

Economic trends

No. 544
March 1999

Editor:	Uzair Rizki
Production Team:	Ayaz Ahmad Paul Dickman Dermot Rhatigan

London: The Stationery Office

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Introduction

Economic trends brings together all the main economic indicators. It contains three regular sections of tables and charts illustrating trends in the UK economy.

'Economic Update' is a feature giving an overview of the latest economic statistics. The content and presentation will vary from month to month depending on topicality and coverage of the published statistics. The accompanying table on main economic indicators is wider in coverage than the table on selected monthly indicators appearing in previous editions of *Economic trends*. Data included in this section may not be wholly consistent with other sections which will have gone to press earlier.

Articles on international economic indicators and the final expenditure prices index appear monthly and an article on regional economic indicators appears every January, April, July and October. Occasional articles comment on and analyse economic statistics and introduce new series, new analyses and new methodology.

Quarterly information on the national accounts and the balance of payments appears in *UK Economic Accounts* which is published every January, April, July and October by The Stationery Office.

The main section is based on information available to the ONS on the date printed in note 1 below and shows the movements of the key economic indicators. The indicators appear in tabular form on left hand pages with corresponding charts on facing right hand pages. Colour has been used to aid interpretation in some of the charts, for example by creating a background grid on those charts drawn to a logarithmic scale. Index numbers in some tables and charts are given on a common base year for convenience of comparison.

Economic trends is prepared monthly by the Office for National Statistics in collaboration with the statistics divisions of Government Departments and the Bank of England.

Notes on the tables

1. All data in the tables and accompanying charts is current, as far as possible, to 24 February 1999.

2. The four letter identification code at the top of each column of data (eg, DJDD) is ONS's own reference to this series of data on our database. Please quote the relevant code if you contact us requiring any further information about the data.

3. Some data, particularly for the latest time period, is provisional and may be subject to revisions in later issues.

4. The statistics relate mainly to the United Kingdom; where figures are for Great Britain only, this is shown on the table.

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

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

7. A line drawn across a column between two consecutive figures indicates that the figures above and below the line have been compiled on different bases and are not strictly comparable. In each case a footnote explains the difference.

8. 'Billion' denotes one thousand million.

9. There is no single correct definition of *money*. The most widely used aggregates are:

M0, the narrowest measure, consists of notes and coin in circulation outside the Bank of England and bankers' operational deposits at the Bank.

M4 comprises notes and coin in circulation with the public, together with all sterling deposits (including *certificates of deposit*) held with UK banks and building societies by the rest of the private sector.

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

10. Symbols used:

.. not available

- nil or less than half the final digit shown

+ alongside a heading indicates a series for which measures of variability are given in the table on page T77

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

* average (or total) of five weeks.

If you have any comments or suggestions about *Economic trends*, please write to Uzair Rizki, ONS, Zone D4/19, 1 Drummond Gate, London, SW1V 2QQ or e-mail uzair.rizki@ons.gov.uk

Office for National Statistics

March 1999

Articles published in *Economic trends*

Regular articles

International economic indicators. Commentary, figures and charts are published monthly.

Final expenditure prices index. Commentary and figures are published monthly.

Regional economic indicators. Commentary, figures and charts are published every January, April, July and October.

United Kingdom national accounts and balance of payments quarterly figures are published in *UK Economic Accounts* every January, April, July and October.

Other Articles

1998

<i>March</i>	Employment in the public and private sectors. Harmonised indices of consumer prices.
<i>April</i>	Effects of taxes and benefits on household income 1996-97.
<i>May</i>	The Budget: 17 March 1998. The economy; an overview.
<i>June</i>	Regional accounts 1996: part 2. Rebasing the national accounts.
<i>July</i>	Developing a methodology for measuring illegal activity for the UK National Accounts. New format for public finances.
<i>August</i>	PPI/RPI comparisons. Forthcoming changes to the national accounts. Research and experimental development (R & D) statistics 1996.
<i>September</i>	Development of the corporate services price index: a review of progress. Estimating and presenting short-term trends.
<i>October</i>	Environmental taxes in the United Kingdom. Measuring the output of non-market services. UK results from the Community Innovation Survey.
<i>November</i>	Improving the non-finance balance sheets. Developing the public sector balance sheet.
<i>December</i>	Geographical breakdown of the balance of payments current account. Harmonised index of consumer prices: historical estimates. The development of a Land Registry-based national house price index. Improving the quality of the producer price index.

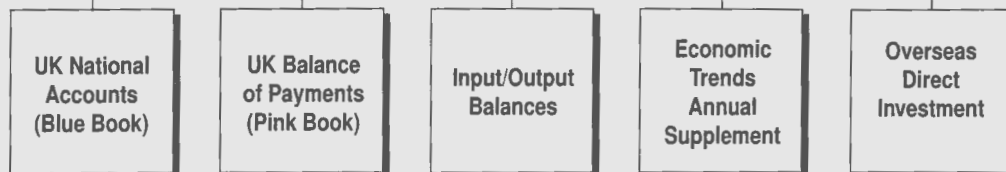
1999

<i>February</i>	Three year ownership programme on RPI methodology. Ownership of United Kingdom quoted companies at the end of 1997.
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For articles published in earlier issues see the list in issue 509 (March 1996) of *Economic trends*. Copies of articles may be obtained from the National Statistics Library, Room 1.001, Government Buildings, Cardiff Road, Newport, NP9 1XG, telephone 01633 812973. The cost is £5.00 per copy inclusive of postage and handling. A cheque for the appropriate remittance should accompany each order, made payable to 'Office for National Statistics'. Credit card transactions can be made by phone; invoices cannot be issued.

United Kingdom Macro-Economic Statistics Publications

Annual Publications



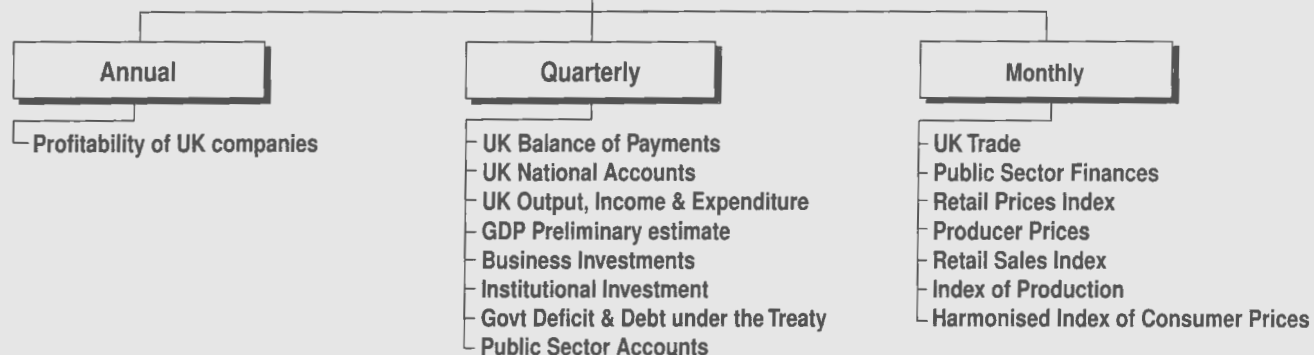
Quarterly Publications



Monthly Publications



First Releases



Other publications: - Retail Prices 1914-1990 - Input/Output Tables - Labour Market Statistics - Family Spending - Sector Classification Guide - Share Ownership - Financial Statistics Explanatory Handbook

Changes to Tables

Table 2.5

This now includes additional series for Households' Total resources and Adjustment for the change in net equity of households in pension funds.

Table 4.5A

Data is now available from 1992q2.

Articles

This month we feature four articles.

Dev Virdee of ONS presents Regional Accounts 1997: Part 1 which analyses provisional estimates of GDP by region for 1997. Regional GDP series have been revised back to 1989 to take account of changes to concepts resulting from the new European System of Accounts (ESA95), and new data and methodology changes, including the move to the new business register (IDBR). In addition at regional level, conceptual and methodological changes have been made as agreed with EU member states as part of the implementation of ESA95. All figures published in this article relate to Government Office Regions (GORs) (*page 25*).

Paul West and Alex Clifton-Fearnside of ONS give the background to Capital Stock estimates in the UK. They summarise the history of the Perpetual Inventory Method (PIM), used to produce the estimates, and discuss recent changes to the model and its deficiencies. Proposals from the NIESR for improving the reliability of the estimates including the direct collection of capital stock data and the impact of the new European system of Accounts (ESA 95) are also discussed. Changes between 1997 *Blue Book* and present figures are summarised (*page 39*).

Deborah Fugeman of ONS compares Taxes and Social security contributions over the period 1986 -1996. Taxes in total and by category, and Social security contributions are compared for OECD countries, and EU countries as a percentage of GNP. Direct tax and Social security contributions are also compared as a percentage of total personal income. Preliminary 1997 estimates are provided for some OECD member countries, but as a percentage of GDP at market prices. The article also includes a comparison of definitions of UK systems of national accounts and technical notes (*page 49*).

Sue Holloway of ONS introduces the measurement of Productivity in the UK. The differences between various ways of measuring productivity are discussed, as well as the importance of productivity in macro-economic policy making. ONS productivity measures are defined in detail and revisions to measures for the whole economy and manufacturing explained. Future work includes the production of enterprise-based estimates, productivity indicators to reflect hours worked and the development of a productivity measure for the service sector (*page 67*).

Future articles

Due to the later release of the Annual Employment Survey 1997, the article '*Employment in the Public and Private Sectors*' which was last published in the March 1998 edition of *Economic Trends*, will be published in the **June 1999** edition. It should be noted that the major categories of employment for the public and private sectors were recently published in *Economic Trends Annual Supplement 1998*. If you require any further information on this subject please call 01928 792560 or e-mail: duncan.macgregor@ons.gov.uk.

Regional economic indicators which were published every January, April, July and October will now be published every February, May, August and November starting with the May 1999 edition. This is to allow sufficient time from the receipt of data to improve the quality of the analysis and produce an improved presentation.

Recent economic publications

Annual

Economic Trends Annual Supplement 1998. The Stationery Office, ISBN 0 11 620974 7, price £28.50. Long runs of up to fifty years of data for most of the tables in *Economic Trends*, plus a notes and definitions supplement.

Share Ownership. The Stationery Office, ISBN 0 11 621076 1, price £39.50. Full analysis of the end-1997 Share Register Survey, analysing the ownership of shares in UK-listed companies.

Quarterly

Consumer Trends: 1998 quarter 3. The Stationery Office, ISBN 0 11 621072 9, price £45.

UK Economic Accounts: 1998 quarter 3. The Stationery Office, ISBN 0 11 621136 9, price £26.

Monthly

Financial Statistics, February 1999. The Stationery Office, ISBN 0 11 621141 5, price £23.50.

Monthly Review of External Trade Statistics (MM24), November 1998. The Stationery Office, ISBN 0 11 537940 1, price £180 p.a.

Retail Prices Index (MM23), December 1998. The Stationery Office, ISBN 0 11 537938 X, price £180 p.a.

All of these publications are available from The Stationery Office Publications Centre, telephone 0171 873 9090 (orders), 0171 873 8499 (subscriptions) or fax 0171 873 8200.

ECONOMIC UPDATE - MARCH 1999

By Geoff Tily, Macro-Economic Analysis - Office for National Statistics

Address: D4/20, 1 Drummond Gate, London, SW1V 2QQ

Tel: 0171 533 5919

Email: geoff.tily@ons.gov.uk

Overview

Official figures continue to indicate a slowdown in activity. GDP growth slowed to 0.2 per cent into the fourth quarter of 1998; underlying this is a sharp decline in manufacturing output and a slowdown in services activity. Retail sales data clearly shows a reduction in domestic demand, although there is evidence of a revival of confidence in recent external surveys. On trade volumes, exports to non-EU countries continue to show the impact of the deterioration in the world economy, however imports from all regions remain relatively robust. Labour force data largely supports a slowdown in the economy. Producer price inflation continues to grow at historically low rates and consumer prices remain subdued, in particular for goods.

Indicators included	
	<i>BRC retail sales monitor – January</i>
<i>UK output, income and expenditure – Q4</i>	<i>UK external trade – December/January</i>
<i>CIPS report on services – January</i>	<i>Money supply – January</i>
<i>Industrial production – December</i>	<i>Consumer credit – December</i>
<i>CBI quarterly industrial trends survey - January</i>	<i>Public sector net borrowing – December</i>
<i>CBI monthly industrial trends survey - February</i>	<i>Labour market statistics – November - December</i>
<i>Retail sales – January</i>	<i>Consumer prices – January</i>
<i>EC/GFK index of consumer confidence – January</i>	<i>Producer prices – January</i>

GDP Activity

GDP growth at constant market prices into the fourth quarter was estimated at 0.2 per cent, the lowest quarterly growth since the second quarter of 1992 (chart 1). Annual growth fell to 1.3 per cent from 2.1 per cent. GDP rose by 2.4 per cent in 1998 compared to 1997, slightly below the Treasury's November forecast of 2.75 per cent.

Output breakdown

Growth in the economy is now dominated by service sector activity. The latest estimate showed the service sector continued to grow by 0.6 per cent into the fourth quarter, slightly lower than growth into the third quarter of 0.8 per cent. The corresponding annual rate fell to 2.9 per cent from 3.6 per cent (chart 2). Within the service sector, growth of distribution, hotels and catering was estimated to have been flat on the quarter. On the other hand transport, storage and communications grew by 2.0 per cent. Smaller quarterly rises were seen for business services and finance, and government and other services.

The January data from the Chartered Institute of Purchasing and Supply (CIPS), report on services, showed an improvement over the December figures and is now perhaps more in line with ONS figures.

Chart 1
GDP

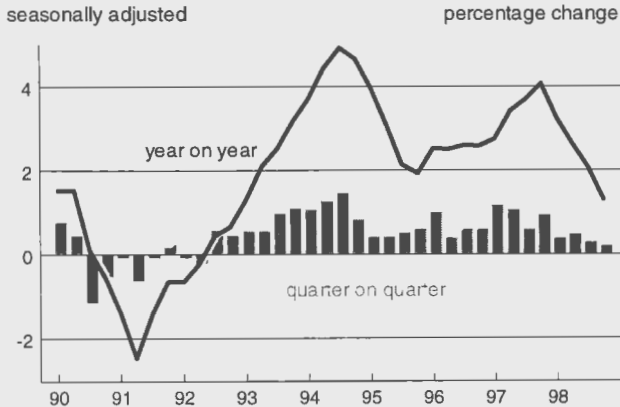
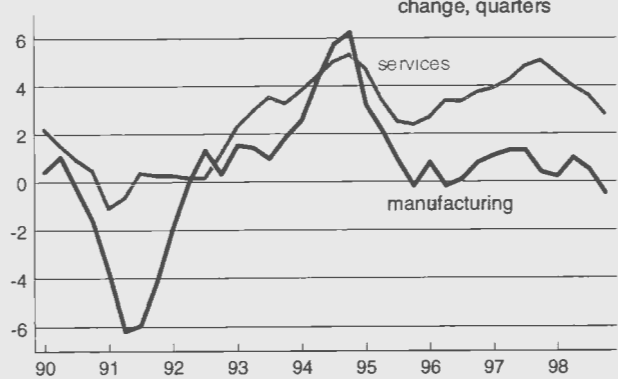


Chart 2

GDP

seasonally adjusted



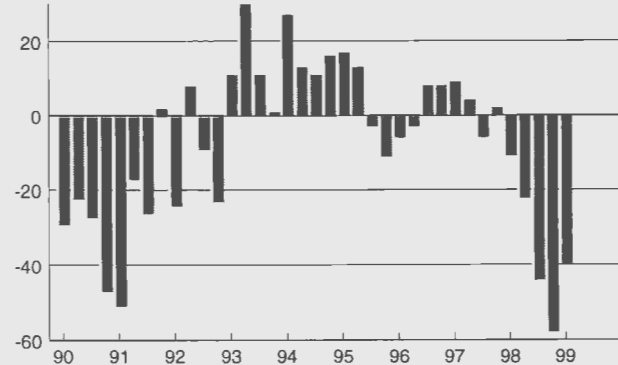
Underlying the fourth quarter estimate of GDP is a sharp downturn in manufacturing activity. The index of manufacturing output fell by 1.3 per cent in the fourth quarter compared with a decline of 0.1 per cent in the third quarter. Manufacturing output in quarter four was 0.6 per cent below a year earlier (see chart 2). Output of both durable and non-durable goods is falling, with intermediate goods growth flat; only investment goods continue to show strong growth at 5.3 per cent on the year.

The CBI survey showed more optimism among industrial firms in February with further rises in output volumes, orders and expectations.

Chart 3

CBI quarterly business optimism

balance



Domestic demand

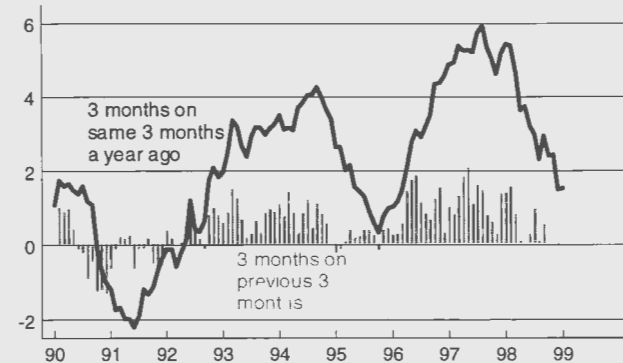
The volume of sales in January was 1.2 per cent higher than in December according to ONS figures. The press have suggested this resulted from heavy discounting in stores. Looking at the three months to January we see a rise of 0.4 per cent compared with the previous three months; this is an improvement over the small fall of 0.1 per cent in the three months to December (chart 4).

Chart 4

Retail sales

seasonally adjusted

percentage change



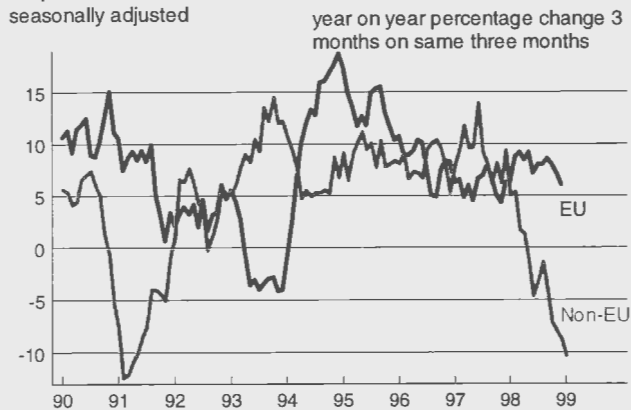
External indicators show evidence of a revival in consumer confidence and demand. The EC/GFK measure of consumer confidence for February 1999 rose to a balance of -1 from -3 in January, well above the long run average of -8 per cent (although one ought to bear in mind that responses to consumer confidence surveys may be influenced by the sharp cutting of base rates). Similarly, the British Retail Consortium information for January showed a sharp rise of 2.5 per cent on the month, although they stress that the three month trend is "broadly flat".

External demand and supply

The December 1998 trade data show the UK's overall balance with the rest of the world in deficit by £1.1bn, unchanged from November. The ONS trend estimate remains of a widening balance.

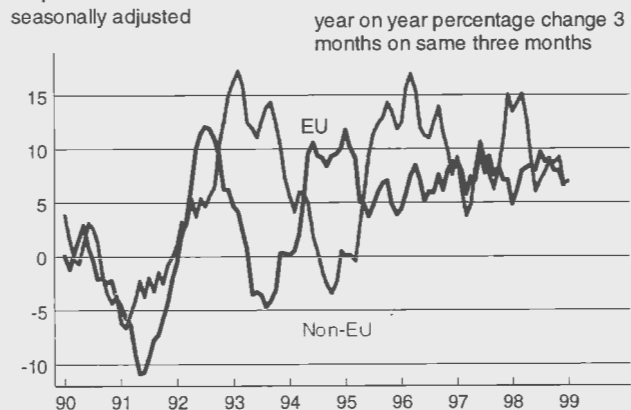
ONS data show exports outside the EU falling particularly strongly between December and January. Thus annual growth of the volume of non-EU exports excluding oil and erratics fell by 10.3 per cent in the three months to January compared with a fall of 8.7 per cent in the three months to December. Chart 5 clearly illustrates the ongoing impact of the deterioration to the global economic climate on these non-EU export markets. As chart 5 also shows there are signs of a turn down in exports to the EU.

Chart 5
Exports
seasonally adjusted



The latest data shows imports growing. Annual growth of imports in the three months to December was 6.6% from EU countries and, in the three months to January, was 7.0 per cent from non-EU countries.

Chart 6
Imports
seasonally adjusted

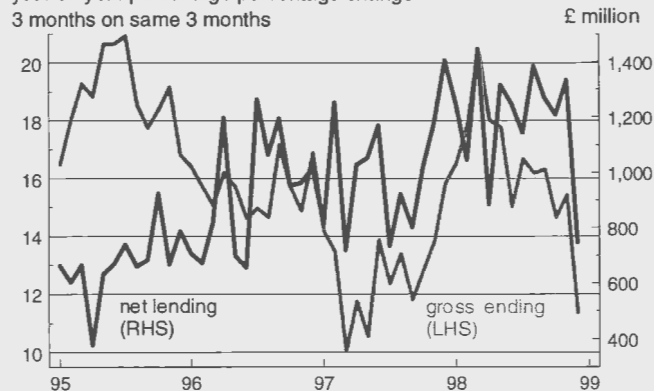


Monetary indicators and government finances

Money supply data also suggests a slowdown in the economy. January M4 annual growth of 7.3 per cent was below the December figure of 8.0 per cent and well below the recent peak of 11.8 per cent seen in December 1997. M0 growth has also slowed somewhat although the monthly movements are more erratic.

This story is consistent with recent consumer credit data (chart 7). Net lending to individuals fell sharply by £0.6 billion between November and December. Gross consumer credit rose by 11.4 per cent in the three months to December, but this is well below the growth of 15.4 per cent in the three months to November and the recent peak growth of 20.4 per cent in March 1998.

Chart 7
Consumer credit
year on year percentage change
3 months on same 3 months



Following a record repayment of £9.9 billion in January 1999 public sector net borrowing has moved back into surplus in the current financial year. Between April 1998 and January 1999, public sector net borrowing was a repayment of £7.3 billion compared with borrowing of £2.3 billion in the same period last year. The main changes between the two financial years are increases in income and corporation tax receipts accompanied by only modest increases to expenditure. The Chancellor's latest forecast is for a repayment of £2.9 billion for the financial year 1998-99 as a whole.

Labour Market

In contrast to most economic data the labour force survey shows employment rising, with the employment rate in the three months to December at 73.8 per cent, up from a rate of 73.6 per cent in the three months to September. Chart 8 shows the continuing rises to the level of employment and the corresponding three month on previous three month percentage changes. However as chart 9 illustrates these recent increases have mainly come from sharp falls in inactivity rather than falls in unemployment.

Chart 8
Employment
percentage change 3 months
on previous 3 months

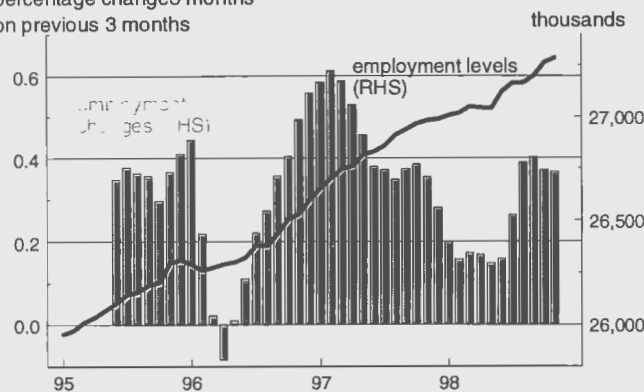
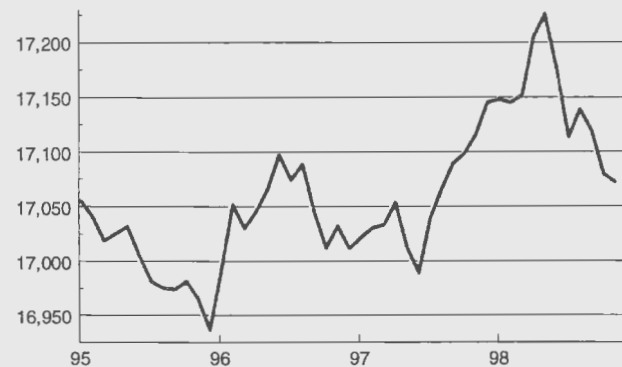


Chart 9
Inactivity
thousands



Aggregate employment data masks a sharp fall in manufacturing employment, where data for December shows a fall of 129,000 since the peak level seen in February 1998. This represents a fall of 2.0 per cent over the year to December compared with a fall of 1.5 per cent for November.

On both measures of unemployment the latest data continues to point to a flattening of the trend. The ILO unemployment rate of 6.2 per cent in the three months to December was unchanged from the rate in the three months to September and the claimant count rate of 4.6 per cent was the same rate as it has been in every month since August.

Prices

There is little inflationary pressure in the economy. The underlying rate of inflation as measured by the annual growth of the Retail Prices Index, excluding mortgage interest payments (RPIX), in January 1999 was 2.6 per cent, the same as in December. Underlying this figure however is a smaller rise in goods inflation, which rose by only 1.4 per cent in the year to January (chart 10). The harmonised index of consumer prices (HICP) with annual growth of 1.6 per cent in January showed a small rise over the December figure of 1.5 per cent. As measured by the HICP, UK inflation was 0.5 per cent above the European average rate in December (the latest month for which all member states' inflation rates are available).

Chart 10
Goods inflation
not seasonally adjusted



As chart 10 also shows, in December 1998 annual producer output price inflation fell for the first time since the series was first compiled in 1958. In January the series showed zero annual producer output price inflation.

Forecasts for the UK Economy

A comparison of independent forecasts, February 1999

The tables below are extracted from HM Treasury's "FORECASTS FOR THE UK ECONOMY" and summarise the average and range of independent forecasts for 1999 and 2000, updated monthly.

	Independent Forecasts for 1999		
	Average	Lowest	Highest
GDP growth (per cent)	0.6	-0.5	2.1
Inflation rate (Q4: per cent)			
- RPI	1.3	0.4	3.1
- RPI excl MIPs	2.2	1.5	3.1
Unemployment (Q4, mn)	1.55	1.20	1.80
Current Account (£ bn)	-5.8	-15.0	0.5
PSNB *(1999-00, £ bn)	4.7	-5.0	13.0

	Independent Forecasts for 2000		
	Average	Lowest	Highest
GDP growth (per cent)	1.8	0.2	2.6
Inflation rate (Q4: per cent)			
- RPI	2.1	1.1	3.0
- RPI excl MIPs	2.2	1.2	2.9
Unemployment (Q4, mn)	1.70	1.30	2.30
Current Account (£ bn)	-6.8	-17.0	3.9
PSNB* (2000-01, £ bn)	7.8	-6.4	20.0

NOTE: "FORECASTS FOR THE UK ECONOMY" gives more detailed forecasts, covering 28 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 – March 1999

by Dermot Rhatigan, Macro-Economic Assessment - Office for National Statistics

Address: D4/20, 1 Drummond Gate, London SW1V 2QQ

Tel: 0171 533 5925

Email: dermot.rhatigan@ons.gov.uk

Overview

Driven by strong growth in consumer spending, the US economy accelerated into the final quarter of 1998. Japan fell deeper into recession in quarter three while Europe saw steady economic growth. The European Union unemployment rate fell below 10.0 per cent in quarter four, for the first time since 1992. Consumer price inflation is falling across the board and prices actually fell in Japan.

EU15

In spite of a levelling-off in domestic demand growth, the pace of economic expansion in the European Union quickened between the second and third quarters of 1998 (Chart 1). Weaker import growth improved the EU's trading position and enhanced the quarterly GDP story. Despite this, year on year GDP growth fell for the second consecutive quarter, to 2.7 per cent.

Private consumption made the largest positive contribution to the change in GDP between the latest quarters. Europe's quarterly consumption figures were boosted by a sharp rebound in consumer activity in Germany following tax changes in the first half of the year, which depressed retail volumes in quarter two. European consumption growth in the year to quarter three, at 2.8 per cent, was the highest recorded in the 1990's.

Stockbuilding, which provided significant support for GDP throughout 1997, remained positive in quarter three but slowed sharply. The slowdown may reflect attempts by Europe's producers to realign stock levels after large additions in 1997 and into 1998. Stock accumulation was particularly rapid in Italy and Germany.

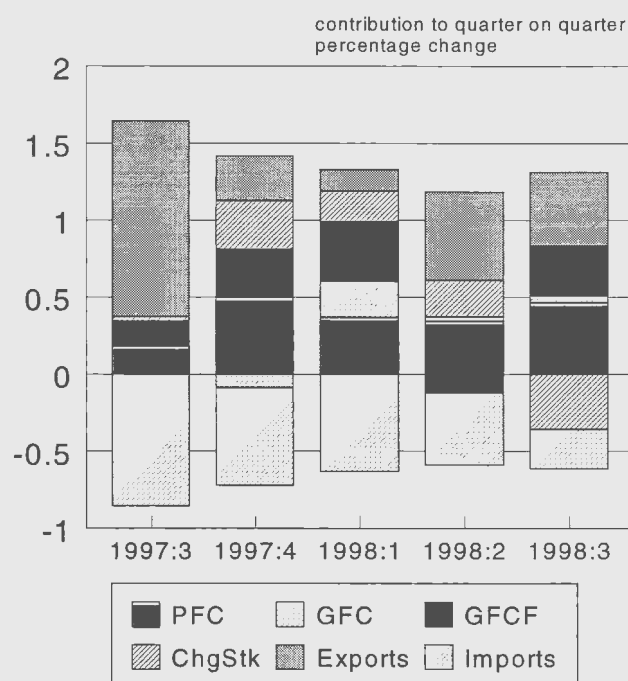
Output of the production industries slowed to 3.1 per cent in the year to quarter three, down from 4.1 per cent in the year to quarter two. Again, the slowdown may be connected with reassessment of stock levels.

Annual consumer price inflation fell by 0.3 percentage points, to 1.4 per cent, between the third and fourth quarters. This continued the downward trend in European inflation that has characterised the 1990's. Producer prices fell by 1.5 per cent in the year to quarter four.

The EU15 unemployment rate fell below 10.0 per cent in quarter four for the first time since 1992.

Chart 1

EU15 - contributions to GDP growth



Germany

Germany's economy recovered strongly in the third quarter of 1998 after almost grinding to a halt in the preceding quarter. Quarterly growth in GDP of 0.9 per cent was sufficient to raise the annual rate by 0.3 percentage points, to 2.7 per cent.

Gauging the underlying strength of the German economy in 1998 has proved to be problematic due to erratic movements in the quarterly path of private consumption, caused by fiscal changes in the first and second quarters. The most important of these was the early announcement of April's VAT increase, which boosted retail sales in quarter one at the expense of those in quarter two. Consumer spending increased by 0.9 per cent during the third quarter - more than reversing the decline of 0.4 per cent recorded in quarter two.

Despite powerful growth in the third quarter, investment expenditure remains below the levels recorded as far back as the final quarter of 1991. The fact that capital formation has been so weak at a time when financing costs have fallen so sharply, may indicate that uncertainty and the perception of risk have increased. The balance from the IFO business tendency survey fell throughout 1998 and has been below its "normal" position since September.

The scale of stock accumulation has to some extent, offset the weakness of capital formation in the last two years. The extent to which this stockbuilding is involuntary and, therefore, needs to be unwound to return stocks to normal levels, will affect the rate of production growth in coming quarters.

The third quarter saw a further increase in the Germany's trade surplus, despite slower export growth. Net trade made a positive contribution to GDP as imports fell for only the second time since 1993.

Firmer signs of improvement in the labour market emerged in quarter three as both employment and unemployment moved in the desired direction. While the unemployment rate peaked around the end of 1997 and began to fall thereafter, the trend in employment did not turn until the third quarter of 1998. The year on year employment growth recorded in quarter three was only the second increase since the start of 1991. Output gains in recent years (GDP has risen in each quarter since Q1 1996) have been delivered mainly from productivity gains rather than increased employment - unit wage costs have fallen.

The existence of slack in the labour market and the emergence of year on year producer price falls since August has helped to drive consumer price inflation down to 0.5 per cent. A fall of 0.2 percentage points between November and December took the annual rate of inflation to its lowest level this decade - less than half that in the EU15.

France

French GDP increased by 0.5 per cent between the second and third quarters of 1998, down from 0.8 per cent in the preceding quarter. The slowdown appeared to be more severe after revisions raised growth in the preceding quarter by 0.2 percentage points. Domestic demand eased during the latest quarter but remained buoyant, while net trade increased its contribution.

Domestic demand was dented in quarter three by slower stockbuilding although year on year growth remained robust at 3.2 per cent. Total consumer demand eased between the second and third quarters; retail sales volumes were flat in quarter three before returning to rapid growth in quarter four. Consumer activity in 1998 has been supported by a number of factors: falling inflation, real earnings growth and an improvement in the labour market. INSEE's consumer confidence indicator improved consistently in 1998.

External demand for French products has held up well in 1998; the trade surplus widened in quarter three as export growth outpaced that of imports.

Echoing the GDP figures the annual growth in industrial production slowed sharply from 5.4 per cent to 3.2 per cent between the second and third quarters.

As in the rest of Europe, consumer price inflation in France remained firmly on a downward trend in 1998. By December the annual rate had fallen to only 0.3 per cent. Falling commodity prices and modest earnings growth have played their part in moderating business costs, thus dampening price pressure.

The unemployment rate in France, at 11.8 per cent, was 2.0 percentage points above the EU15 average rate in quarter four.

Italy

Italy's economy expanded fairly robustly between the second and third quarters although annual growth remained sluggish, at 1.2 per cent. Higher consumption and investment spending coupled with a further improvement in the trade position was sufficient to counteract weakness from the supply side.

Industrial production was dented for the second quarter in succession in quarter three as producers cut their investment in inventories. Stocks levels have risen rapidly since the first quarter of 1997 and falling output may represent adjustment to more appropriate levels.

The improvement in Italy's external trade position during the third quarter was driven by a small pick-up in export demand and a 2.1 per cent fall in imports. Weaker import demand comes despite stronger consumption in the latest quarter. Italy has run a positive trade balance since the first quarter of 1993.

The annual inflation rate fell from 1.8 per cent to 1.5 per cent between the third and fourth quarters - settling 0.1 percentage points above the average in the European Union.

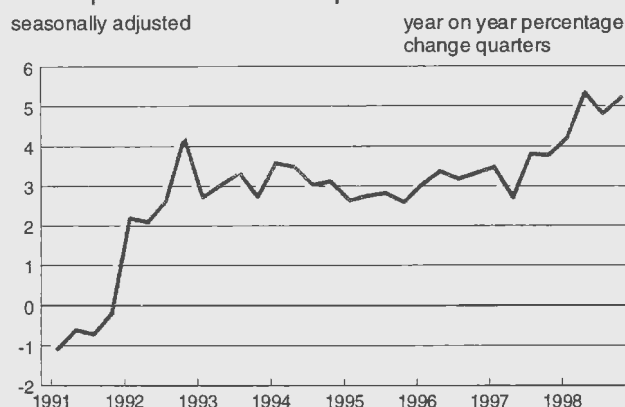
The unemployment rate was steady between the second and third quarters, at 12.3 per cent – 2.3 percentage points above the EU15 average.

USA

After showing signs of easing in the second and third quarters, the US economy accelerated sharply in the final quarter of 1998. Annual growth of GDP topped 4 per cent in quarter four as domestic demand surged and the drag from net trade lessened. Private consumption remained the principal driver of economic activity and investment spending also expanded rapidly (Chart 2).

Chart 2

USA - private final consumption



Consumer activity has been extremely buoyant in 1998; annual growth of private consumption has been close to 5 per cent for most of the year, as Chart 1 shows. The level of consumption has been underpinned by a number of factors: firstly, real incomes were boosted from the turn of the year as general inflation fell faster than nominal wage inflation; secondly, the stock market has delivered capital gains for many consumers; and thirdly, increased activity in the housing market has provided support. Confidence among consumers, as measured by the University of Michigan, dipped slightly towards the end of the year but has stayed at levels consistent with rapid growth in consumers' expenditure.

