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In Brief

Correction

The effect of annual chain-linking on *Blue Book* 2002 annual growth estimates – article published in April 2003 issue:

We regret to inform you that there were two errors in the conclusions section:

In the first paragraph of the conclusion, the penultimate sentence 'There are small upward effects from 1999 to 2001' should read 'There are small downward effects from 1999 to 2001'.

In the final sentence of the article, 'the upward effect on GDP growth rates is greater' should read 'the effect on GDP growth rates is greater'.

These changes have already been made to the electronic version of the article on the National Statistics website:
http://nswebcopy/cci/article.asp?id=328

Articles

This month we feature four articles

Caroline Lakin of the 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, then increased during the second half of the 1980s. Inequality was relatively flat in the 1990s, but with some indications of a slight fall in the first half of the 1990s and a slight rise since then.

Mari Frogner of the DWP and Nigel Stuttard of the ONS summarise the development of an UK Social Accounting Matrix (SAM). The methodology improves on previous work carried out by ONS in 1996 by developing a SAM, which is both more detailed and consistent with the European System of Accounts (ESA95). A SAM is an analytical framework in which social and economic data are integrated and harmonised. The matrix representation of these data has the advantage that both sides of a transaction are identifies, both who pays and who receives.

Leonidas Akritidis of the ONS examines the latest revisions to quarterly GDP growth. This Revisions Analysis investigates the change from the first estimate to the latest official estimate of the quarterly growth in GDP at constant prices. The article examines the bias and dispersion of the quarterly revisions at the different stages of the National Accounts process for the period of 1993 Q1 to 1999 Q4. The average revisions show a positive bias of 0.189 percentage points between the first and last estimates of GDP growth.

Simon Humphries of the ONS describes the IMF Co-ordinated Portfolio Investment Survey, which was launched by the International Monetary Fund (IMF) in response to the recommendations contained in the "Report on the Measurement of International Capital Flows" published in 1992. The report highlighted the increasing importance of portfolio investment across International borders, reflecting the liberalisation of financial markets, financial innovation, and the changing behaviour of investors. The increased liberalisation has brought measurement difficulties which have been reflected in the imbalances between global financial assets and liabilities. If perfectly measured, assets and liabilities have consistently exceeded recorded assets.

Continued...

Changes

Table 4.5A

The table now shows seasonally adjusted data. As population data for 1991–2000 have been published, the data have been revised, replacing the interim population estimates published in October 2002. For further details, please see: **www.statistics.gov.uk/cci/nugget.asp?id=207**

Recent economic publications

Quarterly

Consumer Trends: 2002 quarter 4. Available for downloading from the National Statistics website **www.statistics.gov.uk/products/p242.asp**

United Kingdom Economic Accounts: 2002 quarter 4. TSO, ISBN 0 11 621638 7. Price £26. Also available for downloading from the National Statistics website **www.statistics.gov.uk/products/p1904.asp**

UK Trade in Goods analysed in terms of industries (MQ10): 2002 quarter 4. Available for downloading from the National Statistics website **www.statistics.gov.uk/products/p731.asp**

Monthly

Financial Statistics: April 2003. TSO, ISBN 0 11 621595 X. Price £23.50.

Focus on Consumer Price Indices: March 2003. Available for downloading from the National Statistics website **www.statistics.gov.uk/products/p867.asp**

Monthly Review of External Trade Statistics (MM24): March 2003. Available for downloading from the National Statistics website **www.statistics.gov.uk/products/p613.asp** from 15 May.

TSO publications are available by telephoning 0870 600 5522, fax 0870 600 5533 or online at **www.tso.co.uk/bookshop**

Economic Update - May 2003

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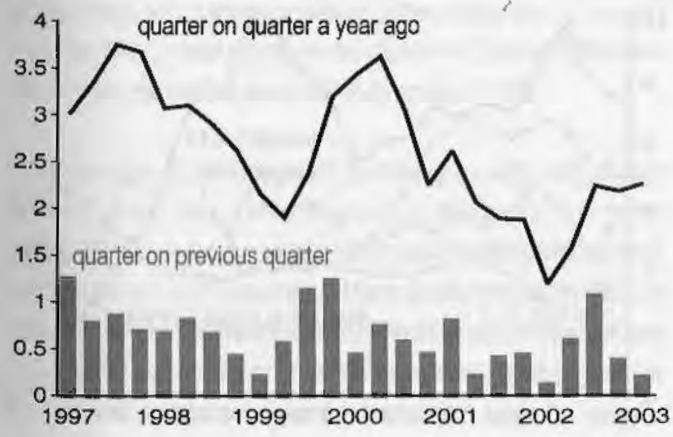
Overview

Preliminary GDP data shows growth slowed down in the last quarter of 2002 and the first quarter of 2003. Similarly external indices of output show a weaker position than earlier in 2002, although the latest monthly manufacturing figures show output rising slightly. Retail sales weakened into 2003, but evidence of any fall in household demand is still fairly limited. Private investment demand stabilised during 2002 after the recent falls. This stabilisation is set against a background of high indebtedness and an increase in bankruptcies. Government demand has been stronger. However weaker revenues have returned public sector finances to deficit. Trade demand may have stabilised after the falls from the strong second quarter demand. Overall labour market aggregates remain fairly stable, and private sector wage pressures are minimal. Producer prices have picked up, driven by oil price rises, while consumer prices remain above target.

GDP activity – overview

The preliminary estimate showed gross domestic product (GDP) quarterly growth in the first quarter of 2003 at 0.2 per cent, down from 0.4 per cent in the fourth quarter of 2002 and 1.0 per cent in the third quarter (figure 1). Comparing the first quarter of 2003 with the same quarter a year ago growth was 2.3 per cent, slightly up from the 2.2 per cent in the year to the fourth quarter of 2002.

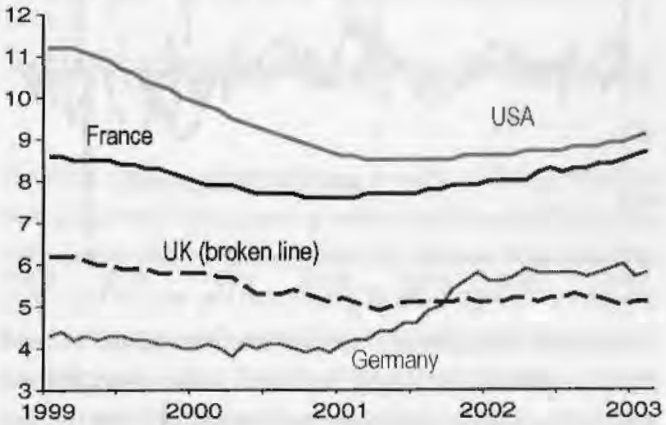
Figure 1
GDP
growth



The lower GDP growth in the latest quarter reflects a slowdown in growth in the service industries. Manufacturing production grew slightly in the first quarter, set against strong construction growth and weak industrial production.

Overall, movements in the UK economy are similar to those around the world. The recovery in the main industrial economies seen in the middle of 2002 has become a little more subdued. Much of this recovery was export led, and exports have subsequently fallen back. Accompanying renewed weakness has been rising unemployment in several of the major economies (figure 2). What has set the UK economy apart from the continental European economies has been the strength of the consumer and government demand, and the stability of the labour market.

Figure 2
International unemployment
percentage of the workforce



Financial Market activity

Recent events continue to be accompanied by a substantial degree of volatility in world stock market valuations of equity. Following falls starting in 2000, the UK FTSE all share index rebounded slightly at the end of 2001, before declining again from the middle of 2002. March saw a stabilisation of the index, and April saw a rise. In the medium term, according to the FTSE all-share index, equity values peaked at 3147 in December 1999. In March 2003 the index was 1748, a total decline of 44 per cent. This is the largest and most prolonged deterioration in equity values since the decline in the early 1970s, where the all-share index fell by 71 per cent between August 1972 and December 1974.

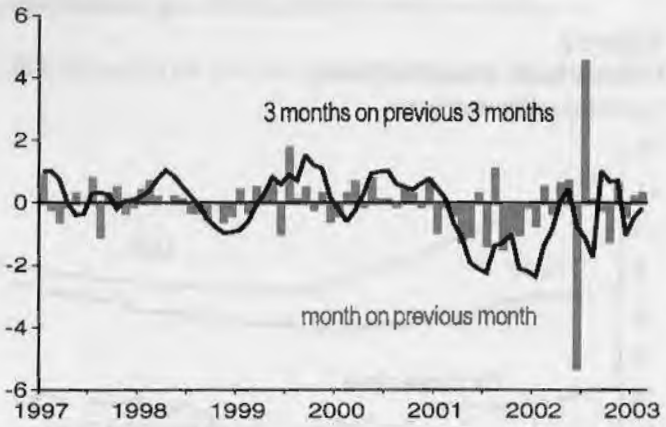
Outside the stock market concerns are echoed in the corporate bond

market, which, alongside long-term loans from banks, has been the primary source of corporate borrowing since 2001. Some measures of spreads between corporate and government bonds continue to show historically high spreads - particularly for lower rated paper.

Output

Although, as noted, manufacturing output has grown so far in the first quarter following a fall in the last quarter of 2002, looking at the monthly figures gives a more mixed picture. While there were small rises in January and February, the three month average, which smoothes out some of the monthly volatility, continues to show small falls (figure 3). Taken together these figures suggest the declines may have halted, but do not provide much evidence for strong growth.

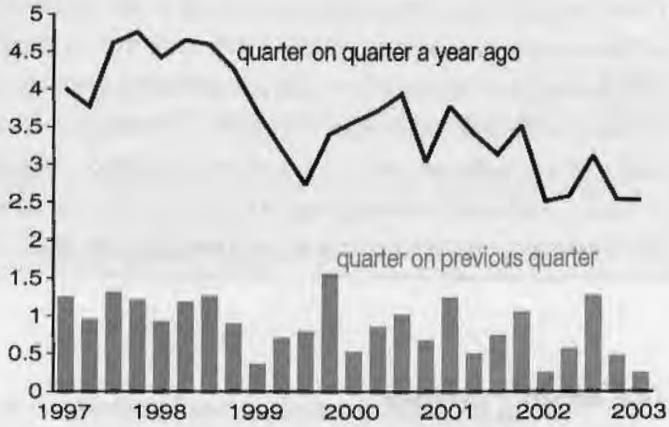
Figure 3
Manufacturing output
growth



The source of the weakness in manufacturing has been the fall in ICT industries since the start of 2001. This decline slowed during 2002, and output rose between November 2002 and January 2003, with February seeing a small fall. Much of the recent volatility has been associated with the production of motor vehicles over the Jubilee period. Output fell sharply in the middle of 2002, rose sharply afterwards, and then fell back to about the same level as at the start of 2002. The latest figures suggesting that output may have stabilised, although the three month figure continues to show a fall due to a weak December. Output in the investment goods industries rose by 1.6 per cent in the latest three months compared with the previous three months.

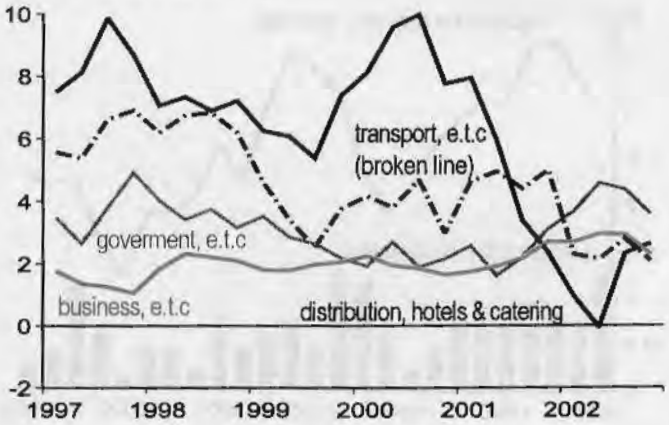
Much of the slowdown in GDP growth since the third quarter of 2002 is due to a slowdown in the output growth of the service industries. Comparing output with that of the previous quarter shows growth of 0.3 per cent in the first quarter of 2003, down on the growth of 0.5 per cent in the last quarter of 2002, but well down on the growth of 1.2 per cent in the third quarter. Comparing with the same quarter a year ago annual growth was 2.6 per cent in the first quarter of 2003, the same as in the last quarter of 2002. Apart from the growth of 3.1 per cent in the third quarter of 2002, growth has been 2.5 or 2.6 per cent since the start of 2002 (figure 4).

Figure 4
Services output
growth



A broad industrial breakdown shows that in 2001 there was a shift in the driver of growth from 'business services and finance' and 'transport, storage and communications' to 'distribution, hotels and catering, and repairs' and 'government and other services' (figure 5). In the last quarter of 2002 and the first quarter of 2003 the general slowdown in the service sector has been due to lower growth in all service industries.

Figure 5
Service industries
growth, quarter on a year ago



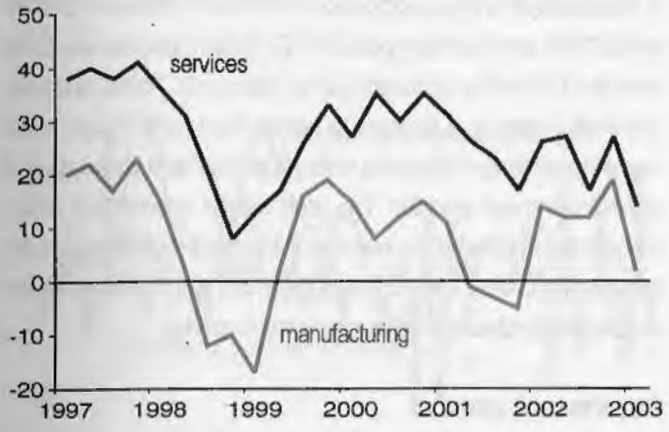
Strong construction output growth has continued to support overall GDP growth. Growth in 2003 as a whole was 7.5 per cent, and strong growth has continued into 2003.

External measures of output

External measures for both the manufacturing and service sectors suggest a weakening of the economy in the first quarter of 2003.

Figure 6 shows the British Chambers of Commerce (BCC) domestic sales for the manufacturing and service sectors. Both indices rose fast at the start of the 2002, rising again in the third quarter of 2002, but falling sharply in the first quarter of 2003. Chartered Institute of Purchasing and Supply (CIPS) and Confederation of British Industry (CBI) figures both show a similar picture, with output and orders deteriorating sharply at the start of 2003, with much of the fall in the CIPS indices occurring in March.

Figure 6
BCC services/manufacturing
growth



Household demand

National Accounts figures for the fourth quarter of 2002 continued to show strong growth, with quarterly growth of 1.1 per cent up from 0.7 per cent in quarter three. Annual growth slowed slightly to 3.6 per cent. However, other data suggests this growth is likely to weaken in 2003.

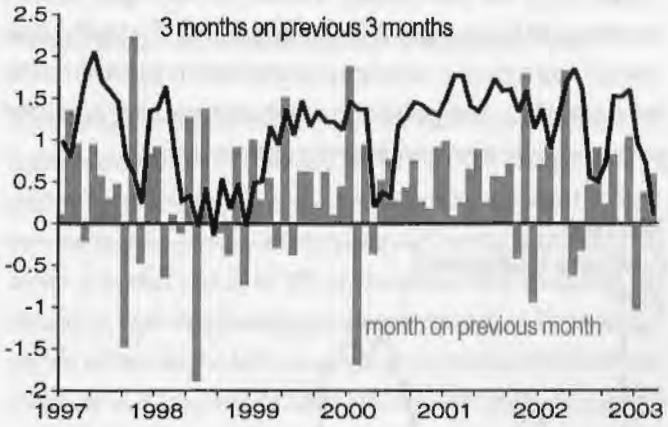
Retail sales data show strong growth into the fourth quarter, with quarterly growth of 1.6 per cent, substantially up from growth of 0.7 per cent in quarter three. However the latest monthly figures show growth slowing, with a monthly rise of 0.6 per cent in March and 0.4 per cent in February offsetting a fall of 1.0 per cent in January, with the thee monthly growth rate positive at 0.1 per cent (figure 7). Overall these latest figures suggest that the recent strong retail sales growth is weakening.

Support for a slowdown in retail sales growth is found in sharply lower consumer confidence figures since the end of 2002. Similarly, both the CBI and British Retail Consortium (BRC) report retail sales weakening in February and March.

Similarly there is evidence that gross consumer credit growth may be easing, with annual growth of 4.9 per cent in the February, well down from the peak growth in 2002 of 16.0 per cent in the March. This slowdown began in the second half of 2002 and, with the exception of December, annual growth has been around 5 per cent since October 2002.

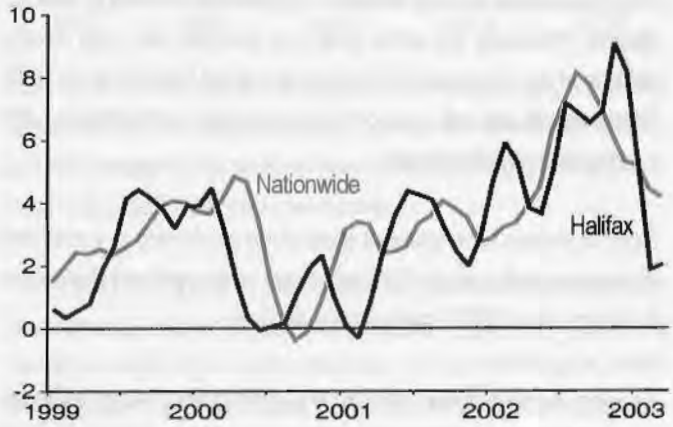
Nevertheless, the prolonged period of high growth in consumer credit shows that the present level of consumer demand is supported by continued addition to the stock of household debt. Debt to income ratios remain at historic highs. As a result household demand is at least partly dependent on bank and building societies' willingness to lend and on households continuing to be willing to take on more debt and to be able to meet the interest payments on previous and new borrowing. Many emphasise though that with interest rates low these debt servicing costs continue to remain relatively low.

Figure 7
Retail sales
growth



Part of this continued willingness to take on additional debt appears to be related to the very strong growth of house prices through 2002; here the Nationwide and Halifax figures show annual inflation in the year to March at 26.4 and 24.5 per cent respectively. Tentative signs of a cooling are based on the three month on previous three month growth rates from the Nationwide and Halifax. These have fallen from their peaks of eight to nine per cent in mid 2002 to 2.0 per cent in March 2003 according to the Halifax and 4.2 per cent according to the Nationwide (figure 8).

Figure 8
House prices
growth, 3 months on previous 3 months



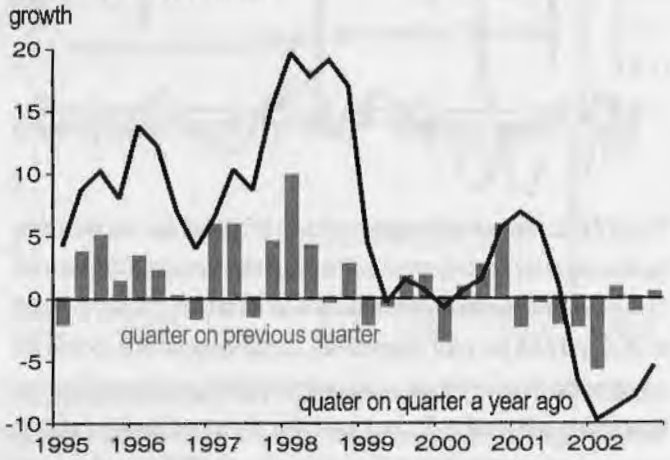
There are quite substantial regional differences in house price inflation, and London in particular appears to have seen a particularly large fall in house price inflation recently.

Business demand

In contrast to household demand, but echoing the position around the world, UK business investment demand fell sharply in 2001, then stabilised in 2002 before a small rise at the end of the year.

Figure 9 shows business investment rose by 0.4 per cent between the third and fourth quarters of 2002. On an annual basis there was a fall of 5.4 per cent in the fourth quarter, however this was largely due to a quarterly fall of 5.6 per cent in the first quarter of 2002. The fourth quarter saw a 0.7 per cent fall in manufacturing investment in the fourth quarter being offset by a 3 per cent rise in construction and other production investment, while investment in services was unchanged.

Figure 9
Business investment



An analysis by asset shows that investment decline in manufacturing was broadly based, although some small components are volatile. Much of the recent fall has been in other machinery and equipment, and the flat investment in this asset in the fourth quarter follows seven quarters of decline. Previously the same asset had recorded very high growth, peaking at annual growth of 26.4 per cent in the first quarter of 1998. These assets include high profile investment in information and communications technologies.

External indices have shown a quite sharp weakening in investment intentions recently, with the BCC indicating a fall in investment intentions in the first quarter of 2003, particularly in services.

As noted, the decline in investment is a global phenomenon that began between the end of 2000 and the start of 2001. In the year to the fourth quarter of 2002, overall investment (i.e. business investment and government investment) rose by 0.8 per cent in the US and 1.2 per cent in Japan, but fell by 4.7 per cent in Germany and 1.1 per cent in France. Comparing the fourth quarter with the third, growth was 0.9 per cent in the US, 1.2 per cent in Japan, and 0.9 per cent in Germany, only France saw a fall in the fourth quarter, with investment 0.6 per cent lower. Comparable figures for the UK show an annual decline of 1.1 per cent, but a quarterly rise of 0.5 per cent in the fourth quarter.

The cutbacks in investment have seen a recovery in the financial situation of the private non-financial corporation (PNFC) sector. Between Q2 2001 and Q4 2002 a net borrowing position of £2.9 billion has given way to net lending of £3.6 billion, as investment has fallen by £1.7 billion and there has been a degree of recovery in profits. Over recent quarters the overall indebtedness of the sector, while still at a high level, had moderated as net lending was recorded. The latest quarter however saw a rise; although this is related to financial flows associated with direct investment and may be a one-off. Lastly DTI data show fairly sharp increases in both company and individual insolvencies in fourth quarter.

Government demand

Government demand is growing at a relatively robust pace, although in the second and third quarters of 2002 growth weakened from the very strong growth between Q3 2001 and Q1 2002, before recovering somewhat in the fourth quarter. In the fourth quarter of 2002 constant price government expenditure rose by 1.0 per cent compared with the previous quarter, following growth of 0.4 per cent in quarter three. Compared with the fourth quarter of 2001, government demand was up 2.2 per cent. In cash terms government expenditure has grown by 7.4 per cent in the year to the fourth quarter.

The ongoing growth in government expenditure has come as revenue growth is slowing, reflecting the slowdown in the economy. The effect is that the central Government sector has returned to net borrowing for five consecutive quarters, following thirteen quarters of net lending.

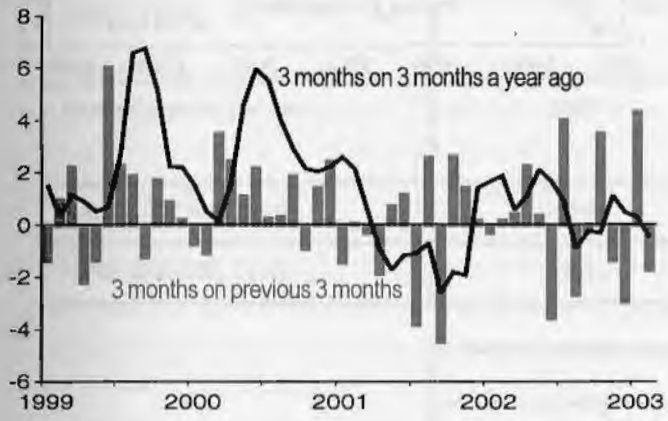
Monthly public sector net borrowing data now extends to March 2002, covering the whole financial year, and shows net borrowing for the financial year 2002-03 stands at £25.2 billion, this compares with lending of £0.4 billion the previous financial year. The data also illustrates the weakness in corporation tax receipts, with corporation tax revenues falling in 2002-03 compared with 2001-02.

Imports

Following a pick-up in the first half of 2002, total imports fell back in the last quarter of 2002.

Monthly goods figures are available up to February, and the three months to February show a fall of 0.5 per cent due to a weak December, although compared with the same period a year ago imports were 1.7 per cent higher (figure 10). In the latest three months goods imports from the EU have fallen 0.5 per cent, the decline in goods imports from non-EU countries was 0.6 per cent. On an annual basis most of the change is due to the EU, with imports in the three months to February 3.1 per cent higher this year than last year, while non-EU imports were unchanged.

Figure 10
Goods import (volume)
growth

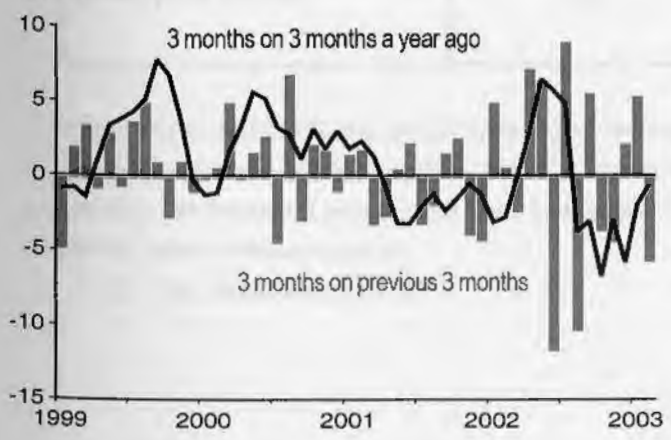


Overseas Demand

UK exports strengthened in the second quarter of 2002 before falling back in the third and fourth quarters.

Using volume indices shows weakness continuing into 2003, with goods exports falling by 0.7 per cent in the three months to February (figure 11). Recent export weakness appears to be due to trade with EU countries. Goods exports by volume to non-EU countries rose by 4.0 per cent in the three months to February 2003 compared with the previous three months, whilst goods exports to EU countries fell by 3.5 per cent in the same period. On an annual basis goods exports rose by 2.8 per cent to non-EU countries and fell by 3.7 per cent to EU countries

Figure 11
Goods export (volume)
growth



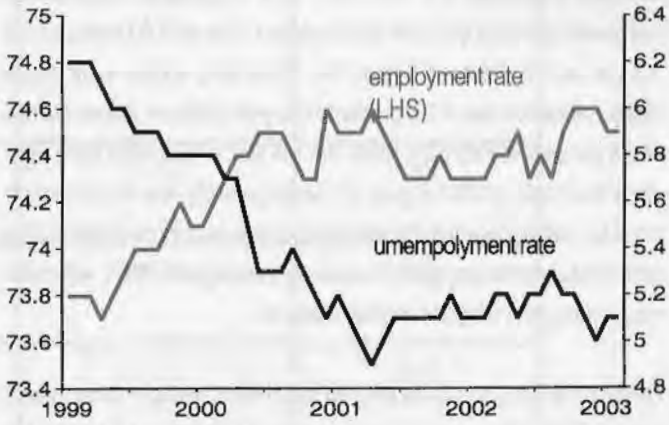
The overall effect of these changes is that the improvement in the balance of trade in goods in the latest three months is due to a fall in imports from and rise in exports to non-EU countries. Trade in services continues to support the current account, although less than in the previous three months.

Labour Market

Headline labour market statistics continue to remain fairly stable.

From the perspective of employment, the labour force survey (LFS) employment rate was 74.5 per cent in Dec.-Feb. little changed over the quarter (figure 12), the LFS count of employment increased by 33,000 over the quarter. Similarly employer survey 'workforce jobs' data has shown a modest rise of 47,000 in December 2002 compared with September. From the perspective of unemployment, the ILO rate was 5.1 per cent in Dec-Feb, the same as a year ago (figure 12), and the claimant count rate, at 3.1 per cent in March, has been unchanged for a year.

Figure 12
Labour Force Survey



Both full-time and part-time employment are growing at 0.1 per cent compared with the previous quarter. This comes after a period when part-time employment grew faster than full-time, leading to annual growth rates of 2.3 and 0.4 per cent respectively.

The industry dis-aggregation from 'workforce jobs' figures shows that the manufacturing sector continues to lose jobs, whilst echoing the output data the main sources of job creation have been 'public administration, health and education', construction and 'distribution, hotels and restaurants'. In the year to December manufacturing lost 154,000 jobs, whilst services

gained 255,000 of which 153,000 were in been 'public administration, health and education' and 96,000 in 'distribution, hotels and restaurants'.

The recent trend for most job creation to be in self-employed jobs may have ended. Again according to workforce jobs data, over the year to quarter four, self-employed jobs have increased by 124,000, whereas 'employee jobs' have fallen by 83,000, however comparing quarters three and four self-employed jobs rose by 21,000 and 'employee' jobs by 25,000.

