1.3
Q4	0.9	0.4	0.1	0.5	0.3	1.2	1.4	1.2	1.3					-0.1
2000 Q1	1.0	0.6	0.1	0.3	0.2	-	0.1	0.7	-1.9					-1.2
Q2	0.3	0.6	-	0.3	-	0.6	1.2	1.8	0.3					1.5
Q3	0.4	0.2	-	0.2	-1.6	2.1	0.4	-0.1	0.3					1.9
Q4	0.8	0.3	0.1	-	0.1	0.5	-	0.9	-					0.6
2001 Q1	0.9	-	-	0.1	0.8	0.4	0.5	-0.1	-1.0					-0.8
Percentage change on previous month														
								ILKE	ILKO					
2000 May								1.8	-					
Jun								-0.8	-					
Jul								-0.9	1.0					
Aug								1.2	-1.9					
Sep								-	1.9					
Oct								-0.7	-1.0					
Nov								0.9	1.0					
Dec								2.1	-1.0					
2001 Jan								-1.9	-1.0					
Feb								-0.1	1.0					
Mar								0.5	-1.0					
Apr								-1.9	-					
May								..	..					

GDP = Gross Domestic Product at constant market prices  
PFC = Private Final Consumption at constant market prices  
GFC = Government Final Consumption at constant market prices

Sales = Retail Sales volume  
CPI = Consumer Prices, measurement not uniform among countries  
PPI = Producer Prices (manufacturing)  
Earnings = Average Wage Earnings (manufacturing), definitions of coverage

## Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	Imports	IoP	Sales	CPI	PPI	Earnings	Empl <sup>1</sup>	Unempl
less														
Percentage change on a year earlier														
	ILGC	HUDG	HUDH	HUDI	HUDJ	HUDK	HUDL	ILGW	ILHQ	ILAA	ILAJ	ILAS	ILIK	GADO
1995	2.7	2.0	—	0.9	-0.5	1.0	0.9	4.8	3.6	2.8	2.9	2.6	1.5	5.6
1996	3.6	2.1	0.1	1.5	—	0.9	1.0	4.6	4.9	2.9	2.3	3.3	1.4	5.4
1997	4.4	2.4	0.3	1.6	0.4	1.4	1.7	6.7	4.1	2.3	0.3	3.2	2.3	5.0
1998	4.4	3.1	0.2	2.1	0.2	0.3	1.6	4.7	6.4	1.6	-1.1	2.5	1.5	4.5
1999	4.2	3.5	0.3	1.9	-0.4	0.3	1.5	4.2	8.6	2.1	1.8	2.9	1.5	4.2
2000	5.0	3.6	0.3	1.9	0.2	1.1	2.1	5.6	6.4	3.4	4.1	3.6	1.3	4.0
1998 Q1	4.8	2.8	0.2	2.0	0.8	0.8	1.8	6.3	4.8	1.4	-1.5	2.8	1.9	4.7
Q2	4.1	3.4	0.2	2.2	-0.3	0.2	1.7	5.3	7.5	1.6	-0.9	2.8	1.5	4.4
Q3	3.9	3.0	0.2	1.9	0.3	-0.2	1.3	4.3	5.3	1.6	-1.0	2.5	1.1	4.5
Q4	4.6	3.3	0.3	2.2	—	0.3	1.5	3.2	7.7	1.5	-0.9	1.9	1.3	4.4
1999 Q1	3.9	3.4	0.4	2.0	-0.8	—	1.2	3.3	9.0	1.7	—	1.8	1.7	4.3
Q2	3.8	3.4	0.1	1.8	-0.5	0.2	1.4	3.8	7.8	2.2	1.1	2.4	1.4	4.3
Q3	4.3	3.5	0.3	1.9	-0.4	0.6	1.8	4.4	9.3	2.4	2.4	3.7	1.4	4.2
Q4	5.0	3.7	0.4	1.9	0.1	0.5	1.8	5.1	8.3	2.6	3.2	3.6	1.5	4.1
2000 Q1	5.3	4.0	0.2	2.1	-0.1	0.9	2.0	5.8	8.5	3.4	4.6	4.2	1.6	4.0
Q2	6.1	3.6	0.5	2.2	0.7	1.2	2.2	6.5	7.0	3.3	4.4	3.6	1.6	4.0
Q3	5.2	3.5	0.3	1.9	0.4	1.3	2.3	5.9	6.3	3.5	3.9	2.9	1.1	4.0
Q4	3.4	3.0	0.1	1.5	-0.3	0.8	1.8	4.2	4.1	3.4	3.4	3.5	1.0	4.0
2001 Q1	2.5	2.3	0.4	0.8	-0.6	0.6	1.1	0.8	1.9	3.2	2.1	2.6	0.7	4.2
2000 May	..	..	..	..	..	..	..	6.4	6.7	3.1	4.2	2.7	1.2	4.1
Jun	..	..	..	..	..	..	..	6.8	6.6	3.7	5.0	3.6	1.3	4.0
Jul	..	..	..	..	..	..	..	5.6	6.7	3.7	4.4	3.6	1.0	4.0
Aug	..	..	..	..	..	..	..	5.9	6.0	3.4	3.6	2.7	1.0	4.1
Sep	..	..	..	..	..	..	..	6.1	6.3	3.4	3.8	2.6	1.1	3.9
Oct	..	..	..	..	..	..	..	5.0	5.7	3.4	3.6	3.5	1.0	3.9
Nov	..	..	..	..	..	..	..	4.4	3.9	3.5	3.5	3.5	0.9	4.0
Dec	..	..	..	..	..	..	..	3.1	2.6	3.4	2.9	3.5	1.1	4.0
2001 Jan	..	..	..	..	..	..	..	1.7	2.9	3.5	2.9	2.6	0.8	4.2
Feb	..	..	..	..	..	..	..	0.8	1.4	3.4	1.9	2.6	0.7	4.2
Mar	..	..	..	..	..	..	..	-0.1	1.5	2.8	1.3	2.6	0.6	4.3
Apr	..	..	..	..	..	..	..	-1.3	2.5	3.3	2.2	2.6	-0.1	4.5
May	..	..	..	..	..	..	..	-2.8	..	3.6	2.4	3.5	0.1	4.4
Percentage change on previous quarter														
	ILGM	HUDM	HUDN	HUDO	HUDP	HUDQ	HUDR	ILHG	ILIA				ILIU	
1998 Q1	1.6	0.8	-0.1	0.7	0.6	—	0.5	0.9	1.4				-1.0	
Q2	0.7	0.9	0.2	0.7	-0.7	-0.1	0.4	0.7	2.6				1.5	
Q3	0.9	0.7	—	0.3	0.1	-0.1	0.2	0.9	0.5				0.6	
Q4	1.4	0.8	0.1	0.5	—	0.4	0.4	0.8	2.9				0.2	
1999 Q1	0.9	0.9	..	0.6	-0.2	-0.2	0.2	0.9	2.6				-0.6	
Q2	0.6	0.9	—	0.4	-0.4	0.2	0.6	1.2	1.5				1.2	
Q3	1.4	0.8	0.2	0.4	0.3	0.3	0.6	1.5	2.0				0.6	
Q4	2.0	1.0	0.2	0.5	0.5	0.3	0.4	1.4	2.0				0.3	
2000 Q1	1.2	1.2	-0.1	0.8	-0.5	0.2	0.4	1.6	2.7				-0.5	
Q2	1.4	0.5	0.3	0.4	0.5	0.4	0.7	1.9	0.1				1.2	
Q3	0.5	0.7	-0.1	0.1	-0.1	0.4	0.7	0.9	1.4				0.1	
Q4	0.3	0.5	—	0.1	-0.2	-0.2	-0.1	-0.2	-0.2				0.2	
2001 Q1	0.3	0.6	0.2	0.1	-0.8	—	-0.2	-1.7	0.6				-0.7	
Percentage change on previous month														
								ILKG	ILKQ				ILLA	
2000 May								0.7	0.3				-0.2	
Jun								0.5	0.1				0.8	
Jul								-0.2	0.9				—	
Aug								0.7	0.4				-0.4	
Sep								0.2	0.2				-0.5	
Oct								-0.2	—				0.6	
Nov								-0.3	-0.6				—	
Dec								-0.6	0.1				0.3	
2001 Jan								-0.9	1.1				-1.2	
Feb								-0.4	-0.4				0.2	
Mar								-0.2	-0.1				0.4	
Apr								-0.6	0.6				-0.1	
May								-0.8	..				—	

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

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



## Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP <sup>1</sup>	Sales	CPI	PPI	Earnings <sup>2</sup>	Empl	Unempl
<b>Percentage change on a year earlier</b>														
	ILGD	HUCU	HUCV	HUCW	HUCX	HUCY	HUCZ	ILGX	ILHR	ILAB	ILAK	ILAT	ILIL	GADP
1995	1.6	0.8	0.6	—	0.6	0.3	0.9	3.0	0.1	-0.1	-0.7	2.9	—	3.1
1996	3.4	1.0	0.4	2.0	0.3	0.6	1.0	2.2	0.7	0.1	-1.7	2.6	0.5	3.4
1997	1.9	0.6	0.2	0.2	—	1.1	0.1	4.0	-1.9	1.7	0.6	2.8	1.0	3.4
1998	-1.1	0.1	0.3	-1.2	-0.6	-0.2	-0.6	-6.7	-5.5	0.7	-1.3	-0.8	-0.6	4.1
1999	0.8	0.7	0.6	-0.2	-0.2	0.1	0.2	1.0	-2.1	-0.3	-1.5	-0.7	-0.8	4.7
2000	1.5	0.3	0.6	0.2	0.1	1.2	0.8	5.2	-1.7	-0.7	0.1	1.7	-0.3	4.7
1998 Q1	-2.6	-2.4	0.2	-0.8	-0.1	0.2	-0.4	-4.2	-10.0	2.0	0.4	-0.4	—	3.7
Q2	0.7	1.3	0.3	-0.7	-0.6	-0.3	-0.6	-7.9	-2.4	0.4	-1.9	-0.3	-0.7	4.1
Q3	-0.8	1.0	0.3	-1.8	-0.9	-0.2	-0.6	-7.9	-3.8	-0.2	-1.8	-1.8	-0.9	4.2
Q4	-1.4	0.6	0.3	-1.5	-0.8	-0.6	-0.6	-6.7	-5.2	0.5	-2.0	-0.7	-1.0	4.4
1999 Q1	-0.4	0.2	0.5	-0.7	-0.4	-0.4	-0.3	-3.7	-4.2	-0.1	-2.1	-0.7	-1.2	4.6
Q2	1.0	1.1	0.5	-0.2	-0.2	-0.1	0.1	0.3	-2.1	-0.3	-1.8	-1.1	-1.1	4.7
Q3	2.1	1.6	0.7	-0.1	-0.1	0.3	0.3	2.7	-1.4	—	-1.4	-0.4	-0.7	4.7
Q4	0.4	-0.2	0.6	0.1	—	0.7	0.8	5.1	-0.4	-1.0	-0.6	-0.5	-0.2	4.7
2000 Q1	2.4	1.0	0.6	0.2	—	1.2	0.7	4.3	-2.9	-0.7	-0.1	2.0	-0.5	4.8
Q2	1.0	—	0.6	-0.3	0.1	1.4	0.8	6.6	-1.8	-0.7	0.4	2.3	-0.4	4.7
Q3	0.3	-0.7	0.5	—	0.1	1.2	0.8	5.3	-1.1	-0.7	0.2	1.6	-0.4	4.7
Q4	2.5	0.8	0.6	0.8	0.2	1.0	0.9	4.4	-1.1	-0.5	—	1.1	0.2	4.8
2001 Q1	-0.1	-0.2	0.4	0.2	0.1	0.2	0.7	0.6	3.0	-0.1	-0.3	0.5	0.5	4.8
2000 Apr	..	..	..	..	..	..	..	8.0	-3.3	-0.8	0.5	2.1	-0.5	4.8
May	..	..	..	..	..	..	..	5.0	-1.1	-0.7	0.3	1.9	-0.5	4.6
Jun	..	..	..	..	..	..	..	6.9	-1.1	-0.7	0.4	2.9	-0.3	4.7
Jul	..	..	..	..	..	..	..	5.7	-1.1	-0.5	0.2	1.4	-0.1	4.7
Aug	..	..	..	..	..	..	..	6.8	-1.1	-0.8	0.3	2.1	-0.4	4.6
Sep	..	..	..	..	..	..	..	3.5	-1.1	-0.8	0.1	1.4	-0.5	4.7
Oct	..	..	..	..	..	..	..	5.0	-1.1	-0.9	—	1.1	0.1	4.7
Nov	..	..	..	..	..	..	..	3.3	-1.1	-0.5	-0.1	-0.2	0.3	4.8
Dec	..	..	..	..	..	..	..	4.9	-1.1	-0.2	—	2.3	0.2	4.9
2001 Jan	..	..	..	..	..	..	..	1.4	2.2	0.1	-0.2	0.1	0.1	4.9
Feb	..	..	..	..	..	..	..	1.8	4.5	-0.1	-0.3	0.8	0.7	4.7
Mar	..	..	..	..	..	..	..	-1.4	2.2	-0.4	-0.4	0.5	0.5	4.7
Apr	..	..	..	..	..	..	..	-3.9	—	-0.4	-0.6	—	-0.2	4.8
<b>Percentage change on previous quarter</b>														
	ILGN	HUDA	HUDB	HUDC	HUDD	HUDE	HUDD	ILHH	ILIB				ILIV	
1998 Q1	-0.6	0.3	—	-0.3	-0.4	-0.3	-0.1	-1.7	-0.3				-1.6	
Q2	0.1	0.2	0.2	-0.2	-0.2	-0.1	-0.3	-4.3	-2.4				2.1	
Q3	-1.1	0.3	—	-1.2	-0.2	-0.1	—	0.3	-0.7				-0.4	
Q4	0.1	-0.1	0.1	0.2	-0.1	-0.1	-0.2	-1.1	-1.8				-1.1	
1999 Q1	0.5	-0.1	0.2	0.5	0.1	—	0.2	1.4	0.7				-1.8	
Q2	1.5	1.1	0.2	0.3	—	0.2	0.2	-0.3	-0.4				2.2	
Q3	-0.1	0.7	0.2	-1.0	-0.1	0.3	0.2	2.7	—				—	
Q4	-1.5	-1.9	0.1	0.4	-0.1	0.3	0.3	1.2	-0.7				-0.6	
2000 Q1	2.4	1.1	0.2	0.6	0.2	0.5	—	0.6	-1.8				-2.1	
Q2	0.1	0.1	0.2	-0.3	0.1	0.4	0.3	1.9	0.8				2.3	
Q3	-0.7	—	0.1	-0.7	—	—	0.1	1.5	0.7				—	
Q4	0.7	-0.3	0.2	1.2	—	0.1	0.5	0.3	-0.7				—	
2001 Q1	-0.2	—	—	—	—	-0.4	-0.2	-3.1	2.2				-1.8	
<b>Percentage change on previous month</b>														
								ILKH	ILKR				ILLB	
2000 Apr								0.7	—				1.4	
May								-0.1	1.1				1.0	
Jun								1.5	1.1				—	
Jul								-0.5	—				-0.2	
Aug								3.3	—				-0.1	
Sep								-3.5	-1.1				—	
Oct								1.3	—				0.4	
Nov								-0.5	—				-0.1	
Dec								1.7	—				-1.0	
2001 Jan								-3.7	2.2				-1.2	
Feb								0.6	1.1				-0.1	
Mar								-2.0	-2.2				0.4	
Apr								-2.0	-2.2				0.7	

GDP = Gross Domestic Product at constant market prices  
PFC = Private Final Consumption at constant market prices  
GFC = Government Final Consumption at constant market prices  
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ChgStk = Change in Stocks at constant market prices

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

# 7 World trade in goods<sup>1</sup>

	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
<b>Percentage change on a year earlier</b>														
	ILIZ	ILJA	ILJB	ILJC	ILJD	ILJE	ILJF	ILJG	ILJH	ILJI	ILJJ	ILJK	ILJL	ILJM
1992	4.3	3.3	8.5	5.3	4.3	8.2	4.2	3.6	5.9	5.0	4.1	7.7	4.8	4.6
1993	4.8	2.2	15.4	4.0	1.0	12.5	4.0	2.2	9.1	3.3	0.9	10.4	4.4	3.8
1994	12.0	9.9	19.9	12.0	12.3	11.0	10.6	9.4	14.0	10.9	10.9	10.7	12.0	10.7
1995	9.6	9.8	8.6	10.9	10.3	12.4	8.9	9.3	7.8	9.7	8.8	12.2	10.2	9.3
1996	6.6	6.2	7.7	7.4	7.7	6.6	6.6	6.3	7.6	6.6	7.2	4.8	6.9	6.6
1997	11.4	11.8	10.2	10.7	11.2	9.4	10.4	11.0	9.2	9.5	9.7	8.9	11.0	10.0
1998	5.9	6.1	5.2	6.6	9.4	-0.6	5.4	5.5	4.6	5.8	8.1	-0.3	6.2	5.5
1999	6.3	5.8	8.1	8.0	10.3	1.4	5.8	5.4	6.7	6.6	8.8	0.2	7.1	6.2
2000	13.7	12.3	18.4	..	13.9	..	..	11.8	..	..	12.5	..	..	..
1995 Q2	10.0	10.3	8.9	12.2	11.5	13.8	9.6	10.2	7.8	11.3	10.4	13.7	11.1	10.4
Q3	8.5	9.0	6.9	10.5	9.6	12.9	7.8	8.2	6.7	9.3	8.0	12.7	9.5	8.5
Q4	6.8	6.9	6.3	7.4	6.3	10.2	6.2	6.0	6.6	6.4	5.1	9.7	7.1	6.3
1996 Q1	5.6	5.3	6.6	7.5	7.2	8.1	5.4	4.9	6.8	6.5	6.4	6.7	6.5	5.9
Q2	5.6	5.1	7.1	6.2	6.3	5.9	5.5	4.8	7.2	5.4	5.9	4.0	5.9	5.4
Q3	6.9	6.6	7.9	7.6	8.5	5.5	7.1	6.8	7.9	6.8	8.1	3.5	7.2	6.9
Q4	8.1	7.8	9.4	8.1	8.6	7.0	8.5	8.5	8.7	7.6	8.6	5.3	8.1	8.1
1997 Q1	8.4	7.9	10.3	8.0	8.0	8.2	8.0	7.5	9.4	7.5	7.5	7.3	8.2	7.7
Q2	12.4	12.9	10.6	11.4	12.2	9.5	11.5	12.3	9.5	10.0	10.4	9.1	11.9	10.8
Q3	13.0	13.9	10.3	11.6	12.2	10.0	11.8	12.8	9.1	10.2	10.4	9.6	12.3	11.0
Q4	11.7	12.3	9.7	11.5	12.1	10.0	10.4	11.1	8.7	10.1	10.4	9.4	11.6	10.3
1998 Q1	10.5	11.3	8.1	10.7	12.8	5.5	9.9	10.9	7.1	9.6	11.2	5.6	10.6	9.8
Q2	6.5	6.6	6.3	7.1	9.3	1.3	5.9	6.1	5.4	6.5	8.2	1.7	6.8	6.2
Q3	3.9	3.9	4.2	4.9	7.9	-2.8	3.4	3.2	3.7	4.3	6.9	-2.5	4.4	3.8
Q4	2.9	3.0	2.6	4.1	7.8	-5.8	2.3	2.3	2.4	3.1	6.4	-5.6	3.5	2.7
1999 Q1	2.4	2.4	2.4	4.1	7.0	-3.6	1.8	1.6	2.5	3.2	5.9	-4.3	3.3	2.5
Q2	3.9	3.7	4.9	6.4	8.9	-0.7	3.7	3.4	4.4	5.1	7.6	-1.9	5.2	4.4
Q3	7.9	7.1	10.3	9.2	11.3	2.9	7.4	7.1	8.2	7.7	9.7	1.6	8.5	7.5
Q4	11.0	9.9	14.7	12.1	13.7	7.1	10.1	9.5	11.6	10.5	12.0	5.8	11.5	10.3
2000 Q1	14.6	13.6	18.1	14.3	15.2	11.7	13.5	13.2	14.3	13.0	13.8	10.5	14.4	13.3
Q2	14.7	13.3	19.5	15.3	15.2	15.9	13.5	12.7	15.8	13.8	13.5	14.9	15.0	13.7
Q3	13.7	12.1	19.1	15.6	14.4	19.6	12.7	11.5	15.9	14.3	12.9	19.0	14.7	13.5
Q4	11.9	10.3	16.9	..	11.3	..	..	10.0	..	..	10.2	..	..	..
2001 Q1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
<b>Percentage change on previous quarter</b>														
	ILJN	ILJO	ILJP	ILJQ	ILJR	ILJS	ILJT	ILJU	ILJV	ILJW	ILJX	ILJY	ILJZ	ILKA
1995 Q2	1.1	0.9	1.6	2.3	1.9	3.3	1.0	0.8	1.6	2.4	2.0	3.2	1.7	1.7
Q3	1.0	0.9	1.5	1.2	0.8	2.2	0.9	0.6	1.6	0.9	0.5	2.0	1.1	0.9
Q4	1.5	1.6	1.3	1.8	2.1	1.1	1.4	1.3	1.6	1.3	1.5	0.8	1.7	1.4
1996 Q1	1.9	1.9	2.0	2.1	2.4	1.3	2.0	2.1	1.8	1.7	2.2	0.5	2.0	1.9
Q2	1.0	0.7	2.1	1.0	0.9	1.2	1.1	0.7	2.0	1.3	1.6	0.6	1.0	1.2
Q3	2.3	2.3	2.3	2.6	2.9	1.8	2.4	2.5	2.2	2.3	2.6	1.6	2.4	2.3
Q4	2.7	2.7	2.7	2.3	2.2	2.5	2.8	3.0	2.4	2.1	2.0	2.5	2.5	2.5
1997 Q1	2.2	2.0	2.8	2.0	1.8	2.5	1.5	1.2	2.4	1.6	1.2	2.5	2.1	1.5
Q2	4.7	5.4	2.4	4.2	4.9	2.4	4.4	5.3	2.2	3.7	4.3	2.2	4.4	4.1
Q3	2.8	3.1	2.0	2.8	2.9	2.3	2.6	2.9	1.9	2.4	2.6	2.1	2.8	2.5
Q4	1.5	1.3	2.2	2.2	2.0	2.5	1.5	1.4	2.0	2.0	1.9	2.3	1.8	1.8
1998 Q1	1.1	1.1	1.3	1.3	2.4	-1.7	1.0	1.0	0.9	1.1	1.9	-1.1	1.2	1.0
Q2	0.9	1.0	0.6	0.7	1.6	-1.7	0.6	0.6	0.6	0.7	1.6	-1.6	0.8	0.7
Q3	0.4	0.5	-	0.7	1.6	-1.8	0.2	0.2	0.2	0.4	1.3	-2.2	0.5	0.3
Q4	0.5	0.5	0.6	1.3	2.0	-0.7	0.5	0.5	0.6	0.9	1.5	-0.9	0.9	0.7
1999 Q1	0.6	0.5	1.2	1.3	1.6	0.6	0.5	0.3	1.1	1.2	1.4	0.3	1.0	0.8
Q2	2.4	2.2	3.1	2.9	3.5	1.2	2.5	2.5	2.5	2.6	3.2	0.9	2.7	2.5
Q3	4.1	3.9	5.1	3.3	3.8	1.8	3.7	3.7	3.9	2.9	3.3	1.4	3.7	3.3
Q4	3.4	3.1	4.6	4.0	4.2	3.4	3.0	2.8	3.7	3.5	3.6	3.2	3.7	3.3
2000 Q1	3.9	3.8	4.1	3.4	2.9	4.9	3.7	3.7	3.6	3.5	3.1	4.8	3.6	3.6
Q2	2.6	2.0	4.4	3.8	3.5	4.9	2.4	2.0	3.8	3.3	2.8	4.9	3.2	2.9
Q3	3.2	2.7	4.7	3.6	3.1	5.1	3.0	2.7	4.0	3.3	2.8	4.9	3.4	3.2
Q4	1.8	1.5	2.7	..	1.4	..	..	1.3	..	..	1.1	..	..	..
2001 Q1	..	..	..	..	..	..	..	..	..	..	..	..	..	..

<sup>1</sup> Data used in the World and OECD aggregates refer to Germany after unification

# Regional Economic Indicators - August 2001

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## Overview

- London and the South East accounted for 31.7 per cent of the UK's total GDP in 1999. The West Midlands recorded the largest percentage increase in household disposable income per head into 1999.
- The claimant count rate is at its lowest level since July 1975 and either fell or remained the same across all regions.
- UK production output once again recorded negative growth, whilst UK construction output rose in 2001 quarter one. Wales' construction output continued to be weak in the first quarter of 2001, whereas Northern Ireland's output quickened in the first quarter.
- CBI/BSL balances in the April 2001 survey showed evidence of a fall in general business optimism across most regions.
- UK house price growth declined slightly in the first quarter of 2001, however, this was due to falls in only three regions, most notably a 5.0 per

## GDP at basic prices

Tables 1 to 4 concern National Accounts statistics for the regions, with data for household disposable income recently becoming available and presented in table 3.

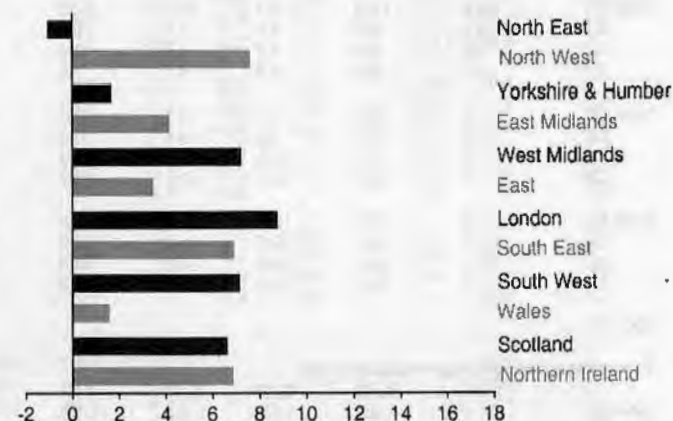
In Table 1, London and the South East accounted for 31.7 per cent of the UK's total GDP in 1999, with contributions of 15.9 per cent and 15.8 per cent respectively. The South East has increased its share from 14.8 per cent in 1989 to 15.8 per cent in 1999. Northern Ireland posted an 82.3 per cent increase in value terms from 1989 to 1999 from £9.0 billion in 1989 to £17.0 billion in 1999. However, it only accounted for 2.2 per cent of the UK's total GDP in 1999. Annual growth for the UK was 3.8 per cent in 1999, compared to 6.1 per cent in 1998. The South East had the highest annual growth rate at 5.1 per cent, whilst the North East had the lowest annual growth of 2.3 per cent. These regional GDP estimates are residence based, locating the income of commuters to where they live rather than to their place of work.

Table 2, shows that London remains the richest region on the basis of GDP per head but that it grew by 2.0 per cent in 1999, compared to 3.4 per cent nationally. This is also the lowest growth rate of all the regions in 1999. The highest rate recorded was in the South East at 4.1 per cent. GDP per head for all of the regions was above £10,000 for the first time. Yorkshire and the Humber, the West Midlands and the East also recorded figures above the UK average in 1999. The North East had the lowest regional GDP per head in 1999, followed by Northern Ireland and Wales.

Table 3, shows household disposable income per head increased in the UK in 1999 by 4.9 per cent, compared to an increase in of 2.1 per cent in 1998. London recorded the highest monetary rate in 1999 of £12,036 followed by the East with £11,255, which has overtaken the South East for the first time since 1992. Looking at annual percentage changes, the West

Chart 1

Individual consumption expenditure per head  
percentage change into 1999



Midlands recorded the largest rise of 6.8 per cent in 1999, while the North East was the slowest growing region, with growth of 3.1 per cent in 1999, compared to no growth in 1998. Other slow growing regions were, the East Midlands with 3.4 per cent and the South West and London, both with growth of 3.7 per cent in 1998. All regions recorded an increase in the rate of increases in 1999 compared to 1998. Significant increases in the rates of increase in 1999 compared to 1998 of more than 3.2 per cent was seen in the West Midlands, Yorkshire and the Humber, the South East, Wales and Northern Ireland.

Table 4, shows individual consumption expenditure per head, with London recording the highest monetary rate in 1999 of £12,250, followed by the South East with £11,392. Looking at annual percentage changes, London recorded the largest rise of 8.8 per cent in 1999, whilst the North East recorded a decline of 1.0 per cent in 1999, compared to an increase of 4.4 per cent in 1998. The average growth for the UK as a whole was 5.9 per cent in 1999, following an increase of 6.2 per cent in 1998 (chart 1).



## The Labour Market

Tables 5 to 11 concern the labour market. Tables 6, 8 and 9 are seasonally adjusted, tables 5, 7, 10 and 11 are not.

The **total in employment** (from the Labour Force Survey), table 9, is continuing to show a mixed picture across the regions in the first quarter of 2001. The UK rate maintained the same modest increase of 0.3 per cent in the latest quarter as in the previous quarter. The largest decline of 0.8 per cent was seen in Yorkshire and the Humber and this comes after three quarters of increases. Other regions to record negative quarterly growth are the East Midlands with a decline of 0.1 per cent compared to a fall of 0.4 per cent in the previous quarter; the East with a decline of 0.1 per cent compared to an increase of 2.0 per cent in the previous quarter and Wales which recorded a decline of 0.4 per cent compared to a decrease of 0.6 per cent in the previous quarter. There was positive growth of 2.0 per cent in Northern Ireland, 1.0 per cent in London and 0.8 per cent in both the North East and the West Midlands during the first quarter of 2001.

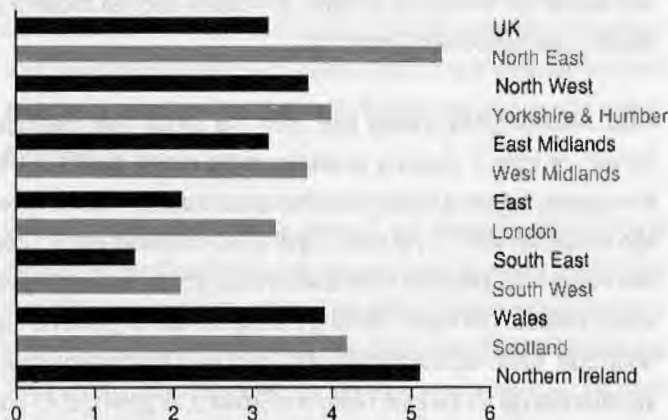
National year-on-year growth to 2001 quarter one rose to 1.3 per cent, up from 1.1 per cent in the previous quarter. All regions except the East Midlands showed positive growth over the year to 2001 quarter one. The East Midlands recorded a decline of 0.4 per cent in compared to a decrease of 0.3 per cent in the previous quarter. On the other hand, employment increased over the same period by 3.0 per cent in the East and by 2.7 per cent in Scotland, which has now recorded five successive quarters of increasing growth.

**Employee jobs** (from Employer Surveys), in table 11, decreased in all regions except the East in 2001 quarter one, however this is in line with the movements between the same quarters in the previous year. Looking at 2000 as a whole, annual growth in the UK slowed to 0.9 per cent in 2000, compared to growth of 1.4 per cent in 1999. Negative annual growth was seen in the North West, the East, London, the South East, the South West, Wales and Scotland. The North East improved its growth dramatically reversing the fall in growth in 1999 of 0.1 per cent to 10.4 per cent in 2000.

The downward trend in the UK **claimant count rate**, table 8, continued throughout the first two quarters of 2001 all be it by only 0.1 per cent over the 6 months. Most regions have seen a decline in their rates, though the maximum fall over the quarter was only 0.2 per cent, North East and Wales. Several regions, Yorkshire and Humber, the East, London and Northern Ireland saw no falls from March 2001 to June 2001. The provisional national rate now stands at 3.2 per cent in June 2001, the lowest level since August 1975. The South East's rate of 1.5 per cent is the lowest since the series began in March 1986. The North East's rate fell to

## Chart 2

Claimant count rate - June 2001  
percentages



5.4 per cent and was last seen at this rate when the series began in March 1986 (chart 2).

In Table 6, the rate of **ILO unemployment**, now seasonally adjusted and showing quarterly data, declined by 0.3 percentage points in the UK to stand at 4.9 per cent in 2001 quarter one, the lowest rate since the series began in 1992 quarter two. The national rate has been declining steadily since 1993 quarter one and during that period has fallen by 5.7 percentage points. Most regions recorded a decline in their unemployment rates apart from Northern Ireland, which increased by 0.1 percentage points to 6.2 per cent, the North West, which increased by 0.2 percentage points to 5.4 per cent, the East Midlands, the East and the South East which increased by 0.3 percentage points to 4.9 per cent, 3.7 per cent and 3.7 per cent respectively. On the other hand, the rate once again fell sharply in the North East, by 0.6 percentage points over the same period, to stand at 7.4 per cent, its lowest rate since the series began in 1992 quarter two, and in the West Midlands by 0.9 percentage points, to stand at 5.1 per cent, also its lowest rate since the series began in 1992 quarter two. Rates also fell by 0.3 percentage points or more in Yorkshire and the Humber, London, the South West and Scotland.

**Long-term claimant count rates as a percentage of the unemployed**, table 7 (now including monthly data), is showing all regions recording a slight increase in the latest data May to June 2001, except for London and Northern Ireland which recorded no change in the latest month of 2001. For the UK as a whole, the rate increased by 0.1 percentage points from the period May 2001 to June 2001 to stand at 20.6 per cent. If the data is looked at from the end of the last quarter of 2001, then all regions except London have increased slightly over this period. It is difficult to interpret the significance of these figures, as the data has only been available since January 1999. Also a decline in these rates can be attributable either to a reduction in the number of long-term unemployed or a rise in the number of short-term unemployed.

Table 10 shows **redundancy rates** in the government office regions, with a stable picture at the national level, but presenting a mixed picture with around half the regions showing an increase and half showing a decline in the latest data of Spring 2001.

**Total average gross weekly pay**, (from the annual New Earnings Survey), in table 5, shows a slowdown in the overall growth of UK average pay, but some regions recording an acceleration. The UK average annual rise was 3.0 per cent in April 2000, compared with 4.1 per cent in April 1999, indicating a slowdown in wage growth between the two survey periods. The region showing the highest rate of growth is the North East, which recorded growth of 4.6 per cent. Other regions growing more strongly are the East, Wales and Scotland, all growing at 4.1 per cent. The East Midlands, West Midlands, London and the South East all recorded below average growth rates of 2.7 per cent, 1.9 per cent and 2.6 per cent respectively. Surprisingly, London recorded the lowest rate of growth in April 2000 compared to April 1999 even though it had the highest monetary value of £529.80 of all of the regions in the April 2000 survey. Comparing growth rates of April 1999 and April 2000 shows a mixed picture. Significant declines over this period were seen in the West Midlands falling from 4.8 per cent to 2.7 per cent and in London, which saw the rate slow from 3.8 per cent to 1.9 per cent. On the other hand, the North East increased from 3.1 per cent to 4.6 per cent, the North West from 3.0 per cent to 3.5 per cent, the South West from 3.1 per cent to 3.9 per cent and Wales from 2.8 per cent to 4.1 per cent.

## Industrial Production and Construction

**UK industrial production** output, table 12, recorded a decline of 0.7 per cent in 2001 quarter one, a continuation of the previous quarter's decline of 0.7 per cent. The decline was mainly driven by falls in output of the 'electrical and optical' engineering sectors.

**UK construction output**, table 13, rose by 1.7 per cent in 2001 quarter one, the second successive quarter of positive growth, following the previous quarter's increase of 0.9 per cent. On an annual basis, output recorded a fall of 1.4 per cent in the first quarter of 2001, a deterioration from the previous quarter's decline of 0.6 per cent.

**Wales' industrial production**, table 12, followed a similar pattern to the UK as a whole between 1994 and 1998. More recently, the decline in output seen in 1998 has been reversed in 1999 and 2000, but the figure for the first quarter of 2001 points once more to a perhaps significant decline in output. The latest industrial production data shows sharply negative quarterly growth of 3.8 per cent in 2001 quarter one, compared with growth of 0.2 per cent in the previous quarter. Annual growth showed a decline of 6.5 per cent in the first quarter of 2001, in contrast with an increase of 0.2 per cent in the fourth quarter of 2000.

**Wales' construction output**, table 13, shows a sharp deterioration into the latest two quarters. The fourth quarter saw a decline of 7.7 per cent, and quarter one only recovered by 1.4 per cent. Comparing the first quarter with a year ago the figures showed a fall of 4.9 per cent, compared with the year-on-year decline of 9.0 per cent in the previous quarter. These sharp declines follow a prolonged period of weakness in the construction industry. Between 1995 and 2000 output has declined to stand at 13.7 per cent below 1995 levels, compared to growth of 8.6 per cent in the UK.

The latest production and construction data for Scotland is for the fourth quarter of 2001, whilst Northern Ireland data is available for the first quarter of 2001 for production and construction.

**Scotland's industrial production**, table 12, recorded negative growth of 0.6 per cent in the fourth quarter, following on from negative growth of 1.0 per cent in the previous quarter. Year-on-year growth recorded its second successive quarter of decline, this time of 1.0 per cent following on from the decline of 1.2 per cent recorded in the previous quarter. Annual growth for 2000 as a whole, slowed sharply to just 0.2 per cent, compared to 3.0 per cent in 1999.

**Scotland's construction output**, table 13, shows in the latest figures quarterly growth of 1.4 per cent in 2000 quarter four, compared to a rise of 0.9 per cent in the previous quarter. This is the second successive quarter of positive growth, after the substantial fall in growth of 6.5 per cent seen in the second quarter of 2000. Annual growth declined by 0.6 per cent in the fourth quarter of 2000, compared with growth of 2.0 per cent in 2000 quarter three. Annual growth for 2000 as a whole was 5.7 per cent, up from 3.4 per cent in 1999.

**Northern Ireland's industrial production**, table 12, recorded growth of 2.2 per cent in the first quarter of 2001, compared to growth of 0.1 per cent in the previous quarter. More generally, growth since 1996 quarter three has been strong. Annual growth has continued to be relatively robust and quickened to 7.5 per cent in the first quarter of 2001, compared with 7.1 per cent in the fourth quarter of 2000. Annual growth has been positive since 1996 quarter one. Annual growth for 2000 as a whole rose from 7.0 per cent in 1999 to 7.6 per cent, the highest rate increase since the series began in 1995.

**Northern Ireland's construction output**, table 13, growth in the first quarter of 2001 rose by 6.3 per cent, following successive falls in quarters three and four of 2000 of 5.2 per cent and 5.4 per cent respectively. Revisions to this data make analysis difficult, as the series is very erratic but this shows a marked improvement on the previous two quarters of negative growth. Annual growth improved to a rate of 5.6 per cent in

2001 quarter one, compared with 5.4 per cent in the previous quarter. This is the second consecutive quarter of growth below the plus 10 per cent increases seen in quarters one, two and three of 2000, suggesting growth may have pulled back from previous figures.

## Manufacturing

Almost all CBI data is presented on the basis of government office regions. However, London and the South East are combined in the same manner as the standard statistical region of the South East.

Tables 14 to 18 show that CBI/BSL balances provide mixed evidence as to the general state of business optimism across most regions in the April survey.

Table 14 shows that businesses in all regions except Wales were less **optimistic about the business situation** in April than in January, with all regions recording a negative balance for manufacturing business optimism in the latest survey. Balances in the North West, Yorkshire and the Humber, the East Midlands, the East, London and the South East and the South West decreased substantially. The recovery in balance was marginal in Wales and the balance remained negative (chart 3).