The strength of domestic demand in the fourth quarter was underlined by the significant contribution made by capital formation. In the year to the fourth quarter investment expenditure increased by 10.8 per cent - the fastest annual rate

this decade. The scale of the increase was amplified by rapid growth in the construction industry, particularly residential construction. Greater activity in the housing market not only adds to investment spending but also supports consumption via those purchases that are associated with moving home.

Perhaps the most surprising feature of the fourth quarter's results surrounds the evolution of the trade data. Following falls in the first three quarters, export volumes rebounded sharply the final quarter of the year. The increase, however, was insufficient to stifle further expansion of the US's yawning trade deficit, as imports continued to respond to the strength of the domestic economy.

Production growth slowed in 1998, but the sequence of positive quarter on quarter growth, stretching back to the second quarter of 1991, was unbroken. Movements in the latest quarters were exaggerated as a result of industrial action at General Motors.

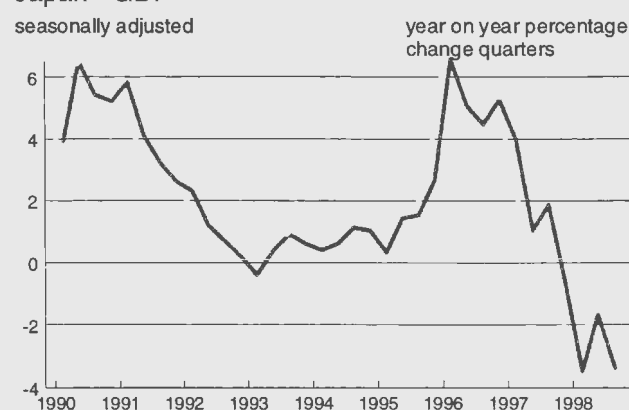
US inflation fell by one percentage point to 1.5 per cent between the third and fourth quarters. Producer price deflation and modest earnings growth have tempered upward pressure created by strong growth in demand and tightness in the labour market.

Japan

The third quarter of 1998 saw Japan's economy contract for the fourth consecutive quarter – GDP fell by 0.7 per cent compared with the previous quarter and by 3.5 per cent on the year before (Chart 3). Government final consumption, which increased by 0.9 per cent, made a positive contribution to third quarter GDP but its effect was dwarfed by falls in private final consumption and investment expenditure.

Chart 3

Japan - GDP



Investment spending emerged as the major source of contractionary pressure in 1997, and this pattern continued into 1998. Capital spending, which fell for the seventh consecutive quarter, has been hit by a sharp downturn in business confidence and this has outweighed the benefit of extremely low financing costs as interest rates have tumbled.

The weakness in consumer activity that has characterised the period since 1992 worsened in quarter three. Attempts made by Japan's monetary and fiscal authorities to arrest the decline - interest rate cuts, public works and announcements of tax rebates - appear to have had little effect. The second round of income tax cuts that came through in August (announced in the April stimulus package) has made no discernible impact. Retail sales continued to fall in the fourth quarter. It appears that Japanese consumers are using the tax cuts to supplement precautionary savings rather than to boost spending.

Evidence of higher government expenditure on increased public works, as announced out in April's stimulus package, has yet to show through. Large percentage increases in government spending may be required to kick-start economic growth; as government spending forms a relatively small part of Japan's GDP, and a greater propensity to save (as a result of increased uncertainty) will reduce the multiplier effects.

External demand for Japanese products picked up in quarter three - exports increased after falls in the two previous quarters. Imports fell by 0.4 per cent in the latest quarter and were down by 8.7 per cent in the year to quarter two. Thus, Japan's trade surplus increased.

The trend in industrial production continues to point downwards in the latest data, although the rate of fall became less steep in the latter half of the year. The impact on company profits is illustrated by the record-breaking fall in manufacturing earnings in December - winter bonuses are paid in this month.

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.

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

1 European Union 15

Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	Imports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl	Unempl
Percentage change on a year earlier															
	ILGB	HUDS	HUDT	HUDU	HUDV	HUDW	HUDX	ILGV	ILHP	HYAB	ILAI	ILAR	ILIJ	GADR	
1990	3.0	1.7	0.4	1.3	-0.2	1.5	1.7	2.0	1.1	5.7	2.5	7.0	1.6	8.1	
1991	3.1	2.7	1.0	0.2	-0.2	0.4	1.0	-0.2	1.8	5.2	2.2	6.8	0.1	8.4	
1992	1.0	0.9	0.4	-0.2	-0.1	0.9	0.9	-1.4	-	4.4	1.3	5.8	-1.7	9.1	
1993	-0.5	-0.1	0.2	-1.4	-0.4	0.4	-0.8	-3.3	-1.1	3.6	1.4	4.7	-2.0	10.7	
1994	3.0	1.1	0.2	0.5	0.9	2.5	2.1	5.0	-0.5	3.0	2.2	3.8	-	11.1	
1995	2.4	1.1	0.2	0.7	-	2.5	2.1	3.5	-0.1	3.2	4.5	3.4	0.7	10.7	
1996	1.8	1.2	0.3	0.3	-0.4	1.7	1.3	0.2	0.9	2.5	0.7	4.2	0.6	10.8	
1997	2.7	1.3	-	0.6	0.5	3.2	2.8	3.7	2.7	2.0	0.9	3.2	0.6	10.7	
1998	..	..	..	..	..	..	..	..	..	1.7	-0.3	..	..	10.0	
1996 Q1	1.7	1.4	0.3	0.1	0.1	1.3	1.6	-0.1	-	2.8	1.9	4.8	0.7	10.9	
Q2	1.6	0.9	0.4	0.4	-0.4	1.1	0.7	-0.2	0.6	2.6	0.6	4.0	0.7	10.9	
Q3	1.9	1.2	0.4	0.3	-0.8	1.9	1.1	0.1	0.3	2.3	-0.1	3.9	0.5	10.8	
Q4	2.0	1.3	0.2	0.4	-0.5	2.5	1.8	0.7	2.3	2.3	0.2	3.8	0.5	10.8	
1997 Q1	1.8	0.9	0.1	0.5	-0.2	2.1	1.6	2.1	1.7	2.1	0.3	3.8	0.4	10.8	
Q2	2.8	1.4	0.1	0.5	0.5	3.4	3.0	3.3	2.7	1.7	0.7	3.1	0.7	10.7	
Q3	3.0	1.2	-	0.6	0.7	3.9	3.3	4.4	3.0	2.0	1.4	3.0	0.7	10.6	
Q4	3.3	1.6	-	0.8	0.8	3.4	3.2	5.1	3.7	2.1	1.3	3.0	0.8	10.5	
1998 Q1	3.5	1.6	0.2	1.3	0.7	3.2	3.5	5.0	3.5	1.8	0.8	2.2	1.2	10.3	
Q2	2.8	1.3	0.2	0.7	0.8	2.3	2.6	4.1	2.6	2.1	0.3	3.7	1.0	10.1	
Q3	2.7	1.6	0.2	0.9	0.4	1.5	2.0	3.1	3.3	1.7	-0.6	..	..	10.0	
Q4	..	..	..	..	..	..	..	..	..	1.4	-1.5	..	..	9.8	
1998 Jan	..	..	..	..	..	..	..	5.3	3.9	1.8	0.9	..	..	10.3	
Feb	..	..	..	..	..	..	..	5.1	2.9	1.8	0.8	..	..	10.3	
Mar	..	..	..	..	..	..	..	4.6	3.9	1.8	0.8	..	..	10.2	
Apr	..	..	..	..	..	..	..	3.9	1.9	2.1	0.5	..	..	10.1	
May	..	..	..	..	..	..	..	4.9	2.9	2.1	0.2	..	..	10.1	
Jun	..	..	..	..	..	..	..	3.5	2.9	2.0	-	..	..	10.0	
Jul	..	..	..	..	..	..	..	3.3	3.8	1.9	-0.2	..	..	10.0	
Aug	..	..	..	..	..	..	..	3.3	2.9	1.7	-0.7	..	..	10.0	
Sep	..	..	..	..	..	..	..	2.9	2.9	1.7	-0.9	..	..	9.9	
Oct	..	..	..	..	..	..	..	2.7	1.9	1.6	-1.3	..	..	9.8	
Nov	..	..	..	..	..	..	..	2.2	..	1.4	-1.5	..	..	9.8	
Dec	..	..	..	..	..	..	..	..	..	1.3	-1.7	..	..	9.8	
1999 Jan	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Percentage change on previous quarter															
	ILGL	HUDY	HUDZ	HUEA	HUEB	HUEC	HUED	ILHF	ILHZ					ILIT	
1996 Q1	0.8	0.7	0.1	-0.1	-0.1	0.8	0.5	-0.7	2.3					-0.9	
Q2	0.3	-	0.1	0.4	-0.5	0.1	-0.1	0.5	0.3					0.8	
Q3	0.6	0.5	0.1	0.1	-0.2	0.8	0.5	0.6	-					0.6	
Q4	0.3	0.1	-0.1	0.1	0.3	0.8	0.8	0.3	-0.3					-	
1997 Q1	0.5	0.3	-	-0.1	0.2	0.4	0.3	0.8	1.7					-1.0	
Q2	1.3	0.5	-	0.4	0.2	1.4	1.3	1.6	1.3					1.1	
Q3	0.8	0.2	-	0.2	-	1.3	0.9	1.7	0.3					0.6	
Q4	0.6	0.5	-0.1	0.3	0.3	0.3	0.6	0.9	0.4					0.1	
1998 Q1	0.8	0.3	0.2	0.4	0.2	0.1	0.6	0.7	1.5					-0.6	
Q2	0.5	0.2	0.1	-0.1	0.2	0.6	0.5	0.7	0.4					0.9	
Q3	0.7	0.6	-	0.3	-0.4	0.5	0.3	0.7	0.9					..	
Q4	..	..	..	..	..	..	..	..	..					..
Percentage change on previous month															
								ILKF	ILKP						
1998 Jan								-0.2	2.9						
Feb								0.4	-0.9						
Mar								0.3	-						
Apr								0.2	-						
May								0.5	-						
Jun								-0.2	1.9						
Jul								1.6	0.9						
Aug								-0.9	-1.8						
Sep								-0.9	-						
Oct								1.2	0.9						
Nov								-0.7	..						
Dec								..	..				
1999 Jan								..	..				

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

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

Source: OECD

2 Germany

Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	Imports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl ¹	Unempl
Percentage change on a year earlier															
	ILFY	HUBW	HUBX	HUBY	HUBZ	HUCA	HUCB	ILGS	ILHM	HVLL	ILAF	ILAO	ILIG	GABD	
1990	..	..	..	..	..	..	..	5.2	8.4	2.8	1.5	5.6	2.8	..	..
1991	..	..	..	..	..	..	..	3.2	5.7	4.1	2.1	6.4	1.9	..	..
1992	1.8	1.4	0.8	0.6	-0.4	-0.4	0.3	-2.5	-2.3	5.1	1.6	5.2	-1.3	..	..
1993	-1.2	0.2	-0.1	-1.3	-0.2	-1.2	-1.5	-7.6	-4.1	4.5	0.1	5.2	-1.1	7.9	..
1994	2.8	0.7	0.4	0.8	0.8	1.9	1.9	3.6	-0.6	2.7	0.7	3.6	-0.4	8.4	..
1995	1.3	1.1	0.4	..	-0.1	1.7	1.9	1.0	1.1	1.8	2.2	3.5	-0.1	8.2	..
1996	1.3	0.8	0.5	-0.2	-0.4	1.4	0.8	0.4	-0.1	1.5	0.1	3.2	-0.4	8.9	..
1997	2.3	0.3	-0.1	..	1.3	3.1	2.3	3.6	-0.4	1.8	0.8	1.2	-0.6	10.0	..
1998	..	..	..	..	..	..	..	..	..	0.9	-0.2	..	..	9.7	..
1996 Q1	0.4	1.2	0.7	-1.5	..	1.2	1.2	-0.9	-1.0	1.6	0.8	5.2	-0.7	8.7	..
Q2	1.0	0.4	0.7	..	-0.5	0.6	0.1	-0.9	..	1.6	0.1	3.4	-0.3	8.8	..
Q3	1.7	1.0	0.7	0.1	-1.1	1.6	0.6	0.9	1.0	1.5	-0.2	2.5	-0.3	8.9	..
Q4	2.1	0.8	0.2	0.5	-0.2	2.3	1.4	2.5	-0.3	1.4	0.2	1.7	-0.6	9.2	..
1997 Q1	2.5	0.2	0.2	0.9	1.0	2.2	2.0	2.6	-0.7	1.7	0.3	1.6	-0.6	9.7	..
Q2	2.2	0.7	0.1	-0.3	0.6	3.1	2.1	3.4	..	1.5	0.7	0.8	-0.5	9.9	..
Q3	2.4	-0.2	-0.3	-0.2	1.9	3.9	2.7	3.9	-1.3	2.0	1.1	1.6	-0.6	10.1	..
Q4	2.3	0.6	-0.6	-0.2	1.7	3.1	2.3	4.6	0.3	1.9	1.0	0.8	-0.5	10.3	..
1998 Q1	3.4	1.1	..	0.9	0.7	2.6	1.9	6.4	2.3	1.1	0.6	..	-0.3	10.0	..
Q2	2.4	0.2	-0.2	-0.3	2.3	2.5	2.1	4.9	-1.6	1.3	0.2	1.6	-0.2	9.8	..
Q3	2.7	1.2	..	..	1.5	0.9	1.0	5.2	2.0	0.8	-0.4	0.8	0.4	9.6	..
Q4	..	..	..	..	..	..	..	..	..	0.6	-1.0	..	..	9.4	..
1998 Jan	..	..	..	..	..	..	..	7.0	-2.0	1.3	0.6	..	..	10.0	..
Feb	..	..	..	..	..	..	..	5.9	..	1.1	0.6	..	..	10.0	..
Mar	..	..	..	..	..	..	..	6.3	9.4	1.1	0.6	..	..	10.0	..
Apr	..	..	..	..	..	..	..	4.8	-4.8	1.4	0.4	..	..	10.0	..
May	..	..	..	..	..	..	..	6.8	2.1	1.3	0.3	..	..	9.8	..
Jun	..	..	..	..	..	..	..	3.2	-2.0	1.2	..	..	..	9.7	..
Jul	..	..	..	..	..	..	..	4.3	2.0	0.9	..	..	..	9.6	..
Aug	..	..	..	..	..	..	..	7.2	3.1	0.8	-0.5	..	..	9.6	..
Sep	..	..	..	..	..	..	..	4.2	1.0	0.8	-0.6	..	..	9.5	..
Oct	..	..	..	..	..	..	..	3.6	-2.0	0.7	-0.8	..	..	9.4	..
Nov	..	..	..	..	..	..	..	1.3	5.1	0.7	-1.0	..	..	9.4	..
Dec	..	..	..	..	..	..	..	..	..	0.5	-1.2	..	..	9.5	..
1999 Jan	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Percentage change on previous quarter															
	ILGI	HUCC	HUCD	HUCE	HUCF	HUCG	HUCH	ILHC	ILHW				ILIQ		
1996 Q1	..	0.6	0.1	-1.0	-0.1	0.7	0.2	0.4	1.4				-1.9		
Q2	1.3	0.1	0.2	1.5	-0.3	..	0.1	0.8	1.6				0.8		
Q3	0.4	0.4	0.2	..	-0.8	0.8	0.3	1.0	-1.0				0.5		
Q4	0.4	-0.3	-0.3	..	1.1	0.7	0.8	0.2	-2.3				..		
1997 Q1	0.4	..	0.1	-0.5	1.0	0.6	0.8	0.5	1.0				-1.9		
Q2	1.0	0.6	0.1	0.2	-0.7	0.9	0.2	1.6	2.3				0.9		
Q3	0.6	-0.5	-0.2	0.1	0.5	1.7	0.9	1.5	-2.3				0.4		
Q4	0.3	0.4	-0.6	..	0.9	-0.1	0.3	0.9	-0.7				0.1		
1998 Q1	1.4	0.5	0.7	0.6	..	0.1	0.4	2.2	3.1				-1.7		
Q2	..	-0.2	-0.1	-1.0	1.0	0.8	0.4	0.2	-1.6				1.0		
Q3	0.9	0.5	..	0.4	-0.4	0.1	-0.2	1.8	1.3				1.0		
Q4	..	..	..	..	..	..	..	..	..				..
Percentage change on previous month															
								ILKC	ILKM						
1998 Jan								1.3	3.1						
Feb								-0.1	1.0						
Mar								1.4	5.0						
Apr								-1.1	-4.8						
May								1.1	-1.0						
Jun								-1.0	1.0						
Jul								3.6	3.0						
Aug								-0.6	-2.9						
Sep								-2.9	..						
Oct								1.2	-1.0						
Nov								-2.4	4.0						
Dec								..	..				
1999 Jan								..	..				

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

Source: OECD

Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	Imports ^{less}	IoP	Sales	CPI	PPI ¹	Earnings	Empl ²	Unempl
Percentage change on a year earlier														
	ILFZ	HUBK	HUBL	HUBM	HUBN	HUBO	HUBP	ILGT	ILHN	HXAA	ILAG	ILAP	ILIH	GABC
1990	2.5	1.6	0.4	0.6	0.2	1.3	1.6	1.5	1.9	3.2	-0.9	4.9	0.8	8.9
1991	0.8	0.8	0.5	-	-0.7	1.0	0.8	-1.2	-0.2	3.2	-1.2	4.7	0.1	9.5
1992	1.2	0.8	0.6	-0.6	-0.6	1.3	0.3	-1.2	0.3	2.4	-1.1	4.0	-0.7	10.4
1993	-1.3	0.1	0.6	-1.5	-1.5	-0.1	-1.0	-3.8	0.2	2.1	-2.1	2.5	-1.2	11.7
1994	2.8	0.8	0.2	0.3	1.7	1.6	1.8	3.9	-0.1	1.7	1.2	1.9	0.1	12.3
1995	2.1	1.0	-	0.5	0.3	1.8	1.4	2.0	-	1.7	5.2	2.4	0.9	11.7
1996	1.6	1.2	0.5	-0.1	-0.7	1.5	0.9	0.2	-0.4	2.1	-2.7	2.4	0.1	12.4
1997	2.3	0.5	0.2	-	0.1	3.8	2.4	3.8	1.1	1.1	-0.5	2.8	0.6	12.4
1998	..	..	..	..	..	..	..	..	2.7	0.7	-0.9	2.3	..	11.9
1996 Q1	1.3	2.1	0.4	-0.3	-0.9	0.8	0.7	-1.0	0.7	2.1	-0.8	2.3	0.4	12.3
Q2	1.0	0.5	0.5	-	-0.1	0.3	0.3	-0.3	-0.8	2.4	-2.7	2.3	0.2	12.4
Q3	1.5	1.1	0.6	-0.1	-1.5	2.1	0.6	0.3	-2.3	1.8	-3.8	2.6	-0.1	12.4
Q4	2.4	1.1	0.5	-	-0.2	2.9	1.9	1.9	1.1	1.7	-3.1	2.6	-	12.4
1997 Q1	1.2	-0.3	0.3	-0.2	0.2	2.0	0.9	0.6	-1.4	1.5	-2.3	3.0	-	12.4
Q2	2.4	0.4	0.2	-	-	4.5	2.6	3.4	0.8	0.9	-0.9	2.7	0.5	12.4
Q3	2.6	0.5	0.2	0.1	0.4	4.6	3.2	5.0	1.7	1.3	0.3	2.8	0.8	12.4
Q4	3.1	1.6	0.2	0.2	-0.2	4.0	2.8	6.2	3.0	1.1	0.7	2.8	0.9	12.3
1998 Q1	3.6	1.9	0.2	0.8	0.6	3.8	3.7	7.2	2.3	0.6	0.6	2.6	1.3	12.1
Q2	3.3	2.5	0.3	0.7	0.5	1.9	2.6	5.4	3.4	1.0	-0.3	2.4	1.3	11.9
Q3	2.9	2.2	0.3	0.8	-	1.7	2.1	3.2	2.3	0.6	-1.3	2.0	1.5	11.9
Q4	..	..	..	..	..	..	..	..	2.9	0.3	-2.3	2.0	..	11.8
1998 Jan	..	..	..	..	..	..	..	6.5	5.8	0.5	0.6	..	..	12.1
Feb	..	..	..	..	..	..	..	6.6	2.0	0.7	0.5	..	..	12.1
Mar	..	..	..	..	..	..	..	8.4	-0.8	0.8	0.6	..	..	12.0
Apr	..	..	..	..	..	..	..	4.4	4.0	1.0	-	..	..	11.9
May	..	..	..	..	..	..	..	5.8	1.2	1.0	-0.3	..	..	11.9
Jun	..	..	..	..	..	..	..	6.1	4.9	1.0	-0.7	..	..	11.8
Jul	..	..	..	..	..	..	..	3.3	2.9	0.8	-1.0	..	..	11.9
Aug	..	..	..	..	..	..	..	3.3	2.0	0.7	-1.3	..	..	11.9
Sep	..	..	..	..	..	..	..	3.1	1.7	0.5	-1.6	..	..	11.9
Oct	..	..	..	..	..	..	..	1.9	2.9	0.4	-2.1	..	..	11.8
Nov	..	..	..	..	..	..	..	4.8	4.4	0.3	-2.3	..	..	11.8
Dec	..	..	..	..	..	..	..	..	1.5	0.3	-2.6	..	..	11.7
1999 Jan	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Percentage change on previous quarter														
	ILGJ	HUBQ	HUBR	HUBS	HUBT	HUBU	HUBV	ILHD	ILHX				ILIR	
1996 Q1	1.4	1.5	0.2	-0.1	-0.8	1.5	0.9	1.3	2.5				0.1	
Q2	-0.1	-0.6	0.1	0.1	0.4	-0.4	-0.3	0.1	-1.7				-0.2	
Q3	0.8	0.5	0.1	-	-0.3	0.9	0.5	0.6	0.1				-0.1	
Q4	0.3	-0.3	0.1	-	0.5	0.9	0.8	-0.1	0.2				0.2	
1997 Q1	0.2	0.1	-	-0.3	-0.3	0.6	-	-	-				0.1	
Q2	1.1	-	-	0.2	0.2	2.0	1.4	2.9	0.5				0.3	
Q3	0.9	0.7	-	0.1	0.1	1.1	1.1	2.1	1.0				0.2	
Q4	0.8	0.7	0.1	0.1	-0.1	0.3	0.3	1.0	1.5				0.3	
1998 Q1	0.7	0.4	0.1	0.3	0.4	0.4	0.9	0.9	-0.7				0.5	
Q2	0.8	0.6	0.1	0.2	0.1	0.1	0.3	1.2	1.6				0.3	
Q3	0.5	0.5	0.1	0.2	-0.4	0.9	0.7	-	-0.1				0.4	
Q4	..	..	..	..	..	..	..	..	2.1				..	
Percentage change on previous month														
								ILKD	ILKN					
1998 Jan								-0.7	2.8					
Feb								0.7	-4.8					
Mar								1.4	-2.7					
Apr								-0.3	5.9					
May								0.4	-1.6					
Jun								0.4	1.2					
Jul								-0.1	1.1					
Aug								-	-1.6					
Sep								-0.7	-0.9					
Oct								0.7	4.8					
Nov								1.0	-2.1					
Dec								..	-0.1					
1999 Jan												

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

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

Source: OECD

1 Producer prices in intermediate goods

2 Excludes members of armed forces

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
1990	2.2	1.5	0.2	0.7	0.1	1.2	1.6	-0.5	-2.2	6.0	4.2	7.3	1.4	9.1
1991	1.1	1.7	0.3	0.2	-0.3	-0.1	0.5	-0.9	3.2	6.5	3.3	9.7	1.3	8.8
1992	0.5	0.7	0.2	-0.4	0.1	1.1	1.1	-1.3	1.8	5.3	1.9	5.4	-1.1	9.0
1993	-1.1	-1.5	0.1	-2.5	-0.6	1.7	-1.7	-2.1	-2.9	4.2	3.7	3.7	-4.1	10.3
1994	2.1	0.9	-0.1	0.1	0.6	2.3	1.6	6.3	-6.0	3.9	3.8	3.3	-1.8	11.4
1995	3.0	1.2	-0.2	1.2	-	2.7	1.9	6.1	-4.9	5.4	7.9	3.1	-0.5	11.9
1996	0.6	0.5	-	0.1	-0.3	-0.1	-0.4	-2.9	-2.4	3.8	1.8	3.1	0.4	12.0
1997	1.5	1.4	-0.1	0.1	1.0	1.6	2.5	2.8	7.0	1.8	1.3	3.6	-	12.1
1998	..	..	..	..	..	..	..	..	..	1.7	..	..	..	..
1996 Q1	1.7	0.8	0.1	0.6	0.9	-0.2	0.5	-	-3.6	5.0	4.7	3.2	0.8	12.0
Q2	0.7	0.4	0.1	0.3	-0.2	-1.1	-1.2	-1.2	-4.0	4.2	1.6	3.3	0.3	12.0
Q3	0.5	0.2	0.1	-0.2	-0.9	0.1	-1.1	-4.6	-5.1	3.4	0.3	3.0	0.3	12.0
Q4	-0.3	0.6	-0.1	-0.5	-1.2	1.0	0.1	-5.5	3.5	2.7	0.7	2.9	0.2	12.1
1997 Q1	-0.9	1.2	-0.2	-0.3	-1.5	-0.8	-0.6	0.1	4.1	2.4	0.9	3.9	-0.1	12.2
Q2	2.0	1.6	-0.2	-0.1	2.2	1.8	3.3	2.4	7.2	1.7	1.1	3.8	0.1	12.1
Q3	2.2	1.7	-0.1	0.2	1.4	3.0	4.0	3.2	8.7	1.6	1.7	3.4	-	12.1
Q4	2.8	1.3	-	0.5	1.8	2.3	3.1	5.3	8.0	1.6	1.5	3.3	-	12.1
1998 Q1	2.5	0.8	0.1	0.7	2.4	3.0	4.5	3.3	2.4	1.7	1.1	2.1	0.6	12.1
Q2	1.2	0.7	0.2	0.4	0.8	1.4	2.3	1.3	4.2	1.7	0.6	3.1	0.1	12.3
Q3	1.2	1.0	0.2	0.4	0.3	-	0.8	0.5	..	1.8	-0.2	..	0.6	12.3
Q4	..	..	..	..	..	..	..	..	..	1.5	..	..	..	..
1998 Jan	..	..	..	..	..	..	..	6.5	2.1	1.6	1.2	1.6	..	12.0
Feb	..	..	..	..	..	..	..	2.4	3.2	1.8	1.2	1.8	..	12.1
Mar	..	..	..	..	..	..	..	1.3	2.1	1.7	0.9	2.8	..	12.1
Apr	..	..	..	..	..	..	..	0.7	3.2	1.8	0.9	3.0	..	12.2
May	..	..	..	..	..	..	..	2.9	4.3	1.7	0.6	3.2	..	12.3
Jun	..	..	..	..	..	..	..	0.3	5.1	1.8	0.4	3.0	..	12.3
Jul	..	..	..	..	..	..	..	1.5	3.2	1.8	0.2	2.5	..	12.3
Aug	..	..	..	..	..	..	..	-1.6	3.1	1.9	-0.2	3.0	..	12.3
Sep	..	..	..	..	..	..	..	1.5	..	1.8	-0.6	..	..	12.3
Oct	..	..	..	..	..	..	..	1.6	..	1.7	-0.9	..	..	12.3
Nov	..	..	..	..	..	..	..	-0.4	..	1.5	-1.2	..	..	..
Dec	..	..	..	..	..	..	..	..	..	1.5	..	..	..	..
1999 Jan	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Percentage change on previous quarter														
	ILGK	HUCO	HUCP	HUCQ	HUCR	HUCS	HUCT	ILHE	ILHY					ILIS
1996 Q1	0.8	0.1	-	-0.2	0.3	0.5	-0.1	-3.7	6.6					-1.3
Q2	-1.1	-	-	-0.1	-2.0	-0.4	-1.3	-0.5	-2.2					1.2
Q3	0.4	0.2	-	-0.1	0.3	0.3	0.3	-0.3	-0.3					1.2
Q4	-0.4	0.4	-0.1	-0.1	0.2	0.6	1.2	-1.0	-0.3					-0.8
1997 Q1	0.1	0.7	-0.1	-	-	-1.3	-0.8	1.9	7.2					-1.6
Q2	1.9	0.4	-	0.2	1.7	2.2	2.6	1.8	0.7					1.4
Q3	0.5	0.2	-	0.2	-0.5	1.5	0.9	0.6	1.1					1.1
Q4	0.3	-	-	0.2	0.6	-0.2	0.3	0.9	-1.0					-0.8
1998 Q1	-0.1	0.1	0.1	0.1	0.6	-0.5	0.5	-	1.7					-1.0
Q2	0.6	0.4	0.1	-0.1	-	0.6	0.4	-0.2	2.5					0.9
Q3	0.5	0.6	0.1	0.2	-0.9	0.1	-0.5	-0.3	..					1.6
Q4	..	..	..	..	..	..	..	..	..					..
Percentage change on previous month														
								ILKE	ILKO					
1998 Jan								0.9	1.1					
Feb								-1.0	1.0					
Mar								-0.9	-1.0					
Apr								-0.2	-					
May								2.5	1.0					
Jun								-2.2	6.2					
Jul								0.8	-4.9					
Aug								-1.6	1.0					
Sep								1.7	..					
Oct								1.3	..					
Nov								-1.5	..					
Dec												
1999 Jan												

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

Source: OECD

Contribution to change in GDP														
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl ¹	Unempl
Percentage change on a year earlier														
	ILGC	HUDG	HUDH	HUDI	HUDJ	HUDK	HUDL	ILGW	ILHQ	ILAA	ILAJ	ILAS	ILIK	GADO
1990	1.2	1.1	0.4	-0.2	-0.4	0.7	0.4	-0.2	0.6	5.4	4.9	3.2	1.2	5.6
1991	-0.9	-0.4	0.2	-1.1	-0.2	0.6	-0.1	-2.0	-2.5	4.2	2.1	3.3	-0.9	6.8
1992	2.7	1.9	-	0.8	0.2	0.6	0.8	3.2	3.2	3.1	1.3	2.4	0.7	7.5
1993	2.3	2.0	-	0.8	0.2	0.3	1.0	3.5	4.5	3.0	1.3	2.4	1.4	6.9
1994	3.5	2.2	0.1	1.1	0.6	0.8	1.4	5.4	5.7	2.6	0.6	2.8	2.4	6.1
1995	2.3	1.8	-0.1	0.8	-0.5	1.2	1.1	5.0	3.1	2.7	2.0	2.7	1.4	5.6
1996	3.4	2.2	0.1	1.4	-	1.0	1.2	4.4	4.6	3.0	2.6	3.1	1.5	5.4
1997	3.9	2.3	0.2	1.3	0.5	1.6	1.9	6.0	4.2	2.3	0.4	3.1	2.2	4.9
1998	3.9	3.3	0.2	1.8	-0.1	0.2	1.6	3.7	..	1.5	-0.9	2.5	1.5	4.5
1996 Q1	2.4	2.0	-0.1	0.9	-0.6	1.0	0.8	2.6	4.4	2.8	2.2	2.9	0.6	5.5
Q2	3.9	2.3	0.1	1.4	0.1	1.1	1.0	4.7	5.0	2.8	2.4	3.2	1.3	5.5
Q3	3.5	2.1	0.1	1.6	0.5	0.6	1.4	5.2	4.3	3.0	2.8	3.1	1.7	5.3
Q4	3.9	2.2	0.3	1.5	0.2	1.2	1.6	5.3	4.4	3.1	3.1	3.5	2.1	5.3
1997 Q1	4.1	2.3	0.3	1.3	0.6	1.4	1.8	6.3	4.8	2.9	2.0	3.4	2.5	5.2
Q2	3.6	1.8	0.2	1.2	0.7	1.7	2.0	5.4	3.1	2.3	0.4	2.8	2.4	5.0
Q3	4.1	2.5	0.2	1.4	-	2.0	2.0	5.8	4.8	2.2	-0.1	2.5	2.1	4.9
Q4	3.8	2.5	0.2	1.3	0.5	1.2	2.0	6.6	4.0	1.9	-0.8	3.4	2.0	4.7
1998 Q1	4.2	2.8	0.1	1.8	0.5	0.9	1.9	5.4	5.1	1.4	-1.5	3.1	1.9	4.6
Q2	3.6	3.6	0.2	1.9	-0.5	0.1	1.7	4.6	7.6	1.6	-0.7	2.5	1.5	4.4
Q3	3.5	3.2	0.1	1.5	0.1	-0.3	1.3	2.9	5.6	1.6	-0.6	2.5	1.2	4.5
Q4	4.1	3.5	0.3	2.0	-0.2	0.1	1.7	2.1	..	1.5	-0.5	1.9	1.4	4.4
1998 Jan	..	..	..	..	..	..	..	6.0	4.9	1.6	-1.8	3.3	2.0	4.6
Feb	..	..	..	..	..	..	..	5.1	4.9	1.4	-1.4	3.3	2.1	4.6
Mar	..	..	..	..	..	..	..	5.1	5.4	1.3	-1.5	2.5	1.6	4.7
Apr	..	..	..	..	..	..	..	4.9	7.0	1.5	-0.9	2.5	1.7	4.3
May	..	..	..	..	..	..	..	5.1	8.2	1.7	-0.7	2.5	1.5	4.4
Jun	..	..	..	..	..	..	..	3.5	7.5	1.7	-0.6	2.5	1.4	4.5
Jul	..	..	..	..	..	..	..	2.7	5.5	1.7	-0.4	1.7	1.1	4.5
Aug	..	..	..	..	..	..	..	3.6	5.1	1.6	-0.7	2.5	1.0	4.5
Sep	..	..	..	..	..	..	..	2.6	6.1	1.5	-0.9	3.3	1.5	4.5
Oct	..	..	..	..	..	..	..	2.5	7.4	1.5	-0.6	1.6	1.4	4.5
Nov	..	..	..	..	..	..	..	2.0	..	1.5	-0.6	2.4	1.2	4.4
Dec	..	..	..	..	..	..	..	1.9	..	1.5	-0.1	1.6	1.5	4.3
1999 Jan	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Percentage change on previous quarter														
	ILGM	HUDM	HUDN	HUDO	HUDP	HUDQ	HUDR	ILHG	ILIA					
1996 Q1	0.8	0.6	0.1	0.5	-0.1	0.1	0.4	0.7	1.4					
Q2	1.5	0.8	0.3	0.5	0.2	0.2	0.4	2.3	1.5					
Q3	0.5	0.3	-	0.3	0.3	0.1	0.4	1.4	0.4					
Q4	1.0	0.5	-	0.2	-0.2	0.9	0.2	0.8	1.1					
1997 Q1	1.0	0.7	-	0.3	0.3	0.3	0.6	1.6	1.8					
Q2	1.0	0.3	0.1	0.4	0.3	0.5	0.6	1.4	-0.2					
Q3	1.0	1.0	-	0.5	-0.4	0.3	0.5	1.8	2.1					
Q4	0.7	0.5	-	0.1	0.2	0.1	0.2	1.5	0.4					
1998 Q1	1.4	1.0	-0.1	0.8	0.3	-0.1	0.6	0.5	2.8					
Q2	0.5	1.0	0.2	0.5	-0.7	-0.3	0.4	0.7	2.2					
Q3	0.9	0.7	-	0.2	0.2	-0.1	0.1	0.2	0.1					
Q4	1.4	0.7	0.2	0.6	-0.1	0.6	0.6	0.8	..					
Percentage change on previous month														
									ILKG	ILKQ				
1998 Jan									-	1.3				
Feb									-0.1	1.1				
Mar									0.4	0.5				
Apr									0.5	0.6				
May									0.5	1.2				
Jun									-1.0	0.3				
Jul									-0.1	-0.7				
Aug									1.4	0.1				
Sep									-0.4	0.6				
Oct									0.5	1.2				
Nov									-0.1	..				
Dec									0.2	..				
1999 Jan												