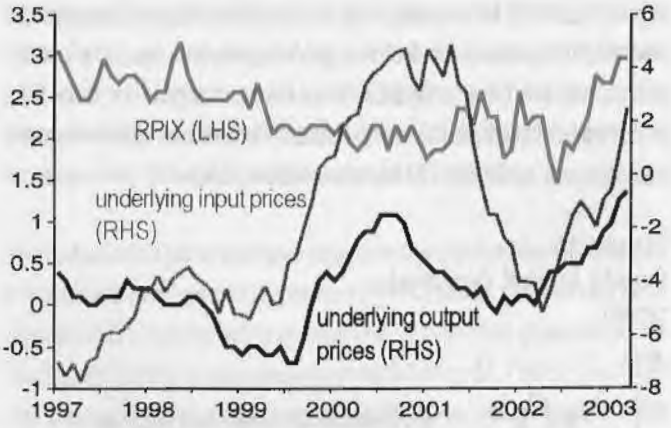
The average earnings index suggests a more subdued labour market. In February 2002 the headline rate was 3.0 per cent, down on the figure of around 3.8 per cent that was the case for much of 2002 and well below the 4.5 per cent figure that the Bank of England consider broadly consistent with their inflation target.

Prices

Over the past few months producer price inflation has shown slight increases on the output side and a shift to rises on the input side. Annual output inflation rose to 1.9 per cent in March, from 1.8 per cent in February continuing the upward trend that began in the middle of 2002, when a brief period of deflation ended. Annual input price inflation fell back from 6.2 per cent in February to 4.5 per cent in March, however this is still well above any figure for 2002, where prices fell for much of the year. Some of these recent rises have been associated with increases in oil prices, however underlying (i.e. excluding food, beverages, tobacco and petroleum) annual output price inflation was 1.4 per cent in March up from 1.3 per cent in February (figure 13). Underlying annual input prices inflation showed a rise of 2.5 per cent in the year to March, following a rise of 0.8 per cent in February, these are the first annual input price rises since the middle of 2001 (figure 13). More generally, the recent low outturns for output price inflation compared with input price inflation may reflect the deteriorating global conditions that began in 2001, with oversupply remaining a significant phenomenon.

On the other hand consumer price inflation has picked up a little in recent months. The Government's target measure RPIX was 3.0 per cent in March, unchanged from February, the RPI rose slightly from 3.0 per cent to 3.1 per cent. The RPIX figure was the highest rate since 1998 (figure 13 again), but this was partly due to ongoing increases to the depreciation of housing component that are due to house price increases and to effects from oil price rises. Other sources of price rises include leisure and household services, possibly indicating the recent strength of the service sector.

Figure 13
Consumer prices
growth, month on a year ago



Forecasts for the UK Economy

A comparison of independent forecasts, April 2003

The tables below are extracted from HM Treasury's "FORECASTS FOR THE UK ECONOMY" and summarise the average and range of independent forecasts for 2003 and 2004, updated monthly.

	Independent Forecasts for 2003		
	Average	Lowest	Highest
GDP growth (per cent)	1.9	-0.4	2.7
Inflation rate (Q4: per cent)			
- RPI	2.6	1.8	3.9
- RPI excl MIPs	2.6	1.9	3.6
Unemployment (Q4, mn)	0.98	0.85	1.10
Current Account (£ bn)	-19.8	-39.3	-7.9
PSNB *(2003-04, £ bn)	28.3	19.7	35.1

	Independent Forecasts for 2004		
	Average	Lowest	Highest
GDP growth (per cent)	2.4	-0.3	3.0
Inflation rate (Q4: per cent)			
- RPI	2.7	1.5	4.0
- RPI excl MIPs	2.4	1.5	3.2
Unemployment (Q4, mn)	1.02	0.72	1.40
Current Account (£ bn)	-20.2	-40.9	-7.2
PSNB* (2004-05, £ bn)	30.5	20.0	39.0

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 Claire Coast-Smith, Public Enquiry Unit 2/S2, HM Treasury, 1 Horse Guards Road, London SW1A 2HQ (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 2003

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Overview

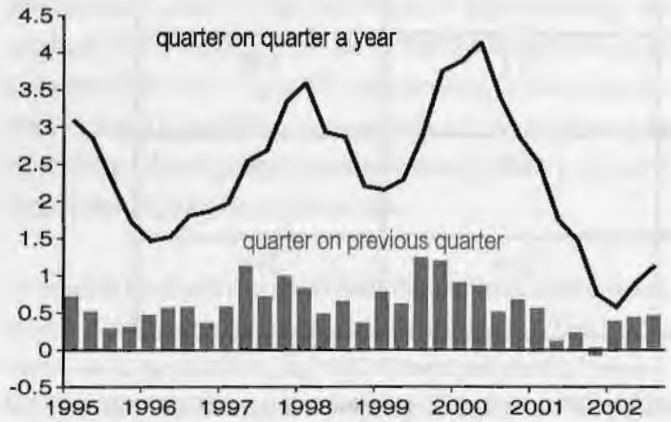
The fourth quarter shows growth in the major economies, although at a declining rate, with the exception of Germany, which did not grow in quarter four and Italy, where growth accelerated throughout 2002. With the exception of Italy, consumer demand is weak in most major economies with the USA in particular showing a marked slowdown. Trade also slowed in the latest period and investment demand is still at best weak or in decline in most major economies again except in Italy. Industrial output declined in all major economies in quarter four, reversing growth in the earlier quarters of 2002. Unemployment is at best broadly flat or inching up in most economies, employment growth is weakening. Headline prices figures remain subdued, although producer prices rose mainly due to increases in the price of oil.

EU15

The latest data for 2002 quarter three shows that the EU economy grew by 0.4 per cent, the same rate of growth as the two preceding quarters.

EU GDP has been subdued since the start of 2001(figure 1). The main driver of this has been falls in investment and falls in exports. In 2001 quarter four GDP declined for the first time since 1993 quarter one. A demand breakdown shows a strengthening in consumer expenditure and exports over the last two quarters. Investment demand also made a modest contribution to quarterly GDP after six consecutive quarters of contraction.

Figure 1
GDP: EU15
growth



As with GDP, industrial production in the EU has been subdued since 2001, when the index grew by just 0.1 per cent. The index contracted in quarter four by 0.5 per cent, following three consecutive quarters of expansion. Annual growth for the year shows the index falling by 1.0 per cent.

Consumer prices in the EU inched up in the second half of 2002, with growth reaching 2.5 per cent in December up from 1.8 per cent in June. February 2003 figures show consumer price inflation picking up to 2.6 per cent, the highest rate since August 2001 and above the ceiling targeted by the European Central Bank. However, the recent increase in the CPI is likely to reflect mainly an increase in oil prices. The same pattern can be seen on prices at the factory gate, which had been falling for the first half of 2002, but started rising in the second half of 2002. Producer prices rose by 2.0 per cent in the year to February, the highest rate since May 2001.

EU employment figures continue to show growth, although at a declining rate. Annual growth in the year to the third quarter was 0.5 per cent. The unemployment rate however is inching up with 7.9 per cent of the workforce unemployed as at February, up from a trough of 7.3 per cent in the second and third quarters of 2001.

Annual earnings showed growth in the year to the third quarter, of 3.3 per cent, following growth in the second quarter of 2.5 per cent and 3.4 per cent in the first quarter; the figures are volatile.

Germany

The German economy did not grow in the fourth quarter of 2002, having posted growth of 0.3 per cent in the previous quarter. Overall GDP grew by just 0.2 per cent for 2002 as a whole compared with 0.8 per cent in 2001.

Recently, there has been a lack of any appreciable domestic momentum in the German economy. Household consumption made a negative contribution of 0.3 per cent in 2002 and did not add to quarterly GDP growth in quarter four. Investment expenditure has been in decline, showing contractions in annual growth in both 2001 and 2002 and

government demand has made only small contributions in recent years. The impetus that came mainly from exports in quarters two and three slowed considerably in quarter four. Germany's growth rate remains below the EU average with quarterly GDP being below the quarterly GDP growth rate of the EU as a whole in every quarter of 2002.

Having grown for three consecutive quarters, the IOP contracted by 1.1 per cent in quarter four. This was dominated by a very large contraction in December of 3.5 per cent although this has since rebounded in January 2003. Overall in 2002, the index fell by 1.4 per cent. Growth in the index has been subdued since 2001, when it grew by only 0.5 per cent, compared to growth of 6.2 per cent in 2000.

The CPI shows consumer prices growing by 1.2 per cent in the year to February, down from growth of 2.1 per cent growth seen at the start of 2002. Figures for the PPI for the same period show prices at the factory gate increasing by 1.9 per cent in the year to February. This is a significant increase when compared to growth in the index of 0.9 per cent in December 2002. The increase in producer prices reflects the recent increases in oil prices. Despite this, Germany has the lowest consumer price inflation of the large Euro economies.

Unemployment in Germany continues to increase steadily, with the rate in February at 8.7 per cent, up from 8.0 per cent at the start of 2002 (figure 2). There has been a gradual increase in the unemployment rate from the recent trough of 7.6 per cent in quarter one 2001. Similarly employment growth contracted for the fifth consecutive quarter in the fourth quarter of 2002, with annual growth figures for the quarter showing a decline of 0.9 per cent, accelerating from a decline of 0.7 per cent in the previous quarter.

Figure 2
GDP : Unemployment
percentage of the workforce

Having hovered between 1.0 per cent and 1.1 per cent between 2001 quarter three and 2002 quarter two and despite the increase in unemployment, earnings growth has picked up in the year to the fourth quarter, growing by 2.4 per cent, the largest growth in earnings since 2000 quarter four.

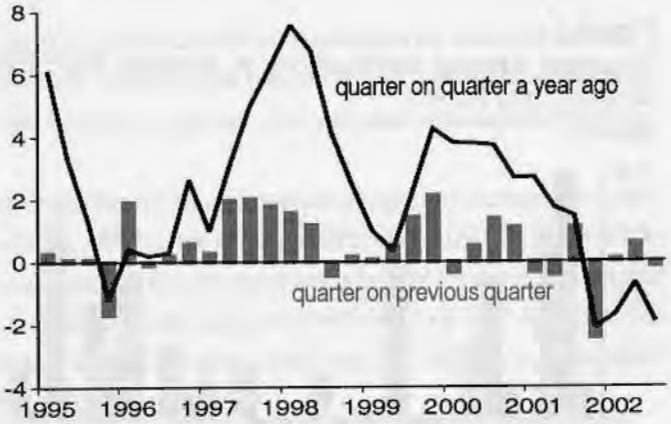
France

The latest data show that growth in the French economy slowed in the fourth quarter to 0.2 per cent, having grown by 0.3 per cent in the previous quarter. Overall in 2002, the economy grew by 1.1 per cent, the lowest growth rate since 1996.

The French economy has slowed significantly over the last two years, in line with global trends, although it outperformed the EU in the first quarter of this year. Consumer spending (helped by recent income tax cuts of five per cent in September) and government consumption drove growth in both 2002 as a whole and 2002 quarter four. This was offset by falls in investment and stocks (which has made a negative contribution to quarterly GDP in six of the last eight quarters).

Industrial production contracted in France in the latest quarter, by 0.1 per cent, the second consecutive quarter of negative growth in the index. Quarter four's contraction was driven by a sharp fall in December, which wiped out the November rebound, although the index has rebounded again in January. Overall in 2002, the IOP contracted by 0.9 per cent having made an equivalent positive contribution to annual GDP growth in the previous year (figure 3).

Figure 3
France : IOP
growth



Consumer price inflation has continued to rise steadily since the second half of 2002. Growth in the index in the year to February was 2.6 per cent, the highest growth since June 1992. The increase was due to a strong rebound in the prices of clothing and footwear and the increase in oil prices. Similarly, producer prices have been rising since the second half of 2002, having fallen in the previous five months. The PPI increased

from 0.5 per cent in January to 0.7 per cent in February.

The French unemployment rate, like most major economies has also been rising steadily over the past year and now stands at 9.1 per cent of the workforce in February; this rate was last seen in August 2000. Employment growth also continued its slowdown in the fourth quarter of 2002, with an annual rate of 0.4 per cent, well down on growth of 2.3 per cent at the start of 2001.

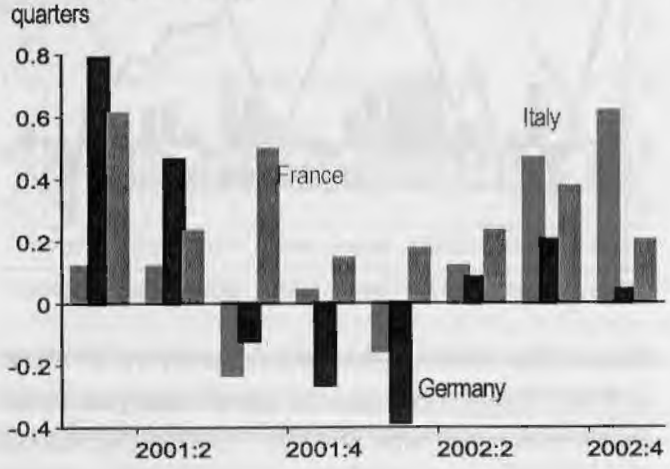
Following on from the labour market conditions, annual earnings growth continued to ease, slowing from 4.1 per cent in the fourth quarter of 2001 to 3.4 in the fourth quarter of 2002.

Italy

Data for 2002 quarter four show the Italian economy growing by 0.4 per cent, following growth of 0.3 per cent in quarter three. The Italian economy is alone in the major economies in seeing an acceleration of growth through 2002. Overall in 2002, the economy grew by 0.4 per cent compared to growth of 1.8 per cent in the previous year and down from 3.1 per cent in 2000.

Unlike France and Germany where consumer demand has been fairly weak, in Italy it was strong particularly in the last two quarters of 2002 and was the main driver of growth in quarters three and four, contributing 0.5 percentage points and 0.6 percentage points to quarterly GDP growth respectively (figure 4). Also while investment was contracting in most major economies, in Italy investment demand has also supported GDP growth strongly in the last two quarters of 2002 and made a positive contribution to GDP in 2002 of 0.1 per cent.

Figure 4
Consumer demand contributions to quarterly GDP: Italy, Germany and France



However, these contributions were offset by weak or negative growth in government demand and trade.

Having grown in quarter three by 0.5 per cent and in the two preceding quarters before then, the IOP contracted in the fourth quarter by an equivalent rate. Industrial production has contracted for all four quarters of 2001. Annual figures show that for 2002 as a whole, the index contracted by 1.4 per cent, following a contraction of 1.0 per cent in the previous year. More generally, the IOP has contracted in Italy in four years out of the last seven.

Inflation in Italy had stabilised somewhat for the past three months since November at 2.8 per cent, but fell by 0.2 percentage points in February to 2.6 per cent, although this is still above the ECB's ceiling of 2.0 per cent. However the increase in the CPI in the last few months can be attributed in part to the recent increases in oil prices. The PPI also grew in the second half of 2002 and has continued to grow in 2003 with the index growing from 2.4 per cent in January to 2.8 per cent in February.

Figures on the Italian labour market show unemployment in 2002 flat at 9.0 per cent, but improved on 9.5 per cent in 2001. Employment growth was 0.9 per cent in the year to the fourth quarter of 2002 down from growth of 1.3 per cent in the year to quarter three.

Earnings growth picked up in the year to the fourth quarter to 2.8 per cent, but the figures are volatile from quarter to quarter.

USA

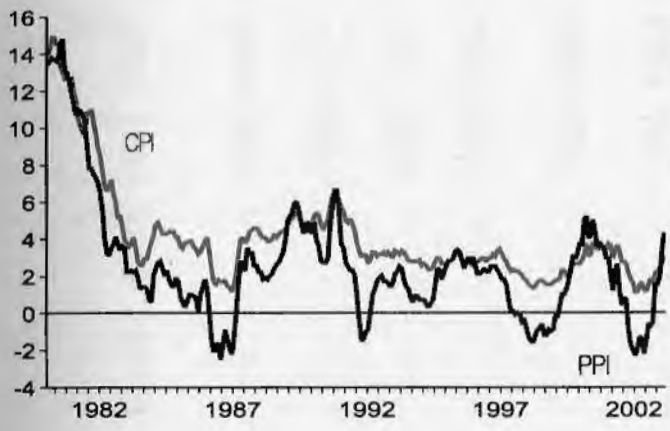
The latest figures for the US economy for 2002 quarter four show the economy growing by 0.3 per cent, following strong growth in the previous quarter of 1.0 per cent.

Quarterly GDP growth in 2002 has been below growth rates seen in the 1990s although performance has been better than in every quarter in 2001 except quarter four. Overall, growth in 2002 was 2.4 per cent, driven mainly by strong consumer spending (stimulated in part by interest free credit on car deals) and strong government demand. The slightly weaker performance in quarter four is largely due to much weaker consumer spending as the impact of the one-off factors faded and also to a fall in exports. Import growth also weakened substantially in the last two quarters of 2002.

The index of production contracted in quarter four for the first time in 2002, by 0.9 per cent. Overall in 2002, the index contracted by 0.8 per cent which although negative is an improvement over the previous year's 3.5 per cent contraction. The index has rebounded strongly in January showing a month on month increase of 0.8 per cent followed by an 0.1 per cent increase in February.

Inflationary pressures had remained subdued since January 2002, and only started increasing in October. This increase has been more marked in the first two month of 2003 when inflation grew by 0.4 percentage points and stands at 3.0 per cent in February. This is the highest rate since June 2001. The Producer prices index also shows prices increasing substantially at the factory gate in February by 4.3 per cent (the highest rate since July 2000) compared to an increase in January of 3.2 per cent (figure 5). These latest increases may be due

Figure 5
CPI & PPI : USA
growth, month on a year ago



in part to the recent increase in oil prices.

The US saw a sharp increase in unemployment in 2001 from 4.1 per cent in January to 5.8 per cent in December. The deterioration slowed somewhat in the first three months of 2002, but the volatility in the figures since then offers no clear signs of recovery. The latest data shows the unemployment rate rising to 6.0 per cent in December and falling back slightly in 2003, with the rate in February at 5.8 per cent. Annual figures show that for 2002, unemployment was 5.8 per cent up from 4.8 per cent in the previous year.

Average earnings growth fell in the year to February to 2.4 per cent from 3.3 per cent in the previous month, possibly reflecting the slight deterioration in the labour market between January and February.

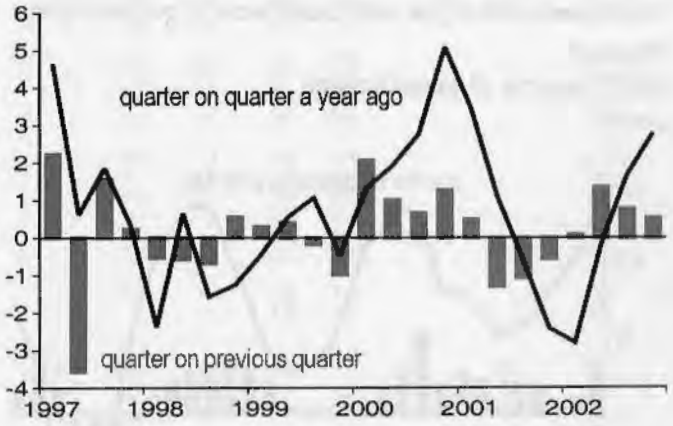
Japan

The Japanese economy grew by 0.5 per cent in the fourth quarter of 2002, following growth of 0.8 per cent in the previous quarter (figure 6).

Japan has had low or negative GDP growth since 1997 (except in 2000 when growth was 2.7 per cent, although this was still below the growth rates for most major economies for that year). Annual figures for 2002 shows the economy growing by just 0.3 per cent, similar to the previous year. The stronger growth in the later quarters of 2002 has been driven by a combination of stronger consumer demand (although this fell back again in 2002 quarter four), substantial stockbuilding (particularly in quarters two and three), and a fairly strong rebound in exports. Consumer demand has been weak especially in the three years prior to 2001 possibly due to falling prices. Export growth has also been low due in part to the global economic slowdown. Investment spending contracted in 1998, 1999, 2001 and 2002.

Having shown strong growth in quarters two and three; the index of production has again contracted in quarter four by 0.9 per cent. Overall in 2002, the index contracted by 1.5 per cent, which, although negative, is a

Figure 6
GDP : Japan
growth



substantial improvement over the previous year's contraction of 7.0 per cent.

Consumer and producer price falls continue the deflation that began in mid-1998. Figures for the year to February show the consumer prices index falling by 0.2 per cent. Producer prices also show a similar story.

However, there has been some improvement to the unemployment rate in February with the rate at 5.2 per cent, down from 5.5 per cent in the previous month. Recent rates of unemployment are very high by historical standards for Japan (unprecedented since 1960 when OECD records began). Employment growth is also negative, declining by 1.1 per cent in the year to 2002 quarter four.

Despite the present unemployment situation, earnings growth declines have been reversed in quarter four to show a moderate increase in earnings of 0.1 per cent in the year to the fourth quarter. This is a significant improvement over the previous quarter when earnings were 2.2 per cent lower than in the same quarter of the previous year.

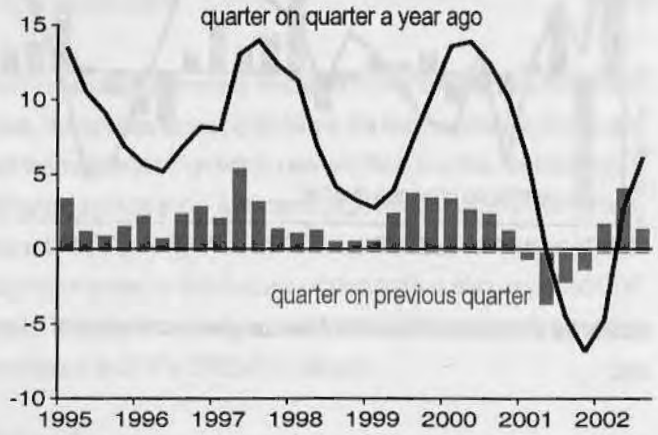
World Trade

Some data for world trade now extends to quarter three and generally shows a fall back in trade from the levels seen in the first half of 2002.

Growth in total manufactures exports slowed considerably from 3.8 per cent in quarter two to 1.9 per cent in quarter three. The slowdown was primarily due to slowing export growth in OECD countries (figure 7). On the export of goods side, OECD exports slowed from 3.8 per cent in quarter two to just 1.5 per cent in quarter three.

Import data for quarter three is only available for OECD countries and shows that import of manufactures also slowed considerably from 3.3 per cent to 1.6 per cent. Similarly, imports of goods data shows OECD imports slowing from 3.7 per cent in quarter two to 1.7 per cent in quarter three.

Figure 7
OECD exports of 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 available on an SNA93 basis. Cross country comparisons are now more valid

1 European Union 15

	Contribution to change in GDP													
	GDP	PFC	GFC	GFCF	ChgStk[1]	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl	Unempl
Percentage change on a year earlier	ILGB	HUDS	HUDT	HUDU	HUDV	HUDW	HUDX	ILGV	ILHP	HYAB	ILAI	ILAR	ILIJ	GADR
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	0.4	10.2
1997	2.6	1.3	0.2	0.7	0.1	3.1	2.7	3.8	1.5	2.1	0.9	3.1	1.0	10.0
1998	2.9	1.9	0.3	1.3	0.4	2.1	3.1	3.8	2.8	1.7	–0.3	2.8	1.9	9.4
1999	2.8	2.1	0.4	1.1	–0.2	1.8	2.4	1.8	2.0	1.2	–	2.7	1.9	8.7
2000	3.6	1.8	0.4	1.0	–0.1	4.3	3.9	4.6	2.3	2.4	4.6	3.3	1.9	7.8
2001	1.6	1.3	0.4	–	–0.4	0.9	0.6	0.1	2.1	2.4	1.2	3.0	1.3	7.3
2002	..	..	..	..	..	..	..	–1.0	1.1	2.1	0.2	..	..	7.6
1999 Q3	2.9	2.1	0.4	1.2	–0.3	2.1	2.5	2.1	1.9	1.1	0.6	3.6	2.0	8.6
Q4	3.8	2.1	0.4	1.2	–	3.3	3.4	4.2	2.8	1.6	2.3	2.7	1.8	8.4
2000 Q1	3.9	1.8	0.4	1.1	–0.1	4.3	3.7	4.2	2.5	2.1	4.1	3.6	1.7	8.1
Q2	4.1	2.2	0.4	1.2	–	4.4	4.1	5.5	3.5	2.1	4.7	3.6	1.9	7.9
Q3	3.4	1.8	0.4	1.0	–	4.3	4.1	4.7	2.1	2.5	4.8	2.6	1.8	7.7
Q4	2.9	1.5	0.4	0.9	–0.2	4.2	3.9	4.1	1.2	2.6	4.8	3.5	2.1	7.5
2001 Q1	2.5	1.4	0.4	0.5	–0.3	3.1	2.6	4.2	2.8	2.4	3.2	2.6	1.9	7.4
Q2	1.8	1.2	0.3	0.2	–0.2	1.5	1.3	0.6	2.1	2.8	2.4	3.4	1.4	7.3
Q3	1.5	1.2	0.4	–0.1	–0.4	0.2	–0.2	–0.7	2.1	2.5	0.8	3.4	1.2	7.3
Q4	0.8	1.2	0.4	–0.4	–0.7	–1.1	–1.4	–3.4	1.5	2.0	–0.9	2.5	0.8	7.4
2002 Q1	0.6	0.7	0.5	–0.6	–0.1	–1.1	–1.2	–3.2	0.9	2.2	–0.5	3.4	0.7	7.4
Q2	0.9	0.7	0.6	–0.7	–0.3	0.2	–0.4	–1.0	0.9	1.9	–0.4	2.5	0.7	7.6
Q3	1.1	0.8	0.5	–0.4	–0.1	1.1	0.8	–0.6	1.5	1.9	0.4	3.3	0.5	7.6
Q4	..	..	..	..	..	..	..	0.6	1.2	2.4	1.2	..	..	7.7
2002 Mar	..	..	..	..	..	..	..	–2.5	0.9	2.3	–0.4	..	..	7.5
Apr	..	..	..	..	..	..	..	–1.0	1.8	2.1	–0.3	..	..	7.5
May	..	..	..	..	..	..	..	–1.0	0.9	1.9	–0.3	..	..	7.6
Jun	..	..	..	..	..	..	..	–1.1	–	1.8	–0.4	..	..	7.6
Jul	..	..	..	..	..	..	..	–0.3	1.8	1.9	0.1	..	..	7.6
Aug	..	..	..	..	..	..	..	–1.1	1.8	1.9	0.4	..	..	7.6
Sep	..	..	..	..	..	..	..	–0.2	0.9	1.9	0.6	..	..	7.7
Oct	..	..	..	..	..	..	..	0.7	2.7	2.2	1.0	..	..	7.7
Nov	..	..	..	..	..	..	..	1.7	–	2.5	1.1	..	..	7.7
Dec	..	..	..	..	..	..	..	–0.4	0.9	2.5	1.5	..	..	7.8
2003 Jan	..	..	..	..	..	..	..	1.0	1.8	2.4	1.7	..	..	7.9
Feb	..	..	..	..	..	..	..	..	..	2.6	2.0	..	..	7.9

Percentage change on previous quarter	ILGL	HUDY	HUDZ	HUEA	HUEB	HUEC	HUED	ILHF	ILHZ	ILIT
1999 Q3	1.2	0.5	0.1	0.4	–	1.1	1.0	1.7	1.6	0.9
Q4	1.2	0.6	0.1	0.3	0.3	1.0	1.0	1.6	1.2	0.1
2000 Q1	0.9	0.5	0.1	0.2	–0.2	1.2	1.0	0.1	–	–0.4
Q2	0.8	0.5	0.1	0.3	–	1.0	1.0	2.0	0.6	1.3
Q3	0.5	0.2	0.1	0.2	–0.1	1.0	0.9	1.0	0.3	0.7
Q4	0.6	0.2	0.1	0.2	0.1	0.9	0.9	1.0	0.3	0.4
2001 Q1	0.5	0.5	0.1	–0.1	–0.3	0.1	–0.2	0.2	1.5	–0.6
Q2	0.1	0.3	0.1	–0.1	–	–0.5	–0.3	–1.5	–	0.8
Q3	0.2	0.2	0.1	–0.1	–0.3	–0.3	–0.6	–0.3	0.3	0.6
Q4	–0.1	0.2	0.2	–0.1	–0.2	–0.4	–0.3	–1.7	–0.3	–
2002 Q1	0.4	–	0.1	–0.2	0.3	–	–0.1	0.4	0.9	–0.6
Q2	0.4	0.3	0.1	–0.1	–0.1	0.8	0.5	0.6	–	0.8
Q3	0.4	0.3	0.1	0.1	–0.1	0.6	0.6	0.1	0.9	0.3
Q4	..	..	..	..	..	..	..	–0.5	–0.6	..

