OFFICE FOR NATIONAL STATISTICS

Economic trends

No. 557
April 2000

Managing Editor: Adèle Barklem

Editor: Paul Dickman

Production Team: Ayaz Ahmad
Craig Richardson

Artwork: DTP, Titchfield

London: The Stationery Office

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In Brief

Articles

This month we feature three articles.

Tim Harris of the ONS discusses the effects of taxes and benefits on household income in 1998-99. The article 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. Before taxes and benefits the top fifth of households have an average income of around seventeen times as great as the bottom fifth; after taxes and benefits the ratio is reduced to four to one. The study also shows how the distribution of income has changed over time. Inequality of disposable income was stable in the first half of the 1980s, and then increased rapidly to a peak in 1990. It fell slightly in the first half of the 1990s, but has risen again between 1995-96 and 1998-99 *(page 45)*.

Ian Hill of the ONS outlines the end-1998 Share Register Survey. This was commissioned by the ONS in order to obtain good quality benchmark data on the ownership of shares in listed companies. With the 1998 survey, annual publication has been resumed using data downloaded from the CREST system. The results of the surveys are used to supplement or replace other sources of information on company securities in preparing the financial balance sheets and financial transaction accounts in the ONS's annual *Blue Book (page 85)*.

Craig Richardson and June Bowman of the ONS provide an account of what ONS and others are doing to measure the use of e-commerce. For improving the monitoring of e-commerce in the context of economic statistics the first main aim is to ensure that e-commerce does not jeopardise the validity of existing statistics, and ensuring that additional data is collected where appropriate to monitor the use of e-commerce in the UK. Secondly there is a commitment to take forward the recommendations of the Performance and Innovations Unit's report "E-commerce @its.best-uk". In the context of social statistics, a strategy is being developed to monitor and measure internet activity within private households. Data will be collected through three large scale household surveys and should be available from autumn 2001. The article also includes a summary of UK market research, and a list of illustrative e-commerce surveys carried out by other National Statistics Institutes *(page 89)*.

Recent economic publications

Annual

Share Ownership: A Report on the Ownership of Shares at 31st December 1998. The Stationery Office, ISBN 0 11 621260 8. Price £39.50.

Quarterly

Consumer Trends: 1999 quarter 4. The Stationery Office, ISBN 0 11 621241 1. Price £45.

UK Economic Accounts: 1999 quarter 4. The Stationery Office, ISBN 0 11 621273 X. Price £26.

UK Trade in Goods Analysed in Terms of Industries (MQ10): 1999 quarter 4. The Stationery Office, ISBN 0 11 538055 8. Price £75 p.a.

Monthly

Consumer Price Indices (MM23): January 2000. The Stationery Office, ISBN 0 11 537345 4. Price £185 p.a.

Financial Statistics: March 2000. The Stationery Office, ISBN 0 11 621186 5. Price £23.50.

Monthly Review of External Trade Statistics (MM24): December 1999. The Stationery Office, ISBN 0 11 537242 3. Price £185 p.a.

All of these publications are available from The Stationery Office, telephone 0870 600 5522, fax 0870 600 5533, e-mail bookorders@theso.co.uk or The Stationery Office bookshops; details on the inside back cover.

ECONOMIC UPDATE – APRIL 2000

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

Address: D4/20, 1 Drummond Gate, London, SW1V 2QQ Tel: 020 7533 5919 Email: geoff.tily@ons.gov.uk

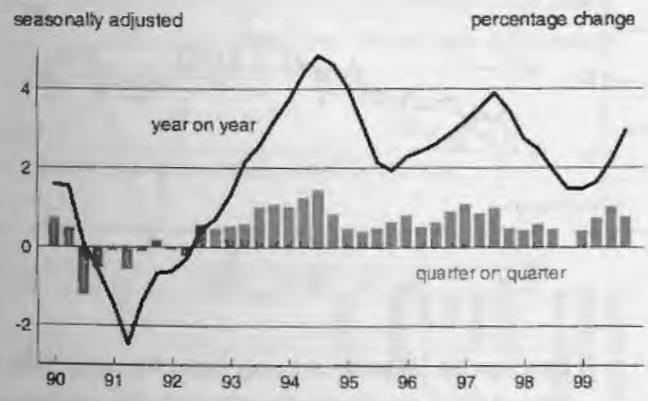
Overview

Data for the fourth quarter shows that the economy continued to grow robustly. Manufacturing growth however fell back from the very strong rate in the third quarter, and continues to be concentrated in the high-tech industries, with other industries weaker. The services sector continued to grow, but at a rate that remains below rates of growth seen in 1997. From the domestic perspective consumer demand is seen to be strong, although consumer confidence appears to have levelled off in the second half of the year. Externally, an apparent pick up in global demand has led to very strong increases in exports to both EU and non-EU countries in the second half of 1999, although a modest fall back into the fourth quarter. Business investment, however, remains more subdued and profits have remained flat in both 1998 and 1999. Notably corporate borrowing reached £21 billion in 1999. The latest labour market information shows ongoing increases to employment at a stable rate, but a levelling off to the ILO measure of the unemployment rate. Average earnings growth surged into December and January, partly reflecting special factors. Apart from oil there is only modest evidence of prices growth at the factory gate, and goods retail prices are deflating quite sharply; however service retail prices are showing some increases.

GDP Activity

GDP data shows the economy grew by 0.8 per cent into the fourth quarter, compared with growth of 1.0 per cent into the third. Annual growth increased sharply to 3.0 per cent, comparing GDP in quarter four with the same quarter a year ago (chart 1).

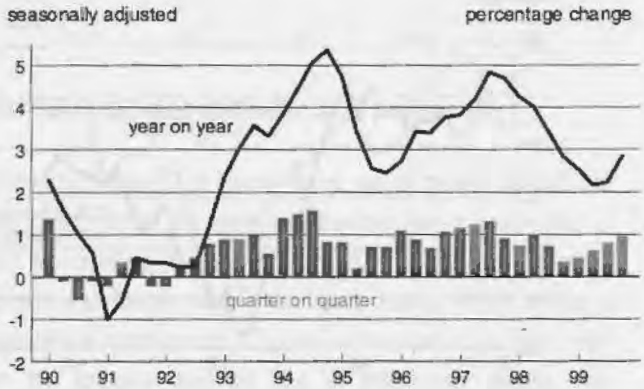
Chart 1
GDP



Output breakdown

In quarter four services output increased to 0.9 per cent from 0.8 per cent in the third quarter (chart 2). The main driver of overall growth continues to be the very strong activity in the communications industries. Robust quarterly growth was also seen in the business services and finance sectors, but this was partially offset by poorer performances in the retail, wholesale, hotel and catering industries, as well as being partly subdued by a weak performance in computer services.

Chart 2
Services



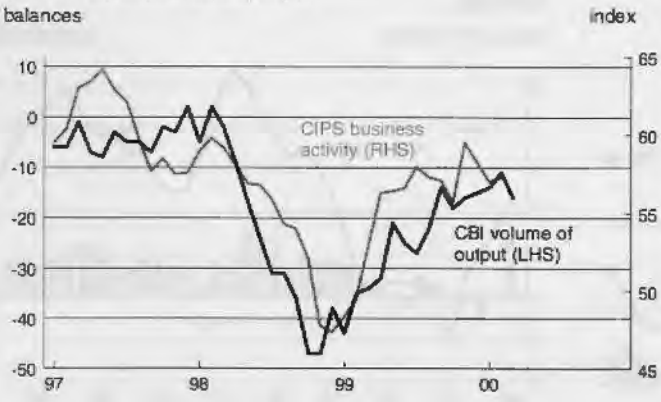
While overall services growth has increased over the last three quarters, manufacturing output growth has been more erratic. Having picked in the second quarter of 1999 growth then surged into the third quarter, but slowed into the fourth and into the start of the year 2000. Chart 3 of index numbers shows that the most recent data remains high compared to the past two years. However it remains notable that recent growth continues to be concentrated in certain industries. Growth in the three months to January compared to the same three months a year ago was 8.2 per cent in the chemicals industry, 3.2 per cent in engineering

and allied industries but much flatter in all other industries, with the highest other growth at 0.9 per cent in the basic metals and metal products industry.

Chart 3
Manufacturing

The latest information from sources outside the ONS continue to show a similar picture to the ONS industrial breakdown. Chart 4 shows how the CBI volume of output data increased throughout 1999, but slowed towards the end of the year. Similarly CIPS data on service sector business activity shows a similar recovery in service sector output, although a more apparent slowdown and upturn, followed by more modest figures into the start of 2000.

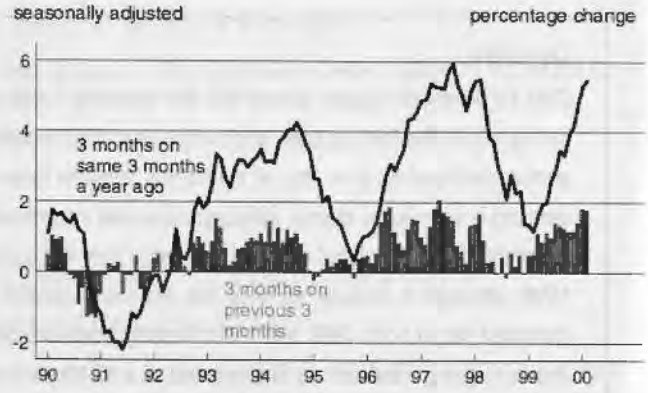
Chart 4
Services: external surveys



Domestic demand

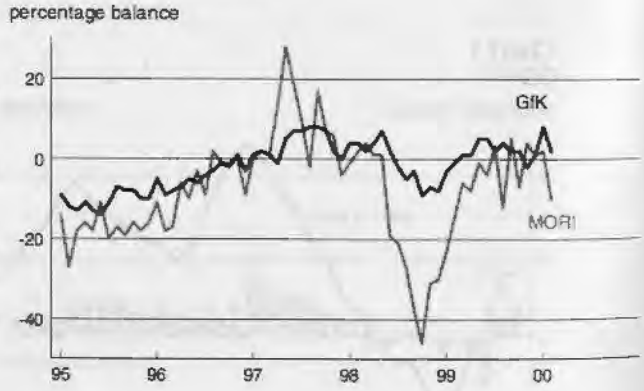
Annual growth in household final consumption expenditure remains strong at 4.5 per cent in the year to the fourth quarter, although this is likely to slow with quarter one data, given the particularly strong first quarter in 1999. Interpreting the data has been made more difficult with the strength of sales over the millennium period, seen in the retail sales data (chart 5). Annual growth comparing the three months to February with the same three months a year ago was 5.5 per cent. However index number data for February showed a modest slowdown and might be interpreted as reflecting a winding down of the millennium effects. Whatever the perspective however, the data shows domestic demand was strong in 1999.

Chart 5
Retail sales



External indices of consumer confidence may be indicative of a modest slowdown in the rate of consumption growth. Both MORI and GfK show a levelling out of confidence since the very strong recovery at the start of 1999. The latest data appears to be particularly erratic for both series, with slightly contradictory movements, with MORI recording a sharp decrease into February, but GfK showing a sharp increase into January and then decrease into February (chart 6).

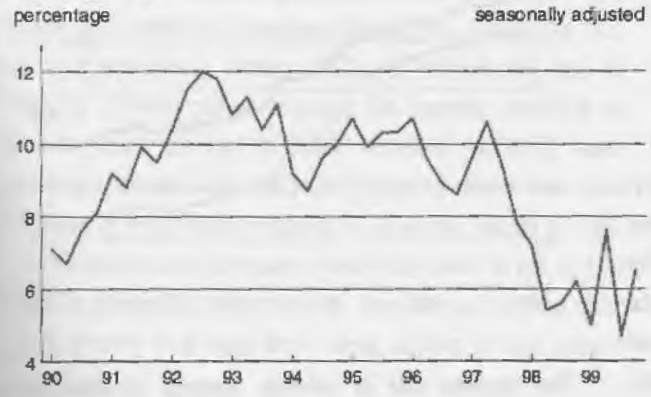
Chart 6
Consumer confidence



Data from the UK sector accounts shows that consumers' have reduced their levels of saving in 1998 and 1999, with the saving ratio falling from around 10 per cent in 1997 to figures around 6 per cent (recent volatility reflects in particular changes in arrangements for dividends payments) (chart 7). The main driver of this decrease in 1998 was a step change in the tax take partly due to self-assessment, but also due to increased take on a number of other taxes and a particularly low take during 1997. This causes strong growth in taxes in 1998 with the shift being sustained into 1999. More generally the saving ratio data shows

that households have maintained expenditure levels by putting less aside as savings.

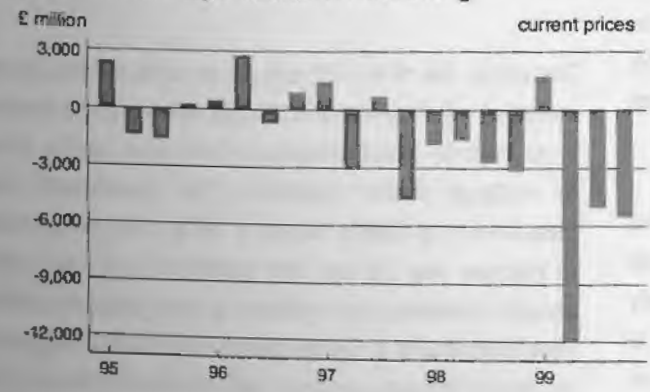
Chart 7
Saving ratio



Investment demand has been more subdued in 1999 than in 1998, although the latest data still shows annual growth of 5.2 per cent between the two years. By asset investment was weakest in dwellings (-0.2 per cent) and strongest in transport equipment (8.8 per cent).

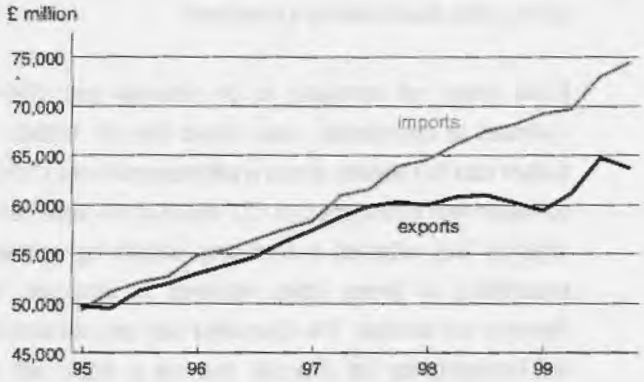
The level of investment remains such that the corporate sector as a whole is borrowing substantially in 1999; this is largely due to the slowdown in corporate profits. Profits of non-financial corporations increased by only 1.3 per cent in 1998 and fell by 0.6 per cent in 1999. Putting the figures into cash terms, between 1997 and 1999 corporate profits grew by £1.2 billion, whereas investment grew by £26.0 billion. Chart 8 shows the net borrowing position for thus sector, with figures for 1999 as a whole echoing the difference between investment and saving, showing net borrowing of £21 billion. The last year net borrowing was this high was in 1990.

Chart 8
Non financial corporations net borrowing



On UK demand for overseas goods, chart 9 (giving cash figures in 1995 prices) shows imports grew very strongly over the second half of 1999, although with growth into the fourth quarter slower than growth into the third. The main growth in imports continues to come from non-EU regions. Looking at figures excluding oil and erratics, between the first and second half of 1999 imports from EU economies rose by 2.3 per cent, whereas imports from non-EU economies rose by 12.8 per cent. A substantial part of this difference is due to large amounts of imports from South East Asian economies, who appear to be selling goods very cheaply on international markets. Data for the year 2000 shows non-EU imports continuing to grow at 3.6 per cent, comparing the three months to February with the previous three months. In January 2000 EU imports remained fairly subdued.

Chart 9
Trade



Overseas demand and balance of payments

Following the surge in quarter three, export growth calmed into the fourth quarter, but again may best be seen in the context of the two quarters together (chart 9). The annual rate of export growth was 5.9 per cent in the fourth quarter, which reflects a substantial improvement in figures at the start of the year. Part of the increase may be due to millennium factors, with companies responding to demands for precautionary stocks of raw materials in the run up to the date change. Over 1999 as a whole exports figures continue to show weakness, with growth of 3.1 per cent, compared with 2.3 per cent in 1998 but 8.6 per cent in 1997. The most recent data into the first months of year 2000 continue to be reasonably erratic, showing EU exports continuing to decrease and non-EU exports increase.

The balance of trade (in current prices) narrowed during the second and third quarters of 1999 but then widened into the fourth quarter. The actual figure for the fourth quarter was a deficit of £4.7 billion compared with £2.6 billion in the third quarter.

Monetary indicators and government finances

Broad money annual growth fell back to 2.6 per cent in February, following 2.7 per cent in January. Annual growth thus continues its pronounced slowdown since rates of around 8 per cent at the start of 1999. The main reason for this slowdown continues to be the substantial decline in the rate of growth of other financial corporations' holdings of M4 assets. Growth in narrow money, on the other hand, accelerated very sharply into December and January but remains at 8.5 per cent in February, higher than it was at the start of 1999 (5.6 per cent in January). The figure remains influenced by millennium effects, with shorter run growth rates now recording a slowdown.

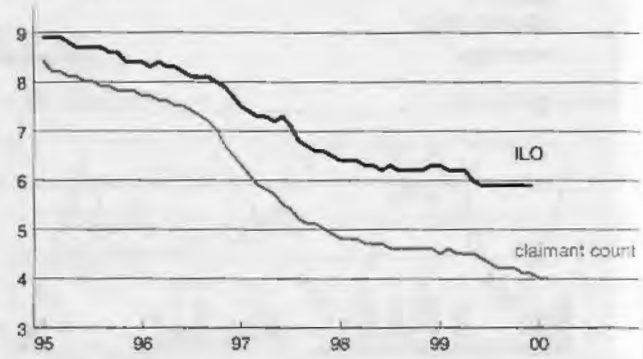
Public sector net borrowing for the financial year 1999-2000 continues at considerably lower levels than in 1998-99. The outturn data to February shows a net repayment of £17.0 billion compared with a repayment of £7.7 billion in the same period of 1998-99. This reduction in borrowing, despite higher levels of expenditure, is largely being achieved by increased Inland Revenue tax receipts. The Chancellor has now estimated that net borrowing for the financial year as a whole will be a repayment of £11.9 billion.

Labour Market

The latest labour market data continues to show improvements to employment, but a levelling off of ILO unemployment. Between November–January 2000 and August-October 1999 the employment rate grew by 0.1 per cent to 74.3 per cent. This increase reflected growth of 0.3 per cent, up slightly on growth between the previous three monthly periods.

Unemployment however appears to be flattening out according to the ILO measure (chart 10). The ILO unemployment rate has remained stable at 5.9 per cent over the last three three-monthly periods, with the latest period actually recording an increase to the rate of unemployment of 0.1 per cent measured on un-rounded data. Nevertheless the claimant count measure still appears to be on a modest downward trend, with the latest rate at 4.0 per cent. Rates of improvement to the claimant count rate are however below rates seen in 1997 and 1998.

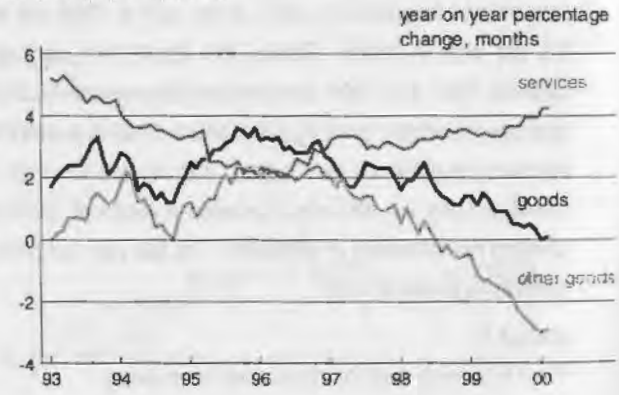
Chart 10
Unemployment rates
seasonally adjusted



The headline rate of average earnings continued to grow strongly in January following the sharp increase in December. The headline rate in January was 5.9 per cent compared with 5.5 per cent in December and 4.9 per cent in November. Growth is seen in both the services and manufacturing sectors, but is partly driven by special factors, financial service bonuses and overtime payments.

Prices

Chart 11
Retail price indices

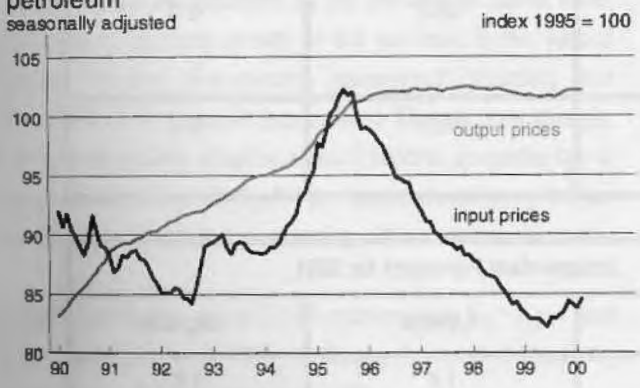


The annual rate of the RPI was 2.3 per cent in February 2000, compared with 2.0 per cent in January, with increases continuing to be driven by recent increases to base rates, feeding through to mortgage interest payments. The government's target measure was up slightly. Growth of RPIX in the twelve months to February was 2.2 per cent compared to 2.1 per cent in January. Underlying data continues to show goods and services inflation continuing to diverge sharply, with goods inflation at 0.1 per cent in February, contrasted with services inflation at 4.2 per cent (chart 11). It is further notable that goods inflation is being held up by petrol prices, increasing at an annual rate of 19.3 per cent. February data showed that goods excluding petrol, oil,

food, alcohol and tobacco are deflating at an annual rate of 2.9 per cent (other goods in chart 11).

Inflationary concerns have also been directed at prices at the factory gate, where oil prices are driving input inflation to 14.5 per cent and output prices to 2.3 per cent in the year to February. A better picture excluding the dramatic effects of oil can be seen looking at index numbers excluding food, beverages, tobacco and petroleum. Chart 12 shows how price increases to these series resumed in about the middle of 1999. Nevertheless recent increases remain fairly minor in the light of previous decreases, particularly for input prices, and the most recent months data may show some slowing of any upward movement.

Chart 12
Producer prices excluding food, beverages, tobacco and petroleum



Forecasts for the UK Economy

A comparison of independent forecasts, March 2000

The tables below are extracted from HM Treasury's "FORECASTS FOR THE UK ECONOMY" and summarise the average and range of independent forecasts for 2000 and 2001, updated monthly.

	Independent Forecasts for 2000		
	Average	Lowest	Highest
GDP growth (per cent)	3.1	2.0	3.7
Inflation rate (Q4: per cent)			
- RPI	2.8	1.6	4.3
- RPI excl MIPs	2.1	1.3	2.8
Unemployment (Q4: mn)	1.08	0.97	1.35
Current Account (£ bn)	-15.6	-28.0	-9.3
PSNB *(2000-01: £ bn)	-7.5	-15.2	0.0

	Independent Forecasts for 2001		
	Average	Lowest	Highest
GDP growth (per cent)	2.6	1.6	3.8
Inflation rate (Q4: per cent)			
- RPI	2.3	1.3	3.1
- RPI excl MIPs	2.4	1.5	2.8
Unemployment (Q4: mn)	1.05	0.78	1.25
Current Account (£ bn)	-16.4	-39.0	-5.0
PSNB* (2001-02: £ bn)	-6.0	-19.1	0.0

NOTE: "FORECASTS FOR THE UK ECONOMY" gives more detailed forecasts, covering 27 variables and is published monthly by HM Treasury, available on annual subscription, price £75. Subscription enquiries should be addressed to Miss C T Coast-Smith, Public Enquiry Unit, HM Treasury, Room 110/2, Parliament Street, London SW1P 3AG (Tel: 0171-270 4558). It is also available at the Treasury's internet site: http://www.hm-treasury.gov.uk.

* PSNB: Public Sector Net Borrowing.

International Economic Indicators – April 2000

by Craig Richardson, Macro-Economic Assessment - Office for National Statistics

Address: D4/20, 1 Drummond Gate, London SW1V 2QQ Tel: 020 7533 5925 Email: Craig.Richardson@ons.gov.uk

Overview

Oil price rises in previous quarters are obvious in the consumer and producer price indices of a number of countries. There is also a general trend of increasing industrial production in most countries, feeding through to improvements in many of the labour markets. However, in the US, the labour market may be cause for concern, with fears of high earnings growth impacting on inflation.

EU15

The EU economies grew at an increasing pace in the third quarter of 1999. The main drivers of this were strengthening exports and continuing growth in private consumption.

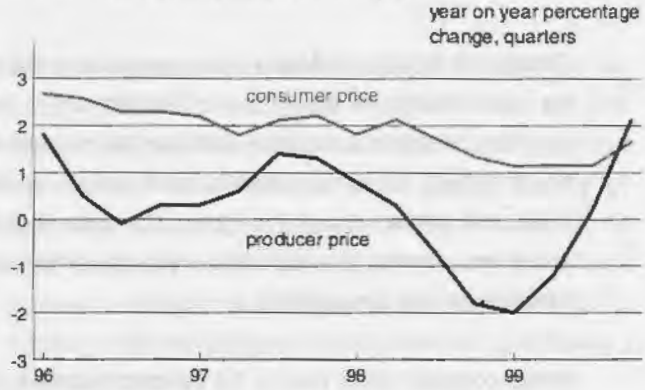
The EU economies expanded by 0.9 per cent in quarter three, compared to quarterly growth of 0.6 per cent in the second quarter. Private consumption, government spending and investment all increased in quarter three. Exports grew strongly, but this was partially offset by a rise in imports. In quarter four in value terms, exports rose by 0.4 per cent and imports by 1.6 per cent, the net effect being a worsening in the trade balance.

Industrial production in the EU15 countries rose by 1.3 per cent in the fourth quarter of 1999, continuing the trend of improving output started at the beginning of 1999.

Retail sales grew by 0.6 per cent in the third quarter of 1999. Monthly data indicates strong growth in October, with sales maintained in November.

Annual consumer prices grew by 2.0 per cent in January 2000, up 0.2 percentage points on the previous month and continuing the steady rise from 1.0 per cent in June 1999. A large part of this rise is likely to be explained by a rise in petrol prices, the energy components of the consumer price index grew by an annual rate of 10.4 per cent in January 2000. Oil prices affect consumers through both producer prices and the direct effect through petrol filling stations. Annual producer prices continued their strong growth, rising by 3.3 per cent in January, compared to 2.6 per cent in December. Oil and energy also remains the driving force behind this series, which in January 1999 had been deflating by 2.0 per cent, as shown by chart 1.

Chart 1
EU15 - consumer and producer price indices



Earnings pressure remains subdued, with annual growth of 2.7 per cent in the third quarter. It is not clear whether or not the higher rate of consumer price inflation will feed through to higher wages. Pay settlements, for example, tend to be conducted earlier in the year.

Annual growth in employment in the EU15 countries slowed modestly in the third quarter, growing by 1.5 per cent. The unemployment rate continued to fall in the fourth quarter of 1999, falling by 0.2 percentage points to 8.9 per cent. This is the lowest level seen since the second quarter of 1992, and represents ten quarters of continuous decline in the rate. In January 2000 the rate was 8.8 per cent, the same as in December 1999.

Germany

German economic growth was 0.7 per cent in the fourth quarter of 1999, a second successive quarter of strong growth following a rise of just 0.1 per cent in the second quarter. In quarter four continuing growth in private consumption offset falling

contributions from government expenditure and investment. The annual growth rate for 1999 was 1.4 per cent, down 0.5 percentage on the previous year. Trade grew only marginally compared with previous quarters. Export growth slightly outweighed that of imports.

German industrial production grew by 1.2 per cent in the fourth quarter of 1999, down from 1.7 per cent in the previous quarter. However, the strong annual and quarterly growth shown by manufacturing order books appears to be reflected in the monthly production figures. Industrial production grew by an annual rate of 3.9 per cent in January 2000.

Quarter four data for retail sales is not yet available, but so far the data indicates a strong rise in October and a fall in November. However, it should be noted that German retail sales tend to fluctuate widely from month to month and are not always in line with private consumption figures. Consumer confidence also shows evidence of a slight recovery in quarter four, which has continued into January 2000.

Annual consumer prices rose by 1.6 per cent in January 2000, up 0.4 percentage points on the previous month. Energy prices rose by an annual rate of 14.6 per cent in January, whilst food deflated by 1.9 per cent. As with other countries, the effect of the higher oil prices is feeding through to consumer prices. Annual producer prices grew by 2.0 per cent in January, up substantially from 1.1 per cent in December and from a period of deflation at annual rates up to September 1999.

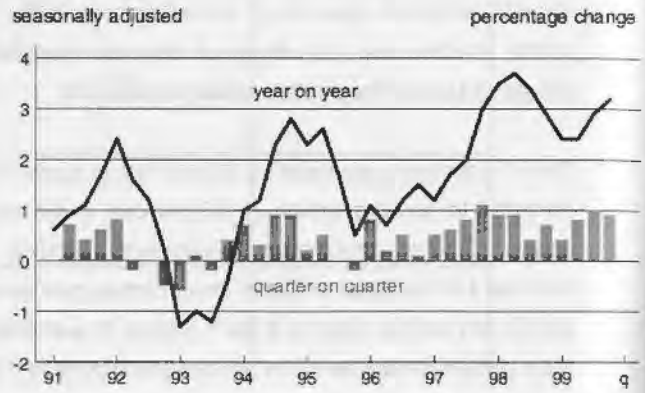
Annual earnings grew by 2.7 per cent in the third quarter. Although this remains low historically the rate has significantly increased from 1.3 per cent in the first quarter of 1998 and is now growing at the same rate as the EU15 average.

Employment rose by 0.2 per cent in the year to fourth quarter of 1999, down from 0.7 per cent in the year to quarter three. The unemployment rate remained virtually flat at 9.1 per cent for most of 1999, but now shows signs of falling, to 8.9 per cent in December 1999 and to 8.8 per cent in January 2000. Historically though, it still remains high.

France

The French economy's run of dynamic growth that started in 1997 continued into the fourth quarter of 1999, with quarterly growth of 0.9 per cent. This reflects consistent quarterly growth in private consumption and investment. In quarter four this offset the large growth in imports relative to exports. The annual growth rate for 1999 was 2.7 per cent, down by 0.7 percentage points on the previous year, as shown by chart 2.

Chart 2
France - GDP



Industrial production grew by 1.4 per cent in the fourth quarter, following growth of 1.9 per cent in quarter three. This reflects the rise in capital utilisation in the fourth quarter by 0.4 per cent on the previous quarter. Manufacturing orders are often erratic, but the trend is increasing.

Retail sales continued to grow in the fourth quarter, increasing by 0.8 per cent, having risen by 1.0 per cent in the previous quarter and fallen by 0.6 per cent in quarter two. However, monthly data shows negative growth in December 1999 and no growth in January 2000. French consumer confidence rose steadily between May and November 1999, but since then has shown signs of decline into 2000, corresponding with the pattern of retail sales.

Annual consumer price inflation was 1.6 per cent in January 2000, up 0.3 percentage points on the previous month. Energy

prices rose by 11.9 per cent in the year to January 2000. In comparison, food prices rose by 0.7 per cent over the same period. Annual producer prices rose by 2.1 per cent in the year to January 2000, driven mainly by a rise in petroleum products prices. These rose by 46.2 per cent in the year to December 1999.

Employment growth the year to the third quarter was 1.7 per cent, driven by labour intensive GDP growth. Employment in both industry and services rose in the year to the forth quarter, by 0.4 per cent and 3.7 per cent respectively. The unemployment rate fell by 0.4 percentage points between the third and fourth quarters, to stand at 10.5 per cent. While this is the lowest rate since the second quarter of 1992, the rate still remains high compared with other euro-zone economies. The latest monthly data for January 2000 shows the rate at 10.3 per cent, the same as in December 1999.

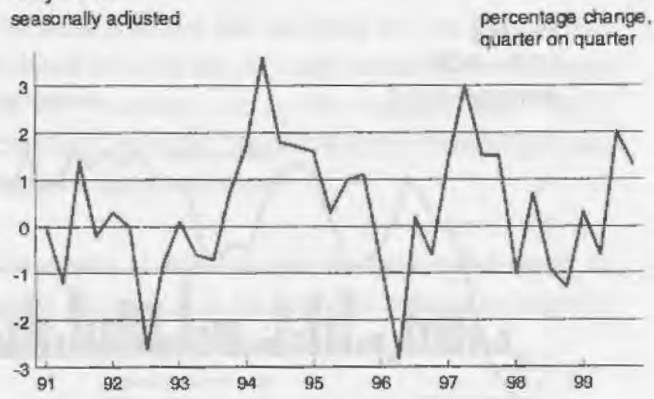
Italy

Italian economic growth from the first quarter of 1998 to the second quarter of 1999 has under-performed that of the EU15. However, in the third quarter of 1999 it recorded growth of 1.0 per cent, above the 0.9 per cent of the EU15 countries. Previously, weak domestic demand and a poor export performance had depressed growth. In quarter three, while private consumption growth remained low, investment improved. However, the main source of growth was a combination of growth in exports coupled with a fall in imports. This could be the result of the deprecation in the value of the euro.

Industrial production continued to show encouraging signs, as shown by chart 3. Following growth of 2.0 per cent in quarter three, industrial production grew by 1.3 per cent in the fourth quarter. Business sentiment showed an improvement in the fourth quarter and capital utilisation also increased.

No new total retail sales data has been available throughout 1999. However, retail sales in value terms from major outlets shows annual growth of 8.6 per cent in December 1999. This is consistent with the general trend of improvement in consumer confidence since May 1999.

Chart 3
Italy - IOP



Annual consumer price inflation continued to creep up into January 2000, rising by 0.1 percentage points to 2.2 per cent. This is the highest rate of growth since March 1997. The annual rate of producer price inflation continued to grow, rising by 1.0 percentage points to 3.8 per cent in January 2000. This is the twelfth consecutive month of strong increases and the inflation contrasts sharply with the deflation of 1.9 per cent in the year to February 1999. It would appear that oil prices are again having a considerable effect.

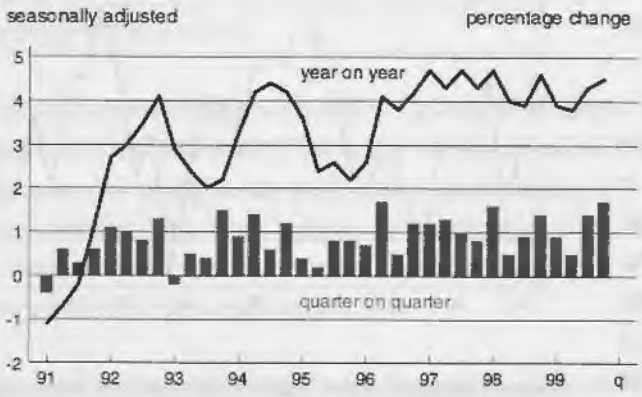
Italian earnings data show the annual growth rate falling, from 2.3 per cent in September 1999 to 1.8 per cent in November. Quarter on quarter employment growth fell by 0.1 per cent in the fourth quarter of 1999, after two previous consecutive quarters of strong growth. While annual growth of employment remains strong at 1.4 per cent for the fourth quarter of 1999, the rate of unemployment remained above 11 per cent in quarter three, as it has done since the third quarter of 1994.

USA

The US economy has grown strongly since the start of 1992, and the latest figures confirm that this trend is continuing. GDP grew by 1.4 per cent in the third quarter and 1.7 per cent in the fourth quarter of 1999, as shown by chart 4. The main contribution to this was a continuing strong growth in private final consumption. Import growth continued to outstrip that of exports in quarter four, widening the trade deficit further. In the year as a whole the economy grew by 4.1 per cent, compared to 4.3 per cent in 1998

and 4.5 per cent in 1997.

Chart 4
USA - GDP



Industrial production grew by 1.3 per cent in the fourth quarter, up from 1.2 per cent in each of the previous two quarters. Early signs from the first quarter of 2000 suggest that this growth may continue, with monthly growth of 1.0 per cent in January. However, the picture painted by manufacturing order books is slightly more cautionary for January 2000, following a big jump in December 1999.

Retail sales grew by 1.7 per cent in the third quarter of 1999, and grew strongly in the first two months of the fourth quarter. These figures are in line with the private consumption figures and consumer confidence. Commercial bank loans continued to grow in January 2000, up 6.3 per cent on the previous January, leading many analysts to worry about the high level of consumer credit. Consumer confidence rose sharply into January 2000 and remained there in February.

Annual consumer prices rose by 2.7 per cent in January 2000, following four successive months at 2.6 per cent. Within the index, fuel and electricity rose by 2.9 per cent, food rose by 1.5 per cent, and durable goods deflated by 1.1 per cent in the year to January. Following the sharp rise in the annual producer price inflation rate in November, it has fallen back in December and January, the latest figures show them growing by 2.5 per cent. There was 68.0 per cent annual growth in the producer price index of petroleum products in January 2000.

Annual growth of earnings rose to 4.5 per cent in January 2000, up from 3.6 per cent where they had been for the previous four months. In February 2000 the annual growth rate remained at 4.5 per cent. A tightening labour market and one-off bonus payments may be factors in the acceleration into the new year.

Annual employment growth rose into February 2000, up 0.2 percentage points to 1.7 per cent. However, at the same time the unemployment rate rose by 0.1 percentage points to 4.1 per cent in February 2000.

Japan

The Japanese economy contracted by 1.0 per cent in the third quarter of 1999, following strong expansion in the previous two quarters, of 1.0 per cent in quarter two and 1.5 per cent in quarter one. Trade made a positive contribution to GDP growth in the third quarter; export growth outweighed that of imports as Japan shared in benefiting from the strength of global demand in quarter three.

However, domestic demand contracted sharply, primarily due to a large decline in investment. Private consumption also declined but much less severely. It is likely that the fiscal expansion that was undertaken by the Japanese government in the first half of 1999, to end five consecutive quarters of decline up to the end of 1998, was wound down by the third quarter. This fiscal expansion largely took the form of public investment projects. However, the high level of Japanese public debt meant it could only be a temporary measure. Nevertheless, the value of the Japanese stockmarket has increased substantially throughout 1999 and most analysts are predicting positive GDP growth in 2000.

Industrial production grew by 0.7 per cent in the fourth quarter. Capital utilisation fell slightly into December, but the fourth quarter was still up on the previous quarter. Business sentiment for both the current and future situation both showed signs of improvement in the fourth quarter.

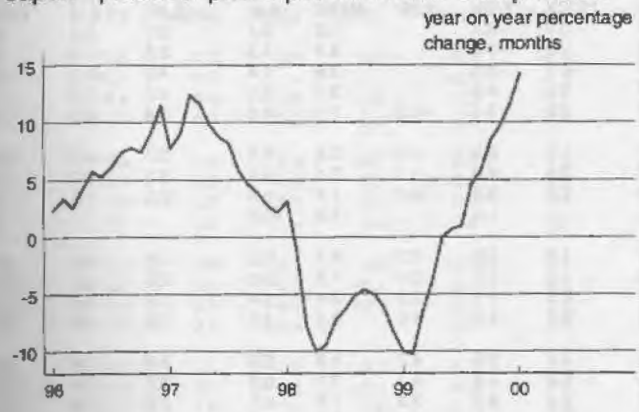
Retail sales declined by 0.8 per cent in the fourth quarter of 1999, following no growth in the third quarter and a decline of 0.3 per cent in the second. The resulting annual growth rate for 1999 was a decline of 2.0 per cent. In contrast, consumer sentiment rose in the fourth quarter.

Annual consumer prices continued to deflate in January 2000, falling by 0.9 per cent, although this represents an improvement of 0.2 percentage points on the previous month. Annual growth of 0.2 per cent in the fuel prices seems low, but is high compared with the rate of price deflation of other goods. Annual producer prices were also deflating in January 2000, by 0.3 per cent, having deflated by 0.5 per cent in the previous month.

Within this, fuel prices rose by 14.2 per cent, as shown by chart 5.

Chart 5

Japan - producer prices petroleum and coal products



The Japanese labour market shows few signs of improvement. Although annual earnings growth was positive for the first time in three months, at 0.6 per cent in January 2000, employment growth continued to fall. January 2000 showed a decline of 0.4 per cent, down 0.1 percentage points on December. The unemployment rate remained steady at 4.7 per cent, still only 0.1 percentage points off the highest post-war rate that the series has reached. The trend towards increasing levels of overtime hours worked also suffered a sharp drop in January 2000.

Notes

The series presented here are taken from the OECD's Main Economic Indicators and are shown for each of the G7 (except the UK) economies and for the European Union (EU15) countries in aggregate. The definitions and methodologies used conform to SNA 68 and SNA 93.

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

Data for France, Germany, Italy and the USA has been updated to SNA93 basis. All other tables are on the SNA68 basis. The two bases are not directly comparable meaning that cross-country comparisons with countries on different bases are less valid. All the European data is likely to be put on the SNA93 basis in OECD data very soon. Japan will not be available on SNA93 basis until near the end of 2000.