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Source: OECD

¹ Excludes members of armed forces

Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP ¹	Sales	CPI	PPI	Earnings ²	Empl	Unempl
Percentage change on a year earlier														
	ILGD	HUCU	HUCV	HUCW	HUCX	HUCY	HUCZ	ILGX	ILHR	ILAB	ILAK	ILAT	ILIL	GADP
1990	5.2	2.6	0.1	2.6	-0.2	0.7	0.8	4.7	5.1	3.1	1.6	5.1	1.9	2.1
1991	3.8	1.5	0.2	1.1	0.2	0.6	-0.3	2.3	2.5	3.3	1.1	3.5	1.9	2.1
1992	1.0	1.2	0.2	-0.5	-0.4	0.5	-0.1	-5.5	-1.1	1.6	-0.9	1.3	1.1	2.1
1993	0.3	0.7	0.2	-0.6	-0.1	0.2	-	-4.7	-3.2	1.2	-1.7	0.4	0.2	2.5
1994	0.7	1.1	0.2	-0.2	-0.2	0.5	0.8	1.3	0.3	0.8	-1.7	2.2	-	2.9
1995	1.4	1.2	0.3	0.4	0.2	0.6	1.4	3.2	-	-0.1	-0.7	3.0	0.1	3.1
1996	5.2	1.8	0.2	3.4	0.4	0.8	1.3	2.4	0.7	0.1	-1.8	2.6	0.5	3.4
1997	1.4	0.6	0.1	-0.7	-0.1	1.4	0.1	3.6	-2.3	1.8	0.7	2.9	1.1	3.4
1998	..	..	..	..	..	..	..	-6.5	-5.3	0.6	-1.4	-0.7	-0.7	4.1
1996 Q1	6.4	3.1	0.2	3.8	0.5	0.5	1.7	1.7	2.0	-0.4	-1.7	1.7	0.1	3.3
Q2	4.9	1.5	0.2	4.2	0.4	0.2	1.6	0.4	0.3	0.1	-1.9	1.7	0.3	3.5
Q3	4.3	1.0	0.1	3.3	0.3	0.8	1.1	3.5	-0.6	0.2	-1.7	4.9	0.7	3.3
Q4	5.1	1.4	0.3	2.5	0.3	1.5	0.8	3.9	1.0	0.5	-1.6	2.3	0.9	3.3
1997 Q1	3.8	2.7	-	0.6	-0.4	1.5	0.6	5.2	3.7	0.6	-0.9	5.1	1.6	3.3
Q2	0.9	-0.2	0.3	-1.0	-	2.0	0.1	5.8	-4.7	2.1	1.3	2.6	1.4	3.5
Q3	1.7	0.6	0.4	-0.8	0.1	1.4	-	4.0	-3.5	2.1	1.3	2.6	0.7	3.4
Q4	-0.8	-0.6	-0.1	-1.5	-	1.0	-0.4	-0.6	-4.7	2.1	1.1	1.6	0.7	3.4
1998 Q1	-3.6	-2.4	0.2	-2.4	0.2	0.3	-0.6	-3.6	-9.6	2.0	0.4	-0.2	-	3.6
Q2	-1.8	0.5	-	-2.7	-0.1	-0.5	-1.1	-7.9	-2.6	0.4	-1.9	-0.2	-0.8	4.2
Q3	-3.5	-0.6	-	-3.3	-0.3	-0.2	-1.0	-7.9	-3.5	-0.2	-1.9	-1.7	-0.9	4.2
Q4	..	..	..	..	..	..	..	-6.3	-4.9	0.5	-2.0	-0.8	-1.0	4.3
1998 Jan	..	..	..	..	..	..	..	-2.3	-5.0	1.8	0.9	-0.5	0.6	3.5
Feb	..	..	..	..	..	..	..	-3.8	-7.9	1.9	0.4	0.2	-0.1	3.6
Mar	..	..	..	..	..	..	..	-4.8	-15.6	2.2	0.1	-0.2	-0.3	3.8
Apr	..	..	..	..	..	..	..	-6.1	-	0.5	-2.0	-0.3	-0.7	4.1
May	..	..	..	..	..	..	..	-10.5	-3.2	0.5	-1.9	-0.1	-0.5	4.3
Jun	..	..	..	..	..	..	..	-7.2	-4.3	0.1	-1.9	-0.3	-1.1	4.3
Jul	..	..	..	..	..	..	..	-8.5	-3.2	-0.1	-1.9	-2.3	-1.1	4.1
Aug	..	..	..	..	..	..	..	-8.3	-4.2	-0.3	-1.9	-2.7	-0.7	4.3
Sep	..	..	..	..	..	..	..	-7.1	-3.2	-0.2	-2.0	-0.1	-1.0	4.3
Oct	..	..	..	..	..	..	..	-7.4	-6.3	0.2	-2.0	0.4	-1.1	4.2
Nov	..	..	..	..	..	..	..	-5.2	-3.2	0.7	-2.1	1.8	-0.8	4.5
Dec	..	..	..	..	..	..	..	-6.2	-5.3	0.6	-2.0	-4.7	-1.0	4.3
1999 Jan	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Percentage change on previous quarter														
	ILGN	HUDA	HUDB	HUDC	HUDD	HUDE	HUDD	ILHH	ILIB				ILIV	
1996 Q1	2.9	0.9	-	1.7	0.4	0.3	0.3	0.6	2.0				-1.6	
Q2	0.2	-0.2	-	0.8	-0.1	-	0.3	-0.7	-1.7				3.1	
Q3	0.3	0.1	-	-0.3	-	0.6	-	1.8	-0.6				0.5	
Q4	1.6	0.6	0.3	0.3	-	0.6	0.2	2.2	1.3				-1.0	
1997 Q1	1.6	2.1	-0.2	-0.2	-0.2	0.3	0.1	1.9	4.7				-0.9	
Q2	-2.5	-3.0	0.2	-0.7	0.3	0.5	-0.2	-0.2	-9.6				2.9	
Q3	1.0	0.9	0.1	-0.1	0.1	-	-0.1	-	0.6				-0.3	
Q4	-0.9	-0.5	-0.2	-0.5	-0.1	0.2	-0.2	-2.2	-				-1.0	
1998 Q1	-1.2	0.2	0.1	-1.1	-0.1	-0.4	-0.1	-1.2	-0.6				-1.5	
Q2	-0.7	-0.1	-	-1.0	-0.1	-0.3	-0.7	-4.7	-2.6				2.1	
Q3	-0.7	-0.2	0.1	-0.7	-0.1	0.2	-	-	-0.3				-0.5	
Q4	..	..	..	..	..	..	..	-0.5	-1.4				-1.0	
Percentage change on previous month														
								ILKH	ILKR				ILLB	
1998 Jan								2.2	2.1				-0.8	
Feb								-3.6	-3.1				-0.7	
Mar								-2.2	-1.1				0.9	
Apr								-1.4	-				1.0	
May								-1.8	-				1.1	
Jun								1.7	-2.2				0.1	
Jul								-0.8	1.1				-0.5	
Aug								-1.2	-				-0.5	
Sep								3.2	-				-0.3	
Oct								-1.1	-2.2				-	
Nov								-2.1	2.2				-0.7	
Dec								1.0	-2.2				-0.6	
1999 Jan								..	..				..

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

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

1 Not adjusted for unequal number of working days in a month
2 Figures monthly and seasonally adjusted

7 World trade in goods¹

	Export of manufactures			Import of manufactures			Export of goods			Import of goods			Total trade	
	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	manufactures	goods
Percentage change on a year earlier														
	ILIZ	ILJA	ILJB	ILJC	ILJD	ILJE	ILJF	ILJG	ILJH	ILJI	ILJJ	ILJK	ILJL	ILJM
1990	5.9	5.9	5.5	5.5	5.5	5.4	4.5	5.6	1.6	4.5	5.2	2.8	5.7	4.5
1991	3.8	2.5	9.6	5.2	3.5	10.0	4.0	3.5	5.2	4.5	3.2	8.1	4.5	4.2
1992	4.5	3.7	7.7	5.1	4.5	6.7	4.5	3.8	6.1	5.0	4.3	6.7	4.8	4.7
1993	4.2	1.9	13.1	3.3	1.1	9.3	4.2	2.5	8.5	3.7	1.4	9.6	3.8	3.9
1994	11.2	10.2	14.7	12.3	12.8	11.1	10.1	9.2	12.2	10.6	10.7	10.3	11.7	10.3
1995	9.9	9.8	10.2	9.8	9.3	11.2	8.7	8.7	8.8	8.3	7.3	10.7	9.9	8.5
1996	5.6	6.4	3.0	5.6	7.0	2.2	5.0	6.0	2.7	5.1	6.1	2.6	5.6	5.0
1997	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1995 Q1	13.3	13.5	12.6	13.1	13.6	12.0	11.7	12.1	10.9	11.0	11.0	11.0	13.2	11.4
Q2	10.4	10.1	11.3	11.0	10.3	12.7	9.2	9.0	9.8	9.6	8.5	12.3	10.7	9.4
Q3	9.1	8.9	9.8	9.1	8.1	11.6	7.9	7.7	8.4	7.8	6.5	11.2	9.1	7.9
Q4	7.1	7.1	6.8	6.4	5.6	8.4	6.0	6.0	6.1	5.2	3.9	8.3	6.7	5.6
1996 Q1	5.7	6.1	4.5	6.2	7.3	3.6	4.8	5.3	3.7	5.5	6.0	4.4	6.0	5.2
Q2	5.3	6.2	2.4	4.7	6.5	0.4	4.6	5.6	2.1	4.4	5.8	1.1	5.0	4.5
Q3	6.4	7.9	1.7	7.0	8.7	2.7	5.8	7.4	2.0	6.1	7.5	2.7	6.7	5.9
Q4	7.3	8.5	3.4	6.7	8.6	2.3	6.6	8.1	3.0	6.7	8.5	2.3	7.0	6.6
1997 Q1	7.2	7.9	4.9	7.3	7.6	6.7	6.7	7.2	5.5	6.8	6.8	6.7	7.3	6.7
Q2	10.8	12.3	5.9	10.5	11.9	7.0	9.8	11.5	5.9	9.1	10.1	6.4	10.7	9.5
Q3	12.6	13.5	9.5	10.8	12.6	6.4	10.8	11.9	8.0	9.5	10.7	6.8	11.7	10.2
Q4	9.3	10.5	5.0	..	..	..	..	..	..	..	..	..	..	..
1998 Q1	9.1	8.8	10.0	..	..	..	..	..	..	..	..	..	..	..
Percentage change on previous quarter														
	ILJN	ILJO	ILJP	ILJQ	ILJR	ILJS	ILJT	ILJU	ILJV	ILJW	ILJX	ILJY	ILJZ	ILKA
1995 Q1	3.2	3.5	2.2	1.5	0.9	2.8	2.6	2.8	2.1	1.0	0.5	2.3	2.3	1.8
Q2	1.1	0.8	2.1	1.8	1.4	3.0	0.8	0.4	1.7	1.9	1.4	3.3	1.5	1.4
Q3	1.0	0.7	1.9	1.1	0.8	1.9	1.1	0.8	1.7	1.0	0.6	2.0	1.1	1.1
Q4	1.6	2.0	0.5	1.8	2.4	0.5	1.5	1.9	0.5	1.1	1.4	0.6	1.7	1.3
1996 Q1	1.9	2.5	-0.1	1.3	2.6	-1.8	1.4	2.1	-0.3	1.3	2.5	-1.4	1.6	1.4
Q2	0.7	0.9	-	0.4	0.6	-0.2	0.6	0.7	0.1	0.9	1.2	-	0.5	0.7
Q3	2.1	2.4	1.2	3.3	2.9	4.3	2.2	2.5	1.6	2.7	2.3	3.6	2.7	2.4
Q4	2.5	2.5	2.3	1.6	2.2	-	2.3	2.6	1.4	1.7	2.3	0.1	2.0	2.0
1997 Q1	1.8	1.9	1.4	1.9	1.7	2.5	1.5	1.2	2.2	1.4	0.9	2.8	1.8	1.5
Q2	4.1	5.0	0.9	3.3	4.6	0.1	3.6	4.8	0.5	3.0	4.3	-0.2	3.7	3.3
Q3	3.7	3.5	4.7	3.6	3.6	3.7	3.1	2.9	3.7	3.1	2.8	4.0	3.7	3.1
Q4	-0.5	-0.1	-1.9	..	..	..	..	..	..	..	..	..	..	..
1998 Q1	1.6	0.3	6.2	..	..	..	..	..	..	..	..	..	..	..

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

Source: OECD

Final Expenditure Prices Index (Experimental) - January 1999

Contact: David Wall

Tel: 0171 533 5823/5827; e-mail: david.wall@ons.gov.uk

Note that further development work, including the adjustment of the Index of Government Prices for productivity change, is ongoing and the FEPI will be available only as an experimental index until this work has been completed.

Summary

1. The Average Earnings Index series was again not published in February, pending completion of a review of methodology. Since components of the Average Earnings Index are used in calculating the pay component of the Index of Government Prices (IGP), it has therefore not been possible to calculate an IGP from October to January. Consequently it has also not been possible to determine an overall value for the FEPI itself. Nevertheless, the ICP and the IIP have been calculated as per normal. As soon as the Average Earnings Index series has been re-instated the missing IGP and FEPI will, of course, be calculated retrospectively.

2. Since it has not been possible to calculate the overall FEPI since September 1998, the chart on the right goes up to September 1998 only. The annual percentage change for the Index of Consumer Prices (ICP) fell from 2.1 per cent in December to 2.0 per cent in January. The annual percentage change in the Index of Investment Prices (IIP) fell from 1.3 per cent to 1.2 per cent.

The FEPI annual percentage change

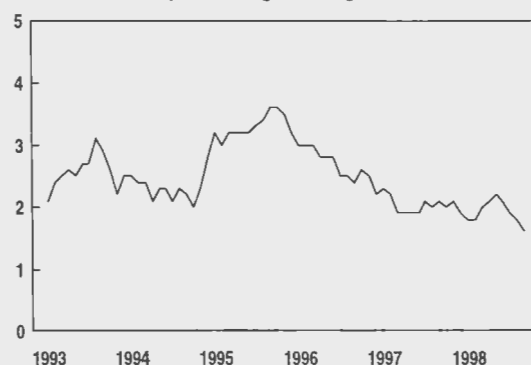


Table A

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

		Index of Consumer Prices (ICP)		Index of Investment Prices (IIP)		Index of Government Prices (IGP)		Final Expenditure Prices Index (FEPI)	
		Index	Annual percentage change	Index	Annual percentage change	Index	Annual percentage change	Index	Annual percentage change
1998	Aug	119.6	1.8	112.7	1.3	117.1	2.2	117.6	1.8
	Sep	120.1	1.9	112.5	1.0	117.3	2.1	117.9	1.7
	Oct	120.1	1.8	112.6	1.3	..	..	..	..
	Nov	120.3	2.0	112.7r	1.4r	..	..	..	..
	Dec	120.6	2.1	112.5	1.3	..	..	..	..
1999	Jan	120.0	2.0	112.6	1.2	..	..	..	..

The Index of Consumer Prices (ICP)

Consumer price inflation, as measured by the ICP, fell from 2.1 per cent in December to 2.0 per cent in January.

Upward pressure came from:

- Food, whose 12-month rate rose from 2.7 per cent to 3.0 per cent, as prices for fresh vegetables increased, especially potatoes.
- Fuel and power, whose 12-month rate rose from -1.9 per cent to -1.1 per cent. This was as a result

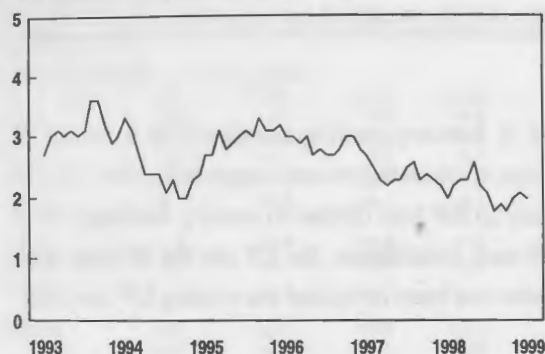
of last year's reduction in the price of gas due to increased competition.

Downward pressure came from:

- Household goods & services, whose 12-month rate fell from 2.2 per cent to 1.4 per cent, due to price decreases for furniture where there is a trend towards large pre-Christmas price increases, followed by steep reductions in the January sales.
- Tobacco, whose 12-month rate fell from 8.4 per cent to 8.0 per cent as prices rose by less than last year.

- Clothing and footwear, whose 12-month rate fell from -1.9 per cent to -2.1 per cent.

The ICP annual percentage change



The Index of Investment Prices (IIP)

Investment price inflation, as measured by the IIP, was 1.2 per cent over the 12 months to January, down from 1.3 per cent in December.

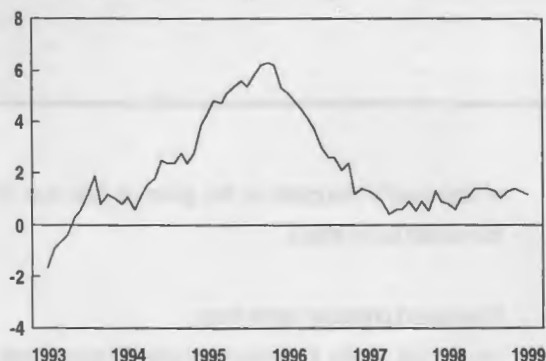
Downward pressure on the 12-month rate came mainly from:

- New dwellings, whose 12-month rate fell from a revised 7.1 per cent in December to 6.1 per cent in January.
- Vehicles, where the 12-month rate fell from 3.6 per cent in December to 3.1 per cent in January.

Upward pressure came from:

- Plant and machinery, where the 12-month rate rose from -5.8 per cent in December to -5.1 per cent in January.

The IIP annual percentage change



The Index of Government Prices (IGP)

It has not been possible to calculate the IGP from October to January for reasons given in the Summary.

Comparison between the FEPI and other inflation measures

Table B

Measures of Inflation (annual percentage changes)

		FEPI	RPIX	HICP	PPI
1998	Aug	1.8	2.5	1.3	0.5
	Sep	1.7	2.5	1.5	0.3
	Oct	..	2.5	1.3	0.1
	Nov	..	2.5	1.4	0.1
	Dec	..	2.6	1.5	-0.1
1999	Jan	..	2.6	1.6	0.0

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 consumers, business and Government for final purchases of goods and services. Intermediate purchases by business are excluded. The FEPI is made up of three components:

- The Index of Consumer Prices (ICP)
- The Index of Investment Prices (IIP)
- The Index of Government Prices (IGP).

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 business and by Government. It also covers new construction projects and dwellings built for consumers, business and government. The price indicators used are mainly Producer Price Indices (PPIs), Construction Output Price Indices and an average house price indicator.

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. Care should be taken when interpreting monthly movements in the IGP. This index is particularly volatile on a month-to-month basis, so a fall one month is often offset by a rise the next and vice-versa. The data are of greatest value if trends rather than individual monthly movements are observed.

7. An article describing the development and composition of the FEPI is included in *Economic Trends*, No 526, September 1997. Longer runs of the FEPI back to January 1992, are available in computer readable form from the ONS Sales Office (telephone 0171 533 5670) or on paper from David Wall.

1 Final Expenditure Prices Index (Experimental)

	Index of Consumer Prices ICP	Index of Investment Prices IIP	Index of Government Prices ¹ IGP	Final Expenditure Prices Index ¹ FEPI	Annual percentage changes			
					ICP	IIP	IGP	FEPI
January 1992=100								
Weights								
1997	605	165	230	1000				
1998	605	169	226	1000				
	CUSE	CUSK	CUSO	CUSP	CGAZ	CGBF	CGBJ	CGBK
1997 Jan	115.3	110.4	113.7	113.9	2.7	1.3	1.9	2.3
Feb	115.7	110.6	113.8	114.2	2.5	1.2	2.0	2.2
Mar	116.0	110.6	113.9	114.4	2.3	0.9	1.5	1.9
Apr	116.6	110.7	114.1	114.8	2.2	0.4	1.9	1.9
May	117.0	110.8	114.7	115.2	2.3	0.6	2.1	1.9
Jun	117.2	110.8	114.8	115.3	2.3	0.6	1.8	1.9
Jul	116.7	111.1	114.6	115.1	2.5	0.9	2.0	2.1
Aug	117.5	111.2	114.6	115.5	2.6	0.5	1.8	2.0
Sep	117.9	111.4	114.9	115.9	2.3	0.9	2.3	2.1
Oct	118.0	111.2	115.1	115.9	2.4	0.5	2.1	2.0
Nov	117.9	111.1	115.6	116.0	2.3	1.3	2.2	2.1
Dec	118.1	111.1	115.6	116.1	2.2	0.9	2.0	1.9
1998 Jan	117.6	111.3	116.2	116.0	2.0	0.8	2.2	1.8
Feb	118.3	111.3	115.9	116.3	2.2	0.6	1.8	1.8
Mar	118.7	111.7	116.3	116.7	2.3	1.0	2.1	2.0
Apr	119.3	111.9	116.3	117.2	2.3	1.1	1.9	2.1
May	120.0	112.4	116.7	117.7	2.6	1.4	1.7	2.2
Jun	119.8	112.4	117.1	117.7	2.2	1.4	2.0	2.1
Jul	119.2	112.7	117.0	117.3	2.1	1.4	2.1	1.9
Aug	119.6	112.7	117.1	117.6	1.8	1.3	2.2	1.8
Sep	120.1	112.5	117.3	117.9	1.9	1.0	2.1	1.7
Oct	120.1	112.6	..	..	1.8	1.3	..	..
Nov	120.3	112.7r	..	..	2.0	1.4r	..	..
Dec	120.6	112.5	..	..	2.1	1.3	..	..
1999 Jan	120.0	112.6	..	..	2.0	1.2	..	..

The symbol r denotes revisions to previous months' data

¹ Please note that, because of the temporary suspension of the Average Earnings Index, it has not been possible to calculate the IGP (or the FEPI) from October 1998 to January 1999.

2 FEPI - Index of Consumer Prices (Experimental)

	Food	Alcoholic Drink	Tobacco	Clothing and Footwear	Housing	Fuel and Power	Household Goods and Services	Transport and Communication	Recreation, Entertainment and Education	Other Goods and Services	Index of Consumer Prices ICP
January 1992=100											
Weights											
1997	126	68	30	67	90	39	71	189	119	201	1000
1998	127	68	29	67	87	39	71	188	118	205	1000
	CURU	CURV	CURW	CURX	CURY	CURZ	CUSA	CUSB	CUSC	CUSD	CUSE
1997 Jan	110.6	118.6	145.6	100.5	123.4	104.2	108.8	117.5	109.9	120.7	115.3
Feb	110.3	119.3	146.2	102.0	123.6	104.3	109.7	118.1	110.1	121.2	115.7
Mar	109.8	119.2	146.6	104.0	123.9	104.4	111.7	118.0	109.9	121.6	116.0
Apr	110.2	119.7	148.3	105.5	125.8	104.2	111.1	118.0	110.3	122.4	116.6
May	110.9	120.4	148.9	106.0	126.0	103.7	111.6	118.1	110.5	123.0	117.0
Jun	111.8	120.6	149.2	105.4	126.2	103.3	111.4	118.5	110.5	123.3	117.2
Jul	111.3	121.1	149.3	100.3	126.2	102.8	109.6	119.4	110.3	123.4	116.7
Aug	112.6	121.3	151.2	102.3	126.4	102.8	110.8	120.0	110.2	124.0	117.5
Sep	112.2	121.4	151.5	106.3	126.6	100.0	111.6	120.4	110.7	124.4	117.9
Oct	112.2	121.7	151.7	106.0	126.8	100.0	111.4	120.3	110.8	124.8	118.0
Nov	111.6	121.1	151.8	107.2	126.9	99.6	112.3	120.0	110.7	124.8	117.9
Dec	111.7	120.6	155.1	106.7	127.0	99.1	113.2	120.0	110.7	125.2	118.1
1998 Jan	111.7	122.1	159.3	99.7	127.3	98.4	109.8	120.6	110.3	125.4	117.6
Feb	111.7	123.1	159.5	102.0	127.4	98.7	111.5	120.8	110.5	126.4	118.3
Mar	111.5	123.5	159.5	104.1	127.6	98.9	113.1	120.8	110.4	126.9	118.7
Apr	111.8	123.6	162.1	105.0	129.9	98.9	112.1	122.1	110.8	127.6	119.3
May	113.5	124.5	162.6	106.0	130.1	98.3	113.3	122.3	111.1	128.1	120.0
Jun	113.1	124.4	162.8	105.7	130.2	97.6	112.7	122.2	110.7	128.4	119.8
Jul	112.8	124.9	163.0	99.3	130.4	97.3	111.4	122.0	110.4	128.6	119.2
Aug	114.1	125.2	163.1	101.2	130.6	97.2	112.2	121.9	110.4	128.8	119.6
Sep	113.7	125.3	163.2	105.8	130.8	97.3	112.9	121.9	111.0	128.7	120.1
Oct	113.9	125.6	163.4	104.7	131.1	97.5	112.4	121.5	111.2	129.5	120.1
Nov	113.8	125.2	163.4	105.3	131.3	97.4	113.6	121.1	111.2	130.2	120.3
Dec	114.7	125.1	168.2	104.7	131.4	97.2	115.7	120.5	111.0	130.6	120.6
1999 Jan	115.1	126.5	172.0	97.6	131.5	97.3	111.3	121.2	110.7	130.6	120.0
Annual Percentage Changes											
	Food	Alcoholic Drink	Tobacco	Clothing and Footwear	Housing	Fuel and Power	Household Goods and Services	Transport and Communication	Recreation Entertainment and Education	Other Goods and Services	Index of Consumer Prices ICP
	CGAP	CGAQ	CGAR	CGAS	CGAT	CGAU	CGAV	CGAW	CGAX	CGAY	CGAZ
1997 Jan	1.5	3.0	6.4	0.2	4.1	-1.3	1.6	4.2	1.6	3.4	2.7
Feb	0.2	2.8	6.4	0.7	4.2	-1.2	0.8	4.5	1.4	3.3	2.5
Mar	-1.2	2.5	6.6	1.3	4.4	-1.2	1.3	4.2	1.0	3.3	2.3
Apr	-0.9	2.5	6.9	1.2	4.1	-1.4	1.3	3.6	0.9	3.4	2.2
May	-1.1	2.7	6.7	1.5	4.1	-1.8	1.0	3.3	1.1	3.6	2.3
Jun	-0.3	2.4	6.7	1.1	4.0	-2.4	0.7	3.6	1.1	3.7	2.3
Jul	0.5	2.3	6.9	1.1	3.5	-2.9	0.7	4.5	1.3	3.8	2.5
Aug	0.7	2.5	8.2	1.8	3.6	-2.7	0.6	4.3	0.9	3.9	2.6
Sep	1.3	2.4	8.1	0.9	3.7	-5.5	0.7	3.5	1.0	3.8	2.3
Oct	1.9	2.4	8.2	0.5	3.8	-5.3	0.9	3.4	0.9	3.7	2.4
Nov	1.7	2.1	8.4	0.6	3.7	-5.1	0.8	3.4	0.5	3.7	2.3
Dec	1.8	2.2	8.6	0.1	3.7	-5.4	0.8	2.8	0.5	3.7	2.2
1998 Jan	1.0	3.0	9.4	-0.8	3.2	-5.6	0.9	2.6	0.4	3.9	2.0
Feb	1.3	3.2	9.1	-	3.1	-5.4	1.6	2.3	0.4	4.3	2.2
Mar	1.5	3.6	8.8	0.1	3.0	-5.3	1.3	2.4	0.5	4.4	2.3
Apr	1.5	3.3	9.3	-0.5	3.3	-5.1	0.9	3.5	0.5	4.2	2.3
May	2.3	3.4	9.2	-	3.3	-5.2	1.5	3.6	0.5	4.1	2.6
Jun	1.2	3.2	9.1	0.3	3.2	-5.5	1.2	3.1	0.2	4.1	2.2
Jul	1.3	3.1	9.2	-1.0	3.3	-5.4	1.6	2.2	0.1	4.2	2.1
Aug	1.3	3.2	7.9	-1.1	3.3	-5.4	1.3	1.6	0.2	3.9	1.8
Sep	1.3	3.2	7.7	-0.5	3.3	-2.7	1.2	1.2	0.3	3.5	1.9
Oct	1.5	3.2	7.7	-1.2	3.4	-2.5	0.9	1.0	0.4	3.8	1.8
Nov	2.0	3.4	7.6	-1.8	3.5	-2.2	1.2	0.9	0.5	4.3	2.0
Dec	2.7	3.7	8.4	-1.9	3.5	-1.9	2.2	0.4	0.3	4.3	2.1
1999 Jan	3.0	3.6	8.0	-2.1	3.3	-1.1	1.4	0.5	0.4	4.1	2.0

The symbol r denotes revisions to previous months' data

3 FEPI - Index of Investment Prices (Experimental)

	Plant and Machinery	Vehicles, etc	New Buildings and Works	Transfer Costs of Land and Buildings	New Dwellings	Index of Investment Prices IIP
January 1992=100						
Weights						
1997	390	103	267	33	207	1000
1998	387	103	277	37	196	1000
	CUSG	CUSH	CUSF	CUSI	CUSJ	CUSK
1997 Jan	111.1	118.2	108.8	139.3	104.3	110.4
Feb	111.2	118.7	109.1	141.8	104.4	110.6
Mar	110.1	118.9	109.4	142.2	105.6	110.6
Apr	109.8	118.5	109.5	142.8	106.9	110.7
May	109.4	118.5	109.4	144.8	107.6	110.8
Jun	108.8	118.3	109.4	144.9	108.6	110.8
Jul	108.0	118.1	110.2	150.8	109.8	111.1
Aug	107.2	118.4	111.1	151.9	110.5	111.2
Sep	107.1	118.6	111.5	153.4	110.6	111.4
Oct	106.6	118.4	112.0	152.2	110.4	111.2
Nov	105.9	118.1	112.4	153.1	110.5	111.1
Dec	105.8	118.5	112.8	152.2	110.5	111.1
1998 Jan	105.6	119.1	113.3	151.7	110.6	111.3
Feb	105.0	118.8	113.8	153.6	111.2	111.3
Mar	104.5	119.5	114.3	154.9	113.1	111.7
Apr	103.7	119.3	114.6	159.6	115.0	111.9
May	103.8	120.4	115.0	160.3	115.9	112.4
Jun	102.9	120.1	115.3	161.0	117.7	112.4
Jul	102.2	120.4	115.8	165.4	118.9	112.7
Aug	101.5r	121.2r	116.1	165.1	119.5	112.7
Sep	100.5r	120.8r	116.5	165.9	120.0	112.5
Oct	100.1	121.2r	117.1	167.3	120.1	112.6
Nov	100.1	122.3r	117.6	166.8r	119.7r	112.7r
Dec	99.7r	122.8r	118.2	165.8r	118.3r	112.5
1999 Jan	100.2	122.8	118.6	167.7	117.3	112.6
Annual Percentage Changes						
	Plant and Machinery	Vehicles, etc	New Buildings and Works	Transfer Costs of Land and Buildings	New Dwellings	Index of Investment Prices IIP
	CGBB	CGBC	CGBA	CGBD	CGBE	CGBF
1997 Jan	-4.8	-0.3	4.9	9.6	7.0	1.3
Feb	-4.4	-	4.7	9.2	6.3	1.2
Mar	-5.1	0.1	4.4	9.0	6.3	0.9
Apr	-5.9	-0.6	4.1	5.2	6.8	0.4
May	-5.2	-0.5	3.5	6.6	7.1	0.6
Jun	-5.1	-0.5	3.1	6.9	7.4	0.6
Jul	-4.8	-0.8	3.5	9.2	7.6	0.9
Aug	-6.0	-1.0	3.9	9.1	7.6	0.5
Sep	-5.3	-0.9	3.9	10.1	7.7	0.9
Oct	-5.7	-0.7	4.0	8.0	7.4	0.5
Nov	-4.2	0.4	4.0	8.7	7.3	1.3
Dec	-4.7	0.9	4.0	7.9	6.5	0.9
1998 Jan	-5.0	0.8	4.1	8.9	6.0	0.8
Feb	-5.6	0.1	4.3	8.3	6.5	0.6
Mar	-5.1	0.5	4.5	8.9	7.1	1.0
Apr	-5.6	0.7	4.7	11.8	7.6	1.1
May	-5.1	1.6	5.1	10.7	7.7	1.4
Jun	-5.4	1.5	5.4	11.1	8.4	1.4
Jul	-5.4	1.9	5.1	9.7	8.3	1.4
Aug	-5.3r	2.4	4.5	8.7	8.1	1.3
Sep	-6.2r	1.9	4.5	8.1	8.5	1.0
Oct	-6.1	2.4r	4.6	9.9	8.8	1.3
Nov	-5.5	3.6r	4.6	8.9r	8.3r	1.4r
Dec	-5.8r	3.6r	4.8	8.9r	7.1r	1.3
1999 Jan	-5.1	3.1	4.7	10.5	6.1	1.2

The symbol r denotes revisions to previous months' data

4 FEPI - Index of Government Prices (Experimental)

	Local Government Total	Central Government Total	Education Grants	Index of Government Prices ¹ IGP	Annual percentage changes			
					Local Government Total	Central Government Total	Education Grants	Index of Government Prices IGP
January 1992=100								
Weights								
1997	347	589	64	1000				
1998	342	591	67	1000				
	CUSL	CUSM	CUSN	CUSO	CGBG	CGBH	CGBI	CGBJ
1996 Dec	114.9	112.3	114.9	113.3	2.0	1.6	2.0	1.7
1997 Jan	115.4	112.6	115.5	113.7	2.4	1.6	1.9	1.9
Feb	115.5	112.7	115.5	113.8	2.4	1.7	1.9	2.0
Mar	116.0	112.6	115.5	113.9	2.7	0.9	1.9	1.5
Apr	115.7	112.9	115.5	114.1	2.6	1.3	1.9	1.9
May	117.0	113.2	116.5	114.7	2.4	2.0	1.9	2.1
Jun	117.6	112.9	116.5	114.8	2.4	1.3	1.9	1.8
Jul	117.0	112.7	118.5	114.6	2.4	1.6	3.5	2.0
Aug	117.2	112.7	118.5	114.6	2.7	1.1	3.4	1.8
Sep	117.2	113.2	118.6	114.9	2.7	2.1	3.5	2.3
Oct	117.5	113.4	118.6	115.1	2.6	1.7	3.5	2.1
Nov	118.4	113.6	118.6	115.6	2.8	1.8	3.3	2.2
Dec	117.8	113.9	118.7	115.6	2.5	1.4	3.3	2.0
1998 Jan	118.3	114.6	119.8	116.2	2.5	1.8	3.7	2.2
Feb	118.2	114.1	119.8	115.9	2.3	1.2	3.7	1.8
Mar	118.9	114.4	119.7	116.3	2.5	1.6	3.6	2.1
Apr	118.6	114.7	119.8	116.3	2.5	1.6	3.7	1.9
May	120.1	114.3	120.7	116.7	2.6	1.0	3.6	1.7
Jun	120.7	114.7	120.6	117.1	2.6	1.6	3.5	2.0
Jul	120.4	114.6	121.1	117.0	2.9	1.7	2.2	2.1
Aug	119.6	115.3	121.1	117.1	2.0	2.3	2.2	2.2
Sep	119.7	115.5r	121.1	117.3	2.1	2.0r	2.1	2.1
Oct	..	..	..	..	..	..	..	..
Nov	..	..	..	..	..	..	..	..
Dec	..	..	..	..	..	..	..	..
1999 Jan	..	..	..	..	..	..	..	..

The symbol r denotes revisions to previous months' data

¹ Note that because of the temporary suspension of the Average Earnings index, it has not been possible to calculate the IGP from October 1998 to January 1999

Regional Accounts 1997: Part 1



J S Virdee
Office for National Statistics

Address: B5/03, 1 Drummond Gate, London SW1V 2QQ
Tel: 0171-533 5790; Fax: 0171-533 5799
e-mail: dev.virdee@ons.gov.uk

This article presents provisional estimates of Gross Domestic Product (GDP) by region for 1997. The estimates of GDP of UK regions show that:

- London and the South East accounted for about 15 and 16 per cent, respectively, of UK GDP in 1997 (see Table A).
- Between 1996 and 1997 GDP per head, relative to the UK average, rose in the South West, the North West and the North East and fell in London, Yorkshire and the Humber and Scotland, with little change in other regions (see Appendix Table 1).

These are the first regional figures to be produced under the European System of Accounts 1995 (ESA95) – the new national and regional accounts system now applied in the UK. Further details on ESA95 are given on the next page, and in the background notes.

Gross Domestic Product by region

Latest figures and recent trends

In 1997, total UK GDP is estimated to have been £694 billion, including £16 billion which cannot be attributed to any particular region. London and the South East together have about 26 per cent of the population of the UK but account for about 31 per cent of GDP. Northern Ireland is the smallest region, accounting for 2.3 per cent of GDP and 2.8 per cent of the population of the UK.

