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Economic Trends

Managing Editor: Prabhat Vaze
Editor: Paul Dickman

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In Brief

Articles

This month we feature three articles.

Alwyn Pritchard of ONS introduces measuring productivity change in the provision of public services. This article provides a first progress report on this new initiative. It describes how productivity might be measured in this context and includes indicative results for some areas. In addition, the article explains where public services fit into the national accounting framework, defines productivity and examines the related concepts of government inputs and outputs.

Caroline Lakin of ONS discusses the effects of taxes and benefits on household income in 2000–2001. 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 eighteen times as great as the bottom fifth; after taxes and benefits the ratio is greatly reduced to four to one. Inequality of disposable income has changed over time; it was stable in the first half of the 1980s, and then increased rapidly to a peak around 1990. It 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. The latest data shows that inequality of disposable income rose again in the second half of the 1990s but has flattened off by the end of the period.

Andrew Linacre of ONS gives an account of Regional, sub-regional and local area household income. The article presents estimates that describe differences in the level and composition of household sector incomes between geographic regions and sub-regions for calendar years 1995 to 1999 and at local area level for the period 1997 to 1999. Regional figures update the provisional estimates published in July 2001. The estimates published in this article are produced in accordance with the *European System of Accounts 1995 (ESA95)* and are consistent with the 2001 edition of the *UK National Accounts - The Blue Book*.

Changes

The regular quarterly **Regional economic indicators** article has had to be postponed and will now be published in the June edition.

Table 6.4 formerly *General government receipts and expenditure*, is now *Public sector receipts and expenditure.*

Table 6.5 now includes Public sector net debt and public sector net debt as a percentage of GDP.

Recent economic publications

Quarterly

Consumer Trends: 2001 quarter 4. Available for downloading from the National Statistics website **www.statistics.gov.uk/products/p242.asp**

United Kingdom Economic Accounts: 2001 quarter 4. TSO, ISBN 0 11 621544 5. Price £26.

UK Trade in Goods analysed in terms of industries (MQ10): 2001 quarter 4. Available for downloading from the National Statistics website **www.statistics.gov.uk/products/p731.asp**

Monthly

Financial Statistics: April 2002. TSO, ISBN 0 11 621497 X. Price £23.50.

Focus on Consumer Price Indices: March 2002. Available for downloading from the National Statistics website **www.statistics.gov.uk/products/p867.asp**

Monthly Review of External Trade Statistics (MM24): February 2002. Available for downloading from the National Statistics website **www.statistics.gov.uk/products/p613.asp**

TSO publications are available by telephoning 0870 600 5522, fax 0870 600 5533, e-mail **bookorders@theso.co.uk** or online at **www.clicktso.com**

Economic Update - May 2002

Geoff Tily, Macroeconomic Assessment - Office for National Statistics

Address: D4/20, 1 Drummond Gate, London, SW1V 2QQ, tel: 020 7533 5919, E-mail: geoff.tily@ONS.gov.uk

Overview

UK GDP has showed only marginal growth over the past two quarters, despite some optimism as to global conditions. Ongoing slow growth was driven by continued falls in production sector output, and weaker growth in the service sector. The UK manufacturing sector has been in recession for five quarters, driven strongly by the sharp contraction in the ICT sector but also by ongoing declines in most other industries. While service sector growth had been more robust, it weakened through 2001. Household demand grew strongly throughout 2001, accompanied by a sharp rise in indebtedness and may have slowed a little into 2002. Investment was weak through 2001, set against a background of falling measured profits and concerns again about the indebtedness of the corporate sector. Exports and imports show very large falls on the year, with little evidence of a reversal. Labour market figures show deterioration over the start of 2001, but subsequently have essentially remained flat. Earnings have slowed substantially over 2001. Producer price data show deflation coming into the factory and zero inflation coming out. RPIX remains close to target.

GDP activity

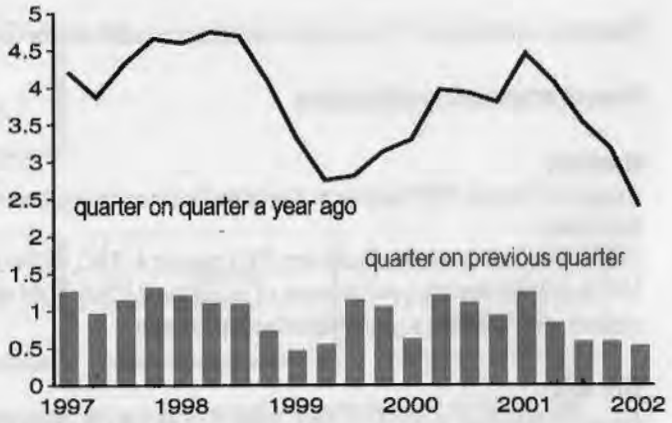
The preliminary estimate of GDP growth shows growth of only 0.1 per cent between the fourth quarter of 2001 and the first quarter of 2002, following zero growth into the fourth quarter. Growth comparing the first quarter of 2002 with the same quarter a year ago was 1.0 per cent, the lowest figure since the economy emerged from the 1990-91 recession (figure 1).

Figure 1
Gross Domestic Product
growth

On the output side the weaker GDP is mainly driven by a manufacturing sector that has been in recession throughout 2001, but also by declines in the mining and energy sectors and more subdued services growth. From the expenditure perspective, low GDP has been driven by weak investment and falling trade.

The UK slowdown in 2001 came alongside a deteriorating global environment. In the third and fourth quarters GDP declined or was weak in the world's three largest economies, Japan, the United States and Germany. From the corporate perspective, increasing numbers of companies have announced profit warnings and redundancies, credit agencies have reported a higher level of debt default, spreads between corporate and government debt are at high levels and over the past two years stock markets have seen large falls in value all over the world. While some have seen reasons for renewed optimism at the start of 2002, the extent to which tangible improvement has been seen remains debatable.

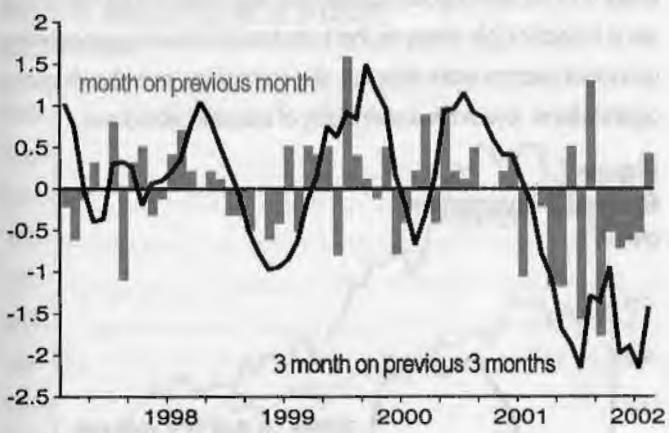
Figure 2
Services
growth



UK GDP growth has for some time been supported by robust growth in the service sector, but latest figures show this appears to have weakened in 2001 and into 2002. In the first quarter of 2002 services output grew by 0.5 per cent compared with the previous quarter, the same as growth in the fourth quarter (figure 2). In the first quarter growth compared with the same period a year ago was 2.4 per cent, the weakest figure since the fourth quarter of 1995. The broad industrial breakdown is not yet available for quarter one, however, fourth quarter data showed the slowdown has been driven by a slowdown to the previously very strongly growing 'post and telecommunications services' (from annual growth of 16.9 per cent in the year to the third quarter of 2000 to growth of 4.8 per cent in the year

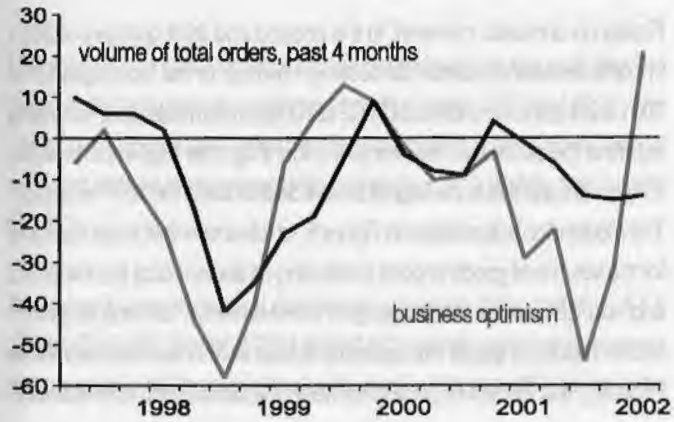
to the fourth quarter of 2001), slightly weakening business activities in the second half of 2001, as well as ongoing falls in 'hotels and restaurants' and 'transport and storage'.

Figure 3
Index of manufacturing
growth



As noted declines in the manufacturing sector continued in the first quarter. While the manufacturing figure that feeds into the first quarter preliminary estimate of GDP is not released, monthly index of manufacturing production figures show a decline of 1.4 per cent in the three months to February, up only a little from the decline of 1.9 per cent in the fourth quarter of 2001 (figure 3). Comparing manufacturing output in the three months to February 2002 with the same period a year ago shows an annual decline of 6.2 per cent, again the largest decline since the recession of 1990-91. The monthly data on the other hand showed a modest increase in output between January and February of 0.4 per cent. Figure 3 also puts this monthly change figure into a longer run perspective, and the volatility suggests that caution should be exercised before taking the figure as indicative of a change in trend. It should also be noted that part of the reason for this monthly increase can be attributed to the performance of a single pharmaceuticals company.

Figure 4
CBI:Business optimism & volume of total orders
balances



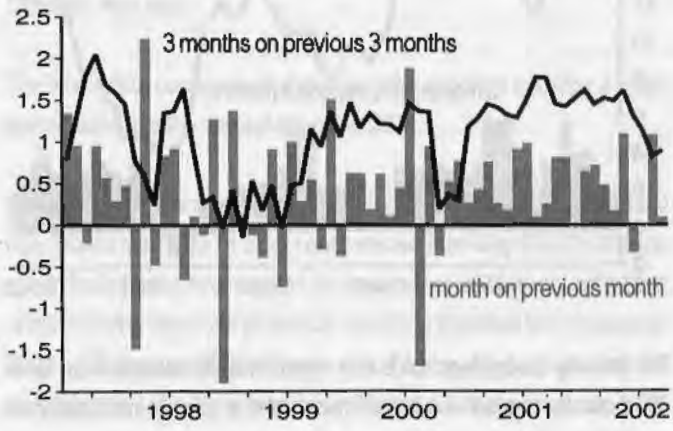
The latest Confederation of British Industry quarterly industrial trends manufacturing survey illustrates the apparent dichotomy between increased confidence and actual impact on output. Figure 4 compares their business optimism index into quarter one with their measure of output over the past four months: while the former is at a nine year high, the improvement in the output measure is only marginal.

Domestic demand

GDP growth was supported by vigorous household demand throughout 2001. Advance figures for 2002 based on retail sales information suggest perhaps a slight moderation at the start of the year.

National Accounts figures for household final consumption expenditure in 2001 showed average quarterly growth of 1.0 per cent, with only slight volatility. Growth in the year to the fourth quarter was 4.1 per cent. However retail sales information over the turn of the year has suggested a slight weakening of consumer activity (figure 5). While in the first quarter of 2002 retail sales grew by a still robust 0.9 per cent compared to the previous quarter, this was below growth of 1.3 per cent in the fourth quarter and more generally below growth throughout 2001.

Figure 5
Retail sales
growth

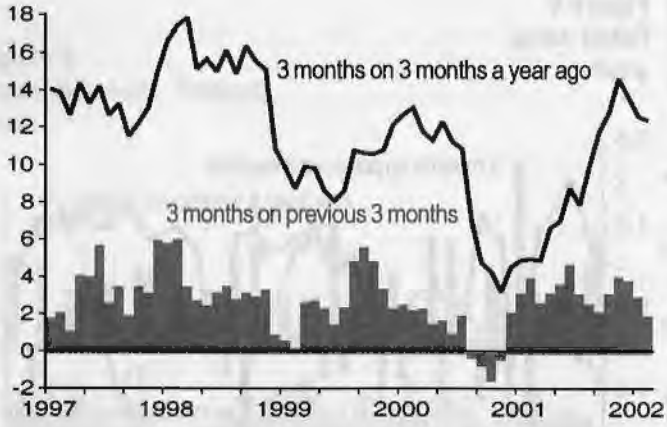


External sources offer mixed messages. On retailing the CBI data suggests a modest slowdown, whereas the British Retail Consortium figures suggest ongoing strength. Consumer confidence data records an upturn, but this follows a slump in confidence following 11 September that did not have any material impact on actual sales. Perhaps in-line with slightly weaker sales, Bank of England gross consumer credit figures showed modest weakening, with growth in the three months to February at 1.9 per cent compared with the previous three months down from quarterly growth 3.7 per cent in quarter four (figure 6). More generally the still positive growth in consumer credit means that consumers continue to add to the stock of debt that is to some extent sustaining the present levels of consumer

demand. The Bank of England has recently emphasised how the stock of household debt through bank lending is at an unprecedented rate, and has questioned whether households have become too indebted. For example, credit debt figures as a share of disposable income are at close to double their share in 1994. From this perspective household demand is at least partly dependent on both bank and building societies' willingness to lend and to households continuing to be able to meet the interest payments on previous and new borrowing. Many emphasise that with interest rates low, these debt servicing costs continue to remain relatively low.

In contrast to household demand throughout 2001, the latest figures – which extend only to quarter four - suggest business investment is weak. In the year to the fourth quarter of 2001 data showed a fall of 7.4 per cent, the largest fall since the 1990-91 recession. However much of this was due to a particularly high fourth quarter in 2000, and the profile of investment spending through the year really suggests that growth stalled in 2001. Comparing 2001 with 2000 investment spending declined by 1.1 per cent, following growth of 4.4 per cent in 2000.

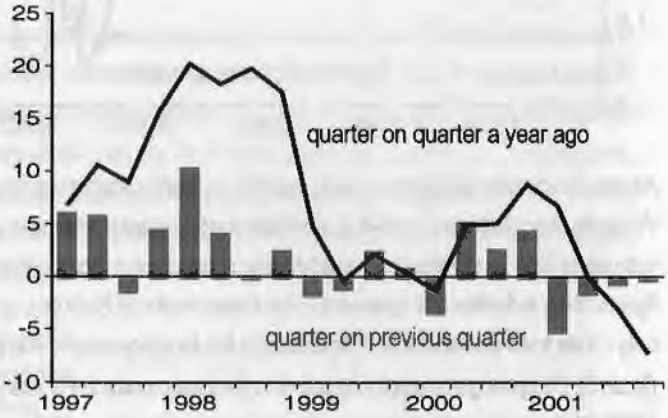
Figure 6
Consumer credit
growth



The industry dis-aggregation is also informative: following a sharp fall in 2001 quarter one service sector investment is seen to have declined modestly each quarter of 2001, manufacturing investment fell away quite sharply in the second half of 2001. External indices echo the general weakness in 2001, with BCC manufacturing and services figures showing investment intentions slowing quite rapidly and deteriorating further into the fourth quarter and CBI manufacturing figures with a similar story. On the other hand, but in a similar way to external output measures, external investment indicators showed a slight increase in the first quarter of 2002.

The weakening investment come as profits of companies are in decline, with private non-financial corporations' gross operating surplus (excluding UK continental shelf companies) in the fourth quarter of 2001 standing 2.0 per cent below their level in the same quarter of 2000. Into 2001 as a whole gross operating surplus declined by 1.6 per cent following growth of 1.4 per cent into 2000. This weakening in profits set alongside weaker oil revenues and still high net property income payments has returned the sector to more substantial net borrowing of £11.8 billion in 2001, following the recovery to £3.7 billion in 2000. This net borrowing continues to add to the overall indebtedness of the private non-financial corporate sector (PNFC), where gross debt liabilities as a share of corporate profits are at a historic high. It may be that investment is faltering as borrowing conditions become more stringent, and companies, as well as financial organisations, review the sustainability of overall indebtedness.

Figure 7
Business investment
growth

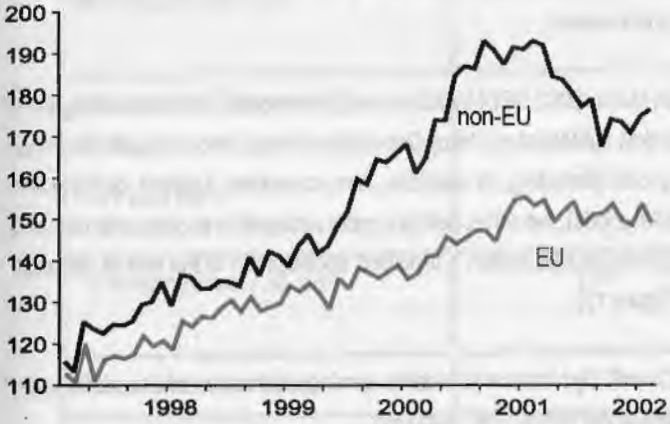


Government output saw quarterly growth of 1.4 per cent into the fourth quarter following a decline of 0.9 per cent in the third. Comparing with the same quarter a year ago growth was 3.0 per cent. This output figure remains considerably weaker than current price government expenditure, which grew by 7.7 per cent in the year to the fourth quarter. Apart from inflation, the figures diverge because present increases in cash expenditure are unlikely to have an immediate impact on government output. Public sector net borrowing figures are now available for the financial year 2001-2002 as a whole; these show that net borrowing was 1.3 billion compared with a repayment of 15.9 billion in 2000-2001. The deterioration reflects the ongoing increases to cash expenditure set alongside a weakening of tax revenues as the economy slows.

Finally on domestic demand, in the second and third quarters of 2001 imports showed a substantial decline, however in the fourth quarter of 2001 and the first two months of 2002 this decline has moderated. Illustrating extent of the decline, in the year to the fourth quarter total imports fell by 2.6 per cent and this is the largest annual decline since the 1991 recession. The moderation is illustrated on Figure 9, which shows that index numbers for the volume of goods imports (excluding oil and erratics) from both EU and non-EU economies levelling off more recently. Looking at growth shows imports of goods increasing by 0.3 per cent in the three months to February, this follows no growth between the second and third quarters.

An apparent incongruence between weak imports, production falls, and strong household consumption is explained to some extent by the market sector breakdown of imports. While capital and intermediate goods imports are in decline, the imports of consumer goods and cars continue to grow fairly robustly.

Figure 8
Imports, excluding oil & erratics
index numbers



Overseas demand

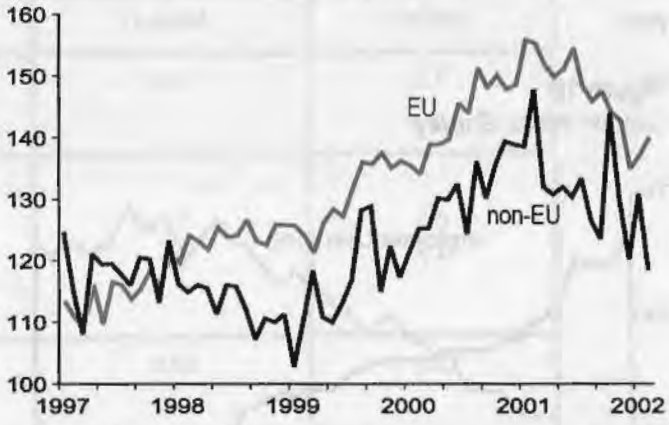
In line with the global deterioration, UK export growth declined sharply throughout 2001 and this decline continued into the first months of 2002, with sales falling to countries throughout the world.

In the year to the fourth quarter of 2001 overall exports declined by 4.9 per cent; this was the largest decline since the 1980-81 recession. Figure 9 shows export volume figures (excluding oil and erratics) to EU and non-EU countries have been fairly volatile recently, but overall continue a downward trend. This trend is illustrated by growth figures: in the three months to February compared with the previous months overall goods exports fell by 6.4 per cent, down on the decline of 1.8 per cent between the third and fourth quarters of 2001. Comparing with the same three months a year ago the decline in the three months to February was 11.4 per cent. By market sector, all sectors are in decline except the export of cars.

The medium term movements of imports and exports are such that the balance of trade was on a widening trend between 1997 and 2001. The latest trade figures however show the balance may have now stopped widening with an improvement into quarter four 2001 and the first months of 2002.

The overall current account deficit saw a marked deterioration to £7.6 billion in the fourth quarter of 2001 as the UK's normally fairly high investment income surplus fell to zero in the fourth quarter following £3.7 billion in the third. Over the year the current account remained fairly stable at £17.4 billion following £17.0 billion in 2000, with investment income increases largely offsetting trade decreases.

Figure 9
Exports, excluding oil & erratics
index numbers



More generally, the UK balance of payments has been negative in every year since 1985. The International Investment Position, reflecting the cumulative effect of these deficits, shows net financial liabilities of the UK at £93.2 billion at the end of 2001, a relatively large figure historically speaking, although an improvement on figures of £133.4 billion in 1999.

Labour Market

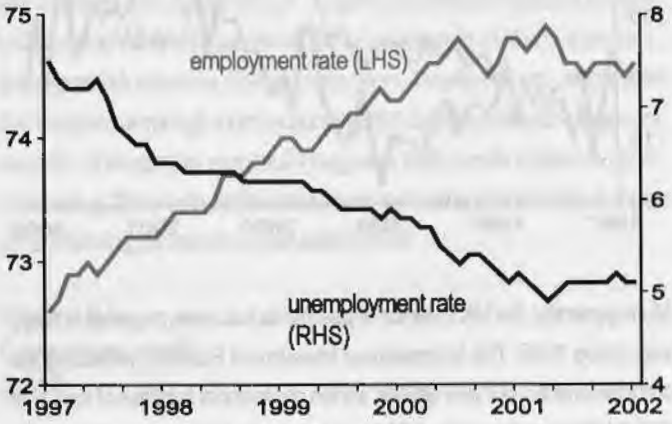
The latest data continues to show the labour market flat after a slight deterioration into the second quarter of 2001.

On employment, the labour force survey figures show that the employment rate deteriorated from 74.9 per cent between Mar-May 2001 to 74.6 per cent in the following three months. It has remained at 74.6 per cent in each of the following three-month periods, including the latest from December 2001 – February 2002 (figure 10). Figure 10 also shows the unemployment rate has showed a similar trend, with the latest rate at 5.1 per cent.

Other labour market data presents a picture that varies slightly from the one just described, with some statistics on the positive side, and others on the negative side. On the positive side: (i) the count of employment continues to increase: by 30,000 between December 2001-Feb 2002 and September-November 2001; (ii) while the claimant count showed a slight rise in the fourth quarter, improvements have resumed in 2002 and the claimant count rate has declined from 3.3 per cent in March 2001 to 3.1 per cent in March 2002. On the negative side: (i) manufacturing employment is declining at its steepest rate since the 1990-91 recession with services employment also falling very slightly into quarter four

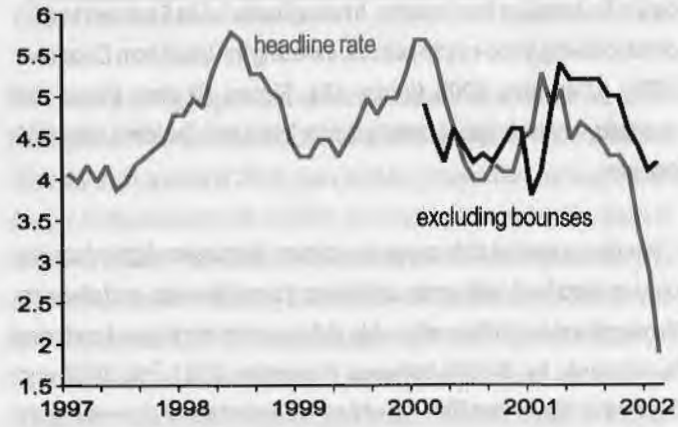
(construction employment is holding up the total); (ii) the number of redundancies has increased for five consecutive quarters, rising by 18.4 per cent over the year to Autumn 2001; (iii) the number of people who record themselves as economically inactive has increased by close to 300,000 between the end of 1999 and the latest period; (iv) many new jobs created have been concentrated in older age groups, with the employment rates for under 50 year olds deteriorating across the past year.

Figure 10
Labour Force Survey



The average earnings index echoes the more subdued labour market. Figure 11 shows that according to the headline rate earnings have slowed very sharply. Over the past year the headline rate slowed to 1.9 per cent in February 2002 from 5.3 per cent in February 2001.

Figure 11
Average earnings index
growth on a year ago



However this slowdown has been dominated by falling bonuses in the financial sector. The corresponding figures excluding bonuses show earnings growth pretty much unchanged, at 4.2 per cent in February 2002 compared with 4.1 per cent in February 2001.

Prices

At the factory gate, output prices show no inflation and input prices show deflation: the headline output price index shows a fall of 0.3 per cent in the year to March and the input price index measure a fall of 2.5 per cent. Both figures are influenced by recent movements to the price of oil, but underlying measures across recent months continue to confirm the same overall story. This weak producer price inflation follows perhaps from the deteriorating global conditions, with over-supply becoming a significant phenomenon.

In March 2002 RPIX inflation was 2.3 per cent. This headline figure is below the Monetary Policy Committee's target, and the figures for 'other goods' (including, for example, cars, consumer durables, clothing and DIY goods), the series perhaps most susceptible to consumer demand pressures has shown a resumed acceleration in the rate of deflation (figure 12).

Overall, by historical standards earnings, consumer and producer price pressures remain very subdued.

Figure 12
Consumer prices

Forecasts for the UK Economy

A comparison of independent forecasts, April 2002

The tables below are extracted from HM Treasury's "FORECASTS FOR THE UK ECONOMY" and summarise the average and range of independent forecasts for 2002 and 2003, updated monthly.

	Independent Forecasts for 2002		
	Average	Lowest	Highest
GDP growth (per cent)	1.9	0.4	2.7
Inflation rate (Q4: per cent)			
- RPI	2.4	1.3	4.0
- RPI excl MIPs	2.2	1.6	3.1
Unemployment (Q4, mn)	1.04	0.90	1.20
Current Account (£ bn)	-21.0	-29.7	-10.0
PSNB * (2002-03, £ bn)	8.5	-2.0	15.4

	Independent Forecasts for 2003		
	Average	Lowest	Highest
GDP growth (per cent)	2.7	-0.1	3.6
Inflation rate (Q4: per cent)			
- RPI	2.9	2.0	4.3
- RPI excl MIPs	2.4	1.8	3.3
Unemployment (Q4, mn)	1.01	0.66	1.35
Current Account (£ bn)	-22.7	-49.1	-8.0
PSNB* (2003-04, £ bn)	13.8	6.6	22.0

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 B K Phamber, Public Enquiry Unit, HM Treasury, Room 88/2, Parliament Street, London SW1P 3AG (Tel: 020-7270 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 - May 2002

Gladys Asogbon, Marcoeconomic Assessment - National Statistics

Address: D4/20, 1 Drummond Gate, London, SW1V 2QQ, tel: 020 7533 5925, E-mail: gladys.asogbon@ONS.gov.uk

Overview

The slowdown in the world's major economies is continuing, with Germany, France, Italy and Japan posting negative GDP growth in 2001 quarter four. However, 2001 quarter four saw the USA returning to positive GDP growth. Inflationary pressure is slowing and prices at the factory gate are still subdued. Industrial production is the area of main decline, with the severest declines occurring in Japan, but the start of 2002 shows slight increases in production for several countries. Trade and investment are still in decline, but household demand is broadly holding up. Unemployment rises have moderated slightly in the major economies.

EU15

The latest data shows that the EU economy did not grow in 2001 quarter four. GDP growth for the previous quarter was 0.3 per cent, while overall growth for 2001 was 1.8 per cent, compared with 3.5 per cent growth in 2000.

This latest data does not provide a breakdown of the components that contributed to GDP change. However, data up to 2001 quarter three show that the main sources of the slowdown has been a sharp deterioration in investment compared with the previous year, accompanied by sharp weakening in both exports and imports.

Index of Production data shows the potential source of the slowdown from the output perspective, with the fourth quarter of 2001 showing a contraction of 1.7 per from a revised fall of 0.4 per cent in the third quarter. Comparing 2001 quarter four with the same quarter a year ago shows the Index falling by 3.5 per cent from a fall of 0.9 per cent in 2001 quarter three. Overall IOP growth for 2001 was a negative 0.1 per cent, a sharp contrast to growth of 4.7 per cent for 2000.

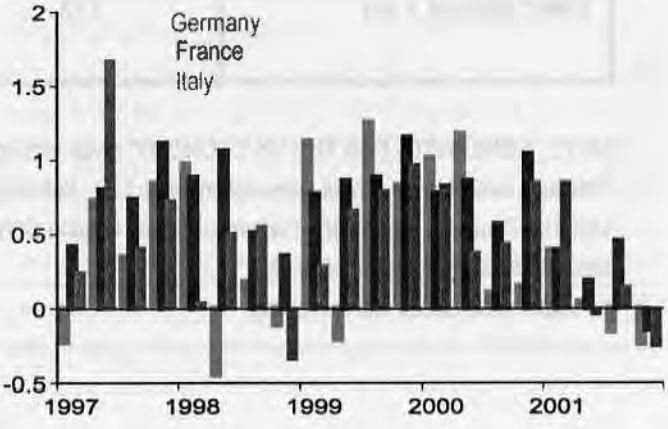
The fourth quarter of 2001 saw a fall in annual producer prices, down 1.1 per cent, after growing by 0.7 per cent in the third quarter. Growth in consumer prices continued to slow, with the rate dropping from 2.5 per cent in the third quarter to 2.0 per cent in the fourth quarter. The most recent figures show consumer price inflation remaining at 2.0 per cent in February. Producer prices growth has fallen by 0.7 per cent in both January and February 2002.

EU employment figures continue to show growth, although at a declining rate. Annual growth for 2001 was 1.2 per cent down from 1.7 per cent in the previous year. Annual growth in the year to the fourth quarter was 0.8 per cent down from 1.0 per cent in 2001 quarter three. The unemployment rate for February 2002 stood at 7.7 per cent, the same as for the previous month and up only marginally from 7.6 per cent throughout 2001. Annual earnings growth slowed to 2.5 per cent in the year to 2001 quarter four, having previously held up at 3.4 per cent for both quarters two and three.

Germany

The latest data for Germany shows quarterly GDP growth contracting for the second consecutive quarter (figure 1). Growth fell by 0.3 per cent in the fourth quarter from a fall of 0.2 per cent in the third. All components of GDP are weak, with households and investment making negative contributions of 0.3 per cent and 0.2 per cent to quarterly GDP respectively. Retail sales figures echo consumer demand weakness with sales for the fourth quarter of 2001 showing a sharp decline of 2.1 per cent from a decline of 0.7 per cent in the previous quarter. Also exports which had previously made positive contributions to GDP made a negative contribution of 0.4 per cent. However, government consumption and inventories both supported GDP by making strong positive contributions to GDP growth in the fourth quarter of 0.2 per cent and 0.4 per cent respectively, after both made negative contributions in the previous quarter.

Figure 1
GDP: Germany, France & Italy
growth, quarter on previous quarter



Industrial production, which showed a more modest decline in quarter three, declined sharply in the fourth quarter of 2001, from a negative 0.5 per cent in the third quarter to a negative 2.5 per cent in the fourth quarter. On the other hand, the percentage change of the index of production measured month on previous month has improved into this year, having been negative for most of last year. January's index of production was up 1.0 per cent. However, the monthly changes tend to be more volatile.

Consumer price inflation slowed in February to 1.7 per cent from 2.1 per cent in the previous month (figure 3). Producer prices growth also fell by 0.3 per cent from a fall of 0.1 per cent in the previous month.

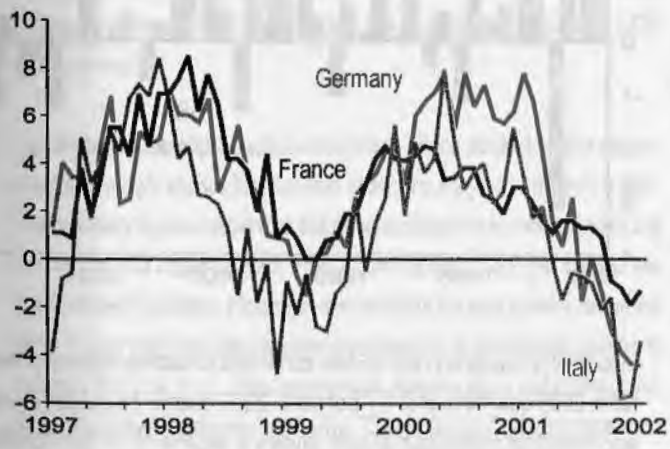
The slowdown in output in 2001 appears to be feeding through to the unemployment figures. Unemployment was 8.1 per cent in February 2002, the same as January's figure, but has been showing gradual increases from the recent trough of 7.7 per cent in the fourth quarter of 2000. Also, employment growth contracted in the fourth quarter of 2001, with annual growth figures for the quarter showing negative growth of 0.2 per cent, the first fall since 1997.

In line with a deteriorating labour market, annual earnings growth weakened further, growing by just 1.1 per cent in the third quarter and fourth quarters, which, after accounting for inflation in the quarter, implied a fall in real earnings.

France

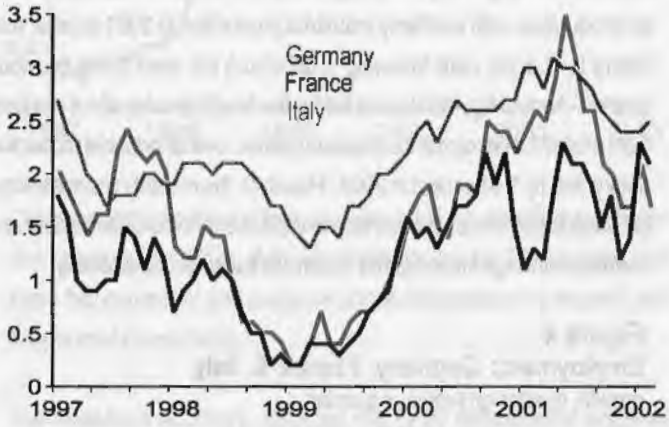
The latest figures for France show GDP quarterly growth negative for the first time since 1996 quarter four. The French economy contracted by 0.1 per cent in 2001 quarter four from a positive 0.5 per cent in the previous quarter (figure 1).

Figure 2
IOP: Germany, France & Italy
growth, month on month a year ago



2001 quarter four saw firms reducing both investment and stocks, which made a zero and a negative contribution of 0.4 per cent to GDP respectively. However, the main driver of the weakness in the French economy in quarter four is the substantial slowing in household spending, which contributed 0.1 per cent to GDP compared with an 0.6 contribution in the previous quarter. The fall in trade flows in France also accelerated in the fourth quarter, although overall trade still made a positive contribution of 0.1 per cent to GDP.

Figure 3
CPI: Germany, France & Italy
growth, month on month a year ago



Having returned to positive growth in 2001 quarter three after two consecutive quarters of negative growth, French industrial production again contracted in the fourth quarter of 2001 by 1.5 per cent. However, January 2002 figures show a monthly increase.

Consumer price inflation eased slightly in February 2002 and was 2.1 per cent down from 2.3 per cent in January (figure 3). These recent figures are historically high when compared with past years when inflation was between 1.2 and 1.7 in the years 1997 to 2000. Producer prices growth was negative for the second consecutive month in February at 0.3 per cent.

The weaker economic activity is also feeding through to the unemployment figures. Unemployment rose slightly in February 2002 to 9.0 per cent of the workforce, from 8.9 per cent in the previous month, and 8.6 per cent in the third quarter of 2001. Employment growth also continued its slowdown in the fourth quarter of 2001, with the annual rate of 1.2 per cent.

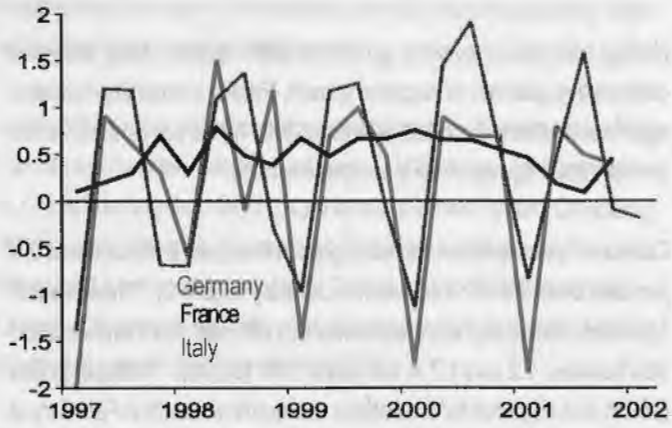
Reflecting the general slowdown, annual earnings growth continued to ease, slowing slightly from 4.2 per cent in the third quarter to 4.1 in the fourth.

Italy

The Italian economy contracted by a revised 0.2 per cent in the fourth quarter of 2001, after posting growth of 0.1 per cent in the previous quarter (figure 1). A closer look at the contributors to change in GDP shows that households moderated the fall in GDP by making the only positive contribution of 0.2 per cent, having made an equivalent negative contribution in the previous quarter. The main drivers of the economy's weakness are destocking and trade, which made negative contributions of 0.7 per cent and 0.3 per cent respectively. Government and investment made zero contributions to GDP.

As with other countries, on the output side this slowdown has been driven by production, with quarterly industrial production in 2001 quarter four falling by 1.8 per cent following a fall of 0.5 per cent in the previous quarter. Annual figures show a fall for the fourth quarter of 4.4 per cent from a fall of 1.2 per cent in the previous quarter. Overall industrial production contracted by 1.0 per cent in 2001. However, the monthly changes show production positive for the last two consecutive months of December and January, although these figures do tend to fluctuate considerably.

Figure 4
Employment: Germany, France & Italy
growth, quarter on previous quarter



Italy's CPI figures remained stable in February and March 2002 at 2.5 per cent, up slightly from January's figure of 2.4 per cent (figure 3). Prices at the factory gate are still negative, with producer prices growth in February falling by 1.4 per cent.

Reflecting the slowdown in the economy, quarterly employment growth was negative in 2002 quarter one, contracting by 0.2 per cent, slightly down from negative growth of 0.1 per cent in the previous quarter (figure 4). Recently updated unemployment figures show slight reductions in the unemployment rate since October. The rate in January 2002 was 9.0 per cent, down slightly from 9.1 per cent in December.

Annual earnings growth continues to be weak, with growth in the fourth quarter of 2001 of 1.8 per cent, although this is the second successive quarter of slightly rising earnings growth

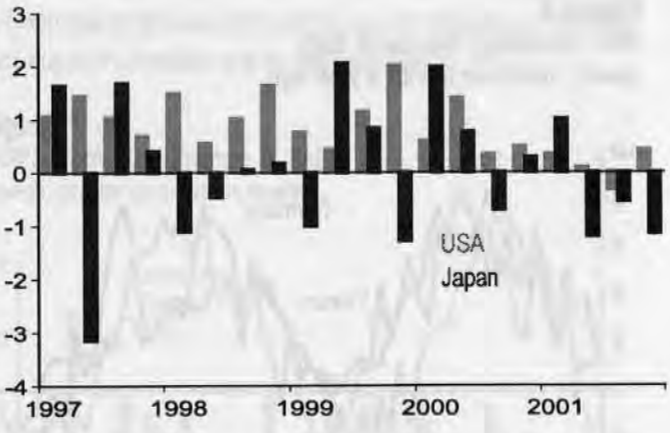
USA

2001 quarter four data show the US economy returning to positive quarterly GDP growth of a revised 0.4 per cent after negative growth of 0.3 per cent in the third quarter (figure 5). Annual growth for 2001 as a whole was 1.2 per cent compared to 4.1 per cent the previous year.

Households and government spending both supported GDP growth by making positive and increased contributions to the change in quarterly GDP growth of 1.0 per cent and 0.2 per cent respectively, with household spending rebounding strongly from 0.2 per cent in 2001 quarter three. The war on terrorism partly explains the increased government spending. On the other hand investment spending continues to decline and made a negative contribution to quarterly GDP growth of 0.3 per cent. Exports also made a negative contribution to quarterly GDP of 0.3 per cent and with an increase in imports, trade made a zero contribution to GDP.

Echoing the consumer demand figures, US retail sales data accelerated very rapidly on the quarter, with quarterly growth in 2001 quarter four of 4.3 per cent compared with growth of 0.6 per cent in the previous quarter. The higher sales have been meet in part by falls in inventories, as stockbuilding made a large negative contribution to quarterly GDP of 0.6 per cent. Cheap finance deals on cars appear to be partly responsible for this increased consumption.

Figure 5
GDP: USA & Japan
growth, quarter on previous quarter



Industrial production in the US has continued to decline with a quarterly fall in 2001 quarter four of 1.7 per cent. 2001 quarter on quarter a year ago industrial production growth shows a decline of 5.8 per cent for quarter four, the largest decline since 1982 quarter four. On the other

hand, January and February 2002 both show increases of 0.3 per cent. Overall, the decline for 2001 was 3.6 per cent, having grown by 4.5 per cent the previous year. Continuing falls in manufacturing output, low capacity utilisation undercutting the incentive for new investment and previous over-investment may be reasons for these sharp declines.

