

# Economic trends

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# Introduction

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*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 25 March 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](mailto:uzair.rizki@ons.gov.uk)

Office for National Statistics

April 1999

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## Articles published in *Economic trends*

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### *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 February, May, August and November.

**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**

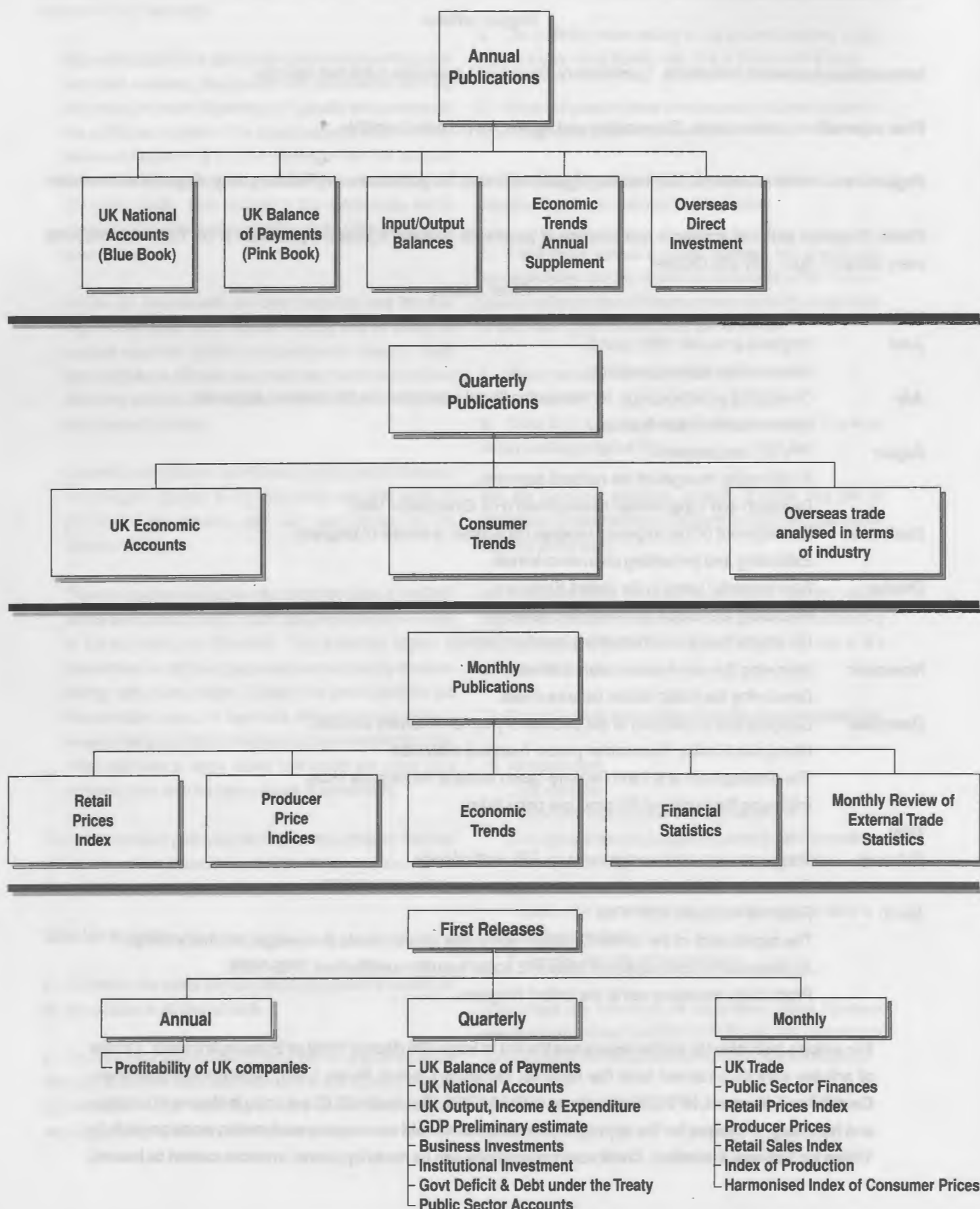
<i>June</i>	Regional accounts 1996: part 2. Rebasing the national accounts.
<i>July</i>	Developing a methodology for measuring illegal activity for the UK National Accounts. New format for public finances.
<i>August</i>	PPI/RPI comparisons. Forthcoming changes to the national accounts. Research and experimental 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.
<i>March</i>	Regional Accounts 1997: Part 1. The capital stock of the United Kingdom - some new developments in coverage and methodology. An international comparison of taxes and social security contributions 1986-1996. Productivity measurement in the United Kingdom.

**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



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

# In brief

## Articles

This month we feature one article.

Tim Harris of the ONS presents 'The effects of taxes and benefits on household income, 1997-98'; this examines how the distribution of income among households in the UK is modified by government benefits and taxation, which reduce the differences in incomes between households. The income share of the bottom fifth of households is increased from two per cent of original income to seven per cent of post-tax income by taxes and benefits, while the income share of the top fifth of households is reduced from nineteen to four times the average of the bottom fifth. The study also shows how the distribution of income has changed over time. Income inequality rose rapidly over the 1980s, declined a little in the first half of the 1990s, but there are signs that this may not be continuing (*page 27*).

As mentioned in 'In Brief' last month, the quarterly 'Regional economic indicators' article which normally appears in the April edition will now appear in May and at three-monthly intervals after that.

## Changes to Tables

### Table 4.6 - Average earnings

This table is now included again following the reinstatement of the Average Earnings Index (AEI) - see the Labour market statistics First Release for March (ONS (99)91).

### Table 4.7

Unit wage costs series are now included following the reinstatement of the AEI as mentioned above.

### Table 5.8

This now includes an unadjusted series for New registrations of cars, since the existing seasonally adjusted series ceases at December 1998. This is because of the change to new bi-annual registrations.

## Recent economic publications

### Gross Domestic Product: Output approach (Gross Value Added)

*GSS Methodological Series no.15, Gross Domestic Product: Output approach (Gross Value Added)*. Government Statistical Service, ISBN 1 85774 318 0, price £20.

This publication, prepared by Peter Sharp, ONS, provides a comprehensive list of the indicators, their sources and the deflators used in the estimation of UK Gross Domestic Product at 1995 basic prices, measured from the output

approach. The output measure is called *Gross Value Added*. The 1995 base weights are also shown along with the ONS Databank identifiers for all the published indices.

### **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 4*. The Stationery Office, ISBN 0 11 621073 7, price £45.

*UK Economic Accounts: 1998 quarter 4*. The Stationery Office, ISBN 0 11 621137 7, price £26.

### **Monthly**

*Consumer Price Indices (MM23), January 1999*. The Stationery Office, ISBN 0 11 537945 2, price £180 p.a. (formerly *Retail Prices Index*).

*Financial Statistics, March 1999*. The Stationery Office, ISBN 0 11 621142 3, price £23.50.

*Monthly Review of External Trade Statistics (MM24), December 1998*. The Stationery Office, ISBN 0 11 537945 2, 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 – APRIL 1999

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

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## Overview

Official figures continue to indicate a slowdown in activity. GDP growth into the fourth quarter of 1998 was revised down to 0.1 per cent, following new data showing falls in companies' profits. Retail sales data continues to show 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 and now exports to EU countries are beginning to slow. However, imports from all regions remain relatively robust. Labour force data largely supports a slowdown in the economy, with revised earnings data showing inflationary pressure subsiding since the middle of 1998. Producer and consumer prices remain subdued.

Indicators included	
Quarterly National Accounts – Q4	Money supply – February
Index of production – January	Consumer credit – January
CIPS reports on services and manufacturing – February	Public sector net borrowing – February
Retail sales – February	Labour market statistics – November - January
EC/GFK index of consumer confidence – March	Consumer prices – February
BRC retail sales monitor – February	Producer prices – February
UK external trade – January/February	

## GDP Activity

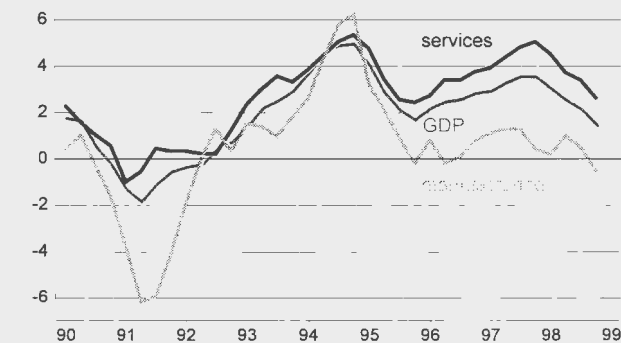
GDP growth at constant market prices into the fourth quarter was revised down to 0.1 per cent, the lowest quarterly growth since the second quarter of 1992 (chart 1). Annual growth fell to 1.1 per cent in quarter four from 1.8 per cent in quarter three. Overall GDP is now estimated to have grown by 2.1 per cent between 1998 and 1997, revised down from 2.4 per cent.

Chart 1

GDP

seasonally adjusted

year on year percentage change, quarters



## Output breakdown

Growth in the economy is now dominated by service sector activity. The latest estimate showed the service sector continued to grow by 0.5 per cent into the fourth quarter, lower than growth into the third quarter of 0.8 per cent. The corresponding annual rate fell to 2.7 per cent from 3.4 per cent (chart 1). Within the service sector, distribution, hotels and catering was estimated to have fallen 0.1 per cent on the quarter. On the other hand transport, storage and communications grew by 1.5 per cent and business services and finance grew by 0.8 per cent.

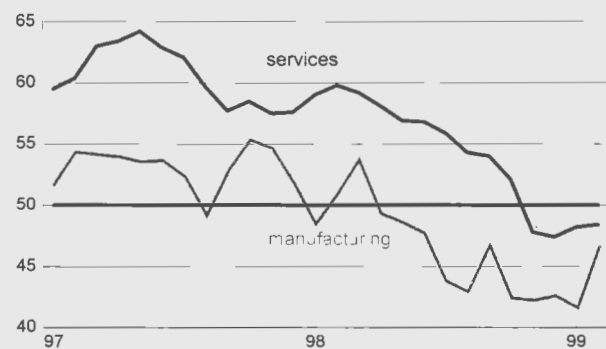
Underlying the fourth quarter estimate of GDP is a sharp downturn in manufacturing activity. The index of manufacturing output fell by 1.3 per cent in the fourth quarter compared with a decline of 0.1 per cent in the third quarter. Annual rates showed a fall of 0.5 per cent in quarter four compared with a rise of 0.5 per cent in quarter three.



The most recent Index of Production data showed manufacturing output falling by 1.0 per cent in the three months to January compared with the previous three months; a slight reduction in the quarterly rate.

Recent business optimism data from the Chartered Institute of Purchasing and Suppliers shows evidence of improvements in both manufacturing and the service industry; although both continue to show contractions in activity. The manufacturing index in February rose to 46.6 from 41.6, and the service index rose more modestly to 48.4 from 48.2 (chart 2).

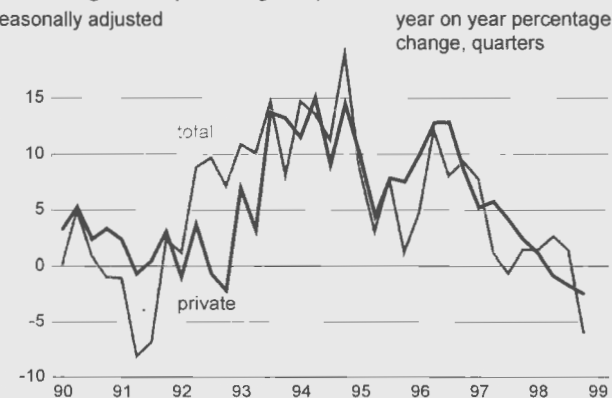
**Chart 2**  
Business optimism  
balance



**Profits**

Evidence of the reduction in demand at home and overseas is seen in the latest company profit data in the National Accounts, which showed a sharp reduction. The gross operating surplus of corporations fell by 5.5 per cent into the fourth quarter following a small reduction of 0.5 per cent in the third quarter (chart 3). About two thirds of this fall was due to financial companies profits. A fall of 0.2 per cent was also seen between 1997 and 1998; this was all due to falls in profits of non-financial companies.

**Chart 3**  
Profits - gross operating surplus  
seasonally adjusted



**Domestic demand**

ONS Retail sales data continues to indicate a reduction in demand. The volume of retail sales in the three months to February was 0.2 per cent higher than in the previous three months, down on the rise of 0.4 per cent in the three months to January. The corresponding annual rate in the three months to February fell to 1.0 per cent from 1.4 per cent in the three months to January.

On the other hand external surveys are showing a revival in consumer confidence and demand. The EC/GFK measure of consumer confidence for March 1999 rose to a positive balance of +1 from -1 in February (although one ought to bear in mind that responses to consumer confidence surveys may continue to be influenced by the sharp cutting of base rates). Similarly, the British Retail Consortium information shows sales growth over the three months to February rising by 1.2 per cent compared to 0.6 per cent in the three months to January. However, they continue to stress the tough climate for retailers.

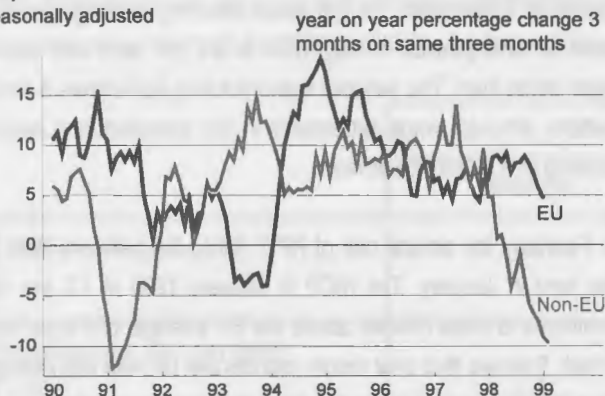
**External demand and supply**

The January 1999 trade data show the UK's deficit with the rest of the world widening sharply to £2.1 billion compared with the revised deficit of £1.4 billion in December. This decrease was due to worsening trade balances on both goods and services. However, a large proportion of the decline was due to erratically low exports figures in January. Advance data on trade to non-EU countries shows that these exports have largely bounced back in February.

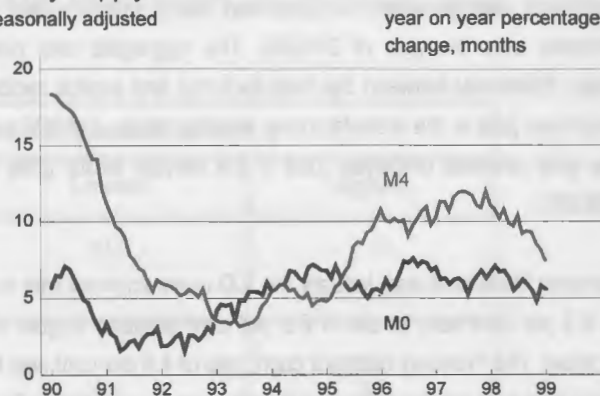
Data on export volumes, excluding erratics to non-EU countries, continues to show sharp falls on the previous year reflecting the deterioration in the global economy. The latest data shows the annual rate in the three months to February falling at 9.8 per cent, slightly below the equivalent January fall of 9.3 per cent (chart 4).

Export volumes to EU countries is now showing evidence of a reduction in overseas demand due to the slowdown in EU economies. The annual rate slowed to 4.8 per cent in the three months to January, compared with 5.7 per cent in the three months to December. In October the rate was 8.1 per cent (chart 4 also).

**Chart 4**  
Exports  
seasonally adjusted

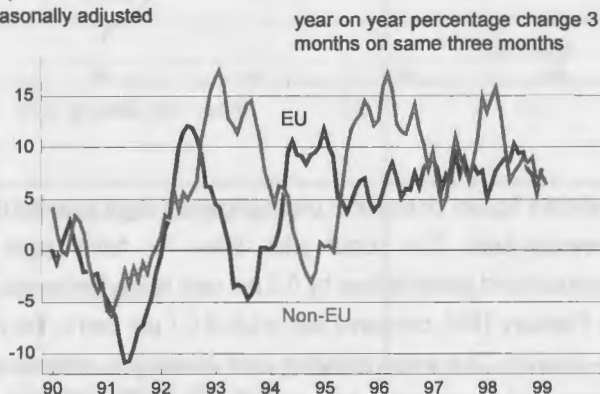


**Chart 6**  
Money supply  
seasonally adjusted



The latest data continues to show imports growing, with annual rates excluding oil and erratics at around 7 per cent (chart 5). A goods breakdown shows that over the latest three months increases were seen for capital and intermediate goods but falls for consumer goods (except for cars which showed a rise).

**Chart 5**  
Imports  
seasonally adjusted



This story is consistent with recent consumer credit data which showed annual growth in gross consumer credit continuing to slow to 10.5 per cent in the three months to January compared with 11.0 per cent than in the three months to December. These annual growth figures are now well below the recent peak annual growth of 20.8 per cent in the three months to March 1998.

Following repayment of £1.1 billion in February 1999 public sector net borrowing in the current financial year remained in surplus for the second consecutive month. Between April 1998 and February 1999, public sector net borrowing was a repayment of £8.7 billion compared with borrowing of £3.0 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 March 1999 Budget forecast was for a repayment of £2.8 billion for the financial year 1998-99 as a whole.

## Monetary indicators and government finances

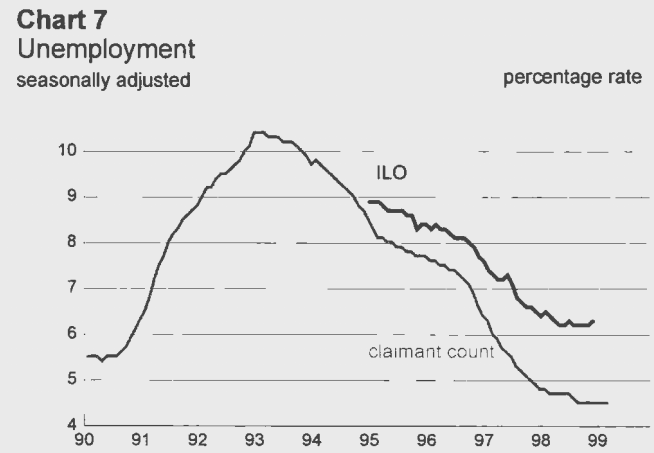
Chart 6 shows the slowdown in money supply data which reflects the slowdown in economic activity. February data shows M4 annual growth of 7.5 per cent below the revised January figure of 7.7 per cent. M0 growth also slowed in February to 5.2 per cent from 5.6 per cent in January.

## Labour Market

The labour force survey data continues to show employment rising; with the employment rate in the three months to January at 73.9 per cent, up from a rate of 73.7 per cent in the three months to October. The rise over the quarter came from decreases to inactivity and most of the jobs created were part time.

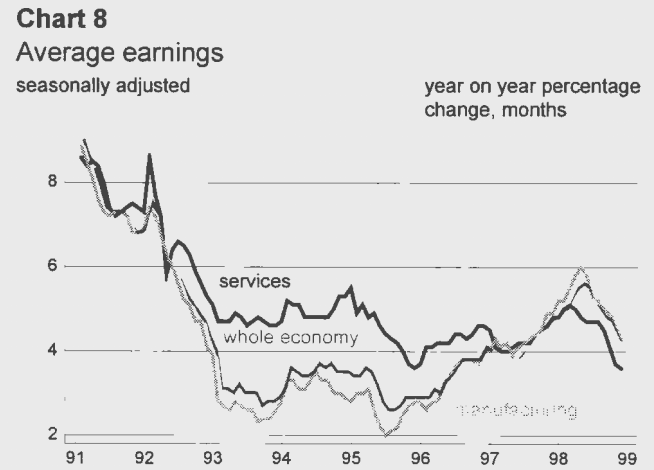
The latest employer survey data echoed the rise in employment seen in the labour force survey. It showed an increase of 69,000 workforce jobs between the third and fourth quarters and an increase over the year of 205,000. The aggregate total hides major differences between the manufacturing and service sectors; employee jobs in the manufacturing industry fell by 118,000 over the year whereas employee jobs in the service sector grew by 388,000.

Between November and January the ILO unemployment rate rose to 6.3 per cent from a rate of 6.2 per cent between August and October. The February claimant count rate of 4.6 per cent was the same rate as it has been in every month since August (chart 7).



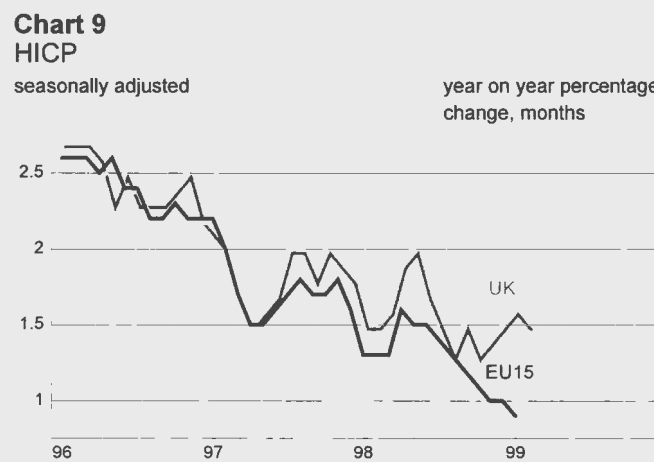
Prices

The revised average earnings index data was released in March 1999 and later updated with the release of labour market data.



It showed a clear reduction in earnings pressure since the middle of 1998 (chart 8) and the headline rate in January at annual growth of 4.3 per cent. For the whole economy earnings growth is seen to have peaked in May 1998 at 5.7 per cent and steadily fallen since then. The services manufacturing split shows a similar pattern, although wage settlements in the manufacturing industry running at a slightly lower rate.

In February the annual rate of RPIX fell to 2.4 per cent from 2.6 per cent in January. The HICP in January 1999 at 1.6 per cent continues to show inflation above the EU average of 0.9 per cent. Chart 9 shows that over recent months the UK rate has diverged from the EU average which has been falling quite quickly.



February figures for producer prices showed a slight increase over previous lows. The output price index for home sales of manufactured products rose by 0.2 per cent in the twelve months to February 1999, compared with a fall of 0.1 per cent in the year to January. The index excluding food beverages, tobacco and petroleum also rose to -0.5 per cent from -0.7 per cent. Input prices continue to fall although the headline rate of decline has slowed in recent months; excluding food, beverages, tobacco and petroleum the rate of decline has remained fairly steady at about 5 per cent.

# Forecasts for the UK Economy

## A comparison of independent forecasts, March 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	1.9
Inflation rate (Q4: per cent)			
- RPI	1.3	0.6	3.1
- RPI excl MIPs	2.2	1.7	3.1
Unemployment (Q4, mn)	1.54	1.20	1.80
Current Account (£ bn)	-5.8	-15.0	0.5
PSNB *(1999-00, £ bn)	3.5	-8.2	13.0

	Independent Forecasts for 2000		
	Average	Lowest	Highest
GDP growth (per cent)	1.8	0.2	2.8
Inflation rate (Q4: per cent)			
- RPI	2.1	1.0	3.4
- RPI excl MIPs	2.2	1.2	2.9
Unemployment (Q4, mn)	1.67	1.00	2.30
Current Account (£ bn)	-7.5	-17.0	-1.6
PSNB* (2000-01, £ bn)	7.8	-6.4	20.0

NOTE: "FORECASTS FOR THE UK ECONOMY" gives more detailed forecasts, covering 25 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 – April 1999

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## 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.

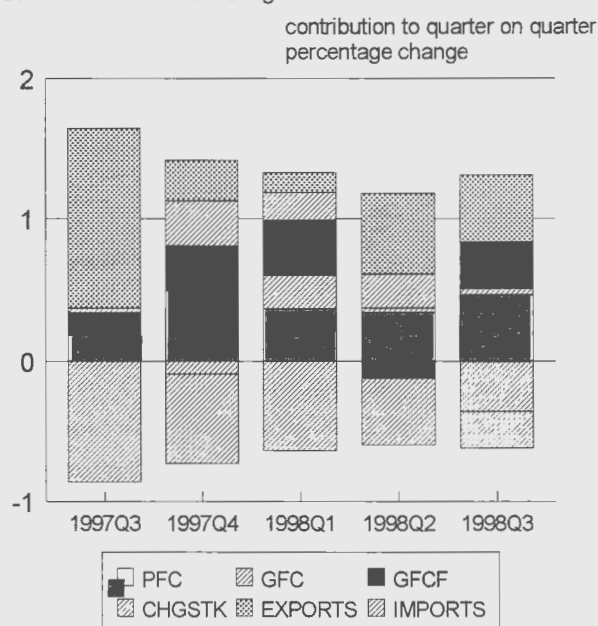
A fall of 0.7 per cent in industrial production in quarter four caused the year on year growth to fall from 3.1 per cent to 1.5 per cent between quarters three and four. Again, the slowdown may be connected with reassessment of stock levels, which may have been behind the falls reported in Germany and Italy.

Annual consumer price inflation fell by 0.1 percentage point to 1.2 per cent in the first month of 1999. 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 to 9.6 per cent in January 1999 after falling below 10.0 per cent in the fourth quarter of 1998 for the first time since 1992.

Chart 1

EU15 - contribution 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 quarterly 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.