There are wide variations in GDP per head between the regions, with London having the highest level, over £14,400 per person in 1997, followed by the South East at £13,500 (see Table A, Chart A). The only other region above the UK average was Eastern, at £11,700. Northern Ireland and Wales had the lowest regional GDP per head in 1997, at £9,200 and £9,400 respectively. The English region with the lowest GDP per head was the North East, at £9,500, just above the level for Wales. Between 1996 and 1997 GDP grew fastest in the South West (8 per cent, compared with UK growth of 6 per cent, in current prices), followed by the North West at 7 per cent (see Appendix Table 1).

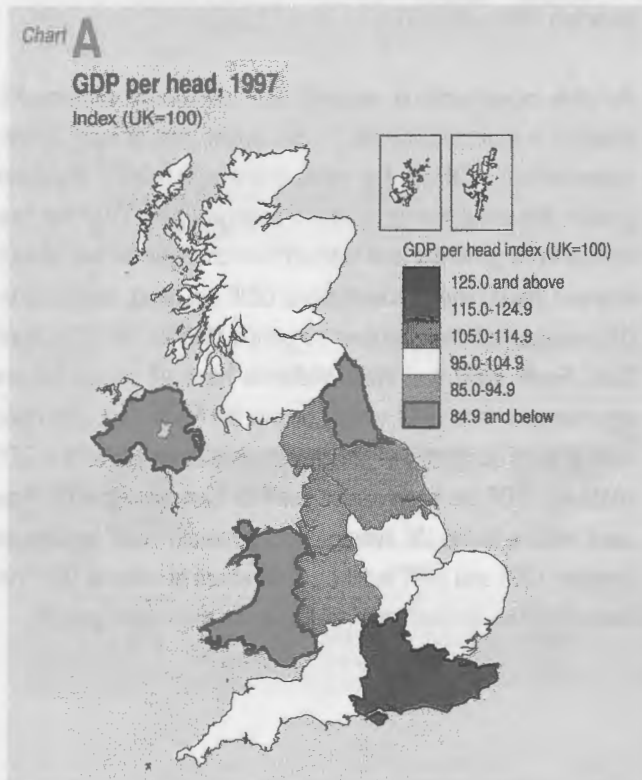


TABLE A Regional GDP, 1997¹

Region	Total £bn	Share of UK (%)	Per head £	Per head Index UK=100
United Kingdom ²	677.9	100.0	11,500	100.0
North East	24.6	3.6	9,500	82.5
North West (GOR) & Merseyside	72.2	10.6	10,500	91.2
Yorkshire & the Humber	51.6	7.6	10,200	89.2
East Midlands	45.7	6.7	11,000	95.8
West Midlands	56.8	8.4	10,700	92.9
Eastern	62.6	9.2	11,700	102.2
London	102.6	15.1	14,400	125.4
South East (GOR)	107.8	15.9	13,500	117.9
South West	54.7	8.1	11,200	97.6
England	578.6	85.3	11,700	102.2
Wales	27.6	4.1	9,400	82.2
Scotland	56.2	8.3	11,000	95.5
Northern Ireland	15.5	2.3	9,200	80.4

1. Provisional GDP at factor cost

2. Excluding Extra-Region (see background note 22) and statistical discrepancy

European System of Accounts 1995 (ESA95)

Under the new European System of Accounts (ESA95), the regional GDP series have been revised back to 1989 to take account of changes to concepts at the national level. Detailed information on the changes at the UK level is available in the publications *Concepts, Sources and Methods* and the *UK National Accounts 1998 – The Blue Book*. An article in the August 1998 edition of *Economic Trends* summarised the changes to the national accounts. See also background notes 1 to 3.

Coinciding with the changes due to ESA95, the national figures were revised as a result of new data and major changes to methodology, including the move to the new business register (IDBR).

The effects on the regional breakdown of the changes at the national level are reflected in the figures published in this article. In addition, at the regional level, conceptual and methodological changes have been agreed as part of the implementation of ESA95 across EU Member States. Two of these changes have resulted in significant changes to regional GDP, and these are briefly discussed below. Further details of the impact of ESA95 on regional GDP are given in background notes 4 to 10.

The first significant change relates to the method of regionalisation of profits for those sectors where actual data are not available. In the past, the national estimate for profits within such industries was apportioned to regions according to the share of employment in the relevant industry. The apportionment is now carried out using wages and salaries for the industry, under the assumption that wages and salaries are more closely related to profits than to employment. The effect of this change is that, due to higher wage levels in London and the South East, a slightly higher proportion of national profits are allocated to these regions and a lower proportion to other regions.

The second change relates to the compensation of employees of offshore oil workers. The GDP for the Continental Shelf previously only included the profits generated offshore. Compensation of employees of offshore workers used to be attributed to the region where they were resident, but have now been allocated to the "Extra-Regio" territory. Extra-Regio GDP therefore comprises Compensation of Employees and Gross Operating Surplus which cannot be assigned to specific regions. The effect of this change

is greatest on Scotland, reducing GDP by about £300 million in 1997, out of a UK total of about £500 million in each of the latest two years.

Components of GDP

Regional GDP is compiled as the sum of (a) compensation of employees and (b) gross operating surplus/mixed income. Appendix Table 2 shows that for all regions compensation of employees accounts for around two-thirds of GDP. In 1996, compensation of employees represented 59 per cent of total GDP in the South West and 61 per cent in Northern Ireland, compared with 66 per cent in the North East. Gross operating surplus/mixed income, which includes profits and self employment income, accounted for between 34 and 41 per cent of a region's GDP and shows significant variation, both between years and between regions. In 1991 the proportion of UK GDP that came from these factors was around 34 per cent, but this had risen to 38 per cent by 1996. Most regions reflected this increase.

Trends over time

Chart B and Appendix Table 1 show the regions' shares of GDP over the period 1989 to 1997. Although there is much variation in year to year movements, some longer term patterns can be seen. The South East, the South West and Northern Ireland have all shown improvement in their GDP shares over the period. In these regions, growth in GDP has been above average in most years between 1989 and 1997.

Relative movements in regions' GDP are partly explained by changes in their populations - in the longer term at least, relative movements in GDP tend to move in line with relative population growth. We would therefore expect changes in the GDP per head indices to be generally less marked than changes for overall GDP shares. Chart C shows how regional GDP per head, relative to the UK average, has changed over the period 1989 to 1997. The South East, South West and West Midlands have all shown general improvement since 1989, whilst London, the North East, and Wales have all seen declines. The difference between movements in GDP share and GDP per head can be seen for Eastern where GDP per head relative to the UK average, has generally been unchanged between 1994 and 1997 but the overall share of national GDP has increased. This is a reflection of Eastern's population growth.

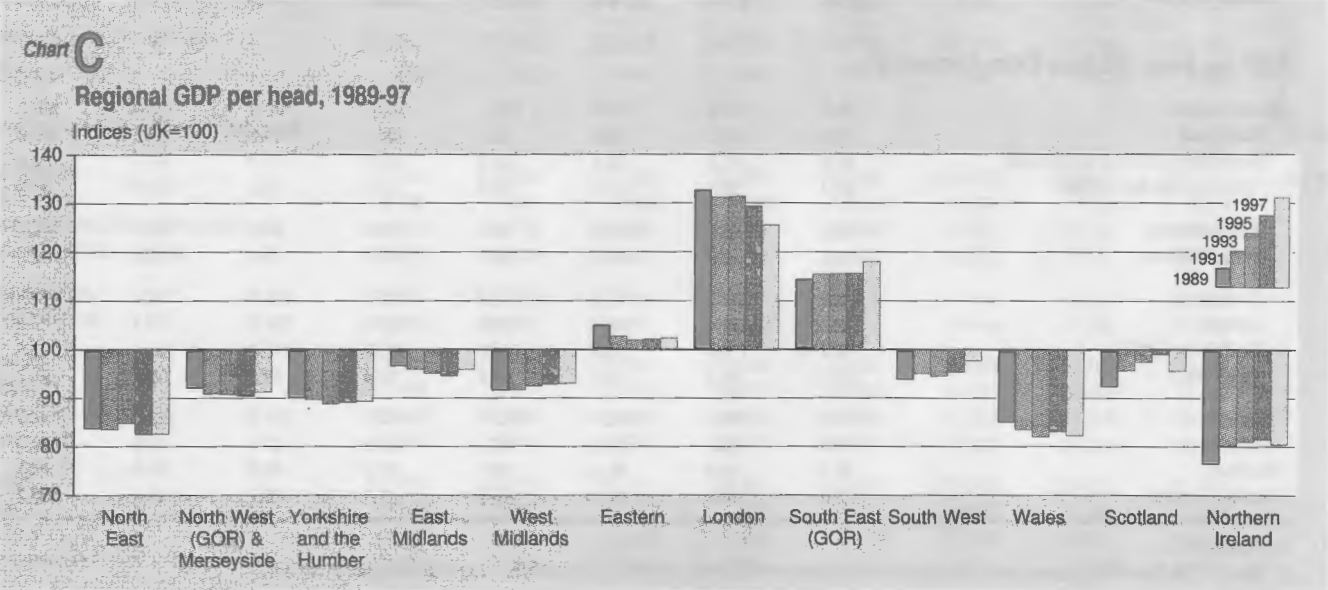
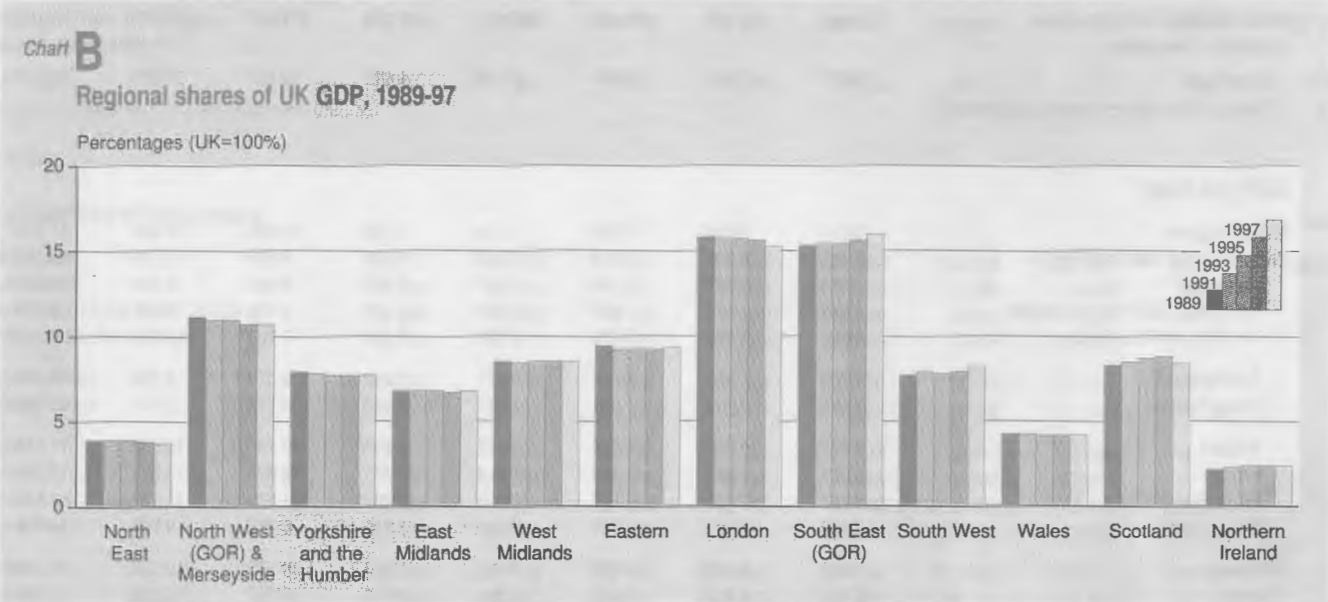
Industrial breakdown of regional GDP

Information on the industrial breakdown of regional GDP is currently only available on the basis of Standard Statistical Regions (SSRs), and only up to 1996. Estimates on the basis of Government Office Regions (GORs) should become available during 1999.

Part of the explanation for the wide variation in regional GDP per head and changes therein lies in the marked differences in the industrial structures of the regions (see Appendix Table 3). Very significant but short term factors, such as changes in the sterling price of oil, may affect industries, and therefore regions, very differently. Appendix Table 3 gives a detailed industrial analysis of

regions' GDP. These show that manufacturing GDP grew rapidly in both 1994 and 1995, but less strongly in 1996. This pattern can also be seen in some of the regions traditionally strong in manufacturing, such as the North, North West (SSR), West Midlands and Wales. East Midlands showed continued strong growth in manufacturing in 1996.

Public administration and defence, which has contributed a declining proportion of UK GDP over time is by its nature more evenly spread throughout the regions. Northern Ireland is however exceptional in deriving twice as high a proportion of its GDP from this sector compared to most regions.



1 Gross domestic product at factor cost by Government Office Regions 1989-97

	1989	1990	1991	1992	1993	1994	1995	1996	1997 ¹
Total GDP	£ million								
United Kingdom	447 951	486 053	506 436	528 691	556 780	589 484	618 889	656 184	694 435
North East	16 616	17 856	18 726	19 947	20 811	21 524	22 237	23 163	24 577
North West (GOR) & Merseyside	48 333	52 021	53 894	56 029	58 905	62 243	64 519	67 596	72 160
Yorkshire and the Humber	34 094	36 844	38 508	39 907	41 855	43 750	46 347	49 334	51 597
East Midlands	29 536	31 819	33 348	34 880	36 510	38 451	40 345	43 479	45 728
West Midlands	36 755	40 447	41 603	43 948	45 984	48 573	51 000	53 659	56 765
Eastern	40 942	44 158	45 583	47 466	49 719	52 908	55 509	58 959	62 619
London	69 148	74 670	77 880	80 907	85 627	90 346	93 849	98 292	102 638
South East (GOR)	66 650	72 878	76 385	79 476	84 036	89 721	93 848	101 145	107 833
South West	33 579	36 732	38 643	40 379	42 341	44 515	47 624	50 539	54 673
England	375 654	407 426	424 569	442 940	465 789	492 030	515 277	546 166	578 590
Wales	18 674	19 937	20 805	21 388	22 415	23 703	25 080	26 253	27 637
Scotland	36 043	39 999	42 126	44 528	46 882	49 791	52 614	54 141	56 219
Northern Ireland	9 274	10 145	11 062	11 647	12 437	13 123	13 907	14 545	15 468
United Kingdom less Extra-Region & statistical discrepancy	439 644	477 507	498 562	520 503	547 524	578 647	606 878	641 105	677 914
Extra-Region ²	8 307	8 546	7 874	8 188	9 256	10 837	12 011	15 079	15 528
Statistical discrepancy (income adjustment)	-	-	-	-	-	-	-	-	993
GDP per head	£								
United Kingdom	7 810	8 444	8 761	9 114	9 568	10 095	10 560	11 159	11 768
United Kingdom less Extra-Region	7 665	8 296	8 624	8 973	9 409	9 909	10 355	10 903	11 488
North East	6 406	6 873	7 195	7 647	7 967	8 248	8 536	8 907	9 473
North West (GOR) & Merseyside	7 049	7 576	7 827	8 132	8 534	9 018	9 351	9 809	10 481
Yorkshire and the Humber	6 889	7 425	7 728	7 978	8 347	8 706	9 215	9 797	10 244
East Midlands	7 395	7 927	8 264	8 587	8 942	9 373	9 783	10 499	11 002
West Midlands	7 013	7 704	7 901	8 327	8 693	9 173	9 611	10 093	10 669
Eastern	8 041	8 637	8 851	9 172	9 574	10 130	10 558	11 140	11 739
London	10 171	10 897	11 303	11 718	12 351	12 967	13 393	13 894	14 411
South East (GOR)	8 761	9 537	9 947	10 305	10 862	11 526	11 959	12 811	13 549
South West	7 182	7 826	8 191	8 508	8 880	9 277	9 866	10 439	11 213
England	7 857	8 490	8 807	9 156	9 597	10 102	10 537	11 126	11 740
Wales	6 508	6 928	7 195	7 379	7 712	8 137	8 598	8 988	9 442
Scotland	7 072	7 839	8 249	8 712	9 156	9 701	10 243	10 558	10 975
Northern Ireland	5 858	6 383	6 908	7 197	7 622	7 993	8 434	8 745	9 235
GDP per head, UK less Extra-Region=100	Index (UK=100)								
United Kingdom	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
North East	83.6	82.9	83.4	85.2	84.7	83.2	82.4	81.7	82.5
North West (GOR) & Merseyside	92.0	91.3	90.8	90.6	90.7	91.0	90.3	90.0	91.2
Yorkshire and the Humber	89.9	89.5	89.6	88.9	88.7	87.9	89.0	89.9	89.2
East Midlands	96.5	95.6	95.8	95.7	95.0	94.6	94.5	96.3	95.8
West Midlands	91.5	92.9	91.6	92.8	92.4	92.6	92.8	92.6	92.9
Eastern	104.9	104.1	102.6	102.2	101.8	102.2	102.0	102.2	102.2
London	132.7	131.4	131.1	130.6	131.3	130.9	129.3	127.4	125.4
South East (GOR)	114.3	115.0	115.3	114.8	115.4	116.3	115.5	117.5	117.9
South West	93.7	94.3	95.0	94.8	94.4	93.6	95.3	95.7	97.6
England	102.5	102.3	102.1	102.0	102.0	101.9	101.8	102.0	102.2
Wales	84.9	83.5	83.4	82.2	82.0	82.1	83.0	82.4	82.2
Scotland	92.3	94.5	95.6	97.1	97.3	97.9	98.9	96.8	95.5
Northern Ireland	76.4	76.9	80.1	80.2	81.0	80.7	81.4	80.2	80.4

1. Provisional.

2. The GDP for Extra-Region comprises compensation of employees and gross operating surplus which cannot be assigned to regions.

2 Gross domestic product by income component by Government Office Regions 1989-97

	1989	1990	1991	1992	1993	1994	1995	1996	1997 ¹
Total GDP	£ million								
United Kingdom	447 951	486 053	506 436	528 691	556 780	589 484	618 889	656 184	694 435
North East	16 616	17 856	18 726	19 947	20 811	21 524	22 237	23 163	24 577
North West (GOR) & Merseyside	48 333	52 021	53 894	56 029	58 905	62 243	64 519	67 596	72 160
Yorkshire and the Humber	34 094	36 844	38 508	39 907	41 855	43 750	46 347	49 334	51 597
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Eastern	40 942	44 158	45 583	47 466	49 719	52 908	55 509	58 959	62 619
London	69 148	74 670	77 880	80 907	85 627	90 346	93 849	98 292	102 638
South East (GOR)	66 650	72 878	76 385	79 476	84 036	89 721	93 848	101 145	107 833
South West	33 579	36 732	38 643	40 379	42 341	44 515	47 624	50 539	54 673
England	375 654	407 426	424 569	442 940	465 789	492 030	515 277	546 166	578 590
Wales	18 674	19 937	20 805	21 388	22 415	23 703	25 080	26 253	27 637
Scotland	36 043	39 999	42 126	44 528	46 882	49 791	52 614	54 141	56 219
Northern Ireland	9 274	10 145	11 062	11 647	12 437	13 123	13 907	14 545	15 468
United Kingdom less Extra-Region & statistical discrepancy	439 644	477 507	498 562	520 503	547 524	578 647	606 878	641 105	677 914
Extra-Region ²	8 307	8 546	7 874	8 188	9 256	10 837	12 011	15 079	15 528
Statistical discrepancy (income adjustment)	-	-	-	-	-	-	-	-	993
<i>of which :</i>									
Compensation of employees	£ million								
United Kingdom	285 787	315 209	333 850	347 036	356 323	369 959	385 397	404 521	432 280
North East	11 060	12 202	12 981	13 599	13 863	14 049	14 686	15 284	..
North West (GOR) & Merseyside	31 349	34 449	36 262	37 563	38 360	39 792	40 987	42 704	..
Yorkshire and the Humber	22 224	24 443	26 061	27 083	27 808	28 675	29 926	31 415	..
East Midlands	19 034	20 759	21 904	22 644	23 450	24 278	25 264	26 997	..
West Midlands	24 007	26 745	28 158	29 404	30 013	31 630	33 138	34 365	..
Eastern	26 359	28 891	30 284	31 226	31 778	33 418	35 056	36 774	..
London	43 490	47 994	50 448	52 190	53 763	55 689	57 934	61 735	..
South East	43 964	48 517	51 388	53 461	55 700	57 930	60 114	64 331	..
South West	21 368	23 421	24 861	25 873	26 498	27 225	28 652	30 036	..
England	242 855	267 419	282 348	293 042	301 231	312 685	325 757	343 641	..
Wales	11 391	12 483	13 381	13 977	14 209	14 796	15 649	16 172	..
Scotland	24 018	27 019	28 987	30 553	31 391	32 497	33 617	34 431	..
Northern Ireland	5 968	6 581	7 299	7 671	7 966	8 340	8 711	8 863	..
United Kingdom less Extra-Region	284 232	313 503	332 015	345 242	354 798	368 318	383 734	403 108	..
Extra-Region ²	1 555	1 705	1 835	1 794	1 525	1 641	1 663	1 413	..
Operating surplus/Mixed income	£ million								
United Kingdom	162 164	170 844	172 586	181 655	200 457	219 525	233 492	251 663	261 162
North East	5 555	5 655	5 744	6 349	6 949	7 476	7 551	7 879	..
North West (GOR) & Merseyside	16 984	17 572	17 632	18 466	20 545	22 451	23 532	24 892	..
Yorkshire and the Humber	11 870	12 401	12 447	12 824	14 047	15 075	16 421	17 919	..
East Midlands	10 503	11 060	11 444	12 237	13 060	14 173	15 080	16 482	..
West Midlands	12 748	13 702	13 444	14 544	15 971	16 944	17 862	19 294	..
Eastern	14 583	15 267	15 299	16 240	17 941	19 489	20 453	22 185	..
London	25 658	26 677	27 431	28 717	31 865	34 657	35 915	36 557	..
South East	22 686	24 362	24 997	26 015	28 337	31 791	33 733	36 813	..
South West	12 211	13 312	13 782	14 507	15 843	17 290	18 972	20 503	..
England	132 799	140 007	142 221	149 898	164 557	179 345	189 520	202 525	..
Wales	7 283	7 453	7 425	7 411	8 206	8 907	9 431	10 081	..
Scotland	12 024	12 979	13 139	13 975	15 491	17 295	18 997	19 710	..
Northern Ireland	3 306	3 564	3 762	3 977	4 472	4 783	5 196	5 682	..
United Kingdom less Extra-Region	155 412	164 004	166 547	175 261	192 726	210 330	223 144	237 997	..
Extra-Region ²	6 752	6 840	6 039	6 394	7 731	9 195	10 348	13 666	..

1. Provisional.

2. The GDP for Extra-Region comprises compensation of employees and gross operating surplus which cannot be assigned to regions.

3 Gross domestic product by industry groups, factor cost : current prices

by Standard Statistical Regions (SSRs) 1993-96

£ million

	1993	1994	1995	1996	1993	1994	1995	1996
North				North West (SSR)				
Agriculture, hunting, forestry and fishing	598	600	574	585	554	556	586	575
Mining, quarrying inc oil and gas extraction	358	261	309	336	164	165	204	199
Manufacturing	7 348	8 027	8 357	8 553	14 844	15 621	16 292	16 548
Electricity, gas and water supply	556	695	676	655	1 341	1 519	1 414	1 584
Construction	1 443	1 403	1 588	1 626	2 763	3 089	3 166	3 304
Wholesale and retail trade	3 271	3 309	3 312	3 379	8 110	8 278	8 620	9 416
Transport and communication	1 827	1 881	1 876	1 929	4 286	4 806	4 802	5 139
Financial intermediation ¹	4 691	4 713	4 827	4 995	11 659	12 576	13 121	13 816
Public administration and defence ²	1 752	1 629	1 637	1 651	2 832	2 812	2 880	2 874
Education, health and social work	3 391	3 786	3 844	4 046	7 135	7 911	8 154	8 708
Other services	906	918	1 027	1 132	2 242	2 236	2 298	2 467
Adjustment for financial services	- 532	- 687	- 638	- 623	- 1 824	- 2 337	- 2 167	- 2 133
Total	25 609	26 534	27 387	28 260	54 107	57 233	59 368	62 499
Yorkshire and Humberside				East Midlands				
Agriculture, hunting, forestry and fishing	874	842	1 021	1 097	1 068	1 032	1 122	1 142
Mining, quarrying inc oil and gas extraction	628	405	444	477	723	428	412	453
Manufacturing	10 928	11 501	12 240	13 277	10 547	11 401	12 039	13 046
Electricity, gas and water supply	1 130	1 120	1 034	1 142	1 223	1 109	1 019	1 082
Construction	2 417	2 693	2 705	2 959	2 016	2 181	2 158	2 184
Wholesale and retail trade	6 259	6 564	6 969	7 388	5 342	5 624	6 101	6 667
Transport and communication	3 169	3 429	3 663	3 697	2 429	2 604	2 714	2 843
Financial intermediation ¹	7 993	8 880	9 643	10 084	6 929	7 601	7 789	8 351
Public administration and defence ²	2 484	2 498	2 590	2 605	1 822	1 841	1 923	1 933
Education, health and social work	5 772	6 044	6 199	6 491	4 022	4 541	4 802	5 272
Other services	1 542	1 607	1 648	1 905	1 203	1 157	1 277	1 479
Adjustment for financial services	- 1 341	- 1 832	- 1 811	- 1 792	- 814	- 1 068	- 1 011	- 974
Total	41 855	43 750	46 347	49 334	36 510	38 451	40 345	43 479
West Midlands				East Anglia				
Agriculture, hunting, forestry and fishing	995	1 012	1 098	1 143	984	938	1 052	1 124
Mining, quarrying inc oil and gas extraction	264	224	270	272	122	124	143	142
Manufacturing	13 209	14 386	15 556	16 461	4 217	4 644	4 922	5 352
Electricity, gas and water supply	1 443	1 342	1 340	1 268	557	565	574	543
Construction	2 464	2 679	2 785	2 918	1 082	1 221	1 446	1 702
Wholesale and retail trade	6 655	7 159	7 301	7 687	2 658	2 808	2 736	2 825
Transport and communication	3 012	3 130	3 416	3 595	1 892	1 969	2 081	2 146
Financial intermediation ¹	9 767	10 350	10 640	11 261	4 382	4 701	4 741	5 028
Public administration and defence ²	2 304	2 305	2 373	2 355	1 449	1 388	1 372	1 419
Education, health and social work	5 699	6 094	6 137	6 422	2 294	2 470	2 484	2 854
Other services	1 479	1 597	1 821	2 012	665	707	762	871
Adjustment for financial services	- 1 307	- 1 705	- 1 734	- 1 735	- 712	- 884	- 800	- 773
Total	45 984	48 573	51 000	53 659	19 590	20 651	21 515	23 233
South East (SSR)				London				
Agriculture, hunting, forestry and fishing	1 383	1 376	1 491	1 534	59	66	93	93
Mining, quarrying inc oil and gas extraction	893	1 064	1 077	1 083	416	418	392	436
Manufacturing	29 665	32 546	34 066	34 659	10 864	10 799	11 219	11 053
Electricity, gas and water supply	4 424	4 061	4 019	4 155	1 579	1 379	1 384	1 363
Construction	9 372	9 841	10 484	11 239	3 178	3 428	3 738	3 969
Wholesale and retail trade	29 295	31 134	33 063	36 111	12 381	13 148	14 035	15 098
Transport and communication	21 033	22 923	23 285	24 083	9 704	10 604	10 567	10 924
Financial intermediation ¹	68 250	75 615	76 905	82 931	34 173	38 488	38 734	41 134
Public administration and defence ²	13 882	13 827	13 470	13 254	5 403	5 217	5 255	5 082
Education, health and social work	21 822	21 592	24 208	25 696	8 887	8 780	9 842	10 406
Other services	9 245	10 854	11 763	13 005	4 896	5 906	6 333	6 906
Adjustment for financial services	- 9 472	- 12 509	- 12 143	- 12 586	- 5 914	- 7 888	- 7 744	- 8 172
Total	199 792	212 324	221 690	235 163	85 627	90 346	93 849	98 292

See footnotes on next page

3 Gross domestic product by industry groups, factor cost : current prices (cont'd)

by Standard Statistical Regions (SSRs) 1993-96

£ million

	1993	1994	1995	1996	1993	1994	1995	1996
	Rest of South East				South West			
Agriculture, hunting, forestry and fishing	1 324	1 309	1 398	1 441	1 579	1 621	1 874	1 853
Mining, quarrying inc oil and gas extraction	477	646	685	647	514	661	779	802
Manufacturing	18 801	21 747	22 847	23 605	8 102	8 642	9 144	10 266
Electricity, gas and water supply	2 844	2 681	2 634	2 793	1 636	1 712	1 587	1 667
Construction	6 194	6 413	6 746	7 270	2 358	2 498	2 652	2 561
Wholesale and retail trade	16 914	17 986	19 029	21 013	6 302	6 633	7 125	7 356
Transport and communication	11 329	12 319	12 718	13 159	2 686	2 783	3 140	3 132
Financial intermediation ¹	34 077	37 126	38 171	41 796	9 935	11 072	11 750	12 334
Public administration and defence ²	8 479	8 610	8 216	8 172	4 212	3 994	4 119	4 270
Education, health and social work	12 935	12 812	14 365	15 290	5 134	5 517	5 759	6 165
Other services	4 349	4 948	5 430	6 099	1 531	1 574	1 836	2 235
Adjustment for financial services	- 3 559	- 4 621	- 4 399	- 4 415	- 1 647	- 2 193	- 2 142	- 2 103
Total	114 165	121 978	127 841	136 871	42 341	44 515	47 624	50 539

	England				Wales			
Agriculture, hunting, forestry and fishing	8 035	7 976	8 818	9 054	623	604	522	600
Mining, quarrying inc oil and gas extraction	3 666	3 332	3 639	3 763	203	232	291	255
Manufacturing	98 860	106 768	112 618	118 162	5 958	6 597	7 437	7 696
Electricity, gas and water supply	12 310	12 123	11 663	12 098	776	710	755	750
Construction	23 915	25 606	26 984	28 493	1 244	1 339	1 363	1 464
Wholesale and retail trade	67 892	71 511	75 226	80 829	2 898	3 105	3 188	3 288
Transport and communication	40 334	43 526	44 977	46 565	1 458	1 534	1 564	1 500
Financial intermediation ¹	123 606	135 508	139 415	148 801	3 756	4 052	4 264	4 314
Public administration and defence ²	30 738	30 295	30 365	30 360	1 693	1 645	1 736	1 808
Education, health and social work	55 268	57 955	61 587	65 654	3 468	3 597	3 588	4 080
Other services	18 814	20 649	22 433	25 106	870	957	1 015	1 147
Adjustment for financial services	- 17 649	- 23 216	- 22 446	- 22 718	- 532	- 669	- 644	- 651
Total	465 789	492 030	515 277	546 166	22 415	23 703	25 080	26 253

	Scotland				Northern Ireland			
Agriculture, hunting, forestry and fishing	1 419	1 502	1 622	1 531	625	627	670	689
Mining, quarrying inc oil and gas extraction	888	894	978	1 036	77	92	113	106
Manufacturing	9 459	10 346	11 926	12 089	2 443	2 557	2 847	3 032
Electricity, gas and water supply	1 450	1 571	1 661	1 932	371	368	347	398
Construction	2 988	3 331	3 424	3 359	707	781	878	931
Wholesale and retail trade	6 402	7 035	7 151	7 521	1 595	1 723	1 908	2 045
Transport and communication	3 761	4 007	4 057	3 968	626	671	698	726
Financial intermediation ¹	9 607	10 133	10 305	10 307	1 876	2 076	2 114	2 227
Public administration and defence ²	3 464	3 449	3 459	3 476	1 940	1 802	1 808	1 795
Education, health and social work	6 986	7 543	7 820	8 286	2 006	2 261	2 335	2 385
Other services	2 019	2 138	2 275	2 477	456	532	533	556
Adjustment for financial services	- 1 560	- 2 158	- 2 064	- 1 842	- 284	- 368	- 345	- 345
Total	46 882	49 791	52 614	54 141	12 437	13 123	13 907	14 545

United Kingdom excluding Extra-Region				
Agriculture, hunting, forestry and fishing	10 702	10 709	11 632	11 874
Mining, quarrying inc oil and gas extraction	4 834	4 551	5 021	5 161
Manufacturing	116 721	126 267	134 829	140 979
Electricity, gas and water supply	14 907	14 772	14 426	15 178
Construction	28 854	31 056	32 649	34 247
Wholesale and retail trade	78 786	83 373	87 473	93 683
Transport and communication	46 178	49 737	51 296	52 758
Financial intermediation ¹	138 845	151 768	156 099	165 650
Public administration and defence ²	37 834	37 191	37 368	37 440
Education, health and social work	67 728	71 357	75 330	80 405
Other services	22 159	24 277	26 255	29 287
Adjustment for financial services	- 20 025	- 26 410	- 25 499	- 25 557
Total	547 524	578 647	606 878	641 105

1. Financial intermediation, real estate, renting, business activities, including rent on dwellings.

2. Public administration, national defence and compulsory social security.

4 Gross domestic product at factor cost by Standard Statistical Regions 1989-97

	1989	1990	1991	1992	1993	1994	1995	1996	1997 ¹
Total GDP	£ million								
United Kingdom	447 951	486 053	506 436	528 691	556 780	589 484	618 889	656 184	694 435
North	20 620	22 182	23 218	24 642	25 609	26 534	27 387	28 260	29 966
North West (SSR)	44 328	47 695	49 402	51 334	54 107	57 233	59 368	62 499	66 772
Yorkshire and Humberside	34 094	36 844	38 508	39 907	41 855	43 750	46 347	49 334	51 597
East Midlands	29 536	31 819	33 348	34 880	36 510	38 451	40 345	43 479	45 728
West Midlands	36 755	40 447	41 603	43 948	45 984	48 573	51 000	53 659	56 765
East Anglia	15 575	16 979	17 708	18 711	19 590	20 651	21 515	23 233	24 579
South East (SSR)	161 165	174 728	182 140	189 138	199 792	212 324	221 690	235 163	248 511
Greater London	69 148	74 670	77 880	80 907	85 627	90 346	93 849	98 292	102 638
Rest of South East	92 017	100 057	104 260	108 231	114 165	121 978	127 841	136 871	145 874
South West	33 579	36 732	38 643	40 379	42 341	44 515	47 624	50 539	54 673
England	375 654	407 426	424 569	442 940	465 789	492 030	515 277	546 166	578 590
Wales	18 674	19 937	20 805	21 388	22 415	23 703	25 080	26 253	27 637
Scotland	36 043	39 999	42 126	44 528	46 882	49 791	52 614	54 141	56 219
Northern Ireland	9 274	10 145	11 062	11 647	12 437	13 123	13 907	14 545	15 468
United Kingdom less Extra-Regio & statistical discrepancy	439 644	477 507	498 562	520 503	547 524	578 647	606 878	641 105	677 914
Extra-Regio ²	8 307	8 546	7 874	8 188	9 256	10 837	12 011	15 079	15 528
Statistical discrepancy (income adjustment)	-	-	-	-	-	-	-	-	993
GDP per head	£								
United Kingdom	7 810	8 444	8 761	9 114	9 568	10 095	10 560	11 159	11 768
United Kingdom less Extra-Regio	7 665	8 296	8 624	8 973	9 409	9 909	10 355	10 903	11 488
North	6 688	7 184	7 510	7 952	8 255	8 560	8 848	9 143	9 709
North West (SSR)	6 961	7 479	7 724	8 022	8 438	8 926	9 262	9 764	10 445
Yorkshire and Humberside	6 889	7 425	7 728	7 978	8 347	8 706	9 215	9 797	10 244
East Midlands	7 395	7 927	8 264	8 587	8 942	9 373	9 783	10 499	11 002
West Midlands	7 013	7 704	7 901	8 327	8 693	9 173	9 611	10 093	10 669
East Anglia	7 619	8 250	8 506	8 958	9 356	9 812	10 134	10 847	11 369
South East (SSR)	9 234	9 956	10 327	10 684	11 244	11 881	12 324	12 978	13 615
Greater London	10 171	10 897	11 303	11 718	12 351	12 967	13 393	13 894	14 411
Rest of South East	8 636	9 354	9 701	10 023	10 535	11 188	11 641	12 391	13 105
South West	7 182	7 826	8 191	8 508	8 880	9 277	9 866	10 439	11 213
England	7 857	8 490	8 807	9 156	9 597	10 102	10 537	11 126	11 740
Wales	6 508	6 928	7 195	7 379	7 712	8 137	8 598	8 988	9 442
Scotland	7 072	7 839	8 249	8 712	9 156	9 701	10 243	10 558	10 975
Northern Ireland	5 858	6 383	6 908	7 197	7 622	7 993	8 434	8 745	9 235
GDP per head, UK less Extra-Regio=100	Index (UK=100)								
United Kingdom	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
North	87.3	86.6	87.1	88.6	87.7	86.4	85.4	83.9	84.5
North West (SSR)	90.8	90.2	89.6	89.4	89.7	90.1	89.4	89.6	90.9
Yorkshire and Humberside	89.9	89.5	89.6	88.9	88.7	87.9	89.0	89.9	89.2
East Midlands	96.5	95.6	95.8	95.7	95.0	94.6	94.5	96.3	95.8
West Midlands	91.5	92.9	91.6	92.8	92.4	92.6	92.8	92.6	92.9
East Anglia	99.4	99.4	98.6	99.8	99.4	99.0	97.9	99.5	99.0
South East (SSR)	120.5	120.0	119.7	119.1	119.5	119.9	119.0	119.0	118.5
Greater London	132.7	131.4	131.1	130.6	131.3	130.9	129.3	127.4	125.4
Rest of South East	112.7	112.8	112.5	111.7	112.0	112.9	112.4	113.6	114.1
South West	93.7	94.3	95.0	94.8	94.4	93.6	95.3	95.7	97.6
England	102.5	102.3	102.1	102.0	102.0	101.9	101.8	102.0	102.2
Wales	84.9	83.5	83.4	82.2	82.0	82.1	83.0	82.4	82.2
Scotland	92.3	94.5	95.6	97.1	97.3	97.9	98.9	96.8	95.5
Northern Ireland	76.4	76.9	80.1	80.2	81.0	80.7	81.4	80.2	80.4

1. Provisional.

2. The GDP for Extra-Regio comprises compensation of employees and gross operating surplus which cannot be assigned to regions.