Percentage change on previous month	ILKF	ILKP
2002 Mar	0.5	–0.9
Apr	0.3	–
May	–	–
Jun	–	–
Jul	–	0.9
Aug	0.2	0.9
Sep	–	–1.7
Oct	–0.4	0.9
Nov	0.5	–0.9
Dec	–1.5	–
2003 Jan	1.4	0.9
Feb	..	..

GDP = Gross Domestic Product at constant market prices
PFC = Private Final Consumption at constant market prices
GFC = Government Final Consumption at constant market prices
GFCF = Gross Fixed Capital Formation at constant market prices
ChgStk = Change in Stocks at constant market prices
Exports = Exports of goods and services
Imports = Imports of goods and services
IoP = Industrial Production
Sales = Retail Sales Volume
CPI = Consumer Prices, 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
Unempl = Standardised Unemployment rates: percentage of total labour force

Source: OECD - SNA93

1 Includes statistical discrepancy

2 Germany

	Contribution to change in GDP													
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl[1]	Unempl
Percentage change on a year earlier														
	ILFY	HUBW	HUBX	HUBY	HUBZ	HUCA	HUCB	ILGS	ILHM	HVLL	ILAF	ILAO	ILIG	GABD
1996	0.8	0.5	0.4	–0.2	–0.4	1.3	0.8	0.7	–1.1	1.5	–1.2	3.5	–0.4	8.7
1997	1.5	0.4	0.1	0.2	–	2.9	2.0	3.7	–1.5	1.8	1.1	1.5	–0.3	9.6
1998	1.7	0.9	0.4	0.5	0.3	1.8	2.2	4.1	1.0	1.0	–0.4	1.8	1.5	9.1
1999	1.9	2.0	0.2	0.8	–0.4	1.5	2.3	1.6	0.4	0.6	–1.0	2.6	0.9	8.4
2000	3.1	0.9	0.2	0.7	0.1	4.4	3.3	6.2	1.4	1.5	3.4	2.7	0.6	7.8
2001	0.8	0.9	0.2	–1.1	–0.6	1.8	0.4	0.5	0.2	1.9	2.9	1.5	0.4	7.8
2002	0.2	–0.3	0.3	–1.4	–	0.9	–0.7	–1.4	–1.8	1.5	–0.4	1.7	–0.6	8.2
1999 Q3	2.3	2.2	0.2	1.0	–0.6	2.0	2.5	1.9	–0.2	0.7	–0.7	2.7	1.4	8.4
Q4	3.3	1.9	0.2	1.2	–0.2	3.3	3.0	4.3	0.7	1.0	0.6	3.0	0.8	8.2
2000 Q1	2.9	0.5	0.2	0.8	–0.1	4.4	2.8	5.1	–0.2	1.5	2.3	2.8	0.5	7.9
Q2	4.5	1.9	0.3	0.9	0.2	4.2	2.9	6.7	4.4	1.1	2.6	2.4	0.8	7.8
Q3	3.0	1.1	0.1	0.6	0.2	4.0	3.0	7.1	1.6	1.3	3.7	3.3	0.5	7.7
Q4	1.9	0.3	0.4	0.4	0.3	4.9	4.4	5.9	–0.1	1.8	4.5	2.4	0.8	7.6
2001 Q1	1.8	1.1	0.2	–0.4	–0.3	3.5	2.3	6.0	1.0	1.7	4.8	2.0	0.7	7.6
Q2	0.7	0.8	0.2	–1.0	–0.3	2.3	1.4	1.4	–	2.5	4.7	2.0	0.6	7.7
Q3	0.4	0.8	0.2	–1.5	–1.0	1.8	–0.1	–1.2	0.6	2.2	2.6	1.1	0.2	7.8
Q4	0.1	0.9	–	–1.6	–0.9	–0.2	–1.8	–3.7	–0.7	1.6	0.3	1.0	–0.1	7.9
2002 Q1	–0.2	–0.3	0.2	–1.4	–0.8	–	–2.0	–4.0	–2.9	1.9	–0.2	1.1	–0.2	8.0
Q2	–0.1	–0.7	0.4	–1.8	0.1	0.6	–1.3	–1.8	–1.9	1.3	–0.9	1.0	–0.5	8.2
Q3	0.5	–0.4	0.4	–1.4	0.5	1.3	–	–0.5	–1.0	1.1	–1.0	2.1	–0.7	8.3
Q4	0.7	–0.1	0.2	–1.0	0.4	1.8	0.6	0.8	–1.5	1.2	0.5	2.4	–0.9	8.4
2002 Mar	..	..	..	..	..	..	..	–3.1	–2.5	2.0	–0.2	..	..	8.0
Apr	..	..	..	..	..	..	..	–1.4	–1.1	1.5	–0.8	..	..	8.0
May	..	..	..	..	..	..	..	–3.0	–2.2	1.2	–0.9	..	..	8.2
Jun	..	..	..	..	..	..	..	–0.8	–2.6	1.0	–1.1	..	..	8.3
Jul	..	..	..	..	..	..	..	–0.5	–1.0	1.2	–1.0	..	..	8.2
Aug	..	..	..	..	..	..	..	–0.7	–1.5	1.2	–1.0	..	..	8.3
Sep	..	..	..	..	..	..	..	–0.3	–0.5	1.1	–0.9	..	..	8.3
Oct	..	..	..	..	..	..	..	–	1.5	1.3	0.3	..	..	8.4
Nov	..	..	..	..	..	..	..	3.1	–3.5	1.2	0.4	..	..	8.4
Dec	..	..	..	..	..	..	..	–0.6	–2.4	1.2	0.9	..	..	8.5
2003 Jan	..	..	..	..	..	..	..	2.1	1.3	1.1	1.6	..	..	8.6
Feb	..	..	..	..	..	..	..	..	..	1.2	1.9	..	..	8.7

Percentage change on previous quarter														
	ILGI	HUCC	HUCD	HUCE	HUCF	HUCG	HUCH	ILHC	ILHW				ILIQ	
1999 Q3	1.5	0.6	0.1	0.5	–	1.0	0.7	1.6	1.4				1.0	
Q4	1.1	0.5	0.1	–0.1	0.2	0.7	0.3	1.3	1.8				0.6	
2000 Q1	0.7	–	0.1	0.3	–	1.4	1.1	0.9	–0.1				–1.8	
Q2	1.1	0.8	–0.1	0.2	–	0.9	0.8	2.6	1.1				1.1	
Q3	–	–0.1	–0.1	0.2	–	0.9	0.8	2.1	–1.3				0.7	
Q4	0.1	–0.3	0.4	–0.2	0.3	1.6	1.7	0.2	0.1				0.9	
2001 Q1	0.6	0.8	–0.1	–0.6	–0.5	–	–1.0	1.0	1.0				–1.9	
Q2	–	0.5	–	–0.3	–0.1	–0.2	–0.1	–1.8	0.2				1.0	
Q3	–0.2	–0.1	–	–0.4	–0.7	0.3	–0.7	–0.5	–0.7				0.3	
Q4	–0.3	–0.3	0.2	–0.3	0.4	–0.4	–	–2.4	–1.1				0.6	
2002 Q1	0.3	–0.4	0.1	–0.4	–0.4	0.2	–1.1	0.7	–1.3				–2.0	
Q2	0.1	0.1	0.1	–0.7	0.7	0.4	0.5	0.4	1.2				0.7	
Q3	0.3	0.2	–	–	–0.3	1.0	0.7	0.8	0.2				0.1	
Q4	–	–	–0.1	0.2	0.3	0.1	0.6	–1.1	–1.6				0.4	

Percentage change on previous month		
	ILKC	ILKM
2002 Mar	0.2	0.5
Apr	0.6	1.0
May	–1.2	0.1
Jun	2.0	–1.2
Jul	–0.9	0.9
Aug	1.4	–
Sep	–0.6	0.3
Oct	–1.4	–
Nov	2.3	–2.4
Dec	–3.5	–0.6
2003 Jan	3.8	2.3
Feb	..	..

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

1 Excludes members of armed forces

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	0.8	0.5	–	–0.5	0.7	0.3	0.9	–0.3	2.0	–2.7	2.6	0.3	11.9
1997	1.8	0.1	0.5	–	0.1	2.7	1.5	3.9	1.1	1.2	–0.6	2.6	0.7	11.8
1998	3.5	1.9	–	1.3	0.7	2.1	2.6	5.2	2.6	0.8	–0.9	2.2	2.0	11.4
1999	3.2	1.9	0.3	1.6	–0.3	1.1	1.5	1.9	2.4	0.5	–1.6	2.5	2.2	10.7
2000	4.2	1.5	0.6	1.7	0.4	3.7	3.7	3.6	0.5	1.7	2.1	5.2	2.8	9.3
2001	1.8	1.5	0.5	0.5	–0.9	0.4	0.2	0.9	–0.2	1.7	1.5	4.2	1.7	8.5
2002	1.1	1.0	0.8	–0.1	–0.6	0.5	0.3	–0.9	–	1.9	0.1	3.6	0.5	8.7
1999 Q3	3.3	2.0	0.3	1.6	–0.7	1.5	1.4	2.3	2.3	0.5	–1.6	2.7	2.2	10.6
Q4	4.0	1.9	0.6	1.6	–0.1	2.4	2.4	4.3	2.1	1.0	–	3.4	2.5	10.2
2000 Q1	4.6	2.1	0.5	1.8	0.1	3.2	3.1	3.8	1.9	1.5	1.2	5.2	2.6	9.8
Q2	4.5	1.6	0.7	1.7	0.1	3.9	3.6	3.8	1.4	1.5	2.1	5.4	2.9	9.4
Q3	3.9	1.3	0.7	1.5	1.0	3.5	4.1	3.7	0.1	1.9	2.7	5.2	2.8	9.1
Q4	3.7	1.2	0.7	1.6	0.4	4.0	4.1	2.7	–1.3	1.9	2.4	5.0	2.7	8.8
2001 Q1	3.0	1.4	0.6	1.1	–0.4	2.8	2.5	2.7	1.1	1.2	2.5	4.3	2.3	8.6
Q2	2.0	1.4	0.5	0.6	–0.3	0.9	1.0	1.7	–0.4	2.1	1.8	4.2	1.9	8.5
Q3	1.9	1.7	0.6	0.5	–1.1	–0.2	–0.3	1.5	–0.7	1.9	1.1	4.2	1.4	8.5
Q4	0.4	1.5	0.5	–	–2.0	–1.7	–2.1	–2.1	–0.8	1.4	0.6	4.1	1.1	8.6
2002 Q1	0.7	1.0	0.7	–0.1	–0.7	–1.0	–0.7	–1.7	–1.6	2.2	–0.2	3.9	0.7	8.6
Q2	1.2	1.0	0.8	–	–0.9	0.3	0.3	–0.7	–0.6	1.6	–0.1	3.9	0.5	8.7
Q3	1.1	0.9	0.7	–0.2	–0.7	1.0	0.6	–1.9	1.0	1.8	0.3	3.5	0.5	8.8
Q4	1.7	1.0	0.9	–0.2	–0.1	1.4	1.2	0.4	1.0	2.2	0.3	3.4	0.4	8.9
2002 Mar	..	..	..	..	..	..	..	–1.0	–0.6	2.1	–0.3	..	..	8.6
Apr	..	..	..	..	..	..	..	–0.3	–0.6	1.9	–0.1	..	..	8.7
May	..	..	..	..	..	..	..	–0.9	2.0	1.5	–0.1	..	..	8.7
Jun	..	..	..	..	..	..	..	–1.0	–3.1	1.5	–0.1	..	..	8.7
Jul	..	..	..	..	..	..	..	–2.4	1.7	1.7	0.3	..	..	8.7
Aug	..	..	..	..	..	..	..	–2.0	2.7	1.8	0.4	..	..	8.8
Sep	..	..	..	..	..	..	..	–1.4	–1.3	1.8	0.4	..	..	8.8
Oct	..	..	..	..	..	..	..	–	3.0	1.9	0.4	..	..	8.8
Nov	..	..	..	..	..	..	..	1.5	2.1	2.2	0.3	..	..	8.9
Dec	..	..	..	..	..	..	..	–0.1	–1.8	2.3	0.4	..	..	8.9
2003 Jan	..	..	..	..	..	..	..	1.0	3.0	2.0	0.5	..	..	9.0
Feb	..	..	..	..	..	..	..	..	–0.7	2.6	0.7	..	..	9.1

Percentage change on previous quarter	ILGJ	HUBQ	HUBR	HUBS	HUBT	HUBU	HUBV	ILHD	ILHX	ILIR
1999 Q3	1.1	0.5	0.1	0.4	–0.6	1.2	0.6	1.4	1.3	0.7
Q4	1.3	0.5	0.3	0.3	0.8	0.6	1.1	2.1	1.0	0.7
2000 Q1	1.2	0.4	0.1	0.6	–	0.9	0.9	–0.3	–0.2	0.8
Q2	0.8	0.2	0.2	0.4	–0.1	1.1	0.9	0.5	–0.7	0.7
Q3	0.5	0.2	0.1	0.1	0.3	0.8	1.1	1.4	–	0.6
Q4	1.1	0.4	0.2	0.4	0.2	1.0	1.0	1.1	–0.4	0.6
2001 Q1	0.4	0.6	–	0.1	–0.8	–0.1	–0.6	–0.3	2.3	0.4
Q2	–0.1	0.2	0.1	–0.1	–	–0.8	–0.6	–0.4	–2.2	0.3
Q3	0.3	0.5	0.3	0.1	–0.5	–0.2	–0.2	1.1	–0.3	0.2
Q4	–0.3	0.1	0.1	–0.1	–0.7	–0.5	–0.8	–2.4	–0.5	0.3
2002 Q1	0.7	0.2	0.3	0.1	0.4	0.6	0.8	0.1	1.4	–
Q2	0.4	0.2	0.2	–	–0.1	0.5	0.4	0.6	–1.2	0.1
Q3	0.3	0.4	0.1	–0.1	–0.3	0.5	0.1	–0.2	1.3	0.1
Q4	0.2	0.2	0.3	–0.1	–0.1	–0.1	–0.1	–0.1	–0.5	0.2

Percentage change on previous month	ILKD	ILKN
2002 Mar	0.8	0.1
Apr	0.4	–2.0
May	–0.4	1.4
Jun	–	–2.4
Jul	–0.2	3.1
Aug	0.3	1.0
Sep	–0.3	–3.8
Oct	–	2.8
Nov	0.9	–
Dec	–1.7	–2.7
2003 Jan	1.5	4.1
Feb	..	–2.0

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

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
Unempl = Standardised Unemployment rates: percentage of total workforce
IoP=Index of Production

1 Producer prices in manufactured goods
2 Excludes members of armed foces

Source: OECD - SNA93

4 Italy

	Contribution to change in GDP													
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl	Unempl
Percentage change on a year earlier	ILGA	HUCI	HUCJ	HUCK	HUCL	HUCM	HUCN	ILGU	ILHO	HYAA	ILAH	ILAQ	ILII	GABE
1996	1.1	0.7	0.2	0.7	–0.7	0.2	–0.1	–1.6	1.2	4.0	1.9	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	3.9	0.4	11.6
1998	1.8	1.9	–	0.7	0.3	1.0	2.1	1.3	1.0	2.0	0.1	3.0	1.1	11.7
1999	1.7	1.6	0.2	1.0	0.3	–	1.4	–0.2	1.0	1.7	–0.2	1.8	1.2	11.3
2000	3.1	1.7	0.3	1.4	–1.1	3.3	2.4	4.1	–0.5	2.5	6.0	2.0	1.9	10.4
2001	1.8	0.7	0.6	0.6	–	0.3	0.3	–1.0	–0.6	2.7	1.9	1.9	2.0	9.5
2002	0.4	0.2	0.3	0.1	0.4	–0.3	0.4	–1.4	–0.4	2.5	0.2	2.6	1.4	9.0
1999 Q3	1.5	1.6	0.2	1.0	–	0.1	1.4	0.4	0.6	1.7	–	1.9	1.2	11.2
Q4	3.1	1.4	0.2	1.5	–0.1	2.1	2.1	3.0	2.3	2.1	2.2	1.5	1.4	11.0
2000 Q1	3.4	1.5	0.2	1.6	–1.3	4.0	2.6	3.6	–	2.4	4.7	1.6	1.0	10.9
Q2	3.3	1.9	0.2	1.6	–0.9	3.0	2.6	5.7	–	2.6	6.2	2.6	1.6	10.5
Q3	3.0	1.7	0.3	1.6	–1.4	3.6	2.6	3.6	1.3	2.6	6.7	1.9	2.1	10.3
Q4	2.9	1.6	0.4	0.9	–0.8	2.6	1.8	3.8	–3.2	2.6	6.5	1.8	2.8	9.9
2001 Q1	2.6	1.2	0.5	0.8	–0.5	1.8	1.2	3.0	0.6	2.9	4.7	2.2	3.2	9.7
Q2	2.3	0.9	0.6	0.6	–0.2	1.5	1.1	–0.4	–0.3	3.0	3.2	1.3	2.0	9.5
Q3	1.7	0.4	0.6	0.4	0.8	–0.8	–0.4	–1.9	–1.6	2.8	1.1	2.0	1.8	9.4
Q4	0.7	–	0.6	0.4	–0.2	–1.0	–0.8	–4.9	–1.0	2.5	–1.1	2.1	1.2	9.2
2002 Q1	–	–0.2	0.5	–0.3	1.5	–3.0	–1.5	–3.8	–	2.4	–1.0	2.2	1.7	9.0
Q2	0.1	–0.2	0.4	–0.3	0.6	–0.7	–0.4	–2.2	–1.3	2.2	–0.6	3.1	1.9	9.0
Q3	0.4	0.5	0.3	0.3	–0.4	1.2	1.4	–0.4	–0.6	2.4	0.5	2.3	1.3	9.0
Q4	1.0	1.0	–	0.8	–	1.3	2.2	0.8	0.3	2.7	1.7	2.8	0.9	8.9
2002 Mar	..	..	..	..	..	..	..	–3.3	1.0	2.5	–0.8	2.8	..	9.0
Apr	..	..	..	..	..	..	..	–3.0	–1.9	2.3	–0.8	3.1	..	9.0
May	..	..	..	..	..	..	..	–1.6	–1.0	2.3	–0.4	3.1	..	9.0
Jun	..	..	..	..	..	..	..	–1.8	–0.9	2.2	–0.4	3.2	..	9.0
Jul	..	..	..	..	..	..	..	–0.3	1.0	2.2	0.4	2.2	..	9.0
Aug	..	..	..	..	..	..	..	–0.9	–0.9	2.4	0.5	2.2	..	9.0
Sep	..	..	..	..	..	..	..	0.2	–2.0	2.6	0.8	2.4	..	9.0
Oct	..	..	..	..	..	..	..	–	1.0	2.7	1.6	2.8	..	8.9
Nov	..	..	..	..	..	..	..	1.9	–	2.8	1.5	2.8	..	8.9
Dec	..	..	..	..	..	..	..	0.4	–	2.8	2.0	2.7	..	8.9
2003 Jan	..	..	..	..	..	..	..	0.5	–	2.8	2.4	..	..	9.0
Feb	..	..	..	..	..	..	..	..	..	2.6	2.8	..	..	..

Percentage change on previous quarter	ILGK	HUCO	HUCP	HUCQ	HUCR	HUCS	HUCT	ILHE	ILHY	ILIS
1999 Q3	0.8	0.5	–	0.3	–0.5	0.7	0.3	2.2	–	1.4
Q4	1.1	0.4	–	0.6	0.1	1.1	1.1	1.4	1.3	–0.1
2000 Q1	1.0	0.6	0.1	0.4	–0.6	1.6	1.1	0.3	–1.6	–1.2
Q2	0.4	0.4	–	0.4	0.2	–0.5	–	1.7	0.3	1.6
Q3	0.6	0.3	0.1	0.2	–1.0	1.3	0.3	0.2	1.3	1.9
Q4	0.9	0.4	0.2	–0.1	0.7	0.1	0.3	1.5	–3.2	0.6
2001 Q1	0.7	0.1	0.2	0.4	–0.4	0.9	0.5	–0.5	2.3	–0.8
Q2	–	0.1	0.1	0.2	0.5	–0.8	–	–1.6	–0.6	0.4
Q3	–	–0.2	0.1	–	–	–1.0	–1.2	–1.3	–	1.7
Q4	–0.1	–	0.2	–0.1	–0.3	–0.1	–0.2	–1.8	–2.6	–
2002 Q1	–	–0.2	0.1	–0.3	1.4	–1.1	–0.2	0.7	3.3	–0.4
Q2	0.2	0.1	–	0.1	–0.5	1.5	1.0	0.1	–1.9	0.6
Q3	0.3	0.5	–	0.6	–1.0	1.0	0.7	0.5	0.6	1.1
Q4	0.4	0.6	–0.1	0.4	0.1	–	0.6	–0.5	–1.6	–0.4

Percentage change on previous month	ILKE	ILKO
2002 Mar	–	–1.0
Apr	–1.2	–2.9
May	1.8	1.0
Jun	–0.8	2.9
Jul	1.0	–
Aug	–1.2	–
Sep	0.6	–4.8
Oct	–0.7	3.0
Nov	0.6	–1.9
Dec	–0.6	–
2003 Jan	–	4.0
Feb	..	..

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

Source: OECD - SNA93

5 USA

	Contribution to change in GDP													
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP	Sales	CPI	PPI	Earnings	Empl[1]	Unempl
Percentage change on a year earlier														
	ILGC	HUDG	HUDH	HUDI	HUDJ	HUDK	HUDL	ILGW	ILHQ	ILAA	ILAJ	ILAS	ILIK	GADO
1996	3.6	2.1	0.1	1.5	–	0.9	1.0	4.3	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	7.4	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	1.8	5.6	7.1	1.6	–1.1	2.5	1.5	4.5
1999	4.1	3.3	0.4	1.6	–0.2	0.4	1.6	4.2	8.8	2.1	1.8	2.9	1.5	4.2
2000	3.8	2.9	0.4	1.2	–	1.1	2.0	4.7	5.5	3.4	4.1	3.5	2.5	4.0
2001	0.3	1.7	0.5	–0.6	–1.4	–0.7	–0.5	–3.5	4.8	2.8	0.7	3.2	–	4.8
2002	2.4	2.2	0.6	–0.4	0.7	–0.2	0.6	–0.8	5.3	1.5	–0.6	3.2	–0.3	5.8
1999 Q3	4.2	3.4	0.5	1.7	–0.3	0.7	1.8	4.3	9.6	2.4	2.4	3.7	1.4	4.2
Q4	4.3	3.3	0.5	1.3	0.1	0.6	1.7	5.0	8.2	2.6	3.2	3.6	1.5	4.1
2000 Q1	4.2	3.4	0.4	1.6	–0.4	1.0	2.0	5.2	7.8	3.2	4.6	4.2	2.8	4.0
Q2	4.9	3.0	0.6	1.4	0.7	1.3	2.2	6.0	5.8	3.3	4.4	3.3	2.8	4.0
Q3	3.7	2.9	0.4	1.0	0.2	1.4	2.2	4.8	5.2	3.5	3.9	2.9	2.3	4.1
Q4	2.3	2.4	0.3	0.7	–0.4	0.9	1.7	2.7	3.5	3.4	3.3	3.5	2.3	3.9
2001 Q1	1.5	1.9	0.5	0.1	–0.8	0.4	0.8	–0.2	2.9	3.4	2.1	2.6	0.8	4.2
Q2	–0.1	1.6	0.4	–0.5	–1.6	–0.4	–0.2	–3.4	4.5	3.4	2.1	3.5	0.1	4.5
Q3	–0.4	1.2	0.5	–0.9	–1.4	–1.3	–1.2	–4.6	3.8	2.7	0.6	3.4	–	4.8
Q4	0.1	1.9	0.7	–1.0	–1.7	–1.4	–1.4	–5.7	7.9	1.8	–1.5	3.4	–0.8	5.6
2002 Q1	1.4	2.0	0.7	–0.9	–	–1.1	–0.7	–3.8	5.9	1.2	–1.8	4.0	–1.2	5.6
Q2	2.2	2.1	0.7	–0.6	0.7	–0.4	0.4	–1.3	5.5	1.3	–1.7	3.4	–0.5	5.8
Q3	3.3	2.6	0.6	–0.2	0.9	0.3	1.1	0.8	7.0	1.5	–0.6	2.8	0.1	5.8
Q4	2.9	1.9	0.6	0.2	1.3	0.4	1.6	1.5	3.0	2.2	1.6	2.7	0.3	5.9
2002 Mar	..	..	..	..	..	..	..	–3.0	6.0	1.5	–1.3	4.2	–1.2	5.7
Apr	..	..	..	..	..	..	..	–2.1	5.8	1.6	–1.4	3.4	–0.8	5.9
May	..	..	..	..	..	..	..	–1.3	4.4	1.2	–2.2	3.4	–0.5	5.8
Jun	..	..	..	..	..	..	..	–0.3	6.2	1.1	–1.6	3.3	–0.5	5.8
Jul	..	..	..	..	..	..	..	0.6	6.9	1.5	–0.6	2.5	–0.5	5.8
Aug	..	..	..	..	..	..	..	0.6	6.5	1.8	–0.7	3.3	0.4	5.8
Sep	..	..	..	..	..	..	..	1.2	7.6	1.5	–0.5	2.5	0.4	5.7
Oct	..	..	..	..	..	..	..	1.0	0.3	2.1	1.5	3.3	0.5	5.8
Nov	..	..	..	..	..	..	..	1.8	3.5	2.2	1.5	2.5	0.2	5.9
Dec	..	..	..	..	..	..	..	1.6	5.3	2.3	1.9	2.4	0.3	6.0
2003 Jan	..	..	..	..	..	..	..	1.9	5.3	2.6	3.2	3.3	1.3	5.7
Feb	..	..	..	..	..	..	..	1.7	2.2	3.0	4.3	2.4	0.7	5.8
Percentage change on previous quarter														
	ILGM	HUDM	HUDN	HUDO	HUDP	HUDQ	HUDR	ILHG	ILIA				ILIU	
1999 Q3	1.3	0.8	0.2	0.3	0.2	0.3	0.5	1.2	1.9				0.6	
Q4	1.7	0.8	0.2	0.2	0.5	0.4	0.4	1.6	2.0				0.3	
2000 Q1	0.6	0.9	–0.1	0.6	–0.5	0.2	0.5	1.3	2.2				0.7	
Q2	1.2	0.5	0.3	0.2	0.5	0.4	0.7	1.7	–0.4				1.2	
Q3	0.1	0.6	–	–	–0.3	0.3	0.5	0.1	1.3				0.1	
Q4	0.3	0.3	0.1	–0.1	–	–0.1	–0.1	–0.4	0.4				0.3	
2001 Q1	–0.2	0.4	0.2	–	–0.9	–0.2	–0.3	–1.6	1.6				–0.7	
Q2	–0.4	0.2	0.1	–0.4	–0.3	–0.4	–0.3	–1.5	1.2				0.5	
Q3	–0.1	0.2	0.1	–0.4	–	–0.6	–0.5	–1.2	0.5				–	
Q4	0.7	1.0	0.3	–0.2	–0.4	–0.3	–0.2	–1.5	4.3				–0.5	
2002 Q1	1.2	0.5	0.1	0.1	0.8	0.1	0.3	0.4	–0.2				–1.1	
Q2	0.3	0.3	0.1	–0.1	0.4	0.4	0.8	1.1	0.8				1.1	
Q3	1.0	0.7	0.1	–	0.1	0.1	0.1	0.9	2.0				0.6	
Q4	0.3	0.3	0.2	0.2	0.1	–0.2	0.3	–0.9	0.4				–0.4	
Percentage change on previous month														
								ILKG	ILKQ				ILLA	
2002 Mar								0.4	–0.4				0.1	
Apr								0.4	0.8				0.3	
May								0.3	–0.7				0.5	
Jun								0.3	1.6				0.5	
Jul								0.7	1.4				0.3	
Aug								–0.2	0.4				–0.2	
Sep								–0.1	–1.5				0.1	
Oct								–0.6	0.2				0.1	
Nov								0.2	0.8				–0.6	
Dec								–0.6	1.8				–	
2003 Jan								0.8	0.2				–0.5	
Feb								0.1	–2.3				0.4	