### Chart 3

Manufacturing industry business optimism  
Balance, April 2001



UK manufacturing output, as measured by CBI/BSL balances for **volume of output** in table 15, varied across regions in the April survey, with only the West Midlands and Northern Ireland showing increases. Regions to show a negative balance are the North East, the North West, Yorkshire and the Humber, the East Midlands and the East. A substantial increase was seen in Northern Ireland, whilst London and the South East, the South West and Scotland all reported falls, but remained positive.

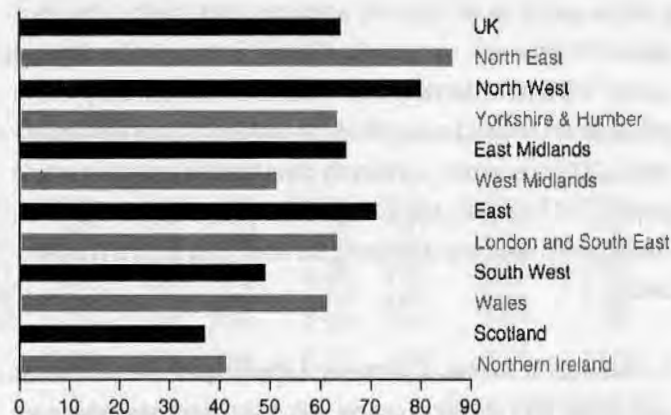
The overall CBI/BSL balance for **volume of new orders**, table 16, shows further deterioration in the April survey compared to the January survey. The North East, the North West, Yorkshire and the Humber, the East Midlands, the West Midlands, the East and Wales all recorded falls and have negative balances. London and the South East and Scotland were the only regions to improve their balances from quarter one to quarter two.

**Volume of new export orders**, table 17, also showed a deterioration in the April survey compared to the January survey for every region apart from Wales and Northern Ireland. The decline in balances was heaviest in the North East, the North West, the East Midlands, the East and the South West. Balances fell also in Yorkshire and the Humber, the West Midlands, London and the South East and Scotland. Export order balances were largely in line with those of new orders, apart from Wales and Northern Ireland where the balances for new export orders improved as the balances for new orders worsened and Scotland where the balance for new export orders worsened as the balance for new orders improved.

The percentages of **firms working below capacity**, table 18, shows a majority of regions recording increases in the number of firms working below capacity, with the UK as a whole seeing a fairly large deterioration. Significant improvements could be seen in Scotland and Northern Ireland, which recorded the lowest figure and largest decline respectively, with smaller improvements in Yorkshire and the Humber and the West Midlands. On the other hand, percentages worsened significantly in North East, the East Midlands, the North West, the South West and the East. Smaller increases were seen in London and the South East and Wales (chart 4).

### Chart 4

Firms working below capacity  
percentage, April 2001





## The Housing Market

In Table 20, UK **house prices** growth declined by 0.5 per cent in the first quarter of 2001, compared to growth of 3.0 per cent in the previous quarter. However the overall slowdown comes despite an increase in prices across most regions. All regions except the North East, the West Midlands and the South East recorded positive growth. The strongest quarterly growth of 11.6 per cent occurred in Merseyside, compared to growth of 11.2 per cent in the previous quarter. This is the highest rate of quarterly growth since the series began in 1993 quarter three. Another regions, which recorded strong growth, was Northern Ireland with 9.9 per cent, the highest rate of quarterly growth since 1994 quarter three. This was followed by growth of 4.8 per cent in Scotland, reversing the previous quarter's negative growth of 0.2 per cent and growth of 4.7 per cent in the North West, compared to a fall of 4.1 per cent in the previous quarter. Dominating the overall decrease were sharp falls in the South East, where negative growth of 5.0 per cent reversed the previous quarter's strong positive growth of 5.0 per cent and the North East, where negative growth of 2.8 per cent took prices back down to similar levels as in the third quarter of 2000. In sum, the situation is difficult to interpret, as quarter one has seen modest growth in some regions, whilst others are recording a slowdown in growth or even a fall.

IN the UK, year-on-year growth to 2001 quarter one decreased to 10.1 per cent, down from 13.5 per cent in the previous quarter. Annual growth was highest in Merseyside, at 37.1 per cent, an increase from 19.6 per cent in the previous quarter. This is the fourth consecutive quarter of positive annual growth. Annual growth above 14.0 per cent was also recorded in the East, at 14.9 per cent, an increase from 13.6 per cent in the previous quarter, the South West at 15.4 per cent, a decrease from 18.0 per cent seen in the previous quarter and in Northern Ireland of 22.3 per cent, continuing the strong growth of the previous quarter. The North West reversed the situation in the latest quarter to record annual growth of 7.0 per cent compared to negative growth of 0.2 per cent in the previous quarter as did Scotland, which recorded growth in the latest quarter of 4.8 per cent, compared to a fall of 0.5 per cent in the previous quarter. The East Midlands and the South East recorded sharp falls in annual growth to record growth of 6.6 per cent and 11.9 per cent respectively in 2001 quarter one, significantly down from the previous quarter's growth of 11.6 per cent and 20.8 per cent respectively. Slowdown in annual growth rates was observed in the North East and the West Midlands.

In Table 19, the number of **permanent dwellings started** fluctuates quite widely from quarter to quarter with a significant seasonal factor involved. The latest data for 2001 quarter one shows an improvement across the regions with all regions except Wales, where 2001 quarter two data is available, recording positive growth in the latest data. Data for

the UK is not available for 2001 quarter one. Data for 2000 quarter four is now available for Scotland. Scotland recorded negative quarterly growth of 21.5 per cent in 2000 quarter four. The West Midlands, the South East and Northern Ireland recorded the greatest growth in the latest data of 38.6 per cent, 40.9 per cent and 65.9 per cent respectively.

Year-on-year growth also shows a general improvement in the overall picture in the latest data. Yorkshire and the Humber recorded the highest rate of annual growth of 7.7 per cent, an increase from the previous quarter's negative annual growth of 12.4 per cent. The only other regions to record positive growth were London with 5.6 per cent and Northern Ireland with 4.8 per cent. The North West and the East recorded negative growth of 13.7 per cent and 14.8 per cent respectively. Scotland recorded negative annual growth of 2.5 per cent in 2000 quarter four, a decline from the previous quarter's growth of 14.4 per cent.

Revised annual rates for 2000 as a whole are now available for the all of the regions including Scotland. Significant positive growth was seen in London at 9.1 per cent in 2000, compared to an increase of just 0.4 per cent in 1999, in Scotland, where annual growth was 6.4 per cent in 2000 and in Northern Ireland, where growth was 4.2 per cent in 2000. Growth in Yorkshire and the Humber was negative, falling by 9.1 per cent in 2000 compared to an increase of 1.8 per cent in 1999. All of the remaining regions except the North East, the East, and Wales all recorded negative growth in 2000.

## Business Start-Ups

Echoing the more moderate economic growth in 1999, table 21, VAT ing de-registrations by 6,500 for the calendar year 1999, a decline from the net gain of 30,300 registered enterprises seen in 1998. The net gain of 6,500 enterprises during 1999 shows a rise in the total business stock for the fourth consecutive year, however, all regions net gains were less than those recorded in 1998. In 1999 registrations outnumbered de-registrations in every region of England, except Yorkshire and the Humber, where there was a net loss of 700 businesses, the East Midlands with a net loss of 200 businesses, and the North East with a net loss of 100 businesses. There were also net losses in Wales of 700 businesses, in Scotland of 500 businesses and in Northern Ireland of 100 businesses. The largest net gains were in London of 4,600 businesses and in the South East of 6,900 businesses. Most newly registered companies in London are small local businesses, so this high rate can not be fully explained by the concentration of head offices in London.

# 1 Gross domestic product<sup>1</sup> at basic prices

Government Office Regions

£ million and percentages

	Percentage of the UK <sup>2</sup>													
	United Kingdom <sup>2</sup> (£m)	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	TMOB	TMQC	TMQD	TMQE	TMQF	TMQG	TMQH	TMQI
1989	452 437	17 156	49 365	34 848	30 439	37 956	45 885	68 907	66 979	34 118	385 653	19 007	38 448	9 329
1993	562 857	21 480	60 664	42 952	37 124	46 859	55 928	86 574	93 817	42 529	477 927	23 191	49 302	12 437
1994	593 931	22 074	63 938	44 752	39 023	49 577	59 824	91 118	88 936	44 607	503 851	24 463	52 273	13 344
1995	622 389	22 975	66 007	47 108	40 976	52 407	62 416	93 843	93 319	47 385	526 437	25 989	55 667	14 297
1996	657 775	23 755	68 937	50 043	44 184	54 851	66 484	99 490	100 614	50 128	558 483	27 017	57 338	14 936
1997	700 567	24 202	72 414	53 182	47 261	57 783	72 698	108 559	108 276	53 580	597 956	28 010	58 650	15 952
1998	743 314	25 294	75 275	55 457	49 413	61 130	77 962	118 499	116 024	56 064	635 117	29 541	62 153	16 501
1999	771 849	25 875	77 562	57 554	50 906	63 495	81 793	122 816	121 956	58 151	660 108	30 689	64 050	17 003

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

2 UK less Extra-Region and statistical discrepancy.

Source: National Statistics

# 2 Gross domestic product<sup>1</sup> at basic prices: £ per head

Government Office Regions

£

	United Kingdom <sup>2</sup>	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	7 888	6 614	7 199	7 042	7 621	7 242	9 012	10 135	8 805	7 297	8 069	6 624	7 544	5 893
1993	9 671	8 216	8 783	8 563	9 102	8 855	10 772	12 494	10 834	8 927	9 852	7 978	9 614	7 610
1994	10 170	8 441	9 248	8 901	9 519	9 352	11 467	13 088	11 441	9 311	10 349	8 393	10 168	8 114
1995	10 619	8 796	9 547	9 354	9 944	9 869	11 889	13 406	11 918	9 828	10 771	8 900	10 818	8 654
1996	11 185	9 111	9 980	9 927	10 673	10 309	12 582	14 107	12 761	10 351	11 384	9 240	11 162	8 964
1997	11 871	9 301	10 494	10 541	11 371	10 845	13 657	15 266	13 634	11 008	12 141	9 562	11 429	9 507
1998	12 548	9 741	10 909	10 983	11 848	11 455	14 530	16 532	14 510	11 447	12 845	10 063	12 117	9 754
1999	12 972	10 024	11 273	11 404	12 146	11 900	15 094	16 859	15 098	11 782	13 278	10 449	12 512	10 050

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

2 UK less Extra-Region and statistical discrepancy.

Source: National Statistics

# 3 Household disposable income<sup>1</sup>: £ per head

Government Office Regions

£

	United Kingdom <sup>2</sup>	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	8 442	7 423	7 912	7 740	7 883	7 871	8 909	10 123	9 306	8 290	8 545	7 703	8 199	7 428
1996	8 867	7 819	8 341	8 272	8 390	8 113	9 292	10 635	9 824	8 698	8 991	8 010	8 579	7 621
1997	9 403	8 108	8 761	8 589	8 931	8 405	10 233	11 358	10 503	9 368	9 559	8 338	8 918	8 150
1998	9 803	8 104	8 932	8 794	9 040	8 612	10 640	11 607	10 663	9 474	9 755	8 583	9 172	8 247
1999	10 078	8 353	9 375	9 305	9 346	9 195	11 255	12 036	11 249	9 825	10 237	9 113	9 558	8 659

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

2 UK less Extra-Region

Source: National Statistics

# 4 Individual consumption expenditure<sup>1</sup>: £ per head

Government Office Regions

£

	United Kingdom <sup>2</sup>	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	TLZZ
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<sup>1</sup>

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	LRGO	LSHZ	DCQI	DCQH	DCQG	LRGO	DCPI	LRGR	DCQF	DCQL	DCQM	DCQN
1993 Apr	316.0	286.2	299.1	287.6	285.5	292.7	312.2	408.8	328.9	298.8	281.5	297.6	282.4
1994 Apr	324.7	294.6	307.7	297.0	292.6	300.1	322.9	420.6	339.4	306.9	290.5	301.9	286.5
1995 Apr	335.3	299.2	317.7	306.0	306.4	311.3	331.5	441.5	348.1	313.9	302.0	313.5	300.2
1996 Apr	350.2	314.1	329.6	316.4	317.9	324.3	345.7	454.3	367.4	326.5	313.1	324.9	306.2
1997 Apr	366.3	327.6	345.8	330.5	332.9	337.8	362.4	480.1	382.5	342.7	330.1	336.8	319.7
1998 Apr	383.1	339.2	361.6	344.9	350.4	358.8	378.6	500.9	405.5	354.0	343.9	350.3	332.6
1999 Apr	398.7	349.6	372.6	361.0	361.7	375.6	396.6	520.0	423.2	364.9	353.6	364.9	344.9
2000 Apr	410.6	365.8	385.7	373.7	371.4	385.9	412.7	529.8	434.2	379.1	368.1	379.8	360.4

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 ILO unemployment rates as a percentage of the economically active<sup>1</sup>, 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 <sup>2</sup>
	MGXK	YCNK	YCNW	YCNH	YCNF	YCNM	YCNH	YCNL	YCNJ	YCNK	YCNL	YCNM	YCNN	MGXW
1998 Q1	6.4	8.5	6.8	7.1	5.2	6.2	5.4	8.2	4.3	4.6	6.1	7.2	7.7	8.5
Q2	6.3	8.4	6.9	7.3	4.8	5.9	4.9	8.6	4.3	4.8	6.1	6.9	7.5	6.9
Q3	6.3	8.3	6.8	7.2	5.4	6.0	4.5	7.8	4.5	4.9	6.0	7.5	7.6	8.1
Q4	6.2	9.7	7.1	7.1	4.9	6.6	4.3	7.7	4.0	4.5	6.0	7.2	7.8	6.8
1999 Q1	6.2	9.7	6.7	6.8	5.1	7.0	4.2	7.8	3.9	4.9	6.0	7.2	7.5	7.2
Q2	6.0	9.6	6.3	6.3	5.3	6.9	4.2	7.4	3.9	4.5	5.8	7.5	7.2	7.6
Q3	5.9	9.7	6.3	6.1	5.6	6.3	4.0	7.5	3.8	4.4	5.7	7.3	7.0	7.3
Q4	5.9	8.4	6.0	6.1	5.6	6.8	4.2	7.1	4.1	4.2	5.6	7.4	7.2	6.6
2000 Q1	5.8	9.0	6.1	6.3	5.2	6.1	4.0	7.6	3.5	4.3	5.5	6.8	7.5	6.6
Q2	5.5	8.9	5.4	6.1	4.9	6.1	3.6	7.2	3.3	4.2	5.2	6.1	7.2	6.7
Q3	5.4	9.0	5.4	6.1	4.8	5.8	3.7	7.0	3.1	4.0	5.1	6.5	6.9	5.8
Q4	5.2	8.0	5.2	5.6	4.6	6.0	3.4	6.9	3.4	3.9	5.0	6.2	6.0	6.1
2001 Q1	4.9	7.4	5.4	5.1	4.9	5.1	3.7	6.1	3.7	3.6	4.7	6.1	5.7	6.2

1 Periods are calendar quarters.

Source: Labour Force Survey, National Statistics

2 Estimates for Northern Ireland are not seasonally adjusted. The quarterly series starting in 1995 provides insufficient data to do this reliably.

## 7 Long-term claimant count as a percentage of the unemployed<sup>1</sup> (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
2000 May	22.9	23.1	20.5	21.0	20.2	25.7	21.0	28.3	20.5	18.2	20.7	20.7	32.8
Jun	23.1	23.4	20.8	21.1	20.6	25.7	21.3	28.3	20.8	18.6	20.7	21.0	32.4
Jul	22.3	22.9	20.2	20.5	20.0	24.8	20.7	27.8	20.0	18.0	19.6	19.9	29.9
Aug	21.8	22.9	19.9	20.1	19.5	24.0	20.2	27.2	19.4	17.6	19.1	19.7	29.4
Sep	22.2	23.1	20.4	20.3	20.0	24.3	20.3	26.9	19.5	17.8	19.5	20.9	30.3
Oct	22.2	23.0	20.6	20.4	20.1	24.5	20.2	26.7	19.3	17.5	19.6	21.0	30.8
Nov	21.8	22.2	20.2	20.0	19.8	24.1	19.6	26.4	18.9	16.8	19.2	20.6	30.8
Dec	21.1	22.1	19.4	19.2	18.9	23.5	18.8	26.0	18.1	16.1	18.6	20.0	30.8
2001 Jan	19.8	20.9	18.1	17.9	17.4	22.2	17.3	25.4	16.9	14.7	17.3	18.3	30.2
Feb	19.6	21.0	18.0	17.6	17.1	21.8	16.6	25.0	16.7	14.5	17.2	18.1	30.6
Mar	19.7	21.3	18.1	17.8	17.3	21.7	16.6	24.7	16.8	14.8	17.5	18.3	31.3
Apr	19.9	21.5	18.2	17.8	17.6	21.8	17.0	24.5	16.8	15.0	18.2	18.7	31.7
May	20.3	22.0	18.7	18.3	18.0	22.2	17.2	24.3	17.1	15.5	18.8	19.0	32.2
Jun	20.6	22.4	19.2	18.7	18.4	22.7	17.6	24.3	17.3	15.9	19.7	18.9	32.2

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
1997	5.3	8.1	5.9	6.1	4.7	5.3	4.0	6.2	3.3	4.2	6.2	6.2	8.1
1998	4.5	7.2	5.1	5.4	4.0	4.6	3.2	5.0	2.6	3.4	5.4	5.5	7.3
1999	4.2	7.0	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	3.5	4.0	2.5	3.8	1.9	2.5	4.4	4.6	5.3
2000 Jun	3.6	6.4	4.2	4.4	3.5	4.0	2.5	3.8	1.9	2.5	4.4	4.7	5.3
Jul	3.6	6.2	4.1	4.3	3.4	4.0	2.4	3.7	1.8	2.5	4.4	4.5	5.2
Aug	3.5	6.1	4.0	4.3	3.4	4.0	2.4	3.6	1.8	2.4	4.3	4.5	5.2
Sep	3.5	6.0	4.0	4.2	3.4	3.9	2.3	3.6	1.7	2.4	4.3	4.5	5.2
Oct	3.5	6.1	4.0	4.2	3.4	4.0	2.3	3.6	1.7	2.3	4.3	4.5	5.2
Nov	3.4	6.0	3.9	4.2	3.4	4.0	2.3	3.5	1.7	2.3	4.3	4.5	5.3
Dec	3.4	6.0	3.9	4.2	3.4	4.0	2.3	3.5	1.7	2.3	4.3	4.4	5.3
2001 Jan	3.3	5.8	3.8	4.1	3.3	3.9	2.2	3.4	1.6	2.2	4.2	4.4	5.2
Feb	3.3	5.7	3.8	4.1	3.3	3.9	2.2	3.4	1.6	2.1	4.2	4.3	5.1
Mar	3.3	5.6	3.8	4.0	3.3	3.8	2.1	3.3	1.6	2.2	4.1	4.3	5.1
Apr	3.2	5.5	3.8	4.0	3.2	3.8	2.1	3.3	1.6	2.2	4.0	4.2	5.1
May	3.2	5.5	3.8	4.0	3.2	3.8	2.1	3.3	1.6	2.2	4.0	4.2	5.1
Jun <sup>1</sup>	3.2	5.4	3.7	4.0	3.2	3.7	2.1	3.3	1.5	2.1	3.9	4.2	5.1

1 Provisional.

Source: National Statistics

## 9 Total in employment<sup>1,2</sup>, 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 <sup>3</sup>
	MGRZ	YCJP	YCJQ	YCJR	YCJS	YCJT	YCUJ	YCJV	YCWJ	YCJX	YCJY	YCJZ	YCKA	YCPT
1998 Q1	27 188	1 079	2 996	2 255	1 984	2 461	2 611	3 279	3 964	2 334	22 962	1 215	2 321	687
Q2	27 230	1 073	2 983	2 255	2 004	2 471	2 621	3 283	3 989	2 333	23 011	1 211	2 313	691
Q3	27 352	1 068	3 027	2 265	1 991	2 485	2 637	3 331	4 009	2 343	23 155	1 221	2 292	685
Q4	27 448	1 060	3 025	2 281	1 989	2 461	2 638	3 376	4 042	2 339	23 211	1 235	2 308	700
1999 Q1	27 540	1 058	3 023	2 287	2 009	2 454	2 652	3 391	4 049	2 372	23 295	1 238	2 309	694
Q2	27 592	1 062	3 064	2 291	1 998	2 461	2 656	3 394	4 046	2 374	23 346	1 231	2 318	693
Q3	27 696	1 077	3 077	2 311	2 006	2 475	2 664	3 389	4 053	2 360	23 411	1 244	2 335	705
Q4	27 769	1 089	3 093	2 320	2 019	2 459	2 661	3 406	4 057	2 390	23 494	1 244	2 333	702
2000 Q1	27 824	1 087	3 106	2 312	2 018	2 471	2 673	3 383	4 107	2 394	23 550	1 242	2 336	695
Q2	27 930	1 105	3 137	2 344	2 036	2 459	2 684	3 378	4 116	2 381	23 641	1 252	2 353	680
Q3	27 999	1 100	3 096	2 348	2 020	2 458	2 702	3 399	4 112	2 425	23 660	1 262	2 378	701
Q4	28 088	1 099	3 125	2 353	2 012	2 461	2 757	3 420	4 117	2 401	23 745	1 255	2 388	699
2001 Q1	28 180	1 108	3 136	2 335	2 009	2 481	2 753	3 454	4 134	2 410	23 819	1 250	2 398	713

1 Includes employees, the self-employed, participants on Government-supported employment and training schemes and unpaid family-workers.

2 Periods are calendar quarters.

3 Estimates for Northern Ireland are not seasonally adjusted. The quarterly series starting in 1995 provides insufficient data to do this reliably.

Source: Labour Force Survey, National Statistics

## 10 Redundancies, not seasonally adjusted<sup>1</sup>

Government Office Regions

Rates<sup>2</sup>

	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
Summer 1997	7	3	8	6	7	8	9	6	6	6	3	8	3
Autumn 1997	6	3	7	7	6	5	6	6	5	6	3	8	3
Winter 1997	7	11	8	6	8	7	6	7	5	8	3	11	3
Spring 1998	7	3	6	7	10	8	7	7	7	7	3	10	3
Summer 1998	7	3	7	8	9	9	5	5	7	6	3	8	3
Autumn 1998	7	10	7	7	8	9	9	6	9	8	3	6	3
Winter 1998	9	16	9	6	8	9	6	10	8	9	11	11	3
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	8	6	6	6	7	8	3	6	3
Winter 1999	8	11	7	7	11	10	5	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	6	8	6	6	6	6	3	7	3
Winter 2000	7	3	9	6	7	9	5	6	6	8	3	6	3
Spring 2001	7	3	8	5	8	8	6	7	5	7	3	10	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.

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	YECB	YEKJ	YEKC	YEKD	YEKI	YEKE	YEKF	YEGG	YEKH	YEKK	YEKL	YEMM
1998	103.7	101.5	102.3	103.8	103.0	102.3	105.5	106.3	104.8	104.6	102.1	101.3	103.9
1999	105.1	101.4	105.1	103.9	103.3	102.0	106.2	109.4	107.6	104.9	104.7	102.7	106.0
2000	106.0	111.9	102.6	109.9	105.7	105.8	106.0	102.6	101.5	103.6	105.4	102.5	106.9
1999 Sep	105.7	101.4	105.7	104.2	103.0	101.8	105.9	110.0	108.7	106.1	106.4	103.7	106.5
Dec	106.3	103.1	106.3	104.1	102.6	103.1	106.2	112.2	110.0	105.9	105.6	102.1	108.1
2000 Mar	105.3	101.9	105.0	103.0	101.4	101.8	106.1	111.0	109.1	105.3	104.4	102.1	107.4
Jun	105.9	102.5	105.6	103.1	101.7	102.7	104.8	111.5	109.6	106.4	105.3	102.4	107.7
Sep	106.3	102.9	106.2	103.8	101.5	102.8	105.8	112.4	110.0	106.1	106.2	102.6	108.0
Dec	107.0	104.0	106.5	104.6	101.9	103.5	106.3	113.3	111.2	106.4	106.8	102.8	109.5
2001 Mar	105.9	102.5	105.1	103.8	101.0	102.7	107.0	112.4	109.7	105.8	105.7	101.5	108.8

Source: National Statistics

# 12 Index of industrial production<sup>1</sup>

Seasonally adjusted 1995 = 100

	United Kingdom	Scotland	Northern Ireland	Wales
	CKYW	LRFK	LRFL	TMQX
1997	102.1	108.9	107.5	101.6
1998	102.9	111.5	110.5	100.0
1999	103.4	114.9	118.2	100.9
2000	105.0	115.1	127.2	102.7
1998 Q1	102.3	111.6	108.9	101.7
Q2	103.4	110.8	111.0	100.2
Q3	103.3	110.9	111.1	99.5
Q4	102.6	112.9	110.9	98.8
1999 Q1	102.0	113.4	113.9	99.8
Q2	102.7	114.3	116.4	100.2
Q3	104.5	116.3	121.0	102.1
Q4	104.5	115.4	121.7	101.4
2000 Q1	103.8	115.0	123.9	104.5
Q2	105.2	116.1	124.2	103.2
Q3	105.9	114.9	130.2	101.4
Q4	105.2	114.2	130.3	101.6
2001 Q1	104.5	..	133.2	97.7

<sup>1</sup> The index of industrial production has been rebased from 1990=100 to 1995=100. Figures on the 1990=100 base are not being continued

Sources: National Statistics;  
Scottish Executive;

Department of Enterprise, Trade & Investment Northern Ireland;

# 13 Index of construction<sup>1</sup>

Seasonally adjusted 1995 = 100

	United Kingdom	Scotland	Northern Ireland <sup>2</sup>	Wales
	GDQB	LRZR	LRFM	TMQY
1997	104.7	101.1	..	99.6
1998	106.1	98.3	..	98.1
1999	106.9	101.6	..	93.0
2000	108.6	107.4	..	86.3
1998 Q1	109.0	95.7	107.8	101.4
Q2	105.3	97.1	109.7	95.0
Q3	105.0	100.8	109.4	92.3
Q4	105.1	99.5	108.1	103.7
1999 Q1	105.5	93.9	97.7	97.2
Q2	106.1	101.3	106.2	94.0
Q3	107.8	103.5	103.1	92.0
Q4	108.4	107.8	103.1	88.8
2000 Q1	111.2	112.0	109.4	86.1
Q2	108.8	104.7	121.2	90.7
Q3	106.8	105.6	114.9	87.5
Q4	107.8	107.1	108.7	80.8
2001 Q1	109.6	..	115.5	81.9

<sup>1</sup> The Index of construction has been rebased from 1990=100 to 1995=100. Figures on the 1990=100 base are not being continued

<sup>2</sup> 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<sup>1</sup>

	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	LYRT	DCMU	DCMT	DCMS	LRYS	DCMP	DCMR	DCMX	DCMY	DCMZ
2000 Jul	-10	-2	-19	-9	-7	-26	-2	-9	-20	4	-3	1
Oct	-9	-32	-39	-11	-2	-8	-2	-24	-4	8	-6	31
2001 Jan	-3	-27	-10	9	1	-25	-11	-12	35	-20	-1	8
Apr	-29	-28	-35	-30	-39	-35	-44	-47	-53	-16	-3	-10

<sup>1</sup> 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<sup>1</sup>

	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
<b>Past 4 months</b>	DCLQ	LRVY	LRVW	DCLW	DCLV	DCLU	LRVX	DCLR	DCLT	DCLZ	DCMA	DCMB
2000 Jul	-8	-14	-20	-8	1	-14	-8	-10	-19	-8	12	-6
Oct	-3	-34	-15	-16	25	-12	3	-2	4	13	-5	10
2001 Jan	5	-9	-15	-1	14	2	6	3	30	19	9	16
Apr	-1	-34	-29	-13	-34	3	-9	1	19	8	7	52
<b>Next 4 months</b>	DCMC	LRYY	LRYZ	DCMI	DCMH	DCME	LRZA	DCMD	DCMF	DCML	DCMM	DCMN
2001 Apr	-2	-13	-12	-16	9	12	-16	-13	-3	-9	-8	30

<sup>1</sup> 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<sup>1</sup>

	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
<b>Past 4 months</b>	DCNA	LRZB	LRZC	DCNG	DCNF	DCNE	LRZD	DCNB	DCND	DCNJ	DCNK	DCNL
2000 Jul	-8	-2	-2	-4	3	-18	-7	-14	-2	-6	5	-14
Oct	-9	-37	-20	-4	21	-19	-9	-12	-3	1	-8	-4
2001 Jan	4	-11	-10	2	27	-1	5	1	18	-	6	9
Apr	-1	-49	-33	-4	-12	-8	-8	13	13	-4	9	4
<b>Next 4 months</b>	DCNM	LRZE	LRZF	DCNS	DCNR	DCNQ	LRZG	DCNN	DCNP	DCNV	DCNW	DCNX
2001 Apr	-4	-19	-9	-22	4	10	3	8	-15	-1	-1	-12

<sup>1</sup> 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<sup>1</sup>

	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
<b>Past 4 months</b>	DCNY	LRZH	LRZI	DCOE	DCOD	DCOC	LRZJ	DCNZ	DCOB	DCOH	DCOI	DCOJ
2000 Jul	-18	-12	-14	-6	-14	13	-7	-8	-13	11	-8	-35
Oct	-11	-12	-15	-32	2	-10	-15	10	11	-6	-2	-11
2001 Jan	-1	-1	-13	2	29	6	1	11	40	-19	13	-15
Apr	-15	-25	-31	-7	2	-2	-22	2	12	3	11	-4
<b>Next 4 months</b>	DCOK	LRZK	LRZL	DCOQ	DCOP	DCOO	LRZM	DCOL	DCON	DCOT	DCOU	DCOV
2001 Apr	-8	-17	-13	-14	17	-7	-	-	-10	-5	4	-13

<sup>1</sup> 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
2000 Jul	56	66	64	64	50	56	51	52	61	58	50	62
Oct	59	51	59	74	47	63	53	54	65	55	47	68
2001 Jan	57	52	64	67	47	59	58	58	34	58	47	57
Apr	64	86	80	63	65	51	71	63	49	61	37	41



# 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 <sup>1</sup>	Northern Ireland
	DEOI	LRDP	LRZQ	DCRX	DCRW	DCRV	LRDR	DCRR	LRDS	DCRU	BLIA	BLFA	BLGA
1999	189 041	7 030	18 804	15 184	15 953	15 593	18 586	13 508	25 268	16 782	9 311	22 685	10 868
2000	..	7 088	18 691	13 805	15 163	15 575	18 802	14 731	23 344	16 744	9 352	24 148	11 326
1998 Q2	49 708	1 917	5 407	3 613	4 090	4 163	5 454	3 478	6 944	4 907	2 241	4 463	3 031
Q3	48 027	1 837	4 439	3 901	4 266	4 083	5 136	3 216	6 588	4 542	2 220	5 246	2 553
Q4	38 662	1 418	4 357	3 067	3 471	2 884	3 868	3 479	4 943	3 363	1 692	4 248	1 872
1999 Q1	49 389	1 874	4 336	3 676	3 799	4 149	4 724	4 196	6 422	3 968	2 255	6 798	3 192
Q2	49 701	1 792	5 037	4 104	4 303	4 191	5 108	3 494	6 920	4 571	2 722	4 760	2 699
Q3	47 492	1 891	5 007	3 986	3 817	3 851	4 653	2 867	6 565	4 534	2 376	5 791	2 352
Q4 <sup>2</sup>	42 459	1 473	4 424	3 418	4 034	3 402	4 101	2 951	5 361	3 709	1 958	5 336	2 625
2000 Q1 <sup>2</sup>	51 873	2 071	5 546	3 571	4 161	4 566	5 350	3 240	6 316	4 688	2 205	6 758	3 592
Q2	50 837	1 786	4 806	3 661	4 025	4 470	5 148	4 340	6 778	4 595	2 749	5 567	2 803
Q3	48 044	1 712	4 560	3 580	3 890	3 657	4 926	3 963	6 028	4 259	2 781	6 623	2 490
Q4	..	1 519	3 779	2 993	3 087	2 882	3 378	3 188	4 222	3 202	1 617	5 200	2 269
2001 Q1	..	1 926	4 788	3 847	3 762	3 995	4 558	3 421	5 950	4 080	2 206	..	3 764
Q2	..	..	..	..	..	..	..	..	..	..	2 041	..	..

1 Includes estimates for outstanding returns for private sector.

2 Quarters 4 of 1999 and 1 of 2000 for the English regions are provisional.

Sources: Department of the Environment, Transport and the Regions; National Assembly for Wales; Scottish Executive; Department for Social Development, Northern Ireland

# 20 House prices<sup>1</sup>

Government Office Regions

1993 = 100

	United Kingdom	North East	North West <sup>2</sup>	Mersey-side	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
	LRBH	LRDX	LRDY	LRBN	LRBJ	LRBK	LRBP	LRDZ	LRBM	LRBA	LRBO	LRBR	LRBS	LRBT
1999	144.6	121.7	124.4	113.1	117.4	127.7	130.6	147.1	177.7	157.5	145.2	124.1	120.4	170.0
2000	165.3	126.9	132.6	122.1	123.2	141.7	147.5	172.8	209.7	188.1	169.1	130.9	124.0	188.6
1998 Q1	122.1	113.1	110.5	116.2	109.0	120.1	117.4	125.6	130.0	130.6	123.9	113.0	111.6	144.1
Q2	128.6	116.0	113.3	104.7	108.1	122.5	121.0	135.9	143.4	141.2	127.5	114.5	115.7	153.0
Q3	134.2	116.3	120.9	108.6	110.9	123.8	121.9	141.0	153.0	146.5	134.1	114.9	121.4	155.6
Q4	133.6	108.0	117.7	111.7	113.1	124.3	123.5	139.7	152.9	145.9	134.2	117.6	116.7	161.1
1999 Q1	134.4	117.1	118.5	114.5	112.4	120.5	122.8	139.8	155.5	148.6	135.9	118.7	112.4	167.7
Q2	140.1	119.6	120.9	110.3	114.8	128.0	124.5	143.1	170.1	151.0	139.5	126.9	118.4	163.8
Q3	148.3	129.5	127.1	115.3	120.0	130.0	135.0	144.7	185.5	160.1	151.3	125.5	124.8	171.1
Q4	152.1	119.4	129.5	112.7	120.0	129.7	136.3	159.7	192.6	167.3	150.6	125.5	124.8	170.7
2000 Q1	156.0	116.5	126.5	109.8	119.9	137.3	137.5	163.7	200.7	171.6	157.7	128.6	124.2	181.5
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

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: Department of the Environment, Transport and the Regions

# 21 VAT registrations and deregistrations<sup>1</sup>: net change<sup>2</sup>

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	LRBE	LRZS	DCYT	DCYU	DCYY	LRDZ	DEON	LRZE	DCYX	DCZA	DCZB	DCZC
1996	11.2	-0.2	0.3	-0.2	-0.3	-	1.1	7.4	2.3	0.1	-0.4	0.3	0.8
1997	18.1	-0.2	1.0	-0.4	0.5	-0.3	2.5	8.9	4.3	0.9	-0.1	0.7	0.2
1998	30.3	0.2	2.5	0.5	1.2	1.7	2.7	11.3	6.9	1.7	-0.1	0.9	0.9
1999	6.5	-0.1	0.9	-0.7	-0.2	0.2	0.6	4.6	2.4	0.1	-0.7	-0.5	-0.1

1 Registrations and deregistrations of VAT-based enterprises. Not wholly comparable with figures for earlier years which counted VAT reporting units.

2 Registrations less deregistrations.

Source: Department of Trade and Industry

# Final Expenditure Prices Index (Experimental) – June 2001

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*Note that further development work is ongoing and the FEPI will be available only as an experimental index until this work has been completed.*

## Summary

The rate of inflation for the FEPI increased from 2.1 per cent in May to 2.4 per cent in June, the highest recorded figure since January 1997. The largest upward effect came from government expenditure which contributed about half of the month-on-month increase in FEPI inflation, with consumer and investment expenditure each contributing about a quarter.

## The FEPI annual percentage change

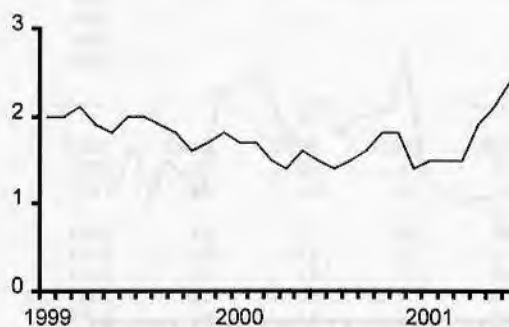


Table A

Final Expenditure Prices Index and components (January 1992=100 and annual percentage change)

		ICP		IIP		IGP		INP		FEPI	
		Index	% change	Index	% change	Index	% change	Index	% change	Index	% change
2001	Jan	123.7	1.1	118.9	1.8	124.2	2.1	130.4	2.9	122.9	1.5
	Feb	124.2	1.1	119.1	2.0	124.2	2.1	130.5	2.9	123.2	1.5
	Mar	124.6	1.1	119.1	1.5	124.2	2.1	130.7	3.1	123.5	1.5
	Apr	125.6	1.5	119.9	2.2	125.7	2.4	132.4	3.6	124.5	1.9
	May	126.6	2.0	120.1	1.7	126.0	2.4	132.6	3.6	125.2	2.1
	Jun	126.9	2.2	120.6	2.0	127.1	3.2	133.1	3.7	125.7	2.4

## The Index of Consumer Prices (ICP)

Consumer price inflation, as measured by the ICP, increased from 2.0 per cent in May to 2.2 per cent in June.

The largest upward effect came from purchase and operation of vehicles where the annual rate of inflation increased from zero in May to 1.0 per cent in June. Upward effects were recorded for both purchase and repair and maintenance of motor vehicles.

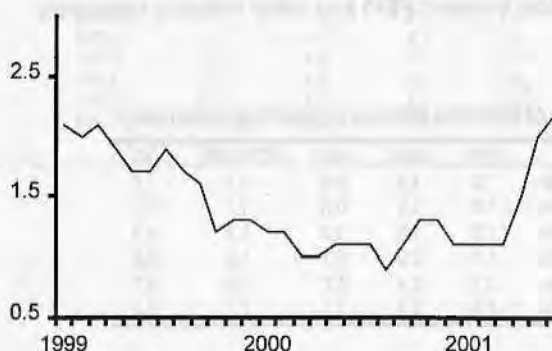
Further large upward effects came from:

- Clothing and footwear, where the annual rate of inflation was less negative in June, at minus 4.9 per cent, than in May at minus 5.5 per cent, mainly due to prices for men's outerwear falling by less than last year.

Downward pressure came from:

- Fuels and lubricants for vehicles, where the annual rate of inflation was more negative in June, at minus 5.4 per cent, than in the previous month at minus 1.6 per cent. Petrol prices increased by less than this time last year.

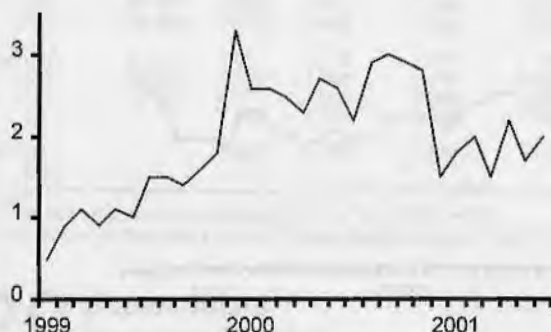
## The ICP annual percentage change



## The Index of Investment Prices (IIP)

Investment price inflation, as measured by the IIP, increased from 1.4 per cent in May to 1.8 per cent in June. This increase in investment price inflation was largely driven by house prices. The annual rate of inflation for dwellings increased from 6.8 per cent in May to 8.6 per cent in June.