All data is *seasonally adjusted* except for the following:
Consumer Price Indices
Producer Price Indices
Earnings (excluding Japan)
Employment

1 European Union 15

	GDP	PFC	GFC	GFCF	ChgStk[1]	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl	Unempl
		Contribution to change in GDP												
Percentage change on a year earlier														
	ILGB	HUDS	HUDT	HUDU	HUDV	HUDW	HUDX	ILGV	ILHP	HYAB	ILAI	ILAR	ILIJ	GADR
1991	1.4	1.4	0.5	0.2	–0.2	0.4	0.9	–0.3	..	5.2	2.2	6.7	0.5	8.4
1992	1.1	0.9	0.5	–0.1	–0.2	0.9	0.9	–1.3	..	4.4	1.3	5.6	–1.8	9.1
1993	–0.4	–0.3	0.2	–1.2	–0.4	0.4	–0.8	–3.5	..	3.6	1.4	4.3	–2.0	10.7
1994	2.8	1.0	0.2	0.5	0.7	2.4	2.0	4.9	..	3.1	2.1	4.0	–0.2	11.1
1995	2.4	1.1	0.1	0.6	0.2	2.3	2.0	3.5	–0.3	3.1	4.5	3.4	0.5	10.7
1996	1.6	1.1	0.4	0.4	–0.5	1.4	1.2	0.5	0.3	2.5	0.6	3.7	0.5	10.8
1997	2.5	1.2	0.1	0.6	0.3	2.9	2.6	4.0	2.8	2.0	0.9	3.2	0.8	10.6
1998	2.6	1.7	0.3	1.1	0.4	1.8	2.6	3.5	3.2	1.7	–0.3	2.5	1.5	9.9
1999	..	..	..	..	..	..	..	1.5	..	1.3	–0.2	..	..	9.2
1997 Q1	1.8	0.9	0.1	0.6	–0.2	1.9	1.5	1.9	1.0	2.2	0.3	2.9	0.5	10.7
Q2	2.5	1.2	0.1	0.6	0.4	3.0	2.8	3.7	3.0	1.8	0.6	2.9	0.7	10.7
Q3	2.7	1.1	0.1	0.5	0.4	3.5	2.9	4.7	3.0	2.1	1.4	2.9	0.9	10.6
Q4	3.1	1.5	–	0.9	0.7	3.2	3.2	5.5	4.0	2.2	1.3	3.8	1.0	10.4
1998 Q1	3.4	1.7	0.3	1.4	0.6	3.1	3.6	5.5	4.2	1.8	0.8	2.9	1.4	10.2
Q2	2.7	1.7	0.3	0.8	0.6	2.2	2.8	4.3	2.2	2.1	0.3	2.8	1.4	10.0
Q3	2.5	1.8	0.2	1.2	0.3	1.4	2.4	3.1	3.3	1.7	–0.7	2.8	1.6	9.9
Q4	1.9	1.7	0.3	1.0	0.1	0.5	1.7	1.3	3.2	1.3	–1.8	1.8	1.7	9.7
1999 Q1	1.8	1.7	0.3	0.9	–	0.2	1.3	0.3	2.8	1.1	–2.0	2.8	1.9	9.5
Q2	1.8	1.5	0.3	1.1	–0.2	0.7	1.5	0.3	3.1	1.1	–1.2	2.8	1.9	9.3
Q3	2.3	1.5	0.3	0.9	–0.2	1.6	2.0	1.7	3.1	1.1	0.2	2.7	1.5	9.1
Q4	..	..	..	..	..	..	..	3.6	..	1.6	2.1	..	..	8.9
1999 Jan	..	..	..	..	..	..	..	1.1	1.9	1.2	–2.0	..	..	9.5
Feb	..	..	..	..	..	..	..	–0.2	2.8	1.1	–2.1	..	..	9.5
Mar	..	..	..	..	..	..	..	–	3.7	1.2	–1.8	..	..	9.4
Apr	..	..	..	..	..	..	..	–0.2	2.9	1.2	–1.4	..	..	9.3
May	..	..	..	..	..	..	..	0.2	1.9	1.0	–1.2	..	..	9.3
Jun	..	..	..	..	..	..	..	0.7	4.7	1.0	–0.9	..	..	9.2
Jul	..	..	..	..	..	..	..	0.8	2.8	1.1	–0.3	..	..	9.2
Aug	..	..	..	..	..	..	..	2.2	3.7	1.2	0.2	..	..	9.1
Sep	..	..	..	..	..	..	..	2.1	2.8	1.2	0.8	..	..	9.0
Oct	..	..	..	..	..	..	..	2.4	3.7	1.4	1.5	..	..	9.0
Nov	..	..	..	..	..	..	..	3.9	2.8	1.5	2.1	..	..	8.9
Dec	..	..	..	..	..	..	..	4.6	..	1.8	2.6	..	..	8.8
2000 Jan	..	..	..	..	..	..	..	..	..	2.0	3.3	..	..	8.8

Percentage change on previous quarter														
	ILGL	HUDY	HUDZ	HUEA	HUEB	HUEC	HUED	ILHF	ILHZ				ILIT	
1997 Q1	0.3	0.3	–0.1	–	0.1	0.5	0.5	1.1	2.0				–1.1	
Q2	1.2	0.5	0.1	0.5	0.2	1.1	1.1	1.7	1.7				1.1	
Q3	0.7	0.2	0.1	0.1	0.1	1.0	0.7	1.5	–0.4				0.9	
Q4	0.8	0.5	–	0.4	0.3	0.6	1.0	1.1	0.7				0.1	
1998 Q1	0.6	0.5	0.1	0.5	–	0.4	0.8	1.0	2.2				–0.7	
Q2	0.5	0.5	0.1	–0.1	0.2	0.2	0.4	0.6	–0.3				1.1	
Q3	0.5	0.4	0.1	0.5	–0.3	0.2	0.3	0.4	0.7				1.1	
Q4	0.2	0.3	–	0.2	0.2	–0.2	0.2	–0.6	0.6				0.2	
1999 Q1	0.5	0.5	0.2	0.3	–0.1	–	0.5	–	1.9				–0.5	
Q2	0.6	0.2	–	0.1	–	0.7	0.5	0.6	–				1.1	
Q3	0.9	0.4	0.1	0.3	–0.2	1.1	0.8	1.7	0.6				0.8	
Q4	..	..	..	..	..	..	..	1.3	..				..	

Percentage change on previous month		
	ILKF	ILKP
1999 Jan	0.8	0.9
Feb	–0.6	0.9
Mar	0.6	1.8
Apr	–	–2.7
May	0.3	0.9
Jun	0.6	1.8
Jul	1.0	–0.9
Aug	0.5	0.9
Sep	–0.2	–1.8
Oct	0.5	1.8
Nov	1.0	–
Dec	–0.1	..
2000 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

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

2 Germany

	Contribution to change in GDP													
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	toP	Sales	CPI	PPI	Earnings	Empl[1]	Unempl
Percentage change on a year earlier	ILFY	HUBW	HUBX	HUBY	HUBZ	HUCA	HUCB	ILGS	ILHM	HVLL	ILAF	ILAO	ILIG	GABD
1991	..	..	..	..	..	..	..	3.2	5.6	4.1	2.1	6.1	1.9	4.2
1992	1.8	1.3	0.9	0.8	–0.7	–0.4	0.1	–2.5	–2.1	5.0	1.7	5.4	–1.4	4.5
1993	–1.1	0.2	–	–1.1	–0.1	–1.3	–1.2	–7.5	–4.3	4.5	0.1	5.1	–1.0	7.9
1994	2.4	0.6	0.5	0.9	0.3	1.7	1.6	3.5	0.7	2.7	0.7	3.7	–0.4	8.4
1995	1.8	1.3	0.3	–0.1	0.3	1.4	1.3	1.0	1.3	1.7	2.1	4.0	–0.2	8.2
1996	0.8	0.4	0.4	–0.2	–0.3	1.3	0.8	0.7	–0.2	1.4	0.2	3.5	–0.3	8.9
1997	1.5	0.5	–0.2	0.1	0.4	2.8	2.0	3.8	–0.5	1.9	0.7	1.5	–0.4	9.9
1998	1.9	1.2	0.1	0.2	0.7	1.8	2.1	4.2	1.3	1.0	–0.4	1.8	0.7	9.4
1999	1.4	1.2	–	0.5	0.5	1.2	1.9	1.1	..	0.6	–1.0	..	0.9	9.1
1997 Q1	1.7	0.6	0.1	0.8	–0.4	2.1	1.5	2.8	–1.3	1.8	0.3	1.6	–0.6	9.7
Q2	1.6	0.8	–0.1	–0.2	0.4	2.8	2.0	3.5	0.9	1.5	0.7	1.5	–0.5	9.8
Q3	1.4	0.1	–0.4	–0.1	0.7	3.6	2.5	3.7	–1.8	2.3	1.1	1.4	–0.2	10.1
Q4	1.5	0.4	–0.5	–	0.9	2.8	2.1	4.8	0.1	2.1	1.0	1.6	–	10.1
1998 Q1	3.0	1.1	0.2	0.8	0.3	3.0	2.4	6.3	3.2	1.2	0.6	1.3	0.1	9.8
Q2	1.8	0.7	0.1	–0.1	0.9	2.7	2.6	4.7	–2.6	1.4	0.2	1.8	0.4	9.5
Q3	1.8	1.6	–	0.2	0.7	1.3	1.9	4.4	2.3	0.7	–0.6	2.1	0.9	9.3
Q4	1.2	1.4	–	–0.1	1.1	0.2	1.4	1.6	2.4	0.4	–1.7	2.2	1.4	9.1
1999 Q1	0.8	1.2	0.1	0.2	0.7	–	1.4	–0.6	0.3	0.3	–2.4	2.5	1.5	9.1
Q2	0.9	1.2	–0.1	0.6	0.5	0.5	1.8	0.1	2.4	0.5	–1.7	2.4	1.3	9.1
Q3	1.5	1.1	0.1	0.5	0.5	1.5	2.2	1.2	0.1	0.7	–0.7	2.7	0.7	9.2
Q4	2.3	1.2	–	0.5	0.1	2.6	2.2	3.8	..	1.0	0.6	..	0.2	9.0
1999 Jan	..	..	..	..	..	..	..	0.7	1.0	0.2	–2.3	..	..	9.1
Feb	..	..	..	..	..	..	..	–0.9	–0.5	0.2	–2.4	..	..	9.1
Mar	..	..	..	..	..	..	..	–1.8	0.4	0.4	–2.3	..	..	9.1
Apr	..	..	..	..	..	..	..	–0.4	1.8	0.7	–1.7	..	..	9.1
May	..	..	..	..	..	..	..	–0.3	0.1	0.4	–1.7	..	..	9.1
Jun	..	..	..	..	..	..	..	0.9	5.4	0.4	–1.5	..	..	9.1
Jul	..	..	..	..	..	..	..	–0.7	–0.1	0.6	–1.0	..	..	9.1
Aug	..	..	..	..	..	..	..	1.7	1.5	0.7	–0.7	..	..	9.2
Sep	..	..	..	..	..	..	..	2.5	–1.3	0.7	–0.5	..	..	9.2
Oct	..	..	..	..	..	..	..	3.1	3.5	0.8	0.2	..	..	9.1
Nov	..	..	..	..	..	..	..	4.4	–1.6	1.0	0.7	..	..	9.1
Dec	..	..	..	..	..	..	..	4.1	..	1.2	1.1	..	..	8.9
2000 Jan	..	..	..	..	..	..	..	3.9	..	1.6	2.0	..	..	8.8

Percentage change on previous quarter	ILGI	HUCC	HUCD	HUCE	HUCF	HUCG	HUCH	ILHC	ILHW	ILIQ
1997 Q1	–0.4	0.1	–0.4	–0.6	0.6	0.4	0.4	1.0	–0.5	–2.3
Q2	1.1	0.2	0.1	0.5	–0.2	0.9	0.3	1.5	3.1	1.2
Q3	0.3	–0.3	–	–	0.2	1.2	0.7	1.0	–2.9	1.0
Q4	0.5	0.3	–0.1	0.1	0.3	0.4	0.6	1.3	0.4	0.1
1998 Q1	1.1	0.8	0.3	0.1	–	0.6	0.7	2.4	2.6	–2.2
Q2	–	–0.1	–	–0.4	0.4	0.5	0.5	–	–2.7	1.5
Q3	0.3	0.5	–0.2	0.3	–0.1	–0.2	0.1	0.6	2.0	1.5
Q4	–0.1	0.2	–0.1	–0.1	0.7	–0.8	0.1	–1.4	0.5	0.6
1999 Q1	0.7	0.5	0.4	0.4	–0.4	0.4	0.7	0.1	0.5	–2.1
Q2	0.1	–0.1	–0.2	–	0.2	1.0	0.8	0.7	–0.6	1.3
Q3	0.9	0.4	–	0.2	–0.1	0.9	0.6	1.7	–0.3	0.9
Q4	0.7	0.4	–0.1	–0.1	0.3	0.2	0.1	1.2	..	0.1

Percentage change on previous month	ILKC	ILKM
1999 Jan	1.0	–0.6
Feb	–1.2	–0.3
Mar	0.1	5.2
Apr	0.7	–5.7
May	0.4	1.5
Jun	0.4	3.0
Jul	0.7	–2.6
Aug	1.4	1.7
Sep	–0.9	–3.7
Oct	1.4	4.6
Nov	–	–2.1
Dec	0.1	..
2000 Jan	0.8	..

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

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

3 France

	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI[1]	Earnings	Empl[2]	Unempl
		Contribution to change in GDP												
Percentage change on a year earlier														
	ILFZ	HUBK	HUBL	HUBM	HUBN	HUBO	HUBP	ILGT	ILHN	HXAA	ILAG	ILAP	ILIH	GABC
1991	1.1	0.4	0.6	–0.3	–0.1	1.0	0.5	–1.2	–0.2	3.2	–1.2	4.7	0.1	9.5
1992	1.4	0.5	0.8	–0.3	–0.2	1.0	0.3	–1.2	0.3	2.3	–1.1	4.0	–0.6	10.4
1993	–1.0	–0.2	1.0	–1.3	–1.2	–	–0.7	–3.8	0.2	2.2	–2.2	3.0	–1.3	11.8
1994	1.8	0.4	0.1	0.3	1.0	1.6	1.6	3.9	–0.1	1.7	1.2	2.0	0.1	12.3
1995	1.8	0.8	–	0.4	0.5	1.7	1.6	2.0	–	1.7	5.2	2.4	0.9	11.7
1996	1.1	0.8	0.5	–	–0.6	0.7	0.3	0.3	–0.3	2.0	–2.6	2.6	0.2	12.4
1997	2.0	0.1	0.4	0.1	0.3	2.4	1.3	3.9	1.0	1.2	–0.5	2.6	0.5	12.3
1998	3.4	2.0	0.3	1.1	0.4	1.7	2.1	4.5	2.6	0.8	–0.9	2.2	1.6	11.7
1999	2.7	1.3	0.4	1.3	–0.4	0.9	0.8	2.2	2.4	0.5	–1.5	..	..	11.0
1997 Q1	1.2	–0.5	0.4	–0.2	0.5	1.3	0.3	0.5	–1.3	1.5	–2.3	2.8	0.1	12.4
Q2	1.7	–0.1	0.4	–	–0.1	2.4	0.8	3.7	0.8	0.9	–0.9	2.7	0.3	12.4
Q3	2.0	–0.3	0.4	0.1	0.8	2.8	1.9	5.1	1.8	1.3	0.3	2.8	0.7	12.3
Q4	3.0	1.3	0.4	0.5	–	3.2	2.3	6.3	2.8	1.2	0.7	2.5	1.0	12.2
1998 Q1	3.5	1.7	0.2	1.0	0.6	2.9	2.9	7.4	2.3	0.9	0.6	2.4	1.4	11.9
Q2	3.7	2.3	0.3	1.0	0.6	2.1	2.7	5.4	3.1	1.1	–0.3	2.0	1.6	11.7
Q3	3.4	2.2	0.2	1.2	0.1	1.5	1.8	3.3	2.5	0.7	–1.3	2.1	1.8	11.7
Q4	2.9	1.7	0.3	1.2	0.5	0.4	1.1	2.3	2.7	0.4	–2.4	2.0	1.7	11.5
1999 Q1	2.4	1.5	0.4	1.4	–0.5	–	0.2	1.0	3.4	0.2	–2.9	2.0	1.6	11.4
Q2	2.4	1.1	0.4	1.3	–0.4	0.5	0.5	0.8	1.8	0.4	–2.5	2.0	1.7	11.2
Q3	2.9	1.2	0.4	1.3	–0.6	1.5	0.9	2.9	2.2	0.5	–1.4	2.7	1.7	10.9
Q4	3.2	1.3	0.5	1.3	–0.3	1.8	1.5	4.2	1.9	1.0	0.7	..	..	10.5
1999 Jan	..	..	..	..	..	..	..	1.9	0.1	0.2	–2.7	..	..	11.5
Feb	..	..	..	..	..	..	..	0.6	3.7	0.2	–3.0	..	..	11.4
Mar	..	..	..	..	..	..	..	0.6	6.8	0.4	–3.1	..	..	11.4
Apr	..	..	..	..	..	..	..	0.6	2.0	0.4	–2.8	..	..	11.3
May	..	..	..	..	..	..	..	0.6	1.1	0.4	–2.5	..	..	11.2
Jun	..	..	..	..	..	..	..	1.3	2.5	0.3	–2.2	..	..	11.2
Jul	..	..	..	..	..	..	..	2.8	4.1	0.4	–1.8	..	..	11.0
Aug	..	..	..	..	..	..	..	2.8	–0.3	0.5	–1.4	..	..	11.0
Sep	..	..	..	..	..	..	..	3.2	2.8	0.7	–0.8	..	..	10.8
Oct	..	..	..	..	..	..	..	3.0	0.1	0.8	0.3	..	..	10.6
Nov	..	..	..	..	..	..	..	4.5	3.1	0.9	0.7	..	..	10.5
Dec	..	..	..	..	..	..	..	5.1	2.8	1.3	1.1	..	..	10.3
2000 Jan	..	..	..	..	..	..	..	..	2.3	1.6	2.1	..	..	10.3
Percentage change on previous quarter														
	ILGJ	HUBQ	HUBR	HUBS	HUBT	HUBU	HUBV	ILHD	ILHX				ILIR	
1997 Q1	0.5	0.1	0.1	–0.3	0.1	0.6	0.1	–	0.5				0.1	
Q2	0.6	0.1	0.1	0.3	–0.3	1.0	0.5	3.2	0.2				0.2	
Q3	0.8	0.3	0.1	0.1	0.4	0.8	1.0	1.8	1.3				0.3	
Q4	1.1	0.8	–	0.3	–0.2	0.8	0.7	1.1	0.8				0.4	
1998 Q1	0.9	0.4	–	0.3	0.6	0.3	0.7	1.0	–				0.5	
Q2	0.9	0.7	0.1	0.3	–0.2	0.2	0.3	1.3	1.0				0.4	
Q3	0.4	0.3	–	0.3	–0.2	0.2	0.1	–0.2	0.7				0.5	
Q4	0.7	0.3	0.1	0.3	0.2	–0.2	–	0.2	1.1				0.3	
1999 Q1	0.4	0.2	0.1	0.5	–0.4	–0.2	–0.2	–0.3	0.7				0.4	
Q2	0.8	0.3	0.1	0.2	–	0.7	0.5	1.1	–0.6				0.5	
Q3	1.0	0.4	0.1	0.3	–0.4	1.1	0.5	1.9	1.0				0.5	
Q4	0.9	0.4	0.2	0.3	0.5	0.1	0.7	1.4	0.8				..	
Percentage change on previous month														
								ILKD	ILKN					
1999 Jan								–	0.5					
Feb								–0.4	0.6					
Mar								1.0	0.9					
Apr								–0.1	–1.0					
May								0.5	–1.4					
Jun								1.0	1.8					
Jul								1.1	2.2					
Aug								–	–3.7					
Sep								–	1.8					
Oct								0.3	–0.2					
Nov								1.7	1.8					
Dec								–	–0.4					
2000 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
Sales = Retail Sales volume
CPI = Consumer Prices, measurement not uniform among countries
PPI = Producer Prices (manufacturing)
Earnings = Average Wage Earnings (manufacturing), definitions of coverage

4 Italy

	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl	Unempl
		Contribution to change in GDP												
Percentage change on a year earlier														
	ILGA	HUCI	HUCJ	HUCK	HUCL	HUCM	HUCN	ILGU	ILHO	HYAA	ILAH	ILAQ	ILII	GABE
1991	1.4	1.7	0.3	0.2	–0.1	–0.3	0.5	–1.8	3.2	6.3	3.3	9.7	1.3	8.6
1992	0.8	1.2	0.1	–0.3	–0.1	1.4	1.6	–1.0	1.9	5.3	2.0	5.4	–1.0	8.8
1993	–0.9	–2.3	–	–2.2	–0.7	1.9	–2.5	–2.3	–3.0	4.6	3.7	3.6	–4.1	10.3
1994	2.2	0.9	–0.2	–	0.8	2.3	1.7	5.8	–6.1	4.1	3.7	3.4	–1.7	11.2
1995	2.9	1.0	–0.4	1.1	0.2	3.1	2.1	5.8	–5.1	5.3	7.9	3.1	–0.6	11.6
1996	0.9	0.5	0.2	0.4	–0.8	0.3	–0.2	–1.5	–1.7	4.0	1.8	3.1	0.5	11.7
1997	1.5	1.5	–0.1	0.2	0.8	1.4	2.3	3.8	7.0	2.0	1.3	3.6	0.4	11.7
1998	1.4	1.1	0.2	0.6	0.6	0.3	1.5	1.4	3.2	2.0	0.1	2.8	1.2	11.8
1999	..	..	..	..	..	..	..	–0.1	..	1.7	–0.2	..	1.2	..
1997 Q1	–0.5	1.2	–0.1	–0.4	–1.1	–	0.1	–1.8	1.6	2.5	0.9	3.8	0.5	11.7
Q2	1.7	1.8	–0.1	–	1.8	1.5	3.3	4.1	8.0	1.9	1.2	3.8	0.5	11.7
Q3	1.8	1.6	–0.1	0.3	0.5	2.1	2.6	5.4	7.9	1.8	1.6	3.5	0.4	11.7
Q4	2.9	1.3	–	0.8	2.0	2.0	3.1	7.6	10.6	2.0	1.6	3.5	0.3	11.8
1998 Q1	2.7	1.2	0.2	1.0	1.6	2.0	3.4	5.1	3.8	2.0	1.2	2.2	1.0	11.8
Q2	1.4	0.9	0.2	0.6	0.3	0.9	1.6	2.7	0.9	2.1	0.6	3.1	0.9	11.9
Q3	1.3	1.1	0.2	0.7	0.3	–0.2	0.9	0.3	3.4	2.1	–0.1	2.8	1.1	11.9
Q4	0.2	1.1	0.3	0.2	–	–1.4	0.1	–2.4	4.8	1.7	–1.2	3.0	1.5	11.8
1999 Q1	0.9	1.1	0.3	0.2	0.9	–1.5	0.1	–1.2	..	1.4	–1.8	3.0	1.2	11.6
Q2	0.8	0.9	0.3	0.5	0.6	–0.7	0.8	–2.4	..	1.4	–1.4	2.1	1.3	11.4
Q3	1.2	0.8	0.4	0.6	–	0.3	0.9	0.4	..	1.7	–	2.4	1.2	11.2
Q4	..	..	..	..	..	..	..	3.0	..	2.1	2.2	..	1.4	..
1999 Jan	..	..	..	..	..	..	..	–1.0	..	1.5	–1.6	3.4	..	11.7
Feb	..	..	..	..	..	..	..	–2.2	..	1.4	–1.9	3.3	..	11.6
Mar	..	..	..	..	..	..	..	–0.5	..	1.3	–1.8	2.1	..	11.5
Apr	..	..	..	..	..	..	..	–3.0	..	1.5	–1.6	2.2	..	11.5
May	..	..	..	..	..	..	..	–2.9	..	1.5	–1.4	2.1	..	11.4
Jun	..	..	..	..	..	..	..	–1.3	..	1.4	–1.4	1.9	..	11.4
Jul	..	..	..	..	..	..	..	–1.1	..	1.7	–0.6	2.6	..	11.3
Aug	..	..	..	..	..	..	..	2.6	..	1.7	–	2.1	..	11.2
Sep	..	..	..	..	..	..	..	–0.4	..	1.8	0.8	2.3	..	11.1
Oct	..	..	..	..	..	..	..	1.5	..	2.0	1.6	1.9	..	11.1
Nov	..	..	..	..	..	..	..	2.4	..	2.0	2.2	1.8	..	..
Dec	..	..	..	..	..	..	..	5.4	..	2.1	2.8	..	..	..
2000 Jan	..	..	..	..	..	..	..	..	..	2.2	3.8	..	..	
Percentage change on previous quarter														
	ILGK	HUCO	HUCP	HUCQ	HUCR	HUCS	HUCT	ILHE	ILHY				ILIS	
1997 Q1	–0.3	0.4	–0.1	–	–0.2	–0.1	0.2	1.4	12.4				–1.4	
Q2	1.8	0.7	–	0.2	1.6	0.7	1.5	3.0	2.5				1.2	
Q3	0.7	0.1	–	0.1	–0.2	0.9	0.3	1.5	–3.3				1.2	
Q4	0.7	0.1	–	0.5	0.7	0.5	1.1	1.5	–0.7				–0.7	
1998 Q1	–0.5	0.3	0.1	0.2	–0.5	–0.2	0.4	–1.0	5.5				–0.7	
Q2	0.5	0.4	–	–0.2	0.3	–0.4	–0.3	0.7	–0.4				1.1	
Q3	0.5	0.3	–	0.2	–0.2	–0.2	–0.4	–0.9	–0.9				1.4	
Q4	–0.4	0.2	0.1	–	0.5	–0.7	0.4	–1.3	0.6				–0.3	
1999 Q1	0.2	0.3	0.1	0.2	0.3	–0.2	0.4	0.3	..				–1.0	
Q2	0.4	0.1	0.1	0.1	–	0.4	0.4	–0.6	..				1.2	
Q3	1.0	0.2	0.1	0.3	–0.8	0.9	–0.3	2.0	..				1.3	
Q4	..	..	..	..	..	..	..	1.3	..				–0.1	
Percentage change on previous month														
								ILKE	ILKO					
1999 Jan								2.2	..					
Feb								–0.8	..					
Mar								1.5	..					
Apr								–1.5	..					
May								–0.4	..					
Jun								1.5	..					
Jul								0.6	..					
Aug								0.9	..					
Sep								–0.4	..					
Oct								0.6	..					
Nov								1.1	..					
Dec								–	..					
2000 Jan								..	..					

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ChgStk = Change in Stocks at constant market prices

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

5 USA

	GDP	Contribution to change in GDP: PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl[1]	Unempl
Percentage change on a year earlier														
	ILGC	HUDG	HUDH	HUDI	HUDJ	HUDK	HUDL	ILGW	ILHQ	ILAA	ILAJ	ILAS	ILIK	GADO
1991	–0.2	0.1	0.2	–0.9	–0.3	0.8	–	–2.0	–1.9	4.2	2.0	3.2	–0.8	6.8
1992	3.3	2.1	0.1	0.8	0.3	0.6	0.6	3.1	3.4	3.0	1.3	2.7	0.6	7.5
1993	2.4	2.0	–0.1	1.0	–	0.3	0.9	3.4	4.9	2.9	1.2	2.6	1.5	6.9
1994	4.0	2.5	–	1.2	0.7	0.8	1.2	5.5	6.5	2.6	0.6	2.4	2.3	6.1
1995	2.7	2.0	–	1.0	–0.5	1.0	0.9	4.8	3.6	2.8	1.9	2.6	1.5	5.6
1996	3.7	2.2	0.1	1.5	–	0.9	1.0	4.4	4.9	2.9	2.6	3.3	1.4	5.4
1997	4.5	2.5	0.3	1.4	0.5	1.4	1.7	6.3	4.3	2.3	0.4	3.1	2.3	4.9
1998	4.3	3.2	0.2	2.0	0.1	0.3	1.6	4.2	6.1	1.6	–0.9	2.6	1.5	4.5
1999	4.1	3.5	0.4	1.7	–0.4	0.4	1.7	3.5	..	2.1	1.9	3.0	1.5	4.2
1997 Q1	4.7	2.5	0.4	1.5	0.6	1.3	1.5	6.4	4.9	2.9	2.1	3.5	2.4	5.3
Q2	4.3	2.0	0.3	1.3	0.8	1.5	1.7	5.9	3.0	2.3	0.4	2.9	2.4	5.0
Q3	4.7	2.8	0.4	1.5	0.1	1.8	1.8	6.2	4.9	2.1	–0.2	2.9	2.1	4.8
Q4	4.3	2.8	0.3	1.4	0.5	1.1	1.8	6.8	4.2	1.9	–0.8	3.2	2.0	4.7
1998 Q1	4.7	2.9	0.2	2.0	0.7	0.8	1.8	5.7	4.8	1.4	–1.5	2.8	1.9	4.7
Q2	4.0	3.6	0.2	2.1	–0.6	0.2	1.7	4.7	7.5	1.6	–0.8	2.8	1.5	4.4
Q3	3.9	3.2	0.1	1.8	0.2	–0.2	1.3	3.8	5.1	1.6	–0.6	2.5	1.1	4.5
Q4	4.6	3.4	0.3	2.2	–	0.2	1.5	2.9	7.3	1.5	–0.4	2.1	1.3	4.4
1999 Q1	3.9	3.5	0.4	1.9	–0.7	0.1	1.4	2.8	8.9	1.7	0.7	1.8	1.7	4.3
Q2	3.8	3.4	0.2	1.6	–0.3	0.3	1.5	3.3	7.5	2.2	1.3	2.8	1.4	4.3
Q3	4.3	3.5	0.4	1.8	–0.4	0.7	1.9	3.7	9.0	2.4	2.3	3.9	1.4	4.2
Q4	4.5	3.7	0.5	1.5	–	0.5	1.9	4.3	..	2.6	2.9	3.6	1.5	4.1
1999 Feb	..	..	..	..	..	..	..	2.9	9.5	1.7	0.4	1.9	1.6	4.4
Mar	..	..	..	..	..	..	..	3.1	8.9	1.8	0.8	1.8	1.6	4.2
Apr	..	..	..	..	..	..	..	2.9	7.5	2.3	1.2	2.8	1.3	4.3
May	..	..	..	..	..	..	..	2.9	7.7	2.2	1.4	2.8	1.4	4.2
Jun	..	..	..	..	..	..	..	3.9	7.1	2.0	1.5	2.8	1.6	4.3
Jul	..	..	..	..	..	..	..	4.7	8.6	2.1	1.5	4.6	1.5	4.3
Aug	..	..	..	..	..	..	..	3.1	9.7	2.3	2.3	3.7	1.6	4.2
Sep	..	..	..	..	..	..	..	3.4	8.6	2.6	3.1	3.6	1.2	4.2
Oct	..	..	..	..	..	..	..	3.7	7.6	2.6	2.7	3.6	1.5	4.1
Nov	..	..	..	..	..	..	..	4.3	7.9	2.6	3.1	3.6	1.5	4.1
Dec	..	..	..	..	..	..	..	4.8	..	2.6	2.9	3.6	1.4	4.1
2000 Jan	..	..	..	..	..	..	..	5.5	..	2.7	2.5	4.5	1.5	4.0
Feb	..	..	..	..	..	..	..	..	..	..	..	4.5	1.7	4.1
Percentage change on previous quarter														
	ILGM	HUDM	HUDN	HUDO	HUDP	HUDQ	HUDR	ILHG	ILIA				ILIU	
1997 Q1	1.2	0.8	0.1	0.3	0.2	0.2	0.5	1.6	1.4				–0.8	
Q2	1.3	0.3	0.2	0.4	0.5	0.4	0.6	1.7	–0.4				1.9	
Q3	1.0	1.1	–	0.5	–0.4	0.3	0.5	1.7	2.5				1.0	
Q4	0.8	0.6	–	0.1	0.2	0.1	0.2	1.6	0.5				–	
1998 Q1	1.6	0.9	–0.1	0.9	0.4	–	0.5	0.6	2.0				–1.0	
Q2	0.5	1.0	0.2	0.6	–0.8	–0.1	0.4	0.7	2.2				1.5	
Q3	0.9	0.7	–	0.2	0.4	–	0.2	0.8	0.2				0.6	
Q4	1.4	0.8	0.1	0.5	–0.1	0.4	0.4	0.8	2.7				0.2	
1999 Q1	0.9	1.1	–	0.6	–0.2	–0.2	0.4	0.5	3.4				–0.6	
Q2	0.5	0.8	–	0.3	–0.4	0.1	0.5	1.2	0.9				1.2	
Q3	1.4	0.8	0.2	0.3	0.3	0.3	0.5	1.2	1.7				0.6	
Q4	1.7	1.0	0.2	0.3	0.3	0.2	0.4	1.3	..				0.3	
Percentage change on previous month														
								ILKG	ILKQ				ILLA	
1999 Feb								0.3	1.9				0.2	
Mar								0.4	–				0.5	
Apr								0.3	–0.4				0.2	
May								0.6	1.1				0.7	
Jun								0.3	–				0.7	
Jul								0.6	0.7				0.3	
Aug								0.2	1.1				–0.4	
Sep								0.2	–0.4				–0.6	
Oct								0.7	0.3				0.7	
Nov								0.3	1.3				0.1	
Dec								0.5	..				0.1	
2000 Jan								1.0	..				–0.9	
Feb								..	..				0.4	

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

6 Japan

	Contribution to change in GDP													
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP[1]	Sales	CPI	PPI	Earnings[2]	Empl	Unempl
Percentage change on a year earlier														
	ILGD	HUCU	HUCV	HUCW	HUCX	HUCY	HUCZ	ILGX	ILHR	ILAB	ILAK	ILAT	ILIL	GADP
1991	3.8	1.5	0.2	1.1	0.3	0.6	–0.3	1.9	2.5	3.2	1.2	3.5	1.9	2.1
1992	1.0	1.2	0.2	–0.5	–0.4	0.5	–	–5.7	–0.2	1.8	–1.0	1.3	1.1	2.1
1993	0.3	0.7	0.2	–0.6	–0.2	0.2	–	–3.6	–2.8	1.2	–1.6	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	0.7	–1.8	2.1	0.1	2.9
1995	1.4	1.2	0.3	0.4	0.2	0.7	1.4	3.3	0.1	–0.1	–0.7	3.0	–	3.1
1996	5.2	1.8	0.2	3.4	0.4	0.8	1.3	2.4	0.7	0.1	–1.8	2.5	0.5	3.4
1997	1.6	0.3	0.1	–0.3	0.1	1.4	0.1	3.5	–1.9	1.7	0.7	3.0	1.0	3.4
1998	–2.6	–0.3	0.1	–2.3	–0.6	–0.3	–0.9	–6.6	–5.5	0.7	–1.3	–0.7	–0.6	4.1
1999	..	..	..	..	..	..	..	0.4	–2.0	–0.3	–1.5	–0.5	–0.8	4.7
1997 Q1	3.8	2.3	–	0.9	–0.3	1.5	0.6	5.2	5.6	0.6	–0.9	5.0	1.6	3.3
Q2	1.2	–0.5	0.2	–0.6	0.2	2.0	0.1	5.8	–4.7	2.0	1.3	2.6	1.3	3.4
Q3	1.8	0.4	0.1	–0.4	0.2	1.4	–	4.0	–3.6	2.1	1.2	2.7	0.7	3.4
Q4	–0.5	–1.0	0.1	–1.2	0.1	1.0	–0.4	–0.7	–4.9	2.2	1.0	1.6	0.7	3.5
1998 Q1	–2.9	–2.1	0.3	–1.8	–0.1	0.3	–0.7	–4.1	–10.0	2.0	0.4	–0.1	–	3.7
Q2	–1.1	0.7	–	–1.8	–0.6	–0.5	–1.1	–8.0	–2.4	0.4	–1.9	–0.3	–0.7	4.1
Q3	–3.2	–0.2	0.2	–3.0	–0.9	–0.2	–1.0	–7.9	–3.8	–0.2	–1.8	–1.7	–0.9	4.2
Q4	–3.1	0.3	0.1	–2.6	–0.9	–0.9	–0.9	–6.3	–5.2	0.5	–2.0	–0.6	–1.0	4.4
1999 Q1	–0.4	0.6	0.2	–0.9	–0.2	–0.4	–0.4	–4.2	–4.2	–0.1	–2.1	–0.3	–1.2	4.6
Q2	0.7	1.1	0.1	–0.1	0.1	–0.1	0.5	–0.9	–2.1	–0.3	–1.8	–1.0	–1.1	4.7
Q3	0.9	1.0	0.1	–	0.2	0.5	0.8	2.7	–1.4	–	–1.4	–0.1	–0.7	4.7
Q4	..	..	..	..	..	..	..	4.2	–0.3	–1.0	–0.6	–0.4	–0.2	4.7
1999 Jan	..	..	..	..	..	..	..	–8.0	–5.2	0.2	–2.2	–2.3	–1.2	4.5
Feb	..	..	..	..	..	..	..	–3.8	–4.2	–0.1	–2.1	0.5	–1.2	4.6
Mar	..	..	..	..	..	..	..	–0.6	–3.2	–0.4	–2.0	0.9	–1.3	4.7
Apr	..	..	..	..	..	..	..	–2.2	–2.1	–0.1	–1.9	1.1	–1.0	4.8
May	..	..	..	..	..	..	..	–0.6	–3.2	–0.4	–1.8	0.1	–1.0	4.6
Jun	..	..	..	..	..	..	..	–	–1.1	–0.3	–1.7	–4.4	–1.3	4.8
Jul	..	..	..	..	..	..	..	0.1	–2.1	–0.1	–1.5	–2.5	–1.3	4.8
Aug	..	..	..	..	..	..	..	5.0	–1.1	0.3	–1.4	0.8	–0.6	4.7
Sep	..	..	..	..	..	..	..	3.0	–1.1	–0.2	–1.1	1.4	–0.2	4.6
Oct	..	..	..	..	..	..	..	1.2	–	–0.7	–0.8	0.9	–0.4	4.7
Nov	..	..	..	..	..	..	..	6.4	–1.1	–1.2	–0.5	–0.7	–	4.6
Dec	..	..	..	..	..	..	..	5.2	–	–1.1	–0.5	–1.3	–0.3	4.7
2000 Jan	..	..	..	..	..	..	..	6.7	–2.2	–0.9	–0.3	0.6	–0.4	4.7
Percentage change on previous quarter														
	ILGN	HUDA	HUDB	HUDC	HUDD	HUDE	HUDF	ILHH	ILIB				ILIV	
1997 Q1	1.3	1.4	–0.2	–0.2	–0.1	0.3	–	1.8	5.3				–0.9	
Q2	–2.0	–2.7	0.2	–0.5	0.3	0.6	–0.1	–0.1	–10.0				2.8	
Q3	0.9	0.9	–	0.1	0.1	–0.2	–0.1	–	0.7				–0.2	
Q4	–0.6	–0.5	0.1	–0.6	–0.1	0.3	–0.2	–2.3	–0.4				–1.0	
1998 Q1	–1.2	0.2	–0.1	–0.8	–0.4	–0.4	–0.3	–1.7	–0.3				–1.6	
Q2	–0.2	0.1	–	–0.4	–0.2	–0.2	–0.5	–4.1	–2.4				2.1	
Q3	–1.2	–	0.1	–1.2	–0.2	0.1	–	0.1	–0.7				–0.4	
Q4	–0.5	–	0.1	–0.2	–0.1	–0.4	–0.1	–0.7	–1.8				–1.1	
1999 Q1	1.5	0.5	0.1	0.9	0.3	–	0.3	0.5	0.8				–1.8	
Q2	1.0	0.7	–0.1	0.4	0.1	0.2	0.3	–0.8	–0.3				2.2	
Q3	–1.0	–0.1	0.1	–1.1	–0.1	0.7	0.3	3.8	–				–	
Q4	..	..	..	..	..	..	..	0.7	–0.8				–0.6	
Percentage change on previous month														
								ILKH	ILKR				ILLB	
1999 Jan								–0.6	1.1				–1.0	
Feb								0.8	–				–0.7	
Mar								2.6	–				0.8	
Apr								–3.1	–				1.3	
May								–1.0	–1.1				1.0	
Jun								3.3	1.1				–0.2	
Jul								–1.0	–				–0.4	
Aug								4.5	–				0.2	
Sep								–0.2	–1.1				0.1	
Oct								–2.9	–				–0.2	
Nov								4.2	–				–0.3	
Dec								–1.1	–				–0.9	
2000 Jan								0.8	–1.1				–1.1	

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

1 Not adjusted

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

7 World trade in goods[1]

	Export of manufactures			Import of manufactures			Export of goods			Import of goods			Total trade	
	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	manufactures	goods
Percentage change on a year earlier	ILIZ	ILJA	ILJB	ILJC	ILJD	ILJE	ILJF	ILJG	ILJH	ILJI	ILJJ	ILJK	ILJL	ILJM
1991	3.6	2.5	8.9	5.5	3.9	10.5	3.9	3.5	4.9	4.5	3.5	7.5	4.5	4.2
1992	4.2	3.3	8.4	5.0	4.0	7.9	4.2	3.6	5.7	5.0	4.1	7.5	4.6	4.6
1993	4.3	1.6	15.3	3.4	0.3	12.5	3.9	2.2	9.1	3.3	0.9	10.3	3.9	3.6
1994	12.2	10.1	20.1	12.2	12.6	11.1	10.7	9.4	14.1	10.9	10.9	10.8	12.2	10.8
1995	9.7	10.0	8.6	10.5	9.7	12.4	8.7	9.1	7.8	9.5	8.5	12.2	10.1	9.1
1996	7.0	6.8	7.8	7.1	7.3	6.5	6.9	6.6	7.6	6.1	6.8	4.3	7.1	6.5
1997	11.3	11.8	9.6	10.4	10.9	9.0	10.1	10.8	8.5	9.4	9.6	8.8	10.8	9.8
1998	..	5.6	..	..	8.5	..	5.2	5.5	4.2	5.5	7.6	–0.2	..	5.3
1995 Q1	13.3	13.4	12.6	13.5	13.7	12.8	11.7	12.3	10.1	12.1	11.9	12.8	13.3	11.9
Q2	10.4	10.7	8.9	11.9	11.0	13.8	9.3	9.8	7.9	10.9	9.9	13.7	11.0	10.1
Q3	8.9	9.2	6.9	10.3	8.8	12.9	7.8	8.3	6.7	9.1	7.7	12.7	9.3	8.5
Q4	7.1	7.0	6.4	7.7	6.0	10.3	6.4	6.3	6.6	6.1	4.8	9.8	7.0	6.2
1996 Q1	6.2	5.7	6.7	7.8	7.2	8.0	5.7	5.2	6.8	6.2	6.2	6.0	6.7	5.9
Q2	6.2	5.6	7.1	6.3	6.0	5.9	5.8	5.3	7.2	4.9	5.6	3.2	5.9	5.4
Q3	7.9	7.2	8.0	7.7	8.0	5.5	7.2	7.0	7.8	6.2	7.4	3.2	7.3	6.7
Q4	9.5	8.8	9.2	8.1	7.9	6.9	8.6	8.6	8.7	7.2	8.0	5.0	8.3	7.9
1997 Q1	8.9	8.2	9.7	8.0	7.3	7.9	8.1	7.7	9.1	7.1	7.0	7.4	8.0	7.6
Q2	12.8	12.8	10.0	11.9	11.9	9.1	11.2	11.9	9.2	10.1	10.4	9.3	11.7	10.6
Q3	13.5	14.1	9.7	11.9	12.3	9.5	11.4	12.5	8.3	10.2	10.5	9.4	12.3	10.8
Q4	11.7	12.0	9.0	11.5	12.0	9.5	9.9	10.8	7.5	10.1	10.4	9.1	11.3	10.0
1998 Q1	10.4	11.1	6.8	10.0	11.9	4.6	9.2	10.7	5.3	9.0	10.7	4.4	10.0	9.1
Q2	5.9	6.1	6.3	6.6	8.6	1.8	5.6	5.8	5.1	6.1	7.8	1.8	6.4	5.9
Q3	3.5	3.2	4.5	4.1	6.7	–2.2	3.1	2.8	3.8	3.8	6.0	–1.9	3.8	3.4
Q4	..	2.5	..	..	7.0	..	3.1	3.2	2.9	3.2	6.3	–4.8	..	3.2
1999 Q1	..	2.1	..	..	6.9	..	2.7	2.5	3.1	3.2	5.7	–3.4	..	2.9
Q2	..	3.5	..	..	7.9	..	..	4.0	..	..	6.6	..	..	..
Percentage change on previous quarter	ILJN	ILJO	ILJP	ILJQ	ILJR	ILJS	ILJT	ILJU	ILJV	ILJW	ILJX	ILJY	ILJZ	ILKA
1995 Q1	3.1	3.5	1.8	1.9	1.3	3.4	2.6	2.9	1.7	1.6	0.9	3.3	2.5	2.1
Q2	1.2	1.1	1.7	2.2	1.7	3.2	1.1	0.9	1.6	2.2	1.8	3.2	1.7	1.6
Q3	0.9	0.7	1.5	1.1	0.6	2.2	1.1	0.9	1.6	1.1	0.7	2.0	1.0	1.1
Q4	1.5	1.6	1.3	1.9	2.2	1.1	1.5	1.4	1.6	1.1	1.3	0.8	1.7	1.3
1996 Q1	2.2	2.2	2.0	2.1	2.4	1.3	1.9	1.9	1.8	1.6	2.4	–0.2	2.1	1.8
Q2	1.2	1.0	2.0	0.8	0.6	1.2	1.3	1.0	2.0	1.0	1.2	0.5	1.0	1.1
Q3	2.3	2.3	2.3	2.3	2.5	1.8	2.4	2.5	2.2	2.3	2.4	2.0	2.3	2.3
Q4	3.0	3.1	2.5	2.2	2.1	2.4	2.8	3.0	2.4	2.0	1.8	2.5	2.6	2.4
1997 Q1	1.8	1.7	2.4	2.0	1.9	2.2	1.4	1.1	2.3	1.6	1.4	2.1	1.9	1.5
Q2	4.6	5.3	2.4	4.2	4.9	2.3	4.2	5.0	2.0	3.8	4.4	2.3	4.4	4.0
Q3	3.1	3.4	2.0	2.7	2.9	2.2	2.6	3.0	1.4	2.4	2.6	2.1	2.9	2.5
Q4	1.4	1.2	1.9	2.0	1.8	2.4	1.5	1.4	1.6	1.9	1.8	2.3	1.7	1.7
1998 Q1	0.7	0.8	0.3	0.6	1.8	–2.4	0.8	1.0	0.1	0.6	1.7	–2.3	0.7	0.7
Q2	0.9	0.5	1.9	1.2	1.7	–0.4	0.7	0.3	1.8	1.1	1.6	–0.3	1.0	0.9
Q3	0.5	0.5	0.2	0.3	1.1	–1.8	0.1	0.1	0.1	0.2	0.9	–1.6	0.4	0.2
Q4	..	0.6	..	..	2.1	..	1.5	1.8	0.8	1.3	2.0	–0.7	..	1.4
1999 Q1	..	0.5	..	..	1.7	..	0.3	0.3	0.4	0.6	1.1	–0.9	..	0.4
Q2	..	1.9	..	..	2.7	..	..	1.9	..	..	2.5	..	..	..