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
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IoP = Industrial Production
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

1 Excludes members of armed forces

6 Japan

	Contribution to change in GDP													
	GDP	PFC	GFC	GFCF	ChgStk	Exports	less Imports	IoP[1]	Sales	CPI	PPI	Earnings[2]	Empl	Unempl
Percentage change on a year earlier														
	ILGD	HUCU	HUCV	HUCW	HUCX	HUCY	HUCZ	ILGX	ILHR	ILAB	ILAK		ILAT	ILIL	GADP
1996	3.5	1.3	0.4	1.9	0.3	0.8	1.0	2.2	0.6	0.1	-1.7		2.5	0.5	3.4
1997	1.9	0.6	0.1	0.2	–	1.1	0.1	4.0	-2.1	1.7	0.6		2.8	1.0	3.4
1998	-1.2	–	0.3	-1.1	-0.6	-0.2	-0.6	-6.7	-6.0	0.7	-1.3		-0.9	-0.6	4.1
1999	0.2	0.1	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	2.7	0.5	0.7	0.7	0.3	1.3	0.7	5.2	-1.1	-0.7	0.1		1.7	-0.3	4.7
2001	0.4	1.0	0.4	-0.3	–	-0.7	–	-7.0	-1.2	-0.7	-2.4		–	-0.5	5.0
2002	0.3	0.8	0.4	-1.1	-0.4	0.8	0.2	-1.5	-2.9	-1.0	-1.9		-1.0	-1.3	5.4
1999 Q3	1.1	0.6	0.8	–	-0.3	0.3	0.3	2.7	-2.2	–	-1.3		-0.3	-0.7	4.7
Q4	-0.5	-0.9	0.7	0.2	-0.2	0.7	0.8	5.1	-1.1	-1.0	-0.5		-0.3	-0.2	4.6
2000 Q1	1.3	0.3	0.6	–	-0.1	1.2	0.7	4.3	-2.2	-0.6	0.8		1.9	-0.5	4.8
Q2	1.9	0.2	0.9	0.2	0.1	1.4	0.8	6.6	-1.5	-0.7	0.5		2.1	-0.4	4.7
Q3	2.8	–	0.8	0.9	0.5	1.3	0.8	5.3	-0.4	-0.6	–		1.7	-0.4	4.7
Q4	5.1	1.4	0.8	1.9	0.6	1.2	0.8	4.4	-0.4	-0.8	-0.6		1.1	0.2	4.7
2001 Q1	3.5	1.1	0.7	1.2	1.0	0.2	0.7	0.6	2.3	-0.5	-1.9		0.3	0.5	4.7
Q2	1.1	1.1	0.4	0.3	0.1	-0.6	0.2	-5.2	-1.1	-0.7	-2.1		0.5	-0.4	4.9
Q3	-0.6	0.8	0.2	-0.4	-0.4	-1.0	-0.2	-10.4	-2.6	-0.8	-2.5		-0.2	-0.8	5.1
Q4	-2.4	0.7	0.4	-2.3	-0.6	-1.2	-0.6	-12.8	-3.4	-1.0	-3.0		-0.6	-1.3	5.4
2002 Q1	-2.8	0.4	0.4	-2.2	-1.6	-0.3	-0.5	-10.1	-4.4	-1.4	-2.8		-1.5	-1.5	5.3
Q2	-0.2	0.5	0.4	-1.4	-0.5	0.8	–	-3.0	-3.0	-0.9	-2.2		-0.8	-1.6	5.4
Q3	1.7	1.3	0.5	-1.0	0.2	1.1	0.5	3.4	-2.3	-0.8	-1.9		-2.2	-1.0	5.4
Q4	2.8	1.0	0.2	0.3	0.3	1.8	0.8	4.9	-1.9	-0.5	-1.1		0.1	-1.1	5.4
2002 Mar	..	..	..	..	..	..	..	-8.5	-4.4	-1.2	-2.7		-1.0	-1.3	5.3
Apr	..	..	..	..	..	..	..	-6.4	-3.4	-1.1	-2.3		0.1	-1.4	5.3
May	..	..	..	..	..	..	..	-1.6	-2.3	-0.9	-2.2		-0.4	-1.9	5.4
Jun	..	..	..	..	..	..	..	-1.1	-3.4	-0.7	-2.1		-1.8	-1.4	5.4
Jul	..	..	..	..	..	..	..	1.7	-4.5	-0.8	-1.9		-4.9	-1.2	5.4
Aug	..	..	..	..	..	..	..	2.6	-1.1	-0.9	-1.9		-2.8	-1.1	5.5
Sep	..	..	..	..	..	..	..	5.8	-1.1	-0.7	-1.8		1.3	-0.7	5.4
Oct	..	..	..	..	..	..	..	5.5	-2.3	-0.9	-1.3		1.0	-0.8	5.5
Nov	..	..	..	..	..	..	..	5.9	-1.1	-0.4	-1.1		0.5	-1.3	5.3
Dec	..	..	..	..	..	..	..	3.4	-2.4	-0.3	-1.0		-1.3	-1.1	5.3
2003 Jan	..	..	..	..	..	..	..	7.4	-2.3	-0.4	-0.9		0.2	-1.0	5.5
Feb	..	..	..	..	..	..	..	..	–	-0.2	-0.9		..	-0.9	5.2
Percentage change on previous quarter														
	ILGN	HUDA	HUDB	HUDC	HUDD	HUDE	HUDF	ILHH	ILIB					ILIV
1999 Q3	-0.2	0.1	0.3	-0.4	-0.2	0.3	0.2	2.7	-0.4					–
Q4	-1.0	-0.9	0.1	–	–	0.2	0.3	1.2	-0.7					-0.6
2000 Q1	2.1	0.9	0.2	0.4	–	0.6	–	0.6	-0.7					-2.1
Q2	1.0	0.2	0.4	0.1	0.3	0.4	0.3	1.9	0.4					2.3
Q3	0.7	-0.1	0.2	0.4	0.2	0.1	0.2	1.5	0.8					–
Q4	1.3	0.4	0.1	0.9	–	–	0.3	0.3	-0.7					–
2001 Q1	0.5	0.6	–	-0.2	0.5	-0.4	-0.1	-3.1	1.9					-1.8
Q2	-1.3	0.1	0.1	-0.7	-0.6	-0.4	-0.2	-4.0	-2.9					1.4
Q3	-1.1	-0.3	–	-0.4	-0.3	-0.3	-0.2	-4.0	-0.8					-0.4
Q4	-0.6	0.3	0.2	-1.0	-0.2	-0.2	-0.2	-2.4	-1.5					-0.5
2002 Q1	0.1	0.2	0.1	-0.2	-0.5	0.5	0.1	-0.1	0.8					-2.0
Q2	1.4	0.2	–	0.1	0.5	0.7	0.3	3.7	-1.5					1.3
Q3	0.8	0.4	0.1	0.1	0.4	–	0.2	2.3	–					0.2
Q4	0.5	–	–	0.3	-0.1	0.5	0.1	-0.9	-1.2					-0.6
Percentage change on previous month														
								ILKH	ILKR					ILLB
2002 Mar								0.5	-1.1					0.7
Apr								0.3	-1.2					0.6
May								4.0	1.2					0.3
Jun								-0.2	-1.2					0.3
Jul								0.4	-1.2					–
Aug								1.2	2.4					–
Sep								-0.3	–					-0.3
Oct								-0.2	-2.3					–
Nov								-1.1	2.4					-0.1
Dec								-0.6	-3.5					-0.9
2003 Jan								2.3	2.4					-1.3
Feb								..	2.4					-0.2

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Earnings = Average Earnings (manufacturing), definitions of coverage and treatment vary among countries
Empl = Total Employment not seasonally adjusted
Unempl = Standardised Unemployment rates: percentage of total workforce
IoP=Index of Production

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

Source: OECD - SNA93

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	9.4	5.5	4.2	9.3	4.5	3.8	6.2	5.2	4.2	8.3	5.0	4.7
1993	3.6	2.1	11.8	3.6	0.7	11.7	4.1	2.2	7.8	3.1	0.7	10.0	3.8	3.4
1994	10.4	9.9	17.8	12.0	11.0	11.3	11.6	9.3	13.2	10.9	12.2	10.7	11.8	10.6
1995	9.1	9.9	10.6	10.5	9.0	11.5	10.2	9.3	8.6	9.8	10.1	11.8	10.3	9.5
1996	6.4	6.5	4.5	7.1	7.2	4.7	6.0	6.5	6.0	6.2	8.0	3.6	6.6	6.3
1997	10.8	11.9	11.2	11.6	9.7	12.4	11.7	11.0	10.2	10.2	11.3	11.5	11.7	10.5
1998	4.8	6.3	1.4	6.1	8.1	–2.7	5.3	5.6	2.4	5.5	9.5	–1.3	5.7	5.1
1999	5.6	6.1	6.9	7.8	9.1	–0.6	6.3	5.7	5.3	6.6	10.8	–0.7	7.1	6.1
2000	12.2	12.4	18.8	14.8	12.1	17.5	13.9	11.9	13.1	12.6	14.0	13.9	14.3	12.4
2001	–0.7	–1.6	–1.2	–0.9	–1.2	1.8	–1.4	–0.8	–0.5	–0.1	–1.8	3.1	–1.2	–0.4
2002	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1996 Q3	6.6	6.8	4.5	6.9	7.7	2.2	6.3	6.6	6.5	5.8	8.8	1.0	6.6	6.2
Q4	8.4	8.2	5.8	8.4	8.5	7.1	7.6	8.8	7.2	7.7	8.9	5.5	8.0	8.0
1997 Q1	8.1	8.0	8.9	8.6	7.3	9.7	8.2	7.6	9.5	7.7	8.2	8.7	8.4	7.9
Q2	11.7	13.0	10.1	12.1	10.4	12.2	12.4	12.4	9.8	10.7	12.1	11.5	12.2	11.2
Q3	12.3	14.0	12.2	13.2	10.5	15.2	13.6	12.9	10.6	11.5	12.4	14.2	13.4	11.9
Q4	11.0	12.3	13.4	12.4	10.4	12.7	12.6	11.1	10.8	10.7	12.3	11.5	12.5	10.9
1998 Q1	9.6	11.3	6.4	10.0	11.0	3.6	10.2	10.9	6.1	9.1	12.6	4.3	10.1	9.3
Q2	5.4	6.9	2.9	6.7	8.3	–1.2	6.0	6.2	3.1	5.9	9.8	–0.4	6.4	5.6
Q3	2.8	4.2	0.1	4.3	6.7	–5.1	3.3	3.3	1.3	3.9	7.9	–3.6	3.8	3.3
Q4	1.7	3.3	–3.4	3.6	6.6	–7.8	1.8	2.6	–0.8	3.3	8.0	–5.5	2.7	2.5
1999 Q1	1.4	2.8	–2.5	3.9	6.2	–6.3	1.6	1.7	0.5	3.4	7.7	–4.0	2.8	2.4
Q2	3.7	3.9	3.9	6.2	7.9	–3.4	3.9	3.7	3.8	5.1	9.5	–2.9	5.1	4.4
Q3	7.0	7.3	9.5	8.8	9.8	0.8	7.8	7.2	6.2	7.3	11.6	–0.1	8.3	7.1
Q4	10.2	10.4	17.0	12.3	12.2	6.4	11.8	10.1	10.8	10.3	14.2	4.8	12.1	10.3
2000 Q1	13.3	13.6	23.1	14.5	13.4	12.7	15.6	13.4	13.1	12.0	15.1	8.0	15.0	12.7
Q2	13.3	13.9	20.9	15.8	13.2	17.7	15.4	13.0	14.4	13.6	15.3	14.7	15.6	13.5
Q3	12.6	12.4	19.6	16.4	12.8	21.7	13.9	11.8	15.0	14.1	14.7	18.3	15.2	13.4
Q4	9.9	10.1	12.5	12.5	9.3	17.6	10.6	9.8	10.1	10.5	10.9	14.6	11.5	10.2
2001 Q1	6.1	6.0	6.4	7.0	5.2	11.6	6.1	5.9	6.8	6.9	5.5	12.0	6.5	6.5
Q2	0.2	–0.3	–1.3	–	–0.4	2.9	–0.6	0.4	–0.4	0.5	–0.9	3.6	–0.3	0.3
Q3	–3.7	–4.6	–5.9	–4.3	–4.1	–2.3	–4.9	–3.4	–4.7	–3.3	–5.0	–0.8	–4.6	–3.5
Q4	–5.1	–6.8	–3.4	–5.7	–4.9	–3.8	–6.1	–5.8	–3.2	–4.1	–6.3	–1.7	–5.9	–4.6
2002 Q1	–3.2	–4.8	1.4	–3.3	–3.1	–2.5	–3.4	–4.0	–0.9	–2.8	–3.6	–1.8	–3.4	–3.0
Q2	3.6	2.7	11.0	2.8	2.2	3.8	4.5	2.5	7.0	2.7	2.4	4.3	3.6	3.2
Q3	–11.8	6.2	16.8	..	5.2	..	8.5	5.6	..	..	5.7	..	..	..
Q4	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Percentage change on previous quarter	ILJN	ILJO	ILJP	ILJQ	ILJR	ILJS	ILJT	ILJU	ILJV	ILJW	ILJX	ILJY	ILJZ	ILKA
1996 Q3	1.8	2.3	–0.2	1.7	2.4	–0.9	1.8	2.3	0.3	1.4	2.8	–1.2	1.8	1.6
Q4	2.7	2.8	1.7	2.7	2.0	4.1	2.6	3.0	1.8	2.5	2.2	3.6	2.6	2.6
1997 Q1	2.4	2.0	6.1	3.2	1.1	6.5	2.9	1.1	5.8	2.7	2.0	6.9	3.1	2.5
Q2	4.4	5.3	2.2	3.9	4.5	2.1	4.6	5.5	1.6	3.7	4.6	1.9	4.3	4.1
Q3	2.3	3.2	1.7	2.7	2.5	1.8	2.8	2.8	1.1	2.1	3.1	1.1	2.8	2.2
Q4	1.5	1.3	2.8	2.0	1.9	1.9	1.7	1.3	2.0	1.7	2.0	1.3	1.8	1.6
1998 Q1	1.0	1.0	–0.4	1.1	1.7	–2.1	0.7	0.9	1.3	1.2	2.3	–	0.9	1.1
Q2	0.4	1.3	–1.2	0.8	1.9	–2.7	0.7	1.1	–1.3	0.7	2.0	–2.7	0.7	0.6
Q3	–0.2	0.5	–1.0	0.4	1.1	–2.2	0.1	–	–0.7	0.2	1.3	–2.2	0.3	–
Q4	0.4	0.5	–0.8	1.3	1.7	–0.9	0.2	0.6	–0.1	1.1	2.1	–0.7	0.8	0.8
1999 Q1	0.7	0.5	0.5	1.3	1.3	–0.6	0.5	0.1	2.6	1.3	2.0	1.5	0.9	1.0
Q2	2.7	2.4	5.3	3.0	3.6	0.3	3.0	3.0	2.0	2.3	3.8	–1.6	3.0	2.5
Q3	2.9	3.7	4.3	2.9	2.9	2.0	3.8	3.4	1.6	2.3	3.2	0.7	3.4	2.6
Q4	3.5	3.4	6.0	4.5	3.9	4.6	4.0	3.2	4.3	4.0	4.5	4.2	4.3	3.7
2000 Q1	3.6	3.4	5.7	3.4	2.4	5.2	3.9	3.1	4.7	2.9	2.8	4.6	3.6	3.2
Q2	2.8	2.7	3.4	4.2	3.5	4.8	2.8	2.6	3.2	3.7	4.0	4.5	3.5	3.2
Q3	2.2	2.4	3.2	3.4	2.5	5.5	2.6	2.3	2.1	2.8	2.7	3.8	3.0	2.5
Q4	1.0	1.3	–0.2	1.0	0.6	1.1	0.9	1.4	–0.2	0.7	1.0	1.0	1.0	0.9
2001 Q1	–	–0.4	–	–1.7	–1.4	–0.2	–0.4	–0.5	1.6	–0.5	–2.1	2.3	–1.0	–0.2
Q2	–3.0	–3.5	–4.1	–2.6	–2.1	–3.3	–3.6	–2.7	–3.8	–2.4	–2.4	–3.3	–3.1	–2.7
Q3	–1.7	–2.0	–1.6	–1.1	–1.3	0.1	–1.9	–1.5	–2.3	–1.1	–1.5	–0.8	–1.5	–1.4
Q4	–0.4	–1.1	2.4	–0.5	–0.2	–0.5	–0.3	–1.1	1.5	–0.1	–0.5	–	–0.4	–0.3
2002 Q1	2.0	1.7	4.9	0.8	0.5	1.2	2.5	1.3	3.9	0.9	0.7	2.2	1.6	1.5
Q2	3.8	4.1	5.1	3.5	3.3	3.0	4.3	3.8	3.9	3.1	3.7	2.7	3.9	3.5
Q3	–16.4	1.4	3.6	..	1.6	..	1.9	1.5	..	..	1.7	..	..	..
Q4	..	..	..	..	..	..	..	..	..	..	..	..	..	..

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

Source: OECD - SNA93

Regional Economic Indicators - May 2003

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Overview

Labour market data shows employment rose across most regions in the fourth quarter of 2002, although employee job growth showed a more mixed picture and somewhat lower growth rates with falls in many regions. Long term unemployment across all regions has been fairly flat so far this year but fell between March 2002 and March 2003, although there are large variances in the rates across regions. Industrial production contracted in 2002 in all countries, while the index of construction generally rose. However, external data shows that businesses in nearly all regions are less optimistic in January 2003 than they were in October 2002. Annual house prices show very strong increases in all regions, but there is some evidence of falls in the latest period in some regions.

GDP at basic prices

Tables 1 to 4 concern National Accounts statistics for the regions.

In Table 1, London and the South East together accounted for 31.7 per cent of the UK's total GDP in 1999, with contributions of 15.9 per cent and 15.8 per cent respectively. For the South East this was a significant increase from 14.8 per cent in 1989. The other region to grow significantly faster than the average was Northern Ireland, which posted an 82.3 per cent increase in value terms from 1989 to 1999, although this only accounted for 2.2 per cent of the UK's total GDP in 1999. In 1999 overall GDP at basic prices rose by 3.8 per cent, compared to 6.1 per cent in 1998 (figure 1). The highest annual rate of increase was in the South East at 5.1 per cent.

Figure 1
GDP: UK, England, Wales, Scotland & Northern Ireland
growth, year on previous year
percentage change, 1997 to 1999

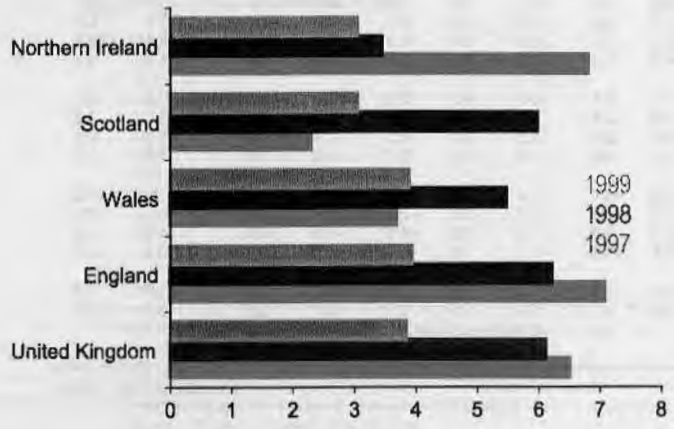


Table 2 compares GDP per head per region and on that basis it shows that London remains the richest region and the North East the poorest. The growth rate was the highest in the South East, at 4.1 per cent. The other regions that grew above the UK average of 3.4 per cent were Yorkshire and the Humber, the West Midlands, the East and Wales. London, with one of the highest growth rates in GDP between 1997 and 1998 had the lowest growth rate in GDP per head of all the regions in 1999.

Table 3 shows how household disposable income per head increased in the UK in 1999 by 4.6 per cent compared to an increase of 1.9 per cent in 1998. London recorded the highest value in 1999 of £12,207 followed by the South East with £11,055, which continues medium term trends. Looking at annual percentage changes, Scotland recorded the largest rise of 7.8 per cent in 1999, while Yorkshire and the Humber was the slowest growing region, with growth of 2.4 per cent in 1999. Other slower growing regions were the South East, with 3.3 per cent, London, with 3.4 per cent, and the South West with growth of 3.6 per cent in 1999. Significant acceleration in the rates of increase in 1999 compared to 1998, of more than 4.5 per cent, was seen in the North East and Scotland, whilst growth fell in the Yorkshire and Humber region.

Table 4, shows individual consumption expenditure per head, with London again recording the highest monetary value of £12,250 in 1999, followed by the South East with £11,392 and the North East having the lowest expenditure. Looking at annual percentage changes, London also recorded the largest rise in consumption with growth of 8.8 per cent in 1999, while the North East recorded a decline of 1.0 per cent in the same period, compared to an increase of 4.4 per cent in 1998.

The Labour Market

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

The **total in employment** (from the Labour Force Survey), table 9, in

the UK grew by 0.5 per cent in 2002 quarter four compared to a fall of 0.1 per cent in the previous quarter. This however masks the varied performance at the regional level with the North East and the East Midlands showing falls in employment growth of 1.6 per cent and 0.4 per cent respectively. The North West had the highest growth in employment of 2.0 per cent. On an annual basis, all regions showed growth in the year to the fourth quarter, with the exception of the East and the North East. Wales recorded the highest growth for the period of 4.8 per cent. The other region that saw high annual growth were Northern Ireland (4.4 per cent).

Employee jobs (from Employers Surveys), in table 11 shows employment in the UK with slower growth than the figures complied from the Labour Force Survey. In quarter four, growth in employee jobs in the UK fell by 0.4 per cent compared to a year ago. Growth in the year to the fourth quarter was mixed across the regions, with many regions seeing declines. The largest decline was in the South East, 1.3 per cent and the strongest growth was in the North East, 1.2 per cent.

The UK **claimant count rate**, table 8, was 3.1 per cent of the workforce in the UK in 2002 and has remained at that rate for the first three months of 2003. Again, the national rate masked large variations between regions with the North East having the highest claimant count in March 2003 of 4.9 per cent, followed closely by Northern Ireland with 4.3 per cent. Over the year, the national level of unemployment has remained the same and this is echoed in most regions.

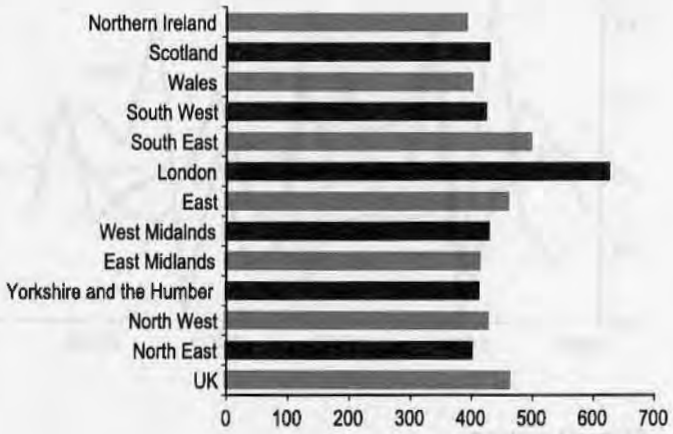
Table 6 shows the rate of **ILO unemployment**. The rate stabilised at 5.1 per cent for most of 2002, except in quarter three when there was a slight increase to 5.3 per cent. However, there was a high degree of volatility between the latest quarters at the regional level and the differences in their rates are also fairly marked. Increases in unemployment in 2002 quarter four were seen in the North East, the East, the South West and Wales. The largest declines in the unemployment rate were seen in Northern Ireland, the North West, and London. The unemployment rate in the north East rose by 1.3 percentage points between quarters three and four.

Long-term claimant count rates as a percentage of the unemployed, table 7, shows an increase in the UK of 0.2 percentage points in March having fallen by 0.4 percentage points between January and February. During the same period across most regions there were also either slight decreases or no change in most regions since the start of the year. Comparing count rates, the highest rate of 22.0 per cent was in Northern Ireland while the South West has the lowest count of 10.8 per cent. Comparing March of this year with last year shows that there has been a significant decrease in the count in all the regions over the year. Although Northern Ireland has the highest count in March 2003, this was reduced from 27.6 per cent in the same month of last year. Other regions to have significantly reduced their count over the year are the North East, the West Midlands and Yorkshire and the Humber.

Table 10 shows **redundancy rates** in the government office regions. Examing the aggregate picture is not possible at the moment due to a re-weighting of the Labour Force Survey data. However, figures for most regions are avaliable. Between Winter 2001 and Winter 2002, there were considerable reductions in the redundancy rates in the North West, the South East and the South West. The other regions that saw small changes in redundancies over the same period were Yorkshire and the Humber, the West Midlands and Wales.

Total average gross weekly pay (from the annual New Earnings Survey), in table 5, shows London having the highest pay of £624 a week in April 2002, up from £596 a year ago, an increase of 4.8 per cent. Regions where the rate of growth increased by 5 per cent or more were the South East (5.0 per cent) and Scotland (5.6 per cent). However, the rates of increase in 2002 are generally lower than those seen in 2001, when the UK average was 6.3 per cent and many more regions had growth rates of 5.0 per cent and above. In April 2002, the West Midland's weekly pay increased by 2.0 per cent, the lowest of all the regions, although this followed the highest rate of growth in the year to April 2001, with a rate of 8.2 per cent.

Figure 2
Total average gross weekly pay
2002 April
seasonally adjusted



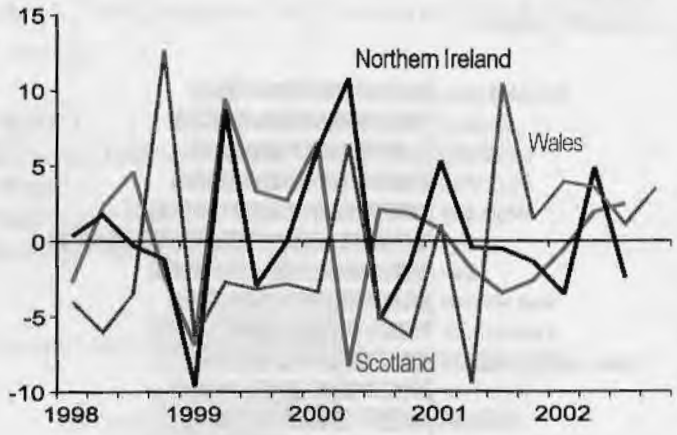
Industrial Production and Construction

For UK industrial production output, table 12, figures for the UK and Wales extend to 2002 quarter four, while data for Scotland and Northern Ireland extends to quarter three. Overall production was declining at the end of 2002, following a degree of recovery earlier in the year. The

index of production in quarter four for the UK shows a contraction of 0.8 per cent following expansions of 0.4 per cent and 0.3 per cent in the previous two quarters. Overall in 2002 the index contracted by 3.5 per cent in the UK accelerating from a 2.2 per cent decline in 2001. In Wales, the index also contracted by 2.4 per cent in quarter four compared with a contraction of 0.5 per cent in the previous quarter. In 2002, the index fell 1.7 per cent. Between quarters two and three in Scotland and Northern Ireland, growth in the index fell by 0.9 per cent and 0.2 per cent respectively.

On the other hand, **UK construction output**, table 13, rose by 1.9 per cent in 2002 quarter four and 1.8 per cent in quarter three; this continues the recent strong positive growth. Overall in 2002, the index for the UK the index grew by 7.5 per cent. Again, data for Scotland and Northern Ireland only extends to quarter three and shows construction in Scotland rising for two consecutive quarters after falling in quarter one. In Northern Ireland, having had a strong quarter two, the index contracted in quarter three by 2.5 per cent. Wales sustained its recent growth in construction in quarter two, but this slowed considerably in quarter three but has again picked up fairly strongly in quarter four, growing by 3.5 per cent (figure 3). Comparing 2002 quarter four to the same quarter a year ago shows the index for the UK growing by 8.0 per cent. In Wales over the same period, growth was 12.7 per cent

Figure 3
Index of construction
growth, quarter on previous quarter



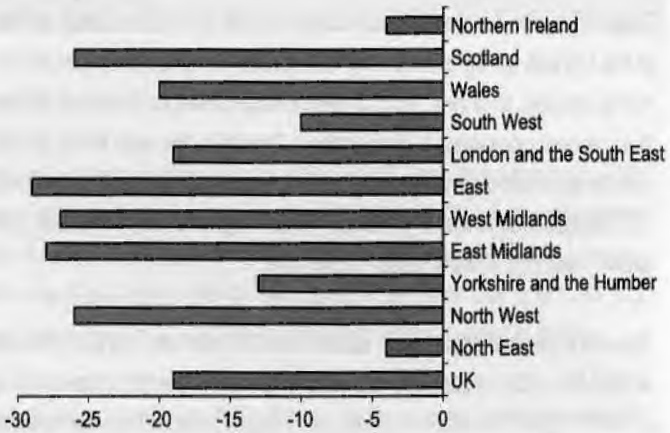
Manufacturing

Almost all CBI data is presented on the basis of government office regions. However, London and the South East are combined.