Despite of the spurt of consumer spending, inflationary pressures continue to remain subdued. Annual consumer prices slowed from 2.7 per cent in 2001 quarter three to 1.8 in quarter four and was 1.1 per cent in January and February 2002. Producer prices growth also remains negative, with annual figures showing PPI declining by 1.7 per cent in 2001 quarter four from 0.6 per cent in the previous quarter. These falls in producer prices have continued into 2002 with falls of 2.3 per cent and 2.0 per cent in January and February 2002 respectively.

Having declined considerably in the second half of 2001, unemployment figures are showing a slight improvement, with the rate now standing at 5.5 per cent in February 2002 down from 5.6 per cent in January (figure 6). Overall, employment in 2001 declined by 0.2 per cent compared to growth of 1.3 per cent in the previous year.

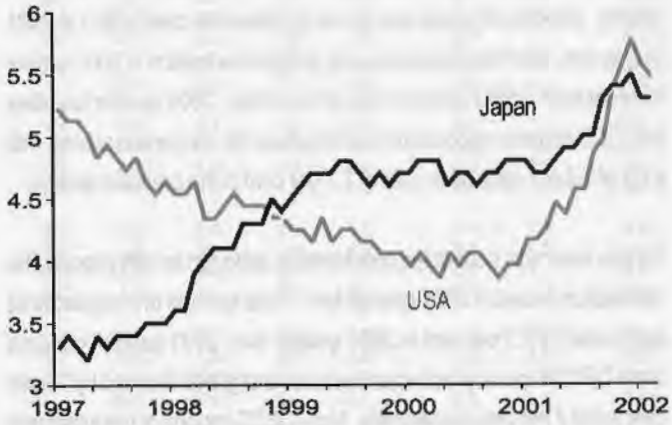
Having increased significantly in January 2002 by 4.2 per cent, annual earnings growth has returned to growth of 3.4 per cent, the rate at which it had been for the last seven months prior to January 2002.

Japan

Latest 2001 quarter four data shows the Japanese economy contracting by 1.2 per cent (figure 5). This is the third consecutive quarterly contraction of the economy. Analysis of the contributors to change in GDP show that a significant rise in private consumption of 1.1 per cent was overshadowed by a huge fall in the contribution of investment of 2.2 per cent. Investment has not made an equivalent negative contribution to GDP since 1974 quarter one. Government contributed 0.1 per cent to GDP, while changes in stock made a zero contribution to GDP. An increase in imports from a negative 0.4 per cent in 2001 quarter three to 0.2 per cent ensured that trade made a net negative contribution to GDP of 0.1 per cent.

Japanese industrial production remains in sharp decline, although the quarter four data shows that the rate of decline may have slowed a little. The quarterly figures show that the decline eased to a contraction of 2.4 per cent in 2001 quarter four, from a contraction of 4.0 per cent in the previous two quarters. However, the monthly figures show a resumed fall of 1.5 per cent into January and a contraction in the twelve months to January 2002 of 11.1. This substantial deterioration may reflect the structure of the Japanese economy. The economy's dependence on the high tech industry make it particularly vulnerable to the vagaries of that industry and with the present downturn in many other economies, it is likely to experience difficulties in its trade position.

Figure 6
Unemployment: USA & Japan
percentage of workforce



Consumer and producer prices continue to fall, continuing the deflation that began in mid-1998. Annual growth figures for 2001 quarter four show that consumer and producer prices declined by 1.0 per cent and 1.5 per cent respectively.

The weakened economy, reflected mainly by deteriorating industrial production and persistent price deflation has led to severe job loses. However, the unemployment rate for January and February 2002 was 5.3 per cent of the workforce, down slightly from 5.5 per cent in December 2001 (figure 6). More generally though, the rate of unemployment is unprecedented since at least before 1960. Employment figures also show contraction for most of 2001, and also in the first two months of this year. Overall, in 2001 employment growth contracted by 0.5 per cent.

Subsequently, earnings growth also contracted considerably with negative annual growth in 2001 quarter four of 0.6 per cent, slightly worse than 2001 quarter three, where earnings fell by 0.4 per cent. The latest monthly figures show a large decline in earnings of 3.4 per cent in the year to January 2002.

World Trade

With national figures showing deterioration, world trade figures are now showing contraction in global trade, albeit at a lag due to later production of these figures. Total trade in manufactures for 2001 quarter two contracted by 2.7 per cent (figure 7) and total trade in goods contracted by 2.2 per cent compared with contractions of 0.9 per cent and 0.2 per cent respectively in the previous quarter.

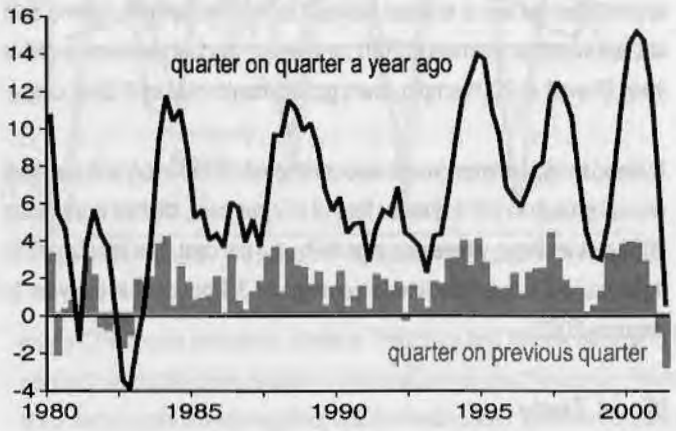
A closer look at the breakdown of the total trade figures show that total

export of manufactures contracted by 2.3 per cent in 2001 quarter three, following a decline of 3.3 per cent in the second quarter of 2001. OECD exports of manufactures declined by 2.2 per cent in 2001 quarter three following a significant decline of 3.6 per cent in the previous quarter. Export of manufactures by non-OECD countries declined by 2.6 per cent in 2001 quarter three from a decline of 2.2 per cent in the previous quarter. Exports of goods also show considerable contraction in 2001 quarter two, with the position showing a slight moderation in 2001 quarter three for both OECD and non-OECD countries. 2001 quarter four data for OECD exports of goods continues to show the contraction easing, with a fall of 1.2 per cent, from a fall of 1.7 per cent in the previous quarter.

Imports have also contracted considerably, although as with exports, the contraction eased in 2001 quarter four. Total imports of manufactures contracted by 2.2 per cent in 2001 quarter two. 2001 quarter four data show OECD imports of both manufactures and goods declined by 1.0 per cent and 0.7 per cent respectively. Non- OECD imports of manufactures and goods contracted by 1.3 per cent and 1.2 per cent in 2001 quarter two respectively.

The decelerating pace of contraction for the latest quarter four data relating to OECD economies could imply a slight easing in the deterioration of world trade activity. This could be partly as a result of the US economy posting a positive growth in 2001 quarter four.

Figure 7
World trade in manufactures
growth



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 93.

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

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

1 European Union 15

	GDP	Contribution to change in GDP: PFC	GFC	GFCF	ChgStk[1]	Exports	less Imports	toP	Sales	CPI	PPI	Earnings	Empl	Unempl
Percentage change on a year earlier	ILGB	HUDS	HUDT	HUDU	HUDV	HUDW	HUDX	ILGV	ILHP	HYAB	ILAI	ILAR	ILIJ	GADR
1996	1.7	1.2	0.3	0.4	–0.5	1.5	1.2	0.6	0.6	2.5	0.7	3.5	0.5	10.6
1997	2.6	1.3	0.2	0.7	0.1	3.1	2.7	3.8	1.5	2.0	0.9	2.9	1.0	10.4
1998	2.9	1.9	0.3	1.3	0.4	2.1	3.1	3.8	2.9	1.8	–0.4	3.1	1.8	9.8
1999	2.6	2.0	0.4	1.0	–0.2	1.8	2.4	1.8	2.0	1.2	–	2.7	1.7	9.0
2000	3.5	1.7	0.4	1.0	–0.1	4.2	3.8	4.7	2.2	2.5	4.8	3.3	1.7	8.1
2001	1.8	..	..	..	..	..	..	–0.1	1.5	2.5	1.2	3.0	1.2	7.6
1999 Q1	2.0	2.1	0.5	0.9	–0.3	0.7	1.8	0.4	2.3	1.2	–1.8	2.8	1.9	9.3
Q2	2.2	1.9	0.4	0.9	–0.3	1.1	1.9	0.6	1.2	1.1	–1.0	1.8	1.7	9.1
Q3	2.7	2.0	0.4	1.1	–0.4	2.1	2.5	2.2	1.9	1.2	0.5	3.6	1.9	8.9
Q4	3.5	2.0	0.5	1.1	–	3.2	3.2	4.2	2.8	1.6	2.4	2.7	1.7	8.6
2000 Q1	3.7	1.8	0.4	1.1	–0.2	4.1	3.5	4.3	2.4	2.1	4.1	3.6	1.6	8.4
Q2	4.0	2.1	0.5	1.1	–	4.2	4.0	5.6	2.8	2.3	4.9	3.6	1.7	8.2
Q3	3.3	1.7	0.4	1.0	–	4.2	3.9	4.8	2.1	2.7	5.1	2.6	1.7	8.0
Q4	2.9	1.3	0.4	0.9	–0.1	4.1	3.7	4.3	1.6	2.8	5.1	3.5	1.9	7.8
2001 Q1	2.6	1.3	0.5	0.5	–0.2	2.9	2.4	3.8	2.2	2.7	3.3	2.6	1.7	7.6
Q2	1.9	1.2	0.4	0.2	–0.3	1.6	1.2	0.4	1.8	2.9	2.4	3.4	1.2	7.6
Q3	1.6	1.2	0.4	–0.2	–0.4	0.3	–0.2	–0.9	1.5	2.5	0.7	3.4	1.0	7.6
Q4	0.9	..	..	..	..	..	..	–3.5	0.5	2.0	–1.1	2.5	0.8	7.6
2002 Q1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2001 Mar	..	..	..	..	..	..	..	2.8	1.8	2.6	2.8	..	..	7.6
Apr	..	..	..	..	..	..	..	0.9	1.8	2.8	2.9	..	..	7.6
May	..	..	..	..	..	..	..	–0.4	0.9	3.2	2.5	..	..	7.6
Jun	..	..	..	..	..	..	..	0.9	2.8	2.9	1.9	..	..	7.6
Jul	..	..	..	..	..	..	..	–1.2	1.8	2.7	1.2	..	..	7.6
Aug	..	..	..	..	..	..	..	–0.2	1.8	2.7	0.8	..	..	7.6
Sep	..	..	..	..	..	..	..	–1.1	0.9	2.3	–	..	..	7.6
Oct	..	..	..	..	..	..	..	–2.5	0.9	2.2	–0.8	..	..	7.6
Nov	..	..	..	..	..	..	..	–3.8	0.9	1.9	–1.2	..	..	7.6
Dec	..	..	..	..	..	..	..	–4.1	–	1.9	–1.1	..	..	7.7
2002 Jan	..	..	..	..	..	..	..	–3.5	–	2.3	–0.7	..	..	7.7
Feb	..	..	..	..	..	..	..	..	..	2.0	–0.7	..	..	7.7
Mar	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Percentage change on previous quarter	ILGL	HUDY	HUDZ	HUEA	HUEB	HUEC	HUED	ILHF	ILHZ	ILIT
1999 Q1	0.7	0.7	0.2	0.3	–0.2	0.3	0.6	0.2	0.7	–0.3
Q2	0.6	0.2	–	0.2	–0.1	0.9	0.6	0.8	–0.4	1.2
Q3	1.1	0.6	0.1	0.4	–0.1	1.1	1.0	1.6	1.3	0.8
Q4	1.0	0.5	0.1	0.2	0.4	0.9	1.1	1.4	1.2	0.1
2000 Q1	0.8	0.6	0.1	0.3	–0.4	1.2	0.8	0.4	0.3	–0.4
Q2	0.9	0.4	0.1	0.3	0.2	1.0	1.1	2.0	–	1.2
Q3	0.5	0.2	–	0.3	–0.1	1.1	0.9	0.9	0.6	0.7
Q4	0.6	0.2	0.1	0.1	0.2	0.8	0.8	0.9	0.6	0.3
2001 Q1	0.5	0.6	0.2	–0.1	–0.4	–	–0.4	–0.1	0.9	–0.6
Q2	0.2	0.3	0.1	–0.1	–	–0.3	–0.1	–1.3	–0.4	0.7
Q3	0.3	0.2	–	–	–0.2	–0.3	–0.5	–0.4	0.4	0.6
Q4	–	..	..	..	..	..	..	–1.7	–0.4	0.1
2002 Q1	..	..	..	..	..	..	..	..	..	..

Percentage change on previous month	ILKF	ILKP
2001 Mar	–0.5	–0.9
Apr	–1.1	–
May	–0.3	–
Jun	0.4	0.9
Jul	–1.1	–
Aug	1.3	–
Sep	–1.0	–0.9
Oct	–1.3	–
Nov	–0.5	0.9
Dec	0.5	–0.9
2002 Jan	–0.4	0.9
Feb	..	..
Mar	..	..

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 and treatment vary among countries

2 Germany

	GDP	Contribution to change in GDP: PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl[1]	Unempl
Percentage change on a year earlier	ILFY	HUBW	HUBX	HUBY	HUBZ	HUCA	HUCB	ILGS	ILHM	HVLL	ILAF	ILAO	ILIG	GABD
1996	0.8	0.5	0.4	–0.1	–0.4	1.3	0.8	0.7	–1.1	1.4	–1.2	3.5	–0.4	8.9
1997	1.5	0.4	0.1	0.2	–	2.9	2.0	3.7	–1.7	1.9	1.1	1.5	–0.3	9.9
1998	1.7	0.9	0.2	0.5	0.5	1.7	2.2	4.2	1.0	1.0	–0.4	1.8	1.5	9.3
1999	1.7	1.7	0.3	0.8	–0.4	1.5	2.3	1.5	0.3	0.6	–1.0	2.6	0.8	8.6
2000	3.2	0.9	0.2	0.7	0.3	4.2	3.1	6.2	1.3	1.9	3.4	2.7	0.5	7.9
2001	0.7	0.7	0.3	–1.0	–0.9	1.7	0.1	0.6	–	2.5	2.9	1.5	0.2	7.9
1999 Q1	0.7	1.8	0.4	0.3	–0.4	0.1	1.6	–0.6	1.4	0.3	–2.4	2.5	1.1	8.8
Q2	1.0	1.7	0.2	0.7	–0.5	0.7	1.9	0.5	–0.6	0.5	–1.7	2.4	0.3	8.7
Q3	2.1	1.7	0.3	1.0	–0.5	2.0	2.5	2.0	–0.4	0.7	–0.7	2.7	1.4	8.6
Q4	3.0	1.5	0.4	1.2	–0.3	3.3	3.0	4.2	0.9	1.0	0.6	3.0	0.7	8.4
2000 Q1	2.9	0.6	0.3	0.9	–0.5	4.3	2.6	5.2	–0.3	1.7	2.3	2.8	0.4	8.1
Q2	4.4	1.7	0.4	0.8	0.3	4.0	2.8	6.6	4.2	1.6	2.6	2.4	0.6	7.9
Q3	3.2	1.1	0.1	0.6	0.4	4.2	3.1	7.1	1.5	2.0	3.7	3.3	0.3	7.8
Q4	2.5	0.4	0.2	0.4	1.1	4.5	4.1	5.9	–0.2	2.4	4.5	2.4	0.5	7.7
2001 Q1	1.8	0.9	0.3	–0.5	–0.2	3.1	1.8	6.2	0.8	2.5	4.8	2.0	0.4	7.8
Q2	0.7	0.7	0.3	–0.8	–0.7	2.4	1.2	1.5	0.1	3.2	4.7	2.0	0.3	7.8
Q3	0.4	0.7	0.3	–1.4	–1.0	1.5	–0.3	–1.1	0.7	2.5	2.6	1.1	0.1	7.9
Q4	–	0.6	0.3	–1.3	–1.5	–	–2.0	–3.8	–1.4	1.8	0.3	1.1	–0.2	8.0
2002 Q1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2001 Mar	..	..	..	..	..	..	..	4.2	2.0	2.5	4.9	..	..	7.8
Apr	..	..	..	..	..	..	..	1.5	0.2	2.9	5.0	..	..	7.8
May	..	..	..	..	..	..	..	0.5	–0.5	3.5	4.6	..	..	7.8
Jun	..	..	..	..	..	..	..	2.5	0.7	3.1	4.3	..	..	7.9
Jul	..	..	..	..	..	..	..	–1.8	0.4	2.6	3.1	..	..	7.9
Aug	..	..	..	..	..	..	..	–	0.8	2.6	2.7	..	..	7.9
Sep	..	..	..	..	..	..	..	–1.4	0.9	2.1	1.9	..	..	7.9
Oct	..	..	..	..	..	..	..	–3.0	–1.6	2.0	0.6	..	..	8.0
Nov	..	..	..	..	..	..	..	–3.9	1.3	1.7	0.1	..	..	8.0
Dec	..	..	..	..	..	..	..	–4.4	–4.0	1.7	0.1	..	..	8.0
2002 Jan	..	..	..	..	..	..	..	–4.5	–2.0	2.1	–0.1	..	..	8.1
Feb	..	..	..	..	..	..	..	..	..	1.7	–0.3	..	..	8.1
Mar	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Percentage change on previous quarter	ILGI	HUCC	HUCD	HUCE	HUCF	HUCG	HUCH	ILHC	ILHW				ILIQ	
1999 Q1	1.1	1.1	0.2	0.7	–0.3	0.4	0.8	–	0.7				–1.5	
Q2	–0.2	–0.5	–0.1	0.1	–	1.1	0.8	1.1	–2.9				0.7	
Q3	1.3	0.6	0.2	0.5	–0.2	0.9	0.7	1.6	1.3				1.0	
Q4	0.8	0.4	0.1	–0.1	0.2	0.8	0.7	1.3	1.8				0.5	
2000 Q1	1.0	0.1	0.1	0.3	–0.5	1.4	0.4	1.0	–0.4				–1.8	
Q2	1.2	0.6	–	–	0.8	0.8	0.9	2.5	1.5				0.9	
Q3	0.1	–0.1	–0.1	0.3	–0.2	1.1	0.9	2.1	–1.2				0.7	
Q4	0.2	–0.2	0.2	–0.3	1.0	1.1	1.7	0.2	0.1				0.7	
2001 Q1	0.4	0.6	0.2	–0.5	–1.8	–	–1.8	1.3	0.5				–1.8	
Q2	–	0.4	–	–0.3	0.2	0.1	0.4	–2.0	0.8				0.8	
Q3	–0.2	–0.1	–0.1	–0.3	–0.4	0.2	–0.5	–0.5	–0.7				0.5	
Q4	–0.3	–0.3	0.2	–0.2	0.4	–0.4	–	–2.5	–2.1				0.4	
2002 Q1	..	..	..	..	..	..	..	..	..				..	
Percentage change on previous month								ILKC	ILKM					
2001 Mar								–1.4	1.6					
Apr								–1.2	0.1					
May								–	0.5					
Jun								0.3	–0.5					
Jul								–1.3	–0.6					
Aug								1.7	0.5					
Sep								–1.3	–0.8					
Oct								–1.7	–2.1					
Nov								–1.0	3.3					
Dec								0.3	–5.1					
2002 Jan								1.0	3.0					
Feb								..	..					
Mar								..	..					

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	Contribution to change in GDP: PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI[1]	Earnings	Empl[2]	Unempl
Percentage change on a year earlier	ILFZ	HUBK	HUBL	HUBM	HUBN	HUBO	HUBP	ILGT	ILHN	HXAA	ILAG	ILAP	ILIH	GABC
1996	1.1	0.7	0.5	–	–0.6	0.7	0.3	0.9	–0.3	2.0	–2.7	2.6	0.3	11.9
1997	1.9	0.1	0.5	–	0.1	2.8	1.5	3.8	1.1	1.2	–0.6	2.6	0.7	11.8
1998	3.5	2.0	–	1.3	0.8	2.1	2.6	5.3	2.6	0.8	–0.9	2.2	1.9	11.4
1999	3.0	1.7	0.5	1.2	–0.4	1.0	1.0	2.0	2.4	0.5	–1.6	2.5	2.3	10.7
2000	3.6	1.6	0.5	1.2	0.4	3.5	3.8	3.5	0.5	1.7	2.1	5.2	2.7	9.3
2001	2.0	1.6	0.5	0.6	–1.0	0.3	–0.1	0.9	–0.1	1.7	1.5	4.2	1.7	8.7
1999 Q1	2.8	1.8	0.3	1.4	–0.1	0.1	0.8	0.7	3.2	0.2	–2.7	2.0	2.4	11.2
Q2	2.5	1.5	0.4	1.1	–0.5	0.4	0.5	0.5	1.9	0.4	–2.3	2.0	2.0	11.0
Q3	2.9	1.7	0.5	1.1	–0.8	1.4	1.0	2.3	2.3	0.5	–1.6	2.7	2.2	10.6
Q4	3.7	1.9	0.6	1.1	–0.2	2.2	1.9	4.4	2.2	1.0	–	3.4	2.5	10.2
2000 Q1	3.7	2.0	0.5	1.1	0.2	3.1	3.1	4.4	2.0	1.5	1.2	5.2	2.6	9.8
Q2	3.7	1.7	0.6	1.2	0.2	3.7	3.7	3.8	1.3	1.5	2.1	5.4	2.8	9.4
Q3	3.4	1.5	0.6	1.2	1.0	3.3	4.2	3.5	0.1	1.9	2.7	5.2	2.7	9.1
Q4	3.3	1.2	0.6	1.4	0.3	4.0	4.1	2.4	–1.3	1.9	2.4	5.0	2.6	8.8
2001 Q1	2.9	1.5	0.5	1.1	–0.7	2.7	2.2	2.3	1.3	1.2	2.5	4.3	2.3	8.6
Q2	2.2	1.4	0.5	0.6	–0.4	1.0	0.9	1.5	–0.4	2.1	1.8	4.2	1.9	8.6
Q3	2.1	1.7	0.5	0.5	–1.1	–0.1	–0.6	1.2	–0.7	1.9	1.1	4.2	1.3	8.6
Q4	0.9	1.6	0.4	0.1	–1.6	–2.2	–2.7	–1.3	–0.8	1.4	0.6	4.1	1.2	8.8
2002 Q1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2001 Mar	..	..	..	..	..	..	..	1.6	1.5	1.2	2.4	..	..	8.6
Apr	..	..	..	..	..	..	..	1.1	–0.2	1.8	2.0	..	..	8.6
May	..	..	..	..	..	..	..	1.6	–2.5	2.3	1.8	..	..	8.6
Jun	..	..	..	..	..	..	..	1.6	1.5	2.1	1.7	..	..	8.6
Jul	..	..	..	..	..	..	..	1.3	–0.8	2.1	1.3	..	..	8.6
Aug	..	..	..	..	..	..	..	1.3	–	1.9	1.1	..	..	8.6
Sep	..	..	..	..	..	..	..	0.9	–1.1	1.5	0.8	..	..	8.6
Oct	..	..	..	..	..	..	..	–0.9	–0.9	1.8	0.6	..	..	8.7
Nov	..	..	..	..	..	..	..	–1.2	–0.6	1.2	0.6	..	..	8.8
Dec	..	..	..	..	..	..	..	–1.9	–0.6	1.4	0.4	..	..	8.9
2002 Jan	..	..	..	..	..	..	..	–1.3	–3.5	2.3	–0.1	..	..	8.9
Feb	..	..	..	..	..	..	..	..	–0.4	2.1	–0.3	..	..	9.0
Mar	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Percentage change on previous quarter	ILGJ	HUBQ	HUBR	HUBS	HUBT	HUBU	HUBV	ILHD	ILHX	ILIR
1999 Q1	0.8	0.2	0.2	0.4	–0.3	0.2	–	–	0.1	0.7
Q2	0.9	0.6	0.1	0.3	–0.2	0.5	0.4	1.1	–0.2	0.5
Q3	0.9	0.5	0.1	0.2	–0.5	1.1	0.5	1.3	1.2	0.7
Q4	1.2	0.6	0.2	0.2	0.8	0.3	0.9	2.0	1.0	0.7
2000 Q1	0.8	0.3	0.1	0.4	0.1	1.1	1.2	–	–0.1	0.8
Q2	0.9	0.3	0.2	0.4	–0.2	1.1	1.0	0.5	–0.8	0.7
Q3	0.6	0.3	0.1	0.3	0.3	0.7	1.1	1.0	–	0.6
Q4	1.0	0.2	0.2	0.3	0.1	1.0	0.8	0.9	–0.4	0.6
2001 Q1	0.4	0.7	0.1	0.1	–0.9	–0.2	–0.6	–0.1	2.6	0.5
Q2	0.2	0.1	0.1	–	0.2	–0.5	–0.3	–0.3	–2.5	0.2
Q3	0.5	0.6	0.2	0.1	–0.5	–0.4	–0.5	0.7	–0.3	0.1
Q4	–0.1	0.1	–	–	–0.4	–1.1	–1.2	–1.5	–0.5	0.5
2002 Q1	..	..	..	..	..	..	..	..	..	..

Percentage change on previous month	ILKD	ILKN
2001 Mar	0.1	0.5
Apr	–0.6	–2.9
May	0.3	–0.5
Jun	0.1	2.0
Jul	0.7	–1.4
Aug	–	0.7
Sep	–0.6	–1.4
Oct	–0.9	–0.3
Nov	0.3	1.0
Dec	–1.1	–0.1
2002 Jan	0.6	–0.2
Feb	..	2.5
Mar	..	..

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

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

4 Italy

	GDP	Contribution to change in GDP: PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl	Unempl
Percentage change on a year earlier	ILGA	HUCI	HUCJ	HUCK	HUCL	HUCM	HUCN	ILGU	ILHO	HYAA	ILAH	ILAQ	ILII	GABE
1996	1.1	0.7	0.2	0.7	–0.7	0.2	–0.1	–1.6	1.2	4.0	1.8	3.1	0.5	11.5
1997	2.0	1.9	–	0.4	0.3	1.7	2.3	3.8	0.9	2.0	1.3	3.6	0.4	11.6
1998	1.8	1.9	–	0.7	0.3	1.0	2.2	1.4	1.0	2.0	0.1	2.8	1.2	11.7
1999	1.6	1.5	0.2	1.1	0.1	0.1	1.4	–	1.0	1.7	–0.2	2.3	1.2	11.2
2000	2.9	1.6	0.3	1.3	–1.1	3.3	2.5	4.1	–0.5	2.5	6.0	2.1	1.9	10.4
2001	1.8	0.7	0.4	0.5	–	0.2	–	–1.0	–1.4	2.7	1.9	1.7	2.0	9.5
1999 Q1	0.9	2.0	0.2	0.6	–	–1.2	0.7	–1.3	1.0	1.4	–1.8	3.0	1.2	11.5
Q2	1.1	1.3	0.2	0.9	0.7	–0.9	1.1	–2.4	0.3	1.4	–1.4	2.1	1.3	11.3
Q3	1.4	1.4	0.2	1.2	–0.2	0.2	1.4	0.4	0.6	1.7	–	2.3	1.2	11.1
Q4	2.9	1.1	0.2	1.7	–	2.2	2.3	3.1	2.3	2.1	2.2	1.8	1.4	11.0
2000 Q1	3.3	1.4	0.2	1.5	–0.6	3.9	3.0	3.4	–0.3	2.4	4.7	1.9	1.2	10.9
Q2	3.1	1.9	0.2	1.5	–0.7	2.9	2.9	5.7	–0.3	2.6	6.2	2.5	1.5	10.6
Q3	2.6	1.7	0.3	1.4	–1.7	3.7	2.8	3.5	–	2.6	6.7	2.0	2.1	10.2
Q4	2.4	1.5	0.4	0.8	–1.4	2.6	1.5	3.6	–1.3	2.6	6.5	1.9	2.8	9.9
2001 Q1	2.5	1.1	0.4	0.8	–0.2	1.1	0.7	2.5	–0.6	2.9	4.8	2.0	3.1	9.7
Q2	2.2	0.8	0.4	0.6	–0.4	1.5	0.6	–0.8	–1.0	3.0	3.2	1.3	2.1	9.5
Q3	1.8	0.5	0.4	0.3	1.1	–0.8	–0.3	–1.2	–2.2	2.8	0.9	1.7	1.8	9.4
Q4	0.7	0.4	0.3	0.4	–0.3	–0.9	–0.8	–4.4	–1.9	2.5	–1.0	1.8	1.1	9.2
2002 Q1	..	..	..	..	..	..	..	..	..	2.5	..	..	1.8	..
2001 Mar	..	..	..	..	..	..	..	2.2	–	2.8	4.2	2.1	..	9.6
Apr	..	..	..	..	..	..	..	–0.1	–1.0	3.1	4.3	1.6	..	9.5
May	..	..	..	..	..	..	..	–1.7	–1.0	3.0	2.9	1.0	..	9.5
Jun	..	..	..	..	..	..	..	–0.6	–1.0	3.0	2.4	1.1	..	9.5
Jul	..	..	..	..	..	..	..	–0.7	–2.9	2.9	1.3	1.7	..	9.5
Aug	..	..	..	..	..	..	..	–1.0	–1.0	2.8	1.2	1.8	..	9.4
Sep	..	..	..	..	..	..	..	–2.1	–2.9	2.6	0.4	1.7	..	9.4
Oct	..	..	..	..	..	..	..	–1.6	–1.9	2.5	–0.6	1.7	..	9.3
Nov	..	..	..	..	..	..	..	–5.8	–1.9	2.4	–1.3	1.8	..	9.2
Dec	..	..	..	..	..	..	..	–5.7	–1.9	2.4	–1.3	1.8	..	9.1
2002 Jan	..	..	..	..	..	..	..	–3.4	2.9	2.4	–1.2	2.0	..	9.0
Feb	..	..	..	..	..	..	..	..	..	2.5	–1.4	1.8	..	..
Mar	..	..	..	..	..	..	..	..	..	2.5	..	..	..	..

Percentage change on previous quarter	ILGK	HUCO	HUCP	HUCQ	HUCR	HUCS	HUCT	ILHE	ILHY	ILIS
1999 Q1	0.4	0.5	0.1	0.5	–0.1	–0.3	0.2	0.2	0.6	–1.0
Q2	0.6	–0.1	–	0.3	0.2	0.6	0.4	–0.5	0.3	1.2
Q3	0.9	0.3	0.1	0.4	–0.5	0.8	0.2	2.1	–	1.3
Q4	1.0	0.3	0.1	0.5	0.5	1.1	1.4	1.3	1.3	–0.1
2000 Q1	0.8	0.7	0.1	0.2	–0.7	1.4	0.9	0.5	–1.9	–1.2
Q2	0.3	0.5	–	0.3	0.1	–0.4	0.3	1.7	0.3	1.5
Q3	0.5	0.1	0.1	0.4	–1.5	1.5	0.1	–0.1	0.3	1.9
Q4	0.8	0.2	0.1	–0.1	0.7	0.1	0.2	1.5	–	0.6
2001 Q1	0.8	0.2	0.1	0.3	0.4	–0.1	0.1	–0.6	–1.3	–0.8
Q2	–	0.2	0.1	–	–0.1	–	0.2	–1.6	–	0.5
Q3	0.1	–0.2	0.1	0.1	–	–0.7	–0.8	–0.5	–1.0	1.6
Q4	–0.2	0.2	–	–	–0.7	–	–0.3	–1.8	0.3	–0.1
2002 Q1	..	..	..	..	..	..	..	..	..	–0.2

Percentage change on previous month	ILKE	ILKO
2001 Mar	0.5	–
Apr	–2.2	–
May	0.5	–
Jun	0.1	–
Jul	–0.7	–1.0
Aug	0.6	–
Sep	–0.9	–
Oct	–0.2	–
Nov	–2.5	1.0
Dec	1.6	–1.0
2002 Jan	0.2	3.9
Feb	..	..
Mar	..	..

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

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

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
1996	3.6	2.1	0.1	1.5	–	0.9	1.0	4.6	5.6	2.9	2.3	3.3	1.4	5.4
1997	4.4	2.4	0.3	1.6	0.4	1.4	1.7	7.0	4.9	2.3	0.3	3.2	2.3	4.9
1998	4.3	3.2	0.2	2.0	0.2	0.3	1.6	5.1	7.1	1.6	–1.1	2.5	1.5	4.5
1999	4.1	3.3	0.3	1.6	–0.2	0.4	1.5	3.7	9.0	2.1	1.8	2.9	1.5	4.2
2000	4.1	3.3	0.4	1.4	–0.1	1.1	2.0	4.5	6.5	3.4	4.1	3.6	1.3	4.0
2001	1.2	2.1	0.4	–0.2	–1.2	–0.6	–0.5	–3.6	4.5	2.8	0.7	3.2	–0.2	4.8
1999 Q1	4.0	3.3	0.4	1.8	–0.3	0.1	1.3	3.4	9.6	1.7	–	1.8	1.7	4.3
Q2	3.9	3.3	0.1	1.6	–0.1	0.3	1.4	3.2	8.2	2.2	1.1	2.4	1.4	4.3
Q3	4.0	3.4	0.3	1.6	–0.4	0.6	1.7	3.7	9.7	2.4	2.4	3.7	1.4	4.2
Q4	4.4	3.4	0.4	1.4	0.1	0.5	1.7	4.4	8.5	2.6	3.2	3.6	1.5	4.1
2000 Q1	4.2	3.6	0.3	1.6	–0.6	1.0	2.0	4.8	8.6	3.2	4.6	4.2	1.6	4.0
Q2	5.2	3.3	0.6	1.6	0.5	1.3	2.2	5.9	7.0	3.3	4.4	3.6	1.6	4.0
Q3	4.4	3.3	0.4	1.4	0.1	1.3	2.2	4.8	6.3	3.5	3.9	2.9	1.1	4.1
Q4	2.8	2.8	0.2	1.1	–0.5	0.8	1.8	2.6	4.2	3.4	3.4	3.5	1.0	4.0
2001 Q1	2.5	2.4	0.4	0.6	–0.6	0.5	0.9	–0.4	2.7	3.4	2.1	2.6	0.7	4.2
Q2	1.2	2.2	0.3	–	–1.3	–0.2	–0.1	–3.5	4.0	3.4	2.1	3.2	–0.1	4.5
Q3	0.5	1.6	0.4	–0.5	–1.2	–1.2	–1.2	–4.8	3.4	2.7	0.6	3.4	–0.2	4.8
Q4	0.5	2.1	0.6	–0.8	–1.7	–1.3	–1.4	–5.8	7.7	1.8	–1.7	3.4	–1.0	5.6
2002 Q1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2001 Mar	..	..	..	..	..	..	..	–1.3	2.0	2.9	1.2	2.6	0.6	4.3
Apr	..	..	..	..	..	..	..	–2.4	4.4	3.3	2.3	2.6	–0.1	4.5
May	..	..	..	..	..	..	..	–3.4	3.7	3.6	2.6	3.5	0.1	4.4
Jun	..	..	..	..	..	..	..	–4.7	3.9	3.3	1.2	3.4	–0.2	4.6
Jul	..	..	..	..	..	..	..	–4.1	4.3	2.7	0.4	3.4	0.2	4.6
Aug	..	..	..	..	..	..	..	–4.6	4.5	2.7	0.9	3.4	–0.6	4.9
Sep	..	..	..	..	..	..	..	–5.7	1.4	2.6	0.7	3.4	–0.1	5.0
Oct	..	..	..	..	..	..	..	–5.9	9.1	2.1	–1.0	3.4	–0.6	5.4
Nov	..	..	..	..	..	..	..	–5.9	6.9	1.8	–1.6	3.4	–1.0	5.6
Dec	..	..	..	..	..	..	..	–5.8	7.1	1.6	–2.2	3.4	–1.4	5.8
2002 Jan	..	..	..	..	..	..	..	–4.7	5.9	1.1	–2.3	4.2	–1.8	5.6
Feb	..	..	..	..	..	..	..	–4.1	6.2	1.1	–2.0	3.4	–1.0	5.5
Mar	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Percentage change on previous quarter	ILGM	HUDM	HUDN	HUDO	HUDP	HUDQ	HUDR	ILHG	ILIA				ILIU	
1999 Q4	2.0	0.9	0.2	0.3	0.6	0.3	0.4	1.5	2.1				0.3	
2000 Q1	0.6	1.0	–0.1	0.6	–0.7	0.3	0.6	1.4	2.6				–0.5	
Q2	1.4	0.6	0.3	0.3	0.5	0.4	0.6	1.7	0.1				1.2	
Q3	0.3	0.7	–0.1	0.1	–0.3	0.3	0.5	0.2	1.3				0.1	
Q4	0.5	0.5	0.1	0.1	–0.1	–0.1	–	–0.7	0.1				0.2	
2001 Q1	0.3	0.5	0.2	0.2	–0.8	–	–0.2	–1.6	1.2				–0.7	
Q2	0.1	0.4	0.1	–0.3	–0.1	–0.4	–0.4	–1.4	1.4				0.4	
Q3	–0.3	0.2	0.1	–0.4	–0.3	–0.6	–0.6	–1.2	0.6				–	
Q4	0.4	1.0	0.2	–0.3	–0.6	–0.3	–0.3	–1.7	4.3				–0.6	
2002 Q1	..	..	..	..	..	..	..	..	..				..	
Percentage change on previous month								ILKG	ILKQ				ILLA	
2001 Mar								–0.4	–0.1				0.4	
Apr								–0.6	1.4				–0.1	
May								–0.3	–				..	
Jun								–0.9	0.1				0.6	
Jul								0.1	1.0				0.4	
Aug								–0.3	0.7				–1.1	
Sep								–1.1	–2.6				–	
Oct								–0.6	7.7				–	
Nov								–0.3	–2.6				–0.4	
Dec								–0.3	0.4				–0.1	
2002 Jan								0.3	0.1				–1.6	
Feb								0.3	0.4				0.9	
Mar								..	..				..	