5 Gross domestic product by income component by Standard Statistical Regions 1989-97

	1989	1990	1991	1992	1993	1994	1995	1996	1997 ¹
Total GDP	<i>£ million</i>								
United Kingdom	447 951	486 053	506 436	528 691	556 780	589 484	618 889	656 184	694 435
North	20 620	22 182	23 218	24 642	25 609	26 534	27 387	28 260	29 966
North West (SSR)	44 328	47 695	49 402	51 334	54 107	57 233	59 368	62 499	66 772
Yorkshire and Humberside	34 094	36 844	38 508	39 907	41 855	43 750	46 347	49 334	51 597
East Midlands	29 536	31 819	33 348	34 880	36 510	38 451	40 345	43 479	45 728
West Midlands	36 755	40 447	41 603	43 948	45 984	48 573	51 000	53 659	56 765
East Anglia	15 575	16 979	17 708	18 711	19 590	20 651	21 515	23 233	24 579
South East (SSR)	161 165	174 728	182 140	189 138	199 792	212 324	221 690	235 163	248 511
Greater London	69 148	74 670	77 880	80 907	85 627	90 346	93 849	98 292	102 638
Rest of South East	92 017	100 057	104 260	108 231	114 165	121 978	127 841	136 871	145 874
South West	33 579	36 732	38 643	40 379	42 341	44 515	47 624	50 539	54 673
England	375 654	407 426	424 569	442 940	465 789	492 030	515 277	546 166	578 590
Wales	18 674	19 937	20 805	21 388	22 415	23 703	25 080	26 253	27 637
Scotland	36 043	39 999	42 126	44 528	46 882	49 791	52 614	54 141	56 219
Northern Ireland	9 274	10 145	11 062	11 647	12 437	13 123	13 907	14 545	15 468
United Kingdom less Extra-Region & statistical discrepancy	439 644	477 507	498 562	520 503	547 524	578 647	606 878	641 105	677 914
Extra-Region ²	8 307	8 546	7 874	8 188	9 256	10 837	12 011	15 079	15 528
Statistical discrepancy (income adjustment)	-	-	-	-	-	-	-	-	993
<i>of which :</i>									
Compensation of employees	<i>£ million</i>								
United Kingdom	285 787	315 209	333 850	347 036	356 323	369 959	385 397	404 521	432 280
North	13 591	14 945	15 838	16 537	16 806	16 984	17 701	18 346	..
North West (SSR)	28 818	31 706	33 405	34 625	35 416	36 856	37 971	39 642	..
Yorkshire and Humberside	22 224	24 443	26 061	27 083	27 808	28 675	29 926	31 415	..
East Midlands	19 034	20 759	21 904	22 644	23 450	24 278	25 264	26 997	..
West Midlands	24 007	26 745	28 158	29 404	30 013	31 630	33 138	34 365	..
East Anglia	9 675	10 725	11 365	11 995	12 184	12 749	13 204	14 253	..
South East (SSR)	104 138	114 676	120 756	124 881	129 056	134 289	139 900	148 587	..
Greater London	43 490	47 994	50 448	52 190	53 763	55 689	57 934	61 735	..
Rest of South East	60 648	66 682	70 308	72 692	75 293	78 600	81 966	86 852	..
South West	21 368	23 421	24 861	25 873	26 498	27 225	28 652	30 036	..
England	242 855	267 419	282 348	293 042	301 231	312 685	325 757	343 641	..
Wales	11 391	12 483	13 381	13 977	14 209	14 796	15 649	16 172	..
Scotland	24 018	27 019	28 987	30 553	31 391	32 497	33 617	34 431	..
Northern Ireland	5 968	6 581	7 299	7 671	7 966	8 340	8 711	8 863	..
United Kingdom less Extra-Region	284 232	313 503	332 015	345 242	354 798	368 318	383 734	403 108	..
Extra-Region ²	1 555	1 705	1 835	1 794	1 525	1 641	1 663	1 413	..
Operating surplus/Mixed income	<i>£ million</i>								
United Kingdom	162 164	170 844	172 586	181 655	200 457	219 525	233 492	251 663	261 162
North	7 029	7 237	7 380	8 106	8 802	9 550	9 686	9 914	..
North West (SSR)	15 511	15 989	15 996	16 709	18 691	20 377	21 397	22 857	..
Yorkshire and Humberside	11 870	12 401	12 447	12 824	14 047	15 075	16 421	17 919	..
East Midlands	10 503	11 060	11 444	12 237	13 060	14 173	15 080	16 482	..
West Midlands	12 748	13 702	13 444	14 544	15 971	16 944	17 862	19 294	..
East Anglia	5 900	6 254	6 343	6 715	7 406	7 902	8 311	8 980	..
South East (SSR)	57 028	60 052	61 384	64 256	70 737	78 035	81 790	86 576	..
Greater London	25 658	26 677	27 431	28 717	31 865	34 657	35 915	36 557	..
Rest of South East	31 369	33 375	33 952	35 539	38 872	43 378	45 875	50 018	..
South West	12 211	13 312	13 782	14 507	15 843	17 290	18 972	20 503	..
England	132 799	140 007	142 221	149 898	164 557	179 345	189 520	202 525	..
Wales	7 283	7 453	7 425	7 411	8 206	8 907	9 431	10 081	..
Scotland	12 024	12 979	13 139	13 975	15 491	17 295	18 997	19 710	..
Northern Ireland	3 306	3 564	3 762	3 977	4 472	4 783	5 196	5 682	..
United Kingdom less Extra-Region	155 412	164 004	166 547	175 261	192 726	210 330	223 144	237 997	..
Extra-Region ²	6 752	6 840	6 039	6 394	7 731	9 195	10 348	13 666	..

1. Provisional.

2. The GDP for Extra-Region comprises compensation of employees and gross operating surplus which cannot be assigned to regions.

Diversity of the Regions

There is much diversity between the regions of the UK. 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 in size of the regions. Scotland has the largest area, but has a small population relative to its size; 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 in cash terms of the working population and by the proportion of dependants. In Northern Ireland, for example, households have a high proportion of children (25 per cent of the population was aged under 16 in 1997 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 UK¹

Region	Area 1996	Population 1997	Total economically active March 97	GDP ² 1997	Household ³ income 1996
United Kingdom (=100%)	242,900 sq km	59.0m	28.7m	£677.9bn	£630.3bn
North East	3.5	4.4	4.1	3.6	3.8
North West (GOR) & Merseyside	5.8	11.7	11.2	10.6	10.6
Yorkshire & the Humber	6.3	8.5	8.4	7.6	7.8
East Midlands	6.4	7.0	7.3	6.7	6.6
West Midlands	5.4	9.0	9.0	8.4	8.4
Eastern	7.9	9.0	9.4	9.2	9.7
London	0.6	12.1	12.3	15.1	14.5
South East (GOR)	7.9	13.5	14.0	15.9	15.2
South West	9.8	8.3	8.4	8.1	8.0
England	53.7	83.5	84.2	85.3	84.8
Wales	8.6	5.0	4.6	4.1	4.3
Scotland	32.2	8.7	8.7	8.3	8.5
Northern Ireland	5.6	2.8	2.5	2.3	2.4

1. Provisional.

2. GDP at factor cost, excluding Extra-Region and statistical discrepancy.

3. Household Income consistent with Blue Book 1997.

BACKGROUND NOTES

European System of Accounts 1995 (ESA95)

1. The regional accounts presented in this article are, in general, consistent with the national accounts published in the United Kingdom National Accounts (Blue Book) 1998 edition, which also defines the terms used.

2. The GDP figures are on an ESA95 basis for the first time. ESA95 is based on the System of National Accounts 1993 (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. It will be a legal requirement for EU Member States to compile national and regional accounts on the new basis in the future.

3. The national changes were summarised in an article in the August 1998 edition of *Economic Trends*. The effects on the regional breakdown of the national changes are reflected in the figures published here. The national changes were described in a family of six publications in 1998. The 1998 Blue Book and *Introducing the European System of Accounts 1995 in the United Kingdom* publications are particularly relevant.

Implementation of ESA95 at the regional level

4. The impact of ESA95 at the regional level is two-fold: (i) the incorporation of the conceptual changes at the national level, and (ii) the implementation of changes specific to regional accounts.

5. At the regional level, conceptual and methodological changes have been agreed as part of the implementation of ESA95 across EU Member States. Two of these changes have resulted in significant changes to regional GDP.

6. The first change relates to the method of regionalisation of profits for those sectors where actual data are not available. In the past, the national estimate for profits within such industries was apportioned to regions according to the share of employment in the relevant industry. The apportionment is now carried out using wages and salaries for the industry, under the assumption that wages and salaries are more closely related to profits than employment. ONS will be working to extend the range of industries for which actual data, from surveys such as the Annual Business Inquiry, are available over the coming years.

7. The second change relates to the compensation of employees of offshore oil workers. The GDP for the Continental Shelf only included the profits generated offshore. Compensation of employees of offshore workers were previously attributed to the region where they were resident, but have now been allocated to the "Extra-Regio" territory.

8. In addition, and also as part of ESA95 implementation, other changes have been made which have had a less significant effect on regional shares of GDP. For instance, the GDP of UK embassies abroad and UK forces stationed overseas is included in Extra Regio, whilst the GDP of foreign embassies in the UK is deducted from regional GDP, from London.

9. Extra-Regio GDP therefore comprises Compensation of Employees and Gross Operating Surplus which cannot be assigned to specific regions

Further impact of ESA95 at the regional level

10. Under ESA95, at the national level, GDP is measured only at market prices. Value added is measured at basic prices which excludes taxes on products, such as VAT and excise duties, and subsidies. This aggregate is named Gross Value Added at basic prices. The former measure of GDP at factor cost, which is not a central concept in ESA95, also excludes taxes and subsidies on production. However, the regional data published here are still at factor cost. Estimates of the regional breakdown of production and product taxes have not yet been compiled.

11. Future publication of regional GDP will be at basic prices and/or market prices, in line with European and national requirements. There are also some other methodological changes to be implemented as part of ESA95, the most significant of which relates to the method of regionalisation of the adjustment for financial services. The outstanding changes should be implemented during the course of 1999.

General

12. 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 GDP per head 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.

13. 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 GDP would be expected to grow relatively strongly; conversely, areas with a low or negative population growth would be expected to grow more slowly.

14. The analyses of GDP by industry, both national and regional, are based on classifying each economic unit by industry, based on its main activity, and allocating all its activity to that industry. Subsidiary activities of these units are therefore included with the main activity.

Accuracy

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

16. The regional GDP 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 are subject to a greater degree of uncertainty than those for more populated areas. An assessment of the quality of the regional and county estimates was published in *Economic Trends*, November 1990.

Regional gross domestic product - concepts and definitions

17. In this article regional GDP is measured as the sum of incomes earned from the production of goods and services in the region. Insufficient information is available to estimate GDP using either the production or expenditure approaches.

18. As mentioned above, regional GDP is defined as the sum of incomes earned from productive activity in the region, so that the income (referred to as compensation of employees under ESA95) of commuters should be included in the region where they work. However, the estimates of regional GDP are not compiled on this basis; they include regional estimates of compensation of employees on a residence basis, because this is the basis of the most reliable data source (the one per cent sample of Department

of Social Security (DSS) records). This has a significant effect on the estimates for London, the South East and Eastern regions, but is assumed not to introduce any significant distortion for the other regions.

19. Figures allocating compensation of employees to their workplace (the preferred GDP approach) are available, but are less timely. The latest estimates available on a workplace basis are for 1996, and are not consistent with ESA95. In addition, there is no industry breakdown currently available on a workplace basis.

Revisions

20. All items in the regional accounts are subject to revision when better information becomes available, either from the national accounts for the UK, from regional data sources, or from improvements to regional accounts methodology. Revisions to one year frequently suggest the need for revisions to other years, and all regional series have previously been maintained back to 1971, with no comparable data for earlier years being available. However, changes due to ESA95 have so far only been taken back to 1989.

Provisional estimates of GDP

21. The estimates of GDP for 1997 given in this article are based on a less complete set of data than estimates for earlier years, and projections are employed where necessary. These provisional estimates are particularly subject to revision when more data for 1997 become available e.g. from the one per cent sample of pay records by DSS, from the Agriculture departments and from the national accounts.

Extra Regio territory

22. Gross domestic product for the Extra Regio territory consists of that part of national GDP which cannot be allocated to any specific region. Since there is no resident population in the Extra Regio territory, GDP per head cannot be calculated for the region. It is, therefore, excluded from the United Kingdom total in the calculation of the national average used in comparisons of regional GDP per head.

Government Offices of the Regions (GORs)

23. The figures published in this article relate to the Government Office Regions (GORs), which will also be the areas represented by the new Regional Development Agencies. The Government Statistical Service has adopted GORs for the standard presentation

of regional data, replacing the old Standard Statistical Regions (SSRs). Estimates of Regional Accounts will from now on be published on a GOR basis, with data continuing to be available on request on the SSR basis for some time.

24. The main differences between SSRs and GORs are that:

- Cumbria moves from the North SSR to the North West GOR
- Essex, Bedfordshire and Hertfordshire are merged with East Anglia to form the new Eastern GOR
- The new South East GOR therefore excludes the above three counties, and London
- London becomes a separate GOR

Nomenclature of territorial units for statistics (NUTS)

25. The NUTS provides a single, uniform breakdown for the production of regional statistics for the European Union. The NUTS structure for the UK has been revised, and levels 1, 2 and 3 are now designated as follows:

NUTS 1	Government Office Regions and Scotland, Wales and Northern Ireland (12 in total); (previously 11 SSRs)
NUTS 2	37 areas, sometimes referred to as sub-regions; (previously 35 areas)
NUTS 3	133 areas – groups of unitary authorities or districts; (previously 65 counties or Scottish regions)

26. Some areas appear at more than one level, for example, Northern Ireland appears at NUTS levels 1 and 2. Figures presented in this article correspond to NUTS level 1.

Personal and Household Income and Consumers' Expenditure

27. Regional estimates of personal disposable income, household income and consumers' expenditure in 1997 are due to be published in the June 1999 issue of *Economic Trends*. The 1996 estimates for these as well as estimates for household income and household disposable income by county for 1995, were published in *Economic*

Trends, June 1998. However, those estimates were based on ESA79, whereas future publication will be on an ESA95 basis.

Regional Trends and other products

28. A wider range of statistics for the regions and sub-regions of the United Kingdom can be found in *Regional Trends 33 (1998 edition)* (The Stationery Office), £39.50 net. The topics covered in *Regional Trends* include population, housing, transport, environment, health, crime, education, labour market, industry and agriculture.

29. The *Regional Focus* series paints pictures of individual regions. The series aims to meet the increasing demand for more easily accessible information on smaller geographic areas. Titles in the series so far are *Focus on the East Midlands* (£19.95), *Focus on London98* (£39.50), *Focus on the South East* (£30.00), *Focus on the South West* (£30.00) and *Focus on Northern Ireland* (£30.00), all available from The Stationary Office, and *A Statistical Focus on Wales* (£10.00), available from the Welsh Office. *Focus on London99* will be published in April 1999 and will include a free CD ROM.

30. Regional and sub-regional statistics can be found in a range of other GSS publications, statistical bulletins and regular press releases. Details of these sources are contained in the *ONS Guide to Official Statistics* (published by The Stationary Office). The *Guide to Official Statistics* and a selection of data from *Regional Trends 33* are available free of charge on the Internet via StatBase (a GSS database). The address is www.statistics.gov.uk. Further information about StatBase can be obtained from the StatBase Administration Team on 0171 533 6129.

The regional accounts database

31. This article necessarily presents only a summary of the regional accounts for recent years. Longer time series and in some cases additional detail can be made available on payment of a fee either on paper or on floppy disk. Requests should be addressed to Shaun Flanagan, Regional Accounts Branch, Office for National Statistics, B5/03, 1, Drummond Gate, London SW1V 2QQ. Telephone: 0171 533 5791, email: shaun.flanagan@ons.gov.uk.

The estimates of regional accounts on which this article is based have been compiled by:

Dev Virdee
Shaun Flanagan

Mohamed Norat
David Lacey

Emma Fox
Philip Papaiah

The capital stock of the United Kingdom - some new developments in coverage and methodology



Paul West
Office for National Statistics
Zone D3/01
1 Drummond Gate
LONDON SW1V 2QQ
Tel: 0171-533 6007
Fax: 0171-533 6023
E-mail: paul.west@ons.gov.uk



Alex Clifton-Fearnside
Office for National Statistics
Zone D3/01
1 Drummond Gate
LONDON SW1V 2QQ
Tel: 0171-533 6073
Fax: 0171-533 6023
E-mail: alex.clifton-fearnside@ons.gov.uk

Background

Estimates of the Capital Stock of the United Kingdom are a measure of the cost of replacing the capital assets held at a particular point in time. These estimates can be calculated either to exclude depreciation (gross) or to include it (net). This depreciation, known as Consumption of Fixed Capital, is also deducted from Gross Fixed Capital Formation to arrive at an estimate of Net Fixed Capital Formation.

These series have been published annually by the Office for National Statistics (ONS). However, except for Gross Fixed Capital Formation, and sector totals for Consumption of Fixed Capital, we did not publish them in the 1998 edition of the United Kingdom National Accounts (BB98). This was because work was underway to improve the method of estimating Capital Stock, and to bring it into line with the expanded definitions of a capital asset in the new European System of Accounts (ESA95).

The purpose of this article is to bring readers up to date with the progress of this project so far, by publishing tables for Gross and Net Capital Stock, Consumption of Fixed Capital and Net Fixed Capital Formation compatible with the estimates of Gross Fixed Capital Formation in BB98. As work on the project is not yet complete, we will not be incorporating the figures as revisions to the National Accounts in BB99. We plan to publish another article in *Economic Trends* in the summer to keep users informed of progress. The article also explains the reasons for changes to previously published figures, and describes the work currently underway to further improve these series.

The tables

The tables that accompany this article are in a similar format to those published in the 1997 edition of the United Kingdom National Accounts (BB97), but are not compatible with them. A study by the National Institute for Economic and Social Research (NIESR) has re-examined the basis of the methodology for producing this data. They made a number of recommendations to ONS which

we accepted. Many of these recommendations relate to the service lives of assets. As explained below, these service lives are of fundamental importance to the model that calculates Capital Stock, and the changes made to them are included here for the first time. In addition the tables in BB97 did not include the new classes of capital asset specified in ESA95 which are now incorporated in these tables. Constant price series have been rebased from 1990 to 1995 in line with BB98.

Changes to the Perpetual Inventory Method (PIM)

Capital stock estimates are not at present derived from directly collected data, but from a model-based approach, which is employed in many countries as well as by the UK. This is the Perpetual Inventory Method. In order to understand the changes made to methodology it is useful, briefly, to summarise the history of the PIM. Estimates of capital stock in the UK were first produced in 1955 using a simple form of the PIM, and a series going back to 1948 was constructed. The gross capital stock was calculated on the basis of accumulated capital expenditure less retirements. Asset types were assumed to have certain fixed life spans, and were "retired" from the accumulated capital expenditure when that life span was concluded.

By the mid 1970s it became clear that this model was too simple in its assumption of absolutely fixed life spans for assets. There had been an extraordinarily erratic pattern of expenditure by British industry - particularly the engineering industry - during and immediately following the Second World War. Under the simple model then in use, many of the assets acquired during these years were about to be retired over a short period of time. This cluster of retirements would necessarily have led to a distortion in the capital stock figures in the coming years. We therefore decided to modify the model to phase retirements so that they would be evenly distributed over a period of years around the actual expected service life. The period chosen was from minus 20 per cent to plus 20 per cent of the expected life. Thus, where a group of assets of the same class is expected to have a service life of

25 years, retirements were spread evenly over a period from 20 to 30 years.

The principles that underlie this revised model are still in operation. A more detailed description of the methodology can be found in an earlier *Economic Trends* article (Revised Estimates of the Consumption and Stock of Fixed Capital - Tom Griffin - *Economic Trends* October 1975). Photocopies of this article can be made available on request.

In theory, PIM should provide accurate results, but in practice it is, as with any model-based approach, only as accurate as the assumptions that underpin it. It has always been possible to collect reasonably accurate figures of capital expenditure from industry. It is not so easy to obtain accurate and current information on the life span of different classes of asset. In an ideal situation of a totally stable economy, and limited technological change, provided the initial estimate of life spans was reasonably accurate, there would be no problem with PIM. But, that type of industrial environment does not exist, and never will. In practice actual asset lives change over time, and sometimes they change very rapidly. There can be many reasons for this, but two stand out at the moment.

- a) Firstly a downturn in the economy leads to both voluntary and compulsory company liquidations. When a company is liquidated, it is likely that some, if not all, of its fixed assets will be prematurely scrapped. Obviously creditors try to obtain the best price for the assets of a company. In practice, however, this may often mean selling as scrap an asset that had many years of productive life left in it. In 1975, when the current PIM model was introduced, there were 1,275 voluntary and compulsory liquidations in manufacturing industry in the UK. In 1992 the figure was 5,449, and in that year the total number of liquidations for all industry was more than 24,000, compared with around 5400 in 1975. Although the majority of these liquidations were likely to involve smaller companies with limited fixed assets, some larger establishments were also affected. In addition to this many large companies, during periods of economic difficulty, close individual plants, and this too often leads to the wholesale premature scrapping of assets. The assumptions of asset lives which underlie PIM do not allow for such premature asset death.
- b) The second phenomenon that undermines the reliability of PIM is rapid technological change. This is also unpredictable and leads to the scrapping of fixed assets earlier than would otherwise have been the case. It is much harder to quantify this, but there is no doubt that increasing and accelerating automation has occurred over recent years. This has led to

the purchase of ever more sophisticated plant and equipment by industry, leading once again to unexpectedly early asset disposal.

The result of these changes has been for PIM to overestimate the level of capital stock in the UK, possibly by as much as 10 per cent for some industries. The scale of the error varies between asset types, but PIM appears to be most accurate in measuring capital stock in buildings. It seems most prone to inaccuracy in measuring capital stock in plant and equipment, with computers probably the greatest problem area.

How then to keep up with these changes? It is not possible to follow the original route of Inland Revenue depreciation allowances. Since PIM was first introduced, depreciation allowances have been used by successive governments as a tool to encourage capital investment. Assets are therefore written off for tax purposes by companies, often while still in use, and long before their useful lives are over. Nor is the use of a company's annual report and accounts likely to be of great assistance. Although many firms do include a breakdown of their assets in their annual report, the details given are seldom sufficient for the purpose. For instance, where a company holds overseas assets, it is rare for the annual report to distinguish them from assets held in the UK.

Because of these doubts about the reliability of the estimates, and the lack of obvious data sources to correct them, the ONS asked NIESR to investigate the problem, and to suggest solutions. A paper¹ in the National Institute Economic Review summarised their findings. In brief, they confirmed the likely inaccuracy of recent PIM estimates. Their principal recommendation was that a feasibility study should be conducted to determine whether it was possible to collect capital stock data direct from industry. Subject to the results of this there should be a full benchmark survey designed to establish both the value and the age of capital stock. They suggested that the benchmark should be supplemented annually by information on the capital stock that has been scrapped.

In their final report to ONS² NIESR did conclude however that, pending any action on direct collection, further study was necessary in order to improve the current PIM estimates. This research showed that, although there was not a general feeling among experts that the service lives of assets have been declining over time.

- a) There may have been an increasing amount of investment in assets with shorter lives, in particular numerically controlled machinery and computers.

- b) The effects of company deaths and closures had indeed led to the premature scrapping of assets in a way not allowed for in the PIM model.

The result of allowing for these factors would be a reduction of about 4 per cent in the level of gross capital stock in real terms for 1992, with an increase in the discrepancy in later years. This relatively modest figure would however be mainly the consequence of a significant reduction for plant and machinery. There would be little change in the estimates for buildings or vehicles.

NIESR have also recommended that the delayed linear retirement pattern in use since 1975 be changed to a normal distribution pattern. In other words, instead of all assets being retired in equal instalments over ± 20 per cent of their life, they are retired in a smooth bell shaped curve, with the summit of the curve at end of their average service life. The width of the bells is set on the basis of average service lives of the type of asset involved. For example, the service lives of vehicles are assumed to be less variable than those of most type of plant and machinery. Overall the retirement patterns assume a rather wider dispersion of asset lives than the old ones. NIESR made this recommendation because, with no clear evidence to the contrary it seemed to them reasonable to assume that a normal distribution would give a closer approximation to the pattern of retirements.

The tables accompanying this article now incorporate these changes.

Direct collection

As mentioned above the principal recommendation of the NIESR report was that ONS should examine the possibility of collecting capital stock data direct from industry. The ONS therefore undertook a feasibility study in 1995.

The purpose of the study was defined as follows.

- a) To determine whether company asset registers contained the following information in readily accessible form:
 - A description of each asset sufficiently detailed to place it into its broad asset category.
 - The Historic cost (at acquisition) of each asset
 - The date of capitalisation.
- b) To establish whether industry would be prepared to supply this information on a voluntary basis.

- c) To estimate the likely compliance cost for respondents.
- d) To judge whether direct collection would be cost effective, and to estimate the resources which the ONS would need to employ.
- e) To gain an insight into industry's policy on capitalisation - i.e. what was included and what excluded from its asset registers.
- f) To see whether there was any information available to enable us to make new estimates of true asset lives.

The main findings of the study were as follows.

- a) There is sufficient information available from enough businesses to make a full sample survey possible. This information is usually available in the form of a computerised asset register, which shows each current asset held, the date of acquisition, and the historic cost.
- b) There is a direct relationship between the size of a business, measured by the number of employees, and the availability of information. As a result of this finding, businesses consisting of a single unit with fewer than 100 employees would need to be excluded from any full survey undertaken; businesses with between 101 and 300 employees would be sampled separately and less intensively.
- c) Only very few companies retained information on disposed assets for any length of time. This means that it is not possible to obtain sufficient information directly from industry, other than anecdotal information, to judge the true service lives of assets. The period over which businesses depreciate assets fully is not a useful indicator because it is tax related rather than a true pointer to the expected life of an asset.

As a result of this study and a subsequent pilot ONS decided that, when resources became available, we would conduct a postal survey of businesses to establish a rolling benchmark of capital stock. It is probable that this will commence in the new financial year, and that the results will be used in parallel with the PIM to produce more robust estimates over a longer period of time.

The ESA 95

The European System of Accounts 1995 specifies new classes of fixed asset. From now on, ONS will include the value of these assets in its estimates of Capital Stock and Net Capital Formation. The new definitions of assets were described in detail in Chapter 6 of *The National Accounts Concepts, Sources and Methods* (The

Stationery Office, 1998). Table 6.3 is particularly relevant. Assets are now divided into four broad categories:

- Produced Tangible
- Produced Intangible
- Non-produced Tangible
- Non-Produced Intangible.

Capital stock covers only the first two of these categories; that is, all produced assets. The new types of assets included in the tables in this article are as follows:

- Military buildings or equipment other than destructive weapons or vehicles whose only function is to deliver them. These items are classified as tangible produced assets, and are included in the estimates for vehicles, plant and machinery, and other buildings and works.
- Livestock cultivated for the products they produce rather than for their meat (e.g. dairy cattle, and breeding stock). These are classified as produced assets, and are now included under the agricultural assets heading. Poultry for egg production are excluded because of their short life span, and sheep are also excluded because, in the UK, they are reared mainly for meat. Their wool is only a by-product.

And the following, which are classified as produced intangible assets:

- Major items of computer software whether purchased, or developed in-house by the user.
- Mineral exploration costs
- Artistic and literary originals (e.g. films, books and broadcast media).

ESA95 also provides for consumption of fixed capital for roads, and this is now included. Previously, although the value of roads was included in estimates of gross capital stock, it was assumed that there was no depreciation.

There remains one class of assets that are not included in these tables, but which are classified as tangible assets by ESA 95. These are growing plants that produce a regular crop year after year. In the UK this means fruit trees and vines. Work is still in progress on obtaining an estimate of their value, and we will make this addition to agricultural assets when the tables appear in future publications.

In addition to the new classes of asset, the tables also take into account certain changes to the definition of the sectors of the economy, as set out in ESA95. The new sectors are listed in the Introduction (page 8) of BB98.

The extent of the changes

The table below indicates, for the latest three years the extent of the differences between the tables accompanying this article, and those published in BB97. In addition to the reasons for changes described above, there have also been some changes due to revisions in investment data between BB97 and BB98:

Changes between BB97 and present figures

Current Prices

	£ billion	£ million	
	Net Capital Stock	Capital Consumption	Net Fixed Capital Formation
1992	26.9	13,818	-6,422
1993	17.4	17,371	-9,725
1994	3.7	15,784	-7,739
1995	-9.0	12,951	-4,481
1996	-74.6	11,428	508

Taking the changes due to the recommendations of NIESR in isolation the effect has been to reduce capital stock, and this effect increases over time. In 1987 this change in net stock was about £-4b, but by 1997 the negative effect increased to around £-74b. Because of the reductions in the asset lives of certain classes of plant and machinery - particularly computer controlled machinery - the period over which we calculate depreciation has been reduced, and this has substantially increased estimates of consumption of fixed capital. This has in turn led to a reduction in estimates of Net Fixed Capital Formation.