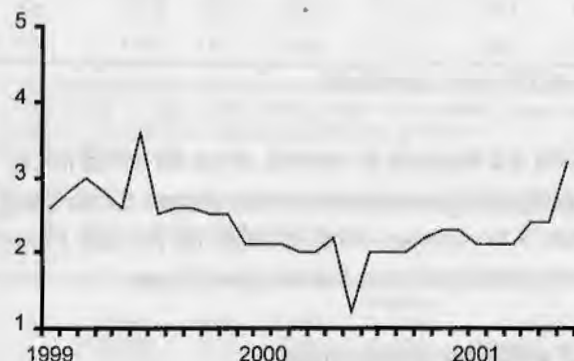
### The IIP annual percentage change



## The Index of Government Prices - IGP

The rate of inflation for the IGP increased substantially from 2.4 per cent in May to 3.2 per cent in June. This was caused by the annual pay settlement for local government employees being paid in June with back pay for April and May. The FEPI currently records local government pay on a cash basis (ie, when it is paid) rather than on an accrued basis (ie, when it is due).

### The IGP annual percentage change



## Comparison between FEPI and other inflation measures

Table B

### Measures of Inflation (annual percentage changes)

		FEPI	RPIX	HICP	ICP(FEPI)	PPI
2001	Jan	1.5	1.8	0.9	1.1	1.8
	Feb	1.5	1.9	0.8	1.1	1.4
	Mar	1.5	1.9	1.0	1.1	1.0
	Apr	1.9	2.0	1.1	1.5	0.6
	May	2.1	2.4	1.7	2.0	0.7
	Jun	2.4	2.4	1.7	2.2	0.4

## NOTES

1. The headline measure of inflation is the Retail Prices Index (RPI). The RPI should be used as the main indicator of inflation affecting average households.

2. The Final Expenditure Prices Index (FEPI) is a measure of the change in the prices paid by UK households, businesses, government and non-profit institutions for final purchases of goods and services. Intermediate purchases by businesses are excluded. The FEPI is made up of four components:

- The Index of Consumer Prices (ICP)
- The Index of Investment Prices (IIP)
- The Index of Government Prices (IGP)
- The Index of Non-Profit Institutions Prices (INP).

3. The ICP measures inflation affecting all consumers in the UK. The price indicators used in the ICP are taken mainly from the Retail Prices Index (RPI).

4. The IIP is a measure of the change in the prices paid for capital goods by businesses and by government. It also covers new construction projects and dwellings built for consumers, businesses and government. The price indicators used are mainly Producer Price Indices (PPIs), implied import deflators, construction output price indices and average house price indicators.

5. The IGP measures inflation affecting government. It covers expenditure by central and local government on pay and on procurement. The price indicators used are mainly Average Earnings Indices (to reflect labour costs), PPIs and RPIs (to reflect the cost of goods consumed by government).

6. The INP measures inflation affecting non-profit institutions serving households (NPISHs); mainly universities, higher and further education colleges and charities. The price indicators used are mainly a higher education pay and prices index and an appropriate component of the Average Earnings Index.

7. The IGP(P) is a variant version of the IGP which incorporates government output prices for a number of areas of government expenditure (which comprise around 65% of general government final consumption expenditure) and therefore reflects movements in productivity. The most significant expenditure items covered by government output prices are health, education, local authority personal social services and social security administration. The IGP(P) feeds into a variant version of the FEPI, the FEPI(P), which differs from the FEPI solely because of the inclusion of government output prices. The IGP(P) and FEPI(P) are only available as annual indices.

8. An article providing further details about the FEPI appears on the National Statistics website:  
<http://www.statistics.gov.uk/themes/economy/Articles/PricesAndInflation/FEPI.asp>.

9. FEPI data are available in computer readable form from the National Statistics website:  
[http://www.statistics.gov.uk/press\\_release/experimental.asp](http://www.statistics.gov.uk/press_release/experimental.asp)



## Final Expenditure Prices Index (FEPI)

## Summary Table

Experimental price indices

	Index of Consumer Prices ICP	Index of Investment Prices IIP	Index of Government Prices IGP	Index of NPISH Prices INP <sup>1</sup>	Final Expenditure Prices Index FEPI	Annual percentage changes				
						ICP	IIP	IGP	INP	FEPI
January 1992=100										
Weights										
1998	601	178	198	23	1000					
1999	607	180	190	24	1000					
2000	605	186	185	24	1000					
2001	602	188	185	24	1000					
	VASH	CUSK	CUSO	ZIUS	CUSP	MKVB	CGBF	CGBJ	ZIUT	CGBK
1997 May	117.6	112.8	114.5	117.0	115.9	2.3	0.5	1.1	1.6	1.8
Jun	117.9	113.0	114.5	117.1	116.1	2.4	0.8	1.1	1.6	1.8
Jul	117.5	113.4	115.9	119.2	116.2	2.6	1.3	2.2	2.8	2.3
Aug	118.1	113.6	115.5	119.9	116.6	2.6	1.2	1.7	3.1	2.2
Sep	118.6	113.7	115.8	120.0	116.9	2.4	1.6	1.7	3.0	2.1
Oct	118.7	113.4	115.4	119.3	116.9	2.5	0.9	1.7	3.1	2.1
Nov	118.8	113.5	115.4	119.0	116.9	2.5	1.4	1.6	2.9	2.1
Dec	118.9	113.2	116.1	119.5	117.1	2.3	0.8	1.6	3.0	1.9
1998 Jan	118.4	113.2	116.2	119.6	116.8	2.1	0.8	1.6	3.0	1.7
Feb	119.0	112.8	116.0	119.7	117.1	2.3	0.2	1.6	2.8	1.8
Mar	119.5	113.2	115.7	119.6	117.4	2.4	0.5	1.6	2.7	1.9
Apr	120.2	113.7	117.0	120.5	118.2	2.6	0.7	2.2	3.1	2.2
May	120.8	113.7	117.3	120.9	118.6	2.7	0.8	2.4	3.3	2.3
Jun	120.7	114.1	117.4	121.2	118.6	2.4	1.0	2.5	3.5	2.2
Jul	120.0	114.0	117.8	122.1	118.3	2.1	0.5	1.6	2.4	1.8
Aug	120.5	113.9	117.9	122.6	118.6	2.0	0.3	2.1	2.3	1.7
Sep	121.1	114.0	118.1	122.7	119.0	2.1	0.3	2.0	2.2	1.8
Oct	121.2	113.9	117.9	122.4	119.0	2.1	0.4	2.2	2.6	1.8
Nov	121.3	113.9	118.1	122.3	119.1	2.1	0.4	2.3	2.8	1.9
Dec	121.6	113.4	118.8	122.9	119.4	2.3	0.2	2.3	2.8	2.0
1999 Jan	120.9	113.8	119.2	123.5	119.1	2.1	0.5	2.6	3.3	2.0
Feb	121.4	113.8	119.2	123.5	119.4	2.0	0.9	2.8	3.2	2.0
Mar	122.0	114.4	119.2	123.5	119.9	2.1	1.1	3.0	3.3	2.1
Apr	122.5	114.7	120.3	124.4	120.5	1.9	0.9	2.8	3.2	1.9
May	122.8	115.0	120.4	124.8	120.7	1.7	1.1	2.6	3.2	1.8
Jun	122.8	115.2	121.6	125.5	121.0	1.7	1.0	3.6	3.5	2.0
Jul	122.3	115.7	120.8	126.1	120.7	1.9	1.5	2.5	3.3	2.0
Aug	122.5	115.6	121.0	126.7	120.8	1.7	1.5	2.6	3.3	1.9
Sep	123.0	115.6	121.2	126.7	121.2	1.6	1.4	2.6	3.3	1.8
Oct	122.7	115.7	120.9	126.4	120.9	1.2	1.6	2.5	3.3	1.6
Nov	122.9	115.9	121.1	126.5	121.1	1.3	1.8	2.5	3.4	1.7
Dec	123.2	117.1	121.3	126.7	121.6	1.3	3.3	2.1	3.1	1.8
2000 Jan	122.4	116.8	121.7	126.7	121.1	1.2	2.6	2.1	2.6	1.7
Feb	122.9	116.8	121.7	126.8	121.4	1.2	2.6	2.1	2.7	1.7
Mar	123.2	117.3	121.6	126.8	121.7	1.0	2.5	2.0	2.7	1.5
Apr	123.7	117.3	122.7	127.8	122.2	1.0	2.3	2.0	2.7	1.4
May	124.1	118.1	123.0	128.0	122.6	1.1	2.7	2.2	2.6	1.6
Jun	124.2	118.2	123.1	128.4	122.8	1.1	2.6	1.2	2.3	1.5
Jul	123.6	118.2	123.2	129.3	122.4	1.1	2.2	2.0	2.5	1.4
Aug	123.6	118.9	123.4	129.7	122.6	0.9	2.9	2.0	2.4	1.5
Sep	124.3	119.1	123.6	129.8	123.1	1.1	3.0	2.0	2.4	1.6
Oct	124.3	119.1	123.6	129.6	123.1	1.3	2.9	2.2	2.5	1.8
Nov	124.5	119.2	123.9	129.7	123.3	1.3	2.8	2.3	2.5	1.8
Dec	124.5	118.8	124.1	130.0	123.3	1.1	1.5	2.3	2.6	1.4
2001 Jan	123.7	118.9	124.2	130.4	122.9 <sup>†</sup>	1.1	1.8	2.1	2.9	1.5 <sup>†</sup>
Feb	124.2	119.1 <sup>†</sup>	124.2	130.5	123.2	1.1	2.0 <sup>†</sup>	2.1	2.9	1.5
Mar	124.6	119.1	124.2	130.7	123.5	1.1	1.5	2.1	3.1	1.5
Apr	125.6	119.9	125.7 <sup>†</sup>	132.4	124.5	1.5	2.2	2.4	3.6	1.9
May	126.6	120.1	126.0	132.6 <sup>†</sup>	125.2	2.0	1.7	2.4	3.6 <sup>†</sup>	2.1
Jun	126.9	120.6	127.1	133.1	125.7	2.2	2.0	3.2	3.7	2.4

<sup>†</sup> indicates earliest revision.<sup>1</sup> NPISH = Non-profit institutions serving households.

# Final Expenditure Prices Index (FEPI) Index of Consumer Prices (ICP) Experimental price indices

	Food and Non- alcoholic Beverages	Alcoholic Beverages	Tobacco	Clothing and Footwear	Actual Rentals for Housing	Housing Goods and Services <sup>1</sup>	Electricity, Gas and Other Household Fuels	Furnishings, Household Equipment, etc.	Health	Purchase and Operation of Vehicles <sup>2</sup>	Fuels and Lubricants for Vehicles
January 1992=100											
COICOP Division	01	02	02	03	04	04	04	05	06	07	07
Weights											
1998	124	19	29	69	46	28	38	64	17	80	30
1999	118	19	28	68	46	29	34	64	17	85	30
2000	115	19	28	66	47	30	30	64	17	85	30
2001	112	20	28	66	47	30	28	64	17	82	30
	VARP	VARQ	VARR	VARS	VART	VARU	VARV	VARW	VARX	VARY	VARZ
1999 Jun	113.2	116.1	181.2	103.1	145.5	136.9	97.1	112.9	150.2	117.0	164.8
Jul	112.3	115.3	184.2	98.2	145.7	137.1	97.4	110.7	153.1	116.3	167.1
Aug	111.8	115.7	184.6	99.6	146.0	137.3	97.5	112.0	153.4	115.6	171.7
Sep	111.8	115.5	184.7	103.5	146.3	137.1	97.8	113.0	153.7	115.2	171.5
Oct	111.7	115.7	184.6	102.6	146.5	137.1	97.9	112.0	154.7	114.6	173.0
Nov	112.2	114.7	184.7	102.8	146.6	137.6	98.2	113.5	155.0	113.8	172.3
Dec	112.4	113.6	184.7	102.0	146.9	137.9	98.9	115.5	155.2	113.0	176.7
2000 Jan	112.3	115.8	184.8	95.2	147.2	138.8	98.7	109.9	156.2	114.1	176.3
Feb	112.2	115.7	186.7	98.4	147.2	139.0	98.8	110.9	156.5	114.2	176.2
Mar	111.5	115.8	186.8	99.8	147.2	138.9	98.8	112.1	156.6	114.7	182.7
Apr	111.1	115.3	198.4	100.8	149.8	134.6	97.6	112.0	157.9	115.0	186.6
May	112.2	115.4	198.6	100.7	149.9	134.7	96.9	112.4	158.2	115.5	185.7
Jun	112.4	115.5	198.9	100.0	150.2	134.7	96.4	111.9	158.4	114.9	194.9
Jul	113.4	115.1	199.0	93.0	150.7	135.0	96.4	109.8	159.9	114.1	196.5
Aug	112.5	114.9	200.2	94.6	150.9	135.5	96.4	110.5	160.2	113.5	188.1
Sep	112.7	115.4	201.5	98.0	151.2	135.7	97.2	112.2	160.4	113.2	191.7
Oct	112.9	115.2	201.6	98.0	151.6	136.0	97.6	111.0	161.7	112.8	186.8
Nov	113.5	114.9	201.6	98.5	151.8	136.2	97.4	112.4	161.8	112.3	191.6
Dec	113.7	113.6	201.6	97.8	152.0	136.7	97.2	114.2	162.3	112.0	188.3
2001 Jan	113.9	115.7	201.6	91.7	152.2	136.9	96.8	109.8	164.1	113.6	180.4
Feb	114.0	116.0	203.6	94.4	152.2	137.5	96.9	111.3	164.2	113.8	181.1
Mar	115.3	116.0	206.4	96.0	152.3	137.3	96.8	112.9	165.6	114.3	175.8
Apr	115.8	116.2	207.2	95.1	155.5	140.3	98.2	112.4	167.8	114.8	177.5
May	118.8	115.9	207.3	95.2	155.8	140.5	98.4	113.2	168.6	115.5	182.7
Jun	119.4	116.5	207.3	95.1	155.9	140.9	98.5	113.0	168.1	116.0	184.3

## Annual Percentage Changes

	Food and Non- alcoholic Beverages	Alcoholic Beverages	Tobacco	Clothing and Footwear	Actual Rentals for Housing	Housing Goods and Services <sup>1</sup>	Electricity, Gas and Other Household Fuels	Furnishings, Household Equipment, etc.	Health	Purchase and Operation of Vehicles <sup>2</sup>	Fuels and Lubricants for Vehicles
	VASK	VASL	VASM	VASN	VASO	VASP	MKUP	MKUQ	MKUR	MKUS	MKUT
1999 Jun	1.0	1.8	11.3	-2.8	3.1	2.9	-0.4	0.6	5.8	-0.7	6.5
Jul	0.4	0.7	13.0	-1.6	3.1	2.9	0.2	-0.1	7.1	-0.9	7.5
Aug	-1.1	1.0	13.2	-2.3	3.1	2.9	0.4	0.4	7.3	-1.4	10.4
Sep	-0.8	0.6	13.2	-2.9	3.0	2.6	0.6	0.5	7.5	-1.9	10.9
Oct	-1.1	0.6	13.0	-2.7	2.9	2.4	0.4	0.4	6.0	-1.9	12.2
Nov	-0.4	1.0	13.0	-3.2	2.8	2.5	0.8	0.3	6.2	-2.0	12.5
Dec	-1.1	0.4	9.8	-3.4	2.8	2.8	1.7	-0.3	6.3	-1.9	17.1
2000 Jan	-1.7	0.6	7.4	-3.4	3.1	3.2	1.5	-0.4	6.8	-2.3	17.9
Feb	-1.9	0.2	8.5	-2.4	3.2	3.5	1.6	-1.0	6.8	-2.2	18.3
Mar	-1.9	0.5	4.9	-2.6	3.1	3.3	1.4	-1.6	6.8	-1.9	16.1
Apr	-1.7	0.3	9.8	-1.8	3.0	-1.3	0.3	-0.3	5.5	-2.0	12.7
May	-1.3	0.1	9.9	-2.4	3.0	-1.2	-0.2	-1.1	5.5	-1.4	12.3
Jun	-0.7	-0.5	9.8	-3.0	3.2	-1.6	-0.7	-0.9	5.5	-1.8	18.3
Jul	1.0	-0.2	8.0	-5.3	3.4	-1.5	-1.0	-0.8	4.4	-1.9	17.6
Aug	0.6	-0.7	8.5	-5.0	3.4	-1.3	-1.1	-1.3	4.4	-1.8	9.6
Sep	0.8	-0.1	9.1	-5.3	3.3	-1.0	-0.6	-0.7	4.4	-1.7	11.8
Oct	1.1	-0.4	9.2	-4.5	3.5	-0.8	-0.3	-0.9	4.5	-1.6	8.0
Nov	1.2	0.2	9.1	-4.2	3.5	-1.0	-0.8	-1.0	4.4	-1.3	11.2
Dec	1.2	-	9.1	-4.1	3.5	-0.9	-1.7	-1.1	4.6	-0.9	6.6
2001 Jan	1.4	-0.1	9.1	-3.7	3.4	-1.4	-1.9	-0.1	5.1	-0.4	2.3
Feb	1.6	0.3	9.1	-4.1	3.4	-1.1	-1.9	0.4	4.9	-0.4	2.8
Mar	3.4	0.2	10.5	-3.8	3.5	-1.2	-2.0	0.7	5.7	-0.3	-3.8
Apr	4.2	0.8	4.4	-5.7	3.8	4.2	0.6	0.4	6.3	-0.2	-4.9
May	5.9	0.4	4.4	-5.5	3.9	4.3	1.5	0.7	6.6	-	-1.6
Jun	6.2	0.9	4.2	-4.9	3.8	4.6	2.2	1.0	6.1	1.0	-5.4

† indicates earliest revision.

# Final Expenditure Prices Index (FEPI) Index of Consumer Prices (ICP)

Experimental price indices

	Transport Services	Communication	Major Durables for Recreation and Culture	Other Recreation and Culture	Education	Restaurants and Hotels	Miscellaneous Goods and Services	Index of Consumer Prices ICP	Of which: goods	Of which: services
January 1992=100										
COICOP Division	07	08	09	09	10	11	12			
Weights										
1998	38	22	29	99	15	126	129	1000	556	444
1999	39	22	31	100	16	126	128	1000	554	446
2000	41	22	34	100	16	126	130	1000	548	452
2001	42	23	35	101	15	129	131	1000	544	456
	VASA	VASB	VASC	VASD	VASE	VASF	VASG	VASH	VASI	VASJ
1999 Jun	129.8	85.2	84.1	121.0	139.0	134.6	133.3	122.8	115.3	133.0
Jul	130.1	84.8	82.9	120.5	139.0	134.7	134.7	122.3	114.1	133.5
Aug	130.2	85.0	81.8	120.4	139.0	135.0	134.7	122.5	114.4	133.6
Sep	130.0	84.5	81.2	120.4	145.0	135.2	135.0	123.0	114.8	134.1
Oct	129.5	83.2	80.7	120.7	146.5	135.5	133.8	122.7	114.5	133.9
Nov	129.6	83.3	80.3	120.8	146.5	135.6	134.3	122.9	114.5	134.3
Dec	129.7	83.8	80.3	120.8	146.5	135.7	134.8	123.2	114.8	134.5
2000 Jan	130.3	83.6	79.6	120.5	146.5	136.2	135.1	122.4	113.2	135.0
Feb	130.4	83.2	79.4	120.9	146.5	136.5	135.3	122.9	113.8	135.2
Mar	130.4	83.1	78.6	121.1	146.5	136.9	135.7	123.2	114.2	135.5
Apr	132.7	82.5	78.6	121.6	146.5	137.7	135.5	123.7	114.7	136.1
May	133.1	82.1	78.5	122.0	146.5	138.6	136.0	124.1	114.9	136.6
Jun	133.5	81.9	77.2	122.0	146.5	139.0	136.3	124.2	114.9	137.0
Jul	134.5	82.8	76.2	121.7	146.5	139.6	136.0	123.6	113.6	137.3
Aug	135.1	81.2	76.5	121.7	146.5	140.3	136.3	123.6	113.4	137.6
Sep	134.7	80.6	76.0	122.3	150.5	140.7	136.9	124.3	114.3	138.0
Oct	135.4	80.3	75.6	122.4	153.9	141.0	136.9	124.3	114.0	138.4
Nov	135.3	80.4	75.2	121.8	153.9	141.3	137.3	124.5	114.4	138.5
Dec	135.4	79.4	74.4	121.9	153.9	141.5	137.3	124.5	114.3	138.5
2001 Jan	137.0	77.1	73.2	121.6	153.9	141.7	137.9	123.7	112.6	139.0
Feb	133.4	76.2	73.8	122.1	153.9	142.0	138.5	124.2	113.5	138.9
Mar	134.3	75.0	73.8	122.2	153.9	142.6	138.5	124.6	114.2	139.1
Apr	144.1	74.7	73.3	122.9	153.9	143.6	139.8	125.6	114.3	141.3
May	147.2	75.0	73.8	123.2	153.9	144.2	140.6	126.6	115.4	142.1
Jun	147.4	74.9	73.5	123.4	153.9	144.7	141.0	126.9	115.6	142.5

## Annual Percentage Changes

	Transport Services	Communication	Major Durables for Recreation and Culture	Other Recreation and Culture	Education	Restaurants and Hotels	Miscellaneous Goods and Services	Index of Consumer Prices ICP	Of which: goods	Of which: services
	MKUU	MKUV	MKUW	MKUX	MKUY	MKUZ	MKVA	MKVB	MKVC	MKVD
1999 Jun	2.9	-3.0	-7.9	1.8	5.7	4.2	3.1	1.7	0.4	3.4
Jul	2.8	-3.1	-8.6	1.6	5.7	3.7	4.3	1.9	0.4	3.6
Aug	2.8	-1.8	-9.2	1.3	5.7	3.4	4.2	1.7	0.2	3.6
Sep	2.8	-2.3	-9.1	1.0	5.4	3.2	4.4	1.6	-	3.6
Oct	3.0	-3.8	-8.9	1.0	5.4	3.2	2.5	1.2	-0.1	3.0
Nov	3.0	-3.6	-9.3	1.0	5.4	3.0	2.4	1.3	-0.2	3.1
Dec	3.1	-3.0	-9.0	0.9	5.4	2.8	2.5	1.3	-0.3	3.1
2000 Jan	2.8	-3.2	-8.5	0.8	5.4	2.9	3.1	1.2	-0.4	3.3
Feb	2.4	-3.7	-8.0	0.9	5.4	2.9	3.0	1.2	-0.4	3.3
Mar	2.4	-3.8	-8.4	0.7	5.4	3.0	3.0	1.0	-0.8	3.3
Apr	3.1	-4.2	-7.7	0.6	5.4	3.1	2.0	1.0	-0.4	2.8
May	3.0	-4.0	-7.6	0.7	5.4	3.4	2.3	1.1	-0.6	2.9
Jun	2.9	-3.9	-8.2	0.8	5.4	3.3	2.3	1.1	-0.3	3.0
Jul	3.4	-2.4	-8.1	1.0	5.4	3.6	1.0	1.1	-0.4	2.8
Aug	3.8	-4.5	-6.5	1.1	5.4	3.9	1.2	0.9	-0.9	3.0
Sep	3.6	-4.6	-6.4	1.6	3.8	4.1	1.4	1.1	-0.4	2.9
Oct	4.6	-3.5	-6.3	1.4	5.1	4.1	2.3	1.3	-0.4	3.4
Nov	4.4	-3.5	-6.4	0.8	5.1	4.2	2.2	1.3	-0.1	3.1
Dec	4.4	-5.3	-7.3	0.9	5.1	4.3	1.9	1.1	-0.4	3.0
2001 Jan	5.1	-7.8	-8.0	0.9	5.1	4.0	2.1	1.1	-0.5	3.0
Feb	2.3	-8.4	-7.1	1.0	5.1	4.0	2.4	1.1	-0.3	2.7
Mar	3.0	-9.7	-6.1	0.9	5.1	4.2	2.1	1.1	-	2.7
Apr	8.6	-9.5	-6.7	1.1	5.1	4.3	3.2	1.5	-0.3	3.8
May	10.6	-8.6	-6.0	1.0	5.1	4.0	3.4	2.0	0.4	4.0
Jun	10.4	-8.5	-4.8	1.1	5.1	4.1	3.4	2.2	0.6	4.0

† indicates earliest revision.



# 3 Final Expenditure Prices Index (FEPI) Index of Investment Prices (IIP) Experimental price indices

	Equipment				Construction				Index of Investment Prices IIP
	Transport Equipment	Other Machinery and Equipment	Intangible Fixed Assets <sup>1</sup>	Total Equipment	Dwellings	Other Buildings and Structures	Transfer Costs of Land and Buildings	Total Construction	
January 1992=100									
Weights									
1998	97	392	33	521	181	263	35	479	1000
1999	98	389	32	519	178	260	42	481	1000
2000	99	382	32	513	179	267	41	487	1000
2001	109	376	28	514	174	263	49	486	1000
1999 Jun	CUSH	CUSG	MJYL	ZIWS	CUSJ	CUSF	CUSI	ZIWT	CUSK
	120.7	95.9	125.4	102.1	127.6	125.5	189.3	130.6	115.2
Jul	120.4	95.4	125.8	101.7	131.0	125.9	191.1	132.3	115.7
Aug	121.1	94.4	125.2	101.0	132.0	126.3	192.4	132.9	115.6
Sep	120.9	93.9	124.9	100.5	133.4	126.5	193.7	133.7	115.6
Oct	121.0	93.2	124.9	100.0	134.0	126.7	199.0	134.4	115.7
Nov	122.5	93.8	124.5	100.7	133.1	127.0	196.5	134.0	115.9
Dec	123.1	94.0	124.5	101.0	138.6	127.1	201.4	136.5	117.1
2000 Jan	121.7	93.6	125.9	100.5	137.3	127.3	205.4	136.4	116.8
Feb	121.8	93.8	126.1	100.7	137.0	127.5	203.2	136.3	116.8
Mar	121.7	93.1	125.8	100.1	140.7	127.9	209.1	138.1	117.3
Apr	119.9	92.4	126.4	99.3	142.4	128.3	215.9	139.4	117.3
May	120.7	93.1	127.4	100.0	143.7	128.7	217.1	140.2	118.1
Jun	121.5	92.8	127.3	99.9	143.8	129.1	218.5	140.5	118.2
Jul	122.2	92.6	127.1	99.9	143.4	129.6	218.6	140.7	118.2
Aug	121.3	93.1	126.8	100.1	145.9	130.0	222.1	142.1	118.9
Sep	122.1	93.3	127.1	100.4	145.4	130.3	224.3	142.2	119.1
Oct	121.6	92.8	126.9	99.9	146.7	130.6	225.0	142.9	119.1
Nov	119.9	92.5	127.7	99.4	147.8	131.4	226.4	143.8	119.2
Dec	120.6 <sup>†</sup>	92.0	128.0	99.2 <sup>†</sup>	146.4	131.6	223.7	143.2	118.8
2001 Jan	120.3	91.7	127.7	98.9	147.2	131.9	227.0	143.9	118.9
Feb	121.2	91.7 <sup>†</sup>	129.0 <sup>†</sup>	99.0	146.8	132.2 <sup>†</sup>	228.4	144.0	119.1 <sup>†</sup>
Mar	120.9	91.1	129.1	98.6	148.1	132.4	230.5	144.7	119.1
Apr	121.1	90.8	130.7	98.4	152.3	132.6	238.5	146.8 <sup>†</sup>	119.9
May	120.2	90.9	131.4	98.4	153.4 <sup>†</sup>	132.9	240.9 <sup>†</sup>	147.5	120.1
Jun	120.5	90.8	131.3	98.3	156.2	133.0	245.8	148.9	120.6

## Annual Percentage Changes

	Equipment				Construction				Index of Investment Prices IIP
	Transport Equipment	Other Machinery and Equipment	Intangible Fixed Assets <sup>1</sup>	Total Equipment	Dwellings	Other Buildings and Structures	Transfer Costs of Land and Buildings	Total Construction	
	CGBC	CGBB	MJYM	ZIWU	CGBE	CGBA	CGBD	ZIUV	
1999 Jun	3.1	-4.9	2.2	-2.9	6.5	3.1	12.2	5.2	1.0
Jul	2.4	-4.6	2.5	-2.9	9.3	2.9	11.9	6.1	1.5
Aug	2.5	-4.8	2.4	-3.0	9.7	2.9	12.8	6.2	1.5
Sep	2.3	-4.5	1.5	-2.8	9.5	2.7	12.6	6.1	1.4
Oct	1.9	-4.8	1.6	-3.2	10.5	2.7	14.9	6.7	1.6
Nov	2.5	-4.0	0.9	-2.4	10.0	2.7	13.8	6.3	1.8
Dec	2.6	-3.3	0.5	-1.9	16.6	2.6	17.9	9.0	3.3
2000 Jan	1.6	-4.0	1.2	-2.6	14.3	2.6	18.0	8.3	2.6
Feb	1.1	-3.7	0.9	-2.5	14.6	2.6	16.2	8.3	2.6
Mar	1.1	-4.0	0.9	-2.7	14.6	2.6	16.4	8.2	2.5
Apr	-0.5	-4.5	1.1	-3.4	14.6	2.8	17.2	8.4	2.3
May	0.1	-3.2	1.8	-2.2	13.7	2.9	15.9	8.0	2.7
Jun	0.7	-3.2	1.5	-2.2	12.7	2.9	15.4	7.6	2.6
Jul	1.5	-2.9	1.0	-1.8	9.5	2.9	14.4	6.3	2.2
Aug	0.2	-1.4	1.3	-0.9	10.5	2.9	15.4	6.9	2.9
Sep	1.0	-0.6	1.8	-0.1	9.0	3.0	15.8	6.4	3.0
Oct	0.5	-0.4	1.6	-0.1	9.5	3.1	13.1	6.3	2.9
Nov	-2.1	-1.4	2.6	-1.3	11.0	3.5	15.2	7.3	2.8
Dec	-2.0 <sup>†</sup>	-2.1	2.8	-1.8 <sup>†</sup>	5.6	3.5	11.1	4.9	1.5
2001 Jan	-1.2	-2.0	1.4	-1.6	7.2	3.6	10.5	5.5	1.8
Feb	-0.5	-2.2 <sup>†</sup>	2.3 <sup>†</sup>	-1.7	7.2	3.7 <sup>†</sup>	12.4	5.6	2.0 <sup>†</sup>
Mar	-0.7	-2.1	2.6	-1.5	5.3	3.5	10.2	4.8	1.5
Apr	1.0	-1.7	3.4	-0.9	7.0	3.4	10.5	5.3 <sup>†</sup>	2.2
May	-0.4	-2.4	3.1	-1.6	6.8 <sup>†</sup>	3.3	11.0 <sup>†</sup>	5.2	1.7
Jun	-0.8	-2.2	3.1	-1.6	8.6	3.0	12.5	6.0	2.0

<sup>†</sup> indicates earliest revision.

<sup>1</sup> This covers mineral exploration, computer software and entertainment, literary and artistic originals.

# 4 Final Expenditure Prices Index - FEPI

## Index of Government Prices - IGP

Experimental price indices

	Annual percentage changes					
	Local Government Pay & Procurement	Central Government Pay & Procurement	Index of Government Prices	Local Government Pay & Procurement	Central Government Pay & Procurement	Index of Government Prices
January 1992=100						
Weights						
1998	383	617	1000			
1999	382	618	1000			
2000	382	618	1000			
2001	393	607	1000			
	CUSL	CUSM	CUSO	CGBG	CGBH	CGBJ
1999 Jun	126.1	118.8	121.6	4.5	3.0	3.6
Jul	124.6	118.5	120.8	3.1	2.2	2.5
Aug	124.7	118.7	121.0	3.1	2.3	2.6
Sep	125.3	118.7	121.2	3.2	2.2	2.6
Oct	125.2	118.2	120.9	3.3	2.1	2.5
Nov	125.4	118.4	121.1	3.3	2.0	2.5
Dec	125.5	118.8	121.3	2.6	1.9	2.1
2000 Jan	125.6	119.4	121.7	2.7	1.8	2.1
Feb	125.6	119.3	121.7	2.8	1.7	2.1
Mar	125.5	119.2	121.6	2.6	1.6	2.0
Apr	127.7	119.7	122.7	3.0	1.4	2.0
May	127.8	120.0	123.0	3.1	1.5	2.2
Jun	127.9	120.1	123.1	1.4	1.1	1.2
Jul	127.9	120.2	123.2	2.6	1.4	2.0
Aug	128.0	120.5	123.4	2.6	1.5	2.0
Sep	128.5	120.6	123.6	2.6	1.6	2.0
Oct	128.5	120.6	123.6	2.6	2.0	2.2
Nov	128.8	120.9	123.9	2.7	2.1	2.3
Dec	128.8	121.2	124.1	2.6	2.0	2.3
2001 Jan	128.8	121.4	124.2	2.5	1.7	2.1
Feb	128.9	121.4	124.2	2.6	1.8	2.1
Mar	128.8	121.3	124.2	2.6	1.8	2.1
Apr	130.6	122.7 <sup>†</sup>	125.7 <sup>†</sup>	2.3	2.5 <sup>†</sup>	2.4
May	130.7 <sup>†</sup>	123.1	126.0	2.3	2.6	2.4
Jun	133.3	123.2	127.1	4.2	2.6	3.2

<sup>†</sup> indicates earliest revision.

## 5 Final Expenditure Prices Index - FEPI(P) Incorporating implied government output prices

Experimental price indices

	Index of Consumer Prices ICP	Index of Investment Prices IIP	Index of Government Prices IGP(P)	Index of NPISH Prices INP <sup>1</sup>	Final Expenditure Prices Index FEPI(P)	Annual percentage changes				
						ICP	IIP	IGP(P)	INP	FEPI(P)
January 1992=100										
Weights										
1998	601	178	198	23	1000					
1999	607	180	190	24	1000					
2000	605	186	185	24	1000					
2001	602	188	185	24	1000					
	VASH	CUSK	LGTZ	ZIUS	LGUA	MKVB	CGBF	GXVN	ZIUT	GXVO
1992	102.1	98.8	101.0	102.0	101.2	..	..	..	..	..
1993	105.5	99.8	103.8	106.3	104.0	3.3	1.0	2.8	4.2	2.8
1994	108.2	103.0	106.1	109.4	106.7	2.6	3.2	2.2	2.9	2.6
1995	111.6	108.5	107.9	112.4	110.1	3.1	5.3	1.7	2.7	3.2
1996	114.8	111.8	110.4	115.3	113.2	2.9	3.0	2.3	2.6	2.8
1997	117.7	113.1	111.2	118.1	115.3	2.5	1.2	0.7	2.4	1.9
1998	120.4	113.7	113.5	121.4	117.6	2.3	0.5	2.1	2.8	2.0
1999	122.4	115.2	118.2	125.4	120.1	1.7	1.3	4.1	3.3	2.1
2000	123.8	118.2	122.1	128.6	122.3	1.1	2.6	3.3	2.6	1.8

† Indicates earliest revision.

1 NPISH = Non-profit institutions serving households.

## 6 Final Expenditure Prices Index - FEPI(P) Index of Government Prices incorporating implied output prices - IGP(P)

Experimental price indices

	Local Government Pay & Procurement	Central Government Pay & Procurement	Index of Government Prices	Annual percentage changes		
				Local Government Pay & Procurement	Central Government Pay & Procurement	Index of Government Prices
January 1992=100						
Weights						
1998	383	617	1000			
1999	382	618	1000			
2000	382	618	1000			
2001	393	607	1000			
	LGTU	LGTX	LGTZ	GXVL	GXVM	GXVN
1992	100.1	101.6	101.0	..	..	..
1993	101.1	105.5	103.8	1.0	3.8	2.8
1994	103.7	107.7	106.1	2.6	2.1	2.2
1995	106.2	109.0	107.9	2.4	1.2	1.7
1996	108.4	111.7	110.4	2.1	2.5	2.3
1997	110.0	112.0	111.2	1.5	0.3	0.7
1998	112.2	114.5	113.5	2.0	2.2	2.1
1999	116.0	119.6	118.2	3.4	4.5	4.1
2000	120.5	123.1	122.1	3.9	2.9	3.3

† Indicates earliest revision.



# Research and Experimental Development (R&D) Statistics 1999

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## Research and Experimental Development (R&D) Statistics 1999

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## Summary of trends

- Measuring expenditure and employment of R&D is difficult because of the subjective judgements that have to be made about the dividing line between R&D and other activities. There are discontinuities in the series arising from the interpretation of definitions, and because of changes in the actual or perceived status of organisations,<sup>1</sup> (Chapter 1 details this). Some general conclusions can be drawn, but significance should not be given to small percentage changes between years.
- In 1999 Gross Domestic Expenditure on R&D (GERD) was 1.84 per cent of GDP, very similar to 1998 (Table 2). In terms of international comparisons in 1999 the UK was just below the EU average of 1.85 per cent.<sup>5</sup>
- Within the UK, net expenditure in real terms on R&D by government peaked in 1980/81. Since then there has been a gradual downward trend (Table 4). The overall level of net government expenditure on defence R&D has fallen from 44 per cent in 1991 to 38 per cent in 1999 (Table 6).
- Expenditure in real terms performed by the business sector has increased by 8 per cent on the total in 1998 (Table 7).
- Within the manufacturing sector, the chemicals broad product group has the largest share of total R&D expenditure at 29 per cent. The services sector accounts for 22 per cent of total R&D expenditure (Table 8).
- Within the regions, spending is highest in the South East for both the business & government sectors (Table 14).

## Background

This article is the latest in an annual series, the previous issue was published in the August 2000 edition of *Economic Trends*. Most of the figures have already been published by the Office for National Statistics<sup>2,4</sup>, the Department of Trade and Industry (Office of Science and Technology)<sup>1</sup> or the OECD.<sup>5</sup> The purpose of this report is to bring together a range of data produced & published by ONS in a single annual article and our aim is to continue to inform and stimulate debate within the R&D community.

The R&D statistics published here are consistent with OECD's Frascati Manual<sup>3</sup> which defines Research and Experimental Development (R&D) and gives guidelines on how to measure

expenditure and employment on R&D. The manual is applied throughout the OECD so it is possible to make comparisons between countries.<sup>5,6</sup>

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

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

## Sources of information

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

The ONS conducts an annual survey of Central Government R&D, which is addressed to all Government departments. The survey collects data on expenditure and employment for outturn and planning years. The latest detailed results will be published in OST's *Science, Engineering and Technology Statistics 2001* (SET 2001).<sup>1</sup> This document will be available on OST's web site at <http://www.dti.gov.uk/ost/>.

The ONS also conducts an annual survey of R&D in businesses. As in previous years the 1999 survey used a sample survey to minimise burdens on contributors. The register of R&D performers is continually updated and results and detailed methodology notes can be found in the 1999 Business Monitor.<sup>2</sup>

Statistics on expenditure and employment on R&D in Higher Education Institutions (HEIs) are based on information collected by Higher Education Funding Councils and HESA (Higher Education Statistics Agency). In 1994 a new methodology was introduced to estimate expenditure on R&D in HEIs. This was based on the allocation of various Funding Council Grants. Full details of the new methodology will be contained in SET 2001.<sup>1</sup>

## The Tables

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

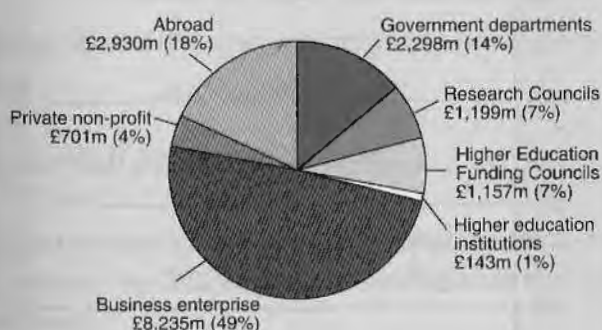
These tables show the performers and funders of R&D in the UK. Measuring expenditure on R&D performed within each sector avoids problems of omission and double counting that can arise when measuring funds provided for R&D. GERD is the sum of R&D performed in the four sectors. Tables 1 and 2 show that UK GERD in 1999 was £16.7 billion in cash terms. GERD is often quoted as a percentage of GDP when making international comparisons. In 1999 UK GERD was 1.83 per cent of GDP, similar to the previous year's figure, just below the provisional OECD estimate for the EU average of 1.85 per cent.