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

Source: OECD - SNA93

6 Japan

	GDP	Contribution to change in 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
1996	3.6	1.3	0.4	2.0	0.3	0.6	1.0	2.2	0.6	0.1	–1.7	2.6	0.5	3.4
1997	1.8	0.5	0.2	0.2	–	1.1	0.1	4.0	–2.1	1.7	0.6	2.8	1.0	3.4
1998	–1.0	0.1	0.3	–1.2	–0.6	–0.2	–0.6	–6.7	–6.0	0.7	–1.3	–0.8	–0.6	4.1
1999	0.7	0.6	0.7	–0.2	–0.3	0.1	0.2	1.0	–2.6	–0.3	–1.4	–0.7	–0.8	4.7
2000	2.2	0.2	0.7	0.9	–0.1	1.3	0.8	5.2	–1.1	–0.7	0.1	1.7	–0.3	4.7
2001	–0.4	0.3	0.5	–0.5	–	–0.7	–0.1	–7.0	–1.3	–0.7	–0.9	–	–0.5	5.0
1999 Q1	–1.2	–0.4	0.4	–0.7	–0.6	–0.3	–0.3	–3.7	–4.6	–0.1	–2.2	–0.7	–1.2	4.6
Q2	1.3	1.3	0.8	–0.3	–0.3	–0.1	0.2	0.3	–2.5	–0.3	–1.7	–1.1	–1.1	4.7
Q3	2.1	1.6	0.8	0.1	–0.3	0.3	0.3	2.7	–2.2	–	–1.3	–0.4	–0.7	4.7
Q4	0.6	–	0.7	0.1	–0.2	0.7	0.8	5.1	–1.1	–1.0	–0.5	–0.5	–0.2	4.7
2000 Q1	3.6	1.7	0.8	0.6	–0.1	1.3	0.7	4.3	–2.2	–0.6	0.1	2.0	–0.5	4.8
Q2	2.3	0.3	0.8	0.7	–0.1	1.4	0.8	6.6	–1.5	–0.7	0.3	2.3	–0.4	4.7
Q3	0.7	–1.4	0.7	0.9	–	1.2	0.7	5.3	–0.4	–0.6	0.2	1.6	–0.4	4.7
Q4	2.3	0.2	0.7	1.3	0.1	1.0	0.9	4.4	–0.4	–0.8	–0.1	1.1	0.2	4.8
2001 Q1	1.4	0.8	0.6	0.4	–	0.2	0.7	0.6	2.3	–0.5	–0.4	0.5	0.5	4.7
Q2	–0.6	–	0.5	–0.2	–	–0.7	0.2	–5.2	–1.1	–0.7	–0.6	0.6	–0.4	4.9
Q3	–0.5	–0.2	0.4	0.2	–0.1	–1.1	–0.3	–10.4	–2.6	–0.8	–1.0	–0.4	–0.8	5.1
Q4	–1.9	0.5	0.5	–2.3	–0.1	–1.3	–0.8	–12.8	–3.7	–1.0	–1.5	–0.6	–1.3	5.4
2002 Q1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2001 Mar	..	..	..	..	..	..	..	–1.4	2.3	–0.7	–0.4	0.5	0.5	4.7
Apr	..	..	..	..	..	..	..	–3.9	–	–0.7	–0.6	–	–0.2	4.8
May	..	..	..	..	..	..	..	–4.8	–1.1	–0.7	–0.6	–0.2	–0.4	4.9
Jun	..	..	..	..	..	..	..	–6.9	–2.2	–0.8	–0.7	2.1	–0.6	4.9
Jul	..	..	..	..	..	..	..	–8.6	–2.2	–0.8	–0.8	0.6	–0.6	5.0
Aug	..	..	..	..	..	..	..	–11.3	–3.3	–0.7	–1.0	–1.2	–0.6	5.0
Sep	..	..	..	..	..	..	..	–11.1	–2.2	–0.8	–1.0	–0.6	–1.3	5.3
Oct	..	..	..	..	..	..	..	–12.2	–3.4	–0.8	–1.3	–0.5	–1.6	5.4
Nov	..	..	..	..	..	..	..	–13.1	–2.2	–1.0	–1.6	0.5	–1.1	5.4
Dec	..	..	..	..	..	..	..	–13.1	–5.6	–1.2	–1.7	–1.8	–1.2	5.5
2002 Jan	..	..	..	..	..	..	..	–11.1	–4.4	–1.4	–1.6	–3.4	–1.4	5.3
Feb	..	..	..	..	..	..	..	..	–4.4	–1.6	–1.4	..	–1.6	5.3
Mar	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Percentage change on previous quarter														
	ILGN	HUDA	HUDB	HUDC	HUDD	HUDE	HUDF	ILHH	ILIB				ILIV	
1999 Q1	–1.0	–1.3	0.1	0.4	–0.1	–	0.2	1.4	0.4				–1.8	
Q2	2.1	1.6	0.4	–	0.1	0.1	0.2	–0.3	–0.4				2.2	
Q3	0.8	1.0	0.1	–0.2	–0.2	0.3	0.2	2.7	–0.4				–	
Q4	–1.3	–1.3	0.1	–	–0.1	0.2	0.2	1.2	–0.7				–0.6	
2000 Q1	2.0	0.4	0.2	0.8	0.1	0.7	0.1	0.6	–0.7				–2.1	
Q2	0.8	0.2	0.4	0.1	–	0.3	0.3	1.9	0.4				2.3	
Q3	–0.7	–0.7	–	–	–0.1	0.1	0.1	1.5	0.8				–	
Q4	0.3	0.3	–	0.3	–	–	0.4	0.3	–0.7				–	
2001 Q1	1.0	1.0	0.2	–	–	–0.2	–	–3.1	1.9				–1.8	
Q2	–1.2	–0.6	0.3	–0.5	–	–0.5	–0.2	–4.0	–2.9				1.4	
Q3	–0.5	–1.0	–	0.5	–0.1	–0.3	–0.4	–4.0	–0.8				–0.4	
Q4	–1.2	1.1	0.1	–2.2	–	–0.3	–0.2	–2.4	–1.9				–0.5	
2002 Q1	..	..	..	..	..	..	..	..	..				..	
Percentage change on previous month														
								ILKH	ILKR				ILLB	
2001 Mar								–2.0	–1.1				0.4	
Apr								–2.0	–2.2				0.7	
May								–1.0	–				0.8	
Jun								–0.7	–				–0.2	
Jul								–2.3	–				–0.2	
Aug								0.3	–1.1				–0.1	
Sep								–3.3	–				–0.7	
Oct								0.1	–1.1				0.1	
Nov								–1.5	1.2				0.4	
Dec								1.7	–3.4				–1.1	
2002 Jan								–1.5	3.6				–1.4	
Feb								..	–				–0.3	
Mar								..	..				..	

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

7 World trade in goods[1]

	Export of manufactures			Import of manufactures			Export of goods			Import of goods			Total trade	
	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	Total	OECD	Other	manufactures	goods
Percentage change on a year earlier	ILIZ	ILJA	ILJB	ILJC	ILJD	ILJE	ILJF	ILJG	ILJH	ILJI	ILJJ	ILJK	ILJL	ILJM
1992	4.3	3.3	8.6	5.3	4.3	8.3	4.2	3.7	5.9	5.1	4.2	7.8	4.8	4.7
1993	4.8	2.2	15.3	4.0	1.0	12.5	4.0	2.2	9.1	3.2	0.8	10.3	4.4	3.6
1994	12.0	9.9	19.9	11.9	12.3	11.0	10.6	9.4	14.0	10.9	11.0	10.8	12.0	10.8
1995	9.6	10.0	8.6	11.0	10.4	12.4	9.0	9.4	7.8	9.9	9.0	12.2	10.3	9.4
1996	6.5	6.4	6.5	7.0	7.9	4.6	6.6	6.4	7.2	6.0	7.0	3.5	6.7	6.3
1997	11.3	11.9	9.4	10.8	11.4	9.5	10.4	11.1	8.9	9.4	9.7	8.9	11.1	10.0
1998	6.0	6.4	4.8	6.8	9.5	–0.4	5.4	5.8	4.3	6.1	8.3	0.3	6.5	5.8
1999	5.9	6.1	5.6	7.9	10.4	0.8	5.4	5.7	4.7	6.3	8.9	–0.9	6.9	5.9
2000	13.8	12.6	18.3	14.5	13.9	16.6	12.6	12.1	13.8	12.9	12.0	15.9	14.2	12.7
2001	..	..	..	..	–1.5	..	..	–0.7	..	..	–0.8	..	..	..
1995 Q4	6.6	6.8	5.9	7.1	6.2	9.4	6.1	6.0	6.4	6.2	5.0	9.5	6.8	6.2
1996 Q1	5.6	5.6	5.7	6.9	7.3	5.8	5.5	5.1	6.6	6.0	6.2	5.7	6.2	5.8
Q2	5.8	5.2	7.6	5.9	6.6	4.1	5.7	4.9	7.8	5.0	5.7	3.1	5.8	5.4
Q3	6.7	6.8	6.2	6.9	8.7	2.5	7.0	7.0	7.2	5.9	7.7	1.1	6.8	6.4
Q4	7.8	8.1	6.5	8.1	9.0	5.8	8.4	8.8	7.3	7.1	8.3	4.0	7.9	7.7
1997 Q1	8.2	8.0	9.0	8.2	8.2	8.3	7.9	7.6	8.7	7.1	7.2	7.1	8.2	7.5
Q2	11.9	13.1	7.8	11.5	12.4	9.3	11.3	12.5	8.2	10.2	10.6	9.2	11.7	10.8
Q3	12.9	14.0	9.0	12.1	12.5	11.2	11.8	13.0	8.7	10.6	10.6	10.8	12.5	11.2
Q4	12.2	12.4	11.6	11.4	12.3	9.1	10.8	11.2	9.8	9.9	10.4	8.7	11.8	10.4
1998 Q1	10.7	11.4	8.5	10.5	13.2	3.7	10.0	11.0	7.4	9.6	11.4	4.7	10.6	9.8
Q2	7.1	6.8	8.3	7.8	9.5	3.2	6.3	6.2	6.5	7.0	8.3	3.4	7.5	6.7
Q3	4.1	4.1	4.0	4.9	7.8	–2.9	3.4	3.4	3.5	4.4	6.9	–2.3	4.5	3.9
Q4	2.2	3.3	–1.6	4.1	7.6	–5.4	1.9	2.6	–	3.5	6.4	–4.6	3.2	2.7
1999 Q1	1.6	2.6	–2.2	4.5	7.3	–3.5	1.4	1.8	0.3	3.6	6.3	–4.1	3.0	2.5
Q2	3.7	4.0	2.8	6.1	9.0	–2.2	3.7	3.7	3.5	4.7	7.7	–3.6	4.9	4.2
Q3	7.3	7.3	7.3	9.0	11.3	2.3	6.7	7.2	5.3	7.1	9.5	–	8.2	6.9
Q4	11.2	10.4	14.3	12.0	13.8	6.6	9.9	10.0	9.6	9.9	11.9	4.1	11.6	9.9
2000 Q1	14.9	13.9	18.5	14.2	14.7	12.6	13.3	13.5	12.7	12.2	12.7	10.9	14.5	12.8
Q2	14.9	14.0	18.1	15.4	15.2	16.2	13.4	13.3	13.5	13.7	13.1	15.6	15.2	13.5
Q3	14.0	12.4	19.6	15.5	14.4	19.1	12.9	11.9	15.7	14.2	12.7	19.0	14.7	13.5
Q4	11.5	10.0	16.8	13.0	11.3	18.6	10.7	9.8	13.4	11.6	9.6	17.9	12.3	11.1
2001 Q1	6.9	6.0	9.9	7.6	5.9	13.0	6.9	6.1	9.0	7.2	5.3	13.0	7.2	7.0
Q2	0.1	–0.4	1.8	0.9	–0.4	5.1	0.8	0.4	2.0	1.4	0.1	5.3	0.5	1.1
Q3	–4.6	–4.8	–4.1	..	–4.7	..	–3.3	–3.5	–2.7	..	–3.7	..	..	..
Q4	..	..	..	..	–6.9	..	..	–5.8	..	..	–5.1	..	..	..
Percentage change on previous quarter	ILJN	ILJO	ILJP	ILJQ	ILJR	ILJS	ILJT	ILJU	ILJV	ILJW	ILJX	ILJY	ILJZ	ILKA
1995 Q4	1.3	1.5	0.8	1.3	1.9	–0.2	1.3	1.3	1.3	0.9	1.4	–0.2	1.3	1.1
1996 Q1	2.2	2.2	2.3	2.0	2.7	0.3	2.3	2.3	2.1	1.6	2.3	–0.3	2.1	1.9
Q2	1.0	0.7	2.2	1.0	1.0	1.0	1.1	0.7	2.0	1.0	1.3	0.5	1.0	1.1
Q3	2.0	2.3	0.7	2.4	2.8	1.2	2.2	2.5	1.6	2.2	2.5	1.2	2.2	2.2
Q4	2.4	2.7	1.1	2.4	2.2	3.0	2.6	3.0	1.4	2.1	1.9	2.7	2.4	2.3
1997 Q1	2.6	2.0	4.7	2.2	1.9	2.8	1.8	1.2	3.4	1.6	1.3	2.6	2.4	1.7
Q2	4.5	5.5	1.1	4.1	4.9	1.9	4.3	5.3	1.5	4.0	4.5	2.5	4.3	4.1
Q3	2.9	3.1	1.9	3.0	2.9	3.1	2.7	3.0	2.1	2.6	2.5	2.7	2.9	2.6
Q4	1.8	1.3	3.5	1.7	2.0	1.1	1.6	1.3	2.5	1.5	1.8	0.7	1.8	1.6
1998 Q1	1.3	1.1	1.8	1.3	2.7	–2.4	1.1	1.1	1.1	1.3	2.2	–1.2	1.3	1.2
Q2	1.1	1.1	0.8	1.6	1.6	1.5	0.7	0.8	0.7	1.5	1.6	1.2	1.3	1.1
Q3	–0.1	0.5	–2.1	0.2	1.3	–3.1	–0.1	0.2	–0.8	–	1.1	–3.0	0.1	–
Q4	–0.1	0.5	–2.1	1.0	1.8	–1.5	0.1	0.5	–0.9	0.6	1.4	–1.7	0.4	0.4
1999 Q1	0.6	0.4	1.2	1.7	2.4	–0.4	0.6	0.3	1.4	1.4	2.1	–0.7	1.2	1.0
Q2	3.2	2.5	5.9	3.1	3.2	2.9	3.0	2.6	3.9	2.6	2.9	1.7	3.2	2.8
Q3	3.4	3.7	2.2	3.0	3.4	1.4	2.9	3.6	0.9	2.3	2.9	0.6	3.2	2.6
Q4	3.6	3.4	4.3	3.8	4.1	2.7	3.1	3.1	3.0	3.3	3.6	2.3	3.7	3.2
2000 Q1	3.9	3.6	5.0	3.7	3.2	5.2	3.7	3.6	4.3	3.5	2.8	5.8	3.8	3.6
Q2	3.3	2.6	5.6	4.2	3.6	6.1	3.0	2.4	4.7	3.9	3.2	6.1	3.8	3.5
Q3	2.5	2.3	3.4	3.0	2.7	3.9	2.4	2.3	2.8	2.8	2.5	3.6	2.8	2.6
Q4	1.3	1.2	1.9	1.5	1.3	2.3	1.1	1.2	1.0	0.9	0.8	1.4	1.4	1.0
2001 Q1	–0.4	–0.1	–1.2	–1.3	–1.8	0.2	0.2	0.1	0.2	–0.6	–1.2	1.4	–0.9	–0.2
Q2	–3.3	–3.6	–2.2	–2.2	–2.5	–1.3	–2.8	–3.1	–2.0	–1.7	–1.8	–1.2	–2.7	–2.2
Q3	–2.3	–2.2	–2.6	..	–1.7	..	–1.8	–1.7	–1.9	..	–1.5	..	..	..
Q4	..	..	..	..	–1.0	..	..	–1.2	..	..	–0.7	..	..	..

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

Source: OECD - SNA93

Measuring productivity change in the provision of public services

Alwyn Pritchard
National Expenditure and Income Division
Office for National Statistics
Room D3/23
1 Drummond Gate
London SW1V 2QQ
Tel: 020 7533 5517
E-mail: alwyn.pritchard@ons.gov.uk

Introduction

The Office for National Statistics (ONS) has started a project to provide a measure of productivity in the provision of public services.[1] This article provides a first progress report on this new initiative. It describes – through some examples – how productivity might be measured in this context and includes indicative results for some areas. In addition, the article explains where public services fit into the national accounting framework, defines productivity and examines the related concepts of government inputs and outputs. The work is still at an exploratory stage: the purpose of this article is to expose the principles with the help of some preliminary numbers. The eventual aim is to produce reliable estimates of productivity change and to publish them regularly.

What do we mean by the provision of public services?

Public services are defined as those activities carried out by government which meet the needs of individuals, businesses or the community as a whole. The services provided are of two types: individual and collective. Defence is an example of a collective service: it is delivered simultaneously to many people whether or not they know they are receiving it. An individual service is consciously consumed by one or more people; examples are education and government-provided health treatments. Excluded from the national accounts definition of government are the following:

- Services provided by government for which the customer pays the full cost. In the national accounts, these are deemed to be produced outside the government sector by a quasi-market organisation. Examples of these activities are the provision of housing and of passports.
- Services that are heavily dependent on funding by government but are produced and sold outside government (e.g. rail services and care homes).

But included are:

- Those services for which government makes a charge, so long as that charge is not economically significant (such as the sales of this journal!)

Government activities play a major part in the economy: they feature prominently in both the expenditure and the production measures of gross domestic product. Where is the provision of public services identified in the national accounts? To show the answer in context, the main **expenditures** of government are identified in this table:

Table 1

Main expenditures of government, SNA identifier (2) and % share year 2000		What it contains
Subsidies D3	1%	current unrequited transfers made to producers to influence their output, prices or costs
Interest D4	7%	payment to service a debt
Transfers D7, D9, D62	41%	unrequited at the time they are made (though perhaps may be subject to contributions having been made in the past)
Final consumption expenditure P3	48%	comprises the cost of labour, non-capital purchases and the cost of running down capital equipment: often referred to as gross government output
Gross capital formation P5	3%	acquisition of plant, machinery, vehicles, newly-built structures

The provision of public services is represented by the second last entry in the table above and it is this gross measure of government output which is the main focus of this article. Everything the money is used for gives rise to a government output – from schooling and subsidised medicines to government policymaking and defence. These services are all consumed – by individuals, businesses or collectively. This measure shows the role of government as "purveyor of services to the public". It includes goods and services government buys from other producers as well as the value added to them by its employees and by the services provided by the capital equipment it possesses. It also includes services which the government pays suppliers to provide to government clients, e.g. medicines, meals on wheels, refuse collection and other services which are "contracted out". Productivity in this context means measuring performance in producing all the goods and services supplied by government. It answers questions such as: *compared with last year, is the Government providing more goods and services for a fixed amount of resources used?*

Another measure of government output also appears in the national accounts: it is a part of the production approach to measuring GDP. This approach shows the value added by the different categories of economic actors, e.g. industries, sectors, government. It is measured as the value of gross output **less** purchases bought in from other producers. The value added by all the producers in the economy add up to the production measure of GDP. This measure shows the role of "government as producer". It is sometimes referred to as government net output as it excludes bought-in goods and services, which are incorporated into the final product consumed by clients.

Measuring productivity

Productivity is defined as real outputs divided by the real inputs of a production process.

There are several possible approaches to measuring productivity. There is a choice as regards **what** to measure:

- Whether to measure productivity in producing net output or gross output (as defined above).
- Whether to measure productivity in relation to a specific factor of production – such as labour – or to more than one factor.

The meaning of productivity will vary according to the approach chosen, of course:

- **Net output** represents the value of production excluding the value of purchases of intermediate inputs. It is a measure of value added by labour and capital in the industry or sector being measured.
- **Gross output** represents more: it does not net off intermediate inputs and therefore, when taking all industries or sectors together, adds to more than GDP.
- **Labour productivity** measures the amount of output generated per unit of labour. An increase in labour productivity comes about when growth in real output exceeds growth in the volume of labour input. This state of affairs can be caused by efficiency changes, economies of scale or the substitution of other inputs for labour.
- **The multi-factor measure of productivity** reflects the contributions of more than one type of input. Positive multi-factor productivity comes about when growth in real output exceeds growth in the volume of all inputs taken together. An observed change in productivity could be the result of economies of scale, variations in capacity utilisation, technical advances, efficiency changes, or any combination of these – but the substitution of one factor for another would not necessarily be sufficient to increase productivity.

In many ways, labour productivity is the easier of these two options to measure: it requires estimates of the volume of output and the volume of labour input. This information is readily available. Multi-factor productivity needs a wider range of information on inputs, not just labour but also intermediate consumption of goods and services and capital consumption. These must be combined and expressed in volume terms.

Which measure to choose?

Those who measure productivity will choose an approach that meets the analytical needs of users; but, for such measures to be of practical use, the right data must be available. The gross output approach meets analytical needs in that there is an interest in the quantum of goods and services provided by government. The data needed to measure this are government current expenditure on goods and services, one of the components of the expenditure approach to GDP. That is the approach used in this article. The ONS has not yet published economy-wide multi-factor productivity estimates but that approach is taken here as it produces results which are unaffected by whether government gross outputs are produced "in-house" or bought in.

In the UK, the major elements of government output are goods and services provided in the areas of education, health, defence, police, social security, courts and prisons. This covers services produced by the directly-employed staff of central and local government but

also any services bought from other parties which are provided free of charge (or at little cost) to people: an example of this is hospital treatments which are bought by government from public corporations (e.g. hospital trusts). The production and provision of such goods and services is a part of government output. Cash payments made to people (e.g. social security benefits) are a transfer rather than an output of government. But the operational process of providing these transfers is a service and hence an output.

Examples of productivity measurement

- A **prison** which has a capacity of 150 contains only 100 inmates. With the arrival of an extra prisoner, the prison will generate 1 per cent more output. But it is likely that any increase in the prison's inputs will be less than 1 per cent. Productivity will go up mainly through higher **capacity utilisation**.
- Two offices processing social security claims are merged in a new location: the new office performs the combined work of both old offices, but does not require the combined staff numbers. The volume of outputs is therefore unchanged, but the volume of inputs is lower because only one manager is required, and one telephone operator, one photocopying machine, etc. Productivity will be higher because **economies of scale** have been obtained.
- A hospital buys a new machine to perform eye surgery. It doubles the number of treatments performed daily for only a small increase in the level of inputs. Productivity has gone up as a result of exploiting a **technical advance**.

These are **examples** of how productivity can go up in everyday situations faced by governments. Using estimates of the volume of inputs and outputs, productivity change can be monitored over time. But there are other issues to consider. We need to ensure that the estimates will be accurate enough. And we need to consider what interpretation it is sensible to put on such results. The remainder of this article outlines the main measurement and interpretation issues and how it is proposed to solve them so as to measure productivity change. They are:

- How to **define** inputs and outputs in volume terms;
- How to **measure** inputs and outputs in volume terms;
- How to cope with the fact that government output has a **zero selling price** when – as is usual – it is provided free;
- How to ensure that our estimates of output volumes reflect any **change in the quality** of government services;
- How to ensure the **accuracy** required of these estimates.

Productivity indicators: what they are not

A few points about these indicators described in this article and what their limits are:

- They do not measure productivity **levels**: they measure the progress of each function over time using index numbers.
- They do not measure outputs that should have been produced but were not – for example, hospital treatments which are deferred for lack of resources, or crimes which the police did not investigate because they were not reported. It is recognised that "what was not produced" is often a matter of public interest.
- They do not measure "outcomes" – states which are the result of several influences. A lower crime rate is an example of an outcome: achieving it may require the police output described in this article as well as other factors such as a decrease in the number of opportunities available to commit crimes.
- They do not suggest that high productivity is, without qualification, a good thing, especially in government. The productivity of prisons increases as the number of inmates increases. It does not follow that there should be a goal of filling jails to capacity although it may be a sensible policy to try to match capacity to demand.
- They are not measured with absolute accuracy.

Measuring the volume of government inputs — some practical illustrations

Government output is produced with the following inputs: labour, intermediate consumption and capital. These are measured by the cost of:

- pay;
- procurement of the goods and services required for production; and
- depreciating the plant and equipment used in production.

The money values of these components must be adjusted so that the effect of inflation is taken out leaving the changes in the volume of inputs. These estimates are then combined to form the total volume of inputs. The "deflation" process is carried out separately for each functional category being measured (education, health, police etc) and for each economic category (pay, procurement etc). This is possible thanks to:

- the detailed accounting data maintained by central government departments;

- information collected from local authorities; and
- the availability of prices for inputs.

To take an example, the inputs of education are deflated as follows.

Table 2

Item	Method used to express in volume terms
Labour input	*Mostly using the number of staff as the volume indicator; partly by deflating using a pay index.*
Intermediate goods and services	*By deflating using a composite index which is thought to be representative of the purchases made.*
Capital consumption	*By deflating using the index constructed to deflate capital consumption*

The result of deflating the inputs is expressed in £million using 1995 as a base year. Some of the detailed calculations are shown in Table 3 and are analysed in the section after next.

A digression: do price changes in the inputs not matter?

The reasoning used so far indicates that productivity is measured in physical units and is therefore not affected by price changes in inputs. Let us illustrate this with the example of a doctor's consultations with patients. In year 1, the cost of a 15-minute consultation is £25; in year 2, it has gone up to £50, but the number of consultations is the same. The physical inputs and outputs do not change so there is no productivity change. As a description of what happened in physical terms this is correct. But is a measure which ignores such price movements useful or is it likely to mislead? Some argue that price movements should be taken into account, especially when measuring government productivity. Unless governments were willing to adjust their budgetary allocations to take account of price changes, items which go up sharply in price would threaten to take a larger and larger share of the budget. There are alternative measures of productivity which highlight these tensions. They are designed in such a way that areas where labour costs are going up faster than average fall behind in their productivity performance: but there is still scope for productivity improvement if cheaper inputs are substituted for those which went up in price, as for example in the provision of consultations by a nurse practitioner in place of a doctor. This is known as the economic approach to measuring productivity and provides an indicator of real cost-effectiveness. It is mentioned here for completeness: the remainder of the article illustrates the physical approach.

Measuring government inputs — analysis

Table 3 tracks the three inputs over the period 1995–2000 in both **money** and **volume** terms for a number of different functional categories.

- Taking education as an example, the figures show that total inputs increased by about 8 per cent in volume (i.e. constant price) terms.
- Labour is the most important input, accounting for around two thirds of the total. Overall, the level of real labour resource consumed increased by less than 1 per cent – the remainder of the 24 per cent increase in money terms being accounted for by pay rises.
- Intermediate consumption also showed a real increase over the period – about 31 per cent against a background of very low annual inflation.
- Capital consumption is almost constant in real terms.

Table 3 also shows the results for a number of other functions for the period 1995 to 2000. The following comments refer to inputs in volume terms:

- In social security, total inputs fell by about 3 per cent – the labour input falling by nearly 5½ per cent in real terms and intermediate consumption decreasing by about 1½ per cent.
- In health, total inputs went up by 25.3 per cent over the period, most of it being spent by government on purchasing health services from NHS Trusts and other suppliers outside government. The labour input series shows clearly the effects of the transfer of hospitals and their staff to bodies outside the government sector. But the total level of inputs reflects the cost of providing health services – whether the producer is within or outside government.
- In prisons, total inputs went up by 10 per cent. Labour is the largest single component, accounting for about two thirds of total inputs at the outset. Labour inputs increased by about 7½ per cent but purchases of goods and services increased by nearly 12 per cent.
- Police inputs were up by nearly 6½ per cent. The labour input increased by 1 per cent in real terms but purchases of goods and services increased substantially.
- Fire inputs were up by nearly 8½ per cent, with both labour and goods and services inputs up by a roughly similar rate.

Table 3 General Government inputs: final consumption for selected categories of services
Current prices, constant prices and implied deflators

£ million

	1995	1996	1997	1998	1999	2000	% change
Education							
Expenditure (current prices)							
Labour	17,834	18,223	18,938	19,837	21,121	22,121	*24.0*
Goods and services	6,391	6,464	6,616	6,981	7,814	8,635	*35.1*
Capital consumption	1,066	1,111	1,138	1,142	1,168	1,217	*14.2*
Price indices / implied deflators							
Labour	100.0	103.3	107.4	111.9	120.8	123.2	
Goods and services	100.0	101.1	101.7	102.1	102.4	103.1	
Capital consumption	100.0	102.4	104.7	108.9	113.5	117.7	
Expenditure (constant prices)							
Labour	17,834	17,646	17,631	17,729	17,483	17,953	*0.7*
Goods and services	6,391	6,396	6,507	6,835	7,632	8,379	*31.1*
Capital consumption	1,066	1,085	1,087	1,049	1,029	1,034	*-3.0*
All inputs	25,291	25,127	25,225	25,613	26,144	27,366	*8.2*
Health							
Expenditure (current prices)							
Labour	3,419	2,841	2,680	2,676	2,865	2,799	*-18.1*
Goods and services	35,470	38,539	39,895	42,632	47,149	50,932	*43.6*
Capital consumption	92	86	82	83	83	117	*27.2*
Price indices / implied deflators							
Labour	100.0	104.9	107.9	111.6	117.5	124.0	
Goods and services	100.0	102.5	104.1	106.2	108.8	109.6	
Capital consumption	100.0	105.8	107.2	107.6	109.5	113.2	
Expenditure (constant prices)							
Labour	3,419	2,709	2,484	2,397	2,438	2,257	*-34.0*
Goods and services	35,470	37,599	38,333	40,143	43,355	46,481	*31.0*
Capital consumption	92	81	77	77	76	103	*12.0*
All inputs	38,981	40,389	40,894	42,617	45,869	48,841	*25.3*
Social Security							
Expenditure (current prices)							
Labour	1,816	1,834	1,899	1,965	1,913	1,884	*3.7*
Goods and services	2,511	2,436	2,420	2,352	2,596	2,715	*8.1*
Capital consumption	94	85	96	101	94	92	*-2.1*
Price indices / implied deflators							
Labour	100.0	102.4	104.3	108.4	113.1	109.6	
Goods and services	100.0	101.5	103.6	106.2	107.5	109.6	
Capital consumption	100.0	103.3	103.0	102.1	105.6	110.3	
Expenditure (constant prices)							
Labour	1,816	1,791	1,821	1,812	1,691	1,720	*-5.3*
Goods and services	2,511	2,400	2,337	2,214	2,416	2,476	*-1.4*
Capital consumption	94	82	93	99	89	83	*-11.7*
All inputs	4,421	4,273	4,251	4,125	4,196	4,279	*-3.2*

Table 3 - *Continued*

£ million

	1995	1996	1997	1998	1999	2000	% change
Prisons							
Expenditure (current prices)							
Labour	1,090	1,124	1,131	1,093	1,191	1,244	*14.1*
Goods and services	516	520	593	660	710	638	*23.6*
Capital consumption	94	94	102	105	130	135	*43.6*
Price indices / implied deflators							
Labour	100.0	103.8	103.3	105.6	106.4	106.1	
Goods and services	100.0	102.3	104.5	107.0	108.6	110.7	
Capital consumption	100.0	103.5	102.3	100.5	104.4	109.3	
Expenditure (constant prices)							
Labour	1,090	1,083	1,095	1,035	1,120	1,173	*7.6*
Goods and services	516	508	568	617	654	576	*11.6*
Capital consumption	94	91	100	104	125	124	*31.9*
All inputs	1,700	1,682	1,763	1,756	1,899	1,873	*10.2*
Police							
Expenditure (current prices)							
Labour	6,834	7,058	7,311	7,625	7,826	8,118	*18.8*
Goods and services	953	1,088	1,100	1,120	1,214	1,457	*52.9*
Capital consumption	88	94	103	108	124	131	*48.9*
Price indices / implied deflators							
Labour	100.0	103.0	106.0	109.5	113.7	117.4	
Goods and services	100.0	101.1	100.9	105.5	106.7	109.1	
Capital consumption	100.0	104.4	104.0	103.8	106.0	111.0	
Expenditure (constant prices)							
Labour	6,834	6,855	6,899	6,964	6,885	6,916	*1.2*
Goods and services	953	1,076	1,090	1,062	1,138	1,335	*40.1*
Capital consumption	88	90	99	104	117	118	*34.1*
All inputs	7,875	8,021	8,088	8,130	8,140	8,369	*6.3*
Fire							
Expenditure (current prices)							
Labour	1,345	1,395	1,453	1,522	1,600	1,636	*21.6*
Goods and services	132	114	129	136	148	157	*18.9*
Capital consumption	38	39	43	47	50	53	*39.5*
Price indices / implied deflators							
Labour	100.0	103.0	105.6	108.8	111.8	112.8	
Goods and services	100.0	96.5	101.4	106.0	107.6	110.2	
Capital consumption	100.0	104.9	104.8	106.8	108.3	112.2	
Expenditure (constant prices)							
Labour	1,345	1,355	1,376	1,399	1,431	1,451	*7.9*
Goods and services	132	118	127	128	138	143	*8.3*
Capital consumption	38	37	41	44	46	47	*23.7*
All inputs	1,515	1,510	1,544	1,571	1,615	1,641	*8.3*

Table 3 - *Continued*

£ million

	1995	1996	1997	1998	1999	2000	% change
Courts							
Expenditure (current prices)							
Labour	1,218	1,206	1,243	1,260	1,284	1,343	*10.8*
Goods and services	1,852	2,019	1,988	1,942	2,121	2,092	*13.0*
Capital consumption	40	40	44	46	53	55	*37.5*
Price indices / implied deflators							
Labour	100.0	102.3	106.3	109.0	110.5	115.4	
Goods and services	100.0	102.0	103.8	106.6	108.2	110.4	
Capital consumption	100.1	103.7	102.7	101.4	105.1	110.0	
Expenditure (constant prices)							
Labour	1,218	1,179	1,170	1,156	1,162	1,164	*-4.4*
Goods and services	1,852	1,980	1,914	1,822	1,960	1,894	*2.3*
Capital consumption	40	39	43	45	50	50	*25.0*
All inputs	3,110	3,198	3,127	3,023	3,172	3,108	*-0.1*

Defining output volume — the principles

How do we recognise an output? In the market sector, we recognise it mainly from the fact that it is sold at a price. Everything sold at a price is someone's gross output, so long as we leave aside items which have already been sold once (e.g. antiques). In the government sector, many outputs are provided to users free of charge: having a zero price, it is not always obvious how to distinguish them. Some principles are considered here.

What identifies a service?

- It is an activity which usually changes the "condition" of one or more beneficiaries who, in turn, may become more educated or healthier or warmer or incarcerated, etc (² para 6.10).
- A service can be produced repeatedly: typically, a unit of output will be produced each time the inputs are used in a similar way.
- The production process may be reorganised so as to produce an output of a higher quality: typically, this higher quality could result from more or better quality labour and / or materials, or from better capital equipment or better techniques.
- If the production process is reorganised so that the same service is produced using less real inputs, this represents a productivity gain.
- Services are consumed at the same time as they are produced: no stocks of services can be held.
- The output of services is therefore measured at the point of delivery – that is, where the government's output becomes someone's consumption. Every service is consumed – either individually or collectively.

Some practical illustrations — measuring government outputs

The principles set out above for defining government output can help to identify the major outputs of different areas of government. In practice, the quality of these outputs will vary – over time, for example. So the measurement process must reflect the fact that 100 units of good quality this year represent more output than 100 units of a lesser quality last year. Hence the outputs referred to below should be regarded as taking account of quality in this way.

- Members of the fire service spend much of their time dealing with emergency events such as fires. Putting out a fire is of direct benefit to those affected, typically the owners of the property. Another part of their time is spent on standby: but being on standby is not a viable activity by itself. This points to the main unit of output being the response to various types of emergency event: it has a clear producer and consumer.
- For the police service, the principles lead us to conclude that investigating crimes and bringing them to a conclusion is the main output. A reasonable approximation of the typical unit of output is doing this for a particular type of crime.
- In the case of the prison service, looking after prisoners is the main output and a reasonable approximation of the unit of output is therefore a night spent in prison by the average prisoner.
- Perhaps unexpectedly, education output – being equal to its consumption – is defined, as a first approximation, in terms of the number of pupil years of teaching carried out. The number of teachers teaching or exams passed would not fit in with these principles.

- In social security, the main units of output would be handling a claim for a benefit, making a benefit payment and providing advice to clients.
- In health, each specific type of treatment will usually be a different output. Example: when two different sets of inputs are used to produce two different results X and Y (say removal of a cataract and stitching a wound), they are creating different outputs. If, as a result of a technical advance, result X is later obtained using a different set of inputs, the output achieved remains the same one as before – an example of productivity change.
- In addition to the main outputs, there will also be subsidiary outputs. The fire service conduct safety inspections and the police carry out patrolling and deal with non-criminal incidents. These must all be taken into account in measuring output.
- Note that the outputs are measured independently of the inputs.
- Overheads, where they are separated out, are to be treated as a cost of producing those outputs which are actually consumed. Overheads do not, of themselves, represent separate outputs.

Articles published in *Economic Trends* over the past few years give details of how government output is currently measured in the UK for education and health[3], for the administration of justice[4], fire and social services.[5]

International guidelines on national accounting contain a requirement to produce estimates of government output measured in volume terms[2,6]. This article should be seen as a contribution to an ongoing discussion on how the concept of government output can be put into practice through the development of generally accepted principles.

Measuring government outputs — analysis

Where there is essentially a single unit of output – for example, prison nights – just counting the number of units gives an indication of the output trend, albeit a rough indication given that the units take no account of any change in quality. Below are some examples covering the period 1995–2000.

- The average annual prison population rose steadily from 57,000 in 1995 to 71,000 in 2000 (see Table 4). If the quality of prison care remained constant, this would be a strong indication of growth in output over this period.

Table 4 Measuring the output of prisons: prison population

Great Britain — Annual Averages

	Thousands
1994	54.4
1995	56.7
1996	61.1
1997	67.2
1998	71.3
1999	70.8
2000	70.8

- The fire service's main unit of output is responding to emergency events such as fires; hence the downward trend in the number of secondary fires since 1995 would suggest falling output (see Table 5). This example shows how output of a government service is often response-driven: the downward trend in fire service output is thought to be largely for reasons outside the control of the fire service, such as wetter than average weather, better fire prevention measures and possibly economic prosperity which made arson less frequent.

Table 5 Measuring the output of fire services

Index numbers

	Fires by type		
	Primary Fires	Secondary Fires	All fires
Weights (percentages)	*49*	*13*	*100*
1994	99.0	67.6	92.3
1995	100.0	100.0	100.0
1996	104.6	78.8	100.0
1997	102.0	65.2	95.1
1998	101.7	50.5	90.0
1999	110.9	61.7	94.5
2000	111.5	63.8	95.6

- In education, the unit of output is a pupil year of teaching. So output is mainly a function of the numbers in education. During this period, these pupil numbers grew at a rate of about 1 per cent per year. Unsurprisingly, education output - when measured in this way – changes very little over the period (see Table 6).

Table 6 Measuring education output: numbers of pupils being taught

Index numbers

	Nursery	Primary	Secondary	Special	Total
1994	97.8	98.3	98.8	101.7	98.4
1995	100.0	100.0	100.0	100.0	100.0
1996	101.6	101.2	101.0	100.6	100.7
1997	102.3	102.0	102.2	101.6	101.6
1998	102.2	102.5	103.6	101.7	102.8
1999	100.4	103.1	104.8	101.7	103.7
2000	100.0	103.6	106.1	101.7	104.6

Table 7 Measuring police output: recorded crimes

Thousands

Incident Description	Violence against the person	Sexual offences	Robbery	Burglary - dwelling	Burglary - commercial+ other	Theft of motor vehicle	Theft from vehicle	Theft - other	All other notifiable crime	Criminal damage	Drug offences	Total
Weight*	*0.3*	*0.03*	*0.05*	*0.08*	*0.04*	*0.06*	*0.03*	*0.14*	*0.13*	*0.05*	*0.1*	*1*
1994	460.7	32.6	60.5	672.8	587.5	540.2	852.1	1,234.9	276.4	959.2	115.4	5,792.4
1995	473.9	31.3	68.7	644.3	590.8	517.7	825.7	1,204.1	263.5	977.1	134.2	5,731.3
1996	517.6	31.9	72.5	596.1	557.7	479.7	793.8	1,153.7	268.9	988.0	142.9	5,603.0
1997	551.2	34.6	65.7	521.7	501.4	418.1	721.4	1,115.3	275.3	928.8	147.8	5,281.2
1998	516.6	36.0	65.9	480.4	481.6	394.2	689.6	1,112.1	326.5	886.8	139.2	5,129.0
1999	561.5	37.4	79.9	450.3	467.9	379.0	673.4	1,163.2	386.1	929.2	125.4	5,253.2

* relative cost of investigating etc each type

In cases where there are several different types of output, the movements in all of these must be examined in order to gain some impression of the overall output trend:

- The volume of police output is not simply a reflection of changes in the number of crimes investigated. We cannot treat all crimes as being equally important in this context. Some types – violent crime, for instance – have much more time and resources spent on them than others: investigating this type of resource-intensive crime must be regarded as creating more output than the investigation of a crime which takes up less resources. It follows that police output is determined by the composition of crimes. Table 7 shows that there was a sharp increase in violent crime over the period and sharp falls in several types of crime which are less expensive (such as thefts from cars, burglaries). Without getting into detailed calculations, we can see that this situation is likely to be sufficient to cause an increase in police output. Some would argue that the police could react to an increased burden of work by spending less time on each case than before: that would be consistent with increased output – and increased productivity – so long as the work is at least of the same quality as before. Some support is lent to this assumption by the fact that the rate of clear-up of violent crimes did not diminish during this period.
- In health, where each specific type of treatment is usually a different output, the changing composition of the aggregate output is an important determinant of the overall trend. Some treatments are expensive while others are not; some treatments are performed frequently, others not. The cost and the incidence of each treatment are taken into account by the Department of Health in compiling an output index.[7] The index covers only England, which is about 80 per cent of UK health expenditure. Table 8 contains the summarised results.

Table 8 Measuring health services output

Year	
1995	100.0
1996	102.5
1997	104.9
1998	107.6
1999	109.3

- In social security, the units of output are mainly claims but in some cases payments. There are many separate benefits: their incidence is shown in Table 9. For each type, the numbers of claims or payments must be weighted in proportion to the processing cost. Taken together, these results paint a picture of declining output for social security during the late 1990's, partly reflecting the period's economic prosperity, but also the reorientation of the social security system. However, this decline might be an overestimate as it does not yet take account of other output activities such as giving advice.

To obtain comprehensive output estimates, account has to be taken of the subsidiary as well as the main outputs and of any changes in the quality of the services produced. For the fire service, this means taking into account the non fire-related work such as emergency incidents, community activities and safety inspections as well as ways in which the quality of the service has changed (e.g. through more success in limiting fire damage). For the police, patrolling and dealing with non-criminal incidents must be included as well as quality changes (e.g. through solving a higher percentage of crimes). Some of these subsidiary outputs are continuous and cannot naturally be expressed as units of output in the same way as shown in the examples above. In the above examples, patrolling and involvement in community activities fall into this "difficult to measure" category: for such cases, the only practical choice is to measure time spent

Table 9 Measuring social security output: indicators of claims made/payments processed

Index numbers

	Retirement Pension	Widows benefit	Job Seekers' Allowance	Sickness benefits	Income support	Family Credit	Social fund	Child benefit + lone parent benefit	Housing Benefit
1995	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1996	102.1	95.0	93.6	100.2	96.5	110.2	100.5	94.1	100.2
1997	104.5	92.5	90.7	93.9	94.0	117.7	101.9	117.4	97.2
1998	91.0	77.5	85.0	81.5	97.9	119.7	102.8	117.4	93.8
1999	93.4	87.5	84.6	80.2	97.1	91.5	103.2	105.4	89.9
2000	81.3	87.5	78.9	79.1	97.8	0.0	103.2	119.6	87.4

on the work, a step that rests on the assumption that there is no productivity change in this type of work.