References

- 1 David Mayes and Garry Young "Improving the Estimates of Capital Stock" *National Institute Economic Review*, London, February 1994
- 2 Lansbury, Soteri and Young "Retrospective Estimates of Capital Stock" 1995

1 Gross capital stock by industry at 1995 prices¹

		£ billion at 1995 prices										
		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Agriculture, hunting, forestry and fishing	CIXN	43.5	43.7	43.9	44.2	44.2	44.4	44.6	45.0	45.3	45.7	45.6
Mining and quarrying	CIXO	83.9	84.5	85.0	86.2	88.3	89.5	88.9	86.7	85.3	83.8	82.6
Manufacturing	CIXP	377.4	380.0	384.5	388.2	386.8	382.0	373.9	368.5	367.5	368.5	371.8
Electricity, gas and water supply	CIXQ	160.6	161.3	162.4	164.1	167.0	171.3	175.0	177.8	179.5	180.2	181.1
Construction	CIXR	22.5	23.3	24.0	24.5	24.3	23.8	23.3	23.1	23.1	23.1	24.0
Wholesale and retail trade; repairs; hotels and restaurants	CIXS	127.3	134.5	142.0	148.3	153.0	157.0	160.5	164.5	170.8	177.3	187.2
Transport and storage	CIXT	95.7	95.3	95.1	94.2	95.3	98.3	100.4	103.7	104.8	105.6	108.9
Post and telecommunications	CIXU	61.1	63.6	67.3	71.0	72.0	72.4	73.3	73.4	75.0	79.5	82.3
Financial intermediation, real estate, renting, and business activities	CIXV	138.2	153.0	175.1	194.5	207.3	215.4	221.6	229.7	238.8	251.9	261.4
Other services ²	CIXW	336.6	346.8	359.2	373.0	385.9	399.6	413.7	427.8	441.2	454.0	466.6
Dwellings	EXEO	855.5	880.1	903.9	923.9	940.4	957.2	975.2	994.0	1 012.1	1 030.6	1 050.0
Total	CIXX	2 302.6	2 366.6	2 442.5	2 512.2	2 564.7	2 611.4	2 650.5	2 694.4	2 743.7	2 800.8	2 862.1

2 Gross capital stock by type of asset at 1995 prices¹

		£ billion at 1995 prices										
		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Road vehicles	CIXY	105.6	107.5	109.7	112.4	113.1	112.8	113.1	113.3	113.6	113.7	112.6
Railway rolling stock, ships and aircraft	EXER	20.1	18.9	17.6	16.4	15.6	16.1	16.7	17.6	16.7	16.7	18.4
Plant and machinery	CIXZ	593.0	608.6	629.6	648.5	656.3	657.8	651.7	650.4	658.6	673.8	691.5
Dwellings	EXEO	855.5	880.1	903.9	923.9	940.4	957.2	975.2	994.0	1 012.1	1 030.6	1 050.0
Other buildings and works	CIYA	699.6	721.2	750.0	777.5	803.9	831.2	857.2	882.6	905.9	928.7	951.6
Intangible assets	BGUR	28.8	30.3	31.7	33.5	35.4	36.3	36.6	36.5	36.8	37.3	38.0
Total	CIXX	2 302.6	2 366.6	2 442.5	2 512.2	2 564.7	2 611.4	2 650.5	2 694.4	2 743.7	2 800.8	2 862.1

1 Differences between totals and sums of components are due to rounding.

2 Comprising sections L,M,N,O,P & Q of the SIC(92).

3 Net capital stock by sector and type of asset at current prices¹

£ billion

		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Vehicles, ships and aircraft:												
Households & NPISHs ²	BGUU	6.6	7.4	7.3	7.8	7.6	8.0	7.9	7.1	7.1	7.6	7.5
Financial corporations	CIWL	2.3	2.9	3.6	4.1	4.1	3.7	3.5	3.3	3.4	3.8	3.5
Private non-financial corporations ³	CIWK	26.9	29.7	35.0	38.8	39.5	37.3	37.8	41.2	42.6	45.6	50.6
Public non-financial corporations	CIWM	4.8	4.7	4.3	4.4	4.4	4.9	5.2	5.7	5.9	2.7	2.7
Central government	CIWN	6.5	7.4	8.3	8.5	8.0	7.6	7.6	8.1	8.6	8.8	8.8
Local government	EXGM	1.3	1.3	1.5	1.6	1.5	1.4	1.3	1.3	1.3	1.2	1.1
Total	BGUU	48.4	53.4	60.0	65.2	65.1	62.9	63.3	66.7	68.9	69.7	74.2
Plant and machinery:												
Households & NPISHs ²	CIWO	11.5	12.4	13.7	14.9	15.8	16.8	17.8	18.6	19.9	21.2	23.0
Financial corporations	CIWQ	8.0	8.3	9.9	11.0	10.9	10.8	10.6	10.2	9.8	9.7	9.6
Private non-financial corporations ³	CIWP	173.7	185.6	204.8	246.9	265.8	277.7	287.6	293.8	303.3	315.7	325.9
Public non-financial corporations	CIWR	51.0	51.3	51.2	27.6	18.7	17.9	17.3	16.5	15.7	9.4	8.8
Central government	CIWS	7.2	7.9	8.8	9.9	10.7	11.4	12.3	12.6	12.8	12.7	12.4
Local government	CIWT	5.3	5.6	6.0	6.4	6.3	6.3	6.3	6.2	5.9	5.5	5.2
Total	CIWU	256.7	271.1	294.4	316.7	328.2	340.9	351.9	357.9	367.4	374.2	384.9
Dwellings:												
Households & NPISHs ²	CIWV	316.0	368.0	421.0	471.8	478.3	477.0	485.9	510.5	537.2	561.3	616.7
Financial corporations	CIWX	—	—	—	—	—	—	—	—	—	—	—
Private non-financial corporations ³	CIWW	7.4	8.3	9.2	9.6	9.6	9.4	9.4	9.6	9.9	10.1	10.9
Public non-financial corporations	CIWY	12.7	14.1	15.4	15.6	15.1	14.4	14.3	15.1	15.8	16.0	17.1
Central government	EXGZ	3.1	3.5	3.8	4.1	4.1	4.1	4.4	4.9	5.3	5.6	6.3
Local government	EXHA	94.0	104.2	113.8	96.4	92.9	88.3	88.2	93.4	97.5	98.6	104.9
Total	CIWZ	433.2	498.1	563.2	597.5	600.0	593.2	602.2	633.5	665.7	691.6	755.9
Other buildings and works:												
Households & NPISHs ²	CIXA	25.8	26.5	29.7	33.0	31.7	29.3	29.3	32.5	35.7	38.2	43.0
Financial corporations	CIXC	25.6	26.5	31.5	37.8	36.2	33.7	33.1	35.8	39.7	42.2	46.0
Private non-financial corporations ³	CIXB	151.5	166.3	223.8	244.6	236.6	226.8	230.1	251.2	280.8	323.9	352.1
Public non-financial corporations	CIXD	65.8	73.0	48.3	47.9	42.1	40.6	41.9	47.2	54.0	37.7	41.9
Central government	CIXE	77.5	88.7	100.0	104.1	99.6	93.9	94.5	103.9	117.0	127.4	137.9
Local government	EXHH	88.5	101.2	114.3	117.9	110.5	102.6	102.5	112.3	126.9	138.4	151.8
Total	CIXF	434.7	482.2	547.6	585.3	556.7	526.9	531.4	582.9	654.1	707.8	772.7
Intangible assets:												
Households & NPISHs ²	BGUK	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Financial corporations	BGUM	0.5	0.6	0.7	0.8	1.0	1.1	1.1	1.1	1.0	1.1	1.2
Private non-financial corporations ³	BGUL	9.9	10.8	11.9	13.3	14.7	15.2	15.3	15.1	15.2	15.4	15.7
Public non-financial corporations	BGUN	0.5	0.5	0.5	0.6	0.8	1.0	1.2	1.5	1.8	2.3	2.7
Central government	BGUO	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Local government	BGUP	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Total	BGUQ	11.2	12.5	13.7	15.3	17.4	18.2	18.5	18.6	18.9	19.7	20.5
All assets:												
Households & NPISHs ²	CIXG	360.0	414.5	471.9	527.7	533.7	531.4	541.2	569.0	600.2	628.6	690.5
Financial corporations	CIXI	36.4	38.3	45.7	53.7	52.2	49.3	48.3	50.4	53.9	56.8	60.3
Private non-financial corporations ³	CIXH	369.4	400.7	484.7	553.2	566.2	566.4	580.2	610.9	651.8	710.7	755.2
Public non-financial corporations	CIXJ	134.8	143.6	119.7	96.1	81.1	78.8	79.9	86.0	93.2	68.1	73.2
Central government	CIXK	94.4	107.7	121.1	126.8	122.7	117.3	119.1	129.8	144.0	154.8	165.7
Local government	CIXL	189.2	212.5	235.8	222.5	211.5	198.9	198.6	213.5	231.9	244.0	263.3
Total	CIXM	1 184.2	1 317.3	1 478.9	1 580.0	1 567.4	1 542.1	1 567.3	1 659.6	1 775.0	1 863.0	2 008.2

1 Differences between totals and sums of the components are due to rounding.

2 Non-profit institutions serving households.

3 Including quasi-corporations.

4 Consumption of fixed capital by industry group at current prices¹

£ million

		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Agriculture, hunting, forestry and fishing	CIGG	1 886	1 910	2 080	2 136	2 136	2 304	2 427	2 358	2 478	2 662	2 712
Mining and quarrying	CIGH	4 527	4 830	5 325	5 631	6 034	5 995	6 139	6 033	6 176	6 214	5 989
Manufacturing	CIGI	11 656	11 767	12 530	13 020	14 710	15 951	18 052	17 559	17 216	16 661	16 672
Electricity, gas and water supply	CIGJ	3 264	3 399	3 697	3 815	3 965	3 991	4 180	4 453	4 844	5 107	5 299
Construction	CIGK	807	835	891	956	1 111	1 243	1 370	1 321	1 276	1 230	1 258
Wholesale and retail trade; repairs; hotels and restaurants	CIGL	3 821	4 031	4 154	4 672	5 349	5 959	6 654	6 518	6 682	6 733	6 802
Transport and storage	CIGM	3 035	3 066	3 351	3 433	3 492	3 533	3 629	3 885	3 979	4 362	4 562
Post and telecommunications	CIGN	2 409	2 541	2 815	3 043	3 284	3 532	3 872	4 142	4 361	4 572	4 489
Financial intermediation, real estate, renting and business activities	CIGO	4 994	5 545	5 860	6 912	8 427	9 713	11 171	11 254	10 865	11 034	11 085
Other services ²	CIGP	5 831	6 386	7 445	8 314	8 845	8 985	9 468	9 760	10 425	11 078	11 446
Dwellings	EXCT	7 734	8 829	10 244	11 380	11 954	12 151	12 331	12 992	13 968	14 751	15 550
Transfer costs of land and buildings	EXCU	4 051	5 457	4 391	4 255	4 163	2 946	3 431	3 807	3 695	4 396	5 344
Total	NQAE	54 015	58 596	62 783	67 567	73 470	76 303	82 724	84 082	85 965	88 800	91 208

5 Consumption of fixed capital by industry group at 1995 prices¹

£ million at 1995 prices

		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Agriculture, hunting, forestry and fishing	CIGQ	2 411	2 368	2 383	2 401	2 424	2 488	2 479	2 481	2 478	2 505	2 511
Mining and quarrying	CIGR	5 970	6 047	6 106	6 159	6 484	6 686	6 710	6 419	6 176	5 927	5 732
Manufacturing	CIGS	15 893	15 711	15 709	15 559	16 990	18 331	19 450	18 235	17 216	16 186	16 420
Electricity, gas and water supply	CIGT	4 014	4 036	4 105	4 129	4 280	4 408	4 540	4 705	4 844	4 951	5 070
Construction	CIGU	1 155	1 156	1 154	1 162	1 297	1 429	1 524	1 409	1 276	1 199	1 222
Wholesale and retail trade; repairs; hotels and restaurants	CIGV	5 097	5 175	5 214	5 299	5 917	6 604	7 150	6 775	6 682	6 588	6 710
Transport and storage	CIGW	4 160	3 977	4 050	3 880	3 819	3 870	3 969	4 091	3 979	4 227	4 435
Post and telecommunications	CIGX	3 024	3 189	3 439	3 577	3 741	3 956	4 073	4 205	4 361	4 558	4 686
Financial intermediation, real estate, renting and business activities	CIGY	5 465	6 072	6 500	7 037	8 568	10 164	11 557	11 408	10 865	11 049	11 442
Other services ²	CIGZ	7 054	7 300	7 809	8 192	8 875	9 518	10 182	10 294	10 425	10 683	10 928
Dwellings	EXDG	10 858	11 299	11 689	12 086	12 491	12 902	13 260	13 628	13 968	14 351	14 737
Transfer costs of land and buildings	EXDH	6 113	6 679	4 810	4 337	4 176	3 640	3 857	4 123	3 695	4 061	4 455
Total	CIHA	71 214	73 009	72 968	73 818	79 062	83 996	88 751	87 773	85 965	86 285	88 348

¹ Differences between totals and sums of components are due to rounding.

² Comprising sections L, M, N, O, P and Q of the SIC(92).

6 Consumption of fixed capital by sector at current prices¹

£ million

		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Dwellings:												
Households & NPISHs ²	CIHB	5 857	6 741	7 846	9 151	9 721	9 970	10 193	10 732	11 515	12 215	12 934
Financial corporations	BGUS	—	—	—	—	—	—	—	—	—	—	—
Private non-financial corporations ³	CIHC	194	213	237	257	267	267	268	272	282	289	296
Public non-financial corporations	CIHD	149	164	187	199	197	189	183	193	209	214	220
Central government	EXFB	38	42	49	54	54	53	55	59	66	72	75
Local government	EXFC	1 496	1 669	1 925	1 719	1 715	1 672	1 632	1 736	1 896	1 961	2 025
Total	EXCT	7 734	8 829	10 244	11 380	11 954	12 151	12 331	12 992	13 968	14 751	15 550
Other tangible assets⁴:												
Households & NPISHs ²	CIHE	5 820	6 869	6 373	6 592	6 879	6 332	7 031	7 299	7 330	7 966	8 642
Financial corporations	CIHG	2 005	2 229	2 015	2 292	2 660	2 948	3 304	3 164	2 804	2 667	2 451
Private non-financial corporations ³	CIHF	26 231	27 697	29 804	32 749	38 324	41 529	46 492	46 799	47 351	49 039	50 330
Public non-financial corporations	CIHH	5 685	5 726	6 034	5 340	3 948	3 522	3 527	3 518	3 585	2 930	2 354
Central government	CIHI	2 234	2 488	2 938	3 238	3 327	3 282	3 354	3 526	3 897	4 159	4 237
Local government	CIHJ	2 323	2 590	2 918	3 139	3 132	2 951	2 951	3 046	3 271	3 505	3 666
Total	CIHK	44 298	47 599	50 082	53 350	58 270	60 564	66 658	67 352	68 238	70 266	71 680
Intangible assets:												
Households & NPISHs ²	BGTW	52	57	66	79	99	114	121	121	119	116	128
Financial corporations	BGTY	182	196	230	281	343	400	426	423	416	403	449
Private non-financial corporations ³	BGTX	1 576	1 729	1 955	2 236	2 516	2 744	2 830	2 819	2 818	2 833	2 887
Public non-financial corporations	BGTZ	69	73	75	82	94	99	117	135	166	201	254
Central government	BGUA	52	56	66	80	98	114	122	121	119	116	128
Local government	BGUB	52	57	66	80	98	114	120	121	119	114	129
Total	BGUC	1 983	2 168	2 458	2 838	3 248	3 585	3 736	3 740	3 757	3 783	3 975
All assets:												
Households & NPISHs ²	QWLL	11 729	13 667	14 285	15 822	16 699	16 416	17 345	18 152	18 964	20 297	21 704
Financial corporations	NHCE	2 187	2 425	2 245	2 573	3 003	3 348	3 730	3 587	3 220	3 070	2 900
Private non-financial corporations ³	NSRX	28 001	29 639	31 996	35 242	41 107	44 540	49 590	49 890	50 451	52 161	53 513
Public non-financial corporations	NSRM	5 903	5 963	6 296	5 621	4 239	3 810	3 827	3 846	3 960	3 345	2 828
Central government	NSRN	2 324	2 586	3 053	3 372	3 479	3 449	3 531	3 706	4 082	4 347	4 440
Local government	NSRO	3 871	4 316	4 909	4 938	4 945	4 737	4 703	4 903	5 286	5 580	5 820
Total	NQAE	54 015	58 596	62 783	67 567	73 470	76 303	82 724	84 082	85 965	88 800	91 208

1 Differences between totals and sums of components are due to rounding.

2 Non-profit institutions serving households.

3 Including quasi-corporations.

4 Including transfer costs of land and buildings. They are wholly written off in the year incurred.

7 Net fixed capital formation¹ by industry group² at current prices

£ million

		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Agriculture, hunting, forestry and fishing	CIIF	-197	-39	-43	-37	-305	-201	-66	116	-57	-16	-360
Mining and quarrying	CIIU	-841	-655	-658	240	1 522	1 231	-41	-1 021	-360	-226	-104
Manufacturing	CIKF	-497	956	2 131	1 625	-908	-3 097	-5 212	-3 508	332	1 597	3 898
Electricity, gas and water supply	CIVD	-497	-401	-47	447	1 798	2 758	2 195	1 309	379	-615	-463
Construction	CIVE	36	497	497	327	-271	-388	-340	-118	-7	-65	675
Wholesale and retail trade; repairs; hotels and restaurants	CIVF	3 906	5 491	5 404	4 583	3 049	2 399	1 975	2 398	4 862	5 035	8 355
Transport, storage and communication	CIVG	1 580	2 517	4 032	3 417	2 029	1 964	2 086	3 500	3 410	5 153	5 853
Financial intermediation, real estate, renting and business activities	CIVH	6 955	11 036	16 062	16 169	8 830	3 749	1 809	3 746	5 235	8 973	6 211
Other services ³	CIVI	6 047	6 474	9 064	10 943	9 775	9 642	9 250	9 555	9 824	9 907	10 322
Dwellings	EXDP	8 813	12 268	12 526	9 667	6 384	6 675	7 560	8 240	7 621	8 016	9 092
Total	CIVJ	25 305	38 144	48 967	47 380	31 901	24 735	19 215	24 215	31 241	37 759	43 482

8 Net fixed capital formation¹ by industry group at 1995 prices²

£ million at 1995 prices

		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Agriculture, hunting, forestry and fishing	CIVK	-249	-38	-35	-23	-343	-260	-96	113	-57	-11	-353
Mining and quarrying	CIVL	-1 386	-1 064	-1 023	-58	1 526	1 320	-19	-1 033	-360	-226	-92
Manufacturing	CIVM	-1 519	246	1 522	933	-1 801	-4 183	-5 746	-3 654	332	1 558	3 881
Electricity, gas and water supply	CIVN	-623	-525	-140	357	1 819	2 955	2 341	1 393	379	-589	-311
Construction	CIVO	51	665	616	382	-326	-435	-390	-133	-7	-55	707
Wholesale and retail trade; repairs; hotels and restaurants	CIVP	4 515	6 115	5 341	4 476	2 958	2 529	2 201	2 604	4 862	4 820	8 045
Transport, storage and communication	CIVQ	1 576	2 745	4 325	3 519	2 063	2 222	2 410	3 679	3 410	5 087	5 902
Financial intermediation, real estate, renting and business activities	CIVR	8 184	12 546	16 371	16 029	8 865	3 864	1 974	4 110	5 235	8 877	6 289
Other services ³	CIVS	6 684	6 751	8 316	9 703	8 904	9 806	10 284	10 619	9 824	9 275	9 357
Dwellings	EXEB	12 978	16 297	15 407	11 348	7 096	7 139	8 231	8 639	7 621	7 803	8 517
Total	CIVT	30 211	43 738	50 700	46 666	30 761	24 957	21 190	26 337	31 241	36 539	41 942

1 Gross fixed capital formation *less* capital consumption.

2 Differences between totals and sums of components are due to rounding.

3 Comprising sections L, M, N, O, P and Q of the SIC(92).

9 Net fixed capital formation¹ by sector at current prices²

£ million

		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Dwellings:³												
Households & NPISHs	CIVU	7 604	11 253	10 908	7 526	5 674	6 085	6 724	7 341	7 053	8 017	9 426
Financial corporations	BGUT	—	—	—	—	—	—	—	—	—	—	—
Private non-financial corporations	CIVV	-16	-4	-34	-68	-86	-75	-62	-61	-65	-53	-38
Public non-financial corporations	CIVW	96	62	36	2	-44	-17	-33	-54	-47	-63	-85
Central government	EXFR	41	43	76	198	156	165	313	261	155	242	203
Local government	EXFS	1 088	914	1 540	2 009	684	517	618	753	525	-127	-414
Total	EXDP	8 813	12 268	12 526	9 667	6 384	6 675	7 560	8 240	7 621	8 016	9 092
Other tangible assets:												
Households & NPISHs	CIVX	3 035	3 624	2 946	2 936	1 608	805	1 471	3 466	4 202	6 349	4 932
Financial corporations	CIVZ	1 373	4 439	6 115	4 196	3 196	1 559	-191	2 038	1 621	2 047	3 109
Private non-financial corporations	CIVY	11 416	18 265	25 758	26 094	14 890	8 109	4 355	4 471	11 338	17 610	23 120
Public non-financial corporations	CIWA	-1 370	-1 373	-797	-591	-320	1 455	1 204	1 277	1 394	1 375	1 417
Central government	CIWB	2 286	2 475	3 326	4 475	5 035	4 893	4 207	3 756	3 233	1 463	674
Local government	CIWC	-347	-1 978	-1 272	-130	294	1 043	697	1 094	1 650	546	735
Total	CIWD	16 393	25 452	36 076	36 980	24 702	17 864	11 743	16 102	23 438	29 390	33 987
Intangible assets:												
Households & NPISHs	BGUD	7	14	20	23	12	4	3	8	13	21	13
Financial corporations	BGUF	25	52	72	80	42	13	6	27	46	74	44
Private non-financial corporations	BGUE	56	339	240	507	579	15	-264	-416	-233	-169	-37
Public non-financial corporations	BGUG	-3	-10	-9	77	158	156	162	239	330	384	358
Central government	BGUH	7	15	21	23	12	4	2	8	13	21	13
Local government	BGUI	7	14	21	23	12	4	3	7	13	22	12
Total	BGUJ	99	424	365	733	815	196	-88	-127	182	353	403
All assets:												
Households & NPISHs	CIWE	10 646	14 891	13 874	10 485	7 294	6 894	8 198	10 815	11 268	14 387	14 371
Financial corporations	CIWG	1 398	4 491	6 187	4 276	3 238	1 572	-185	2 065	1 667	2 121	3 153
Private non-financial corporations	CIWF	11 456	18 600	25 964	26 533	15 383	8 049	4 029	3 994	11 040	17 388	23 045
Public non-financial corporations	CIWH	-1 277	-1 321	-770	-512	-206	1 594	1 333	1 462	1 677	1 696	1 690
Central government	CIWI	2 334	2 533	3 423	4 696	5 203	5 062	4 522	4 025	3 401	1 726	890
Local government	CIWJ	748	-1 050	289	1 902	990	1 564	1 318	1 854	2 188	441	333
Total	CIVJ	25 305	38 144	48 967	47 380	31 901	24 735	19 215	24 215	31 241	37 759	43 482

1 Gross fixed capital formation less capital consumption.

2 Differences between totals and sums of components are due to rounding.

3 Excluding existing land and buildings.

4 Non-profit institutions serving households.

5 Including quasi-corporations.

An International Comparison of Taxes and Social Security Contributions (1986-1996)

By Deborah Fugeman, Economic Initiatives – Office for National Statistics

Address: D4/19, 1 Drummond Gate, London SW1V 2QQ Tel 0171 533 5909 Email: deborah.fugeman@ons.gov.uk

Overview

There has been a rise in tax and social security contributions as a percentage of GNP in the majority of OECD countries between 1986 and 1996. Most of the increase seems to be due to a larger proportion of social security contributions although there has also been a slight rise in the OECD average for direct taxation. Many households in the EU15 countries are spending over 25% of their total personal income on direct tax and social security contributions, although the United Kingdom has remained below the average throughout the period.

Summary of Taxes and Social Security Contributions

Table 1

The majority of OECD countries have experienced a rise in tax and social security contributions as a percentage of gross national product over the period 1986 to 1996. The average in the 15 European Union Countries rose from 40.4% in 1986 to 44.4% in 1996, as shown in chart one.

from 18% in 1986 to 24.9% in 1996. The United States of America had the second lowest percentage in 1986 of 28.1% and this grew slowly to 30.3% in 1996.

UK tax and social security contributions as a percentage of GNP were 8.9 percentage points lower than the EU average of 44.4% in 1996. The UK figure fell 3.5 percentage points between 1986 and 1993 which was the greatest fall amongst the OECD countries over that period. The figure then rose by 1.5 percentage points between 1993 and 1996.

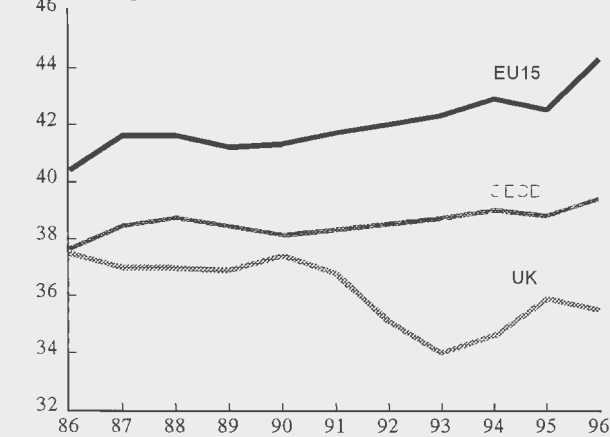
Table 2

When social security contributions are removed Korea still collected the lowest tax revenue as a percentage of Gross National Product in 1986. The figure rose to 21.9% in 1996, leaving Japan with the lowest proportion in the OECD, at 18.4%.

In the United States, tax as a percentage of GNP was 5.5 percentage points below the OECD mean average of 28.3% in 1996. The UK tax revenue as a percentage of GNP was 29.3% which was above this OECD average but below the EU average of 29.4%. It was not as low as Germany and France with 23.5% and 26.1% respectively. Over the period, Greece has collected the lowest percentage of tax in the EU15, and the Scandinavian members the highest.

Chart 1

Taxes and social security contributions as a percentage of GNP



Sweden had the highest proportion of tax and social security contributions over the entire eleven year period. Tax and social security contributions in Sweden were over 50% in all years shown and reached a peak of 57.7% in 1989. Greece had the lowest percentage in the EU15 throughout, although there was an increase from 28.7% in 1986 to 31.6% in 1995.

Korea had the lowest tax and social security contributions as a proportion of GNP amongst the OECD countries, but this too rose

Breakdown by Categories of Tax

Direct taxes

Table 3

Total direct taxes as a percentage of GNP have fluctuated slightly over the interval for most countries. The OECD average rose from 13.6% in 1986 to 14.6% in 1996. The biggest rise was in Iceland where there was a 5 percentage point increase over the

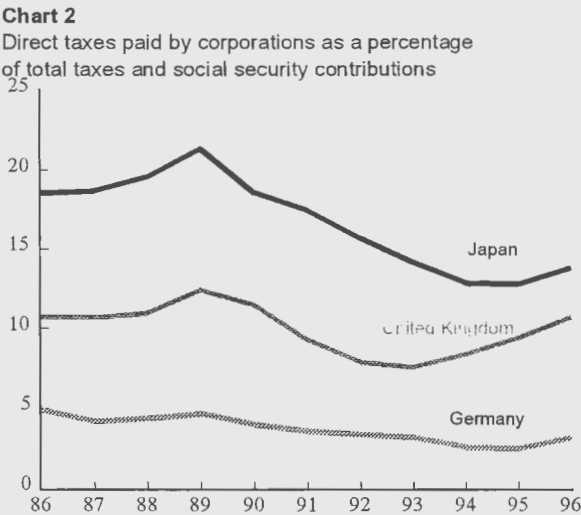
entire period. Direct taxes paid by households made up the greatest proportion of direct taxes throughout the time span. In 1996 they ranged from 4.9% of GNP in Korea to 20.1% in Sweden. Corporations' direct tax made up a much smaller proportion of the total, ranging from 1.3% in Germany, to 5.4% in Norway in 1996.

Table 4

Direct tax as a percentage of total tax and social security contributions averaged 37.5% in the OECD in 1996 with the UK slightly above this average. Data was not available for Denmark in 1996, but for the rest of the period it showed the highest total as a percentage of GNP, averaging at 63.9%.

In the UK 27% of total taxes and social security contributions in 1996 were from households paying direct tax. This is close to the OECD average of 28.9%. The EU15 average was 27.6% in 1986, and this had only changed slightly by 1996 to 26.7%.

Direct tax paid by corporations made up a much smaller proportion of the total tax and social security contributions. In 1996 it was highest in Australia at 14.4%, and lowest in Germany at 3.2%. In the majority of countries corporation tax rose as a percentage of the total tax over the period. However, there were also some significant falls, as shown in chart 2. In Japan there was a fall of 7.6 percentage points between 1989 and 1996.



Indirect Taxes

Table 3

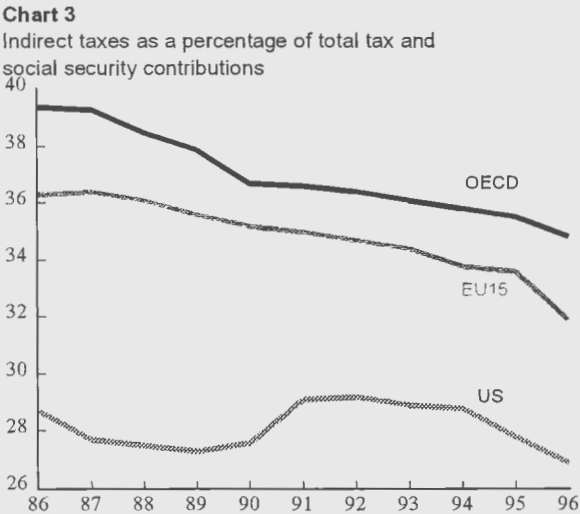
Total indirect tax as a percentage of Gross National Product seems to have stayed fairly stable for most countries since 1986. There was a rise of over 4 percentage points in Luxembourg and a fall of over 4 percentage points in Iceland but other changes were small.

In the EU, VAT as a source of revenue also did not fluctuate very much over the time period. It ranged between 5.6% of GNP in Spain to 9.8% in Denmark in 1996. Outside of Europe the percentage was much lower, for example 1.5% in Japan and 2.7% in Canada in 1996. Australia and the US are not included in these tables because they have not introduced VAT. Sales tax in 1996 in these countries was 2.7% and 2.3% of GNP respectively.

Table 4

As a proportion of all taxes and social security contributions, indirect taxes fell over the eleven year period in the majority of OECD countries. In 1986 the EU average was 36.2%. This had fallen to 31.8% by 1996, as shown in chart 3. Outside of Europe, indirect tax as a proportion of all taxes in the US fell by 1.8 percentage points, to 26.9%. There were dramatic falls in Iceland from 71.4% in 1986 to 53.9% in 1996, and in Korea where the fall was from 68.2% to 55.8%.

When VAT is taken as a percentage of total tax and social security contributions, the UK was amongst the highest in the EU in 1995. The average in the EU in 1995 was 17.3%. The UK figure rose by 3.7 percentage points between 1986 and 1996 to 19.7%. There was also a rise in Germany, but falls in France and Italy.



Capital Taxes

Table 3 and Table 4

Capital taxes remained the smallest source of revenue to governments in the OECD, generally between 0.1% and 0.4% of GNP. They were also a small percentage of total tax and social security contributions. The OECD average was just 0.6% in 1996. Japan, however, was much higher than average, peaking at 2.1% in 1993.

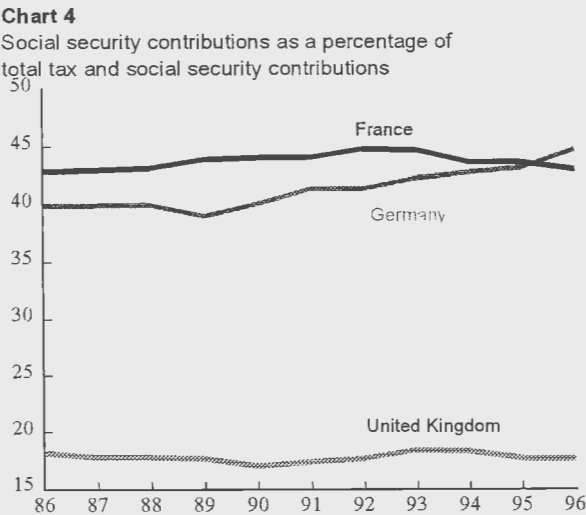
Social Security Contributions

Table 3

Social security contributions vary enormously in importance amongst the OECD countries. In 1995 social security contributions as a percentage of GNP stood at 1.6% in Denmark, yet they were 19.4% in France. A number of countries saw a rise in the total contributions as a percentage of GNP over the eleven years. The largest rise was in Finland where the figure grew by 6.5 percentage points between 1986 and 1994. Falls between 1986 and 1996 were experienced in the Netherlands, Norway and the UK, of 1.8, 2.6 and 0.5 percentage points respectively. There were no big changes in the contributions made by employers, except in the Netherlands where there was a fall of 4.4 percentage points over the eleven years. The OECD average was 7% of GNP in 1996.

Table 4

Social security contributions as a percentage of total taxes and contributions averaged 27.1% in 1995 but there was wide variation within this. In France 43% of the total was collected through social security contributions in 1996 and in Germany the figure stood at 44.6%. This makes social security contributions the largest source of receipts for these two countries. Britain relied on these contributions far less, as shown in chart 4, the peak in 1993 was 18.4%.



Many countries experienced fairly substantial growth over the eleven year period. In Finland there was a 6.6 percentage point increase to 29.8% in 1996, and in Korea there was growth of 6.5 percentage points to 12.1%. The contributions made by employers were fairly stable for most countries between 1986 and 1996 where data was available. There was a substantial fall of 9.3 percentage points in the Netherlands and a rise of 2.8 percentage points in Japan.

Tax and Social Security Contributions as a percentage of Total Personal Income

Table 5

Direct tax and social security contributions as a percentage of total personal income are relatively high amongst EU countries; most are above 25%. Households paying the highest proportions in 1996 were in Sweden, Finland and Germany. By far the lowest percentage was 9% in Korea in 1996, although data for the Czech Republic was also low for the years available.

UK households are spending a low proportion of their income on direct tax and social security compared with many OECD countries. Over the period it has varied between 18.4% and 19.8% of total income which is similar to the percentage paid in the US.

In 1996 direct taxes as a percentage of total personal income was 11.4% on average amongst OECD countries. Average social security contributions were 12.3% of total personal income.

Preliminary Estimates for 1997

For some member countries of the OECD, provisional data for 1997 are available in the latest edition of *OECD Revenue Statistics*. While these figures are not on the same basis as those in the rest of the article, Table A below is included for information.

Table A : Total receipts from taxes and social security contributions as a percentage of GDP at market prices – Preliminary estimates for 1997.

	Percentages		Differences between 1997 and 1996
	1996	1997	
Australia	29.6	30.3	0.7
Austria	43.3	44.4	1.1
Belgium	46.0	46.5	0.5
Czech Republic	42.8	39.4	-3.4
Finland	47.6	47.3	-0.3
France	44.1	46.1	2.0
Germany	39.2	37.5	-1.7
Iceland	30.9	32.0	1.1
Ireland	36.1	34.8	-1.3
Italy	41.7	44.9	3.2
Luxembourg	44.3	45.6	1.3
Netherlands	44.7	43.4	-1.3
Norway	41.3	42.5	1.2
Portugal	33.8	34.5	0.7
Spain	34.7	35.3	0.6
Sweden	50.8	53.3	2.5
Switzerland	33.0	34.6	1.6
UK	34.5	35.3	0.8

Table B shown below provides the percentages scored both on an OECD National Accounts basis and on a Revenue Statistics basis, but as a percentage of GDP. Suggested reasons for differences are given in the Technical Notes.

Table B : Total taxes and social security contributions as a percentage of GDP

	1986		1991		1996	
	National Accounts	Revenue Statistics	National Accounts	Revenue Statistics	National Accounts	Revenue Statistics
Australia	30.9	30.8	29.1	28.9	31.1	31.1
Austria	39.3	42.4	37.9	41.5	39.5	44.0
Belgium	46.3	46.3	44.1	44.1	45.9	46.0
Canada	33.9	33.8	38.0	36.6	37.7	36.8
Czech Republic						40.5
Denmark	47.2	50.8	44.4	48.8		52.2
Finland	42.5	42.4	47.0	46.9	47.9	48.2
France	43.9	44.0	43.7	43.9	45.5	45.7
Germany	41.0	37.7	41.2	38.2	42.1	38.1
Greece	28.7	36.9	29.0	37.6		40.6
Iceland	31.1	28.4	34.6	31.4	34.3	32.3
Ireland	39.5	37.2	37.3	35.2		33.7
Italy	35.3	36.0	39.6	39.7	42.5	43.2
Japan	28.3	28.4	30.8	30.8	28.8	28.4
Korea	17.4	16.4	20.0	18.8	24.6	23.2
Luxembourg	43.9	44.0		42.6		44.7
Netherlands	45.9	44.9	47.5	47.2	44.8	43.3
Norway	44.1	45.5	41.7	41.8	42.9	41.1
Portugal	30.9	29.2	33.6	32.2		34.9
Spain	31.2	30.4	35.9	34.5	35.9	33.7
Sweden	51.8	52.5	52.8	53.7	54.2	52.0
Switzerland		31.9	28.0	30.6	30.8	34.7
United Kingdom	37.6	37.8	36.3	35.6	35.5	36.0
United States	28.2	25.8	28.8	26.8	30.4	28.5

Table C : Definitions of UK system of national accounts, SNA 1968 and Former SNA

	UK System/ESA95/SNA93	SNA 1968	Former SNA
Definition of gross national product at factor cost			
(i) Net property income from abroad			
a. Unremitted profits	Included	Excluded	Excluded
b. Profits remitted abroad	Measured before deduction of tax	Measured before deduction of tax	Measured before deduction of tax
(ii) Rent income of public authorities (other than from dwellings)	Includes only capital consumption in place of imputed rents	Includes only capital consumption in place of imputed rents	Includes imputed rents before deduction interest and depreciation
Definition of taxes			
Direct taxes are taxes on income and indirect taxes are taxes on expenditure			
There are the following differences in treatment:			
Motor vehicle licence duties paid by households	Direct	Direct	Indirect
Taxes on capital gains	Direct	Direct	Capital
Compulsory fees, fines and penalties	Direct/indirect/non-tax ¹	Non-tax ²	Indirect

¹ The classification of compulsory fees, fines and penalties depends on whether a service is provided to the payer and the price roughly the same, or less, than the cost of supplying the service.

² Only compulsory fees paid by households are excluded. Similar payments by business are treated as indirect taxes.

Technical Notes

1. Limitations of the comparisons

The comparisons made in this article indicate only broadly the relative importance of taxation in different countries. There are various factors which should be kept in mind.

- Total taxation, the composition of taxes, and the burden of taxes on households income, reflect differences between countries in their economic and financial structures and in the degree of government involvement in providing services and financial support (for example, medical care and retirement pensions).
- Comparisons are also affected by the methods governments choose to achieve their aims. For example, government tax receipts may be reduced through a system of tax relief, or a gross system may be adopted under which money is collected in taxes and then handed back as cash grants.
- The extent to which governments finance their expenditure by borrowing or from taxation varies between countries, and over time, and has an effect on the ratios of taxes to the gross national product.

2. Sources

The figures for direct taxes, indirect taxes, social security contributions, GNP and total personal income are based on returns supplied to the OECD by national statistical offices and summarised in OECD National Accounts 1984 – 1996, Volume Two. These returns are made on the accounting conventions of the international organisations, which differ from those established in the United Kingdom. Consequently the estimates made are not in all cases identical to those given in the ONS's own publications. Taxes on capital – which in the OECD national accounts presentation are included indistinguishably in capital transfers – have been derived from Revenue Statistics of OECD Member Countries 1965 – 1997. Figures for value added tax have also been obtained from this publication.

3. Differences between OECD National Accounts Statistics and OECD Revenue Statistics

There are a few differences between the definitions of taxes and social security contributions used in Revenue Statistics and those used in the national accounts returns.

Some differences arise due to the national accounting system used. The OECD National Accounts publication uses the 1968 System of National Accounts, except in certain cases where there have been revisions (see below). The Revenue Statistics publication uses the 1993 System of National Accounts. Differences in the data sets are highlighted in Table B.

An important difference is in the time of recording the transactions. Revenue Statistics use a cash-based system (that is transactions at the time the public authority receives the money), while National Accounts are accrual-based (entries occur when a transaction is due to be paid).

4. Differences between the United Kingdom system of National Accounts, the SNA1968 and the Former SNA

The national accounts returns are based as far as possible on the System of National Accounts introduced by the United Nations in 1968. However, Greece still provides most figures on the basis of the previous system, the Former SNA, and Canada and Norway provide figures on the basis of the new system, SNA 1993. The figures on one basis are not strictly comparable with those on the other but the difference in definitions has little effect on the comparisons made in this article.