Table 1 shows the interaction between R&D funders and performers. For example, £11.3 billion was spent on R&D in the business sector. Of this, £1.2 billion was provided by the government, £2.6 billion came from abroad and £7.6 billion was funded by businesses from their own sources. Funds from abroad include those from overseas parent companies, contracts for R&D projects, support for R&D provided through European Union schemes and international collaborative projects typically for aerospace or defence projects.

Figure 1

#### Gross Expenditure on R&D in the UK, by sectors, 1999

##### Sectors providing the funds



##### Sectors carrying out the work

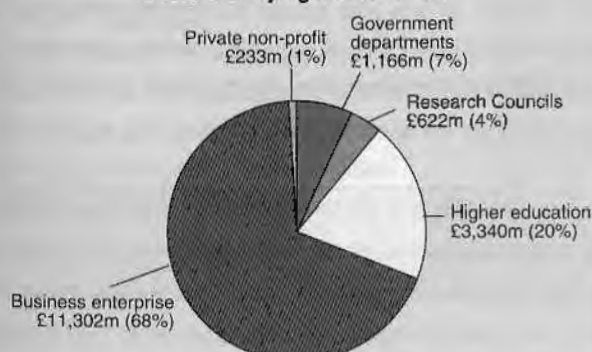


Figure 1 shows that the business sector is the most important sector of the economy in terms of providing funds for and carrying out R&D.

### Government R&D expenditure (Tables 4–6)

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

The sum of a department's net expenditure is the R&D element of the government's budget expenditure. This is used for international comparisons of Government appropriations for R&D (e.g., Table 18). The UK has a high proportion of Central Government expenditure devoted to R&D for defence purposes.

Figures in Tables 4 and 6 for Government's net expenditure on R&D differ from Government funding figures in Tables 1 and 3. This is because Tables 1 to 3 are based on information supplied by R&D (**performers**) whilst Tables 4 to 6 contain expenditure figures reported by Government departments (**funders**). The gap is mainly accounted for by differences in the reporting of Government contracts with businesses for certain types of defence R&D and R&D performed abroad but funded by the UK Government. In addition, the difference is also attributed to other factors such as time lag problems due to differences in accounting periods and not all monies given being used in that financial period, treatment of VAT and sub-contracting of R&D work.

R&D in NHS hospitals previously included in Table 5 on the basis of the Culyer report,<sup>7</sup> are now reported as extramural expenditure. The figures for Central Government intramural R&D in Table 5 are lower than those performed by the government sector in Tables 1 and 2. This is because the latter includes estimates for a small amount of R&D not available from the Government survey and R&D performed by local authorities.

Table 4 shows a time series dating back to 1966/67. This shows that in 1999/00 the net Government expenditure on R&D (by civil and defence departments) was £5.7 billion, a 9 per cent increase on 1998/99. In real terms, spending on R&D was flat in the late sixties but rose in the seventies to a peak in 1980/81. Since then it has declined, although spending in 1999/00 was still more than in 1966/67.

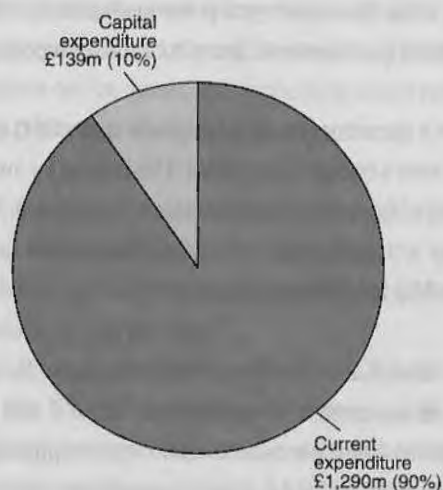
Table 5 shows the breakdown of departmental intramural expenditure (see Figure 2); the current (which is also shown by Frascati type of research) and capital expenditure. Figure 2 shows that 90 per cent (£1.3 billion) of intramural expenditure is current expenditure. Applied research accounts for 64 per cent of the total intramural expenditure. Total intramural expenditure is further broken down in Table 5 into



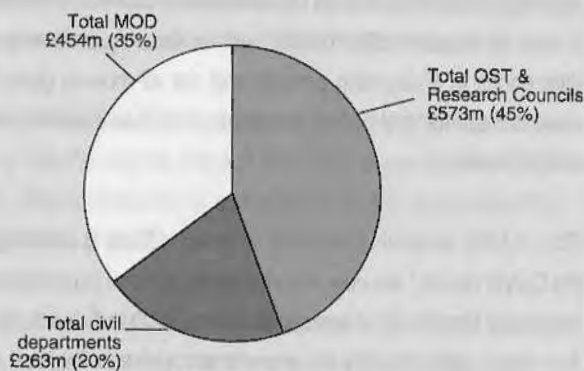
**Figure 2**

**Analysis of Central Government Intramural Expenditure 1999–2000**

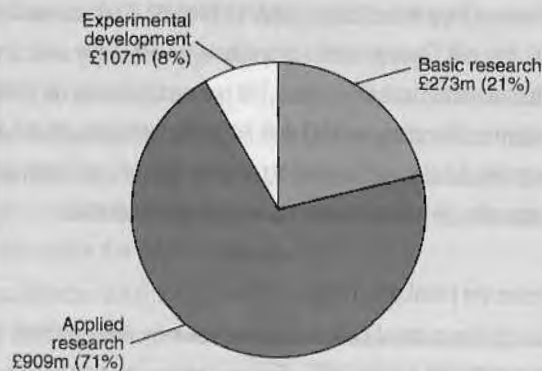
**Breakdown of intramural current and capital expenditure**



**Departmental breakdown of current intramural R&D**



**Breakdown of current expenditure by Frascati type of research**



Social Science & Humanities (SSH) and Natural Science & Engineering (NSE) research.

Table 6 provides an analysis of net government R&D expenditure by Frascati type of research activity for the period 1991–92 to 1999–00. The share of expenditure attributed to applied research has remained fairly constant over the nine-year period, whereas the share attributed to basic research has increased at the expense of the share attributed to experimental development. In 1990–91 defence expenditure accounted for 44 per cent of total expenditure. This share had declined to 38 per cent by 1999–00.

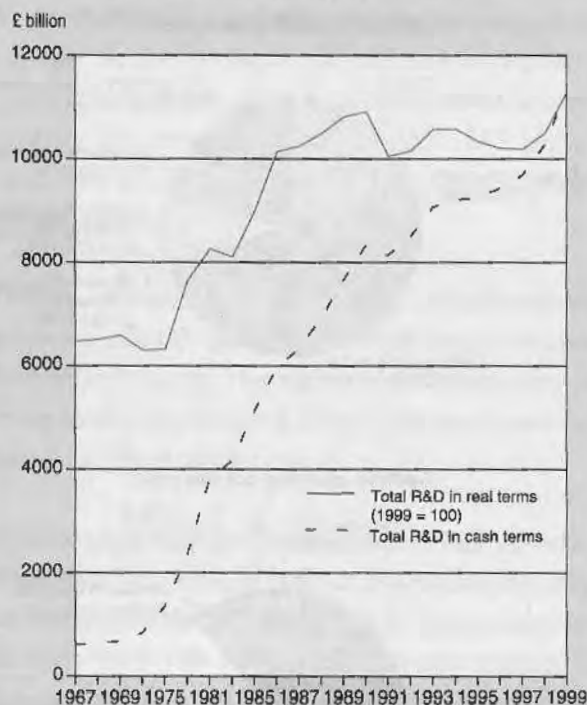
**R&D performed by the Business Sector (Tables 7–12)**

Table 7 and Figure 3 show a time series dating back to 1966 for expenditure performed by the Business sector. They show that in 1999 R&D expenditure was £11.3 billion. Expenditure in real terms has increased by 8 per cent in the business sector on 1998 figures and by 77 per cent on 1966 figures.

Table 8 shows that within the business sector, the services broad product group accounted for 22 per cent of the total expenditure in 1999. In the manufacturing sector the pharmaceuticals and chemicals

**Figure 3**

**Net Business enterprise expenditure on R&D, in cash and real terms, 1967 to 1999**



broad product group had the largest share of R&D expenditure at 29 per cent of the total.

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

In 1999, civil R&D represented 85 per cent of all R&D expenditure performed by business (Table 9), compared to 82 per cent in 1991. Table 10 and Figure 4 show that, in 1999, 75 per cent of civil R&D performed by businesses was funded by businesses themselves. Government funded 3 per cent of civil R&D, whereas it funded 50 per cent of defence R&D.

The breakdown into detailed product groups is shown in Tables 11 and 12. The product group with the largest expenditure is pharmaceuticals, medical chemicals and botanical products, which accounted for £2.5 billion in 1999, followed by Aerospace at £1.2 billion.

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

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

Between 1998 and 1999, employment rates have remained at similar levels.

#### Regional R&D statistics (Tables 14–15)

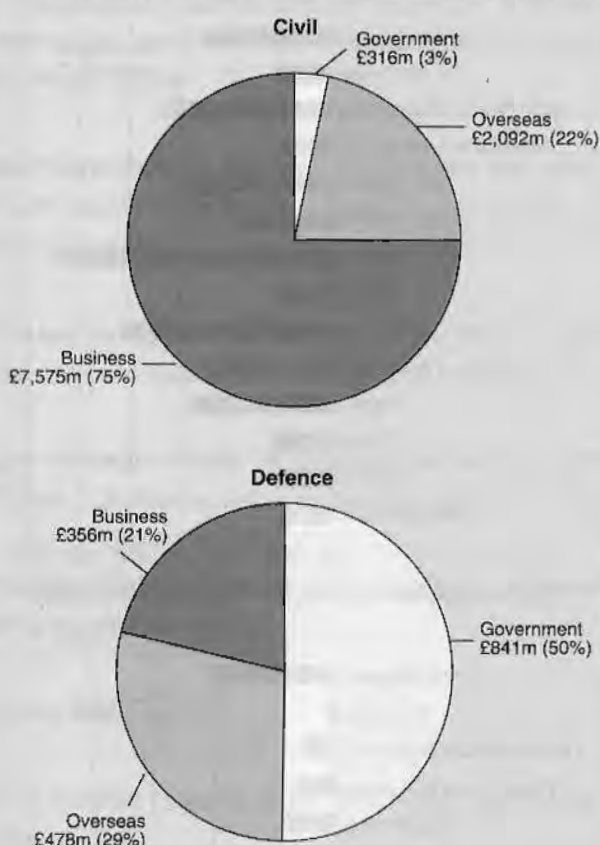
Regional estimates for the Government and Business sectors are derived from the ONS surveys of Government and Business Enterprises.

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

Estimates are given for UK Government Office Regions (GORs). Of the 12 GOR regions, the South East of England has the highest number of R&D personnel and the largest expenditure on R&D (this

**Figure 4**

Sources of funds for Business Enterprise R&D, 1999



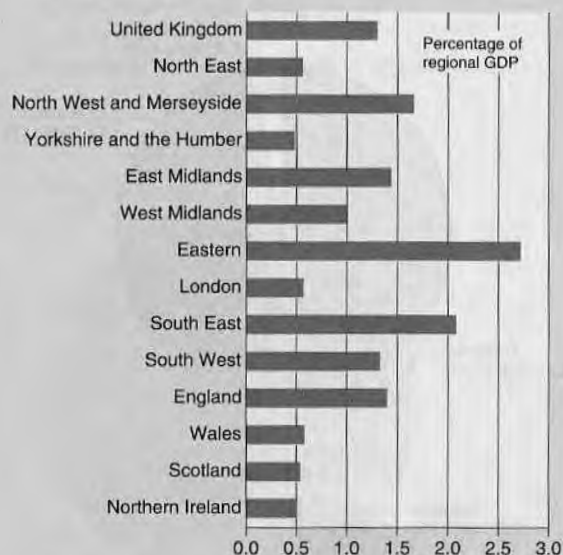
reflects in part the greater size of the South East). To adjust for this the R&D expenditure estimates are also shown as a percentage of GDP and the personnel estimates as a percentage of the labour force (see Figures 5 and 6). Tables 14 and 15 show that, within the UK, the Eastern and South East have the highest concentration of R&D expenditure performed by business. For the Government sector the highest regions are the South East, the South West and the Eastern region, whilst for the Higher Education Sector, London, the South East and Scotland are prominent (see Figure 5). In terms of personnel estimates as a percentage of the labour force (see Figure 6), the South East and the Eastern region are prominent in the Business sector and the South East and South West are prominent in the Government sector.

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

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

**Figure 5**

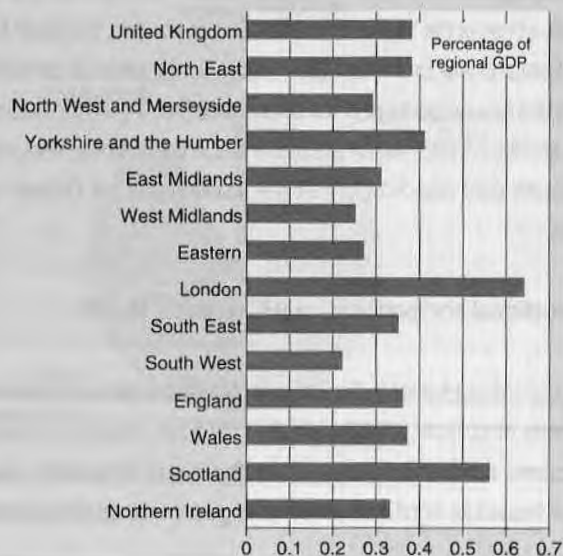
(i) Estimated regional (GOR) BERD in 1999



(ii) Estimated regional (GOR) GOVERD in 1999

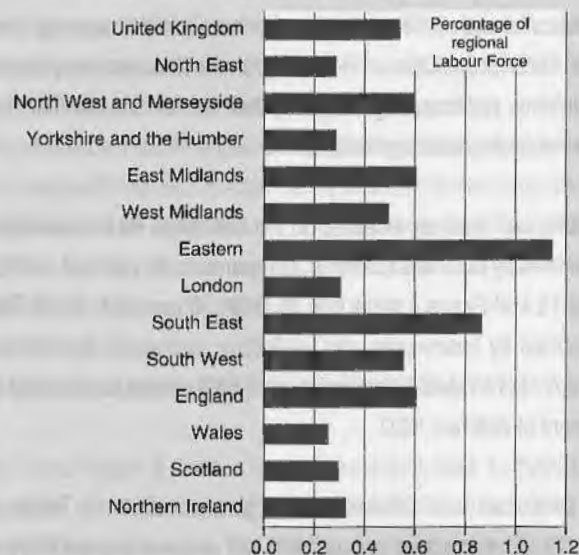


(iii) Estimated regional (GOR) HERD in 1999

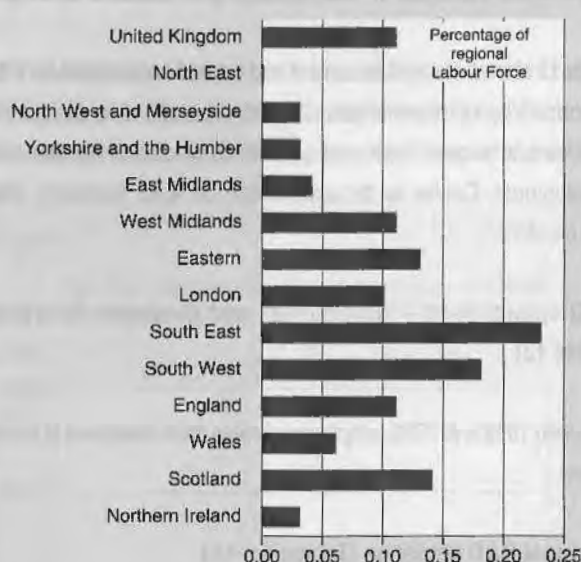


**Figure 6**

(i) Estimated regional (GOR) BERD in 1999



(ii) Estimated regional (GOR) Government R&D in 1999



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

Table 16 shows the trend of R&D as a percentage of GDP for the G7 countries over the time period 1991 to 1999. The ratio for GERD has been fairly constant over this time for most of the countries. Figure 7 shows the position in 1999. The UK was ranked 5th. Table 16 also shows BERD and GOVERD as a percentage of GDP.

Table 17 shows the international comparisons of GERD by sector of performance and source of funding. Table 18 shows R&D performed in the business sector. Table 16 also shows this as a percentage of GDP; Japan and the USA are the top spenders with the UK holding a middle ranking position. International comparison of Government funding of R&D in 1999 by socio-economic objective is shown in



Figure 7

Comparison of BERD, GOVERD, HERD and PNP as a percentage of GDP, 1999

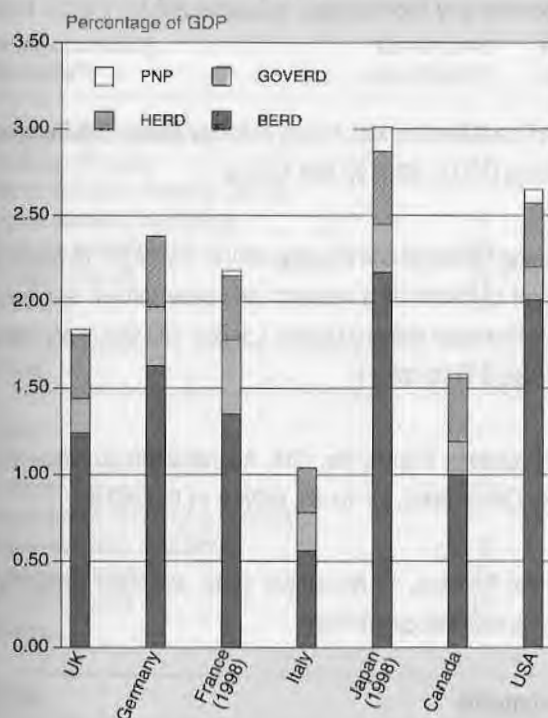


Table 19. Of the G7 countries, the USA and the UK devoted the highest proportion of their total Government funding of R&D to defence. For Germany, Italy and Japan about half of their total Government funding of R&D was classified as the advancement of knowledge compared to approximately a third for France.

## Definitions

### Type of R&D

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

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

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

## Sectors of the Economy

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

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

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

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

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

## Regional data

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

## Rounding

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

## Revisions and Discontinuities

In the Government Tables, a new method for estimating Government funded R&D in HE was introduced in 1994/95, therefore 1993/94 figures have been revised. It is not possible to revise the data for prior years because of the structural changes in the HE sector.

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

The 1997 and 1998 Business Survey results have been revised where necessary to take account of company misreporting. There have also been some small changes due to misclassification and updated population information. Full details on the revisions were included in ONS's News Release published on 17 November 2000.<sup>9</sup>

Figures relating to gross expenditure on R&D published in the ONS First Release on 30 March 2001<sup>4</sup> have been revised slightly due to government department amendments.

Regional data is published using GOR regions and these should not be compared to NUTS regional data previously published in this annual article.

### Data Analysis Service

The ONS is now able to offer additional analysis concerning R&D statistics, e.g., sizeband and regional breakdowns. The contact for this service is:

Jane Morgan  
Tel: 01633 813109  
E-mail: jane.morgan@ons.gov.uk

For further information on:	ONS Contacts:
Business R&D <sup>2</sup>	Jane Morgan Tel. 01633 813109
Information on aggregated R&D data	Jane Morgan Tel. 01633 813109
Definitions of R&D <sup>3</sup>	Jane Morgan Tel. 01633 813109
GERD <sup>4</sup>	Jane Morgan Tel. 01633 813109
General information on Science & Technology <sup>1</sup>	Steve Churchill Tel. 01633 812003
International comparisons <sup>5, 6, 8</sup>	Steve Churchill Tel. 01633 812003

### References

<sup>1</sup> DTI/OST. *Science, Engineering and Technology Statistics 2001*. London: The Stationery Office (2001).

<sup>2</sup> ONS, Business Enterprise. *Research and Development in UK Businesses* (MA14). ONS, January 2001, ISSN 1463-6115.

<sup>3</sup> *Proposed Standard Practice for Surveys of Research and Experimental Development* (The Frascati Manual). OECD: Paris (1993).

<sup>4</sup> ONS First Release ONS (2000) 119, 30 March 2001. *Gross Domestic Expenditure on Research and Development 1999*.

<sup>5</sup> *Main Science and Technological Indicators 2001/1*. OECD: Paris (2001).

<sup>6</sup> *Research and Development: Annual Statistics 1988-1998*. Eurostat: Luxembourg (2000). ISBN 92 828 7822-8.

<sup>7</sup> "Supporting Research and Development in The NHS." (A report to the Minister of Health by a research and development task force chaired by Professor Anthony Culyer). London: The Stationery Office (1994). ISBN 0 11 321831 1.

<sup>8</sup> ONS, *Economic Trends*, No. 561, August 2000. London: The Stationery Office (2000, pp. 61-85. ISBN 0 11 621203 9.

<sup>9</sup> ONS First Release, 17 November 2000. *Business Enterprise Research and Development 1999*.

### Abbreviations

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

Table 1 Gross expenditure on civil and defence R&D performed in the UK in 1999<sup>1</sup>

£ million

Sectors providing the funds <sup>2,3</sup>	Sectors carrying out the work <sup>2,3</sup>					Totals	Abroad
	Government departments <sup>4</sup>	Research Councils	Higher education	Business enterprise	Private non-profit		
Government departments <sup>4</sup>	765	76	273	1,152	31	2,298	167
Research Councils	17	424	743	5	10	1,199	109
Higher Education Funding Councils	-	-	1,157	-	-	1,157	-
Higher education institutions	0	6	136	0	2	143	-
Business enterprise	329	48	242	7,574	42	8,235	-
Private non-profit	15	32	525	1	128	701	-
Abroad	39	36	265	2,570	20	2,930	-
<b>TOTAL</b>	<b>1,166</b>	<b>622</b>	<b>3,340</b>	<b>11,302</b>	<b>233</b>	<b>16,663</b>	<b>n/a</b>
<b>Civil</b>							
Government departments <sup>4</sup>	425	72	238	311	31	1,077	165
Research Councils	17	424	743	5	10	1,199	109
Higher Education Funding Councils	-	-	1,157	-	-	1,157	-
Higher education institutions	0	6	136	0	2	143	-
Business enterprise	225	48	215	7,217	42	7,747	-
Private non-profit	15	32	525	1	128	701	-
Abroad	10	36	265	2,092	20	2,423	-
<b>TOTAL</b>	<b>692</b>	<b>618</b>	<b>3,278</b>	<b>9,626</b>	<b>232</b>	<b>14,447</b>	<b>n/a</b>
<b>Defence</b>							
Government departments <sup>4</sup>	340	5	35	841	0	1,221	2
Research Councils	0	-	-	-	-	0	-
Higher Education Funding Councils	-	-	-	-	-	-	-
Higher education institutions	0	-	-	-	-	0	-
Business enterprise	104	-	28	356	-	488	-
Private non-profit	0	-	-	-	-	0	-
Abroad	29	-	-	478	-	507	-
<b>TOTAL</b>	<b>474</b>	<b>5</b>	<b>62</b>	<b>1,675</b>	<b>0</b>	<b>2,216</b>	<b>n/a</b>

Source: ONS

**Notes:**

## General Note:

These estimates are derived from the ONS surveys of government and business enterprise R&D and from information from the HEFC. More details are in the ONS First Release Gross Domestic Expenditure on Research and Development, published on 30 March 2001. The First Release has been revised slightly due to departmental amendments.

**Notes:**

1 Research in the social sciences and humanities is included.

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

3 Some of the numbers have been estimated.

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

0 Represents a value less than 0.5.

- Represents a nil value.



**Table 2 Gross expenditure on R&D in the UK by performing sector, 1991 to 1999<sup>1</sup>**

£ million

	1991	1992	1993	1994	1995	1996	1997r	1998r	1999
<b>Expenditure in cash terms (£m):</b>									
Performed by:									
Government	1,757	1,846	1,928	2,051	1,462	1,495	1,427	1,487	1,166
Research Councils	-	-	-	-	581	575	590	591	622
Business enterprise	8,135	8,489	9,069	9,204	9,254	9,431	9,680	10,261	11,302
Higher education	2,020	2,129	2,312	2,623	2,696	2,792	2,893	3,040	3,340
Private non-profit	219	224	232	168	177	177	190	203	233
<b>TOTAL</b>	<b>12,131</b>	<b>12,689</b>	<b>13,541</b>	<b>14,046</b>	<b>14,172</b>	<b>14,470</b>	<b>14,781</b>	<b>15,582</b>	<b>16,663</b>
<b>Expenditure in real terms (1999=100)<sup>2</sup> (£m):</b>									
Performed by:									
Government	2,170	2,208	2,247	2,356	1,633	1,617	1,501	1,522	1,166
Research Councils	-	-	-	-	649	622	621	605	622
Business enterprise	10,046	10,152	10,566	10,574	10,335	10,204	10,185	10,496	11,302
Higher education	2,495	2,547	2,694	3,013	3,011	3,021	3,044	3,110	3,340
Private non-profit	271	268	270	193	198	192	200	208	233
<b>TOTAL</b>	<b>14,982</b>	<b>15,175</b>	<b>15,776</b>	<b>16,137</b>	<b>15,827</b>	<b>15,656</b>	<b>15,551</b>	<b>15,940</b>	<b>16,663</b>
<b>Total as percentage of GDP<sup>3</sup></b>	<b>2.05</b>	<b>2.06</b>	<b>2.09</b>	<b>2.04</b>	<b>1.96</b>	<b>1.88</b>	<b>1.81</b>	<b>1.81</b>	<b>1.83</b>

**Notes:**

1 See notes at Table 1.

2 GDP deflators are:

	1991	1992	1993	1994	1995	1996	1997	1998	1999
	81.0	83.6	85.8	87.0	89.5	92.4	95.0	97.8	100.0

3 Gross domestic product values are:

£ million

	1991	1992	1993	1994	1995	1996	1997	1998	1999
	592,207	614,883	648,178	687,811	722,107	768,087	815,827	858,600	908,132

r = revised

Source: ONS

Table 3 Gross expenditure on R&D in the UK by source of funds, 1991 to 1999<sup>1,2</sup>

£ million

	1991	1992	1993	1994	1995	1996	1997r	1998r	1999
<b>Sector providing funds</b>									
<b>Expenditure in cash terms (£m):</b>									
Funded by:									
Government	4,131	4,239	4,400	4,657	2,611	2,494	2,422	2,619	2,298
Research Councils	-	-	-	-	1,078	1,092	1,135	1,128	1,199
Higher Education Funding Councils	-	-	-	-	1,018	1,027	1,033	1,085	1,157
Higher education	92	99	103	116	119	120	123	130	143
Business enterprise	6,054	6,461	6,974	7,025	6,796	6,846	7,344	7,382	8,235
Private non-profit	397	435	451	495	511	546	578	621	701
Abroad	1,458	1,455	1,613	1,753	2,039	2,345	2,147	2,617	2,930
<b>TOTAL</b>	<b>12,131</b>	<b>12,689</b>	<b>13,541</b>	<b>14,046</b>	<b>14,172</b>	<b>14,470</b>	<b>14,781</b>	<b>15,582</b>	<b>16,663</b>
<b>Expenditure in real terms (1999=100) (£m):</b>									
Funded by:									
Government	5,102	5,069	5,126	5,350	2,916	2,698	2,548	2,679	2,298
Research Councils	-	-	-	-	1,204	1,182	1,194	1,154	1,199
Higher Education Funding Councils	-	-	-	-	1,137	1,112	1,087	1,110	1,157
Higher education	113	119	120	133	133	130	129	133	143
Business enterprise	7,477	7,727	8,125	8,071	7,590	7,407	7,727	7,551	8,235
Private non-profit	490	520	526	569	571	590	609	635	701
Abroad	1,800	1,740	1,880	2,014	2,277	2,537	2,259	2,677	2,930
<b>TOTAL</b>	<b>14,982</b>	<b>15,175</b>	<b>15,776</b>	<b>16,137</b>	<b>15,827</b>	<b>15,656</b>	<b>15,551</b>	<b>15,940</b>	<b>16,663</b>
<b>Total as percentage of GDP</b>	<b>2.05</b>	<b>2.06</b>	<b>2.09</b>	<b>2.04</b>	<b>1.96</b>	<b>1.88</b>	<b>1.81</b>	<b>1.81</b>	<b>1.83</b>

## Notes:

1 See notes at Table 1.

2 See notes at Table 2.

r = revised

Source: ONS

**Table 4 Total Net Government expenditure on R&D in cash terms and real terms, 1966-67 to 1999-2000**

£ million		
Total Net Government R&D		
Year	In cash terms excluding NHS figures	In real terms (1999=100) <sup>1</sup>
1966-67	486	5,350
1967-68	503	5,379
1968-69	531	5,408
1969-70	562	5,442
1970-71	606	5,414
1971-72	755	6,183
1972-73	847	6,417
1973-74	964	6,814
1974-75	1,169	6,904
1975-76	1,495	7,049
1976-77	1,647	6,834
1977-78	1,814	6,628
1978-79	2,097	6,898
1979-80	2,601	7,326
1980-81	3,184	7,587
1981-82	3,395	7,388
1982-83	3,519	7,162
1983-84	3,730	7,259
1984-85	3,964	7,334
1985-86	4,175	7,335
1986-87	4,255	7,249
1987-88	4,408	7,130
1988-89	4,497	6,813
1989-90	4,772	6,744
1990-91	4,955	6,495
1991-92	5,027	6,209
1992-93	5,078	6,073
1993-94	5,402	6,294
1994-95	5,200	5,975
1995-96 <sup>2</sup>	5,295	5,914
1996-97 <sup>2</sup>	5,351	5,790
1997-98 <sup>2</sup>	5,504	5,791
1998-99 <sup>2</sup>	5,304	5,426
1999-00 <sup>2</sup>	5,784	5,784

**Notes:**

1 See note at Table 2.

2 Figures for NHS are available in SET 2001.<sup>1</sup>

Source: ONS



**Table 5 Analysis of Government Intramural expenditure, 1999-2000<sup>1,2</sup>**

£ million

	Breakdown of current Frascati R&D expenditure					TOTAL INTRAMURAL	SSH	NSE
	Current expenditure	Basic	Applied	Experimental development	Capital expenditure			
<b>OST - DTI</b>	-	-	-	-	-	-	-	-
<b>Research Councils</b>								
BBSRC	153.6	47.1	106.5	-	12.0	165.7	-	165.7
ESRC	4.3	4.3	-	-	0.6	4.9	4.9	-
MRC	165.1	101.1	64.0	-	23.6	188.7	-	188.7
NERC	115.1	24.8	83.5	6.7	8.1	123.2	-	123.2
EPSRC	16.3	8.6	7.7	-	0.4	16.7	-	16.7
PPARC	23.0	20.7	2.3	-	3.9	26.8	-	26.8
CCLRC	95.7	22.2	73.5	-	13.8	109.5	-	109.5
<b>Total OST &amp; Research Councils</b>	<b>573.0</b>	<b>228.9</b>	<b>337.4</b>	<b>6.7</b>	<b>62.5</b>	<b>635.5</b>	<b>4.9</b>	<b>630.6</b>
<b>Higher Education Funding Councils</b>	-	-	-	-	-	-	-	-
<b>Total Higher Education Funding Councils</b>	-	-	-	-	-	-	-	-
<b>Civil departments</b>								
MAFF	83.2	17.6	61.5	4.2	2.9	86.2	0.1	86.0
DFEE	8.0	-	3.4	4.6	-	8.0	8.0	-
DETR (formerly DOT & DOE)	11.1	-	10.1	1.0	-	11.1	1.9	9.3
DH (includes NHS)	33.0	1.7	25.7	5.6	2.9	35.9	2.5	33.3
NHS <sup>3</sup>	0.0	-	0.0	-	-	0.0	0.0	0.0
DSS	1.0	1.0	-	-	-	1.0	1.0	-
HSC	6.6	-	6.0	0.6	0.4	7.0	0.8	6.1
HO	18.6	-	17.1	1.5	1.3	19.9	12.5	7.5
DCMS (formerly DNH)	10.2	8.9	1.2	0.1	0.5	10.7	0.4	10.3
DFID (formerly ODA)	2.4	-	2.4	-	-	2.4	0.8	1.6
DTI (ex OST)	6.6	3.3	3.3	-	-	6.6	-	6.6
NI	7.9	0.4	6.8	0.6	0.5	8.3	1.7	6.6
SE (formerly SO)	49.8	10.9	37.9	1.0	0.4	50.2	2.5	47.7
NAW (formerly WO)	0.5	0.1	0.5	-	-	0.5	0.5	0.0
Other departments	23.7	0.7	19.5	3.6	1.7	25.4	8.0	17.4
<b>Total civil departments</b>	<b>262.8</b>	<b>44.5</b>	<b>195.4</b>	<b>22.9</b>	<b>10.6</b>	<b>273.4</b>	<b>40.9</b>	<b>232.5</b>
<b>Total civil R&amp;D</b>	<b>835.8</b>	<b>273.4</b>	<b>532.8</b>	<b>29.6</b>	<b>73.1</b>	<b>908.9</b>	<b>45.8</b>	<b>863.1</b>
<b>MOD</b>	<b>454.4</b>	<b>-</b>	<b>376.6</b>	<b>77.8</b>	<b>65.5</b>	<b>519.9</b>	<b>15.8</b>	<b>504.1</b>
<b>TOTAL</b>	<b>1,290.3</b>	<b>273.4</b>	<b>909.4</b>	<b>107.4</b>	<b>138.6</b>	<b>1,428.8</b>	<b>61.6</b>	<b>1,367.2</b>

**Notes:**

1 Excludes Research Councils' pensions/other costs.

2 Includes intramural R&D funded by other departments.

3 NHS expenditure figures are now reported as extramural.

Source: ONS

**Table 6 Analysis of net Government R&D expenditure by Frascati type of research activity, 1991-92 to 1999-2000<sup>1</sup>**

£ million

	1991-92	1992-93	1993-94	1994-95	1995-96 <sup>2</sup>	1996-97 <sup>2</sup>	1997-98 <sup>2</sup>	1998-99 <sup>2</sup>	1999-00 <sup>2</sup>
<b>Total Government R&amp;D</b>									
Basic	1,362	1,511	1,571	-	-	-	-	-	-
- pure	-	-	-	1,253	1,273	1,322	1,334	1,369	1,492
- orientated	-	-	-	472	504	524	523	535	563
Applied	850	953	1,019	879	1,004	1,109	1,079	1,020	1,171
- strategic	884	870	1,050	1,075	1,322	1,224	1,198	1,178	1,065
- specific	1,931	1,744	1,762	1,492	1,530	1,570	1,757	1,592	1,883
Experimental development									
<b>Total £m</b>	<b>5,027</b>	<b>5,078</b>	<b>5,402</b>	<b>5,171</b>	<b>5,634</b>	<b>5,750</b>	<b>5,891</b>	<b>5,695</b>	<b>6,173</b>
<b>Civil R&amp;D</b>									
Basic	1,362	1,511	1,571	-	-	-	-	-	-
- pure	-	-	-	1,253	1,273	1,322	1,334	1,369	1,467
- orientated	-	-	-	472	504	524	523	535	563
Applied	815	907	962	810	839	948	923	875	988
- strategic	508	403	454	479	813	681	698	704	673
- specific	129	177	137	126	136	131	102	116	138
Experimental development									
<b>Total £m</b>	<b>2,814</b>	<b>2,997</b>	<b>3,124</b>	<b>3,140</b>	<b>3,565</b>	<b>3,606</b>	<b>3,580</b>	<b>3,599</b>	<b>3,829</b>
<b>Defence R&amp;D</b>									
Basic	-	-	-	-	-	-	-	-	-
- pure	-	-	-	-	-	-	-	-	25
- orientated	-	-	-	-	-	-	-	-	-
Applied	35	46	58	69	166	160	156	145	183
- strategic	376	467	596	596	510	544	500	475	392
- specific	1,802	1,568	1,624	1,366	1,394	1,439	1,655	1,476	1,745
Experimental development									
<b>Total £m</b>	<b>2,214</b>	<b>2,080</b>	<b>2,278</b>	<b>2,032</b>	<b>2,070</b>	<b>2,144</b>	<b>2,311</b>	<b>2,096</b>	<b>2,345</b>

**Notes:**

1 For the purpose of this analysis Research Councils expenditure for Pensions/Other costs have been excluded from 1994-95 onwards.

2 Includes NHS estimates (ref 1)

Source: ONS

**Table 7 Business Enterprise R&D, in cash terms and real terms, 1966-1999**

Year	£ million	
	In cash terms	In real terms (1999=100) <sup>1</sup>
1966	580	6,385
1967	605	6,469
1968	639	6,508
1969	680	6,584
1970	N/S	N/S
1971	N/S	N/S
1972	831	6,296
1973	N/S	N/S
1974	N/S	N/S
1975	1,340	6,318
1976	N/S	N/S
1977	N/S	N/S
1978	2,324	7,645
1979	N/S	N/S
1980	N/S	N/S
1981	3,793	8,254
1982	N/S	N/S
1983	4,163	8,102
1984	N/S	N/S
1985	5,122	8,998
1986	5,951	10,139
1987	6,335	10,247
1988	6,922	10,488
1989	7,650	10,812
1990	8,318	10,903
1991	8,135	10,046
1992	8,489	10,152
1993	9,069	10,566
1994	9,204	10,574
1995	9,254	10,335
1996	9,431	10,204
1997	9,680	10,185
1998	10,261	10,496
1999	11,302	11,302

**Notes:**

<sup>1</sup> See notes at Table 2.