What is outlined here is a simple, practical approach to output measurement which focuses on the areas of government which produce many repeated services. This article makes no effort to describe productivity measurement in areas where the nature of the service and the unit of output are difficult to define and to monitor – areas such as foreign policy, defence and the management of the economy.

Comparing outputs with inputs

- Table 4 shows the average annual **prison** population rising by 25 per cent. Total inputs were up by about 10 per cent (Table 3). If these figures referred to units of constant quality, this would represent an increase in productivity (resulting mainly from higher capacity utilisation and the opening of new and more cost-efficient prisons). In reality, some prisons were filled beyond their capacity and we cannot assume that a prison night at the end of the period was of the same quality as in 1995.
- Changing crime patterns over the period led to the police carrying out more of the expensive tasks (investigating violent crimes) and fewer of the inexpensive ones (such as thefts from cars, burglaries). Weighting these together according to their cost gives an increase in **police** output of about 5½ per cent. On this basis, output barely kept pace with the inputs consumed which were up by just over 6 per cent (Table 3) leaving productivity almost unchanged.
- In **education**, pupil numbers suggest output growth over the period of just below 5 per cent (see Table 6): this is before taking account of changes in the quality of the output – which is discussed in the next section. The volume of inputs consumed grew by about 8 per cent (Table 3).

On this basis, some other important areas did not fare so well and experienced falling productivity:

- The downward trend in the number of **fires** since 1995 indicates that output has fallen by about 4 per cent over the period while the inputs consumed went up by nearly 8½ per cent (Table 3).
- The cost and the incidence of each treatment are taken into account in compiling an output index for **health**. Output went up by 15.3 per cent (Table 5) but total inputs went up by 25.3 per cent over the period (Table 3), most of it being spent by government on purchasing health services from NHS Trusts and other suppliers outside government. One would expect technical advances to have played an important role in increasing outputs. But the higher growth in inputs used suggests that much of their impact has still to feed through into output.
- In **social security**, the units of output are claims and payments, weighted in proportion to the processing cost. Taken together, these results paint a picture of declining output for social security during the late 1990s of just under 6 per cent, ignoring any possible changes in quality (Table 9). Total input volume fell by less than this, about 3 per cent down (Table 3). Given the declining output, the productivity fall appears to reflect an inability to adjust the available capacity.

Taking account of the changing quality of output

So far the illustrations assume that the units of output being measured are comparable over time. This is unlikely to be the case in practice. The quality of any product rarely stands still: for many goods seen in the shops, enhanced models are introduced from time to time. In the national accounts, the main method used to measure output is to deflate the money value by a suitable price index. If the quality of the output improves, the price index is adjusted downwards so that the deflation process yields a higher output. This is not possible where zero-price or subsidised government output is concerned.

However, we should not allow this to mask the possibility that the quality of government services has improved. There is evidence that the quality of **education** output has increased in recent years through improving examination results. But, in order to isolate the effect of quality change, we need to use a measure which is more closely linked to output. For many years, school inspectors have regularly assessed the quality of teaching. They are provided with clear guidelines: for instance, teaching quality is to be judged:

- by whether clear goals are set for the group and for individuals;
- by the extent to which activities are well-planned and presented in a range of ways, have suitable content, and engage and motivate all pupils enabling them to make progress at an appropriate pace; and
- by the extent of arrangements to improve teaching quality.

Inspectors are required to mark lessons as:

- Good / very good;
- Satisfactory;
- Unsatisfactory / poor.

An ideal way of taking account of quality would be to construct an index, which treats a good lesson as generating more output, etc. If the quality of teaching improves over time, some teachers – or, more precisely, some of their lessons – would move from a lower quality category to a higher one thereby increasing output. In the example reported in the table below, quality-adjusted productivity has been computed using weights of 1.2, 1.0 and 0.8 attached to the three qualities of lesson listed above. These weights are shown here for illustrative purposes: it is hoped that future research will yield more objective ways of choosing such weights.

A different way of measuring quality has been proposed for use in measuring **police** output. The method measures output in much the same way as was described earlier but, as with education, treats some types of police work as having less output attached to them than others. The argument used here is that there is a degree of wastage in police output, i.e. some of what is produced is of no value. This happens in other industries and, generally speaking, such production is not sold (as with imperfect chinaware). It is proposed therefore that the police measure should exclude from output those activities which have no value: in this example, these are defined as investigation work on crimes which do not get solved or cleared up in some way.

In both areas, incorporating these quality adjustments increases productivity as compared with the simple calculation, making productivity positive in both cases. The reasons are as follows. In education, there has been a steady shift to better quality lessons during this period. In police work, there has been an increase in the percentage of crimes cleared up (with a slight falling off in 2000, which has caused quality-adjusted output to do likewise). This table shows what difference incorporating the quality adjustments makes:

Table 10 Examples of output before and after quality adjustment: education and police

	1995	1996	1997	1998	1999	2000
Education						
Simple calculation	100.0	101.1	102.1	103.0	103.9	104.6
Quality adjusted	100.0	101.0	104.0	106.0	108.0	109.0
Police						
Simple calculation	100.0	101.8	102.1	101.3	104.5	105.4
Quality adjusted	100.0	104.0	106.0	108.8	110.5	108.6

Other areas of government output have recorded improvements in quality. In health, the fall in the number of post-operation deaths is an indicator of an improvement in the quality of output. Needless to say, these computations are only illustrations based on possible methods for taking quality change into account. The aim here is to show that quality change can be reflected in output measures in an objective way but that there is some difficulty about deciding what the correct weights should be. Much more work has to be done on these issues before the results can be regarded as an adequate representation of reality. It is perhaps noteworthy though that, in both these cases, giving due weight to improved quality now shows outputs as having grown faster than inputs – that is, productivity has improved over the period.

Remaining issues: data quality

This article is concerned mainly with defining a robust conceptual approach. Figures are included to help illustrate how productivity will be measured in practice. Accuracy is crucial if estimates of government productivity are to be produced on an ongoing basis. The main issue to note here is not that the quality of the data used is inadequate but that its quality has not yet been thoroughly assessed at the level of detail which is used here. When it is assessed – and if found wanting – there may be fairly simple remedies. Given that we are dividing two figures to obtain a productivity estimate, we need to be clear about the degree of accuracy we can obtain.

Records of central and local government expenditure are kept in sufficient detail to provide good estimates for the functions and components identified here. Part of any validation process will be to verify this, which could be useful given that the figures are not normally published at this level of detail.

The price indices used to deflate the expenditure figures must be thoroughly examined. The weakest element in the calculation lies in a lack of knowledge of which types of goods and services make up the inputs for each function and what their relative importance is in each case. In other words, although we know how much central and local government actually spend to achieve each functional output – and how much of that is spent on pay – we know little about the amounts of different goods and services which go "into the mix" for each function. If all prices moved at the same rate, this might not matter too much. But price inflation over the past five years or so has varied greatly. Manufactured goods have increased little in price – on average, about 4 per cent between 1995 and 1999. Many services have increased at a far higher rate: business services, for example, went up by 9.5 per cent. On the other hand, telecommunication charges recorded a fall in price of about 16 per cent. For this exercise, detailed knowledge of this composition is replaced by informed guesswork.

Capital consumption is not calculated at the level of detail shown here. This is not something that could be remedied without a thorough overhaul of the suite of programs which calculate capital consumption, mainly from past capital expenditure. Fortunately, such an overhaul is currently being carried out and there is a prospect of reliable data in a few months.

An ideal productivity measure would take account of the cost of capital. This would add greatly to the comparability of the performance of government and the private sector by measuring the services produced by each on a similar basis – the basis that capital used in the business costs money. This has not yet been attempted for government-produced services (and might not make a noticeable difference). But it will be made easier by the requirement that government departments are now charged an estimated amount for the cost of capital they are deemed to use.

As regards the outputs identified in each function, these are obtained from administrative records, which are deemed to be suitable for the purpose. However, we cannot claim that coverage is exhaustive – or ever will be without a massive amount of work. But so long as the actual outputs chosen are the important ones, the output figures should not mislead. Geographical coverage is an issue though: the intention is to cover the whole of the United Kingdom, but, in most cases, the output data relate to England and Wales and, in some cases, to England only. This reflects the way administrative responsibilities are allocated and it is hoped that coverage will eventually be complete. For the present, the assumption is made that those areas not covered are similar to the rest of the UK in their characteristics.

Finally, the weights used to combine the various output indicators come from separate sources: they have been chosen as, in principle, they appear to be suitable for use in this context. However, they must be reviewed for their suitability.

Where we are now

In this article, we have set out some initial propositions as to how a productivity index of government services might be developed, how it might be calculated, and what data might be used. The results shown here are provisional and much work remains to be done before a meaningful assessment can be made as to their validity. In particular:

- a wider range of government services needs to be covered;
- changing quality must be adequately incorporated into the estimates; and
- rigorous quality assurance processes must be built into the statistical production process.

As this work progresses and its coverage is extended, regular reports will be published to convey the results and to provide an assessment of their quality.

A strong feature of this work is that it respects the national accounts framework of the System of National Accounts[2] and is consistent in approach with the OECD's recommendations for measuring productivity given in its Manual on the subject.[8] This feature allows us to compare government output with other components of the national accounts and also compare productivity movements for the different areas of government on a comparable basis.

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The effects of taxes and benefits on household income, 2000—01

Caroline Lakin
Social Analysis and Reporting Division
Office for National Statistics
Zone B6/11
1 Drummond Gate
London SW1V 2QQ
Tel: 020 7533 5770
E-mail: caroline.lakin@ons.gov.uk

SUMMARY

This article examines how taxes and benefits redistribute income between various groups of households in the United Kingdom. It 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 tables and charts have been renumbered since the last annual publication. New tables and charts have been added. In particular, there are more tables showing distributions for households analysed by quintile group as well as by decile group. Table 1 showing links between old and new tables and charts is included at the end of the summary section.

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. As shown in Table 4, before government intervention, the top fifth of households have an average of around £55,700 per year in original income (that is from sources such as earnings, occupational pensions and investments). This is around 18 times as great as the figure of around £3,100 for the bottom fifth. After taxes and benefits, the ratio is greatly reduced to four to one. In 1999–2000 the ratio was 19 to 1 for original income but it was also reduced to four to one for final income. Figure 1 also shows the effect on the transition between original income and final income for 2000–01 broken down by quintiles.

Figure 1

Original income and Final income by quintile groups for ALL households, 2000—01

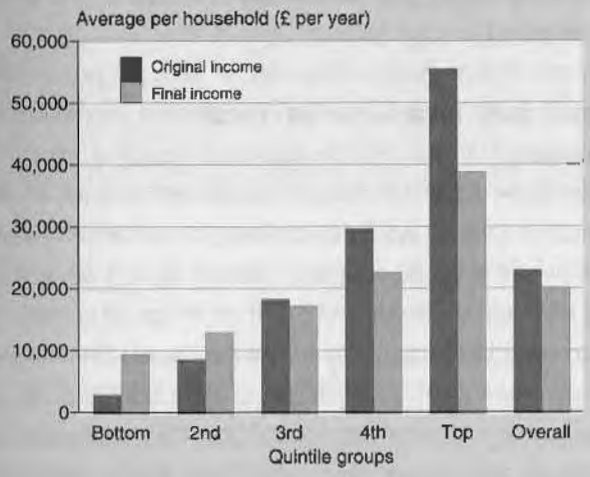
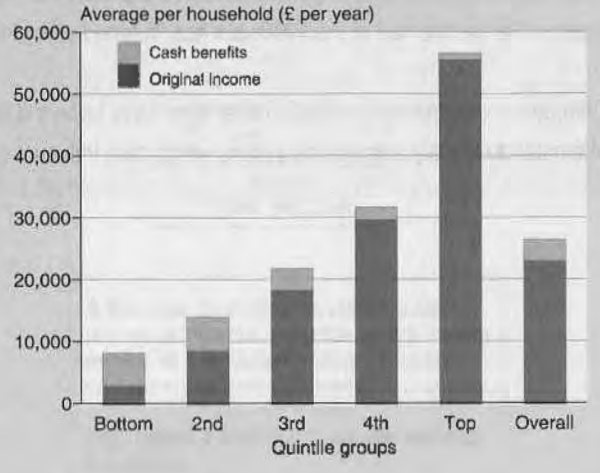


Figure 2

Gross income by quintile groups for ALL households, 2000—01



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 £5,400 from cash benefits, as shown in Table 4, 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 (see Table 12). The majority of cash benefits for these households come from contributory benefits, particularly the state pension. Figure 2 shows gross income broken down into original income and cash benefits by the quintile distribution for equivalised disposable income.

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 (Table 3) by the top fifth of households is double that paid by the bottom fifth: 23 per cent compared with 12 per cent. For local taxes, the top quintile group pays the largest absolute amount (Table 14A). On the other hand, when expressed as a proportion of gross income (Table 3), the impact of local taxes 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, i.e. are regressive. This is partly due to the recorded expenditure of some low income households being higher than their recorded current incomes. This results 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. These do not attract indirect taxes. Despite this, the top fifth of households still pay more indirect tax in absolute terms than other households, see Table 4.

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 (Tables 15 and 15A). For example, there are more children in households in the lower half of the distribution. Among adults, women appear fairly evenly across income groups. There are more men in households in the higher groups than in the lower groups. There are also distinct patterns by household type. Households containing one adult and at least one child are concentrated in the bottom fifth. 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 of the distribution.

Trends in income inequality

As shown in Figure 5 and Table 27, 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 around 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. The latest figures suggest that inequality of disposable income rose again in the second half of the 1990s but has flattened off by the end of the period.

Changes in the income distribution over time have been the focus of much study. The article includes discussion of 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.

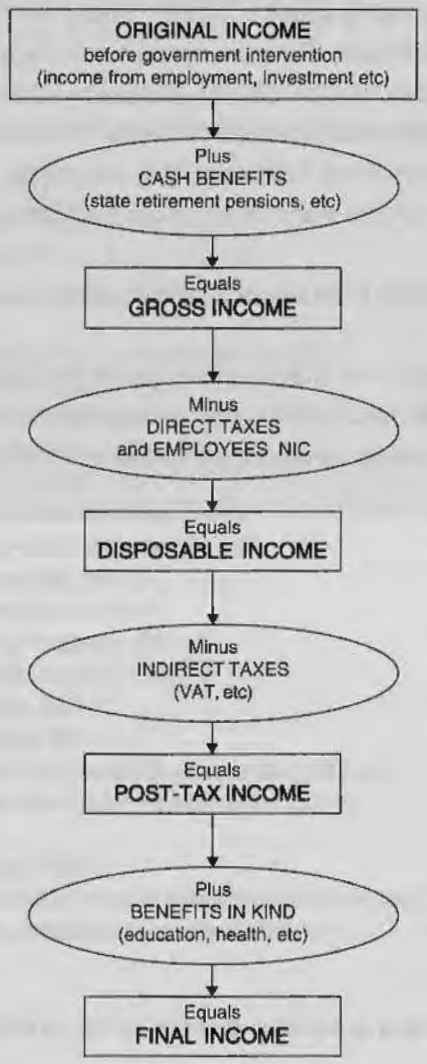
Diagram 1 shows the stages in the redistribution of income used in this analysis. Household members receive income from employment, occupational pensions, investments and other non-government sources. This is referred to as original income. The diagram shows the various ways that government raises revenue 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 £257 billion of taxes and £201 billion of benefits have been allocated to households. This is equivalent to 72 per cent and 56 per cent respectively of general government expenditure, which totalled around £358 billion in 2000 (Table 13).

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 (the Family Expenditure Survey, to be replaced by the new Expenditure and Food Survey from 2001–02) 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 Gini coefficients and other measures of inequality in Tables 26 and 27. Beyond these measures, one 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. So a single person's income of £6,100 is treated as equivalent to an income of £10,000 for a couple (see Appendix 2, 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

Diagram 1
Stages of redistribution



A National Statistics strategic quality review of income statistics and a quality review of the redistribution of income analyses are being carried out currently.

For further information, please contact the author.

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 from 6,500 to 7,000 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 re-weighted and grossed so that the totals reflect the whole household population in terms of age, sex and region. Different weights 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 re-weighting and grossing methodology and may lead to some under-estimation of income. Those who are interested in the level of income for the top decile group of the income distribution should refer to the Department for Work and Pensions publication *Households Below Average Income 2000–01.*[1] This analysis 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 2.

The results of the analysis are reported in three sections. The first looks at the effects for all households. 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.

TABLE 1: Comparison between old and new table and chart numbers, and additional tables and charts

Old table or chart	New Name	Description
Chart 1	Diagram 1	Stages of redistribution
New Chart	Figure 1	Original income and final income by quintile groups of all households, 2000–01
New Chart	Figure 2	Gross income (original income & cash benefits) by quintile groups of all households, 2000–01
Chart 2	Figure 3	Sources of gross income by quintile groups of equivalised disposable income, 2000–01
Chart 3	Figure 4	Summary of the effects of taxes and benefits on all households, 2000–01
Chart 4	Figure 5	Gini coefficients 1978 to 2000–01
Chart 5	Figure 6	Income stages by non–retired household types, 2000–01
Look up table	Table 1	Comparison between old tables and new table numbers and additional tables
A	Table 2	Percentage shares of household income and Gini coefficients, 2000–01
B	Table 3	Taxes as a percentage of gross income, disposable income and expenditure for all households by quintile groups, 2000–01
	Tables 3A–3D	Table 3 for earlier years, linked in web version
C	Table 4	Summary of the effects of taxes and benefits by quintile groups of all households, 2000–01
D	Table 5	Percentage shares of household income and Gini coefficients for non–retired households, 2000–01
E	Table 6	Summary of the effects of taxes and benefits on non–retired households by quintile groups, 2000–01
F	Table 7	Cash benefits for non–retired households by quintile groups, 2000–01
G	Table 8	Taxes as a percentage of gross income for non–retired households by quintile groups, 2000–01
H	Table 9	Indirect taxes as a percentage of (a) disposable income and (b) household expenditure for non–retired households by quintile groups, 2000–01
I	Table 10	Benefits in kind for non–retired households by quintile groups, 2000–01
J	Table 11	Percentage shares of household income and Gini coefficients for retired households, 2000–01
K	Table 12	Summary of the effects of taxes and benefits on retired households by quintile groups, 2000–01
Appendix 1	Appendix 1	
1	Table 13	Taxes and benefits allocated to households as a percentage of general government expenditure, 2000
2A	Table 14	Average incomes, taxes and benefits by decile groups of all households, 2000–01
New quintiles	Table 14A	Average incomes, taxes and benefits by quintile groups of all households, 2000–01
2B	Table 15	Household characteristics of decile groups of all households, 2000–01
New quintiles	Table 15A	Household characteristics of quintile groups of all households, 2000–01
3A	Table 16	Average incomes, taxes and benefits by decile groups of non–retired households, 2000–01
New quintiles	Table 16A	Average incomes, taxes and benefits by quintile groups of non–retired households, 2000–01
3B	Table 17	Household characteristics of decile groups of non–retired households, 2000–01
New quintiles	Table 17A	Household characteristics of quintile groups of non–retired households, 2000–01
4A	Table 18	Average incomes, taxes and benefits by decile groups of retired households, 2000–01
New quintiles	Table 18A	Average incomes, taxes and benefits by quintile groups of retired households, 2000–01
4B	Table 19	Household characteristics of decile groups of retired households, 2000–01
New quintiles	Table 19A	Household characteristics of quintile groups of retired households, 2000–01
5	Table 20	Average incomes, taxes and benefits by decile groups of non–retired households without children, 2000–01
6	Table 21	Average incomes, taxes and benefits by decile groups of non–retired households with children, 2000–01
7	Table 22	Distribution of households by household type, 2000–01
8	Table 23	Summary of the effects of taxes and benefits, by household type, 2000–01
9	Table 24	Average incomes, taxes and benefits by decile groups of households (ranked by unadjusted disposable income), 2000–01
10	Table 25	Cross–tabulation of households ranked by disposable income, unadjusted and equivalised, 2000–01
Appendix 2	Appendix 1	Long run time series
1	Table 26	Percentage shares of equivalised total original, gross, disposable and post–tax incomes by quintile groups for all households, 1978 to 2000–01
2	Table 27	Gini coefficients for the distribution of income at each stage of the tax–benefit system
3	Table 27	and P90/P10 and P75/P25 ratios for disposable income for all households, 1978 to 2000–01
Appendix 3	Appendix 2	Methodology and definitions
Diagram A	Diagram 3	Complete income inequality
Diagram B	Diagram 2	Lorenz curve for a typical income distribution

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 2 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 50 per cent of all original income (Table 2). This compares with only 2 per cent for households in the bottom fifth. Figure 3 shows a breakdown of gross income by quintiles.

Adding cash benefits to original income produces gross income. In contrast to original income, the amount received from cash benefits

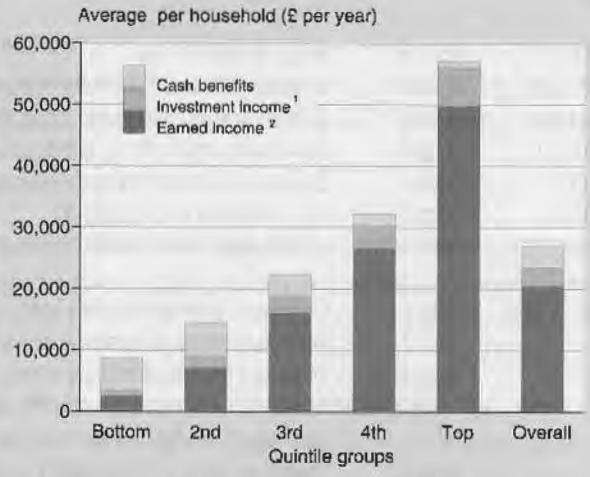
TABLE 2: Percentage shares of household income and Gini coefficients[1], 2000–01

	Percentage shares of equivalised income			
	Original income	Gross income	Disposable income	Post-tax income
Quintile group[2]				
Bottom	2	7	7	6
2nd	7	11	12	11
3rd	15	16	16	16
4th	25	23	23	22
Top	50	44	42	44
All households	100	100	100	100
Decile group[2]				
Bottom	1	3	3	2
Top	32	28	27	29
Gini coefficient (per cent)	*51*	*38*	*35*	*39*

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

Figure 3

Sources of gross income by quintile groups of equivalised disposable income, 2000–01



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

is higher for households lower down the income distribution than for those at the top. This has an equalising effect on the distribution. It raises 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.

Tables 3, 14 and 14A show the effect of direct and indirect tax on each quintile and decile group in more detail. 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 all households, the bottom two quintile groups pay about 7 per cent. This compares with 79 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. As a proportion of their gross incomes, households in the bottom quintile group typically pay 4 per cent in income tax compared with 18 per cent for those in the top quintile group.

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

TABLE 3: Taxes as a percentage of gross income, disposable income and expenditure for ALL households by quintile group[1], 2000–01

(a) Direct and indirect taxes as a percentage of gross income

(b) Indirect taxes as a percentage of disposable income

(c) Indirect taxes as a percentage of expenditure[2]

	Quintile groups of ALL households[2]					
	Bottom	2nd	3rd	4th	Top	All households
(a) Percentages of gross income						
Direct taxes						
Income tax	3.6	7.3	10.9	13.9	17.7	13.7
Employees' NIC	1.4	2.6	4.2	4.9	3.8	3.8
Local taxes	6.6	4.7	3.7	2.9	1.9	3.0
All direct taxes	*11.6*	*14.6*	*18.7*	*21.7*	*23.4*	*20.5*
Indirect taxes						
VAT	11.3	8.6	7.7	6.9	5.3	6.8
Duty on alcohol	1.4	1.0	1.0	0.9	0.7	0.9
Duty on tobacco	3.3	2.0	1.4	0.9	0.4	1.1
Duty on hydrocarbon oils & Vehicle excise duty	3.3	2.6	2.6	2.3	1.5	2.1
Other indirect taxes	10.2	7.5	6.4	5.5	4.1	5.6
All indirect taxes	*29.5*	*21.8*	*19.1*	*16.5*	*12.1*	*16.4*
All taxes	*41.2*	*36.4*	*37.8*	*38.2*	*35.5*	*37.0*
(b) Percentages of disposable income						
VAT	12.8	10.1	9.5	8.8	6.9	8.6
Duty on alcohol	1.6	1.2	1.3	1.2	0.9	1.1
Duty on tobacco	3.7	2.4	1.8	1.1	0.6	1.3
Duty on hydrocarbon oils and Vehicle excise duty	3.7	3.1	3.2	3.0	2.0	2.7
Other indirect taxes	11.6	8.8	7.8	7.0	5.3	7.0
All indirect taxes	*33.4*	*25.5*	*23.6*	*21.1*	*15.7*	*20.7*
(c) Percentages of expenditure[2]						
VAT	8.3	8.4	8.2	8.0	7.3	7.9
Duty on alcohol	1.0	1.0	1.1	1.1	0.9	1.0
Duty on tobacco	2.4	2.0	1.5	1.0	0.6	1.2
Duty on hydrocarbon oils and Vehicle excise duty	2.4	2.5	2.7	2.7	2.1	2.5
Other indirect taxes	7.5	7.3	6.7	6.4	5.7	6.4
All indirect taxes	*21.6*	*21.2*	*20.3*	*19.1*	*16.6*	*18.9*

1 Households are ranked by equivalised disposable income.

2 Calculated to be consistent with disposable income. See paragraph 34 of Appendix 2 for the definition of expenditure.

insurance contributions are only levied on the first £535 of weekly earnings in 2000–01, 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 3. 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 around half of those in the top fifth. On the other hand, when expressed as a proportion of gross income, the burden decreases as income rises. Local taxes represent 7 per cent of gross income for the bottom fifth but 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 2, 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. Some types of receipts are not included as income in the FES, e.g. inheritance, severance payments and receipts from building society demutualisations. 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 3 as a proportion of gross and disposable income and, separately, as a proportion of expenditure. In addition, direct taxes are also shown as a proportion of gross income so that the impact of direct and indirect taxes can be compared.

In cash terms, the top fifth of households pay around two and three quarters 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, as shown in Table 3, 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 whichever measure is used.

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 2, 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 (as shown in Tables 2 and 27) produce a similar picture to the shares of income discussed earlier. For 2000–01, the figure of 51 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. The Gini coefficients for original income and post-tax income show a marginal fall in 2000–01 compared to that in 1999–2000 while those for gross income and disposable income are broadly unchanged. All comparisons are subject to the earlier reference to the potential effect of the discrepancy between income and expenditure in the lower half of the income distribution. Estimates of sampling variability for the estimates shown in Figure 5 suggest that the trend of small rises in the late 1990s in the coefficients for gross, disposable and post-tax income is flattening out.

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 4 with more detail in Tables 15 and 15A.

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

TABLE 4: Summary of the effects of taxes and benefits by quintile groups on ALL households[1], 2000–01

	Quintile groups of ALL households[1]						
	Bottom	2nd	3rd	4th	Top	All households	Ratio Top/Bottom quintile
Income, taxes and benefits per household (£ per year)[2]							
Original income	3 090	8 820	18 570	29 950	55 740	23 230	18
plus cash benefits	5 330	5 470	3 520	2 050	1 110	3 490	0
Gross income	8 420	14 290	22 080	32 000	56 850	26 730	7
less direct taxes[3] and employees' NIC	980	2 090	4 130	6 930	13 300	5 490	14
Disposable income	7 440	12 200	17 960	25 060	43 550	21 240	6
less indirect taxes	2 470	3 100	4 220	5 290	6 850	4 390	3
Post-tax income	4 970	9 100	13 730	19 770	36 690	16 850	7
plus benefits in kind	4 700	4 080	3 730	3 090	2 390	3 600	1
Final income	9 670	13 190	17 460	22 870	39 080	20 460	4
Number of individuals per household							
Children[4]	*0.7*	*0.6*	*0.6*	*0.5*	*0.3*	*0.5*	
Adults	*1.6*	*1.8*	*1.9*	*2.0*	*1.9*	*1.8*	
Men	*0.7*	*0.8*	*0.9*	*1.0*	*1.0*	*0.9*	
Women	*0.9*	*1.0*	*1.0*	*1.0*	*0.9*	*0.9*	
People	2.3	2.3	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	0.5	0.8	1.3	1.6	1.6	1.2	
Retired people	0.6	0.6	0.4	0.3	0.2	0.4	
Household type (percentages)							
Retired	42	40	25	13	8	26	
Non-retired							
1 adult	14	12	14	18	23	16	
2 adults	9	13	18	27	37	21	
1 adult with children[5]	11	7	5	2	1	5	
2 adults with children	16	18	24	22	18	20	
3 or more adults[6]	9	11	14	17	12	13	
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 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.

Non-retired households with one adult and one or more children are concentrated in the lower groups. Around 70 per cent 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, as shown in Table 15A, 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. Nearly two thirds 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 4, with more detailed information for decile groups in Table 14 and quintile groups in Table 14A.

On average, households receive about £23,200 a year in original income but this varies widely between households. Those in the top quintile group have around £55,700 compared with £3,100 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, as shown in Tables 15 and 15A, 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. Those in the bottom fifth are more likely to work part time or be unemployed or economically inactive. Those in the higher deciles tend to have better paid jobs as well as being more likely to be economically active.

Earnings from employment or self-employment are typically the most important source of income, making up three quarters of gross income on average. The proportion accounted for by earnings from self-employment has tended to increase in recent years and such earnings are more volatile. 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 more than 60 per cent. These households typically receive around £5,400 from cash benefits, representing approximately two thirds of gross income for the bottom quintile group and two fifths for the next group (Figure 3).

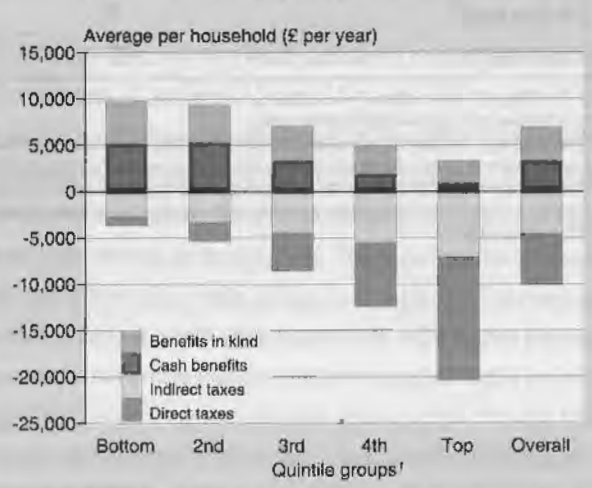
Higher income groups pay both higher amounts of direct tax and higher proportions of their income in direct tax (Tables 4, 14 and 14A). The top quintile group pays about £13,300 per household in income tax, national insurance contributions and local tax – 23 per cent of gross income. In contrast the direct tax bill for households in the bottom fifth is around £1,000, 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 in kind, such as those from state education and the health service. Households in the bottom quintile group receive the equivalent of around £4,700 from these benefits, which is twice the amount received by the top fifth (see Figure 4).

Figure 4

Summary of the effects of taxes and benefits on ALL households, 2000—01



1 Households are ranked throughout by their grossed equivalised disposable incomes.

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 £9,700 to £39,100, a ratio of one to four compared to a ratio of one to 18 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. Tables 26 and 27 (at the end of Appendix 1) show trends for three measures of inequality. Table 26 shows trends for the shares of income figures that have already been seen for 2000–01 earlier in this article. Table 27 contains time series for Gini coefficients and 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.

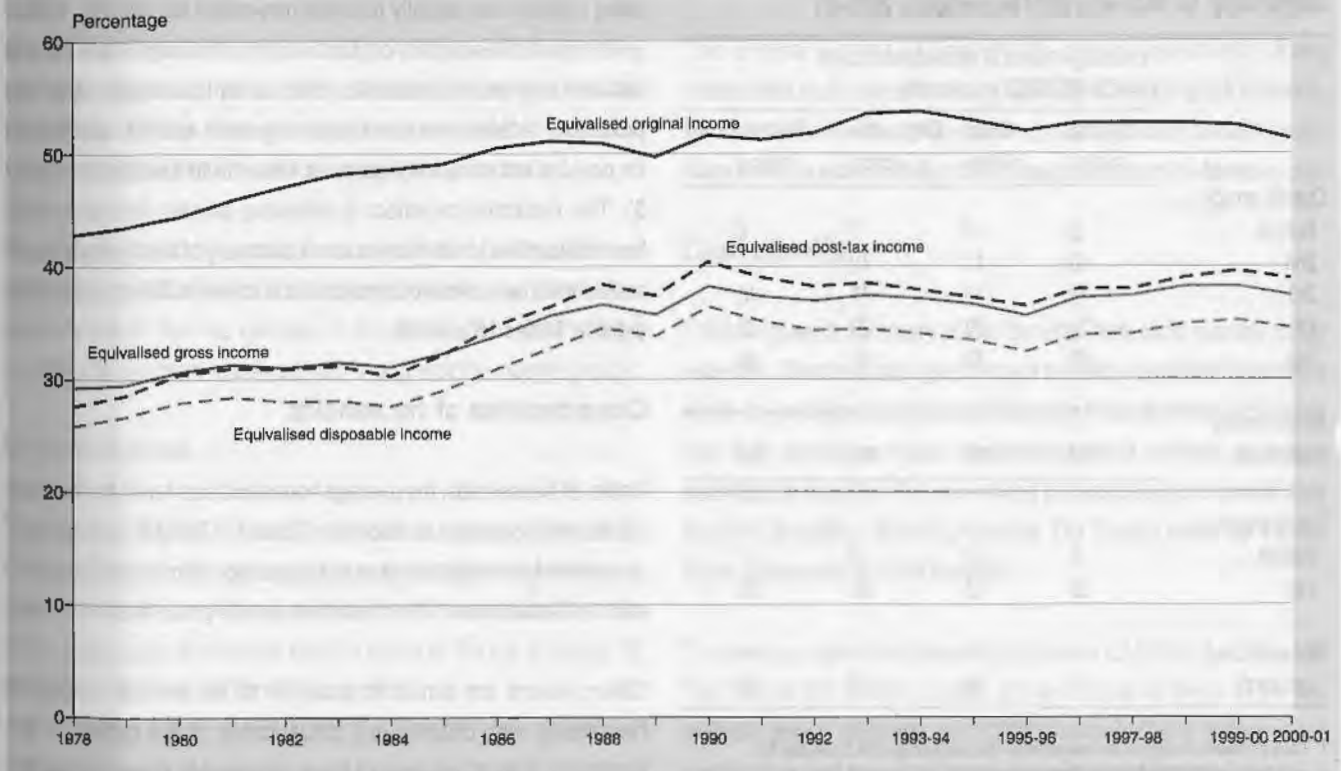
Figure 5 shows how inequality has been changing over time since 1978 for the various measures of income as measured by the Gini coefficient. It indicates several distinct phases over the last two decades and shows that the different measures of income do not always show the same trend in inequality.

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 fairly stable. In contrast, inequality of disposable income reduced slowly until the mid 1990s, although the fall only reversed a small part of the rise seen in the previous decade. Data for the latest years show that, in the late 1990s, inequality of disposable income has risen slightly once again but it was flattening off by the end of the period. Inequality of post-tax income has tended to follow a similar pattern.

Figure 5

Gini coefficients 1978 to 2000–01



As with all measures derived from sample surveys, the Gini coefficients are subject to sampling errors. To give an indication as to 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 Figure 5 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, longer term changes in inequality.

Figures produced by the alternative measures of inequality shown in Tables 26 and 27 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 in the early 1990s; then a small rise but flattening off by the end of the period.

Changes in income distribution over time have been the focus of much study. The OECD[3] 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 during the 1980s.

TABLE 5: Percentage shares of household income and Gini coefficients[1] for NON-RETIRED households, 2000–01

	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	17	17	17	16
4th	24	23	23	23
Top	46	42	41	44
All non-retired households	100	100	100	100
Decile group[2]				
Bottom	1	2	3	2
Top	29	27	26	28
Gini coefficient (per cent)	*44*	*36*	*34*	*39*

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

The most prominent reasons given are globalisation of trade pushing down some wages, recent technological changes having a bias against unskilled workers, and other developments concerning the deregulation of labour and product markets.

Other explanations for trends in recent years offered by, for example, the Institute for Fiscal Studies[4] (IFS) include the effect of wage growth in some areas, the change in the importance of self-employment income and change in the level of unemployment and the type of people affected. There has been a movement from full time male employment to unemployment or inactivity particularly for older men in less skilled occupations. On the other hand, female employment, particularly part time, has increased. Like previous work, the IFS study looked at a limited set of factors, particularly concentrating on the role of the labour market. 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 11 per cent by the end of the period.

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 coefficients for post-tax income are the same as those for all households (Table 5). 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 6, with more detail in Tables 16 and 16A.

Characteristics of households

Unlike all households, the average household size tends to decrease as income increases, as shown in Table 17. This fall is more than accounted for by the decrease in the average number of children in each household from 1.1 in the bottom quintile group to 0.4 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 43 per cent of these households in the bottom fifth

TABLE 6: Summary of the effects of taxes and benefits on NON-RETIRED households by quintile groups[1], 2000–01

	Quintile groups of NON-RETIRED households[1]					All non-retired households	Ratio Top/Bottom quintile
	Bottom	2nd	3rd	4th	Top		
Income, taxes and benefits per household (£ per year)[2]							
Original income	5 350	15 850	25 490	35 630	61 750	28 810	12
plus cash benefits	5 200	3 930	1 630	1 190	740	2 540	0
Gross income	10 550	19 780	27 130	36 810	62 480	31 350	6
less direct taxes[2] and employees' NIC	1 320	3 530	5 730	8 390	14 780	6 750	11
Disposable income	9 230	16 250	21 390	28 420	47 710	24 600	5
less indirect taxes	3 140	4 220	4 990	5 830	7 190	5 070	2
Post-tax income	6 090	12 030	16 410	22 590	40 510	19 530	7
plus benefits in kind	5 300	4 390	3 390	2 950	2 290	3 660	0
Final income	11 390	16 430	19 800	25 540	42 800	23 190	4
Number of individuals per household							
Children[3]	*1.1*	*0.9*	*0.7*	*0.5*	*0.4*	*0.7*	
Adults	*1.8*	*2.0*	*2.0*	*2.0*	*1.9*	*1.9*	
Men	*0.9*	*1.0*	*1.0*	*1.1*	*1.0*	*1.0*	
Women	*0.9*	*1.0*	*1.0*	*1.0*	*0.9*	*1.0*	
People	2.9	2.9	2.7	2.5	2.3	2.6	
People in full-time education	1.1	0.8	0.6	0.5	0.3	0.7	
Economically active people	0.9	1.5	1.8	1.9	1.7	1.6	
Retired people	0.1	0.1	0.1	0.1	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 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.

and a further 26 per cent in the second quintile group (Table 22). Two adult households with three or more children are also concentrated towards the bottom although not to the same extent. Two adult households without children are over-represented at the top.

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

Original income

The average original income for non-retired households is nearly £29,000 (Table 6). 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 12 (compared to one to 18 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 nearly twice as many economically active people as those in the lowest group.

Cash benefits

Table 7 gives a summary of the benefits that each quintile group receives. There are two types of cash 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 (including Working Families Tax Credit) make up almost three quarters of all cash benefits.

The average non-retired household receives £2,500 in cash benefits. The bottom fifth receive double this amount while those in the top quintile group typically get £700. 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. The presence of some individuals with low incomes in high income households means that some payments are recorded further up the income distribution. Nearly two thirds of income support and housing benefit paid to non-retired households goes to households in the bottom fifth of the distribution. Child benefit payments and Working Families Tax Credits (WFTC) are based on the number of children in the household. Payments of child benefit are higher at the lower end of the distribution, as these households tend to have more children. Payments of WFTC are high partly for that reason but, to a greater extent, because the amount paid is higher the lower the income of the household.