The main differences between the present United Kingdom system, ESA1995, and the international systems are summarised in Table C. United Kingdom figures in this article have been converted to the SNA1968 national accounts basis.

5. Country Specific Issues

- This article contains data for 24 OECD countries. The remaining OECD countries, namely Hungary, Mexico, New Zealand, Poland and Turkey, have not been included due to the lack of available data from these countries.
- Some countries do not appear in certain tables because data do not exist or because the country does not collect the particular tax/social security contribution.
- Data for **Germany** up to, and including, the year 1990 refers to the Federal Republic of Germany before the unification of Germany. Data for 1991 to 1996 refer to unified Germany.
- All data for **Australia** refer to fiscal years beginning on the 1st July of the year indicated.

- The social security contributions and employers' contributions for social security in **Luxembourg** were unavailable in the OECD National Accounts. The Luxembourg Statistical Office has supplied the figures used.
- Direct taxes paid by corporations were unavailable for the **United Kingdom** in the National Accounts publication for the years 1995 and 1996. The figures used have been taken from Revenue Statistics where there is a small difference in the method of measurement.

6. Other Issues

- For many of the countries, data on non-recurrent tax are unavailable or only available in limited years. Non-recurrent tax makes up a small proportion of **capital tax**. Its absence may cause a distortion but it is assumed this distortion would be an insignificant amount.
- Data on **employers' social security contributions** to government is often unavailable or indistinguishable from contributions made to private institutions. Where this applies countries have been omitted from certain tables.
- The **community charge** was introduced in Scotland from April 1989 and England and Wales from April 1990 to replace domestic rates. This was succeeded by the **council tax** in January 1993. Domestic rates were classified as an indirect tax. Community charge and council tax are non-discretionary transfers to general government and are shown separately. The different classification will cause distortion in indirect tax for the United Kingdom from 1989.

1 Taxes and social security contributions as a percentage of gross national product at current market prices

		Percentages										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Australia	DAGY	32.0	32.1	32.0	32.0	32.2	30.3	29.4	29.5	30.7	31.4	32.3
Austria	DAGZ	43.1	42.7	42.5	41.4	41.4	42.1	43.3	44.1	42.9	43.5	44.7
Belgium	DAHA	46.6	46.8	45.4	43.7	44.2	44.1	44.3	44.4	45.5	45.3	45.3
Canada	DAHB	35.0	35.6	36.5	36.5	38.4	39.3	39.5	38.5	38.3	38.4	39.0
Czech Republic	HRTH	..	..	..	..	..	..	..	42.5	42.1	..	..
Denmark	DAHC	48.5	49.2	49.3	47.8	45.6	45.8	44.7	46.4	47.7	46.6	..
Finland	DAHD	43.4	41.4	44.3	44.5	46.9	48.6	49.1	48.3	50.0	47.9	49.5
France	DAHE	44.0	44.6	43.9	43.7	43.9	43.9	43.7	44.2	44.2	44.5	45.7
Germany	DAHF	40.7	40.9	40.6	40.9	39.2	40.8	41.6	42.3	42.7	42.9	42.4
Greece	DAHG	28.7	28.9	27.5	26.0	28.3	28.7	29.5	29.7	30.9	31.6	..
Iceland	FTBX	32.2	32.1	35.9	36.0	34.8	35.6	35.8	34.1	33.7	34.3	35.1
Irish Republic	DAHH	44.0	44.1	45.4	42.4	41.5	41.3	41.8	42.5	43.5	41.1	..
Italy	DAHI	35.5	36.2	36.7	38.4	39.3	40.2	40.7	43.5	41.2	40.9	43.1
Japan	DAHJ	28.2	29.7	29.9	30.2	31.1	30.6	30.1	29.1	28.3	28.8	28.5
Korea	HRUG	18.0	18.1	19.0	19.8	20.8	20.2	21.2	22.1	23.0	23.9	24.9
Luxembourg	DAHK	32.3	..	..	..	..	..	..	..	..	..	..
Netherlands	DAHL	45.9	48.3	48.8	45.5	45.2	47.6	47.6	48.4	46.0	45.0	44.5
Norway	DAHM	44.9	45.7	45.1	43.6	43.8	43.1	42.7	42.2	43.0	43.2	43.3
Portugal	HSAA	32.2	31.0	32.0	32.2	32.6	33.9	36.0	34.7	..	..	..
Spain	DAHN	31.5	33.7	34.0	35.9	35.9	36.2	38.0	37.0	37.0	35.6	36.3
Sweden	DAHO	52.8	57.1	55.6	57.7	57.6	54.4	53.1	52.4	51.9	52.1	56.6
Switzerland	DAHP	..	..	..	..	27.0	26.8	27.2	27.6	28.5	28.8	29.5
United Kingdom ¹	DAHQ	37.5	37.0	37.0	36.9	37.4	36.8	35.1	34.0	34.6	35.9	35.5
United States	DAHR	28.1	29.0	28.6	28.8	28.7	28.7	28.6	28.9	29.3	29.7	30.3

1 Includes the community charge/council tax

Source: Data derived from OECD statistics

2 Taxes as a percentage of gross national product at current market prices

		Percentages										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Australia	DAFJ	32.0	32.1	32.0	32.0	32.2	30.3	29.4	29.5	30.7	31.4	32.3
Austria	DAFK	30.8	30.3	30.2	29.2	29.2	29.7	30.5	30.9	29.4	29.9	31.2
Belgium	DAFL	31.0	31.0	30.1	28.8	29.1	28.5	28.5	28.5	30.0	30.0	30.3
Canada	DAFM	30.3	30.8	31.5	31.9	33.3	33.8	33.6	32.6	32.4	32.5	33.3
Czech Republic	HSEV	..	..	..	..	..	..	..	26.9	25.7	..	..
Denmark	DAFN	46.9	47.3	47.9	46.4	44.1	44.3	43.1	44.8	46.0	45.1	..
Finland	DASX	33.3	31.5	33.3	33.3	34.2	34.5	33.9	32.3	33.3	32.4	34.7
France	DAFQ	25.1	25.4	24.9	24.6	24.6	24.6	24.1	24.4	24.9	25.1	26.1
Germany	DAFR	24.5	24.6	24.4	25.0	23.5	24.0	24.5	24.5	24.5	24.5	23.5
Greece	DAFS	19.7	20.0	18.9	17.0	19.2	19.9	20.6	20.0	20.8	21.5	..
Iceland	FICF	30.9	30.8	34.7	34.6	33.5	32.9	32.9	31.2	30.8	31.4	31.9
Irish Republic	DAFT	36.1	36.3	37.5	34.7	33.8	33.5	33.9	34.3	35.6	33.7	..
Italy	DAFU	23.1	23.8	24.4	25.7	26.2	26.9	27.2	29.5	27.9	27.7	28.1
Japan	DAFV	20.0	21.3	21.5	21.9	22.1	21.6	20.9	19.8	18.8	18.5	18.4
Korea	HSEW	17.0	17.1	17.5	18.0	18.9	18.2	19.1	19.4	20.4	21.3	21.9
Luxembourg	DAFW	23.3	..	..	..	..	..	..	..	..	..	..
Netherlands	DAFX	26.3	27.8	28.1	26.6	28.1	29.6	29.0	29.9	27.1	26.1	26.7
Norway	DAFY	32.6	32.4	32.3	32.1	32.5	31.8	31.3	31.9	32.8	33.2	33.6
Portugal	HSEX	22.2	20.9	22.6	22.9	22.9	23.8	25.5	23.7	..	..	..
Spain	DAFZ	19.5	21.6	22.0	23.5	23.3	23.3	24.2	23.0	23.2	22.7	23.1
Sweden	DAGA	39.4	43.5	41.6	42.5	41.9	38.9	38.3	38.0	37.7	37.5	40.7
Switzerland	DAGB	..	..	..	..	20.1	19.7	20.0	19.7	20.6	20.5	21.1
United Kingdom ¹	DAGC	30.7	30.4	30.4	30.4	31.0	30.4	28.9	27.8	28.3	29.5	29.3
United States	DAGD	21.0	21.9	21.2	21.5	21.3	21.2	21.1	21.4	21.8	22.1	22.8

1 Includes the community charge/council tax

Source: Data derived from OECD statistics

Taxes and social security contributions by category as a percentage of gross national product at current market prices

Percentages

		Total Direct Taxes ¹										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Australia	FILC	17.7	17.7	17.9	18.2	18.4	16.9	16.3	15.8	16.6	17.4	18.2
Austria	FILD	14.3	13.7	13.8	12.9	13.2	13.8	14.5	14.8	13.4	14.1	15.1
Belgium	FILE	19.1	18.7	17.9	16.6	16.9	16.3	16.3	16.2	17.4	17.8	17.7
Canada	FILF	16.0	16.4	16.6	16.5	17.8	17.5	17.1	16.4	16.6	17.1	18.0
Czech Republic	HSEZ	..	..	..	..	..	..	17.7	11.7	10.5	..	..
Denmark	FIEM	29.5	30.0	31.0	30.7	29.1	29.5	29.7	30.3	31.1	30.4	..
Finland	FILG	18.2	16.2	17.5	17.3	18.5	18.6	18.0	16.4	17.9	17.8	19.6
France	FILH	9.3	9.4	9.0	9.0	9.0	9.4	9.1	9.3	9.5	9.6	10.0
Germany	FILI	12.2	12.3	12.1	12.5	11.1	11.5	11.8	11.5	11.1	11.4	10.5
Greece	FILJ	5.0	5.0	4.9	4.3	4.9	4.9	4.7	4.9	6.0	6.8	..
Iceland	HSFH	7.9	7.1	10.1	10.2	10.9	11.0	11.3	12.0	12.0	12.5	12.9
Irish Republic	FILK	16.3	16.8	17.9	15.1	15.4	15.9	16.4	17.4	17.7	16.2	..
Italy	FILL	13.0	13.4	13.5	14.4	14.6	14.7	15.0	16.5	15.2	14.9	15.4
Japan	FILM	12.1	12.7	12.8	13.4	13.5	13.5	12.5	11.4	10.4	9.9	9.8
Korea	HSFP	4.6	5.1	5.8	6.6	6.6	6.5	6.8	6.8	7.2	7.8	7.7
Luxembourg	HSGF	12.8	..	..	..	..	..	..	..	..	..	..
Netherlands	FILO	13.4	14.2	14.5	13.9	15.5	16.9	16.0	16.8	14.0	13.0	13.3
Norway	FILP	14.2	14.3	15.1	15.8	16.6	15.9	15.3	15.6	16.1	16.5	17.2
Portugal	HSFX	6.4	5.7	6.9	8.2	8.3	9.2	10.2	9.2	..	..	..
Spain	FILQ	8.3	10.3	10.6	12.2	12.1	12.1	12.6	12.0	11.7	11.6	11.8
Sweden	FILR	22.2	24.2	24.7	25.8	24.2	20.5	21.2	21.7	22.1	22.5	23.4
Switzerland	FIW	..	..	..	..	13.6	13.4	13.8	13.4	14.2	13.5	14.1
United Kingdom	FILS	14.4	14.1	14.2	14.7	15.0	14.0	13.0	12.2	12.7	13.6	13.4
United States	FILT	12.7	13.6	13.1	13.4	13.1	12.6	12.5	12.7	13.0	13.6	14.3

		Direct Taxes paid by Households										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Australia	DABV	14.8	14.4	14.5	14.1	13.8	12.5	12.0	12.1	12.3	12.7	13.3
Austria	DABW	12.4	12.0	12.0	10.8	11.3	11.8	12.2	12.7	11.9	12.3	12.7
Belgium	DABX	16.3	16.0	15.2	13.8	14.4	13.9	14.4	13.8	14.7	14.7	14.5
Canada	DABY	12.6	13.0	13.3	13.3	14.9	14.9	14.7	14.1	13.8	14.0	14.6
Czech Republic	HSFA	..	..	..	..	..	..	6.6	4.3	4.9	..	..
Denmark	DABZ	25.4	26.4	27.4	27.2	26.5	26.9	27.0	27.0	27.9	..	..
Finland	DACA	16.6	15.0	16.0	15.7	16.4	16.4	16.2	15.8	17.1	15.6	16.5
France	DACB	6.6	6.5	6.1	6.0	6.0	6.8	6.9	7.1	7.2	7.2	7.6
Germany	DACC	10.1	10.5	10.2	10.5	9.3	9.9	10.3	10.0	9.9	10.2	9.0
Greece	DACD	3.8	3.7	3.8	3.2	3.5	3.2	2.7	2.8	3.1	3.6	..
Italy	DACF	10.2	10.4	10.9	11.5	11.8	11.9	12.5	13.4	12.0	11.7	11.9
Japan	DACG	6.8	7.1	7.0	6.9	7.7	8.2	7.8	7.3	6.8	6.2	5.9
Korea	HSFQ	2.7	2.9	3.4	3.4	3.8	3.8	4.0	4.3	4.4	4.9	4.9
Netherlands	DACI	10.0	10.3	10.7	10.5	11.9	13.3	12.7	13.3	10.5	9.6	9.0
Norway	DACJ	10.6	11.3	12.7	12.5	12.3	12.1	11.5	11.7	11.9	11.9	..
Portugal	HSFY	5.0	4.3	5.2	6.0	5.6	6.2	7.2	6.9	..	..	..
Spain	DACK	6.1	7.6	7.9	8.6	8.6	9.1	9.8	9.5	9.5	9.2	9.1
Sweden	DACL	20.4	21.5	22.1	23.0	22.1	19.5	19.6	19.5	19.5	19.4	20.1
Switzerland	DACM	..	..	..	..	11.1	11.0	11.4	11.2	11.9	11.2	11.7
United Kingdom	DACN	10.5	10.2	10.2	10.2	10.9	10.7	10.3	9.8	9.9	10.1	9.6
United States	DACO	10.2	10.8	10.3	10.7	10.6	10.3	10.1	10.2	10.3	10.6	11.2

		Direct Taxes paid by Corporations										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Australia	DACP	2.6	3.0	3.1	3.7	4.2	4.1	4.0	3.6	4.1	4.4	4.6
Belgium	DACR	2.8	2.7	2.8	2.8	2.5	2.4	1.9	2.4	2.8	3.1	3.2
Canada	DACS	3.0	3.2	3.0	3.0	2.6	2.3	2.2	2.1	2.5	2.9	3.1
Czech Republic	HSFB	..	..	..	..	..	..	11.0	7.3	5.5	..	..
Finland	DACU	1.5	1.1	1.3	1.5	2.0	2.0	1.7	0.5	0.6	2.1	2.9
France	DACV	2.6	2.8	2.8	2.9	2.8	2.5	2.1	2.1	2.2	2.3	2.3
Germany	DACW	2.0	1.7	1.8	1.9	1.6	1.5	1.4	1.4	1.1	1.1	1.3
Italy	DACZ	2.8	3.0	2.6	3.0	2.8	2.8	2.5	3.1	3.3	3.2	3.5
Japan	HSFA	5.2	5.5	5.9	6.4	5.8	5.3	4.7	4.1	3.6	3.7	3.9
Korea	HSFR	1.9	2.1	2.4	3.1	2.8	2.7	2.8	2.5	2.7	2.8	2.8
Netherlands	DADC	3.3	3.7	3.5	3.3	3.4	3.5	3.1	3.4	3.3	3.3	4.1
Norway	DADD	3.6	3.0	2.4	3.3	4.3	3.8	3.8	3.9	4.2	4.6	5.4
Portugal	HSFZ	1.4	1.4	1.7	2.3	2.7	3.0	3.0	2.3	..	..	..
Spain	DADE	2.2	2.7	2.6	3.5	3.5	3.0	2.7	2.5	2.5	2.4	2.6
Sweden	DADF	1.7	2.7	2.6	2.8	2.1	1.0	1.6	2.1	2.5	3.0	3.2
Switzerland	DADG	..	..	..	..	2.2	2.1	2.1	2.0	2.1	2.1	2.1
United Kingdom ²	DADH	4.0	3.9	4.0	4.5	4.1	3.3	2.6	2.5	2.8	3.3	3.8
United States	DADI	2.5	2.8	2.8	2.7	2.5	2.3	2.4	2.6	2.8	3.0	3.1

1 Direct tax comprises direct tax paid by households, corporations and others
e.g. non-profit institutions

2 1995 and 1996 data are taken from *Revenue Statistics*

3 Taxes and social security contributions by category as a percentage of gross national product at current market prices

continued

Percentages

		Indirect Taxes										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Australia	DADJ	14.2	14.3	14.0	13.9	13.9	13.4	13.2	13.7	14.0	14.1	14.1
Austria	DADK	16.4	16.6	16.4	16.3	15.9	15.8	15.9	16.1	16.0	15.8	16.1
Belgium	DADL	11.9	12.3	12.2	12.2	12.2	12.1	12.2	12.3	12.6	12.2	12.6
Canada	DADM	14.1	14.3	14.4	14.8	15.0	15.8	16.1	15.9	15.5	15.2	15.1
Czech Republic	HSFC	..	..	..	..	..	..	14.6	15.2	15.1	14.4	14.5
Denmark	DADN	17.2	17.0	16.6	15.4	14.7	14.5	13.2	14.2	14.6	14.4	14.6
Finland	DADO	15.1	15.1	15.7	15.9	15.6	15.8	15.7	15.7	15.2	14.4	14.9
France	DADP	15.5	15.7	15.6	15.2	15.2	14.8	14.6	14.7	15.0	15.1	15.6
Germany	DADQ	12.2	12.3	12.2	12.4	12.3	12.4	12.6	12.9	13.4	13.0	12.9
Greece	DADR	14.4	14.7	13.7	12.4	13.9	14.6	15.3	14.8	14.5	14.3	14.3
Iceland	HSFK	23.0	23.6	24.5	24.3	22.5	21.7	21.5	19.2	18.7	18.8	18.9
Irish Republic	DADS	19.6	19.4	19.5	19.5	18.2	17.4	17.4	16.8	17.7	17.4	17.2
Italy	DADT	10.0	10.4	10.9	11.2	11.5	12.1	12.1	13.0	12.7	12.7	12.6
Japan	DADU	7.5	8.1	8.2	8.0	8.1	7.6	7.8	7.8	7.9	8.1	8.1
Korea	HSFS	12.3	11.9	11.6	11.3	12.1	11.6	12.1	12.3	12.9	13.2	13.9
Luxembourg	DADV	11.9	12.2	12.3	12.6	12.5	12.5	13.3	15.0	15.7	15.7	16.3
Netherlands	DADW	12.7	13.3	13.3	12.5	12.4	12.4	12.8	12.9	12.8	12.8	13.1
Norway	DADX	18.4	18.0	17.1	16.1	15.8	15.8	15.9	16.2	16.6	16.6	16.3
Portugal	HSGA	15.6	15.0	15.5	14.6	14.5	14.5	15.2	14.4	15.1	15.1	15.1
Spain	DADY	10.9	10.9	11.1	11.0	10.8	10.8	11.4	10.6	11.2	10.8	11.0
Sweden	DADZ	17.1	17.6	16.7	16.6	17.7	18.3	16.9	16.3	15.5	15.0	17.3
Switzerland	DAEA	6.9	7.1	6.9	6.5	6.3	6.1	5.9	6.0	6.1	6.7	6.7
United Kingdom	DAEB	16.0	16.1	15.9	15.4	14.1	14.8	14.4	14.1	14.1	14.4	14.3
United States	DAEC	8.0	8.0	7.9	7.8	7.9	8.3	8.4	8.4	8.4	8.3	8.2

		Indirect Taxes of which VAT										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Austria	DAEE	8.8	8.8	8.7	8.7	8.6	8.5	8.4	8.3	9.1	7.7	8.5
Belgium	DAEF	7.1	7.2	7.2	7.1	7.1	7.0	6.9	6.8	7.1	6.8	6.9
Canada	FIAT	..	..	..	..	0.5	2.7	2.6	2.7	2.7	2.5	2.7
Czech Republic	HSFD	..	..	..	..	..	..	..	7.7	7.5	7.1	7.3
Denmark	DAED	9.9	9.8	9.4	9.2	9.0	8.9	9.7	9.6	9.8	9.6	9.8
Finland	HSEY	8.0	8.7	9.4	9.2	9.1	8.9	8.8	8.6	8.4	7.8	8.5
France	DAEG	8.4	8.6	8.5	8.3	8.1	7.7	7.6	7.4	7.5	7.6	7.9
Germany	DAEW	5.7	5.9	5.8	5.8	6.0	6.2	6.4	6.8	7.1	6.8	6.8
Greece	FIAU	8.0	6.6	6.5	6.6	7.3	7.4	7.6	7.3	7.2	7.2	7.3
Iceland	HSFL	..	..	..	..	9.3	10.1	10.3	10.1	9.7	9.6	9.6
Irish Republic	DAEJ	8.6	8.4	9.0	8.7	8.1	7.8	7.9	7.7	8.3	8.3	8.2
Italy	DAEK	5.3	5.3	5.6	5.4	5.8	5.8	5.7	5.7	6.5	5.8	5.7
Japan	FIAT	..	..	..	1.0	1.3	1.3	1.4	1.5	1.5	1.5	1.5
Korea	HSFT	3.5	3.3	3.2	3.6	3.9	3.9	4.2	4.4	4.3	4.2	4.3
Luxembourg	DAEL	4.4	4.6	4.7	4.6	4.6	4.8	5.2	5.5	5.5	5.7	6.2
Netherlands	DAEM	7.4	7.8	7.9	7.3	7.4	7.4	7.2	6.9	6.7	6.8	6.9
Norway	DAEN	9.1	9.3	9.1	8.2	8.1	7.7	7.9	8.3	8.7	8.9	8.7
Portugal	HSGB	5.1	5.9	6.1	6.1	6.0	6.0	6.9	6.3	7.5	7.8	7.7
Spain	DAUC	4.6	5.3	5.4	5.7	5.5	5.5	5.9	5.2	5.6	5.5	5.6
Sweden	DAEI	7.2	7.6	7.5	7.7	8.5	9.0	8.3	8.8	8.4	7.8	7.3
Switzerland	DAUD	..	..	..	..	..	..	..	..	..	2.3	3.1
United Kingdom	DAEO	6.0	6.0	6.3	6.3	6.2	6.8	6.8	6.8	6.9	6.9	7.0

3 Taxes and social security contributions by category as a percentage of gross national product at current market prices

continued

Percentages

		Capital Taxes										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Australia	DAEP	..	..	..	..	..	..	..	..	..	..	..
Austria	DAEQ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	..	0.1
Belgium	DAER	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
Canada	DAES	0.2	0.2	0.5	0.5	0.5	0.5	0.4	0.2	0.2	0.2	0.2
Czech Republic	HSFE	..	..	..	..	..	..	..	..	..	..	..
Denmark	DAET	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
Finland	DAEU	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
France	DAEV	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Germany	DAEH	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Greece	DAEX	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.4	0.3	0.3	0.3
Irish Republic	DAEY	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2
Italy	DAEZ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Japan	DAFA	0.4	0.5	0.5	0.5	0.4	0.6	0.6	0.6	0.6	0.6	0.5
Korea	HSFU	0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.3	0.3	0.3	0.3
Luxembourg	DAFB	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Netherlands	DAFC	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
Norway	DAFD	..	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Portugal	HSGC	0.3	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Spain	DAFE	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Sweden	DAFF	0.1	1.7	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Switzerland	DAFG	0.6	0.7	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3
United Kingdom	DAFH	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
United States	DAFI	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3

		Social Security Contributions										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Austria	DASZ	12.3	12.4	12.3	12.2	12.2	12.4	12.8	13.2	13.5	13.6	13.6
Belgium	DATA	15.5	15.8	15.3	14.9	15.1	15.5	15.8	16.0	15.5	15.3	15.0
Canada	DATB	4.8	4.8	5.0	4.7	5.1	5.5	6.0	5.9	5.9	5.9	5.7
Czech Republic	HSFF	..	..	..	..	..	..	12.5	15.5	16.4	..	..
Denmark	DATC	1.6	2.0	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.6	..
Finland	DATD	10.1	10.0	11.0	11.2	12.6	14.1	15.2	16.0	16.6	15.5	14.8
France	DATE	18.9	19.1	19.0	19.2	19.4	19.4	19.6	19.8	19.3	19.4	19.6
Germany	DATF	16.2	16.3	16.2	15.9	15.6	16.8	17.2	17.8	18.2	18.5	18.9
Greece	DATG	9.0	8.9	8.6	9.0	9.0	8.8	8.9	9.7	10.1	10.1	..
Irish Republic	DATH	7.9	7.8	7.9	7.7	7.7	7.8	7.9	8.1	7.9	7.4	..
Italy	DATI	12.5	12.4	12.3	12.7	13.1	13.3	13.6	14.0	13.3	13.3	14.9
Japan	DATJ	8.2	8.4	8.3	8.3	9.0	8.9	9.1	9.3	9.4	10.2	10.1
Korea	HSFV	1.0	1.1	1.6	1.8	1.9	1.9	2.1	2.7	2.6	2.6	3.0
Luxembourg	DATK	9.0	9.5	9.3	9.1	9.1	9.2	9.9	10.7	10.7	10.8	10.9
Netherlands	DATL	19.6	20.5	20.7	18.8	17.0	18.0	18.6	18.5	18.9	18.9	17.8
Norway	DATM	12.3	13.3	12.8	11.5	11.4	11.3	11.4	10.3	10.2	10.0	9.7
Portugal	HSGD	10.0	10.0	9.4	9.3	9.8	10.1	10.5	11.0	..	..	..
Spain	DATN	12.0	12.1	12.0	12.3	12.6	12.9	13.8	14.1	13.9	12.8	13.2
Sweden	DATO	13.4	13.6	14.1	15.1	15.6	15.5	14.9	14.3	14.2	14.6	15.9
Switzerland	DATP	..	..	..	..	6.9	7.1	7.2	7.9	7.9	8.3	8.4
United Kingdom	DATQ	6.8	6.6	6.6	6.5	6.4	6.4	6.2	6.3	6.3	6.4	6.3
United States	DATR	7.1	7.1	7.4	7.3	7.4	7.5	7.5	7.5	7.5	7.6	7.5

		Social Security Contributions paid by Employers ¹										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Belgium	DAGG	9.2	9.4	9.3	9.2	9.4	9.7	9.7	9.6	9.3	9.2	8.9
Canada	DAGH	2.5	2.6	2.6	2.5	2.7	2.9	3.2	3.2	3.2	3.2	3.2
Czech Republic	HSFG	..	..	..	..	..	..	12.3	11.0	11.7	..	..
France	DAGK	12.0	12.0	11.8	11.8	11.9	11.9	12.0	12.1	11.8	11.9	12.0
Germany	DAGL	7.6	7.7	7.6	7.5	7.4	7.9	8.0	8.1	8.3	8.3	8.3
Italy	DAGO	8.9	8.7	8.7	9.1	9.4	9.4	9.4	9.3	8.8	8.7	10.4
Japan	DAGP	4.3	4.4	4.3	4.4	4.6	4.6	4.7	4.8	4.8	5.2	5.2
Luxembourg	DAGQ	4.5	4.7	4.6	4.5	4.5	4.5	4.9	5.3	5.1	5.1	5.1
Netherlands	DAGR	8.1	8.2	8.1	7.4	3.6	3.8	3.7	3.6	3.2	3.5	3.7
Sweden	DAGU	12.8	13.1	13.5	14.5	14.9	15.1	14.4	13.5	12.9	12.5	13.2
United Kingdom	DAGW	3.5	3.4	3.5	3.6	3.7	3.7	3.6	3.7	3.5	3.5	3.4
United States	DAGX	3.7	3.7	3.8	3.7	3.7	3.7	3.8	3.8	3.8	3.8	3.7

		Community charge / Council tax										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
United Kingdom	FIAB	..	..	..	0.1	1.6	1.4	1.3	1.3	1.3	1.3	1.3

¹ See technical note on employers' social security contributions

Source: Data derived from OECD statistics

4 Taxes and social security contributions by category as a percentage of total taxes and social security contributions

Percentages

		Total Direct Taxes ¹										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Australia	DAJG	55.5	55.3	56.1	56.7	56.9	55.7	55.3	53.7	54.2	55.3	56.2
Austria	DAJH	33.1	32.1	32.4	31.0	31.9	32.9	33.5	33.5	31.2	32.4	33.7
Belgium	DAJI	41.0	40.0	39.5	38.0	38.1	37.1	36.8	36.4	38.3	39.3	39.1
Canada	DAJJ	45.6	46.1	45.5	45.3	46.4	44.5	43.3	42.7	43.3	44.6	46.1
Czech Republic	HSGK	..	..	..	..	..	..	..	27.6	25.0	..	..
Denmark	DAJK	60.8	60.9	62.8	64.2	63.9	64.4	66.4	65.3	65.3	65.2	..
Finland	DAJL	41.9	39.0	39.4	38.8	39.5	38.2	36.6	34.0	35.9	37.2	39.6
France	DAJM	21.1	21.0	20.4	20.6	20.4	21.4	20.8	21.0	21.4	21.5	22.0
Germany	DAJN	30.1	30.0	29.8	30.7	28.3	28.1	28.3	27.1	25.9	26.5	24.7
Greece	DAJO	17.5	17.3	17.8	16.5	17.4	17.2	16.0	16.3	19.5	21.5	..
Iceland	FICR	24.5	22.0	28.1	28.5	31.4	31.0	31.5	35.2	35.5	36.5	36.7
Irish Republic	DAJP	37.0	38.0	39.4	35.6	37.2	38.5	39.1	40.9	40.8	39.3	..
Italy	DAJQ	36.5	36.9	36.6	37.6	37.2	36.6	36.8	37.8	36.9	36.5	35.8
Japan	DAJR	42.8	42.7	43.0	44.4	43.4	44.1	41.6	39.2	36.9	34.4	34.4
Korea	HSGS	25.7	27.9	30.5	33.2	31.6	32.1	32.1	30.9	31.2	32.6	30.9
Netherlands	DAJT	29.2	29.3	29.8	30.6	34.4	35.6	33.6	34.6	30.4	28.9	29.8
Norway	DAJU	31.6	31.4	33.5	36.3	37.8	37.0	35.8	36.9	37.5	38.3	39.7
Portugal	HSGZ	19.7	18.4	21.5	25.6	25.3	27.0	28.2	26.6	..	..	..
Spain	DAJV	26.3	30.7	31.1	33.9	33.8	33.5	33.1	32.5	31.5	32.5	32.4
Sweden	DAJW	42.0	42.4	44.4	44.8	42.0	37.7	40.0	41.4	42.5	43.1	41.2
Switzerland	DAJX	..	..	..	..	50.2	49.8	50.8	48.6	49.9	47.0	47.8
United Kingdom	DAJY	38.5	38.1	38.5	39.8	40.3	38.0	36.9	35.9	36.7	37.8	37.6
United States	DAJZ	45.3	46.9	45.9	46.5	45.7	43.9	43.6	44.2	44.5	45.8	47.3
		Direct Taxes paid by Households										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Australia	DAIM	46.5	45.0	45.5	44.0	42.8	41.4	40.9	40.9	40.1	40.6	41.2
Austria	DAIN	28.9	28.0	28.1	26.1	27.2	28.0	28.2	28.7	27.8	28.3	28.3
Belgium	DAIO	35.1	34.2	33.4	31.5	32.6	31.6	32.5	31.1	32.2	32.5	32.1
Canada	DAIP	36.1	36.5	36.5	36.5	38.9	38.0	37.1	36.6	36.1	36.4	37.4
Czech Republic	HSGI	..	..	..	..	..	..	..	10.1	11.7	..	..
Denmark	DAIQ	52.3	53.6	55.5	56.9	58.2	58.7	60.5	58.1	58.6	..	..
Finland	DAIR	38.2	36.1	36.2	35.4	34.9	33.8	33.0	32.8	34.3	32.5	33.3
France	DAIS	14.9	14.6	13.9	13.7	13.8	15.6	15.8	16.1	16.3	16.2	16.7
Germany	DAIT	24.9	25.6	25.1	25.7	23.8	24.3	24.7	23.7	23.1	23.7	21.3
Greece	DAIU	13.2	12.7	13.8	12.2	12.4	11.0	9.2	9.4	10.1	11.5	..
Italy	DAIW	28.8	28.7	29.6	29.9	30.1	29.7	30.6	30.8	29.0	28.6	27.7
Japan	DAIX	24.2	24.0	23.4	23.0	24.8	26.7	25.9	25.0	24.0	21.6	20.5
Korea	HSGQ	14.9	16.1	17.7	17.4	18.4	18.6	19.0	19.6	19.4	20.7	19.8
Netherlands	DAIZ	21.7	21.2	22.0	23.0	26.5	27.9	26.7	27.4	22.9	21.3	20.2
Norway	DAJA	23.6	24.8	28.2	28.7	28.0	28.1	26.9	27.7	27.6	27.6	..
Portugal	HSGX	15.5	13.8	16.3	18.5	17.1	18.3	19.9	20.0	..	..	..
Spain	HSHE	19.4	22.7	23.3	24.1	24.1	25.2	25.9	25.7	25.6	25.8	25.2
Sweden	DAJC	38.6	37.6	39.7	39.9	38.3	35.8	36.9	37.3	37.6	37.2	35.4
Switzerland	DAJD	..	..	..	..	41.0	41.0	42.0	40.4	41.6	38.8	39.7
United Kingdom	DAJE	27.9	27.5	27.6	27.6	29.3	29.1	29.4	28.7	28.6	28.2	27.0
United States	DAJF	36.4	37.3	36.2	37.3	37.0	35.8	35.3	35.2	35.0	35.6	37.1
		Direct Taxes paid by Corporations										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Australia	DAKC	8.1	9.4	9.8	11.7	13.2	13.5	13.7	12.2	13.5	14.1	14.4
Belgium	DAKE	5.9	5.8	6.1	6.5	5.5	5.5	4.3	5.3	6.1	6.8	7.0
Canada	DAKF	8.5	8.9	8.3	8.1	6.8	5.9	5.5	5.5	6.6	7.6	8.0
Czech Republic	HSGJ	..	..	..	..	..	..	..	17.3	13.0	..	..
Finland	DAKH	3.5	2.7	3.0	3.3	4.3	4.2	3.5	0.9	1.3	4.3	5.8
France	DAKI	6.0	6.2	6.4	6.7	6.5	5.6	4.8	4.7	5.0	5.1	5.1
Germany	DAKJ	4.9	4.2	4.4	4.7	4.0	3.6	3.4	3.2	2.6	2.5	3.2
Italy	DAKM	7.8	8.3	7.0	7.7	7.2	6.9	6.2	7.0	7.9	7.9	8.2
Japan	DAKN	18.6	18.7	19.6	21.4	18.6	17.5	15.7	14.2	12.9	12.8	13.8
Korea	HSGR	10.8	11.8	12.8	15.8	13.2	13.5	13.1	11.3	11.8	11.9	11.1
Netherlands	DAKP	7.1	7.7	7.3	7.2	7.5	7.3	6.6	6.9	7.3	7.3	9.3
Norway	DAKQ	7.9	6.6	5.3	7.7	9.8	8.9	8.9	9.2	9.9	10.6	12.5
Portugal	HSGY	4.3	4.6	5.3	7.0	8.1	8.7	8.3	6.6	..	..	..
Spain	HSHF	6.9	8.0	7.7	9.8	9.7	8.3	7.2	6.9	5.9	6.8	7.2
Sweden	DAKS	3.3	4.7	4.7	4.9	3.6	1.8	3.0	4.1	4.9	5.8	5.6
Switzerland	DAKT	..	..	..	..	8.3	7.9	7.8	7.2	7.4	7.2	7.1
United Kingdom ²	DAKU	10.6	10.6	10.9	12.2	11.0	8.9	7.5	7.2	8.0	9.3	10.6
United States	DAKV	8.9	9.7	9.8	9.3	8.8	8.1	8.3	9.0	9.4	10.2	10.2