Source: ONS

(N/S) = No survey carried out



**Table 8 Expenditure on R&D performed in UK businesses: broad product groups, in cash & real terms, 1991-1999**

£ million

In cash terms	1991	1992	1993	1994	1995	1996	1997r	1998r	1999
Manufacturing: Total	6,118	6,305	6,741	6,848	6,917	7,035	7,383	7,908	8,783
Chemicals	1,906	2,166	2,400	2,509	2,514	2,479	2,831	2,926	3,253
Mechanical engineering	538	580	665	761	683	668	709	730	712
Electrical machinery	1,329	1,258	1,386	1,218	1,245	1,313	1,181	1,320	1,335
Transport equipment	638	670	717	710	833	977	990	1,020	1,235
Aerospace	1,005	898	782	860	886	812	893	1,039	1,237
Other manufacturing	702	733	791	790	755	787	779	874	1,010
Services	2,017	2,184	2,328	2,356	2,337	2,396	2,297	2,352	2,519
<b>TOTAL</b>	<b>8,135</b>	<b>8,489</b>	<b>9,069</b>	<b>9,204</b>	<b>9,254</b>	<b>9,431</b>	<b>9,680</b>	<b>10,261</b>	<b>11,302</b>
In real terms (at 1999 prices)	1991	1992	1993	1994	1995	1996	1997r	1998r	1999
Manufacturing: Total	7,556	7,540	7,854	7,867	7,725	7,611	7,768	8,090	8,783
Chemicals	2,354	2,590	2,796	2,883	2,808	2,683	2,978	2,993	3,253
Mechanical engineering	664	694	775	874	763	723	746	747	712
Electrical machinery	1,641	1,504	1,615	1,399	1,390	1,420	1,242	1,350	1,335
Transport equipment	788	801	835	816	930	1,057	1,041	1,043	1,235
Aerospace	1,241	1,074	911	988	989	878	940	1,063	1,237
Other manufacturing	867	877	922	908	843	851	820	894	1,010
Services	2,491	2,612	2,712	2,707	2,610	2,593	2,417	2,406	2,519
<b>TOTAL</b>	<b>10,046</b>	<b>10,152</b>	<b>10,566</b>	<b>10,574</b>	<b>10,335</b>	<b>10,204</b>	<b>10,185</b>	<b>10,496</b>	<b>11,302</b>

**Notes:**

1 1997 & 1998 data have been revised where necessary to take into account misclassification and updated population information.

r = revised

Source: ONS

**Table 9 Expenditure on civil and defence R&D performed by Business Enterprises, 1991-1999**

(i) in cash terms (£m)

	Civil									Defence								
	1991	1992	1993	1994	1995	1996	1997r	1998r	1999	1991	1992	1993	1994	1995	1996	1997	1998	1999
<b>All product groups</b>	<b>6,669</b>	<b>7,092</b>	<b>7,710</b>	<b>7,770</b>	<b>7,863</b>	<b>8,071</b>	<b>8,237</b>	<b>8,727</b>	<b>9,626</b>	<b>1,466</b>	<b>1,397</b>	<b>1,359</b>	<b>1,433</b>	<b>1,391</b>	<b>1,360</b>	<b>1,443</b>	<b>1,533</b>	<b>1,675</b>
All manufactured products	4,816	5,050	5,550	5,534	5,626	5,767	6,079	6,491	7,164	1,301	1,254	1,193	1,314	1,291	1,268	1,304	1,417	1,618
Chemicals and pharmaceuticals	1,980	2,238	2,473	2,590	2,511	2,477	2,829	2,926	3,252	17	20	26	10	3	2	2	-	1
Mechanical engineering	262	325	398	405	418	395	407	455	434	256	236	246	335	266	273	302	276	279
Electrical machinery	959	885	999	827	823	896	803	916	1,013	354	357	377	379	423	417	377	404	322
Transport equipment	548	574	622	661	823	967	979	983	1,159	59	64	59	14	10	10	11	36	77
Aerospace	477	403	374	380	413	359	412	485	535	525	493	412	481	473	453	481	554	701
Other manufacturing	590	625	684	671	639	673	648	727	771	90	84	73	95	116	113	131	147	239
Services	1,853	2,042	2,160	2,236	2,237	2,304	2,158	2,236	2,462	165	143	166	120	99	92	139	116	57

(ii) in real terms (£m 1999 prices)<sup>1</sup>

	Civil									Defence								
	1991	1992	1993	1994	1995	1996	1997r	1998r	1999	1991	1992	1993	1994	1995	1996	1997	1998	1999
<b>All product groups</b>	<b>8,236</b>	<b>8,482</b>	<b>8,982</b>	<b>8,927</b>	<b>8,781</b>	<b>8,733</b>	<b>8,666</b>	<b>8,927</b>	<b>9,626</b>	<b>1,810</b>	<b>1,671</b>	<b>1,583</b>	<b>1,646</b>	<b>1,553</b>	<b>1,471</b>	<b>1,519</b>	<b>1,568</b>	<b>1,675</b>
All manufactured products	5,948	6,040	6,466	6,358	6,283	6,240	6,396	6,640	7,164	1,607	1,500	1,390	1,510	1,442	1,372	1,372	1,450	1,618
Chemicals and pharmaceuticals	2,445	2,677	2,881	2,976	2,804	2,680	2,976	2,993	3,252	21	24	30	11	4	3	2	-	1
Mechanical engineering	324	389	464	465	467	428	429	465	434	316	282	287	385	297	295	318	282	279
Electrical machinery	1,184	1,058	1,164	950	919	969	845	937	1,013	437	427	439	435	472	451	397	413	322
Transport equipment	677	686	725	759	919	1,046	1,030	1,006	1,159	73	77	69	16	11	11	12	37	77
Aerospace	589	482	436	437	461	388	434	497	535	648	590	480	553	529	490	506	566	701
Other manufacturing	729	747	797	771	714	729	682	743	771	111	100	85	109	130	122	138	151	239
Services	2,288	2,442	2,516	2,569	2,498	2,493	2,271	2,287	2,462	204	171	193	138	111	100	146	119	57

**Notes:**

<sup>1</sup> See table 2 for deflators

(r) = revised

Source: ONS

Table 10 Sources of funds for business enterprise R&amp;D in cash terms, 1991-1999

£ million, cash terms

		Government £m	Overseas £m	Mainly own resources <sup>1</sup> £m	Total intramural R&D £m
<b>1991</b>		<b>1,189</b>	<b>1,299</b>	<b>5,647</b>	<b>8,135</b>
of which:	Civil	479	950	5,240	6,669
	Defence	710	349	407	1,466
<b>1992</b>		<b>1,171</b>	<b>1,270</b>	<b>6,048</b>	<b>8,489</b>
of which:	Civil	478	981	5,633	7,092
	Defence	693	289	415	1,397
<b>1993</b>		<b>1,129</b>	<b>1,398</b>	<b>6,542</b>	<b>9,069</b>
of which:	Civil	390	1,103	6,217	7,710
	Defence	739	295	324	1,359
<b>1994</b>		<b>1,088</b>	<b>1,474</b>	<b>6,642</b>	<b>9,204</b>
of which:	Civil	363	1,135	6,272	7,770
	Defence	726	338	370	1,433
<b>1995</b>		<b>1,050</b>	<b>1,748</b>	<b>6,456</b>	<b>9,254</b>
of which:	Civil	321	1,419	6,124	7,863
	Defence	729	329	332	1,391
<b>1996</b>		<b>934</b>	<b>2,031</b>	<b>6,465</b>	<b>9,431</b>
of which:	Civil	242	1,728	6,102	8,071
	Defence	693	303	364	1,360
<b>1997r</b>		<b>1,005</b>	<b>1,811</b>	<b>6,864</b>	<b>9,680</b>
of which:	Civil	288	1,486	6,462	8,237
	Defence	717	325	401	1,443
<b>1998r</b>		<b>1,190</b>	<b>2,245</b>	<b>6,826</b>	<b>10,261</b>
of which:	Civil	403	1,864	6,461	8,727
	Defence	787	381	365	1,533
<b>1999</b>		<b>1,157</b>	<b>2,570</b>	<b>7,575</b>	<b>11,302</b>
of which:	Civil	316	2,092	7,219	9,626
	Defence	841	478	356	1,675
		%	%	%	%
<b>1991</b>		<b>15</b>	<b>16</b>	<b>69</b>	<b>100</b>
of which:	Civil	7	14	79	100
	Defence	48	24	28	100
<b>1992</b>		<b>14</b>	<b>15</b>	<b>71</b>	<b>100</b>
of which:	Civil	7	14	79	100
	Defence	50	21	30	100
<b>1993</b>		<b>12</b>	<b>15</b>	<b>72</b>	<b>100</b>
of which:	Civil	5	14	81	100
	Defence	54	22	24	100
<b>1994</b>		<b>12</b>	<b>16</b>	<b>72</b>	<b>100</b>
of which:	Civil	5	15	81	100
	Defence	51	24	26	100
<b>1995</b>		<b>11</b>	<b>19</b>	<b>70</b>	<b>100</b>
of which:	Civil	4	18	78	100
	Defence	52	24	24	100
<b>1996</b>		<b>10</b>	<b>22</b>	<b>69</b>	<b>100</b>
of which:	Civil	3	21	76	100
	Defence	51	22	27	100
<b>1997</b>		<b>10</b>	<b>19</b>	<b>71</b>	<b>100</b>
of which:	Civil	3	18	78	100
	Defence	50	22	28	100
<b>1998</b>		<b>12</b>	<b>22</b>	<b>67</b>	<b>100</b>
of which:	Civil	5	21	74	100
	Defence	51	25	24	100
<b>1999</b>		<b>10</b>	<b>23</b>	<b>67</b>	<b>100</b>
of which:	Civil	3	22	75	100
	Defence	50	29	21	100

## Notes:

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

(r) = revised

Source: ONS



**Table 11 Intramural expenditure on R&D performed in UK businesses: detailed product groups, 1991–1999**

	£ million								
	1991	1992	1993	1994	1995	1996	1997r	1998r	1999
<b>Total</b>	<b>8,135</b>	<b>8,489</b>	<b>9,069</b>	<b>9,204</b>	<b>9,254</b>	<b>9,431</b>	<b>9,680</b>	<b>10,261</b>	<b>11,302</b>
Agriculture, hunting and forestry; Fishing	76	80	89	80	..	76	84	102	115
Extractive Industries	129	126	62	66	65	64	44	41	42
Food products and beverages; Tobacco products	196	225	191	228	189	198	180	242	237
Textiles, clothing and leather products	23	25	44	22	23	27	33	33	28
Pulp, paper and paper products; printing and publishing; Wood and straw products	43	44	40	44	39	57	44	49	45
Refined petroleum products and coke oven products; Processing of nuclear fuel	369	386	370	354	377	364	349	362	212
Chemicals, man- made fibres	707	720	721	689	701	627	680	688	718
Pharmaceuticals, medical chemicals and botanical products	1,199	1,446	1,679	1,820	1,813	1,852	2,151	2,238	2,535
Rubber and plastic products	35	25	67	72	60	67	60	66	72
Other non-metallic mineral products	44	43	42	56	54	60	47	56	59
Casting of iron and steel	40	43	50	51	46	39	39	47	41
Non-ferrous metals	24	22	16	15	20	15	15	20	22
Fabricated metal products	48	63	72	72	100	91	88	90	70
Machinery and equipment	490	517	593	689	583	577	622	640	642
Office machinery and computers	327	256	252	134	150	161	102	125	111
Electrical machinery and apparatus	518	523	576	567	494	490	424	423	357
Radio, television and communication equipment	484	479	558	517	602	662	655	772	867
Precision instruments	276	283	312	273	303	307	336	340	473
Motor vehicles and parts	605	636	682	669	795	926	924	913	1,060
Other transport equipment	17	18	17	24	18	30	50	72	99
Shipbuilding and repairs	16	16	18	17	20	20	15	36	76
Aerospace	1,005	898	782	860	886	812	893	1,039	1,237
Furniture; Other manufactured goods	20	22	28	28	21	16	25	20	33
Recycling	1	1	1	1	..	1	0	0	1
Electricity, gas and water supply	192	187	214	177	168	148	130	140	137
Construction	19	15	11	11	8	8	38	39	41
Wholesale and retail trade	4	4	5	6	8	4	5	8	25
Transport and storage	8	10	13	8	15	8	11	13	13
Post and telecommunications	317	386	389	408	414	455	496	449	565
Miscellaneous business activities; Technical testing and analysis	146	156	195	181	..	141	142	157	196
Computer and related activities	494	555	635	744	675	749	680	688	713
Research and development services	244	261	329	311	247	369	313	346	448
Public administration	19	18	16	10	14	10	6	8	11

**Notes:**

1 .. denotes disclosive figures.

2 Zero denotes a value less than 0.5

3 1997 & 1998 data have been revised where necessary to take into account misclassification and updated population information.

4 For 1991 and 1992 Furniture; Wood and straw products was included with Pulp, paper and paper products; Printing and publishing.

r = revised

Source: ONS

Table 12 Current and capital expenditure, and as a percentage, on R&D performed in the UK Businesses: detailed product groups, 1999

	Total	Capital Total	Current Total	Salaries and wages	Other current	Total	Capital Total	Current Total	Salaries and wages	Other current
	£m	£m	£m	£m	£m	%	%	%	%	%
<b>Total</b>	<b>11,302</b>	<b>1,225</b>	<b>10,077</b>	<b>4,491</b>	<b>5,586</b>	<b>100</b>	<b>11</b>	<b>89</b>	<b>40</b>	<b>49</b>
Agriculture, hunting and forestry; Fishing	115	16	99	56	44	100	14	86	48	38
Extractive Industries	42	1	41	22	19	100	2	98	53	45
Food products and beverages; Tobacco products	237	29	209	117	92	100	12	88	49	39
Textiles, clothing and leather products	28	3	25	16	8	100	11	89	59	30
Pulp, paper and paper products; Printing and publishing; Wood and straw products	45	1	44	17	28	100	2	98	37	61
Refined petroleum products and coke oven products; Processing of nuclear fuel	212	44	169	63	105	100	20	80	30	50
Chemicals, man-made fibres	718	65	653	345	308	100	9	91	48	43
Pharmaceuticals, medical chemicals and botanical products	2,535	493	2,042	836	1,206	100	19	81	33	48
Rubber and plastic products	72	2	70	30	40	100	3	97	41	56
Other non-metallic mineral products	59	5	53	27	26	100	9	91	47	44
Casting of iron and steel	41	1	40	21	19	100	2	98	51	46
Non-ferrous metals	22	1	20	10	10	100	6	94	47	48
Fabricated metal products	70	9	61	28	33	100	13	87	40	47
Machinery equipment	642	20	622	271	351	100	3	97	42	55
Office machinery and computers	111	13	99	42	57	100	11	89	37	51
Electrical machinery and apparatus	357	26	332	141	191	100	7	93	39	53
Radio, television and communication equipment	867	97	770	351	419	100	11	89	41	48
Precision instruments	473	33	440	218	222	100	7	93	46	47
Motor vehicles and parts	1,060	115	945	413	532	100	11	89	39	50
Other transport equipment	99	1	98	12	86	100	1	99	13	87
Shipbuilding and repairs	76	1	75	40	35	100	2	98	53	46
Aerospace	1,237	112	1,124	375	750	100	9	91	30	61
Furniture; Other manufactured goods	33	6	27	14	13	100	17	83	44	39
Recycling	1	0	1	0	0	100	3	97	68	29
Electricity, gas and water supply	137	13	124	57	67	100	10	90	41	49
Construction	41	1	40	20	19	100	3	97	50	47
Wholesale and retail trades	25	0	25	13	12	100	0	100	53	47
Transport and storage	13	0	13	6	7	100	2	98	49	49
Post and telecommunications	565	20	545	239	306	100	4	96	42	54
Miscellaneous business activities; Technical testing and analysis	196	17	179	95	84	100	9	91	48	43
Computer related activities	713	64	649	365	284	100	9	91	51	40
Research and development services	448	15	432	227	206	100	3	97	51	46
Public administration	11	1	9	2	7	100	12	88	22	66

Notes:

1 Zero denotes a value less than 0.5

Source: ONS

Table 13 Government and business enterprise personnel engaged on R&amp;D in the UK, 1991-1999

Full time equivalents, thousands

	1991	1992	1993	1994	1995	1996	1997	1998	1999	% change in 1999 from 1998
<b>PERSONNEL ENGAGED ON R&amp;D</b>										
- Business Enterprise	159	159	164	157	146	143	138	150	153	2
- Research Councils	12	13	13	12	12	12	11	11	11	1
- Government Departments <sup>1</sup>	24	25	22	20	17	16	15	18	18	2
<b>Total Civil</b>	<b>153</b>	<b>157</b>	<b>166</b>	<b>154</b>	<b>145</b>	<b>142</b>	<b>136</b>	<b>147</b>	<b>149</b>	<b>2</b>
<b>Total Defence</b>	<b>42</b>	<b>40</b>	<b>33</b>	<b>35</b>	<b>31</b>	<b>29</b>	<b>28</b>	<b>32</b>	<b>33</b>	<b>4</b>
<b>RESEARCHERS</b>										
- Business Enterprise	80	82	86	83	83	83	84	92	92	-
- Research Councils	6	6	6	6	6	5	5	5	5	3
- Government Departments <sup>1</sup>	9	9	8	8	8	8	7	9	10	5
<b>Total Civil</b>	<b>77</b>	<b>79</b>	<b>83</b>	<b>79</b>	<b>79</b>	<b>79</b>	<b>79</b>	<b>88</b>	<b>87</b>	<b>-1</b>
<b>Total Defence</b>	<b>18</b>	<b>18</b>	<b>17</b>	<b>18</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>19</b>	<b>20</b>	<b>7</b>
<b>TECHNICIANS</b>										
- Business Enterprise	38	38	40	40	33	33	30	32	33	2
- Research Councils	2	2	3	2	2	3	3	3	3	1
- Government Departments <sup>1</sup>	4	4	4	4	4	3	3	4	4	1
<b>Total Civil</b>	<b>35</b>	<b>36</b>	<b>41</b>	<b>38</b>	<b>33</b>	<b>33</b>	<b>29</b>	<b>32</b>	<b>32</b>	<b>1</b>
<b>Total Defence</b>	<b>9</b>	<b>8</b>	<b>6</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>6</b>	<b>7</b>	<b>7</b>	<b>7</b>
<b>ADMIN &amp; OTHER STAFF</b>										
- Business Enterprise	41	39	37	34	30	27	25	25	28	10
- Research Councils	5	5	4	4	4	4	3	3	3	-
- Government Departments <sup>1</sup>	11	11	9	8	5	5	4	5	5	-3
<b>Total Civil</b>	<b>42</b>	<b>41</b>	<b>40</b>	<b>37</b>	<b>33</b>	<b>30</b>	<b>28</b>	<b>27</b>	<b>30</b>	<b>11</b>
<b>Total Defence</b>	<b>15</b>	<b>14</b>	<b>10</b>	<b>9</b>	<b>7</b>	<b>6</b>	<b>5</b>	<b>6</b>	<b>6</b>	<b>-8</b>

Note:

<sup>1</sup> Excludes NHS employment, as these figures were not available.

Source: ONS



**Table 14 Estimated GOR breakdown of expenditure on Intramural R&D in the Business, Government and Higher Education sectors, 1999**

	R&D performed within business (BERD)		R&D performed Government Establishments (GOVERD) <sup>1</sup>		R&D performed within Higher Education Institutions (HERD)	
	£m	percentage of regional GDP	£m	percentage of regional GDP	£m	percentage of regional GDP
<b>United Kingdom</b>	<b>11,302</b>	<b>1.29</b>	<b>1,788</b>	<b>0.20</b>	<b>3,341</b>	<b>0.38</b>
North East	164	0.55	2	0.01	113	0.38
North West and Merseyside	1,476	1.65	48	0.05	260	0.29
Yorkshire and the Humber	309	0.47	40	0.06	270	0.41
East Midlands	838	1.43	48	0.08	182	0.31
West Midlands	724	0.99	164	0.22	180	0.25
Eastern	2,559	2.71	213	0.23	255	0.27
London	735	0.56	198	0.15	837	0.64
South East	2,916	2.07	557	0.40	493	0.35
South West	887	1.32	259	0.39	148	0.22
<b>England</b>	<b>10,607</b>	<b>1.39</b>	<b>1,529</b>	<b>0.20</b>	<b>2,737</b>	<b>0.36</b>
Wales	203	0.57	47	0.13	129	0.37
Scotland	393	0.53	200	0.27	411	0.56
Northern Ireland	99	0.50	12	0.06	64	0.33

Note:

<sup>1</sup> Figures include estimates for those areas of Central Government not available from the Government Survey and local authorities.

Source: ONS

**Table 15 Estimated regional breakdown of personnel engaged on R&D in the Business and Government sectors, 1999<sup>1</sup>**

	R&D performed within business		R&D performed within Government establishments <sup>2</sup>	
	Full time equivalents 000's	% of the regional Labour Force <sup>3,4</sup>	Full time equivalents 000's	% of the regional Labour Force <sup>3,4</sup>
<b>United Kingdom</b>	<b>152.9</b>	<b>0.55</b>	<b>29.7</b>	<b>0.11</b>
North East	3.0	0.28	0.0	0.00
North West and Merseyside	18.4	0.59	0.8	0.03
Yorkshire and the Humber	6.5	0.28	0.7	0.03
East Midlands	12.1	0.60	0.8	0.04
West Midlands	12.1	0.49	2.7	0.11
Eastern	30.3	1.14	3.5	0.13
London	10.1	0.30	3.3	0.10
South East	35.2	0.86	9.2	0.23
South West	13.1	0.55	4.3	0.18
<b>England</b>	<b>140.8</b>	<b>0.60</b>	<b>25.4</b>	<b>0.11</b>
Wales	3.1	0.25	0.8	0.06
Scotland	6.7	0.29	3.3	0.14
Northern Ireland	2.2	0.32	0.2	0.03

Notes:

Source: ONS

<sup>1</sup> Regional breakdown is based on the GOR (Government Office Region) classification.

<sup>2</sup> Government sector covers Central Government only. Local Authorities, NHS and those areas of Central Government not available from the Government survey are excluded.

<sup>3</sup> Labour Force figure used is a head count. An estimate of the Labour Force in full-time equivalents (FTE) is not available. Using the head count figure gives a lower percentage than a FTE would give.

Labour Force figures relate to those in employment, rather than all those economically active.

<sup>4</sup> Labour Force figures are for Spring 2000.

**Table 16 OECD Science and Technology indicators**  
**Gross Expenditure on R&D: International Comparisons, 1991–1999**

	Year	UK	Germany <sup>1</sup>	France <sup>2</sup>	Italy <sup>3</sup>	Japan <sup>4</sup>	Canada	USA <sup>5</sup>
<b>Gross Domestic Product (GDP)<sup>6</sup></b> (£ billion at ppp) <sup>7</sup>	1991	592.2	891.2	671.5	625.4	1,508.1	331.9	3,767.6
	1992	614.9	940.6	683.7	640.7	1,541.5	330.2	3,855.9
	1993	648.2	980.6	700.7	649.6	1,643.9	360.0	4,195.6
	1994	687.8	1,058.9	731.0	696.1	1,712.6	389.9	4,513.0
	1995	722.1	1,142.9	784.7	753.9	1,859.4	439.6	4,798.7
	1996	768.1	1,139.3	779.2	773.9	1,945.5	445.7	4,991.9
	1997	815.8	1,188.2	794.4	785.4	2,009.0	474.1	5,360.6
	1998	858.6	1,252.2	846.8	822.5	2,020.0	505.2	5,770.7
	1999	908.1	1,307.5	897.5	858.6	2,083.5	543.8	6,185.6 (e)
<b>Gross Expenditure on R&amp;D (GERD)</b> (£ billion at ppp) <sup>7</sup>	1991	12.1	22.6	15.9	7.7	42.5 (e)	5.1	102.1
	1992	12.7	22.6 (e)	16.3	7.6	42.5 (e)	5.2	101.9
	1993	13.5	23.1	16.8	7.3	44.0 (e)	5.9	105.7
	1994	14.0	23.9 (e)	17.1	7.3	45.1 (e)	6.5	109.2
	1995	14.2	25.8 (e)	18.1	7.5	51.4 (e)	7.2	120.1
	1996	14.5	25.7 (e)	17.9	7.8	54.5 (e)	7.1	126.9
	1997	14.8	27.2 (e)	17.6	7.8	57.8 (e)	7.6	138.1
	1998	15.6	28.9 (e)	18.5 (p)	8.4 (p)	60.8 (e)	8.2 (p)	150.4 (p)
	1999	16.7	31.1 (e)	-	9.0 (p)	-	8.6 (p)	163.9 (p)
<b>GERD as a percentage of GDP</b>	1991	2.05	2.53	2.37	1.23	2.82 (e)	1.53	2.71
	1992	2.06	2.41 (e)	2.38	1.18	2.76 (e)	1.58	2.64
	1993	2.09	2.35	2.40	1.13	2.68 (e)	1.63	2.52
	1994	2.04	2.26 (e)	2.34	1.05	2.63 (e)	1.67	2.42
	1995	1.96	2.26 (e)	2.31	1.00	2.77 (e)	1.64	2.50
	1996	1.88	2.26 (e)	2.30	1.01	2.80 (e)	1.60	2.54
	1997	1.81	2.29 (e)	2.21	0.99	2.88 (e)	1.61	2.58
	1998	1.81	2.31 (e)	2.18 (p)	1.02 (p)	3.01 (e)	1.62 (p)	2.61 (p)
	1999	1.83	2.38 (e)	-	1.04 (p)	-	1.58 (p)	2.65 (p)
<b>BERD as a percentage of GDP</b>	1991	1.37	1.76	1.46	0.68	2.13	0.80	1.97
	1992	1.38	1.66 (e)	1.49	0.66	2.03	0.84	1.90
	1993	1.40	1.58	1.48	0.60	1.90	0.90	1.78
	1994	1.34	1.51 (e)	1.45	0.56	1.87	0.98	1.71
	1995	1.28	1.50	1.41	0.53	1.94	0.98	1.80
	1996	1.23	1.49 (e)	1.41	0.54	2.01	0.95	1.87
	1997	1.19	1.54	1.35	0.52	2.09	0.99	1.91
	1998	1.20	1.57 (e)	1.35 (p)	0.55 (p)	2.17	1.01 (p)	1.94
	1999	1.24	1.63 (e)	-	0.56 (p)	-	1.00 (p)	2.01 (p)
<b>GOVERD as a percentage of GDP</b>	1991	0.30	0.35	0.54	0.28	0.23	0.30	0.27 (e)
	1992	0.30	0.34	0.50	0.26	0.25	0.29	0.26
	1993	0.30	0.36	0.51	0.24	0.27	0.28	0.26
	1994	0.30	0.34	0.48	0.22	0.26	0.26	0.24
	1995	0.28	0.35	0.48	0.21	0.29	0.25	0.24
	1996	0.27	0.34	0.47	0.20	0.27	0.25	0.22
	1997	0.25	0.33	0.45	0.20	0.26	0.22	0.21
	1998	0.24	0.34	0.43 (p)	0.22 (p)	0.28	0.21 (p)	0.21
	1999	0.20	0.34 (e)	-	0.22 (p)	-	0.19 (p)	0.19 (p)
<b>HERD as a percentage of GDP</b>	1991	0.34	0.41	0.36	0.26	0.34 (e)	0.42	0.38
	1992	0.35	0.41 (e)	0.36	0.26	0.35 (e)	0.44	0.39
	1993	0.36	0.41	0.38	0.28	0.38 (e)	0.42	0.39
	1994	0.38	0.41	0.38	0.27	0.37 (e)	0.41	0.39
	1995	0.37	0.41	0.39	0.25	0.40 (e)	0.40	0.38
	1996	0.36	0.42	0.39	0.27	0.39 (e)	0.39	0.38
	1997	0.35	0.41	0.38	0.26	0.39 (e)	0.38	0.37
	1998	0.35	0.40	0.37 (p)	0.25 (p)	0.42 (e)	0.38 (p)	0.37 (p)
	1999	0.37	0.41 (e)	-	0.26 (p)	-	0.37 (p)	0.37 (p)

**Notes:**

1 There is a break in series between 1991 and 1992.

2 For government and business enterprise data there is a break in series between 1991 and 1992.

3 There is a break in series between 1993 and 1994.

4 Data for Japan are adjusted by OECD.

5 Excludes most or all capital expenditure.

6 The measure of GDP used is at market prices, based on the UN definition.

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

(p) = provisional

(e) = estimated

Source: OECD databank (February 2001)

Table 17 International comparison of gross expenditure on R&amp;D by sector of performance and source of funding, 1999

Per cent

	UK	Germany <sup>1</sup>	France (p)	Italy (p)	Japan (e) <sup>2</sup>	Canada (p)	USA (p) <sup>3</sup>
<b>Percentage by sector of performance<sup>4</sup></b>							
Government	10.7	14.3	19.5	21.2	9.3	12.2	7.2
Business enterprise	67.8	68.6	62.0	53.8	71.9	63.0	75.7
Higher education	20.0	17.0	17.1	25.1	14.0	23.6	14.1
Other	1.4	-	1.4	-	4.8	1.2	2.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Percentage by source of funds<sup>5</sup></b>							
Government	27.9	33.8	40.2	51.1	19.7	31.2	29.2
Business enterprise	49.4	63.5	50.3	43.9	73.4	49.2	66.8
Abroad	17.6	2.3	7.9	5.0	0.3	13.8	-
Other <sup>6</sup>	5.1	0.3	1.6	-	6.5	5.7	4.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## Notes:

Source: OECD databank (February 2001)

1 Data for "other" included elsewhere.

2 Data for Japan are OECD estimates.

3 Excludes most or all capital expenditure.

4 Sector of performance data for France are for 1998.

5 Source of funds data for France are for 1997.

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

(p) = provisional

(e) = estimate

Table 18 R&amp;D performed in the Business Enterprise sector (BERD), 1991-1999

£ billion at ppp<sup>1</sup>

Year	UK	Germany <sup>2</sup>	France <sup>3</sup>	Italy <sup>4</sup>	Japan <sup>5</sup>	Canada	USA <sup>6</sup>
1991	8.1	15.7	9.8	4.3	32.1	2.6	74.3
1992	8.5	15.6 (e)	10.2	4.2	31.3	2.8	73.3
1993	9.1	15.5	10.4	3.9	31.3	3.2	74.8
1994	9.2	16.0 (e)	10.6	3.9	32.1	3.8	77.2
1995	9.3	17.1	11.1	4.0	36.2	4.3	86.4
1996	9.4	17.0 (e)	11.0	4.2	39.1	4.2	93.2
1997	9.7	18.3	10.8	4.1	42.0	4.7	102.5
1998	10.3	19.6 (e)	11.5 (p)	4.5 (p)	43.8	5.1 (p)	112.2
1999	11.3	21.3 (e)	-	4.8 (p)	-	5.4 (p)	124.1 (p)

## Notes:

Source: OECD databank (February 2001)

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

2 There is a break in series between 1991 and 1992.

3 There is a break in series between 1991 and 1992.

4 There is a break in series between 1993 and 1994.

5 Data for Japan are adjusted by OECD.

6 Excludes most or all capital expenditure.

(p) = provisional

(e) = estimate

Table 19 International comparison of Government funding of R&D in 1999 by socio-economic objective (percentage distribution)<sup>1</sup>

Per cent

	UK	Germany (p)	France (p)	Italy	Japan <sup>2</sup>	Canada (p)	USA (p) <sup>3</sup>
Agriculture, forestry and fishing	4.2	2.6	3.0	1.9	3.5	14.4	2.2
Industrial development	0.9	12.7	6.2	8.1	6.5	16.3	0.5
Energy	0.5	3.6	4.9	5.0	19.3	7.0	1.5
Infrastructure	1.7	1.7	0.6	0.6	3.5	5.2	2.3
Environmental protection	2.4	3.5	1.6	3.4	0.7	4.0	0.7
Health	15.1	3.3	5.5	5.6	3.7	11.7	21.0
Social development and services	3.5	3.2	1.5	3.6	0.9	4.5	1.0
Earth and atmosphere	1.3	1.8	0.7	1.6	1.5	6.0	1.4
Advancement of knowledge	30.0	54.7	40.3	59.4	49.5	10.3	6.2
Civil space	2.3	4.5	11.0	8.3	6.3	11.3	10.7
Defence	37.9	8.4	22.7	2.6	4.6	6.1	52.5
Not elsewhere classified	0.3	0.2	2.0	-	0.0	3.2	-
<b>Total</b>	<b>%</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
	<b>£ million<sup>4</sup></b>	<b>6,194</b>	<b>10,761</b>	<b>8,621</b>	<b>4,754</b>	<b>1,822</b>	<b>51,739</b>

## Notes:

Source: OECD databank (February 2001)

1 Data for Italy and Canada are for 1998.

2 Data for Japan are OECD estimates.

3 Excludes most or all capital expenditure.

4 Data are converted using the purchasing power parities (ppp) developed by the OECD.



# Introducing a New Estimator for the Producer Price Index

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## Summary

- The Producer Price Index (PPI) has been undergoing a major redevelopment that will significantly improve the methodology used. A new method of estimation is to be introduced as the culmination of this redevelopment – the biggest change to the PPI for over 40 years.
- A lengthy parallel run has been undertaken to fully assess the difference in current and new estimator results and quality assure results produced on the new estimator basis. This found little difference between current and new estimator results at the aggregate level with larger differences for the detailed level indices.
- Other areas of methodological development have also been considered as part of the project. These include the need for an outlier detection method and producing estimates of accuracy (sampling errors) for new estimator results.
- It is planned that the new estimator will be introduced for the September 2001 PPI, to be published in early October 2001.

## Introduction

This article is a follow-up to a December 1998 article, which outlined changes being made (and planned) to improve the quality of the Producer Price Index (PPI). These included introduction of a new sample design, annual rotation, a new method of estimation and production of sampling errors. For completeness, some of the issues discussed in the previous article are included here.

Good progress has been made since the previous article was published. A number of improvements have already been introduced

including a random sample based on an optimal allocation and annual rotation. Work has also proceeded in other areas: the testing of a new estimator and the calculation of sampling errors. This article provides a brief summary of progress in each area of development, but focuses on the next key change to be implemented: the introduction of a new method of estimation.

The article:

- Outlines progress made since publication of the previous article;
- Considers the benefits of the new estimator and discusses the main differences between the current and new methods;
- Discusses the practicalities of introducing the new estimator;
- Provides a summary of the parallel run results;
- Discusses progress in other areas of development work;
- Outlines plans for introducing the new estimator.

## Background to the PPI Redevelopment Project

### What is the PPI?

The PPI measures the change in prices of goods bought and sold by UK manufacturers. Both input and output indices are produced. The output PPI measures the change in price of goods sold to the UK market as they leave the factory gate, whilst the input PPI measures the change in price of materials and fuel bought by manufacturers that are used within the manufacturing process, both materials used in the final product and those required for the normal day to day running of the company. The PPI covers manufacturing and some other industries such as mining.

### Index calculation

For the output series, around 9,000 price quotes are collected each month from some 3,200 contributors. In addition some prices are obtained from administrative sources, such as other government departments and trade publications, for example electricity and coffee prices.

Basic output PPIs are calculated at a fairly detailed product group (six digit) level, with the products which fall into each PPI defined by the European 'Classification of Products by Activity' (CPA) which in turn is based on the 1992 Standard Industrial Classification. Indices produced for around 1,400 detailed product groups are then grouped together using the 'family tree' structure of the CPA to produce 240 industry (four digit) level series. The industry level series are then grouped to give 23 division level (two digit) indices, which in turn are grouped into the 'all-manufacturing' index. The table below illustrates the PPI index structure.

**Table 1: PPI Index Structure**

**All manufacturing**

**Division (PPI two digit)**

15 Manufacture of Food Products and Beverages

**Industry (PPI four digit)**

15.31 Prepared and preserved potatoes

**Product (PPI six digit)**

15.31.11 Potatoes, frozen (e.g. oven ready chips)

15.31.12 Potatoes, preserved

**Prodcom product (eight digit level)**

15.31.11.00 Frozen potatoes

15.31.12.10 Dried potatoes

15.31.12.30 Potato flour, meal, flakes and granules

15.31.12.50 Frozen potatoes, prepared or preserved

15.31.12.70 Potatoes in the form of flour, meal or flakes prepared or preserved

15.31.12.90 Other preserved potatoes

There is no direct price collection of input prices from companies. Output PPIs and import price indices are used as proxies in the calculation of the input series.

**Index calculation (current method)**

At the detailed (six digit) level the index is a weighted sum of the price relatives, where the price relative is the current price of an item divided by the price of the item in the base year (currently 1995). The weights are based on the value of the reporting unit's sales of products within the six digit product group relative to the sales of products within the product group of other reporting units included in the sample. The formula is:

**Equation 1**

$$\text{Index value} = \frac{\sum_i \text{sales}_i \text{PR}_i}{\sum_i \text{sales}_i}$$

where  $\text{PR}_i$  represents the average price relative for enterprise unit  $i$ ;  $\text{sales}_i$  represents the sales value for company  $i$ ; and  $i$  counts the

Information on the value of a reporting unit's sales of products is obtained from the Prodcom survey, which collects sales information on around 4,400 products from approximately 29,000 contributors each year. Prodcom (eight digit) product definitions are based on the 1992 Standard industrial classifications and can be aggregated to the CPA six digit classification (see table 1). The latest available Prodcom survey data has been used in the calculation of contributor weights since the new sample was introduced in 1999. The item level weights are updated on an annual basis (see section on annual rotation below).

**Index to index weights**

The PPIs are Laspeyres (base weighted) where the base year and index level weights are updated every five years to reflect changes in the sales and purchasing patterns of industry. The weights used to combine the detailed product level indices to calculate the broader industry, division and all-manufacturing level are also based on Prodcom sales figures. In this case, as the PPI is a measure of price movements of products sold to the UK market, the Prodcom total sales values are adjusted, using information supplied by Customs and Excise, to remove the proportion of sales exported. This information is not available at the detailed company level to adjust item weights in a similar way. The weights at industry level are simply the homesales value for the particular product group divided by the total homesales of all product groups within the industry (and similarly for the division and all-manufacturing series).

For the input series index level weights are based on Input-Output data on industry purchasing patterns.

**Uses**

Approximately 750 indices are published each month (in one of three Business Monitors and on the National Statistics website). The PPI is an important macroeconomic indicator used to monitor inflation and another key use is in the deflation of National Accounts e.g. in the calculation of the Index of Production. The PPIs are also used extensively by business users to price long-term contracts.

**History of the PPI methodological developments**

This panel shows how the methodology for the PPI has developed over time since the index was first published in 1903. Table 2 provides a brief history of the index and shows that the current programme of developments are among the most significant improvements in methodology since the index was introduced, and certainly are the biggest change since the 1950s.

**Table 2: History of PPI methodological developments**

Year	PPI Methods
1903	The first official PPI (formerly Wholesale Price Index) is prepared by the Board of Trade. Prices are mainly derived from trade accounts and weights are estimated values of different commodities used or consumed in the country. The index is based on just 45 commodities, mainly materials and foodstuffs.
1921	A new weighting method is introduced. Weights are derived from the first Census of Production. The main interest continues to be centred on the aggregate index rather than any individual component.
1935	The Index is reweighted using weights derived from the 1930 Census figures. The main interest continues to be centred on the aggregate index.
1958	The objective changes from one of deriving an overall index for the manufacturing sector to one of producing a family of index numbers for each of the industrial sectors. A system is derived based on individual monthly price quotations supplied voluntarily by manufacturers for a wide range of individual closely specified goods produced in the UK for the home market. Information is supplemented by the collection of price quotations for a number of imported commodities, mainly raw materials. Weights continue to be based on Census of Production.
1983	The Wholesale Price Index is renamed the Producer Price Index and reclassified from the 1968 Standard Industrial Classification to the revised 1980 version.
1991	The collection of data becomes statutory under the Statistics of Trade Act 1947 (since 1993 data collection has also been statutory in Northern Ireland under Article 5 of the Statistics of Trade and Employment Order 1988).
1999-2001	The recommendations of the PPI Redevelopment Project are implemented. A random sample design is introduced with companies selected from contributors sampled for Prodcom using an optimal allocation. A new unbiased estimator introduced which gives more weight to smaller companies and the sample is updated on an annual basis.

## PPI Redevelopment Project

In 1996 the ONS began a major programme of development work to significantly improve the methodology of the PPI. This redevelopment project involved the ONS working with Southampton University and Social and Community Planning Research (SCPR). It began with a review of methods with the aim of identifying any deficiencies in procedures. User consultation on the findings of the review included a presentation to the Royal Statistical Society (RSS).

Five main areas for improvement were identified, the main recommendations being:

- i. *New sample from Prodcom:* The PPI sample should be randomly drawn from companies selected for Prodcom. This would replace a panel based sample design and ensure that where companies are recruited information is available on products produced and level of sales for these products.
- ii. *Optimal allocation:* The sample should be selected using a method of optimal allocation so that whilst the same number of price quotes (9,000) would be retained, the sampling errors of the PPIs would be minimised.
- iii. *Rotation:* The sample should be updated on an annual basis to systematically pick up new products and share the form-filling burden for smaller companies across a wider number of firms.
- iv. *New estimator:* weights given to products when they are combined to form the six digit index should take into account the likelihood of selection for the sample as well as the level of sales for a contributor.