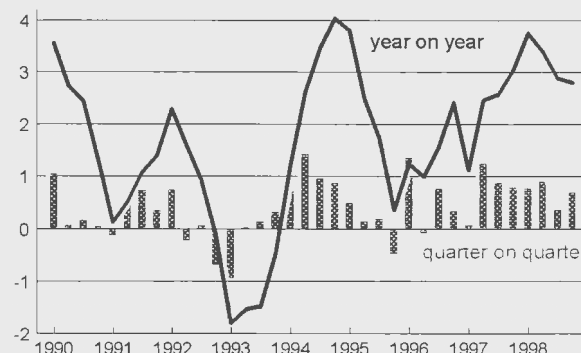
The existence of slack in the labour market and the emergence of year on year producer price falls since August 1998 have helped to drive consumer price inflation down to 0.4 per cent. A fall of 0.1 percentage point between December and January took the annual rate of inflation to its lowest level this decade - less than half that in the EU15.

## France

French GDP increased by 0.7 per cent between the third and fourth quarters of 1998, up from 0.4 per cent in the preceding quarter (Chart 2). Domestic demand eased during the latest quarter but remained buoyant, while net trade reduced GDP.

**Chart 2**  
**France - GDP**

seasonally adjusted



Domestic demand was supported in quarter four by a rebound stockbuilding and higher investment expenditure. Total consumer demand eased between the third and fourth quarters despite rapid growth in retail sales volumes. 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, which had held up well in 1998, slipped in quarter four as exports fell for the first time since quarter two 1996. The impact on France's trade surplus in quarter four, however, was small as imports also fell.

The weakness in external demand is echoed in the slowdown in industrial production. Following growth of 0.3 per cent in quarter three production was flat in quarter four, and the annual rate fell by 0.9 percentage points to 2.4 per cent between the latest 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 before picking up to 0.4 per cent in January 1999. 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. By January the rate had fallen to 11.6 per cent of the workforce.

## 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 fell for the third quarter in succession in quarter four 1998 and again in the first month of 1999. This downturn reflects weakness in both final demand and attempts by producers to 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.

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

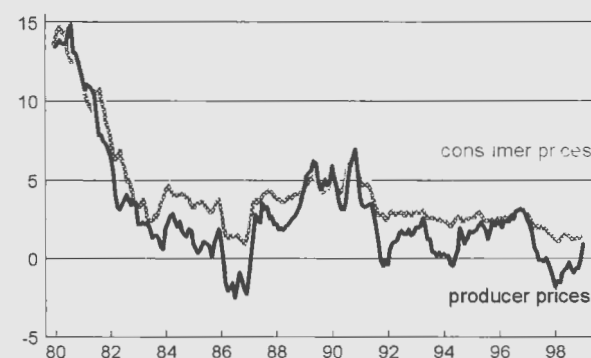
stock market has delivered capital gains for many consumers; and thirdly, increased activity in the housing market has provided support. Confidence among consumers, as measured by the University of Michigan, dipped slightly towards the end of the year but has stayed at levels consistent with rapid growth 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 purchases 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 of 1998, 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.

**Chart 3**  
USA - Prices

seasonally adjusted



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 final quarters of 1998, before edging up slightly in January 1999 to 1.6 per cent. A combination of producer price deflation and modest earnings growth have tempered upward price pressure created by strong growth in demand and tightness in the labour market. However, the increase in producer price in

January 1999, for the first time since May 1997, may herald an upturn in inflationary pressure (Chart 3).

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. 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.

Investment spending emerged as the major source of contractionary pressure in 1997, and this pattern continued into 1998 (Chart 4). 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.

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.

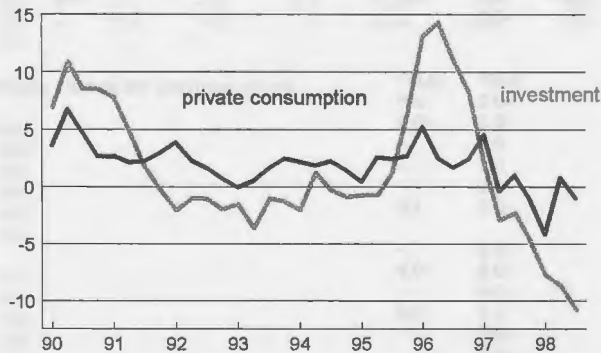
The trend in industrial production continues to signal falls in the latest data, although the rate of fall is less steep than in the latter half of 1998. In the year to January 1999 industrial production fell by 7.2 per cent. The impact on company profits and wages is illustrated by the record-breaking fall in manufacturing earnings in December – the month in which winter bonuses are paid.

Notes

The series presented here are taken from the OECD's Main Economic Indicators and are shown for each of the G7 (except the UK) economies and for the European Union (EU15) countries in aggregate. The definitions and methodologies used conform to SNA 68.

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

Chart 4  
Japan - private consumption and investment  
seasonally adjusted



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



## Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	Imports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl	Unempl
<b>Percentage change on a year earlier</b>															
	ILGB	HUDS	HUDT	HUDU	HUDV	HUDW	HUDX	ILGV	ILHP	HYAB	ILAI	ILAR	ILIJ	GADR	
1990	3.0	1.7	0.4	0.8	-0.1	1.7	1.6	2.0	1.1	5.7	2.5	6.6	1.6	8.1	
1991	1.2	1.4	0.4	0.2	-0.2	0.4	0.9	-0.2	1.8	5.2	2.2	7.0	0.1	8.4	
1992	1.0	0.9	0.4	-0.2	-0.1	0.9	0.9	-1.3	-	4.4	1.3	5.6	-1.7	9.1	
1993	-0.5	-	0.1	-1.4	-0.4	0.4	-0.8	-3.4	-1.1	3.6	1.4	4.4	-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	3.9	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	4.1	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	3.0	0.6	10.6	
1998	..	..	..	..	..	..	..	3.4	..	1.7	-0.3	..	..	9.9	
1996 Q1	1.7	1.4	0.3	0.1	0.1	1.3	1.6	-0.1	-	2.8	1.9	4.0	0.7	10.9	
Q2	1.6	1.0	0.4	0.4	-0.4	1.1	0.7	-0.2	0.6	2.6	0.6	4.8	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	2.1	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	1.9	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	2.3	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	1.5	-	0.8	0.8	3.4	3.2	5.1	3.7	2.1	1.3	3.0	0.8	10.4	
1998 Q1	3.5	1.6	0.2	1.3	0.7	3.2	3.5	5.0	3.5	1.8	0.8	3.0	1.2	10.2	
Q2	2.8	1.4	0.2	0.7	0.8	2.3	2.6	4.1	2.6	2.1	0.3	3.7	1.0	10.0	
Q3	2.7	1.7	0.2	0.9	0.4	1.5	2.0	3.1	2.9	1.7	-0.6	..	1.3	9.9	
Q4	..	..	..	..	..	..	..	1.5	..	1.4	-1.5	..	..	9.7	
1998 Jan	..	..	..	..	..	..	..	5.3	3.9	1.8	0.9	..	..	10.3	
Feb	..	..	..	..	..	..	..	5.1	2.9	1.8	0.8	..	..	10.2	
Mar	..	..	..	..	..	..	..	4.6	3.9	1.8	0.8	..	..	10.1	
Apr	..	..	..	..	..	..	..	3.8	1.9	2.1	0.5	..	..	10.1	
May	..	..	..	..	..	..	..	5.0	2.9	2.1	0.2	..	..	10.0	
Jun	..	..	..	..	..	..	..	3.5	2.9	2.0	-	..	..	9.9	
Jul	..	..	..	..	..	..	..	3.2	2.9	1.9	-0.2	..	..	9.9	
Aug	..	..	..	..	..	..	..	3.3	2.9	1.7	-0.7	..	..	9.9	
Sep	..	..	..	..	..	..	..	2.9	2.9	1.7	-0.9	..	..	9.8	
Oct	..	..	..	..	..	..	..	2.6	1.9	1.6	-1.3	..	..	9.8	
Nov	..	..	..	..	..	..	..	2.1	3.8	1.4	-1.5	..	..	9.7	
Dec	..	..	..	..	..	..	..	-0.2	..	1.3	-1.7	..	..	9.7	
1999 Jan	..	..	..	..	..	..	..	..	..	1.2	..	..	..	9.6	
<b>Percentage change on previous quarter</b>															
	ILGL	HUDY	HUDZ	HUEA	HUEB	HUEC	HUED	ILHF	ILHZ					ILIT	
1996 Q1	0.7	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	0.4	0.1	0.1	-0.2	0.8	0.5	0.6	-					0.6	
Q4	0.4	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	0.7	0.5	-0.1	0.3	0.3	0.3	0.6	0.9	0.4					0.1	
1998 Q1	0.7	0.4	0.2	0.4	0.2	0.1	0.6	0.6	1.5					-0.6	
Q2	0.6	0.3	-	-0.1	0.2	0.6	0.5	0.8	0.4					0.9	
Q3	0.7	0.5	-	0.3	-0.4	0.5	0.3	0.7	0.6					0.9	
Q4	..	..	..	..	..	..	..	-0.7	..					..	
<b>Percentage change on previous month</b>															
								ILKF	ILKP						
1998 Jan								-0.2	2.9						
Feb								0.3	-0.9						
Mar								0.4	-						
Apr								0.2	-						
May								0.5	-						
Jun								-0.3	1.9						
Jul								1.5	-						
Aug								-0.8	-0.9						
Sep								-0.8	-						
Oct								1.1	0.9						
Nov								-0.8	-						
Dec								-1.3	..						
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

## Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	Imports	less	IoP	Sales	CPI	PPI	Earnings	Empl <sup>1</sup>	Unempl
<b>Percentage change on a year earlier</b>															
	ILFY	HUBW	HUBX	HUBY	HUBZ	HUCA	HUCB	ILGS	ILHM	HVLL	ILAF	ILAO	ILIG	GABD	
1990	..	..	..	..	..	..	..	5.2	8.2	2.8	1.5	5.0	2.8	..	
1991	..	..	..	..	..	..	..	3.2	5.7	4.1	2.1	6.0	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	5.3	-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	5.3	-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	3.5	-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	4.0	-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	3.4	-0.4	8.9	
1997	2.3	0.3	-0.1	..	1.3	3.1	2.3	3.6	-0.7	1.8	0.8	1.1	-0.6	9.9	
1998	..	..	..	..	..	..	..	4.5	..	0.9	-0.2	1.5	..	9.4	
1996 Q1	0.4	1.2	0.7	-1.5	..	1.2	1.2	-0.9	-1.0	1.6	0.8	5.1	-0.7	8.7	
Q2	1.0	0.4	0.7	..	-0.5	0.6	0.1	-0.9	..	1.6	0.1	3.8	-0.3	8.8	
Q3	1.7	1.0	0.7	0.1	-1.1	1.6	0.6	1.0	1.0	1.5	-0.2	2.7	-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	2.2	-0.6	9.2	
1997 Q1	2.5	0.2	0.2	0.9	1.0	2.2	2.0	2.7	-1.0	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	3.3	..	1.5	0.7	0.4	-0.5	9.9	
Q3	2.4	-0.2	-0.3	-0.2	1.9	3.9	2.7	3.9	-2.0	2.0	1.1	1.4	-0.6	10.1	
Q4	2.3	0.6	-0.6	-0.2	1.7	3.1	2.3	4.6	..	1.9	1.0	1.0	-0.5	10.1	
1998 Q1	3.4	1.1	..	0.9	0.7	2.6	1.9	6.3	2.6	1.1	0.6	0.4	-0.3	9.8	
Q2	2.4	0.2	-0.2	-0.3	2.3	2.5	2.1	5.0	-2.3	1.3	0.2	2.1	-0.2	9.5	
Q3	2.7	1.2	..	..	1.5	0.9	1.0	5.1	1.7	0.8	-0.4	1.2	0.4	9.3	
Q4	..	..	..	..	..	..	..	1.8	..	0.6	-1.0	2.2	..	9.1	
1998 Jan	..	..	..	..	..	..	..	7.0	-1.0	1.3	0.6	..	..	9.8	
Feb	..	..	..	..	..	..	..	5.8	..	1.1	0.6	..	..	9.8	
Mar	..	..	..	..	..	..	..	6.2	9.4	1.1	0.6	..	..	9.8	
Apr	..	..	..	..	..	..	..	4.8	-4.8	1.4	0.4	..	..	9.6	
May	..	..	..	..	..	..	..	6.9	1.0	1.3	0.3	..	..	9.5	
Jun	..	..	..	..	..	..	..	3.2	-2.9	1.2	..	..	..	9.4	
Jul	..	..	..	..	..	..	..	4.2	2.0	0.9	..	..	..	9.3	
Aug	..	..	..	..	..	..	..	7.1	2.1	0.8	-0.5	..	..	9.3	
Sep	..	..	..	..	..	..	..	4.2	1.0	0.8	-0.6	..	..	9.2	
Oct	..	..	..	..	..	..	..	3.6	-2.0	0.7	-0.8	..	..	9.1	
Nov	..	..	..	..	..	..	..	1.2	5.1	0.7	-1.0	..	..	9.1	
Dec	..	..	..	..	..	..	..	0.4	..	0.5	-1.2	..	..	9.2	
1999 Jan	..	..	..	..	..	..	..	..	..	0.4	..	..	..	9.1	
Feb	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
<b>Percentage change on previous quarter</b>															
	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	0.6	0.7				-1.9		
Q2	1.0	0.6	0.1	0.2	-0.7	0.9	0.2	1.4	2.6				0.9		
Q3	0.6	-0.5	-0.2	0.1	0.5	1.7	0.9	1.6	-3.0				0.4		
Q4	0.3	0.4	-0.6	..	0.9	-0.1	0.3	0.9	-0.3				0.1		
1998 Q1	1.4	0.5	0.7	0.6	..	0.1	0.4	2.2	3.4				-1.7		
Q2	..	-0.2	-0.1	-1.0	1.0	0.8	0.4	0.2	-2.3				1.0		
Q3	0.9	0.5	..	0.4	-0.4	0.1	-0.2	1.7	1.0				1.0		
Q4	..	..	..	..	..	..	..	-2.3	..				..		
<b>Percentage change on previous month</b>															
								ILKC	ILKM						
1998 Jan								1.2	4.2						
Feb								-0.1	1.0						
Mar								1.4	5.0						
Apr								-1.1	-4.8						
May								1.1	-2.0						
Jun								-1.0	1.0						
Jul								3.4	3.0						
Aug								-0.6	-2.9						
Sep								-2.8	..						
Oct								1.1	..						
Nov								-2.3	4.0						
Dec								0.2	..						
1999 Jan								..	..						

GDP = Gross Domestic Product at constant market prices  
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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 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

# 3 France

## Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI <sup>1</sup>	Earnings	Empl <sup>2</sup>	Unempl
<b>Percentage change on a year earlier</b>														
	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	1.5	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	0.1	3.8	2.4	3.9	1.1	1.1	-0.5	2.8	0.6	12.4
1998	3.2	2.2	0.2	0.8	0.3	2.1	2.5	4.5	2.7	0.7	-0.9	2.3	..	11.9
1996 Q1	1.2	2.1	0.4	-0.3	-1.0	0.8	0.7	-0.9	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	-0.4	-0.8	2.4	-2.7	2.3	0.2	12.4
Q3	1.6	1.1	0.6	-0.1	-1.5	2.1	0.6	0.2	-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	2.0	1.1	1.7	-3.1	2.6	-	12.4
1997 Q1	1.1	-0.3	0.3	-0.1	0.1	2.0	0.9	0.5	-1.4	1.5	-2.3	3.0	-	12.4
Q2	2.5	0.4	0.3	-	-0.1	4.5	2.6	3.6	0.8	0.9	-0.9	2.7	0.5	12.4
Q3	2.6	0.5	0.2	0.2	0.3	4.6	3.2	5.1	1.7	1.3	0.3	2.8	0.8	12.4
Q4	3.0	1.5	0.2	0.2	-0.1	4.1	2.8	6.2	3.0	1.1	0.7	2.8	0.9	12.3
1998 Q1	3.8	2.0	0.2	0.8	0.7	3.8	3.6	7.2	2.3	0.6	0.6	2.6	1.3	12.1
Q2	3.4	2.6	0.2	0.7	0.6	1.9	2.6	5.3	3.4	1.0	-0.3	2.4	1.3	11.9
Q3	2.9	2.3	0.2	0.8	-	1.8	2.2	3.3	2.3	0.6	-1.3	2.0	1.5	11.9
Q4	2.8	2.1	0.2	1.0	0.2	0.9	1.5	2.4	2.9	0.3	-2.3	2.0	..	11.8
1998 Jan	..	..	..	..	..	..	..	6.6	5.8	0.5	0.6	..	..	12.1
Feb	..	..	..	..	..	..	..	6.3	2.0	0.7	0.5	..	..	12.1
Mar	..	..	..	..	..	..	..	8.5	-0.8	0.8	0.6	..	..	12.0
Apr	..	..	..	..	..	..	..	4.1	4.0	1.0	-	..	..	11.9
May	..	..	..	..	..	..	..	5.9	1.2	1.0	-0.3	..	..	11.9
Jun	..	..	..	..	..	..	..	6.0	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	..	..	..	..	..	..	..	3.4	1.7	0.5	-1.6	..	..	11.9
Oct	..	..	..	..	..	..	..	2.0	2.9	0.4	-2.1	..	..	11.8
Nov	..	..	..	..	..	..	..	4.4	4.4	0.3	-2.3	..	..	11.8
Dec	..	..	..	..	..	..	..	0.9	1.5	0.3	-2.5	..	..	11.7
1999 Jan	..	..	..	..	..	..	..	..	-0.8	0.4	-2.7	..	..	11.6
<b>Percentage change on previous quarter</b>														
	ILGJ	HUBQ	HUBR	HUBS	HUBT	HUBU	HUBV	ILHD	ILHX				ILIR	
1996 Q1	1.4	1.5	0.2	-0.2	-0.7	1.5	0.9	1.4	2.5				0.1	
Q2	-0.1	-0.6	0.1	0.2	0.4	-0.4	-0.3	-	-1.7				-0.2	
Q3	0.8	0.5	0.1	-	-0.4	1.0	0.5	0.8	0.1				-0.1	
Q4	0.3	-0.3	0.1	-	0.5	0.8	0.7	-0.2	0.2				0.2	
1997 Q1	0.1	0.1	-	-0.3	-0.4	0.6	-0.1	-0.1	-				0.1	
Q2	1.2	0.1	-	0.3	0.2	2.0	1.4	3.1	0.5				0.3	
Q3	0.9	0.7	-	0.1	0.1	1.1	1.2	2.2	1.0				0.2	
Q4	0.8	0.6	0.1	0.1	-	0.3	0.3	0.9	1.5				0.3	
1998 Q1	0.8	0.5	0.1	0.3	0.4	0.3	0.8	0.8	-0.7				0.5	
Q2	0.9	0.7	0.1	0.3	0.1	0.2	0.4	1.3	1.6				0.3	
Q3	0.4	0.4	0.1	0.2	-0.5	1.0	0.7	0.3	-0.1				0.4	
Q4	0.7	0.4	-	0.3	0.2	-0.6	-0.3	-	2.1				..	
<b>Percentage change on previous month</b>														
								ILKD	ILKN					
1998 Jan								-0.4	2.8					
Feb								0.2	-4.8					
Mar								1.8	-2.7					
Apr								-0.5	5.9					
May								0.6	-1.6					
Jun								0.4	1.2					
Jul								-0.1	1.1					
Aug								-	-1.6					
Sep								-0.2	-0.9					
Oct								0.6	4.8					
Nov								0.1	-2.1					
Dec								-1.6	-					
1999 Jan								..	0.5					

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, 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
<b>Percentage change on a year earlier</b>														
	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	0.6	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	-1.2	-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	2.2	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	2.9	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	0.7	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	..	..	..	..	..	..	..	0.8	..	1.7	0.1	..	..	..
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	12.0
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	..	..	..	..	..	..	..	-1.6	..	1.5	-1.1	..	..	..
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	..	..	..	..	..	..	..	-0.3	..	1.5	-1.2	..	..	..
Dec	..	..	..	..	..	..	..	-6.3	..	1.5	-1.3	..	..	..
1999 Jan	..	..	..	..	..	..	..	..	..	..	-1.7	..	..	..
<b>Percentage change on previous quarter</b>														
	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	..	..	..	..	..	..	..	-1.2	..				..	
<b>Percentage change on previous month</b>														
								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								-1.4	..					
Dec								-6.1	..					
1999 Jan								..	..					

GDP = Gross Domestic Product at constant market prices  
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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  
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 not seasonally adjusted

Source: OECD

## Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl <sup>1</sup>	Unempl
<b>Percentage change on a year earlier</b>														
	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	4.3	3.5	0.3	2.0	-0.2	0.2	1.5	2.0	..	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	-0.3	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	..	..	..	..	..	..	..	2.4	7.4	1.5	-0.6	1.6	1.4	4.5
Nov	..	..	..	..	..	..	..	1.8	7.7	1.5	-0.6	2.4	1.2	4.4
Dec	..	..	..	..	..	..	..	1.7	..	1.5	-0.1	1.6	1.5	4.3
1999 Jan	..	..	..	..	..	..	..	1.7	..	1.6	0.9	1.6	1.9	4.3
<b>Percentage change on previous quarter</b>														
	ILGM	HUDM	HUDN	HUDO	HUDP	HUDQ	HUDR	ILHG	ILIA				ILIU	
1996 Q1	0.8	0.6	0.1	0.5	-0.1	0.1	0.4	0.7	1.4				-1.2	
Q2	1.5	0.8	0.3	0.5	0.2	0.2	0.4	2.3	1.5				2.0	
Q3	0.5	0.3	-	0.3	0.3	0.1	0.4	1.4	0.4				1.2	
Q4	1.0	0.5	-	0.2	-0.2	0.9	0.2	0.8	1.1				0.1	
1997 Q1	1.0	0.7	-	0.3	0.3	0.3	0.6	1.6	1.8				-0.8	
Q2	1.0	0.3	0.1	0.4	0.3	0.5	0.6	1.4	-0.2				2.0	
Q3	1.0	1.0	-	0.5	-0.4	0.3	0.5	1.8	2.1				0.9	
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				-1.0	
Q2	0.5	1.0	0.2	0.5	-0.7	-0.3	0.4	0.7	2.2				1.6	
Q3	0.9	0.7	-	0.2	0.2	-0.1	0.1	0.2	0.1				0.6	
Q4	1.5	0.8	0.2	0.6	-0.1	0.6	0.5	0.6	..				0.2	
<b>Percentage change on previous month</b>														
								ILKG	ILKQ					ILLA
1998 Jan								-	1.3					-1.5
Feb								-0.1	1.1					0.5
Mar								0.4	0.5					0.6
Apr								0.5	0.6					0.5
May								0.5	1.2					0.5
Jun								-1.0	0.3					0.5
Jul								-0.1	-0.7					0.4
Aug								1.4	0.1					-0.4
Sep								-0.4	0.6					-0.3
Oct								0.4	1.2					0.5
Nov								-0.1	0.7					0.1
Dec								0.2	..					0.1
1999 Jan								-0.1	..					-1.0

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

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

1 Excludes members of armed forces

## Contribution to change in GDP

	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP <sup>1</sup>	Sales	CPI	PPI	Earnings <sup>2</sup>	Empl	Unempl
<b>Percentage change on a year earlier</b>														
	ILGD	HUCU	HUCV	HUCW	HUCX	HUCY	HUCZ	ILGX	ILHR	ILAB	ILAK	ILAT	ILIL	GADP
1990	5.2	2.6	0.1	2.6	-0.2	0.7	0.8	4.7	5.2	3.1	1.6	5.1	1.9	2.1
1991	3.8	1.5	0.2	1.1	0.3	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	-	-5.5	-0.2	1.6	-0.9	1.3	1.1	2.1
1993	0.3	0.7	0.2	-0.6	-0.2	0.2	-	-4.7	-2.9	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	0.7	1.4	3.2	0.1	-0.1	-0.7	3.0	0.1	3.1
1996	5.2	1.7	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	-2.0	1.8	0.7	2.9	1.1	3.4
1998	..	..	..	..	..	..	..	-6.5	-5.2	0.6	-1.4	-0.8	-0.7	4.1
1996 Q1	6.4	3.1	0.2	3.8	0.5	0.5	1.7	1.7	1.3	-0.4	-1.7	1.7	0.1	3.3
Q2	4.9	1.5	0.2	4.2	0.5	0.2	1.6	0.4	1.0	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	-0.4	0.2	-1.7	4.9	0.7	3.3
Q4	5.1	1.4	0.3	2.5	0.3	1.5	0.9	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	5.4	0.6	-0.9	5.1	1.6	3.3
Q2	0.9	-0.2	0.2	-1.0	-	2.0	0.1	5.8	-4.8	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	-3.7	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	-5.0	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	-9.9	2.0	0.4	-0.2	-	3.6
Q2	-1.8	0.5	-	-2.7	-0.1	-0.5	-1.0	-7.9	-2.1	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	-3.2	-0.2	-1.9	-1.7	-0.9	4.2
Q4	..	..	..	..	..	..	..	-6.3	-4.9	0.5	-2.0	-1.0	-1.0	4.3
1998 Jan	..	..	..	..	..	..	..	-2.3	-5.0	1.8	0.9	-0.5	0.6	3.5
Feb	..	..	..	..	..	..	..	-3.8	-8.7	1.9	0.4	0.2	-0.1	3.6
Mar	..	..	..	..	..	..	..	-4.8	-15.5	2.2	0.1	-0.2	-0.3	3.8
Apr	..	..	..	..	..	..	..	-6.1	-1.1	0.5	-2.0	-0.3	-0.7	4.1
May	..	..	..	..	..	..	..	-10.5	-2.1	0.5	-1.9	-0.1	-0.5	4.3
Jun	..	..	..	..	..	..	..	-7.2	-3.2	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	-3.2	-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	..	..	..	..	..	..	..	-6.1	-5.3	0.6	-2.0	-5.4	-1.0	4.3
1999 Jan	..	..	..	..	..	..	..	-7.2	-5.3	0.3	-2.2	-3.1	-1.2	4.4
<b>Percentage change on previous quarter</b>														
	ILGN	HUDA	HUDB	HUDC	HUDD	HUDE	HUDF	ILHH	ILIB				ILIV	
1996 Q1	2.9	0.9	-	1.7	0.4	0.3	0.3	0.6	0.7				-1.6	
Q2	0.2	-0.2	-	0.8	-0.1	-	0.3	-0.7	-0.3				3.1	
Q3	0.3	0.1	-	-0.3	-	0.6	-	1.8	-0.4				0.5	
Q4	1.5	0.7	0.3	0.3	-	0.6	0.2	2.2	1.0				-1.0	
1997 Q1	1.6	2.1	-0.2	-0.2	-0.2	0.3	0.1	1.9	5.0				-0.9	
Q2	-2.5	-3.0	0.2	-0.7	0.3	0.5	-0.2	-0.2	-9.9				2.9	
Q3	1.0	0.9	0.1	-0.1	0.1	-	-0.1	-	0.7				-0.3	
Q4	-0.9	-0.5	-0.2	-0.5	-0.1	0.2	-0.2	-2.2	-0.4				-1.0	
1998 Q1	-1.2	0.2	0.1	-1.1	-0.1	-0.4	-0.1	-1.2	-0.3				-1.5	
Q2	-0.7	-0.1	-	-1.0	-0.1	-0.3	-0.7	-4.7	-2.1				2.1	
Q3	-0.7	-0.2	0.1	-0.8	-0.1	0.2	-	-	-0.3				-0.5	
Q4	..	..	..	..	..	..	..	-0.5	-2.2				-1.0	
<b>Percentage change on previous month</b>														
								ILKH	ILKR				ILLB	
1998 Jan								2.2	1.1				-0.8	
Feb								-3.6	-1.1				-0.7	
Mar								-2.2	-1.1				0.9	
Apr								-1.4	-1.1				1.0	
May								-1.8	-				1.1	
Jun								1.7	-				0.1	
Jul								-0.8	-				-0.5	
Aug								-1.2	-				-0.5	
Sep								3.2	-1.1				-0.3	
Oct								-1.1	-1.1				-	
Nov								-2.1	-				-0.7	
Dec								1.1	-1.1				-0.6	
1999 Jan								1.1	1.1				-1.0	

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

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 goods<sup>1</sup>

	Export of manufactures			Import of manufactures			Export of goods			Import of goods			Total trade	
	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	manufactures	goods
<b>Percentage change on a year earlier</b>														
	ILIZ	ILJA	ILJB	ILJC	ILJD	ILJE	ILJF	ILJG	ILJH	ILJI	ILJJ	ILJK	ILJL	ILJM
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	..	..	..	..	..	..	..	..	..	..	..
<b>Percentage change on previous quarter</b>														
	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	..	..	..	..	..	..	..	..	..	..	..