1 Direct tax comprises direct tax paid by households, corporations and others e.g. non-profit institutions

2 1995 and 1996 data are taken from *Revenue Statistics*

4 Taxes and social security contributions by category as a percentage of total taxes and social security contributions

continued

Percentages

		Indirect Taxes										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Australia	DAKW	44.5	44.7	43.9	43.3	43.1	44.3	44.7	46.3	45.8	44.7	43.8
Austria	DAKX	38.1	38.7	38.5	39.3	38.5	37.6	36.7	36.4	37.2	36.3	35.9
Belgium	DAKY	25.6	26.4	26.8	27.8	27.7	27.5	27.4	27.7	27.8	26.9	27.9
Canada	DAKZ	40.3	40.0	39.5	40.6	39.0	40.1	40.7	41.3	40.6	39.5	38.7
Czech Republic	HSGL	..	..	..	..	..	..	..	35.8	35.9	..	..
Denmark	DALA	35.4	34.5	33.7	32.3	32.1	31.7	29.5	30.5	30.7	30.9	..
Finland	DALB	34.7	36.6	35.3	35.7	33.2	32.4	31.9	32.5	30.3	30.1	30.1
France	DALC	35.3	35.2	35.5	34.7	34.6	33.6	33.5	33.4	34.0	34.0	34.1
Germany	DALD	30.0	30.0	30.0	30.3	31.5	30.5	30.2	30.6	31.3	30.3	30.3
Greece	DALE	50.0	50.9	49.8	47.7	49.3	50.9	52.0	49.8	46.8	45.4	..
Iceland	FICZ	71.4	73.6	68.2	67.5	64.7	61.1	60.2	56.3	55.6	54.6	53.9
Irish Republic	DALF	44.7	43.9	42.9	46.0	43.9	42.2	41.7	39.5	40.7	42.3	..
Italy	DALG	28.1	28.6	29.6	29.2	29.3	30.2	29.7	29.9	30.7	31.0	29.3
Japan	DALH	26.5	27.2	27.5	26.5	26.2	24.8	26.1	26.6	27.8	28.1	28.5
Korea	HSGT	68.2	65.7	60.9	57.2	58.1	57.5	57.1	55.6	56.2	55.1	55.8
Netherlands	DALJ	27.6	27.6	27.3	27.4	27.4	26.1	26.9	26.6	27.8	28.4	29.5
Norway	DALK	41.0	39.4	37.9	37.0	36.1	36.7	37.3	38.4	38.5	38.4	37.7
Portugal	HSHA	48.3	48.5	48.5	45.4	44.4	42.6	42.3	41.4	..	..	..
Spain	DALL	34.6	32.4	32.5	30.6	30.0	29.9	30.0	28.7	30.2	30.5	30.4
Sweden	DALM	32.4	30.7	30.1	28.8	30.7	33.6	31.9	31.1	30.0	28.7	30.5
Switzerland	DALN	..	..	..	..	23.2	22.9	21.7	21.9	21.3	23.1	22.8
United Kingdom	DALO	42.6	43.5	43.1	41.6	37.8	40.2	41.0	41.3	40.8	40.3	40.3
United States	DALP	28.7	27.7	27.5	27.3	27.6	29.1	29.2	28.9	28.8	27.8	26.9

		Indirect Taxes of which VAT										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Austria	DALQ	20.5	20.7	20.5	21.0	20.6	20.1	19.5	18.8	21.2	17.8	18.9
Belgium	DALR	15.2	15.4	15.9	16.3	16.1	16.0	15.7	15.4	15.5	15.0	15.3
Canada	FIAY	..	..	..	..	1.4	6.8	6.6	7.0	7.1	6.6	6.9
Czech Republic	HSGM	..	..	..	..	..	..	..	18.2	17.8	..	..
Denmark	DALS	20.4	19.9	19.1	19.2	19.7	19.4	21.8	20.7	20.6	20.6	..
Finland	FIAB	18.3	20.9	21.1	20.6	19.4	18.4	17.8	17.7	16.8	16.3	17.1
France	DALT	19.2	19.2	19.3	18.9	18.4	17.6	17.4	16.8	17.0	17.2	17.3
Germany	DALU	14.1	14.5	14.4	14.3	15.4	15.3	15.3	16.1	16.6	15.9	15.9
Greece	FIBA	..	22.8	23.8	25.3	25.7	25.6	25.8	24.6	23.3	23.0	..
Iceland	FIDD	..	..	..	..	26.7	28.3	28.7	29.6	28.8	28.1	27.4
Irish Republic	DALW	19.7	19.0	19.8	20.4	19.4	18.8	19.0	18.2	19.0	20.1	..
Italy	DALX	15.0	14.7	15.3	14.0	14.8	14.3	14.0	13.1	15.8	14.2	13.2
Japan	FIDG	..	..	..	3.4	4.3	4.4	4.6	5.0	5.2	5.2	5.3
Korea	HSGU	19.5	18.4	16.8	18.0	18.8	19.1	19.9	19.9	18.7	17.6	17.5
Netherlands	DALZ	16.1	16.1	16.2	16.1	16.3	15.5	15.2	14.2	14.5	15.2	15.5
Norway	DAMA	20.3	20.4	20.2	18.8	18.4	17.9	18.6	19.8	20.2	20.7	20.1
Portugal	HSHB	15.8	19.1	18.9	18.9	18.2	17.6	19.2	18.1	..	..	..
Spain	DAUE	14.5	15.6	16.0	15.8	15.2	15.1	15.5	13.9	15.2	15.4	15.5
Sweden	DAMB	13.6	13.2	13.4	13.4	14.8	16.6	15.5	16.8	16.2	15.0	13.0
Switzerland	HSHG	..	..	..	..	..	..	..	..	..	8.1	10.7
United Kingdom	DAMC	16.0	16.2	17.0	17.0	16.7	18.4	19.5	20.1	20.0	19.3	19.7

4 Taxes and social security contributions by category as a percentage of total taxes and social security contributions

continued

Percentages

		Capital Taxes										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Australia	DAMD	—	—	—	—	—	—	—	—	—	—	—
Austria	DAME	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1
Belgium	DAMF	0.6	0.6	0.6	0.6	0.7	0.8	0.7	0.7	0.7	0.7	0.8
Canada	DAMG	0.5	0.5	1.3	1.3	1.3	1.4	0.9	0.6	0.6	0.6	0.6
Czech Republic	HSGN	..	..	..	..	..	..	..	..	0.1	..	..
Denmark	DAMH	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	..
Finland	DAMI	0.3	0.3	0.4	0.3	0.4	0.4	0.5	0.4	0.4	0.4	0.5
France	DAMJ	0.7	0.8	0.9	0.9	1.0	0.9	0.9	0.9	0.9	0.8	0.9
Germany	DAMK	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3
Greece	DAML	1.1	1.1	1.2	1.2	1.3	1.2	1.8	1.2	1.1	1.0	..
Iceland	FIDH	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
Irish Republic	DAMM	0.3	0.3	0.3	0.3	0.4	0.5	0.3	0.4	0.4	0.4	..
Italy	DAMN	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Japan	DAMO	1.5	1.7	1.6	1.7	1.4	1.8	1.9	2.1	2.0	1.9	1.7
Korea	HSGV	0.5	0.5	0.4	0.6	1.2	0.8	0.9	1.3	1.4	1.3	1.2
Netherlands	DAMQ	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.6	0.7
Norway	DAMR	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Portugal	HSHC	0.8	0.8	0.6	0.3	0.5	0.5	0.2	0.2	..	..	..
Spain	DAMS	1.1	1.1	1.2	1.1	1.0	0.9	0.7	0.7	0.9	0.9	0.9
Sweden	DAMT	0.2	3.0	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1
Switzerland	DAMU	..	..	..	..	1.0	0.9	1.0	0.9	1.0	1.0	1.0
United Kingdom	DAMV	0.7	0.7	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6
United States	DAMW	0.8	0.8	0.8	0.8	1.0	0.9	0.9	0.9	1.0	0.9	1.0

		Social Security Contributions										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Austria	DAMY	28.6	29.0	29.0	29.6	29.5	29.4	29.6	30.0	31.4	31.2	30.4
Belgium	DAMZ	33.4	33.7	33.7	34.1	34.2	35.3	35.8	35.9	34.0	33.8	33.0
Canada	DANA	13.6	13.5	13.6	12.8	13.4	14.1	15.1	15.3	15.5	15.2	14.6
Czech Republic	HSGO	..	..	..	..	..	..	..	36.6	39.0	..	..
Denmark	DANB	3.3	4.0	2.8	3.0	3.4	3.3	3.5	3.5	3.5	3.4	..
Finland	DANC	23.2	24.1	24.9	25.1	27.0	29.0	31.0	33.1	33.3	32.3	29.8
France	DAND	42.9	43.0	43.2	43.9	44.1	44.1	44.8	44.7	43.6	43.6	43.0
Germany	DANE	39.7	39.8	39.8	38.8	39.9	41.2	41.2	42.1	42.6	43.0	44.6
Greece	DANF	31.4	30.8	31.1	34.6	32.0	30.7	30.1	32.7	32.6	32.0	..
Iceland	FIDL	4.0	4.2	3.5	3.8	3.7	7.6	8.1	8.3	8.6	8.7	9.1
Irish Republic	DANG	18.0	17.7	17.4	18.1	18.5	18.9	18.9	19.2	18.1	18.0	..
Italy	DANH	35.1	34.2	33.5	33.0	33.3	33.1	33.3	32.1	32.2	32.4	34.7
Japan	DANI	29.2	28.4	27.9	27.5	29.0	29.3	30.4	32.0	33.4	35.6	35.5
Korea	HSGW	5.6	5.9	8.2	9.1	9.1	9.6	10.0	12.2	11.2	10.9	12.1
Netherlands	DANK	42.8	42.5	42.4	41.5	37.8	37.8	39.1	38.2	41.1	42.1	40.1
Norway	DANL	27.4	29.1	28.4	26.4	26.0	26.2	26.7	24.5	23.8	23.1	22.3
Portugal	HSHD	31.1	32.4	29.4	28.8	29.9	29.8	29.2	31.8	..	..	..
Spain	DANM	38.1	35.8	35.2	34.4	35.2	35.7	36.2	38.0	37.5	36.1	36.3
Sweden	DANN	25.4	23.9	25.3	26.3	27.1	28.5	28.0	27.4	27.4	28.0	28.1
Switzerland	DANO	..	..	..	..	25.5	26.4	26.5	28.6	27.7	28.9	28.5
United Kingdom	DANP	18.2	17.8	17.8	17.7	17.0	17.4	17.7	18.4	18.3	17.7	17.6
United States	DANQ	25.3	24.6	25.8	25.4	25.7	26.1	26.3	26.0	25.7	25.5	24.8

		Social Security Contributions paid by employers ¹										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Belgium	DANT	19.8	20.2	20.4	21.0	21.2	22.0	21.9	21.7	20.3	20.3	19.7
Canada	DANR	7.2	7.2	7.3	6.9	7.1	7.4	8.2	8.3	8.4	8.4	8.2
Czech Republic	HSGP	..	..	..	..	..	..	..	25.8	27.8	..	..
France	DANS	27.3	27.0	26.9	27.0	27.1	27.1	27.5	27.3	26.7	26.8	26.3
Germany	DANU	18.7	18.7	18.8	18.3	18.8	19.4	19.1	19.1	19.3	19.3	19.6
Italy	DANV	24.9	23.9	23.6	23.7	23.9	23.3	23.1	21.4	21.4	21.2	24.1
Japan	DANW	15.4	14.7	14.5	14.6	14.9	15.2	15.8	16.6	17.1	18.2	18.2
Netherlands	DANX	17.6	17.0	16.6	16.2	8.0	7.9	7.8	7.5	6.9	7.8	8.3
Sweden	DAOA	24.3	22.9	24.3	25.1	25.9	27.7	27.0	25.7	25.0	23.9	23.2
United Kingdom	DAOC	9.4	9.2	9.4	9.6	9.9	10.2	10.3	10.8	10.1	9.6	9.6
United States	DAOD	13.1	12.6	13.1	12.7	12.9	13.0	13.2	13.0	12.9	12.6	12.3

		Community charge / Council tax										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
United Kingdom	FIAC	..	..	..	0.3	4.3	3.9	3.8	3.8	3.7	3.6	3.8

¹ See technical note on employers' social security contributions

Source: Data derived from OECD statistics

5 Direct taxes on households, community charge / council tax and social security contributions as a percentage of total personal income¹

Percentages

		Direct taxes										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
a. Including employers' contributions												
Austria	CJNB	13.0	12.4	12.5	11.4	11.8	12.2	12.7	13.0	12.3	12.7	13.1
Belgium	DAPO	14.1	13.9	13.4	12.3	12.6	12.0	12.3	11.8	12.8	13.0	13.0
Canada	DAPQ	14.8	15.5	15.8	15.6	16.8	16.4	16.1	15.7	15.9	16.2	17.0
Czech Republic	HSHH	..	..	..	..	..	..	8.9	5.6	6.3	..	..
Denmark	DAPR	32.2	32.9	33.5	33.0	32.1	32.0	32.1	31.8	32.7	..	..
Finland	DAPS	18.2	16.7	18.2	17.7	17.8	16.3	15.4	15.3	17.3	16.3	17.6
France	DAPT	6.5	6.5	6.2	6.1	6.0	6.7	6.7	6.8	7.0	7.0	7.4
Germany	DAPU	10.5	10.7	10.6	11.0	9.9	10.1	10.3	10.0	9.8	10.1	8.9
Greece	DAPV	4.7	4.5	4.6	3.8	4.3	3.9	3.4	3.3	3.8	4.4	..
Italy	DAPW	9.5	9.7	10.3	10.7	10.9	10.8	11.0	12.0	11.0	10.9	11.1
Japan	DAPX	7.3	7.7	7.7	7.7	8.4	8.9	8.5	7.9	7.3	6.6	6.4
Korea	HSHN	3.3	3.6	4.2	4.1	4.5	4.3	4.6	5.0	5.1	5.6	5.6
Netherlands	DAPY	9.4	9.4	9.9	9.9	11.1	12.3	11.5	12.0	9.8	9.0	8.7
Norway	DATZ	12.4	12.8	13.8	13.9	13.7	13.5	12.7	13.2	13.9	14.2	..
Portugal	HSII	4.7	4.1	5.3	6.2	5.7	6.1	7.1	6.9	..	..	..
Spain	DAPZ	6.4	8.0	8.2	9.0	8.8	9.1	9.7	9.2	9.4	9.3	9.3
Sweden	DAQA	20.6	21.7	22.2	22.7	21.4	18.6	18.2	17.9	18.2	18.8	19.3
Switzerland	DAQB	..	..	..	..	12.0	11.5	11.6	11.3	12.1	11.4	11.8
United Kingdom	DAQC	11.7	11.6	11.6	11.2	11.5	11.1	10.7	10.4	10.8	10.9	10.4
United States	DAQD	11.0	11.6	11.1	11.6	11.3	10.9	10.7	10.8	11.0	11.2	11.8
b. Excluding employers' contributions²												
Australia	DAPM	16.7	16.7	16.6	15.6	15.2	14.1	14.0	14.3	14.3	14.6	15.2
Belgium	DAQG	15.3	15.2	14.6	13.4	13.8	13.1	13.4	12.8	13.9	14.2	14.2
Canada	DAQH	15.2	16.0	16.3	16.1	17.3	17.0	16.6	16.3	16.5	16.8	17.7
France	DAQK	7.4	7.4	7.0	6.9	6.8	7.6	7.5	7.6	7.9	7.9	8.3
Germany	DAQL	11.4	11.7	11.5	11.9	10.7	10.9	11.2	10.8	10.7	11.0	9.7
Italy	DAQN	10.3	10.6	11.2	11.7	11.9	11.8	12.0	13.1	12.0	11.8	12.3
Japan	DAQO	7.7	8.1	8.1	8.1	8.9	9.4	8.9	8.3	7.7	7.0	6.7
Netherlands	DAQP	10.2	10.2	10.7	10.6	11.5	12.7	11.9	12.5	10.1	9.3	9.0
Sweden	DAQR	23.7	25.1	25.6	26.5	25.0	21.8	20.9	20.4	20.7	21.4	22.1
Switzerland	DAQS	..	..	..	..	13.0	12.5	12.6	12.3	13.1	12.4	12.8
United Kingdom	DAQT	12.2	12.0	12.0	11.6	11.9	11.6	11.1	10.8	11.2	11.3	10.8
United States	DAQU	11.5	12.1	11.6	12.1	11.8	11.3	11.1	11.3	11.5	11.6	12.3
		Social Security Contributions										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
a. Including employers' contributions												
Austria	DAOW	12.9	12.8	12.9	12.9	12.8	12.8	13.3	13.6	13.9	14.0	14.0
Belgium	DAOX	13.4	13.7	13.5	13.3	13.3	13.4	13.5	13.6	13.5	13.5	13.4
Canada	DAOY	5.6	5.7	5.9	5.5	5.8	6.1	6.5	6.6	6.8	6.8	6.6
Czech Republic	HSHI	..	..	..	..	..	..	16.7	20.2	20.9	..	..
Denmark	DAOZ	2.0	2.5	1.7	1.7	1.9	1.8	1.9	1.9	1.9	..	..
Finland	DAPA	11.0	11.1	12.5	12.6	13.7	14.0	14.4	15.4	16.8	16.2	15.8
France	DAPB	18.7	19.2	19.3	19.4	19.3	19.0	18.9	18.8	18.7	18.8	18.9
Germany	DAPC	16.8	16.7	16.8	16.6	16.5	17.1	17.2	17.6	18.1	18.3	18.7
Greece	DAPD	11.1	10.9	10.3	10.8	11.0	10.8	11.2	11.6	12.2	12.3	..
Italy	DAPE	11.6	11.6	11.6	11.9	12.0	12.1	12.0	12.5	12.2	12.3	14.0
Japan	DAPF	8.9	9.1	9.2	9.2	9.9	9.7	9.9	10.1	10.2	10.9	11.0
Korea	HSIG	1.2	1.3	1.9	2.1	2.2	2.2	2.4	3.1	3.0	3.0	3.4
Netherlands	DAPG	18.5	18.9	19.1	17.8	15.9	16.6	16.9	16.8	17.7	17.9	17.2
Norway	DAUA	14.4	15.1	13.9	12.8	12.7	12.6	12.5	11.7	12.0	11.9	12.0
Portugal	HSIJ	9.4	9.7	9.6	9.7	10.0	10.0	10.4	10.9	..	..	..
Spain	DAPH	12.6	12.7	12.4	12.8	12.8	12.9	13.6	13.6	13.8	13.1	13.4
Sweden	DAPI	13.5	13.8	14.1	14.9	15.1	14.8	13.8	13.1	13.2	14.2	15.3
Switzerland	DAPJ	..	..	..	..	7.5	7.4	7.3	8.0	8.0	8.5	8.5
United Kingdom	DAPK	7.6	7.5	7.5	7.2	6.6	6.6	6.5	6.7	6.9	6.8	6.8
United States	DAPL	7.7	7.7	7.9	7.9	7.9	8.0	7.9	8.0	8.1	8.0	7.9
b. Excluding employers' contributions²												
Belgium	DAQX	5.9	6.0	5.8	5.6	5.5	5.5	5.7	5.9	5.9	5.9	5.9
Canada	DAQY	2.7	2.8	2.8	2.6	2.8	3.0	3.1	3.1	3.2	3.2	3.0
France	DARB	7.8	8.1	8.3	8.5	8.5	8.3	8.3	8.2	8.2	8.2	8.3
Germany	DARC	9.6	9.6	9.6	9.5	9.5	9.8	10.0	10.5	10.8	11.0	11.4
Italy	DARE	3.7	3.8	3.7	3.6	3.7	3.9	4.0	4.5	4.4	4.7	4.7
Japan	DARF	4.4	4.6	4.7	4.5	5.0	4.9	5.0	5.1	5.2	5.6	5.7
Netherlands	DARG	11.8	12.2	12.5	11.6	12.9	13.6	13.9	14.0	15.2	15.0	14.1
Sweden	DARI	0.7	0.6	0.6	0.8	0.8	0.5	0.5	0.9	1.3	2.4	3.0
United Kingdom	DARK	3.8	3.7	3.7	3.4	2.9	2.9	2.8	2.9	3.2	3.2	3.2
United States	DARL	3.8	3.9	4.1	4.1	4.1	4.2	4.1	4.1	4.2	4.2	4.2

1 Part b of the table removes employers' contributions from total personal income and from total social security contributions

2 See technical note on employers' social security contributions

5 Direct taxes on households, community charge / council tax and social security contributions as a percentage of total personal income¹

continued

Percentages

		Community Charge / Council tax										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
a. Including employers' contributions												
United Kingdom	FIAD	..	..	..	0.1	1.7	1.5	1.4	1.4	1.4	1.4	1.5
b. Excluding employers' contributions												
United Kingdom	FIAE	..	..	..	0.1	1.7	1.6	1.4	1.4	1.4	1.5	1.5
		Total										
		1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
a. Including employers' contribution												
Austria	DAOF	25.9	25.1	25.4	24.3	24.6	25.0	26.0	26.6	26.2	26.8	27.0
Belgium	DAOG	27.4	27.6	26.9	25.7	25.9	25.4	25.7	25.4	26.2	26.5	26.4
Canada	DAOH	20.4	21.2	21.7	21.0	22.6	22.5	22.6	22.3	22.7	23.0	23.7
Czech Republic	HSHK	..	..	..	..	..	..	10.6	6.5	7.4	..	..
Denmark	DAOI	34.2	35.3	35.2	34.7	33.9	33.8	34.0	33.7	34.7	..	..
Finland	DAOJ	29.2	27.8	30.7	30.3	31.5	30.3	29.8	30.7	34.1	32.5	33.4
France	DAOK	25.2	25.7	25.5	25.5	25.3	25.7	25.6	25.5	25.7	25.7	26.3
Germany	DAOL	27.3	27.5	27.4	27.6	26.4	27.1	27.5	27.6	28.0	28.4	27.7
Greece	DAOM	15.8	15.3	14.8	14.6	15.2	14.7	14.7	14.9	15.9	16.7	..
Italy	DAOO	21.1	21.3	21.9	22.6	22.9	22.9	23.0	24.5	23.2	23.2	25.1
Japan	DAOP	16.2	16.9	16.9	16.9	18.3	18.6	18.4	18.0	17.5	17.5	17.3
Korea	HSIH	4.5	4.9	6.1	6.2	6.7	6.5	7.0	8.1	8.1	8.6	9.0
Netherlands	DAOQ	27.9	28.3	29.0	27.6	27.0	28.9	28.4	28.8	27.5	26.9	25.8
Norway	DAUB	26.8	27.9	27.7	26.7	26.3	26.0	25.2	24.9	25.8	26.1	..
Portugal	HSIK	14.1	13.8	14.9	15.9	15.7	16.1	17.5	17.8	..	..	..
Spain	DAOR	19.0	20.7	20.6	21.8	21.6	22.0	23.3	22.7	23.2	22.4	22.6
Sweden	DAON	34.2	35.5	36.3	37.6	36.5	33.5	31.9	31.0	31.4	33.0	34.7
Switzerland	DAOS	..	..	..	..	19.5	18.9	19.0	19.3	20.1	19.9	20.3
United Kingdom ³	DAOT	19.3	19.0	19.0	18.5	19.8	19.3	18.6	18.4	19.0	19.1	18.6
United States	DAOU	18.7	19.3	19.1	19.5	19.2	18.8	18.6	18.8	19.1	19.2	19.8
b. Excluding employers' contributions²												
Australia	FIET	16.7	16.7	16.6	15.6	15.2	14.1	14.0	14.3	14.3	14.6	15.2
Belgium	DARO	21.2	21.2	20.4	19.0	19.3	18.6	19.1	18.7	19.8	20.1	20.1
Canada	DARP	17.9	18.8	19.1	18.7	20.1	20.0	19.7	19.4	19.7	20.0	20.7
France	DARS	15.2	15.5	15.3	15.4	15.3	15.9	15.8	15.8	16.1	16.1	16.6
Germany	DART	21.0	21.3	21.1	21.4	20.2	20.7	21.2	21.3	21.5	22.0	21.1
Italy	DARV	14.0	14.4	14.9	15.3	15.6	15.7	16.0	17.6	16.4	16.5	17.0
Japan	DARW	12.1	12.7	12.8	12.6	13.9	14.3	13.9	13.4	12.9	12.6	12.4
Netherlands	DARX	22.0	22.4	23.2	22.2	24.4	26.3	25.8	26.5	25.3	24.3	23.1
Sweden	DARZ	24.4	25.7	26.2	27.3	25.8	22.3	21.4	21.3	22.0	23.8	25.1
United Kingdom ³	DASB	16.0	15.7	15.7	15.1	16.5	16.1	15.3	15.1	15.8	16.0	15.5
United States	DASC	15.3	16.0	15.7	16.2	15.9	15.5	15.2	15.4	15.7	15.8	16.5

1 Part b of the table removes employers' contributions from total personal income and from total social security contributions

2 See technical note on social security contributions

3 Includes community charge / council tax

Source: Data derived from OECD statistics

PRODUCTIVITY MEASUREMENT IN THE UK - March 1999

By Sue Holloway, Economic Initiatives – Office for National Statistics

Address: D4/19, 1 Drummond Gate, London SW1V 2QQ Tel: 0171 533 5975 Email: sue.holloway@ons.gov.uk

Overview

There are a number of different ways to measure productivity, and this article briefly examines some of them. It goes on to look at the current interest in productivity at the whole economy and industrial level, before giving details of development of the measure produced by the ONS.

Productivity is defined by the Oxford English Dictionary as the capacity to produce, the effectiveness of productive effort, especially in industry. At the macro-economic level, measures of productivity are used to assess economic performance over time and to make international comparisons. Breakdowns by sector and industry allow companies to benchmark their performance against these estimates.

Measures of productivity

A country's performance can be measured by GDP per capita – output per head of population. This relates to productivity in terms of the number of people who have to be supported by the productive effort, rather than the productivity of the workforce. When making international comparisons using this measure, adjustments can be made for the demographic composition of different populations.

Output per filled job narrows the focus to the paid workforce. However, it takes no account of the hours people are working and whether jobs are full-time or part-time. Output per hour worked more accurately reflects differences in working practices, but problems arise in its measurement. Estimates of hours worked vary according to whether surveys are employer based, such as the New Earnings Survey, or household surveys, such as the Labour Force survey. Differences arise between hours paid for and actual hours worked, as well as between employee and employer classifications of the industry to which they belong. International comparisons based on these two measures do not give a full picture of a country's performance because, for example, a country could achieve a high level of productivity by employing only a small number of highly skilled and productive workers.

Further refinements to productivity measures include multi-factor or total factor productivity, which takes account of the amount

and quality of capital equipment to which workers have access, as well as the labour input to production. Some users are also interested in measures of current price turnover per head. Alternative measures of productivity might also take account of production and hours worked in the household and voluntary sectors of the economy.

The current context

The importance of productivity in macro-economic policy making was highlighted by a chapter in the November Pre-Budget Report entitled 'The Productivity Challenge', where the government set out for consultation the next steps in their strategy to tackle the productivity gap. They proposed measures to encourage innovation and enterprise, to ensure that capital markets work effectively, to ensure that competitive pressures are strengthened and that the UK's skills base is geared to the needs of a modern economy. They also highlighted some of the problems in the measurement of productivity, including the potential problems in measuring GDP as the economy becomes more 'weightless' and the difficulties in separating changes in volume and quality from price inflation in service output. The use of Purchasing Power Parities in international comparisons can also give rise to difficulties, as they are estimates rather than actual exchange rates.

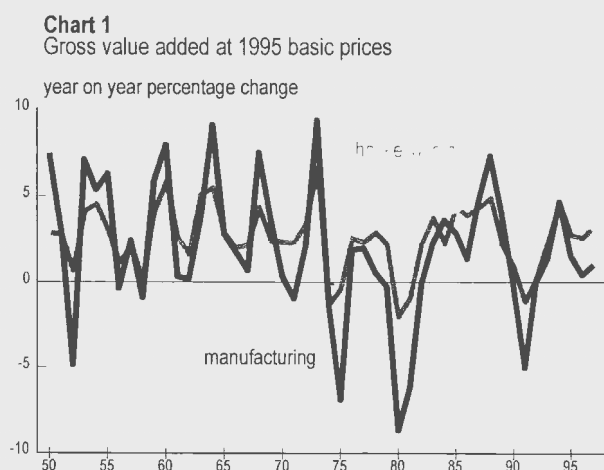
Productivity analysis has received a lot of attention recently. In addition to the ongoing work of the National Institute, a report by the McKinsey Institute and papers by the Institute for Fiscal Studies and Institute of Directors have been published in the last six months. Research suggests that the story told by the productivity data may be different if factors such as the age and quality of physical capital, and adjustments to employment to take account of age, labour force participation and unemployment, are also included in the calculations. Estimates of the difference these factors might make to international

comparisons of productivity vary considerably, but in most cases narrow the gap between the UK and its major trading partners in Europe and North America.

ONS productivity measures

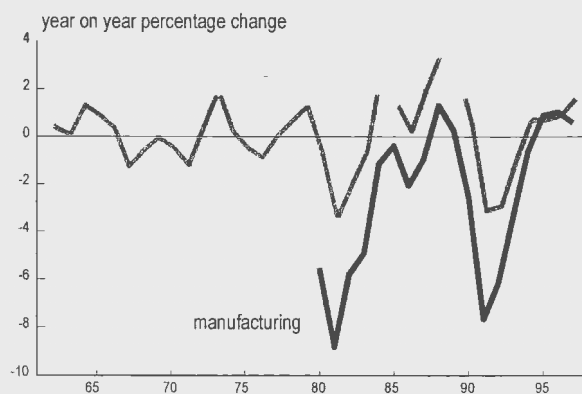
The ONS currently publishes two productivity series - output per filled job for the whole economy and for the manufacturing sector. The output numerator is a constant price index of gross value added, i.e. total output less the inputs used up in the production process. It is a Laspeyres index - a base-weighted index of volume - where the base year estimate of value added is extrapolated by estimates of the quarterly movements in constant price value added, based on survey data. (For a fuller description of the methodology, see National Accounts Concepts, Sources and Methods, Chapter 13.)

The ONS output series was recently revised to take account of both the new European System of Accounts 1995 and rebasing to 1995 as the base year. Chart 1 below shows the growth rates of the revised output measure since 1950 for the whole economy and manufacturing output, from which it can be seen that output growth for manufacturing has been more volatile than for the economy as a whole.



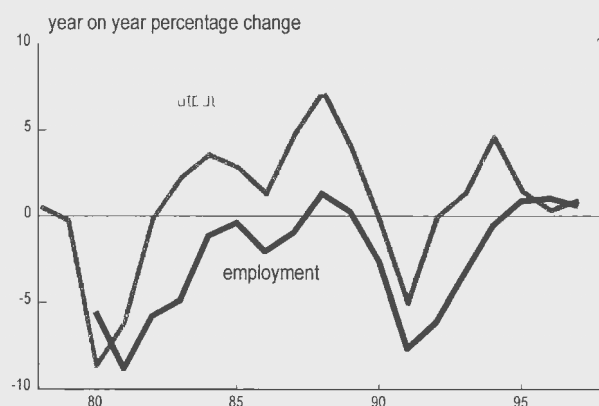
The employment denominator of the productivity measure is an index based on the workforce jobs series. The latter is based on an employer survey of employee jobs, plus self-employment jobs from the Labour Force survey, plus HM Forces and Government-supported trainees from administrative data. Employee jobs are benchmarked onto the Annual Employment Survey (AES), and last December the series was revised back to September 1995, as a result of revisions to the 1995 and 1996 AES and the inclusion of the AES 1997 results. The self-employed component of the workforce jobs series was also revised to reflect the second self-employment jobs which were previously only included from March 1994. Chart 2 below shows the growth rates

Chart 2
Employment



in the revised employment series for the whole economy since 1961 and for the manufacturing sector since 1980. Falls in employment in manufacturing mirror the falls in output, as shown in Chart 3 below. Employment growth in manufacturing has been generally slower than whole economy employment growth, apart from the period 1995 to 1996.

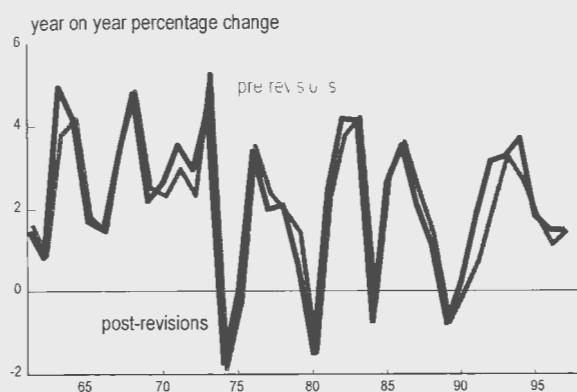
Chart 3
Manufacturing output and employment



Revisions to productivity data

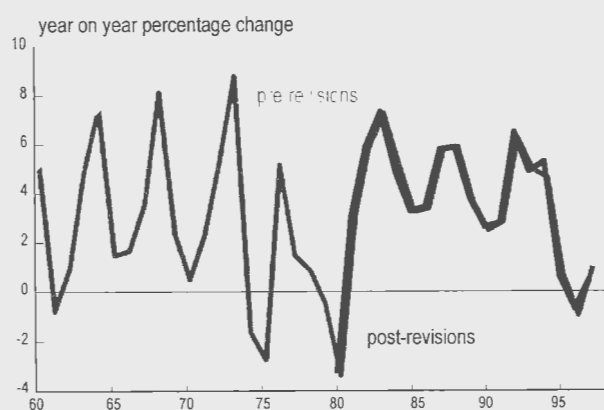
The revised index for the whole economy and for the manufacturing sector show only minor differences in growth rates after revision, as shown in charts three and four below. What the charts illustrate are the two phenomena known as the "productivity paradox" and the "productivity puzzle". The paradox is that productivity growth has been lower on average in the whole economy since the mid-1970s than during the 1960s and early 1970s (see Chart 4 below). This is in spite of huge investment in information technology, which it was expected would increase productivity growth rates. Attempts have been made to explain this phenomenon in terms of measurement error, due to the increased importance of services. It can be difficult to measure the volume of services, particularly when economic transactions involve 'intangible' goods and services. Or it may simply be that the productivity gains have yet to be realised.

Chart 4
Whole economy productivity



The productivity puzzle is the slowdown in manufacturing productivity growth since 1995, after averaging 4.5% between 1984 and 1994, as illustrated in Chart 5 below. This has been variously attributed to incorrect data, a more relaxed macro-economic environment after the UK's exit from the ERM, high profits, low investment and problems of labour quality. Other explanations include an unsustainable improvement to manufacturing productivity growth in the 1980s and a correction to the sharp fall in manufacturing employment in the recession of the early 1990s, with the latter possibly also being due to a period of contracting-out of services by manufacturing industries.

Chart 5
Manufacturing productivity



Commentators offer a variety of solutions, depending on their assessment of the problem.

Developments in 1999

The ONS has set up a steering group, chaired by the Chief Economist, to look at the issue of productivity measurement and co-ordinate a range of developments. The most immediate concerns centre on the current measure of productivity, which is calculated by dividing enterprise-based output measures by local unit-based employment measures. An enterprise group is a group of all legal units under common control, and an enterprise

is the smallest group of legal units within an enterprise group with a relative degree of autonomy. A local unit is an individual site or workplace (factory, shop etc.) at which activity takes place. Using a mixture of the two definitions is not ideal, as the local unit series is sensitive to the range of secondary activities carried out by enterprises. For example, the employees in an enterprise comprising three shops and one factory, each employing equal numbers, will all be classified to the sector relating to the majority of activity – retailing – on an enterprise basis. The local unit approach will allocate the employees working in the factory to the manufacturing sector.

Output is collected on an enterprise basis, as this relates to the recognised consolidation of accounting information. Work is currently in progress to produce enterprise-based estimates of employment, so as to generate enterprise-based productivity figures for the whole economy and the manufacturing sector. Furthermore, since 1998 the Annual Business Inquiry has collected output values and employment numbers from the same businesses using a single survey form, which will lead to greater coherence between output and employment.

The ONS is also developing productivity indicators reflecting hours worked rather than output per head. These will be more sensitive to changing employment patterns. An article in the May 1998 edition of Labour Market Trends highlighted some of the issues involved in the reconciliation of hours worked from employee and employer survey sources. These investigations will continue, with a view to introducing both whole economy and manufacturing productivity series based on enterprise-hours.

A further stage in the process is to develop improved measures of service sector output and deflation in order to generate an index of service sector output. This would enable the ONS to generate a productivity measure for the service sector, for which there is a growing demand.

The steering group will be producing a timetable and publishing the results of its findings over the course of the development programme.

Acknowledgements

The author would like to acknowledge the helpful comments received from Derek Bird, Sanjiv Mahajan, James Partington, Mike Pepper, Keith Perry and Amanda Rowlatt.

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