- v. *Sampling errors:* introduction of a random sample means that, for the first time, it would be possible to calculate sampling errors to give a better understanding of the quality of the indices.

Significant progress has been made in each area of development and many of the improvements – the random sample, optimal allocation and annual sample rotation – have already been introduced (see next section below). The next key change is the introduction of the new estimator.

## Recommendations implemented to date

### Introduction of the new sample

The first stage of the project concentrated on the introduction of the new random sample selected from Prodcom. The sample was allocated in an optimal way so as to retain the same number (9,000) of price quotes whilst minimising the sampling error of the all-manufacturing index and providing high quality four digit indices (this is the level at which the PPI is used to deflate the national accounts). The move from the old-style panel of contributors to this random sample resulted in large-scale changes. More quotes from smaller companies were included in the sample and there was a redistribution of quotes across industries to better reflect the relative importance of products in the current economy. As a result the sample selected within hi-tech industries such as computers has increased, whilst there has been an offsetting decrease in the number of quotes for industries such as navigation instruments whose relative importance (in terms of value of sales) has decreased.



There are a number of issues that impacted on (successful) recruitment of the new sample, most significantly that the reallocation resulted in 7,000 of the 9,000 price quotes being replaced. Recruitment of new quotes is a time-consuming process to ensure that a sufficiently detailed specification is provided and the representative product selected by the contributor is appropriate for inclusion in the PPI. To make this a manageable process, a phased approach was adopted given the size of the task. Recruitment was split into four phases, with each phase comprising a number of four digit series. In total recruitment and introduction of the new sample took some 20 months to complete. Table 3 below summarises the timing for introduction of each phase of the sample.

**Table 3: Timing of introduction of each recruitment phase**

Date	Phase introduced	Percentage of all- manufacturing PPI included in the phase
May 1999	Phase 1	44
October 1999	Phase 2	11
February 2000	Phase 3	20
May 2000	Phase 4	25

As the new sample was introduced a factor was applied to match the index value calculated on the new sample basis to the index value calculated on the old sample basis in the link month. This link factor would continue to be applied in all subsequent months, until a further sample update took place and the link factor was reworked. On completion of recruitment for each sample phase, a short parallel run of the existing and new sample was completed to assess the impact of sample changes on results in the months following the link month. For each recruitment phase, the parallel run showed, at the all-manufacturing level, that differences were minimal (0.1 index points or less).

Other factors affecting recruitment of the new sample relate to achieving the number of quotes specified by the optimal allocation. Past experience of recruitment has shown that when the PPI sample is selected from Prodcorn, some of the products will be unsuitable for inclusion; for example because the product is not sold to the UK market, there has been a change in a company's product range since information was supplied to Prodcorn and a particular product is no longer manufactured or the company has ceased trading. To compensate for the anticipated drop-out a sample based on 11,000 price quotes was selected. In some industries the drop out rate was higher than expected and as a result there is a slight shortfall in the achieved sample size. Through the process of annual rotation the sample size is working back steadily to the level of 9,000 items.

### Annual rotation

Whilst introduction of the new sample represented a big improvement over the old panel, in time the sample will gradually diminish as companies cease trading or stop manufacturing particular products. As new products come onto the market and demand for other products changes, the sample will also become less representative of the current economic position. To ensure that the sample remains representative, it is being updated on an annual basis by selecting the sample afresh each year from the latest available Prodcorn sample. This annual rotation also helps to spread the form-filling burden for smaller companies.

The approach to rotation adopted means that around a third of the sample will be updated each year. Recruitment of the first year rotated sample was again, for operational reasons, completed in a phased approach with the final phase introduced for the February 2001 PPI. Work is already underway to recruit the next rotated sample.

### The new estimator

Calculation of item weights for the new estimator requires information on the value of products sold by each company, i.e. a sample selected from Prodcorn. It was therefore necessary for the new sample to be introduced before the impact of the proposed change in estimation procedure could be assessed. Once sample recruitment and rotation aspects of the project were fully operational (around May 2000), the focus of the development work moved to the introduction of the new estimator.

The main difference between the current and new estimator is the increased weight given to smaller companies. The current method of estimation as shown in Equation 1 weights together price relatives based only on the value of the company's sales of products within the particular six digit product group relative to the sales of other companies *included in the sample*.

Companies included in the sample are only taken to be representative of themselves, not of other companies within the same sample stratum that were not chosen for inclusion in the PPI sample. This means that the current estimator would be biased if price movements for small companies differed significantly from those of larger companies.

The new estimator addresses this deficiency by giving proper weight to the smaller companies within the sample. It introduces an unbiased method of estimation, which takes into account a company's probability of selection for the sample (both the probability of initial selection for Prodcorn and subsequent selection for PPI from companies selected for Prodcorn). The formula is:



## Equation 2

$$\text{Index value} = \frac{\sum_g w_g \sum_h w_h \sum_{i \in S_{hg}} \text{sales}_i \text{PR}_i}{\sum_g w_g \sum_h w_h \sum_{i \in S_{hg}} \text{sales}_i}$$

Where  $\text{sales}_i$  represent the sales in the year of sample selection by the reporting unit,  $w_g$  represents the weight for selection for Prodcorn in stratum  $g$ ,  $w_h$  represents the weight for selection for PPI in stratum  $h$ ,  $\text{PR}_i$  represents the average price relative for company  $i$ ,  $i$  counts the number of quotes selected from Prodcorn stratum  $g$  and PPI stratum  $h$  and the weights are calculated as expansion weights as follows:

## Equation 3

$$w_g = \frac{\text{Total number of companies in stratum } g}{\text{Number of companies selected for Prodcorn from stratum } g}$$

## Equation 4

$$w_h = \frac{\text{Total number of contributors manufacturing products in PPI stratum } h}{\text{Number of contributors manufacturing products selected for PPI from stratum } h}$$

## Redistribution of item weights

The effect of the change in estimator has, as expected, been a shift in the distribution of item weights, with less extreme (large or small) item weights and a more even distribution across the sample.

Chart 1 below illustrates the effect of the change in estimator on the

distribution of item weights and shows that, whilst under the old estimator design there were a significant number of items having minimal effect on index movements, with a weight of less than one per cent of the six digit index total, this proportion has been significantly reduced under the new estimator design. A large proportion (around 34 per cent) of item weights now account for between 5 per cent and 20 per cent of the six digit index. There are also fewer large weights - single items with a weight of 60 per cent or more of a six digit index.

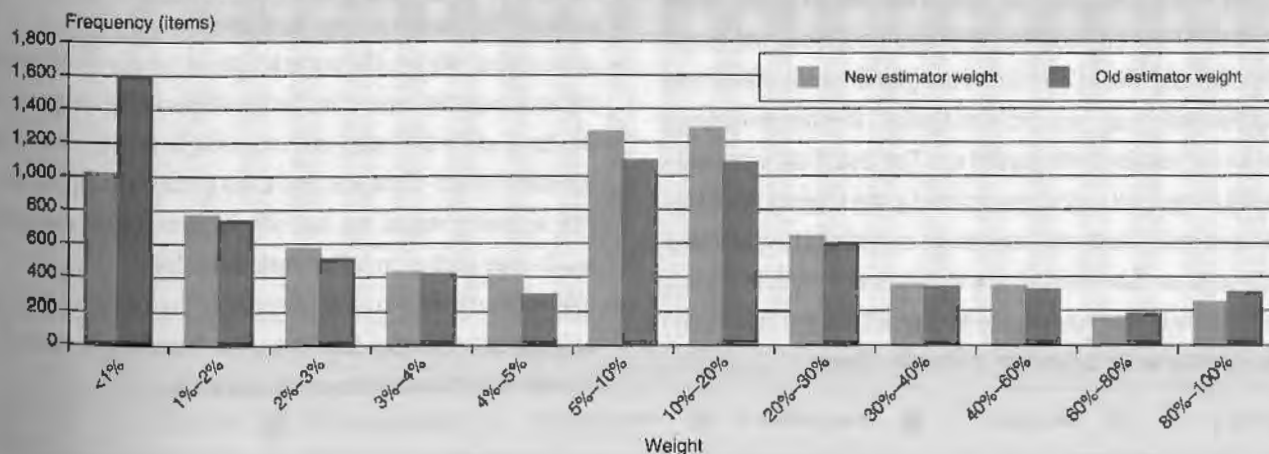
Given the change in weighting pattern, it is possible that the two methods of estimation could produce different results for the PPI if price movements of smaller companies differed from those of larger companies. To fully assess the impact of change in item weights, a detailed investigation of differences in index values derived based on current and new estimator methods has been carried out as a parallel run. This is described further in the next section.

## Practicalities of introducing the new estimator

While the new method of estimation should be sound from a theoretical point of view, given the potential for significant changes to the PPI, a parallel run of results produced on the current and new estimator basis was completed to fully assess the impact of the changes before switching to the new method. The parallel run began in May 2000 and was carried out using data for up to a two year period. For PPI indices included in the early phase of sample recruitment, data back to May 1999 were available for inclusion in the parallel run, whilst for later phases of recruitment the parallel run had fewer months available. Precisely the same input data were used for the existing and new estimators; any differences observed in results would then be solely due to the differences in weights.

Chart 1

Distribution of current and new estimator weights



A considerable volume of results (for some 1,500 or more indices) were considered during the parallel run analysis. A formal project management process was employed to manage the work and ensure that any potential problems with the new estimation method were identified and resolved. Following consultation with a range of PPI users and ONS methodologists, a set of criteria were specified against which parallel run results would be assessed. Results for the range of PPI indices (i.e. at all levels of aggregation) were considered against these criteria which compared differences in current and new estimator index levels, growth and volatility.

### Summary of the parallel run results

Whilst the change in estimator could potentially lead to differences in current and new estimator results, the parallel run showed *at the aggregate level* little change between the old and the new estimator series. Where significant differences did occur, investigations revealed that there was a valid reason for the change. Differences were more noticeable at the more detailed level, but again thorough investigations identified valid reasons for the differences and gave no cause for concern with new estimator results. In summary the results showed:

#### All manufacturing level

At the all-manufacturing level gross and net sector output and input series were compared and showed no major difference in index values calculated on the current estimator and the new estimator. Chart 2 shows the difference in current and new estimator index levels for each of the all-manufacturing series over the two year parallel run period. For example, the index calculated for Gross Sector Output for April 2000 was 0.07 index points higher on the new method than the current method.

For the early periods, differences are based on a subset of PPI series, those four digit series included in the early sample recruitment phases. As the parallel run progressed, more and more indices were included in the comparison as further recruitment phases were brought live (Table 2 provides details of when each recruitment phase was introduced). Whilst differences are greater as more and more component indices are included in the analysis, they remain relatively small for the duration of the parallel run. The results show that even when all component indices are included in the analysis (from May 2000 onwards), differences between the current and new estimator results continue to be minimal; less than 0.2 index points in any one month. There is also no evidence to suggest that the current and new estimator series are starting to steadily diverge.

#### Division level

The change in estimation method is likely to produce bigger differences at the more detailed levels where the effects of re-weighting will be more significant as company prices change and the weights of individual items are greater. At divisional level the parallel run results show, as expected, larger differences than the all-manufacturing level, but in turn much less than the lower level four digit and six digit series. There is no general trend in the differences, i.e. the new estimator does not produce indices that are consistently higher/lower than current estimator index values.

All division level differences of 0.1 index points or more were investigated during the course of the parallel run and again there were valid reasons for the differences in current and new estimator index values, with no problems identified with the performance of the new estimator. Chart 3 summarises *absolute* division level parallel run differences. Again the chart shows that differences increase as more indices are included in the parallel run (further recruitment phases are introduced). The majority of division level differences remain small - 0.5 index points or less.

#### Detailed level differences

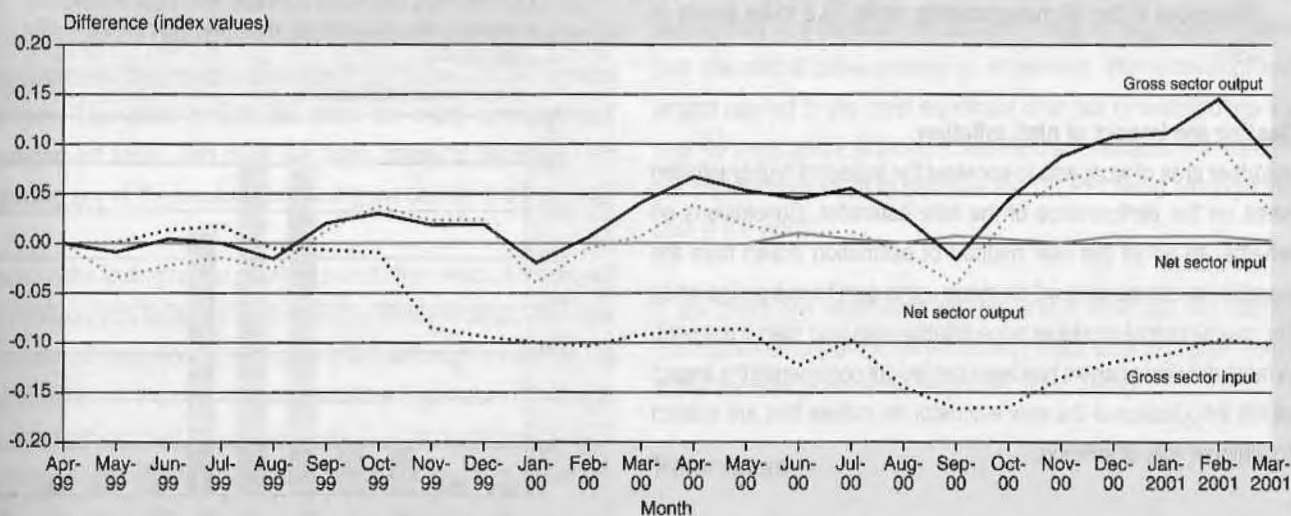
At the more detailed industry (four digit) and product (six digit) level, as might be expected, the rates of divergence increase throughout the parallel run period. Typically a six digit level index might be based on perhaps five price quotes and where prices change over time re-weighting of prices within indices can have a significant impact on results. As the parallel run comparison moves further away from the link month, more prices are likely to change and differences in index values are likely to increase. Chart 4 shows the percentage of six digit indices that have *absolute* differences of one index point or more between current and new estimator index values in each month of the parallel run analysis from the link month (where current and new estimator index values will match) onwards. Similar results were observed for the four digit series, although in this case differences were, as expected, slightly smaller.

In summary, the parallel run results showed:

- some quite significant differences in detailed (six digit level) series, but an acceptable explanation for the difference (re-weighting of the items within the index) and no cause for concern with new estimator results - there was also some evidence to suggest that new estimator results are less volatile than current estimator results (see section on outlier treatment below);
- differences continue to be apparent when the six digit series are aggregated to four digit level but again there was no cause for concern with the behaviour of the new estimator;

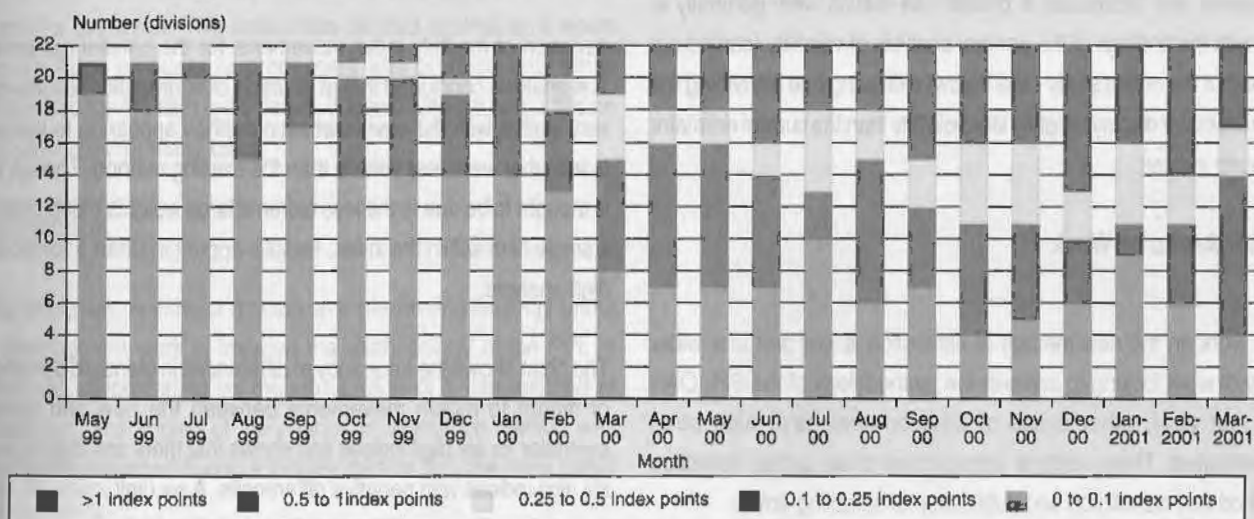
**Chart 2**

Difference between current and new estimator all-manufacturing index values



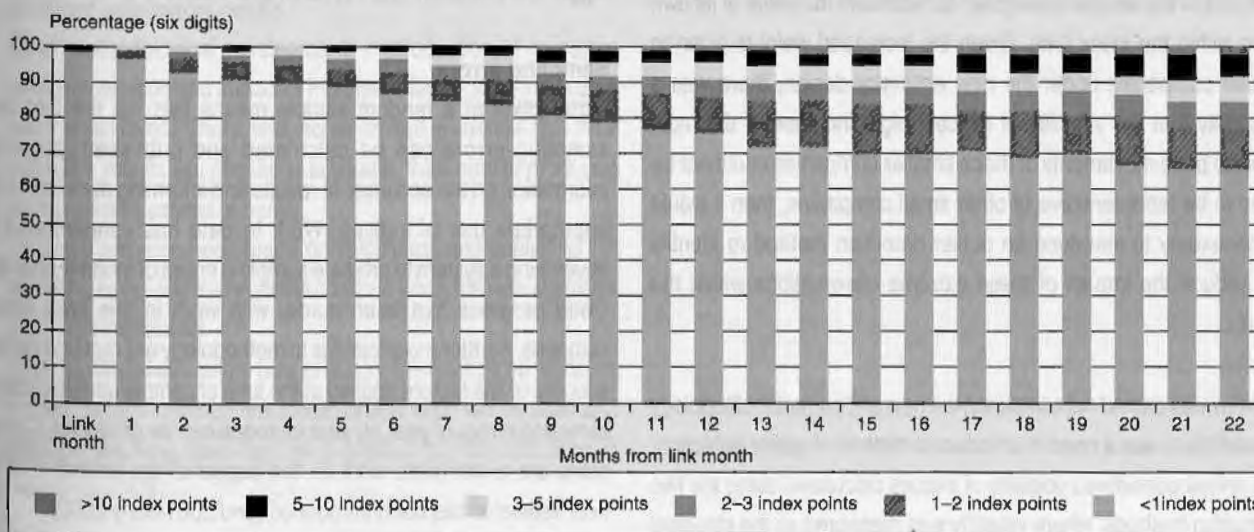
**Chart 3**

Summary of absolute differences in new estimator division level index



**Chart 4**

Summary of absolute differences in new and current estimator six digit index values





- much smaller differences were observed in the division level and all-manufacturing series. In particular there were minimal differences in the all manufacturing series (0.2 index points or less).

### Testing the impact of high inflation

A further area of work was to consider the impact of higher inflation rates on the performance of the new estimator. Conclusions on whether to adopt the new method of estimation drawn from the parallel run comparison will be made using data from a period when the overall output producer price inflation was less than 3 per cent. A more detailed analysis has been carried out considering the impact of the introduction of the new estimator on indices that are subject to a higher rate of inflation.

Characterising all six digit indices according to inflation level, measured as the mean monthly movement in index over the period, this part of the study considered only indices displaying the largest increases and decreases in prices. The results were generally in line with the findings of the general analysis of volatility (carried out as part of the outlier study - see below) indicating that if anything the new estimator displays slightly less volatility than the current estimator for such indices.

### Other Areas of Work

The work on the new method of estimation is just part of a wider body of work looking to improve the methodology of the PPI. Over the last year, other areas of development have also been investigated. These include introduction of an outlier detection method and calculation and publication of sampling errors.

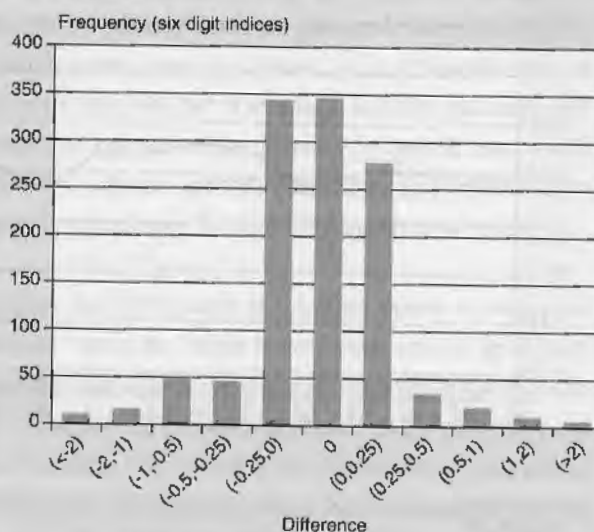
#### Outlier treatment

No form of outlier treatment is currently used within the PPI, since each unit in the sample is weighted to represent the value of its own sales within the index total. Given the increased weights given to smaller companies under the new estimator design, there was a possibility that the volatility of indices might increase. If the most extreme price movements of these smaller companies could not be taken to be representative of other small companies, then it would be necessary to introduce an outlier detection method to identify and reduce the impact of these extreme observations within the results.

A review was carried out comparing the new and current methodology to see if there was a need to introduce a method of outlier detection. The review considered volatility of indices calculated using the two estimation methods, where volatility was measured as the standard

**Chart 5**

Differences between current and new estimator standard deviations of monthly movements (six digit level)



deviation of monthly index movements for the parallel run period. The analysis concluded that at all levels of aggregation results were very similar with the new estimation method appearing to produce results that were *less* volatile than the existing method. Though this is thought to be due to the less extreme large weights being given to a single item within the index. Results appear in Chart 5 for the six-digit analysis.

The chart shows the frequency of differences in standard deviations of month to month movements between the new and current estimator for six digit indices and shows that there are slightly more six digit indices with negative differences. A six digit index will have a negative difference if the standard deviation of the new estimator is less than the standard deviation of the current estimator and a positive difference if the standard deviation of the new estimator is bigger than the standard deviation of the current estimator.

#### Sampling errors

Introduction of a random sample means that, for the first time, sampling errors can be calculated and published, providing information on the accuracy of results and informing decision on the appropriate use of indices. Work to date has concentrated on developing a system to produce sampling errors of monthly changes. Good progress has been made, with work in this area almost complete. Further modifications to methodology are required (to take account of link factors applied at the time of sample updates) before sampling errors of year on year changes can be produced. Current plans are to complete work on this aspect of the project after the new estimator has been introduced (end 2001/early 2002).



## Introducing the changes

Introduction of the new estimation method and other improvements associated with the project require significant procedural and system changes. The whole project has been run using formal project management tools, and care has been taken to consult users regarding any of the results found during the course of the project.

Based on the findings of the parallel run and other areas of the project the decision was taken to implement the new estimator. The new estimator will be linked in for August 2001, although results will not be published on the new estimator until the September PPI due to the amendments that need to be carried out to procedures and IS systems. All data series will use a common link month of July 2001.

A decision was also taken after consultation not to revise back data. One possibility would have been to revise data back to June 2000 and link in the new estimator, with June 2000 being a common link month for the series. This option was decided against, as it would require huge amounts of processing and produce only small differences for the high level series. It would also cause confusion and difficulties for many users

## Conclusion

This article has provided an update on implementing the programme of development work to improve the methodology of the PPI, in particular concentrating on the introduction of a new method of estimation. The impact of the change in estimation method was thoroughly assessed during a lengthy parallel run, the main points to note being:

- There were minimal differences in current and new estimator results at the aggregate level and larger differences at the more detailed level. At each level of aggregation the new estimator produced satisfactory results.
- Other methodological developments - introduction of an outlier detection method and impact of high/low inflation rate - have also been considered. There was some limited evidence that new estimator results are slightly less volatile than results produced on the current estimator basis.
- Progress has also been made on calculation and publication of sampling errors and this work will continue when the new estimator has been introduced.
- With the introduction of the new estimator there will be no revisions to back data, a common link month of July 2001 will be used and data on the new basis will be published for the first time in September 2001.

Introduction of the new estimation method will be the culmination of this large-scale programme of work, which has addressed deficiencies in a number of areas and required significant system and operational developments to implement. The redevelopment project has led to the most significant changes in methodology for over 40 years and it is thought that the improvements will result in the methodology used to calculate the UK PPI being amongst the best in the world.

If you have any comments on this article or would like further information on any of the issues raised please write to Louise Morris at the address given at the beginning of the article.

## References

- 1 Cope I and Freeman D. Improving the quality of the Producer Price Index. *Economic Trends* No.541 (December 1998). London: The Stationery Office, pp. 63-74.

# Regional Accounts 1999: Part 2

## Regional household sector income and individual consumption expenditure

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This article presents estimates of total and disposable household sector income by region for 1989 to 1999, and regional estimates of individual consumption expenditure (ICE) for 1994-1999. The estimates published in this article are produced under the European System of Accounts 1995 (ESA95)<sup>1</sup>, and are consistent with the 2000 edition of *the UK National Accounts – The Blue Book*<sup>2</sup>.

The provisional estimates for 1999 (Table A) show that:

- Household income per head in London was 22 per cent higher than the UK average. In the North East and Northern Ireland it was about 18 per cent lower.
- Disposable household income ranged from 67 per cent of total household income in London and the South East to 72 per cent in Wales and Northern Ireland.
- Individual consumption expenditure (ICE) in London was 24 per cent above the UK average. In the North East it was 19 per cent below.

### Regional household income

Due to the absence of key regional indicator data for compensation of employees (CoE), estimates for 1997 to 1999 are marked as provisional. When the 2000 estimates of regional household income are released in 2002, it is expected that these missing series will be available, and only the latest year will be marked as provisional.

### Total and disposable household income

London and the South East each accounted for about 15 per cent of UK total household income in 1999 (Table A). Household income per head in Wales, the North East and Northern Ireland remained substantially below the UK average, whilst that in London and the South East remained substantially above it.

**Table A Regional household sector accounts<sup>1</sup> - 1999<sup>2</sup>**

Region	£ bn			Per head index, UK=100			Disposable Income as % of total income
	Total Income	Disposable Income	consumption expenditure	Total Income	Disposable Income	consumption expenditure	
United Kingdom <sup>3</sup>	873.1	599.6	586.9	100.0	100.0	100.0	69%
North East	31.1	21.6	20.7	82.2	82.9	81.1	69%
North West	92.3	64.5	64.1	91.4	93.0	94.5	70%
Yorkshire and the Humber	67.8	47.0	45.0	91.5	92.3	90.3	69%
East Midlands	57.4	39.2	38.0	93.4	92.7	91.8	68%
West Midlands	71.6	49.1	49.4	91.5	91.2	93.9	68%
East	88.8	61.0	54.6	111.7	111.7	102.2	69%
London	130.4	87.7	89.2	122.0	119.4	124.2	67%
South East	135.4	90.9	92.0	114.3	111.6	115.5	67%
South West	69.5	48.5	47.4	95.9	97.5	97.3	70%
England	744.4	509.3	500.4	102.0	101.6	102.0	68%
Wales	37.2	26.8	24.1	86.2	90.4	83.2	72%
Scotland	71.3	48.9	48.4	94.9	94.8	95.9	69%
Northern Ireland	20.3	14.6	14.0	81.7	85.9	83.9	72%

<sup>1</sup> Includes households and non profit institutions serving households.

<sup>2</sup> Provisional.

<sup>3</sup> Excluding income for Extra Region which comprise compensation of employees that cannot be assigned to regions.

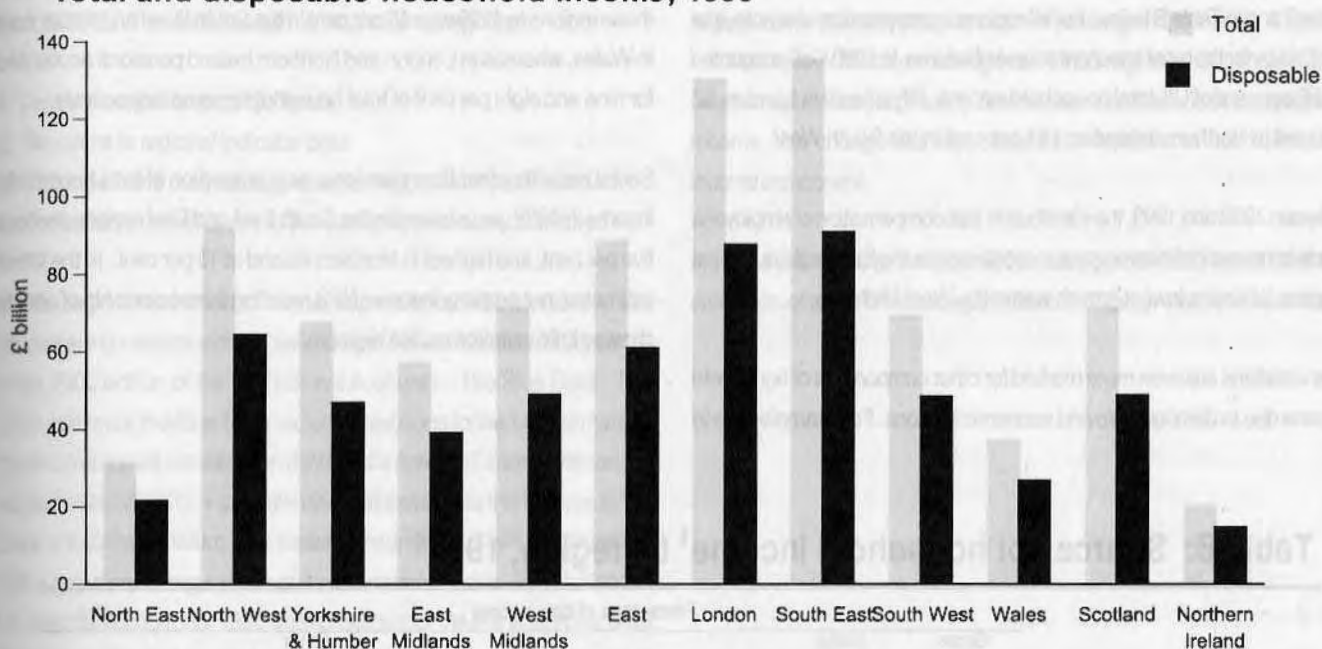
Chart A and Appendix Tables 1 and 2 show that total and disposable household income per head in London, the South East and East have consistently remained above the UK average. Total and disposable income per head for all other regions have remained consistently below the UK

average, with Northern Ireland, Wales and the North East displaying the lowest relative levels. Only London and the South East have shown an underlying upward trend in household disposable income relative to the UK between 1989 and 1999.



**Chart B**

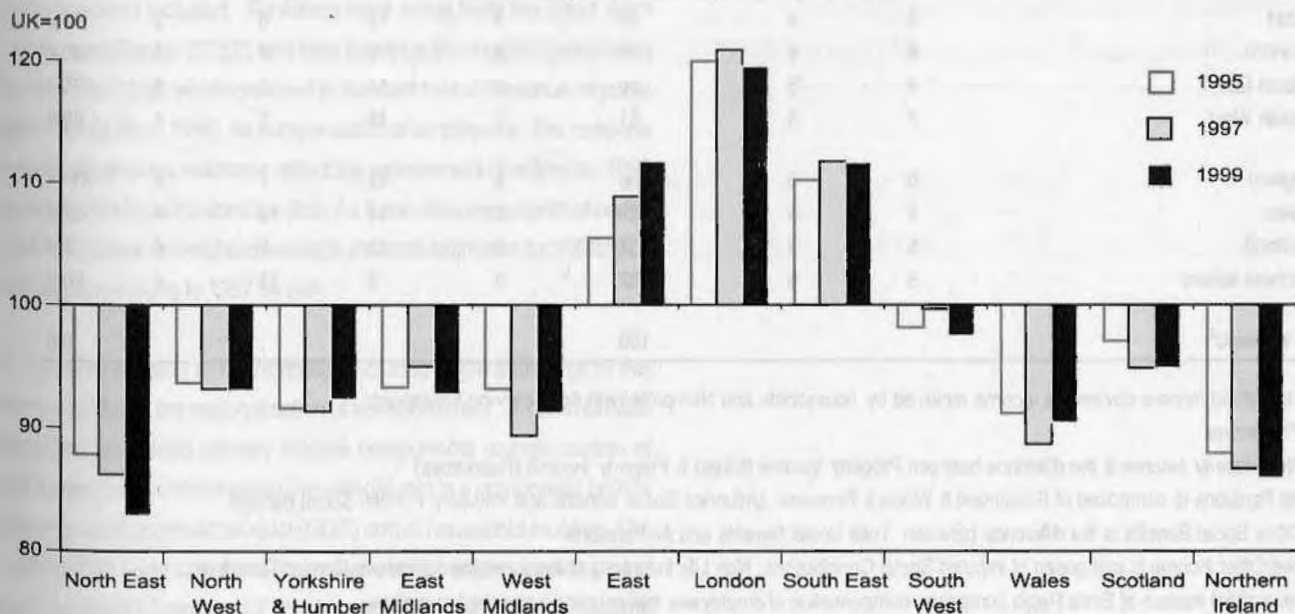
**Total and disposable household income, 1999**



Source: Appendix Table 1

**Chart C**

**Household disposable income per head, 1995-1999**



Source: Appendix Table 2



## Sources of household income by region

The sources of total household income by region are shown in Appendix Table 3 and in Table B below. For all regions, compensation of employees (CoE) is by far the most important source of income. In 1999 CoE accounted for 56 per cent of UK total household income, 59 per cent in London, 52 per cent in Northern Ireland and 51 per cent in the South West.

Between 1998 and 1999, the contribution that compensation of employees made to household income grew most strongly in the East and South East regions, while the lowest growth was in the West Midlands.

The variations are even more marked for other components of household income due to demographic and economic reasons. For example, due to

the relatively large numbers of retired people in the South West and Wales, the proportion of household income derived from pensions in those regions in 1999 was 16 per cent in the South West and 14 per cent in Wales, whereas in London and Northern Ireland pensions accounted for nine and eight per cent of total household income respectively.

Social benefits other than pensions, as a proportion of total household income in 1999, were lowest in the South East and East regions at about five per cent, and highest in Northern Ireland at 16 per cent. In the latest estimates, net property income (NPI) resulting from ownership of assets showed little variation across regions.

**Table B: Sources of household income<sup>1</sup> by region, 1999<sup>2</sup>**

	Percentage of total income						£bn	
	Gross Operating Surplus	Gross Mixed Income	Compensation of Employees	Net Property Income <sup>3</sup>	All Pensions <sup>4</sup>	Other Social Benefits <sup>5</sup>	Net Other Income <sup>6</sup>	Total Income
United Kingdom	6	5	56	9	12	8	4	873.7
North East	5	4	56	8	12	11	5	31.1
North West	5	4	55	9	13	10	4	92.3
Yorkshire and the Humber	5	4	56	10	12	8	4	67.8
East Midlands	5	5	56	10	12	7	4	57.4
West Midlands	6	4	58	8	12	8	4	71.6
East	6	6	58	9	12	6	3	88.8
London	8	6	59	8	9	7	3	130.4
South East	8	5	56	8	14	5	3	135.4
South West	7	5	51	9	16	7	4	69.5
England	6	5	56	9	12	7	4	744.4
Wales	6	5	53	8	14	10	4	37.2
Scotland	5	4	57	9	13	9	4	71.3
Northern Ireland	5	6	52	9	8	16	4	20.3
Extra-Region <sup>7</sup>			100					0.6

1 Household income covers the income received by households and Non-profit institutions serving households

2 Provisional

3 Net Property Income is the difference between Property Income (Uses) & Property Income (Resources)

4 All Pensions is composed of Retirement & Widows Pensions, Unfunded Social Benefits and Privately Funded Social Benefits

5 Other Social Benefits is the difference between Total Social Benefits and All Pensions

6 Net Other Income is composed of Imputed Social Contributions, Non Life Insurance Claims and Miscellaneous Current Transfers

7 Household income of Extra Region comprises compensation of employees that cannot be assigned to regions.

## Revisions

The household income estimates released today have been revised back to 1989. The revisions fall into four main categories:

1. Revisions to national control totals
2. Revisions to regional indicator data
3. A change to the methodology used to regionalise household rent
4. Correction to minor errors in the accounts previously published.

1. The regional estimates of household sector income included in this release are consistent with UK estimates of household income published in the 2000 edition of the UK National Accounts – The Blue Book. The 2000 edition of the Blue Book included revisions to the UK estimate of non-market capital consumption (NMCC) for non-profit institutions serving households (NPISH). For 1989-1998 the revision to the UK was in the order of £400m to £900m. The capital consumption of NPISH forms part of the gross operating surplus of the household sector. Fully balanced UK national accounts for 1998 were published for the first time in the 2000 Blue Book. This led to an upward revision to total household income of £5.5bn for the UK in 1998, mostly coming from large revisions to gross operating surplus and net property income. The revision to disposable household income for the UK was +£3.6bn in 1998. These revisions have fed through to the regional totals for 1998 depending on the significance of the different components of income for each region.

2. As well as taking on regional indicators for 1999 where these data were available, revisions to regional indicators for years before 1999 have also been included. Revisions have come from the Short Term Employment Survey (STES) and New Earnings Survey (NES) estimates for 1997 and 1998, which are used to forecast Inland Revenue regional control totals (from 1996), for compensation of employees. The revisions to regional pensions estimates reflect the replacement of estimated 1998 pensions data by administrative data. As these data are smoothed on the basis of a 3 year unweighted average, the new estimates for 1998 have resulted in revisions to 1997 as well.

3. The only revision to methodology included in the estimates in this release relates to the regionalisation of household rent. In common with two other household primary income components (compensation of employees and mixed income), household rent is a component both of regional gross domestic product (GDP) and of household income. The methodology used to regionalise household rent was revised as part of the February 2001 regional GDP publication<sup>3</sup>. For the household income estimates published in November 2000<sup>4</sup>, household rent was regionalised on the basis of house prices from the Land Registry for England and Wales, and equivalent bodies in Scotland and Northern Ireland. These house price estimates have now been replaced by mix-adjusted house prices by region, produced by the Department of Transport, Local

Government & the Regions (DTLR), previously the DETR<sup>5</sup>. Mix-adjusted prices more accurately reflect the mix of housing within any particular region, rather than just that proportion of housing on the market. This has resulted in revisions to most regions. Since regional household rent is used to regionalise the property interest payments included in net property income, this change has also resulted in revisions to this household income component.

4. Revisions to net other income for years before 1998 result from the correction of an error in the regionalisation of motor insurance claims.

## Regional individual consumption expenditure (ICE)

Estimates of ICE given in this article are at current prices, and are consistent with the 2000 edition of the United Kingdom National Accounts - *The Blue Book*.

### Total consumption expenditure

Regional estimates of total ICE for 1994 to 1999 are given in appendix Table 4. Estimates for years earlier than 1994 are not currently available. The South East and London each accounted for over 15 per cent of consumption expenditure in 1999, around £90bn each. Provisional estimates for 1999 showed that Total ICE per head was 24 per cent higher than the UK average in London in 1999, whilst in the North East it was 19 per cent lower.