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

Source: OECD

# Final Expenditure Prices Index (Experimental) - February 1999

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*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.*

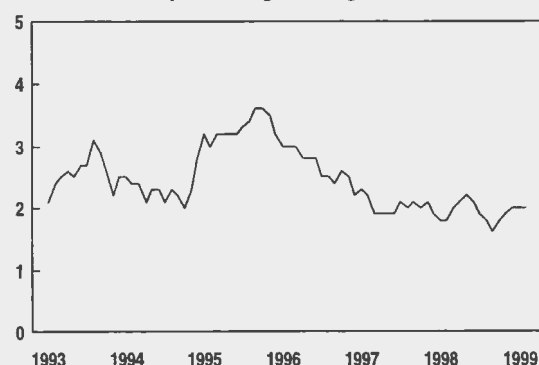
## Re-instatement of the Average Earnings Index

1. This has enabled both the Index of Government Prices and the overall FEPI to be brought up to date. The last FEPI inflation rate to be published (for September 98) was 1.6 per cent (revised). Calculations now reveal that it rose to 1.8 per cent in October, 1.9 per cent in November and then remained stable at 2.0 per cent from December 98 to February 99. Underpinning this recent stability has been a slight decline in consumer price inflation offset by a slight rise in investment price inflation and a more substantial rise in the level of inflation affecting government expenditure on pay and procurement.

## Annual revision of the weights

2. As is customary at this time of year, the FEPI weights have been revised in line with the most recent annual national accounts - namely those for 1997 that were published in last September's Blue Book. Thus the structure of the FEPI - and its weights - are, with effect from February 1999, consistent with the European System of Accounts (ESA95).

**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	Sep	120.1	1.9	112.5	1.0	116.9r	1.7r	117.8r	1.6r
	Oct	120.1	1.8	112.6	1.3	117.5	2.1	118.0	1.8
	Nov	120.3	2.0	112.7	1.4	118.0	2.1	118.2	1.9
	Dec	120.6	2.1	112.6r	1.4r	118.3	2.3	118.4	2.0
1999	Jan	120.0	2.0	113.0r	1.5r	119.0	2.4	118.3	2.0
	Feb	120.4	1.8	113.0	1.5	119.1	2.8	118.6	2.0

## The Index of Consumer Prices (ICP)

Consumer price inflation, as measured by the ICP, fell from 2.0 per cent in January to 1.8 per cent in February.

Upward pressure came from:

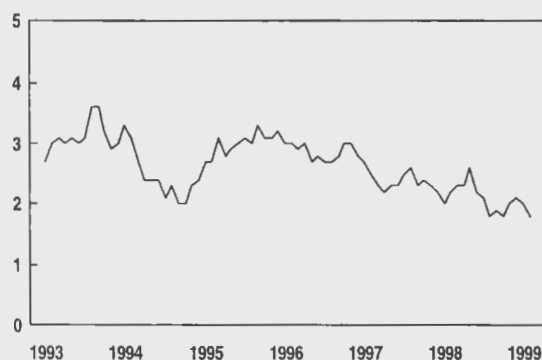
- Food, whose 12-month rate rose from 3.0 per cent to 3.3 per cent, as prices for seasonal foods increased, especially fresh fish and potatoes.

Downward pressure came from:

- Alcoholic drink, whose 12-month rate fell from 3.6 per cent to 3.0 per cent, where prices for off-sales rose by less than last year.
- Fuel and power, whose 12-month rate fell from -1.1 per cent to -1.5 per cent.
- Other goods and services, whose 12-month rate fell from 4.1 per cent to 3.6 per cent, as last year's recoveries from special offers were not repeated.



### The ICP annual percentage change



### The Index of Investment Prices (IIP)

Investment price inflation, as measured by the IIP, was 1.5 per cent over the 12 months to February, the same as in January.

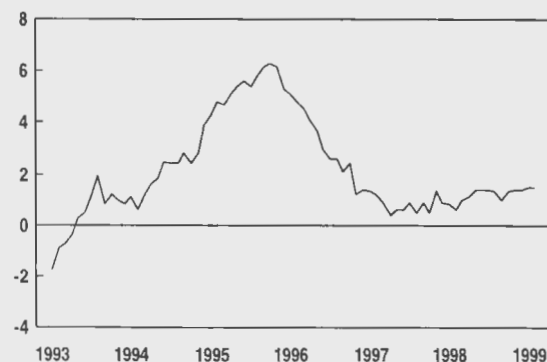
Downward pressure on the 12-month rate came mainly from:

- New dwellings, whose 12-month rate fell from a revised 7.9 per cent in January to 7.3 per cent in February.
- Transfer costs of land and buildings, where the 12-month rate fell from 10.2 per cent in January to 9.6 per cent in February.

Upward pressure came from:

- Plant and machinery, where the 12-month rate rose from -5.1 per cent in January to -4.8 per cent in February.
- Vehicles, where the 12-month rate rose from 3.1 per cent in January to 3.6 per cent in February.

### The IIP annual percentage change

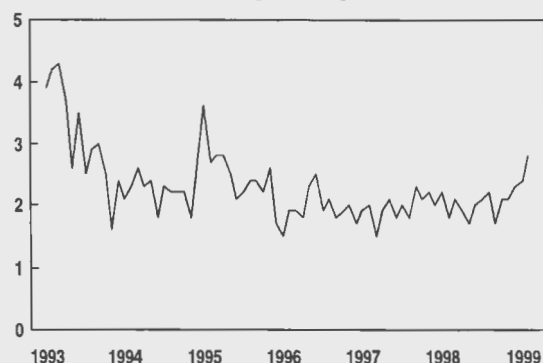


### The Index of Government Prices (IGP)

The IGP inflation rate rose from 2.4 per cent in January to 2.8 per cent in February. The most significant contribution to this was a rise from 2.5 per cent to 3.2

per cent in the component index covering Central Government expenditure.

### The IGP annual percentage change



### Comparison between the FEPI and other inflation measures

Table B

Measures of Inflation (annual percentage changes)

		FEPI	RPIX	HICP	PPI
1998	Sep	1.6	2.5	1.5	0.3
	Oct	1.8	2.5	1.3	0.1
	Nov	1.9	2.5	1.4	0.1
	Dec	2.0	2.6	1.5	-0.1
1999	Jan	2.0	2.6	1.6	-0.1
	Feb	2.0	2.4	1.5	0.2

### 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 IGP	Final Expenditure Prices Index FEPI	Annual percentage changes			
					ICP	IIP	IGP	FEPI
January 1992=100								
Weights								
1997	605	165	230	1000				
1998	605	169	226	1000				
1999	622	173	205	1000				
	CUSE	CUSK	CUSO	CUSP	CGAZ	CGBF	CGBJ	CGBK
1997 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	116.9r	117.8r	1.9	1.0	1.7r	1.6r
Oct	120.1	112.6	117.5	118.0	1.8	1.3	2.1	1.8
Nov	120.3	112.7	118.0	118.2	2.0	1.4	2.1	1.9
Dec	120.6	112.6r	118.3	118.4	2.1	1.4r	2.3	2.0
1999 Jan	120.0	113.0r	119.0	118.3	2.0	1.5r	2.4	2.0
Feb	120.4	113.0	119.1	118.6	1.8	1.5	2.8	2.0

The symbol r denotes revisions to previous months' data

# 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
1999	119	66	27	70	85	34	75	192	114	218	1000
	CURU	CURV	CURW	CURX	CURY	CURZ	CUSA	CUSB	CUSC	CUSD	CUSE
1997 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
Feb	115.4	126.8	172.1	100.0	131.5	97.2	112.8	121.2	110.6	131.0	120.4
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 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
Feb	3.3	3.0	7.9	-2.0	3.2	-1.5	1.2	0.3	0.1	3.6	1.8

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						
<b>Weights</b>						
1997	390	103	267	33	207	1000
1998	387	103	277	37	196	1000
1999	392	110	266	42	190	1000
	CUSG	CUSH	CUSF	CUSI	CUSJ	CUSK
1997 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	101.5	121.2	116.1	165.1	119.5	112.7
Sep	100.5	120.9r	116.5	165.9	120.0	112.5
Oct	100.1	121.3r	117.1	166.1r	120.2r	112.6
Nov	100.1	122.4r	117.6	165.6r	119.7	112.7
Dec	99.7	123.0r	118.2	164.8r	119.1r	112.6r
1999 Jan	100.2	122.8	118.6	167.2r	119.3r	113.0r
Feb	100.0	123.1	118.8	168.3	119.3	113.0
<b>Annual Percentage Changes</b>						
	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 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	-5.3	2.4	4.5	8.7	8.1	1.3
Sep	-6.2	1.9	4.5	8.1	8.5	1.0
Oct	-6.1	2.4	4.6	9.1r	8.9r	1.3
Nov	-5.5	3.6	4.6	8.2r	8.3	1.4
Dec	-5.8	3.8r	4.8	8.3r	7.8r	1.4r
1999 Jan	-5.1	3.1	4.7	10.2r	7.9r	1.5r
Feb	-4.8	3.6	4.4	9.6	7.3	1.5

The symbol r denotes revisions to previous months' data

# 4 FEPI - Index of Government Prices (Experimental)

					Annual percentage changes			
	Local Government Total	Central Government Total	Education Grants	Index of Government Prices IGP	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				
1999	350	567	83	1000				
	CUSL	CUSM	CUSN	CUSO	CGBG	CGBH	CGBI	CGBJ
1997 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	119.6r	114.9r	121.1	116.9r	2.0r	1.5r	2.1	1.7r
Oct	120.2	115.5	121.1	117.5	2.3	1.9	2.1	2.1
Nov	121.1	115.9	121.2	118.0	2.3	2.0	2.2	2.1
Dec	120.5	116.7	121.2	118.3	2.3	2.5	2.1	2.3
1999 Jan	121.0	117.5	122.0	119.0	2.3	2.5	1.8	2.4
Feb	120.9	117.7	122.0	119.1	2.3	3.2	1.8	2.8

The symbol r denotes revisions to previous months' data

# The effects of taxes and benefits on household income, 1997-98



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## Main findings

- The income share of the bottom fifth of households is increased from 2 per cent of original income to 7 per cent of post-tax income by taxes and benefits.
- The average original income of the top fifth of households is 19 times the average of the bottom fifth. Taxes and benefits reduce this inequality so that the corresponding ratio for final income is four to one.
- Income inequality rose rapidly during the 1980s. There was a small reduction in inequality in the first half of the current decade but for the 1990s as a whole the pattern is one of little change.
- Cash benefits are an important source of income for low income households. They make up almost two thirds of gross income for the bottom fifth of households.
- Direct taxes take a higher proportion of income as income rises: the top fifth of non-retired households pay almost a quarter of gross income in direct tax compared to a tenth for the bottom fifth.
- When considered together, the burden of direct and indirect tax is broadly flat across income groups – the average non-retired household pays 37 per cent of gross income in tax.
- The types of household that tend to be net beneficiaries from taxes and benefits include one adult households with children, two adult households with three or more children and retired households.

## Summary

The analysis in this article looks at how taxes and benefits redistribute income between various groups of households, shows where different types of household and individuals are in the income distribution and examines the changing levels of income inequality over time.

Adults and children are not spread evenly throughout the income distribution. For example there are more children in households in the lower half of the distribution. Among adults, women appear fairly evenly across income groups while there are more men in households in the higher income groups. There are also distinct patterns by household type. Households containing one adult and at least one child are concentrated in the bottom quintile group while retired households, particularly those containing one woman, are over-represented in the bottom two quintiles.

The higher income groups are characterised by households with more economically active people than those lower down the income distribution. Two adult households with no children are also over-represented towards the top.

Government intervention, by means of taxes and benefits, alters the incomes of households and tends to reduce the differences between households. Before this intervention, the top fifth of households have an average of £48,000 from original income (that is from sources such as earnings, occupational pensions and investments). This is around 19 times as great as the figure of £2,500 for the bottom fifth. However after taxes and benefits the ratio is greatly reduced to four to one.

In general households in the top half of the distribution pay more in taxes than they receive in benefits while the reverse is true for those in the lower half. The types of households that tend to be net gainers include one adult households with children, two adult households with three or more children and retired households.

Cash benefits play the largest part in reducing inequality. These make up more than two thirds of the gross income of households in the bottom quintile group. This proportion is even higher for retired households in this group with the majority of cash benefits for these households coming from contributory benefits, particularly the state retirement pension.

Direct taxes, except for local taxes, are progressive – they take a larger proportion of income from those higher up the income distribution – therefore they also contribute to a reduction in inequality although not to the same extent as cash benefits. The proportion of gross income paid in direct tax by the top fifth of non-retired households is more than double that paid by those in the bottom fifth: 24 per cent compared with 11 per cent. Most retired households pay little income tax as, in general, their incomes do not greatly exceed their personal tax allowances. For local taxes the top quintile group pays the largest absolute amount. However when expressed as a proportion of gross income the burden is higher in the lower half of the distribution.

Indirect taxes have the opposite effect to direct taxes taking a higher proportion of income from those with lower incomes. This is partly due to the expenditure of some low income households being higher than their current incomes and some high income households channelling a relatively high proportion of their income into savings, investments and mortgage payments which do not attract indirect taxes. However the top fifth of households still pay more indirect tax in absolute terms than other households.

Taken together, the burden of direct and indirect taxes is broadly flat across the income distribution. The average non-retired household pays 37 per cent of gross income in taxes and there is little variation by income group.

Households also receive benefits in kind from services provided by government such as health and education. The amount received by households reflects their demographic composition and falls gradually as income increases indicating that these benefits lead to a reduction in inequality.

This article also looks at trends in income inequality between households over time. Inequality of disposable income was fairly stable in the first half of the 1980s. This was followed by a period where it increased rapidly reaching a peak in 1990. Inequality then fell slightly in the first half of the 1990s although figures for the latest two years, 1996-97 and 1997-98, indicate that this trend may not be continuing.



## Concepts and sources

This study examines how taxes and benefits redistribute income. The analysis is based on households rather than individuals with each household receiving equal weight. It adds the value of government benefits to the private income of households and subtracts the value of taxes to look at different measures of household income.

Chart 1  
Stages of redistribution

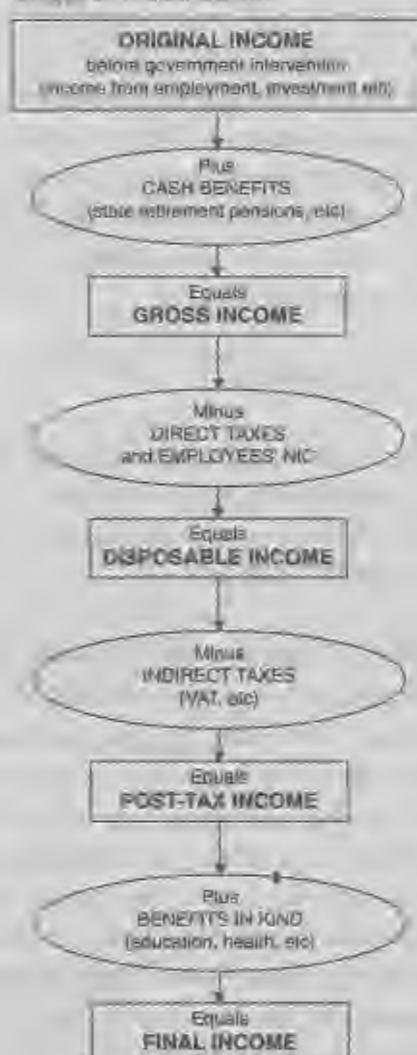


Chart 1 shows the stages of redistribution of income used in this analysis. Household members receive income from employment, occupational pensions, investments and other non-government sources – this is referred to as original income. The flow chart shows the various ways that government raises revenue from households through taxation and distributes benefits to them in cash and in kind.

The analysis only allocates those taxes and benefits that can reasonably be attributed to households. Therefore some government revenue and expenditure are not allocated such as revenue from corporation tax and expenditure on defence and public order. There are three main reasons for non-allocation. Some taxes and benefits fall on people who do not live in private households. In other cases there is no clear conceptual basis for allocation to particular households. Finally there may be a lack of data to enable allocation. In this study, some £197 billion of taxes and £176 billion of benefits have been

allocated to households. This is equivalent to 83 per cent and 60 per cent respectively of general government expenditure which totalled over £315 billion in 1997 (Appendix 1, Table 1).

The estimated values of taxes and benefits reflect the study methodology. They are based on assumptions about which taxes and benefits should be covered and to whom they should apply. Where it is practical, the methodology used is similar to that used in previous years. However there have been some changes in the underlying survey and improvements in the methodology. For example changes from 1996-97 onwards include new questions for the self-employed and the use of data which are grossed up to the UK household population. Time series are presented for some measures which are relatively robust to these changes. These include the Gini coefficients and the shares of income in Appendix 2. Beyond these measures, the reader should not make direct comparisons with earlier studies.

The unit of analysis used in this study is the household. The households are ranked by their equivalised disposable income. Equivalisation takes into account the size and composition of households and adjusts their incomes to recognise differing demands on resources. For example a couple would need a higher income than a single person to achieve the same standard of living and so a single person's income of £8,100 is treated as equivalent to an income of £10,000 for a couple (see Appendix 3, paragraph 46). Households with the same equivalised income do not necessarily have the same standard of living where non-household size characteristics are different. For example households which own their homes outright would be in a better position than identical households with the same income which had to pay rent or mortgage payments. Also households which include disabled people may require additional resources to maintain the same standard of living as those without disabled people. Equivalisation does not adjust for these differences.

Equivalised income is used only to rank the households. Most monetary values shown in the article are not equivalised. Where equivalised amounts are given, they are shown in *italics*. Once the households have been ranked, the distribution is split into five (or ten) equally sized groups – that is quintile groups (or decile groups). The bottom and second quintiles are those with the lowest equivalised disposable incomes while the fourth and top quintiles have the highest.

The main data source for this analysis is the Family Expenditure Survey (FES) which covers about 6,500 households in the United Kingdom each year. It only covers private households – people living in hotels, lodging houses and in institutions such as old people's homes are excluded.

The survey results are grossed up so that the totals reflect the whole household population in terms of age, sex and region. Different grossing factors are applied to different types of household in order to correct for over or under-representation of these groups in the responding sample of the FES. Studies have indicated that the FES suffers from under-representation at the very top of the income distribution. This under-representation is not directly corrected by the grossing methodology and may lead to some underestimation of income. Readers who are interested in the level of income for the top decile group of the income distribution should refer to the Department of Social Security publication *Households Below Average Income 1979 to 1996-97*. This series, which uses data from the Family Resources Survey, contains an income adjustment for households at the top of the income distribution that is made using the Inland Revenue's Survey of Personal Incomes.

Fuller details of the concepts and methodology used are given in Appendix 3.

The results of the analysis are reported in three sections. The first looks at the effects for all households. However retired and non-retired households have distinct income and expenditure patterns and so the tax and benefit systems affect the two groups in very different ways. Therefore the second and third sections look separately at results for non-retired and retired households.

RESULTS FOR ALL HOUSEHOLDS

Overall effect

In broad terms households in the bottom half of the income distribution tend to be net gainers from the tax and benefit systems while those in the top half pay more in tax than they receive as benefits. Therefore, taken as a whole, government intervention leads to income being shared more equally between households. Table A summarises the overall effects.

TABLE A: Percentage shares of household income and Gini coefficients<sup>1</sup>, 1997-98

	Percentage shares of equivalised income			
	Original income	Gross income	Disposable income	Post-tax income
Quintile group <sup>2</sup>				
Bottom	2	7	8	7
2nd	7	11	12	11
3rd	15	16	16	16
4th	25	23	23	22
Top	51	44	42	44
All households	100	100	100	100
Decile group <sup>2</sup>				
Bottom	1	3	3	2
Top	33	28	26	28
Gini coefficient (percent)	53	38	34	38

1 This is a measure of the dispersion of each definition of income (see Appendix 3, paragraph 51).  
2 Households are ranked by equivalised disposable income.

The top fifth of households (those in the top quintile group) receive more than 50 per cent of all original income, which includes income from earnings, occupational pensions and investments. This compares with 2 per cent received by the bottom fifth. In contrast the amount received from cash benefits is higher for households lower down the income distribution than those at the top. This has the effect of increasing the share of gross income received by the bottom quintile to 7 per cent while the share of the top fifth is reduced to 44 per cent.

Direct taxes also have an equalising effect although the impact is much smaller than for cash benefits. Indirect taxes reverse this effect: the post-tax shares of income are almost exactly the same as those for gross income.

A similar picture emerges when Gini coefficients are calculated. This measure is the most widely used summary of the inequality of an income distribution (see Appendix 3, paragraph 51). It can take values from 0 to 100 per cent: a value of zero would indicate that each household had an equal share of income while higher values indicate greater inequality. The Gini coefficient for original income is 53 per cent. Cash benefits contribute the most to the reduction in inequality and this reduces the value to 38 per cent. As with the shares of income, there is little net effect on the Gini coefficient when direct and indirect taxes are considered together.

Characteristics of households

Different types of household are not evenly spread throughout the income distribution. Information about the characteristics of households in the different income groups is shown in Table B with more detail in Appendix 1, Table 2b.

On average there are 2.4 people in each household. Although this figure does not vary much across the income distribution, the split between adults and children varies by income group. In particular there are more children in the lower half of the distribution and the bottom decile group has three times as many children as the top decile group. There are also differences between the patterns for women and men: women are spread fairly evenly across income groups while there are more men in the top half of the distribution. The number of economically active people increases with increasing household income with the top fifth of households having more than three times as many economically active people compared to the bottom fifth.