Tables 14 to 18 show that CBI/BSL balances reveal a fairly mixed picture across regions regarding in business optimism and in the volumes of new orders in its latest survey.

Table 14 shows that businesses in most regions were substantially less **optimistic about the business situation** in the January 2003 survey than the October 2002 survey, with most regions also being less optimistic than in the July survey. The only regions where optimism increased significantly were the North East and the South West and Northern Ireland and even then, the balances are relatively low.

Figure 4
Manufacturing industry
business optimism (balances)
January 2003



UK manufacturing output, as measured by CBI/BSL balances for **volume of output** in table 15, shows a generally more mixed picture some regions reporting improvements but the majority reporting deterioration in the volume of output over the past four months, but looking ahead an improvement is anticipated. Output is anticipated to deteriorate significantly only in Scotland and Wales.

The overall CBI/BSL January 2003 balance for **volume of new orders**, table 16, shows a slight improvement for the UK in the volume of new orders between the October and January surveys but a mixed picture by region. The figures are volatile and those regions showing small recent increases generally have had large falls in earlier surveys. Looking ahead to the next four months, again, most regions anticipate improvements.

Volume of new export orders, table 17, for the next four months is showing a mixed picture from the January 2003 survey across the regions. Broadly the figures show continuing decline, although there has been reductions to the extent of the deterioration in most cases. Only the North East was the balance of opinion positive about the volume of orders in the past four months. Looking ahead, the picture on new export orders across the regions is mixed but with majority of the regions expecting the decline to continue. The exceptions are the North East, Yorkshire and the Humber, the West Midlands and London and the South East.

In line with the overall general fall in output and expected workflows in the

future, the percentages of **firms working below capacity,** table 18, shows an increase in the number of firms working below capacity in January 2003 of 74 per cent compared with 67 per cent in October 2002. This pattern is generally seen across the regions with the highest increase in the East Midlands where the number of firms working below capacity increased from 53 per cent to 72 per cent in the same period. The most significant decrease was in Northern Ireland where there was a decrease from 70 per cent to 51 per cent between October 2002 and January 2003, but again these figures are volatile.

The Housing Market

In Table 20, UK **house prices** (not seasonally adjusted) continued to grow in the fourth quarter with falls in some regions. This was however at a slower pace than in the previous quarters of the year, increasing by just 2.1 per cent compared with 8.3 per cent in quarter three and 8.0 per cent in quarter two.

The latest quarterly data shows increases occurring in most regions, but at a wide range of rates. The exceptions being London, the South West, Wales and Northern Ireland, where prices fell by 2.6 per cent, 1.1 per cent, 9.3 per cent and 1.7 per cent respectively. The highest rates of growth in houses prices were in the North East and the North West.

The annual data shows a fairly similar story of house prices increasing but generally at lower rates. UK year-on-year growth in 2002 saw house prices increase by 17 per cent from 8.6 per cent in the previous year and this was reflected in all regions. Regions with increases in house prices of over 20 per cent were Yorkshire and the Humber, East Midlands, West Midlands, the South West and Wales.

In Table 19 the number of **permanent dwellings started** fluctuates quite widely from quarter to quarter with a significant seasonal factor involved. Year-on-year growth to quarter four shows a mixed picture across the regions with some showing an increase in the number of permanent dwelling started and others showing a decrease.

Business Start-Ups

VAT registrations and de-registrations, table 21, shows registrations outnumbering de-registrations by 12,700 for the calendar year 2001 which, is well up on the levels of 1999 and 2000, although well down on that recorded in 1998. In 2001 registrations outnumbered de-registrations in every region, except the North East, where there was a small net decline of 100 enterprises. The largest net gains were in London (2,800 businesses), the South East (3,900 businesses), the East (1,000 businesses) and the North West (1,400 businesses).

1 Gross domestic product[1] at basic prices

Government Office Regions

£ million

	United Kingdom[2] (£m)	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Northern Ireland
	TMPV	TMPW	TMPX	TMPY	TMPZ	TMQA	TMQB	TMQC	TMQD	TMQE	TMQF	TMQG	TMQH	TMQI
1989	452 437	17 156	49 365	34 848	30 439	37 956	45 885	68 907	66 979	34 118	385 653	19 007	38 448	9 329
1993	562 857	21 480	60 664	42 952	37 124	46 859	55 928	86 574	83 817	42 529	477 927	23 191	49 302	12 437
1994	593 931	22 074	63 938	44 752	39 023	49 577	59 824	91 118	88 936	44 607	503 851	24 463	52 273	13 344
1995	622 389	22 975	66 007	47 108	40 976	52 407	62 416	93 843	93 319	47 385	526 437	25 989	55 667	14 297
1996	657 775	23 755	68 937	50 043	44 184	54 851	66 484	99 490	100 614	50 128	558 483	27 017	57 338	14 936
1997	700 567	24 202	72 414	53 182	47 261	57 783	72 698	108 559	108 276	53 580	597 956	28 010	58 650	15 952
1998	743 314	25 294	75 275	55 457	49 413	61 130	77 962	118 499	116 024	56 064	635 117	29 541	62 153	16 501
1999	771 849	25 875	77 562	57 554	50 906	63 495	81 793	122 816	121 956	58 151	660 108	30 689	64 050	17 003

1 Based on the European System of Accounts 1995 (ESA95).
2 UK *less* Extra-Regio and statistical discrepancy.

Source: National Statistics

2 Gross domestic product[1] at basic prices: £ per head

Government Office Regions

£

	United Kingdom[2]	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Northern Ireland
	TMQJ	TMQK	TMQL	TMQM	TMQN	TMQO	TMQP	TMQQ	TMQR	TMQS	TMQT	TMQU	TMQV	TMQW
1989	7 888	6 614	7 199	7 042	7 621	7 242	9 012	10 135	8 805	7 297	8 069	6 624	7 544	5 893
1993	9 671	8 216	8 783	8 563	9 102	8 855	10 772	12 494	10 834	8 927	9 852	7 978	9 614	7 610
1994	10 170	8 441	9 248	8 901	9 519	9 352	11 467	13 088	11 441	9 311	10 349	8 393	10 168	8 114
1995	10 619	8 796	9 547	9 354	9 944	9 869	11 889	13 406	11 918	9 828	10 771	8 900	10 818	8 654
1996	11 185	9 111	9 980	9 927	10 673	10 309	12 582	14 107	12 761	10 351	11 384	9 240	11 162	8 964
1997	11 871	9 301	10 494	10 541	11 371	10 845	13 657	15 266	13 634	11 008	12 141	9 562	11 429	9 507
1998	12 548	9 741	10 909	10 983	11 848	11 455	14 530	16 532	14 510	11 447	12 845	10 063	12 117	9 754
1999	12 972	10 024	11 273	11 404	12 146	11 900	15 094	16 859	15 098	11 782	13 278	10 449	12 512	10 050

1 Based on the European System of Accounts 1995 (ESA95).
2 UK *less* Extra-Regio and statistical discrepancy.

Source: National Statistics

3 Household disposable income[1]: £ per head

Government Office Regions

£

	United Kingdom[2]	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Northern Ireland
	DEPZ	LRCG	LRCH	DEQB	DEQC	DEQH	LRCI	DEQE	LRCJ	DEQG	LREV	DEQJ	DEQK	DEQL
1989	5 560	4 908	5 239	5 208	5 280	4 934	6 097	6 549	6 110	5 638	5 643	4 994	5 355	4 729
1993	7 771	7 053	7 313	7 232	7 214	7 112	8 248	9 311	8 519	7 608	7 867	6 986	7 704	6 540
1994	8 019	7 095	7 536	7 417	7 569	7 391	8 540	9 612	8 873	7 767	8 127	7 235	7 773	6 959
1995	8 497	7 522	7 874	7 780	7 869	7 939	9 011	10 102	9 282	8 606	8 592	7 742	8 287	7 678
1996	8 938	7 972	8 334	8 323	8 401	8 313	9 484	10 650	9 814	8 915	9 070	8 056	8 541	7 834
1997	9 513	8 554	8 900	8 776	8 835	8 748	10 025	11 485	10 579	9 511	9 674	8 389	8 977	8 365
1998	9 696	8 585	9 008	9 106	8 935	8 981	10 147	11 811	10 698	9 725	9 862	8 529	9 154	8 500
1999	10 142	9 018	9 501	9 325	9 409	9 541	10 638	12 207	11 055	10 073	10 284	8 870	9 870	8 998

1 Based on the European System of Accounts 1995 (ESA95).
2 UK *less* Extra-Regio

Source: National Statistics

4 Individual consumption expenditure[1]: £ per head

Government Office Regions

£

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Northern Ireland
	TLZI	TLZJ	TLZK	TLZL	TLZM	TLZN	TLZO	TLZP	TLZQ	TLZR	TLZS	TLZT	TLZU	THZZ
1994	7 441	6 676	7 082	7 081	7 180	6 920	7 380	8 799	8 424	7 045	7 539	6 563	7 334	6 427
1995	7 762	6 973	7 336	7 306	7 583	7 364	7 915	9 011	8 697	7 408	7 865	6 997	7 537	6 775
1996	8 268	7 391	7 798	7 758	7 939	7 705	8 514	9 485	9 333	8 049	8 365	7 722	8 007	7 188
1997	8 776	7 744	8 331	8 177	8 370	8 128	8 963	10 248	9 938	8 584	8 895	8 041	8 488	7 463
1998	9 316	8 086	8 662	8 763	8 695	8 640	9 740	11 264	10 656	8 961	9 488	8 079	8 874	7 749
1999	9 864	8 003	9 321	8 907	9 057	9 262	10 077	12 250	11 392	9 600	10 057	8 206	9 459	8 281

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

Source: National Statistics

5 Total average gross weekly pay[1]

Government Office Regions

£

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
	DEOG	LRCO	LSHZ	DCQI	DCQH	DCQG	LRCQ	DCPI	LRCR	DCQF	DCQL	DCQM	DCQN
1993 Apr	316.0	286.2	299.1	287.6	285.5	292.6	312.2	408.8	328.9	298.8	281.5	297.6	282.4
1994 Apr	324.7	294.6	307.7	297.0	292.5	300.1	322.8	420.6	339.4	306.9	290.5	301.9	286.5
1995 Apr	336.7	299.2	317.7	306.0	306.4	311.3	331.5	441.5	348.1	313.9	302.1	313.4	300.2
1996 Apr	350.2	315.2	329.5	316.8	318.5	323.9	347.7	455.0	367.1	325.3	313.3	325.2	306.2
1997 Apr	366.3	327.4	345.6	330.6	333.1	337.3	362.2	480.1	382.6	342.6	330.2	336.9	319.7
1998 Apr	383.1	338.7	363.3	345.2	350.3	359.8	380.3	504.5	406.3	354.6	342.8	350.0	332.6
1999 Apr	398.7	348.3	371.8	353.2	362.8	375.9	396.2	537.7	429.0	363.3	352.3	368.9	344.9
2000 Apr	418.1	368.0	389.0	375.1	374.4	387.2	416.2	561.7	443.3	380.6	368.4	383.0	360.4
2001 Apr	442.3	379.7	408.2	391.7	393.4	417.4	438.0	595.6	472.5	408.3	381.6	404.8	375.0
2002 Apr	462.6	399.3	426.8	409.9	413.0	427.3	459.6	624.1	496.7	421.7	399.7	427.0	390.1

1 Average gross weekly earnings of full-time employees on adult rates whose pay for the survey pay-period was not affected by absence.

Sources: New Earnings Survey, National Statistics; Department of Economic Development, Northern Ireland

6 Unemployed as a percentage of the economically active population[1], seasonally adjusted

Government Office Regions

Percentages

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Northern Ireland
	MGSX	YCNC	YCND	YCNE	YCNF	YCNG	YCNH	YCNI	YCNJ	YCNK	YCNL	YCNM	YCNN	MGXW
1999 Q4	5.8	8.5	6.0	6.0	5.5	6.7	4.2	6.9	4.0	4.2	5.5	7.2	7.1	6.8
2000 Q1	5.8	8.9	6.1	6.4	5.1	6.1	3.9	7.5	3.5	4.2	5.5	6.7	7.6	6.5
Q2	5.5	8.8	5.4	6.1	4.8	6.1	3.6	7.3	3.3	4.3	5.3	6.1	7.0	6.6
Q3	5.3	8.8	5.4	5.9	4.8	5.8	3.7	6.9	3.1	4.1	5.1	6.6	6.7	5.6
Q4	5.2	7.9	5.3	6.1	4.7	5.9	3.6	6.7	3.4	3.9	5.1	5.8	6.3	6.2
2001 Q1	5.1	7.7	5.3	5.4	4.7	5.6	3.6	6.5	3.3	3.9	4.9	6.1	6.0	6.1
Q2	5.0	7.3	5.4	5.4	5.0	5.4	3.5	6.1	3.2	3.6	4.8	6.1	6.2	5.9
Q3	5.1	6.9	5.2	5.4	4.6	5.6	4.0	6.5	3.4	3.6	4.9	5.5	6.7	6.1
Q4	5.2	7.3	5.3	5.1	4.7	5.5	3.9	7.2	3.3	3.6	5.0	5.9	6.7	6.0
2002 Q1	5.1	7.3	5.4	5.0	4.8	5.6	3.7	6.8	3.5	3.4	4.9	5.7	6.6	6.0
Q2	5.1	6.3	5.6	5.2	4.5	5.5	3.7	6.7	3.9	3.7	4.9	5.7	6.4	5.4
Q3	5.3	6.2	5.5	5.5	4.7	6.0	3.8	7.0	4.0	3.9	5.1	5.2	6.4	6.3
Q4	5.1	7.5	5.0	5.1	4.8	5.6	3.9	6.5	4.0	4.0	5.0	5.3	6.2	5.7

1 Periods are calendar quarters.

Source: Labour Force Survey, National Statistics

7 Long-term claimant count as a percentage of the unemployed[1] (those out of work for 12 months or more)

Government Office Regions

Percentages

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
	LRFN	LRFO	LSIA	LRFR	LRFS	LRFT	LRFU	LRFV	LRFW	LRFX	LRFY	LRFZ	LRGA
2002 Feb	*16.4*	*17.3*	16.2	*15.6*	*15.3*	*19.0*	*12.5*	*20.0*	*11.4*	*11.5*	*15.3*	*14.1*	*28.4*
Mar	*16.3*	*17.4*	16.1	*15.4*	*15.1*	*18.9*	*12.4*	*19.8*	*11.3*	*11.8*	*15.3*	*14.0*	*27.6*
Apr	*16.6*	*17.8*	16.5	*15.8*	*15.8*	*19.2*	*12.7*	*19.8*	*11.6*	*12.6*	*15.8*	*14.2*	*27.7*
May	*16.7*	*18.1*	16.6	*15.8*	*15.9*	*19.2*	*12.7*	*19.7*	*11.6*	*12.9*	*16.1*	*14.2*	*27.4*
Jun	*16.7*	*18.1*	16.6	*15.7*	*16.1*	*19.0*	*12.8*	*19.6*	*11.8*	*13.1*	*16.3*	*14.1*	*26.2*
Jul	*16.2*	*17.7*	16.2	*15.2*	*15.7*	*18.2*	*12.4*	*19.3*	*11.6*	*12.8*	*15.6*	*13.5*	*23.8*
Aug	*15.9*	*17.7*	15.9	*14.9*	*15.2*	*17.6*	*12.1*	*19.2*	*11.4*	*12.3*	*15.1*	*13.4*	*23.3*
Sep	*16.1*	*18.1*	16.3	*14.9*	*15.4*	*17.7*	*12.3*	*19.2*	*11.7*	*12.6*	*15.2*	*14.2*	*23.3*
Oct	*16.3*	*18.2*	16.6	*15.2*	*15.6*	*17.9*	*12.5*	*19.3*	*12.0*	*12.6*	*15.6*	*14.4*	*23.9*
Nov	*16.0*	*17.6*	16.3	*14.8*	*15.1*	*17.6*	*12.3*	*19.3*	*11.8*	*12.3*	*15.3*	*14.2*	*23.2*
Dec	*15.7*	*17.0*	15.8	*14.3*	*14.5*	*17.1*	*12.2*	*19.3*	*11.9*	*11.7*	*14.8*	*14.1*	*22.8*
2003 Jan	*14.8*	*15.6*	14.6	*13.4*	*13.4*	*16.1*	*11.5*	*19.3*	*11.3*	*10.9*	*13.8*	*12.9*	*22.1*
Feb	*14.4*	*15.2*	14.4	*13.0*	*12.9*	*15.6*	*10.9*	*18.9*	*10.9*	*10.5*	*13.3*	*12.6*	*21.9*
Mar	*14.6*	*15.1*	14.6	*13.0*	*13.1*	*15.6*	*11.1*	*18.9*	*11.0*	*10.8*	*13.5*	*13.0*	*22.0*

1 Computerised claims only.

Source: National Statistics

8 Claimant count rates as a percentage of total workforce

Government Office Regions

Seasonally adjusted

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
	BCJE	DPDM	IBWC	DPBI	DPBJ	DPBN	DPDP	DPDQ	DPDR	DPBM	DPBP	DPBQ	DPBR
1999	*4.2*	*7.1*	*4.6*	*5.0*	*3.7*	*4.5*	*2.9*	*4.5*	*2.3*	*3.1*	*5.0*	*5.1*	*6.4*
2000	*3.6*	*6.3*	*4.1*	*4.4*	*3.4*	*4.0*	*2.4*	*3.7*	*1.9*	*2.5*	*4.4*	*4.6*	*5.3*
2001	*3.2*	*5.7*	*3.7*	*4.0*	*3.1*	*3.7*	*2.1*	*3.3*	*1.6*	*2.1*	*4.0*	*4.0*	*4.9*
2002	*3.1*	*5.2*	*3.6*	*3.7*	*2.9*	*3.5*	*2.1*	*3.6*	*1.7*	*2.0*	*3.6*	*3.9*	*4.5*
2002 Mar	*3.1*	*5.4*	*3.6*	*3.7*	*2.9*	*3.5*	*2.1*	*3.5*	*1.6*	*2.0*	*3.7*	*3.9*	*4.7*
Apr	*3.1*	*5.3*	*3.6*	*3.7*	*2.9*	*3.5*	*2.1*	*3.6*	*1.7*	*2.0*	*3.7*	*4.0*	*4.7*
May	*3.1*	*5.3*	*3.6*	*3.7*	*2.9*	*3.5*	*2.1*	*3.6*	*1.7*	*2.0*	*3.7*	*3.9*	*4.6*
Jun	*3.1*	*5.3*	*3.6*	*3.7*	*2.9*	*3.5*	*2.1*	*3.6*	*1.7*	*2.0*	*3.7*	*3.9*	*4.6*
Jul	*3.1*	*5.3*	*3.6*	*3.7*	*2.9*	*3.5*	*2.1*	*3.6*	*1.7*	*2.0*	*3.6*	*3.9*	*4.5*
Aug	*3.1*	*5.2*	*3.5*	*3.6*	*2.9*	*3.5*	*2.1*	*3.6*	*1.7*	*2.0*	*3.6*	*3.8*	*4.4*
Sep	*3.1*	*5.2*	*3.5*	*3.7*	*2.9*	*3.5*	*2.1*	*3.6*	*1.7*	*1.9*	*3.7*	*3.8*	*4.4*
Oct	*3.1*	*5.1*	*3.5*	*3.6*	*2.9*	*3.5*	*2.1*	*3.6*	*1.7*	*1.9*	*3.6*	*3.8*	*4.4*
Nov	*3.1*	*5.0*	*3.5*	*3.6*	*2.9*	*3.5*	*2.1*	*3.6*	*1.7*	*1.9*	*3.6*	*3.8*	*4.4*
Dec	*3.1*	*4.9*	*3.5*	*3.6*	*2.8*	*3.5*	*2.1*	*3.6*	*1.7*	*1.9*	*3.6*	*3.8*	*4.4*
2003 Jan	*3.1*	*4.9*	*3.5*	*3.6*	*2.8*	*3.5*	*2.1*	*3.6*	*1.7*	*1.9*	*3.6*	*3.8*	*4.4*
Feb	*3.1*	*4.9*	*3.5*	*3.6*	*2.8*	*3.6*	*2.2*	*3.6*	*1.7*	*1.9*	*3.5*	*3.8*	*4.3*
Mar	*3.1*	*4.9*	*3.4*	*3.5*	*2.9*	*3.6*	*2.2*	*3.7*	*1.7*	*1.9*	*3.5*	*3.8*	*4.3*

Source: National Statistics

9 Total in employment[1,2], seasonally adjusted

Government Office Regions

Thousands

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Northern Ireland
	MGRZ	YCJP	YCJQ	YCJR	YCJS	YCJT	YCJU	YCJV	YCJW	YCJX	YCJY	YCJZ	YCKA	YCPT
1999 Q4	27 141	1 058	2 994	2 245	1 982	2 400	2 605	3 324	3 986	2 350	22 946	1 217	2 295	690
2000 Q1	27 187	1 057	2 998	2 237	1 987	2 404	2 613	3 311	4 024	2 356	22 987	1 214	2 301	692
Q2	27 294	1 069	3 019	2 270	1 997	2 397	2 637	3 311	4 030	2 345	23 075	1 228	2 321	680
Q3	27 350	1 066	2 998	2 272	1 979	2 398	2 658	3 323	4 017	2 384	23 096	1 234	2 338	691
Q4	27 336	1 059	3 002	2 269	1 970	2 390	2 680	3 320	4 011	2 356	23 057	1 233	2 353	697
2001 Q1	27 428	1 062	3 016	2 263	1 965	2 409	2 695	3 365	4 019	2 361	23 155	1 229	2 348	699
Q2	27 512	1 065	3 032	2 256	1 971	2 409	2 680	3 404	4 030	2 380	23 228	1 221	2 357	708
Q3	27 487	1 067	2 982	2 263	1 990	2 412	2 668	3 409	4 038	2 386	23 217	1 219	2 343	714
Q4	27 559	1 066	3 016	2 261	1 993	2 439	2 684	3 405	4 050	2 393	23 308	1 219	2 338	700
2002 Q1	27 576	1 070	3 011	2 274	1 991	2 435	2 688	3 393	4 065	2 393	23 320	1 221	2 335	707
Q2	27 698	1 069	3 006	2 275	2 013	2 448	2 690	3 425	4 059	2 410	23 396	1 238	2 352	720
Q3	27 662	1 070	3 003	2 273	2 027	2 430	2 687	3 404	4 042	2 410	23 347	1 252	2 355	718
Q4	27 812	1 053	3 064	2 276	2 018	2 444	2 678	3 432	4 061	2 412	23 436	1 277	2 377	731

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

Source: Labour Force Survey, National Statistics

10 Redundancies, not seasonally adjusted[1]

Government Office Regions

Rates[2]

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
	DITA	LRDH	LRDI	DCXF	DCXG	DCXL	LRDJ	DCXI	LRDK	DCXK	DCXN	DCXO	DITB
Winter 1998	9	16	9	6	8	9	6	10	8	9	12	11	–[3]
Spring 1999	8	–[3]	9	9	–[3]	11	8	6	7	7	10	10	–[3]
Summer 1999	7	–[3]	9	9	8	8	7	4	6	7	–[3]	8	–[3]
Autumn 1999	7	–[3]	10	6	9	6	6	6	7	8	–[3]	6	–[3]
Winter 1999	8	11	8	7	11	10	6	7	7	6	15	9	–[3]
Spring 2000	7	10	7	9	8	8	4	7	6	8	–[3]	10	–[3]
Summer 2000	6	–[3]	7	5	9	7	5	4	7	8	–[3]	6	–[3]
Autumn 2000	7	–[3]	8	7	7	8	6	6	6	6	–[3]	7	–[3]
Winter 2000	7	–[3]	9	6	7	9	5	6	6	8	9	6	–[3]
Spring 2001	7	–[3]	8	5	8	8	6	7	5	7	–[3]	10	–[3]
Summer 2001	7	–[3]	8	7	7	8	9	5	7	5	–[3]	8	–[3]
Autumn 2001	8	10	9	10	7	6	7	8	9	6	–[3]	7	–[3]
Winter 2001	–[4]	12	10	5	8	9	8	8	10	8	10	10	–[3]
Spring 2002	–[4]	–[3]	8	5	8	11	10	7	8	7	–[3]	8	–[3]
Summer 2002	–[4]	–[3]	7	8	7	10	7	7	6	8	–[3]	8	–[3]
Autumn 2002	–[4]	–[3]	6	6	9	6	7	6	8	7	–[3]	7	–[3]
Winter 2002	–[4]	10	7	6	7	10	7	7	7	5	12	8	–[3]

1 The method of calculating redundancy estimates back to spring 1995 has changed from that used to calculate data previously published in this table Thus the data in this table are not comparable to those previously published. See pp225-229 of the May 2000 Labour Market Trends for more information.
2 Redundancies per 1,000 employees.
3 Sample size too small to provide a reliable estimate.
4 Data to be shown on completion of full re-weighting of all LFS series

Source: Labour Force Survey, National Statistics

11 Employee jobs (all industries)

Government Office Regions

June 1996 = 100

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
	YEKA	YEKB	YEKJ	YEKC	YEKD	YEKI	YEKE	YEKF	YEKG	YEKH	YEKK	YEKL	YEKM
1999	105.3	100.1	106.5	104.0	103.7	101.9	106.2	111.9	107.7	104.7	104.8	102.0	106.3
2000	107.2	116.5	101.8	109.1	110.7	107.2	106.5	102.0	104.0	105.3	106.0	103.5	108.7
2001	108.2	117.3	100.6	110.0	112.1	108.1	109.6	102.1	104.1	105.1	106.2	106.5	110.2
2002	108.1	115.7	102.3	110.4	110.5	108.5	111.0	102.7	103.7	105.1	105.8	106.6	111.3
2001 Jun	108.1	99.8	107.5	104.8	103.9	101.6	112.8	117.4	109.8	109.8	106.3	106.8	109.8
Sep	108.4	100.2	108.9	105.2	104.6	102.1	111.7	117.4	110.2	110.3	106.2	106.9	110.1
Dec	108.9	102.4	108.9	105.8	104.9	103.0	111.2	117.1	111.5	110.9	106.2	107.6	111.3
2002 Mar	107.9	101.4	107.8	104.4	103.9	102.5	110.5	115.7	110.6	110.3	105.2	106.9	110.6
Jun	107.9	101.8	108.0	104.3	103.6	102.2	110.5	115.4	110.7	111.1	105.9	106.5	111.0
Sep	108.1	102.6	108.7	105.4	103.5	102.8	110.4	115.4	110.1	111.3	106.0	106.4	111.1
Dec	108.5	103.6	109.4	106.3	103.7	103.3	110.6	116.3	110.1	111.2	106.0	106.5	112.5

Source: National Statistics

12 Index of industrial production[1]

Seasonally adjusted 1995 = 100

	United Kingdom	Scotland	Northern Ireland	Wales
	CKYW	LRFK	LRFL	TMQX
1999	104.2	115.3	118.3	100.9
2000	105.9	115.7	128.0	103.1
2001	103.6	106.4	126.9	95.4
2002	100.0	..	..	93.8
1999 Q4	105.3	116.7	122.0	101.8
2000 Q1	104.8	116.8	124.3	104.5
Q2	106.2	117.2	125.6	103.8
Q3	106.4	115.8	130.3	101.9
Q4	106.3	113.0	131.7	102.0
2001 Q1	105.7	110.4	134.2	97.9
Q2	104.3	109.5	127.2	94.5
Q3	103.4	105.1	125.1	94.7
Q4	101.0	100.5	121.0	94.5
2002 Q1	99.8	97.3	118.3	93.9
Q2	100.1	96.9	120.8	94.9
Q3	100.5	96.0	120.6	94.4
Q4	99.7	..	..	92.1

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

Sources: National Statistics; Scottish Executive; Department of Enterprise, Trade & Investment Northern Ireland;

13 Index of construction[1]

Seasonally adjusted 1995 = 100

	United Kingdom	Scotland	Northern Ireland	Wales
	GDQB	LRZR	LRFM	TMQY
1999	107.8	101.6	..	93.0
2000	109.7	109.3	..	86.3
2001	113.7	106.4	..	80.5
2002	122.2	..	..	90.3
1999 Q4	109.3	107.7	103.1	88.9
2000 Q1	112.1	114.8	109.4	85.9
Q2	109.7	105.3	121.2	91.4
Q3	107.9	107.5	114.9	86.8
Q4	109.2	109.5	113.2	81.3
2001 Q1	111.5	110.4	119.2	82.2
Q2	113.1	108.4	118.7	74.4
Q3	114.1	104.7	118.1	82.2
Q4	116.1	102.0	116.5	83.4
2002 Q1	119.6	101.5	112.4	86.7
Q2	120.9	103.5	117.9[2]	89.8
Q3	123.1	106.1	115.0[3]	90.8
Q4	125.4	..	..	94.0

1 The Index of construction has been rebased from 1990=100 to 1995=100. Figures on the 1990=100 base are not being continued
2 Partially revised.
3 Fully revised.