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

Source: OECD - SNA68

Final Expenditure Prices Index (Experimental) – February 2000

Contact: Richard Clegg Tel: 020-7533 5822; e-mail: richard.clegg@ons.gov.uk

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

Re-calculation of the index from 1992

1 The FEPI weights for the Index of Investment Prices (IIP), and the Index of Government Prices (IGP) have been revised from 1992 onwards and are now consistent with the National Accounts data published in the 1999 edition of the United Kingdom National Accounts (the ONS Blue Book). A new index for intangible assets has been added to the IIP; this brings the structure of these indices into line with the European System of Accounts 1995 (ESA95).

2. The IIP and IGP have been revised to include revisions to component price indices which have occurred since the FEPI was first published. Usually revisions to the FEPI are restricted to the last six months regardless of any changes in the underlying data, which took place earlier. Additionally some indices have been replaced with ones specifically designed for use in the FEPI.

3. Detailed information on the prices of imported goods by commodity has been included in the calculations from 1994 onwards, the earliest period for which it is available, replacing a single 'import adjustment factor'. The implied import price data are used to adjust Producer Price Indices, which measure UK manufacturing output prices, to take into account the price of imports included in purchases.

4. An output index of government prices, the IGP(P), has been introduced in addition to the IGP. This index reflects output prices of government services for education, health and social security, which comprise around 50% of government expenditure. The new index goes some way towards removing an inconsistency in the FEPI which had previously included output prices for the Index of Consumer Prices (ICP) and the IIP, but input prices for the IGP. An article in the February 2000 edition of Economic Trends provides further details. The IGP(P) feeds into a variant version of the overall FEPI, the FEPI (P), which is shown at Table 1A. Data for the IGP(P) and FEPI(P) are only available up to December 1999.

5. The presentation of the ICP has been improved by the addition of two new series, which provide an analysis of changes in prices of goods and services. It is planned to re-structure the ICP onto the Classification of Individual Consumption by Purpose (COICOP) in the February 2001 index.

Summary

The rate of inflation, as measured by the Final Expenditure Prices Index (FEPI) in February 2000, was 1.7 per cent, up from 1.6 per cent in January. Consumer price inflation, as measured by the Index of Consumer Prices (ICP), was 1.6 per cent, up from 1.3 per cent in January. Investment price inflation, as measured by the Index of Investment Prices (IIP) was 2.1 per cent, down from 2.5 per cent in January, while inflation as measured by the Index of Government Prices (IGP) was 2.3 per cent, up from 2.1 per cent in January.

The FEPI annual percentage change

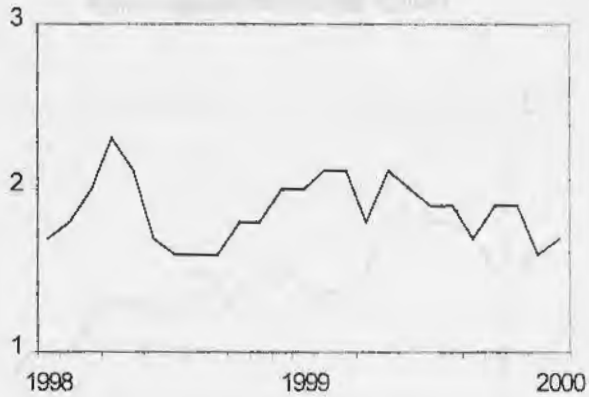


Table A

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

		ICP		IIP		IGP		IGP(P)		FEPI		FEPI(P)	
		Index	%change	Index	%change	Index	%change	Index	%change	Index	%change	Index	%change
1999	Sept	122.1	1.7	112.4	1.5	121.4	2.7	120.6	3.2	120.0	1.9	119.8	2.0
	Oct	121.9	1.5	112.4	1.4	121.2	2.7	120.6	3.2	119.8	1.7	119.7	1.9
	Nov	122.1	1.5	113.0	2.0	121.5	2.8	120.9	3.2	120.1	1.9	120.0	2.0
	Dec	122.4	1.5	113.5	2.5	121.7	2.3	121.2	3.1	120.4	1.9	120.3	2.0
2000	Jan	121.5	1.3	113.6	2.5	121.7	2.1	..	..	119.9	1.6	..	..
	Feb	122.3	1.6	113.3	2.1	121.8	2.3	..	..	120.3	1.7	..	..

The Index of Consumer Prices (ICP)

Consumer price inflation, as measured by the ICP, was 1.6 per cent in February. Within this, inflation in the price of goods was 0.3 per cent and services 3.4 per cent.

Upward pressure came from:

- Clothing and footwear, whose 12-month rate rose from -3.3 per cent in January to –2.5 per cent in February. The increase was mainly in men's outerwear, and footwear where price increases following the January sales were greater than last year.

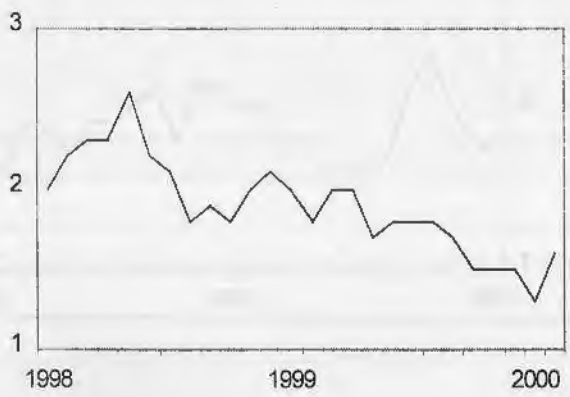
- Tobacco, whose 12-month rate rose from 7.5 per cent to 8.5 per cent. Price increases were spread across all outlets and brands.

Downward pressure came from:

- Household goods and services whose 12-month rate fell from 0.2 per cent to – 0.2 per cent. Special offers and continuing sales accounted for the lower rate of inflation.

- Food, whose 12-month rate fell from –1.5 per cent to –1.7 per cent. Plentiful supplies of fresh fruit and vegetables helped to lower prices.

The ICP annual percentage change



The Index of Investment Prices (IIP)

Investment price inflation, as measured by the IIP, fell from 2.5 per cent to 2.1 per cent over the 12 months to February.

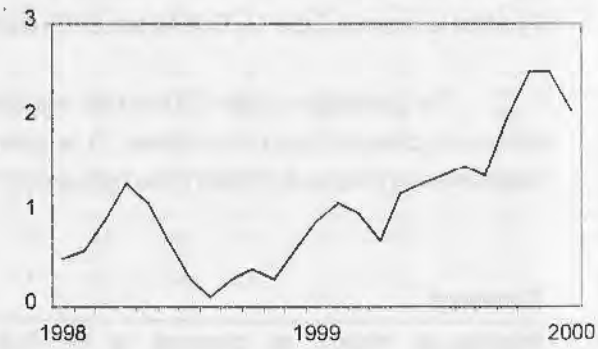
Upward pressure on the 12-month rate came from:

- New Dwellings, where the 12-month rate rose from 14.2 per cent in January to 14.7 per cent in February.

Downward pressure on the 12-month rate came from:

- Plant and machinery, where the twelve month rate fell from –3.8 per cent to –4.9 per cent.

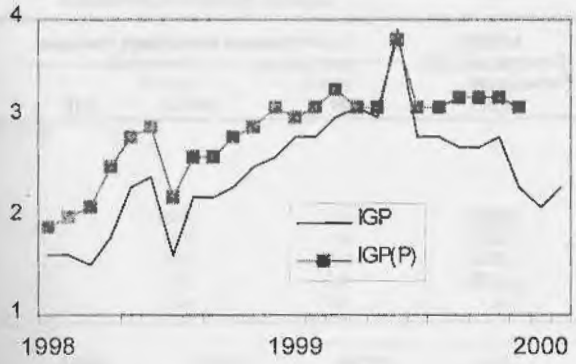
The IIP annual percentage change



The Index of Government Prices (IGP)

The IGP inflation rate increased from 2.1 per cent in January to 2.3 per cent in February. While the rate of inflation for local government pay and procurement and education grants was unchanged between January and February 2000, the rate of inflation for central government pay and procurement rose from 1.7 per cent to 1.9 per cent.

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
1999	Sep	1.9	2.1	1.2	1.7
	Oct	1.7	2.2	1.2	1.9
	Nov	1.9	2.2	1.3	2.1
	Dec	1.9	2.2	1.2	2.3
2000	Jan	1.6	2.1	0.8	2.4
	Feb	1.7	2.2	1.0	2.3

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). The IGP(P) is a variant version of the IGP incorporating government output prices for health, education and social security which comprise around 50% of general government final consumption expenditure.

6. Care should be taken when interpreting monthly movements in the IGP and IGP(P). These indices are 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, December 1997. Data are available in computer readable form from the ONS Sales Office (telephone 020-7533 5670).

1 Final Expenditure Prices Index (FEPI) Summary Table

Experimental price indices

	Index of Consumer Prices ICP	Index of Investment Prices IIP	Index of Government Prices IGP	Final Expenditure Prices Index FEPI	Annual percentage changes ICP	IIP	IGP	FEPI
January 1992=100								
Weights								
1992	578	216	206	1000				
1993	586	193	221	1000				
1994	591	179	230	1000				
1995	599	172	229	1000				
	CUSE	CUSK	CUSO	CUSP	CGAZ	CGBF	CGBJ	CGBK
1992 Jan	100.0	100.0	100.0	100.0	..	..	..	..
Feb	100.5	99.7†	99.9†	100.2†	..	..	..	..
Mar	101.0	99.7	99.8	100.5	..	..	..	..
Apr	102.2	99.7	102.0	101.6	..	..	..	..
May	102.6	98.6	101.8	101.6	..	..	..	..
Jun	102.6	98.2	102.0	101.5	..	..	..	..
Jul	102.2	98.1	102.9	101.4	..	..	..	..
Aug	102.2	97.4	102.4	101.2	..	..	..	..
Sep	102.7	97.0	102.7	101.7	..	..	..	..
Oct	103.0	97.3	103.1	101.9	..	..	..	..
Nov	103.1	97.5	103.9	102.2	..	..	..	..
Dec	103.3	97.8	103.8	102.3	..	..	..	..
1993 Jan	102.7	97.7	104.2	102.0	2.7	−2.3†	4.2†	2.0†
Feb	103.5	98.3	104.3	102.6	3.0	−1.4	4.4	2.4
Mar	104.1	98.4	104.4	103.0	3.1	−1.3	4.6	2.5
Apr	105.3	98.8	105.2	104.0	3.0	−0.9	3.1	2.4
May	105.8	98.5	104.9	104.1	3.1	−0.1	3.0	2.5
Jun	105.7	98.2	105.3	104.1	3.0	–	3.2	2.6
Jul	105.4	98.9	105.6	104.1	3.1	0.8	2.6	2.7
Aug	105.9	98.9	105.6	104.4	3.6	1.5	3.1	3.2
Sep	106.4	98.5	105.8	104.7	3.6	1.5	3.0	2.9
Oct	106.3	98.7	106.6	104.8	3.2	1.4	3.4	2.8
Nov	106.1	98.8	106.1	104.6	2.9	1.3	2.1	2.3
Dec	106.4	98.6	106.6	104.9	3.0	0.8	2.7	2.5
1994 Jan	106.1	98.9	106.4	104.7	3.3	1.2	2.1	2.6
Feb	106.7	98.9	106.6	105.1	3.1	0.6	2.2	2.4
Mar	106.9	99.4	106.9	105.4	2.7	1.0	2.4	2.3
Apr	107.8	100.0	107.4	106.2	2.4	1.2	2.1	2.1
May	108.3	99.8	107.2	106.3	2.4	1.3	2.2	2.1
Jun	108.2	100.4	107.6	106.5	2.4	2.2	2.2	2.3
Jul	107.6	101.1	107.7	106.3	2.1	2.2	2.0	2.1
Aug	108.3	101.8	107.7	106.9	2.3	2.9	2.0	2.4
Sep	108.5	101.2	108.0	106.9	2.0	2.7	2.1	2.1
Oct	108.4	101.1	108.0	106.8	2.0	2.4	1.3	1.9
Nov	108.5	101.6	109.0	107.2	2.3	2.8	2.7	2.5
Dec	109.0	102.3	108.8	107.6	2.4	3.8	2.1	2.6
1995 Jan	109.0	102.7	109.8	107.9	2.7	3.8	3.2	3.1
Feb	109.6	103.1	109.3	108.2	2.7	4.2	2.5	2.9
Mar	110.2	103.4	109.7	108.7	3.1	4.0	2.6	3.1
Apr	110.8	104.3	110.3	109.4	2.8	4.3	2.7	3.0
May	111.4	104.7	110.0	109.7	2.9	4.9	2.6	3.2
Jun	111.5	105.3	110.3	110.0	3.0	4.9	2.5	3.3
Jul	110.9	105.8	110.4	109.7	3.1	4.6	2.5	3.2
Aug	111.5	106.3	110.5	110.2	3.0	4.4	2.6	3.1
Sep	112.1	106.7	110.7	110.7	3.3	5.4	2.5	3.6
Oct	111.8	106.8	110.8	110.5	3.1	5.6	2.6	3.5
Nov	111.9	107.0	111.0	110.6	3.1	5.3	1.8	3.2
Dec	112.5	107.3	111.5	111.2	3.2	4.9	2.5	3.3

† Indicates earliest revision.

1 Final Expenditure Prices Index (FEPI) Summary Table

continued

Experimental price indices

	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								
1996	598	174	228	1000				
1997	595	180	225	1000				
1998	597	183	220	1000				
1999	608	182	210	1000				
2000	602	191	207	1000				
	CUSE	CUSK	CUSO	CUSP	CGAZ	CGBF	CGBJ	CGBK
1996 Jan	112.3	107.7†	111.7†	111.2†	3.0	4.9†	1.7†	3.1†
Feb	112.9	108.1	112.3	111.7	3.0	4.8	2.7	3.2
Mar	113.4	108.5	111.8	112.0	2.9	4.9	1.9	3.0
Apr	114.1	109.3	112.8	112.8	3.0	4.8	2.3	3.1
May	114.4	109.2	113.3	113.1	2.7	4.3	3.0	3.1
Jun	114.6	109.3	113.2	113.2	2.8	3.8	2.6	2.9
Jul	113.9	109.0	113.3	112.7	2.7	3.0	2.6	2.7
Aug	114.5	109.3	113.3	113.1	2.7	2.8	2.5	2.6
Sep	115.2	109.1	113.7	113.6	2.8	2.2	2.7	2.6
Oct	115.2	109.4	113.4	113.6	3.0	2.4	2.3	2.8
Nov	115.3	109.1	113.6	113.6	3.0	2.0	2.3	2.7
Dec	115.6	109.5	114.2	114.0	2.8	2.1	2.4	2.5
1997 Jan	115.3	109.3	114.2	113.8	2.7	1.5	2.2	2.3
Feb	115.7	109.5	114.0	114.1	2.5	1.3	1.5	2.1
Mar	116.0	109.4	113.9	114.2	2.3	0.8	1.9	2.0
Apr	116.6	109.5	114.6	114.7	2.2	0.2	1.6	1.7
May	117.0	109.6	114.6	114.9	2.3	0.4	1.1	1.6
Jun	117.2	109.7	114.5	115.1	2.3	0.4	1.1	1.7
Jul	116.7	110.2	115.9	115.2	2.5	1.1	2.3	2.2
Aug	117.5	110.6	115.4	115.6	2.6	1.2	1.9	2.2
Sep	117.9	110.6	115.7	115.9	2.3	1.4	1.8	2.0
Oct	118.0	110.5	115.3	115.9	2.4	1.0	1.7	2.0
Nov	117.9	110.4	115.3	115.8	2.3	1.2	1.5	1.9
Dec	118.1	110.4	116.0	116.1	2.2	0.8	1.6	1.8
1998 Jan	117.6	110.1	116.0	115.7	2.0	0.7	1.6	1.7
Feb	118.3	110.0	115.8	116.0	2.2	0.5	1.6	1.7
Mar	118.7	110.1	115.6	116.3	2.3	0.6	1.5	1.8
Apr	119.3	110.5	116.7	117.0	2.3	0.9	1.8	2.0
May	120.0	111.0	117.2	117.6	2.6	1.3	2.3	2.3
Jun	119.8	110.9	117.3	117.5	2.2	1.1	2.4	2.1
Jul	119.2	111.0	117.8	117.2	2.1	0.7	1.6	1.7
Aug	119.6	110.9	117.9	117.5	1.8	0.3	2.2	1.6
Sep	120.1	110.7	118.2	117.8	1.9	0.1	2.2	1.6
Oct	120.1	110.8	118.0	117.8	1.8	0.3	2.3	1.6
Nov	120.3	110.8	118.2	117.9	2.0	0.4	2.5	1.8
Dec	120.6	110.7	119.0	118.2	2.1	0.3	2.6	1.8
1999 Jan	120.0	110.8	119.2	118.0	2.0	0.6	2.8	2.0
Feb	120.4	111.0	119.1	118.3	1.8	0.9	2.8	2.0
Mar	121.1	111.3	119.1	118.7	2.0	1.1	3.0	2.1
Apr	121.7	111.6	120.3	119.4	2.0	1.0	3.1	2.1
May	122.0	111.8	120.7	119.7	1.7	0.7	3.0	1.8
Jun	122.0	112.2	121.9	120.0	1.8	1.2	3.9	2.1
Jul	121.4	112.4	121.1	119.5	1.8	1.3	2.8	2.0
Aug	121.7	112.4	121.2	119.7	1.8	1.4	2.8	1.9
Sep	122.1	112.4	121.4	120.0	1.7	1.5	2.7	1.9
Oct	121.9	112.4	121.2	119.8	1.5	1.4	2.7	1.7
Nov	122.1	113.0	121.5	120.1	1.5	2.0	2.8	1.9
Dec	122.4	113.5	121.7	120.4	1.5	2.5	2.3	1.9
2000 Jan	121.5	113.6	121.7	119.9	1.3	2.5	2.1	1.6
Feb	122.3	113.3	121.8	120.3	1.6	2.1	2.3	1.7

† Indicates earliest revision.

1A Final Expenditure Prices Index Incorporating Implied Government Output Prices - FEPI(P)

Experimental price indices

	Index of Consumer Prices ICP	Index of Investment Prices IIP	Index of Government Prices IGP(P)	Final Expenditure Prices Index FEPI(P)	Annual percentage changes ICP	IIP	IGP(P)	FEPI(P)
January 1992=100								
Weights								
1992	578	216	206	1000				
1993	586	193	221	1000				
1994	591	179	230	1000				
1995	599	172	229	1000				
	CUSE	CUSK	LGTZ	LGUA	CGAZ	CGBF	GXVN	GXVO
1992 Jan	100.0	100.0	100.0	100.0	..	..	..	..
Feb	100.5	99.7†	100.0	100.2	..	..	..	..
Mar	101.0	99.7	100.3	100.6	..	..	..	..
Apr	102.2	99.7	100.9	101.4	..	..	..	..
May	102.6	98.6	100.6	101.3	..	..	..	..
Jun	102.6	98.2	100.7	101.3	..	..	..	..
Jul	102.2	98.1	101.5	101.2	..	..	..	..
Aug	102.2	97.4	101.5	101.0	..	..	..	..
Sep	102.7	97.0	102.2	101.6	..	..	..	..
Oct	103.0	97.3	102.5	101.8	..	..	..	..
Nov	103.1	97.5	103.3	102.1	..	..	..	..
Dec	103.3	97.8	103.3	102.2	..	..	..	..
1993 Jan	102.7	97.7	103.3	101.9	2.7	–2.3†	3.3	1.9
Feb	103.5	98.3	103.5	102.5	3.0	–1.4	3.5	2.3
Mar	104.1	98.4	103.7	102.9	3.1	–1.3	3.4	2.3
Apr	105.3	98.8	104.0	103.8	3.0	–0.9	3.1	2.4
May	105.8	98.5	104.0	103.9	3.1	–0.1	3.4	2.6
Jun	105.7	98.2	104.3	103.9	3.0	–	3.6	2.6
Jul	105.4	98.9	104.5	103.9	3.1	0.8	3.0	2.7
Aug	105.9	98.9	104.5	104.2	3.6	1.5	3.0	3.2
Sep	106.4	98.5	104.8	104.5	3.6	1.5	2.5	2.9
Oct	106.3	98.7	105.2	104.5	3.2	1.4	2.6	2.7
Nov	106.1	98.8	105.1	104.4	2.9	1.3	1.7	2.3
Dec	106.4	98.6	105.4	104.6	3.0	0.8	2.0	2.3
1994 Jan	106.1	98.9	105.4	104.5	3.3	1.2	2.0	2.6
Feb	106.7	98.9	105.5	104.9	3.1	0.6	1.9	2.3
Mar	106.9	99.4	105.9	105.2	2.7	1.0	2.1	2.2
Apr	107.8	100.0	106.0	105.9	2.4	1.2	1.9	2.0
May	108.3	99.8	105.9	106.1	2.4	1.3	1.8	2.1
Jun	108.2	100.4	106.3	106.2	2.4	2.2	1.9	2.2
Jul	107.6	101.1	106.4	106.0	2.1	2.2	1.8	2.0
Aug	108.3	101.8	106.6	106.6	2.3	2.9	2.0	2.3
Sep	108.5	101.2	107.0	106.7	2.0	2.7	2.1	2.1
Oct	108.4	101.1	107.1	106.6	2.0	2.4	1.8	2.0
Nov	108.5	101.6	108.2	107.1	2.3	2.8	2.9	2.6
Dec	109.0	102.3	108.0	107.4	2.4	3.8	2.5	2.7
1995 Jan	109.0	102.7	108.5	107.6	2.7	3.8	2.9	3.0
Feb	109.6	103.1	108.4	108.0	2.7	4.2	2.7	3.0
Mar	110.2	103.4	108.8	108.5	3.1	4.0	2.7	3.1
Apr	110.8	104.3	109.1	109.1	2.8	4.3	2.9	3.0
May	111.4	104.7	108.8	109.5	2.9	4.9	2.7	3.2
Jun	111.5	105.3	109.2	109.7	3.0	4.9	2.7	3.3
Jul	110.9	105.8	109.5	109.5	3.1	4.6	2.9	3.3
Aug	111.5	106.3	109.7	110.0	3.0	4.4	2.9	3.2
Sep	112.1	106.7	109.9	110.5	3.3	5.4	2.7	3.6
Oct	111.8	106.8	110.0	110.4	3.1	5.6	2.7	3.6
Nov	111.9	107.0	110.2	110.5	3.1	5.3	1.8	3.2
Dec	112.5	107.3	110.3	110.9	3.2	4.9	2.1	3.3

† indicates earliest revision.

1A continued

Final Expenditure Prices Index
Incorporating Implied Government Output Prices - FEPI(P)

Experimental price indices

	Index of Consumer Prices ICP	Index of Investment Prices IIP	Index of Government Prices IGP(P)	Final Expenditure Prices Index FEPI(P)	Annual percentage changes			
					ICP	IIP	IGP(P)	FEPI(P)
January 1992=100								
Weights								
1996	598	174	228	1000				
1997	595	180	225	1000				
1998	597	183	220	1000				
1999	608	182	210	1000				
2000	602	191	207	1000				

	CUSE	CUSK	LGTZ	LGUA	CGAZ	CGBF	GXVN	GXVO
1996 Jan	112.3	107.7†	110.6	110.9	3.0	4.9†	1.9	3.1
Feb	112.9	108.1	110.8	111.4	3.0	4.8	2.2	3.1
Mar	113.4	108.5	110.8	111.8	2.9	4.9	1.8	3.0
Apr	114.1	109.3	111.4	112.4	3.0	4.8	2.1	3.0
May	114.4	109.2	111.5	112.7	2.7	4.3	2.5	2.9
Jun	114.6	109.3	111.6	112.8	2.8	3.8	2.2	2.8
Jul	113.9	109.0	111.7	112.4	2.7	3.0	2.0	2.6
Aug	114.5	109.3	111.9	112.8	2.7	2.8	2.0	2.5
Sep	115.2	109.1	112.1	113.3	2.8	2.2	2.0	2.5
Oct	115.2	109.4	111.9	113.3	3.0	2.4	1.7	2.6
Nov	115.3	109.1	111.9	113.3	3.0	2.0	1.5	2.5
Dec	115.6	109.5	112.2	113.6	2.8	2.1	1.7	2.4
1997 Jan	115.3	109.3	112.3	113.4	2.7	1.5	1.5	2.3
Feb	115.7	109.5	112.2	113.7	2.5	1.3	1.3	2.1
Mar	116.0	109.4	112.1	113.8	2.3	0.8	1.2	1.8
Apr	116.6	109.5	112.4	114.2	2.2	0.2	0.9	1.6
May	117.0	109.6	112.4	114.5	2.3	0.4	0.8	1.6
Jun	117.2	109.7	112.5	114.6	2.3	0.4	0.8	1.6
Jul	116.7	110.2	113.8	114.8	2.5	1.1	1.9	2.1
Aug	117.5	110.6	113.6	115.2	2.6	1.2	1.5	2.1
Sep	117.9	110.6	113.9	115.5	2.3	1.4	1.6	1.9
Oct	118.0	110.5	113.7	115.5	2.4	1.0	1.6	1.9
Nov	117.9	110.4	113.8	115.5	2.3	1.2	1.7	1.9
Dec	118.1	110.4	114.1	115.7	2.2	0.8	1.7	1.8
1998 Jan	117.6	110.1	114.4	115.4	2.0	0.7	1.9	1.8
Feb	118.3	110.0	114.4	115.7	2.2	0.5	2.0	1.8
Mar	118.7	110.1	114.4	116.0	2.3	0.6	2.1	1.9
Apr	119.3	110.5	115.2	116.7	2.3	0.9	2.5	2.2
May	120.0	111.0	115.5	117.2	2.6	1.3	2.8	2.4
Jun	119.8	110.9	115.8	117.1	2.2	1.1	2.9	2.2
Jul	119.2	111.0	116.3	116.9	2.1	0.7	2.2	1.8
Aug	119.6	110.9	116.6	117.2	1.8	0.3	2.6	1.7
Sep	120.1	110.7	116.9	117.5	1.9	0.1	2.6	1.7
Oct	120.1	110.8	116.9	117.5	1.8	0.3	2.8	1.7
Nov	120.3	110.8	117.1	117.7	2.0	0.4	2.9	1.9
Dec	120.6	110.7	117.6	117.9	2.1	0.3	3.1	1.9
1999 Jan	120.0	110.8	117.8	117.7	2.0	0.6	3.0	2.0
Feb	120.4	111.0	118.0	118.0	1.8	0.9	3.1	2.0
Mar	121.1	111.3	118.2	118.5	2.0	1.1	3.3	2.2
Apr	121.7	111.6	118.8	119.1	2.0	1.0	3.1	2.1
May	122.0	111.8	119.1	119.3	1.7	0.7	3.1	1.8
Jun	122.0	112.2	120.2	119.6	1.8	1.2	3.8	2.1
Jul	121.4	112.4	119.9	119.3	1.8	1.3	3.1	2.1
Aug	121.7	112.4	120.2	119.5	1.8	1.4	3.1	2.0
Sep	122.1	112.4	120.6	119.8	1.7	1.5	3.2	2.0
Oct	121.9	112.4	120.6	119.7	1.5	1.4	3.2	1.9
Nov	122.1	113.0	120.9	120.0	1.5	2.0	3.2	2.0
Dec	122.4	113.5	121.2	120.3	1.5	2.5	3.1	2.0
2000 Jan	121.5	113.6	..	..	1.3	2.5	..	..
Feb	122.3	113.3	..	..	1.6	2.1	..	..

† indicates earliest revision.

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

Experimental price indices

	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	*Of which: goods*	*Of which: services*
January 1992=100													
Weights													
1992	137	69	28	69	82	40	71	192	110	202	1000	621	379
1993	139	71	30	67	80	45	71	183	109	205	1000	619	381
1994	137	71	31	67	82	43	71	182	110	206	1000	611	389
1995	132	69	31	66	84	42	73	185	111	207	1000	607	393
	CURU	CURV	CURW	CURX	CURY	CURZ	CUSA	CUSB	CUSC	CUSD	CUSE	MJYH	MJYI
1992 Jan	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	*100.0*	*100.0*
Feb	100.6	100.5	100.1	101.2	100.1	100.1	101.0	100.6	100.2	100.5	100.5	*100.6*	*100.3*
Mar	100.8	100.9	100.1	102.8	100.4	100.0	101.9	101.3	100.6	100.9	101.0	*101.3*	*100.6*
Apr	100.4	102.3	106.0	103.9	103.8	100.1	102.1	102.8	101.5	102.0	102.2	*102.1*	*102.4*
May	100.8	102.8	106.4	103.8	104.0	100.5	102.3	103.3	101.7	102.7	102.6	*102.4*	*102.9*
Jun	100.4	103.1	106.3	104.1	103.6	100.6	102.3	103.6	101.7	102.7	102.6	*102.4*	*103.0*
Jul	99.0	103.7	106.2	99.8	104.9	100.7	101.3	103.5	101.5	102.6	102.2	*101.6*	*103.1*
Aug	99.2	104.0	106.1	99.7	105.0	100.2	102.0	103.4	101.5	102.7	102.2	*101.6*	*103.2*
Sep	98.8	104.4	106.1	103.9	104.9	99.9	103.1	103.2	102.2	103.1	102.7	*102.1*	*103.6*
Oct	99.1	104.9	106.2	105.3	105.1	100.0	103.4	103.5	102.1	103.6	103.0	*102.4*	*104.0*
Nov	99.0	104.8	107.1	104.8	105.3	100.0	103.6	103.6	102.2	104.0	103.1	*102.5*	*104.2*
Dec	99.9	104.3	108.8	104.3	105.3	99.6	104.3	103.4	102.2	104.2	103.3	*102.6*	*104.4*
1993 Jan	100.2	105.0	109.1	99.3	105.2	99.5	102.3	102.7	102.1	104.2	102.7	*101.5*	*104.7*
Feb	101.3	105.4	109.1	101.2	105.5	99.5	103.1	103.6	102.6	104.8	103.5	*102.5*	*105.2*
Mar	102.1	106.0	109.2	103.0	105.6	99.6	104.1	104.4	102.7	105.4	104.1	*103.2*	*105.6*
Apr	101.8	107.3	113.3	104.6	109.0	99.3	104.8	106.4	103.4	106.3	105.3	*104.1*	*107.4*
May	103.0	107.6	114.0	104.9	109.1	98.7	104.9	106.9	103.8	106.7	105.8	*104.6*	*107.7*
Jun	102.3	107.8	114.0	103.9	109.3	98.3	104.4	107.4	103.7	106.9	105.7	*104.4*	*107.8*
Jul	102.3	108.2	114.2	100.3	109.3	98.2	103.0	107.5	103.5	107.0	105.4	*103.8*	*108.0*
Aug	102.5	108.5	115.4	101.7	109.6	98.1	103.9	107.7	104.0	107.6	105.9	*104.4*	*108.3*
Sep	101.9	108.8	116.1	105.8	109.8	98.4	104.7	108.0	104.4	108.0	106.4	*104.9*	*108.7*
Oct	101.2	109.0	116.2	106.1	109.8	98.6	104.5	107.6	104.5	108.2	106.3	*104.7*	*108.9*
Nov	100.5	108.5	116.3	106.2	109.9	98.4	105.0	106.7	104.8	108.4	106.1	*104.4*	*108.9*
Dec	100.8	108.1	118.6	105.9	110.0	98.3	105.5	107.4	104.9	108.7	106.4	*104.7*	*109.3*
1994 Jan	101.2	109.0	121.2	100.3	109.6	98.2	103.2	107.7	104.6	108.9	106.1	*104.0*	*109.5*
Feb	101.8	109.3	121.6	103.0	109.8	97.8	103.8	108.2	104.9	109.6	106.7	*103.0*	*112.8*
Mar	102.4	109.2	121.6	104.4	109.9	97.5	105.0	108.3	105.0	109.4	106.9	*103.4*	*112.8*
Apr	102.7	109.6	122.0	104.8	113.0	105.2	104.8	108.8	105.3	109.8	107.8	*104.1*	*114.0*
May	103.9	109.7	122.6	104.9	113.1	104.8	105.1	109.2	105.5	110.5	108.3	*104.7*	*114.3*
Jun	103.8	110.2	122.6	104.6	113.2	104.7	105.0	109.3	105.5	110.2	108.2	*104.6*	*114.3*
Jul	103.2	110.6	122.6	100.2	113.3	104.9	103.3	109.1	104.9	110.1	107.6	*103.6*	*114.4*
Aug	103.7	110.8	122.7	102.4	113.4	105.1	104.7	109.5	105.1	111.1	108.3	*104.4*	*114.8*
Sep	102.7	111.0	122.7	105.6	113.6	105.1	105.2	109.4	105.7	111.2	108.5	*104.6*	*115.0*
Oct	102.5	111.1	122.6	105.5	113.7	104.9	105.0	108.7	105.8	111.1	108.4	*104.3*	*115.0*
Nov	102.9	110.8	122.3	106.0	113.9	104.8	105.9	108.4	105.9	111.4	108.5	*104.5*	*115.1*
Dec	103.7	110.4	124.4	106.1	114.2	104.8	106.5	109.3	106.0	112.0	109.0	*105.1*	*115.5*
1995 Jan	104.7	112.1	127.8	101.0	114.2	105.1	104.2	109.9	106.1	112.1	109.0	*104.9*	*115.8*
Feb	105.3	112.9	129.0	102.3	114.4	105.2	105.7	110.4	106.3	112.5	109.6	*105.6*	*116.1*
Mar	105.9	113.4	129.1	103.7	114.6	105.3	106.9	111.0	106.4	113.1	110.2	*106.4*	*116.4*
Apr	105.9	113.5	130.4	105.2	117.6	105.5	106.8	111.5	106.7	113.8	110.8	*106.7*	*117.6*
May	107.6	114.1	131.0	105.5	117.7	105.2	107.9	111.7	106.9	114.5	111.4	*107.4*	*118.0*
Jun	107.1	114.6	131.1	105.2	117.9	105.2	107.7	112.2	107.1	114.6	111.5	*107.4*	*118.2*
Jul	106.5	115.1	131.1	100.3	117.6	105.3	106.2	111.8	107.0	114.8	110.9	*106.6*	*118.0*
Aug	108.3	115.1	131.1	101.8	118.0	105.3	107.5	111.7	107.2	115.3	111.5	*107.3*	*118.4*
Sep	108.5	115.4	131.0	105.9	118.1	105.5	108.8	111.6	107.9	115.8	112.1	*108.0*	*118.9*
Oct	107.3	116.0	131.0	105.7	118.0	105.4	108.3	110.9	107.9	115.9	111.8	*107.6*	*118.8*
Nov	107.5	115.3	131.0	106.3	118.1	105.4	109.3	110.3	107.9	116.1	111.9	*107.6*	*119.0*
Dec	108.4	114.2	134.2	106.4	118.1	105.5	110.4	111.8	108.3	116.6	112.5	*108.4*	*119.3*

† indicates earliest revision.

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

continued

Experimental price indices

	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	*Of which: goods*	*Of which: services*
January 1992=100													
Weights													
1996	128	70	30	67	85	40	72	190	113	205	1000	606	394
1997	126	68	30	67	90	39	71	189	119	201	1000	595	405
1998	127	68	29	67	87	39	71	188	118	206	1000	597	403
1999	119	66	28	70	85	34	75	192	113	218	1000	600	400
2000	117	64	26	68	85	31	76	191	126	216	1000	595	405
	CURU	CURV	CURW	CURX	CURY	CURZ	CUSA	CUSB	CUSC	CUSD	CUSE	MJYH	MJYI
1996 Jan	109.0	115.2	136.8	100.3	118.5	105.6	107.1	112.8	108.2	116.7	112.3	*107.8*	*119.7*
Feb	110.1	116.0	137.4	101.3	118.6	105.6	108.8	113.0	108.6	117.3	112.9	*108.9*	*119.5*
Mar	111.1	116.3	137.5	102.7	118.7	105.7	110.3	113.2	108.8	117.7	113.4	*109.6*	*119.7*
Apr	111.2	116.8	138.7	104.2	120.8	105.7	109.7	113.9	109.3	118.4	114.1	*110.1*	*120.6*
May	112.1	117.2	139.6	104.4	121.0	105.6	110.5	114.3	109.3	118.7	114.4	*110.5*	*121.0*
Jun	112.1	117.8	139.8	104.3	121.3	105.8	110.6	114.4	109.3	118.9	114.6	*110.5*	*121.2*
Jul	110.7	118.4	139.6	99.2	121.9	105.9	108.8	114.3	108.9	118.9	113.9	*109.4*	*121.3*
Aug	111.8	118.3	139.8	100.5	122.0	105.7	110.1	115.1	109.2	119.4	114.5	*110.1*	*121.7*
Sep	110.8	118.5	140.1	105.4	122.1	105.8	110.8	116.3	109.6	119.9	115.2	*110.9*	*122.3*
Oct	110.1	118.8	140.2	105.5	122.2	105.6	110.4	116.4	109.8	120.3	115.2	*110.9*	*122.5*
Nov	109.7	118.6	140.0	106.6	122.4	105.0	111.4	116.0	110.1	120.4	115.3	*110.9*	*122.6*
Dec	109.7	118.0	142.8	106.6	122.5	104.8	112.3	116.7	110.1	120.7	115.6	*111.2*	*122.9*
1997 Jan	110.6	118.6	145.6	100.5	123.4	104.2	108.8	117.5	109.9	120.7	115.3	*110.4*	*123.5*
Feb	110.3	119.3	146.2	102.0	123.6	104.3	109.7	118.1	110.1	121.2	115.7	*110.9*	*123.8*
Mar	109.8	119.2	146.6	104.0	123.9	104.4	111.7	118.0	109.9	121.6	116.0	*111.3*	*123.9*
Apr	110.2	119.7	148.3	105.5	125.8	104.2	111.1	118.0	110.3	122.4	116.6	*111.5*	*124.9*
May	110.9	120.4	148.9	106.0	126.0	103.7	111.6	118.1	110.5	123.0	117.0	*111.9*	*125.4*
Jun	111.8	120.6	149.2	105.4	126.2	103.3	111.4	118.5	110.5	123.3	117.2	*112.0*	*125.7*
Jul	111.3	121.1	149.3	100.3	126.2	102.8	109.6	119.4	110.3	123.4	116.7	*111.3*	*125.8*
Aug	112.6	121.3	151.2	102.3	126.4	102.8	110.8	120.0	110.2	124.0	117.5	*112.2*	*126.2*
Sep	112.2	121.4	151.5	106.3	126.6	100.0	111.6	120.4	110.7	124.4	117.9	*112.6*	*126.7*
Oct	112.2	121.7	151.7	106.0	126.8	100.0	111.4	120.3	110.8	124.8	118.0	*112.4*	*127.2*
Nov	111.6	121.1	151.8	107.2	126.9	99.6	112.3	120.0	110.7	124.8	117.9	*112.4*	*127.2*
Dec	111.7	120.6	155.1	106.7	127.0	99.1	113.2	120.0	110.7	125.2	118.1	*112.4*	*127.5*
1998 Jan	111.7	122.1	159.3	99.7	127.3	98.4	109.8	120.6	110.3	125.4	117.6	*111.3*	*128.0*
Feb	111.7	123.1	159.5	102.0	127.4	98.7	111.5	120.8	110.5	126.4	118.3	*112.2*	*128.4*
Mar	111.5	123.5	159.5	104.1	127.6	98.9	113.1	120.8	110.4	126.9	118.7	*112.6*	*128.7*
Apr	111.8	123.6	162.1	105.0	129.9	98.9	112.1	122.1	110.8	127.6	119.3	*113.0*	*129.8*
May	113.5	124.5	162.6	106.0	130.1	98.3	113.3	122.3	111.1	128.1	120.0	*113.7*	*130.4*
Jun	113.1	124.4	162.8	105.7	130.2	97.6	112.7	122.2	110.7	128.4	119.8	*113.4*	*130.5*
Jul	112.8	124.9	163.0	99.3	130.4	97.3	111.4	122.0	110.4	128.6	119.2	*112.3*	*130.6*
Aug	114.1	125.2	163.1	101.2	130.6	97.2	112.2	121.9	110.4	128.8	119.6	*112.9*	*130.8*
Sep	113.7	125.3	163.2	105.8	130.8	97.3	112.9	121.9	111.0	128.7	120.1	*113.4*	*131.1*
Oct	113.9	125.6	163.4	104.7	131.1	97.5	112.4	121.5	111.2	129.5	120.1	*113.2*	*131.7*
Nov	113.8	125.2	163.4	105.3	131.3	97.4	113.6	121.1	111.2	130.2	120.3	*113.2*	*132.1*
Dec	114.7	125.1	168.2	104.7	131.4	97.2	115.7	120.5	111.0	130.6	120.6	*113.5*	*132.3*
1999 Jan	115.1	126.5	172.0	97.6	131.5	97.3	111.3	121.2	110.7	130.6	120.0	*112.4*	*132.6*
Feb	115.4	126.8	172.1	100.0	131.5	97.2	112.8	121.2	110.6	131.0	120.4	*113.0*	*132.8*
Mar	114.7	126.8	178.2	101.6	131.4	97.5	114.5	122.6	110.7	131.3	121.1	*113.8*	*133.3*
Apr	114.1	127.0	180.7	102.0	133.5	97.3	113.2	124.1	111.1	132.3	121.7	*114.0*	*134.6*
May	114.7	127.6	180.7	102.5	133.6	97.1	114.6	124.1	111.2	132.5	122.0	*114.3*	*134.9*
Jun	114.2	128.2	181.2	102.3	133.7	97.1	114.0	123.8	111.0	132.9	122.0	*114.1*	*135.1*
Jul	113.5	127.9	184.3	97.4	134.0	97.4	112.0	123.8	110.3	133.6	121.4	*113.0*	*135.5*
Aug	113.0	128.1	184.7	98.8	134.3	97.4	113.1	124.2	110.1	133.7	121.7	*113.3*	*135.7*
Sep	112.9	128.1	184.8	102.6	134.4	97.7	114.1	123.9	110.6	133.9	122.1	*113.8*	*136.2*
Oct	112.8	128.2	184.7	101.6	134.8	97.9	113.4	123.7	110.9	133.1	121.9	*113.4*	*136.0*
Nov	113.4	127.8	184.8	102.0	135.1	98.1	114.6	123.3	110.8	133.7	122.1	*113.5*	*136.4*
Dec	113.5	127.5	184.7	101.2	135.3	98.7	116.5	123.6	110.7	134.1	122.4	*113.7*	*136.8*
2000 Jan	113.4	128.4	184.9	94.4	136.0	98.6	111.5	124.1	110.3	133.9	121.5	*112.2*	*137.1*
Feb	113.4	128.5	186.7	97.5	136.1	98.6	112.6	125.6	110.8	134.1	122.3	*113.3*	*137.3*

† indicates earliest revision.