TABLE 7: Cash benefits for NON-RETIRED households by quintile group[1], 2000–01

	Quintile groups of NON-RETIRED households[1]					All non-retired households
	Bottom	2nd	3rd	4th	Top	
Average per household (£ per year)						
Contributory						
Retirement pension	200	480	260	300	250	300
Incapacity benefit	560	600	180	120	30	300
Job seeker's allowance[2]	100	40	20	10	10	30
Other	70	110	120	60	100	90
Total contributory	920	1 230	580	480	380	720
Non-contributory						
Income support	1 370	560	80	50	10	410
Working Families Tax Credit	320	260	100	20	0	140
Child benefit	720	580	460	350	240	470
Housing benefit	1 050	480	90	30	0	330
Job seeker's allowance[3]	280	60	20	0	0	70
Sickness/disablement related	390	650	240	130	40	290
Other	160	110	60	120	50	100
Total non-contributory	4 280	2 700	1 050	700	350	1 820
Total cash benefits	5 200	3 930	1 630	1 190	740	2 540
Cash benefits as a percentage of gross income	*49*	*20*	*6*	*3*	*1*	*8*

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

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. For those in the bottom quintile group they form a much larger proportion – 49 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 (Tables 16 and 16A). Of the total income tax paid by non-retired households, the bottom two quintile groups pay about 11 per cent. This compares with 74 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 (Table 8). This is due to the progressive nature of the income tax system. As a proportion of their gross incomes, households in the bottom quintile group typically pay 5 per cent in income tax compared with 18 per cent for those in the top quintile group.

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

TABLE 8: Taxes as a percentage of gross income for NON-RETIRED households by quintile group[1], 2000–01

	Quintile groups of NON-RETIRED households[1]					All non-retired households
	Bottom	2nd	3rd	4th	Top	
Percentages						
Direct taxes						
Income tax[2]	5.1	9.9	12.7	14.9	18.1	14.5
Employees' NIC	2.5	4.2	5.3	5.4	3.8	4.4
Local taxes[3]	4.9	3.8	3.2	2.5	1.7	2.6
All direct taxes	12.5	17.8	21.1	22.8	23.7	21.5
All indirect taxes	29.8	21.3	18.4	15.8	11.5	16.2
All taxes	42.3	39.1	39.5	38.6	35.2	37.7

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

insurance contributions are only levied on the first £535 of weekly earnings in 2000–01, 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 8. 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 (Table 16A). When expressed as a proportion of gross income, the impact 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 2, 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. Some types of receipts are not included as income in the FES, e.g. inheritance, severance payments, receipts from building society demutualisations. 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 9 as a proportion of total income and, separately, as a proportion of expenditure. In addition, indirect taxes are also shown as a proportion of gross income in Table 8 so that the impact of direct and indirect taxes can be compared.

In cash terms, the top fifth of non-retired households pay nearly two and a half times as much indirect tax as the bottom fifth (Table 16A). On the other hand, when expressed as a percentage of disposable income or expenditure (Table 9), 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. These 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

TABLE 9: Indirect taxes as a percentage of (a) disposable income and (b) household expenditure[2] for NON-RETIRED households by quintile group[1], 2000–01

	Quintile groups of NON-RETIRED households[1]					All non-retired households
	Bottom	2nd	3rd	4th	Top	
(a) Percentages of disposable income						
VAT	13.2	10.2	9.5	8.6	6.7	8.6
Duty on alcohol	1.7	1.3	1.3	1.2	0.8	1.1
Duty on tobacco	4.1	2.5	1.5	1.1	0.5	1.4
Duty on hydrocarbon oils and Vehicle excise duty	3.8	3.4	3.4	2.9	1.9	2.7
Other indirect taxes	11.2	8.5	7.7	6.7	5.1	6.9
All indirect taxes	34.1	25.9	23.3	20.5	15.1	20.6
(b) Percentages of expenditure[2]						
VAT	8.5	8.3	8.0	7.9	7.2	7.8
Duty on alcohol	1.1	1.0	1.1	1.1	0.9	1.0
Duty on tobacco	2.6	2.0	1.3	1.0	0.6	1.2
Duty on hydrocarbon oils and Vehicle excise duty	2.4	2.7	2.8	2.7	2.1	2.5
Other indirect taxes	7.2	6.9	6.5	6.2	5.5	6.2
All indirect taxes	21.8	21.0	19.7	18.9	16.2	18.8

1 Households are ranked by equivalised disposable income.
2 Calculated to be consistent with disposable income. See paragraph 34 of Appendix 2 for the definition of expenditure.

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 year 2000 expenditure on these that is allocated in this analysis is equivalent to around 26 per cent of total general government expenditure, as shown in Table 13. Other items for which imputations are made are free school meals, welfare milk, housing subsidy and travel subsidies. These items are equivalent to a further 1 per cent of general government expenditure. Table 10 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 2, 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. The impact of expenditure on free 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 2, 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 increases marginally from the bottom quintile to the second quintile then falls gradually as income rises. This pattern is a reflection of the demographic composition of households. A study by Sefton[5] attempted to allow for variations in 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 (see Appendix 2, paragraph 39), is spread between public sector tenants. 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 10: Benefits in kind for NON-RETIRED households by quintile group[1], 2000–01

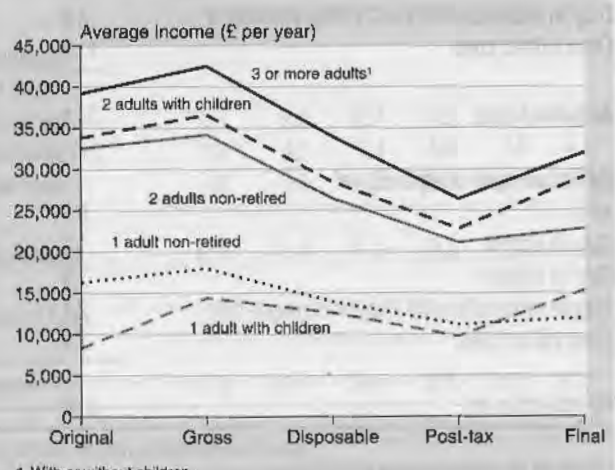
	Quintile groups of NON-RETIRED households[1]					All non-retired households
	Bottom	2nd	3rd	4th	Top	
Average per household (£ per year)						
Education	3 140	2 260	1 580	1 280	730	1 800
National health service	1 900	2 000	1 720	1 600	1 480	1 740
Housing subsidy	100	50	30	10	10	40
Travel subsidies	40	40	50	50	70	50
School meals and welfare milk	130	30	10	0	0	30
All benefits in kind	5 300	4 390	3 390	2 950	2 290	3 660
Benefits in kind as a percentage of post-tax income	*87*	*37*	*21*	*13*	*6*	*19*

1 Households are ranked by equivalised disposable income.

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 87 per cent for the lowest quintile group to 6 per cent for the highest, as shown in Table 10. This indicates that these benefits contribute to the reduction in inequality.

Figure 6

Income stages by NON-RETIRED household types, 2000–01



1 With or without children.

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 Figure 6, only those containing one adult and children are net gainers, with average final incomes of £15,400 compared to original incomes of £8,500. Table 23 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 similar levels of original income to those without, but receive more cash benefits than those without. This is a change from the previous year, when the effect of cash benefits was broadly similar for both groups. It could reflect in part the full year effect of the introduction of Working Families Tax Credit. The effect of taxes is 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 11: Percentage shares of household income and Gini coefficients[1] for RETIRED households, 2000–01

	Percentage shares of equivalised income for RETIRED households[2]			
	Original income	Gross income	Disposable income	Post-tax income
Quintile group[2]				
Bottom	3	9	9	8
2nd	6	13	14	13
3rd	11	16	17	17
4th	20	21	22	22
Top	60	40	39	40
All retired households	100	100	100	100
Decile group[2]				
Bottom	1	4	4	3
Top	43	26	24	25
Gini coefficient (per cent)	*65*	*31*	*29*	*33*

1 This is a measure of the dispersion of each definition of income (see Appendix 2, 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 2, paragraph 9 for the definition of a retired person). These households have quite distinct income and expenditure patterns. 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. Tables 11, 18 and 18A show that, before government intervention, the richest fifth of retired households receive three fifths of total original income, while the Gini coefficient for this measure of income is 65 per cent. Both these measures are higher (showing more inequality) than equivalent figures for non-retired households. 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. 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 £7,000 in original income with most of this coming from occupational pensions and investments (Tables 12, 18 and 18A). Original income ranges from £1,000 for the bottom quintile group to £21,000 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 £4,900 from this source, while those in the second to top quintile groups receive between £6,300 and £7,000. These cash benefits make up large proportions of the gross incomes for the bottom four quintiles ranging from 83 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 23 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 these is the retirement pension, which accounts for almost three quarters of their cash benefits (Tables 12, 18 and 18A).

Non-contributory benefits are lowest in the bottom quintile group, where three quarters 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 their receipt may push a household up the income distribution. This does not necessarily mean that households receiving disability benefits have a higher standard of

TABLE 12: Summary of the effects of taxes and benefits on RETIRED households by quintile group[1], 2000–01

	Quintile groups of RETIRED households[1]					
	Bottom	2nd	3rd	4th	Top	All retired households
Income, taxes and benefits per household (£ per year)[2]						
Original income						
Earnings	20	70	220	390	670	270
Occupational pensions	700	1 560	3 080	5 500	13 700	4 910
Investment income	280	340	520	1 140	6 380	1 730
Other income	20	40	110	70	210	90
Total original income	1 020	2 010	3 940	7 100	20 950	7 010
plus Contributory benefits	4 310	4 990	4 890	5 030	4 990	4 840
Non-contributory benefits	620	1 320	1 900	1 980	1 340	1 430
Total cash benefits	4 930	6 310	6 790	7 020	6 340	6 280
Gross income	5 960	8 320	10 730	14 120	27 290	13 280
less Income tax[2]	80	160	430	930	3 680	1 060
Employees' NIC	0	0	10	20	30	10
Local taxes[3]	650	610	680	740	1 010	740
Disposable income	5 230	7 540	9 610	12 430	22 560	11 470
less Indirect taxes	1 530	1 800	2 090	2 520	4 000	2 390
Post-tax income	3 700	5 750	7 520	9 910	18 560	9 090
plus National health service	3 500	3 190	3 260	3 220	3 060	3 250
Housing subsidy	40	60	70	50	20	50
Other benefits in kind	190	130	90	90	100	120
Final income	7 430	9 120	10 940	13 270	21 740	12 500
Cash benefits as a percentage of gross income	*83*	*76*	*63*	*50*	*23*	*47*
Retirement pension as a percentage of cash benefits	*86*	*76*	*71*	*70*	*77*	*75*

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

living than those lower down the income distribution. The income from these benefits may be offset by the additional costs that may be incurred by the individual due to the illness or disability in question.

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 significantly higher for the second and third 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 23 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

received twice the level of original income than that of women on average: £6,300 for men compared with £3,200 for women. This is a much higher proportion than in the previous year and may be volatile as a result of the small numbers of retired households in the sample containing only one man. 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 Peter Acol, Daniel Annan, Paul Janvier, Peter Mayne and Zobia Saeed.

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APPENDIX 1

TABLE 13 (Appendix 1): Taxes and benefits allocated to households as a percentage of general government expenditure, 2000

Taxes and compulsory social contributions[1] allocated to households

	£ million	% of GGE[2]
Income tax (gross)	105 700	29.5
Tax reliefs	- 530	-0.1
Income tax (net)	105 170	29.4
Employees' & self-employed NI contributions	25 950	7.2
Council tax	13 720	3.8
Taxes on final goods and services		
VAT	43 150	12.1
Duty on hydrocarbon oils	11 620	3.2
Duty on tobacco	7 610	2.1
Vehicle excise duty	3 100	0.9
Duty on wines,cider,perry and spirits	3 560	1.0
Duty on beer	2 690	0.8
Betting duties	1 480	0.4
Camelot: payments to NLDF	1 550	0.4
Stamp duty on house purchase	2 270	0.6
Other	3 310	0.9
Taxes & NI contributions on		
Intermediate goods & services[3]		
Employers' NI contributions	11 590	3.2
Commercial & industrial rates	7 570	2.1
Duty on hydrocarbon oils	5 830	1.6
VAT	3 510	1.0
Vehicle excise duty	830	0.2
Other	2 480	0.7
Total	256 990	71.8

Benefits allocated to households

	£ million	% of GGE[2]
Cash benefits		
Contributory (National Insurance,etc)		
Retirement	39 130	10.9
Incapacity benefit	6 710	1.9
Widows and guardians	980	0.3
Maternity/Statutory maternity pay	680	0.2
Unemployment/Job seekers allowance	440	0.1
Social fund	1 860	0.5
Other	190	0.1
Non-contributory		
Income support	12 830	3.6
Working Families Tax Credit	3 970	1.1
Other family benefits	8 630	2.4
War pensions	1 210	0.3
Other	16 000	4.5
Student support	470	0.1
Rent rebates and allowances	11 230	3.1
Benefits in kind		
Health services	53 840	15.0
Education	39 120	10.9
Travel subsidies[4]	1 310	0.4
Housing subsidy	1 060	0.3
School meals and welfare milk	860	0.2
Total	200 520	56.0

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, 2001 Edition.

TABLE 14 (Appendix 1): Average incomes, taxes and benefits by decile groups of ALL households, 2000–01

	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 £)		*7 775*	*9 790*	*11 600*	*13 808*	*16 173*	*19 029*	*22 367*	*27 109*	*35 249*	
Number of households in the population ('000s)	2 501	2 503	2 502	2 504	2 501	2 502	2 506	2 503	2 500	2 506	25 030
Original income											
Wages and salaries	1 171	2 670	4 692	7 500	12 592	16 526	21 984	26 109	31 949	47 842	17 304
Imputed income from benefits in kind	11	12	26	32	120	153	286	470	700	1 734	354
Self-employment income	326	417	751	872	1 027	1 164	1 761	2 160	3 068	13 765	2 531
Occupational pensions, annuities	249	689	1 064	1 742	1 885	2 071	2 151	2 455	2 807	3 092	1 820
Investment income	193	203	301	377	471	688	877	1 143	2 003	4 133	1 039
Other income	127	123	144	130	161	272	307	198	136	257	186
Total	2 076	4 113	6 979	10 653	16 256	20 874	27 367	32 534	40 663	70 823	23 234
Direct benefits in cash											
Contributory											
Retirement pension	1 678	2 231	2 319	2 115	1 554	1 390	922	870	710	524	1 431
Job seeker's allowance (Contribution based)	80	49	41	45	12	23	8	2	10	5	28
Incapacity benefit	301	361	407	510	363	124	148	131	66	7	242
Widows' benefits	40	49	60	61	83	36	40	41	36	33	48
Statutory Maternity Pay/Allowance	3	3	2	8	35	42	49	29	50	50	27
Non-contributory											
Income support	853	1 062	683	444	307	199	134	68	13	0	376
Child benefit	437	426	382	367	409	384	346	307	238	221	352
Housing benefit	569	945	837	574	280	200	115	46	5	-	357
Job seeker's allowance (Income based)	249	144	44	39	34	18	18	5	2	3	56
Invalid care allowance	31	42	77	62	54	20	29	4	4	-	32
Attendance allowance	9	104	125	174	166	124	64	52	9	7	83
Disabled Persons Tax Credit	106	202	280	480	340	239	129	96	55	28	195
War pensions/War widows' pensions	0	16	15	36	15	47	30	72	23	6	26
Severe disablement allowance	17	40	71	75	47	41	30	13	4	-	34
Industrial injury disablement benefit	10	32	30	24	31	28	10	8	-	-	17
Student support	94	27	47	23	58	21	40	127	36	38	51
Government training schemes	39	9	21	17	20	16	8	7	10	7	15
Working Families Tax Credit	128	204	205	194	139	90	49	20	5	-	103
Other non-contributory benefits	29	41	24	24	42	8	13	9	2	3	20
Total cash benefits	4 673	5 987	5 669	5 271	3 989	3 048	2 183	1 908	1 279	932	3 494
Gross income	6 749	10 100	12 648	15 924	20 245	23 922	29 549	34 442	41 942	71 754	26 727
Direct taxes and Employees' NIC											
Income tax	219	397	785	1 297	2 026	2 781	3 960	4 963	6 710	13 459	3 660
less: Tax relief at source[1]	2	3	4	4	3	5	4	6	7	9	5
Employees' NI contributions	82	158	295	459	783	1 054	1 434	1 683	2 006	2 302	1 026
Local taxes[2]	784	785	786	834	842	886	942	954	1 022	1 161	900
less: Council tax benefit/Rates rebates	238	221	158	117	62	45	41	24	22	17	94
Total	845	1 116	1 704	2 470	3 586	4 671	6 291	7 571	9 709	16 896	5 486
Disposable income	5 903	8 984	10 944	13 454	16 659	19 251	23 258	26 871	32 233	54 858	21 242
Equivalised disposable income	*5 761*	*8 807*	*10 657*	*12 654*	*14 955*	*17 620*	*20 643*	*24 584*	*30 595*	*53 047*	*19 932*
Indirect taxes											
Taxes on final goods and services											
VAT	910	1 000	1 106	1 351	1 610	1 802	2 061	2 371	2 626	3 419	1 826
Duty on tobacco	244	306	270	306	341	291	282	268	291	219	282
Duty on beer and cider	49	61	64	85	114	117	126	149	153	156	107
Duty on wines & spirits	70	59	73	75	116	110	144	164	192	253	126
Duty on hydrocarbon oils	192	232	244	325	398	478	552	602	632	749	440
Vehicle excise duty	65	68	79	100	122	145	169	180	180	185	129
Television licences	88	80	82	86	92	99	103	99	99	102	93
Stamp duty on house purchase	29	19	23	29	41	52	65	83	111	195	65
Customs duties	20	21	24	28	33	37	43	47	52	69	37
Betting taxes	41	41	51	59	60	55	67	81	54	66	57
Insurance premium tax	15	15	19	24	30	36	42	45	50	72	35
Air passenger duty	6	3	12	10	12	15	22	19	32	65	20
Camelot National Lottery Fund	37	49	56	64	66	62	75	73	62	55	60
Other	4	5	15	11	16	16	8	17	23	16	13
Intermediate taxes											
Commercial and industrial rates	141	146	165	194	232	258	296	325	359	475	259
Employers' NI contributions	226	233	264	311	371	414	474	521	575	761	415
Duty on hydrocarbon oils	105	109	124	145	174	193	221	243	269	356	194
Vehicle excise duty	13	14	16	18	22	24	28	31	34	45	24
Other	111	115	130	153	183	204	233	256	283	375	204
Total indirect taxes	2 366	2 576	2 818	3 375	4 032	4 410	5 009	5 573	6 076	7 632	4 387
Post-tax income	3 537	6 408	8 125	10 079	12 627	14 841	18 250	21 299	26 156	47 226	16 855
Benefits in kind											
Education	2 346	1 602	1 506	1 317	1 643	1 323	1 275	1 091	767	644	1 351
National health service	2 458	2 568	2 626	2 421	2 214	2 076	1 951	1 734	1 716	1 513	2 128
Housing subsidy	68	91	68	67	44	43	20	10	12	6	43
Rail travel subsidy	12	8	7	14	20	23	31	31	37	63	24
Bus travel subsidy	40	39	42	40	34	26	24	20	15	12	29
School meals and welfare milk	90	77	39	19	6	6	1	2	2	0	24
Total	5 014	4 386	4 288	3 878	3 961	3 498	3 302	2 888	2 549	2 238	3 600
Final income	8 551	10 793	12 413	13 957	16 589	18 339	21 552	24 186	28 705	49 464	20 455

1 On life assurance premiums.
2 Council tax, domestic rates and water charges after deducting discounts.

TABLE 14A (Appendix 1): Average incomes, taxes and benefits by quintile groups of ALL households, 2000–01

	Quintile groups of all households ranked by equivalised disposable income					All households
	Bottom	2nd	3rd	4th	Top	
Average per household (£ per year)						
Quintile points (equivalised £)	*9 790*	*13 808*	*19 029*	*27 109*		
Number of households in the population ('000s)	5 005	5 007	5 003	5 009	5 007	25 030
Original income						
Wages and salaries	1 920	6 096	14 559	24 047	39 896	17 304
Imputed income from benefits in kind	11	29	137	378	1 217	354
Self-employment income	371	812	1 095	1 961	8 417	2 531
Occupational pensions, annuities	469	1 403	1 978	2 303	2 949	1 820
Investment income	198	339	579	1 010	3 068	1 039
Other income	125	137	217	253	196	186
Total	3 094	8 816	18 565	29 950	55 743	23 234
Direct benefits in cash						
Contributory						
Retirement pension	1 954	2 217	1 472	896	617	1 431
Job seeker's allowance (Contribution based)	65	43	18	5	8	28
Incapacity benefit	331	459	243	140	37	242
Widows' benefits	44	61	59	41	35	48
Statutory Maternity Pay/Allowance	3	5	38	39	50	27
Non-contributory						
Income support	957	564	253	101	7	376
Child benefit	431	375	397	326	229	352
Housing benefit	757	705	240	81	2	357
Job seeker's allowance (Income based)	196	41	26	11	3	56
Invalid care allowance	36	69	37	17	2	32
Attendance allowance	56	149	145	58	8	83
Disabled Persons Tax Credit	154	380	289	113	41	195
War pensions/War widows' pensions	8	26	31	51	15	26
Severe disablement allowance	29	73	44	21	2	34
Industrial injury disablement benefit	21	27	29	9	-	17
Student support	60	35	39	83	37	51
Government training schemes	24	19	18	8	8	15
Working Families Tax Credit	166	199	115	34	3	103
Other non-contributory benefits	35	24	25	11	3	20
Total cash benefits	5 330	5 470	3 519	2 045	1 105	3 494
Gross income	8 424	14 286	22 084	31 995	56 848	26 727
Direct taxes and Employees' NIC						
Income tax	308	1 041	2 404	4 461	10 084	3 660
less: Tax relief at source[1]	3	4	4	5	8	5
Employees' NI contributions	120	377	919	1 558	2 154	1 026
Local taxes[2]	785	810	864	948	1 091	900
less: Council tax benefit/Rates rebates	229	138	54	32	19	94
Total	981	2 087	4 129	6 931	13 302	5 486
Disposable income	7 443	12 199	17 955	25 065	43 545	21 242
Equivalised disposable income	*7 284*	*11 655*	*16 287*	*22 614*	*41 821*	*19 932*
Indirect taxes						
Taxes on final goods and services						
VAT	955	1 229	1 706	2 216	3 022	1 826
Duty on tobacco	275	288	316	275	255	282
Duty on beer and cider	55	74	116	138	154	107
Duty on wines & spirits	65	74	113	154	223	126
Duty on hydrocarbon oils	212	284	438	577	691	440
Vehicle excise duty	66	89	134	175	183	129
Television licences	84	84	95	101	100	93
Stamp duty on house purchase	24	26	46	74	153	65
Customs duties	21	26	35	45	60	37
Betting taxes	41	55	57	74	60	57
Insurance premium tax	15	22	33	43	61	35
Air passenger duty	4	11	14	20	49	20
Camelot National Lottery Fund	43	60	64	74	58	60
Other	4	13	16	12	20	13
Intermediate taxes						
Commercial and industrial rates	143	180	245	310	417	259
Employers' NI contributions	229	288	393	497	668	415
Duty on hydrocarbon oils	107	134	183	232	312	194
Vehicle excise duty	14	17	23	29	39	24
Other	113	142	193	245	329	204
Total indirect taxes	2 471	3 097	4 221	5 291	6 854	4 387
Post-tax income	4 973	9 102	13 734	19 774	36 691	16 855
Benefits in kind						
Education	1 974	1 411	1 483	1 183	706	1 351
National health service	2 513	2 524	2 145	1 842	1 614	2 128
Housing subsidy	79	68	43	15	9	43
Rail travel subsidy	10	10	22	31	50	24
Bus travel subsidy	40	41	30	22	14	29
School meals and welfare milk	83	29	6	2	1	24
Total	4 700	4 083	3 730	3 095	2 394	3 600
Final income	9 672	13 185	17 464	22 869	39 085	20 455

1 On life assurance premiums.
2 Council tax, domestic rates and water charges after deducting discounts.

TABLE 15 (Appendix 1): Household characteristics of decile groups of ALL households, 2000–01

	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	2.3	2.3	2.3	2.4	2.5	2.5	2.5	2.4	2.3	2.2	2.4
Adults	*1.6*	*1.7*	*1.7*	*1.8*	*1.9*	*1.9*	*2.0*	*1.9*	*1.9*	*1.8*	*1.8*
Men	*0.7*	*0.7*	*0.8*	*0.8*	*0.9*	*0.9*	*1.0*	*1.0*	*1.0*	*1.0*	*0.9*
Women	*0.9*	*0.9*	*0.9*	*1.0*	*1.0*	*1.0*	*1.0*	*0.9*	*0.9*	*0.8*	*0.9*
Children	*0.7*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.5*	*0.4*	*0.4*	*0.3*	*0.5*
Economically active people	0.5	0.5	0.7	0.9	1.2	1.4	1.6	1.6	1.6	1.6	1.2
Retired people	0.6	0.7	0.7	0.6	0.4	0.4	0.3	0.2	0.2	0.1	0.4
People in full-time education	0.76	0.58	0.53	0.49	0.60	0.51	0.45	0.41	0.32	0.31	0.49
In state primary schools	*0.32*	*0.29*	*0.26*	*0.26*	*0.27*	*0.24*	*0.18*	*0.16*	*0.13*	*0.10*	*0.22*
In state secondary schools	*0.24*	*0.18*	*0.18*	*0.16*	*0.19*	*0.16*	*0.15*	*0.14*	*0.09*	*0.06*	*0.15*
In further and higher education	*0.19*	*0.09*	*0.08*	*0.05*	*0.12*	*0.07*	*0.10*	*0.08*	*0.06*	*0.06*	*0.09*
In other educational establishments	*0.02*	*0.02*	*0.01*	*0.02*	*0.02*	*0.03*	*0.02*	*0.03*	*0.04*	*0.09*	*0.03*
Composition (percentages)											
Household type											
Retired											
1 adult	26	23	24	19	15	11	6	5	4	3	14
1 adult men	*5*	*6*	*5*	*5*	*5*	*2*	*2*	*2*	*2*	*1*	*4*
1 adult women	*21*	*17*	*19*	*13*	*10*	*8*	*4*	*3*	*2*	*2*	*10*
2 or more adults	14	20	20	17	12	13	7	7	6	3	12
Non-retired											
1 adult	16	12	12	11	14	15	17	20	23	24	16
1 adult men	*10*	*8*	*6*	*6*	*6*	*9*	*10*	*12*	*15*	*18*	*10*
1 adult women	*5*	*4*	*6*	*6*	*8*	*6*	*6*	*7*	*8*	*6*	*6*
2 adults	7	10	10	15	15	20	26	28	34	39	21
3 or more adults	4	4	6	7	10	8	14	12	11	9	8
1 adult with children	9	13	7	6	5	4	2	2	1	1	5
2 adults with 1 child	5	4	4	5	9	9	10	10	8	8	7
2 adults with 2 children	9	4	7	10	11	11	9	9	8	9	9
2 adults with 3 or more children	6	5	5	4	4	4	4	2	2	1	4
3 or more adults with children	4	6	5	5	4	5	5	3	3	1	4
Household tenure											
Rented	46	58	52	42	32	26	19	16	14	12	32
Local authority rented	*27*	*36*	*26*	*22*	*16*	*13*	*7*	*2*	*3*	*1*	*15*
Housing association or RSL	*7*	*10*	*13*	*8*	*6*	*4*	*4*	*2*	*1*	*1*	*6*
Other rented unfurnished	*4*	*6*	*7*	*6*	*4*	*4*	*5*	*4*	*3*	*4*	*5*
Rented furnished	*7*	*5*	*4*	*5*	*4*	*3*	*3*	*4*	*6*	*6*	*5*
Rent free	*1*	*1*	*2*	*2*	*2*	*1*	*1*	*3*	*1*	*1*	*2*
Owner occupied	54	42	48	58	68	74	81	84	86	88	68
With mortgage	*14*	*12*	*19*	*25*	*37*	*48*	*57*	*62*	*64*	*68*	*41*
Rental purchase	*–*	*0*	*0*	*0*	*0*	*0*	*0*	*–*	*1*	*–*	*0*
Owned outright	*40*	*29*	*29*	*33*	*31*	*25*	*24*	*22*	*21*	*20*	*27*
Age of chief economic supporter											
Under 25	8	6	5	3	5	4	3	3	2	2	4
Over 24 and under 35	12	14	13	12	16	20	18	24	23	25	18
Over 34 and under 45	17	14	16	17	21	23	23	24	23	26	21
Over 44 and under 55	13	13	12	15	18	18	23	22	27	26	19
Over 54 and under 65	13	12	13	18	15	13	19	15	15	14	15
Over 64 and under 75	14	20	19	20	13	13	8	7	6	5	13
Over 74	22	20	22	15	12	10	5	5	4	2	12
Employment status of chief economic supporter											
Self-employed	4	4	5	5	5	5	7	7	9	17	7
Full-time employee	7	14	21	30	48	60	66	73	73	72	46
Part-time employee	10	7	8	9	8	7	8	4	5	4	7
Unemployed	11	7	3	2	1	1	1	1	1	0	3
Unoccupied and under minimum NI age	30	26	20	17	11	5	5	4	3	2	12
Retired/unoccupied over minimum NI age	37	41	43	37	26	21	13	11	9	5	24
Other	1	0	1	0	0	0	0	0	0	0	0

TABLE 15A (Appendix 1): Household characteristics of quintile groups of ALL households, 2000–01

	Quintile groups of all households ranked by equivalised disposable income					All households
	Bottom	2nd	3rd	4th	Top	
Average per household (number)						
People	2.3	2.2	2.5	2.4	2.2	2.3
Adults	*1.6*	*1.6*	*1.9*	*2.0*	*1.9*	*1.8*
Men	*0.7*	*0.7*	*0.9*	*1.0*	*1.0*	*0.9*
Women	*0.9*	*0.9*	*0.9*	*0.9*	*0.9*	*0.9*
Children	*0.7*	*0.6*	*0.6*	*0.4*	*0.4*	*0.5*
Economically active people	0.5	0.7	1.3	1.6	1.6	1.1
Retired people	0.5	0.6	0.4	0.3	0.2	0.4
People in full-time education	0.71	0.49	0.52	0.40	0.32	0.49
In state primary schools	*0.33*	*0.25*	*0.24*	*0.16*	*0.11*	*0.22*
In state secondary schools	*0.20*	*0.15*	*0.18*	*0.14*	*0.08*	*0.15*
In further and higher education	*0.16*	*0.06*	*0.08*	*0.08*	*0.06*	*0.09*
In other educational establishments	*0.03*	*0.02*	*0.02*	*0.03*	*0.07*	*0.03*
Composition (percentages)						
Household type						
Retired						
1 adult	21	27	14	7	3	14
1 adult men	*5*	*7*	*3*	*3*	*1*	*4*
1 adult women	*16*	*20*	*11*	*4*	*2*	*10*
2 or more adults	16	17	12	8	5	11
Non-retired						
1 adult	17	12	15	18	24	17
1 adult men	*10*	*7*	*10*	*11*	*16*	*11*
1 adult women	*7*	*5*	*5*	*7*	*8*	*6*
2 adults	9	12	17	27	36	20
3 or more adults	5	4	9	13	9	8
1 adult with children	15	8	3	2	1	6
2 adults with 1 child	4	5	7	9	10	7
2 adults with 2 children	6	7	11	9	8	8
2 adults with 3 or more children	5	5	4	2	1	4
3 or more adults with children	3	3	6	4	3	4
Household tenure						
Rented	53	50	31	19	11	33
Local authority rented	*32*	*30*	*16*	*6*	*2*	*17*
Housing association or RSL	*8*	*10*	*5*	*3*	*0*	*5*
Other rented unfurnished	*4*	*5*	*4*	*3*	*3*	*4*
Rented furnished	*7*	*4*	*4*	*6*	*5*	*5*
Rent free	*2*	*2*	*1*	*1*	*1*	*1*
Owner occupied	47	50	69	81	89	67
With mortgage	*14*	*21*	*42*	*58*	*69*	*41*
Rental purchase	*0*	*0*	*0*	*0*	*0*	*0*
Owned outright	*32*	*28*	*27*	*23*	*20*	*26*
Age of chief economic supporter						
Under 25	8	4	4	3	2	4
Over 24 and under 35	16	13	16	21	26	18
Over 34 and under 45	18	15	21	21	25	20
Over 44 and under 55	10	12	18	23	27	18
Over 54 and under 65	13	14	14	17	12	14
Over 64 and under 75	15	22	15	8	6	13
Over 74	19	20	12	6	3	12
Employment status of chief economic supporter						
Self-employed	4	4	6	8	12	7
Full-time employee	9	24	49	65	72	44
Part-time employee	9	8	5	5	4	6
Unemployed	10	5	3	3	2	5
Unoccupied and under minimum NI age	33	16	9	5	2	13
Retired/unoccupied over minimum NI age	35	43	27	14	7	25
Other	1	0	0	0	0	0

TABLE 16 (Appendix 1): Average incomes, taxes and benefits by decile groups of NON-RETIRED households, 2000–01

	Decile groups of non-retired households ranked by equivalised disposable income										All such households
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Average per household (£ per year)											
Decile points (equivalised £)		*8 285*	*10 865*	*13 188*	*15 794*	*18 534*	*21 282*	*24 774*	*29 598*	*38 364*	
Number of households in the population ('000s)	1 861	1 862	1 863	1 863	1 862	1 861	1 864	1 864	1 863	1 863	18 626
Original income											
Wages and salaries	2 127	6 210	10 385	16 287	20 437	23 804	28 363	32 967	37 834	53 243	23 166
Imputed income from benefits in kind	21	29	51	139	189	302	495	588	949	1 971	473
Self-employment income	529	894	1 476	1 380	1 474	2 047	2 391	2 500	4 423	16 860	3 398
Occupational pensions, annuities	68	174	620	501	486	791	1 044	918	1 294	1 693	759
Investment income	131	120	232	286	366	517	552	983	1 388	3 426	800
Other income	206	183	172	176	297	279	310	140	232	185	218
Total	3 082	7 610	12 935	18 769	23 248	27 741	33 155	38 096	46 119	77 378	28 813
Direct benefits in cash											
Contributory											
Retirement pension	138	257	557	397	315	206	385	212	243	261	297
Job seeker's allowance (Contribution based)	123	68	68	18	26	16	3	10	6	7	34
Incapacity benefit	517	603	662	534	184	177	156	78	48	9	297
Widows' benefits	48	83	54	117	80	51	30	32	23	45	56
Statutory Maternity Pay/Allowance	5	4	10	45	46	67	28	34	77	46	36
Non-contributory											
Income support	1 343	1 395	748	363	113	53	85	8	13	0	412
Child benefit	708	727	601	568	522	388	391	311	269	220	471
Housing benefit	981	1 126	676	278	122	56	37	16	5	–	330
Job seeker's allowance (Income based)	401	156	74	47	24	24	5	2	2	4	74
Invalid care allowance	43	87	89	69	23	22	11	2	6	–	35
Attendance allowance	10	3	37	39	14	11	32	3	–	–	15
Disabled Persons Tax Credit	164	328	428	433	189	110	119	46	42	33	189
War pensions/War widows' pensions	3	5	1	4	1	11	3	33	4	–	6
Severe disablement allowance	28	57	91	70	50	15	4	–	5	–	32
Industrial injury disablement benefit	10	32	22	25	26	12	14	–	–	–	14
Student support	134	57	66	74	24	44	30	179	48	29	68
Government training schemes	57	21	22	29	18	7	13	6	10	9	19
Working Families Tax Credit	204	434	260	252	114	76	42	1	6	–	139
Other non-contributory benefits	18	25	11	18	4	15	6	3	1	3	10
Total cash benefits	4 935	5 470	4 475	3 380	1 898	1 363	1 394	978	808	666	2 537
Gross income	8 017	13 080	17 410	22 148	25 146	29 104	34 549	39 074	46 927	78 043	31 350
Direct taxes and Employees' NIC											
Income tax	320	768	1 645	2 267	3 083	3 829	4 914	6 053	7 866	14 781	4 553
less: Tax relief at source[1]	2	2	4	4	3	4	5	5	7	10	5
Employees' NI contributions	144	378	644	1 011	1 301	1 551	1 875	2 090	2 302	2 444	1 374
Local taxes[2]	749	784	837	843	860	909	946	958	1 038	1 176	910
less: Council tax benefit/Rates rebates	276	228	125	58	28	32	22	20	15	17	82
Total	936	1 700	2 997	4 060	5 213	6 254	7 708	9 076	11 184	18 373	6 750
Disposable income	7 081	11 380	14 412	18 088	19 933	22 850	26 841	29 998	35 743	59 670	24 600
Equivalised disposable income	*5 949*	*9 538*	*12 034*	*14 532*	*17 132*	*19 855*	*22 939*	*27 038*	*33 351*	*57 179*	*21 955*
Indirect taxes											
Taxes on final goods and services											
VAT	1 098	1 344	1 543	1 784	1 886	2 171	2 372	2 509	2 805	3 566	2 108
Duty on tobacco	333	431	378	425	326	322	310	303	286	220	333
Duty on beer and cider	72	92	102	136	132	147	153	176	158	162	133
Duty on wines & spirits	81	73	77	105	116	149	160	195	175	274	141
Duty on hydrocarbon oils	239	310	406	458	527	585	632	645	711	753	527
Vehicle excise duty	68	82	114	126	156	166	186	184	184	182	145
Television licences	101	105	105	106	109	109	102	105	101	105	105
Stamp duty on house purchase	33	24	34	45	59	63	74	98	118	217	76
Customs duties	24	27	32	37	40	44	48	50	56	71	43
Betting taxes	43	41	66	64	56	72	93	62	72	50	62
Insurance premium tax	14	18	26	31	37	41	46	44	54	73	38
Air passenger duty	6	6	15	13	14	18	24	20	41	67	22
Camelot National Lottery Fund	40	56	67	72	65	79	75	77	57	56	64
Other	4	20	13	18	22	10	5	19	16	16	14
Intermediate taxes											
Commercial and industrial rates	166	188	221	259	275	304	333	348	390	495	298
Employers' NI contributions	266	302	355	415	440	487	534	558	624	792	477
Duty on hydrocarbon oils	124	141	166	194	206	228	250	261	292	370	223
Vehicle excise duty	16	18	21	24	26	29	31	33	37	47	28
Other	131	149	175	205	217	240	263	275	307	390	235
Total indirect taxes	2 861	3 427	3 915	4 518	4 708	5 264	5 693	5 962	6 483	7 907	5 074
Post-tax income	4 220	7 953	10 497	13 570	15 225	17 585	21 148	24 036	29 260	51 763	19 526
Benefits in kind											
Education	3 524	2 762	2 260	2 262	1 831	1 336	1 401	1 155	819	637	1 799
National health service	1 834	1 966	2 056	1 953	1 739	1 706	1 715	1 491	1 583	1 386	1 743
Housing subsidy	99	98	68	42	41	28	9	14	11	4	41
Rail travel subsidy	16	12	16	22	28	32	35	38	50	62	31
Bus travel subsidy	23	21	25	25	19	19	15	16	9	10	18
School meals and welfare milk	148	104	43	12	8	2	2	3	1	1	32
Total	5 644	4 962	4 468	4 317	3 667	3 123	3 177	2 715	2 472	2 099	3 664
Final income	9 864	12 916	14 965	17 887	18 892	20 708	24 325	26 751	31 732	53 862	23 190

1 On life assurance premiums.
2 Council tax, domestic rates and water charges after deducting discounts.

Table 16A (Appendix 1): Average incomes, taxes and benefits by quintile groups of NON-RETIRED households, 2000–01