One adult households with children are concentrated in the lower income groups: over three-quarters of these households are in the bottom two quintile groups. This group makes up the majority of lone parent families; however some lone parents will be part of larger households and be included in other household types. For non-retired two adult households with children, the position in the income distribution tends to vary according to the number of children with those with three or more children tending to be in lower income groups than those with only one or two. This reflects the fact that two adult households with three or more children are less likely to have two economically active adults

**TABLE B: Summary of the effects of taxes and benefits by quintile groups<sup>1</sup>, 1997-98**

	Quintile groups of households <sup>1</sup>					All households
	Bottom	2nd	3rd	4th	Top	
Income, taxes and benefits per household (£ per year) <sup>2</sup>						
Original income	2 520	6 780	15 530	25 960	47 610	19 680
plus cash benefits	4 780	4 990	3 590	2 050	1 120	3 300
Gross income	7 300	11 780	19 120	28 000	48 720	22 980
less direct taxes <sup>3</sup> and employees' NIC	750	1 500	3 360	5 860	11 440	4 580
Disposable income	6 550	10 280	15 760	22 140	37 280	18 400
less indirect taxes	2 010	2 550	3 570	4 680	5 770	3 720
Post-tax income	4 540	7 730	12 180	17 460	31 520	14 690
plus benefits in kind	3 890	3 300	3 150	2 660	2 070	3 010
Final income	8 430	11 030	15 330	20 120	33 590	17 700
Number of individuals per household						
Children <sup>4</sup>	0.8	0.5	0.6	0.5	0.4	0.5
Adults	1.6	1.7	1.9	2.0	1.9	1.8
Men	0.7	0.8	0.9	1.0	1.0	0.9
Women	0.9	0.9	1.0	1.0	0.9	0.9
People	2.4	2.2	2.5	2.5	2.3	2.4
People in full-time education	0.7	0.5	0.5	0.4	0.3	0.5
Economically active people	0.5	0.8	1.3	1.6	1.7	1.2
Retired people	0.5	0.6	0.5	0.3	0.2	0.4
Household type (percentages)						
Retired	38	41	27	14	9	26
Non-retired						
1 adult	14	12	11	16	22	15
2 adults	9	12	18	26	35	20
1 adult with children <sup>5</sup>	15	8	4	1	1	6
2 adults with children	18	16	25	24	20	20
3 or more adults <sup>6</sup>	6	11	16	19	14	13
All household types	100	100	100	100	100	100

<sup>1</sup> Households are ranked by equivalised disposable income.

<sup>2</sup> All the tables in Part 1 of this article show unequivalised income. Equivalised income has only been used in the ranking process to produce the quintile groups (and to produce the percentage shares and Gini coefficients).

<sup>3</sup> These are income tax (which is after tax relief at source on mortgage interest and life assurance premiums) and Council tax, domestic rates and water charges but after deducting discounts, Council tax benefit and rate rebates.

<sup>4</sup> Children are defined as people aged under 16 or aged between 16 and 18, unmarried and receiving non-advanced further education.

<sup>5</sup> This group is smaller than the category of 'one parent families' because some of these families will be contained in the larger household types.

<sup>6</sup> With or without children.

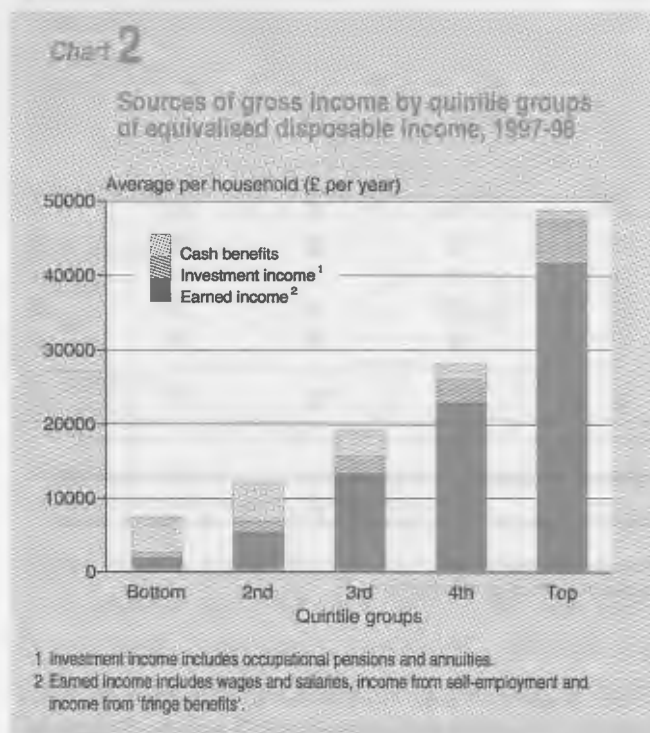
compared to those with one or two children. In addition those with three or more children will have a higher equivalence value than households with fewer children which will tend to pull them down the income distribution. Where there are no children in the household, non-retired two adult households tend to be found at the top of the distribution.

Retired households are over-represented at the lower end of the distribution: 64 per cent are in the bottom two fifths. This over-representation is higher for one adult retired households than those with two or more adults. In addition those with one retired woman are more concentrated towards the bottom compared to those with one retired man.

## Stages of redistribution

Details of the amounts which households in each quintile receive under the various measures of income are shown in Table B with more detailed information for decile groups in Appendix 1, Table 2a. The average household receives a little under £20,000 in original income but this varies widely between households. Those in the top quintile have around £48,000 compared to £2,500 for the lowest. This pattern is driven by differences in the numbers of economically active people and the employment status of the chief economic supporter between the groups. For example almost 90 per cent of adults in the top quintile group are economically active compared to only 30 per cent of those in the lowest. The chief economic supporters in the top fifth are predominantly full-time employees or self-employed while those in the bottom fifth are more likely to work part time or be unemployed or inactive.

For the average household, earnings from employment or self-employment are the most important source of income making up more than 70 per cent of gross income. However cash benefits are also an important source, particularly for households in the lower half of the income distribution. On average households in the bottom two quintiles receive £4,900 in cash benefits which represents around two thirds of gross income for the bottom quintile group and a little over two fifths for the next quintile (Chart 2).

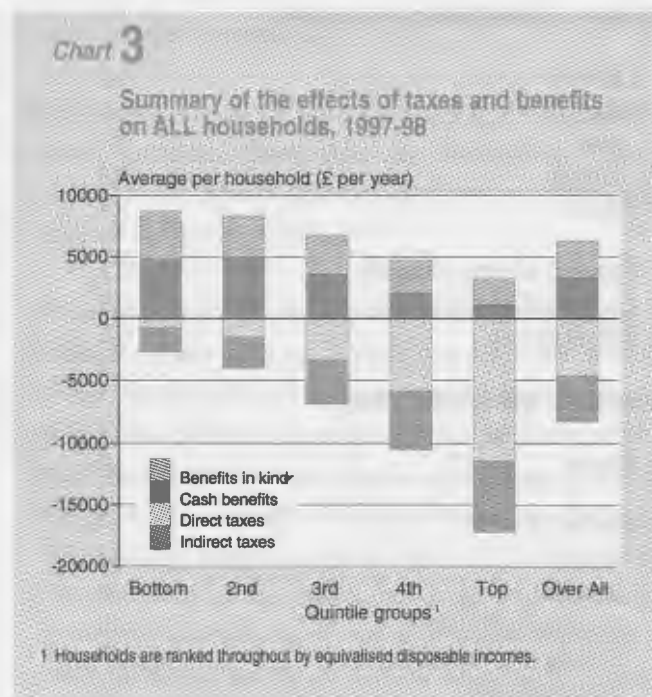


The direct tax system is progressive which means that as taxable income increases a higher proportion is taken as direct tax. The top quintile households pay an average of more than £11,000 in

direct tax compared to £750 for those in the bottom group. The indirect tax system has a different effect: households with higher incomes still pay more indirect tax in absolute terms but not as a proportion of their incomes.

The final stage in the redistribution process is the addition of benefits in kind such as from education and the health service. Households in the bottom quintile receive around £3,900 from these benefits which is almost twice the amount received by the top quintile group.

Taken as a whole, the tax and benefit systems redistribute income from high income households to those on low incomes. The average final income for the quintile groups ranges from £8,400 to £34,000, a ratio of one to four compared to a ratio of one to 19 before government intervention. The differing impact for each quintile group is shown in Chart 3.



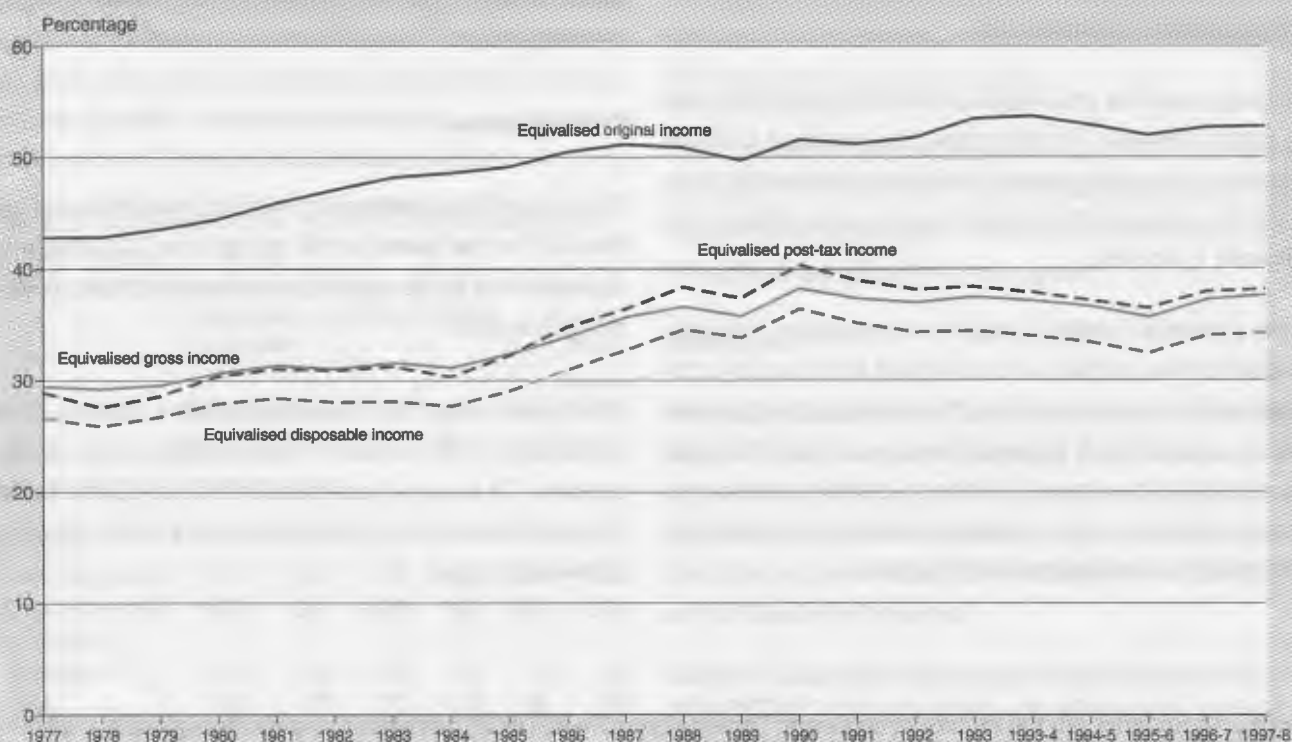
## Changes in inequality over time

Chart 4 shows how inequality has been changing since 1977 for the various measures of income. Inequality in original income has risen considerably since the late 1970s: the Gini coefficient rose from 43 per cent in 1977 to a high of 54 per cent in 1993-94. Since then the growth seems to have stopped and the coefficient has been stable at around 53 per cent from 1994-95 to 1997-98.

The pattern for inequality in disposable income is slightly different. For this measure of income, inequality was stable in the first half of the 1980s, with a Gini coefficient of around 28 per cent. There then followed a period of rapidly increasing inequality with the coefficient

Chart 4

Gini coefficients 1977 to 1997-98



reaching a peak of 36 per cent in 1990. This then fell to around 33 per cent in 1995-96. As with all measures derived from sample surveys, these figures are subject to sampling errors. The Institute for Social and Economic Research, University of Essex, has calculated standard errors and confidence intervals for the Gini coefficients for disposable income in each year. These statistics allow us to determine whether the estimated changes in inequality are real changes or simply the result of sampling variation. The application of a standard statistical test confirms that inequality was lower in 1995-96 than in 1991. However the small increase seen in the Gini coefficient between 1995-96 and 1996-97 is within the bounds of sampling variation rather than a real change.

In recent years the trends in inequality for gross income and post-tax income have been very similar to the trend for disposable income.

## RESULTS FOR NON-RETIRED HOUSEHOLDS

### Overall effect

As for all households, the tax and benefit systems lead to income being shared more equally between non-retired households. Before government intervention original income is shared more equally between non-retired households than for all households. After the

process of redistribution, the shares of income and Gini coefficient for post-tax income are virtually the same as those for all households (Table C). The redistribution effect is therefore smaller for non-retired

**TABLE C: Percentage shares of household income and Gini coefficients<sup>1</sup> for NON-RETIRED households, 1997-98**

	Percentage shares of equivalised income for NON-RETIRED households			
	Original income	Gross income	Disposable income	Post-tax income
Quintile group <sup>2</sup>				
Bottom	3	6	7	6
2nd	9	11	12	11
3rd	17	17	17	16
4th	25	23	23	23
Top	47	43	41	44
All non-retired households	100	100	100	100
Decile group <sup>2</sup>				
Bottom	1	2	3	2
Top	30	27	26	28
Gini coefficient (percent)	46	37	34	38

<sup>1</sup> This is a measure of the dispersion of each definition of income (see Appendix 3, paragraph 51).

<sup>2</sup> Households are ranked by equivalised disposable income.

households than for all households. A summary of the effects of taxes and benefits on non-retired households is shown in Table D with more detail in Appendix 1, Table 3a.

### Characteristics of households

Unlike all households, the average household size tends to decrease as income increases. This fall is more than accounted for by the decrease in the average number of children in each household from 1.1 in the bottom quintile to 0.4 in the top quintile (Table D and Appendix 1, Table 3b).

Other patterns are similar to those for all households. One adult households with children are concentrated at the bottom of the distribution with around 60 per cent of these households in the bottom quintile and a further 25 per cent in the second quintile. Two adult households with three or more children are also concentrated at the bottom although not to the same extent while two adult households with no children are over-represented at the top.

For one adult non-retired households with no children there are distinct patterns for men and women. Households containing only one man tend to be over represented in the top and bottom quintiles while one woman households are more evenly spread throughout the distribution.

### Original income

The average original income for non-retired households is around £24,000. For the lowest quintile the figure is £3,700 while the original income for the highest quintile group is £52,000 giving a ratio of one to 14.

The original income of a household shows a relatively strong relationship to the number of economically active people it contains. On average households in the top quintile contain more than twice as many economically active people than those in the lowest group.

**TABLE D: Summary of the effects of taxes and benefits on NON-RETIRED households by quintile groups<sup>1</sup>, 1997-98**

	Quintile groups of NON-RETIRED households <sup>1</sup>					All non-retired households
	Bottom	2nd	3rd	4th	Top	
<b>Income, taxes and benefits per household (£ per year)</b>						
Original income	3 730	12 690	21 820	30 970	52 440	24 330
plus cash benefits	4 740	3 740	2 040	1 210	710	2 490
Gross income	8 480	16 430	23 860	32 180	53 150	26 820
less direct taxes <sup>2</sup> and employees' NIC	910	2 620	4 760	7 080	12 730	5 620
Disposable income	7 570	13 810	19 100	25 090	40 430	21 200
less indirect taxes	2 410	3 570	4 240	5 220	5 990	4 290
Post-tax income	5 160	10 230	14 860	19 870	34 440	16 910
plus benefits in kind	4 330	3 710	3 070	2 540	1 980	3 130
Final income	9 490	13 950	17 930	22 410	36 410	20 040
<b>Number of individuals per household</b>						
Children <sup>3</sup>	1.1	0.9	0.7	0.5	0.4	0.7
Adults	1.7	2.0	2.1	2.1	1.9	1.9
Men	0.8	1.0	1.1	1.1	1.0	1.0
Women	0.9	1.0	1.0	1.0	0.9	1.0
People	2.8	2.9	2.8	2.6	2.3	2.7
People in full-time education	1.0	0.8	0.6	0.4	0.3	0.7
Economically active people	0.8	1.4	1.8	1.9	1.8	1.5
Retired people	0.0	0.1	0.1	0.1	0.0	0.1

<sup>1</sup> Households are ranked by equivalised disposable income.

<sup>2</sup> These are income tax (which is after tax relief at source on mortgage interest and life assurance premiums) and council tax, domestic rates and water charges but after deducting discounts, council tax benefit and rate rebates.

<sup>3</sup> Children are defined as people aged under 16 or aged between 16 and 18, unmarried and receiving non-advanced further education.



Cash benefits

Table E gives a summary of the benefits that each quintile group receives. There are two types of benefits: contributory benefits, which are paid from the National Insurance Fund to which individuals and their employers make contributions while working, and non-contributory benefits. For non-retired households, non-contributory benefits make up 70 per cent of all cash benefit income.

TABLE E: Cash benefits for NON-RETIRED households by quintile group<sup>1</sup>, 1997-98

	Quintile groups of NON-RETIRED households <sup>1</sup>					All non-retired households
	Bottom	2nd	3rd	4th	Top	
Average per household (£ per year)						
Contributory						
Retirement pension	100	460	430	290	220	300
Incapacity benefit	520	540	310	190	120	340
Job seeker's allowance <sup>2</sup>	100	40	30	20	10	40
Other	80	70	70	70	60	70
Total contributory	800	1 110	840	560	400	740
Non-contributory						
Income support	1 380	610	150	50	10	440
Child benefit	620	490	390	270	200	390
Housing benefit	1 070	610	160	30	0	380
Job seeker's allowance <sup>3</sup>	230	80	30	10	10	70
Sickness/disablement related	210	510	310	200	40	250
Other	440	330	160	90	50	210
Total non-contributory	3 950	2 630	1 200	650	310	1 750
Total cash benefits	4 740	3 740	2 040	1 210	710	2 490
Cash benefits as a percentage of gross income	56	23	9	4	1	9

<sup>1</sup> Households are ranked by equivalised disposable income.  
<sup>2</sup> Contribution based.  
<sup>3</sup> Income based.

Most non-contributory benefits, in particular income support and housing benefit, are income related and so payments are concentrated in the two lowest quintile groups. However the presence of some individuals with low incomes in high income households means that some payments are recorded further up the income distribution. About 60 per cent of income support and housing benefit paid to non-retired households goes to households in the bottom

fifth of the distribution. Child benefit payments are based on the number of children in the household. The payments are higher at the lower end of the distribution as these households tend to have more children. Contributory benefits, for which the individual's contribution record rather than income is a criterion for payment, are highest for the second quintile group.

For all non-retired households, cash benefits provide 9 per cent of gross income. However for those in the bottom quintile group they form a much larger proportion – 56 per cent. Their payment results in a significant reduction in income inequality.

Direct taxes

Households at the lower end of the income distribution pay a smaller proportion of their income in direct taxes than households at the higher end due to the progressive nature of the income tax system (Table F). Households in the bottom fifth pay less than 4 per cent of their gross income in income tax on average compared to 18 per cent for those in the top quintile.

TABLE F: Taxes as a percentage of gross income for NON-RETIRED households by quintile group<sup>1</sup>, 1997-98

	Quintile groups of NON-RETIRED households <sup>1</sup>					All non-retired households
	Bottom	2nd	3rd	4th	Top	
<b>Percentages</b>						
Direct taxes						
Income tax <sup>2</sup>	3.7	7.9	11.4	13.8	17.9	13.7
Employees' NIC	2.3	4.4	5.5	5.8	4.3	4.8
Local taxes <sup>3</sup>	4.8	3.6	3.0	2.4	1.7	2.5
All direct taxes	10.7	15.9	19.9	22.0	23.9	21.0
All indirect taxes	28.5	21.7	17.8	16.2	11.3	16.0
All taxes	39.2	37.7	37.7	38.2	35.2	36.9

<sup>1</sup> Households are ranked by equivalised disposable income.  
<sup>2</sup> After tax relief at source on mortgage interest and life assurance premiums.  
<sup>3</sup> Council tax, domestic rates and water charges after deducting discounts, council tax benefit and rate rebates.

For National Insurance (NI) contributions, households in the top quintile pay a slightly smaller proportion of their gross income in these contributions than those in the third and fourth quintiles. This is because NI contributions are only levied on the first £465 of weekly earnings in 1997-98.

Local taxes mainly consist of council tax in Great Britain and domestic rates in Northern Ireland and are shown net of council tax benefit

and rates rebates in Table F. Households in the lower part of the income distribution pay smaller absolute amounts in local taxes – net payments by the bottom quintile are on average around 45 per cent of those in the top fifth. However, when expressed as a proportion of gross income, the burden decreases as income rises – local taxes represent almost 5 per cent of gross income for the bottom fifth but less than 2 per cent for those in the top quintile.

### Indirect taxes

The amount of indirect tax that each household pays is estimated from its expenditure recorded in the FES. However the income and expenditure data recorded in the FES are not fully compatible because they are compiled in different ways (see Appendix 3, paragraph 33). Indeed, measured expenditure exceeds measured income in the lower half of the distribution. There are a number of possible explanations for this. Some households with low incomes may draw on their savings or borrow in order to finance their expenditure. In these cases expenditure taxes are not being met from current income. For a minority of households the FES may be measuring incomes inaccurately. Therefore to give a more complete picture of the impact of indirect taxes they are shown in Table G as a proportion of disposable income and, separately, as a proportion of expenditure. In addition indirect taxes are also shown as a proportion of gross income in Table F so that the burden of direct and indirect taxes can be compared.

In cash terms, the top fifth of households pay around two and a half times as much in indirect taxes as the bottom fifth. However, whether expressed as a percentage of disposable income or expenditure, the proportion paid in indirect taxes tends to be lower for households at the top of the distribution compared to those lower down.

When expressed as a proportion of disposable income, the impact of indirect taxes declines sharply for the higher income groups as these households tend to channel a higher proportion of their disposable income into savings, investments and mortgage payments which do not attract indirect taxes. Indirect taxes appear less regressive when expressed as a proportion of expenditure with payments rising broadly in line with expenditure. However the top fifth still pay a smaller proportion of their expenditure in indirect taxation. In particular the burden of tobacco duty is much heavier on households in the lower half of the distribution.

Taken together, the burden of direct and indirect taxes is broadly flat across the income distribution. The average non-retired household pays 37 per cent of gross income in taxes and there is little variation by income group (Table F).

### Benefits in kind

The Government provides certain goods and services to households either free at the time of use or at subsidised prices. These benefits in kind are allocated to individual households in order to arrive at

**TABLE G: Indirect taxes as a percentage of (a) disposable income and (b) household expenditure<sup>1</sup> for NON-RETIRED households by quintile group<sup>2</sup>, 1997-98**

	Quintile groups of NON-RETIRED households <sup>2</sup>					All non-retired households
	Bottom	2nd	3rd	4th	Top	
<b>(a) Percentages of disposable income</b>						
VAT	11.7	10.1	8.9	8.9	6.8	8.5
Duty on alcohol	1.7	1.4	1.3	1.3	0.8	1.1
Duty on tobacco	5.4	3.3	2.2	1.6	0.6	1.8
Duty on hydrocarbon oils and vehicle excise duty	3.4	3.3	3.2	2.8	1.8	2.6
Other indirect taxes	9.7	7.8	6.6	6.2	4.8	6.2
All indirect taxes	31.9	25.9	22.2	20.8	14.8	20.2
<b>(b) Percentages of expenditure<sup>1</sup></b>						
VAT	8.1	8.2	8.1	8.0	6.8	7.6
Duty on alcohol	1.2	1.1	1.1	1.1	0.8	1.0
Duty on tobacco	3.7	2.7	2.0	1.4	0.6	1.6
Duty on hydrocarbon oils and vehicle excise duty	2.4	2.6	2.8	2.5	1.8	2.4
Other indirect taxes	6.7	6.3	6.0	5.6	4.8	5.6
All indirect taxes	22.1	21.0	20.0	18.6	14.9	18.3

<sup>1</sup> Calculated to be consistent with disposable income. See paragraph 33 of Appendix 3 for the definition of expenditure.

<sup>2</sup> Households are ranked by equivalised disposable income.



final income. The imputed value of these benefits is based on the estimated cost of providing them. The largest two items for which such imputations are made are health and education services. The 1997 expenditure on these that is allocated in this analysis is equivalent to around 25 per cent of total general government expenditure. Other items for which imputations are made are school meals and welfare milk, housing subsidy and travel subsidies. These items are equivalent to a further 1.2 per cent of general government expenditure. Table H gives a summary of the value of these benefits for each quintile group.