2A Final Expenditure Prices Index (FEPI) Index of Consumer Prices (ICP) Annual Percentage Changes

Experimental price indices

	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	*Of which: goods*	*Of which: services*
	CGAP	CGAQ	CGAR	CGAS	CGAT	CGAU	CGAV	CGAW	CGAX	CGAY	CGAZ	MJYJ	MJYK
1993 Jan	0.2	5.0	9.1	–0.7	5.2	–0.5	2.3	2.7	2.1	4.2	2.7	*1.5*	*4.7*
Feb	0.7	4.9	9.0	–	5.4	–0.6	2.1	3.0	2.4	4.3	3.0	*1.9*	*4.9*
Mar	1.3	5.1	9.1	0.2	5.2	–0.4	2.2	3.1	2.1	4.5	3.1	*1.9*	*5.0*
Apr	1.4	4.9	6.9	0.7	5.0	–0.8	2.6	3.5	1.9	4.2	3.0	*2.0*	*4.9*
May	2.2	4.7	7.1	1.1	4.9	–1.8	2.5	3.5	2.1	3.9	3.1	*2.1*	*4.7*
Jun	1.9	4.6	7.2	–0.2	5.5	–2.3	2.1	3.7	2.0	4.1	3.0	*2.0*	*4.7*
Jul	3.3	4.3	7.5	0.5	4.2	–2.5	1.7	3.9	2.0	4.3	3.1	*2.2*	*4.8*
Aug	3.3	4.3	8.8	2.0	4.4	–2.1	1.9	4.2	2.5	4.8	3.6	*2.8*	*4.9*
Sep	3.1	4.2	9.4	1.8	4.7	–1.5	1.6	4.7	2.2	4.8	3.6	*2.7*	*4.9*
Oct	2.1	3.9	9.4	0.8	4.5	–1.4	1.1	4.0	2.4	4.4	3.2	*2.2*	*4.7*
Nov	1.5	3.5	8.6	1.3	4.4	–1.6	1.4	3.0	2.5	4.2	2.9	*1.9*	*4.5*
Dec	0.9	3.6	9.0	1.5	4.5	–1.3	1.2	3.9	2.6	4.3	3.0	*2.0*	*4.7*
1994 Jan	1.0	3.8	11.1	1.0	4.2	–1.3	0.9	4.9	2.4	4.5	3.3	*2.5*	*4.6*
Feb	0.5	3.7	11.5	1.8	4.1	–1.7	0.7	4.4	2.2	4.6	3.1	*0.5*	*7.2*
Mar	0.3	3.0	11.4	1.4	4.1	–2.1	0.9	3.7	2.2	3.8	2.7	*0.2*	*6.8*
Apr	0.9	2.1	7.7	0.2	3.7	5.9	–	2.3	1.8	3.3	2.4	–	*6.1*
May	0.9	2.0	7.5	–	3.7	6.2	0.2	2.2	1.6	3.6	2.4	*0.1*	*6.1*
Jun	1.5	2.2	7.5	0.7	3.6	6.5	0.6	1.8	1.7	3.1	2.4	*0.2*	*6.0*
Jul	0.9	2.2	7.4	–0.1	3.7	6.8	0.3	1.5	1.4	2.9	2.1	*–0.2*	*5.9*
Aug	1.2	2.1	6.3	0.7	3.5	7.1	0.8	1.7	1.1	3.3	2.3	–	*6.0*
Sep	0.8	2.0	5.7	–0.2	3.5	6.8	0.5	1.3	1.2	3.0	2.0	*–0.3*	*5.8*
Oct	1.3	1.9	5.5	–0.6	3.6	6.4	0.5	1.0	1.2	2.7	2.0	*–0.4*	*5.6*
Nov	2.4	2.1	5.2	–0.2	3.6	6.5	0.9	1.6	1.0	2.8	2.3	*0.1*	*5.7*
Dec	2.9	2.1	4.9	0.2	3.8	6.6	0.9	1.8	1.0	3.0	2.4	*0.4*	*5.7*
1995 Jan	3.5	2.8	5.4	0.7	4.2	7.0	1.0	2.0	1.4	2.9	2.7	*0.9*	*5.8*
Feb	3.4	3.3	6.1	–0.7	4.2	7.6	1.8	2.0	1.3	2.6	2.7	*2.5*	*2.9*
Mar	3.4	3.8	6.2	–0.7	4.3	8.0	1.8	2.5	1.3	3.4	3.1	*2.9*	*3.2*
Apr	3.1	3.6	6.9	0.4	4.1	0.3	1.9	2.5	1.3	3.6	2.8	*2.5*	*3.2*
May	3.6	4.0	6.9	0.6	4.1	0.4	2.7	2.3	1.3	3.6	2.9	*2.6*	*3.2*
Jun	3.2	4.0	6.9	0.6	4.2	0.5	2.6	2.7	1.5	4.0	3.0	*2.7*	*3.4*
Jul	3.2	4.1	6.9	0.1	3.8	0.4	2.8	2.5	2.0	4.3	3.1	*2.9*	*3.1*
Aug	4.4	3.9	6.8	–0.6	4.1	0.2	2.7	2.0	2.0	3.8	3.0	*2.8*	*3.1*
Sep	5.6	4.0	6.8	0.3	4.0	0.4	3.4	2.0	2.1	4.1	3.3	*3.3*	*3.4*
Oct	4.7	4.4	6.9	0.2	3.8	0.5	3.1	2.0	2.0	4.3	3.1	*3.2*	*3.3*
Nov	4.5	4.1	7.1	0.3	3.7	0.6	3.2	1.8	1.9	4.2	3.1	*3.0*	*3.4*
Dec	4.5	3.4	7.9	0.3	3.4	0.7	3.7	2.3	2.2	4.1	3.2	*3.1*	*3.3*
1996 Jan	4.1	2.8	7.0	–0.7	3.8	0.5	2.8	2.6	2.0	4.1	3.0	*2.8*	*3.4*
Feb	4.6	2.7	6.5	–1.0	3.7	0.4	2.9	2.4	2.2	4.3	3.0	*3.1*	*2.9*
Mar	4.9	2.6	6.5	–1.0	3.6	0.4	3.2	2.0	2.3	4.1	2.9	*3.0*	*2.8*
Apr	5.0	2.9	6.4	–1.0	2.7	0.2	2.7	2.2	2.4	4.0	3.0	*3.2*	*2.6*
May	4.2	2.7	6.6	–1.0	2.8	0.4	2.4	2.3	2.2	3.7	2.7	*2.9*	*2.5*
Jun	4.7	2.8	6.6	–0.9	2.9	0.6	2.7	2.0	2.1	3.8	2.8	*2.9*	*2.5*
Jul	3.9	2.9	6.5	–1.1	3.7	0.6	2.4	2.2	1.8	3.6	2.7	*2.6*	*2.8*
Aug	3.2	2.8	6.6	–1.3	3.4	0.4	2.4	3.0	1.9	3.6	2.7	*2.6*	*2.8*
Sep	2.1	2.7	6.9	–0.5	3.4	0.3	1.8	4.2	1.6	3.5	2.8	*2.7*	*2.9*
Oct	2.6	2.4	7.0	–0.2	3.6	0.2	1.9	5.0	1.8	3.8	3.0	*3.1*	*3.1*
Nov	2.0	2.9	6.9	0.3	3.6	–0.4	1.9	5.2	2.0	3.7	3.0	*3.1*	*3.0*
Dec	1.2	3.3	6.4	0.2	3.7	–0.7	1.7	4.4	1.7	3.5	2.8	*2.6*	*3.0*

† Indicates earliest revision.

2A continued

Final Expenditure Prices Index (FEPI)
Index of Consumer Prices (ICP) Annual Percentage Changes

Experimental price indices

	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	*Of which: goods*	*Of which: services*
	CGAP	CGAQ	CGAR	CGAS	CGAT	CGAU	CGAV	CGAW	CGAX	CGAY	CGAZ	MJYJ	MJYK
1997 Jan	1.5	3.0	6.4	0.2	4.1	−1.3	1.6	4.2	1.6	3.4	2.7	*2.4*	*3.2*
Feb	0.2	2.8	6.4	0.7	4.2	−1.2	0.8	4.5	1.4	3.3	2.5	*1.8*	*3.6*
Mar	−1.2	2.5	6.6	1.3	4.4	−1.2	1.3	4.2	1.0	3.3	2.3	*1.6*	*3.5*
Apr	−0.9	2.5	6.9	1.2	4.1	−1.4	1.3	3.6	0.9	3.4	2.2	*1.3*	*3.6*
May	−1.1	2.7	6.7	1.5	4.1	−1.8	1.0	3.3	1.1	3.6	2.3	*1.3*	*3.6*
Jun	−0.3	2.4	6.7	1.1	4.0	−2.4	0.7	3.6	1.1	3.7	2.3	*1.4*	*3.7*
Jul	0.5	2.3	6.9	1.1	3.5	−2.9	0.7	4.5	1.3	3.8	2.5	*1.7*	*3.7*
Aug	0.7	2.5	8.2	1.8	3.6	−2.7	0.6	4.3	0.9	3.9	2.6	*1.9*	*3.7*
Sep	1.3	2.4	8.1	0.9	3.7	−5.5	0.7	3.5	1.0	3.8	2.3	*1.5*	*3.6*
Oct	1.9	2.4	8.2	0.5	3.8	−5.3	0.9	3.4	0.9	3.7	2.4	*1.4*	*3.8*
Nov	1.7	2.1	8.4	0.6	3.7	−5.1	0.8	3.4	0.5	3.7	2.3	*1.4*	*3.8*
Dec	1.8	2.2	8.6	0.1	3.7	−5.4	0.8	2.8	0.5	3.7	2.2	*1.1*	*3.7*
1998 Jan	1.0	3.0	9.4	−0.8	3.2	−5.6	0.9	2.6	0.4	3.9	2.0	*0.8*	*3.6*
Feb	1.3	3.2	9.1	–	3.1	−5.4	1.6	2.3	0.4	4.3	2.2	*1.2*	*3.7*
Mar	1.5	3.6	8.8	0.1	3.0	−5.3	1.3	2.4	0.5	4.4	2.3	*1.2*	*3.9*
Apr	1.5	3.3	9.3	−0.5	3.3	−5.1	0.9	3.5	0.5	4.2	2.3	*1.3*	*3.9*
May	2.3	3.4	9.2	–	3.3	−5.2	1.5	3.6	0.5	4.1	2.6	*1.6*	*4.0*
Jun	1.2	3.2	9.1	0.3	3.2	−5.5	1.2	3.1	0.2	4.1	2.2	*1.3*	*3.8*
Jul	1.3	3.1	9.2	−1.0	3.3	−5.4	1.6	2.2	0.1	4.2	2.1	*0.9*	*3.8*
Aug	1.3	3.2	7.9	−1.1	3.3	−5.4	1.3	1.6	0.2	3.9	1.8	*0.6*	*3.6*
Sep	1.3	3.2	7.7	−0.5	3.3	−2.7	1.2	1.2	0.3	3.5	1.9	*0.7*	*3.5*
Oct	1.5	3.2	7.7	−1.2	3.4	−2.5	0.9	1.0	0.4	3.8	1.8	*0.7*	*3.5*
Nov	2.0	3.4	7.6	−1.8	3.5	−2.2	1.2	0.9	0.5	4.3	2.0	*0.7*	*3.9*
Dec	2.7	3.7	8.4	−1.9	3.5	−1.9	2.2	0.4	0.3	4.3	2.1	*1.0*	*3.8*
1999 Jan	3.0	3.6	8.0	−2.1	3.3	−1.1	1.4	0.5	0.4	4.1	2.0	*1.0*	*3.6*
Feb	3.3	3.0	7.9	−2.0	3.2	−1.5	1.2	0.3	0.1	3.6	1.8	*0.7*	*3.4*
Mar	2.9	2.7	11.7	−2.4	3.0	−1.4	1.2	1.5	0.3	3.5	2.0	*1.1*	*3.6*
Apr	2.1	2.8	11.5	−2.9	2.8	−1.6	1.0	1.6	0.3	3.7	2.0	*0.9*	*3.7*
May	1.1	2.5	11.1	−3.3	2.7	−1.2	1.1	1.5	0.1	3.4	1.7	*0.5*	*3.5*
Jun	1.0	3.1	11.3	−3.2	2.7	−0.5	1.2	1.3	0.3	3.5	1.8	*0.6*	*3.5*
Jul	0.6	2.4	13.1	−1.9	2.8	0.1	0.5	1.5	−0.1	3.9	1.8	*0.6*	*3.8*
Aug	−1.0	2.3	13.2	−2.4	2.8	0.2	0.8	1.9	−0.3	3.8	1.8	*0.4*	*3.7*
Sep	−0.7	2.2	13.2	−3.0	2.8	0.4	1.1	1.6	−0.4	4.0	1.7	*0.4*	*3.9*
Oct	−1.0	2.1	13.0	−3.0	2.8	0.4	0.9	1.8	−0.3	2.8	1.5	*0.2*	*3.3*
Nov	−0.4	2.1	13.1	−3.1	2.9	0.7	0.9	1.8	−0.4	2.7	1.5	*0.3*	*3.3*
Dec	−1.0	1.9	9.8	−3.3	3.0	1.5	0.7	2.6	−0.3	2.7	1.5	*0.2*	*3.4*
2000 Jan	−1.5	1.5	7.5	−3.3	3.4	1.3	0.2	2.4	−0.4	2.5	1.3	*−0.2*	*3.4*
Feb	−1.7	1.3	8.5	−2.5	3.5	1.4	−0.2	3.6	0.2	2.4	1.6	*0.3*	*3.4*

† indicates earliest revision.

3 Final Expenditure Prices Index (FEPI) Index of Investment Prices (IIP)

Experimental price indices

	Plant and Machinery	Intangible fixed assets[1]	Vehicles, etc	New Buildings and Works	Transfer Costs of Land and Buildings	New Dwellings	Index of Investment Prices IIP
January 1992=100							
Weights							
1992	334	32	93	326	29	186	1000
1993	335	39	83	328	40	175	1000
1994	346	38	84	315	29	188	1000
1995	351	36	95	286	34	198	1000
	CUSG	MJYL	CUSH	CUSF	CUSI	CUSJ	CUSK
1992 Jan	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Feb	100.4†	100.4	101.6	98.8†	99.8	99.1	99.7†
Mar	101.6	101.0	101.6	97.6	99.8	98.7	99.7
Apr	102.6	101.9	101.6†	96.6	100.0	98.5	99.7
May	100.7	101.7	100.9	95.6	99.5	98.4	98.6
Jun	100.2	101.7	100.6	94.6	99.9	98.6	98.2
Jul	100.8	101.4	100.8	93.8	99.6	98.6	98.1
Aug	100.0	101.1	100.7	93.0	98.1	98.3	97.4
Sep	99.8	101.3	100.1	92.1	128.8	97.2	97.0
Oct	101.6	102.0	100.6	91.4	122.5	95.8	97.3
Nov	103.1	102.4	100.8	90.7	124.8	95.0	97.5
Dec	104.5	102.8	101.4	90.0	123.0	94.7	97.8
1993 Jan	104.3	102.6	103.7	89.4	122.5	94.2	97.7
Feb	106.6	103.2	105.2	88.8	123.7	93.8	98.3
Mar	107.1	103.6	105.6	88.2	125.2	94.1	98.4
Apr	107.8	105.3	105.7	87.8	127.8	95.0	98.8
May	107.1	105.9	105.7	87.4	125.8	95.6	98.5
Jun	106.5	105.9	105.6	86.9	125.8	95.6	98.2
Jul	108.2	106.3	106.5	86.8	128.5	96.0	98.9
Aug	108.2	106.3	106.8	86.6	129.9	96.3	98.9
Sep	107.0	106.5	107.0	86.4	130.4	96.3	98.5
Oct	107.7	106.5	107.9	86.4	128.9	96.0	98.7
Nov	108.2	106.6	108.0	86.3	128.9	95.7	98.8
Dec	108.1	106.7	108.0	86.2	127.2	95.5	98.6
1994 Jan	109.0	107.5	108.8	86.2	124.3	95.1	98.9
Feb	108.7	107.8	108.6	86.2	126.1	95.6	98.9
Mar	109.6	108.4	108.9	86.2	126.9	96.7	99.4
Apr	110.1	109.1	109.8	86.5	128.6	97.4	100.0
May	109.7	109.3	108.2	86.8	128.7	97.2	99.8
Jun	110.9	109.8	109.1	87.1	128.8	97.4	100.4
Jul	111.6	109.9	110.6	87.6	129.1	98.2	101.1
Aug	112.7	110.9	112.5	88.1	128.8	98.4	101.8
Sep	110.5	110.5	111.6	88.7	130.0	97.8	101.2
Oct	110.0	110.2	110.9	89.5	126.0	97.4	101.1
Nov	110.5	110.5	111.7	90.3	125.5	97.5	101.6
Dec	111.4	111.2	112.6	91.1	126.4	97.5	102.3
1995 Jan	111.8	111.4	114.2	92.0	125.1	96.8	102.7
Feb	112.2	112.0	115.0	92.8	125.2	96.4	103.1
Mar	111.6	112.4	114.9	93.7	124.4	97.6	103.4
Apr	111.9	113.1	115.6	94.9	128.6	98.6	104.3
May	112.1	113.6	116.0	96.0	127.7	98.2	104.7
Jun	112.6	113.8	116.3	97.2	128.9	98.2†	105.3
Jul	113.0	113.6	116.4	98.1	129.9	98.5	105.8
Aug	113.3	114.1	117.4	99.2	130.0	98.3	106.3
Sep	113.4	114.6	117.8	100.2	130.3	98.1	106.7
Oct	113.0	114.2	118.1	101.0	129.7	97.9	106.8
Nov	113.1	114.3	118.2	101.8	130.0	97.6	107.0
Dec	113.4	114.9	118.6	102.6	128.6	97.4	107.3

† Indicates earliest revision.

1 This covers mineral exploration, computer software and entertainment, literary and artistic originals.

3 continued

Final Expenditure Prices Index (FEPI)
Index of Investment Prices (IIP)

Experimental price indices

	Plant and Machinery	Intangible fixed assets[1]	Vehicles, etc	New Buildings and Works	Transfer Costs of Land and Buildings	New Dwellings	Index of Investment Prices IIP
January 1992=100							
Weights							
1996	351	34	105	277	35	198	1000
1997	382	34	95	270	32	187	1000
1998	392	33	97	262	35	181	1000
1999	390	32	98	260	42	178	1000
2000	383	32	97	267	41	180	1000
	CUSG	MJYL	CUSH	CUSF	CUSI	CUSJ	CUSK
1996 Jan	113.9†	114.9	119.1†	103.1†	127.0†	97.5	107.7†
Feb	113.7	115.5	119.8	103.6	129.8	98.2	108.1
Mar	113.6	115.9	119.9	104.2	130.6	99.3	108.5
Apr	114.5	116.5	120.3	104.6	135.7	100.0†	109.3
May	113.6	116.8	120.1	105.0	135.8	100.5	109.2
Jun	113.2	116.9	119.9	105.5	135.5	101.0	109.3
Jul	111.6	116.2	119.1	105.9	138.1	101.9	109.0
Aug	111.1	116.7	119.5	106.3	139.2	102.6	109.3
Sep	110.5	117.2	119.3	106.6	139.3	102.6	109.1
Oct	110.8	117.2	119.2	107.0	141.0	102.7	109.4
Nov	109.8	116.9	117.9	107.4	141.0	102.9	109.1
Dec	110.1	117.3	117.6	107.8	141.0	103.7	109.5
1997 Jan	109.3	117.1	117.2	108.1	139.1	104.3	109.3
Feb	109.2	117.5	117.6	108.4	141.9	104.3	109.5
Mar	108.2	117.7	117.5	108.7	142.2	105.5	109.4
Apr	107.8	117.9	117.1	108.7	142.6	106.8	109.5
May	107.6	118.2	117.2	108.6	144.7	107.5	109.6
Jun	107.2	118.4	117.2	108.6	144.8	108.5	109.7
Jul	107.0	118.1	117.2	109.3	150.6	109.7	110.2
Aug	106.9	118.8	117.8	110.2	151.6	110.4	110.6
Sep	106.5	119.1	117.6	110.6	153.2	110.5	110.6
Oct	106.2	119.2	117.4	111.0	152.2	110.3	110.5
Nov	105.5	119.1	116.9	111.4	153.2	110.3	110.4
Dec	105.3	119.2	117.3	111.8	152.2	110.4	110.4
1998 Jan	104.4	118.7	117.0	112.3	151.3	110.5	110.1
Feb	103.3	119.1	116.8	112.8	153.4	111.1	110.0
Mar	102.1	119.2	116.3	113.2	154.6	113.0	110.1
Apr	101.7	119.5	116.1	113.5	159.3	114.9	110.5
May	101.9	120.3	119.2	113.9	160.0	115.9	111.0
Jun	100.8	119.9	118.8	114.2	160.6	117.6	110.9
Jul	99.9	119.4	119.0	114.6	165.0	118.9	111.0
Aug	99.1	119.8	119.7	115.0	164.6	119.5	110.9
Sep	98.1	120.1	119.8	115.4	165.4	120.0	110.7
Oct	97.8	120.1	120.3	115.9	165.7	120.1	110.8
Nov	97.5	120.1	121.2	116.5	165.1	119.7	110.8
Dec	97.1	120.3	121.7	117.0	164.3	119.0	110.7
1999 Jan	97.3	120.0	121.2	117.3	167.0	118.7	110.8
Feb	97.2	120.4	121.8	117.6	168.0	118.9	111.0
Mar	96.8	120.9	121.9	117.9	170.2	120.7	111.3
Apr	96.6	121.4	122.1	118.1	171.6	122.8	111.6
May	96.0	121.5	122.1	118.3	175.4	124.4	111.8
Jun	95.7	121.4	122.3	118.5	179.9	126.3	112.2
Jul	95.3	121.2	121.5	118.8	182.5	128.6	112.4
Aug	94.2	121.3	121.3	119.0	185.3	130.8	112.4
Sep	93.6	121.5	121.2	119.2	186.0	131.6	112.4
Oct	93.0	121.4	121.0	119.7	189.5	132.1	112.4
Nov	93.5	121.7	122.7	120.0	186.3	133.4	113.0
Dec	93.6	121.8	123.5	120.4	186.1	135.4	113.5
2000 Jan	93.6	121.2	121.9	120.6	191.1	135.5	113.6
Feb	92.4	122.4	122.7	120.8	190.3	136.4	113.3

† indicates earliest revision.

1 This covers mineral exploration, computer software and entertainment, literary and artistic originals.

3A Final Expenditure Prices Index (FEPI) Index of Investment Prices (IIP) Annual Percentage Changes

Experimental price indices

	Plant and Machinery	Intangible fixed assets	Vehicles, etc	New Buildings and Works	Transfer Costs of Land and Buildings	New Dwellings	Index of Investment Prices IIP
	CGBB	MJYM	CGBC	CGBA	CGBD	CGBE	CGBF
1993 Jan	4.3	2.6	3.7†	−10.6†	22.5	−5.8	−2.3†
Feb	6.2†	2.8	3.5	−10.1	23.9	−5.3	−1.4
Mar	5.4	2.6	3.9	−9.6	25.5	−4.7	−1.3
Apr	5.1	3.3	4.0	−9.1	27.8	−3.6	−0.9
May	6.4	4.1	4.8	−8.6	26.4	−2.8	−0.1
Jun	6.3	4.1	5.0	−8.1	25.9	−3.0	–
Jul	7.3	4.8	5.7	−7.5	29.0	−2.6	0.8
Aug	8.2	5.1	6.1	−6.9	32.4	−2.0	1.5
Sep	7.2	5.1	6.9	−6.2	1.2	−0.9	1.5
Oct	6.0	4.4	7.3	−5.5	5.2	0.2	1.4
Nov	4.9	4.1	7.1	−4.9	3.3	0.7	1.3
Dec	3.4	3.8	6.5	−4.2	3.4	0.8	0.8
1994 Jan	4.5	4.8	4.9	−3.6	1.5	1.0	1.2
Feb	2.0	4.5	3.2	−2.9	1.9	1.9	0.6
Mar	2.3	4.6	3.1	−2.3	1.4	2.8	1.0
Apr	2.1	3.6	3.9	−1.5	0.6	2.5	1.2
May	2.4	3.2	2.4	−0.7	2.3	1.7	1.3
Jun	4.1	3.7	3.3	0.2	2.4	1.9	2.2
Jul	3.1	3.4	3.8	0.9	0.5	2.3	2.2
Aug	4.2	4.3	5.3	1.7	−0.8	2.2	2.9
Sep	3.3	3.8	4.3	2.7	−0.3	1.6	2.7
Oct	2.1	3.5	2.8	3.6	−2.2	1.5	2.4
Nov	2.1	3.7	3.4	4.6	−2.6	1.9	2.8
Dec	3.1	4.2	4.3	5.7	−0.6	2.1	3.8
1995 Jan	2.6	3.6	5.0	6.7	0.6	1.8	3.8
Feb	3.2	3.9	5.9	7.7	−0.7	0.8	4.2
Mar	1.8	3.7	5.5	8.7	−2.0	0.9	4.0
Apr	1.6	3.7	5.3	9.7	–	1.2	4.3
May	2.2	3.9	7.2	10.6	−0.8	1.0	4.9
Jun	1.5	3.6	6.6	11.6	0.1	0.8†	4.9
Jul	1.3	3.4	5.2	12.0	0.6	0.3	4.6
Aug	0.5	2.9	4.4	12.6	0.9	−0.1	4.4
Sep	2.6	3.7	5.6	13.0	0.2	0.3	5.4
Oct	2.7	3.6	6.5	12.8	2.9	0.5	5.6
Nov	2.4	3.4	5.8	12.7	3.6	0.1	5.3
Dec	1.8	3.3	5.3	12.6	1.7	−0.1	4.9
1996 Jan	1.9	3.1	4.3	12.1	1.5†	0.7	4.9
Feb	1.3	3.1	4.2	11.6	3.7	1.9	4.8
Mar	1.8	3.1	4.4	11.2	5.0	1.7	4.9
Apr	2.3	3.0	4.1	10.2	5.5	1.4	4.8
May	1.3	2.8	3.5	9.4	6.3	2.3	4.3
Jun	0.5	2.7	3.1	8.5	5.1	2.9	3.8
Jul	−1.2	2.3	2.3	8.0	6.3	3.5	3.0
Aug	−1.9	2.3	1.8	7.2	7.1	4.4	2.8
Sep	−2.6	2.3	1.3	6.4	6.9	4.6	2.2
Oct	−1.9	2.6	0.9	5.9	8.7	4.9	2.4
Nov	−2.9	2.3	−0.3	5.5	8.5	5.4	2.0
Dec	−2.9	2.1	−0.8	5.1	9.6	6.5	2.1

† indicates earliest revision.

3A
continued

Final Expenditure Prices Index (FEPI)
Index of Investment Prices (IIP) Annual Percentage Changes
Experimental price indices

	Plant and Machinery	Intangible fixed assets	Vehicles, etc	New Buildings and Works	Transfer Costs of Land and Buildings	New Dwellings	Index of Investment Prices IIP
	CGBB	MJYM	CGBC	CGBA	CGBD	CGBE	CGBF
1997 Jan	–4.0†	1.9	–1.6†	4.8†	9.5†	7.0	1.5†
Feb	–4.0	1.7	–1.8	4.6	9.3	6.2†	1.3
Mar	–4.8	1.6	–2.0	4.3	8.9	6.2	0.8
Apr	–5.9	1.2	–2.7	3.9	5.1	6.8	0.2
May	–5.3	1.2	–2.4	3.4	6.6	7.0	0.4
Jun	–5.3	1.3	–2.3	2.9	6.9	7.4	0.4
Jul	–4.1	1.6	–1.6	3.2	9.1	7.7	1.1
Aug	–3.8	1.8	–1.4	3.7	8.9	7.6	1.2
Sep	–3.6	1.6	–1.4	3.8	10.0	7.7	1.4
Oct	–4.2	1.7	–1.5	3.7	7.9	7.4	1.0
Nov	–3.9	1.9	–0.8	3.7	8.7	7.2	1.2
Dec	–4.4	1.6	–0.3	3.7	7.9	6.5	0.8
1998 Jan	–4.5	1.4	–0.2	3.9	8.8	5.9	0.7
Feb	–5.4	1.4	–0.7	4.1	8.1	6.5	0.5
Mar	–5.6	1.3	0.7	4.1	8.7	7.1	0.6
Apr	–5.7	1.4	0.9	4.4	11.7	7.6	0.9
May	–5.3	1.8	1.7	4.9	10.6	7.8	1.3
Jun	–6.0	1.3	1.4	5.2	10.9	8.4	1.1
Jul	–6.6	1.1	1.5	4.8	9.6	8.4	0.7
Aug	–7.3	0.8	1.6	4.4	8.6	8.2	0.3
Sep	–7.9	0.8	1.9	4.3	8.0	8.6	0.1
Oct	–7.9	0.8	2.5	4.4	8.9	8.9	0.3
Nov	–7.6	0.8	3.7	4.6	7.8	8.5	0.4
Dec	–7.8	0.9	3.8	4.7	8.0	7.8	0.3
1999 Jan	–6.8	1.1	3.6	4.5	10.4	7.4	0.6
Feb	–5.9	1.1	4.3	4.3	9.5	7.0	0.9
Mar	–5.2	1.4	3.0	4.2	10.1	6.8	1.1
Apr	–5.0	1.6	3.4	4.1	7.7	6.9	1.0
May	–5.8	1.0	2.4	3.9	9.6	7.3	0.7
Jun	–5.1	1.3	2.9	3.8	12.0	7.4	1.2
Jul	–4.6	1.5	2.1	3.7	10.6	8.2	1.3
Aug	–4.9	1.3	1.3	3.5	12.6	9.5	1.4
Sep	–4.6	1.2	1.2	3.3	12.5	9.7	1.5
Oct	–4.9	1.1	0.6	3.3	14.4	10.0	1.4
Nov	–4.1	1.3	1.2	3.0	12.8	11.4	2.0
Dec	–3.6	1.2	1.5	2.9	13.3	13.8	2.5
2000 Jan	–3.8	1.0	0.6	2.8	14.4	14.2	2.5
Feb	–4.9	1.7	0.7	2.7	13.3	14.7	2.1

† indicates earliest revision.

4 Final Expenditure Prices Index (FEPI) Index of Government Prices (IGP)

Experimental price indices

	Local Government Pay & Procurement	Central Government Pay & Procurement	Education Grants	Index of Government Prices	Annual percentage changes: Local Government Pay & Procurement	Central Government Pay & Procurement	Education Grants	Index of Government Prices
January 1992=100								
Weights								
1992	382	576	42	1000				
1993	382	575	43	1000				
1994	377	576	47	1000				
1995	354	577	69	1000				
	CUSL	CUSM	CUSN	CUSO	CGBG	CGBH	CGBI	CGBJ
1992 Jan	100.0	100.0	100.0	100.0	..	..	..	..
Feb	99.9†	99.8†	100.0	99.9†	..	..	..	..
Mar	99.9	99.7	100.0	99.8	..	..	..	..
Apr	103.5	101.1	100.4†	102.0	..	..	..	..
May	103.2	100.9	100.4	101.8	..	..	..	..
Jun	103.1	101.4	100.4	102.0	..	..	..	..
Jul	104.0	102.1	102.6	102.9	..	..	..	..
Aug	104.1	101.3	102.6	102.4	..	..	..	..
Sep	104.9	101.2	102.6	102.7	..	..	..	..
Oct	104.8	102.0	102.6	103.1	..	..	..	..
Nov	105.1	103.2	102.6	103.9	..	..	..	..
Dec	105.4	102.9	102.7	103.8	..	..	..	..
1993 Jan	105.4	103.3	105.0	104.2	5.4†	3.3†	5.0	4.2†
Feb	105.3	103.5	105.0	104.3	5.4	3.7	5.0	4.4
Mar	105.4	103.7	105.0	104.4	5.5	4.0	5.0	4.6
Apr	106.8	104.1	105.2	105.2	3.2	3.0	4.8†	3.1
May	106.8	103.6	105.2	104.9	3.5	2.7	4.8	3.0
Jun	106.8	104.3	105.2	105.3	3.6	2.9	4.8	3.2
Jul	106.8	104.7	106.9	105.6	2.7	2.5	4.2	2.6
Aug	106.9	104.7	106.9	105.6	2.7	3.4	4.2	3.1
Sep	107.1	104.8	106.9	105.8	2.1	3.6	4.2	3.0
Oct	108.4	105.4	106.9	106.6	3.4	3.3	4.2	3.4
Nov	107.7	105.0	106.9	106.1	2.5	1.7	4.2	2.1
Dec	107.8	105.8	107.0	106.6	2.3	2.8	4.2	2.7
1994 Jan	107.7	105.4	107.5	106.4	2.2	2.0	2.4	2.1
Feb	107.7	105.8	107.5	106.6	2.3	2.2	2.4	2.2
Mar	107.7	106.4	107.4	106.9	2.2	2.6	2.3	2.4
Apr	108.8	106.4	107.8	107.4	1.9	2.2	2.5	2.1
May	108.9	106.0	107.9	107.2	2.0	2.3	2.6	2.2
Jun	108.9	106.8	107.9	107.6	2.0	2.4	2.6	2.2
Jul	108.9	106.8	109.4	107.7	2.0	2.0	2.3	2.0
Aug	109.0	106.7	109.4	107.7	2.0	1.9	2.3	2.0
Sep	109.4	107.0	109.4	108.0	2.1	2.1	2.3	2.1
Oct	109.3	107.1	109.4	108.0	0.8	1.6	2.3	1.3
Nov	112.3	106.9	109.4	109.0	4.3	1.8	2.3	2.7
Dec	110.2	107.9	109.4	108.8	2.2	2.0	2.2	2.1
1995 Jan	110.5	109.4	110.1	109.8	2.6	3.8	2.4	3.2
Feb	110.3	108.6	110.1	109.3	2.4	2.6	2.4	2.5
Mar	110.4	109.2	110.1	109.7	2.5	2.6	2.5	2.6
Apr	111.5	109.5	110.8	110.3	2.5	2.9	2.8	2.7
May	111.6	108.8	110.9	110.0	2.5	2.6	2.8	2.6
Jun	112.2	109.1	110.9	110.3	3.0	2.2	2.8	2.5
Jul	112.1	109.1	112.5	110.4	2.9	2.2	2.8	2.5
Aug	112.2	109.3	112.5	110.5	2.9	2.4	2.8	2.6
Sep	112.6	109.3	112.6	110.7	2.9	2.1	2.9	2.5
Oct	112.5	109.6	112.5	110.8	2.9	2.3	2.8	2.6
Nov	112.7	109.7	112.6	111.0	0.4	2.6	2.9	1.8
Dec	112.9	110.4	112.6	111.5	2.5	2.3	2.9	2.5

† indicates earliest revision.

4 continued

Final Expenditure Prices Index (FEPI)
Index of Government Prices (IGP)

Experimental price indices

	Local Government Pay & Procurement	Central Government Pay & Procurement	Education Grants	Index of Government Prices	Annual percentage changes: Local Government Pay & Procurement	Annual percentage changes: Central Government Pay & Procurement	Annual percentage changes: Education Grants	Annual percentage changes: Index of Government Prices
January 1992=100								
Weights								
1996	351	574	75	1000				
1997	354	569	77	1000				
1998	353	570	77	1000				
1999	351	567	82	1000				
2000	352	569	79	1000				
	CUSL	CUSM	CUSN	CUSO	CGBG	CGBH	CGBI	CGBJ
1996 Jan	113.0†	110.7†	113.4	111.7†	2.3†	1.2†	3.0	1.7†
Feb	113.0	111.7	113.4†	112.3	2.4	2.9	3.0†	2.7
Mar	113.1	110.9	113.3	111.8	2.4	1.6	2.9	1.9
Apr	114.9	111.3	114.2	112.8	3.0	1.6	3.1	2.3
May	114.9	112.2	114.2	113.3	3.0	3.1	3.0	3.0
Jun	115.0	112.0	114.2	113.2	2.5	2.7	3.0	2.6
Jul	114.9	112.2	114.5	113.3	2.5	2.8	1.8	2.6
Aug	115.1	112.1	114.5	113.3	2.6	2.6	1.8	2.5
Sep	115.6	112.4	114.6	113.7	2.7	2.8	1.8	2.7
Oct	115.6	111.9	114.6	113.4	2.8	2.1	1.9	2.3
Nov	115.8	112.0	114.7	113.6	2.8	2.1	1.9	2.3
Dec	116.4	112.7	115.1	114.2	3.1	2.1	2.2	2.4
1997 Jan	116.4	112.8	115.4	114.2	3.0	1.9	1.8	2.2
Feb	116.4	112.4	115.3	114.0	3.0	0.6	1.7	1.5
Mar	116.2	112.3	115.2	113.9	2.7	1.3	1.7	1.9
Apr	116.8	113.1	115.9	114.6	1.7	1.6	1.5	1.6
May	116.9	113.0	115.9	114.6	1.7	0.7	1.5	1.1
Jun	116.9	112.9	115.9	114.5	1.7	0.8	1.5	1.1
Jul	119.4	113.4	118.2	115.9	3.9	1.1	3.2	2.3
Aug	117.8	113.5	118.2	115.4	2.3	1.2	3.2	1.9
Sep	118.3	113.9	118.2	115.7	2.3	1.3	3.1	1.8
Oct	118.1	113.3	118.2	115.3	2.2	1.3	3.1	1.7
Nov	118.3	113.0	118.2	115.3	2.2	0.9	3.1	1.5
Dec	118.9	113.9	118.7	116.0	2.1	1.1	3.1	1.6
1998 Jan	118.8	113.9	119.3	116.0	2.1	1.0	3.4	1.6
Feb	118.8	113.5	119.3	115.8	2.1	1.0	3.5	1.6
Mar	118.7	113.3	119.2	115.6	2.2	0.9	3.5	1.5
Apr	120.5	114.0	120.1	116.7	3.2	0.8	3.6	1.8
May	120.6	114.8	120.1	117.2	3.2	1.6	3.6	2.3
Jun	120.6	115.0	120.1	117.3	3.2	1.9	3.6	2.4
Jul	120.6	115.7	120.6	117.8	1.0	2.0	2.0	1.6
Aug	120.7	115.8	120.6	117.9	2.5	2.0	2.0	2.2
Sep	121.2	116.1	120.6	118.2	2.5	1.9	2.0	2.2
Oct	121.1	115.8	120.6	118.0	2.5	2.2	2.0	2.3
Nov	121.3	116.0	120.7	118.2	2.5	2.7	2.1	2.5
Dec	122.1	116.7	121.4	119.0	2.7	2.5	2.3	2.6
1999 Jan	122.0	117.1	122.3	119.2	2.7	2.8	2.5	2.8
Feb	122.0	117.0	122.3	119.1	2.7	3.1	2.5	2.8
Mar	122.1	116.9	122.3	119.1	2.9	3.2	2.6	3.0
Apr	123.7	117.7	123.7	120.3	2.7	3.2	3.0	3.1
May	123.7	118.5	123.7	120.7	2.6	3.2	3.0	3.0
Jun	125.9	119.3	123.7	121.9	4.4	3.7	3.0	3.9
Jul	124.4	118.7	124.7	121.1	3.2	2.6	3.4	2.8
Aug	124.5	118.8	124.7	121.2	3.1	2.6	3.4	2.8
Sep	125.1	118.8	124.8	121.4	3.2	2.3	3.5	2.7
Oct	125.1	118.4	124.8	121.2	3.3	2.2	3.5	2.7
Nov	125.2	118.9	124.9	121.5	3.2	2.5	3.5	2.8
Dec	125.3	119.1	124.9	121.7	2.6	2.1	2.9	2.3
2000 Jan	125.3	119.1	124.9	121.7	2.7	1.7	2.1	2.1
Feb	125.3	119.2	124.9	121.8	2.7	1.9	2.1	2.3

† Indicates earliest revision.