	Quintile groups of non-retired households ranked by equivalised disposable income					All such households
	Bottom	2nd	3rd	4th	Top	
Average per household (£ per year)						
Quintile points (equivalised £)		*10 865*	*15 794*	*21 282*	*29 598*	
Number of households in the population ('000s)	3 723	3 726	3 724	3 727	3 726	18 626
Original income						
Wages and salaries	4 169	13 336	22 121	30 665	45 539	23 166
Imputed income from benefits in kind	25	95	245	542	1 460	473
Self-employment income	712	1 428	1 761	2 446	10 641	3 398
Occupational pensions, annuities	121	560	638	981	1 494	759
Investment income	126	259	441	767	2 407	800
Other income	194	174	288	225	208	218
Total	5 346	15 852	25 494	35 626	61 748	28 813
Direct benefits in cash						
Contributory						
Retirement pension	198	477	261	298	252	297
Job seeker's allowance (Contribution based)	95	43	21	7	6	34
Incapacity benefit	560	598	181	117	29	297
Widows' benefits	65	86	65	31	34	56
Statutory Maternity Pay/Allowance	5	28	57	31	62	36
Non-contributory						
Income support	1 369	555	83	47	7	412
Child benefit	717	584	455	351	245	471
Housing benefit	1 054	477	89	27	3	330
Job seeker's allowance (Income based)	278	61	24	4	3	74
Invalid care allowance	65	79	22	6	3	35
Attendance allowance	6	38	13	18	–	15
Disabled Persons Tax Credit	246	430	150	82	38	189
War pensions/War widows' pensions	4	3	6	18	2	6
Severe disablement allowance	43	80	33	2	2	32
Industrial injury disablement benefit	21	23	20	7	–	14
Student support	95	70	34	105	38	68
Government training schemes	39	25	13	10	9	19
Working Families Tax Credit	319	256	95	22	3	139
Other non-contributory benefits	22	14	9	5	2	10
Total cash benefits	5 202	3 927	1 631	1 186	737	2 537
Gross income	10 548	19 779	27 125	36 812	62 485	31 350
Direct taxes and Employees' NIC						
Income tax	544	1 956	3 456	5 484	11 323	4 553
less: Tax relief at source[1]	2	4	3	5	8	5
Employees' NI contributions	261	828	1 426	1 983	2 373	1 374
Local taxes[2]	767	840	885	952	1 107	910
less: Council tax benefit/Rates rebates	252	91	30	21	18	82
Total	1 318	3 529	5 734	8 392	14 779	6 750
Disposable income	9 231	16 250	21 391	28 420	47 706	24 600
Equivalised disposable income	*7 744*	*13 283*	*18 494*	*24 988*	*45 265*	*21 955*
Indirect taxes						
Taxes on final goods and services						
VAT	1 221	1 664	2 029	2 440	3 185	2 108
Duty on tobacco	382	402	324	307	253	333
Duty on beer and cider	82	119	140	165	160	133
Duty on wines & spirits	77	91	132	177	225	141
Duty on hydrocarbon oils	274	432	556	638	732	527
Vehicle excise duty	75	120	161	185	183	145
Television licences	103	105	109	103	103	105
Stamp duty on house purchase	28	39	61	86	167	76
Customs duties	26	35	42	49	64	43
Betting taxes	42	65	64	77	61	62
Insurance premium tax	16	28	39	45	63	38
Air passenger duty	6	14	16	22	54	22
Camelot National Lottery Fund	48	70	72	76	56	64
Other	12	15	16	12	16	14
Intermediate taxes						
Commercial and industrial rates	177	240	289	341	442	298
Employers' NI contributions	284	385	464	546	708	477
Duty on hydrocarbon oils	133	180	217	255	331	223
Vehicle excise duty	17	23	27	32	42	28
Other	140	190	228	269	349	235
Total indirect taxes	3 144	4 217	4 986	5 828	7 195	5 074
Post-tax income	6 087	12 034	16 405	22 592	40 512	19 526
Benefits in kind						
Education	3 143	2 261	1 584	1 278	728	1 799
National health service	1 900	2 005	1 722	1 603	1 484	1 743
Housing subsidy	99	55	35	11	7	41
Rail travel subsidy	14	19	30	37	56	31
Bus travel subsidy	22	25	19	15	9	18
School meals and welfare milk	126	27	5	2	1	32
Total	5 303	4 392	3 395	2 946	2 285	3 664
Final income	11 390	16 426	19 800	25 538	42 797	23 190

1 On life assurance premiums.
2 Council tax, domestic rates and water charges after deducting discounts.

TABLE 17 (Appendix 1): Household characteristics of decile groups of NON-RETIRED households, 2000–01

	Decile groups of non-retired households ranked by equivalised disposable income										All such households
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Average per household (number)											
People	2.9	2.9	2.9	2.9	2.7	2.6	2.6	2.4	2.3	2.2	2.6
Adults	*1.8*	*1.8*	*1.9*	*2.1*	*1.9*	*2.0*	*2.1*	*2.0*	*1.9*	*1.9*	*1.9*
Men	*0.9*	*0.9*	*0.9*	*1.0*	*1.0*	*1.1*	*1.1*	*1.0*	*1.0*	*1.0*	*1.0*
Women	*0.9*	*0.9*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*0.9*	*0.9*	*0.8*	*1.0*
Children	*1.1*	*1.1*	*0.9*	*0.8*	*0.8*	*0.6*	*0.6*	*0.5*	*0.4*	*0.3*	*0.7*
Economically active people	0.8	1.0	1.3	1.6	1.7	1.8	1.9	1.9	1.8	1.7	1.6
Retired people	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1
People in full-time education	1.18	0.99	0.81	0.81	0.70	0.48	0.51	0.44	0.34	0.32	0.66
In state primary schools	*0.52*	*0.49*	*0.41*	*0.37*	*0.35*	*0.19*	*0.24*	*0.14*	*0.12*	*0.12*	*0.30*
In state secondary schools	*0.36*	*0.32*	*0.28*	*0.26*	*0.22*	*0.18*	*0.15*	*0.17*	*0.09*	*0.05*	*0.21*
In further and higher education	*0.27*	*0.15*	*0.08*	*0.16*	*0.10*	*0.09*	*0.11*	*0.08*	*0.08*	*0.05*	*0.12*
In other educational establishments	*0.03*	*0.02*	*0.04*	*0.03*	*0.03*	*0.02*	*0.02*	*0.04*	*0.06*	*0.10*	*0.04*
Composition (percentages)											
Household type											
Non-retired											
1 adult	26	21	18	19	20	20	20	23	24	27	22
1 adult men	*17*	*13*	*9*	*9*	*11*	*13*	*13*	*15*	*15*	*21*	*13*
1 adult women	*9*	*9*	*9*	*10*	*9*	*7*	*7*	*9*	*9*	*7*	*9*
2 adults	14	16	24	20	24	31	30	36	38	43	28
3 or more adults	7	9	9	15	10	15	16	12	12	9	11
1 adult with children	17	19	10	7	6	3	3	1	2	1	7
2 adults with 1 child	8	7	9	10	13	11	11	10	11	8	10
2 adults with 2 children	13	10	14	16	15	11	10	12	9	9	12
2 adults with 3 or more children	10	9	8	6	5	4	4	3	1	2	5
3 or more adults with children	6	9	9	7	5	6	6	4	2	1	5
Household tenure											
Rented	65	65	45	34	25	22	17	17	14	12	32
Local authority rented	*38*	*32*	*21*	*16*	*12*	*9*	*2*	*2*	*3*	*1*	*14*
Housing association or RSL	*11*	*13*	*10*	*7*	*4*	*4*	*2*	*1*	*2*	*1*	*5*
Other rented unfurnished	*5*	*10*	*7*	*5*	*5*	*4*	*5*	*5*	*3*	*4*	*5*
Rented furnished	*11*	*9*	*6*	*5*	*4*	*4*	*5*	*7*	*5*	*6*	*6*
Rent free	*1*	*2*	*1*	*1*	*2*	*1*	*3*	*1*	*1*	*1*	*1*
Owner occupied	35	35	55	66	75	78	83	83	86	88	68
With mortgage	*21*	*21*	*35*	*48*	*61*	*61*	*68*	*69*	*70*	*73*	*53*
Rental purchase	*–*	*0*	*1*	*1*	*0*	*0*	*–*	*1*	*0*	*–*	*0*
Owned outright	*14*	*14*	*19*	*17*	*13*	*16*	*15*	*13*	*16*	*15*	*15*
Age of chief economic supporter											
Under 25	12	9	6	8	4	4	3	3	3	2	5
Over 24 and under 35	22	24	21	19	25	23	26	27	25	26	24
Over 34 and under 45	28	27	25	30	32	25	28	29	25	29	28
Over 44 and under 55	22	22	23	24	22	28	24	25	31	28	25
Over 54 and under 65	14	15	19	16	13	18	16	15	14	14	15
Over 64 and under 75	2	2	4	2	3	1	3	1	2	2	2
Over 74	–	0	2	2	0	1	1	0	1	0	1
Employment status of chief economic supporter											
Self-employed	7	8	9	7	7	8	8	7	11	19	9
Full-time employee	12	30	45	63	76	78	79	85	81	76	62
Part-time employee	15	14	14	10	11	8	7	5	5	5	9
Unemployed	17	7	4	2	2	1	1	1	0	–	4
Unoccupied and under minimum NI age	46	38	24	14	4	4	3	1	2	0	14
Retired/unoccupied over minimum NI age	1	1	4	4	1	1	2	–	1	–	1
Other	2	1	1	–	–	–	–	–	–	–	0

TABLE 17A (Appendix 1): Household characteristics of quintile groups of NON-RETIRED households, 2000–01

	Quintile groups of non-retired households ranked by equivalised disposable income					All such households
	Bottom	2nd	3rd	4th	Top	
Average per household (number)						
People	2.9	2.9	2.7	2.5	2.3	2.6
Adults	*1.8*	*2.0*	*2.0*	*2.0*	*1.9*	*1.9*
Men	*0.9*	*1.0*	*1.0*	*1.1*	*1.0*	*1.0*
Women	*0.9*	*1.0*	*1.0*	*1.0*	*0.9*	*1.0*
Children	*1.1*	*0.9*	*0.7*	*0.5*	*0.4*	*0.7*
Economically active people	0.9	1.5	1.8	1.9	1.7	1.6
Retired people	0.1	0.1	0.1	0.1	0.0	0.1
People in full-time education	1.08	0.81	0.59	0.48	0.33	0.66
In state primary schools	*0.50*	*0.39*	*0.27*	*0.19*	*0.12*	*0.30*
In state secondary schools	*0.34*	*0.27*	*0.20*	*0.16*	*0.07*	*0.21*
In further and higher education	*0.21*	*0.12*	*0.09*	*0.10*	*0.06*	*0.12*
In other educational establishments	*0.02*	*0.03*	*0.03*	*0.03*	*0.08*	*0.04*
Composition (percentages)						
Household type						
Non-retired						
1 adult	24	18	20	22	26	22
1 adult men	*15*	*9*	*12*	*14*	*18*	*13*
1 adult women	*9*	*9*	*8*	*8*	*8*	*9*
2 adults	15	22	28	33	40	28
3 or more adults	8	12	12	14	11	11
1 adult with children	18	8	5	2	1	7
2 adults with 1 child	7	9	12	10	9	10
2 adults with 2 children	12	15	13	11	9	12
2 adults with 3 or more children	9	7	5	3	2	5
3 or more adults with children	7	8	5	5	2	5
Household tenure						
Rented	65	40	24	17	13	32
Local authority rented	*35*	*19*	*10*	*2*	*2*	*14*
Housing association or RSL	*12*	*8*	*4*	*2*	*1*	*5*
Other rented unfurnished	*7*	*6*	*4*	*5*	*4*	*5*
Rented furnished	*10*	*5*	*4*	*6*	*6*	*6*
Rent free	*1*	*1*	*1*	*2*	*1*	*1*
Owner occupied	35	60	76	83	87	68
With mortgage	*21*	*42*	*61*	*69*	*72*	*53*
Rental purchase	*0*	*1*	*0*	*0*	*0*	*0*
Owned outright	*14*	*18*	*15*	*14*	*15*	*15*
Age of chief economic supporter						
Under 25	11	7	4	3	2	5
Over 24 and under 35	23	20	24	26	25	24
Over 34 and under 45	28	27	28	28	27	28
Over 44 and under 55	22	24	25	24	29	25
Over 54 and under 65	15	17	15	15	14	15
Over 64 and under 75	2	3	2	2	2	2
Over 74	0	2	1	0	1	1
Employment status of chief economic supporter						
Self-employed	7	8	7	8	15	9
Full-time employee	21	54	77	82	78	62
Part-time employee	15	12	9	6	5	9
Unemployed	12	3	1	1	0	4
Unoccupied and under minimum NI age	42	19	4	2	1	14
Retired/unoccupied over minimum NI age	1	4	1	1	0	1
Other	1	0	–	–	–	0

TABLE 18 (Appendix 1): Average incomes, taxes and benefits by decile groups of RETIRED households, 2000–01

	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 £)		*6 768*	*8 394*	*9 546*	*10 564*	*11 662*	*13 172*	*15 164*	*17 906*	*23 123*	
Number of households in the population ('000s)	639	641	640	639	641	642	637	643	641	641	6 404
Original income											
Wages and salaries	10	19	61	64	245	183	168	542	608	630	253
Imputed income from benefits in kind	–	–	–	11	–	–	–	–	1	77	9
Self-employment income	–	6	–	–	7	2	38	41	–	16	11
Occupational pensions, annuities	403	994	1 425	1 700	2 248	3 921	4 586	6 410	9 162	18 229	4 908
Investment income	279	285	320	362	445	600	1 012	1 266	2 795	9 970	1 733
Other income	1	47	38	41	119	106	73	74	113	301	91
Total	693	1 352	1 843	2 177	3 063	4 812	5 876	8 332	12 679	29 223	7 005
Direct benefits in cash											
Contributory											
Retirement pension	3 656	4 844	4 664	4 982	4 750	4 828	4 685	5 123	4 909	4 860	4 730
Job seeker's allowance (Contribution based)	–	–	41	23	–	–	17	–	–	–	8
Incapacity benefit	43	34	137	72	56	106	171	71	38	92	82
Widows' benefits	46	–	40	19	46	–	–	–	25	64	24
Statutory Maternity Pay/Allowance	–	–	–	–	–	–	–	–	–	–	–
Non-contributory											
Income support	209	363	234	120	345	229	193	486	452	89	272
Child benefit	4	17	12	2	7	4	4	–	–	7	6
Housing benefit	35	185	608	682	838	584	455	460	481	40	437
Job seeker's allowance (Income based)	–	–	–	–	17	–	2	–	–	–	2
Invalid care allowance	17	13	–	14	41	47	63	5	41	–	24
Attendance allowance	18	155	160	246	312	275	584	547	387	141	282
Disabled Persons Tax Credit	75	32	105	114	189	482	322	434	247	132	213
War pensions/War widows' pensions	2	6	32	15	41	102	86	46	349	149	83
Severe disablement allowance	–	–	67	55	56	11	30	48	114	10	39
Industrial injury disablement benefit	–	11	23	58	45	34	26	40	15	–	25
Student support	–	–	–	–	–	–	–	–	–	–	–
Government training schemes	–	–	–	0	–	42	–	–	–	–	4
Working Families Tax Credit	–	–	–	–	–	–	–	–	–	–	–
Other non-contributory benefits	37	66	48	41	49	51	82	58	16	16	46
Total cash benefits	4 143	5 726	6 171	6 444	6 790	6 794	6 719	7 318	7 075	5 600	6 278
Gross income	4 836	7 078	8 015	8 622	9 854	11 606	12 595	15 649	19 754	34 823	13 283
Direct taxes and Employees' NIC											
Income tax	65	98	143	178	292	585	720	1 154	1 997	5 386	1 062
less: Tax relief at source[1]	3	3	5	3	6	3	2	10	3	11	5
Employees' NI contributions	4	0	8	1	11	4	1	29	28	41	13
Local taxes[2]	848	812	776	765	764	866	815	880	1 004	1 167	870
less: Council tax benefit/Rates rebates	181	184	174	139	150	125	106	102	108	37	131
Total	734	723	748	802	911	1 327	1 429	1 951	2 917	6 546	1 809
Disposable income	4 102	6 354	7 267	7 820	8 943	10 278	11 167	13 698	16 836	28 277	11 474
Equivalised disposable income	*5 592*	*7 690*	*8 983*	*9 993*	*11 048*	*12 395*	*14 011*	*16 555*	*20 109*	*34 118*	*14 049*
Indirect taxes											
Taxes on final goods and services											
VAT	573	603	712	698	740	930	974	1 131	1 318	2 366	1 005
Duty on tobacco	63	130	234	109	105	192	165	158	88	93	132
Duty on beer and cider	13	24	32	31	21	35	40	50	33	44	32
Duty on wines & spirits	37	59	60	45	61	83	92	101	112	167	82
Duty on hydrocarbon oils	114	109	138	115	160	190	170	232	282	384	189
Vehicle excise duty	61	50	54	57	70	72	83	94	135	167	85
Television licences	84	49	50	49	45	64	51	70	56	77	59
Stamp duty on house purchase	24	19	11	14	16	19	28	24	42	111	31
Customs duties	13	15	16	15	17	20	19	23	28	43	21
Betting taxes	18	51	60	45	61	41	40	57	31	40	44
Insurance premium tax	16	14	16	14	18	20	21	27	35	67	25
Air passenger duty	2	6	3	3	9	8	7	17	14	46	11
Camelot National Lottery Fund	29	46	42	47	50	51	55	57	44	41	46
Other	2	6	3	1	2	5	2	3	16	54	9
Intermediate taxes											
Commercial and industrial rates	93	103	111	107	117	136	135	162	192	301	146
Employers' NI contributions	149	165	178	171	187	219	216	260	307	482	233
Duty on hydrocarbon oils	69	77	83	80	87	102	101	121	143	225	109
Vehicle excise duty	9	10	11	10	11	13	13	15	18	28	14
Other	73	81	88	84	92	108	106	128	151	237	115
Total indirect taxes	1 443	1 619	1 902	1 694	1 869	2 308	2 317	2 730	3 025	4 973	2 388
Post-tax income	2 659	4 736	5 365	6 125	7 073	7 970	8 849	10 968	13 811	23 304	9 086
Benefits in kind											
Education	111	125	111	9	2	37	18	34	30	32	51
National health service	3 304	3 703	3 085	3 295	3 453	3 064	3 299	3 144	3 115	3 014	3 248
Housing subsidy	25	45	62	50	74	69	57	42	40	5	47
Rail travel subsidy	3	2	4	1	0	8	1	10	4	15	5
Bus travel subsidy	58	75	67	62	63	72	55	62	57	54	62
School meals and welfare milk	1	4	3	1	0	–	0	–	–	–	1
Total	3 503	3 955	3 331	3 418	3 592	3 249	3 430	3 292	3 245	3 119	3 414
Final income	6 162	8 690	8 697	9 543	10 666	11 220	12 280	14 260	17 057	26 424	12 500

1 On life assurance premiums

TABLE 18A (Appendix 1): Average incomes, taxes and benefits by quintile groups of RETIRED households, 2000–01

	Quintile groups of retired households ranked by equivalised disposable income					All such house-holds
	Bottom	2nd	3rd	4th	Top	
Average per household (£ per year)						
Quintile points (equivalised £)	*8 394*	*10 564*	*13 172*	*17 906*		
Number of households in the population ('000s)	1 280	1 279	1 283	1 280	1 282	6 404
Original income						
Wages and salaries	15	62	214	355	619	253
Imputed income from benefits in kind	–	5	–	–	39	9
Self-employment income	3	–	4	39	8	11
Occupational pensions, annuities	698	1 562	3 084	5 498	13 696	4 908
Investment income	282	341	522	1 139	6 382	1 733
Other income	24	39	112	74	207	91
Total	1 022	2 010	3 938	7 104	20 951	7 005
Direct benefits in cash						
Contributory						
Retirement pension	4 250	4 823	4 789	4 904	4 885	4 730
Job seeker's allowance (Contribution based)	–	32	–	9	–	8
Incapacity benefit	38	104	81	121	65	82
Widows' benefits	23	29	23	–	45	24
Statutory Maternity Pay/Allowance	–	–	–	–	–	–
Non-contributory						
Income support	286	177	287	339	270	272
Child benefit	11	7	5	2	4	6
Housing benefit	110	645	711	457	260	437
Job seeker's allowance (Income based)	–	–	8	1	–	2
Invalid care allowance	15	7	44	34	21	24
Attendance allowance	86	203	293	566	264	282
Disabled Persons Tax Credit	53	110	336	378	189	213
War pensions/War widows' pensions	4	24	72	66	249	83
Severe disablement allowance	–	61	33	39	62	39
Industrial Injury disablement benefit	6	41	39	33	8	25
Student support	–	–	–	–	–	–
Government training schemes	–	0	21	–	–	4
Working Families Tax Credit	–	–	–	–	–	–
Other non-contributory benefits	51	45	50	70	16	46
Total cash benefits	4 934	6 308	6 792	7 018	6 337	6 278
Gross income	5 957	8 318	10 730	14 122	27 288	13 283
Direct taxes and Employees' NIC						
Income tax	82	161	439	937	3 692	1 062
less: Tax relief at source[1]	3	4	4	6	7	5
Employees' NI contributions	2	4	7	15	35	13
Local taxes[2]	830	770	815	847	1 085	870
less: Council tax benefit/Rates rebates	183	156	138	104	73	131
Total	729	775	1 119	1 690	4 732	1 809
Disposable income	5 226	7 543	9 610	12 432	22 557	11 474
Equivalised disposable income	*6 641*	*9 488*	*11 721*	*15 283*	*27 113*	*14 049*
Indirect taxes						
Taxes on final goods and services						
VAT	588	705	835	1 052	1 842	1 005
Duty on tobacco	96	171	149	162	81	132
Duty on beer and cider	18	31	28	45	39	32
Duty on wines & spirits	48	53	72	97	139	82
Duty on hydrocarbon oils	112	126	175	201	333	189
Vehicle excise duty	56	56	71	89	151	85
Television licences	66	49	55	60	66	59
Stamp duty on house purchase	21	13	17	26	77	31
Customs duties	14	16	18	21	36	21
Betting taxes	35	52	51	48	36	44
Insurance premium tax	15	15	19	24	51	25
Air passenger duty	4	3	8	12	30	11
Camelot National Lottery Fund	38	45	50	56	42	46
Other	4	2	3	2	35	9
Intermediate taxes						
Commercial and industrial rates	98	109	127	149	246	146
Employers' NI contributions	157	174	203	238	394	233
Duty on hydrocarbon oils	73	82	95	111	184	109
Vehicle excise duty	9	10	12	14	23	14
Other	77	86	100	117	194	115
Total indirect taxes	1 531	1 798	2 089	2 524	3 999	2 388
Post-tax income	3 697	5 745	7 522	9 909	18 558	9 086
Benefits in kind						
Education	118	60	20	26	31	51
National health service	3 503	3 190	3 258	3 222	3 065	3 248
Housing subsidy	35	56	71	49	22	47
Rail travel subsidy	3	2	4	5	9	5
Bus travel subsidy	67	64	67	59	55	62
School meals and welfare milk	3	2	0	0	–	1
Total	3 729	3 375	3 421	3 361	3 182	3 414
Final income	7 426	9 120	10 943	13 270	21 740	12 500

1 On life assurance premiums.
2 Council tax, domestic rates and water charges after deducting discounts.

TABLE 19 (Appendix 1): Household characteristics of decile groups of RETIRED households, 2000–01

	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	1.3	1.6	1.5	1.4	1.5	1.6	1.5	1.5	1.6	1.6	1.5
Adults	*1.3*	*1.5*	*1.5*	*1.4*	*1.5*	*1.5*	*1.5*	*1.5*	*1.6*	*1.6*	*1.5*
Men	*0.5*	*0.6*	*0.6*	*0.5*	*0.6*	*0.7*	*0.6*	*0.7*	*0.7*	*0.8*	*0.6*
Women	*0.9*	*0.9*	*0.9*	*0.9*	*0.9*	*0.9*	*0.9*	*0.8*	*0.9*	*0.8*	*0.9*
Children	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	-	-	*0.0*	*0.0*
Economically active people	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
Retired people	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.4
People in full-time education	0.02	0.04	0.03	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.01
Composition (percentages)											
Household type											
Retired											
1 adult	71	51	55	57	54	48	57	50	47	44	53
1 adult men	*14*	*12*	*14*	*10*	*13*	*13*	*17*	*17*	*11*	*20*	*14*
1 adult women	*57*	*39*	*42*	*47*	*41*	*35*	*40*	*33*	*35*	*24*	*39*
2 or more adults	29	49	45	43	46	52	43	50	53	56	47
Household tenure											
Rented	17	30	49	45	50	40	32	27	24	6	32
Local authority rented	*11*	*23*	*34*	*27*	*30*	*22*	*19*	*19*	*13*	*2*	*20*
Housing association or RSL	*3*	*3*	*7*	*11*	*13*	*7*	*7*	*5*	*6*	*2*	*6*
Other rented unfurnished	*2*	*2*	*4*	*3*	*3*	*4*	*2*	*2*	*2*	–	*3*
Rented furnished	*1*	*1*	*1*	*2*	*1*	*2*	*1*	–	*1*	–	*1*
Rent free	–	*1*	*2*	*3*	*3*	*4*	*2*	*1*	*1*	*2*	*2*
Owner occupied	83	70	51	55	50	60	68	73	76	94	68
With mortgage	*2*	*4*	*3*	*3*	*4*	*7*	*4*	*4*	*5*	*11*	*5*
Rental purchase	–	–	–	–	–	–	–	–	–	–	–
Owned outright	*81*	*66*	*48*	*52*	*46*	*53*	*65*	*69*	*70*	*83*	*63*
Age of chief economic supporter											
Under 25	–	–	–	–	–	–	–	–	–	–	–
Over 24 and under 35	–	–	–	–	–	–	–	–	–	–	–
Over 34 and under 45	–	–	–	–	–	–	–	–	–	–	–
Over 44 and under 55	0	1	1	0	1	1	2	1	1	2	1
Over 54 and under 65	14	8	10	7	10	16	13	12	14	16	12
Over 64 and under 75	28	38	47	43	41	47	43	47	44	48	43
Over 74	58	53	42	49	49	36	43	41	40	34	44
Employment status of chief economic supporter											
Self-employed	–	–	–	–	–	–	1	–	–	–	0
Full-time employee	–	–	–	–	–	–	0	–	–	–	0
Part-time employee	–	0	–	–	1	1	–	–	–	–	0
Unemployed	1	–	–	–	–	–	–	–	–	–	0
Unoccupied and under minimum NI age	8	6	6	3	7	8	10	8	12	15	8
Retired/unoccupied over minimum NI age	91	94	94	97	93	91	90	92	88	85	90

TABLE 19A (Appendix 1): Household characteristics of quintile groups of RETIRED households, 2000–01

	Quintile groups of retired households ranked by equivalised disposable income					All such households
	Bottom	2nd	3rd	4th	Top	
Average per household (number)						
People	1.4	1.5	1.5	1.5	1.6	1.5
Adults	*1.4*	*1.5*	*1.5*	*1.5*	*1.6*	*1.5*
Men	*0.5*	*0.6*	*0.6*	*0.7*	*0.7*	*0.6*
Women	*0.9*	*0.9*	*0.9*	*0.8*	*0.9*	*0.9*
Children	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Economically active people	0.0	0.0	0.0	0.1	0.1	0.0
Retired people	1.3	1.4	1.4	1.4	1.5	1.4
People in full-time education	0.03	0.01	0.01	0.01	0.01	0.01
Composition (percentages)						
Household type						
Retired						
1 adult	61	56	51	54	45	53
1 adult men	*13*	*12*	*13*	*17*	*16*	*14*
1 adult women	*48*	*44*	*38*	*37*	*29*	*39*
2 or more adults	39	44	49	46	55	47
Household tenure						
Rented	24	47	45	29	15	32
Local authority rented	*17*	*31*	*26*	*19*	*8*	*20*
Housing association or RSL	*3*	*9*	*10*	*6*	*4*	*6*
Other rented unfurnished	*2*	*4*	*4*	*2*	*1*	*3*
Rented furnished	*1*	*1*	*1*	*1*	*1*	*1*
Rent free	*0*	*2*	*4*	*2*	*8*	*2*
Owner occupied	76	53	55	71	85	68
With mortgage	*3*	*3*	*6*	*4*	*8*	*5*
Rental purchase	–	–	–	–	–	–
Owned outright	*74*	*50*	*50*	*67*	*77*	*63*
Age of chief economic supporter						
Under 25	–	–	–	–	–	–
Over 24 and under 35	–	–	–	–	–	–
Over 34 and under 45	–	–	–	–	–	–
Over 44 and under 55	1	1	1	1	1	1
Over 54 and under 65	11	9	13	12	15	12
Over 64 and under 75	33	45	44	45	46	43
Over 74	55	45	42	42	37	44
Employment status of chief economic supporter						
Self-employed	–	–	–	0	–	0
Full-time employee	–	–	–	0	–	0
Part-time employee	0	–	1	–	–	0
Unemployed	1	–	–	–	–	0
Unoccupied and under minimum NI age	7	4	7	9	13	8
Retired/unoccupied over minimum NI age	93	96	92	91	87	92

TABLE 20 (Appendix 1): Average incomes, taxes and benefits by decile groups of NON-RETIRED households WITHOUT CHILDREN, 2000–01

	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 £)	*9 111*	*12 267*	*15 071*	*18 114*	*20 694*	*23 739*	*27 418*	*32 597*	*41 714*		
Number of households in the population ('000s)	1 132	1 136	1 136	1 133	1 138	1 135	1 133	1 140	1 134	1 136	11 352
Original income											
Wages and salaries	2 132	5 042	10 664	16 413	21 048	24 084	26 990	30 883	38 581	53 784	22 962
Imputed income from benefits in kind	24	28	45	69	84	223	388	462	887	2 024	423
Self-employment income	213	923	842	809	1 611	2 019	1 850	2 827	3 984	13 054	2 813
Occupational pensions, annuities	155	676	850	814	661	1 677	1 089	1 340	1 709	2 074	1 104
Investment income	126	257	270	500	413	596	636	1 081	1 402	3 319	860
Other income	259	87	77	71	126	336	83	67	216	86	141
Total	2 909	7 013	12 748	18 677	23 945	28 935	31 037	36 660	46 778	74 341	28 304
Direct benefits in cash											
Contributory											
Retirement pension	222	780	924	494	295	665	242	272	290	324	451
Job seeker's allowance (Contribution based)	121	99	60	41	15	12	2	18	4	5	38
Incapacity benefit	748	1 051	939	333	157	267	108	91	31	11	374
Widows' benefits	100	85	137	115	43	23	70	35	7	67	68
Statutory Maternity Pay/Allowance	–	–	1	–	1	–	4	–	10	4	2
Non-contributory											
Income support	596	790	505	165	56	106	27	9	7	–	226
Child benefit	6	–	6	8	18	16	16	-	11	–	8
Housing benefit	843	858	453	148	87	57	46	6	-	–	250
Job seeker's allowance (Income based)	346	132	96	49	36	3	1	1	3	1	67
Invalid care allowance	37	81	54	37	22	15	3	10	–	–	26
Attendance allowance	16	19	65	27	19	38	11	-	–	–	19
Disabled Persons Tax Credit	119	563	574	262	131	177	66	46	33	45	202
War pensions/War widows' pensions	5	1	1	1	9	-	10	18	–	–	5
Severe disablement allowance	33	131	83	84	4	14	–	–	–	–	35
Industrial injury disablement benefit	32	44	49	27	4	19	4	–	–	–	18
Student support	170	71	39	32	8	64	198	15	82	25	70
Government training schemes	32	14	5	60	13	3	14	19	2	14	18
Working Families Tax Credit	–	–	–	21	6	–	–	–	–	–	3
Other non-contributory benefits	34	18	13	23	1	4	5	1	1	4	10
Total cash benefits	3 461	4 739	4 005	1 927	927	1 482	826	544	481	501	1 889
Gross income	6 369	11 752	16 753	20 604	24 872	30 417	31 863	37 204	47 260	74 841	30 194
Direct taxes and Employees' NIC											
Income tax	214	736	1 519	2 253	3 250	3 975	4 535	5 757	7 755	14 210	4 420
less: Tax relief at source[1]	3	5	5	4	4	5	6	5	10	11	6
Employees' NI contributions	131	302	652	1 022	1 368	1 594	1 767	2 086	2 418	2 423	1 376
Local taxes[2]	671	782	782	800	842	886	881	908	997	1 137	869
less: Council tax benefit/Rates rebates	236	188	103	38	30	23	23	25	12	16	69
Total	776	1 627	2 845	4 034	5 425	6 427	7 154	8 721	11 149	17 743	6 590
Disposable income	5 593	10 125	13 908	16 570	19 446	23 991	24 709	28 483	36 111	57 098	23 603
Equivalised disposable income	*6 189*	*10 720*	*13 642*	*16 532*	*19 450*	*22 137*	*25 492*	*29 896*	*36 548*	*60 867*	*24 147*
Indirect taxes											
Taxes on final goods and services											
VAT	1 064	1 154	1 472	1 603	1 898	2 143	2 141	2 331	2 814	3 192	1 981
Duty on tobacco	287	301	419	374	339	374	318	336	332	198	328
Duty on beer and cider	101	96	132	154	159	160	170	193	163	169	150
Duty on wines & spirits	105	80	90	117	153	171	179	189	198	274	156
Duty on hydrocarbon oils	207	297	337	441	488	582	600	600	733	696	498
Vehicle excise duty	61	76	102	131	146	183	171	174	181	173	140
Television licences	98	92	94	107	102	105	103	101	96	107	101
Stamp duty on house purchase	24	22	30	46	46	59	84	86	111	192	70
Customs duties	21	24	29	33	38	43	42	46	55	65	40
Betting taxes	52	47	90	57	76	110	60	64	84	51	69
Insurance premium tax	13	18	25	28	36	43	40	42	57	72	38
Air passenger duty	5	7	7	13	16	19	15	27	49	66	22
Camelot National Lottery Fund	45	55	78	66	78	85	73	77	57	52	67
Other	3	21	12	10	13	5	8	22	19	24	14
Intermediate taxes											
Commercial and industrial rates	149	167	204	227	263	300	293	319	379	454	275
Employers' NI contributions	239	267	326	363	422	480	470	511	607	727	441
Duty on hydrocarbon oils	112	125	152	170	197	224	219	239	284	340	206
Vehicle excise duty	14	16	19	21	25	28	28	30	36	43	26
Other	118	132	161	179	208	236	231	252	299	358	217
Total indirect taxes	2 717	2 998	3 780	4 141	4 703	5 350	5 247	5 639	6 553	7 251	4 838
Post-tax income	2 876	7 127	10 127	12 429	14 743	18 641	19 462	22 844	29 558	49 847	18 765
Benefits in kind											
Education	1 837	597	237	418	307	536	273	86	305	179	477
National health service	1 088	1 478	1 557	1 286	1 279	1 471	1 126	1 160	1 216	1 122	1 278
Housing subsidy	91	75	54	52	30	9	12	19	12	3	36
Rail travel subsidy	16	16	17	23	36	36	27	37	33	68	31
Bus travel subsidy	20	26	25	22	19	18	16	10	6	10	17
School meals and welfare milk	–	–	–	–	–	–	–	–	–	–	–
Total	3 051	2 192	1 890	1 801	1 670	2 070	1 454	1 312	1 572	1 382	1 839
Final income	5 927	9 319	12 017	14 230	16 413	20 711	20 916	24 157	31 130	51 229	20 605

1 On life assurance premiums.
2 Council tax, domestic rates and water charges after deducting discounts.

TABLE 21 (Appendix 1): Average incomes, taxes and benefits by decile groups of NON-RETIRED households WITH CHILDREN, 2000–01

	Decile groups of non-retired households with children ranked by equivalised disposable income										All such households
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Average per household (£ per year)											
Decile points (equivalised £)	*7 568*	*9 350*	*11 292*	*13 230*	*15 486*	*17 609*	*20 556*	*24 321*	*31 354*		
Number of households in the population ('000s)	724	729	727	728	728	725	726	731	726	729	7 274
Original income											
Wages and salaries	2 364	4 940	10 204	14 548	19 277	23 971	27 835	34 238	42 362	55 095	23 483
Imputed income from benefits in kind	–	26	58	82	100	473	529	902	1 107	2 233	551
Self-employment income	865	647	1 651	1 752	2 289	2 064	2 215	2 987	4 303	24 319	4 309
Occupational pensions, annuities	13	44	20	146	387	177	206	353	418	429	219
Investment income	128	121	41	172	293	254	280	615	1 462	3 698	706
Other income	91	187	302	295	247	419	728	327	316	470	338
Total	3 461	5 965	12 276	16 994	22 592	27 359	31 792	39 422	49 968	86 245	29 607
Direct benefits in cash											
Contributory											
Retirement pension	48	115	8	48	129	9	33	47	53	83	57
Job seeker's allowance (Contribution based)	147	55	10	44	7	10	7	–	5	6	29
Incapacity benefit	371	296	277	284	322	31	133	38	21	–	177
Widows' benefits	33	–	82	36	57	76	44	8	18	22	38
Statutory Maternity Pay/Allowance	11	3	14	22	103	124	121	121	147	236	90
Non-contributory											
Income support	1 759	2 522	1 426	748	308	159	30	50	16	7	703
Child benefit	1 327	1 328	1 353	1 220	1 223	1 163	1 106	1 109	1 031	1 061	1 192
Housing benefit	1 066	1 496	1 036	599	190	119	38	–	–	–	454
Job seeker's allowance (Income based)	521	210	44	40	3	2	9	10	3	9	85
Invalid care allowance	48	65	135	128	45	40	19	16	–	–	50
Attendance allowance	–	–	–	19	40	5	–	–	15	–	8
Disabled Persons Tax Credit	220	261	263	344	287	132	79	67	29	21	170
War pensions/War widows' pensions	–	7	6	–	10	–	7	6	57	–	9
Severe disablement allowance	15	24	75	65	33	27	12	10	12	–	27
Industrial injury disablement benefit	13	–	–	15	–	37	10	14	–	–	9
Student support	101	43	47	88	87	31	75	23	132	27	65
Government training schemes	97	12	42	30	18	3	–	13	–	–	21
Working Families Tax Credit	375	655	698	561	532	336	155	117	50	14	351
Other non-contributory benefits	12	28	7	4	3	0	35	0	10	0	10
Total cash benefits	6 164	7 121	5 522	4 315	3 395	2 303	1 914	1 650	1 598	1 488	3 547
Gross income	9 625	13 086	17 798	21 309	25 988	29 662	33 706	41 073	51 566	87 733	33 154
Direct taxes and Employees' NIC											
Income tax	498	637	1 505	2 094	2 832	3 723	4 481	6 190	8 911	18 714	4 759
less: Tax relief at source[1]	1	2	1	3	4	2	3	4	5	5	3
Employees' NI contributions	167	304	644	910	1 189	1 549	1 809	2 231	2 475	2 431	1 371
Local taxes[2]	836	820	833	850	919	927	996	1 066	1 153	1 346	975
less: Council tax benefit/Rates rebates	329	274	173	109	32	20	25	27	10	16	101
Total	1 172	1 486	2 808	3 743	4 904	6 176	7 259	9 457	12 525	20 470	7 000
Disposable income	8 452	11 600	14 990	17 566	21 084	23 486	26 447	31 615	39 041	67 263	26 155
Equivalised disposable income	*5 777*	*8 536*	*10 347*	*12 260*	*14 390*	*16 459*	*18 958*	*22 388*	*27 323*	*48 889*	*18 533*
Indirect taxes											
Taxes on final goods and services											
VAT	1 244	1 276	1 573	1 854	2 004	2 301	2 382	2 768	3 412	4 239	2 305
Duty on tobacco	418	471	487	409	405	333	259	269	174	196	342
Duty on beer and cider	52	66	83	106	106	138	106	137	148	131	107
Duty on wines & spirits	55	56	72	70	113	122	106	153	175	250	117
Duty on hydrocarbon oils	305	306	398	467	546	653	666	734	739	900	571
Vehicle excise duty	82	81	104	130	152	178	180	200	208	210	152
Television licences	98	107	132	117	102	116	119	105	109	105	111
Stamp duty on house purchase	45	24	29	42	56	74	79	98	127	287	86
Customs duties	28	27	33	38	43	49	51	57	68	87	48
Betting taxes	34	30	46	58	50	59	54	81	50	47	51
Insurance premium tax	18	16	23	30	36	45	44	52	55	76	40
Air passenger duty	7	3	26	10	20	16	15	35	28	64	22
Camelot National Lottery Fund	42	47	58	73	67	72	65	76	59	51	61
Other	7	9	19	11	22	32	28	5	15	8	16
Intermediate taxes											
Commercial and industrial rates	191	185	232	266	301	339	350	396	469	605	333
Employers' NI contributions	306	296	372	426	482	543	561	634	752	969	534
Duty on hydrocarbon oils	143	138	174	199	225	254	262	296	351	453	250
Vehicle excise duty	18	17	22	25	28	32	33	37	44	57	31
Other	151	146	183	210	237	267	276	312	370	477	263
Total indirect taxes	3 245	3 300	4 066	4 542	4 997	5 622	5 636	6 444	7 353	9 214	5 442
Post-tax income	5 207	8 300	10 925	13 024	16 087	17 864	20 811	25 171	31 688	58 050	20 713
Benefits in kind											
Education	5 123	4 231	4 519	4 227	4 336	3 963	3 282	3 335	3 141	2 447	3 860
National health service	2 544	2 418	2 624	2 533	2 495	2 386	2 387	2 396	2 411	2 482	2 467
Housing subsidy	112	129	101	44	45	27	27	9	4	6	50
Rail travel subsidy	16	13	9	17	30	24	36	32	51	90	32
Bus travel subsidy	29	15	20	24	26	21	17	19	11	14	19
School meals and welfare milk	276	263	147	73	24	20	4	9	7	4	83
Total	8 099	7 069	7 420	6 917	6 956	6 441	5 753	5 800	5 625	5 044	6 512
Final income	13 306	15 369	18 344	19 941	23 043	24 305	26 564	30 971	37 314	63 094	27 225