**TABLE H: Benefits in kind for NON-RETIRED households by quintile group<sup>1</sup>, 1997-98**

	Quintile groups of NON-RETIRED households <sup>1</sup>					All non-retired households
	Bottom	2nd	3rd	4th	Top	
<b>Average per household (£ per year)</b>						
Education	2 600	2 030	1 480	1 090	660	1 570
National health service	1 460	1 540	1 500	1 370	1 180	1 410
Housing subsidy <sup>2</sup>	110	70	30	10	0	50
Travel subsidies	40	50	60	70	120	70
School meals and welfare milk	120	30	10	0	0	30
All benefits in kind	4 330	3 710	3 070	2 540	1 980	3 130
Benefits in kind as a percentage of post-tax income	84	36	21	13	6	18

<sup>1</sup> Households are ranked by equivalised disposable income.  
<sup>2</sup> Does not include tax relief at source on mortgage payments. These are taken into account in the income tax payments shown in Table E.

The benefit in kind from education is allocated to a household according to its members' use of state education (Appendix 3, paragraph 36). Households in the bottom quintile receive the highest benefit from education. This is due to the concentration of children in this part of the distribution. In addition most of the households that contain only students, for whom education costs are greatest, are found in the bottom quintile. There will however be benefit from higher education further up the distribution where students are living with their parents. The impact of expenditure on school meals and welfare foods is greatest in the lower income groups where children are more likely to have school meals provided free of charge.

The benefit from the health service is estimated according to the age and sex of the household members rather than their actual use of the service as the FES does not contain this information (Appendix

3, paragraph 38). The imputed benefit is relatively high for young children, low in later childhood and through the adult years until it begins to rise from late middle age onwards. This benefit falls gradually as income rises and this pattern is a reflection of the demographic composition of the households.

The housing subsidy, which excludes housing benefit and mortgage interest tax relief (see Appendix 3, paragraph 39), is spread between public sector tenants and since such households tend to be concentrated in the lower half of the income distribution this is where the imputed benefit is highest.

Travel subsidies cover the support payments made to bus and train operating companies. The use of public transport by non-retired households is partly related to the need to travel to work and therefore to the number of economically active people in a household. This results in these subsidies increasing as income increases. This pattern is also due to London having high levels of commuting by public transport together with higher than average household incomes.

Taken together the absolute value of these benefits in kind declines as household income increases. The ratio of benefits in kind to post-tax income decreases from 84 per cent for the lowest quintile group to 6 per cent for the highest. This indicates that these benefits contribute to the reduction in inequality.

### The effects of taxes and benefits by household type

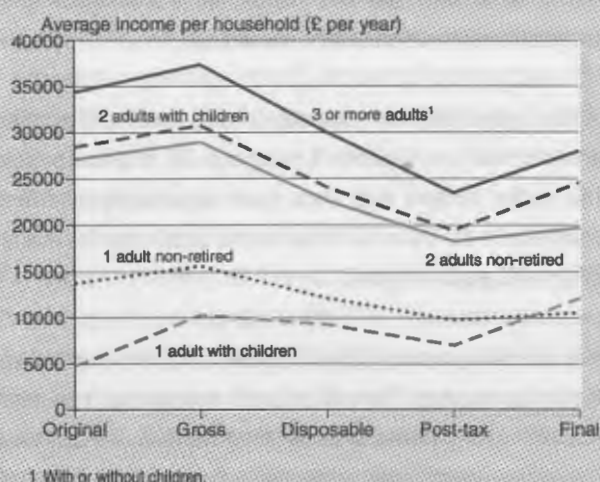
The tax and benefit systems affect different types of household in different ways reflecting, in part, the number and ages of people within each household type. Of the types of non-retired households shown in Chart 5, only those containing one adult and children are net gainers with average final incomes of more than £12,000 compared to original incomes of £4,900. Table 8 in Appendix 1 has a more detailed breakdown that shows that households with two adults and three or more children are also net beneficiaries but to a smaller extent.

Original income is strongly related to the number of adults in the household. For two adult households, the presence of children makes little difference to average original incomes or the broad effect of cash benefits and taxes. Final incomes are higher for two adults with children compared to households with only two adults due to the imputed benefit in kind from education.

For one adult households, original income is much lower for those with children as the adult is less likely to be economically active. Benefits, both in cash and in kind, are significantly higher for those with children.

# Chart 5

## Income stages by non-retired household types, 1997-98



One man households receive around 30 per cent more original income than those with only one woman but, after the effects of taxes and benefits, this figure is reduced to 17 per cent for final income.

## RESULTS FOR RETIRED HOUSEHOLDS

In this analysis retired households are those where the income of retired household members accounts for more than half of the household gross income (see Appendix 3, paragraph 9 for a definition of a retired person). These households have quite distinct income and expenditure patterns and so the tax and benefit systems affect them in different ways from non-retired households.

There is a high degree of inequality in original income between retired households: Table J shows a Gini coefficient of 66 per cent, which is much higher than the 46 per cent for non-retired households. However after the impact of cash benefits and taxes has been taken into account there is a large reduction in inequality which reduces the coefficient for retired households to 32 per cent compared to 38 per cent for non-retired households. Cash benefits play by far the largest part in bringing about this reduction for retired households and income tax payments make a further, though much smaller, contribution. Payments of indirect taxes result in an increase in inequality.

Overall retired households receive an average of £6,100 in original income with most of this coming from occupational pensions and investments (Table K). This ranges from £950 for the bottom quintile to more than £19,000 for the top. On the other hand, amounts received from cash benefits vary less across the distribution: the bottom fifth typically receive around £4,600 from this source while

**TABLE J: Percentage shares of household income and Gini coefficients<sup>1</sup> for RETIRED households, 1997-98**

	Percentage shares of equivalised income for RETIRED households <sup>2</sup>			
	Original income	Gross income	Disposable income	Post-tax income
<b>Quintile group<sup>2</sup></b>				
Bottom	3	10	10	9
2nd	6	13	14	14
3rd	10	16	17	16
4th	18	21	21	22
Top	63	41	38	39
<b>All retired households</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Decile group<sup>2</sup></b>				
Bottom	1	4	4	4
Top	45	26	24	25
<b>Gini coefficient (percent)</b>	<b>66</b>	<b>31</b>	<b>28</b>	<b>32</b>

<sup>1</sup> This is a measure of the dispersion of each definition of income (see Appendix 3, paragraph 51).

<sup>2</sup> Households are ranked by equivalised disposable income.

those in the fourth quintile receive £6,700. These cash benefits make up large proportions of the gross income for the bottom four quintiles ranging from 83 per cent for the bottom quintile to 54 per cent for the fourth quintile. The top fifth are much less dependent on cash benefits – these account for only 22 per cent of their gross incomes.

Most retired people will have made contributions to the National Insurance Fund throughout their working lives. The bulk of the benefits which retired households receive will be paid out of this fund in the form of contributory benefits, the most significant of which is the retirement pension which accounts for more than 70 per cent of their cash benefits (Appendix 1, Table 4A).

Non-contributory benefits are lowest in the bottom quintile group where more than two-thirds of the households own their homes outright and so receive little in the way of housing benefit. In addition, disability benefits sometimes make up a significant proportion of the income of a retired household and its receipt may push a household up the income distribution. This does not necessarily mean that households receiving disability benefits have a higher standard of living than those lower down the income distribution as the income from these benefits will be offset by the higher expenditure that these benefits are supposed to address.

Retired households derive significant benefits from health services and, to a lesser extent, the housing subsidy and travel subsidies. Health benefit is spread fairly evenly between retired households whereas benefit from

**TABLE K: Summary of the effects of taxes and benefits on RETIRED households by quintile group<sup>1</sup>, 1997-98**

	Quintile groups of retired households <sup>1</sup>					All retired households
	Bottom	2nd	3rd	4th	Top	
<b>Income, taxes and benefits per household (£ per year)</b>						
Original income						
Earnings	50	70	180	330	750	280
Occupational pensions	520	1 120	1 920	4 090	11 900	3 910
Investment income	360	420	670	1 280	6 610	1 870
Other income	20	50	60	50	30	40
Total original income	950	1 670	2 840	5 750	19 290	6 100
plus Contributory benefits	4 090	4 460	4 400	4 510	4 340	4 360
Non-contributory benefits	460	1 210	1 550	2 160	1 250	1 330
Gross income	5 510	7 330	8 790	12 420	24 890	11 790
less Income tax <sup>2</sup>	70	140	280	750	3 460	940
Employees' NIC	0	0	10	20	40	10
Local taxes <sup>3</sup>	500	490	540	600	880	600
Disposable income	4 930	6 710	7 960	11 050	20 510	10 230
less Indirect taxes	1 330	1 390	1 690	2 120	3 720	2 050
Post-tax income	3 600	5 310	6 270	8 930	16 790	8 180
plus National health service	2 710	2 550	2 370	2 510	2 500	2 530
Housing subsidy <sup>4</sup>	30	90	80	60	20	50
Other benefits in kind	120	60	110	140	100	110
Final income	6 460	8 010	8 830	11 640	19 410	10 870

<sup>1</sup> Households are ranked by equivalised disposable income.

<sup>2</sup> After tax relief at source on mortgage interest and life assurance premiums.

<sup>3</sup> Council tax, local rates and water charges after deducting discounts, council tax benefit and rate rebates.

<sup>4</sup> Does not include tax relief at source on mortgage payments, which is included in the income tax payments shown above.

the housing subsidy is substantially higher for the middle three quintiles since public sector tenants are concentrated in these groups. The benefits received by retired households from travel subsidies are mainly for bus travel, particularly in the form of concessionary fares and passes for senior citizens, and since these are not usually means-tested there is no particular relationship with income.

Table 8 in Appendix 1 gives some details of the effect of taxes and benefits on different types of retired household. On average, both one adult retired households and those with two or more adults are

net gainers from the tax and benefit systems. For one adult retired households there are distinct differences in original income by gender. Men receive almost twice as much original income as women on average: £5000 for men compared with £2600 for women. However after the addition of benefits and the deduction of taxes the differences are greatly reduced so that men have final incomes around 9 per cent higher than women.

*The author gratefully acknowledges the considerable work done by Tony Newman and Dave Westcott for this study.*

# APPENDIX 1

## Detailed tables for 1997-98

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TABLE 1 (Appendix 1) Taxes and benefits allocated to households as a percentage of general government expenditure, 1997

Taxes and compulsory social contributions <sup>1</sup> allocated to households			Benefits allocated to households		
	£ million	% of GGE <sup>2</sup>		£ million	% of GGE <sup>2</sup>
Income tax (gross)	72 200	22.9	Cash benefits		
Tax reliefs (MIRAS, etc)	-2 590	-0.8			
Income tax (net)	69 610	22.0	Contributory		
Employees' & self-employed NI contributions	22 700	7.2	Retirement	33 490	10.6
Council tax	10 570	3.3	Widows and guardians	990	0.3
			Unemployment/ Job seekers allowance	620	0.2
Taxes on final goods and services			Incapacity benefit	7 580	2.4
VAT	36 910	11.7	Maternity/Statutory maternity pay	540	0.2
Duty on beer	2 590	0.8	Other	380	0.1
Duty on wines, cider, perry and spirits	2 910	0.9	Non-contributory		
Customs duties, etc	1 340	0.4	Family benefits	9 330	3.0
Betting duties	1 470	0.5	Income support	12 050	3.8
Duty on tobacco	7 930	2.5	War pensions	1 310	0.4
Duty on hydrocarbon oils	8 470	2.7	Other	15 360	4.9
Vehicle excise duty	2 970	0.9	Student maintenance grants	1 500	0.5
Camelot: payments to NLDF	1 510	0.5	Rent rebates and allowances	11 190	3.5
Other	2 600	0.8			
Taxes & NI contributions on intermediate goods & services <sup>3</sup>			Benefits in kind		
Employers' NI contributions	9 060	2.9	Health services	42 750	13.5
Commercial & industrial rates	6 730	2.1	Education	35 300	11.2
Duty on hydrocarbon oils	4 900	1.6	School meals and welfare milk	810	0.3
VAT	2 990	0.9	Housing subsidy	1 210	0.4
Vehicle excise duty	760	0.2	Travel subsidies <sup>4</sup>	1 690	0.5
Other	1 200	0.4			
Total	197 220	62.5	Total	176 100	55.8

1 Paid to UK central and local government and European Union institutions.

2 Expressed as a percentage of general government expenditure.

3 These are taxes paid by industry and commerce assumed to be passed on to households in the prices of goods and services they buy. For instance, duty on derv used in the transportation of goods is an 'intermediate' tax whereas the duty on petrol bought by the private motorist is a tax on final goods and services.

4 Including concessionary fares expenditure.

Source: United Kingdom National Accounts, 1998 Edition

**TABLE 2A (Appendix1) : Average incomes, taxes and benefits by decile groups of ALL households, 1997-98**

	Decile groups of all households ranked by equivalised disposable income										All households
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Average per household (£ per year)											
Decile points (equivalised £)	6 766	8 504	10 146	11 922	13 917	16 342	19 316	23 457	30 451		
Number of households in the population ('000s)	2 456	2 453	2 457	2 461	2 452	2 457	2 453	2 458	2 455	2 453	24 556
Original income											
Wages and salaries	884	2 143	3 250	6 115	10 188	13 993	17 705	23 923	28 688	41 450	14 834
Imputed income from benefits in kind	13	4	10	58	70	114	265	375	664	1 364	294
Self-employment income	319	314	416	729	995	1 142	1 619	1 783	2 723	8 430	1 847
Occupational pensions, annuities	151	454	733	1 148	1 537	1 472	1 912	2 208	2 377	3 171	1 516
Investment income	236	213	289	401	550	673	811	1 028	1 469	4 492	1 016
Other income	177	141	199	215	209	122	253	105	129	186	173
Total	1 779	3 268	4 897	8 667	13 549	17 516	22 566	29 421	36 049	59 093	19 680
Direct benefits in cash											
Contributory											
Retirement pension	1 294	1 852	2 204	1 767	1 639	1 322	914	787	558	554	1 289
Job seeker's allowance (Contribution based)	92	54	32	28	23	24	26	16	7	9	31
Incapacity benefit	249	381	425	432	422	287	234	193	151	101	288
Widows' benefits	38	49	67	47	15	54	38	34	39	13	39
Statutory Maternity Pay/ Allowance	3	3	7	6	20	17	18	34	35	46	19
Non-contributory											
Income support	946	970	565	583	328	265	184	31	52	7	393
Child benefit	448	374	266	305	329	309	276	246	221	157	293
Housing benefit	591	928	891	738	338	280	148	22	29	3	397
Job seeker's allowance (Income based)	215	99	49	76	51	20	14	5	3	6	54
Invalid care allowance	16	39	32	65	59	25	19	15	8	7	29
Attendance allowance	6	49	78	95	162	193	79	43	18	7	73
Disability living allowance	71	99	186	354	292	185	191	83	52	15	153
War pensions / War widows' pensions	-	6	21	17	47	103	43	68	5	10	32
Severe disablement allowance	17	27	27	44	58	21	23	15	6	-	24
Industrial injury disablement benefit	2	12	21	11	21	33	7	48	10	-	17
Student maintenance awards	158	49	48	158	32	72	61	51	53	14	70
Government training schemes	18	30	24	15	19	15	23	24	17	2	19
Family credit	105	180	121	118	38	22	24	4	2	-	61
Other non-contributory benefits	39	41	40	25	16	21	33	23	2	11	25
Total cash benefits	4 308	5 244	5 105	4 884	3 909	3 268	2 355	1 742	1 267	963	3 304
Gross income	6 087	8 512	10 001	13 550	16 458	20 784	24 921	31 163	37 317	60 056	22 985
Direct taxes and Employees' NIC											
Income tax	196	307	471	939	1 651	2 308	3 216	4 481	5 793	11 677	3 104
less: Tax relief at source <sup>1</sup>	44	37	44	71	113	135	176	212	257	278	137
Employees' NI contributions	75	141	215	414	718	985	1 249	1 646	1 967	2 147	956
Local taxes <sup>2</sup>	642	649	661	697	724	737	770	830	865	985	756
less: Council tax benefit / Rate rebates	222	210	162	124	80	66	44	19	15	21	96
Total	647	850	1 141	1 855	2 900	3 829	5 014	6 726	8 352	14 511	4 583
Disposable income	5 440	7 661	8 860	11 695	14 558	16 955	19 907	24 437	28 965	45 545	18 402
Equivalised disposable income	5 225	7 704	9 321	11 047	12 913	15 102	17 749	21 278	26 453	45 165	17 196
Indirect taxes											
Taxes on final goods and services											
VAT	743	747	808	1 148	1 367	1 538	1 784	2 178	2 285	2 966	1 556
Duty on tobacco	315	276	288	362	354	365	363	341	319	221	320
Duty on beer and cider	52	52	55	80	85	113	136	163	137	148	10
Duty on wines	12	10	12	18	29	24	35	55	59	99	35
Duty on spirits	43	41	46	52	58	64	89	105	103	96	70
Duty on hydrocarbon oils	157	161	174	267	320	389	445	527	534	546	352
Vehicle excise duty	54	52	62	88	107	131	149	170	175	171	116
Television licences	78	78	80	82	84	85	85	87	89	87	83
Stamp duty on house purchase	9	5	7	12	16	18	24	30	49	76	24
Customs duties	28	29	28	40	44	51	57	69	70	89	50
Betting taxes	31	41	41	58	61	56	77	97	64	75	60
Fossil fuel levy	3	3	3	3	3	3	4	4	4	4	4
Camelot National Lottery Fund	38	45	44	60	72	75	78	77	73	56	62
Other	22	23	26	32	49	43	54	72	94	91	51
Intermediate taxes											
Commercial and industrial rates	112	110	119	162	188	207	237	280	306	394	211
Employers' NI contributions	150	147	162	221	252	279	319	376	416	538	286
Duty on hydrocarbon oils	95	91	100	135	148	164	188	213	244	307	168
Vehicle excise duty	13	13	14	20	21	24	27	31	36	46	24
Other	75	74	80	109	124	137	157	186	202	258	140
Total indirect taxes	2 031	1 997	2 151	2 950	3 382	3 767	4 307	5 061	5 259	6 268	3 717
Post-tax income	3 409	5 664	6 709	8 745	11 176	13 188	15 600	19 376	23 705	39 277	14 685
Benefits in kind											
Education	2 219	1 286	1 144	1 407	1 198	1 188	1 027	1 060	808	459	1 180
National health service	1 904	1 924	1 929	1 811	1 890	1 804	1 551	1 509	1 350	1 283	1 696
Housing subsidy	71	105	91	73	51	38	25	13	9	2	48
Rail travel subsidy	23	14	17	22	29	26	44	51	74	127	43
Bus travel subsidy	32	35	38	35	31	26	21	18	13	9	26
School meals and welfare milk	107	59	25	18	10	7	3	-	3	1	23
Total	4 356	3 422	3 244	3 365	3 209	3 089	2 671	2 651	2 258	1 882	3 015
Final income	7 765	9 086	9 954	12 111	14 385	16 277	18 271	22 027	25 964	41 159	17 700

1 On mortgage interest and life assurance premiums.

2 Council tax, domestic rates and water charges after deducting discounts.

**TABLE 2B (Appendix 1) : Household characteristics of decile groups of ALL households, 1997-98**

	Decile groups of all households ranked by equivalised disposable income										All households
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Average per household (number)											
People	2.4	2.3	2.0	2.3	2.5	2.5	2.5	2.5	2.4	2.1	2.4
Adults	1.6	1.6	1.6	1.8	1.9	2.0	2.0	2.1	2.0	1.8	1.8
Men	0.7	0.7	0.7	0.9	0.9	1.0	1.0	1.1	1.1	1.0	0.9
Women	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	0.9	0.8	0.9
Children	0.9	0.7	0.5	0.5	0.6	0.6	0.5	0.5	0.4	0.3	0.5
Economically active people	0.5	0.5	0.6	0.9	1.2	1.4	1.5	1.8	1.7	1.6	1.2
Retired people	0.5	0.6	0.7	0.5	0.6	0.4	0.3	0.2	0.2	0.2	0.4
People in full-time education	0.86	0.54	0.46	0.54	0.51	0.49	0.46	0.42	0.37	0.24	0.49
In state primary schools	0.40	0.29	0.23	0.22	0.24	0.24	0.22	0.17	0.16	0.07	0.22
In state secondary schools	0.25	0.17	0.14	0.18	0.19	0.16	0.15	0.14	0.10	0.04	0.15
In further and higher education	0.18	0.07	0.07	0.12	0.06	0.07	0.06	0.08	0.06	0.05	0.08
In other educational establishments	0.03	0.02	0.01	0.02	0.01	0.02	0.02	0.02	0.05	0.08	0.03
Composition (percentages)											
Household type											
Retired											
1 adult	22	21	31	21	13	13	8	5	4	3	14
1 adult men	4	5	7	6	4	4	2	2	2	2	4
1 adult women	19	15	24	14	10	10	6	3	2	1	10
2 or more adults	12	20	16	13	16	11	7	7	5	5	11
Non-retired											
1 adult	16	12	12	12	9	13	17	16	19	25	15
1 adult men	12	8	6	7	4	7	11	8	14	19	10
1 adult women	5	4	6	5	5	6	6	7	5	6	6
2 adults	10	8	11	14	18	17	24	27	32	38	20
3 or more adults	2	3	4	10	9	12	14	15	14	9	9
1 adult with children	14	16	9	7	5	3	2	1	1	0	6
2 adults with 1 child	6	4	4	7	9	9	8	12	9	9	8
2 adults with 2 children	6	8	6	7	13	13	11	10	11	6	9
2 adults with 3 or more children	8	4	3	4	3	4	4	2	2	1	4
3 or more adults with children	4	3	3	4	5	6	4	5	2	2	4
Household tenure											
Rented	46	62	58	49	32	29	24	12	11	10	33
Local authority rented	28	44	35	26	17	15	9	3	2	1	18
Housing association	4	7	10	8	5	4	3	1	1	0	4
Other rented unfurnished	4	5	7	7	4	5	4	3	3	3	4
Rented furnished	8	5	5	6	4	5	5	5	5	4	5
Rent free	1	1	2	2	2	1	3	0	1	2	2
Owner occupied	54	38	42	51	68	71	76	88	89	90	67
With mortgage	18	14	16	27	39	46	53	62	69	70	41
Rental purchase	-	0	0	0	0	0	0	1	-	-	0
Owned outright	36	23	26	24	30	24	23	24	20	21	25
Age of chief economic supporter											
Under 25	10	6	4	5	3	3	4	3	1	0	4
Over 24 and under 35	18	16	12	14	17	21	19	23	27	26	19
Over 34 and under 45	18	15	13	18	18	19	21	22	24	25	19
Over 44 and under 55	13	11	12	13	16	19	23	25	24	27	18
Over 54 and under 65	10	13	13	14	15	13	18	15	15	13	14
Over 64 and under 75	11	20	23	20	17	14	8	9	6	5	13
Over 74	21	18	23	16	13	11	8	3	3	4	12
Employment status of chief economic supporter											
Self-employed	5	4	4	6	6	5	7	7	9	15	7
Full-time employee at work	4	10	15	27	43	54	61	69	72	72	43
Part-time employee at work	11	10	10	10	7	5	5	5	5	2	7
Unemployed	13	9	5	5	3	4	4	3	3	2	5
Unoccupied and under minimum NI age	33	27	18	16	11	7	7	4	3	3	13
Retired/unoccupied over minimum NI age	33	40	47	37	31	24	16	11	8	7	26
Other	1	1	0	0	-	-	-	-	-	-	0