4A Final Expenditure Prices Index - FEPI(P)
Index of Government Prices Incorporating Implied Output Prices - IGP(P)

Experimental price indices

	Local Government Pay & Procurement	Central Government Pay & Procurement	Education Grants	Index of Government Prices IGP(P)	Annual percentage changes: Local Government Pay & Procurement	Central Government Pay & Procurement	Education Grants	Index of Government Prices IGP(P)
January 1992=100								
Weights								
1992	382	576	42	1000				
1993	382	575	43	1000				
1994	377	576	47	1000				
1995	354	577	69	1000				
	LGTU	LGTX	CUSN	LGTZ	GXVL	GXVM	CGBI	GXVN
1992 Jan	100.0	100.0	100.0	100.0	..	..	..	..
Feb	99.9	100.1	100.0	100.0	..	..	..	..
Mar	99.8	100.6	100.0	100.3	..	..	..	..
Apr	100.1	101.5	100.4†	100.9	..	..	..	..
May	100.0	101.1	100.4	100.6	..	..	..	..
Jun	99.9	101.3	100.4	100.7	..	..	..	..
Jul	100.6	102.1	102.6	101.5	..	..	..	..
Aug	100.6	102.0	102.6	101.5	..	..	..	..
Sep	101.5	102.7	102.6	102.2	..	..	..	..
Oct	101.3	103.3	102.6	102.5	..	..	..	..
Nov	101.4	104.6	102.6	103.3	..	..	..	..
Dec	101.3	104.6	102.7	103.3	..	..	..	..
1993 Jan	101.3	104.6	105.0	103.3	1.3	4.6	5.0	3.3
Feb	101.2	105.0	105.0	103.5	1.3	4.9	5.0	3.5
Mar	101.1	105.4	105.0	103.7	1.3	4.8	5.0	3.4
Apr	101.6	105.6	105.2	104.0	1.5	4.0	4.8†	3.1
May	101.5	105.5	105.2	104.0	1.5	4.4	4.8	3.4
Jun	101.4	106.1	105.2	104.3	1.5	4.7	4.8	3.6
Jul	101.4	106.4	106.9	104.5	0.8	4.2	4.2	3.0
Aug	101.5	106.4	106.9	104.5	0.9	4.3	4.2	3.0
Sep	101.8	106.6	106.9	104.8	0.3	3.8	4.2	2.5
Oct	103.0	106.6	106.9	105.2	1.7	3.2	4.2	2.6
Nov	102.3	106.9	106.9	105.1	0.9	2.2	4.2	1.7
Dec	102.4	107.3	107.0	105.4	1.1	2.6	4.2	2.0
1994 Jan	102.5	107.3	107.5	105.4	1.2	2.6	2.4	2.0
Feb	102.7	107.3	107.5	105.5	1.5	2.2	2.4	1.9
Mar	102.8	107.8	107.4	105.9	1.7	2.3	2.3	2.1
Apr	103.0	108.0	107.8	106.0	1.4	2.3	2.5	1.9
May	103.2	107.6	107.9	105.9	1.7	2.0	2.6	1.8
Jun	103.4	108.0	107.9	106.3	2.0	1.8	2.6	1.9
Jul	103.6	108.0	109.4	106.4	2.2	1.5	2.3	1.8
Aug	104.0	108.1	109.4	106.6	2.5	1.6	2.3	2.0
Sep	104.5	108.4	109.4	107.0	2.7	1.7	2.3	2.1
Oct	104.8	108.5	109.4	107.1	1.7	1.8	2.3	1.8
Nov	107.6	108.4	109.4	108.2	5.2	1.4	2.3	2.9
Dec	105.9	109.2	109.4	108.0	3.4	1.8	2.2	2.5
1995 Jan	106.3	109.8	110.1	108.5	3.7	2.3	2.4	2.9
Feb	106.5	109.6	110.1	108.4	3.7	2.1	2.4	2.7
Mar	106.7	110.1	110.1	108.8	3.8	2.1	2.5	2.7
Apr	107.0	110.3	110.8	109.1	3.9	2.1	2.8	2.9
May	107.2	109.8	110.9	108.8	3.9	2.0	2.8	2.7
Jun	107.8	110.0	110.9	109.2	4.3	1.9	2.8	2.7
Jul	107.8	110.3	112.5	109.5	4.1	2.1	2.8	2.9
Aug	107.9	110.6	112.5	109.7	3.8	2.3	2.8	2.9
Sep	108.4	110.6	112.6	109.9	3.7	2.0	2.9	2.7
Oct	108.3	111.0	112.5	110.0	3.3	2.3	2.8	2.7
Nov	108.2	111.2	112.6	110.2	0.6	2.6	2.9	1.8
Dec	108.2	111.5	112.6	110.3	2.2	2.1	2.9	2.1

† Indicates earliest revision.

4A continued

Final Expenditure Prices Index - FEPI(P)
Index of Government Prices Incorporating Implied Output Prices - IGP(P)

Experimental price indices

	Local Government Pay & Procurement	Central Government Pay & Procurement	Education Grants	Index of Government Prices IGP(P)	Annual percentage changes: Local Government Pay & Procurement	Central Government Pay & Procurement	Education Grants	Index of Government Prices IGP(P)
January 1992=100								
Weights								
1996	351	574	75	1000				
1997	354	569	77	1000				
1998	353	570	77	1000				
1999	351	567	82	1000				
2000	352	569	79	1000				
	LGTU	LGTX	CUSN	LGTZ	GXVL	GXVM	CGBI	GXVN
1996 Jan	108.1	112.0	113.4	110.6	1.7	2.0	3.0	1.9
Feb	108.0	112.4	113.4†	110.8	1.4	2.6	3.0†	2.2
Mar	108.0	112.4	113.3	110.8	1.2	2.1	2.9	1.8
Apr	108.6	112.9	114.2	111.4	1.5	2.4	3.1	2.1
May	108.6	113.2	114.2	111.5	1.3	3.1	3.0	2.5
Jun	108.7	113.2	114.2	111.6	0.8	2.9	3.0	2.2
Jul	108.6	113.5	114.5	111.7	0.7	2.9	1.8	2.0
Aug	108.7	113.8	114.5	111.9	0.7	2.9	1.8	2.0
Sep	109.3	113.8	114.6	112.1	0.8	2.9	1.8	2.0
Oct	109.3	113.3	114.6	111.9	0.9	2.1	1.9	1.7
Nov	109.4	113.3	114.7	111.9	1.1	1.9	1.9	1.5
Dec	109.8	113.6	115.1	112.2	1.5	1.9	2.2	1.7
1997 Jan	109.9	113.5	115.4	112.3	1.7	1.3	1.8	1.5
Feb	110.1	113.3	115.3	112.2	1.9	0.8	1.7	1.3
Mar	110.2	113.2	115.2	112.1	2.0	0.7	1.7	1.2
Apr	110.3	113.3	115.9	112.4	1.6	0.4	1.5	0.9
May	110.5	113.4	115.9	112.4	1.7	0.2	1.5	0.8
Jun	110.7	113.4	115.9	112.5	1.8	0.2	1.5	0.8
Jul	113.2	113.9	118.2	113.8	4.2	0.4	3.2	1.9
Aug	111.8	114.3	118.2	113.6	2.9	0.4	3.2	1.5
Sep	112.5	114.4	118.2	113.9	2.9	0.5	3.1	1.6
Oct	112.5	114.1	118.2	113.7	2.9	0.7	3.1	1.6
Nov	112.6	114.1	118.2	113.8	2.9	0.7	3.1	1.7
Dec	112.8	114.6	118.7	114.1	2.7	0.9	3.1	1.7
1998 Jan	112.8	114.9	119.3	114.4	2.6	1.2	3.4	1.9
Feb	112.8	115.0	119.3	114.4	2.5	1.5	3.5	2.0
Mar	112.8	115.0	119.2	114.4	2.4	1.6	3.5	2.1
Apr	113.8	115.7	120.1	115.2	3.2	2.1	3.6	2.5
May	113.9	116.2	120.1	115.5	3.1	2.5	3.6	2.8
Jun	114.0	116.6	120.1	115.8	3.0	2.8	3.6	2.9
Jul	114.1	117.2	120.6	116.3	0.8	2.9	2.0	2.2
Aug	114.3	117.6	120.6	116.6	2.2	2.9	2.0	2.6
Sep	114.9	117.8	120.6	116.9	2.1	3.0	2.0	2.6
Oct	114.9	117.8	120.6	116.9	2.1	3.2	2.0	2.8
Nov	115.1	118.1	120.7	117.1	2.2	3.5	2.1	2.9
Dec	115.3	118.7	121.4	117.6	2.2	3.6	2.3	3.1
1999 Jan	115.3	119.0	122.3	117.8	2.2	3.6	2.5	3.0
Feb	115.5	119.2	122.3	118.0	2.4	3.7	2.5	3.1
Mar	115.7	119.4	122.3	118.2	2.6	3.8	2.6	3.3
Apr	116.1	120.1	123.7	118.8	2.0	3.8	3.0	3.1
May	116.3	120.4	123.7	119.1	2.1	3.6	3.0	3.1
Jun	118.5	121.0	123.7	120.2	3.9	3.8	3.0	3.8
Jul	117.3	121.1	124.7	119.9	2.8	3.3	3.4	3.1
Aug	117.6	121.5	124.7	120.2	2.9	3.3	3.4	3.1
Sep	118.4	121.6	124.8	120.6	3.0	3.2	3.5	3.2
Oct	118.5	121.6	124.8	120.6	3.1	3.2	3.5	3.2
Nov	118.7	121.9	124.9	120.9	3.1	3.2	3.5	3.2
Dec	119.0	122.3	124.9	121.2	3.2	3.0	2.9	3.1
2000 Jan	..	..	124.9	..	..	..	2.1	..
Feb	..	..	124.9	..	..	..	2.1	..

† indicates earliest revision

Index of Distribution (Prototype) – December 1999

Contact: Hugh Skipper Tel: 01633 813388; e-mail: hugh.skipper@ons.gov.uk

In December, the prototype Index of Distribution (IoD) showed distribution industries' gross value added rising by 3.1 per cent in the latest three months, compared with the same three months in 1998. This rise was driven mainly by the component for the retail trades. The level of the IoD was at 113.4 in December 1999.

The prototype IoD shows the monthly movements in volume terms of gross value added in the distribution sector, which consists of motor trades, wholesaling and retailing (SIC92 section G). Index numbers are based on 1995=100 and all values are seasonally adjusted.

Prototype Index of Distribution

seasonally adjusted: 1995=100

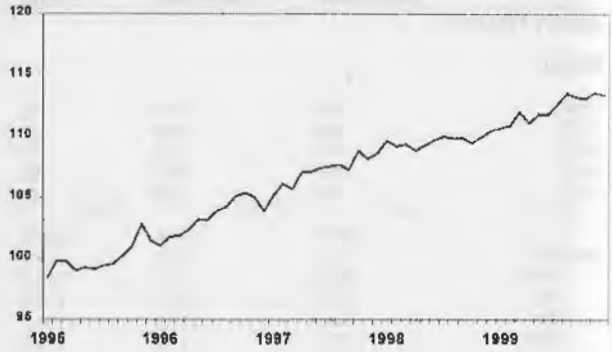


Table A

Prototype IoD and components (1995=100 index and 3 month-on-3 month annual percentage change)

seasonally adjusted

		Index of Distribution		Motor trades		Wholesale		Retail	
		Index	Latest 3 mth on same 3 mth a year ago: % change	Index	Latest 3 mth on same 3 mth a year ago: % change	Index	Latest 3 mth on same 3 mth a year ago: % change	Index	Latest 3 mth on same 3 mth a year ago: % change
1999	Jan	110.7r	1.4	114.5r	2.1	104.4r	0.0	114.7r	2.3
	Feb	110.9	1.4	115.0	3.1	104.5	-0.5	115.0	2.3
	Mar	112.0	1.6	115.9	2.7	105.6	-0.5	116.2	3.0
	Apr	111.1	2.0	114.9	4.5	104.4	-0.6	115.4	3.2
	May	111.8	2.2	114.9	4.5	104.9	0.3	116.8	3.0
	June	111.8	2.1	115.2	3.7	104.6	0.3	116.8	2.9
	July	112.6	2.2	117.1	3.2	105.8	0.9	116.9	2.9
	Aug	113.5	2.5	117.8	3.5	106.8	1.1	117.7	3.3
	Sept	113.2	2.9	118.3	4.5	106.0	1.4	117.6	3.5
	Oct	113.1	3.2	117.7	4.4	105.1	1.5	118.5	4.1
	Nov	113.6	3.2	117.7	4.6	105.7	1.2	119.0	4.2
	Dec	113.4	3.1	118.9	4.0	104.6	0.7	119.1	4.7

The symbol 'r' indicates that the data have been revised since the previous month's release. The values marked are the earliest shown in this table to have been revised.

Tables following this note show data back to January 1995.

Motor trades (SIC92 division 50)

In December, the prototype seasonally adjusted index of gross value added in the motor trades rose by 4.0 per cent in the latest three months compared with the same period in 1998. The level of the prototype index for the motor trades was at 118.9 in December 1999. Values for 1999 should be treated with caution, however. The new seasonal pattern in vehicle sales, following the change in the vehicle registration system, is not yet clear.

Data are therefore liable to be revised more than usual and this will apply particularly to the next release, when a full two years will be open for revision. This is a longer

Prototype component index for motor trades

seasonally adjusted: 1995=100

growths can be expected. The seasonal adjustment methodology has been modified and this has an impact on both the 1999 and 1998 data.

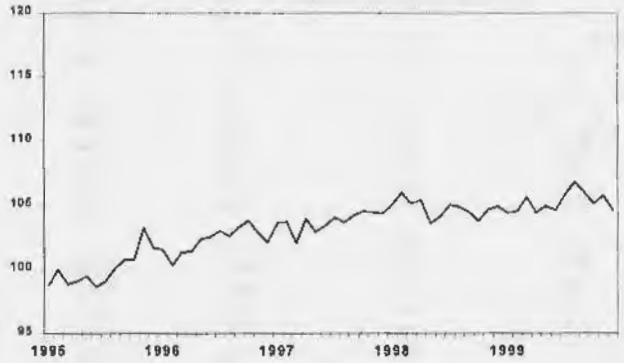
Until a consistent seasonal pattern emerges, the seasonally adjusted series for the affected components will be derived by extending the underlying trend of the series from quarter 4 1998, taking into account movements in the unadjusted data. The approach is consistent with the treatment of other affected series published by the ONS.

Wholesale (SIC92 division 51)

In December, the prototype index of gross value added in the wholesale trades increased by 0.7 per cent compared with the same period in 1998. The pattern within wholesaling continued to be mixed but, as in November, the most important growth was in the sub-component for the wholesale of food, drink, tobacco and household goods. The level of the prototype index for the wholesale trades was at 104.6 in December 1999.

Prototype component index for wholesale

seasonally adjusted: 1995=100

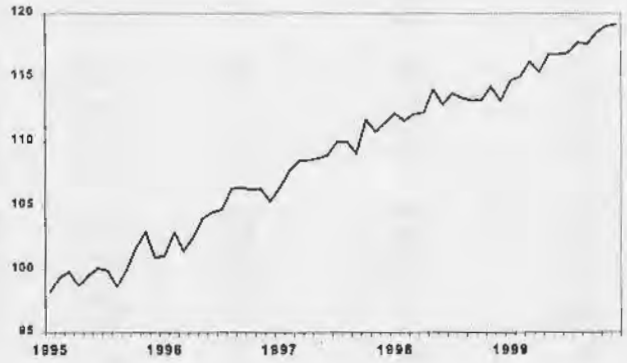


Retail (SIC92 division 52)

In December, the prototype seasonally adjusted index of gross value added in the retail trades rose by 4.7 per cent compared with the same period in 1998. This was driven mainly by the sub-component for retail sales through predominantly non-food stores. The level of the prototype index for the retail trades was at 119.1 in December 1999.

Prototype component index for retail

seasonally adjusted: 1995=100



Consistency with quarterly estimates of GDP(O)

The monthly figures for the prototype IoD and its three component series are consistent with the corresponding quarterly series for the same industries contained in the quarterly estimates of GDP by the output measure (GDP(O)). The GDP(O) quarterly index for the distribution sector is shown in table 2.9 of this publication. However, the prototype IoD values presented here match the quarterly GDP(O) estimates released on 28 February, whereas the GDP(O) series in table 2.9 are based on more recent data. Any apparent inconsistencies are therefore due to this timing difference.

ONS identifiers for the quarterly GDP(O) series that correspond to the IoD and its three main components are given in the footnotes to the tables that follow.

Component series for retail: differs from the Retail Sales Index

The prototype IoD component for retail shown in this release differs from the established Retail Sales Index (RSI) in that the IoD retail series is designed to indicate movements in retailing gross value added, whereas the RSI is an index of sales. The two series may therefore follow slightly different paths, although the broad trends in each are very similar.

Notes

Further details of the data sources and methods used in this prototype index are given in the article, 'Release of a prototype monthly Index of Distribution', by Hugh Skipper and Ian Cope, which appeared in the December 1999 issue of *Economic Trends* (no. 553).

The data sources and methodology on which the current prototype IoD series are based are to be reviewed as part of the ONS's programme to develop a full Index of Services (IoS). The IoS will be a monthly indicator of changes in gross value added across the whole services sector. Hugh Skipper and Ian Cope's article, 'Plans for the development of a monthly Index of Services', in the October 1999 issue of Economic Trends (no. 551) gives further details.

1 IOD: Index of Distribution (PROTOTYPE)

Index numbers of gross value added at basic prices[1,2,3]

1995=100, seasonally adjusted

	Component series							
	SIC Section G: IoD [4]				SIC50: Motor trades [4]			
		percentage change				percentage change		
	Index	month on month	latest 3 months on previous 3 months	latest 3 months on same 3 months a year ago	Index	month on month	latest 3 months on previous 3 months	latest 3 months on same 3 months a year ago
	FVVR	FVVK	FVVL	FVVM	FVVO	FVVB	FVVC	FVVD
1995 Jan	98.5	..	..	..	98.5	..	..	..
Feb	99.8	1.4	..	..	100.7	2.2	..	..
Mar	99.7	−0.1	..	..	101.5	0.8	..	..
Apr	99.0	−0.7	..	..	99.7	−1.8	..	..
May	99.3	0.3	..	..	98.4	−1.3	..	..
Jun	99.1	−0.2	−0.2	..	97.8	−0.6	−1.6	..
Jul	99.4	0.3	−0.3	..	99.1	1.4	−2.2	..
Aug	99.6	0.1	–	..	100.7	1.6	−0.7	..
Sep	100.2	0.7	0.6	..	99.8	−0.8	1.2	..
Oct	101.0	0.8	1.0	..	99.7	−0.1	1.7	..
Nov	102.8	1.8	2.0	..	101.7	2.0	1.3	..
Dec	101.5	−1.3	2.0	..	102.4	0.6	1.4	..
1996 Jan	101.1	−0.4	1.5	..	100.0	−2.3	1.3	..
Feb	101.8	0.7	0.1	..	102.1	2.1	1.1	..
Mar	101.9	0.1	−0.2	2.2	104.1	2.0	0.8	1.9
Apr	102.3	0.5	0.2	2.5	103.9	−0.2	2.0	2.7
May	103.2	0.8	1.0	3.1	103.1	−0.8	2.2	3.9
Jun	103.2	–	1.3	3.8	101.4	−1.7	0.7	4.3
Jul	103.9	0.7	1.4	4.2	103.9	2.4	−0.5	4.5
Aug	104.3	0.3	1.3	4.4	102.9	−0.9	−0.9	3.6
Sep	105.1	0.8	1.5	4.7	106.0	2.9	1.4	4.4
Oct	105.4	0.3	1.5	4.7	107.0	1.0	2.4	5.2
Nov	105.1	−0.3	1.4	3.8	106.9	−0.1	3.8	6.2
Dec	103.9	−1.1	0.4	3.0	104.4	−2.3	1.8	4.8
1997 Jan	105.2	1.2	−0.2	2.9	105.7	1.2	0.3	4.3
Feb	106.2	0.9	−0.1	3.6	107.9	2.1	−0.6	4.5
Mar	105.7	−0.4	0.9	4.1	107.1	−0.8	0.7	4.7
Apr	107.1	1.3	1.5	4.3	110.6	3.2	2.7	4.9
May	107.2	–	1.5	4.1	112.7	1.9	3.8	6.1
Jun	107.4	0.3	1.5	4.2	112.7	–	4.7	8.9
Jul	107.6	0.1	1.0	3.8	109.5	−2.8	2.8	8.5
Aug	107.7	0.1	0.9	3.7	111.1	1.4	0.9	8.1
Sep	107.3	−0.4	0.3	3.0	109.9	−1.1	−1.6	5.6
Oct	108.9	1.4	0.5	2.9	111.4	1.4	−0.7	5.2
Nov	108.2	−0.6	0.5	2.8	110.2	−1.1	−0.5	3.6
Dec	108.7	0.4	1.0	3.6	111.3	1.0	0.7	4.6
1998 Jan	109.7	0.9	0.8	3.9	113.7	2.1	0.8	5.7
Feb	109.2	−0.4	1.0	3.9	110.5	−2.8	1.2	5.5
Mar	109.4	0.2	0.8	3.5	112.1	1.4	1.0	4.8
Apr	108.9	−0.5	0.3	2.7	108.4	−3.2	−1.2	1.7
May	109.3	0.4	–	2.4	110.2	1.6	−1.4	0.1
Jun	109.7	0.4	−0.1	1.9	114.2	3.6	−1.0	−0.9
Jul	110.0	0.3	0.5	2.1	111.9	−2.0	1.6	0.4
Aug	109.9	−0.1	0.6	2.1	112.3	0.4	2.3	1.5
Sep	109.9	–	0.6	2.2	113.8	1.3	1.5	2.3
Oct	109.5	−0.4	0.1	1.7	112.9	−0.7	0.8	2.0
Nov	110.0	0.5	−0.1	1.6	111.4	−1.4	−0.1	2.0
Dec	110.5	0.4	0.1	1.3	116.2	4.4	0.8	2.3
1999 Jan	110.7†	0.2†	0.6	1.4	114.5†	−1.5†	0.9†	2.1†
Feb	110.9	0.2	0.8†	1.4†	115.0	0.4	2.3	3.1
Mar	112.0	1.0	1.1	1.6	115.9	0.8	1.5	2.7
Apr	111.1	−0.9	0.9	2.0	114.9	−0.9	1.1	4.5
May	111.8	0.7	0.9	2.2	114.9	−0.1	–	4.5
Jun	111.8	–	0.3	2.1	115.2	0.3	−0.2	3.7
Jul	112.6	0.8	0.7	2.2	117.1	1.7	0.3	3.2
Aug	113.5	0.8	0.9	2.5	117.8	0.6	1.3	3.5
Sep	113.2	−0.2	1.4	2.9	118.3	0.4	2.4	4.5
Oct	113.1	−0.1	1.1	3.2	117.7	−0.6	1.9	4.4
Nov	113.6	0.4	0.6	3.2	117.7	–	1.0	4.6
Dec	113.4	−0.2	0.3	3.1	118.9	1.0	0.3	4.0

1 Indices are valued at basic prices, which exclude taxes and subsidies on production.
2 Estimates cannot be regarded as accurate to the last digit shown.
3 Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.
4 The equivalent quarterly index series, released electronically as part of the GDP(O) estimates, have identifiers EWAD (motor), EWAE (wholesale), EWAF (retail) and GDQC (IoD). For further information about obtaining these series please telephone 0207 533 5675, fax 0207 533 5688, or email

Sources: Office for National Statistics;
For further information on these data please telephone 01633 813388, fax 01633 812575, or email hugh.skipper@ons.gov.uk

2 IOD: Index of Distribution (PROTOTYPE) continued

Index numbers of gross value added at basic prices[1,2,3]

1995=100, seasonally adjusted

	Component series							
	SIC51: Wholesale [4]				SIC52: Retail [4]			
		percentage change				percentage change		
	Index	month on month	latest 3 months on previous 3 months	latest 3 months on same 3 months a year ago	Index	month on month	latest 3 months on previous 3 months	latest 3 months on same 3 months a year ago
	FVVP	FVVE	FVVF	FVVG	FVVQ	FVVH	FVVI	FVVJ
1995 Jan	98.8	..	..	..	98.2	..	..	..
Feb	99.9	1.2	..	..	99.4	1.2	..	..
Mar	98.8	−1.1	..	..	99.8	0.4	..	..
Apr	99.0	0.2	..	..	98.7	−1.1	..	..
May	99.4	0.4	..	..	99.5	0.8	..	..
Jun	98.6	−0.8	−0.2	..	100.1	0.6	0.3	..
Jul	99.0	0.4	−0.3	..	100.0	−0.1	0.6	..
Aug	100.1	1.1	0.1	..	98.6	−1.3	0.2	..
Sep	100.7	0.6	0.9	..	100.0	1.4	0.1	..
Oct	100.7	–	1.5	..	101.7	1.8	0.2	..
Nov	103.2	2.4	2.3	..	102.9	1.2	2.0	..
Dec	101.7	−1.5	1.9	..	100.9	−1.9	2.3	..
1996 Jan	101.5	−0.1	1.6	..	101.1	0.2	1.5	..
Feb	100.3	−1.2	−0.4	..	102.9	1.8	0.1	..
Mar	101.3	1.0	−0.8	1.9	101.5	−1.4	–	2.7
Apr	101.4	0.1	−1.1	1.7	102.5	1.1	0.6	3.0
May	102.3	0.9	0.5	2.6	104.0	1.4	1.0	3.3
Jun	102.5	0.2	1.0	3.1	104.5	0.4	1.8	4.2
Jul	103.0	0.5	1.6	3.6	104.7	0.2	2.1	4.5
Aug	102.6	−0.4	1.0	3.5	106.3	1.5	2.4	5.6
Sep	103.3	0.7	0.9	3.0	106.4	0.1	2.1	6.3
Oct	103.8	0.5	0.6	2.7	106.3	−0.2	1.9	6.2
Nov	102.8	−0.9	0.6	1.7	106.3	0.1	1.1	4.7
Dec	102.1	−0.7	–	1.0	105.3	−0.9	0.1	4.0
1997 Jan	103.6	1.5	−0.3	0.7	106.4	1.0	−0.3	4.3
Feb	103.7	0.1	−0.1	1.9	107.7	1.2	0.1	4.6
Mar	102.0	−1.6	0.2	2.1	108.5	0.7	1.5	5.6
Apr	103.9	1.8	0.4	2.2	108.6	0.1	2.1	5.8
May	102.9	−1.0	−0.2	1.3	108.7	0.1	2.0	5.8
Jun	103.4	0.5	0.3	1.3	108.9	0.2	1.1	4.9
Jul	104.0	0.6	0.2	0.8	110.0	0.9	0.9	4.6
Aug	103.7	−0.4	0.7	1.0	110.0	–	1.0	4.2
Sep	104.2	0.5	0.5	1.0	109.1	−0.8	0.9	3.7
Oct	104.5	0.3	0.7	0.9	111.7	2.4	1.0	3.7
Nov	104.4	−0.1	0.7	1.1	110.8	−0.8	0.8	3.9
Dec	104.4	−0.1	0.5	1.5	111.5	0.6	1.5	5.0
1998 Jan	105.0	0.6	0.5	1.7	112.2	0.6	1.1	5.1
Feb	105.9	0.9	0.7	1.9	111.6	−0.5	1.1	4.9
Mar	105.1	−0.8	0.9	2.2	112.1	0.5	0.6	4.1
Apr	105.4	0.3	0.8	2.2	112.2	0.1	0.5	3.5
May	103.6	−1.7	−0.4	1.7	114.0	1.6	0.9	3.9
Jun	104.1	0.5	−1.0	0.9	112.9	−1.0	1.0	4.0
Jul	105.0	0.9	−1.2	0.8	113.7	0.8	1.4	4.0
Aug	104.9	−0.1	–	0.9	113.4	−0.3	0.5	3.4
Sep	104.5	−0.4	0.4	0.8	113.2	−0.2	0.3	3.4
Oct	103.8	−0.6	0.1	0.2	113.2	–	−0.3	2.7
Nov	104.7	0.8	−0.3	−0.1	114.2	0.9	0.2	2.7
Dec	104.9	0.2	−0.3	–	113.1	−1.0	0.1	2.0
1999 Jan	104.4†	−0.5†	0.3†	–	114.7†	1.4†	0.7	2.3†
Feb	104.5	0.1	0.3	−0.5†	115.0	0.2	0.6†	2.3
Mar	105.6	1.1	0.4	−0.5	116.2	1.0	1.6	3.0
Apr	104.4	−1.1	0.2	−0.6	115.4	−0.6	1.3	3.2
May	104.9	0.5	0.4	0.3	116.8	1.2	1.6	3.0
Jun	104.6	−0.2	−0.2	0.3	116.8	–	0.9	2.9
Jul	105.8	1.1	0.3	0.9	116.9	0.1	1.1	2.9
Aug	106.8	0.9	0.8	1.1	117.7	0.7	0.8	3.3
Sep	106.0	−0.8	1.5	1.4	117.6	−0.1	0.9	3.5
Oct	105.1	−0.9	0.8	1.5	118.5	0.8	0.9	4.1
Nov	105.7	0.7	−0.2	1.2	119.0	0.4	1.1	4.2
Dec	104.6	−1.1	−1.0	0.7	119.1	0.1	1.3	4.7

For footnotes see table 1 of this article.

Sources: Office for National Statistics;
For further information on these data please
telephone 01633 813388,
fax 01633 812575,
or email hugh.skipper@ons.gov.uk

The effects of taxes and benefits on household income, 1998-99

Tim Harris
Office for National Statistics
Zone B4/08
1 Drummond Gate
London SW1V 2QQ
Tel: 020 7533 5770
E-mail: tim.harris@ons.gov.uk

SUMMARY

This article examines how taxes and benefits redistribute income between various groups of households in the United Kingdom, shows where different types of households and individuals are in the income distribution and looks at the changing levels of income inequality over time. The data presented are for 1998-99.

Redistribution through taxes and benefits

Government intervention, by means of taxes and benefits, alters the incomes of households. 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. Taxes and benefits therefore tend to reduce the differences between households' incomes. Before government intervention, the top fifth of households have an average of £51,000 per year in original income (that is from sources such as earnings, occupational pensions and investments). This is around 17 times as great as the figure of £2,900 for the bottom fifth. However, after taxes and benefits, the ratio is greatly reduced to four to one.

Cash benefits play the largest part in reducing inequality. The majority of these go to households in the lower part of the distribution, with the poorest two fifths receiving 60 per cent of the total. These households typically receive around £5,000 from cash benefits, representing around two thirds of gross income for the bottom quintile group and two fifths for the next group. These proportions are even higher for retired households in this part of the distribution, with the majority of cash benefits for these households coming from contributory benefits, particularly the state 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 households is double that paid by the bottom fifth: 24 per cent compared with 12 per cent. 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 resulting in relatively large payments of indirect tax. In addition some high income households channel a relatively high proportion of their income into savings 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.

Households also receive benefits in kind from services provided free or at subsidised prices by government, such as health and education. The amount received falls gradually as income increases indicating that these benefits lead to a reduction in inequality.

Characteristics across the income distribution

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 groups. There are also distinct patterns by household type. Households containing one adult and at least one child are concentrated in the bottom fifth while retired households, particularly those containing only one woman, are over-represented in the bottom two quintile groups.

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.

Trends in income inequality

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 the fall only reversed a small part of the rise seen in the previous decade. However the latest figures show that inequality of disposable income rose again between 1995-96 and 1998-99.

Changes in the income distribution over time have been the focus of much study. The article includes discussion of recent work which has attempted to identify some of the factors which have influenced these changes.

CONCEPTS AND SOURCES

This study examines how taxes and benefits redistribute income. 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 shows the stages in the 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 £219 billion of taxes and £181 billion of benefits have been allocated to households. This is equivalent to 67 per cent and 55 per cent respectively of general government expenditure, which totalled over £327 billion in 1998 (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 that are relatively robust to these changes. These include the Gini coefficients and other measures of inequality in Appendix 2. Beyond these measures, the reader should be cautious about making 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, which is used as a proxy for their level of welfare. Equivalisation is a standard methodology that 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 £6,100 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 other 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.

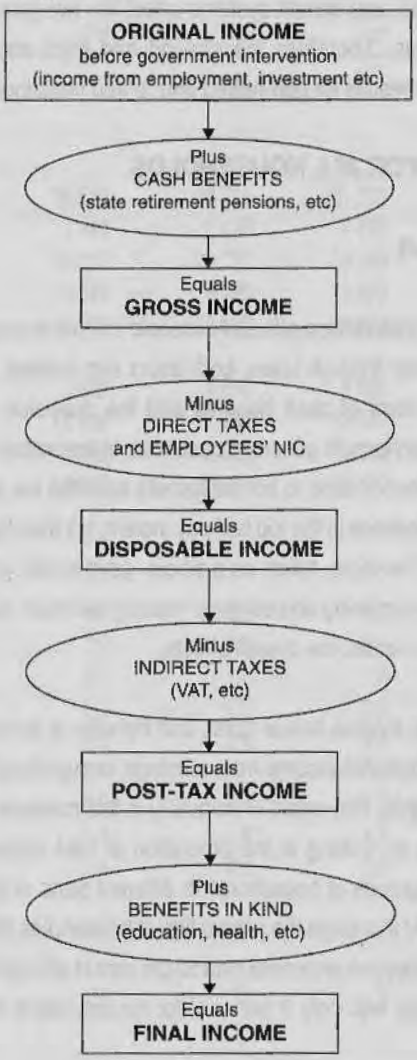
Equivalised income is used only to rank the households. Most monetary values shown in the article are not equivalised. Where equivalised amounts are given, they are shown in *italics*. Once the households have been ranked, the distribution is split into five (or ten) equally sized groups - that is quintile groups (or decile groups). The bottom and second quintile groups are those with the lowest equivalised disposable incomes while the fourth and top groups 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 under-estimation 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 1997-8* [1]. This series uses data from the Family Resources Survey and contains an income adjustment for households at the top of the income distribution, which is made using the Inland Revenue's Survey of Personal Incomes.

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

Chart 1
Stages of redistribution



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

Government intervention affects household income in various ways: money is taken through taxes, both direct and indirect, and given back in the form of cash benefits and the provision of free or subsidised services. In general, 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 in benefits. Therefore, taken as a whole, government intervention leads to income being shared more equally between households. Table A summarises the overall effects.

In this article, income before taxes and benefits is termed original income and includes income from earnings, occupational pensions and investments. The extent of inequality in this measure of income can be seen by looking at the proportion of total original income received by groups of households in different parts of the income distribution. At this stage the richest fifth of households (those in the top quintile group) receive more than 50 per cent of all original income. This compares with only 3 per cent for households in the bottom fifth.

Adding cash benefits to original income produces gross income. In contrast to original income, the amount received from cash benefits is higher for households lower down the income distribution than for those at the top. This has an equalising effect on the distribution, raising the share of income received by the bottom quintile group to 7 per cent of gross income while the share of the top fifth is reduced to 44 per cent.

The tax system has a much smaller effect on income inequality. The shares of income for disposable income (that is after direct taxes) and post-tax income (after indirect taxes) for each quintile group are similar to those for gross income. The direct tax system has a small equalising effect while the indirect system reverses this.

Another way of looking at how taxes and benefits change inequality is to calculate Gini coefficients - a widely used summary measure of inequality (see Appendix 3, paragraph 51). It can take values from 0 to 100 per cent where a value of zero would indicate that each household had an equal share of income, while higher values indicate greater inequality.

The Gini coefficients produce a similar picture to the shares of income discussed above. The figure of 53 per cent for original income is reduced to 38 per cent for gross income by the inclusion of cash benefits - a large reduction in inequality. The coefficient for disposable income shows the equalising effect of direct taxes with the figure falling further to 35 per cent. The picture of indirect taxes reversing this effect is confirmed by the Gini coefficient rising to 39 per cent for post-tax income.

Characteristics of households

Different types of household are not spread evenly 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.

Household size does not vary much across the income distribution, with an average of between 2.2 and 2.5 people per household in each decile group. However there are differences in the split between adults and children. In particular there are more children in the lower half of the income distribution: the bottom decile group has almost three times as many children as the top group. The pattern for the numbers of men and women also varies across income groups: the number of women is fairly constant while households in the higher

TABLE A: Percentage shares of household income and Gini coefficients [1], 1998-99

	Percentage shares of equivalised income			
	Original income	Gross income	Disposable income	Post-tax income
Quintile group [2]				
Bottom	3	7	7	6
2nd	7	11	12	11
3rd	15	16	16	16
4th	25	23	23	22
Top	52	44	42	45
All households	100	100	100	100
Decile group [2]				
Bottom	1	3	3	2
Top	34	29	27	29
Gini coefficient (percent)	53	38	35	39

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.

TABLE B: Summary of the effects of taxes and benefits by quintile groups [1], 1998-99

	Quintile groups of households [1]					
	Bottom	2nd	3rd	4th	Top	All households
Income, taxes and benefits per household (£ per year) [2]						
Original income	2 940	7 260	16 570	26 700	51 220	20 940
plus cash benefits	4 810	5 170	3 440	2 030	1 120	3 310
Gross income	7 740	12 430	20 010	28 720	52 340	24 250
less direct taxes [3] and employees' NIC	920	1 710	3 680	6 130	12 660	5 020
Disposable income	6 830	10 730	16 330	22 590	39 680	19 230
less indirect taxes	2 190	2 650	3 820	4 840	6 340	3 970
Post-tax income	4 630	8 070	12 500	17 750	33 340	15 260
plus benefits in kind	4 190	3 400	3 340	2 630	2 100	3 130
Final income	8 820	11 470	15 840	20 380	35 440	18 390
Number of individuals per household						
Children [4]	0.8	0.5	0.6	0.5	0.3	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	2.4	2.2	2.4
People in full-time education	0.7	0.5	0.6	0.4	0.3	0.5
Economically active people	0.6	0.8	1.3	1.6	1.7	1.2
Retired people	0.6	0.7	0.4	0.3	0.2	0.4
Household type (percentages)						
Retired	39	44	26	15	9	27
Non-retired						
1 adult	12	11	12	16	21	15
2 adults	9	12	19	28	39	21
1 adult with children [5]	14	8	4	2	1	6
2 adults with children	19	17	24	22	17	20
3 or more adults [6]	7	9	15	17	12	12
All household types	100	100	100	100	100	100

1 Households are ranked by equivalised disposable income.
2 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).
3 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 benefits and rate rebates.
4 Children are defined as people aged under 16 or aged between 16 and 18, unmarried and receiving non-advanced further education.
5 This group is smaller than the category of 'one parent families' because some of these families will be contained in the larger household types.
6 With or without children.

income groups tend to have more men than the lower groups. Higher income groups also contain more economically active people, with the top fifth of households having three times as many economically active people compared to the bottom fifth.

Households with one adult and one or more children are concentrated in the lower groups: around 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 will be included in other household types. For two adult households with children, the position in the income distribution tends to vary according to the number of children: those with three or more children tend to be in lower groups than those with only one or two. This reflects the fact that households with three

or more children are less likely to have two economically active adults compared to those with fewer children. In addition households with higher numbers of children will tend to have higher needs than smaller households; as the ranking of households is based on income adjusted for the needs of the household (i.e. equivalised income, adjusted for household size and composition) this increases the chance that households with three or more children will be found in the lower part of the income distribution. Where there are no children in the household, non-retired two adult households tend to be found in the higher income groups.

Retired households are over-represented at the lower end of the distribution: more than 60 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 group receive from the various measures of income are shown in Table B with more detailed information for decile groups in Appendix 1, Table 2a.

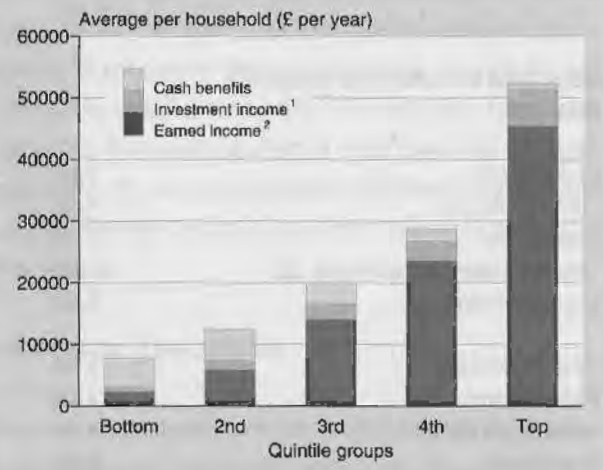
On average households receive a little under £21,000 a year in original income but this varies widely between households. Those in the top quintile group have around £51,000 compared with £2,900 for the bottom fifth. This pattern is driven by differences in the numbers of economically active people and the employment status of the chief economic supporter between the groups. For example almost nine in ten adults in the top quintile group are economically active compared with only one in three 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.

Earnings from employment or self-employment are typically the most important source of income, making up three quarters of gross income on average. However cash benefits are also a significant source, particularly for households in the lower half of the distribution. Of the total amount of cash benefits paid, the bottom two quintile groups receive 60 per cent. These households typically receive around £5,000 from cash benefits, representing approximately two thirds of gross income for the bottom quintile group and two fifths for the next group (Chart 2).

Higher income groups pay both higher amounts of direct tax and higher proportions of their income in direct tax. The top quintile group pays almost £13,000 per household in income tax, national insurance

Chart **2**

Sources of gross income by quintile groups of equivalised disposable income, 1998-99



1 Investment income includes occupational pensions and annuities.
2 Earned income includes wages and salaries, income from self-employment and income from 'fringe benefits'.

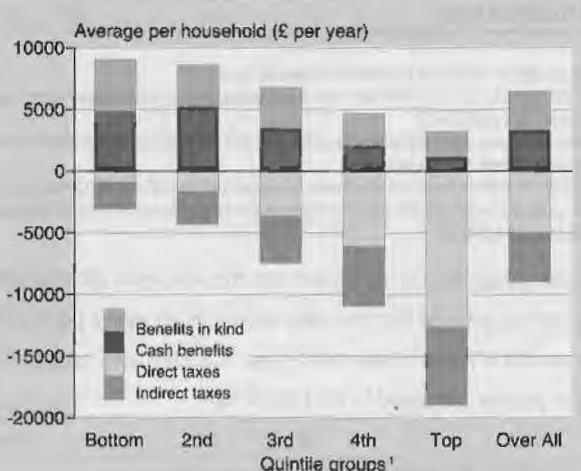
contributions and local tax - 24 per cent of gross income. In contrast the direct tax bill for households in the bottom fifth is £920, representing 12 per cent of their gross income. Looking at income tax on its own, the top two quintile groups pay around 80 per cent of the total.