1 On life assurance premiums.

TABLE 22 (Appendix 1): Distribution of households[1] by household type, 2000–01

	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	126	525	651	350	260	137	398
2nd	140	435	575	502	192	107	299
3rd	127	481	608	494	147	147	294
4th	136	335	471	434	139	144	282
5th	128	242	371	307	155	195	350
6th	62	208	270	317	216	159	375
7th	42	112	154	184	260	155	416
8th	42	81	123	186	305	184	489
9th	61	47	108	140	369	194	563
Top	37	49	86	75	451	161	612
All households in population ('000s)	900	2 516	3 416	2 988	2 494	1 583	4 077

	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	186	110	230	116	221	151	90	2 501
2nd	241	100	322	97	106	124	139	2 503
3rd	250	140	185	108	179	128	117	2 502
4th	384	178	149	132	245	98	132	2 504
5th	380	256	120	225	282	108	102	2 501
6th	499	199	106	236	279	92	130	2 502
7th	656	347	60	242	237	95	116	2 506
8th	711	304	59	256	234	59	82	2 503
9th	859	271	33	201	212	41	72	2 500
Top	986	220	25	206	232	32	33	2 506
All households in population ('000s)	5 151	2 124	1 288	1 819	2 227	927	1 013	25 030

1 See Appendix 2 for definitions of retired households, adults and children.

TABLE 23 (Appendix 1): Summary of the effects of taxes and benefits, by household type[1], 2000–01

	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	6 346	3 221	4 045	10 389	17 840	13 839	16 286
plus Cash benefits	4 792	5 564	5 361	7 326	1 514	1 997	1 702
Gross income	11 139	8 785	9 405	17 716	19 354	15 836	17 988
less Direct taxes and employees' NIC	1 741	1 021	1 211	2 493	4 387	3 498	4 042
Disposable income	9 398	7 764	8 195	15 223	14 967	12 337	13 946
Equivalised disposable income	*15 407*	*12 721*	*13 429*	*14 759*	*24 536*	*20 225*	*22 862*
less Indirect taxes	1 903	1 273	1 439	3 473	2 893	2 618	2 786
Post-tax income	7 495	6 491	6 756	11 750	12 074	9 719	11 160
plus Benefits in kind	2 454	3 015	2 867	4 038	791	837	809
Final income	9 949	9 507	9 623	15 788	12 865	10 556	11 968

	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	32 643	40 854	8 456	32 734	36 241	30 222	35 745	23 234
plus Cash benefits	1 649	2 832	6 059	2 022	2 629	4 486	4 249	3 494
Gross income	34 292	43 687	14 515	34 756	38 870	34 708	39 993	26 727
less Direct taxes and employees' NIC	7 708	8 771	1 817	7 852	8 690	7 327	8 046	5 486
Disposable income	26 584	34 916	12 698	26 904	30 181	27 381	31 947	21 242
Equivalised disposable income	*25 950*	*22 243*	*12 996*	*21 958*	*20 906*	*15 796*	*16 712*	*19 932*
less Indirect taxes	5 350	7 534	2 831	5 507	5 870	5 563	7 593	4 387
Post-tax income	21 233	27 382	9 868	21 397	24 310	21 818	24 354	16 855
plus Benefits in kind	1 680	4 205	5 581	4 079	6 459	10 485	8 546	3 600
Final income	22 913	31 587	15 449	25 476	30 770	32 302	32 900	20 455

1 See Appendix 2 for definitions of retired households, adults and children.

TABLE 24 (Appendix 1): Average incomes, taxes and benefits by decile groups of ALL households (ranked by UNADJUSTED disposable income), 2000–01

	Decile groups of all households ranked by equivalised disposable income										All households
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Average per household (£ per year)											
Decile points (equivalised £)	*6 125*		*8 467*	*10 874*	*13 611*	*16 884*	*20 232*	*24 688*	*30 389*	*40 202*	
Number of households in the population ('000s)	2 498	2 505	2 503	2 503	2 503	2 505	2 503	2 501	2 503	2 506	25 030
Original income											
Wages and salaries	445	1 069	3 081	5 919	10 573	15 068	19 835	26 736	35 525	54 786	17 304
Imputed income from benefits in kind	19	4	11	16	91	114	242	394	758	1 893	354
Self-employment income	109	178	346	702	808	1 201	1 930	2 313	3 026	14 698	2 531
Occupational pensions, annuities	409	947	1 448	1 930	2 072	2 193	2 431	2 345	1 999	2 428	1 820
Investment income	212	256	366	470	616	992	816	1 159	1 702	3 799	1 039
Other income	66	101	132	149	255	170	302	134	378	168	186
Total	1 260	2 555	5 384	9 186	14 415	19 739	25 556	33 081	43 389	77 773	23 234
Direct benefits in cash											
Contributory											
Retirement pension	2 115	2 539	2 439	1 974	1 575	1 179	955	635	517	384	1 431
Job seeker's allowance (Contribution based)	42	37	28	45	42	46	10	6	8	13	28
Incapacity benefit	278	396	298	365	308	330	169	184	63	28	242
Widows' benefits	58	46	93	49	39	33	47	69	20	26	48
Statutory Maternity Pay/Allowance	0	2	4	4	15	32	62	36	55	61	27
Non-contributory											
Income support	396	825	830	671	412	296	201	88	32	11	376
Child benefit	74	208	250	289	340	451	484	457	484	480	352
Housing benefit	532	1 030	797	628	295	175	79	35	1	–	357
Job seeker's allowance (Income based)	110	50	115	106	54	50	26	25	8	12	56
Invalid care allowance	12	19	17	45	70	83	37	17	21	2	32
Attendance allowance	56	130	216	164	92	57	58	25	31	4	83
Disabled Persons Tax Credit	60	150	254	359	365	317	180	137	80	52	195
War pensions/War widows' pensions	6	1	13	91	77	6	26	8	17	15	26
Severe disablement allowance	14	20	53	40	80	33	54	33	10	3	34
Industrial injury disablement benefit	4	20	33	27	28	32	11	9	3	3	17
Student support	23	18	56	30	28	42	38	33	144	97	51
Government training schemes	10	6	19	26	26	12	6	17	11	21	15
Working Families Tax Credit	8	34	101	236	238	177	120	71	40	9	103
Other non-contributory benefits	17	32	31	30	40	9	5	6	21	3	20
Total cash benefits	3 817	5 561	5 645	5 178	4 125	3 362	2 568	1 889	1 566	1 226	3 494
Gross income	5 078	8 116	11 028	14 364	18 540	23 101	28 125	34 970	44 955	78 999	26 727
Direct taxes and Employees' NIC											
Income tax	131	242	604	1 164	1 881	2 689	3 572	4 900	7 078	14 335	3 660
less: Tax relief at source[1]	2	2	4	4	2	4	5	5	7	11	5
Employees' NI contributions	38	55	199	366	681	980	1 284	1 711	2 218	2 725	1 026
Local taxes[2]	703	716	763	819	819	887	953	1 010	1 056	1 271	900
less: Council tax benefit/Rates rebates	199	215	162	134	78	58	36	25	18	19	94
Total	670	796	1 400	2 211	3 301	4 494	5 767	7 590	10 328	18 302	5 486
Disposable income	4 407	7 320	9 628	12 153	15 239	18 607	22 357	27 380	34 627	60 697	21 242
Indirect taxes											
Taxes on final goods and services											
VAT	617	693	929	1 252	1 495	1 810	2 085	2 402	2 899	4 073	1 826
Duty on tobacco	145	211	274	242	337	323	325	321	305	336	282
Duty on beer and cider	33	35	57	72	107	118	123	143	164	222	107
Duty on wines & spirits	52	48	64	87	102	126	126	159	194	298	126
Duty on hydrocarbon oils	104	122	204	306	358	472	557	646	729	906	440
Vehicle excise duty	42	49	75	95	114	135	168	191	202	224	129
Television licences	71	71	85	94	94	104	102	100	103	106	93
Stamp duty on house purchase	21	17	27	32	42	49	75	83	106	196	65
Customs duties	14	16	20	26	31	37	43	49	58	80	37
Betting taxes	30	30	51	52	59	67	76	61	65	84	57
Insurance premium tax	11	12	18	22	27	35	42	48	55	78	35
Air passenger duty	4	5	4	9	11	18	18	30	36	62	20
Camelot National Lottery Fund	26	37	49	59	64	72	70	78	71	72	60
Other	2	4	12	7	7	19	15	23	12	31	13
Intermediate taxes											
Commercial and industrial rates	100	108	140	180	216	255	295	340	404	553	259
Employers' NI contributions	161	173	224	288	347	408	472	545	647	886	415
Duty on hydrocarbon oils	75	81	105	135	162	191	221	255	302	414	194
Vehicle excise duty	9	10	13	17	20	24	28	32	38	52	24
Other	79	85	110	142	171	201	232	268	319	436	204
Total indirect taxes	1 596	1 808	2 459	3 117	3 765	4 463	5 071	5 773	6 706	9 109	4 387
Post-tax income	2 812	5 512	7 169	9 036	11 474	14 144	17 287	21 606	27 921	51 588	16 855
Benefits in kind											
Education	650	698	893	1 072	1 423	1 661	1 769	1 641	1 861	1 846	1 351
National health service	2 088	2 284	2 332	2 302	2 055	2 124	2 101	1 933	2 060	1 997	2 128
Housing subsidy	58	93	77	64	45	36	18	13	15	9	43
Rail travel subsidy	7	6	10	10	19	15	25	28	53	71	24
Bus travel subsidy	34	42	43	37	31	26	24	23	18	17	29
School meals and welfare milk	10	43	54	41	35	29	17	4	4	4	24
Total	2 846	3 167	3 409	3 528	3 608	3 892	3 955	3 643	4 011	3 943	3 600
Final income	5 658	8 679	10 578	12 564	15 082	18 035	21 242	25 249	31 932	55 531	20 455

1 On life assurance premiums.
2 Council tax, domestic rates and water charges after deducting discounts.

TABLE 25 (Appendix 1): Cross-tabulation of households ranked by disposable income, unadjusted and equivalised, 2000–01

(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	3 252	1 720	31	–	–	5 003
2nd	1 367	1 662	1 387	570	–	5 006
3rd	336	1 256	1 955	922	538	5 008
4th	29	344	1 388	2 241	1 001	5 004
Top	–	24	242	1 276	3 467	5 009
All households	5 005	5 007	5 003	5 009	5 007	25 030

(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	1 458	879	161	–	–	–	–	–	–	–	2 498
2nd	578	338	803	756	31	–	–	–	–	–	2 505
3rd	222	711	447	61	693	369	–	–	–	–	2 503
4th	187	267	455	699	46	279	570	–	–	–	2 503
5th	42	184	349	335	688	216	4	612	73	–	2 503
6th	13	96	161	412	322	728	294	13	466	–	2 505
7th	–	27	101	161	424	348	728	397	135	182	2 503
8th	–	2	19	63	235	381	434	682	437	247	2 501
9th	–	–	6	17	53	164	412	571	821	458	2 503
Top	–	–	–	–	8	17	65	228	568	1 620	2 506
All households	2 501	2 503	2 502	2 504	2 501	2 502	2 506	2 503	2 500	2 506	25 030

TABLE 26 (Appendix 1): Percentage shares of equivalised total original, gross, disposable and post-tax incomes by quintile groups for ALL households[1], 1978 to 2000–01[2]

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Original income												
Bottom	3	2	2	3	3	3	3	2	3	2	2	2
2nd	10	10	9	9	8	8	7	7	7	7	7	7
3rd	18	18	18	17	17	17	17	17	16	16	16	16
4th	26	27	26	26	26	26	26	27	26	25	26	26
Top	43	43	44	46	46	47	47	47	49	50	50	49
All households	100	100	100	100	100	100	100	100	100	100	100	100
Gross income												
Bottom	9	9	8	8	9	9	9	8	8	7	7	7
2nd	13	13	12	12	12	12	12	12	11	11	11	11
3rd	18	18	18	17	17	17	17	17	16	16	16	16
4th	23	24	23	23	23	23	23	24	23	23	23	23
Top	37	37	38	39	39	39	39	40	41	43	43	42
All households	100	100	100	100	100	100	100	100	100	100	100	100
Disposable income												
Bottom	10	9	9	9	9	9	10	9	9	8	8	8
2nd	14	13	13	13	13	13	13	13	12	12	11	12
3rd	18	18	18	17	17	17	17	17	17	16	16	17
4th	23	23	23	23	23	23	23	23	23	23	23	23
Top	35	36	37	38	37	38	37	38	40	41	42	41
All households	100	100	100	100	100	100	100	100	100	100	100	100
Post-tax income												
Bottom	10	10	9	9	9	9	9	9	8	8	7	7
2nd	14	13	13	13	13	13	13	13	12	12	11	11
3rd	18	18	17	17	17	17	17	17	16	16	16	16
4th	23	23	23	22	22	22	22	23	22	22	22	23
Top	36	37	38	39	39	39	38	39	41	43	44	43
All households	100	100	100	100	100	100	100	100	100	100	100	100

	1990	1991	1992	1993	1993–94	1994–95	1995–96	1996–97	1997–98	1998–99	1999–00	2000–01
Original income												
Bottom	2	2	2	2	2	2	3	2	2	3	2	2
2nd	7	7	6	6	6	6	7	7	7	7	7	7
3rd	15	16	15	15	14	15	15	15	15	15	15	15
4th	25	26	26	25	25	25	25	25	25	25	25	25
Top	51	50	50	52	52	51	50	51	51	52	52	50
All households	100	100	100	100	100	100	100	100	100	100	100	100
Gross income												
Bottom	7	7	7	7	7	7	7	7	7	7	7	6
2nd	10	10	11	11	11	11	11	11	11	11	11	11
3rd	16	16	16	16	16	16	16	16	16	16	16	16
4th	23	23	23	23	23	23	23	23	23	23	23	23
Top	44	44	43	44	44	43	43	44	44	44	44	44
All households	100	100	100	100	100	100	100	100	100	100	100	100
Disposable income												
Bottom	7	7	7	8	8	8	8	8	8	7	7	7
2nd	11	11	11	12	12	12	12	12	12	12	12	12
3rd	16	16	16	16	16	16	17	16	16	16	16	16
4th	23	23	23	23	23	23	23	23	23	23	23	23
Top	43	42	42	42	42	41	40	42	42	42	42	42
All households	100	100	100	100	100	100	100	100	100	100	100	100
Post-tax income												
Bottom	6	7	7	7	7	7	7	7	7	6	6	6
2nd	10	11	11	11	11	11	12	11	11	11	11	11
3rd	15	16	16	16	16	16	16	16	16	16	16	16
4th	23	23	23	22	22	22	23	22	22	22	22	22
Top	45	44	44	44	44	43	43	44	44	45	45	44
All households	100	100	100	100	100	100	100	100	100	100	100	100

1 Ranked by equivalised disposable income.

2 From 1990 this includes company car benefit and beneficial house purchase loans from employers. From 1996–97 values are based on estimates for the sample grossed up to population totals.

TABLE 27 (Appendix 1): Gini coefficients for the distribution of income at each stage of the tax-benefit system and P90/P10 and P75/P25[1] ratios for disposable income for ALL households, 1978 to 2000–01[2]

	Gini coefficients (per cent)				Ratios for disposable income	
	Equivalised income					
	Original	Gross	Disposable	Post-tax	P90/P10	P75/P25
1978	43	29	26	28	3.2	1.9
1979	44	30	27	29	3.3	2.0
1980	44	31	28	30	3.5	2.0
1981	46	31	28	31	3.4	2.0
1982	47	31	28	31	3.3	2.0
1983	48	32	28	31	3.3	1.9
1984	49	31	28	30	3.3	2.0
1985	49	32	29	32	3.5	2.1
1986	50	34	31	35	3.7	2.1
1987	51	36	33	36	4.1	2.2
1988	51	37	35	38	4.4	2.4
1989	50	36	34	37	4.5	2.4
1990	52	38	36	40	4.9	2.5
1991	51	37	35	39	4.8	2.5
1992	52	37	34	38	4.6	2.4
1993	53	38	35	38	4.5	2.3
1993/94	54	37	34	38	4.5	2.3
1994/95	53	37	33	37	4.5	2.3
1995/96	52	36	33	37	4.2	2.2
1996/97	53	37	34	38	4.4	2.3
1997/98	53	37	34	38	4.5	2.3
1998/99	53	38	35	39	4.5	2.3
1999/00	53	38	35	40	4.6	2.4
2000/01	51	38	35	39	4.5	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 From 1990 this includes company car benefit and beneficial house purchase loans from employers. From 1996–97 values are based on estimates for the sample grossed to population totals.

APPENDIX 2

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. The Family Expenditure Survey has been replaced by the new Expenditure and Food Survey from 2001–02 but the analysis in this article uses the 2000–01 FES.

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 2000–2001,* published by The Stationery Office in January 2002, shows detailed results on expenditure and income from the 2000–2001 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 2000–01 was 6,600 (about 1 in every 3,800 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 (e.g. investment income over the previous 12 months). FES income does not include proceeds from the sale of assets (e.g. 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 half of the income distribution. 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 from 2000–01 onwards in terms of the harmonised definition as used in the Census and nearly all other government household surveys since 1981. This is one person or a group of persons who have the accommodation as their only or main residence and (for a group) share the living accommodation, that is a living or sitting room, or share meals together or have common housekeeping. Up till 1999–2000 the FES definition was based on the pre-1981 Census definition and required members to share eating and budgeting arrangements as well as shared living accommodation. The definition of a household was comprising people who live at the same address and who share common catering for at least one meal a day. The effect of the change is fairly small but not negligible. 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 dependent) 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 (4 in 2000–01) where a spouse is absent from the household at the time of interview. The absent spouse may well be working away from home (e.g. 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, i.e. 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 2001* 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 and tax credits to original income to obtain **gross income**. This is slightly different from the 'gross normal weekly income' used in the FES report. Cash benefits and tax credits 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, disabled persons tax credit, war pensions, severe disablement allowance, industrial injury disablement benefits, working families tax credit, old persons pension, Christmas bonus for pensioners, government training scheme allowances, educational support (largely 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 (e.g. the discount of 25 per cent for single person households). All local taxes are shown after the deduction of council tax benefit and rates 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 2000–01 there was only one type of tax relief obtained in this way: life assurance premium relief. Where households are eligible for these reliefs, imputations are made and deducted from recorded income tax payments.

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
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 Commission franchise payments
Landfill tax
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, e.g. 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 Tables 2 and 9 of the main article, we have constructed a measure of expenditure on goods and services from data from the FES. Indirect taxes are shown as a proportion both of

disposable income and of expenditure. One drawback of comparing the incidence of indirect taxes on households at different levels of income is that, by whatever measure used, on average, recorded expenditure exceeds income apparently available for it by significant amounts at the bottom of the distribution. Thus, it has been argued that for many households, where, for instance, income fluctuates widely or where it is difficult to measure accurately, a measure based on regular household outgoings would be a far better indicator of resources available to the household and therefore give a better picture of the incidence of indirect taxes.

34. This measure of expenditure has been customised to be analogous to the definition of disposable income used in the analysis in order to facilitate these comparisons. For instance, because the imputed benefit of company cars and beneficial loans will have boosted the figure for disposable income these items have had to be added to this expenditure measure. Expenditure on alcohol, tobacco and confectionery have been grossed up for under-recording in line with the treatment of the indirect taxes on these items. Payments deemed to be made out of income such as superannuation, regular savings, mortgage repayments etc have been included and adjusted where necessary but not items such as lump sum 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 from information provided by the Department for Education and Skills of 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.

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, Scottish Homes, Northern Ireland Housing Executive (NIHE), housing associations and Registered Social Landlords. The total housing subsidy includes the contribution from central government to the housing revenue accounts of local authorities, and grants paid to Scottish Homes, the NIHE, housing associations and Registered Social Landlords. 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, 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 a life assurance premium, for example, accrues directly to the taxpayer rather than to some other party, for instance, the seller of the policy. 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	
(i.e. 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 (i.e. un-equivalised) £ per year, not equivalised £ per year. Where equivalised values do appear (e.g. the quintile points in Table 16 of Appendix 1), they are shown in *italics*.

Diagram 2
Lorenz curve for a typical income distribution

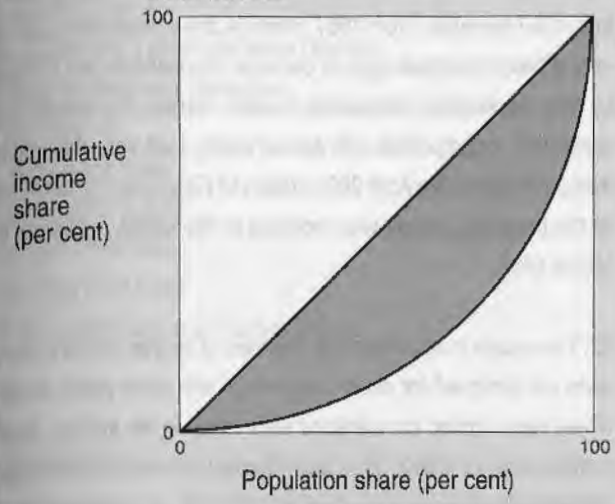
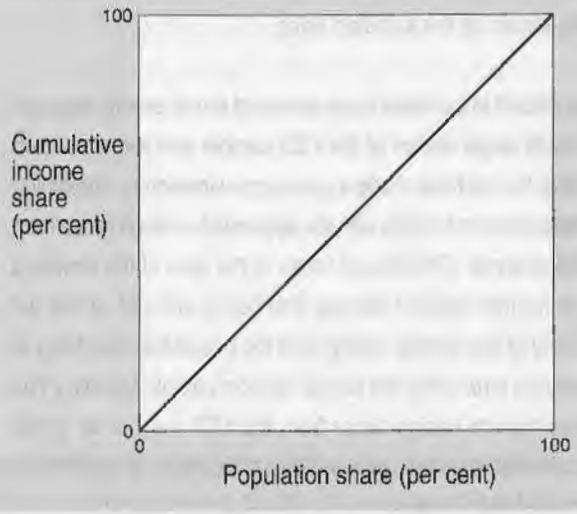


Diagram 3
Complete income equality



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 2), i.e. 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 3). 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, e.g. 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 (e.g. 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 population weighting

54. The survey results have been re-weighted and grossed so that the population totals reflect the whole household population, a process described as population weighting. Different weights 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. Population weighting 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 population weighted data set are different from estimates based on the sample. Indeed, if they were not, there would be little point in the weighting. The effect of weighting on some of the major variables used in the analysis was given in the 1997–98 article. More detail about the effect of weighting 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 sample and the population weighting, 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 and the population weighting to the standard error using the simple random sample formula.] The most appropriate design factor from the FES work is for 'gross normal weekly household income'. The standard error of the mean for N households is given by:

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

where the design factor is 0.9 for 2000–01, and S^2 is the estimate of the population variance.

The method of population weighting used for the FES tends to reduce sampling error and this is the reason for the design factor of less than 1.0

57. The standard error for normal weekly disposable income of all households is slightly more than one per cent of the mean but, for the less frequent household types, e.g. 1 adult with children and 3 or more adults with children, it is likely to be higher.

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 quintile 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. The 'complex' standard errors for quintile and decile groups are quite a bit larger than the simple random sample estimates.

Previous articles

61. 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 2001 edition of *Economic Trends*. A list of the previous articles was included in the article published in March 1997.

62. 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 2000–01.

Regional, sub-regional and local area household income

Andrew Linacre
Regional and Local Statistics Division
Office for National Statistics
Room B4/10
1 Drummond Gate
London SW1V 2QQ
Tel: 020 7533 5694
Fax: 020 7533 5799
E-mail: regionalaccounts@ons.gov.uk

Estimates presented here describe differences in the level and composition of household sector incomes between geographic regions and sub-regions for calendar years 1995 to 1999. At local area level, income differences are described for the period 1997 to 1999. Regional figures update the provisional estimates published in July 2001. The estimates published in this article are produced in accordance with the *European System of Accounts 1995 (ESA95)*[1] and are consistent with the 2001 edition of the *UK National Accounts - The Blue Book.*[2]

The estimates show that:

- The level and composition of Gross Disposable Household Income (GDHI) differs considerably between local areas (Table A, and Annex B Table 6). For example, Inner London – West had a per capita GDHI 64 per cent above the UK average, whereas the North of Northern Ireland had a per capita GDHI 28 per cent below the UK average over the period 1997 to 1999.

- Northern Ireland had the lowest per capita Total Household Income in 1999 (Annex B Table 1), but GDHI per capita was lowest in Wales at 87 per cent of the UK average (Annex B Table 2).

- In 1999, sub-regional GDHI per head was highest in Inner London at 128 per cent of the UK average and lowest in West Wales and the Valleys, where it was 86 per cent of the UK average (Annex B Table 4).

Table A: Local areas with the highest/lowest Gross Disposable Household Income, averaged 1997 to 1999

Local area (NUTS3)	GDHI per capita index UK*=100	GDHI as % of total household income
Inner London - West	164	58
Surrey	131	60
Buckinghamshire	120	58
Outer London - South	120	63
Outer London - West & North West	119	63
UNITED KINGDOM *	**100**	**65**
Leicester	81	68
West & South of Northern Ireland	79	73
East Merseyside	79	69
Central Valleys (Wales)	76	69
North of Northern Ireland	72	71

* Excluding GDHI for Extra-Regio

Regional (NUTS1)# Household Income

In 1999, the UK average per capita GDHI was £10,142. Average per capita incomes were highest in London at £12,207 and lowest in Wales, Northern Ireland and North East (Table B).

England's Total Household Income equalled £793 billion in 1999 representing 85.2 per cent of the UK total. Wales accounted for 4.1 per cent of the UK total, Scotland for 8.2 per cent, and Northern Ireland for 2.3 per cent. However, England accounted for only 84.6 per cent of GDHI, the lower percentage being due to English residents making above average per capita payments for tax, social contributions and property related expenditures. In contrast, Wales, Scotland and Northern Ireland accounted for 4.3 per cent, 8.4 per cent, and 2.5 per cent respectively of UK total GDHI - higher than their shares of Total Household Income (Annex B Tables 1 & 2).

The 'Nomenclature of Units for Territorial Statistics' geographic classification system is described in this article

The redistributive effects on income of the social security and taxation systems may be crudely gauged by noting regional differences in the levels of the social security receipts of households and the taxation payments of households. In each of the lowest income Regions in 1999, (North East, Northern Ireland, and Wales) social security receipts and taxation payments were in near balance (Annex B Table 5e, and Annex B Table 7). In contrast, in each of the highest income Regions (London, South East, and East) tax payments were over double the level of social security benefits.

Table B: Regional (NUTS1) Gross Disposable Household Income per capita, 1999

Region	£ per capita	Index UK*=100
UK *	£10,142	100
North East	£9,018	89
North West	£9,501	94
Yorkshire & the Humber	£9,325	92
East Midlands	£9,409	93
West Midlands	£9,541	94
East	£10,638	105
London	£12,207	120
South East	£11,055	109
South West	£10,073	99
Wales	£8,870	87
Scotland	£9,870	97
Northern Ireland	£8,998	89

* Excluding GDHI for Extra-Regio

Sub-regional (NUTS2) household income

Of the 37 NUTS2 geographic areas that comprise the UK, Total Household Income per capita in 1999 was highest in Inner London (£21,331). This was 69 per cent above the lowest per capita income, which was in West Wales and the Valleys (£12,585). However, after deducting payments such as taxes, contributions to pension funds, social security, and interest payments, the Gross Disposable Household Incomes of these areas were less far apart, with Inner London (£12,935) being 47 per cent higher than West Wales and the Valleys (£8,791). In Inner London, pensions accounted for 6 per cent of Total Income and social security benefits for 8 per cent, whereas in West Wales and the Valleys, pensions accounted for 14 per cent of Total Income and social security benefits for 11 per cent.

Local area household income (NUTS3), averaged over 1997 to 1999

Within some NUTS2 areas there are considerable income variations between constituent local areas. For example, in 1999 the NUTS2 area of Inner London had a GDHI per capita of £12,935, which was 28 per cent above the UK average. Within this, the NUTS3 area of Inner London – East had a GDHI per capita averaging only 6 per cent above the UK average over the period 1997 to 1999, whereas Inner London – West had a GDHI averaging 64 per cent above the UK average over these years. The geographic pattern of GDHI across NUTS2 and NUTS3 areas of the UK is illustrated in figures C and D.

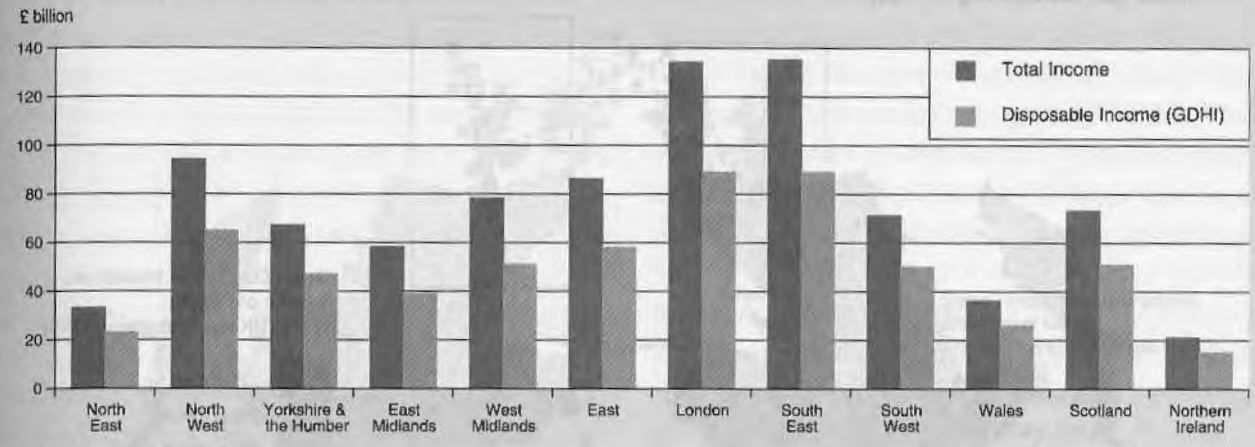
Of the 133 NUTS3 areas that comprise the UK, Inner London - West had the highest GDHI per capita, averaged over 1997 to 1999. The NUTS3 area with the lowest GDHI per capita over the same period was North of Northern Ireland at 72 per cent of the UK average. In this area social security benefits provided 17 per cent of Total Income, compared with a UK average of 8 per cent. Taxes accounted for 8 per cent of Total Income in North of Northern Ireland, compared with a UK average of 12 per cent, (Annex B Table 7).

Over 1997 to 1999, the per capita total incomes in Inner London - West averaged 76 per cent above the level in adjacent Inner London - East. However, householders in Inner London - West made considerably higher per capita payments for; taxes (182 per cent higher); National Insurance and pension contributions (69 per cent higher); and property expenditures - primarily interest on housing loans – (149 per cent higher). As a result of these larger 'outgoings', the per capita Gross Disposable Household Income in Inner London - West householders averaged only 55 per cent above the level in Inner London - East.

Although Inner London - West seems to be a higher income area, its householders were not uniformly better off than the UK average, with significant numbers of people being reliant on social security income (excluding Retirement and Widows pensions). Receipts of social security benefits were actually 21 per cent above the UK average on a per capita basis. However in neighbouring Inner London - East, social security benefits were 58 per cent above the UK average on a per capita basis providing 11 per cent of the total income of the household sector. The local area within the UK least reliant on social security was Buckinghamshire, with per capita payments 34 per cent below the UK average and providing just 4 per cent of householders' total incomes.

Figure **A**

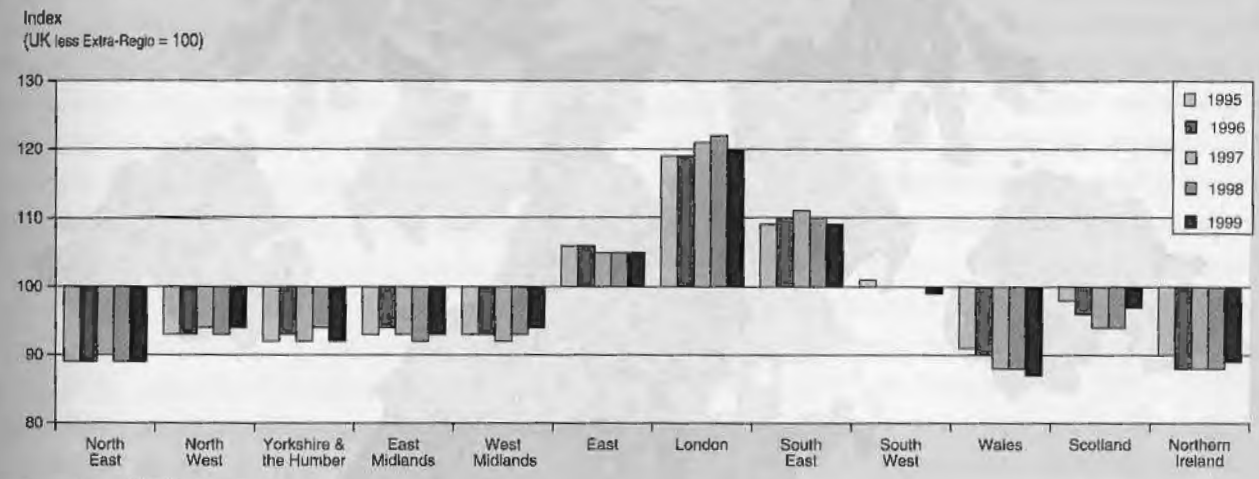
Regional (NUTS1) Total Household Income and Gross Disposable Household Income (GDHI), 1999



Source: Annex B Tables 1 & 2.

Figure **B**

Regional (NUTS1) Gross Disposable Household Income per capita, 1995—1999



Source: Annex B Table 2.

The areas with the highest and lowest levels of GDHI also differ markedly in relation to individual components of income, as shown in Table C.

Included in Annex B Table 6 are indices of workplace based Gross Domestic Product (GDP) per capita (UK less Extra-Regio =100, averaged over 1996 to 1998 – local area GDP figures are not available for 1999). GDP is a measure of the goods and services production activity occurring in a region. Areas for which the GDHI per capita index exceeded the GDP per capita index include: those commuter areas where people travel to adjoining areas for work, as well as traditional retirement areas such as those on the south coast of England. Areas for which the GDP per capita index notably exceeded the GDHI per capita index include: business and industrial centres, and areas that have commuting in-flows.

Table C: Components of Income: Inner London – West, and North of Northern Ireland

Income components, £ per capita index UK less Extra-Regio = 100, averaged over 1997 to 1999	Inner London – West	UK	North of Northern Ireland
Compensation of Employees	185	100	60
Mixed Income	313	100	90
Gross Operating Surplus	262	100	62
Property Income	249	100	47
Pension Income	85	100	49
Social Security excl. Retirement & Widows Pensions	121	100	149
Total Income	**186**	**100**	**67**
Taxes paid	288	100	45
Social Security Contributions Paid	182	100	61
Property Expenditures	271	100	55
Gross Disposable Household Income	**164**	**100**	**72**

Figure **C**

Gross Disposable Household Income per capita, 1999, NUTS2
Index (UK less Extra-Regio = 100)

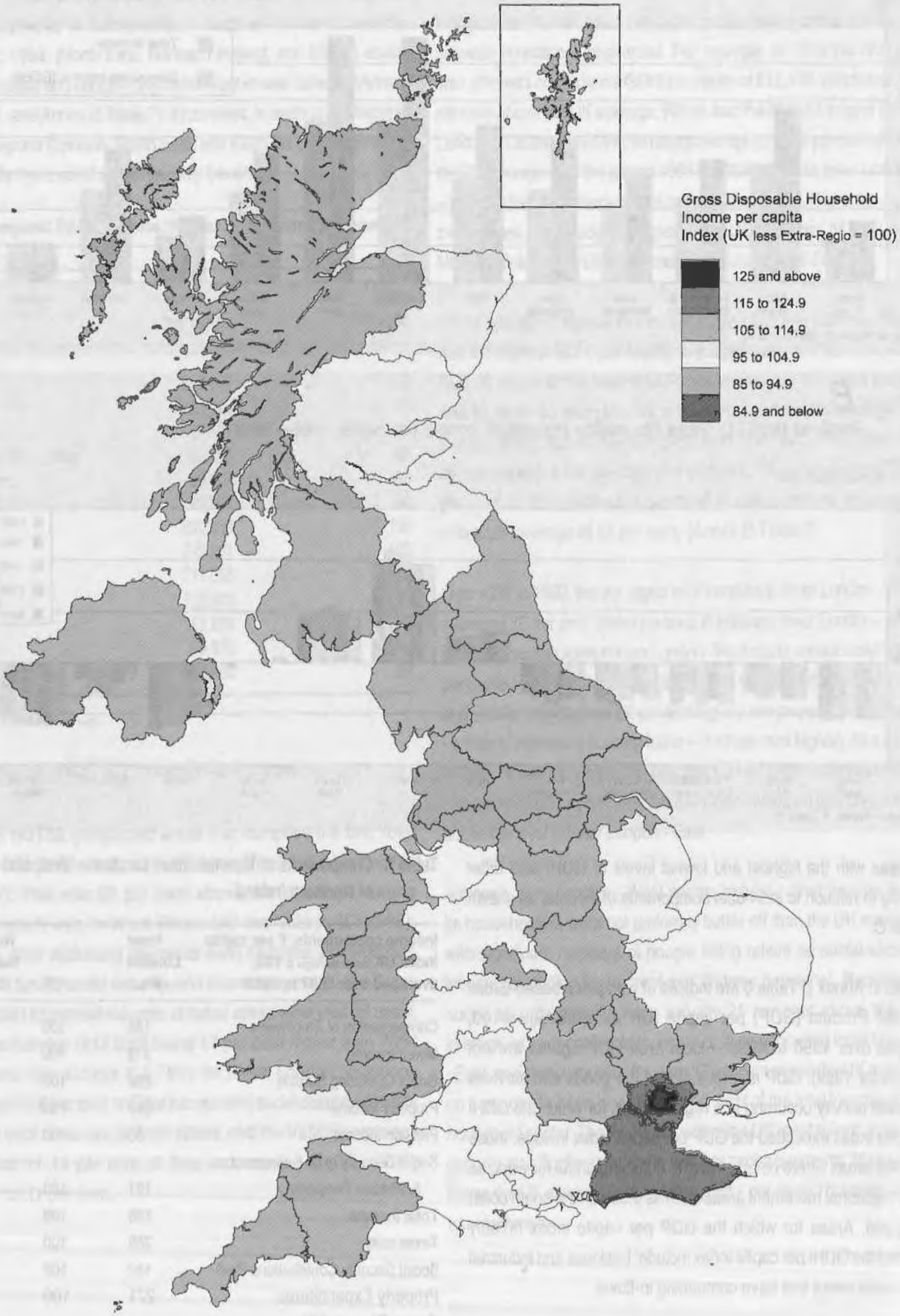
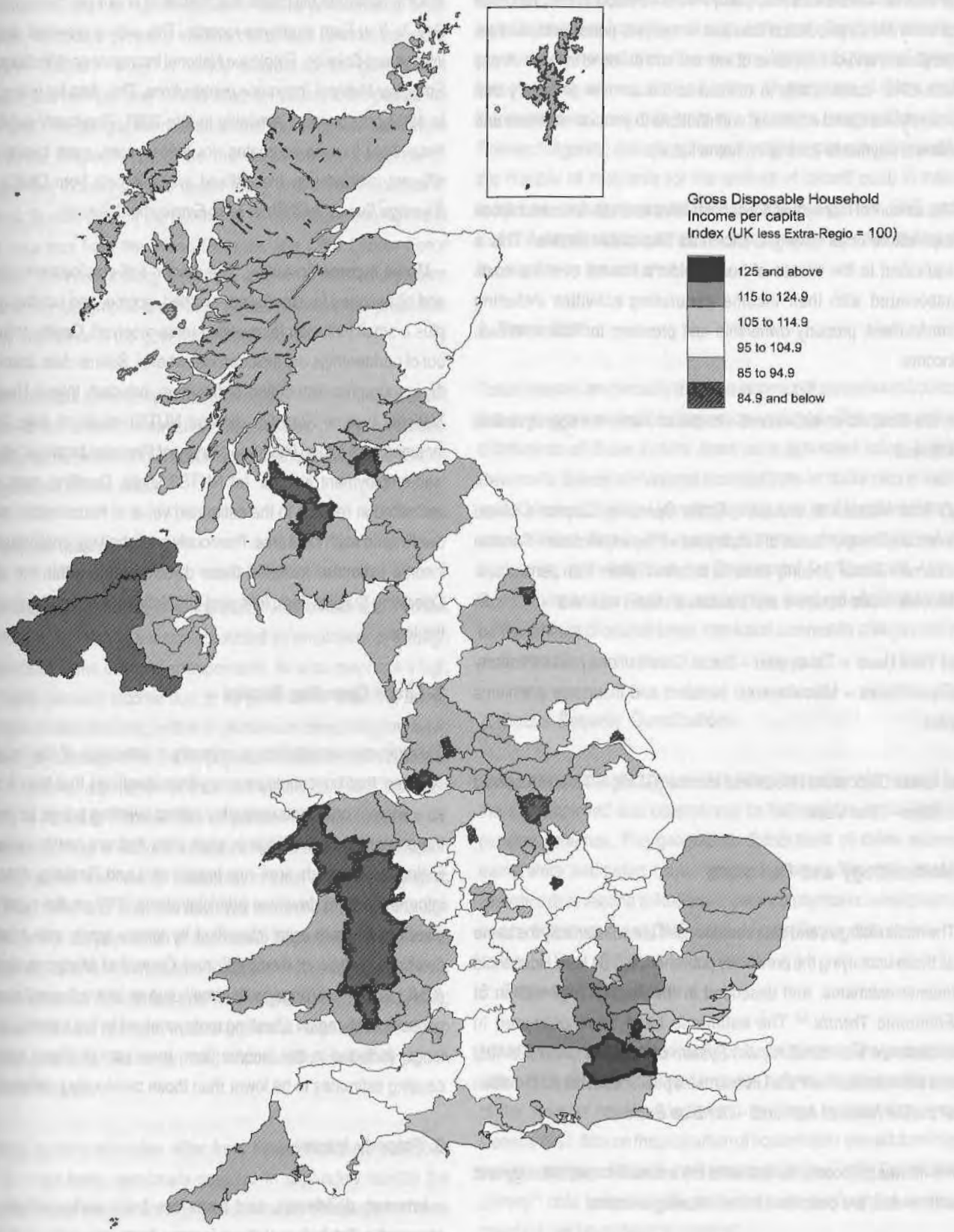


Figure **D**

Gross Disposable Household Income per capita, averaged over 1997 to 1999, NUTS3
Index (UK less Extra-Regio = 100)



1. Figures for Caithness and Sutherland and Ross and Cromarty; Inverness and Nairn and Moray, Badenoch and Stranthspey; Lochaber, Skye and Lochaish, and Argyll and the Islands have not been estimated separately.This map shows the average per capita index for the combined group of these NUTS3 areas.
2. Figures for Eilean Siar (Western Isles); Orkney Islands and Shetland Islands have not been estimated separately. This map shows the average per capita index for the combined group of these NUTS3 areas.