### ICE by broad function

Estimates of consumption expenditure for 1994 to 1999 by broad function are given in appendix table 5 and table C. The broad function headings are based on the Classification of Individual Consumption by purpose (COICOP). Table 5 shows both national and domestic consumption expenditure by region. Table C shows percentage of total spending for each region.

### Sources

Regional consumption expenditure estimates are primarily based on data from the Family Expenditure Survey (FES)<sup>5</sup>, augmented by other survey and administrative data sources (such as new vehicle registrations and regional household rent calculated as part of regional GDP).

## Methodology

An accompanying methodological article, outlining the methods and processes used in the construction of the estimates presented here is included in this edition of *Economic Trends*<sup>7</sup>.

### Future changes

Regional Accounts are revised on an annual basis, taking account of revisions to the UK control totals included in the latest edition of the *Blue Book*, as well as revised regional indicator data where these are available. When regional household sector accounts estimates for 2000 (consistent with the 2001 edition of the *Blue Book*) are published in 2002, it is expected that the following revisions will be included:

1. Significant revisions to UK household sector income and ICE totals. The 2001 edition of the *Blue Book* will include a large number of revisions and methodological changes.
2. Regional estimates of wages and salaries and national insurance contributions for 1997 to 1999 are expected to be available from Inland Revenue for the first time. These will replace the employment and earnings survey estimates currently being used for these years.

An *Economic Trends* article giving details of forthcoming revisions, planned methodological changes and a publication timetable for the regional accounts will be published in the autumn of 2001.

**Table C Individual consumption expenditure by broad function by region, 1999<sup>1</sup>**

	percentage of spending in UK							£ million	
	Food, drink and tobacco	Clothing and footwear	Housing and fuel	Household goods and services	Vehicles, transport and communications	Recreation	Other goods and services	Consumption expenditure in the UK <sup>2</sup>	Total Consumption expenditure <sup>3</sup>
United Kingdom	18	6	19	6	17	12	23	560,275	586,913
North East	21	7	18	7	17	11	20	19,128	20,659
North West	20	7	18	6	16	12	21	60,919	64,133
Yorkshire and the Humber	19	6	17	6	16	13	23	42,140	44,956
East Midlands	19	5	19	7	16	12	22	35,853	37,961
West Midlands	18	6	17	7	17	12	22	46,531	49,416
East	17	6	19	7	17	12	23	51,943	54,607
London	15	7	20	6	17	10	26	88,453	89,241
South East	16	5	19	7	18	11	24	87,776	92,024
South West	17	5	20	6	15	12	24	45,482	47,384
England	17	6	19	6	17	12	23	478,225	500,380
Wales	20	7	19	6	15	12	22	22,627	24,103
Scotland	20	7	18	6	16	12	21	46,361	48,421
Northern Ireland	21	9	16	6	18	11	21	13,061	14,009

1. Provisional.

2. Expenditure by UK households and foreign residents in the UK.

3. Expenditure by UK consumers, including non-profit institutions serving households and UK households abroad.



## Annex A

### Diversity of the Regions

Scotland, Wales, Northern Ireland and the regions of England are all different in character, industrial structure and economic performance. The table below shows some of the differences. Scotland has the largest area, but has a small population; London has by far the smallest area, but the second largest population - over 7 million. At the other extreme, Northern Ireland has only a population of 1.7 million. These large variations in the regions' populations are reflected in the size of regional GDP and incomes.

The wide variation in the size of the regions makes it difficult to compare the regions' economic performance using cash totals; comparisons are therefore usually expressed in terms of amounts per head of the population. However, it is important to note that the growth in totals may be quite different to the growth per head in regions where the population has increased or decreased. Furthermore, the level per head is determined both by the average amount of cash of the working population and by the proportion of dependants. In Northern Ireland, for example, households have a high proportion of children (24 per cent of the population were aged under 16 in 1999 compared with 19 to 21 per cent in other regions). This will tend to depress amounts per head. Ideally the age structure of the population should therefore be taken into account when comparing figures on a per head basis.

**Key Regional Statistics - Percentages of the UK**

Region	Area 1999	Population 1999	Total economically active June-99	Gross Domestic Product <sup>1</sup> 1999	Individual Consumption Expenditure 1999	Household Income <sup>2</sup> 1999
United Kingdom (=100%)	243820 sq km	59.5m	29.1m	£786.2bn	£586.9bn	£873.7bn
North East	3.5	4.3	4.0	3.3	3.5	3.6
North West	5.8	11.6	11.2	9.9	10.9	10.6
Yorkshire & the Humber	6.4	8.5	8.4	7.3	7.7	7.8
East Midlands	6.4	7.0	7.3	6.5	6.5	6.6
West Midlands	5.3	9.0	9.1	8.1	8.4	8.2
East	7.8	9.1	9.4	10.4	9.3	10.2
London	0.6	12.2	12.3	15.6	15.2	14.9
South East	7.8	13.6	14.2	15.5	15.7	15.5
South West	9.8	8.3	8.6	7.4	8.1	8.0
England	53.4	83.6	84.4	84.0	85.3	85.2
Wales	8.5	4.9	4.5	3.9	4.1	4.3
Scotland	32.0	8.6	8.5	8.1	8.3	8.2
Northern Ireland	5.8	2.8	2.5	2.2	2.4	2.3

1. Excluding Extra- Region and the statistical discrepancy.

2. Excluding Extra- Region.



# 1 Total household income<sup>1</sup> by region 1989-1999

		1989	1990	1991	1992	1993	1994	1995	1996	1997 <sup>2</sup>	1998 <sup>2</sup>	1999 <sup>2</sup>
<b>Total Household Income (£million)</b>												
United Kingdom <sup>3</sup>	QWMP	475 104	529 272	574 225	614 110	640 471	667 658	706 351	749 815	789 791	830 192	873 724
North East	DETY	18 504	20 674	22 847	24 739	25 633	26 048	27 286	28 753	29 542	30 320	31 120
North West	DETZ	52 842	58 866	64 261	67 957	70 450	73 328	76 975	81 446	84 836	88 272	92 262
Yorkshire & the Humber	DEUA	37 742	41 777	45 489	48 024	50 938	52 652	55 208	59 157	61 112	63 953	67 775
East Midlands	DEUB	31 512	34 554	37 368	39 979	41 771	44 400	46 654	49 986	52 763	54 971	57 445
West Midlands	DEUC	39 113	44 015	47 684	51 481	53 417	55 989	59 808	62 279	64 358	67 619	71 638
East	DEUD	46 734	51 963	55 708	59 870	61 057	63 949	67 523	71 582	77 970	83 517	88 824
London	DEUE	67 727	76 647	83 339	88 594	92 888	96 515	102 265	109 534	116 740	124 156	130 403
South East	DEUF	70 407	77 618	83 958	89 657	94 768	99 847	105 705	113 456	120 734	127 477	135 433
South West	DEUG	38 261	42 545	45 817	49 085	50 774	52 403	56 152	59 591	63 522	66 263	69 456
England	DEUH	402 843	448 658	486 471	519 385	541 697	565 129	597 576	635 785	671 578	706 547	744 355
Wales	DEUI	20 755	22 895	25 059	26 901	27 787	29 051	30 948	32 503	33 614	35 198	37 169
Scotland	DEUJ	40 200	45 346	49 300	53 464	55 729	57 107	60 408	63 381	65 305	68 397	71 296
Northern Ireland	DEUK	10 684	11 700	12 706	13 656	14 725	15 795	16 858	17 527	18 680	19 434	20 287
United Kingdom less Extra-Region <sup>4</sup>	DISX	474 462	528 600	573 536	613 406	639 938	667 082	705 791	749 197	789 175	829 576	873 108
Extra-Region <sup>4</sup>	DDVE	642	672	689	704	533	576	560	618	616	616	616
<b>Per head (£)</b>												
United Kingdom <sup>3</sup>	DGKE	8 282	9 194	9 932	10 586	11 005	11 432	12 051	12 750	13 383	14 015	14 684
North East	DEUY	7 133	7 957	8 768	9 479	9 805	9 960	10 446	11 028	11 353	11 676	12 056
North West	DEUZ	7 705	8 572	9 326	9 850	10 200	10 606	11 134	11 791	12 294	12 792	13 409
Yorkshire & the Humber	DEVA	7 626	8 418	9 129	9 603	10 155	10 472	10 962	11 735	12 113	12 666	13 429
East Midlands	DEVK	7 888	8 608	9 265	9 858	10 242	10 831	11 322	12 075	12 695	13 181	13 706
West Midlands	DEVN	7 462	8 383	9 050	9 750	10 095	10 562	11 263	11 705	12 079	12 671	13 426
East	DEVE	9 177	10 162	10 834	11 578	11 760	12 258	12 862	13 547	14 648	15 566	16 391
London	DEVF	9 960	11 184	12 103	12 824	13 405	13 863	14 609	15 531	16 417	17 321	17 900
South East	DEVG	9 254	10 156	10 937	11 631	12 250	12 844	13 500	14 389	15 203	15 943	16 767
South West	DEVH	8 182	9 063	9 716	10 356	10 657	10 937	11 646	12 306	13 050	13 530	14 072
England	DEVI	8 425	9 348	10 093	10 737	11 162	11 604	12 222	12 954	13 629	14 279	14 961
Wales	DEVJ	7 232	7 955	8 669	9 277	9 559	9 967	10 598	11 116	11 475	11 990	12 655
Scotland	DEVK	7 887	8 887	9 633	10 443	10 868	11 108	11 739	12 339	12 726	13 334	13 927
Northern Ireland	DEVL	6 736	7 361	7 918	8 424	9 010	9 604	10 205	10 520	11 133	11 488	11 991
United Kingdom less Extra-Region <sup>4</sup>	DGKF	8 271	9 182	9 920	10 574	10 996	11 422	12 042	12 740	13 373	14 004	14 674
<b>Per head, Indices</b> (UK less Extra-Region=100)												
United Kingdom	DGKG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
North East	DEVN	86.2	86.7	88.4	89.6	89.2	87.2	86.7	86.6	84.9	83.4	82.2
North West	DEVN	93.2	93.4	94.0	93.2	92.8	92.9	92.5	92.6	91.9	91.3	91.4
Yorkshire & the Humber	DEVO	92.2	91.7	92.0	90.8	92.4	91.7	91.0	92.1	90.6	90.4	91.5
East Midlands	DEVP	95.4	93.7	93.4	93.2	93.1	94.8	94.0	94.8	94.9	94.1	93.4
West Midlands	DEVQ	90.2	91.3	91.2	92.2	91.8	92.5	93.5	91.9	90.3	90.5	91.5
East	DEVV	111.0	110.7	109.2	109.5	106.9	107.3	106.8	106.3	109.5	111.1	111.7
London	DEVV	120.4	121.8	122.0	121.3	121.9	121.4	121.3	121.9	122.8	123.7	122.0
South East	DEVV	111.9	110.6	110.2	110.0	111.4	112.4	112.1	112.9	113.7	113.8	114.3
South West	DEVU	98.9	98.7	97.9	97.9	96.9	95.8	96.7	96.6	97.6	96.6	95.9
England	DEVV	101.9	101.8	101.7	101.5	101.5	101.6	101.5	101.7	101.9	102.0	102.0
Wales	DEVW	87.4	86.6	87.4	87.7	86.9	87.3	88.0	87.3	85.8	85.6	86.2
Scotland	DEVX	95.4	96.8	97.1	98.8	98.8	97.2	97.5	96.9	95.2	95.2	94.9
Northern Ireland	DEVY	81.4	80.2	79.8	79.7	81.9	84.1	84.7	82.6	83.3	82.0	81.7

1 Household Income covers the income received by households and non-profit institutions serving households.

2 Provisional.

3 Components may not sum to totals as a result of rounding.

4 Parts of UK economic territory that cannot be attached to any particular region.

		1989	1990	1991	1992	1993	1994	1995	1996	1997 <sup>2</sup>	1998 <sup>2</sup>	1999 <sup>2</sup>
<b>Disposable Household Income (£million)</b>												
United Kingdom <sup>3</sup>	QWND	319 581	357 257	391 316	424 838	452 809	468 883	495 336	522 089	555 518	569 495	600 258
North East	DDTC	12 733	14 304	15 923	17 460	18 440	18 555	19 389	20 386	21 098	21 044	21 563
North West	DDTD	35 932	40 275	44 460	47 751	50 511	52 104	54 699	57 614	60 456	61 635	64 503
Yorkshire and the Humber	DDTE	25 777	28 691	31 434	33 416	36 275	37 293	38 981	41 700	43 335	44 405	46 964
East Midlands	DDTF	21 093	23 289	25 342	27 618	29 422	31 029	32 482	34 734	37 120	37 703	39 173
West Midlands	DDTG	25 861	29 426	32 282	35 460	37 636	39 179	41 800	43 166	44 782	45 960	49 062
East	DDTH	31 049	34 789	37 602	41 170	42 824	44 552	46 773	49 102	54 470	57 086	60 992
London	DDTI	44 528	50 045	55 093	59 687	64 517	66 919	70 860	75 004	80 768	83 197	87 683
South East	DDTJ	46 487	51 054	55 978	60 743	65 904	68 971	72 866	77 462	83 406	85 258	90 864
South West	DDTK	26 366	29 206	31 681	34 388	36 247	37 212	39 971	42 118	45 601	46 398	48 492
England	DDTL	269 825	301 080	329 794	357 692	381 776	395 814	417 821	441 286	471 036	482 686	509 296
Wales	DDTM	14 332	15 926	17 834	19 348	20 308	21 087	22 494	23 421	24 425	25 197	26 764
Scotland	DDTN	27 295	31 250	33 997	37 380	39 504	39 961	42 190	44 066	45 766	47 045	48 931
Northern Ireland	DDTO	7 488	8 329	9 002	9 715	10 688	11 446	12 271	12 697	13 674	13 951	14 650
United Kingdom less Extra-Region <sup>4</sup>	DISY	318 939	356 585	390 627	424 134	452 276	468 307	494 776	521 471	554 902	568 879	599 642
Extra-Region <sup>4</sup>	DDTP	642	672	689	704	533	576	560	618	616	616	616
<b>Per head (£)</b>												
United Kingdom	DGKL	5 571	6 206	6 769	7 323	7 780	8 029	8 451	8 878	9 413	9 614	10 088
North East	LRCG	4 908	5 506	6 111	6 690	7 053	7 095	7 423	7 819	8 108	8 104	8 353
North West	LRCH	5 239	5 865	6 452	6 922	7 313	7 536	7 912	8 341	8 761	8 932	9 375
Yorkshire and the Humber	DEQB	5 208	5 781	6 308	6 682	7 232	7 417	7 740	8 272	8 589	8 794	9 305
East Midlands	DEQC	5 280	5 801	6 284	6 810	7 214	7 569	7 883	8 390	8 931	9 040	9 346
West Midlands	DEQH	4 934	5 605	6 127	6 716	7 112	7 391	7 871	8 113	8 405	8 612	9 195
East	LRCI	6 097	6 803	7 312	7 962	8 248	8 540	8 909	9 292	10 233	10 640	11 255
London	DEQE	6 549	7 302	8 001	8 640	9 311	9 612	10 123	10 635	11 358	11 607	12 036
South East	LRCJ	6 110	6 680	7 292	7 880	8 519	8 873	9 306	9 824	10 503	10 663	11 249
South West	DEQG	5 638	6 222	6 718	7 255	7 608	7 767	8 290	8 698	9 368	9 474	9 825
England	LREV	5 643	6 273	6 842	7 395	7 867	8 127	8 545	8 991	9 559	9 755	10 237
Wales	DEQJ	4 994	5 534	6 169	6 672	6 986	7 235	7 703	8 010	8 338	8 583	9 113
Scotland	DEQK	5 355	6 124	6 643	7 301	7 704	7 773	8 199	8 579	9 118	9 172	9 558
Northern Ireland	DEQL	4 729	5 240	5 610	5 993	6 540	6 959	7 428	7 621	8 150	8 247	8 659
United Kingdom less Extra-Region <sup>4</sup>	DEPZ	5 560	6 194	6 757	7 311	7 771	8 019	8 442	8 867	9 403	9 603	10 078
<b>Per head, indices</b> (UK less Extra-Region=100)												
United Kingdom	DGKN	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
North East	DEWC	88.3	88.9	90.4	91.5	90.8	88.5	87.9	88.2	86.2	84.4	82.9
North West	DEWD	94.2	94.7	95.5	94.7	94.1	94.0	93.7	94.1	93.2	93.0	93.0
Yorkshire and the Humber	DEWE	93.7	93.3	93.4	91.4	93.1	92.5	91.7	93.3	91.3	91.6	92.3
East Midlands	DEWF	95.0	93.7	93.0	93.2	92.8	94.4	93.4	94.6	95.0	94.1	92.7
West Midlands	DEWJ	88.7	90.5	90.7	91.9	91.5	92.2	93.2	91.5	89.4	89.7	91.2
East	DEWK	109.7	109.8	108.2	108.9	106.1	106.5	105.5	104.8	108.8	110.8	111.7
London	DEWL	117.8	117.9	118.4	118.2	119.8	119.9	119.9	119.9	120.8	120.9	119.4
South East	DEWM	109.9	107.8	107.9	107.8	109.6	110.6	110.2	110.8	111.7	111.0	111.6
South West	DEWN	101.4	100.4	99.4	99.2	97.9	96.9	98.2	98.1	99.6	98.6	97.5
England	DEWO	101.5	101.3	101.3	101.1	101.2	101.4	101.2	101.4	101.7	101.6	101.6
Wales	DEWP	89.8	89.3	91.3	91.3	89.9	90.2	91.3	90.3	88.7	89.4	90.4
Scotland	DEWQ	96.3	98.9	98.3	99.9	99.1	96.9	97.1	96.7	94.8	95.5	94.8
Northern Ireland	DEWR	85.1	84.6	83.0	82.0	84.2	86.8	88.0	85.9	86.7	85.9	85.9

<sup>1</sup> Household income covers the income received by households and non-profit institutions serving households.

<sup>2</sup> Provisional.

<sup>3</sup> Components may not sum to totals as a result of rounding.

<sup>4</sup> Parts of UK economic territory that cannot be attached to any particular region.

### 3 Sources of household income<sup>1</sup> by region 1989-1999

(£million)

	Gross Operating Surplus	Gross Mixed Income	Compensation of Employees	Net Property Income <sup>3</sup>	All Pensions <sup>4</sup>	Other Social Benefits <sup>5</sup>	Net Other Income <sup>6</sup>	Total Income	Disposable Income	Disposable Income as % of Total Income
<b>1989</b>										
United Kingdom	21 527	29 286	285 649	42 798	47 770	31 697	16 377	475 104	319 581	67.3
North East	492	683	11 569	1 577	1 703	1 726	754	18 504	12 733	68.8
North West	1 774	2 535	31 806	5 859	4 684	4 188	1 996	52 842	35 932	68.0
Yorkshire and the Humber	1 402	2 065	22 385	4 064	3 518	2 787	1 522	37 742	25 777	68.3
East Midlands	1 412	2 031	19 263	2 886	2 791	1 976	1 154	31 512	21 093	66.9
West Midlands	1 793	2 306	24 350	2 880	3 452	2 874	1 459	39 113	25 861	66.1
East	2 287	3 665	28 169	4 355	4 773	2 086	1 399	48 734	31 049	66.4
London	3 778	4 936	43 448	4 369	4 838	4 184	2 174	67 727	44 528	65.7
South East	3 984	4 704	41 186	5 808	9 401	3 234	2 092	70 407	46 487	66.0
South West	2 278	2 780	20 913	3 502	5 359	2 137	1 291	38 261	26 366	68.9
England	19 199	25 705	243 088	35 299	40 518	25 193	13 841	402 843	269 825	67.0
Wales	921	1 126	11 583	2 050	2 519	1 830	727	20 755	14 332	69.1
Scotland	1 143	1 749	24 441	4 164	3 867	3 396	1 439	40 200	27 295	67.9
Northern Ireland	264	706	5 894	1 285	866	1 278	370	10 664	7 488	70.2
Extra-Region <sup>7</sup>	-	-	642	-	-	-	-	642	642	-
<b>1990</b>										
United Kingdom	25 401	33 030	315 098	46 821	54 323	34 665	19 934	529 272	357 257	67.5
North East	626	792	12 699	1 788	1 954	1 881	934	20 674	14 304	69.2
North West	2 236	2 910	34 771	6 160	5 793	4 534	2 463	58 866	40 275	68.4
Yorkshire and the Humber	1 720	2 337	24 515	4 206	4 072	3 035	1 892	41 777	28 691	68.7
East Midlands	1 644	2 235	20 943	2 985	3 172	2 168	1 408	34 554	23 289	67.4
West Midlands	2 109	2 604	26 942	3 549	3 884	3 134	1 792	44 015	29 426	66.9
East	2 636	4 030	31 037	4 883	5 354	2 357	1 665	51 963	34 789	67.0
London	4 376	5 686	48 235	4 989	6 114	4 593	2 654	76 647	50 045	65.3
South East	4 645	5 293	45 706	5 736	10 082	3 644	2 512	77 618	51 054	65.8
South West	2 572	3 053	23 065	3 954	5 969	2 374	1 557	42 545	29 206	68.6
England	22 564	28 939	267 914	38 250	46 393	27 722	16 877	448 658	301 080	67.1
Wales	1 088	1 300	12 639	2 249	2 777	1 970	871	22 895	15 926	69.6
Scotland	1 428	2 003	27 430	4 937	4 234	3 574	1 740	45 346	31 250	68.9
Northern Ireland	321	788	6 443	1 385	919	1 399	445	11 700	8 329	71.2
Extra-Region <sup>7</sup>	-	-	672	-	-	-	-	672	672	-
<b>1991</b>										
United Kingdom	29 162	31 635	333 787	47 446	63 401	46 276	22 518	574 225	391 316	68.1
North East	796	779	13 597	1 647	2 494	2 480	1 054	22 847	15 923	69.7
North West	2 828	2 851	36 798	6 125	6 857	6 001	2 802	64 261	44 460	69.2
Yorkshire and the Humber	2 060	2 210	26 246	4 233	4 606	4 006	2 128	45 489	31 434	69.1
East Midlands	1 870	2 090	22 151	3 011	3 855	2 814	1 579	37 368	25 342	67.8
West Midlands	2 419	2 486	28 540	3 384	4 714	4 121	2 020	47 684	32 282	67.7
East	2 924	3 791	32 686	4 816	6 312	3 317	1 862	55 708	37 602	67.5
London	4 801	5 511	50 477	6 044	7 416	6 098	2 992	83 339	55 093	66.1
South East	5 220	5 030	47 836	6 397	11 469	5 185	2 822	83 958	55 978	66.7
South West	2 795	2 868	24 310	4 075	6 780	3 247	1 743	45 817	31 681	69.1
England	25 713	27 616	282 640	39 732	54 502	37 267	19 001	486 471	329 794	67.8
Wales	1 265	1 285	13 625	2 143	3 027	2 703	1 011	25 059	17 834	71.2
Scotland	1 795	1 988	29 616	4 329	4 996	4 575	2 001	49 300	33 997	69.0
Northern Ireland	388	747	7 216	1 243	877	1 731	504	12 706	9 002	70.9
Extra-Region <sup>7</sup>	-	-	689	-	-	-	-	689	689	-

1 Household Income includes income received by households and non-profit institutions serving households.

2 Provisional.

3 Net Property Income is the difference between Property Income (uses) and Property Income (Resources).

4 Includes Retirement & Widows Pensions, Unfunded Social Benefits and Privately Funded Social Benefits.

5 Social Benefits excluding pensions.

6 Includes Imputed Social Contributions, Non-Life Insurance Claims and Miscellaneous Current Transfers.

7 Parts of UK economic territory that cannot be attached to any particular region.



# 3 Sources of household income<sup>1</sup> by region 1989-1999

continued

(£million)

	Gross Operating Surplus	Gross Mixed Income	Compensation of Employees	Net Property Income <sup>3</sup>	All Pensions <sup>4</sup>	Other Social Benefits <sup>5</sup>	Net Other Income <sup>6</sup>	Total Income	Disposable Income	Disposable Income as % of Total Income
<b>1992</b>										
United Kingdom	33 390	33 872	346 987	49 631	70 806	56 126	23 298	614 110	424 836	69.2
North East	994	828	14 233	1 735	2 939	2 929	1 080	24 739	17 460	70.6
North West	3 378	3 124	38 159	5 511	7 517	7 353	2 914	67 957	47 751	70.3
Yorkshire and the Humber	2 408	2 296	27 252	3 881	5 221	4 774	2 194	48 024	33 416	69.6
East Midlands	2 106	2 166	22 872	3 252	4 536	3 413	1 634	39 979	27 618	69.1
West Midlands	2 737	2 675	29 787	4 019	5 268	4 911	2 085	51 481	35 460	68.9
East	3 329	3 930	34 008	5 397	7 220	4 047	1 939	59 870	41 170	68.8
London	5 256	5 924	52 204	6 361	8 292	7 457	3 100	88 594	59 687	67.4
South East	5 954	5 405	49 561	7 063	12 441	6 280	2 952	89 657	60 743	67.8
South West	3 112	3 106	25 280	4 513	7 345	3 923	1 804	49 085	34 388	70.1
England	29 275	29 455	293 357	41 731	60 780	45 086	19 701	519 385	357 692	68.9
Wales	1 450	1 354	14 196	2 186	3 316	3 340	1 059	26 901	19 348	71.9
Scotland	2 198	2 251	31 163	4 441	5 744	5 669	1 998	53 464	37 380	69.9
Northern Ireland	468	813	7 567	1 272	966	2 030	540	13 656	9 715	71.1
Extra-Region <sup>7</sup>	-	-	704	-	-	-	-	704	704	-

	Gross Operating Surplus	Gross Mixed Income	Compensation of Employees	Net Property Income <sup>3</sup>	All Pensions <sup>4</sup>	Other Social Benefits <sup>5</sup>	Net Other Income <sup>6</sup>	Total Income	Disposable Income	Disposable Income as % of Total Income
<b>1993</b>										
United Kingdom	35 153	36 095	356 358	50 289	74 680	61 690	26 206	640 471	452 809	70.7
North East	1 103	917	14 502	1 632	3 100	3 184	1 195	25 633	18 440	71.9
North West	3 664	3 504	38 900	5 117	7 875	8 158	3 231	70 450	50 511	71.7
Yorkshire and the Humber	2 514	2 511	28 028	4 702	5 586	5 195	2 401	50 938	36 275	71.2
East Midlands	2 200	2 421	23 647	3 074	4 887	3 702	1 841	41 771	29 422	70.4
West Midlands	2 850	2 902	30 414	3 935	5 588	5 386	2 342	53 417	37 636	70.5
East	3 493	3 986	34 543	4 903	7 454	4 435	2 242	61 057	42 824	70.1
London	5 382	6 005	53 803	7 372	8 400	8 487	3 438	92 888	64 517	69.5
South East	6 271	5 555	51 805	7 494	13 326	6 943	3 373	94 768	65 904	69.5
South West	3 199	3 317	25 892	4 430	7 599	4 246	2 091	50 774	36 247	71.4
England	30 877	31 119	301 534	42 660	63 815	49 738	22 154	541 697	381 776	70.5
Wales	1 531	1 481	14 428	2 130	3 441	3 565	1 212	27 787	20 308	73.1
Scotland	2 426	2 558	31 989	4 229	6 267	6 044	2 216	55 729	39 504	70.9
Northern Ireland	519	937	7 874	1 270	1 158	2 344	624	14 725	10 688	72.6
Extra-Region <sup>7</sup>	-	-	533	-	-	-	-	533	533	-

	Gross Operating Surplus	Gross Mixed Income	Compensation of Employees	Net Property Income <sup>3</sup>	All Pensions <sup>4</sup>	Other Social Benefits <sup>5</sup>	Net Other Income <sup>6</sup>	Total Income	Disposable Income	Disposable Income as % of Total Income
<b>1994</b>										
United Kingdom	37 510	38 336	369 790	51 476	78 744	64 559	27 243	667 658	468 883	70.2
North East	1 185	975	14 605	1 679	3 098	3 275	1 230	26 048	18 555	71.2
North West	3 863	3 859	40 270	5 310	8 194	8 496	3 336	73 328	52 104	71.1
Yorkshire and the Humber	2 648	2 676	28 805	4 479	6 176	5 394	2 474	52 652	37 293	70.8
East Midlands	2 310	2 674	24 471	3 849	5 251	3 935	1 909	44 400	31 029	69.9
West Midlands	3 007	3 122	31 944	4 005	5 916	5 562	2 432	55 989	39 179	70.0
East	3 779	4 163	36 241	5 175	7 612	4 631	2 348	63 949	44 552	69.7
London	5 747	6 094	55 900	7 081	8 864	9 282	3 545	96 515	66 919	69.3
South East	6 756	5 788	54 088	8 109	14 160	7 400	3 546	99 847	68 971	69.1
South West	3 374	3 508	26 723	4 115	8 068	4 434	2 181	52 403	37 212	71.0
England	32 669	32 860	313 046	43 803	67 340	52 410	23 002	565 129	395 814	70.0
Wales	1 614	1 553	14 995	2 320	3 625	3 667	1 275	29 051	21 087	72.6
Scotland	2 641	2 791	32 978	4 007	6 434	5 955	2 300	57 107	39 961	70.0
Northern Ireland	586	1 132	8 195	1 346	1 345	2 527	665	15 795	11 446	72.5
Extra-Region <sup>7</sup>	-	-	576	-	-	-	-	576	576	-

See footnotes on first page of table.



# 3 Sources of household income<sup>1</sup> by region 1989-1999

continued

(£million)

	Gross Operating Surplus	Gross Mixed Income	Compensation of Employees	Net Property Income <sup>3</sup>	All Pensions <sup>4</sup>	Other Social Benefits <sup>5</sup>	Net Other Income <sup>6</sup>	Total Income	Disposable Income	Disposable Income as % of Total Income
<b>1995</b>										
United Kingdom	40 084	40 238	385 101	62 739	82 479	66 755	28 955	706 351	495 336	70.1
North East	1 240	955	15 208	2 119	3 160	3 283	1 321	27 286	19 389	71.1
North West	4 040	3 905	41 392	6 467	8 776	8 842	3 553	76 975	54 699	71.1
Yorkshire and the Humber	2 770	2 770	30 038	5 054	6 484	5 444	2 670	55 208	38 981	70.6
East Midlands	2 469	2 688	25 465	4 275	5 599	4 118	2 040	46 654	32 482	69.6
West Midlands	3 213	3 206	33 442	5 395	6 245	5 720	2 587	59 808	41 800	69.9
East	4 057	4 446	37 930	6 249	7 569	4 797	2 474	67 523	46 773	69.3
London	6 170	6 574	58 067	9 028	8 979	9 661	3 785	102 265	70 860	69.3
South East	7 309	6 258	56 520	9 287	15 056	7 518	3 757	105 705	72 866	68.9
South West	3 627	3 765	27 981	5 226	8 484	4 746	2 322	56 152	39 971	71.2
England	34 895	34 567	326 044	53 101	70 332	54 129	24 508	597 576	417 821	69.9
Wales	1 707	1 546	15 801	2 902	3 862	3 788	1 342	30 948	22 494	72.7
Scotland	2 825	2 930	34 110	5 153	6 851	6 131	2 408	60 408	42 190	69.8
Northern Ireland	657	1 195	8 585	1 583	1 434	2 707	696	16 858	12 271	72.8
Extra-Region <sup>7</sup>	-	-	560	-	-	-	-	560	560	-

	Gross Operating Surplus	Gross Mixed Income	Compensation of Employees	Net Property Income <sup>3</sup>	All Pensions <sup>4</sup>	Other Social Benefits <sup>5</sup>	Net Other Income <sup>6</sup>	Total Income	Disposable Income	Disposable Income as % of Total Income
<b>1996</b>										
United Kingdom	41 913	41 570	404 614	68 643	89 426	67 003	36 646	749 815	522 089	69.6
North East	1 259	996	15 725	2 159	3 526	3 416	1 672	28 753	20 386	70.9
North West	4 105	3 790	43 196	7 131	9 759	8 960	4 505	81 446	57 614	70.7
Yorkshire and the Humber	2 853	2 926	31 470	6 067	6 754	5 669	3 417	59 157	41 700	70.5
East Midlands	2 551	2 694	27 135	4 860	6 051	4 116	2 579	49 986	34 734	69.5
West Midlands	3 338	3 101	34 588	5 460	6 725	5 786	3 280	62 279	43 166	69.3
East	4 313	4 751	39 791	6 798	8 153	4 655	3 122	71 582	49 102	68.6
London	6 572	7 067	62 120	9 854	9 579	9 504	4 838	109 534	75 004	68.5
South East	7 712	6 796	60 777	10 182	16 094	7 117	4 778	113 456	77 462	68.3
South West	3 806	3 789	29 276	5 926	9 201	4 681	2 912	59 591	42 118	70.7
England	36 510	35 911	344 079	58 435	75 843	53 903	31 104	635 785	441 286	69.4
Wales	1 752	1 635	16 340	2 867	4 381	3 855	1 674	32 503	23 421	72.1
Scotland	2 926	2 818	34 852	5 745	7 731	6 329	2 980	63 381	44 066	69.5
Northern Ireland	725	1 207	8 725	1 597	1 471	2 917	887	17 527	12 697	72.4
Extra-Region <sup>7</sup>	-	-	618	-	-	-	-	618	618	-

	Gross Operating Surplus	Gross Mixed Income	Compensation of Employees	Net Property Income <sup>3</sup>	All Pensions <sup>4</sup>	Other Social Benefits <sup>5</sup>	Net Other Income <sup>6</sup>	Total Income	Disposable Income	Disposable Income as % of Total Income
<b>1997<sup>2</sup></b>										
United Kingdom	45 094	41 665	432 471	74 152	97 534	67 711	31 164	789 791	555 518	70.3
North East	1 313	1 050	16 100	2 368	3 749	3 551	1 410	29 542	21 098	71.4
North West	4 287	3 724	45 483	7 767	10 893	8 911	3 773	84 836	60 456	71.3
Yorkshire and the Humber	2 955	2 876	33 685	6 013	7 028	5 713	2 842	61 112	43 335	70.9
East Midlands	2 709	2 640	29 088	5 287	6 656	4 188	2 196	52 763	37 120	70.4
West Midlands	3 547	2 856	36 526	5 440	7 375	5 833	2 782	64 358	44 782	69.6
East	4 724	4 782	44 056	7 903	9 073	4 728	2 704	77 970	54 470	69.9
London	7 293	7 503	67 209	10 638	10 559	9 488	4 051	116 740	80 768	69.2
South East	8 462	7 101	65 554	11 175	17 170	7 182	4 090	120 734	83 406	69.1
South West	4 095	3 657	31 703	6 666	10 152	4 732	2 516	63 522	45 601	71.8
England	39 385	36 189	369 403	63 257	82 653	54 325	26 364	671 576	471 036	70.1
Wales	1 836	1 661	17 226	2 882	4 707	3 859	1 442	33 614	24 425	72.7
Scotland	3 075	2 599	35 842	6 332	8 485	6 372	2 600	65 305	45 766	70.1
Northern Ireland	799	1 216	9 382	1 681	1 689	3 154	758	18 680	13 674	73.2
Extra-Region <sup>7</sup>	-	-	616	-	-	-	-	616	616	-

See footnotes on first page of table.

continued

(£million)

	Gross Operating Surplus	Gross Mixed Income	Compensation of Employees	Net Property Income <sup>3</sup>	All Pensions <sup>4</sup>	Other Social Benefits <sup>5</sup>	Net Other Income <sup>6</sup>	Total Income	Disposable Income	Disposable Income as % of Total Income
<b>1998<sup>2</sup></b>										
United Kingdom	48 905	42 810	463 034	73 053	103 283	67 106	32 001	830 192	569 495	68.6
North East	1 383	1 113	16 774	2 333	3 833	3 470	1 414	30 320	21 044	69.4
North West	4 534	3 845	47 741	7 732	11 716	8 818	3 886	88 272	61 635	69.8
Yorkshire and the Humber	3 074	2 928	35 692	6 061	7 677	5 612	2 910	63 953	44 405	69.4
East Midlands	2 829	2 747	30 749	5 309	6 925	4 158	2 254	54 971	37 703	68.6
West Midlands	3 747	2 821	39 063	5 373	7 959	5 785	2 870	67 619	45 960	68.0
East	5 162	4 904	48 002	7 974	9 827	4 871	2 776	83 517	57 086	68.4
London	8 438	7 985	73 238	9 995	11 060	9 266	4 173	124 156	83 197	67.0
South East	9 311	7 211	70 588	10 711	18 274	7 200	4 183	127 477	85 258	66.9
South West	4 442	3 666	33 644	6 496	10 705	4 730	2 580	66 263	46 398	70.0
England	42 918	37 220	395 491	61 985	87 977	53 911	27 046	706 547	482 686	68.3
Wales	1 913	1 722	18 459	2 898	4 918	3 816	1 472	35 198	25 197	71.6
Scotland	3 206	2 629	38 521	6 463	8 718	6 168	2 692	68 397	47 045	68.8
Northern Ireland	868	1 239	9 947	1 707	1 671	3 212	791	19 434	13 951	71.8
Extra-Region <sup>7</sup>	-	-	616	-	-	-	-	616	616	-
<b>1999<sup>2</sup></b>										
United Kingdom	54 058	43 655	491 574	75 467	107 064	68 108	33 794	873 724	600 258	68.7
North East	1 483	1 132	17 352	2 357	3 819	3 517	1 460	31 120	21 563	69.3
North West	4 887	3 919	50 348	7 927	12 218	8 891	4 071	92 262	64 503	69.9
Yorkshire and the Humber	3 275	2 957	38 136	6 619	8 066	5 697	3 023	67 775	46 964	69.3
East Midlands	3 055	2 786	32 371	5 482	7 138	4 237	2 376	57 445	39 173	68.2
West Midlands	4 061	2 868	41 444	5 838	8 493	5 895	3 039	71 638	49 062	68.5
East	5 710	4 999	51 761	8 151	10 249	4 993	2 959	88 824	60 992	68.7
London	9 832	8 226	77 143	10 014	11 249	9 476	4 463	130 403	87 683	67.2
South East	10 425	7 364	75 913	11 107	19 015	7 162	4 447	135 433	90 864	67.1
South West	4 913	3 741	35 661	6 497	11 079	4 830	2 734	69 456	48 492	69.8
England	47 642	37 991	420 130	63 992	91 326	54 698	28 573	744 355	509 296	68.4
Wales	2 049	1 744	19 732	3 133	5 093	3 864	1 554	37 169	26 764	72.0
Scotland	3 413	2 677	40 593	6 591	8 961	6 242	2 820	71 296	48 931	68.6
Northern Ireland	955	1 243	10 502	1 751	1 684	3 304	848	20 287	14 650	72.2
Extra-Region <sup>7</sup>	-	-	616	-	-	-	-	616	616	-

See footnotes on first page of table.