In contrast to benefits and direct taxes, the indirect tax system has a different effect: households with higher incomes still pay more in absolute terms but not as a proportion of their incomes. This means that indirect taxes tend to increase income inequality.

The final stage in the redistribution process is the addition of benefits

Chart **3**

Summary of the effects of taxes and benefits on ALL households, 1998-99



1 Households are ranked throughout by equivalised disposable incomes.

in kind, such as those from state education and the health service. Households in the bottom quintile group receive the equivalent of around £4,200 from these benefits, which is twice the amount received by the top fifth.

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 £8,800 to £35,400, a ratio of one to four compared to a ratio of one to 17 before government intervention.

Changes in inequality over time

There are many ways of measuring income inequality. Different measures may show different trends depending on whether they are particularly sensitive to changes in one part of the distribution. Calculation of several measures of inequality allows us to see whether a particular trend is peculiar to one particular measure or backed up by others. The tables in Appendix 2 show trends for three measures of inequality. Table 1 shows trends for the shares of income figures that have already been seen for 1998-99 earlier in this article. Table 2 contains time series for Gini coefficients. Table 3 shows another concept: using the ratio of the incomes at two points in the distribution. Two such measures are calculated: the ratio of the disposable income at the 90th percentile compared to the 10th (P90/P10); and the ratio of the 75th percentile to the 25th (P75/P25). (The 90th percentile is the income below which nine out of ten households lie.) An advantage of this measure is that it is not affected by extreme values at either end of the distribution, which may be inaccurately measured.

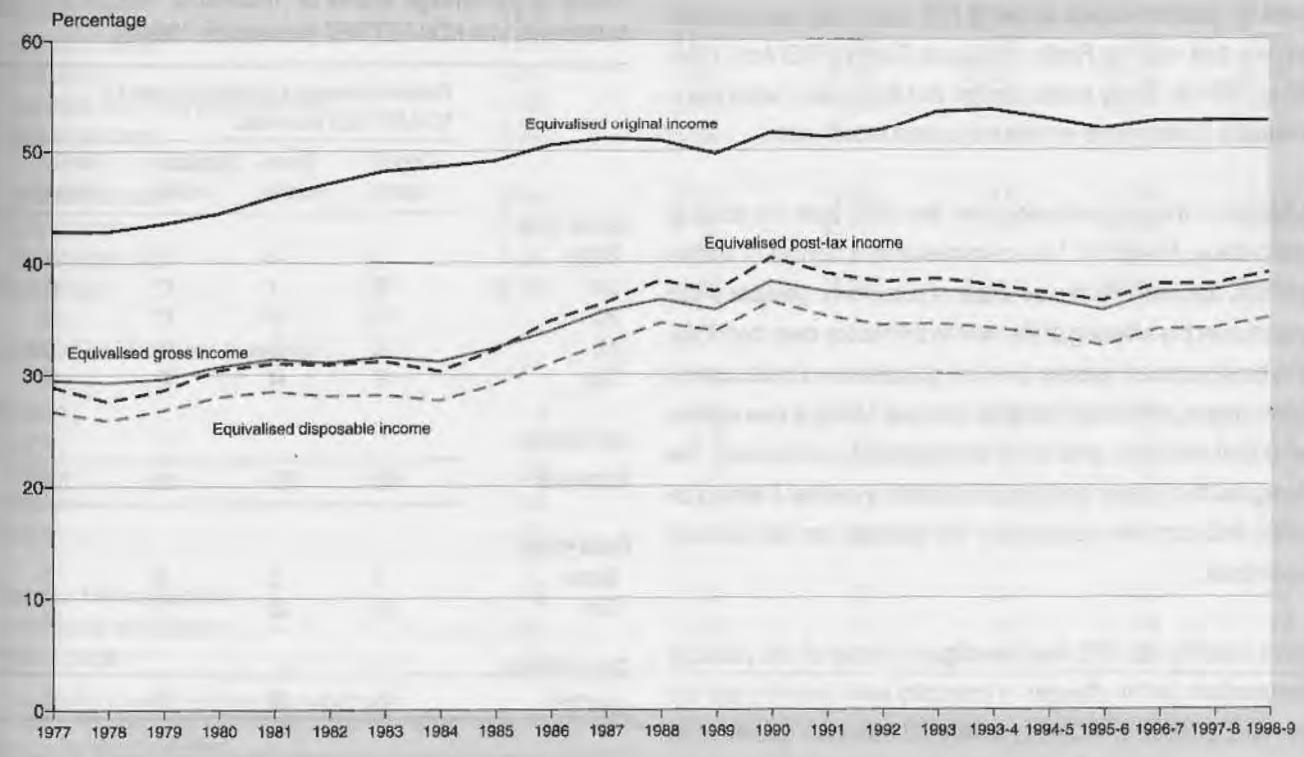
Chart 4 shows how inequality has been changing over time since 1977 for the various measures of income as measured by the Gini coefficient. It indicates several distinct phases over the last two decades and shows that the different measures of income do not always show the same trend in inequality.

The 1980s were characterised by a large increase in inequality. The Gini coefficient for original income rose steadily throughout this period. However the pattern for the coefficient for disposable income is slightly different: for the first half of the decade inequality of disposable income was stable; this was then followed by six years which saw a rapid rise in inequality.

The figures for the 1990s show a different story. Inequality of original income was relatively stable for the first two years, and then showed a small rise up to 1993-94. Since then the coefficient has again remained stable. In contrast inequality of disposable income reduced slowly until 1995-96 although the fall only reversed a small part of the rise seen in the previous decade. However data for the latest

Chart **4**

Gini coefficients 1977 to 1998-99



years show that, since 1995-96, inequality of disposable income has risen once again.

As with all measures derived from sample surveys, the Gini coefficients are subject to sampling errors. To determine whether the estimated changes in inequality are real changes or simply the result of sampling variation, we have calculated confidence intervals for the coefficients in Chart 4 using software developed at the London School of Economics [2]. These show that, in most cases, the year-on-year changes are within the bounds of sampling variation. An exception to this is the period from 1986 to 1988 when the increases are large enough to say that inequality of disposable income rose in each successive year. However when we look at changes over periods of more than one year there are many more periods which cannot be explained by variation introduced by the sampling process. The confidence intervals confirm that the trends described in the paragraphs above are, in fact, real changes in inequality.

Figures produced by the alternative measures of inequality shown in Appendix 2 tell the same story as the Gini coefficient: one of increasing inequality of disposable income in the 1980s, particularly in the second half of the decade; a small decline from 1990 to 1995-96; and a small rise over the most recent three year period. We can therefore be confident that the trends observed in Chart 4 are not due to a peculiarity of this particular measure.

Further work on this subject has recently been done by the Institute for Fiscal Studies [3] (IFS). Their calculation of several inequality measures and associated confidence intervals confirms the findings here. In addition, as well as using FES data, they also analysed income data from the Family Resources Survey (FRS) from 1994-95 to 1997-98. These results confirm that there was a small rise in inequality of disposable income in the most recent years.

Changes in income distribution over time have been the focus of much study. The OECD [4] has commissioned a number of studies into this, and has identified a number of reasons for possible shifts, in particular the widening of the income distribution over the 1980s. The most prominent reasons given are globalisation of trade pushing down wages, recent technological changes having a bias against unskilled workers, and other developments concerning the deregulation of labour and product markets. However it should be noted that complete reasons for the changes are still not well understood.

More recently the IFS has investigated some of the possible explanations for the changes in inequality seen over the last two decades, particularly focussing on why the trends are different over the economic cycles of the 1980s and the 1990s. Among the explanations offered were the effect of wage growth, the change in the importance of self-employment income and change in the level of unemployment and the type of people affected. Like previous work, the IFS study has only looked at a limited set of factors, particularly concentrating on the role of the labour market. The work has not yet been able to examine the role of tax and benefit policy or the contribution of changing household composition and demographics.

The IFS found that wage growth had a part to play in changes in inequality. In general inequality tends to rise during times of rapid real wage growth. One of the major reasons for this is that the poorest households are the most likely to contain non-working individuals, so that earnings make up a much smaller fraction of income for these groups. The economic recovery in the 1980s was characterised by large increases in wages in each of the years from 1984 to 1988 matching the period when inequality increased rapidly. In contrast wage growth was very slow to return in the recovery of the 1990s - a time of stable or falling inequality.

Self-employment income was found to be much more unequally distributed among the self-employed than earnings are among employees. For this reason, we might expect any growth in the importance of this source to increase total inequality. Indeed the IFS found that the trend in self-employment income as a proportion of total income does mirror the trend in inequality: this source made up 6 per cent of income in 1979, rose to a peak of 12 per cent in 1990, fell to 8 per cent in 1994-95 and recovered to 10 per cent by the end of the period.

TABLE C: Percentage shares of household income and Gini coefficients [1] for NON-RETIRED households, 1998-99

	Percentage shares of equivalised income for NON-RETIRED households			
	Original income	Gross income	Disposable income	Post-tax income
Quintile group [2]				
Bottom	3	6	7	6
2nd	10	11	12	11
3rd	16	16	17	16
4th	24	23	23	22
Top	47	44	42	45
All non-retired households	100	100	100	100
Decile group [2]				
Bottom	1	2	3	2
Top	30	28	27	29
Gini coefficient (percent)	45	38	35	39

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.

Growing unemployment also tends to increase inequality as people are deprived of earning a wage and see their incomes fall as they rely more on state benefits, which are uprated in line with prices rather than earnings. The IFS found that the rising unemployment of the early 1980s increased inequality, as many low-skilled male workers moved from the lower-middle of the distribution towards the bottom. The fall in unemployment at the end of the decade did not reverse this trend, partly because many of the new jobs went to young single people living with their parents, recent graduates and second earners. Consequently falling unemployment improved the position of people who might already have been higher up the income distribution, exacerbating inequality.

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 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 1.2 in the bottom quintile group to 0.3 in the top.

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 fifth and a further 25 per cent in the second quintile group. Two adult households with three or more children are also concentrated towards the bottom although not to the same extent, while two adult households without children are over-represented at the top.

TABLE D: Summary of the effects of taxes and benefits on NON-RETIRED households by quintile groups [1], 1998-99

	Quintile groups of NON-RETIRED households [1]					All non-retired households
	Bottom	2nd	3rd	4th	Top	
Income, taxes and benefits per household (£ per year)						
Original income	4 520	14 090	23 190	32 250	57 430	26 290
plus cash benefits	4 690	3 510	1 850	1 020	670	2 350
Gross income	9 210	17 590	25 040	33 270	58 100	28 640
less direct taxes [2] and employees' NIC	1 160	3 060	5 220	7 450	14 390	6 260
Disposable income	8 040	14 540	19 820	25 820	43 710	22 390
less indirect taxes	2 690	3 790	4 630	5 410	6 750	4 650
Post-tax income	5 350	10 750	15 190	20 410	36 960	17 730
plus benefits in kind	4 760	3 770	3 210	2 510	1 960	3 240
Final income	10 120	14 520	18 390	22 920	38 930	20 980
Number of individuals per household						
Children [3]	1.2	0.9	0.7	0.5	0.3	0.7
Adults	1.7	2.0	2.0	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	3.0	2.9	2.8	2.5	2.3	2.7
People in full-time education	1.2	0.8	0.7	0.4	0.3	0.7
Economically active people	0.9	1.5	1.7	1.9	1.8	1.6
Retired people	0.1	0.1	0.1	0.0	0.0	0.1

1 Households are ranked by equivalised disposable income.
2 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.
3 Children are defined as people aged under 16 or aged between 16 and 18, unmarried and receiving non-advanced further education.

For single person households there are different patterns for men and women. Households containing only one man are over-represented at the top of the distribution while one woman households are more evenly spread throughout the income groups.

Original income

The average original income for non-retired households is just over £26,000. As mentioned above, inequality of original income is lower for non-retired households than for all households - the ratio of the average for the bottom quintile group to the top is one to 13 (compared to one to 17 for all households).

The original income of households shows a relatively strong relationship to the number of economically active people it contains. Households in the top three quintile groups typically contain twice as many economically active people as those in the lowest group.

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 almost three quarters of all cash benefits.

The average non-retired household receives £2,300 in cash benefits. The bottom fifth receive almost double this amount while those in the top quintile group typically get £670. However the patterns for contributory and non-contributory benefits are different.

Most non-contributory benefits, particularly 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.

In contrast, one criterion for receipt of contributory benefits is the amount of national insurance contributions that has been paid by, or on behalf of, the individual. The amounts received from these benefits are highest in the second quintile group.

For all non-retired households, cash benefits provide 8 per cent of gross income on average. However for those in the bottom quintile group they form a much larger proportion - 51 per cent. Their payment results in a significant reduction in income inequality.

Direct taxes

Households at the lower end of the income distribution pay smaller amounts of direct tax compared with households with higher incomes. Of the total income tax paid by non-retired households, the bottom two quintile groups pay less than 10 per cent. This compares with 75 per cent of the total paid by the top two fifths.

In addition, low income households also pay a smaller proportion of their income in income tax. This is due to the progressive nature of the income tax system (Table F). As a proportion of their gross incomes, households in the bottom quintile group typically pay 5 per cent in income tax compared with 19 per cent for those in the top quintile group.

TABLE E: Cash benefits for NON-RETIRED households by quintile group [1], 1998-99

	Quintile groups of NON-RETIRED households [1]					All non-retired households
	Bottom	2nd	3rd	4th	Top	
Average per household (£ per year)						
Contributory						
Retirement pension	150	400	390	170	150	250
Incapacity benefit	460	530	260	110	40	280
Job seeker's allowance [2]	110	20	20	20	10	40
Other	80	40	50	110	50	70
Total contributory	800	1 000	730	410	260	640
Non-contributory						
Income support	1 240	560	130	60	60	410
Child benefit	700	510	400	280	190	420
Housing benefit	1 030	610	100	20	0	350
Job seeker's allowance [3]	230	60	10	10	0	60
Sickness/disablement related	250	540	330	130	100	270
Other	440	230	150	120	60	200
Total non-contributory	3 890	2 510	1 130	620	410	1 710
Total cash benefits	4 690	3 510	1 850	1 020	670	2 350
Cash benefits as a percentage of gross income	51	20	7	3	1	8

1 Households are ranked by equivalised disposable income.
2 Contribution based.
3 Income based.

TABLE F: Taxes as a percentage of gross income for NON-RETIRED households by quintile group [1], 1998-99

	Quintile groups of NON-RETIRED households [1]					All non-retired households
	Bottom	2nd	3rd	4th	Top	
Percentages						
Direct taxes						
Income tax [2]	5.0	8.9	12.2	14.0	18.8	14.4
Employees' NIC	2.6	4.7	5.5	5.8	4.2	4.8
Local taxes [3]	5.0	3.8	3.2	2.6	1.7	2.6
All direct taxes	12.6	17.4	20.9	22.4	24.8	21.8
All indirect taxes	29.2	21.5	18.5	16.2	11.6	16.2
All taxes	41.9	38.9	39.4	38.7	36.4	38.1

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

For national insurance contributions, the amount paid as a proportion of gross income rises as income rises until the fourth quintile group; the proportion then falls for the top fifth. This is because national insurance contributions are only levied on the first £485 of weekly earnings in 1998-99, so part of the earnings of many of those in the top quintile group will not be subject to this deduction.

Local taxes mainly consist of council tax in Great Britain and domestic rates in Northern Ireland and are shown net of council tax benefits 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 group are typically less than half of those in the top fifth. However, when expressed as a proportion of gross income, the burden decreases as income rises - local taxes represent 5 per cent of gross income for the bottom fifth but less than 2 per cent for those in the top quintile group.

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 recorded in different ways (see Appendix 3, paragraph 6). 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 total income and, separately, as a proportion of

TABLE G: Indirect taxes as a percentage of (a) disposable income and (b) household expenditure[1] for NON-RETIRED households by quintile group [2], 1998-99

	Quintile groups of NON-RETIRED households [2]					All non-retired households
	Bottom	2nd	3rd	4th	Top	
(a) Percentages of disposable income						
VAT	12.6	10.2	9.6	8.7	7.1	8.7
Duty on alcohol	1.5	1.3	1.3	1.3	0.9	1.1
Duty on tobacco	4.6	2.9	1.8	1.2	0.4	1.5
Duty on hydrocarbon oils and vehicle excise duty	4.2	3.6	3.4	3.2	2.0	2.9
Other indirect taxes	10.5	8.0	7.4	6.6	5.0	6.6
All indirect taxes	33.5	26.0	23.4	20.9	15.4	20.8
(b) Percentages of expenditure [1]						
VAT	8.2	8.4	8.2	8.0	7.4	7.9
Duty on alcohol	1.0	1.1	1.1	1.2	0.9	1.0
Duty on tobacco	3.0	2.4	1.5	1.1	0.5	1.3
Duty on hydrocarbon oils and vehicle excise duty	2.8	3.0	2.9	2.9	2.1	2.6
Other indirect taxes	6.8	6.6	6.3	6.1	5.3	6.0
All indirect taxes	21.8	21.4	19.9	19.2	16.2	18.9

1 Calculated to be consistent with disposable income. See paragraph 32 of Appendix 3 for the definition of expenditure.
2 Households are ranked by equivalised disposable income.

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 non-retired households pay around two and a half times as much indirect tax as the bottom fifth. However, when expressed as a percentage of disposable income or expenditure, the proportion paid in indirect tax 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 as income rises. This is because those in higher income groups tend to channel a larger proportion of their income into savings 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.

Benefits in kind

The Government provides certain goods and services to households either free at the time of use or at subsidised prices. This study allocates these benefits in kind to individual households in order to arrive at 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 1998 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, welfare milk, housing subsidy and travel subsidies. These items are equivalent to a further 1.1 per cent of general government expenditure. Table H gives a summary of the value of these benefits for each quintile group.

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 households. A study by Sefton [5] attempted to allow for variations in the use of the health service according to socio-economic characteristics and incomes. His results showed a picture that is broadly similar to that presented here.

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 and the South East having high levels of commuting by public transport together with higher than average household incomes.

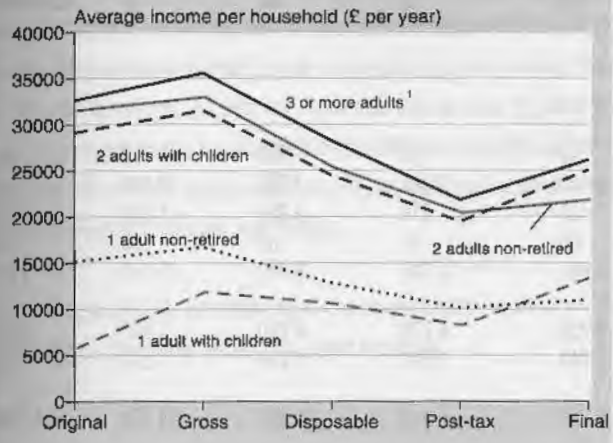
TABLE H: Benefits in kind for NON-RETIRED households by quintile group [1], 1998-99

	Quintile groups of NON-RETIRED households [1]					All non-retired households
	Bottom	2nd	3rd	4th	Top	
Average per household (£ per year)						
Education	2 900	2 010	1 550	1 030	630	1 630
National health service	1 620	1 630	1 570	1 400	1 210	1 490
Housing subsidy [2]	90	50	20	10	0	40
Travel subsidies	30	40	60	60	110	60
School meals and welfare milk	120	30	10	0	0	30
All benefits in kind	4 760	3 770	3 210	2 510	1 960	3 240
Benefits in kind as a percentage of post-tax income	89	35	21	12	5	18

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

Chart **5**

Income stages by non-retired household types, 1998-99



1 With or without children.

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 89 per cent for the lowest quintile group to 5 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 £13,000 compared to original incomes of £5,800. 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, those with children have slightly lower levels of original income than those without, but the effects of taxes and cash benefits are broadly similar for both groups. Final incomes are higher for those with children 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.

TABLE J: Percentage shares of household income and Gini coefficients [1] for RETIRED households, 1998-99

	Percentage shares of equivalised income for RETIRED households [2]			
	Original income	Gross income	Disposable income	Post-tax income
Quintile group [2]				
Bottom	3	10	10	9
2nd	5	13	14	13
3rd	9	16	17	17
4th	21	22	22	22
Top	61	40	38	39
All retired households	100	100	100	100
Decile group [2]				
Bottom	1	4	4	3
Top	44	26	24	25
Gini coefficient (percent)	66	30	28	31

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.

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 the definition of a retired person). These households have quite distinct income and expenditure patterns and 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 households. Table J shows that, before government intervention, the richest fifth of retired households receive almost two thirds of total original income, while the Gini coefficient for this measure of income is 66 per cent. Both these measures are higher (showing more inequality) than equivalent figures for non-retired households. However after the impact of taxes and benefits there is a large reduction in inequality. Cash benefits play by far the largest part in bringing about this reduction 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). Original income ranges from £1,000 for the bottom quintile group to £18,500 for the top. On the other hand, amounts received from cash benefits vary less across the distribution: on average households in the bottom fifth receive around £4,800 from this source, while those in the third and fourth quintile groups receive around £6,500. These cash benefits make up large proportions of the gross incomes for the bottom four quintiles ranging

TABLE K: Summary of the effects of taxes and benefits on RETIRED households by quintile group [1],1998-99

Income, taxes and benefits per household (£ per year)	Quintile groups of RETIRED households [1]					All retired households
	Bottom	2nd	3rd	4th	Top	
Original income						
Earnings	50	70	150	250	700	250
Occupational pensions	600	1 100	2 000	4 780	12 180	4 130
Investment income	350	420	570	1 300	5 500	1 630
Other income	20	60	30	130	160	80
Total original income	1 020	1 660	2 760	6 470	18 540	6 090
plus Contributory benefits	4 300	4 750	4 770	4 740	4 600	4 630
Non-contributory benefits	520	1 340	1 810	1 780	1 350	1 360
Gross income	5 850	7 740	9 340	12 980	24 480	12 080
less Income tax [2]	100	120	290	870	3 270	930
Employees' NIC	0	0	10	10	30	10
Local taxes [3]	580	530	560	680	900	650
Disposable income	5 170	7 090	8 480	11 420	20 270	10 490
less Indirect taxes	1 470	1 490	1 660	2 230	3 520	2 070
Post-tax income	3 700	5 590	6 820	9 190	16 750	8 410
plus National health service	2 910	2 730	2 600	2 680	2 390	2 660
Housing subsidy [4]	30	70	70	50	20	50
Other benefits in kind	140	130	80	90	110	110
Final income	6 790	8 520	9 570	12 010	19 270	11 230

1 Households are ranked by equivalised disposable income.
2 After tax relief at source on mortgage interest and life assurance premiums.
3 Council tax, local rates and water charges after deducting discounts, council tax benefit and rate rebates.
4 Does not include tax relief at source on mortgage payments, which is included in the income tax payments shown above.

from 82 per cent for the bottom quintile group to 50 per cent for the fourth quintile group. The top fifth are much less dependent on cash benefits - these account for only 24 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 almost three-quarters of their cash benefits (Appendix 1, Table 4A).

Non-contributory benefits are lowest in the bottom quintile group, where more than two-thirds of 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 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 50 per cent more original income than women on average: £4,900 for men compared with £3,400 for women. However after the addition of benefits and the deduction of taxes the differences are greatly reduced, so that final income levels for these men and women are similar.

The author gratefully acknowledges the considerable work done for this study by Christine Smith and Dave Westcott.

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APPENDIX 1

Detailed tables for 1998-99

CONTENTS

TABLE 1 (Appendix 1) Taxes and benefits allocated to households as a percentage of general government expenditure, 1998

Taxes and compulsory social contributions [1] allocated to households	£ million	% of GGE [2]
Income tax (gross)	86 490	26.4
Tax reliefs (MIRAS ,etc)	-2 070	-0.6
Income tax (net)	84 410	25.8
Employees' & self-employed NI contributions	24 900	7.6
Council tax	11 600	3.5
Taxes on final goods and services		
VAT	37 940	11.6
Duty on hydrocarbon oils	10 470	3.2
Duty on tobacco	7 430	2.3
Vehicle excise duty	3 040	0.9
Duty on wines, cider, perry and spirits	3 020	0.9
Duty on beer	2 600	0.8
Betting duties	1 490	0.5
Camelot: payments to NLDF	1 470	0.4
Stamp duty on house purchase	1 070	0.3
Other	2 880	0.9
Taxes & NI contributions on intermediate goods & services [3]		
Employers' NI contributions	9 490	2.9
Commercial & industrial rates	6 890	2.1
Duty on hydrocarbon oils	5 260	1.6
VAT	3 080	0.9
Vehicle excise duty	840	0.3
Other	1 230	0.4
Total	219120	66.9

Benefits allocated to households	£ million	% of GGE [2]
Cash benefits		
Contributory		
Retirement	35 380	10.8
Incapacity benefit	7 320	2.2
Widows and guardians	980	0.3
Maternity/Statutory maternity pay	580	0.2
Unemployment/ Job seekers allowance	500	0.2
Other	300	0.1
Non-contributory		
Income support	11 780	3.6
Family benefits	9 710	3.0
War pensions	1 260	0.4
Other	15 490	4.7
Student maintenance grants	1 400	0.4
Rent rebates and allowances	11 340	3.5
Benefits in kind		
Health services	45 150	13.8
Education	37 090	11.3
Travel subsidies [4]	1 550	0.5
Housing subsidy	960	0.3
School meals and welfare milk	850	0.3
Total	181 640	55.4

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, 1999 Edition.

TABLE 2A (Appendix1) : Average incomes, taxes and benefits by decile groups of ALL households, 1998-99

	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 £)		*7 048*	*8 785*	*10 438*	*12 494*	*14 628*	*17 192*	*20 343*	*24 255*	*31 830*	
Number of households in the population ('000s)	2 464	2 465	2 469	2 463	2 471	2 463	2 465	2 469	2 465	2 470	24 664
Original income											
Wages and salaries	1 125	2 510	3 362	6 842	10 796	14 194	18 862	23 899	29 106	48 564	15 926
Imputed income from benefits in kind	0	10	4	28	68	212	255	365	665	1 351	296
Self-employment income	463	363	678	712	1 112	1 657	1 652	2 018	3 014	8 061	1 973
Occupational pensions, annuities	217	517	705	1 270	1 687	1 705	1 930	2 090	2 393	3 246	1 576
Investment income	198	264	304	376	506	701	692	1 157	1 578	4 015	979
Other income	117	88	102	137	208	290	294	179	185	261	186
Total	2 119	3 753	5 156	9 365	14 377	18 757	23 685	29 707	36 943	65 496	20 936
Direct benefits in cash											
Contributory											
Retirement pension	1 358	2 082	2 431	2 026	1 658	1 206	1 046	691	600	534	1 363
Job seeker's allowance (Contribution based)	115	59	14	20	13	17	23	14	8	4	29
Incapacity benefit	264	327	346	445	342	269	230	80	104	39	245
Widows' benefits	40	56	44	33	30	34	54	38	40	13	38
Statutory Maternity Pay/ Allowance	13	9	7	8	11	32	13	66	32	31	22
Non-contributory											
Income support	762	880	698	435	314	196	153	65	82	19	360
Child benefit	451	425	308	311	353	336	297	233	189	173	308
Housing benefit	538	897	944	623	414	221	123	41	11	0	381
Job seeker's allowance (Income based)	235	91	84	37	11	15	14	7	2	2	50
Invalid care allowance	19	43	80	56	53	17	48	3	5	0	32
Attendance allowance	25	55	113	164	171	160	58	43	29	11	83
Disability living allowance	63	106	209	317	310	194	221	71	52	27	157
War pensions / War widows' pensions	2	3	30	20	54	67	109	39	24	7	36
Severe disablement allowance	16	33	36	59	16	44	26	4	30	31	29
Industrial injury disablement benefit	12	22	27	51	24	6	7	10	0	14	17
Student maintenance awards	141	58	25	67	48	84	51	87	35	80	67
Government training schemes	20	12	10	7	14	34	5	20	2	0	12
Family credit	147	156	103	66	54	16	8	8	0	1	56
Other non-contributory benefits	42	36	44	49	18	29	19	29	7	6	28
Total cash benefits	4 262	5 351	5 552	4 794	3 907	2 979	2 506	1 551	1 252	990	3 314
Gross income	6 381	9 104	10 708	14 159	18 284	21 736	26 191	31 258	38 195	66 486	24 250
Direct taxes and Employees' NIC											
Income tax	249	378	547	1 077	1 789	2 529	3 374	4 464	6 024	13 352	3 378
less: Tax relief at source [1]	33	24	33	50	77	101	120	142	171	183	93
Employees' NI contributions	96	162	236	478	756	1 000	1 348	1 675	2 002	2 330	1 008
Local taxes [2]	697	706	718	764	800	811	847	884	933	1 086	825
less: Council tax benefit / Rate rebates	206	193	199	125	82	55	35	27	28	25	98
Total	803	1 029	1 269	2 144	3 185	4 183	5 414	6 855	8 760	16 559	5 020
Disposable income	5 578	8 075	9 439	12 016	15 099	17 554	20 777	24 403	29 434	49 927	19 230
Equivalised disposable income	*5 178*	*7 952*	*9 588*	*11 456*	*13 591*	*15 833*	*18 672*	*22 185*	*27 538*	*49 023*	*18 102*
Indirect taxes											
Taxes on final goods and services											
VAT	839	804	918	1 127	1 391	1 697	1 885	2 083	2 379	3 352	1 648
Duty on tobacco	258	283	242	329	367	270	339	254	260	152	275
Duty on beer and cider	59	44	64	78	97	103	138	172	160	141	105
Duty on wines & spirits	60	41	53	75	84	109	120	144	160	251	110
Duty on hydrocarbon oils	208	199	233	299	394	430	510	594	638	696	420
Vehicle excise duty	66	68	72	96	118	141	154	176	185	183	126
Television licences	80	83	83	86	89	91	92	92	93	92	88
Stamp duty on house purchase	16	11	12	18	22	34	35	45	60	108	36
Customs duties	18	17	18	22	27	32	36	40	44	62	32
Betting taxes	33	36	42	52	60	58	73	103	72	56	59
Insurance premium tax	12	10	12	16	22	26	32	36	40	56	26
Air passenger duty	6	3	6	5	11	16	25	28	23	54	18
Camelot National Lottery Fund	36	43	49	57	65	62	80	74	68	50	58
Other	5	6	4	5	12	29	19	14	17	30	14
Intermediate taxes											
Commercial and industrial rates	136	126	139	169	207	239	269	303	332	468	239
Employers' NI contributions	192	177	196	238	292	338	379	427	468	660	337
Duty on hydrocarbon oils	106	98	109	131	161	187	209	236	259	365	186
Vehicle excise duty	16	15	17	20	25	29	32	36	40	56	29
Other	93	86	96	116	142	164	185	208	228	321	164
Total indirect taxes	2 238	2 150	2 365	2 940	3 587	4 055	4 611	5 065	5 527	7 153	3 969
Post-tax income	3 340	5 925	7 074	9 076	11 511	13 498	16 166	19 338	23 908	42 774	15 261
Benefits in kind											
Education	2 317	1 450	1 234	1 169	1 379	1 280	1 080	883	686	598	1 208
National health service	2 091	2 129	2 108	2 001	1 971	1 854	1 622	1 507	1 422	1 284	1 799
Housing subsidy	65	83	71	56	42	27	21	16	6	1	39
Rail travel subsidy	13	9	12	14	24	26	38	42	59	119	36
Bus travel subsidy	30	34	42	37	32	27	21	18	11	10	26
School meals and welfare milk	89	66	34	18	9	5	6	3	3	2	24
Total	4 604	3 771	3 501	3 294	3 457	3 219	2 787	2 468	2 187	2 015	3 130
Final income	7 945	9 696	10 575	12 370	14 969	16 717	18 953	21 806	26 095	44 789	18 391

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, 1998-99

	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	2.5	2.3	2.2	2.3	2.5	2.5	2.5	2.4	2.3	2.2	2.4
Adults	*1.7*	*1.6*	*1.6*	*1.8*	*1.9*	*1.9*	*1.9*	*2.0*	*2.0*	*1.9*	*1.8*
Men	*0.7*	*0.7*	*0.7*	*0.8*	*0.9*	*1.0*	*1.0*	*1.1*	*1.0*	*1.0*	*0.9*
Women	*0.9*	*0.9*	*0.9*	*0.9*	*1.0*	*0.9*	*1.0*	*0.9*	*0.9*	*0.8*	*0.9*
Children	*0.8*	*0.7*	*0.5*	*0.5*	*0.6*	*0.6*	*0.5*	*0.4*	*0.3*	*0.3*	*0.5*
Economically active people	0.6	0.5	0.6	0.9	1.2	1.3	1.5	1.7	1.7	1.6	1.2
Retired people	0.5	0.6	0.7	0.6	0.5	0.4	0.3	0.2	0.2	0.2	0.4
People in full-time education	0.87	0.61	0.48	0.47	0.56	0.54	0.46	0.38	0.28	0.28	0.49
In state primary schools	*0.41*	*0.34*	*0.23*	*0.21*	*0.25*	*0.27*	*0.21*	*0.16*	*0.12*	*0.08*	*0.23*
In state secondary schools	*0.24*	*0.18*	*0.17*	*0.16*	*0.19*	*0.15*	*0.16*	*0.11*	*0.07*	*0.07*	*0.15*
In further and higher education	*0.21*	*0.08*	*0.06*	*0.08*	*0.09*	*0.10*	*0.06*	*0.07*	*0.05*	*0.05*	*0.09*
In other educational establishments	*0.00*	*0.01*	*0.02*	*0.01*	*0.03*	*0.02*	*0.03*	*0.04*	*0.03*	*0.08*	*0.03*
Composition (percentages)											
Household type											
Retired											
1 adult	21	22	30	20	14	13	11	7	4	4	15
1 adult men	*4*	*5*	*7*	*7*	*5*	*3*	*3*	*2*	*2*	*1*	*4*
1 adult women	*17*	*17*	*23*	*13*	*10*	*10*	*8*	*5*	*2*	*2*	*11*
2 or more adults	13	21	20	17	15	9	7	5	6	6	12
Non-retired											
1 adult	15	10	10	13	11	14	15	17	21	21	15
1 adult men	*10*	*4*	*6*	*6*	*5*	*9*	*8*	*11*	*14*	*15*	*9*
1 adult women	*5*	*6*	*4*	*6*	*5*	*5*	*7*	*6*	*8*	*6*	*6*
2 adults	10	7	9	15	17	21	24	31	35	43	21
3 or more adults	5	3	4	6	8	9	12	14	13	7	8
1 adult with children	11	16	9	6	5	3	3	2	1	1	6
2 adults with 1 child	4	5	4	7	9	6	8	8	9	7	7
2 adults with 2 children	8	7	7	7	12	14	13	11	7	8	9
2 adults with 3 or more children	8	5	5	5	4	4	3	2	1	2	4
3 or more adults with children	3	3	3	4	6	7	4	3	3	2	4
Household tenure											
Rented	47	58	57	45	35	25	20	18	10	11	33
Local authority rented	*28*	*40*	*33*	*22*	*18*	*11*	*7*	*5*	*1*	*1*	*17*
Housing association	*6*	*8*	*10*	*10*	*6*	*4*	*4*	*2*	*1*	*0*	*5*
Other rented unfurnished	*3*	*5*	*8*	*5*	*3*	*3*	*3*	*3*	*3*	*3*	*4*
Rented furnished	*10*	*4*	*4*	*7*	*5*	*5*	*3*	*6*	*4*	*5*	*5*
Rent free	*1*	*1*	*3*	*1*	*3*	*2*	*1*	*2*	*1*	*1*	*2*
Owner occupied	53	42	43	55	65	75	80	82	90	89	67
With mortgage	*20*	*14*	*18*	*27*	*37*	*48*	*55*	*61*	*70*	*70*	*42*
Rental purchase	*-*	*-*	*0*	*0*	*1*	*0*	*0*	*-*	*0*	*-*	*0*
Owned outright	*33*	*28*	*24*	*29*	*28*	*27*	*25*	*22*	*20*	*19*	*25*
Age of chief economic supporter											
Under 25	10	6	4	4	4	4	3	3	2	1	4
Over 24 and under 35	17	18	11	12	15	19	18	23	28	25	19
Over 34 and under 45	18	14	15	17	22	21	24	24	23	24	20
Over 44 and under 55	13	9	10	15	15	19	21	25	25	30	18
Over 54 and under 65	11	13	13	15	14	14	15	14	13	12	14
Over 64 and under 75	12	19	24	21	16	13	11	7	6	5	13
Over 74	19	21	23	17	14	10	8	4	2	3	12
Employment status of chief economic supporter											
Self-employed	9	4	5	5	6	9	7	8	9	12	7
Full-time employee at work	5	14	16	31	44	54	61	70	73	71	44
Part-time employee at work	10	9	6	7	6	5	5	4	5	4	6
Unemployed	10	6	5	5	2	3	3	3	2	3	4
Unoccupied and under minimum NI age	34	26	18	15	11	7	4	3	3	3	12
Retired/unoccupied over minimum NI age	32	42	49	38	30	22	19	11	9	7	26
Other	1	0	0	-	0	-	-	-	-	-	0

TABLE 3A (Appendix 1):Average incomes, taxes and benefits by decile groups of NON-RETIRED households,1998-99

	Decile groups of non-retired households ranked by equivalised disposable income										All such house-
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	holds
Average per household (£ per year)											
Decile points (equivalised £)		*7 274*	*9 541*	*12 057*	*14 298*	*16 542*	*19 285*	*22 317*	*26 593*	*34 796*	
Number of households in the population ('000s)	1 808	1 813	1 816	1 812	1 810	1 814	1 813	1 811	1 813	1 812	18 123
Original income											
Wages and salaries	1 727	4 991	9 456	14 324	17 525	21 347	26 363	28 886	34 979	56 339	21 594
Imputed income from benefits in kind	0	17	35	82	246	293	362	426	1 003	1 556	402
Self-employment income	698	810	1 224	1 329	2 389	1 923	1 795	2 977	3 261	10 369	2 677
Occupational pensions, annuities	91	121	421	496	523	681	737	1 148	978	1 334	653
Investment income	152	118	224	176	408	446	438	908	1 223	3 358	745
Other income	169	140	181	224	326	274	241	217	256	212	224
Total	2 836	6 197	11 541	16 629	21 416	24 963	29 936	34 563	41 700	73 168	26 295
Direct benefits in cash											
Contributory											
Retirement pension	97	202	337	457	379	404	176	169	166	143	253
Job seeker's allowance (Contribution based)	171	50	24	21	25	24	27	5	8	5	36
Incapacity benefit	373	552	593	476	254	266	118	99	52	36	282
Widows' benefits	30	92	42	18	21	24	46	64	32	5	37
Statutory maternity pay / Allowance	18	16	9	20	40	19	42	67	38	34	30
Non-contributory											
Income support	1 211	1 267	759	363	149	103	75	35	103	25	409
Child benefit	718	691	545	485	429	381	304	254	195	177	418
Housing benefit	871	1 180	747	464	143	63	28	15	0	-	351
Job seeker's allowance (Income based)	355	113	92	38	16	9	20	2	3	2	65
Invalid care allowance	21	65	79	66	30	35	14	12	0	0	32
Attendance allowance	0	-	21	25	62	40	11	13	16	-	19
Disability living allowance	75	206	368	340	217	145	113	44	50	29	159
War pensions / War widows' pensions	-	12	3	16	4	38	6	6	4	-	9
Severe disablement allowance	21	65	70	19	54	35	20	8	33	38	36
Industrial injury disablement benefit	14	23	37	31	2	4	6	8	0	20	15
Student maintenance awards	184	78	107	49	124	55	89	71	17	108	88
Government training schemes	32	9	18	15	48	7	32	3	0	0	16
Family credit	225	279	129	81	21	13	7	5	1	-	76
Other non-contributory benefits	47	19	48	6	18	7	14	19	1	0	18
Total cash benefits	4 462	4 920	4 029	2 990	2 035	1 673	1 148	897	720	617	2 349
Gross income	7 298	11 117	15 570	19 619	23 451	26 636	31 083	35 460	42 419	73 785	28 644
Direct taxes and Employees' NIC											
Income tax	338	670	1 313	1 983	2 838	3 524	4 268	5 392	7 034	15 234	4 259
less: Tax relief at source [1]	44	44	71	103	117	142	158	169	191	199	124
Employees' NI contributions	143	334	655	1 006	1 242	1 518	1 866	2 002	2 317	2 597	1 368
Local taxes [2]	682	708	759	801	812	839	856	903	946	1 098	840
less: Council tax benefit / Rate rebates	242	221	145	82	44	22	25	25	31	26	86
Total	878	1 448	2 512	3 604	4 731	5 717	6 806	8 104	10 075	18 705	6 258
Disposable income	6 420	9 669	13 059	16 015	18 720	20 919	24 277	27 356	32 345	55 081	22 386
Equivalised disposable income	*5 134*	*8 415*	*10 853*	*13 157*	*15 353*	*17 959*	*20 817*	*24 216*	*29 993*	*53 587*	*19 948*
Indirect taxes											
Taxes on final goods and services											
VAT	980	1 052	1 411	1 549	1 878	1 913	2 131	2 354	2 586	3 563	1 944
Duty on tobacco	347	397	414	427	336	371	337	271	226	163	329
Duty on beer and cider	77	62	105	118	127	153	170	187	173	149	132
Duty on wines and spirits	61	43	78	85	119	111	139	157	178	269	124
Duty on hydrocarbon oils	255	279	394	431	507	511	650	641	659	736	506
Vehicle excise duty	70	76	107	122	156	159	177	188	178	184	142
Television licences	77	83	86	88	91	93	91	93	94	92	89
Stamp duty on house purchase	18	14	23	25	37	39	45	52	70	119	44
Customs duties	21	21	27	30	35	37	40	44	48	66	37
Betting taxes	32	37	59	65	58	78	68	107	89	55	65
Insurance premium tax	13	12	17	22	27	31	35	36	42	55	29
Air passenger duty	7	3	7	11	15	24	25	25	26	54	20
Camelot National lottery fund	39	47	60	69	67	87	77	76	69	52	64
Other	6	5	5	14	35	13	20	24	18	29	17
Intermediate taxes											
Commercial and industrial rates	156	157	201	229	263	277	304	335	361	498	278
Employers' NI contributions	220	221	284	323	370	391	429	472	509	703	392
Duty on hydrocarbon oils	122	122	157	179	205	216	237	261	281	388	217
Vehicle excise duty	19	19	24	27	31	33	36	40	43	60	33
Other	107	108	138	157	180	190	209	230	248	342	191
Total indirect taxes	2 626	2 757	3 598	3 975	4 538	4 726	5 221	5 593	5 899	7 596	4 653
Post-tax income	3 794	6 912	9 461	12 040	14 182	16 193	19 057	21 764	26 446	47 484	17 733
Benefits in kind											
Education	3 422	2 387	2 189	1 841	1 674	1 433	1 053	1 014	648	620	1 628
National health service	1 670	1 563	1 622	1 642	1 654	1 489	1 394	1 411	1 261	1 166	1 487
Housing subsidy	92	89	53	43	24	15	14	13	6	1	35
Rail travel subsidy	17	14	20	24	35	40	37	61	72	130	45
Bus travel subsidy	16	17	18	24	21	16	14	10	7	6	15
School meals and welfare milk	148	88	42	16	6	6	4	4	2	4	32
Total	5 366	4 158	3 944	3 591	3 415	3 000	2 516	2 513	1 995	1 928	3 242
Final income	9 161	11 070	13 405	15 631	17 597	19 193	21 573	24 277	28 441	49 411	20 976