**TABLE 3A (Appendix 1) : Average incomes, taxes and benefits by decile groups of NON-RETIRED households,1997-98**

	Decile groups of non-retired households ranked by equivalised disposable income										All such households
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Average per household (£ per year)											
Decile points (equivalised £)	7 130	9 241	11 364	13 523	15 723	18 239	21 302	25 200	32 766		
Number of households in the population ('000s)	1 830	1 834	1 826	1 829	1 831	1 831	1 827	1 829	1 828	1 828	18 292
Original income											
Wages and salaries	1 508	3 967	8 305	12 587	17 998	19 500	24 465	29 031	32 421	48 479	19 826
Imputed income from benefits in kind	17	6	55	97	106	247	381	558	804	1 649	392
Self-employment income	434	665	1 020	1 326	1 220	2 158	1 589	2 642	3 540	10 152	2 475
Occupational pensions, annuities	70	112	315	600	474	773	829	990	1 220	1 582	696
Investment income	152	96	196	234	367	347	633	599	1 177	3 439	724
Other income	231	208	356	290	193	258	147	123	176	196	218
Total	2 412	5 053	10 246	15 133	20 358	23 284	28 044	33 944	39 338	65 496	24 331
Direct benefits in cash											
Contributory											
Retirement pension	45	155	429	496	467	388	333	240	211	220	298
Job seeker's allowance (Contribution based)	120	78	41	34	28	32	22	12	5	12	38
Incapacity benefit	378	666	513	566	366	263	222	151	104	130	336
Widows' benefits	57	84	89	15	63	42	25	33	39	12	45
Statutory maternity pay / Allowance	3	6	15	23	16	21	35	45	28	58	25
Non-contributory											
Income support	1 391	1 363	775	440	175	133	70	30	16	5	440
Child benefit	669	565	513	465	434	339	272	275	216	181	393
Housing benefit	931	1 213	781	443	208	112	48	19	4	-	376
Job seeker's allowance (Income based)	297	160	75	81	48	15	12	1	4	8	70
Invalid care allowance	16	52	71	76	23	19	11	7	11	5	29
Attendance allowance	4	-	13	13	51	19	31	7	7	-	15
Disability living allowance	94	169	362	319	158	187	127	89	24	20	155
War pensions / War widows' pensions	3	3	-	2	29	49	59	3	-	10	16
Severe disablement allowance	26	49	43	71	16	15	7	4	4	-	24
Industrial injury disablement benefit	7	8	23	27	38	5	5	49	2	-	16
Student maintenance awards	234	46	208	67	89	75	41	70	53	18	90
Government training schemes	29	48	33	18	34	31	16	12	24	1	25
Family credit	165	297	185	97	41	29	9	1	2	-	83
Other non-contributory benefits	18	39	33	19	11	12	17	10	1	1	16
Total cash benefits	4 488	5 000	4 202	3 273	2 296	1 787	1 362	1 057	753	667	2 488
Gross income	6 900	10 053	14 448	18 406	22 654	25 072	29 406	35 000	40 090	66 163	26 819
Direct taxes and Employees' NIC											
Income tax	268	474	1 094	1 740	2 645	3 178	4 153	5 223	6 464	13 163	3 840
less: Tax relief at source <sup>1</sup>	59	60	93	139	169	193	228	263	277	310	179
Employees' NI contributions	121	262	566	877	1 264	1 379	1 694	2 028	2 198	2 398	1 279
Local taxes <sup>2</sup>	626	645	685	718	738	757	781	835	854	995	763
less: Council tax benefit / Rate rebates	240	224	129	81	44	37	30	13	15	24	84
Total	716	1 096	2 124	3 115	4 433	5 085	6 370	7 810	9 224	16 222	5 619
Disposable income	6 184	8 957	12 324	15 291	18 221	19 987	23 036	27 191	30 866	49 941	21 200
Equivalised disposable income	5 194	8 182	10 370	12 448	14 587	17 024	19 701	23 242	28 526	48 614	18 789
Indirect taxes											
Taxes on final goods and services											
VAT	849	922	1 269	1 533	1 707	1 712	2 026	2 453	2 354	3 143	1 797
Duty on tobacco	425	387	442	464	452	385	377	401	271	234	384
Duty on beer and cider	68	71	97	120	133	145	160	171	141	161	127
Duty on wines	14	10	20	28	24	34	45	58	60	108	40
Duty on spirits	40	50	58	54	60	87	95	113	88	98	74
Duty on hydrocarbon oils	195	208	315	379	441	474	490	593	549	582	423
Vehicle excise duty	59	57	95	113	142	150	158	185	172	170	130
Television licences	74	78	83	85	87	85	87	88	88	87	84
Stamp duty on house purchase	8	6	12	17	18	22	29	40	52	86	29
Customs duties	31	35	44	50	57	56	62	78	72	94	58
Betting taxes	31	43	56	66	63	74	90	102	54	88	67
Fossil fuel levy	3	4	4	4	4	4	4	4	4	4	4
Camelot National lottery fund	43	47	66	70	83	88	81	86	63	63	69
Other	25	30	35	54	49	50	58	74	94	92	56
Intermediate taxes											
Commercial and industrial rates	125	129	177	206	227	233	263	311	319	420	241
Employers' NI contributions	169	174	241	277	306	312	354	419	434	575	326
Duty on hydrocarbon oils	107	107	148	165	181	182	205	239	253	330	192
Vehicle excise duty	15	15	22	23	26	26	30	35	37	49	28
Other	84	87	119	138	152	156	174	208	211	275	160
Total indirect taxes	2 365	2 462	3 302	3 844	4 211	4 272	4 788	5 658	5 316	6 658	4 288
Post-tax income	3 819	6 495	9 023	11 447	14 009	15 715	18 248	21 532	25 551	43 283	16 912
Benefits in kind											
Education	3 192	2 010	2 278	1 776	1 727	1 229	1 114	1 056	794	534	1 571
National health service	1 460	1 459	1 519	1 569	1 582	1 409	1 396	1 345	1 187	1 178	1 411
Housing subsidy	97	126	80	53	37	27	17	13	6	2	46
Rail travel subsidy	29	20	33	29	29	46	50	64	83	143	53
Bus travel subsidy	15	14	21	20	20	17	16	10	9	7	15
School meals and welfare milk	160	78	38	14	12	5	0	2	3	2	31
Total	4 954	3 707	3 969	3 461	3 405	2 734	2 594	2 491	2 083	1 866	3 126
Final income	8 773	10 202	12 991	14 908	17 415	18 449	20 843	24 023	27 634	45 149	20 039

1 On mortgage interest and life assurance premiums.

2 Council tax, domestic rates and water charges after deducting discounts.



**TABLE 3B (Appendix 1) : Household characteristics of decile groups of NON-RETIRED households, 1997-98**

	Decile groups of non-retired households ranked by equivalised disposable income										All such households
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Average per household (number)											
People	2.9	2.7	2.8	2.9	2.9	2.7	2.6	2.6	2.4	2.2	2.7
Adults	1.7	1.7	1.9	2.0	2.1	2.0	2.1	2.1	1.9	1.9	1.9
Men	0.8	0.7	0.9	1.0	1.1	1.1	1.1	1.1	1.1	1.0	1.0
Women	0.9	0.9	1.0	1.0	1.1	1.0	1.0	1.0	0.9	0.8	1.0
Children	1.3	1.0	0.9	0.8	0.8	0.6	0.5	0.5	0.4	0.3	0.7
Economically active people	0.8	0.9	1.3	1.5	1.8	1.8	1.9	2.0	1.8	1.7	1.5
Retired people	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1
People in full-time education	1.26	0.83	0.89	0.74	0.71	0.54	0.46	0.44	0.37	0.28	0.65
In state primary schools	0.60	0.43	0.41	0.34	0.33	0.27	0.20	0.20	0.14	0.08	0.30
In state secondary schools	0.36	0.28	0.28	0.28	0.24	0.18	0.15	0.13	0.11	0.05	0.21
In further and higher education	0.26	0.10	0.17	0.10	0.10	0.07	0.08	0.08	0.06	0.06	0.11
In other educational establishments	0.03	0.03	0.03	0.02	0.03	0.02	0.02	0.03	0.05	0.09	0.04
Composition (percentages)											
Household type											
Non-retired											
1 adult	24	24	18	13	15	20	18	18	25	26	20
1 adult men	17	14	10	7	8	13	10	11	17	20	13
1 adult women	7	10	9	6	7	7	8	7	8	6	7
2 adults	15	16	20	24	22	27	32	32	37	42	27
3 or more adults	4	5	11	15	14	17	18	18	13	10	12
1 adult with children	23	24	14	7	5	2	2	1	1	0	8
2 adults with 1 child	8	7	10	11	12	11	12	11	9	11	10
2 adults with 2 children	10	11	13	17	17	13	12	12	11	7	12
2 adults with 3 or more children	11	6	8	5	5	4	3	3	2	2	5
3 or more adults with children	5	6	6	7	10	5	4	5	2	2	5
Household tenure											
Rented	62	69	52	37	28	26	15	14	13	9	33
Local authority rented	40	43	30	19	14	8	5	3	1	0	16
Housing association	4	10	7	4	3	4	1	1	1	0	4
Other rented unfurnished	4	7	8	6	5	4	3	3	3	2	5
Rented furnished	13	8	8	6	5	7	4	5	6	4	7
Rent free	1	0	0	2	1	3	2	1	2	2	1
Owner occupied	38	31	48	63	72	74	85	86	87	91	67
With mortgage	23	22	33	48	56	59	68	73	74	77	53
Rental purchase	-	0	1	0	1	-	0	1	-	-	0
Owned outright	14	9	14	15	15	15	16	12	13	14	14
Age of chief economic supporter											
Under 25	14	9	7	5	5	4	4	3	1	0	5
Over 24 and under 35	27	24	25	22	27	22	24	30	31	27	26
Over 34 and under 45	26	25	25	28	24	26	24	26	26	28	26
Over 44 and under 55	20	21	20	22	25	27	28	26	28	30	25
Over 54 and under 65	11	19	16	17	14	17	17	13	13	13	15
Over 64 and under 75	1	2	3	5	5	3	3	1	2	2	3
Over 74	0	1	4	2	1	2	1	0	0	0	1
Employment status of chief economic supporter											
Self-employed	7	8	8	8	6	9	7	10	11	17	9
Full-time employee at work	8	17	40	54	70	70	78	79	80	78	57
Part-time employee at work	16	19	15	11	7	8	4	6	5	3	9
Unemployed	19	12	7	5	6	5	5	3	3	2	7
Unoccupied and under minimum NI age	48	41	24	17	7	5	5	1	1	1	15
Retired/unoccupied over minimum NI age	1	1	6	5	4	3	2	0	0	0	2
Other	2	1	0	0	-	-	-	-	-	-	0

TABLE 4A (Appendix 1) : Average incomes, taxes and benefits by decile groups of RETIRED households, 1997-98

	Decile groups of retired households ranked by equivalised disposable income										All such households
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Average per household (£ per year)											
Decile points (equivalised £)	6 324	7 646	8 562	9 415	10 346	11 744	13 282	15 659	20 387		
Number of households in the population ('000s)	628	627	624	628	626	627	624	627	626	626	6 264
Original income											
Wages and salaries	3	46	72	62	89	221	407	217	771	660	255
Imputed income from benefits in kind	-	-	-	-	1	30	-	-	20	18	7
Self-employment income	45	-	-	13	-	20	30	-	7	25	14
Occupational pensions, annuities	274	765	1 001	1 242	1 514	2 326	3 442	4 746	7 606	16 190	3 911
Investment income	400	310	426	415	507	841	1 223	1 346	2 810	10 414	1 869
Other income	25	25	34	70	71	57	67	27	35	32	44
Total	746	1 147	1 533	1 801	2 183	3 496	5 169	6 336	11 249	27 338	6 100
Direct benefits in cash											
Contributory											
Retirement pension	3 550	4 437	4 277	4 355	4 151	4 263	4 310	4 222	4 198	4 058	4 182
Job seeker's allowance (Contribution based)	45	27	8	-	-	-	-	22	-	-	10
Incapacity benefit	41	57	178	93	78	230	243	204	108	227	146
Widows' benefits	-	31	-	-	61	21	-	24	50	45	23
Statutory maternity pay/ Allowance	2	-	-	-	-	-	-	-	-	-	0
Non-contributory											
Income support	151	151	151	242	179	303	333	422	525	111	257
Child benefit	3	4	-	-	-	-	3	3	-	-	1
Housing benefit	17	229	646	709	857	666	506	495	377	77	458
Job seeker's allowance (Income based)	10	10	26	-	-	-	-	12	6	-	6
Invalid care allowance	28	-	-	7	35	40	35	70	46	15	28
Attendance allowance	13	58	135	143	161	265	506	571	486	105	244
Disability living allowance	21	33	45	66	154	255	353	347	171	26	147
War pensions / War widows' pensions	-	10	16	52	11	62	149	288	152	57	80
Severe disablement allowance	-	-	-	24	-	26	54	56	62	22	24
Industrial injury disablement benefit	-	21	3	18	-	20	9	8	11	77	17
Student maintenance awards	-	19	24	-	-	27	33	-	-	-	10
Government training schemes	-	-	-	-	-	-	-	-	12	-	1
Family credit	-	-	-	-	-	-	-	-	-	-	-
Other non-contributory benefits	83	66	62	44	12	25	14	44	91	77	52
Total cash benefits	3 964	5 154	5 572	5 754	5 698	6 204	6 549	6 789	6 296	4 897	5 688
Gross income	4 710	6 300	7 105	7 555	7 881	9 699	11 717	13 125	17 545	32 235	11 787
Direct taxes and Employees' NIC											
Income tax	66	87	138	162	210	374	630	898	1 830	5 134	953
less: Tax relief at source <sup>1</sup>	8	11	10	16	9	8	14	13	18	20	13
Employees' NI contributions	5	1	1	1	4	11	25	9	35	38	13
Local taxes <sup>2</sup>	681	686	645	658	642	708	723	722	831	1 052	735
less: Council tax benefit / Rate rebates	210	147	171	161	161	118	128	118	103	16	133
Total	534	615	602	644	687	967	1 236	1 498	2 575	6 188	1 555
Disposable income	4 176	5 686	6 502	6 911	7 194	8 733	10 481	11 627	14 969	26 047	10 233
Equivalised disposable income	5 482	6 995	8 103	9 007	9 830	10 997	12 426	14 447	17 678	30 469	12 543
Indirect taxes											
Taxes on final goods and services											
VAT	484	526	538	498	585	776	850	892	1 491	1 905	854
Duty on tobacco	85	107	137	133	152	146	110	155	215	110	135
Duty on beer and cider	22	22	27	22	23	23	26	29	51	53	30
Duty on wines	7	10	10	9	6	14	24	26	37	76	22
Duty on spirits	46	37	33	49	28	44	40	85	87	114	56
Duty on hydrocarbon oils	84	96	96	77	88	129	159	166	256	310	146
Vehicle excise duty	40	51	43	48	51	61	77	87	122	162	74
Television licences	84	84	81	77	77	79	80	84	80	90	82
Stamp duty on house purchase	8	7	4	4	5	9	11	12	19	36	11
Customs duties	19	20	22	20	20	28	29	31	42	60	29
Betting taxes	30	37	42	37	29	47	55	52	42	41	41
Fossil fuel levy	3	3	2	3	3	3	3	3	4	4	3
Camelot National lottery fund	30	38	41	31	39	50	57	49	42	39	42
Other	14	14	13	21	18	27	24	26	93	103	35
Intermediate taxes											
Commercial and industrial rates	82	85	88	82	90	116	128	128	202	253	125
Employers' NI contributions	109	113	118	109	122	159	174	172	278	338	169
Duty on hydrocarbon oils	68	69	73	67	75	98	103	100	169	183	100
Vehicle excise duty	9	9	10	9	10	14	14	14	25	26	14
Other	54	57	60	55	61	78	84	83	125	160	81
Total indirect taxes	1 280	1 387	1 438	1 349	1 483	1 899	2 046	2 196	3 378	4 061	2 052
Post-tax income	2 897	4 299	5 064	5 561	5 712	6 834	8 435	9 431	11 591	21 986	8 181
Benefits in kind											
Education	-	104	-	-	-	82	127	-	-	52	37
National health service	2 730	2 692	2 434	2 659	2 323	2 413	2 448	2 570	2 640	2 369	2 528
Housing subsidy	17	41	91	81	85	72	60	57	29	4	54
Rail travel subsidy	10	4	3	-	8	10	30	8	27	38	14
Bus travel subsidy	64	65	65	57	66	63	58	54	40	39	57
School meals and welfare milk	-	-	-	-	-	-	-	-	-	-	-
Total	2 822	2 906	2 593	2 797	2 482	2 640	2 722	2 690	2 737	2 502	2 689
Final income	5 718	7 205	7 657	8 358	8 194	9 474	11 157	12 121	14 328	24 487	10 870

1 On mortgage interest and life assurance premiums.

2 Council tax, domestic rates and water charges after deducting discounts.

**TABLE 4B (Appendix 1) : Household characteristics of decile groups of RETIRED households, 1997-98**

	Decile groups of retired households ranked by equivalised disposable income										All such households
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Average per household (number)											
People	1.4	1.5	1.5	1.4	1.3	1.5	1.6	1.5	1.6	1.6	1.5
Adults	1.39	1.49	1.49	1.40	1.30	1.45	1.58	1.49	1.58	1.61	1.48
Men	0.50	0.59	0.58	0.50	0.47	0.60	0.66	0.64	0.65	0.80	0.60
Women	0.89	0.90	0.91	0.89	0.84	0.86	0.92	0.85	0.93	0.81	0.88
Children	0.01	0.02	-	-	-	0.00	0.01	0.01	0.00	0.01	0.00
Economically active people	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1
Retired people	1.3	1.4	1.4	1.3	1.3	1.3	1.5	1.4	1.4	1.5	1.4
People in full-time education	-	0.02	-	-	-	0.02	0.03	0.01	-	0.01	0.01
Composition (percentages)											
Household type											
Retired											
1 adult	64	53	55	61	71	59	50	54	47	41	56
1 adult men	13	10	12	12	19	17	15	16	13	21	15
1 adult women	51	43	42	50	51	42	35	38	34	19	41
2 or more adults	36	47	45	39	29	41	50	46	53	59	44
Household tenure											
Rented	15	32	57	55	57	45	35	32	24	3	36
Local authority rented	8	21	46	40	32	25	22	20	15	1	23
Housing association	3	4	5	7	15	12	9	7	5	0	7
Other rented unfurnished	3	5	4	4	7	4	1	2	3	0	3
Rented furnished	0	0	0	0	1	0	2	1	0	1	0
Rent free	-	2	3	4	3	5	1	1	1	1	2
Owner occupied	85	68	43	45	43	55	65	68	76	97	64
With mortgage	5	5	6	7	4	4	8	10	6	7	6
Rental purchase	-	-	-	-	-	-	-	-	-	-	-
Owned outright	81	63	36	37	39	50	57	58	70	91	58
Age of chief economic supporter											
Under 25	-	-	-	-	-	-	-	-	-	-	-
Over 24 and under 35	-	-	-	-	-	-	-	-	-	-	-
Over 34 and under 45	1	-	1	-	-	-	-	-	0	1	0
Over 44 and under 55	1	1	-	-	-	-	2	1	1	2	1
Over 54 and under 65	9	8	9	8	10	9	8	12	19	21	11
Over 64 and under 75	30	38	53	42	46	51	50	46	41	46	44
Over 74	60	54	38	51	43	40	40	42	40	30	44
Employment status of chief economic supporter											
Self-employed	2	-	-	-	-	-	-	-	-	-	0
Full-time employee at work	-	-	-	-	-	-	-	-	0	-	0
Part-time employee at work	-	-	-	-	-	0	-	-	-	-	0
Unemployed	-	-	-	1	-	-	-	-	-	-	0
Unoccupied and under minimum NI age	5	3	5	2	3	2	7	9	13	19	7
Retired/unoccupied over minimum NI age	94	97	95	98	97	97	93	91	86	81	93

**TABLE 5 (Appendix 1) : Average incomes, taxes and benefits by decile groups of NON-RETIRED households WITHOUT CHILDREN, 1997-98**

	Decile groups of non-retired households without children, ranked by equivalised disposable income										All such households
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Average per household (£ per year)											
Decile points (equivalised £)	7 989	10 695	13 045	15 578	17 912	20 369	23 780	28 371	36 355		
Number of households in the population ('000s)	1 088	1 090	1 088	1 091	1 085	1 092	1 087	1 086	1 087	1 091	10 884
Original income											
Wages and salaries	1 488	4 074	8 056	13 733	16 452	21 035	24 500	28 347	30 377	49 904	19 797
Imputed income from benefits in kind	15	48	38	80	118	189	323	444	702	1 702	366
Self-employment income	251	474	1 081	942	1 407	1 390	1 923	2 160	4 273	8 802	2 270
Occupational pensions, annuities	138	330	671	851	977	1 125	1 089	1 449	1 565	1 991	1 018
Investment income	186	202	329	324	332	641	605	857	1 108	3 271	785
Other income	252	263	131	250	124	100	133	58	95	210	161
Total	2 330	5 392	10 306	16 180	19 410	24 481	28 574	33 314	38 119	65 880	24 399
Direct benefits in cash											
Contributory											
Retirement pension	78	574	859	882	570	505	346	276	292	256	464
Job seeker's allowance (Contribution based)	103	94	32	20	28	28	13	11	10	11	35
Incapacity benefit	742	1 007	932	534	347	309	220	144	102	136	447
Widows' benefits	70	120	54	55	50	35	48	44	21	-	50
Statutory Maternity Pay/ Allowance	-	-	-	-	-	-	4	-	-	-	0
Non-contributory											
Income support	683	688	605	226	129	115	23	45	1	9	252
Child benefit	8	8	10	12	3	2	-	3	-	9	5
Housing benefit	775	906	598	276	136	68	46	5	7	-	282
Job seeker's allowance (income based)	306	147	129	73	21	18	6	-	6	-	71
Invalid care allowance	38	29	80	8	26	6	-	12	-	-	20
Attendance allowance	-	7	31	53	25	38	6	16	-	-	18
Disability living allowance	66	354	458	122	212	194	97	44	21	-	157
War pensions / War widows' pensions	-	4	-	37	87	92	16	-	-	16	25
Severe disablement allowance	33	87	78	51	17	12	-	13	-	-	29
Industrial injury disablement benefit	-	8	44	23	9	6	76	5	-	-	17
Student maintenance awards	351	207	174	105	74	45	74	82	26	17	116
Government training schemes	58	47	15	47	49	21	17	1	41	0	30
Family credit	-	0	3	10	-	29	-	-	-	-	4
Other non-contributory benefits	11	22	29	15	9	39	8	1	1	1	14
Total cash benefits	3 324	4 310	4 131	2 551	1 792	1 562	1 000	705	529	455	2 036
Gross income	5 654	9 702	14 437	18 731	21 202	26 043	29 574	34 019	38 648	66 335	26 434
Direct taxes and Employees' NIC											
Income tax	325	432	1 099	2 011	2 578	3 413	4 046	5 087	6 089	13 248	3 833
less: Tax relief at source <sup>1</sup>	43	39	62	80	126	171	190	237	264	306	152
Employees' NI contributions	107	253	549	944	1 158	1 525	1 778	2 060	2 130	2 470	1 297
Local taxes <sup>2</sup>	569	625	682	687	693	726	754	794	823	965	732
less: Council tax benefit / Rate rebates	207	160	119	64	41	38	15	15	13	27	70
Total	750	1 111	2 149	3 498	4 262	5 455	6 373	7 688	8 764	16 349	5 640
Disposable income	4 904	8 592	12 288	15 234	16 940	20 588	23 200	26 331	29 883	49 985	20 794
Equivalised disposable income	5 589	9 375	11 802	14 315	16 695	19 167	22 045	25 628	31 595	53 486	20 969
Indirect taxes											
Taxes on final goods and services											
VAT	739	862	1 224	1 404	1 430	1 825	2 221	2 212	2 319	3 072	1 731
Duty on tobacco	309	390	438	476	398	451	409	377	281	216	375
Duty on beer and cider	105	94	134	129	139	185	202	157	163	158	147
Duty on wines	14	15	22	20	26	39	58	56	66	119	43
Duty on spirits	63	61	60	64	85	103	128	122	85	108	88
Duty on hydrocarbon oils	161	181	305	346	395	431	549	521	542	539	397
Vehicle excise duty	54	58	89	120	137	152	181	169	177	160	130
Television licences	68	79	81	83	81	85	87	88	88	85	82
Stamp duty on house purchase	7	7	10	10	12	18	26	39	48	90	26
Customs duties	23	26	39	46	44	53	65	64	70	90	52
Betting taxes	33	51	77	64	82	111	123	65	106	60	77
Fossil fuel levy	3	3	3	3	3	4	4	4	4	4	3
Camelot National lottery fund	36	49	74	83	94	92	85	82	73	60	73
Other	24	21	58	40	38	55	59	100	67	98	56
Intermediate taxes											
Commercial and industrial rates	105	121	166	183	191	235	265	279	293	401	224
Employers' NI contributions	139	165	226	247	256	317	353	376	395	553	303
Duty on hydrocarbon oils	88	104	139	145	149	192	197	218	221	328	178
Vehicle excise duty	13	15	20	21	22	28	28	32	32	50	26
Other	70	81	111	123	128	155	176	185	196	262	149
Total indirect taxes	2 054	2 384	3 276	3 607	3 711	4 529	5 216	5 144	5 225	6 452	4 160
Post-tax income	2 850	6 207	9 012	11 627	13 229	16 059	17 985	21 187	24 658	43 534	16 635
Benefits in kind											
Education	1 598	761	594	464	151	265	260	256	145	196	469
National health service	810	1 046	1 284	1 269	1 103	1 168	1 030	1 019	896	929	1 056
Housing subsidy	67	99	59	53	36	29	18	10	2	-	37
Rail travel subsidy	52	29	32	28	49	58	54	84	59	167	61
Bus travel subsidy	12	23	27	24	19	20	12	10	7	6	16
School meals and welfare milk	1	0	-	-	1	-	-	-	-	-	0
Total	2 541	1 958	1 997	1 839	1 358	1 539	1 375	1 379	1 109	1 298	1 639
Final income	5 391	8 166	11 008	13 466	14 587	17 598	19 359	22 566	25 768	44 832	18 274

1 On mortgage interest and life assurance premiums.

2 Council tax, domestic rates and water charges after deducting discounts.

**TABLE 6 (Appendix 1) : Average incomes, taxes and benefits by decile groups of NON-RETIRED households with CHILDREN, 1997-98**