# 4 Individual consumption expenditure by region 1994-1999

		1994	1995	1996	1997	1998	1999 <sup>1</sup>
Individual consumption expenditure (£ million)							
United Kingdom <sup>2</sup>	DDBR	434 549	454 934	486 226	517 909	551 823	586 906
North East	DDNQ	17 460	18 214	19 272	20 150	20 998	20 659
North West	DDNR	48 962	50 717	53 864	57 489	59 774	64 133
Yorkshire & the Humber	DDNS	35 603	36 798	39 108	41 255	44 248	44 956
East Midlands	DDNT	29 432	31 245	32 865	34 787	36 261	37 961
West Midlands	DDNU	36 685	39 106	40 993	43 309	46 107	49 416
East	DDNV	38 503	41 554	44 989	47 712	52 258	54 607
London	DDNW	61 257	63 080	66 893	72 873	80 737	89 241
South East	DDNX	65 488	68 100	73 585	78 921	85 207	92 024
South West	DDNY	33 755	35 717	38 979	41 784	43 887	47 384
England	DDNZ	367 145	384 531	410 548	438 280	469 478	500 380
Wales	DDOA	19 128	20 433	22 578	23 553	23 716	24 103
Scotland	DDOB	37 703	38 787	41 129	43 556	45 520	48 421
Northern Ireland	DDOC	10 570	11 192	11 977	12 521	13 109	14 009
Per head (£)							
United Kingdom <sup>2</sup>	TLZI	7 441	7 762	8 268	8 776	9 316	9 864
North East	TLZJ	6 676	6 973	7 391	7 744	8 086	8 003
North West	TLZK	7 082	7 336	7 798	8 331	8 662	9 321
Yorkshire & the Humber	TLZL	7 081	7 306	7 758	8 177	8 763	8 907
East Midlands	TLZM	7 180	7 583	7 939	8 370	8 695	9 057
West Midlands	TLZN	6 920	7 364	7 705	8 128	8 640	9 262
East	TLZO	7 380	7 915	8 514	8 963	9 740	10 077
London	TLZP	8 799	9 011	9 485	10 248	11 264	12 250
South East	TLZQ	8 424	8 697	9 333	9 938	10 656	11 392
South West	TLZR	7 045	7 408	8 049	8 584	8 961	9 600
England	TLZS	7 539	7 865	8 365	8 895	9 488	10 057
Wales	TLZT	6 563	6 997	7 722	8 041	8 079	8 206
Scotland	TLZU	7 334	7 537	8 007	8 488	8 874	9 459
Northern Ireland	TLZZ	6 427	6 775	7 188	7 463	7 749	8 281
Per head, indices (UK=100)							
United Kingdom <sup>2</sup>	DDBS	100.0	100.0	100.0	100.0	100.0	100.0
North East	DDPD	89.7	89.8	89.4	88.2	86.8	81.1
North West	DDPE	95.2	94.5	94.3	94.9	93.0	94.5
Yorkshire & the Humber	DDPF	95.2	94.1	93.8	93.2	94.1	90.3
East Midlands	DDPG	96.5	97.7	96.0	95.4	93.3	91.8
West Midlands	DDPH	93.0	94.9	93.2	92.6	92.7	93.9
East	DDPI	99.2	102.0	103.0	102.1	104.6	102.2
London	DDPJ	118.3	116.1	114.7	116.8	120.9	124.2
South East	DDPK	113.2	112.1	112.9	113.2	114.4	115.5
South West	DDPL	94.7	95.4	97.4	97.8	96.2	97.3
England	DDPM	101.3	101.3	101.2	101.4	101.9	102.0
Wales	DDPN	88.2	90.1	93.4	91.6	86.7	83.2
Scotland	DDPO	98.6	97.1	96.8	96.7	95.3	95.9
Northern Ireland	DDPP	86.4	87.3	86.9	85.0	83.2	83.9

1 Provisional.

2 Components may not sum to totals as a result of rounding.

	Food, drink and tobacco	Clothing and footwear	Housing and fuel	Household goods and services	Vehicles, transport and communications	Recreation	Other goods and services	Consumption expenditure in the UK <sup>1</sup>	Total consumption expenditure <sup>2</sup>
<b>1994</b>									
United Kingdom	83 743	27 625	79 772	24 758	68 382	41 750	91 254	417 287	434 549
North East	3 932	1 125	3 060	944	2 606	1 574	3 157	16 398	17 460
North West	9 963	3 131	8 943	2 951	7 595	4 498	9 676	46 757	48 962
Yorkshire and the Humber	7 198	2 211	6 191	2 186	5 100	3 239	7 427	33 552	35 603
East Midlands	5 876	1 755	5 245	1 657	4 432	3 120	5 917	28 003	29 432
West Midlands	7 150	2 082	6 624	2 035	6 165	3 525	7 194	34 776	36 685
East	6 974	2 228	7 124	2 384	6 637	3 670	7 867	36 884	38 503
London	10 751	4 642	11 632	3 280	10 097	5 864	15 200	61 466	61 257
South East	11 482	3 918	12 360	3 734	10 485	6 424	14 516	62 919	65 488
South West	6 428	2 036	6 763	1 898	5 016	3 325	7 128	32 594	33 755
England	69 754	23 127	67 942	21 069	58 135	35 240	78 082	353 349	367 145
Wales	3 913	1 120	3 743	1 060	2 862	1 767	3 561	18 025	19 128
Scotland	7 801	2 563	6 572	1 997	5 760	3 763	7 604	36 060	37 703
Northern Ireland	2 276	815	1 516	631	1 625	980	2 007	9 850	10 570
	Food, drink and tobacco	Clothing and footwear	Housing and fuel	Household goods and services	Vehicles, transport and communications	Recreation	Other goods and services	Consumption expenditure in the UK <sup>1</sup>	Total consumption expenditure <sup>2</sup>
<b>1995</b>									
United Kingdom	86 738	28 140	83 473	25 767	71 316	45 236	96 247	437 909	454 934
North East	3 895	1 179	3 215	964	2 679	1 820	3 357	17 109	18 214
North West	10 390	3 215	9 127	2 925	7 880	4 899	9 901	48 336	50 717
Yorkshire and the Humber	7 330	2 273	6 290	2 249	5 072	3 477	8 050	34 741	36 798
East Midlands	5 975	1 949	5 533	1 778	4 651	3 445	6 363	29 693	31 245
West Midlands	7 660	2 222	6 982	2 129	6 657	3 884	7 520	37 055	39 106
East	7 396	2 532	7 689	2 495	7 007	4 309	8 423	39 851	41 554
London	10 934	4 916	12 522	3 528	10 516	6 134	15 674	64 223	63 080
South East	11 888	3 998	12 886	3 825	10 743	6 806	15 144	65 289	68 100
South West	6 676	2 221	7 061	1 926	5 284	3 504	7 657	34 329	35 717
England	72 143	24 506	71 305	21 819	60 489	38 278	82 087	370 626	384 531
Wales	4 064	1 164	3 919	1 150	3 032	2 024	4 004	19 357	20 433
Scotland	8 161	2 584	6 684	2 078	6 041	3 896	7 969	37 411	38 787
Northern Ireland	2 371	887	1 565	720	1 754	1 039	2 188	10 523	11 192
	Food, drink and tobacco	Clothing and footwear	Housing and fuel	Household goods and services	Vehicles, transport and communications	Recreation	Other goods and services	Consumption expenditure in the UK <sup>1</sup>	Total consumption expenditure <sup>2</sup>
<b>1996</b>									
United Kingdom	92 136	30 370	87 440	28 032	76 283	48 247	104 898	467 400	486 226
North East	4 007	1 198	3 456	1 024	2 833	1 996	3 557	18 070	19 272
North West	11 081	3 487	9 246	3 048	8 327	5 465	10 729	51 384	53 864
Yorkshire and the Humber	7 658	2 354	6 576	2 360	5 503	3 737	8 635	36 823	39 108
East Midlands	6 278	1 988	5 644	1 987	4 867	3 467	6 981	31 211	32 865
West Midlands	8 009	2 333	7 122	2 412	6 839	4 016	8 043	38 773	40 993
East	7 931	2 773	8 218	2 685	7 351	4 803	9 297	43 058	44 989
London	11 433	5 018	12 997	3 897	11 453	6 197	16 628	67 624	66 893
South East	12 672	4 166	13 716	4 078	11 605	7 457	16 825	70 519	73 585
South West	7 289	2 307	7 533	2 165	5 762	3 779	8 714	37 549	38 979
England	76 358	25 624	74 509	23 655	64 541	40 917	89 408	395 011	410 548
Wales	4 426	1 231	4 264	1 405	3 338	2 192	4 620	21 477	22 578
Scotland	8 788	2 591	6 915	2 233	6 531	4 077	8 518	39 654	41 129
Northern Ireland	2 564	924	1 752	739	1 873	1 060	2 351	11 263	11 977

<sup>1</sup> Expenditure by UK households and foreign residents in the UK.

<sup>2</sup> Expenditure by UK consumers, including non-profit institutions serving households and UK households abroad but excluding expenditure in the UK by foreign residents in the UK.

<sup>3</sup> Provisional.



populated areas. An assessment of the quality of the regional estimates was published in *Economic Trends*, November 1990<sup>13</sup>.

### The regional accounts database

13. This release contains only some of the regional economic data available. Further information is available on the web at:

<http://www.statistics.gov.uk/themes/economy/articles/regionalaccounts.asp>  
and on request from:

Regional Accounts Branch, Office for National Statistics, B4/10,  
1, Drummond Gate, London, SW1V 2QQ, tel: 020-7533 5793,  
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14. The estimates and text presented in this article were produced by the Regional Accounts branch of the Office for National Statistics. Regional Accounts Branch are David Vincent, Alex Clifton-Fearnside, Nosa Okunbor, Adam Douglas, Aubrey Stoll, Janette Conquest, Greg Braun, Hara Sidiropoulou, and Philip Papaiah. The author would also like to acknowledge the contribution made by David Lacey.

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# UK regional household sector accounts: a methodological guide

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This article provides a description of the methodologies and data sources which are used to compile the regional household sector accounts. The most recent estimates of regional household sector income and consumption expenditure were published in a news release on 26<sup>th</sup> July 2001. These estimates are also included in a separate article in this edition of *Economic Trends*. The geographic level of breakdown of the estimates is described and a summary of each income component is provided in this article. Some understanding of national accounts methods and regional geographies is assumed throughout. For more information on these, refer to the publications listed in the references section.

This article does not detail the methodology used to calculate sub-regional household sector income. The Office for National Statistics (ONS) aims to publish sub-regional household sector income estimates, along with the methodology used to produce them, in an article in *Economic Trends* at the end of 2001.

## The household sector and published geographies

This sector covers people living in traditional households, as well as those living in institutions. The latter, (about 1.5% of the UK population), includes people living in retirement homes etc. This sector also includes sole trader enterprises and non-profit institutions serving households (NPISHs), examples of the latter being charities and most universities.

ONS annually publishes estimates of household sector income for the 9 Government Office Regions (GORs) in England and for Wales, Scotland and Northern Ireland. Together these areas form level 1 of the Nomenclature of Units for Territorial Statistics (NUTS), a Europe-wide classification of comparable geographies. There are 12 NUTS - level 1, 37 NUTS level 2 and 133 NUTS level 3 areas in the UK.

## Household sector income

### Data sources and concepts

Regional household sector income is derived using a variety of data sources. The methodology reflects the aims and definitions of the European System of Accounts 1995<sup>1</sup> (ESA95). ONS publishes aggregate levels of household sector income as well as per capita levels and indices.

ESA95 was introduced at the national level in 1998 and at the regional level in 1999. ESA95 replaced ESA79 and included a series of revised sector and component definitions under which the former *personal sector* was replaced by the *household sector*. For a more detailed description of ESA95 refer to *Introducing the European System of Accounts 1995 in the UK*<sup>2</sup>.

Estimates of regional household sector income are consistent with those published for the UK in *United Kingdom National Accounts: The Blue Book*<sup>3</sup> and are normally updated within the following year.

The calculation of each component is discussed in detail later, but from a broad perspective, household sector income totals are calculated using the same *top down* principle as is used for regional GDP. For a further description the methodology used to calculate regional mixed income for GDP refer to: *UK Regional Gross Domestic Product: A methodological Guide*. In summary, this approach means that regional estimates are derived by sharing out national totals to individual regions according to one or more indicator data series.

## Total and disposable household sector income

*Total* and *disposable* household sector income are calculated for each region at *current* prices.

- The total income for the household sector refers to the income received as remuneration for productive activity, i.e. wages and salaries, in addition to other forms of income such as pensions and social security benefits. The components are listed in *Table 1* (overleaf).

- Disposable income incorporates deductions for certain cost items i.e. income tax payments, council tax payments and National Insurance Contributions. This income is indicative of the funds available to the household sector for expenditure on consumption items.

The consumption of fixed capital (i.e. the depreciation in value of property) is not deducted from either form of income at the regional level and both are expressed at current prices.

## Extra-Regio

Where household income cannot be attributed to mainland UK regions, it is allocated to *Extra-Regio*. Included in *Extra-Regio* are the earnings of UK residents employed in UK enclaves in other countries, mainly civil servants, diplomats and the armed forces.

continued

	Food, drink and tobacco	Clothing and footwear	Housing and fuel	Household goods and services	Vehicles, transport and communications	Recreation	Other goods and services	Consumption expenditure in the UK <sup>1</sup>	Total consumption expenditure <sup>2</sup>
<b>1997</b>									
United Kingdom	94 046	31 978	91 855	30 881	83 965	53 334	111 304	497 362	517 909
North East	4 034	1 283	3 497	1 202	3 133	2 082	3 639	18 869	20 150
North West	11 259	3 721	9 969	3 316	9 028	6 137	11 512	54 943	57 489
Yorkshire and the Humber	7 848	2 536	6 738	2 596	6 156	4 323	8 697	38 895	41 255
East Midlands	6 452	1 971	6 100	2 312	5 251	3 772	7 146	33 005	34 787
West Midlands	7 930	2 468	7 463	2 753	7 192	4 471	8 661	40 939	43 309
East	8 113	2 909	8 358	2 892	8 145	5 159	10 081	45 657	47 712
London	12 026	5 343	13 785	4 284	12 974	6 836	18 015	73 243	72 873
South East	12 817	4 425	14 170	4 563	13 157	8 263	18 130	75 526	78 921
South West	7 474	2 293	8 165	2 350	6 240	4 285	9 462	40 270	41 784
England	77 954	26 949	78 246	26 248	71 276	45 329	95 343	421 346	438 280
Wales	4 440	1 327	4 421	1 516	3 564	2 298	4 836	22 401	23 553
Scotland	9 005	2 740	7 412	2 363	7 082	4 569	8 730	41 902	43 556
Northern Ireland	2 647	962	1 776	754	2 043	1 138	2 394	11 715	12 521
	Food, drink and tobacco	Clothing and footwear	Housing and fuel	Household goods and services	Vehicles, transport and communications	Recreation	Other goods and services	Consumption expenditure in the UK <sup>1</sup>	Total consumption expenditure <sup>2</sup>
<b>1998</b>									
United Kingdom	95 728	33 350	96 321	32 953	89 054	60 072	121 233	528 711	551 823
North East	4 048	1 429	3 482	1 350	3 247	2 184	3 887	19 629	20 998
North West	11 283	3 651	9 915	3 469	9 296	6 815	12 463	56 891	59 774
Yorkshire and the Humber	8 122	2 742	7 098	2 819	6 393	5 136	9 381	41 692	44 248
East Midlands	6 504	1 957	6 252	2 559	5 508	4 190	7 359	34 328	36 261
West Midlands	8 036	2 599	7 772	2 960	7 570	5 052	9 520	43 508	46 107
East	8 397	3 029	9 244	3 232	9 017	5 675	11 530	50 124	52 258
London	12 628	5 776	15 081	4 509	14 204	8 076	20 168	80 441	80 737
South East	13 043	4 571	15 538	5 067	14 376	9 134	19 848	81 577	85 207
South West	7 536	2 256	8 328	2 313	6 522	4 868	10 387	42 210	43 887
England	79 595	28 009	82 710	28 279	76 134	51 129	104 543	450 399	469 478
Wales	4 374	1 433	4 288	1 415	3 530	2 427	4 923	22 390	23 716
Scotland	9 088	2 937	7 532	2 469	7 172	5 262	9 240	43 700	45 520
Northern Ireland	2 672	971	1 792	790	2 218	1 254	2 526	12 221	13 109
	Food, drink and tobacco	Clothing and footwear	Housing and fuel	Household goods and services	Vehicles, transport and communications	Recreation	Other goods and services	Consumption expenditure in the UK <sup>1</sup>	Total consumption expenditure <sup>2</sup>
<b>1999<sup>3</sup></b>									
United Kingdom	99 473	34 601	103 887	34 781	93 181	65 467	128 878	560 268	586 906
North East	3 970	1 317	3 454	1 289	3 189	2 085	3 825	19 128	20 659
North West	11 973	4 063	10 740	3 505	10 036	7 566	13 036	60 919	64 133
Yorkshire and the Humber	8 110	2 459	7 341	2 514	6 734	5 470	9 512	42 140	44 956
East Midlands	6 908	1 896	6 638	2 401	5 805	4 347	7 859	35 853	37 961
West Midlands	8 409	2 688	8 106	3 182	7 903	5 795	10 448	46 531	49 416
East	8 662	2 919	9 830	3 489	8 839	6 136	12 067	51 943	54 607
London	13 263	6 451	17 467	4 928	14 811	8 941	22 591	88 453	89 241
South East	13 847	4 782	16 585	5 706	15 845	9 914	21 097	87 776	92 024
South West	7 745	2 297	9 049	2 859	6 988	5 412	11 132	45 482	47 384
England	82 888	28 872	89 211	29 874	80 148	55 666	111 566	478 225	500 380
Wales	4 479	1 486	4 327	1 370	3 464	2 618	4 884	22 627	24 103
Scotland	9 358	3 129	8 236	2 693	7 468	5 739	9 738	46 361	48 421
Northern Ireland	2 747	1 114	2 113	844	2 101	1 451	2 690	13 061	14 009

See footnotes on first page of table.



## BACKGROUND NOTES

### European System of Accounts 1995 (ESA95)

1. The regional estimates of household income and consumption expenditure published here are consistent with the *European System of Accounts 1995* (ESA95). ESA95 is based on the *System of National Accounts 1993*<sup>8</sup> (SNA93) which was sponsored by all major international organisations and is being adopted world wide. The European system, which is being adopted by EU Member States, is consistent with SNA93 but is more specific and prescriptive in certain parts. *Introducing the European System of Accounts 1995*<sup>9</sup>, *National Accounts Concepts Sources & Methods* (1998)<sup>10</sup>, & *Regional Accounts Methods: Household accounts*<sup>11</sup> give more detail of the changed system of accounts, and the particular effects on the UK.

### Regional household accounts

2. The regional estimates presented in this article are consistent with the national accounts published in the *United Kingdom National Accounts 2000 (The Blue Book)*, which also defines the terms used. Regional household income estimates for 2000, consistent with the 2001 edition of *the Blue Book* will be published in 2002.

### Geography

3. The regional estimates published in this article relate to the nine Government Office Regions (GORs) of England, as well as totals for Scotland, Wales, and Northern Ireland. These form level 1 of the NUTS geography described below.

4. The nomenclature of territorial units for statistics (NUTS) provides a single uniform breakdown for the production of regional statistics for the European Union. There are five levels of NUTS in the UK, although GDP estimates are only published for the first three. These are:

NUTS-1 Government Office Regions and Scotland, Wales, and Northern Ireland.

NUTS-2 37 areas - sometimes referred to as sub-regions.

NUTS-3 133 areas - generally groups of unitary authorities or districts, also known as local areas.

Some areas appear at more than one level, for example,

Northern Ireland appears at NUTS levels 1 and 2.

5. Revised estimates of household income for geographies below NUTS-1 have not been published by the ONS since June 1998<sup>12</sup>, when they were published on the basis of the old geography. The ONS is currently engaged in a project to produce estimates on the new geography. Sub-regional estimates of household income will be published at the end of 2001 in the form of an ONS News Release.

6. There are no sub-regional estimates of individual consumption expenditure, due to the absence of reliable consumption data for sub-regional areas. This is because the Family Expenditure Survey (FES), the key consumption expenditure data source, is not published for county or sub-county geographies. At the current time, ICE data are only available from 1994 on a Government Office Region (GOR) basis. It is expected that estimates for the years 1990-1993 will be published in 2002.

### Regional household accounts - concepts and definitions

7. A further article describing the methods used to calculate the regional estimates presented here is included in the August 2001 edition of *Economic Trends*.

### Extra-Region within household income

8. The compensation of employees (CoE) attributable to UK embassies abroad and UK forces stationed overseas is included in Extra-Region. As this income cannot be assigned to specific regions it is assigned as "Extra-Region household income".

### General

9. All the items in regional accounts are measured in current prices which means that increases over time reflect inflation as well as real growth. Trends in total consumption expenditure per head (for example) cannot be analysed easily without deflating the data. However, there are no regional price indices that could be used to remove the effect of inflation from the figures. Comparisons of trends can therefore be based either on the difference between regional increases at current prices or on movements in the amount relative to the UK average. Both approaches would be misleading if the rate of inflation in any region were different from the national average.
10. In the regional accounts it is usual to look at changes per head relative to the UK average over time. However, this obscures the effect of changes in population size. In areas where the population is increasing most rapidly, growth in total household income or expenditure would be expected to grow relatively strongly; conversely, areas with a low or negative population growth would be expected to grow more slowly.

### Accuracy

11. As with the national accounts, the regional estimates, although calculated as reliably as possible, cannot be regarded as accurate to the last digit shown.

12. The regional accounts estimates are partly based on sample surveys and the quality of the results therefore varies according to sample size. This means that the results for areas with smaller populations



**Table 1. Components of Household Sector Income**

**Total Household Sector Income [Balances of Primary Incomes, Gross]**

Compensation of Employees	
-Wages and Salaries	
-Employers Social Contributions	
Gross Mixed Income	
Net Property Income	
-Interest Received	
-Distributed Income of Corporations	
-Rental Income on Land Received	
-Attributed Property Income of Insurance Policy Holders	
Less	
-Interest Paid by the Household Sector	
-Payments for the Rental of Land	
Pensions	
-Private Pensions	
-State Pensions and Widowers Allowance	
-Notional and Non-funded Pensions	
Other Social Benefits	
-Social Security Benefits	
-Local Authority and Education Authority Benefits	
Gross Operating Surplus	
-Rental Income from Buildings	
-Owner Occupier Imputed Rent	
-Consumption of Fixed Capital by NPISHs	
Net Other Income	
-Miscellaneous Current Transfers	
-Non-Life Insurance Claims	
-Imputed Social Contributions	

**Disposable Income**

Total Household Sector Income [Balances of Primary Incomes, Gross]	
Less	
Current Taxes on Income and Wealth	
-Current Taxes on Income	
-Other Current Taxes	
Employers Social Contributions	
-Employers National Insurance Contributions	
-Employers Other Social Contributions	
Employees Social Contributions	
-Employees National Insurance Contributions	
-Employees Other Social Contributions	
Social Contributions Paid by Self and Non-Employed Persons	
Miscellaneous Current Transfers Paid by the Household Sector	
Non-Life Insurance Premiums	
Social Benefits Paid by the Household Sector	

**Concept of residence**

Household sector Extra-Region income differs from that included in regional gross domestic product (GDP). The biggest difference between the two is that the earnings of offshore (North Sea) oil workers are not classified as Extra-Region in household sector income, rather these are allocated to mainland UK regions. For household income, it is assumed that the earnings of the majority of these workers flow back to households on the UK mainland.

The regional allocation of household sector income is based on the residence principle. A household or a NPISH unit is included within a given region only if it has an economic interest in that area. A household is defined as having an economic interest in an area if it maintains one or more dwellings there. For UK citizens, this principle means that their income is allocated to the regions where they live.

## Compensation of employees

This is the largest single component of household sector income in the UK, accounting for around 56% of total resources. It covers all remuneration, both in cash and kind, payable to an employee.

Compensation of employees (CoE) is comprised of wages & salaries *plus* employers social contributions. In the household sector accounts, each component is allocated to regions using different indicators and then added to give regional CoE. The definitions of both wages and salaries and CoE in the household sector accounts are slightly different to those calculated for GDP. Specifically, the wages and salaries of the household sector includes the value of the balance between the earnings of foreign nationals working in UK territory on a short-term basis and UK nationals working in the rest of the world on a short term basis. The net of these is comparatively small, typically amounting to less than £200 million per year.

Regional wages & salaries are calculated using information taken from the regional GDP system and Inland Revenue data detailing employers social contributions by region.

The social contributions made by employers are made up of three separate series: National Insurance, pensions and other social contributions. Each of these is allocated to regions using Inland Revenue estimates of National Insurance receipts; Labour Force Survey estimates of public sector employment; and wages & salaries estimates from the GDP system, respectively.

After 2001, employers' social contributions for Extra-Region employees will be derived using information supplied by the Inland Revenue which details the income of a sample of Extra-Region employees.

Due to problems with the National Insurance Recording System, managed by the Department for Work and Pensions (DWP) for the Inland Revenue, some key data are not available for years after 1996. Where this has occurred, the latest years have been forecast using the same information and methodologies as those used for estimating regional GDP.

## Gross mixed income

Mixed income is the income from labour and profits (which cannot easily be distinguished) of households that operate as sole proprietorships without independent legal status. Under ESA95:

"Sole traders accounts are generally not fully separable from those of the households of which they are part. Nor can sole traders necessarily be deemed to have autonomy of decision. Almost all of them are therefore classified to the household sector under the latest [ESA95] system."

—*Introducing the European System of Accounts 1995 in the UK, p10.*

Since partnership enterprises are usually owned by more than one household and do generally, keep separate accounts as well as having autonomy of decision, under ESA95 they are treated as quasi-corporations and are now classified within the private corporations sector.

Nearly all sole trader enterprises belong in the household sector, and the mixed income estimates calculated in the residence-based GDP system are used as the basis for regional household sector mixed income. There are some minor adjustments made to the respective totals.

## Net property income

This series relates to the income received by the household sector as a result of ownership of financial holdings, land and other non-produced assets. The components of this are: income from interest, distributed income from corporations (dividends and withdrawals on capital invested in partnerships), rent received and the attributed income to the holders of insurance policies. Each of these components are calculated separately and added together to give net property income.

Interest received is estimated for each individual region using Inland Revenue Survey of Personal Incomes (SPI) information which details the regional income from investment taken from the 1% sample of all Inland Revenue tax records. At the regional level, and across years, this data can be subject to high levels of volatility and data smoothing techniques have been applied.

This property income is balanced by the interest paid by the household sector (which mainly consists of the interest on property loans). This balancing item is allocated to regions using a combination of information on housing stocks and property values.

Dividends, and withdrawals on the capital invested in partnerships are similar concepts, and together are classified as the *distributed income from corporations*. Regional income for the former are based on regional investment income and the latter on regional income from partnership businesses and self-employment.

The Inland Revenue data used in the calculation of interest receipts are not normally available for the latest years required. Because of this data are imputed for the latest year needed using regression techniques.

Rent covers the income received from and paid to other sectors by the household sector for the use or exploitation of land and subsoil assets (mainly farmland). Regional rent receipts are by far the smallest part of net property income, and are calculated using population as the regional indicator.

The final component is the attributed property income of insurance policy

holders. This represents the growth in the technical reserves held by insurance companies which is attributed to households. At the moment research to identify the most appropriate regional proxy is still ongoing, and whilst this is in progress wages and salaries are used as the regional indicator.

### **Pensions**

Covers the income from a range of private, National Insurance and non-funded social protection schemes. Both state and private pensions are included as well as the income for recipients of notional – funded pensions (mainly local government employees such as teachers and NHS nurses) and non-funded schemes (primarily civil servants, police officers and fire-fighters).

The individual pension components published in *The Blue Book* are aggregated to three broad categories: private, state and notional & non-funded pensions received by the household sector. Each of these is then allocated to regions separately, using pensions information supplied by the Inland Revenue. These indicators can also be affected by high levels of volatility across time so data smoothing techniques are also used on some of the pensions indicators.

Some Inland Revenue data are not normally available for the latest year that are needed in our calculations. Where this is the case regression techniques are used to derive estimates for the latest year.

### **Remaining social benefits**

This component includes a wide range of central government Social Security benefits in cash i.e. sickness, invalidity, maternity, unemployment etc. In addition to these National Insurance funded benefits, a variety of local authority cash awards are also included such as: rent rebates and allowances and Local Education Authority awards for subsistence to full time students living away from their family home. In 1998 these accounted for around 8% of the total resources available to the household sector.

More than twenty different benefit controls are allocated to regions using a range of regional data from the DWP, such as claimant count (unemployment), estimates of population as well as local government information (detailing i.e. rent rebates and allowances). In a few cases these data are sufficiently volatile to require data smoothing.

It should be noted that social benefits can also be provided in *kind* as well as in cash for example, education and health-care. The value of social benefits in kind are not recorded in these regional household sector accounts at the present time and at the national level, are recorded in the *redistribution of income in kind account*.

### **Gross operating surplus**

The gross operating surplus (GOS) of the household sector is mainly comprised of the income received by household sector landlords and the value of owner-occupied imputed rent (OOIR). It also incorporates an imputed estimate of the consumption of fixed capital by NPISHs units. OOIR refers to the value of the accommodation services generated by owner-occupiers for their own consumption.

In the forthcoming 2001 United Kingdom National Accounts, the rental income received by householder landlords will be reclassified as mixed income and not GOS, since many of these landlords operate as or through sole trader enterprises or meet many of the criteria for these which are laid out in ESA95.

Because the greater proportion of household sector GOS consists of OOIR, this component is assigned to regions using the same methodology and data sources as are used in regional residence-based GDP (regional housing stocks *multiplied by* mix-adjusted house sale prices).

### **Net other income**

The three remaining components which make up total household sector income are miscellaneous current transfers, imputed social contributions and non-life insurance claims.

Non-life insurance claims cover the value of property, motor vehicle and health insurance pay-outs received by the household sector. The regional value of each type of claim is allocated using UK - level claims information supplied by the Association of British Insurers (ABI) and are distributed by using regional estimates of the number of burglaries and road accidents which are supplied by the Home Office (HO) and the Department of Transport Local Government and the Regions (DTLR), respectively.

The *uses* item for insurance is non-life insurance premiums paid by the household sector. After 2001, regional non-life insurance premiums will be calculated using ABI information coupled with regional estimates of expenditure on insurance from the Family Expenditure Survey (FES).

Miscellaneous current transfers cover money received from a very broad range of payments, but consist in the main of transfers or *gifts* from the rest of the world and government grants to NPISHs. Because of the diverse nature of this component, it is allocated to regions using current population information. The *uses* entry for miscellaneous current transfers item (which also covers a variety of payments made by the household sector to other sectors and the rest of the world) also uses population as the regional indicator.

The smallest element of net other income are the contributions that households and NPISHs receive as notional contributions to cover the



sick or redundancy pay of their employees. This component amounted to less than £500 million in 1998 and is allocated using regional estimates of population.

### **Disposable income**

This is the balance between the resources and uses of the household sector. In short, it is the income available after a number of direct deductions such as income tax have been included.

To arrive at disposable income, each of the deduction items listed in Table 1, are netted from total income by region.

Current Taxes on income and wealth are the compulsory unrequited payments made by the household sector to the government sector and are divided into two types of taxes in the regional calculations.

The first part of this component refers to the value of the taxes on income, which are comprised of: income tax, taxes on unincorporated enterprises and capital gains tax. Regional taxation information from the Inland Revenue is used to calculate the regional totals. As with some other Inland Revenue data, the latest year needed in our calculations is not normally available, and regression is used to derive the estimates for the latest year. In addition, some data smoothing is introduced where high levels of volatility exist in the data.

The remaining taxes, mainly local authority property taxes and motor vehicle taxes are calculated by using local authority taxation information supplied by the DTLR and the devolved administrations and motor vehicle duty information supplied by the Driver and Vehicle Licensing Agency (DVLA).

The social contributions of employees are also deducted and comprise national insurance contributions plus contributions to private, notional and non-funded pension schemes. National Insurance contributions are allocated to regions using a combination of smoothed regional estimates of National Insurance receipts taken from the 1% sample of all National Insurance records, produced by Inland Revenue and population data. For the latest year, where the above data are not available, estimates are derived using the same methodology as are used in the calculation of regional interest and taxation on income.

After 2001, employees other social contributions will be split into their component series (privately funded, non-funded and notional funded contributions) and assigned to regions using regional wages and salaries from total household income, and Labour Force Survey (LFS) estimates of employment in (SIC 92) industry sections L, M and N. At the moment, wages and salaries are used to allocate a combined employee contributions series. The LFS data will be introduced because recent

ONS research indicates that non-funded and notional funded schemes have a different distribution across regions from private pensions and LFS employment in the public sector industries were the best indicators.

The social contributions paid by self-employed and non-employed persons are the final deductions component included in the accounts. These amounted to less than £2 billion in 1998. From 2001, these will be allocated to regions using regional mixed income information taken from the regional GDP system.

### **Future research and publications**

Details of future changes will be published in an *Economic Trends* article in the autumn of 2001.

## Individual consumption expenditure (ICE)

### Definition

Regional estimates of ICE complement the figures already discussed for household sector income and, together with them complete the current account of that sector. The margins of error on both sets of figures, however make it unwise to compare the two in practice. Estimates of ICE are published by category of expenditure using the Classification Of Individual Consumption by Purpose (COICOP). The COICOP classification structure is defined in the European System of Accounts 1995 (ESA95) which provides a basis for consistent estimates across all EU Member States.

The 32 categories of consumption for which ICE is published at a regional level are listed at Annex A, alongside the relevant COICOP coding. A summary of these estimates, aggregated to seven categories of consumption is shown in Table 5 of the latest Regional Household Accounts article. The full detail is available on request from ONS at the address shown at the top of this article.

### Data sources and methodology

#### a) Family expenditure survey (FES)

Regional estimates for the majority of the categories of expenditure listed at Annex A are calculated using information taken from the FES. The FES is an annual survey carried out by ONS that looks at spending patterns across the UK. The methodology used to derive regional estimates of categories of expenditure for which the FES is the main data source is described in this section.

Estimates for years 1994 to 1999 are derived using average weekly household expenditure by region. These estimates are corrected to a per head basis and grossed up by population to give an estimate of total consumption for each category by region. To compensate for small sample sizes in regional FES data, these estimates of total spending are converted to shares of the UK total and are smoothed using a three-year moving average which is weighted 1:2:1 across these three years. This smoothing is applied to each individual category and the estimates are then constrained to the UK totals published in *Blue Book* for each category of expenditure.

#### b) Other sources

The remaining categories of consumption expenditure will be dealt with separately. These categories do not use the FES as the regional source either because they are not covered by the survey or because a better regional indicator is available.

- Actual and Imputed rental for housing (04.1 and 04.2)

These categories cover expenditure on housing by those renting

accommodation and an imputed expenditure for owner-occupiers via mortgage repayments. As with the equivalent sections of household income, regional information for these categories is taken from estimates of private and owner-occupied rent calculated as part of regional accounts estimates of regional GDP. For more information on how these figures are derived, refer to *Regional Gross Domestic Product: A Methodological Guide*<sup>4</sup>.

- Purchase of vehicles (07.1)

Regional estimates for the purchase of vehicles are calculated for England, Wales and Scotland based on the number of new car registrations. These data are supplied by the Driver and Vehicle Licensing Agency (DVLA). Equivalent estimates for Northern Ireland are supplied by the Northern Ireland Statistics and Research Agency (NISRA). The Northern Ireland figures are discounted by 10% for all years to reflect the lower price of vehicles there. No other adjustments are made to the remaining UK NUTS-1 areas.

Since the use of a company car is treated as an expenditure within the vehicles category, estimates of expenditure on company cars are included within the calculation.

- Betting and gaming (09.4.3)

Since the FES includes an estimate of expenditure on betting and gaming net of winnings, rather than of gross expenditure, the regional population of people aged over 15 years is used as the indicator for splitting the national controls.

- Education (10)

This item includes expenditure on school and university fees and should not be confused with the NPISH item which reflects the expenditure of these bodies, and which will be discussed later.

Information on fees paid to each university in the UK (with the exception of Buckingham University which is classified as a private corporation) is taken from published estimates and can be assigned directly to the relevant region in which the universities belong. Estimates of expenditure on schools are derived from information supplied by unitary and local authorities.

- Social protection (12.4)

Social protection covers expenditure on support services for the elderly, disabled and other groups. The largest component of this is residential care for the elderly and so regional estimates are derived from estimates of the resident population aged over 60 years within each region.

### c) Consumption expenditure in the UK by overseas residents

The preceding categories of income cover expenditure on goods and services in the UK by UK residents. To arrive at an estimate for total expenditure on each category in the UK, we must add to these figures an estimate for the expenditure by category of overseas residents in the UK (in total, this is approximately 3.5% of expenditure in the UK).

These figures are derived by region and category of expenditure for different types of overseas resident including students, tourists, diplomats and armed forces stationed in the UK using information from the International Passenger Survey and other sources. They are then included within the published estimates of expenditure by category. Total expenditure of overseas residents in the UK is also published as a separate series.

### d) Consumption expenditure of NPISHs

Expenditure of NPISHs is calculated in two parts; expenditure of universities is published and can be attributed to the correct regions. The expenditure of the rest of NPISHs is derived using estimates of regional employment in SIC(92) industries 91.2 and 91.3, Activities of Trade Unions and Other Membership (including religious and political) Organisations respectively.

### e) Consumption expenditure of UK residents overseas

The final category of expenditure to be calculated is the expenditure of UK residents overseas (around 2.5% of all expenditure by UK households). As with the expenditure of overseas residents in the UK, these estimates are calculated by region and by type of resident using information from the International Passenger Survey as well as other sources.

### Accuracy of regional household sector income and ICE estimates

The accuracy of the estimates of the components of both ICE and household sector income cannot be greater than those of the surveys or control totals on which they are dependant. Survey results are subject both to sampling error and to non-sampling error (i.e. non-response bias or miss reporting). The sampling error of the point estimates is reduced by the use of smoothing but no adjustments are made for non-sampling error at the present time.

Recent years' estimates for ICE in Northern Ireland are thought to be more accurate than those for earlier years, reflecting improvements to methodologies and sample sizes.

The accuracy of estimates for ICE consumption categories not derived from the FES will vary according to the accuracy of the individual data sources used.

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6. Regional Accounts Methods *Household Accounts*: Eurostat; Office for Official Publications of the European Communities. (Luxembourg: 1996).
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# Annex A: categories of ICE for which regional estimates are published<sup>1</sup>

PRODUCT NAME	COICOP CODE
Food and non-alcoholic beverages	0.1
Spirits	02.1.1
Wine	02.1.2
Beer	02.1.3
Tobacco	02.2
Clothing and footwear	03
Actual rentals for housing	04.1
Imputed rentals for housing	04.2
Maintenance and repair of the dwelling	04.3
Water supply and miscellaneous dwelling services	04.4
Electricity, gas and other fuels	04.5
Household goods 1: <i>Furniture, furnishings, carpets and other floor coverings</i> <i>Household appliances</i>	05.1, 05.3
Household goods 2: <i>Household textiles</i> <i>Glassware, tableware and household utensils</i> <i>Tools and equipment for house and garden</i> <i>Goods and services for routine household maintenance</i>	05.2, 05.4, 05.5, 05.6
Health	06
Purchase of vehicles	07.1
Operation of personal transport equipment	07.2
Transport services	07.3
Communications	08
Audio-visual, photographic and information processing equipment	09.1
Other recreational goods: <i>Other Major durables for recreation and culture</i> <i>Other recreational items and equipment; flowers, gardens &amp; pets</i>	09.2, 9.3
Recreational services: <i>Recreational and cultural services except betting and gaming</i> <i>Package holidays</i>	09.4 except 09.4.3, 09.6
Betting and gaming	09.4.3
Newspapers, books and stationery	09.5
Education	10
Restaurants and hotels	11
Personal care and effects: <i>Personal care</i> <i>Personal effects not elsewhere classified</i>	12.1, 12.3
Social protection	12.4
Insurance	12.5
Financial and other services: <i>Financial services not elsewhere classified</i> <i>Other services not elsewhere classified</i>	12.6, 12.7
Consumption in the UK by households resident in the rest of the world	P.34
Consumption outside the UK by UK resident households	P.33
Final consumption expenditure of NPISHs	P31

<sup>1</sup> Indented items are not published separately.