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, 1998-99

	Decile groups of non-retired households ranked by equivalised disposable income										All such house-holds
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Average per household (number)											
People	3.1	2.9	2.9	2.9	2.8	2.7	2.6	2.5	2.3	2.2	2.7
Adults	*1.8*	*1.7*	*1.9*	*2.0*	*2.1*	*2.0*	*2.1*	*2.0*	*2.0*	*1.9*	*1.9*
Men	*0.8*	*0.7*	*1.0*	*1.0*	*1.1*	*1.0*	*1.1*	*1.1*	*1.0*	*1.1*	*1.0*
Women	*0.9*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*0.9*	*0.9*	*0.8*	*1.0*
Children	*1.3*	*1.2*	*0.9*	*0.8*	*0.8*	*0.7*	*0.5*	*0.5*	*0.3*	*0.3*	*0.7*
Economically active people	0.9	0.9	1.4	1.6	1.7	1.8	1.9	1.9	1.9	1.8	1.6
Retired people	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1
People in full-time education	1.32	0.99	0.85	0.75	0.70	0.60	0.47	0.41	0.28	0.29	0.67
In state primary schools	*0.65*	*0.53*	*0.38*	*0.34*	*0.34*	*0.31*	*0.20*	*0.15*	*0.12*	*0.07*	*0.31*
In state secondary schools	*0.37*	*0.32*	*0.30*	*0.25*	*0.20*	*0.19*	*0.15*	*0.13*	*0.07*	*0.07*	*0.20*
In further and higher education	*0.29*	*0.12*	*0.14*	*0.12*	*0.14*	*0.07*	*0.08*	*0.08*	*0.05*	*0.06*	*0.12*
In other educational establishments	*0.01*	*0.02*	*0.03*	*0.03*	*0.03*	*0.03*	*0.04*	*0.05*	*0.03*	*0.10*	*0.04*
Composition (percentages)											
Household type											
Non-retired											
1 adult	22	18	20	17	16	20	18	22	22	24	20
1 adult men	*14*	*9*	*10*	*9*	*10*	*11*	*12*	*15*	*14*	*18*	*12*
1 adult women	*8*	*9*	*10*	*8*	*7*	*8*	*7*	*7*	*8*	*6*	*8*
2 adults	15	14	21	24	28	30	33	34	43	48	29
3 or more adults	8	6	10	12	12	13	14	16	13	8	11
1 adult with children	19	26	12	7	3	4	2	2	1	1	8
2 adults with 1 child	7	10	9	12	10	8	10	10	9	8	9
2 adults with 2 children	13	13	12	15	17	17	13	9	8	8	13
2 adults with 3 or more children	12	8	10	5	6	4	2	3	1	2	5
3 or more adults with children	5	5	7	9	8	5	6	4	2	2	5
Household tenure											
Rented	62	64	47	38	25	20	19	13	11	11	31
Local authority rented	*37*	*39*	*21*	*18*	*10*	*6*	*5*	*3*	*2*	*0*	*14*
Housing association	*6*	*11*	*9*	*7*	*2*	*4*	*3*	*1*	*1*	*0*	*4*
Other rented unfurnished	*4*	*7*	*7*	*4*	*4*	*4*	*3*	*3*	*2*	*4*	*4*
Rented furnished	*14*	*6*	*10*	*7*	*6*	*5*	*6*	*5*	*4*	*6*	*7*
Rent free	*1*	*1*	*1*	*2*	*2*	*1*	*2*	*2*	*2*	*1*	*1*
Owner occupied	38	36	53	62	75	80	81	87	89	89	69
With mortgage	*26*	*23*	*37*	*49*	*57*	*64*	*69*	*71*	*77*	*75*	*55*
Rental purchase	*-*	*-*	*0*	*1*	*0*	*0*	*0*	*-*	*0*	*-*	*0*
Owned outright	*12*	*13*	*16*	*12*	*18*	*15*	*12*	*15*	*12*	*14*	*14*
Age of chief economic supporter											
Under 25	14	10	7	6	4	4	4	3	2	1	6
Over 24 and under 35	28	27	20	20	24	22	28	23	32	28	25
Over 34 and under 45	27	28	28	30	29	28	29	26	24	26	28
Over 44 and under 55	18	16	22	23	24	25	25	32	28	33	25
Over 54 and under 65	11	16	20	14	14	17	13	14	12	11	14
Over 64 and under 75	1	2	3	4	4	3	1	1	1	1	2
Over 74	0	0	1	2	1	1	1	0	0	0	1
Employment status of chief economic supporter											
Self-employed	12	9	9	8	12	9	7	10	9	15	10
Full-time employee at work	8	26	44	60	68	75	80	78	81	76	60
Part-time employee at work	15	15	11	10	7	6	5	6	5	4	8
Unemployed	15	9	7	6	3	4	4	2	3	3	6
Unoccupied and under minimum NI age	48	39	26	13	7	3	3	2	1	1	14
Retired/unoccupied over minimum NI age	0	2	3	4	3	3	1	1	1	0	2
Other	1	0	0	0	-	-	-	-	-	-	0

TABLE 4A (Appendix 1) : Average incomes, taxes and benefits by decile groups of RETIRED households, 1998-99

	Decile groups of retired households ranked by equivalised disposable income										All such house-holds
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Average per household (£ per year)											
Decile points (equivalised £)	*6 486*		*7 924*	*8 845*	*9 685*	*10 669*	*12 173*	*13 982*	*16 781*	*21 371*	
Number of households in the population ('000s)	653	652	654	657	654	652	655	655	654	656	6 541
Original income											
Wages and salaries	68	31	61	78	67	139	198	291	404	904	224
Imputed income from benefits in kind	-	-	-	-	-	13	-	-	-	2	1
Self-employment income	-	6	2	9	-	78	20	-	47	51	21
Occupational pensions, annuities	410	789	1 127	1 079	1 477	2 529	4 154	5 409	7 523	16 836	4 133
nvestment income	271	435	415	416	514	627	1 100	1 507	2 165	8 826	1 628
Other income	1	37	34	93	45	23	200	57	184	137	81
Total	750	1 298	1 640	1 674	2 104	3 408	5 672	7 264	10 323	26 755	6 089
Direct benefits in cash											
Contributory											
Retirement pension	3 665	4 585	4 621	4 710	4 342	4 775	4 550	4 380	4 205	4 562	4 440
Job seeker's allowance (Contribution based)	11	29	36	-	-	-	-	4	-	-	8
Incapacity benefit	72	167	11	77	211	133	151	298	163	135	142
Widows' benefits	48	20	42	-	64	24	62	26	74	53	41
Statutory maternity pay/ Allowance	-	-	-	-	-	-	-	-	-	-	-
Non-contributory											
Income support	121	120	204	342	222	222	198	436	385	9	226
Child benefit	-	1	2	6	-	3	8	-	2	6	3
Housing benefit	46	223	579	731	949	736	414	473	473	22	465
Job seeker's allowance (Income based)	18	-	26	6	-	-	16	9	-	-	8
Invalid care allowance	20	23	44	47	58	49	28	9	52	-	33
Attendance allowance	63	155	114	248	166	420	473	499	333	134	261
Disability living allowance	11	56	20	45	210	252	221	251	392	68	153
War pensions / War widows' pensions	6	7	5	33	43	61	111	235	406	184	109
Severe disablement allowance	-	-	-	37	13	16	-	-	21	11	10
Industrial injury disablement benefit	3	25	25	30	49	46	42	19	15	-	26
Student maintenance awards	36	-	-	15	-	8	-	-	39	-	10
Government training schemes	-	8	5	-	-	-	-	-	-	-	1
Family credit	-	-	-	-	-	-	-	-	-	-	-
Other non-contributory benefits	44	60	44	64	33	64	46	64	88	48	55
Total cash benefits	4 163	5 481	5 780	6 390	6 360	6 810	6 320	6 702	6 650	5 233	5 989
Gross income	4 913	6 779	7 419	8 064	8 464	10 218	11 992	13 966	16 973	31 988	12 078
Direct taxes and Employees' NIC											
Income tax	75	129	123	129	204	380	714	1 035	1 655	4 925	937
less: Tax relief at source [1]	3	10	5	8	6	5	8	11	14	21	9
Employees' NI contributions	3	1	4	1	3	12	4	15	32	38	11
Local taxes [2]	740	716	697	710	714	737	777	799	843	1 073	781
less: Council tax benefit / Rate rebates	155	143	147	196	192	129	102	114	97	17	129
Total	661	695	672	637	723	995	1 385	1 725	2 419	5 998	1 591
Disposable income	4 253	6 084	6 747	7 427	7 741	9 223	10 607	12 241	14 553	25 990	10 487
Equivalised disposable income	*5 374*	*7 265*	*8 393*	*9 279*	*10 137*	*11 363*	*13 099*	*15 249*	*18 670*	*31 022*	*12 985*
Indirect taxes											
Taxes on final goods and services											
VAT	537	531	534	595	623	627	793	978	1 242	1 806	827
Duty on tobacco	112	131	81	127	126	160	126	162	169	79	127
Duty on beer and cider	22	22	24	24	36	36	37	41	40	40	32
Duty on wines and spirits	40	62	38	55	48	46	86	75	94	164	71
Duty on hydrocarbon oils	114	114	115	106	132	143	189	209	270	428	182
Vehicle excise duty	53	59	65	58	55	63	86	92	107	180	82
Television licences	86	90	80	87	77	84	87	90	91	92	86
Stamp duty on house purchase	9	9	8	7	6	9	11	13	16	47	14
Customs duties	12	12	12	13	13	14	17	20	23	35	17
Betting taxes	33	39	38	38	37	39	38	58	60	33	41
Insurance premium tax	10	9	9	10	9	11	16	19	28	60	18
Air passenger duty	4	3	8	5	3	3	8	8	29	42	11
Camelot National lottery fund	28	38	42	44	40	52	49	48	45	30	42
Other	2	13	2	2	6	2	7	4	12	17	7
Intermediate taxes											
Commercial and industrial rates	92	93	91	99	98	109	126	147	176	264	130
Employers' NI contributions	130	131	128	140	139	154	178	208	248	372	183
Duty on hydrocarbon oils	72	72	71	77	77	85	98	115	137	206	101
Vehicle excise duty	11	11	11	12	12	13	15	18	21	32	16
Other	63	64	62	68	67	75	87	101	121	181	89
Total indirect taxes	1 429	1 503	1 421	1 567	1 603	1 724	2 055	2 405	2 929	4 108	2 074
Post-tax income	2 824	4 581	5 326	5 860	6 138	7 498	8 552	9 836	11 624	21 882	8 412
Benefits in kind											
Education	139	14	29	94	-	30	58	-	37	25	43
National health service	2 960	2 867	2 720	2 740	2 582	2 631	2 791	2 560	2 408	2 376	2 661
Housing subsidy	30	39	68	66	76	73	45	50	42	2	49
Rail travel subsidy	5	3	7	3	5	7	2	10	22	29	9
Bus travel subsidy	52	65	56	68	62	63	55	53	44	53	57
School meals and welfare milk	-	1	-	-	-	1	0	-	-	0	0
Total	3 186	2 989	2 880	2 971	2 705	2 806	2 950	2 673	2 553	2 485	2 820
Final income	6 009	7 570	8 206	8 831	8 843	10 304	11 502	12 509	14 178	24 367	11 232

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, 1998-99

	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	1.6	1.5	1.5	1.4	1.5	1.5	1.5	1.4	1.6	1.5
Adults	*1.45*	*1.56*	*1.48*	*1.47*	*1.38*	*1.50*	*1.49*	*1.49*	*1.43*	*1.58*	*1.48*
Men	*0.50*	*0.66*	*0.56*	*0.54*	*0.58*	*0.63*	*0.69*	*0.58*	*0.60*	*0.72*	*0.61*
Women	*0.94*	*0.90*	*0.92*	*0.93*	*0.80*	*0.87*	*0.80*	*0.91*	*0.83*	*0.86*	*0.88*
Children	-	*0.00*	*0.00*	*0.01*	-	*0.01*	*0.03*	-	*0.00*	*0.01*	*0.01*
Economically active people	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1
Retired people	1.3	1.5	1.4	1.4	1.3	1.4	1.4	1.4	1.4	1.5	1.4
People in full-time education	0.03	0.00	0.01	0.03	-	0.01	0.02	-	0.01	0.01	0.01
Composition (percentages)											
Household type											
Retired											
1 adult	62	46	56	56	64	53	54	54	60	42	55
1 adult men	*10*	*12*	*12*	*11*	*20*	*16*	*19*	*13*	*18*	*15*	*15*
1 adult women	*51*	*34*	*44*	*45*	*44*	*36*	*35*	*40*	*43*	*27*	*40*
2 or more adults	*38*	*54*	*44*	*44*	*36*	*47*	*46*	*46*	*40*	*58*	*45*
Household tenure											
Rented	22	33	52	56	57	49	37	30	24	6	37
Local authority rented	15	23	40	41	35	26	20	20	18	0	24
Housing association	6	3	7	6	13	13	8	6	4	1	7
Other rented unfurnished	1	4	3	3	7	6	2	0	1	2	3
Rented furnished	0	1	0	1	0	3	2	1	0	0	1
Rent free	-	1	2	5	2	1	4	3	1	3	2
Owner occupied	78	67	48	44	43	51	63	70	76	94	63
With mortgage	3	9	5	5	6	6	6	5	8	11	6
Rental purchase	-	-	-	1	-	-	-	-	-	-	0
Owned outright	75	58	43	39	37	45	58	64	68	83	57
Age of chief economic supporter											
Under 25	-	-	-	-	-	-	-	-	-	-	-
Over 24 and under 35	-	-	-	-	-	-	-	-	-	-	-
Over 34 and under 45	-	-	-	-	-	-	-	-	-	-	-
Over 44 and under 55	2	-	1	0	-	-	1	-	2	1	1
Over 54 and under 65	13	8	10	10	9	9	10	14	13	24	12
Over 64 and under 75	30	43	43	43	44	51	45	49	47	50	44
Over 74	55	49	46	47	47	41	43	37	39	25	43
Employment status of chief economic supporter											
Self-employed	-	-	1	-	-	-	-	-	-	-	0
Full-time employee at work	-	-	-	-	-	-	-	-	-	-	-
Part-time employee at work	-	-	-	0	0	1	-	-	-	-	0
Unemployed	-	-	-	1	-	-	-	-	-	-	0
Unoccupied and under minimum NI age	9	4	5	4	4	3	7	10	9	17	7
Retired/unoccupied over minimum NI age	91	96	94	95	95	96	93	90	91	83	93

TABLE 5 (Appendix 1) : Average incomes, taxes and benefits by decile groups of NON-RETIRED households WITHOUT CHILDREN, 1998-99

	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 £)	*8 228*	*11 558*	*14 070*	*16 472*	*19 181*	*21 756*	*24 885*	*29 517*	*37 768*		
Number of households in the population ('000s)	1 080	1 084	1 085	1 080	1 084	1 084	1 081	1 084	1 086	1 085	10 835
Original income											
Wages and salaries	1 914	5 282	10 667	13 964	17 527	23 095	26 589	28 710	34 964	60 203	22 291
Imputed income from benefits in kind	0	6	51	66	111	239	267	472	841	1 531	358
Self-employment income	473	801	938	1 468	1 656	1 336	1 866	2 613	3 254	8 133	2 254
Occupational pensions, annuities	237	425	893	786	946	957	1 242	1 146	1 402	1 432	947
Investment income	253	261	231	381	516	481	851	1 031	1 404	4 012	942
Other income	155	138	154	305	99	80	100	32	386	91	154
Total	3 032	6 913	12 935	16 971	20 856	26 187	30 915	34 005	42 252	75 403	26 947
Direct benefits in cash											
Contributory											
Retirement pension	206	581	836	664	542	318	160	223	193	215	394
Job seeker's allowance (Contribution based)	188	52	19	45	30	37	3	2	15	2	39
Incapacity benefit	542	919	675	459	358	167	116	106	70	22	343
Widows' benefits	63	52	47	31	40	41	51	21	12	1	36
Statutory Maternity Pay/ Allowance	5	-	10	-	-	37	-	11	-	-	6
Non-contributory											
Income support	447	653	378	204	80	118	85	187	43	0	219
Child benefit	5	6	16	3	9	3	5	-	13	4	7
Housing benefit	641	826	344	226	64	44	11	25	-	-	218
Job seeker's allowance (Income based)	287	120	28	21	13	27	3	0	6	1	51
Invalid care allowance	29	71	43	36	16	4	7	12	-	-	22
Attendance allowance	-	22	42	96	46	9	11	11	17	-	25
Disability living allowance	111	323	414	293	132	136	83	64	48	24	163
War pensions / War widows' pensions	-	20	14	7	18	3	10	-	7	-	8
Severe disablement allowance	38	104	47	67	20	26	-	61	70	-	43
Industrial injury disablement benefit	10	45	25	-	4	10	10	-	17	16	14
Student maintenance awards	279	106	42	185	65	28	115	65	10	175	107
Government training schemes	24	28	3	39	4	48	3	0	-	-	15
Family credit	10	3	-	-	-	-	-	-	-	-	1
Other non-contributory benefits	28	16	10	22	11	23	31	1	1	1	14
Total cash benefits	2 915	3 949	2 993	2 398	1 453	1 080	702	789	521	462	1 726
Gross income	5 948	10 861	15 928	19 369	22 309	27 267	31 617	34 794	42 773	75 865	28 673
Direct taxes and Employees' NIC											
Income tax	361	740	1 523	2 111	2 742	3 644	4 485	5 250	6 886	16 252	4 399
less: Tax relief at source [1]	31	31	58	74	110	134	148	165	184	191	113
Employees' NI contribution	149	351	740	974	1 266	1 665	1 913	2 059	2 364	2 590	1 407
Local taxes [2]	634	682	771	755	791	797	845	873	923	1 056	813
less: Council tax benefit / Rate rebates	181	174	104	62	19	22	31	27	20	30	67
Total	932	1 567	2 872	3 703	4 670	5 950	7 064	7 991	9 969	19 677	6 440
Disposable income	5 016	9 294	13 056	15 665	17 639	21 317	24 552	26 804	32 804	56 188	22 233
Equivalised disposable income	*5 455*	*9 920*	*12 790*	*15 253*	*17 867*	*20 537*	*23 284*	*27 128*	*33 297*	*60 481*	*22 601*
Indirect taxes											
Taxes on final goods and services											
VAT	896	1 008	1 285	1 569	1 650	1 940	2 206	2 179	2 638	3 659	1 903
Duty on tobacco	242	367	410	371	428	337	286	241	212	169	306
Duty on beer and cider	101	106	105	121	157	183	237	155	178	154	150
Duty on wines and spirits	79	74	85	118	109	140	175	145	234	268	143
Duty on hydrocarbon oils	228	283	367	433	459	603	581	619	639	777	499
Vehicle excise duty	67	84	105	138	149	173	180	183	175	180	143
Television licences	73	81	85	90	92	90	92	93	92	91	88
Stamp duty on house purchase	16	13	18	29	33	40	41	57	73	113	43
Customs duties	19	19	25	29	31	36	41	40	48	64	35
Betting taxes	35	56	63	50	60	72	89	53	60	60	64
Insurance premium tax	13	13	18	23	27	31	36	37	42	55	29
Air passenger duty	9	4	6	15	24	23	36	19	30	64	23
Camelot National lottery fund	39	62	70	62	92	80	80	70	59	51	67
Other	3	4	14	21	8	27	30	10	7	25	15
Intermediate taxes											
Commercial and industrial rates	143	145	188	221	235	273	308	298	359	482	265
Employers' NI contributions	202	205	265	312	331	384	434	420	507	680	374
Duty on hydrocarbon oils	112	113	146	172	183	212	240	232	280	376	207
Vehicle excise duty	17	17	23	27	28	33	37	36	43	58	32
Other	98	100	129	152	161	187	212	205	247	331	182
Total indirect taxes	2 393	2 754	3 407	3 955	4 278	4 865	5 342	5 091	5 942	7 657	4 568
Post-tax income	2 622	6 539	9 649	11 710	13 361	16 452	19 210	21 713	26 861	48 531	17 665
Benefits in kind											
Education	1 831	598	256	537	192	174	282	152	223	180	442
National health service	934	1 127	1 353	1 294	1 137	1 102	1 084	1 016	989	917	1 095
Housing subsidy	61	62	45	40	14	18	16	8	4	0	27
Rail travel subsidy	23	17	17	29	31	44	49	61	73	147	49
Bus travel subsidy	16	19	32	23	20	13	12	6	7	6	15
School meals and welfare milk	-	-	0	-	-	-	-	-	-	-	0
Total	2 865	1 823	1 703	1 922	1 395	1 351	1 444	1 244	1 295	1 250	1 629
Final income	5 488	8 362	11 351	13 633	14 756	17 803	20 654	22 956	28 156	49 781	19 294

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, 1998-99

	Decile groups of non-retired households with children ranked by equivalised disposable income										All such house-holds
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Average per household (£ per year)											
Decile points (equivalised £)		*6 693*	*8 262*	*9 613*	*11 707*	*13 552*	*15 385*	*17 994*	*21 434*	*27 239*	
Number of households in the population ('000s)	727	730	725	730	731	728	724	734	730	729	7 288
Original income											
Wages and salaries	1 700	4 156	6 308	11 919	16 479	20 844	24 330	29 484	35 402	54 937	20 556
Imputed income from benefits in kind	0	26	15	50	67	339	547	600	920	2 104	467
Self-employment income	848	846	1 172	1 356	2 080	2 651	2 725	2 912	4 508	13 972	3 307
Occupational pensions, annuities	29	27	129	148	82	76	195	355	474	646	216
Investment income	81	55	46	148	176	245	392	381	752	2 242	452
Other income	239	80	169	156	322	279	617	533	461	423	328
Total	2 897	5 190	7 840	13 778	19 207	24 434	28 806	34 266	42 516	74 323	25 326
Direct benefits in cash											
Contributory											
Retirement pension	49	10	78	78	27	0	86	71	-	32	43
Job seeker's allowance (Contribution based)	156	66	12	8	21	7	15	8	15	4	31
Incapacity benefit	248	376	389	275	273	139	90	59	23	33	191
Widows' benefits	59	61	34	39	17	-	6	53	81	36	39
Statutory Maternity Pay/ Allowance	37	15	26	16	34	25	101	69	174	164	66
Non-contributory											
Income support	1 548	2 110	1 442	1 031	497	168	61	53	0	0	691
Child benefit	1 259	1 192	1 107	1 065	1 035	977	983	950	872	848	1 029
Housing benefit	956	1 378	1 327	828	701	204	68	27	-	-	549
Job seeker's allowance (Income based)	389	203	90	85	73	2	11	9	-	1	86
Invalid care allowance	15	18	113	86	95	42	43	64	-	-	48
Attendance allowance	-	-	-	19	-	-	25	28	-	16	9
Disability living allowance	45	116	250	369	251	232	59	160	33	10	153
War pensions / War widows' pensions	-	-	-	8	18	-	68	10	-	-	10
Severe disablement allowance	-	32	64	49	10	35	27	42	-	-	26
Industrial injury disablement benefit	8	34	25	35	27	17	5	-	5	-	16
Student maintenance awards	76	77	47	100	41	77	58	36	92	-	61
Government training schemes	34	18	12	7	21	53	32	5	5	-	19
Family credit	342	434	480	259	197	72	30	39	15	2	187
Other non-contributory benefits	39	42	40	39	57	11	1	1	0	0	23
Total cash benefits	5 263	6 183	5 536	4 397	3 395	2 063	1 770	1 684	1 315	1 146	3 275
Gross income	8 160	11 373	13 376	18 175	22 602	26 497	30 576	35 950	43 830	75 469	28 601
Direct taxes and Employees' NIC											
Income tax	371	527	862	1 561	2 343	3 247	4 099	5 060	7 040	15 403	4 051
less: Tax relief at source [1]	67	39	58	97	137	172	189	197	217	232	141
Employees' NI contributions	146	297	429	815	1 172	1 496	1 725	2 063	2 289	2 666	1 310
Local taxes [2]	733	729	726	811	849	852	885	953	1 036	1 243	882
less: Council tax benefit / Rate rebates	274	284	209	142	98	32	20	31	19	37	115
Total	909	1 230	1 750	2 948	4 129	5 391	6 500	7 848	10 129	19 044	5 988
Disposable income	7 251	10 143	11 625	15 227	18 473	21 106	24 076	28 102	33 701	56 426	22 613
Equivalised disposable income	*4 938*	*7 474*	*8 865*	*10 717*	*12 699*	*14 477*	*16 583*	*19 797*	*23 877*	*40 619*	*16 005*
Indirect taxes											
Taxes on final goods and services											
VAT	1 040	1 085	1 265	1 612	1 841	2 006	2 377	2 384	2 670	3 764	2 004
Duty on tobacco	399	520	431	437	409	419	254	308	272	175	362
Duty on beer and cider	51	50	60	86	123	127	145	142	137	136	106
Duty on wines and spirits	41	35	42	60	80	112	123	111	138	215	96
Duty on hydrocarbon oils	283	259	353	468	488	577	566	703	754	720	517
Vehicle excise duty	79	64	96	114	134	164	173	179	202	189	139
Television licences	83	80	87	90	92	92	93	96	93	95	90
Stamp duty on house purchase	23	12	15	26	35	45	45	52	65	134	45
Customs duties	22	22	24	30	36	39	44	46	55	76	39
Betting taxes	32	26	36	66	61	66	59	64	153	94	66
Insurance premium tax	13	11	13	19	24	31	35	39	41	59	29
Air passenger duty	3	4	4	8	9	21	26	13	26	39	15
Camelot National lottery fund	42	35	49	57	65	74	70	75	71	71	61
Other	11	6	4	6	12	6	62	18	15	57	20
Intermediate taxes											
Commercial and industrial rates	166	163	185	230	270	297	330	347	412	576	297
Employers' NI contributions	234	230	260	324	380	419	465	489	580	812	419
Duty on hydrocarbon oils	129	127	144	179	210	231	257	270	321	449	232
Vehicle excise duty	20	20	22	28	32	36	39	42	49	69	36
Other	114	112	127	158	185	204	226	238	283	396	204
Total indirect taxes	2 784	2 860	3 219	3 999	4 486	4 966	5 388	5 615	6 338	8 127	4 778
Post-tax income	4 467	7 283	8 406	11 228	13 987	16 140	18 688	22 487	27 363	48 299	17 835
Benefits in kind											
Education	4 384	3 824	3 648	3 611	3 579	3 343	3 364	3 004	2 874	2 271	3 390
National health service	2 349	2 041	1 808	2 018	2 043	1 906	2 172	2 048	2 146	2 167	2 070
Housing subsidy	108	134	86	49	48	14	11	12	13	1	47
Rail travel subsidy	12	10	24	14	32	35	52	42	60	114	39
Bus travel subsidy	14	16	20	12	21	17	14	12	9	6	14
School meals and welfare milk	252	211	134	79	46	19	14	20	7	16	80
Total	7 119	6 236	5 719	5 782	5 769	5 335	5 626	5 138	5 109	4 574	5 841
Final income	11 585	13 520	14 125	17 011	19 755	21 475	24 314	27 625	32 473	52 873	23 476

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 [1] by household type, 1998-99

	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	99	417	516	329	242	117	359
2nd	125	407	532	529	102	147	249
3rd	176	557	733	496	138	105	243
4th	165	327	493	425	158	154	312
5th	114	243	357	365	135	129	264
6th	82	247	329	232	214	119	333
7th	70	202	273	175	192	173	365
8th	53	115	168	129	280	136	416
9th	44	43	87	146	342	186	527
Top	32	58	90	138	370	157	527
All households in population ('000s)	960	2 618	3 578	2 964	2 172	1 422	3 595

	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	254	132	276	105	206	207	80	2 464
2nd	172	83	396	132	172	126	73	2 465
3rd	214	94	221	104	161	124	77	2 469
4th	358	149	153	161	183	124	105	2 463
5th	420	200	117	215	288	94	151	2 471
6th	527	224	71	146	338	103	160	2 463
7th	604	296	73	194	311	71	103	2 465
8th	770	337	42	209	262	51	83	2 469
9th	858	314	25	230	168	29	81	2 465
Top	1054	178	20	179	195	47	42	2 470
All households in population ('000s)	5 232	2 008	1 394	1 676	2 286	977	956	24 664

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 [1], 1998-99

	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
Average per household (£ per year)							
Original income	4 851	3 357	3 758	8 902	16 721	12 810	15 174
plus Cash benefits	4 745	5 203	5 080	7 086	1 384	1 717	1 516
Gross income	9 596	8 561	8 838	15 988	18 104	14 528	16 689
less Direct taxes and employees' NIC	1 292	1 040	1 108	2 175	4 259	3 204	3 842
Disposable income	8 304	7 520	7 731	13 813	13 845	11 323	12 847
Equivalised disposable income	*13 565*	*12 318*	*12 653*	*13 386*	*22 697*	*18 563*	*21 061*
less Indirect taxes	1 716	1 218	1 351	2 947	2 950	2 341	2 709
Post-tax income	6 587	6 303	6 379	10 866	10 895	8 982	10 138
plus Benefits in kind	2 120	2 379	2 310	3 436	834	860	844
Final income	8 707	8 682	8 689	14 302	11 729	9 842	10 982

	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
Average per household (£ per year)								
Original income	31 553	36 021	5 829	28 517	31 022	25 674	34 197	20 936
plus Cash benefits	1 428	2 879	6 053	2 044	1 977	3 937	3 810	3 314
Gross income	32 981	38 900	11 882	30 561	32 999	29 610	38 007	24 250
less Direct taxes and employees' NIC	7 605	8 053	1 237	6 878	7 497	6 049	7 685	5 020
Disposable income	25 376	30 847	10 645	23 683	25 501	23 561	30 322	19 230
Equivalised disposable income	*24 777*	*19 689*	*10 782*	*19 526*	*17 619*	*13 693*	*15 953*	*18 102*
less Indirect taxes	4 932	6 950	2 385	4 896	5 133	5 027	6 961	3 969
Post-tax income	20 444	23 897	8 261	18 787	20 368	18 534	23 362	15 261
plus Benefits in kind	1 389	3 659	5 127	3 485	5 581	9 119	6 761	3 130
Final income	21 834	27 557	13 387	22 271	25 949	27 652	30 123	18 391

1 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), 1998-99

	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)	*5 641*		*7 656*	*9 739*	*12 148*	*14 990*	*18 209*	*22 541*	*27 887*	*36 430*	
Number of households in the population ('000s)	2 465	2 463	2 466	2 469	2 465	2 470	2 464	2 466	2 467	2 469	24 664
Original income											
Wages and salaries	404	1 087	2 170	4 542	8 441	13 549	18 455	24 174	32 364	54 074	15 926
Imputed income from benefits in kind	0	6	2	31	43	103	239	392	710	1 431	296
Self-employment income	203	181	406	603	854	1 410	1 609	2 297	2 656	9 510	1 973
Occupational pensions, annuities	319	754	1 177	1 621	1 904	1 722	2 049	1 813	2 167	2 233	1 576
Investment income	235	286	366	535	769	761	774	1 135	1 378	3 551	979
Other income	108	88	154	141	154	174	244	203	298	297	186
Total	1 269	2 402	4 275	7 474	12 166	17 720	23 370	30 014	39 573	71 096	20 936
Direct benefits in cash											
Contributory											
Retirement pension	1 930	2 359	2 458	2 035	1 519	994	856	604	454	423	1 363
Job seeker's allowance (Contribution based)	32	51	36	53	25	28	27	15	13	6	29
Incapacity benefit	195	252	303	408	373	316	213	214	113	60	245
Widows' benefits	55	47	44	58	58	35	14	17	35	16	38
Statutory maternity pay/ Allowance	11	1	7	7	12	16	50	52	41	27	22
Non-contributory											
Income support	329	683	764	683	497	229	200	73	49	98	360
Child benefit	100	176	282	295	328	347	385	408	425	332	308
Housing benefit	506	1 044	821	669	432	209	83	43	5	-	381
Job seeker's allowance (Income based)	105	75	88	44	79	48	15	21	9	14	50
Invalid care allowance	4	11	30	88	53	47	31	32	24	5	32
Attendance allowance	30	68	183	202	123	64	64	42	32	21	83
Disability living allowance	33	69	166	296	311	278	150	114	88	66	157
War pensions / War widows' pensions	10	11	18	111	84	26	36	29	10	20	36
Severe disablement allowance	5	9	49	31	31	51	27	4	36	49	29
Industrial injury disablement benefit	13	8	22	26	20	41	12	15	7	11	17
Student maintenance awards	91	32	86	29	30	65	65	75	63	136	67
Government training schemes	8	5	10	9	11	9	17	13	25	17	12
Family credit	18	47	141	143	87	58	25	31	2	8	56
Other non-contributory benefits	19	31	50	34	29	25	47	31	7	6	28
Total cash benefits	3 496	4 978	5 557	5 223	4 099	2 888	2 318	1 833	1 436	1 314	3 314
Gross income	4 765	7 380	9 832	12 697	16 265	20 608	25 688	31 847	41 009	72 410	24 250
Direct taxes and Employees' NIC											
Income tax	166	264	466	922	1 564	2 398	3 281	4 401	6 385	13 934	3 378
less: Tax relief at source [1]	18	18	27	45	69	108	136	153	171	189	93
Employees' NI contributions	44	69	145	311	606	985	1 318	1 693	2 162	2 748	1 008
Local taxes [2]	621	647	718	749	786	822	850	923	988	1 143	825
less: Council tax benefit / Rate rebates	182	209	168	140	105	56	34	28	26	28	98
Total	630	753	1 134	1 798	2 782	4 041	5 280	6 837	9 338	17 609	5 020
Disposable income	4 135	6 627	8 698	10 899	13 483	16 567	20 409	25 011	31 671	54 801	19 230
Indirect taxes											
Taxes on final goods and services											
VAT	532	599	793	1 002	1 263	1 575	1 976	2 258	2 755	3 723	1 648
Duty on tobacco	142	205	244	286	332	348	377	285	284	250	275
Duty on beer and cider	41	39	48	60	82	101	135	156	175	218	105
Duty on wines and spirits	42	38	60	60	86	101	127	123	185	277	110
Duty on hydrocarbon oils	128	118	183	269	364	440	515	643	694	850	420
Vehicle excise duty	44	43	73	90	112	136	162	184	196	218	126
Television licences	78	78	84	88	89	91	93	93	93	94	88
Stamp duty on house purchase	12	8	14	17	22	35	43	49	60	100	36
Customs duties	12	13	17	20	25	31	37	42	51	69	32
Betting taxes	22	27	34	57	48	54	74	81	102	87	59
Insurance premium tax	8	8	12	15	19	25	32	39	43	60	26
Air passenger duty	4	4	6	7	8	15	26	27	25	56	18
Camelot National lottery fund	24	33	43	54	57	66	76	79	73	79	58
Other	2	4	12	9	10	20	13	9	26	36	14
Intermediate taxes											
Commercial and industrial rates	93	98	127	152	187	231	279	319	381	520	239
Employers' NI contributions	131	138	179	215	263	326	393	450	537	733	337
Duty on hydrocarbon oils	72	77	99	119	146	180	217	249	297	405	186
Vehicle excise duty	11	12	15	18	22	28	33	38	46	62	29
Other	64	67	87	105	128	159	192	219	262	357	164
Total indirect taxes	1 461	1 609	2 129	2 643	3 264	3 963	4 800	5 344	6 284	8 192	3 969
Post-tax income	2 674	5 018	6 569	8 256	10 219	12 603	15 608	19 666	25 387	46 609	15 261
Benefits in kind											
Education	861	552	959	1 109	1 128	1 318	1 421	1 570	1 632	1 525	1 208
National health service	1 698	1 845	2 098	1 994	1 829	1 627	1 735	1 686	1 778	1 698	1 799
Housing subsidy	56	84	73	66	45	27	16	9	11	1	39
Rail travel subsidy	7	12	9	15	18	21	31	54	59	130	36
Bus travel subsidy	29	40	36	33	29	23	20	17	19	14	26
School meals and welfare milk	15	31	53	44	46	12	13	11	4	6	24
Total	2 666	2 564	3 228	3 262	3 095	3 029	3 236	3 348	3 502	3 373	3 130
Final income	5 340	7 582	9 797	11 518	13 315	15 632	18 844	23 014	28 889	49 983	18 391

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, 1998-99

(i) Quintile groups

	Quintile groups of **equivalised** disposable income					All households
	Bottom	2nd	3rd	4th	Top	
Number of households in the population ('000s)						
Quintile groups of **unadjusted** disposable income						
Bottom	3 080	1 835	13	-	-	4 928
2nd	1 478	1 547	1 326	584	-	4 935
3rd	354	1 191	1 969	919	502	4 935
4th	18	337	1 395	2 222	959	4 930
Top	-	22	230	1 208	3 475	4 936
All households	4 929	4 932	4 934	4 933	4 936	24 664

(ii) Decile groups

	Decile groups of **equivalised** disposable income										All households
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Number of households in the population ('000s)											
Decile groups of **unadjusted** disposable income											
Bottom	1 395	791	279	-	-	-	-	-	-	-	2 465
2nd	501	392	747	809	13	-	-	-	-	-	2 463
3rd	307	683	479	49	619	329	-	-	-	-	2 466
4th	196	293	440	578	43	336	584	-	-	-	2 469
5th	59	233	260	401	709	115	80	584	44	-	2 465
6th	3	59	192	338	382	763	265	10	458	-	2 470
7th	3	14	44	203	476	298	639	468	115	203	2 464
8th	-	-	21	69	185	435	483	632	488	153	2 466
9th	-	-	7	16	43	182	362	548	812	498	2 467
Top	-	-	-	-	-	5	72	226	549	1 616	2 469
All households	2 464	2 465	2 469	2 463	2 471	2 463	2 465	2 469	2 465	2 470	24 664

APPENDIX 2

Trends in income distribution, 1978 to 1998-99

CONTENTS

This section gives Gini coefficients and shares of income for 1978 to 1998-99. 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 1994/5 - 1997/8,* 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 [1], 1978 to 1998-99 [2]

	1978	1980	1982	1984	1986	1988	1990	1992	1993-4	1995-6	1996-7	1997-8	1998-9
Equivalised original income													
Quintile group													
Bottom	3	2	3	3	3	2	2	2	2	3	2	2	3
2nd	10	9	8	7	7	7	7	6	6	7	7	7	7
3rd	18	18	17	17	16	16	15	15	14	15	15	15	15
4th	26	26	26	26	26	26	25	26	25	25	25	25	25
Top	43	44	46	47	49	50	51	50	52	50	51	51	52
All households	100	100	100	100	100	100	100	100	100	100	100	100	100
Equivalised gross income													
Quintile group													
Bottom	9	8	9	9	8	7	7	7	7	7	7	7	7
2nd	13	12	12	12	11	11	10	11	11	11	11	11	11
3rd	18	18	17	17	16	16	16	16	16	16	16	16	16
4th	23	23	23	23	23	23	23	23	23	23	23	23	23
Top	37	38	39	39	41	43	44	43	44	43	44	44	44
All households	100	100	100	100	100	100	100	100	100	100	100	100	100
Equivalised disposable income													
Quintile group													
Bottom	10	9	9	10	9	8	7	7	8	8	8	8	7
2nd	14	13	13	13	12	11	11	11	12	12	12	12	12
3rd	18	18	17	17	17	16	16	16	16	17	16	16	16
4th	23	23	23	23	23	23	23	23	23	23	23	23	23
Top	35	37	37	37	40	42	43	42	42	40	42	42	42
All households	100	100	100	100	100	100	100	100	100	100	100	100	100
Equivalised post-tax income													
Quintile group													
Bottom	10	9	9	9	8	7	6	7	7	7	7	7	6
2nd	14	13	13	13	12	11	10	11	11	12	11	11	11
3rd	18	17	17	17	16	16	15	16	16	16	16	16	16
4th	23	23	22	22	22	22	23	23	22	23	22	22	22
Top	36	38	39	38	41	44	45	44	44	43	44	44	45
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 from 1990 and beneficial house purchase loans from employers from 1992. 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, 1978 to 1998-99 [1]

	1978	1980	1982	1984	1986	1988	1990	1992	1993-4	1995-6	1996-7	1997-8	1998-9
Gini coefficients (per cent)													
Equivalised original income	43	44	47	49	50	51	52	52	54	52	53	53	53
Equivalised gross income	29	31	31	31	34	37	38	37	37	36	37	37	38
Equivalised disposable income	26	28	28	28	31	35	36	34	34	33	34	34	35
Equivalised post-tax income	28	30	31	30	35	38	40	38	38	37	38	38	39

1 Includes Company car benefit from 1990 and beneficial house purchase loans from employers from 1992. From 1996-7 values are based on estimates for the sample grossed up to population totals.

TABLE 3 (Appendix 2) : P90/P10 and P75/P25 [1] ratios for equivalised disposable income, 1978 to 1998-99 [2]

	1978	1980	1982	1984	1986	1988	1990	1992	1993-4	1995-6	1996-7	1997-8	1998-9
P90/P10	3.2	3.5	3.3	3.3	3.7	4.4	4.9	4.6	4.5	4.2	4.4	4.5	4.5
P75/P25	1.9	2.0	2.0	2.0	2.1	2.4	2.5	2.4	2.3	2.2	2.3	2.3	2.3

1 P90/P10 is the ratio of the income at the 90th percentile to the 10th; P75/P25 is the ratio of the income at the 75th percentile to the 25th
2 Includes Company car benefit from 1990 and beneficial house purchase loans from employers from 1992. From 1996-97 values are based on estimates for the sample grossed 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 receipts from public corporations: 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 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; children aged 7 to 15 keep a simplified diary. The respondents also give detailed information, where appropriate, about income (including cash benefits received from the state) and payments of income tax. 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 retail prices index. The fieldwork is undertaken by the Social Survey Division of ONS and by the Northern Ireland Statistics and Research Agency. *Family Spending 1998-99*, published by The Stationery Office in November 1999, shows detailed results on expenditure and income from the 1998-99 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 1998-99 was 6,630 (about 1 in every 3,000 households). The response rate was 58 per cent. 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 (5 in 1998-99) 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 25 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. 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 1999 (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 rates 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, 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**. Taxes on capital, such as capital gains tax and inheritance tax, 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 transitional relief and 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 1998-99 there were two 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 licenses
- Television licenses
- 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
- Independent TV Commission franchise payments
- Consumer Credit Act fees

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 ar-

gued 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
married head of household (ie a married or cohabiting couple)	1.00
1st additional adult	0.42
2nd (or more) additional adult	0.36 (per adult)
single head of household adult	0.61
1st additional adult	0.46
2nd additional adult	0.42
3rd (or more) additional adult	0.36 (per adult)
Child aged:	
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 3 of Appendix 1), they are shown in italics.