	Decile groups of non-retired households with children ranked by equivalised disposable income										All such households
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Average per household (£ per year)											
Decile points (equivalised £)	6 321	7 897	9 736	11 360	13 222	14 862	17 533	21 209	26 628		
Number of households in the population ('000s)	741	742	741	738	741	742	738	740	742	742	7 408
Original income											
Wages and salaries	1 405	3 178	7 294	10 552	16 062	20 433	23 746	28 698	36 341	50 985	19 869
Imputed income from benefits in kind	12	9	-	49	148	166	303	769	924	1 919	430
Self-employment income	652	508	1 020	1 545	1 684	1 479	2 196	2 789	3 848	12 026	2 775
Occupational pensions, annuities	-	40	105	153	316	291	335	320	345	330	223
Investment income	113	57	90	74	134	438	411	402	740	3 875	633
Other income	212	318	249	317	378	227	354	387	308	252	300
Total	2 394	4 111	8 758	12 690	18 722	23 033	27 346	33 365	42 506	69 387	24 231
Direct benefits in cash											
Contributory											
Retirement pension	11	48	65	91	78	76	46	103	-	36	55
Job seeker's allowance (Contribution based)	151	74	16	50	34	47	22	27	7	5	43
Incapacity benefit	215	254	177	215	213	248	123	133	61	88	172
Widows' benefits	40	90	22	74	-	48	59	-	38	-	37
Statutory Maternity Pay/ Allowance	5	8	13	34	45	44	57	93	132	186	62
Non-contributory											
Income support	1 854	2 216	1 440	883	296	236	145	57	4	16	715
Child benefit	1 198	1 062	1 030	996	977	887	900	899	863	811	962
Housing benefit	1 048	1 423	1 022	920	348	269	102	12	-	-	514
Job seeker's allowance (Income based)	298	208	45	36	40	41	-	4	-	19	69
Invalid care allowance	7	27	95	58	97	54	22	26	17	19	42
Attendance allowance	9	-	10	-	-	33	15	31	-	-	10
Disability living allowance	126	143	141	350	213	177	138	95	64	71	152
War pensions / War widows' pensions	-	7	-	-	-	-	-	-	6	-	1
Severe disablement allowance	31	17	29	23	32	11	-	12	-	-	15
Industrial injury disablement benefit	-	22	8	39	15	21	39	-	5	4	15
Student maintenance awards	43	74	18	121	19	24	105	65	38	17	53
Government training schemes	14	25	38	40	6	17	16	9	5	3	17
Family credit	269	401	597	331	215	99	35	19	5	5	198
Other non-contributory benefits	26	24	46	73	3	10	1	1	12	0	20
Total cash benefits	5 345	6 121	4 814	4 337	2 630	2 342	1 825	1 585	1 255	1 281	3 153
Gross income	7 739	10 232	13 571	17 027	21 352	25 375	29 171	34 950	43 761	70 668	27 385
Direct taxes and Employees' NIC											
Income tax	188	424	906	1 426	2 231	2 988	3 861	5 083	7 273	14 132	3 851
less: Tax relief at source <sup>1</sup>	74	56	103	139	215	256	283	330	379	354	219
Employees' NI contributions	116	215	507	743	1 142	1 465	1 632	1 923	2 364	2 404	1 251
Local taxes <sup>2</sup>	685	662	687	720	746	803	829	873	971	1 121	810
less: Council tax benefit / Rate rebates	279	284	163	132	52	44	35	16	11	23	104
Total	636	961	1 835	2 619	3 853	4 955	6 004	7 532	10 217	17 280	5 589
Disposable income	7 103	9 271	11 736	14 408	17 499	20 420	23 167	27 418	33 544	53 389	21 795
Equivalised disposable income	4 970	7 208	8 743	10 501	12 344	14 072	16 104	19 235	23 516	39 158	15 585
Indirect taxes											
Taxes on final goods and services											
VAT	958	909	1 216	1 477	1 853	1 957	2 081	2 312	2 806	3 367	1 894
Duty on tobacco	504	488	466	419	429	490	382	325	259	214	398
Duty on beer and cider	35	48	75	74	94	117	157	121	127	128	97
Duty on wines	13	9	14	22	29	31	36	48	64	86	35
Duty on spirits	31	28	46	55	45	54	84	79	58	65	55
Duty on hydrocarbon oils	213	223	320	371	467	477	584	592	701	655	460
Vehicle excise duty	67	53	81	109	137	148	168	165	190	188	131
Television licences	79	81	84	85	88	89	90	89	89	91	87
Stamp duty on house purchase	10	5	11	14	25	24	36	44	62	93	32
Customs duties	38	38	46	57	63	67	70	78	99	108	66
Betting taxes	32	39	48	47	56	59	58	61	66	47	51
Fossil fuel levy	4	4	4	4	4	4	4	4	5	5	4
Camelot National lottery fund	49	51	56	60	76	78	78	67	70	49	64
Other	32	33	38	33	38	71	61	66	88	100	56
Intermediate taxes											
Commercial and industrial rates	141	133	173	205	250	266	285	315	390	501	266
Employers' NI contributions	193	179	235	278	336	360	380	425	532	689	361
Duty on hydrocarbon oils	123	113	145	165	194	217	215	242	307	396	212
Vehicle excise duty	17	16	21	24	27	31	31	35	45	59	30
Other	95	91	117	138	167	178	189	212	260	327	177
Total indirect taxes	2 634	2 541	3 194	3 637	4 377	4 719	4 989	5 280	6 219	7 166	4 476
Post-tax income	4 469	6 731	8 542	10 771	13 122	15 700	18 178	22 138	27 325	46 222	17 320
Benefits in kind											
Education	4 211	3 617	3 289	3 485	3 250	3 015	3 156	3 006	2 892	1 977	3 190
National health service	2 009	1 832	1 932	1 819	1 911	1 985	1 904	1 939	1 961	2 027	1 932
Housing subsidy	130	151	102	88	39	40	13	6	0	8	58
Rail travel subsidy	16	12	12	23	34	23	32	41	77	132	40
Bus travel subsidy	19	17	12	15	12	19	12	11	13	8	14
School meals and welfare milk	285	207	101	85	29	25	20	6	1	14	77
Total	6 668	5 837	5 448	5 516	5 276	5 108	5 137	5 010	4 945	4 165	5 311
Final income	11 137	12 567	13 990	16 287	18 398	20 808	23 315	27 148	32 270	50 388	22 631

1 On mortgage interest and life assurance premiums.

2 Council tax, domestic rates and water charges after deducting discounts.

TABLE 7 (Appendix 1) : Distribution of households' by household type, 1997-98

	Retired households				Non-Retired households			
	1 adult Men	1 adult Women	All 1 adult	2 or more adults	1 adult Men	1 adult Women	All 1 adult	
Decile groups of households ranked by equivalised disposable income								
Number of households ('000s)								
Bottom	89	460	549	292	285	112	397	
2nd	132	379	511	491	195	107	302	
3rd	173	599	771	404	158	149	307	
4th	160	346	506	330	162	126	288	
5th	86	241	327	386	95	114	209	
6th	88	241	329	261	166	143	309	
7th	59	142	200	176	277	136	413	
8th	44	70	113	183	203	183	386	
9th	55	38	92	132	340	130	470	
Top	44	34	77	132	456	156	612	
All households in population ('000s)	928	2 548	3 477	2 787	2 337	1 356	3 692	
Non-Retired households								
	2 adults	3 or more adults	1 adult with children	2 adults with 1 child	2 adults with 2 children	2 adults with 3 or more children	3 or more adults with children	All house- holds
Decile groups of households ranked by equivalised disposable income								
Number of households ('000s)								
Bottom	243	59	350	141	150	186	88	2 456
2nd	198	63	403	99	193	107	86	2 453
3rd	264	93	229	93	144	82	71	2 457
4th	345	246	178	166	184	110	108	2 461
5th	447	227	112	227	323	76	118	2 452
6th	419	302	73	216	308	88	152	2 457
7th	596	353	55	202	266	100	90	2 483
8th	664	376	13	293	255	48	126	2 458
9th	797	341	33	215	267	49	58	2 455
Top	936	221	6	233	159	36	41	2 453
All households in population ('000s)	4 909	2 283	1 453	1 887	2 249	882	937	24 556

1 See Appendix 3 for definitions of retired households, adults and children.

**TABLE 8 (Appendix 1) : Summary of the effects of taxes and benefits, by household type<sup>1</sup>, 1997-98**

	Retired households				Non-Retired households			
	1 adult Men	1 adult Women	All 1 adult	2 or more adults	1 adult Men	1 adult Women	All 1 adult	
<b>Average per household (£ per year)</b>								
Original income	5 006	2 568	3 219	9 693	15 030	11 662	13 793	
plus Cash benefits	4 690	4 992	4 911	6 656	1 695	2 015	1 812	
Gross income	9 696	7 560	8 130	16 349	16 725	13 677	15 605	
less Direct taxes and employees' NIC	1 349	870	998	2 249	3 731	2 890	3 422	
Disposable income	8 347	6 690	7 132	14 100	12 993	10 787	12 183	
<i>Equivalised disposable income</i>	<i>13 684</i>	<i>10 953</i>	<i>11 682</i>	<i>13 618</i>	<i>21 301</i>	<i>17 683</i>	<i>19 972</i>	
less Indirect taxes	1 640	1 093	1 239	3 065	2 603	2 073	2 408	
Post-tax income	6 707	5 596	5 893	11 035	10 390	8 714	9 775	
plus Benefits in kind	1 930	2 363	2 247	3 240	762	831	787	
Final income	8 637	7 959	8 140	14 275	11 152	9 545	10 562	
<b>Non-Retired households</b>								
	2 adults	3 or more adults	1 adult with children	2 adults with 1 child	2 adults with 2 children	2 adults with 3 or more children	3 or more adults with children	All house- holds
<b>Average per household (£ per year)</b>								
Original income	27 241	35 439	4 943	28 337	30 047	24 437	31 721	19 680
plus Cash benefits	1 868	2 758	5 515	1 982	2 018	4 058	3 724	3 304
Gross income	29 109	38 198	10 457	30 319	32 064	28 495	35 445	22 985
less Direct taxes and employees' NIC	6 410	7 570	1 049	6 674	7 130	5 487	6 842	4 583
Disposable income	22 699	30 628	9 408	23 646	24 934	23 007	28 604	18 402
<i>Equivalised disposable income</i>	<i>22 179</i>	<i>19 981</i>	<i>9 578</i>	<i>19 383</i>	<i>17 295</i>	<i>13 255</i>	<i>15 343</i>	<i>17 196</i>
less Indirect taxes	4 429	6 414	2 243	4 657	4 714	4 599	6 883	3 717
Post-tax income	18 270	24 214	7 164	18 989	20 219	18 409	21 721	14 685
plus Benefits in kind	1 414	3 501	4 981	3 362	5 240	8 592	6 829	3 015
Final income	19 684	27 715	12 145	22 351	25 459	27 001	28 550	17 700

<sup>1</sup> See Appendix 3 for definitions of retired households, adults and children.

**TABLE 9 (Appendix 1) : Average incomes, taxes and benefits by decile groups of households (ranked by UNADJUSTED disposable income), 1997-98**

	Decile groups of households ranked by UNADJUSTED disposable income										All households
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Average per household (£ per year)											
Decile points (£ per year)	5 461	7 180	9 305	11 731	14 680	17 953	21 649	26 826	35 070		
Number of households in the population ('000s)	2 455	2 452	2 460	2 456	2 454	2 457	2 457	2 457	2 453	2 454	24 556
Original income											
Wages and salaries	329	875	1 950	4 840	8 050	12 570	17 757	23 395	30 425	48 148	14 834
Imputed income from benefits in kind	3	11	8	29	37	152	196	367	595	1 539	294
Self-employment income	155	91	231	456	865	1 254	1 244	2 043	2 778	9 353	1 847
Occupational pensions, annuities	265	656	1 022	1 267	1 826	1 845	1 798	1 773	2 163	2 549	1 516
Investment income	207	290	358	530	705	891	848	1 058	1 418	3 856	1 016
Other income	69	113	96	193	209	190	260	211	220	174	173
Total	1 028	2 035	3 666	7 315	11 693	16 903	22 101	28 847	37 597	65 619	19 680
Direct benefits in cash											
Contributory											
Retirement pension	1 812	2 168	2 319	1 630	1 449	1 209	868	533	527	376	1 289
Job seeker's allowance (Contribution based)	38	40	57	39	26	26	30	20	17	19	31
Incapacity benefit	285	228	387	386	436	354	296	214	169	120	288
Widows' benefits	35	54	68	37	52	61	48	12	13	11	39
Statutory maternity pay/ Allowance	1	1	4	5	9	39	20	19	39	51	19
Non-contributory											
Income support	426	804	816	733	476	253	198	118	77	30	393
Child benefit	73	186	244	301	303	340	365	389	357	371	293
Housing benefit	619	1 006	930	681	334	217	80	66	35	-	397
Job seeker's allowance (Income based)	122	55	82	84	66	49	48	13	12	7	54
Invalid care allowance	-	18	10	55	63	51	32	25	13	19	29
Attendance allowance	24	49	180	189	83	61	76	30	16	23	73
Disability living allowance	38	87	159	242	351	237	160	139	72	42	153
War pensions / War widows' pensions	2	10	60	52	82	33	41	20	11	10	32
Severe disablement allowance	13	9	23	39	64	13	36	31	3	6	24
Industrial injury disablement benefit	4	6	8	26	17	8	42	36	12	6	17
Student maintenance awards	51	53	57	123	32	79	81	65	81	74	70
Government training schemes	14	9	16	11	11	17	32	16	55	7	19
Family credit	9	29	89	183	130	79	45	24	24	2	61
Other non-contributory benefits	18	31	37	34	36	9	51	5	19	10	25
Total cash benefits	3 586	4 844	5 547	4 851	4 021	3 133	2 549	1 778	1 551	1 185	3 304
Gross income	4 614	6 879	9 213	12 166	15 713	20 036	24 650	30 625	39 149	66 803	22 985
Direct taxes and Employees' NIC											
Income tax	143	190	393	894	1 472	2 239	3 101	4 224	5 883	12 496	3 104
less: Tax relief at source <sup>1</sup>	26	23	28	63	101	148	185	241	259	291	137
Employees' NI contributions	34	55	129	336	566	891	1 255	1 646	2 050	2 597	956
Local taxes <sup>2</sup>	576	603	643	672	731	752	782	845	891	1 066	756
less: Council tax benefit / Rate rebates	194	203	178	133	89	59	47	28	13	20	96
Total	534	623	959	1 706	2 579	3 675	4 906	6 445	8 552	15 848	4 583
Disposable income	4 080	6 256	8 254	10 460	13 135	16 361	19 745	24 180	30 597	50 956	18 402
Indirect taxes											
Taxes on final goods and services											
VAT	469	554	729	992	1 210	1 596	1 780	2 150	2 589	3 494	1 556
Duty on tobacco	186	247	269	314	303	400	416	377	362	331	320
Duty on beer and cider	36	39	40	63	86	105	132	155	170	193	102
Duty on wines	7	9	14	15	26	33	34	50	62	104	35
Duty on spirits	32	31	47	52	62	79	77	91	111	115	70
Duty on hydrocarbon oils	76	99	155	225	283	393	426	529	614	719	352
Vehicle excise duty	34	40	61	79	98	127	144	169	194	213	116
Television licences	73	75	78	80	87	87	88	88	89	89	83
Stamp duty on house purchase	5	6	6	10	14	21	22	38	47	75	24
Customs duties	17	20	27	34	41	49	57	69	82	109	50
Betting taxes	24	33	37	50	74	64	94	71	78	78	60
Fossil fuel levy	3	3	3	3	3	4	4	4	4	5	4
Camelot National lottery fund	27	36	40	52	64	75	80	81	86	80	62
Other	16	18	22	23	35	43	81	80	79	110	51
Intermediate taxes											
Commercial and industrial rates	73	87	109	142	169	216	240	282	334	463	211
Employers' NI contributions	98	117	147	192	227	292	326	378	452	634	286
Duty on hydrocarbon oils	60	74	91	117	133	173	197	216	259	365	168
Vehicle excise duty	8	10	13	17	19	25	29	31	38	54	24
Other	50	58	73	95	113	142	160	188	221	302	140
Total indirect taxes	1 295	1 556	1 961	2 555	3 046	3 923	4 386	5 047	5 870	7 533	3 717
Post-tax income	2 786	4 701	6 293	7 905	10 089	12 438	15 358	19 132	24 727	43 423	14 685
Benefits in kind											
Education	510	608	829	1 294	1 246	1 227	1 513	1 404	1 690	1 474	1 180
National health service	1 517	1 793	1 966	1 709	1 671	1 769	1 685	1 545	1 640	1 659	1 696
Housing subsidy	59	100	101	70	46	35	37	16	10	2	48
Rail travel subsidy	14	12	10	25	24	38	40	50	77	136	43
Bus travel subsidy	30	40	37	30	28	26	21	16	17	12	26
School meals and welfare milk	14	41	47	57	31	14	11	10	2	7	23
Total	2 145	2 593	2 992	3 186	3 046	3 110	3 308	3 041	3 435	3 291	3 015
Final income	4 931	7 294	9 285	11 091	13 135	15 548	18 666	22 173	28 162	46 713	17 700

1 On mortgage interest and life assurance premiums.

2 Council tax, domestic rates and water charges after deducting discounts.



TABLE 10 (Appendix 1) : Cross-tabulation of households ranked by disposable income, unadjusted and equivalised, 1997-98

(i) Quintile groups		Quintile groups of <b>equivalised</b> disposable income					All households	
		Bottom	2nd	3rd	4th	Top		
Number of households in the population ('000s)								
Quintile groups of <b>unadjusted</b> disposable income								
Bottom		3 074	1 833	-	-	-		4 907
2nd		1 506	1 573	1 236	601	-		4 916
3rd		301	1 196	2 051	862	501		4 911
4th		28	303	1 419	2 110	1 054		4 914
Top		-	13	203	1 333	3 357		4 907
All households		4 909	4 919	4 910	4 907	4 912		24 556

(ii) Decile groups		Decile groups of <b>equivalised</b> disposable income									All households	
		Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Number of households in the population ('000s)												
Decile groups of <b>unadjusted</b> disposable income												
Bottom		1 333	819	303	-	-	-	-	-	-	-	2 455
2nd		580	343	799	730	-	-	-	-	-	-	2 452
3rd		282	716	430	125	555	352	-	-	-	-	2 460
4th		176	332	461	556	35	294	601	-	-	-	2 456
5th		74	168	271	355	821	191	24	499	51	-	2 454
6th		11	48	107	463	419	620	336	3	450	-	2 457
7th		-	25	68	170	440	420	585	436	74	240	2 457
8th		-	3	7	59	123	437	487	603	509	230	2 457
9th		-	-	10	3	55	144	378	657	752	455	2 453
Top		-	-	-	-	5	-	41	261	619	1 528	2 454
All households		2 456	2 453	2 457	2 461	2 452	2 457	2 453	2 458	2 455	2 453	24 556

# APPENDIX 2

## Trends in income distribution, 1977 to 1997-98

CONTENTS	
	Table
Percentage shares of original, gross, disposable and post-tax income by quintile group of households, 1977 to1997-98	1
Gini coefficients for the distribution of income at each stage of the tax-benefit system, 1977 to1997-98	2

This section gives Gini coefficients and shares of income for 1977 to 1997-98. As was noted in the main article, it is not possible to produce a fully consistent time series because of changes in methodology and definition. Many of these changes, like the inclusion of the income from company cars since 1990, improve the quality of the results but previous data cannot be reproduced on the same consistent basis. However, Gini coefficients and shares of income are relatively robust and can be used to shed light on broad trends in income distribution. The Department of Social Security publication, Households Below Average Income 1979 - 1996/97, contains more detailed data for comparison of incomes over time.

**TABLE 1 (Appendix 2) : Percentage shares of total original, gross, disposable and post-tax incomes by quintile groups of households<sup>1</sup>, 1977 to 1997-98**

	1977	1978	1980	1982	1984	1986	1988	1990	1992 <sup>2</sup>	1993-4 <sup>2</sup>	1995-6 <sup>2</sup>	1996-7 <sup>2</sup>	1997-8 <sup>2</sup>
<b>Equivalised original income</b>													
Quintile group													
Bottom	4	3	2	3	3	3	2	2	2	2	3	2	2
2nd	10	10	9	8	7	7	7	7	6	6	7	7	7
3rd	18	18	18	17	17	16	16	15	15	14	15	15	15
4th	26	26	26	26	26	26	26	25	26	25	25	25	25
Top	43	43	44	46	47	49	50	51	50	52	50	51	51
All households	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Equivalised gross income</b>													
Quintile group													
Bottom	9	9	8	9	9	8	7	7	7	7	7	7	7
2nd	13	13	12	12	12	11	11	10	11	11	11	11	11
3rd	18	18	18	17	17	16	16	16	16	16	16	16	16
4th	24	23	23	23	23	23	23	23	23	23	23	23	23
Top	37	37	38	39	39	41	43	44	43	44	43	44	44
All households	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Equivalised disposable income</b>													
Quintile group													
Bottom	10	10	9	9	10	9	8	7	7	8	8	8	8
2nd	14	14	13	13	13	12	11	11	11	12	12	12	12
3rd	18	18	18	17	17	17	16	16	16	16	17	16	16
4th	23	23	23	23	23	23	23	23	23	23	23	23	23
Top	36	35	37	37	37	40	42	43	42	42	40	42	42
All households	100	100	100	100	100	100	100	100	100	100	100	100	100
<b>Equivalised post-tax income</b>													
Quintile group													
Bottom	9	10	9	9	9	8	7	6	7	7	7	7	7
2nd	14	14	13	13	13	12	11	10	11	11	12	11	11
3rd	17	18	17	17	17	16	16	15	16	16	16	16	16
4th	23	23	23	22	22	22	22	23	23	22	23	22	22
Top	37	36	38	39	38	41	44	45	44	44	43	44	44
All households	100	100	100	100	100	100	100	100	100	100	100	100	100

1 Ranked by equivalised disposable income.

2 Includes Company car benefit and beneficial house purchase loans from employers. From 1996-7 values are based on estimates for the sample grossed up to population totals.

**TABLE 2 (Appendix 2) : Gini coefficients for the distribution of income at each stage of the tax-benefit system, 1977 to 1997-98**

	1977	1978	1980	1982	1984	1986	1988	1990	1992 <sup>1</sup>	1993-4 <sup>1</sup>	1995-6 <sup>1</sup>	1996-7 <sup>1</sup>	1997-8 <sup>1</sup>
<b>Gini coefficients (per cent)</b>													
Equivalised original income	43	43	44	47	49	50	51	52	52	54	52	53	53
Equivalised gross income	29	29	31	31	31	34	37	38	37	37	36	37	38
Equivalised disposable income	27	26	28	28	28	31	35	36	34	34	33	34	34
Equivalised post-tax income	29	28	30	31	30	35	38	40	38	38	37	38	38

1 Includes Company car benefit and beneficial house purchase loans from employers. From 1996-7 values are based on estimates for the sample grossed up to population totals.

# APPENDIX 3

## METHODOLOGY AND DEFINITIONS

### The allocation of government expenditure and its financing

1. There are considerable difficulties in moving from the aggregates of government expenditure and financing published in the United Kingdom National Accounts - the ONS Blue Book - to apportioning taxes and benefits to individual households. We can obtain information about the types of household that receive cash benefits and pay direct taxes through surveys such as the Family Expenditure Survey (FES). From the replies respondents give to questions on their expenditure we can impute their payments of indirect taxes, and from information they supply about such factors as their ages and number of children in the household we can estimate the average costs of providing them with social services, such as health and education. But there are other kinds of financing, such as corporation tax and government borrowing: no attempt is made in this analysis to apportion them to households because it would be too difficult. Similarly, there are other items of government expenditure, such as capital expenditure and expenditure on defence and on the maintenance of law and order, for which there is no clear conceptual basis for allocation, or for which we do not in any event have sufficient information to make an allocation.

### Family Expenditure Survey (FES)

2. The estimates in this article are based mainly on data derived from the FES. The FES is an annual survey of the expenditure and income of private households. People living in hotels, lodging houses, and in institutions such as old peoples' homes are excluded. Each person aged 16 and over keeps a full record of payments made during 14 consecutive days and answers questions about hire purchase and other payments. The respondents also give detailed information, where appropriate, about income (including cash benefits received from the state) and payments of income tax and national insurance contributions. Information on age, occupation, education received, family composition and housing tenure is also obtained. The survey covers the whole 12 month period.

3. One of the main purposes of the FES is to produce information on household expenditure patterns which is used to derive the weights for the index of retail prices. The fieldwork is undertaken by the Social Survey Division of ONS and by the Northern Ireland

Statistics and Research Agency. *Family Spending 1997-98*, published by The Stationery Office in November 1998, shows detailed results on expenditure and income from the 1997-98 survey, and how they vary with household characteristics. The report also includes an outline of the survey design.

4. The number of households in the United Kingdom responding to the FES in 1997-98 was 6,409 (about 1 in every 3,000 households). The response rate in Great Britain was 62 per cent: the FES in Northern Ireland is done as a separate exercise to the rest of UK, with a larger sampling fraction, and only a proportion of these cases go into the UK analysis. To count as a co-operating household, all members aged 16 and over must fill in the diaries for both weeks and give full details of income etc. The available evidence suggests that households containing a couple with non-dependent children, those where the head is self-employed, and those where the head was born outside the United Kingdom, are less likely to co-operate than others (see 'A comparison of the Census characteristics of respondents and non-respondents to the 1991 Family Expenditure Survey' by Kate Foster, Survey Methodology Bulletin, ONS, No 38, Jan 1996). In addition response in Greater London is noticeably lower than in other areas.