Components of Gross Disposable Household Income

Geographic areas differ considerably in relation to their main sources of income. Differences may partly reflect variation in the proportion of each area's population that are: employed, pensioners, welfare recipients, and/or recipients of interest and dividend income. Areas also differ considerably in relation to the amount of money that households spend on: taxes, contributions to pension schemes and interest payments (mainly on home loans).

The amount of money that households have available for consumption expenditure or for saving, is known as 'Disposable Income'. This is equivalent to the excess of householder's income over the costs associated with their income generating activities including employment, property ownership and provision for future pension income.

In the attached tables, income receipts and uses are aggregated as follows:

a) Total Household Income = Gross Operating Surplus + Mixed Income + Compensation of Employees + Property Income + Pension Income + Social Security benefits received (other than pensions) + Miscellaneous transfers and Insurance claims received

b) Total Uses = Taxes paid + Social Contributions paid + Property Expenditures + Miscellaneous transfers and Insurance premiums paid

c) Gross Disposable Household Income (GDHI) = Total Household Income - Total Uses

Methodology and Revisions

The methodologies and data sources used are substantially the same as those underlying the previously published NUTS1 level Household Income estimates, and described in the August 2001 edition of *Economic Trends*.[3,4] The estimates have been produced in accordance with the *European System of Accounts 1995 (ESA95)* and are consistent with the UK estimates published in the 2001 edition of the *UK National Accounts - The Blue Book*.

For individual income components the estimation methodology and source data are described in the following sections.

1. Employment Income

The largest source of Household Income is income from employment. Tables include estimates of the income in each area from:

– Compensation of Employees (including employee income and employers' social contributions). Estimation of the geographic distribution of this item is primarily based on Inland Revenue's *National Income Statistics*[5] estimates that are based on a 1 per cent sample of Pay As You Earn employee records. This survey provided data on: Wages and Salaries; Employee National Insurance contributions; and Employer National Insurance contributions. This data for years 1996 to 1999 only became available in late 2001. Previously published Household Income estimates, for these years, were based on a different methodology that utilised available data from ONS's *New Earnings Survey*, and *Short Term Employment Survey*.

– Mixed Income (including 'Sole trader' self-employment income, and allowances for smuggling, avoided income, and holding gains, plus a small inclusion for dwelling rents received. Capital transfers out of partnerships are included elsewhere). Source data describing the geographic distribution of this item included: Inland Revenue *National Income Statistics* data (at NUTS1 level) on Sole Trader incomes, and Inland Revenue *Survey of Personal Incomes*[6] data on 'self-employment income' (at NUTS3 level). Dwelling rents were estimated in relation to the estimated value of householder owned dwellings in each local area. Previously published regional household income estimates included these dwelling rents within the Gross Operating Surplus item, following UK National Accounts practice at the time.

2. Gross Operating Surplus

This income contribution is primarily a valuation of the 'housing services' that householders enjoy from dwellings that they occupy as owners. Local area estimates reflect dwelling prices as well as the proportion of dwellings in each area that are owner occupied. Estimates for each area are based on Land Registry data and information from devolved administrations,[7,8,9,10] on the number of dwellings in each area (classified by tenure type); sale prices of dwellings by type of dwelling[11]; and *Council of Mortgage Lenders (CML) Survey of Mortgage Centres*[12] data on 'mix-adjusted' dwelling prices in each region. Dwelling rents received by households are no longer included in this income item, (now part of Mixed Income), causing estimates to be lower than those previously published.

3. Property Income

– Interest, dividends, and transfers from partnerships. The geographic distribution of these income items was estimated using: Inland Revenue *National Income Statistics* data on partnership incomes; and Inland Revenue *Survey of Personal Incomes* data on incomes from interest and dividends.

– **'Attributed Property Income of Insurance Policy Holders'**, this being householders' financial interest in the earnings of funds invested by insurance companies. This money is mostly held by insurance companies as the basis for future pension and other payouts. Attributed property income comprises two components: 'pension' related – which is mainly relevant to non-government workers; and 'non-pension' related which is relevant to the population in general. The geographic distributions of these income items were estimated, respectively, to be the same as the patterns of: employment income (private sector only); and of total incomes in general. Source data on the number of private sector employees in each area was from the Inland Revenue and ONS *Labour Force Survey*.[13] This methodology resulted in downward revision of income estimates for geographic areas that had an above average proportion of their workforce in the government sector.

– **Rent receipts** are included but relate only to the very small amount of income that is from the rental of land and below ground resources. Its geographic distribution is assumed to be the same as the pattern of population across areas.

4. Pension Income

Pensions include the National Insurance Retirement and Widows pensions in addition to pensions provided by employers or through householder's own financial arrangements. An area may have a high per capita pension income due to its pensioners receiving above average private pensions, or due to pensioners comprising an above average percentage of the area's population. Source data relating to the geographic distribution of this item included: Inland Revenue *Survey of Personal Incomes* data on pension incomes in each area, and on the number of National Insurance Retirement Pensioners (with incomes above the taxable threshold) in each area; demographic data from ONS and from the devolved administrations on the age distribution of the population in each area; Department of Work and Pensions[14], and Northern Ireland Statistical Research Agency, data on the number of Retirement and Widows pensioners in each area; and data from the Northern Ireland Statistical Research Agency on the total amount of Retirement and Widows pension money paid in Northern Ireland.

Pension income estimates differ from those previously published due to it not being previously possible to separately identify the National Insurance Retirement Pension receipts of taxpayers in each local area. Separate geographic patterns can now be estimated for the incomes received from government pensions and from 'private' pensions.

5. Social Security Income, (excluding Retirement and Widows Pensions)

Items in this category include Income Support, Housing Benefit, benefits related to Invalidity and Incapacity, and other social security payments to households. The geographic distributions of these income items were estimated using: Department of Work and Pensions data, and data from the Northern Ireland Statistical Research Agency, describing for each major social security benefit, the number of recipients (or the amount of benefit paid) in each local area; and demographic data (by age group) from ONS and from the devolved administrations describing the age distribution of the population in each area.

6. Taxes Paid

Taxes included are primarily those on income but also include Council Tax and rates as well as taxes on vehicles. The geographic distributions of these income items were estimated using: Inland Revenue's *Survey of Personal Incomes* data on taxes paid in each area; Driver and Vehicle Licensing Agency data, and Northern Ireland administration data on the number of motor vehicles registered in each area; and data from the Department for Transport, Local Government and the Regions, and from the devolved administrations, on the amount of council taxes, rates and community charge paid in each area.

7. Social Security Contributions

These include contributions made by employees, employers and by the self-employed and unemployed to National Insurance and to pension schemes. The geographic distributions of these income items were estimated using: Inland Revenue *National Income Statistics* data relating to National Insurance payments by employers and by employees, and ONS *Labour Force Survey* data series.

8. Property Expenditures

– **Interest payments** are primarily on housing loans. The geographic distribution of these income items was estimated using: estimates of the value of householder owned dwellings in each local area; Census 1991 data on the proportion of householder owned dwellings that are mortgaged in each local area; and ONS's *Family Expenditure Survey*[15] data (only available at the regional level) on the average payment per household on 'interest'.

– **Rent paid** for rental of land is a very minor item and its geographic distribution is assumed to be the same as the pattern of population across areas.

9. Non-Life Insurance: Premiums and Claims

The geographic distribution of the insurance premium payments sub-items was estimated using: data on numbers of motor vehicles registered in each local area; estimates of incomes in each area; and demographic data for each area. For each local area, the National Accounting practice was followed – treating the insurance industry as providing benefits to householders in the form of a risk sharing service, and as payments made on insurance claims. The value of these benefits is estimated as equalling the cost of premiums paid in each year. In the attached tables the geographic pattern of benefits from insurance is assumed identical to the estimated pattern of premium payments.

10. Miscellaneous Transfers

– **Miscellaneous transfers received** include those from: Rest of the World, grants from Non-profit Institutions Serving Households (NPISH), and grants from central Government. The geographic distribution of these receipts was estimated in relation to the size of population in each local area.

– **Miscellaneous transfers paid** include: court fines, certain government fees, transfers to Rest of World and financial transactions involving NPISH. The geographic distribution of these payments was estimated in relation to the total household income in each local area.

Change in Naming

– **'Total Income'** is used in the accompanying tables to refer to the sum of all income items – whereas previous publications have included an item 'Total Resources' that referred to a summation of income items that included only 'net property income' rather than the gross sum of all property income items.

– **'Total Uses'**, in this publication, is inclusive of property 'outgoings' (mainly interest payments) which in previous publications had instead been deducted from 'Total Resources'.

– The basis for calculating 'Gross Disposable Household Income' has not changed.

Adjustment of outliers in survey based source data

Source data sets that are based on sample surveys may contain a small proportion of data cells that appear to include sizeable and erroneous 'errors'. By examining differences from the previous and following year figures, and year on year movements in related data series, some such data values may be identified as being 'outliers'. Such data values have been partially adjusted to bring them more into line with the movements in data values for other similar geographic areas. Individual 'outliers' have been replaced by adjusted value estimates. This practice replaced a previously used 'moving average' methodology.

European System of Accounts 1995 (ESA95)

The regional, sub-regional and local area estimates of household income published here are consistent with the *European System of Accounts 1995* (ESA95). ESA95 is based on the *System of National Accounts 1993* (SNA93)[16] which is being adopted worldwide. The European system, which is being adopted by EU member states, is consistent with SNA93 but is more specific and prescriptive in certain parts. *National Accounts Concepts Sources & Methods (1998)*[17] gives detailed descriptions of individual national accounting terminology and methods applied in the UK.

NUTS geographies

The geographies used in this article are those introduced by the ONS in the summer of 1998, following reorganisation of the UK's local government structure.

The Nomenclature of Units for Territorial Statistics (NUTS) provides the geographic description of the UK, and its component areas, that is used for the production of regional statistics for the European Union. There are five levels of NUTS in the UK. Household Income has only been estimated for the first three. These are:

NUTS1 – 12 areas – Government Office Regions in England, and Scotland, Wales, and Northern Ireland.
NUTS2 – 37 areas – often referred to as 'sub-regions'.
NUTS3 – 133 areas – generally groups of unitary authorities or districts, also known as 'local areas'.

Extra-Regio

The contribution to GDHI of UK embassy staff stationed abroad, together with that of UK forces stationed overseas is included in the 'Extra-Regio' category rather than being assigned to a land area of the UK. Where measures of UK income per capita are calculated, including indexes, these are net of the 'Extra-Regio' part of total UK income.

General

Tables of per capita index values assist income comparisons across geographic areas. Where a particular area had its income index series increase over time, this indicates the area has had an income growth rate that, on a per capita basis, exceeded the UK average growth rate over the time period. Where an index value declined over time, for a particular area, this indicates a slower than average rate of increase, on a per capita basis. Index values that decline over time are not by themselves evidence that real per capita incomes have declined.

Accuracy

In most of the published tables, no attempt is made to round estimates beyond the nearest £million. In some instances figures appear to have more precision than evidence warrants. Reasons for this approach are as follows:

- Rounded figures can distort apparent differences over time or between items.
- Not rounding beyond the nearest £million aids users who prepare derived statistics, by avoiding the accumulation of rounding errors which can occur when a number of rounded numbers are manipulated.

The regional accounts estimates are partly based on sample survey data and the reliability of the results is related to the sample sizes used. This usually means that income estimates for areas with small populations are subject to a greater degree of uncertainty than those for geographic areas having larger populations.

The Regional Accounts database

Further information is available on the National Statistics website at:
www.statistics.gov.uk/themes/economy/articles/regionalaccounts.asp

and on request from:
Regional Accounts Branch, Office for National Statistics, Room B4/10, 1 Drummond Gate, London SW1V 2QQ. Tel: 020 7533 5793, fax: 020 7533 5799, e-mail: regionalaccounts@ons.gov.uk

The estimates reported here were prepared with the assistance of Amanda Thomas and members of the Regional Accounts Branch, and of the Statistics and Research for Regional Policy Branch.

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Annex A

Diversity of the Regions

Scotland, Wales, Northern Ireland and the regions of England are all different in character, industrial structure and economic performance. The table below shows some of the differences. Scotland has the largest area, but has a low population density. The London region has by far the smallest area, but the second largest population – over 7 million. In contrast, Northern Ireland has a population of only 1.7 million. Variations in the Regions' populations are reflected in the sizes of their GDP and Household Incomes.

The wide variation in the sizes of the Regions makes it difficult to compare their economic performance using monetary totals. Data tabulated below describes each region's share of the various UK totals. Regions with the highest Household Income (or GDP) per capita are those that have a percentage of UK Household Income (or GDP) that exceeds the region's percentage share of UK total population.

In making comparisons it is important to note the implications of regional differences in demographic structures. For example, in Northern Ireland, households have a high proportion of children (24 per cent of the population were aged under 16 in 1999 compared with 19 to 21 per cent in other regions). This will tend to depress the per capita measures of income and production for Northern Ireland.

Key Regional Statistics – Percentages of the UK

Country / Region	Area 1999	Population 1999	Total economically active* June-99	Gross Domestic Product 1999	Individual Consumption Expenditure# 1999	Total Household Income 1999
United Kingdom less Extra-Regio	243820 sq km	59.5m	29.1m	£786.2bn	£586.9bn	£929.3bn
North East	3.5	4.3	4.0	3.3	3.5	3.7
North West	5.8	11.6	11.2	9.9	10.9	10.5
Yorkshire & the Humber	6.4	8.5	8.4	7.3	7.7	7.5
East Midlands	6.4	7.0	7.3	6.5	6.5	6.5
West Midlands	5.3	9.0	9.1	8.1	8.4	8.3
East	7.8	9.1	9.4	10.4	9.3	9.8
London	0.6	12.2	12.3	15.6	15.2	15.4
South East	7.8	13.6	14.2	15.5	15.7	15.5
South West	9.8	8.3	8.6	7.4	8.1	8.1
England	53.4	83.6	84.4	84.0	85.3	85.4
Wales	8.5	4.9	4.5	3.9	4.1	4.1
Scotland	32.0	8.6	8.5	8.1	8.3	8.2
Northern Ireland	5.8	2.8	2.5	2.2	2.4	2.3

* Economic activity covers those people who are either in employment or ILO unemployed.

These estimates were published in the August 2001 edition of *Economic Trends*.

Annex B

List of Tables

Table 1 Total Household Income[1] by Region (NUTS1) 1995–1999

	1995	1996	1997	1998	1999
Total Household Income (£million)					
United Kingdom[2]	754 140	796 674	843 244	893 466	930 887
North East	28 810	30 169	31 913	32 947	34 111
North West	80 562	84 957	89 563	93 569	97 705
Yorkshire and the Humber	57 964	61 943	64 684	68 748	70 011
East Midlands	49 436	52 692	55 061	57 759	60 480
West Midlands	63 732	66 702	69 466	73 738	77 569
East	72 767	77 164	81 804	87 008	90 712
London	109 563	116 859	126 154	136 966	143 088
South East	114 268	121 783	130 769	139 224	144 133
South West	61 585	64 561	68 719	72 928	75 627
England	638 687	676 831	718 134	762 887	793 435
Wales	32 551	33 981	35 209	36 592	37 926
Scotland	63 668	66 030	68 814	72 007	76 325
Northern Ireland	17 778	18 375	19 611	20 557	21 642
United Kingdom less Extra-Regio[3]	752 684	795 217	841 767	892 042	929 329
Extra-Regio[3]	1 456	1 457	1 477	1 424	1 558
Total Household Income per capita (£)					
United Kingdom less Extra-Regio[3]	12 842	13 522	14 264	15 059	15 619
North East	11 059	11 601	12 301	12 723	13 215
North West	11 676	12 328	13 009	13 579	14 200
Yorkshire and the Humber	11 525	12 301	12 842	13 633	13 872
East Midlands	11 988	12 723	13 247	13 853	14 430
West Midlands	12 010	12 546	13 056	13 828	14 538
East	13 841	14 579	15 336	16 181	16 740
London	15 636	16 519	17 713	19 057	19 641
South East	14 562	15 425	16 431	17 395	17 844
South West	12 759	13 335	14 093	14 879	15 323
England	13 060	13 788	14 571	15 414	15 948
Wales	11 160	11 633	12 029	12 474	12 913
Scotland	12 395	12 876	13 434	14 064	14 910
Northern Ireland	10 743	11 009	11 671	12 174	12 792
Total Household Income per capita, UK less Extra-Regio = 100					
United Kingdom less Extra-Regio[3]	100	100	100	100	100
North East	86	86	86	84	85
North West	91	91	91	90	91
Yorkshire and the Humber	90	91	90	91	89
East Midlands	93	94	93	92	92
West Midlands	94	93	92	92	93
East	108	108	108	107	107
London	122	122	124	127	126
South East	113	114	115	116	114
South West	99	99	99	99	98
England	102	102	102	102	102
Wales	87	86	84	83	83
Scotland	97	95	94	93	95
Northern Ireland	84	81	82	81	82

1. Household income covers the income received by households and non-profit institutions serving households.
2. Components may not sum to totals as a result of rounding.
3. Excludes Extra-Regio: parts of UK economic territory that cannot be attached to any particular region.

Table 2 Gross Disposable Household Income[1] by Region (NUTS1) 1995–1999

	1995	1996	1997	1998	1999
Gross Disposable Household Income (£million)					
United Kingdom[2]	499 059	526 693	562 454	575 332	604 543
North East	19 597	20 731	22 193	22 231	23 278
North West	54 329	57 429	61 271	62 070	65 372
Yorkshire and the Humber	39 131	41 912	44 203	45 920	47 061
East Midlands	32 450	34 791	36 723	37 253	39 436
West Midlands	42 127	44 196	46 546	47 889	50 909
East	47 373	50 193	53 474	54 558	57 647
London	70 785	75 340	81 800	84 890	88 930
South East	72 840	77 486	84 199	85 622	89 299
South West	41 542	43 160	46 375	47 664	49 718
England	420 175	445 240	476 785	488 097	511 651
Wales	22 582	23 533	24 555	25 017	26 051
Scotland	42 568	43 799	45 986	46 871	50 529
Northern Ireland	12 707	13 075	14 056	14 354	15 223
United Kingdom less Extra-Regio[3]	498 032	525 647	561 382	574 339	603 453
Extra-Regio[3]	1 027	1 046	1 072	993	1 090
Gross Disposable Household Income per capita (£)					
United Kingdom less Extra-Regio[3]	8 497	8 938	9 513	9 696	10 142
North East	7 522	7 972	8 554	8 585	9 018
North West	7 874	8 334	8 900	9 008	9 501
Yorkshire and the Humber	7 780	8 323	8 776	9 106	9 325
East Midlands	7 869	8 401	8 835	8 935	9 409
West Midlands	7 939	8 313	8 748	8 981	9 541
East	9 011	9 484	10 025	10 147	10 638
London	10 102	10 650	11 485	11 811	12 207
South East	9 282	9 814	10 579	10 698	11 055
South West	8 606	8 915	9 511	9 725	10 073
England	8 592	9 070	9 674	9 862	10 284
Wales	7 742	8 056	8 389	8 529	8 870
Scotland	8 287	8 541	8 977	9 154	9 870
Northern Ireland	7 678	7 834	8 365	8 500	8 998
Gross Disposable Household Income per capita, UK less Extra-Regio = 100					
United Kingdom less Extra-Regio[3]	100	100	100	100	100
North East	89	89	90	89	89
North West	93	93	94	93	94
Yorkshire and the Humber	92	93	92	94	92
East Midlands	93	94	93	92	93
West Midlands	93	93	92	93	94
East	106	106	105	105	105
London	119	119	121	122	120
South East	109	110	111	110	109
South West	101	100	100	100	99
England	101	101	102	102	101
Wales	91	90	88	88	87
Scotland	98	96	94	94	97
Northern Ireland	90	88	88	88	89

1. Household income covers the income received by households and non-profit institutions serving households.
2. Components may not sum to totals as a result of rounding.
3. Excludes Extra-Regio: parts of UK economic territory that cannot be attached to any particular region.

Table 3a Total Household Income[1] by NUTS 1 & 2 Areas

NUTS Level 1 NUTS Level 2	Total Household Income (£million)				
	1995	1996	1997	1998	1999
UNITED KINGDOM[2]	754 140	796 674	843 244	893 466	930 887
England	638 687	676 831	718 134	762 887	793 435
North East	28 810	30 169	31 913	32 947	34 111
Tees Valley and Durham	12 891	13 570	14 256	14 645	15 315
Northumberland and Tyne and Wear	15 918	16 599	17 657	18 302	18 797
North West	80 562	84 957	89 563	93 569	97 705
Cumbria	5 871	6 192	6 453	6 752	6 885
Cheshire	12 847	13 700	14 695	15 452	16 349
Greater Manchester	29 459	31 199	32 955	34 522	35 617
Lancashire	16 302	17 228	18 030	18 692	19 734
Merseyside	16 083	16 639	17 430	18 151	19 120
Yorkshire and the Humber	57 964	61 943	64 684	68 748	70 011
East Riding and North Lincolnshire	10 061	10 811	11 132	11 779	12 072
North Yorkshire	9 917	10 493	10 892	11 755	12 215
South Yorkshire	13 868	14 813	15 577	16 531	16 825
West Yorkshire	24 118	25 826	27 083	28 683	28 898
East Midlands	49 436	52 692	55 061	57 759	60 480
Derbyshire and Nottinghamshire	22 749	24 340	25 197	26 633	27 687
Leicestershire, Rutland and Northamptonshire	19 039	20 312	21 586	22 439	23 515
Lincolnshire[3]	7 647	8 040	8 277	8 687	9 277
West Midlands[4]	63 732	66 702	69 466	73 738	77 569
Herefordshire, Worcestershire and Warwickshire	16 231	16 931	17 553	18 815	19 702
Shropshire and Staffordshire	18 106	18 912	19 583	20 884	22 301
West Midlands	29 395	30 858	32 331	34 039	35 566
East	72 767	77 164	81 804	87 008	90 712
East Anglia	27 079	28 698	29 964	31 687	32 902
Bedfordshire and Hertfordshire	23 871	25 177	26 846	28 736	29 842
Essex	21 818	23 288	24 994	26 585	27 968
London	109 563	116 859	126 154	136 966	143 088
Inner London	44 924	47 988	51 737	56 370	60 091
Outer London	64 640	68 871	74 417	80 596	82 997
South East	114 268	121 783	130 769	139 224	144 133
Berkshire, Buckinghamshire and Oxfordshire	31 914	34 242	36 863	39 337	40 570
Surrey, East and West Sussex	36 397	41 122	44 530	47 802	49 746
Hampshire and Isle of Wight	23 612	24 769	26 377	27 892	28 444
Kent	20 345	21 650	22 999	24 194	25 372
South West	61 585	64 561	68 719	72 928	75 627
Gloucestershire, Wiltshire and North Somerset	28 645	30 081	32 212	34 239	35 303
Dorset and Somerset	14 745	15 581	16 629	17 700	18 688
Cornwall and Isles of Scilly[3]	5 422	5 686	5 973	6 338	6 563
Devon	12 772	13 213	13 905	14 651	15 073
Wales	32 551	33 981	35 209	36 592	37 926
West Wales and the Valleys	20 203	21 153	21 919	22 696	23 500
East Wales	12 348	12 827	13 290	13 895	14 426
Scotland	63 668	66 030	68 814	72 007	76 325
North Eastern Scotland	6 924	7 258	7 617	7 911	8 202
Eastern Scotland	24 414	25 433	26 479	27 788	29 826
South Western Scotland	27 895	28 783	30 074	31 504	33 178
Highlands and Islands	4 436	4 556	4 643	4 805	5 120
Northern Ireland[3]	17 778	18 375	19 611	20 557	21 642
Extra-Regio[5]	1 456	1 457	1 477	1 424	1 558

1. Household income covers the income received by households and non-profit institutions serving households.
2. Components may not sum to totals as a result of rounding.
3. This area is represented at more than one NUTS level.
4. NUTS1 area West Midlands includes NUTS2 area West Midlands in addition to the other two NUTS2 areas listed.
5. Extra-Regio includes those parts of UK economic territory that cannot be attached to any particular region.

Table 3b Total Household Income[1] by NUTS 1 & 2 Areas

NUTS Level 1 NUTS Level 2	Total Household Income (£ per capita)				
	1995	1996	1997	1998	1999
UNITED KINGDOM[2] excl. Extra-Regio	12 842	13 522	14 264	15 059	15 619
England	13 060	13 788	14 571	15 414	15 948
North East	11 059	11 601	12 301	12 723	13 215
Tees Valley and Durham	11 048	11 640	12 245	12 580	13 172
Northumberland and Tyne and Wear	11 067	11 570	12 346	12 839	13 250
North West	11 676	12 328	13 009	13 579	14 200
Cumbria	11 974	12 623	13 112	13 700	13 998
Cheshire	13 135	13 979	14 963	15 699	16 640
Greater Manchester	11 426	12 113	12 814	13 394	13 821
Lancashire	11 431	12 092	12 651	13 100	13 843
Merseyside	11 269	11 714	12 332	12 879	13 622
Yorkshire and the Humber	11 525	12 301	12 842	13 633	13 872
East Riding and North Lincolnshire	11 315	12 192	12 583	13 338	13 693
North Yorkshire	13 574	14 282	14 767	15 833	16 339
South Yorkshire	10 636	11 353	11 940	12 676	12 918
West Yorkshire	11 453	12 244	12 835	13 573	13 661
East Midlands	11 988	12 723	13 247	13 853	14 430
Derbyshire and Nottinghamshire	11 433	12 208	12 613	13 305	13 797
Leicestershire, Rutland and Northamptonshire	12 507	13 260	14 023	14 528	15 114
Lincolnshire[3]	12 499	13 055	13 364	13 941	14 758
West Midlands[4]	12 010	12 546	13 056	13 828	14 538
Herefordshire, Worcestershire and Warwickshire	13 606	14 143	14 563	15 514	16 201
Shropshire and Staffordshire	12 264	12 805	13 189	14 002	14 937
West Midlands	11 146	11 678	12 290	12 951	13 541
East	13 841	14 579	15 336	16 181	16 740
East Anglia	12 755	13 399	13 860	14 528	14 983
Bedfordshire and Hertfordshire	15 332	16 092	17 023	18 070	18 590
Essex	13 830	14 682	15 667	16 557	17 289
London	15 636	16 519	17 713	19 057	19 641
Inner London	16 781	17 722	18 970	20 419	21 331
Outer London	14 928	15 773	16 933	18 207	18 576
South East	14 562	15 425	16 431	17 395	17 844
Berkshire, Buckinghamshire and Oxfordshire	15 587	16 575	17 673	18 743	19 171
Surrey, East and West Sussex	15 318	16 323	17 501	18 676	19 184
Hampshire and Isle of Wight	13 556	14 131	14 965	15 750	15 970
Kent	13 115	13 902	14 687	15 366	15 985
South West	12 759	13 335	14 093	14 879	15 323
Gloucestershire, Wiltshire and North Somerset	13 476	14 093	14 980	15 836	16 191
Dorset and Somerset	12 715	13 380	14 162	14 994	15 762
Cornwall and Isles of Scilly[3]	11 232	11 764	12 251	12 925	13 268
Devon	12 063	12 474	13 069	13 713	14 021
Wales	11 160	11 633	12 029	12 474	12 913
West Wales and the Valleys	10 779	11 309	11 727	12 153	12 585
East Wales	11 845	12 211	12 565	13 038	13 485
Scotland	12 395	12 876	13 434	14 064	14 910
North Eastern Scotland	13 540	14 233	15 016	15 693	16 262
Eastern Scotland	12 904	13 447	13 976	14 667	15 698
South Western Scotland	11 815	12 223	12 799	13 395	14 143
Highlands and Islands	11 913	12 249	12 517	13 003	13 877
Northern Ireland[3]	10 743	11 009	11 671	12 174	12 792

1. Household income covers the income received by households and non-profit institutions serving households.
2. Components may not sum to totals as a result of rounding.
3. This area is represented at more than one NUTS level.
4. NUTS1 area West Midlands includes NUTS2 area West Midlands in addition to the other two NUTS2 areas listed.

Table 3c Total Household Income[1] by NUTS 1 & 2 Areas

NUTS Level 1 NUTS Level 2	Total Household Income (£ per capita, Index, UK less Extra-Regio = 100)				
	1995	1996	1997	1998	1999
UNITED KINGDOM[2] excl. Extra-Regio	100	100	100	100	100
England	102	102	102	102	102
North East	86	86	86	84	85
Tees Valley and Durham	86	86	86	84	84
Northumberland and Tyne and Wear	86	86	87	85	85
North West	91	91	91	90	91
Cumbria	93	93	92	91	90
Cheshire	102	103	105	104	107
Greater Manchester	89	90	90	89	88
Lancashire	89	89	89	87	89
Merseyside	88	87	86	86	87
Yorkshire and the Humber	90	91	90	91	89
East Riding and North Lincolnshire	88	90	88	89	88
North Yorkshire	106	106	104	105	105
South Yorkshire	83	84	84	84	83
West Yorkshire	89	91	90	90	87
East Midlands	93	94	93	92	92
Derbyshire and Nottinghamshire	89	90	88	88	88
Leicestershire, Rutland and Northamptonshire	97	98	98	96	97
Lincolnshire[3]	97	97	94	93	94
West Midlands[4]	94	93	92	92	93
Herefordshire, Worcestershire and Warwickshire	106	105	102	103	104
Shropshire and Staffordshire	96	95	92	93	96
West Midlands	87	86	86	86	87
East	108	108	108	107	107
East Anglia	99	99	97	96	96
Bedfordshire and Hertfordshire	119	119	119	120	119
Essex	108	109	110	110	111
London	122	122	124	127	126
Inner London	131	131	133	136	137
Outer London	116	117	119	121	119
South East	113	114	115	116	114
Berkshire, Buckinghamshire and Oxfordshire	121	123	124	124	123
Surrey, East and West Sussex	119	121	123	124	123
Hampshire and Isle of Wight	106	104	105	105	102
Kent	102	103	103	102	102
South West	99	99	99	99	98
Gloucestershire, Wiltshire and North Somerset	105	104	105	105	104
Dorset and Somerset	99	99	99	100	101
Cornwall and Isles of Scilly[3]	87	87	86	86	85
Devon	94	92	92	91	90
Wales	87	86	84	83	83
West Wales and the Valleys	84	84	82	81	81
East Wales	92	90	88	87	86
Scotland	97	95	94	93	95
North Eastern Scotland	105	105	105	104	104
Eastern Scotland	100	99	98	97	101
South Western Scotland	92	90	90	89	91
Highlands and Islands	93	91	88	86	89
Northern Ireland[3]	84	81	82	81	82

1. Household income covers the income received by households and non-profit institutions serving households.
2. Components may not sum to totals as a result of rounding.
3. This area is represented at more than one NUTS level.
4. NUTS1 area West Midlands includes NUTS2 area West Midlands in addition to the other two NUTS 2 areas listed.

Table 4a Gross Disposable Household Income[1] by NUTS 1 & 2 Areas

NUTS Level 1 NUTS Level 2	Gross Disposable Household Income (£million)				
	1995	1996	1997	1998	1999
UNITED KINGDOM[2]	499 059	526 693	562 454	575 332	604 543
England	420 175	445 240	476 785	488 097	511 651
North East	19 597	20 731	22 193	22 231	23 278
Tees Valley and Durham	8 786	9 336	9 908	9 908	10 481
Northumberland and Tyne and Wear	10 811	11 395	12 285	12 323	12 797
North West	54 329	57 429	61 271	62 070	65 372
Cumbria	3 976	4 204	4 429	4 469	4 642
Cheshire	8 231	8 830	9 629	9 751	10 404
Greater Manchester	19 937	21 165	22 604	22 980	23 956
Lancashire	10 958	11 614	12 298	12 405	13 256
Merseyside	11 227	11 616	12 311	12 465	13 113
Yorkshire and the Humber	39 131	41 912	44 203	45 920	47 061
East Riding and North Lincolnshire	6 860	7 353	7 637	7 910	8 166
North Yorkshire	6 760	7 112	7 418	7 788	8 080
South Yorkshire	9 465	10 138	10 758	11 188	11 485
West Yorkshire	16 047	17 310	18 390	19 034	19 330
East Midlands	32 450	34 791	36 723	37 253	39 436
Derbyshire and Nottinghamshire	14 999	16 187	16 952	17 383	18 278
Leicestershire, Rutland and Northamptonshire	12 214	13 112	14 080	14 048	14 859
Lincolnshire[3]	5 238	5 493	5 690	5 821	6 300
West Midlands[4]	42 127	44 196	46 546	47 889	50 909
Herefordshire, Worcestershire and Warwickshire	10 535	10 971	11 472	11 813	12 451
Shropshire and Staffordshire	11 911	12 488	13 110	13 557	14 713
West Midlands	19 682	20 738	21 964	22 519	23 745
East	47 373	50 193	53 474	54 558	57 647
East Anglia	18 070	19 123	20 095	20 442	21 471
Bedfordshire and Hertfordshire	15 169	15 964	17 066	17 420	18 302
Essex	14 133	15 106	16 313	16 695	17 874
London	70 785	75 340	81 800	84 890	88 930
Inner London	28 662	30 440	32 972	34 130	36 439
Outer London	42 124	44 900	48 828	50 759	52 491
South East	72 840	77 486	84 199	85 622	89 299
Berkshire, Buckinghamshire and Oxfordshire	19 787	21 089	22 981	23 333	24 280
Surrey, East and West Sussex	24 320	26 115	28 753	29 484	30 929
Hampshire and Isle of Wight	15 407	16 096	17 246	17 486	17 942
Kent	13 326	14 186	15 219	15 318	16 147
South West	41 542	43 160	46 375	47 664	49 718
Gloucestershire, Wiltshire and North Somerset	18 918	19 638	21 233	21 787	22 553
Dorset and Somerset	9 954	10 482	11 292	11 655	12 392
Cornwall and Isles of Scilly[3]	3 778	3 933	4 167	4 305	4 506
Devon	8 891	9 107	9 682	9 918	10 268
Wales	22 582	23 533	24 555	25 017	26 051
West Wales and the Valleys	14 189	14 845	15 492	15 743	16 360
East Wales	8 393	8 688	9 063	9 274	9 691
Scotland	42 568	43 799	45 986	46 871	50 529
North Eastern Scotland	4 434	4 606	4 917	4 960	5 276
Eastern Scotland	16 221	16 794	17 561	17 881	19 492
South Western Scotland	18 912	19 350	20 374	20 874	22 326
Highlands and Islands	3 002	3 048	3 135	3 156	3 435
Northern Ireland[3]	12 707	13 075	14 056	14 354	15 223
Extra-Regio[5]	1 027	1 046	1 072	993	1 090

1. Household income covers the income received by households and non-profit institutions serving households.
2. Components may not sum to totals as a result of rounding.
3. This area is represented at more than one NUTS level.
4. NUTS1 area West Midlands includes NUTS2 area West Midlands in addition to the other two NUTS2 areas listed.
5. Extra-Regio includes those parts of UK economic territory that cannot be attached to any particular region.

Table 4b Gross Disposable Household Income[1] by NUTS 1 & 2 Areas

NUTS Level 1 NUTS Level 2	Gross Disposable Household Income (£ per capita)				
	1995	1996	1997	1998	1999
UNITED KINGDOM[2] excl. Extra-Regio	8 497	8 938	9 513	9 696	10 142
England	8 592	9 070	9 674	9 862	10 284
North East	7 522	7 972	8 554	8 585	9 018
Tees Valley and Durham	7 530	8 008	8 511	8 511	9 014
Northumberland and Tyne and Wear	7 516	7 943	8 590	8 645	9 021
North West	7 874	8 334	8 900	9 008	9 501
Cumbria	8 110	8 570	8 999	9 067	9 438
Cheshire	8 416	9 010	9 805	9 907	10 589
Greater Manchester	7 733	8 218	8 789	8 916	9 296
Lancashire	7 684	8 152	8 630	8 694	9 299
Merseyside	7 867	8 178	8 710	8 844	9 342
Yorkshire and the Humber	7 780	8 323	8 776	9 106	9 325
East Riding and North Lincolnshire	7 714	8 292	8 632	8 957	9 263
North Yorkshire	9 253	9 680	10 057	10 490	10 808
South Yorkshire	7 259	7 770	8 246	8 579	8 818
West Yorkshire	7 620	8 206	8 715	9 007	9 138
East Midlands	7 869	8 401	8 835	8 935	9 409
Derbyshire and Nottinghamshire	7 538	8 119	8 486	8 684	9 108
Leicestershire, Rutland and Northamptonshire	8 023	8 560	9 147	9 096	9 550
Lincolnshire[3]	8 561	8 918	9 187	9 342	10 022
West Midlands[4]	7 939	8 313	8 748	8 981	9 541
Herefordshire, Worcestershire and Warwickshire	8 831	9 164	9 518	9 740	10 238
Shropshire and Staffordshire	8 068	8 455	8 829	9 090	9 855
West Midlands	7 463	7 848	8 349	8 568	9 041
East	9 011	9 484	10 025	10 147	10 638
East Anglia	8 512	8 928	9 295	9 372	9 777
Bedfordshire and Hertfordshire	9 743	10 203	10 822	10 955	11 401
Essex	8 959	9 523	10 226	10 398	11 050
London	10 102	10 650	11 485	11 811	12 207
Inner London	10 706	11 242	12 089	12 363	12 935
Outer London	9 728	10 283	11 110	11 467	11 748
South East	9 282	9 814	10 579	10 698	11 055
Berkshire, Buckinghamshire and Oxfordshire	9 664	10 208	11 018	11 118	11 473
Surrey, East and West Sussex	9 702	10 366	11 300	11 519	11 928
Hampshire and Isle of Wight	8 845	9 183	9 785	9 874	10 074
Kent	8 591	9 109	9 718	9 729	10 173
South West	8 606	8 915	9 511	9 725	10 073
Gloucestershire, Wiltshire and North Somerset	8 900	9 201	9 875	10 077	10 343
Dorset and Somerset	8 583	9 001	9 616	9 873	10 452
Cornwall and Isles of Scilly[3]	7 827	8 138	8 547	8 778	9 109
Devon	8 398	8 597	9 101	9 283	9 552
Wales	7 742	8 056	8 389	8 529	8 870
West Wales and the Valleys	7 571	7 936	8 288	8 430	8 761
East Wales	8 050	8 270	8 568	8 701	9 059
Scotland	8 287	8 541	8 977	9 154	9 870
North Eastern Scotland	8 670	9 033	9 693	9 839	10 461
Eastern Scotland	8 574	8 879	9 269	9 439	10 259
South Western Scotland	8 010	8 218	8 671	8 875	9 517
Highlands and Islands	8 062	8 195	8 451	8 541	9 310
Northern Ireland[3]	7 678	7 834	8 365	8 500	8 998

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4. NUTS1 area West Midlands includes NUTS2 area West Midlands in addition to the other two NUTS2 areas listed.