Diagram **A**

Complete income equality

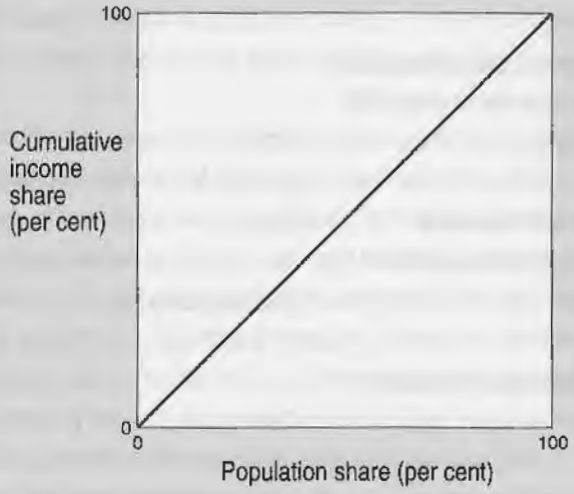
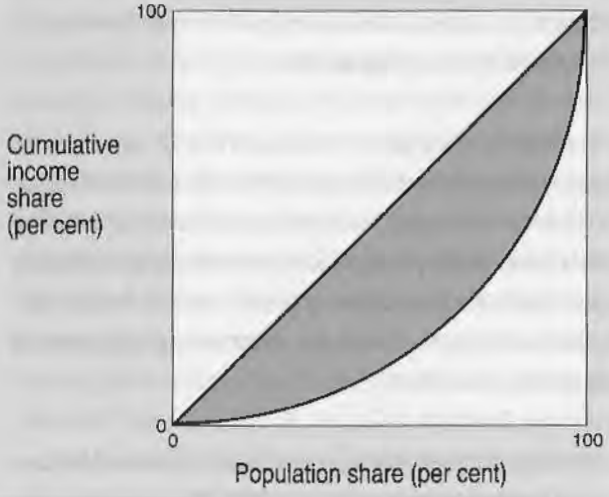


Diagram **B**

Lorenz curve for a typical income distribution



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 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 the article published in April 1998. 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:

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

where the design factor is 1.2 for 1998-99, 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 (x) calculated between two sample percentiles, Q_1 and Q_2, corresponding to proportions p_1 and p_2 is:

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

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.

Previous articles

62. 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 1999 edition of *Economic Trends*. A list of the previous articles was included in the article published in March 1997.

63. 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 difficult because of changes in definitions, 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 1978 to 1998-99.

Ownership of United Kingdom quoted companies at the end of 1998

Ian Hill and Shane Duffield
Office for National Statistics
Zone D3/03
1 Drummond Gate
London SW1V 2QQ
Tel: 020 7533 6019/6096
Fax: 020 7533 6023
E-mail: share.ownership@ons.gov.uk

Introduction

The value of the United Kingdom's Stock Market forms a large proportion of the United Kingdom's financial wealth produced as a part of the National Accounts. There are few good quality sources of data for ownership of shares in listed companies, and in some cases there are no sources. Accurate figures are important, not only for the quality of the financial balance sheets in the National Accounts, but also for dividends receipts data which is apportioned according to the balance sheets.

Background

Surveys of the pattern of shareholding in UK companies have been carried out at intervals since the late 1950s (in 1957, 1963, 1969, 1975, with a small survey in 1981). In 1989 the Pickford report on UK economic statistics[1] recommended that surveys should be carried out more frequently in order to improve the National Accounts. Accordingly, surveys were carried out annually between 31 December 1989 and 31 December 1994 (some were full-scale benchmark surveys, and some were small-scale surveys). After the 1994 survey it was decided that the costs of carrying out the survey annually were prohibitive, so the survey would in future only be carried out every third year with the next survey covering end-1997. With the 1998 edition, annual publication has been resumed using data downloaded from the CREST system. The results of the surveys are used to supplement or replace other sources of information on company securities in preparing the financial balance sheets and financial transaction accounts in the ONS's annual *Blue Book*[2].

End-1998 survey

The end-1998 survey, the subject of this report, was carried out during 1999. It was a full-scale survey looking at registers from 193 companies. Companies were sampled proportional to size at 30 September 1998. To do this, companies were ranked according to their market capitalisation. A sampling interval was set, all companies with a market capitalisation greater than the sampling interval were selected, the probability of other companies being selected was directly proportional to their market capitalisation.

In total, 199 registers were sampled (Investors Capital Trust had 3 registers and HSBC, Daily Mail, Schroders and Geared Income Investment Trust had two share registers each). The companies in the sample represented approximately 80 per cent of the capitalisation of UK companies ordinary shares listed on the London Stock Exchange in London (which stood at £1,504 billion at 31 December 1998). All shares in these companies held via the CREST system were analysed.

Further information to help with the end-1998 survey was obtained from *The Macmillan Stock Exchange Yearbook 1999* published by Waterlow, which details substantial shareholders for many of the listed companies. Considerable efforts were made to accurately identify the underlying shareholders and/or the category of beneficial shareholders to which each CREST account belongs.

The sample shareholdings were classified into categories, broadly following those of previous surveys and consistent with the definitions used in the National Accounts. The results presented in the main section of the report have generally been analysed in terms of National Accounts sectors. This involves the aggregation of some of the categories and the re-allocation of unidentified holdings across known sectors.

The registers analysed were run as at 31 December 1998 but, due to the settlement period on the CREST system, transactions immediately prior to 31 December may not have been recorded on the registers.

Summary Results

The headline findings of the end-1998 Share Register Survey are set out in the following paragraphs, but for full details the publication *Share Ownership*, published by the ONS in March 2000 should be consulted.

Institutional shareholders accounted for 52.3 per cent of UK ordinary shares at 31 December 1998, with a combined value of £787 billion. Of this, the largest components were insurance companies and pension funds (each with £326 billion).

At end-1998, individuals' holdings amounted to £250.8 billion, or 16.7 per cent. This excludes individuals' ownership of unit trust units, which in turn represented substantial amounts of shares.

Rest of the World holders owned 27.6 per cent of the ordinary shares, representing investments of £414.9 billion.

As would be expected, individuals held a significantly larger proportion of the recently de-mutualised companies, 48.5 per cent, than they did of the market as a whole (16.7 per cent). This figure had decreased from over 60 per cent at the end of 1997.

Holdings in companies in the FT-SE 100 companies were held by sectors in approximately the same proportions as for all companies. The exceptions being Rest of the World shareholders who are more heavily invested in the FT-SE 100, UK based individuals and Private Non-Financial Companies who are more heavily invested in Companies outside of the FT-SE 100.

Total equity owned 31 December 1998, £ billion

Rest of the world	414.9
Insurance companies	325.5
Pension funds	325.8
Individuals	250.8
Unit Trusts	45.6
Investment Trusts	29.1
Other Financial Institutions	61.0
Charities	20.4
Private non-financial companies	20.9
Other	9.7
Total	1,503.7

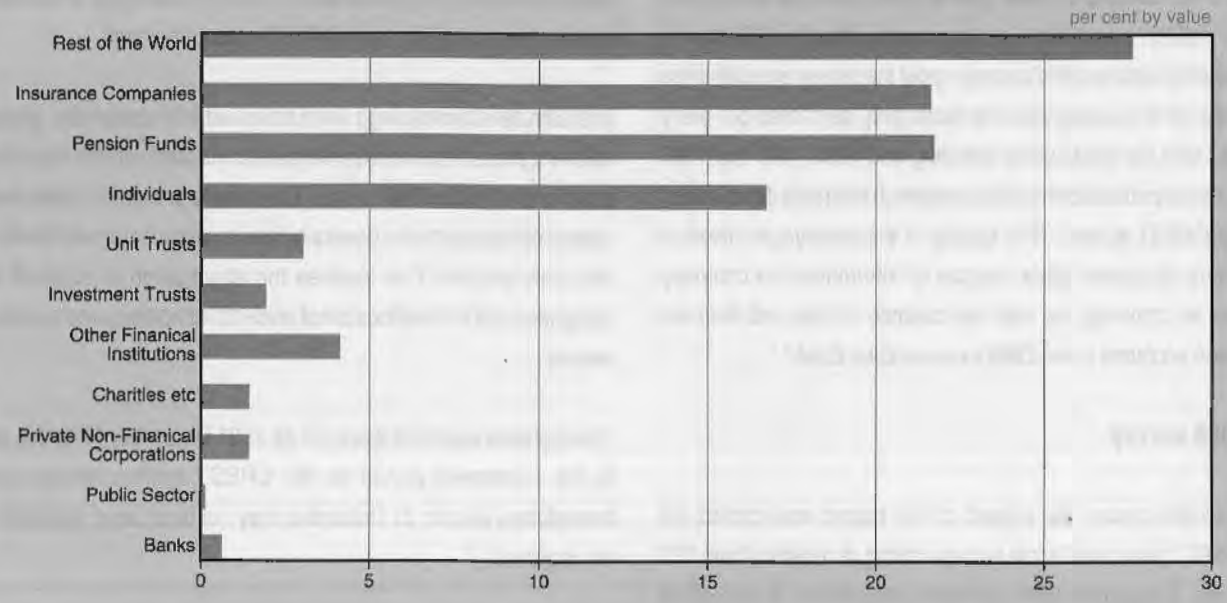
Unidentified holders have been allocated proportionately across all beneficial sectors

Further Information

Further Information can be obtained from the publication
Share Ownership, end-1998
ISBN 0 11 621260 8 ISSN 1465-2757
Price £39.50
Published by The Stationery Office.
To obtain a copy call The Stationery Office on 0870 600 5522, or fax on 0870 600 5533.

Chart 1

Beneficial ownership of UK shares: end 1998



Footnotes

1 *Government Economic Statistics* a scrutiny report by Stephen Pickford and others HMSO 1989.

2 *United Kingdom National Accounts* (The ONS *Blue Book*) HMSO annual publication.

3 Share Register Survey Report end 1989 *Economic Trends* No. 447 (January 1991) HMSO.

4 The 1991 Share Register Survey (covers 31 December 1990) *Economic Trends* No. 456 (October 1991) HMSO.

5 The 1992 Share Register Survey (covers 1st January 1992) *Economic Trends* No 466 (August 1992) HMSO.

6 Share Register Survey Report end-1992 HMSO 1994; *Economic Trends* No 480(October 1993) HMSO.

7 *Share Ownership, The Share Register Survey Report end-1993* HMSO 1995.

8 *Share Ownership, A Report on the Ownership of Shares at 31st of December 1994* HMSO 1996.

9 *Share Ownership, A Report on the Ownership of Shares at 31st of December 1997* HMSO 1999. Also *Econmic Trends* No 543 (February 1999). The Stationery Office 1999.

10 *European System of Accounts*, ESA 1995 Office for Official Publications of the European Communities.

11 *The Macmillan Stock Exchange Yearbook 1999* published by Waterlow.

E-Commerce@the.ONS.UK

By Craig Richardson & June Bowman, Office for National Statistics

Address: D4/20, 1 Drummond Gate, London SW1V 2QQ Tel 020 7533 5925 Email: craig.richardson@ons.gov.uk

Overview

This paper provides an update of what ONS and others are doing to measure the use of e-commerce. We have been working closely with the DTI and the e-envoy's office on this issue, notably in the Interdepartmental Working Group chaired by the DTI.

Sections 1 and 2 summarise what the ONS is currently doing and has planned to improve the monitoring of e-commerce in the context of economic and socio-economic statistics respectively. Where applicable, they also comment on the impact of e-commerce on ONS statistics.

The third section of the paper provides an overview of the findings in the UK by market research and consultancy firms, such as the Spectrum Benchmarking studies commissioned by the DTI. Section 4 goes on to look at the work being done abroad by other national statistics institutes, such as the Australian Bureau of Statistics and Statistics Netherlands. Annex 1 provides a list of sources

Thanks go to Adrian Ball, Derek Bird, Margaret Dolling, Harry Duff, Simon Humphries, Mike Pepper, Amanda Rowlatt, David Ruffles, and Barry Werner for their help and contributions. A list of acronyms used is provided in annex 2.

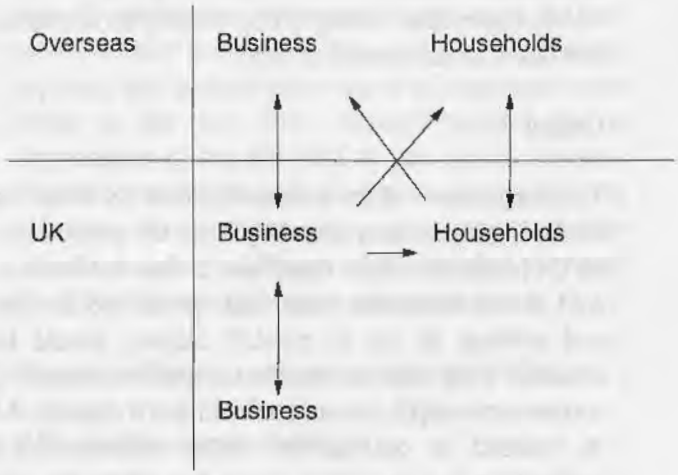
1. Economic Statistics

This section provides a summary of what ONS is currently doing to improve the monitoring of e-commerce in the context of our economic statistics.

Our efforts fall into two main categories; ensuring that e-commerce does not jeopardise the validity of our existing statistics, and ensuring that additional data is collected where appropriate to monitor the use of e-commerce in the UK. We also have a commitment to take forward the recommendations of the Performance and Innovation Unit's report "E-commerce@its.best.uk", which state that we should develop and pilot changes to existing industrial classifications and to existing tools to gather business statistics (recommendations 12.2 and 12.3).

Figure 1 shows the flows of goods and services provided by e-commerce. However, when people discuss e-commerce they are often discussing different things. A distinction must be made between flows relating to the output and trade of e-commerce as a commodity, and the use of e-commerce to facilitate a transaction that could have taken place in a different fashion. In the case of the latter the transaction should be treated as it would normally in the accounts and the issue then is the possible differentials in price and quality of the service provided.

Figure 1 – E-commerce Flows



Households receive goods and services from companies both in the UK and abroad, these flows are likely to be the latter form of e-commerce, facilitating a transaction. Businesses are involved with trade with UK households, other UK firms, firms abroad and households abroad. The business to business side maybe either since the firm might be involved in producing e-commerce products. It should be noted that the household to household flow, in the form of auctions etc., is currently very small.

The subsections that follow cover these various flows.

Retail Sales

This covers a mixture UK businesses to households and the business to business flows.

This is an area affected by e-commerce with consumers transferring sales from the high street to the internet. The ONS is currently ensuring that e-commerce sales are satisfactorily covered in the monthly enquiry, both through contacts with top retailers that are using e-commerce and monitoring the position of e-commerce specialists. This should confirm that e-commerce is included in our statistics, if not separately measured.

Within the Annual Business Inquiry (ABI) efforts are being made to ensure that the firms known to be involved in e-commerce are recording their transactions. There is no reason why e-commerce sales should not be included in reported business. However, there are large difficulties in the main because new firms are appearing in this area every week. Consideration is being given to how information on e-commerce activity can be specifically measured through the ABI.

It should be noted that household consumption expenditure relies on the non-food retail sales, as well as Family Expenditure Survey (FES) results (see Section 2) and business services information.

Output

This should cover all flows emanating from UK firms. The inquires to businesses operating in the UK aim to cover all UK produced output, regardless of how it is made or sold, thus e-commerce sales, both goods and services and whether to UK or non-UK citizens, should be included. Thus while we may lack a specific measure of e-commerce output, we are confident that a majority of it is included in our current output statistics. More problematic from an output perspective will be the self-employed individuals selling intangible goods, like software or information, over the net. In this case their income generated should be picked up by Inland Revenue data.

Overseas Trade

Trade in Goods - Any e-commerce between the UK and the rest of the world involving physical delivery of goods to or from the UK should be reflected in customs data or the Intrastat system for trade with EU. However, Intrastat only covers VAT registered businesses, not personal exports/imports. Unregistered businesses only account for about 2% of trade with the EU, with racehorses and art being the main items. Growth of personal trade with the EU due to purchases over the internet will not be included in any Intrastat returns, so although we would catch the UK business to foreign firms and households flows, we will miss the foreign firms to UK households flow. Changing Intrastat to capture goods purchased by private individuals would require amendments to existing EU legislation. Similarly, changing Intrastat or Customs declarations to identify goods purchased via the internet would also require international agreement. The way forward would appear to be using the additional questions on the FES.

Trade in Services – Like trade in goods, any e-commerce between UK business and the rest of the world, should be reflected in existing inquiry data. Exports and imports of UK business are mainly monitored through ONS surveys - the most important being the Overseas Trade in Services (OTIS) survey. The OTIS consists of a panel of the main (known) traders and a random sample of smaller traders. One difficulty is that trade in services is still a relatively rare behaviour and with a sample of only 10,000 firms a year we may be missing new and smaller companies who specialise in e-commerce. Eventually the sampling methodology (using filter questions on the ABI) should pick these companies up, but it may take some time.

E-commerce service transactions between UK households and the rest of the world are currently thought to be small, although they are likely to be growing - offshore gambling being one example. There is no existing data source, although household surveys are a potential source of information. This approach will require further research.

Travel – The International Passenger Survey should continue to pick up all travel data, regardless of whether the tickets were bought from the internet or by conventional means.

Consumer Prices and General Inflation

The issue of e-commerce and the level of prices is an important one, given that the decision to use internet for a transaction is often decided on the grounds of the differentials in price and quality of service, rather than the existence of new products available on the net.

Currently the level of consumer expenditure on e-commerce is unlikely to be large enough to have a measurable effect on the Retail Prices Index, thus internet shopping is not currently included in the ONS's calculations. The ONS is currently beginning to collect some representative prices for certain goods from the internet, for example, we began to collect data for items

like books and toys from the internet in January 2000. We begin collecting estimates of weights data from the FES from April 2000 and start conducting research into the conceptual issues in Summer 2000. The aim is to allow the gradual inclusion of internet shopping for items by 2001, as their expenditure on the internet becomes significant, although expenditure patterns suggest this will not be required until 2002. A threshold for this decision will be developed as part of the research.

Business Classification

One of the main problems at present with measuring e-commerce activities is the lack of detail provided by the SIC industry classification codes. However, the classifications are largely controlled by international organisations and the next proper change is scheduled for 2007. Thus from the business side rather than change the classifications we are looking to enhance the existing system to allow for more detail in the Information and Communications Technology (ICT) sector. We feel that this is essential for more accurate measurement of e-commerce from the point of view of the companies that actually provide the infrastructure, the servers and software etc.

At present software production is coded under 72.20, Computer Software and Services. Obviously it would be useful to have knowledge about what sorts of software is being produced, thus the ONS and the DTI are proposing to introduce subcategories for this sector, for example producing applications, internet software, custom software etc. Other areas under consideration include manufacture of office machinery and computers (30.00), the manufacture of electronic components (32.10) and Database activities (72.40).

30.00 and 32.00 are included in the PRODCOM survey (A list of 4,800 products for which production data has been required from all EU member states since 1993 and collected via annual and quarterly surveys) and in theory existing results could be mapped onto the new classification. But this would miss the majority of small businesses. The main problem is that 72.20 and 72.40 are considered service industries, and at present there is no equivalent survey for services.

Negotiations between the DTI and industry about the 30.00 and 32.00 codes is underway, however, they feel it wont be possible to provide data on the new sectors by the end of the year as the PIU report requires. The ONS is discussing the classification issue with HM Customs and Excise and Inland Revenue, but it is assumed that no changes in the classifications will be made at this level in the short run, all classification would be through the statistical inquiries route only.

In the Economic Statistics Directorate (ESD) budget £100,000 has been allocated to a services sector survey, and it is intended that the pilot will be run in the computer services sector, so we can use the data for e-commerce analysis.

New Business Surveys

ESD have allocated additional funding in 2000/01 to the measurement of e-commerce in business statistics. The intention is to use part of this to do a feasibility study on the topic, including piloting some data collection during the course of the financial year. For example the Prices and Business Group within ONS is considering a small survey along the lines of that by Statistics Netherlands ("E-commerce Survey", see section 4). This would aim, amongst other things, to assess the level of internet penetration within firms, the level of e-commerce activity and possible "bottlenecks" in e-commerce

In addition we will be exploring sample designs which enable linkages via the IDBR to the wider data sets obtained from ONS's major structural surveys. These links will certainly exist for the larger businesses, but may not for smaller companies. This suggests a two-stage approach: pilot a stand alone inquiry to businesses in the middle of the year 2000, followed possibly by an augmentation of the ABI 2001 in very specific sectors. However, it is recognised that the second stage will have a much slower time scale, and require further consultation with the DTI and e-Envoy's office to ensure that the information collected matches user needs.

We are also drawing upon work done in other NSIs.

2. Socio-Economic Statistics

Socio-Economic Division (SED), in consultation with survey Steering Groups, has been developing a strategy to monitor and measure internet activity within private households. The core instruments for this strategy are the three large scale household surveys for which SED have responsibility; the General Household Survey (GHS), the Time Use Survey (TUS) and the Family Expenditure Survey (FES).

Each of these surveys has been developed to collect information about particular areas of society. SED plan to build upon the particular strengths of each survey to collect data about different aspects of technology usage within households. This approach will allow for each of

the surveys to become the primary source of information in a different area:

internet access within households - GHS
internet usage by households - TUS
internet purchases by households – FES

The data from all three surveys should be available from Autumn 2001. The GHS will provide information about internet access via PCs, Digital TV and any other developing technologies. The FES will provide information on money and the TUS time spent on the internet. It will also be possible to relate the data to social and demographic characteristics collected within each survey. All the surveys include the harmonised questions on employment status, age, sex as well as some measure of income.

Using all three surveys will allow for the collection of a coherent set of information without overburdening any one of the surveys or jeopardising the response rates on any individual survey.

The following sections describe plans for the development of the GHS, FES and TUS as sources of information on e-commerce and technology use. Also described is the value of the forthcoming new Standard Occupational Classification (SOC 2000) for use with the 2001 Census, New Earnings Survey (NES) and Labour Force Survey (LFS) to provide information about changes in the labour market arising from the impact of information and communications technology.

Internet access within households

From April 2000 the GHS, FES and TUS will include a harmonised question on consumer durables (see the annex) which include categories identifying households which have:

- home computers
- access to the internet via home computer, digital TV, mobile phones, games consoles or other technologies

The FES already collects some information on consumer durables, since 1998 this has included whether the household have a home computer and internet access, this data, published in "*Family Spending, A report on the 1998-1999 Family Expenditure Survey*", has been provided to the Interdepartmental Working Group is shown in tables 1-3.

While the TUS will provide internet access information for 2000/2001 only, the GHS and the FES will provide a continuous future source. Both the GHS and FES are sample surveys and it will therefore be important to monitor continually the uptake of various technologies within the sample. Monitoring will enable SED to both assess the accuracy of estimates produced using the survey data and assess when uptake reaches a level when it would be prudent to start collecting additional information on technology usage within households.

Initially at least the GHS should be regarded as the primary source of information on internet access because of it has the largest sample size – around 13,000 households each year compared with 11,500 for the FES which results in approximately 8,000 and 6,500 fully participating households, respectively. Subject to validation, users consultation and the provision of the necessary resources, it may be possible to pool the GHS and the FES samples to yield a more precise harmonised source of information. Work will also be carried out to assess the possibility of producing quarterly estimates from either or both the GHS and FES.

Internet usage by households

Whilst the GHS will enable SED to establish who has computers within the household the Time Use Survey will provide further information about the time spent using them.

In addition to the harmonised consumer durables questions the time use household questionnaire also asks households to specify whether they use the internet to 'browse for' or 'purchase goods and services'.

The TUS also asks respondents to complete two diaries each recording all their activities within a 24-hour period. These activities are then coded using a pre-designed coding frame of approximately 800 activities. The TUS self completion diaries should pick up information on the time spent using computers, the coding frame for the main TUS in 2000 is still being developed, however, the current version of the frame allows computer use to be split into:

- free time study (computer mentioned)
- computing household management (banking services paying bills on the internet)
- correspondence by computer
- computing as hobby
- computer games
- information by computing
- shopping using the internet

Data published in "*Family Spending, A report on the 1998-1999 Family Expenditure Survey*"

Table 1

Household income deciles 1998-99	% households with home computer	% households with internet connection
Lowest	10	3
2	10	1
3	12	2
4	18	3
5	23	4
6	31	7
7	40	10
8	50	16
9	58	19
Highest	69	32
All households	33	10

Table 2

Type of Household	% households with home computer	% households with internet connection
One adult, retired household	0	0
One adult, non-retired hhld	26	8
One adult, one child	25	4
One adult, 2+ children	28	6
One man, one woman, retired hhld	2	0
One man , one woman, non-ret hhld	38	14
One man, one woman, 1 child	46	15
One man, one woman, 2+ children	58	16
All other hhlds without children	48	16
All other hhlds with children	66	20
All households	33	10

Table 3

Govt Office Region of residence Average of 1996-97 and 98-99 [1]	% households with home computer	% households with internet connection
North East	22	7
North West	28	9
Yorkshire & Humber	28	8
East Midlands	31	9
West Midlands	28	8
East	31	11
London	36	16
South East	36	13
South West	30	9
England	31	11
Wales	25	7
Scotland	25	8
N. Ireland	21	5
UK	30	10

Obviously these activities can only be identified if the respondents differentiate between different types of computer use in their diaries.

Internet purchases by households

Similarly to the TUS the FES also collects information using both an individual and household questionnaire, respondents are also asked to complete a two-week expenditure diary. In the diary respondents are asked to record all their purchases within the period. Any IT related expenditure on the purchase of PCs or subscription to the internet over this two week period will be included in this diary

The FES currently collects information on purchases made over the internet, in fact FES interviewers are specifically instructed to remind respondents not to forget to record, in their expenditure diaries, any purchases made over the internet. The current expenditure diary does not allow for internet purchases to be identified separately. However, from April 2000 internet purchases will be identified as respondents will be instructed to record whether a purchase was made over the internet in the column where they would ordinarily write the name of the shop. This will allow the FES to be used to make annual estimates of the proportions of households and individuals that use the internet for shopping at least once in any period of two weeks. Analysis of these data, along with information collected on the FES individual questionnaires, will yield demographic profiles of e-commerce.

This information will help inform ONS when consumer expenditure on e-commerce has reached levels which are likely to have an effect on the Retail Prices Index. The FES will also provide a useful source of information about e-commerce transactions for the household expenditure element of the GDP.

As mentioned previously, the Retail Prices Index is calculated using information from the FES as a source of the weights to be applied to surveyed price levels of a 'basket' of goods. ONS plan to investigate, from April 2000, the extent to which the prices of goods purchased via the internet differ from those purchased from shops. Information from the FES diaries will enable ONS to monitor which goods are purchased via the internet and, if required, could be used as a source for any weights to be applied to a basket of goods purchased using the internet.

Labour market statistics

Undoubtedly the most significant factor which is changing the nature of many jobs and, more widely, the organisation of work is the widespread introduction and diffusion of digital information and communication technology (ICT). The ICT revolution has both fundamentally changed many existing occupations and given rise to new ICT occupations. Against this background, the fundamental revision of the Standard Occupational Classification (SOC 2000) will lead to an important step forward in the understanding of the impact of ICT on the labour market.

In designing the ICT content of SOC 2000, ONS's advisers - the University of Warwick - were assisted by the Information Technology National Training Organisation (ITNTO). An underlying principle was to seek to distinguish between occupations concerned with ICT *development and implementation* and those concerned with *service delivery and data support*. Some of the key ICT-related groups to be identified will be as follows, but many other occupations affected indirectly by the impact of ICT will also be identifiable.

Unit group -

1136- Information and communications technology managers
2131- IT strategy and planning professionals
2132- Software professionals
3131- IT operations technicians
3132- IT user support technicians
4136- Database assistants/clerks
4142- Communication operators
5242- Telecommunications engineers
5245- Computer engineers, installation and maintenance

Where information sources permit, the analysis of employment by occupation within industry sectors will yield much more helpful information about the impact of ICT on the labour market than industry sectoral analysis alone. In addition to the 2001 Census, the New Earnings Survey (NES) will be a valuable data source for this purpose. The Labour Force Survey (LFS), while not providing such a large sample as the NES, has the advantage of yielding a wide range of demographic and labour market-related details not available from other sources. LFS and NES data coded to SOC 2000, will become available during 2001 and the Census data should be available in 2002.

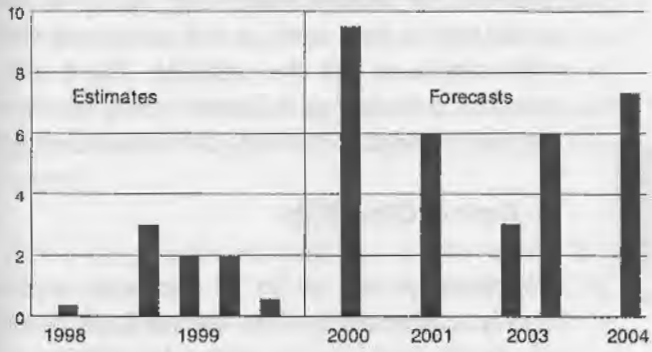
Likewise, the sample used to measure the Average Earnings Index (AEI) should in theory pick up any wage rises paid to people working in e-commerce. However, the AEI is designed for broad aggregate industries, and picking out specific sectors, like e-commerce, would be impractical. In the ESD business plan funds have been set aside for 2001 to enhance the sample of the AEI which will help to improve the measurement of the overall average.

Also for consideration is the method in which the workers are being paid. The AEI identifies separately the effects of bonuses, which allows ONS to produce an index excluding their impact. However, a number of internet start-ups are offering equity options to their staff instead of higher wages, banking on the firm's success. The ONS currently has no plans to include this in the AEI, mainly due to the complex problems surrounding the issue, such as the treatment of share options.

3. Summary of UK Market Research

There are a number of private sector statistics on the UK Internet environment available in the public domain. These cover issues such as the growth of Internet usage, estimates of on-line spending, and corporate issues such as e-commerce take up by UK companies.

Chart 1
UK internet spending estimates and forecasts



As always with market research by different firms, the degree to which the results are comparable is debatable. There are various definitions of e-commerce and many results are based on relatively small samples of respondents that may also ignore the problem of non-response. Estimates of UK consumer e-commerce spending can come from two sources, according to a paper by the Centre for Research on Innovation and Competition (CRIC). Surveys of consumers estimate the average spend to derive a national figure. Surveys of the supply side assess total sales of e-commerce vendors in the UK to estimate the market size. However, due to the international nature of e-commerce these two estimates are likely to be different. Likewise, forecasts may be derived from a model, or by simply asking consumers about their future spending patterns. Again, the two methods will yield differing results.

Users and Shoppers

Estimates of users in the UK range from just under 10 million to 15 million. The average figure tends to be around 11 million people using the net. We see a wider variability when we look for estimates of the number of people shopping on the net. This could partly be due to different definitions though, for example is browsing on the internet shops classed as shopping? Figures here range from 1 million to 5 million internet shoppers.

On the issue of the amount these shoppers spend on the Internet, both now and in the future, the variance in the results is magnified further, as shown by Chart 1.

Estimates of the UK's annual on-line spending for 1999 range from just over £0.5bn to £3bn. Predictions for future spending are even more varied, from £9.5bn in 2000 to only £3bn in 2003. It is obvious that forecasting Internet spending is not an exact science yet. However, what most do agree on is that the volume of spending over the Internet will grow in future. The CRIC suggest that the differing forecasts arise from "unclear methodologies and partial data" [2] combined with differing definitions of e-commerce, but they also note that once these differences are taken into account, the ballpark figures tend to be similar.

The Common User - Demographics

The public perception of the common Internet user has changed somewhat in the last five years. Gone is the bespectacled geek with no social life, now the surveys suggest that the most typical user is a male from Southern England in the A/B social grade. Other surveys look at the age break down, with the over 55s accounting for a relatively small proportion of the UK user base, and the under 17s providing a relatively large section. The ratio of males to females on the net appears to be determined by age, with more teenage females than teenage males on the net, but more males on the net generally.

All data on this subject should obviously be treated with great care, due to serious concerns over the sampling techniques used.

[2] CRIC Team "Exploring the Effects of E-commerce" October 1999

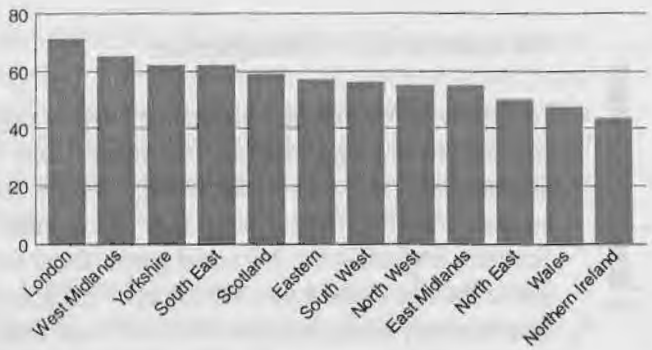
Corporate Internet Usage

Companies believe the Internet is important, but the pattern of usage varies around the country. Chart 2 illustrates this. The Spectrum/DTI study finds that Internet access in firms varies from 71% of firms in London to 43% of firms in Northern Ireland. Estimates of firm usage of websites and e-mail for information and communication vary. According to one paper by the Informal Economy Research Centre, 37% of firms have web sites and 63% use e-mail. Spectrum estimates that the former figure may be higher, with 51% of firms having web sites, 44% of firms using web sites for advertising and marketing, and 9% using their websites for on-line sales.

Surveys suggest that a majority of large firms believe the Internet is a beneficial way of doing business compared with traditional methods and that firms in the supply chain believe the Internet could significantly lower their costs. There are other benefits aside from cost reduction though, notably expanding markets. Estimates vary, but roughly a third of firms believe the internet has enabled them to reach new markets and customers.

Firms believe that competition with the US is important, a high proportion believe that Europe lags behind the US in terms of e-commerce, and most UK firms expect the US to dominate the e-commerce market.

Chart 2
Estimate of proportion of firms with internet access



Source: Spectrum/DTI Regional Benchmarking survey

The traditional barriers to net usage appear to remain. A majority of firms in multiple surveys listed security as their main fear, both of financial transactions and of company data. However, the proportion of companies claiming a lack of knowledge of the benefits is falling.

An issue that is likely to become a barrier in the future is the skills shortage of IT trained staff, with firms stating that the availability of skills was crucial to their IT uptake, and many stating that IT should play a stronger part in school education. This in despite IT training already being included in the National Curriculum from ages 5-16, and 75% of all secondary schools with Internet access[3].

Gaps in the Research

The CRIC makes a number of comments about the research available in the UK. They draw attention to the lack of clarity and transparency in the sampling methods used by the various companies is clear. But it does make a number of other points where ONS data, when available, maybe able to help with.

For example, there are no demographic profiles of e-commerce users, only of Internet users, and as the report states, these are not necessarily the same. FES expenditure diaries to be collected from April 2000 will record the Internet purchases of each individual in the sampled households. Analysis of these data, along with the information collected on the FES individual questionnaires, will yield demographic profiles of e-commerce users

There has been little work done on other forms of non-PC and non-WWW e-commerce, e.g. digital TV usage. Again, the ONS is to include questions on mobile phones and digital TVs in the harmonised GHS, FES and TUS to enable us to distinguish between Internet access via PC and via digital TV.

Finally, little work has been done on users' on-line behaviour patterns and integration of e-commerce into daily life. An expanded technology section in the TUS would provide more detail, as well as showing effects on other areas of life, like watching TV, it will allow households to distinguish between using the Internet to browse for goods and services and actually buying them.

4. Work of Other NSIs

We describe here a list of illustrative e-commerce surveys carried out by other National Statistics Institutes around the world, but we acknowledge that the list of surveys here is by no means comprehensive.

A number of countries have attempted to survey various aspects of e-commerce and ICT usage, these include the Netherlands, Singapore and Canada. Netherlands for example has a short survey designed to look at transactions e-commerce. The survey would provide an estimate of the level of IT investment within the firm and the level of services they provide over the net, as well as other aspects of the e-commerce age, effects on IT staff and assessment of problems with e-commerce projects.

Singapore has taken a similar route to the Netherlands with the first section of their "Survey on Electronic Commerce". But by asking firms when they first set up their websites they can categorise the firm's progress by the length of time it has been involved with e-commerce. The second section would provide interesting information on business-to-business and business-to-consumer e-commerce, such as the percentage of the firm's total sales that come from e-commerce, which specific activities this revenue comes from and where their investment is targeted.

The survey by Statistics Canada takes a much wider look at technology uptake. As well as the usual questions on why the firm may be delaying e-commerce projects and where they use e-commerce it also asks what initiatives by government would persuade them to adopt more technology, for example funding for workforce training or legislation on digital signatures.

Rather than using a single survey dedicated to e-commerce to assess the effects, the USA is proposing to amend a number of its current surveys to include relevant ICT questions. This will include collecting internet sales from their monthly Retail Businesses Survey, as well as information on e-commerce and e-business from the Annual Survey of Manufactures. This approach is similar to that proposed by the ONS.

But are surveys of businesses alone is suitable to the task of assessing the impact of e-commerce on the economy? To get a complete picture the firms providing the internet services can also be surveyed, as can the households using them. If it is possible to obtain it, information from infrastructure providers, both upstream and downstream of the e-retailer, may also be very valuable.

This is the path the Australia has chosen to take. It is proposing a survey of Internet Survey Providers (ISPs) which are the main source of access to the net for households and a major option for firms. They feel that an on-line survey to the ISPs would minimise the burden to them, and provide information such as megabytes downloaded by subscriber type, revenue from ISP operations and possibly the quality of the service and infrastructure. The survey to businesses, the "Business Technology Survey", follows a similar pattern to the other business surveys, benefits to the organisation, investment, problems, what they use the net for etc. are all covered.

More unusual though is their household surveys. There are two possible paths here, and the Australians appear to have explored both. One is to include e-commerce questions on a survey going out to a sample of the population. The "Population Survey Monitor" is the quarterly survey to households on a number of issues. Recently, questions on PC usage, internet access and details of the number and value of on-line purchases made within the household have been added. The second path is to add a single question, such as the availability of internet access, to a questionnaire, then perform a follow-up survey on usage to those that have access. This is what the "Internet Use Survey, Agriculture" does. The questions here are much more detailed than those on the population survey, looking at the cost of access, which services they use, what purchases they make, how they paid for them etc.

To summarise, while the ONS has a lot of work on stream, there is a wealth of information and experience from other countries that we can and are exploiting in the design and implementation of our own surveys.

5. Conclusions

In general, e-commerce activity should already be included in ONS statistics, if not separately identified. Areas where this may not be the case, such as the RPI, are currently being investigated.

A range of work has been carried out by other National Statistics Institutes. The Australian Bureau of Statistics (ABS) is the most commonly quoted source, for good reason. The ABS is one of the few NSIs to have surveys, or at least proposed surveys, in all three areas: firms using the net, firms providing net infrastructure, and households. However, these have not been without their problems and other countries are in a position to learn from their mistakes. Singapore and the Netherlands, also have firm-based inquiries on e-commerce.

The PIU report suggests using the Annual Business Inquiry (ABI), like the USA. However, there are a number of flaws with this suggestion, one being that the 1999 inquiry is already in the field, so the earliest an e-commerce section could be included would be for the December 2000 survey. There are also sampling issues and the fact that the ABI is already overburdened.

As mentioned in section 2, the PBG is investigating a separate e-commerce survey along the lines of the

Statistics Netherlands one, as well as considering other possible business surveys. A team will meet shortly to discuss how to take these issues forward. PBG are also working on the breakdown of SIC codes, with the aim of mapping the existing PRODCOM codes to the DTI's breakdown, and funding is available for a pilot of the proposed services output survey. CPGI are currently monitoring e-commerce prices and sales volumes.

The ABS also suggests information is available from internet service providers. The DTI has been in touch with ISPs on this issue. There has been no formal response yet but initial conversations indicate that ISPs in the UK do hold substantial information on activity, if not on the value of transactions. The e-Envoy's office has been meeting with the Credit Card Research Group who have information on the amount of money spent on the net.

On the household side work is already underway, and as we have seen, some data on internet penetration by income, type of household and region is already available. With the addition of e-commerce and internet questions to the existing General Household, Time Use and Family Expenditure surveys (see Annex) this data set will be expanded considerably. The first results are expected during 2001 and should enable us to estimate the UK's on-line spending, and relate the data to the social and demographic statistics collected by the same surveys. This is a similar plan to that of the ABS, amend existing sample surveys to include an internet question. However, we have not yet gone as far as issuing a separate e-commerce survey to a portion of the population (the ABS internet Use Survey, Agriculture)

Summing up, the ONS and the UK government is making progress on e-commerce; it is important to maintain momentum on this issue, given its high profile. Therefore the ONS has a wide range of projects in hand as described in this paper.

Annex 1. Index of Sources - National Statistics Institutes

Australian Bureau of Statistics "*Proposed ISP Survey*"

Australian Bureau of Statistics "*Business Technology Survey 1997-98*"

Australian Bureau of Statistics "*Population Survey Monitor*" 1999

Australian Bureau of Statistics "*internet Use Survey, Agriculture 1998/99*"

Statistics Canada "*Survey of Technology Diffusion in Service Industries*"

National Institute of Statistics, Italy "*E-Commerce in Italy*"

Statistics Netherlands "*E-Commerce Survey*"

Department of Statistics, Singapore "*Survey on Electronic Commerce*"

Annex 2. List of Abbreviations Used

ABI – Annual Business Inquiry, ONS
ABS – Australian Bureau of Statistics
CPGI – Consumer Prices and General Inflation, ONS
CRIC - Centre for Research on Innovation and Competition
ESD – Economic Statistics Directorate, ONS
FES – Family Expenditure Survey, ONS
GHS - General Household Survey, ONS
ICT – Information and Communication Technology
ISP - Internet Service Provider
NSI – National Statistics Institute
PBG – Prices and Business Group, ONS
PIU – Performance and Innovation Unit, Cabinet Office
PRODCOM – PRODucts of the european COMmunity
SED - Socio-Economic Directorate, ONS
SIC – Standard Industrial Classification
TUS - Time Use Survey, ONS