5. The results in the article are based on the survey grossed up so that totals reflect the total population in private households in the United Kingdom (that is excluding those in institutions such as residential homes for the elderly). Households were assigned different initial weights based on the non-response in the 1991 FES. These weights were derived from Census-linked data (see 'Weighting the FES in Great Britain to compensate for non-response: an investigation using census-linked data' by Kate Foster). The final household weights were produced using specialised software developed by INSEE, the French national statistics institute. The control variables used in the grossing system were the number of individuals by age (in five year bands) and sex; and the number of individuals by region.

6. The FES is designed primarily as a survey of expenditure on goods and services by households. It has been developed to gather information about the income of household members, and is an important and detailed source of income data. However, no information is collected that would enable a balance sheet of income and expenditure to be drawn up for a household over any

particular period. Much expenditure relates to the two-week period after the interview, whereas many income components refer to a much longer period (eg investment income over the previous 12 months). FES income does not include proceeds from the sale of assets (eg a car) or windfalls such as legacies. But recorded expenditure might reflect these items, as well as the effects of living off savings, using capital or borrowing money. Hence, there is no reason why income and expenditure should balance either for an individual household or even averaged over a group of households. Indeed, measured expenditure substantially exceeds measured income for the bottom decile groups of households. Moreover, the difference between income and expenditure is not necessarily a measure of savings or dis-savings.

### Unit of analysis

7. The basic unit of analysis in the article is the household, and not the family, individual or benefit unit. A household is defined in the FES as comprising people who live at the same address and who share common catering for at least one meal a day. Spending on many items, particularly on food, housing, fuel and light, is largely joint spending by the members of the household. Without further information or assumptions it is difficult to apportion indirect taxes between individuals or other sub-divisions of households.

8. In classifying the households into various types, a **child** (i.e. a dependant) is defined as:

either aged under 16

or aged 16, 17 or 18 not married, and receiving full-time non-advanced further education.

Most of the 'extra' adults in households with at least three adults are sons or daughters of the head of household rather than retired people.

9. A **retired household** is defined as one where the combined income of retired members amounts to at least half the total gross income of the household, where a retired person is defined as anyone who describes themselves as 'retired' or anyone over minimum NI pension age describing themselves as 'unoccupied' or 'sick or injured but not intending to seek work'.

10. By no means all retired people are in retired households: about one in five households comprising three or more adults contains retired people, for example, and households comprising one retired and one non-retired adult are often classified as non-retired.

11. The sample households have been classified according to their compositions at the time of the interview. This classification is

sensible for the vast majority of households, but it can be misleading for the very small number of cases (7 in 1997-98) where a spouse is absent from the household at the time of interview. The absent spouse may well be working away from home (eg on an oil rig), or living separately - but contributing financially to the household's upkeep. These contributions would be picked up as part of the household's original income. Also, it is likely that some households will have changed their composition during the year.

12. Economically active people comprise persons aged 16 or over who, at the time of interview, were:

employees at work,  
employees temporarily away from work through illness,  
temporary lay-off, industrial action, etc,  
on government training schemes,  
self-employed,  
not in employment but who had sought work within the last four weeks, or were waiting to start a job already obtained.

### Income: redistributive stages

13. Stage one:

Original income plus cash benefits = Gross income.

Stage two:

Gross income minus income tax, employees' National Insurance contributions and local taxes (see paragraph 24 below) = Disposable income.

Stage three:

Disposable income minus indirect taxes = Post-tax income.

Stage four:

Post-tax income plus 'benefits in kind' = Final income.

14. The starting point of the analysis is **original income**. This is the annualised income in cash of all members of the household before the deduction of taxes or the addition of any state benefits. It includes income from employment, self-employment, investment income, occupational pensions and annuities. The term 'annualised' rather than 'annual' is used advisedly. For instance, annualised income from a respondent's 'main job' is not current wage or salary multiplied up to an annual value; nor is it the sum of income from this source in the twelve month period prior to interview. Rather it is an estimate of such income expressed at an annual rate based on the respondent's assessment of his "normal" wage or salary subject to his current employment status.

15. Furthermore, to avoid double counting and to make it consistent with the estimate of income from cash benefits (see paragraph 20),

this annualised estimate has to be 'abated' for the number of weeks likely to be lost due to unemployment, sickness, etc. This figure is taken as the number of weeks so lost in the 12 months prior to interview. It should be noted that regardless of whether the respondent is currently working or unemployed the treatment is essentially the same, ie normal gross wage or salary expressed at an annual rate abated as required.

16. In all of this the crucial determining role of current employment status should also be noted. Thus no employment income would be assigned to a respondent whose employment status had recently become retired or unoccupied even though he or she may have worked for most of the twelve months prior to interview.

17. About 98 per cent of original income comes from earnings, occupational pensions (including annuities) and investment income. The tiny bit remaining comes from a variety of sources: trade union benefits, income of children under 16, private scholarships, earnings as a mail order agent or baby-sitter, regular allowance from a non-spouse, allowance from an absent spouse and the imputed value of rent-free accommodation. Households living in rent-free dwellings are each assigned an imputed income. This is counted as employment income if the tenancy depends on the job.

18. In addition to salary, many employees receive as part of their income fringe benefits such as company cars, private medical insurance and beneficial loans. Until recently, these benefits were not allocated to individual households as the information was not available in the FES. However, the company car benefit, together with the benefit from fuel for personal use, has been included in the analysis since 1990. This is by far the most important fringe benefit accounting for over two thirds of all taxable fringe benefits according to Inland Revenue statistics. The benefit is taken to be the taxable income in accordance with Inland Revenue scale charges. *Inland Revenue Statistics 1998* (The Stationery Office) contains more detailed information on taxable fringe benefits and their impact on individuals. Although for those earning below £8,500 per year the benefit is not taxable, benefit has been allocated to all those with a company car regardless of the level of earnings. The calculation of this benefit is based primarily on the car price as reported in the FES. In any given year the total amount of benefit will depend on the level of scale charges for tax purposes as well as the numbers and prices of vehicles in the FES.

19. The benefit of subsidised loans from employers for house purchase has been allocated since the 1992 analysis. The benefit is taken to be the difference between the interest payments on such loans as reported in the FES and the interest payments that would have been payable at the ruling market rate of interest.

20. The next stage of the analysis is to add cash benefits to original income to obtain **gross income**. This is slightly different from the 'gross normal weekly income' used in the FES Report. Cash benefits include:

Contributory:

Retirement pension, part of job seeker's allowance, incapacity benefit, widows' benefits, and statutory maternity pay.

Non-contributory:

Income support, part of job seeker's allowance, child benefit, housing benefit (council tax benefit and rate rebates are treated as deductions from local taxes), invalid care allowance, attendance allowance, disability living allowance, disability working allowance, war pensions, severe disablement allowance, industrial injury disablement benefits, family credit, old persons pension, Christmas bonus for pensioners, government training scheme allowances (YTS etc), student maintenance awards.

21. Statutory maternity pay is classified as a cash benefit even though it is paid through the employer.

22. Income from short-term benefits is taken as the product of the last weekly payment and the number of weeks the benefit was received in the 12 months prior to interview. Income from long-term benefits, and from housing benefits, is based on current rates.

23. Income tax, local taxes and employees' and self-employed contributions to National Insurance and National Health services are then deducted to give **disposable income**. Capital gains tax, inheritance tax and other taxes on capital are not included in these deductions because there is no clear conceptual basis for doing so, and the relevant data are not available from the FES.

24. The figures for local taxes include:

council tax (for households in Great Britain),  
domestic rates (for households in Northern Ireland),  
and charges made by water authorities for water, environmental and sewerage services.

25. Council tax is shown after deduction of discounts to reduce or remove the personal element of the tax (eg the discount of 25 per cent for single person households). All local taxes are shown after the deduction of council tax benefit and rate rebates. This brings the treatment in line with that of National Accounts which treats such rebates as revenue foregone. Up to and including 1995-96 these rebates were included as part of housing benefits.

26. The tax estimates are based on the amount deducted from the last payments of employment income and pensions, and on the amount paid in the last 12 months in respect of income from self-employment, interest, dividends and rent. The income tax payments recorded will therefore take account of a household's tax allowances, with the exception of tax relief obtained 'at source'. In 1997-98 there were two main types of tax relief obtained in this way: mortgage interest relief and life assurance premium relief. Where households are eligible for these reliefs, imputations are made and deducted from recorded income tax payments. In the case of mortgage interest relief obtained through the MIRAS scheme, which was introduced in April 1983, these imputations are based on the interest component of the latest mortgage repayment.

27. The next step is to deduct indirect taxes to give **post-tax income**. Indirect tax on final consumer goods and services include:

- Duties on alcoholic drinks, tobacco, petrol, oil, betting, etc
- Value Added Tax (VAT)
- Customs (import) duties
- Motor vehicle duties
- Air passenger duty
- Insurance premium tax
- Driving licences
- Television licences
- Stamp duties
- Gas levy
- Fossil fuel levy
- Camelot: payments to National Lottery Distribution Fund

28. Taxes levied on final goods and services are assumed to be fully incident on the consumer, and can be imputed from a household's FES expenditure record. For example, the amount of VAT that is paid by the household is calculated from the household's total expenditure on goods and services subject to VAT.

29. VAT affects the prices of second-hand cars and is therefore assumed to be incident on the purchasers of such cars as well as on the purchasers of new cars. In allocating taxes, expenditures recorded in the FES on alcoholic drink, tobacco, ice cream, soft drinks and confectionery are grossed up to allow for the known under-recording of these items in the sample. The true expenditure in each case is assumed to be proportional to the recorded expenditure. This approach has its drawbacks because there is some evidence to suggest that heavy drinkers, for example, are under-represented in the FES.

30. The incidence of stamp duty on house purchase on an owner-occupying household has been taken as the product of the hypothetical duty payable on buying their current dwelling

(estimated from valuations given in the FES) and the probability of a household of that type moving in a given year (estimated from the General Household Survey).

31. Indirect taxes on intermediate goods and services include:

- Rates on commercial and industrial property
- Motor vehicle duties
- Duties on hydrocarbon oils
- Employers' contributions to National Insurance, the National Health Service, the industrial injuries fund and the redundancy payments scheme
- Customs (import) duties
- Stamp duties
- VAT

32. These are taxes that fall on goods and services purchased by industry. Only the elements attributable to the production of subsequent goods and services for final consumption by the UK personal sector are allocated in the article, being assumed to be fully shifted to the consumer. Their allocations between different categories of consumers' expenditure are based on the relation between intermediate production and final consumption using estimated input-output techniques. This process is not an exact science, and many assumptions have to be made. Some analyses, eg that by Dilnot, Kay and Keen 'Allocating Taxes to Households: A Methodology', suggest that the taxes could be progressive rather than regressive if one were to use different incidence assumptions.

33. For Table G of the main article, we have constructed a measure of expenditure on goods and services from data from the FES. Indirect taxes are shown as a proportion both of disposable income and of expenditure. One drawback of comparing the incidence of indirect taxes on households at different levels of income is that, by whatever measure used, on average, recorded expenditure exceeds income apparently available for it by significant amounts at the bottom of the distribution. Thus, it has been argued that for many households, where, for instance, income fluctuates widely or where it is difficult to measure accurately, a measure based on regular household outgoings would be a far better indicator of resources available to the household and therefore give a better picture of the incidence of indirect taxes.

34. This measure of expenditure has been customised to be analogous to the definition of disposable income used in the analysis in order to facilitate these comparisons. For instance, because the imputed benefit of company cars and beneficial loans will have boosted the figure for disposable income these items have had to be added to this expenditure measure. Expenditure

on alcohol, tobacco and confectionery have been grossed up for under-recording in line with the treatment of the indirect taxes on these items. Payments deemed to be made out of income such as superannuation, regular savings, mortgage repayments etc have been included and adjusted where necessary but not items such as lumpsum capital payments in line with the exclusion of capital gains and windfalls from income.

35. Finally, we add those notional benefits in kind provided to households by government for which there is a reasonable basis for allocation to households, to obtain **final income**. The benefits in kind allocated are:

- State education
- School meals and welfare milk
- National Health Service
- Housing subsidy
- Railway travel subsidy
- Bus travel subsidy (including concessionary fares schemes)

36. Education benefit is estimated by the Department for Education and Employment as the cost per pupil or student in special schools, primary and secondary schools, universities, and other further education establishments. The value of the benefits attributed to a household depends on the number of people in the household recorded in the FES as receiving each kind of state education (students away from the household are excluded). No benefit is allocated for pupils attending private schools.

37. The value of school meals and other welfare foods is based on their costs to the public authorities. Any payment by the individual household is subtracted to arrive at a net contribution.

38. Data are available on the average cost to the Exchequer of providing the various types of health care - hospital inpatient/outpatient care, GP consultations, dental services, etc. Each individual in the FES is allocated a benefit from the National Health Service according to the estimated average use made of these various types of health service by people of the same age and sex, and according to the total cost of providing those services. The benefit from maternity services is assigned separately to those households containing children under the age of 12 months. No allowance is made for the use of private health care services.

39. In this article public sector tenants are defined to include the tenants of local authorities, New Town Corporations, the Scottish Special Housing Association (SSHA), Northern Ireland Housing Executive (NIHE) and housing associations. The total housing

subsidy includes the contribution from central government to the housing revenue accounts of local authorities: and grants paid to the New Town Corporations, the SSHA, the NIHE and housing associations. Within Greater London, the rest of England, Wales, Scotland and Northern Ireland each public sector tenant has been allocated a share of the region's total relevant subsidy based on the Council Tax band of the dwelling. Housing subsidy does not include mortgage interest tax relief, rent rebates and allowances or local tax rebates.

40. The rail travel subsidies allocated are the support payments made to the train operating companies. The subsidy to London and South East services is allocated to households living in the area and subsidies to provincial services to households living outside the South East, in proportion to households' expenditure on rail fares as recorded in the FES. In making these allocations, allowances are made for the use of rail travel by the business sector, tourists and the institutional part of the personal sector.

41. In this article, bus travel subsidy covers both the cost of concessionary travel schemes for senior citizens and others, and subsidies to operators. Separate allocations are made for Greater London, the other metropolitan areas and the rest of the United Kingdom. The subsidy is divided between households according to recorded expenditure on bus travel and the types of concessionary passes held.

42. We must emphasise that the analysis in this article provides only a rough guide to the kinds of household which benefit from government expenditure, and by how much, and to those which finance it. Apart from the fact that large parts of expenditure and receipts are not allocated, the criteria used both to allocate taxes and to value and apportion benefits to individual households could be regarded as too simplistic.

43. For example, the lack of data forces us to assume that the incidence of direct taxes falls on the individual from whose income the tax is deducted. This implies that the benefit of tax relief for mortgage interest, for example, accrues directly to the taxpayer rather than to some other party, for instance, the vendor of the land. It also implies that the working population is not able to pass the cost of the direct tax back to employers through lower profits, or to consumers through higher prices.

44. In allocating indirect taxes we assume that the part of the tax falling on consumers' expenditure is borne by the households which buy the item or the service taxed, whereas in reality the incidence of the tax is spread by pricing policies and probably falls in varying proportions on the producers of a good or service, on their employees, on the buyer, and on the producers and consumers of other goods and services.



45. Another example is that we know only an estimate of the total financial cost of providing benefits such as education, and so we have to treat that cost as if it measured the benefit which accrues to recipients of the service. In fact, the value the recipients themselves place on the service may be very different to the cost of providing it. Moreover, there may be households in the community, other than the immediate beneficiaries, who receive a benefit indirectly from the general provision of the service.

Equivalence scale

46. The equivalence scale used in this analysis is the *McClements scale* (**before** housing costs are deducted). The scales (separate ones for before and after housing costs) were developed by Dr L D McClements at the Department of Health and Social Security (DHSS) in the mid-seventies, based on expenditure data from the 1971 and 1972 FES. They are based on the assumption that it is possible to estimate equivalence scales from people's spending behaviour as recorded in the FES without making any specific assumption about the criteria for equivalence. These scales are in regular use and an analysis by Banks and Johnson ('Children and Household Living Standards', IFS, 1993) suggests that the scales are as valid now as when they were developed. The scales are regarded as plausible and they are well within the range of equivalence scales developed at different times in a number of countries. Hence their use is fully justified for broad statistical standardisation.

47. The equivalence values are given below:

Type of household member	Equivalence value
<u>married head of household</u> (ie a married or cohabiting couple)	1.00
1st additional adult	0.42
2nd (or more) additional adult	0.36 (per adult)
<u>single head of household</u> adult	0.61
1st additional adult	0.46
2nd additional adult	0.42
3rd (or more) additional adult	0.36 (per adult)
<u>Child aged:</u>	
16-18	0.36
13-15	0.27

11-12	0.25
8-10	0.23
5-7	0.21
2-4	0.18
Under 2	0.09

48. The values for each household member are added together to give the total equivalence number for that household. This number is then divided into the disposable income for that household to give **equivalised disposable income**. For example, a household has a married couple with two children (aged six and nine) plus one adult lodger. The household's equivalence number is 1.0 + 0.21 + 0.23 + 0.42 = 1.86. The household's disposable income is £20,000, and so its equivalised disposable income is £10,753 (=£20,000/1.86).

49. This quantity is used to produce the single ranking used in all the tables in this article (apart from the Gini coefficients which have to be ranked afresh for each different definition of income).

50. It is important to note that most monetary values shown in the article are ordinary (ie un-equivalised) £ per year, not equivalised £ per year. Where equivalised values do appear (eg the quintile points in Table 2A of Appendix 1), they are shown in *italics*.

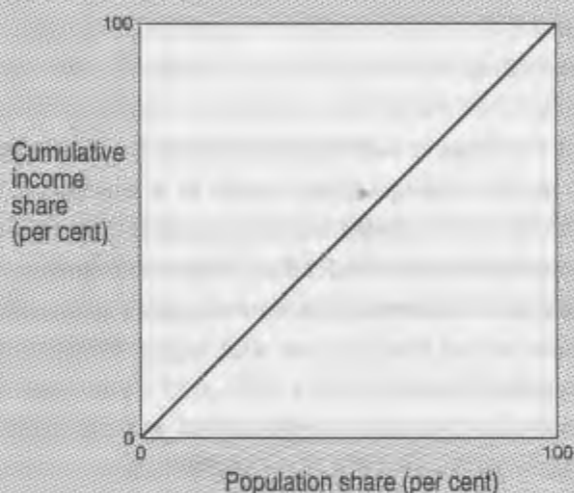
Gini coefficient

51. The Gini coefficient is the most widely used summary measure of the degree of inequality in an income distribution. It can more easily be understood by considering a Lorenz curve of the income distribution, (see Diagram B) ie a graph of the cumulative income share against the cumulative share of households. The curve representing complete equality of income is thus a diagonal line while complete inequality (with only one recipient of income) is represented by a curve comprising the horizontal axis and the right-hand vertical axis (see Diagram A). The area between the Lorenz curve and the diagonal line of complete equality, as a proportion of the triangular area between the curves of complete equality and inequality, gives the value of the Gini coefficient. Thus a distribution of perfectly equal incomes has a Gini coefficient of zero; as inequality increases (and the Lorenz curve bellies out), so does the Gini coefficient until, with complete inequality, it reaches its maximum value of 1 (or 100 per cent).

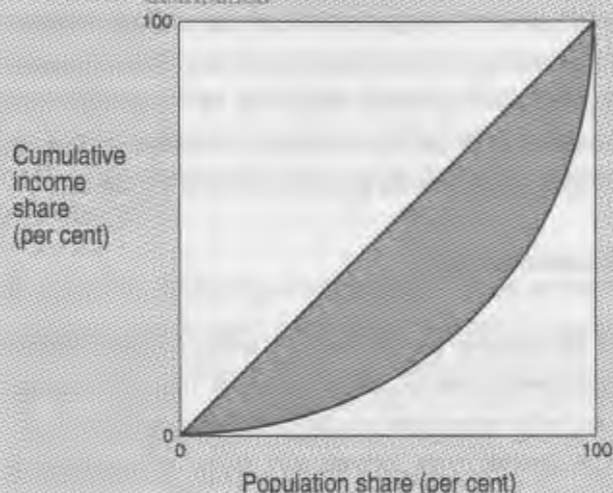
52. To calculate the Gini coefficient for an income distribution, the first step is to rank that distribution in ascending order. All the Gini coefficients shown in this article are based on

**Diagram A**

Complete income inequality

**Diagram B**

Lorenz curve for a typical income distribution



distributions of equivalised income eg the coefficient for original income is calculated after dividing the original income for all the households by their appropriate equivalence values.

53. Strictly speaking, one could argue that the equivalence scales used here are only applicable to disposable income because this is the only income measure relating directly to spending power. Since the scales are often applied, in practice, to other income measures, we are content to use them to equivalise original, gross and post-tax income for the purpose of producing Gini coefficients (and in the tables giving percentage shares of total income). However, we do not think it is appropriate to equivalise the final income measure because this contains notional income from benefits in kind (eg state education): the equivalence scales used in this article are based on actual household spending and do not, therefore, apply to such items as notional income.

### Impact of grossing

54. The survey results have been grossed up so that the population totals reflect the whole household population. Different grossing factors are applied to different types of households in order to correct for over and under-representation of these groups in the responding sample of the FES. Grossing raises the quality of the estimates by making the population more representative and by improving the allocation of national accounts aggregates to individual households. Estimates based on the grossed up data set are different from estimates based on the sample. Indeed, if they were not, there would be little point in grossing. The effect of grossing on some of the major variables used in the analysis was given in last year's article. More detail about the effect of grossing can be obtained from the ONS on request.

### Sampling errors and reliability

55. As the FES is a sample survey, data from it will differ in varying degrees from those of all households in the UK. The degree of difference will depend on how widely particular categories of income and expenditure vary between households. This 'sampling error' is smallest in relation to large groups of households and measures that do not vary greatly between households. Conversely, it is largest for small groups of households, and for measures that vary considerably between households. A broad numerical measure of the amount of variability is provided by the quantity known as the standard error.

56. It is difficult to calculate these standard errors exactly because of the multi-stage design of the FES, but we have made a good approximation by combining the simple random formula with the appropriate design factor from the FES analysis. [The design factor is the ratio of the standard error using the detailed formula that takes account of the full complexity of the sample design to the standard error using the simple random sample formula.] The most appropriate design factor from the FES work is for 'gross normal weekly household income'. The standard error of the mean for  $N$  households is given by:

$$(\text{design factor}) * S/\sqrt{N}$$

where the design factor is 1.31 for 1997-98, and  $S^2$  is the estimate of the population variance.

57. The standard error for disposable income of all households is less than 2 per cent of the mean but, for the less frequent household types, eg 1 adult with children and 3 or more adults with children, it is about 5 per cent of the mean.

58. The standard errors can be used to give an idea of the reliability of a mean by quoting a confidence interval of the form:

estimate of mean + or - (1.96 \* standard error)

where the factor 1.96 corresponds to the 95 per cent confidence interval.

59. The standard errors for the household types are larger than for the whole sample, mainly because the sample sizes concerned are smaller. For quantile groups of given household types, the sample sizes are of course smaller still, which would tend to increase sampling variability. On the other hand, the income values are by definition in a narrower range which would tend to reduce the sampling error.

60. Precise estimates of standard errors for averages for quantile groups are complicated to produce. As well as the variability of the observations between the quantile points, we should also take account of the randomness which exists because the sample quantile points are themselves subject to random variation. We have used a formula for the asymptotic variance of a 'randomly trimmed' mean. This formula gives a good approximation where the total sample size is around 1,000 (when the variance is underestimated by about 2 per cent on average), and a reasonable approximation for samples of 100-500 (when the variance is underestimated by about 5 per cent on average). The formula for the variance of a mean ( $\bar{x}$ ) calculated between two sample percentiles,  $Q_1$  and  $Q_2$ , corresponding to proportions  $p_1$  and  $p_2$  is:

$$\frac{S^2 + p_1 (\bar{x} - Q_1)^2 + (1 - p_2) (Q_2 - \bar{x})^2 + \frac{p_1 (1 - p_2)}{(p_2 - p_1)} (Q_2 - Q_1)^2}{n (p_2 - p_1)}$$

where  $S^2$  = variance calculated from observations between  $Q_1$  and  $Q_2$ , and  $n$  = total sample size.

The square root of this quantity is then multiplied by the design factor (as described in paragraph 56) to give the standard errors.

61. The 'complex' standard errors for quintile and decile groups are quite a bit larger than the simple random sample estimates. For the 'all households' group, the standard errors for disposable income for the middle decile groups are about 10 per cent of the mean for the group.

62. More information on standard errors for the income measures for the different household types and quantile groups is available on request.

## Previous articles

63. This article is the latest in an annual series covering the years from 1957 onwards. From 1987 onwards, the articles have used a very different methodology, in particular households are ranked by their equivalised disposable income. Hence the results are completely incompatible with earlier years. Last year the article was published in the April 1998 edition of *Economic Trends*. A list of the previous articles was included in the article published in March 1997.

64. The results in all articles are intended to be free standing: they were not designed for direct comparison with other years except where some limited comparisons were made in the articles. Such comparisons are fraught with difficulty because of changes in definitions eg housing benefit in 1983. However, some broader measures like the Gini coefficients are relatively robust and will stand comparison with other years: this year's article gives such a comparison for the years 1977-1997-98.

65. Enquiries should be addressed to Dave Westcott, Social and Regional Division, Office for National Statistics, Zone B4/08, 1 Drummond Gate, London SW1V 2QQ.