Sources: National Statistics; Scottish Executive; Department of Finance and Personnel, Northern Ireland

14 Manufacturing industry: optimism about business situation
Government Office Regions (London and the South East is still on an SSR basis)

Balance[1]

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London and the South East	South West	Wales	Scotland	Northern Ireland
	DCMO	LRYS	LRYT	DCMU	DCMT	DCMS	LRYU	DCMP	DCMR	DCMX	DCMY	DCMZ
2002 Apr	21	11	13	14	15	–6	18	26	4	22	14	–2
Jul	4	–12	14	12	–4	–3	–	–8	10	–1	–7	–6
Oct	–19	–11	–18	–9	3	–20	–20	–18	–37	–15	–18	–7
2003 Jan	–19	–4	–26	–13	–28	–27	–29	–19	–10	–20	–26	–4

1 Balance in percentage of firms reporting rises *less* those reporting falls.

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

15 Manufacturing industry: volume of output
Government Office Regions (London and the South East is still on an SSR basis)

Balance[1]

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London and the South East	South West	Wales	Scotland	Northern Ireland
Past 4 months	DCLQ	LRYV	LRYW	DCLW	DCLV	DCLU	LRYX	DCLR	DCLT	DCLZ	DCMA	DCMB
2002 Apr	–15	–3	–5	–24	–5	–17	–11	–9	–26	–	–33	–21
Jul	–10	1	7	–17	–12	–8	–9	1	–8	6	4	–4
Oct	–12	–17	–2	–20	6	–8	–26	–19	–17	12	1	24
2003 Jan	–7	13	–25	–23	–10	–26	–7	–11	22	9	–7	–
Next 4 months	DCMC	LRYY	LRYZ	DCMI	DCMH	DCME	LRZA	DCMD	DCMF	DCML	DCMM	DCMN
2003 Jan	2	31	–4	15	–4	2	9	8	7	–11	–12	11

1 Balance in percentage of firms reporting rises *less* those reporting falls.

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

16 Manufacturing industry: volume of new orders
Government Office Regions (London and the South East is still on an SSR basis)

Balance[1]

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London and the South East	South West	Wales	Scotland	Northern Ireland
Past 4 months	DCNA	LRZB	LRZC	DCNG	DCNF	DCNE	LRZD	DCNB	DCND	DCNJ	DCNK	DCNL
2002 Apr	–14	7	9	–19	–1	–15	–10	–17	–22	–7	–30	–22
Jul	–11	–5	8	–17	–17	–17	–1	3	–22	6	–3	6
Oct	–16	7	1	–20	3	–6	–28	–20	–35	–8	–2	8
2003 Jan	–9	22	–18	–2	–13	–12	–12	–6	–5	–24	–19	38
Next 4 months	DCNM	LRZE	LRZF	DCNS	DCNR	DCNQ	LRZG	DCNN	DCNP	DCNV	DCNW	DCNX
2003 Jan	2	27	–4	6	–	8	–7	4	–26	–10	–7	–

1 Balance in percentage of firms reporting rises *less* those reporting falls.

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

17 Manufacturing industry: volume of new export orders
Government Office Regions (London and the South East is still on an SSR basis)

Balance[1]

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London and the South East	South West	Wales	Scotland	Northern Ireland
Past 4 months	DCNY	LRZH	LRZI	DCOE	DCOD	DCOC	LRZJ	DCNZ	DCOB	DCOH	DCOI	DCOJ
2002 Apr	–18	7	–8	–20	–29	–23	–22	–14	–56	2	–21	–31
Jul	–14	–1	11	–11	–33	–21	–13	–1	–43	–1	9	11
Oct	–19	6	–	2	13	–4	–29	–25	–26	–9	–23	13
2003 Jan	–21	15	–14	–16	–18	–8	–20	–17	–22	–34	–24	–5
Next 4 months	DCOK	LRZK	LRZL	DCOQ	DCOP	DCOO	LRZM	DCOL	DCON	DCOT	DCOU	DCOV
2003 Jan	–9	12	–17	3	–27	14	–9	1	–19	–5	–18	–15

1 Balance in percentage of firms reporting rises *less* those reporting falls.

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

18 Manufacturing industry: firms working below capacity
Government Office Regions (London and the South East is still on an SSR basis)

Percentages

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London and the South East	South West	Wales	Scotland	Northern Ireland
	DCOW	LRZN	LRZO	DCPC	DCPB	DCPA	LRZP	DCOX	DCOZ	DCPF	DCPG	DCPH
2002 Apr	*72*	*80*	*65*	*80*	*66*	*60*	*69*	*72*	*71*	*69*	*54*	*68*
Jul	*67*	*92*	*53*	*70*	*62*	*55*	*66*	*73*	*56*	*64*	*44*	*54*
Oct	*67*	*74*	*63*	*81*	*53*	*63*	*66*	*66*	*67*	*52*	*47*	*70*
2003 Jan	*74*	*76*	*64*	*79*	*72*	*73*	*65*	*72*	*70*	*54*	*59*	*51*

Source: CBI/BSL Regional Trends Survey ISSN:0960 7781

19 Permanent dwellings started
Government Office Regions

Numbers

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland[1]	Northern Ireland
	DEOI	LRDP	LRZQ	DCRX	DCRW	DCRV	LRDR	DCRR	LRDS	DCRU	BLIA	BLFA	BLGA
2001	193 053	6 373	19 228	14 774	14 982	14 616	19 071	16 601	25 727	16 393	9 141	23 091	13 245
2002	..	6 541	18 924	14 635	16 705	14 599	19 896	17 642	25 464	16 904	9 373	..	11 976
1999 Q4	42 842	1 473	4 424	3 418	4 034	3 402	4 101	2 951	5 361	3 709	1 958	5 386	2 625
2000 Q1	52 100	2 071	5 546	3 571	4 161	4 566	5 350	3 240	6 316	4 688	2 205	6 794	3 592
Q2	50 641	1 793	4 804	3 661	3 992	4 464	5 074	4 466	6 776	4 595	2 749	5 464	2 803
Q3	48 140	1 712	4 554	3 594	3 890	3 663	4 871	4 119	6 078	4 258	2 781	6 130	2 490
Q4	37 971	1 518	3 779	2 987	3 087	3 087	3 391	3 475	4 270	3 200	1 617	5 291	2 269
2001 Q1	48 861	1 926	4 788	3 879	3 757	4 026	4 521	3 446	6 043	4 082	2 206	6 392	3 764
Q2	51 617	1 735	4 938	3 797	3 766	4 116	5 641	4 338	7 071	4 431	2 705	5 464	3 847
Q3	49 735	1 593	4 813	3 644	3 967	3 309	4 825	5 705	6 509	4 125	2 452	5 802	2 889
Q4	42 840	1 119	4 689	3 454	3 492	3 165	4 084	3 112	6 104	3 755	1 778	5 433	2 745
2002 Q1	50 629	1 768	5 258	3 328	3 580	4 079	5 391	4 765	6 431	4 672	2 159	6 326	3 381
Q2	50 559	1 764	5 093	3 765	4 439	3 621	4 403	4 152	7 145	4 372	2 794	5 165	3 381[3]
Q3	..	1 644	4 672	4 196	4 976	3 864	5 982	4 321	6 300	4 508	2 617	5 250	3 107
Q4	..	1 365	3 901	3 345	3 710	3 035	4 120	4 404	5 588	3 352	1 803	..	2 107

1 Includes estimates for outstanding returns for private sector.
2 Estimate for 2002 Q4 for the English regions is provisional.
3 Estimate for 2002 Q2 for Northern Ireland has been revised.

Sources: Office of the Deputy Prime Minister; National Assembly for Wales; Scottish Executive; Department for Social Development, Northern Ireland

20 House prices[1]
Government Office Regions

1993 = 100

	United Kingdom	North East	North West[2]	Mersey-side	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
	LRBH	LRDX	LRDY	LREN	LRBJ	LRBK	LRBP	LRDZ	LRBM	LREA	LRBO	LRBR	LRBS	LRBT
2001	179.2	132.1	143.5	141.9	132.5	157.1	160.5	192.9	231.8	207.5	191.3	146.4	129.3	207.8
2002	209.6	156.3	168.7	152.0	160.2	196.3	195.2	235.4	254.8	241.7	236.2	176.3	146.0	229.3
1999 Q4	152.1	119.4	129.5	112.7	120.0	129.7	136.3	159.7	192.6	167.3	150.6	125.5	124.8	170.7
2000 Q1	156.0	116.5	126.5	109.8	119.9	137.3	137.5	163.7	200.7	171.6	157.7	128.6	124.2	181.5
Q2	164.5	131.9	135.8	120.0	119.9	140.8	146.9	170.6	215.7	184.5	163.8	129.2	123.6	184.3
Q3	167.6	122.4	134.8	121.2	127.4	144.6	151.0	178.0	204.1	192.4	176.9	131.8	124.4	186.0
Q4	172.6	126.2	129.3	134.8	125.7	144.7	153.1	181.4	219.2	202.1	177.7	133.2	124.2	201.9
2001 Q1	171.7	122.7	135.4	150.5	129.0	146.3	152.2	188.1	225.5	192.0	182.0	137.7	130.2	221.9
Q2	177.9	132.9	138.0	132.0	128.8	154.5	157.9	187.9	234.4	211.3	183.8	154.6	126.9	204.4
Q3	184.3	132.7	153.5	141.5	135.9	162.6	166.6	196.3	236.4	214.3	200.2	148.1	130.5	215.0
Q4	180.6	141.3	142.0	140.7	135.7	163.6	162.1	196.2	228.2	207.9	197.9	145.1	131.5	196.2
2002 Q1	187.3	139.6	144.5	121.6	141.7	173.8	168.9	222.2	226.6	211.0	201.2	168.3	146.2	210.7
Q2	202.3	144.0	169.9	158.1	156.0	190.5	184.3	227.7	253.1	228.1	226.8	170.2	141.0	222.1
Q3	219.1	153.6	172.3	153.8	164.2	202.4	209.6	239.4	268.5	254.1	255.9	192.5	145.3	237.9
Q4	223.8	181.7	185.2	163.4	176.4	216.2	210.5	247.9	261.5	263.6	253.1	174.6	154.7	233.8

1 These indices adjust for the mix of dwellings (by size and type, whether new or second-hand) and exclude those bought at non-market prices and are based on a sample of mortgage completions by all lenders.
2 Excludes Merseyside.

Source: Office of the Deputy Prime Minister

21 VAT registrations and deregistrations[1]: net change[2]
Government Office Regions

Thousands

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland	Northern Ireland
	DCYQ	LREB	LRZS	DCYT	DCYU	DCYY	LRED	DEON	LREE	DCYX	DCZA	DCZB	DCZC
1998	30.3	0.2	2.5	0.5	1.2	1.7	2.7	11.3	6.9	1.7	–0.1	0.9	0.9
1999	6.5	–0.1	0.9	–0.7	–0.2	0.2	0.6	4.6	2.4	0.1	–0.7	–0.5	–0.1
2000	6.2	0.1	0.8	–0.8	0.2	0.3	1.0	2.7	1.9	–	–0.2	–	0.3
2001	12.7	–0.1	1.4	0.2	0.8	1.0	1.0	2.8	3.9	0.8	0.1	0.8	0.2

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

Source: Department of Trade and Industry

The effects of taxes and benefits on household income, 2001—02

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SUMMARY

This analysis 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 figures were renumbered starting from the previous annual publication and new tables and figures were added. Table 1, showing links between the current tables and figures and those for 1999–2000 and previous years, 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 for 2001–02, before government intervention, the top fifth of households have an average of around £62,900 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 £3,500 for the bottom fifth. After taking account of taxes and benefits, the ratio for final income is greatly reduced to four to one. Both of these ratios are basically the same as in 2000–01. The effect on the transition between original income and final income for 2001–02, broken down by quintiles, is also shown graphically in Figure 1.

Figure 1

Original income and Final income by quintile groups for ALL households, 2001—02

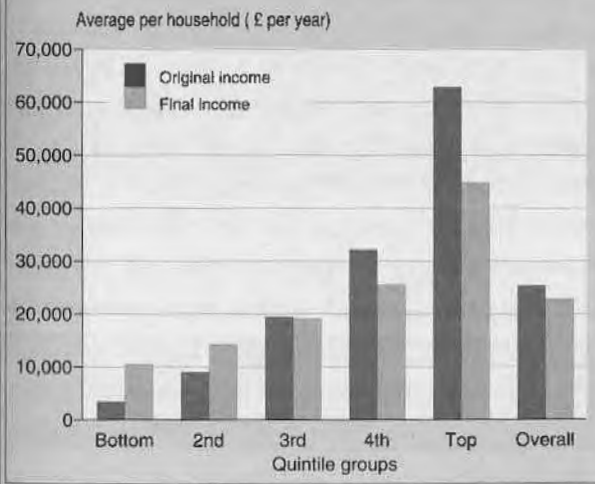
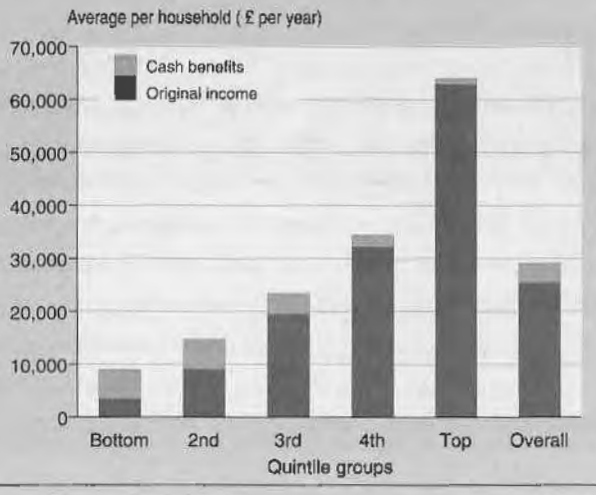


Figure 2

Gross income by quintile groups for ALL households, 2001—02



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. As shown in Table 4, these households typically receive around £5,600 from cash benefits, representing around three fifths 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 non-retired households come from non-contributory benefits and, for retired households, 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 because tax is not paid on the first tranche of income and higher rates of tax are paid on higher incomes. 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: 24 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. they are regressive. This is partly due to the recorded expenditure of some lower income households being higher than their recorded current incomes. This results in relatively large payments of indirect tax. In addition, on average higher 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 14A.

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 also lead to a reduction in inequality.

Characteristics across the income distribution

Adults and children are not spread evenly throughout the income distribution (Tables 4, 15 and 15A). For example, there are more children in households in the lower half of the distribution. However, among adults, women appear fairly evenly spread 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. For example, households containing one adult and at least one child are concentrated in the bottom fifth. Retired households 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 then increased during the second half of the 1980s. Inequality was relatively flat in the 1990s but with some indications of a slight fall in the first half of the 1990s and a slight rise since then.

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

CONCEPTS AND SOURCES

Redistribution through taxes and benefits

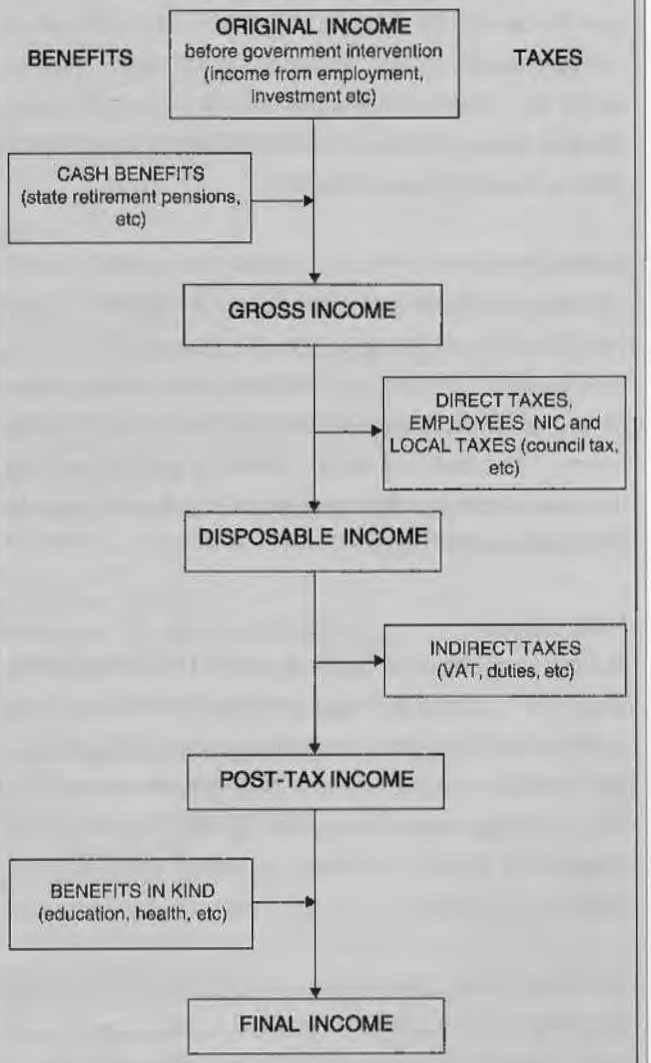
This study examines how taxes and benefits redistribute income. It adds the value of government benefits to the private income of households and subtracts the value of taxes to look at different measures of household income.

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 is 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 £270 billion of taxes and compulsory social contributions have been allocated to households. This is equivalent to 69 per cent of general government expenditure, which totalled around £384 billion in 2001 (Table 13). Similarly, £219 billion of cash benefits and benefits in kind have been allocated to households, making up 57 per cent of general government expenditure (Table 13).

The estimated values of taxes and benefits reflect the methodology used in this study. 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 Expenditure and Food Survey (EFS) from 2001–02, formerly the Family Expenditure Survey (FES)) 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.

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.

Unit of analysis

The unit of analysis used in this study is the household. The households are ranked by their equivalised disposable income, which the analysis uses 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 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 analysis 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.

Data source

The main data source for this analysis is the EFS which covers about 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 peoples' homes, are excluded. The EFS brought together and replaced the FES and the National Food Survey from 2001–02. However, the income questions were essentially unchanged.

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 initial 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 EFS. Studies have indicated that the EFS 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 2001–02*.[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. Non-retired and 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 figure numbers, and additional tables and figures

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, 2001–02
New Chart	Figure 2	Gross income (original income & cash benefits) by quintile groups of all households, 2001–02
Chart 2	Figure 3	Sources of gross income by quintile groups of equivalised disposable income, 2001–02
Chart 3	Figure 4	Summary of the effects of taxes and benefits on all households, 2001–02
Chart 4	Figure 5	Gini coefficients 1979 to 2001–02
Chart 5	Figure 6	Income stages by non–retired household types, 2001–02
Look up table	Table 1	Comparison between old and new table and figure numbers and additional tables and figures
A	Table 2	Percentage shares of household income and Gini coefficients, 2001–02
B	Table 3	Taxes as a percentage of gross income, disposable income and expenditure for all households by quintile groups, 2001–02
C	Table 4	Summary of the effects of taxes and benefits by quintile groups on all households, 2001–02
D	Table 5	Percentage shares of household income and Gini coefficients for non–retired households, 2001–02
E	Table 6	Summary of the effects of taxes and benefits on non–retired households by quintile groups, 2001–02
F	Table 7	Cash benefits for non–retired households by quintile groups, 2001–02
G	Table 8	Taxes as a percentage of gross income for non–retired households by quintile groups, 2001–02
H	Table 9	Indirect taxes as a percentage of (a) disposable income and (b) household expenditure for non–retired households by quintile groups, 2001–02
I	Table 10	Benefits in kind for non–retired households by quintile groups, 2001–02
J	Table 11	Percentage shares of household income and Gini coefficients for retired households, 2001–02
K	Table 12	Summary of the effects of taxes and benefits on retired households by quintile groups, 2001–02
Appendix 1	Appendix 1	
1	Table 13	Taxes and benefits allocated to households as a percentage of general government expenditure, 2001
2A	Table 14	Average incomes, taxes and benefits by decile groups of all households, 2001–02
New quintiles	Table 14A	Average incomes, taxes and benefits by quintile groups of all households, 2001–02
2B	Table 15	Household characteristics of decile groups of all households, 2001–02
New quintiles	Table 15A	Household characteristics of quintile groups of all households, 2001–02
3A	Table 16	Average incomes, taxes and benefits by decile groups of non–retired households, 2001–02
New quintiles	Table 16A	Average incomes, taxes and benefits by quintile groups of non–retired households, 2001–02
3B	Table 17	Household characteristics of decile groups of non–retired households, 2001–02
New quintiles	Table 17A	Household characteristics of quintile groups of non–retired households, 2001–02
4A	Table 18	Average incomes, taxes and benefits by decile groups of retired households, 2001–02
New quintiles	Table 18A	Average incomes, taxes and benefits by quintile groups of retired households, 2001–02
4B	Table 19	Household characteristics of decile groups of retired households, 2001–02
New quintiles	Table 19A	Household characteristics of quintile groups of retired households, 2001–02
5	Table 20	Average incomes, taxes and benefits by decile groups of non–retired households without children, 2001–02
6	Table 21	Average incomes, taxes and benefits by decile groups of non–retired households with children, 2001–02
7	Table 22	Distribution of households by household type, 2001–02
8	Table 23	Summary of the effects of taxes and benefits, by household type, 2001–02
9	Table 24	Average incomes, taxes and benefits by decile groups of households (ranked by unadjusted disposable income), 2001–02
10	Table 25	Cross–tabulation of households ranked by disposable income, unadjusted and equivalised, 2001–02
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, 1979 to 2001–02
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, 1979 to 2001–02
Appendix 3	Appendix 2	Methodology and definitions
Diagram A	Diagram 3	Complete income equality
Diagram B	Diagram 2	Lorenz curve for a typical income distribution

Note:
Symbols *The following symbols have been used throughout the analysis*
0 negligible (less than half the final digit shown)
- nil

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 analysis, 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 52 per cent of all original income (Table 2). This compares with only 3 per cent for households in the bottom fifth.

Adding cash benefits to original income produces gross income. In contrast to original income, the amount received from cash benefits is higher for households lower down the income distribution than for those at the top. This has an equalising effect on the distribution. It raises the share of income received by the bottom quintile group to 6 per cent of gross income while the share of the top fifth is reduced to 45 per cent. Figure 3 shows a breakdown of gross income by quintiles.

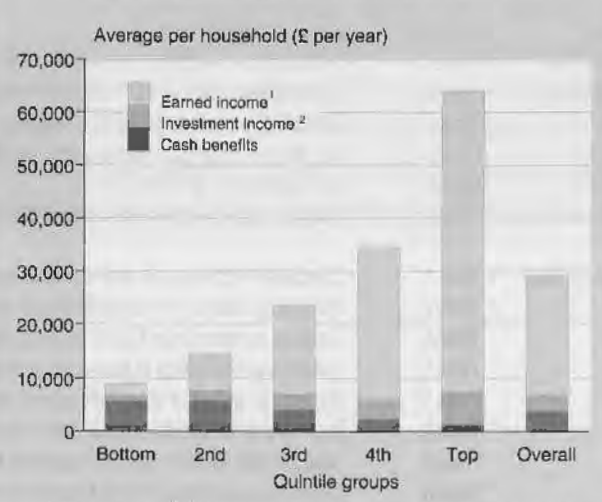
TABLE 2: Percentage shares of household income and Gini coefficients[1], 2001–02

	Percentage shares of equivalised income for ALL households[2]			
	Original income	Gross income	Disposable income	Post-tax income
Quintile group[2]				
Bottom	3	6	7	6
2nd	7	11	12	11
3rd	14	15	16	15
4th	24	22	22	22
Top	52	45	43	46
All households	100	100	100	100
Decile group[2]				
Bottom	1	3	3	2
Top	34	30	28	31
Gini coefficient (per cent)	*53*	*39*	*36*	*40*

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, 2001–02



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

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 together pay about 6 per cent. This compares with 82 per cent of the total paid by the top two fifths combined.

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 pay 3 per cent in income tax on average 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 insurance contributions are only levied on the first £575 of weekly earnings in 2001–02, so part of the earnings of many of those in the top quintile group will not be subject to this deduction.

TABLE 3: Taxes as a percentage of gross income, disposable income and expenditure for ALL households by quintile groups[1], 2001–02
(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[1]					
	Bottom	2nd	3rd	4th	Top	All households
(a) Percentages of gross income						
Direct taxes						
Income tax	3.2	6.3	10.3	13.5	18.3	13.7
Employees' NIC	1.2	2.4	4.0	4.8	3.8	3.8
Local taxes	7.1	4.8	3.7	2.9	1.8	3.0
All direct taxes	*11.6*	*13.5*	*18.0*	*21.2*	*23.9*	*20.5*
Indirect taxes						
VAT	11.3	7.5	7.0	6.2	4.6	6.1
Duty on alcohol	1.6	1.0	1.0	0.9	0.6	0.8
Duty on tobacco	3.1	1.8	1.5	0.9	0.3	1.0
Duty on hydrocarbon oils & Vehicle excise duty	3.3	2.4	2.4	2.1	1.3	1.9
Other indirect taxes	10.8	7.1	5.8	5.0	3.5	5.1
All indirect taxes	*30.1*	*19.9*	*17.7*	*15.2*	*10.4*	*14.9*
All taxes	*41.7*	*33.3*	*35.7*	*36.4*	*34.2*	*35.3*
(b) Percentages of disposable income						
VAT	12.8	8.7	8.5	7.9	6.0	7.6
Duty on alcohol	1.8	1.2	1.3	1.2	0.8	1.1
Duty on tobacco	3.5	2.1	1.8	1.1	0.4	1.2
Duty on hydrocarbon oils and Vehicle excise duty	3.8	2.8	2.9	2.7	1.7	2.4
Other indirect taxes	12.2	8.2	7.1	6.3	4.6	6.4
All indirect taxes	*34.1*	*23.0*	*21.6*	*19.2*	*13.6*	*18.7*
(c) Percentages of expenditure[2]						
VAT	8.0	8.1	7.9	7.7	7.0	7.6
Duty on alcohol	1.1	1.1	1.2	1.1	0.9	1.1
Duty on tobacco	2.2	1.9	1.7	1.1	0.5	1.2
Duty on hydrocarbon oils and Vehicle excise duty	2.4	2.6	2.7	2.6	2.0	2.4
Other indirect taxes	7.7	7.6	6.6	6.1	5.4	6.3
All indirect taxes	*21.4*	*21.3*	*20.1*	*18.7*	*15.8*	*18.5*

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.

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 Tables 3, 14 and 14A. 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 just over 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 those in 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 EFS. However, the income and expenditure data recorded in the EFS are not fully compatible because they are recorded in different ways (see Appendix 2, paragraph 6). Indeed, measured expenditure exceeds measured income for households 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 EFS, e.g. inheritance and severance payments. In some cases, the information given on direct tax is not consistent with that on income received, possibly because of timing differences. For a minority of households, the EFS 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 nearly two and a half times as much indirect tax as the bottom fifth. However, when expressed as a percentage of 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 gross or disposable income, as shown in Table 3, the impact of indirect taxes declines sharply as income rises (as shown in Table 14A). 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 therefore appear more regressive than when expressed as a proportion of expenditure. However, the top fifth still pay a smaller proportion of their expenditure or income 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 2001–02, the figure of 53 per cent for original income is reduced to 39 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 36 per cent. The picture of indirect taxes reversing this effect is confirmed by the Gini coefficient rising to 40 per cent for post-tax income. The Gini coefficients for original, gross, disposable and post-tax income show marginal rises in 2001–02 compared to those in 2000–01, taking them back to similar levels to those in 1999–2000. As discussed earlier, all comparisons are subject to the potential effect of the discrepancy between income and expenditure in the lower half of the income distribution.

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 2.1 and 2.5 people per household in each decile group in 2001–02. There are differences in the split between adults and children. 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. There are more children in the lower half of the income distribution. The bottom quintile group has about one and a half times the number of 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 about three times as many economically active people as the bottom fifth. Non-retired households with one adult and one or more children are concentrated in the lower groups, as shown in Tables 4, 15A and 22.

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

TABLE 4: Summary of the effects of taxes and benefits by quintile groups on ALL households[1], 2001–02

	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	3 460	9 060	19 490	32 220	62 860	25 420	18
plus cash benefits	5 530	5 650	3 950	2 230	1 150	3 700	0
Gross income	8 980	14 710	23 430	34 440	64 010	29 120	7
less direct taxes[3] and employees' NIC	1 040	1 980	4 220	7 300	15 270	5 960	15
Disposable income	7 950	12 730	19 210	27 140	48 740	23 150	6
less indirect taxes	2 710	2 920	4 150	5 220	6 630	4 330	2
Post-tax income	5 240	9 800	15 060	21 920	42 110	18 830	8
plus benefits in kind	5 290	4 480	4 070	3 640	2 670	4 030	1
Final income	10 530	14 280	19 140	25 550	44 780	22 860	4
Number of individuals per household							
Children[4]	*0.6*	*0.5*	*0.6*	*0.5*	*0.4*	*0.5*	
Adults	*1.7*	*1.7*	*1.9*	*2.0*	*1.9*	*1.8*	
Men	*0.8*	*0.7*	*0.9*	*1.1*	*1.0*	*0.9*	
Women	*0.9*	*0.9*	*1.0*	*1.0*	*0.9*	*0.9*	
People	2.4	2.2	2.5	2.5	2.3	2.4	
People in full-time education	0.7	0.5	0.5	0.4	0.3	0.5	
Economically active people	0.6	0.8	1.3	1.7	1.7	1.2	
Retired people	0.6	0.7	0.4	0.3	0.1	0.4	
Household type (percentages)							
Retired	40	44	25	13	7	26	
Non-retired							
1 adult	14	11	13	15	20	15	
2 adults	10	12	18	29	38	22	
1 adult with children[5]	11	6	5	3	1	5	
2 adults with children	15	18	24	23	20	20	
3 or more adults[6]	9	9	15	18	13	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 rates 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.

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. Households with three or more children are less likely to have two economically active adults compared to those with fewer children, partly reflecting the fact that the youngest child or children may not yet be of school age. In addition, households with higher numbers of children will tend to have higher needs than smaller households. As the ranking of households is based on income adjusted for the needs of the household (i.e. equivalised income, adjusted for household size and composition), this increases the chance that households with three or more children will be found in the lower part of the income distribution. Where there are no children in the household, non-retired two adult households tend to be found in the higher income groups.

Retired households are over-represented at the lower end of the distribution. Two-thirds are in the bottom two fifths (as shown in Table 22). Those consisting of 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 £25,400 a year in original income but this varies widely between households. Those in the top quintile group have around £62,900 compared with £3,500 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.

Wages and salaries and income from self-employment are typically the most important source of income, together making up three quarters of gross income on average (as shown in Table 14A). Cash benefits are also a significant source, particularly for households in the lower half of the distribution. Of the total amount of cash benefits received, the bottom two quintile groups together receive about 60 per cent. These households typically receive around £5,600 from cash benefits, representing approximately three-fifths 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 3, 4, 14 and 14A). The top quintile group pays about £15,300 per household in income tax, national insurance contributions and local tax – 24 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 £5,300 from all benefits in kind, which is twice the amount received by the top fifth (see Figure 4). These are described in more detail later in the analysis.

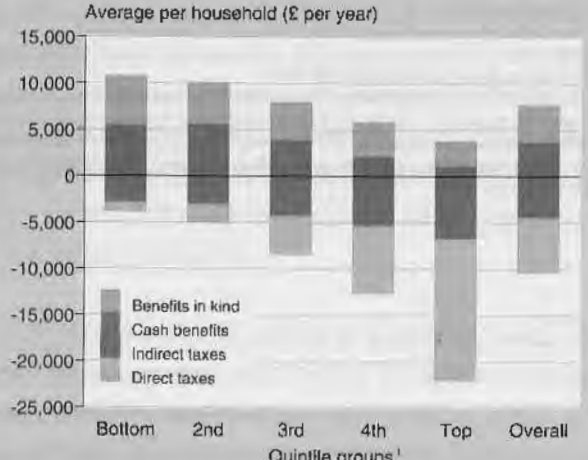
Taken as a whole, the tax and benefit systems redistribute income from high income households to those on low incomes. The average final income for the quintile groups ranges from £10,500 to £44,800, a ratio of one to four compared to a ratio of one to 18 for original income, i.e. before government intervention, as shown in Table 4.

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

Figure 4

Summary of the effects of taxes and benefits on ALL households, 2001–02



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

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 2001–02 earlier in this analysis. 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 and the 75th percentile is the income below which three quarters of households lie.) An advantage of the measure of the ratio of the 75th percentile to the 25th is that it is not affected by extreme values at either end of the distribution, which may be inaccurately measured. However, it does not reflect changes within households in the middle of the distribution.

Figure 5 shows how inequality has been changing over time since 1979 for the various measures of income as measured by the Gini coefficient. It indicates several 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 fairly 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 a rise in the second half of the 1980s.

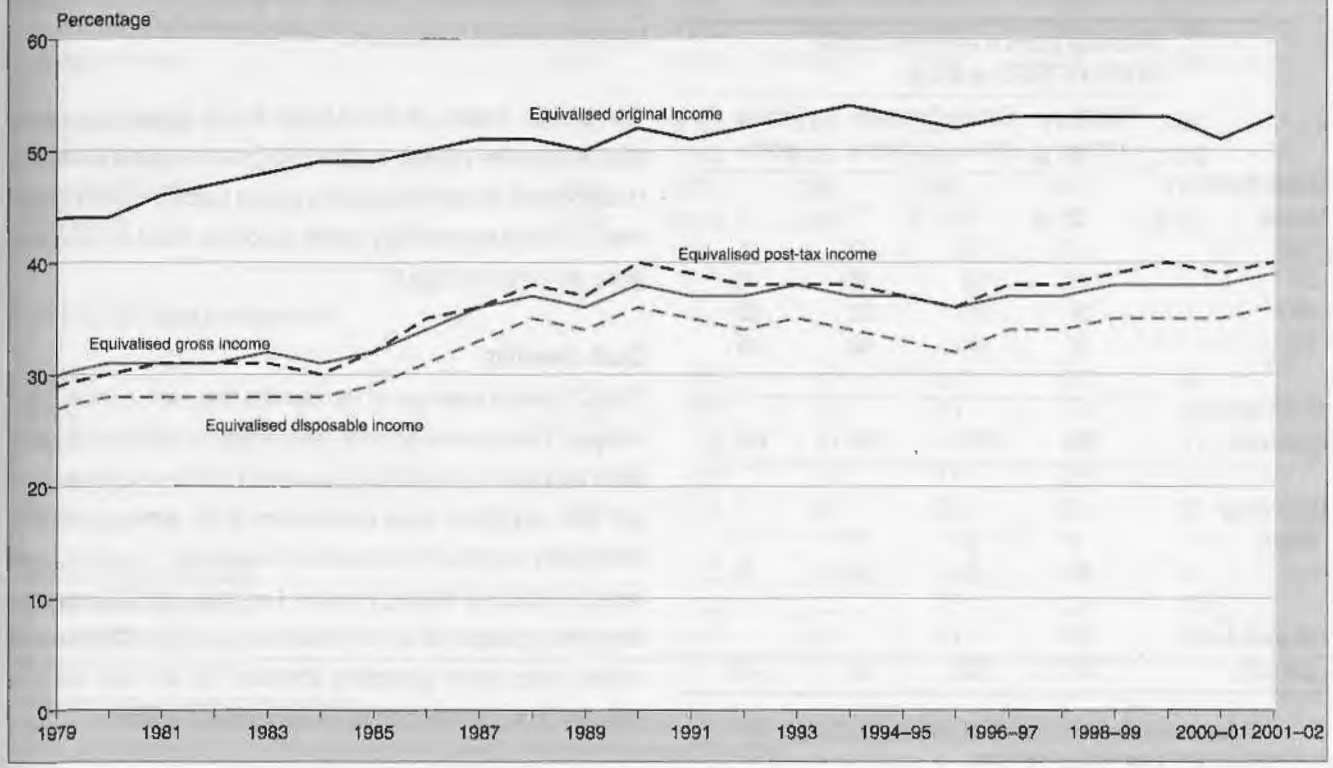
The data for the 1990s and since then show a different story. Inequality of original income has been relatively stable for the whole period. Inequality of disposable and post-tax income has been relatively flat over the whole period but with some indications of a slight fall in the first half of the 1990s, and a slight rise since then. The gap between the Gini coefficients for original income and post-tax income has tended to narrow towards the end of the period.

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. However, when we look at changes over periods of more than one year there are changes which cannot be explained by variation introduced by the sampling process.

Figures in Table 26 for trends in the shares of income figures tell the same story as the Gini coefficient: one of increasing inequality of disposable income in the 1980s then a flatter picture in the 1990s.

Figure 5

Gini coefficients 1979 to 2001–02



Changes in income distribution over time have been the focus of much study. The Organisation for Economic Co-operation and Development (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. 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; the change in the level of unemployment and the type of people affected; the importance of additional income sources; demographics; and the tax and benefit system.

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, as shown in Table 5, than for all households, as shown in Table 2. However, after the process of redistribution, the shares of income and Gini coefficients for post-tax income are almost the same as those for all households. 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.

TABLE 5: Percentage shares of household income and Gini coefficients[1] for NON-RETIRED households, 2001–02

	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	5
2nd	10	11	12	11
3rd	16	16	16	16
4th	24	23	22	22
Top	47	44	43	45
All non-retired households	100	100	100	100
Decile group[2]				
Bottom	1	2	2	2
Top	31	29	28	30
Gini coefficient (per cent)	*45*	*38*	*36*	*40*

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.

Characteristics of households

Unlike for all households, the average household size tends to decrease as income increases, as shown in Tables 17 and 17A. 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 44 per cent of these households in the bottom fifth and a further 25 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 £31,600 (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 around twice as many economically active people as those in the lowest group, as shown in Table 6.

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 (WFTC)) make up nearly three quarters of all cash benefits on average. Children's tax credits could not be separately identified but will have led to a reduction in income tax paid by households with children.

The average non-retired household receives £2,600 in cash benefits. The bottom fifth receive double this amount while those in the top quintile group typically get £800. 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 and WFTC are based on the number of children in the household. Levels of child benefit received are therefore higher at the lower end of the distribution, as these households tend to have more children. Receipts of WFTC are high partly for that reason but, to a greater extent, because the amount received is higher the lower the income of the household.

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 the same in the first and second quintile groups and only slightly lower in the middle quintile group.

For all non-retired households, as shown in Table 7, cash benefits provide 8 per cent of gross income on average. For those in the bottom quintile group they form a much larger proportion – 48 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 together pay about 10 per cent. This compares with 76 per cent of the total paid by the top two fifths.

TABLE 6: Summary of the effects of taxes and benefits on NON-RETIRED households by quintile groups[1], 2001–02

	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)							
Original income	5 560	17 340	27 030	38 890	69 430	31 650	12
plus cash benefits	5 220	3 680	2 280	1 220	790	2 640	0
Gross income	10 780	21 020	29 310	40 110	70 220	34 290	7
less direct taxes[2] and employees' NIC	1 310	3 610	5 850	9 040	17 070	7 380	13
Disposable income	9 470	17 410	23 460	31 060	53 150	26 910	6
less indirect taxes	3 280	4 100	5 010	5 650	6 970	5 000	2
Post-tax income	6 180	13 310	18 450	25 410	46 190	21 910	7
plus benefits in kind	5 900	4 830	3 950	3 360	2 560	4 120	0
Final income	12 080	18 140	22 400	28 770	48 750	26 030	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*	*2.1*	*1.9*	*2.0*	
Men	*0.8*	*1.0*	*1.1*	*1.1*	*1.0*	*1.0*	
Women	*1.0*	*1.0*	*1.0*	*1.0*	*0.9*	*1.0*	
People	2.9	2.9	2.7	2.6	2.3	2.7	
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	1.8	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 rates rebates.*
3 *Children are defined as people aged under 16 or aged between 16 and 18, unmarried and receiving non-advanced further education.*

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 19 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 insurance contributions are only levied on the first £575 of weekly earnings in 2001–02, so part of the earnings of many of those in the top quintile group will not be subject to this deduction.

TABLE 7: Cash benefits for NON-RETIRED households by quintile groups[1], 2001–02

	Quintile groups of NON-RETIRED households[1]					All non-retired households
	Bottom	2nd	3rd	4th	Top	
Average per household (£ per year)						
Contributory						
Retirement pension	210	440	500	380	230	350
Incapacity benefit	620	410	280	120	40	300
Job seeker's allowance[2]	80	20	20	10	0	30
Other	50	90	80	50	110	70
Total contributory	960	960	880	560	390	750
Non-contributory						
Income support	1 470	600	160	30	10	450
Working Families Tax Credit	300	280	130	40	0	150
Child benefit	700	610	490	340	270	480
Housing benefit	1 070	450	110	20	0	330
Job seeker's allowance[3]	240	60	10	0	0	60
Sickness/disablement related	330	570	370	170	80	300
Other	150	150	120	60	30	100
Total non-contributory	4 270	2 720	1 400	660	400	1 890
Total cash benefits	5 220	3 680	2 280	1 220	790	2 640
Cash benefits as a percentage of gross income	*48*	*18*	*8*	*3*	*1*	*8*

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

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 Tables 8, 16 and 16A. Households in the lower part of the income distribution pay smaller absolute amounts in local taxes. Net payments by the bottom quintile group are only about half of those in the top fifth (Table 16A). When expressed as a proportion of gross income in Table 8, 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 EFS. However, as described earlier in this analysis, the income and expenditure data recorded in the EFS are not fully compatible because they are recorded in different ways (see Appendix 2, paragraph 6). Therefore, to give a more complete picture of the impact of indirect taxes, they are shown in Table 9 as a proportion of disposable income and, separately, as a proportion of expenditure. In addition, indirect taxes are also shown as a proportion of gross income in Table 8 so that the impact of direct and indirect taxes can be compared.

In cash terms, the top fifth of non-retired households pay over twice 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.

TABLE 8: Taxes as a percentage of gross income for NON-RETIRED households by quintile groups[1], 2001–02

	Quintile groups of NON-RETIRED households[1]					All non-retired households
	Bottom	2nd	3rd	4th	Top	
Percentages						
Direct taxes						
Income tax[2]	4.6	9.2	11.9	14.6	18.9	14.6
Employees' NIC	2.1	4.1	4.9	5.4	3.8	4.3
Local taxes[3]	5.4	3.9	3.1	2.6	1.6	2.6
All direct taxes	12.2	17.2	20.0	22.5	24.3	21.5
All indirect taxes	30.5	19.5	17.1	14.1	9.9	14.6
All taxes	42.7	36.7	37.1	36.6	34.2	36.1

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 rates rebates.

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 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 categories for which such imputations are made are health and education services. The 2001 expenditure for both these allocated in this analysis to all households is equivalent to around 27 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 for non-retired households.

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 lower quintiles receive the highest benefit from education, as shown in Table 10. This is due to the concentration of children in this part of the distribution. The impact of expenditure on free school meals and welfare milk 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 EFS 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, as shown in Table 10. This pattern is a reflection of the demographic composition of households. Studies by Sefton[5] have attempted to allow for variations in use of the health service according to socio-economic characteristics.

TABLE 9: Indirect taxes as a percentage of (a) disposable income and (b) household expenditure[1] for NON-RETIRED households by quintile groups[2], 2001–02

	Quintile groups of NON-RETIRED households[2]					All non-retired households
	Bottom	2nd	3rd	4th	Top	
(a) Percentages of disposable income						
VAT	12.9	9.0	8.5	7.5	5.9	7.6
Duty on alcohol	1.8	1.3	1.3	1.1	0.8	1.1
Duty on tobacco	4.0	2.3	1.7	1.0	0.4	1.3
Duty on hydrocarbon oils and Vehicle excise duty	3.8	3.1	2.9	2.7	1.6	2.4
Other indirect taxes	12.1	7.9	6.9	5.9	4.5	6.2
All indirect taxes	34.7	23.5	21.4	18.2	13.1	18.6
(b) Percentages of expenditure[1]						
VAT	8.1	7.9	7.8	7.4	6.9	7.5
Duty on alcohol	1.1	1.1	1.2	1.1	0.9	1.1
Duty on tobacco	2.5	2.0	1.6	1.0	0.5	1.2
Duty on hydrocarbon oils and Vehicle excise duty	2.4	2.7	2.7	2.7	1.9	2.4
Other indirect taxes	7.6	6.9	6.4	5.9	5.3	6.1
All indirect taxes	21.7	20.6	19.8	18.0	15.4	18.3

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

The housing subsidy, which excludes housing benefit (see Appendix 2, paragraph 39), is spread between public sector, housing association and Registered Social Landlord tenants. Since such households tend to be concentrated in the lower half of the income distribution, this is where the imputed benefit is highest, as shown in Table 10.

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 estimates of these subsidies being higher for households in higher income quintiles. This pattern is also due to London and the South East having higher levels of commuting by public transport together with higher than average household incomes.

Taken together, the absolute value of these benefits in kind declines as household income increases. The ratio of benefits in kind to post-tax income decreases from 95 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.

The effects of taxes and benefits by household type

The tax and benefit systems affect different types of household in different ways reflecting, in part, the number and ages of people within each household type. Of the types of non-retired households shown in Figure 6, only those containing one adult and children are net gainers, with average final incomes of £16,800 compared to original incomes of £8,700 (Table 23). This table also 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 broadly similar levels of original income to those without, but receive more cash benefits than those without. This reflects the effect of receiving child benefit and WFTC. 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 10: Benefits in kind for NON-RETIRED households by quintile groups[1], 2001–02

	Quintile groups of NON-RETIRED households[1]					All non-retired households
	Bottom	2nd	3rd	4th	Top	
Average per household (£ per year)						
Education	3 590	2 610	1 890	1 450	770	2 060
National health service	2 040	2 090	1 980	1 820	1 700	1 930
Housing subsidy	110	60	30	20	10	40
Travel subsidies	50	40	50	70	80	60
School meals and welfare milk	110	30	10	0	0	30
All benefits in kind	5 900	4 830	3 950	3 360	2 560	4 120
Benefits in kind as a percentage of post-tax income	*95*	*36*	*21*	*13*	*6*	*19*

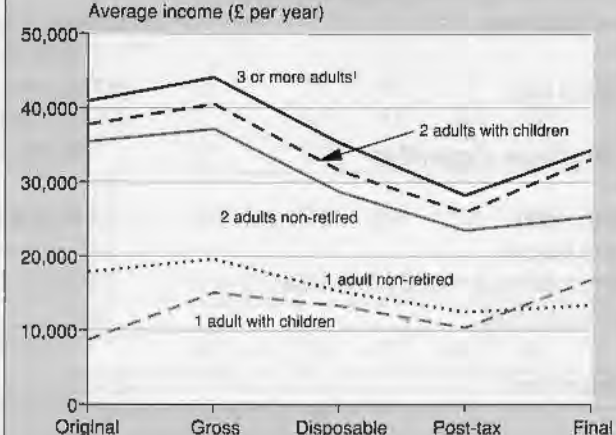
1 Households are ranked by equivalised disposable income.

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.

Figure 6

Income stages by NON-RETIRED household types, 2001—02



1 With or without children.

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 over three-fifths of total original income, while the Gini coefficient for this measure of income is 66 per cent. Both these measures are higher (showing more inequality) than equivalent figures for non-retired households. 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 £7,400 in original income with most of this coming from occupational pensions and investments (Tables 12, 18 and 18A). Original income ranges from £1,300 for the bottom quintile group to £22,700 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 £5,500 from this source, while those in the second to fourth quintile groups receive between £7,000 and £7,500. These cash benefits make up large proportions of the gross incomes for the bottom four quintiles ranging from 82 per cent for the bottom quintile group to 51 per cent for the fourth quintile group. The top fifth are much less dependent on cash benefits – these account for only 22 per cent of their gross incomes.

TABLE 11: Percentage shares of household income and Gini coefficients[1] for RETIRED households, 2001–02

	Percentage shares of equivalised income for RETIRED households[2]			
	Original income	Gross income	Disposable income	Post-tax income
Quintile group[2]				
Bottom	3	10	10	8
2nd	6	13	14	13
3rd	9	16	17	17
4th	19	21	21	21
Top	63	41	39	41
All retired households	100	100	100	100
Decile group[2]				
Bottom	1	4	4	3
Top	45	27	26	27
Gini coefficient (per cent)	*66*	*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.

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 state retirement pension, which on average accounts for three quarters of their cash benefits (Tables 12, 18 and 18A).

Non-contributory benefits are lowest in the bottom quintile group, where about three quarters of households own their homes outright (Table 19A) and so receive little in the way of housing benefit. In addition, as shown in Table 18A, 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 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, housing and travel subsidies. Health benefit is spread fairly evenly between retired households whereas benefit from the housing subsidy is significantly higher for those in the middle 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 one and a half times the level of original income than that of women on average: £6,400 for men compared with £4,300 for women. After the addition of benefits and the deduction of taxes, the differences are greatly reduced, so that final income levels for these men is only slightly higher than for women.

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TABLE 12: Summary of the effects of taxes and benefits on RETIRED households by quintile groups[1], 2001–02

	Quintile groups of RETIRED households[1]					
	Bottom	2nd	3rd	4th	Top	All retired households
Income, taxes and benefits per household (£ per year)						
Original income						
Earnings	30	180	190	400	1 020	370
Occupational pensions	840	1 710	2 370	5 730	14 030	4 940
Investment income	340	420	690	990	7 360	1 960
Other income	40	80	60	70	340	120
Total original income	1 250	2 400	3 310	7 200	22 740	7 380
plus Contributory benefits	4 860	5 490	5 210	5 480	5 130	5 230
Non-contributory benefits	670	1 480	2 170	2 050	1 320	1 540
Total cash benefits	5 530	6 980	7 380	7 530	6 440	6 770
Gross income	6 780	9 370	10 690	14 720	29 180	14 150
less Income tax[2]	100	190	290	910	3 850	1 070
Employees' NIC	10	10	10	70	50	30
Local taxes[3]	720	680	650	790	1 040	780
Disposable income	5 960	8 490	9 740	12 950	24 240	12 280
less Indirect taxes	1 780	1 790	1 930	2 540	3 790	2 370
Post-tax income	4 180	6 700	7 810	10 410	20 450	9 910
plus National health service	3 940	3 680	3 460	3 460	3 430	3 600
Housing subsidy	20	60	90	60	10	50
Other benefits in kind	150	160	140	130	100	130
Final income	8 290	10 600	11 500	14 050	23 990	13 690
Cash benefits as a percentage of gross income	*82*	*74*	*69*	*51*	*22*	*48*
Retirement pension as a percentage of cash benefits	*85*	*77*	*70*	*71*	*77*	*76*

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.

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APPENDIX 1

TABLE 13 (Appendix 1): Taxes and benefits allocated to households as a percentage of general government expenditure, 2001

Taxes and compulsory social contributions[1] allocated to households	£ million	% of GGE[2]	Benefits allocated to households	£ million	% of GGE[2]
Income tax (gross)	109 010	28.4	Cash benefits		
Tax reliefs	– 90	0.0			
Income tax (net)	108 920	28.4	Contributory (National Insurance, etc)		
			Retirement	42 600	11.1
Employees' & self-employed NI contributions	27 720	7.2	Incapacity benefit	6 800	1.8
Council tax	14 980	3.9	Widows' and guardians' allowances	1 080	0.3
			Maternity/Statutory maternity pay	710	0.2
			Job seekers allowance	450	0.1
			Social fund	1 870	0.5
			Other	220	0.1
Taxes on final goods and services					
VAT	45 260	11.8	Non-contributory		
Duty on hydrocarbon oils	11 120	2.9	Income support	14 220	3.7
Duty on tobacco	7 410	1.9	Working Families Tax Credit	5 440	1.4
Vehicle excise duty	2 860	0.7	Other family benefits	8 740	2.3
Duty on wines, cider, perry and spirits	3 760	1.0	War pensions	1 200	0.3
Duty on beer	2 690	0.7	Other	16 990	4.4
Betting duties	1 330	0.3			
Camelot: payments to NLDF	1 350	0.4	Student support	520	0.1
Stamp duty on house purchase	2 030	0.5			
Other	2 800	0.7	Rent rebates and allowances	11 540	3.0
Taxes & NI contributions on intermediate goods & services[3]			Benefits in kind		
Employers' NI contributions	12 420	3.2			
Commercial & industrial rates	8 900	2.3	Health services	59 490	15.5
Duty on hydrocarbon oils	5 590	1.5	Education	43 430	11.3
VAT	3 270	0.9	Travel subsidies[4]	1 520	0.4
Vehicle excise duty	640	0.2	Housing subsidy	1 020	0.3
Other	3 320	0.9	School meals and welfare milk	850	0.2
Total	266 370	69.4	Total	218 680	57.0

1 Paid to UK central and local government and European Community 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, 2002 Edition.

TABLE 14 (Appendix 1): Average incomes, taxes and benefits by decile groups of ALL households, 2001–02

	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 £)	*8 271*	*10 412*	*12 456*	*14 751*	*17 249*	*20 085*	*23 831*	*28 640*	*37 544*		
Number of households in the population ('000s)	2 489	2 488	2 491	2 489	2 488	2 491	2 490	2 489	2 492	2 490	24 898
Original income											
Wages and salaries	1 504	2 710	4 610	8 331	12 960	17 682	22 992	29 564	37 176	56 034	19 356
Imputed income from benefits in kind	28	28	43	52	152	242	280	572	836	1 477	371
Self-employment income	273	424	529	732	1 122	1 003	2 110	1 731	3 489	14 276	2 569
Occupational pensions, annuities	265	833	1 061	1 620	2 173	2 292	2 230	2 702	2 093	3 513	1 878
Investment income	228	246	362	441	408	544	824	978	1 345	4 879	1 025
Other income	205	171	139	191	168	225	160	292	200	411	216
Total	2 503	4 412	6 745	11 367	16 983	21 989	28 596	35 839	45 138	80 590	25 416
Direct benefits in cash											
Contributory											
Retirement pension	1 683	2 564	2 686	2 303	1 865	1 440	1 158	928	586	531	1 574
Job seeker's allowance (Contribution based)	82	27	15	18	9	19	6	15	10	2	20
Incapacity benefit	325	486	279	293	294	315	173	129	80	41	241
Widows' benefits	27	48	55	65	46	38	51	26	25	23	40
Statutory Maternity Pay/Allowance	5	-	1	11	11	6	33	19	40	114	24
Non-contributory											
Income support	746	1 207	826	505	471	237	87	53	4	18	415
Child benefit	399	456	354	386	402	410	380	316	244	259	361
Housing benefit	529	892	956	563	392	180	69	35	3	-	362
Job seeker's allowance (Income based)	240	106	39	53	15	14	2	4	1	2	48
Invalid care allowance	15	52	62	50	59	30	6	10	5	-	29
Attendance allowance	-	26	45	94	34	41	26	35	5	5	31
Disability living allowance	89	184	262	364	398	243	199	146	79	61	202
Disabled Persons Tax Credit	-	-	-	10	8	0	6	-	7	-	3
War pensions/War widows' pensions	12	19	45	24	33	138	116	42	21	2	45
Severe disablement allowance	16	48	33	29	60	57	37	30	2	-	31
Industrial injury disablement benefit	9	15	33	27	36	33	9	13	-	-	19
Student support	59	38	9	97	52	48	29	21	17	8	38
Government training schemes	37	10	4	8	21	21	15	2	1	0	12
Working Families Tax Credit	125	204	200	228	109	129	66	43	9	-	112
Other non-contributory benefits	139	133	135	134	97	82	62	57	29	43	91
Total cash benefits	4 538	6 515	6 040	5 263	4 412	3 482	2 531	1 922	1 178	1 118	3 700
Gross income	7 041	10 928	12 785	16 630	21 395	25 470	31 127	37 760	46 316	81 708	29 116
Direct taxes and Employees' NIC											
Income tax	228	359	654	1 196	2 025	2 794	3 981	5 321	7 281	16 184	4 002
less: Tax relief at source[1]	2	3	2	4	6	4	3	6	7	11	5
Employees' NI contributions	83	138	253	467	802	1 079	1 447	1 872	2 325	2 529	1 099
Local taxes[2]	843	855	836	873	930	940	991	1 047	1 078	1 205	960
less: Council tax benefit/Rates rebates	214	211	198	111	77	41	24	16	14	27	93
Total	938	1 137	1 542	2 421	3 674	4 769	6 392	8 218	10 664	19 881	5 964
Disposable income	6 103	9 790	11 243	14 209	17 721	20 702	24 735	29 542	35 652	61 827	23 152
Equivalised disposable income	*5 888*	*9 353*	*11 447*	*13 588*	*16 031*	*18 607*	*21 809*	*26 043*	*32 465*	*61 158*	*21 639*
Indirect taxes											
Taxes on final goods and services											
VAT	1 055	980	985	1 231	1 523	1 735	2 053	2 251	2 534	3 349	1 770
Duty on tobacco	285	276	249	275	345	365	324	299	235	169	282
Duty on beer and cider	62	65	63	90	106	126	157	141	162	145	112
Duty on wines & spirits	92	61	59	91	109	141	161	167	201	267	135
Duty on hydrocarbon oils	221	233	232	316	392	458	527	606	657	644	429
Vehicle excise duty	74	71	72	92	122	138	156	173	184	181	126
Television licences	78	78	75	81	90	94	95	99	101	103	90
Stamp duty on house purchase	37	35	30	36	56	64	86	102	125	260	83
Customs duties	22	22	21	25	29	31	37	41	45	58	33
Betting taxes	37	43	61	58	57	70	64	48	63	44	55
Insurance premium tax	22	19	19	27	37	39	47	54	61	79	40
Air passenger duty	11	6	11	15	17	20	26	24	40	51	22
Camelot National Lottery Fund	41	53	50	64	67	72	72	65	62	44	59
Other	8	5	5	6	10	15	28	15	23	28	14
Intermediate taxes											
Commercial and industrial rates	185	181	179	209	244	264	311	339	374	487	277
Employers' NI contributions	257	252	248	290	339	366	432	472	520	678	385
Duty on hydrocarbon oils	115	112	111	129	151	163	192	210	232	302	172
Vehicle excise duty	16	16	15	18	21	23	27	29	32	42	24
Other	145	142	140	164	191	207	244	266	293	382	217
Total indirect taxes	2 764	2 648	2 625	3 219	3 906	4 391	5 041	5 402	5 947	7 313	4 326
Post-tax income	3 339	7 142	8 617	10 990	13 816	16 311	19 694	24 141	29 706	54 514	18 827
Benefits in kind											
Education	2 566	2 016	1 524	1 632	1 704	1 651	1 383	1 432	849	708	1 547
National health service	2 688	2 887	2 825	2 652	2 329	2 263	2 267	2 025	1 810	1 807	2 355
Housing subsidy	69	95	80	74	46	32	18	19	15	5	45
Rail travel subsidy	16	10	12	10	15	15	21	40	49	61	25
Bus travel subsidy	43	54	51	47	38	36	35	29	22	22	38
School meals and welfare milk	70	70	30	19	12	7	3	2	0	0	21
Total	5 452	5 133	4 523	4 434	4 143	4 004	3 727	3 547	2 746	2 604	4 031
Final income	8 791	12 274	13 140	15 423	17 959	20 315	23 421	27 687	32 451	57 118	22 858

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, 2001–02

	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 £)		*10 412*	*14 751*	*20 085*	*28 640*	
Number of households in the population ('000s)	4 978	4 981	4 980	4 978	4 982	24 898
Original income						
Wages and salaries	2 107	6 471	15 321	26 278	46 605	19 356
Imputed income from benefits in kind	28	48	197	426	1 156	371
Self-employment income	348	630	1 063	1 920	8 883	2 569
Occupational pensions, annuities	549	1 341	2 232	2 466	2 803	1 878
Investment income	237	401	476	901	3 112	1 025
Other income	188	165	197	226	305	216
Total	3 458	9 056	19 486	32 217	62 864	25 416
Direct benefits in cash						
Contributory						
Retirement pension	2 124	2 494	1 653	1 043	558	1 574
Job seeker's allowance (Contribution based)	55	17	14	10	6	20
Incapacity benefit	405	286	304	151	60	241
Widows' benefits	38	60	42	38	24	40
Statutory Maternity Pay/Allowance	2	6	8	26	77	24
Non-contributory						
Income support	976	666	354	70	11	415
Child benefit	428	370	406	348	252	361
Housing benefit	710	760	286	52	4	362
Job seeker's allowance (Income based)	173	46	14	3	1	48
Invalid care allowance	33	56	45	8	2	29
Attendance allowance	13	70	38	31	5	31
Disability living allowance	137	313	321	172	70	202
Disabled Persons Tax Credit	-	5	4	3	4	3
War pensions/War widows' pensions	15	34	85	79	11	45
Severe disablement allowance	32	31	59	33	1	31
Industrial injury disablement benefit	12	30	35	11	5	19
Student support	49	53	50	25	13	38
Government training schemes	23	6	21	8	0	12
Working Families Tax Credit	165	214	119	54	7	112
Other non-contributory benefits	136	135	89	60	36	91
Total cash benefits	5 527	5 652	3 947	2 226	1 148	3 700
Gross income	8 984	14 708	23 433	34 444	64 012	29 116
Direct taxes and Employees' NIC						
Income tax	293	925	2 409	4 651	11 733	4 002
less: Tax relief at source[1]	3	3	5	5	9	5
Employees' NI contributions	110	360	940	1 660	2 427	1 099
Local taxes[2]	849	855	935	1 019	1 142	960
less: Council tax benefit/Rates rebates	212	155	59	20	21	93
Total	1 038	1 982	4 221	7 305	15 272	5 964
Disposable income	7 947	12 726	19 212	27 139	48 739	23 152
Equivalised disposable income	*7 620*	*12 517*	*17 319*	*23 926*	*46 812*	*21 639*
Indirect taxes						
Taxes on final goods and services						
VAT	1 017	1 108	1 629	2 152	2 942	1 770
Duty on tobacco	281	262	355	312	202	282
Duty on beer and cider	64	77	116	149	154	112
Duty on wines & spirits	76	75	125	164	234	135
Duty on hydrocarbon oils	227	274	425	586	651	429
Vehicle excise duty	72	62	130	164	182	126
Television licences	78	78	92	97	102	90
Stamp duty on house purchase	36	33	60	94	192	83
Customs duties	22	23	30	39	51	33
Betting taxes	40	60	64	56	54	55
Insurance premium tax	20	23	38	51	70	40
Air passenger duty	8	13	18	25	46	22
Camelot National Lottery Fund	47	57	70	69	53	59
Other	7	6	12	22	26	14
Intermediate taxes						
Commercial and industrial rates	183	194	254	325	431	277
Employers' NI contributions	254	269	352	452	599	385
Duty on hydrocarbon oils	113	120	157	201	267	172
Vehicle excise duty	16	17	22	28	37	24
Other	143	152	199	255	338	217
Total indirect taxes	2 706	2 922	4 148	5 221	6 630	4 326
Post-tax income	5 240	9 804	15 063	21 917	42 110	18 827
Benefits in kind						
Education	2 291	1 578	1 677	1 408	779	1 547
National health service	2 787	2 738	2 296	2 146	1 808	2 355
Housing subsidy	82	77	39	19	10	45
Rail travel subsidy	13	11	15	30	55	25
Bus travel subsidy	49	49	37	32	22	38
School meals and welfare milk	70	24	10	2	0	21
Total	5 292	4 478	4 074	3 637	2 675	4 031
Final income	10 533	14 282	19 137	25 554	44 785	22 858

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, 2001–02

	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	2.4	2.1	2.3	2.5	2.5	2.5	2.5	2.4	2.2	2.4
Adults	*1.7*	*1.7*	*1.6*	*1.8*	*1.9*	*1.9*	*2.0*	*2.0*	*2.0*	*1.8*	*1.8*
Men	*0.8*	*0.8*	*0.7*	*0.8*	*0.9*	*0.9*	*1.0*	*1.1*	*1.1*	*1.0*	*0.9*
Women	*0.9*	*0.9*	*0.9*	*1.0*	*1.0*	*1.0*	*1.0*	*0.9*	*0.9*	*0.9*	*0.9*
Children	*0.6*	*0.7*	*0.5*	*0.6*	*0.6*	*0.6*	*0.5*	*0.4*	*0.3*	*0.4*	*0.5*
Economically active people	0.6	0.5	0.6	0.9	1.2	1.4	1.6	1.7	1.8	1.6	1.2
Retired people	0.5	0.7	0.7	0.6	0.5	0.4	0.3	0.2	0.1	0.1	0.4
People in full-time education	0.73	0.64	0.48	0.52	0.53	0.53	0.45	0.45	0.30	0.33	0.49
In state primary schools	*0.28*	*0.33*	*0.23*	*0.25*	*0.25*	*0.23*	*0.21*	*0.17*	*0.11*	*0.10*	*0.22*
In state secondary schools	*0.19*	*0.21*	*0.15*	*0.18*	*0.20*	*0.19*	*0.15*	*0.13*	*0.08*	*0.06*	*0.15*
In further and higher education	*0.24*	*0.08*	*0.08*	*0.07*	*0.07*	*0.08*	*0.07*	*0.11*	*0.05*	*0.04*	*0.09*
In other educational establishments	*0.02*	*0.02*	*0.02*	*0.02*	*0.02*	*0.02*	*0.02*	*0.04*	*0.05*	*0.12*	*0.03*
Composition (percentages)											
Household type											
Retired											
1 adult	21	19	30	21	13	11	8	5	3	4	14
1 adult men	*4*	*5*	*7*	*6*	*5*	*2*	*2*	*2*	*1*	*1*	*3*
1 adult women	*16*	*14*	*24*	*16*	*8*	*9*	*6*	*3*	*2*	*2*	*10*
2 or more adults	16	25	19	16	15	10	7	6	4	3	12
Non-retired											
1 adult	17	10	10	13	12	15	14	15	19	22	15
1 adult men	*9*	*6*	*6*	*6*	*6*	*9*	*9*	*10*	*13*	*15*	*9*
1 adult women	*7*	*4*	*4*	*6*	*6*	*6*	*5*	*5*	*6*	*7*	*6*
2 adults	11	10	10	14	18	19	26	32	37	40	22
3 or more adults	7	4	4	6	9	10	13	14	15	7	9
1 adult with children	8	15	8	5	5	4	3	2	1	1	5
2 adults with 1 child	5	4	5	6	10	11	9	9	9	10	8
2 adults with 2 children	7	6	5	10	11	11	12	11	9	10	9
2 adults with 3 or more children	6	4	5	5	4	3	3	2	1	2	3
3 or more adults with children	3	4	4	4	5	6	4	4	2	1	4
Household tenure											
Rented	42	54	54	40	31	26	17	17	12	11	30
Local authority rented	*24*	*31*	*30*	*21*	*14*	*11*	*6*	*4*	*2*	*1*	*14*
Housing association or RSL	*6*	*11*	*11*	*9*	*6*	*4*	*2*	*2*	*1*	*1*	*5*
Other rented unfurnished	*4*	*5*	*6*	*5*	*5*	*5*	*2*	*4*	*3*	*4*	*4*
Rented furnished	*6*	*5*	*5*	*3*	*4*	*3*	*5*	*6*	*5*	*5*	*5*
Rent free	*1*	*2*	*1*	*2*	*2*	*2*	*2*	*2*	*1*	*1*	*2*
Owner occupied	58	46	46	60	69	74	83	83	88	89	70
With mortgage	*18*	*14*	*17*	*27*	*42*	*47*	*57*	*61*	*69*	*66*	*42*
Rental purchase	*0*	-	*0*	*0*	*0*	*1*	*0*	*1*	*1*	-	*0*
Owned outright	*40*	*33*	*30*	*33*	*27*	*27*	*25*	*21*	*19*	*22*	*28*
Age of chief economic supporter											
Under 25	9	5	3	2	2	4	3	2	3	1	4
Over 24 and under 35	13	14	10	12	13	18	22	22	23	22	17
Over 34 and under 45	17	17	18	17	19	21	22	25	25	31	21
Over 44 and under 55	12	12	9	16	20	19	22	22	29	24	19
Over 54 and under 65	15	12	13	16	19	15	15	17	11	16	15
Over 64 and under 75	12	20	23	19	16	13	8	7	5	5	13
Over 74	21	21	24	17	11	10	8	5	3	2	12
Employment status of chief economic supporter											
Self-employed	5	4	4	5	6	4	8	5	9	16	7
Full-time employee	8	11	19	32	46	58	64	73	78	72	46
Part-time employee	11	9	8	11	8	7	8	5	4	3	7
Unemployed	10	5	2	2	1	1	1	1	1	0	3
Unoccupied and under minimum NI age	32	28	17	12	11	7	4	5	2	2	12
Retired/unoccupied over minimum NI age	34	42	49	37	28	22	16	11	7	5	25
Other	0	0	0	-	-	-	-	-	-	-	0

TABLE 15A (Appendix 1): Household characteristics of quintile groups of ALL households, 2001–02

	Quintile groups of all households ranked by equivalised disposable income					All households
	Bottom	2nd	3rd	4th	Top	
Average per household (number)						
People	2.4	2.2	2.5	2.5	2.3	2.4
Adults	*1.7*	*1.7*	*1.9*	*2.0*	*1.9*	*1.8*
Men	*0.8*	*0.7*	*0.9*	*1.1*	*1.0*	*0.9*
Women	*0.9*	*0.9*	*1.0*	*1.0*	*0.9*	*0.9*
Children	*0.6*	*0.5*	*0.6*	*0.5*	*0.4*	*0.5*
Economically active people	0.6	0.8	1.3	1.7	1.7	1.2
Retired people	0.6	0.7	0.4	0.3	0.1	0.4
People in full-time education	0.68	0.50	0.53	0.45	0.31	0.49
In state primary schools	*0.30*	*0.24*	*0.24*	*0.19*	*0.11*	*0.22*
In state secondary schools	*0.20*	*0.16*	*0.20*	*0.14*	*0.07*	*0.15*
In further and higher education	*0.16*	*0.08*	*0.07*	*0.09*	*0.05*	*0.09*
In other educational establishments	*0.02*	*0.02*	*0.02*	*0.03*	*0.06*	*0.03*
Composition (percentages)						
Household type						
Retired						
1 adult	20	26	12	6	4	14
1 adult men	*4*	*6*	*3*	*2*	*1*	*3*
1 adult women	*15*	*20*	*9*	*4*	*2*	*10*
2 or more adults	20	18	12	7	4	12
Non-retired						
1 adult	14	11	13	15	20	15
1 adult men	*8*	*6*	*8*	*10*	*14*	*9*
1 adult women	*6*	*5*	*6*	*5*	*6*	*6*
2 adults	10	12	18	29	38	22
3 or more adults	5	5	9	13	11	9
1 adult with children	11	6	5	3	1	5
2 adults with 1 child	4	6	10	9	9	8
2 adults with 2 children	6	8	11	12	9	9
2 adults with 3 or more children	5	5	3	3	2	3
3 or more adults with children	4	4	5	4	2	4
Household tenure						
Rented	48	47	28	17	12	30
Local authority rented	*27*	*25*	*13*	*5*	*1*	*14*
Housing association or RSL	*8*	*10*	*5*	*2*	*1*	*5*
Other rented unfurnished	*5*	*6*	*5*	*3*	*3*	*4*
Rented furnished	*6*	*4*	*3*	*5*	*5*	*5*
Rent free	*2*	*1*	*2*	*2*	*1*	*2*
Owner occupied	52	53	72	83	88	70
With mortgage	*16*	*22*	*44*	*59*	*68*	*42*
Rental purchase	*0*	*0*	*0*	*1*	*0*	*0*
Owned outright	*36*	*31*	*27*	*23*	*20*	*28*
Age of chief economic supporter						
Under 25	7	3	3	3	2	4
Over 24 and under 35	13	11	15	22	23	17
Over 34 and under 45	17	17	20	23	28	21
Over 44 and under 55	12	13	19	22	26	19
Over 54 and under 65	14	15	17	16	14	15
Over 64 and under 75	16	21	15	8	5	13
Over 74	21	21	10	6	3	12
Employment status of chief economic supporter						
Self-employed	5	5	5	7	13	7
Full-time employee	10	26	52	69	75	46
Part-time employee	10	10	8	7	4	7
Unemployed	8	2	1	1	1	3
Unoccupied and under minimum NI age	30	14	9	4	2	12
Retired/unoccupied over minimum NI age	38	43	25	13	6	25
Other	0	0	-	-	-	0

TABLE 16 (Appendix 1): Average incomes, taxes and benefits by decile groups of NON-RETIRED households, 2001–02

	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 £)	*8 719*	*11 604*	*14 369*	*17 038*	*19 597*	*22 711*	*26 370*	*31 321*	*40 892*		
Number of households in the population ('000s)	1 850	1 850	1 850	1 852	1 850	1 849	1 849	1 853	1 849	1 852	18 504
Original income											
Wages and salaries	2 473	6 199	12 031	17 496	21 719	25 390	31 356	37 038	41 065	64 560	25 933
Imputed income from benefits in kind	34	56	84	193	269	385	538	729	924	1 757	497
Self-employment income	366	844	1 245	1 523	1 198	2 379	1 729	2 542	5 291	17 333	3 445
Occupational pensions, annuities	87	254	446	690	729	833	1 065	1 158	904	2 047	821
Investment income	165	127	237	244	224	466	547	606	1 001	3 415	703
Other income	260	246	266	222	239	224	287	183	208	364	250
Total	3 385	7 726	14 309	20 369	24 378	29 677	35 522	42 256	49 392	89 476	31 649
Direct benefits in cash											
Contributory											
Retirement pension	81	338	399	491	557	448	451	303	200	254	352
Job seeker's allowance (Contribution based)	111	39	28	16	20	14	20	10	5	2	26
Incapacity benefit	481	766	440	373	306	262	116	130	34	47	295
Widows' benefits	49	39	102	46	55	54	13	24	34	11	43
Statutory Maternity Pay/Allowance	6	2	11	17	8	39	21	32	58	126	32
Non-contributory											
Income support	1 296	1 650	678	515	225	105	31	22	7	18	455
Child benefit	654	753	642	575	509	464	371	311	254	292	482
Housing benefit	943	1 200	592	317	170	59	22	8	2	-	332
Job seeker's allowance (Income based)	353	128	76	38	17	5	4	1	2	2	63
Invalid care allowance	16	85	80	70	30	7	8	12	-	-	31
Attendance allowance	3	4	8	-	5	13	18	11	-	6	7
Disability living allowance	132	298	397	381	256	192	122	80	63	62	198
Disabled Persons Tax Credit	-	-	13	9	0	4	4	10	-	-	4
War pensions/War widows' pensions	9	1	-	22	28	68	23	-	7	3	16
Severe disablement allowance	29	61	42	52	67	35	26	11	3	-	33
Industrial injury disablement benefit	14	13	27	37	25	12	12	12	-	-	16
Student support	83	49	52	123	91	20	49	23	3	9	50
Government training schemes	49	11	12	13	42	22	2	0	1	0	15
Working Families Tax Credit	201	397	391	175	171	85	43	33	2	-	150
Other non-contributory benefits	52	50	48	55	44	30	28	18	34	17	38
Total cash benefits	4 563	5 883	4 040	3 324	2 627	1 938	1 384	1 049	717	859	2 638
Gross income	7 948	13 609	18 349	23 693	27 005	31 615	36 906	43 305	50 109	90 335	34 288
Direct taxes and Employees' NIC											
Income tax	315	682	1 489	2 390	2 993	3 987	5 156	6 537	8 293	18 298	5 014
less: Tax relief at source[1]	2	2	3	5	4	3	5	8	5	11	5
Employees' NI contributions	129	330	664	1 054	1 309	1 584	1 992	2 344	2 541	2 749	1 470
Local taxes[2]	814	829	882	932	927	970	1 024	1 069	1 084	1 230	976
less: Council tax benefit/Rates rebates	249	220	116	61	34	25	15	13	13	31	78
Total	1 007	1 619	2 917	4 309	5 191	6 512	8 153	9 928	11 901	22 235	7 377
Disposable income	6 942	11 990	15 433	19 384	21 815	25 103	28 753	33 376	38 209	68 100	26 910
Equivalised disposable income	*5 824*	*10 118*	*12 992*	*15 782*	*18 259*	*21 080*	*24 458*	*28 743*	*35 388*	*66 180*	*23 882*
Indirect taxes											
Taxes on final goods and services											
VAT	1 231	1 209	1 419	1 729	1 868	2 108	2 232	2 410	2 640	3 622	2 047
Duty on tobacco	383	378	399	395	436	381	313	292	233	184	339
Duty on beer and cider	83	93	106	130	148	171	156	173	166	153	138
Duty on wines & spirits	102	66	91	112	149	162	161	203	191	294	153
Duty on hydrocarbon oils	259	308	364	473	501	550	616	695	649	669	508
Vehicle excise duty	74	80	101	137	144	155	175	182	180	181	141
Television licences	99	99	98	101	104	103	102	106	104	106	102
Stamp duty on house purchase	39	44	45	66	68	85	99	117	134	299	99
Customs duties	26	26	28	33	34	38	41	43	47	61	38
Betting taxes	42	50	73	57	83	72	49	57	62	47	59
Insurance premium tax	20	21	28	38	39	47	50	58	64	78	44
Air passenger duty	9	6	15	20	20	28	23	37	44	44	25
Camelot National Lottery Fund	45	57	67	73	80	80	69	64	64	40	64
Other	9	7	8	9	18	26	17	17	18	34	16
Intermediate taxes											
Commercial and industrial rates	218	220	238	273	281	319	344	363	394	514	317
Employers' NI contributions	304	306	331	379	390	444	479	504	549	715	440
Duty on hydrocarbon oils	135	136	147	169	174	198	213	225	244	319	196
Vehicle excise duty	19	19	20	23	24	27	30	31	34	44	27
Other	171	173	186	214	220	250	270	284	309	403	248
Total indirect taxes	3 267	3 297	3 767	4 431	4 781	5 245	5 440	5 862	6 125	7 808	5 002
Post-tax income	3 674	8 693	11 666	14 953	17 034	19 858	23 313	27 514	32 084	60 293	21 908
Benefits in kind											
Education	3 983	3 202	2 736	2 485	2 027	1 753	1 683	1 218	829	716	2 063
National health service	1 943	2 144	2 089	2 090	1 940	2 020	1 891	1 753	1 653	1 745	1 927
Housing subsidy	101	122	66	49	32	23	21	11	15	7	45
Rail travel subsidy	21	15	17	14	18	22	36	48	46	71	31
Bus travel subsidy	29	27	29	25	30	27	28	21	21	19	26
School meals and welfare milk	118	94	34	18	9	5	1	2	0	0	28
Total	6 194	5 603	4 970	4 681	4 056	3 849	3 660	3 053	2 564	2 558	4 119
Final income	9 869	14 296	16 636	19 634	21 090	23 707	26 973	30 567	34 648	62 851	26 027

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, 2001–02

	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 £)		*11 604*	*17 038*	*22 711*	*31 321*	
Number of households in the population ('000s)	3 700	3 701	3 699	3 703	3 702	18 504
Original income						
Wages and salaries	4 336	14 764	23 555	34 197	52 812	25 933
Imputed income from benefits in kind	45	138	327	634	1 341	497
Self-employment income	605	1 384	1 788	2 135	11 312	3 445
Occupational pensions, annuities	171	568	781	1 111	1 475	821
Investment income	146	241	345	576	2 208	703
Other income	253	244	231	235	286	250
Total	5 556	17 339	27 027	38 889	69 434	31 649
Direct benefits in cash						
Contributory						
Retirement pension	209	445	503	377	227	352
Job seeker's allowance (Contribution based)	75	22	17	15	4	26
Incapacity benefit	623	406	284	123	40	295
Widows' benefits	44	74	54	18	22	43
Statutory Maternity Pay/Allowance	4	14	24	27	92	32
Non-contributory						
Income support	1 473	596	165	26	12	455
Child benefit	704	608	486	341	273	482
Housing benefit	1 071	455	114	15	3	332
Job seeker's allowance (Income based)	240	57	11	3	2	63
Invalid care allowance	51	75	18	10	-	31
Attendance allowance	4	4	9	15	3	7
Disability living allowance	215	389	224	101	62	198
Disabled Persons Tax Credit	-	11	2	7	-	4
War pensions/War widows' pensions	5	11	48	11	5	16
Severe disablement allowance	45	47	51	19	2	33
Industrial injury disablement benefit	13	32	19	12	4	16
Student support	66	88	56	36	6	50
Government training schemes	30	13	32	1	1	15
Working Families Tax Credit	299	283	128	38	5	150
Other non-contributory benefits	51	51	37	23	25	38
Total cash benefits	5 223	3 682	2 283	1 216	788	2 638
Gross income	10 779	21 021	29 310	40 105	70 222	34 288
Direct taxes and Employees' NIC						
Income tax	498	1 940	3 490	5 847	13 296	5 014
less: Tax relief at source[1]	2	4	4	6	8	5
Employees' NI contributions	230	859	1 446	2 168	2 645	1 470
Local taxes[2]	821	907	948	1 046	1 157	976
less: Council tax benefit/Rates rebates	235	89	29	14	22	78
Total	1 313	3 613	5 851	9 041	17 068	7 377
Disposable income	9 466	17 408	23 459	31 064	53 155	26 910
Equivalised disposable income	*7 971*	*14 387*	*19 669*	*26 601*	*50 784*	*23 882*
Indirect taxes						
Taxes on final goods and services						
VAT	1 220	1 574	1 988	2 321	3 131	2 047
Duty on tobacco	380	397	408	303	208	339
Duty on beer and cider	88	118	160	164	160	138
Duty on wines & spirits	84	101	156	182	243	153
Duty on hydrocarbon oils	284	419	525	656	659	508
Vehicle excise duty	77	119	150	179	181	141
Television licences	99	100	103	104	105	102
Stamp duty on house purchase	41	56	76	108	216	99
Customs duties	26	31	36	42	54	38
Betting taxes	46	65	77	53	54	59
Insurance premium tax	21	33	43	54	71	44
Air passenger duty	7	17	24	30	44	25
Camelot National Lottery Fund	51	70	80	67	52	64
Other	8	9	22	17	26	16
Intermediate taxes						
Commercial and industrial rates	219	255	300	354	454	317
Employers' NI contributions	305	355	417	492	632	440
Duty on hydrocarbon oils	136	158	186	219	281	196
Vehicle excise duty	19	22	26	30	39	27
Other	172	200	235	277	356	248
Total indirect taxes	3 282	4 099	5 013	5 651	6 966	5 002
Post-tax income	6 184	13 310	18 446	25 414	46 188	21 908
Benefits in kind						
Education	3 592	2 610	1 890	1 451	772	2 063
National health service	2 043	2 090	1 980	1 822	1 699	1 927
Housing subsidy	111	57	27	16	11	45
Rail travel subsidy	18	15	20	42	58	31
Bus travel subsidy	28	27	28	25	20	26
School meals and welfare milk	106	26	7	1	0	28
Total	5 899	4 826	3 952	3 357	2 561	4 119
Final income	12 082	18 135	22 398	28 770	48 749	26 027

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, 2001–02

	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	2.8	2.9	2.8	2.9	2.7	2.7	2.6	2.6	2.3	2.3	2.7
Adults	*1.8*	*1.8*	*1.9*	*2.0*	*2.0*	*2.1*	*2.1*	*2.1*	*2.0*	*1.8*	*2.0*
Men	*0.8*	*0.8*	*0.9*	*1.0*	*1.0*	*1.1*	*1.1*	*1.2*	*1.1*	*1.0*	*1.0*
Women	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*0.9*	*0.8*	*1.0*
Children	*1.0*	*1.1*	*0.9*	*0.8*	*0.7*	*0.7*	*0.5*	*0.4*	*0.4*	*0.5*	*0.7*
Economically active people	0.9	1.0	1.4	1.6	1.7	1.8	1.9	2.0	1.8	1.7	1.6
Retired people	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1
People in full-time education	1.15	1.02	0.86	0.77	0.65	0.57	0.51	0.40	0.31	0.36	0.66
In state primary schools	*0.48*	*0.53*	*0.41*	*0.35*	*0.29*	*0.27*	*0.20*	*0.17*	*0.11*	*0.11*	*0.29*
In state secondary schools	*0.31*	*0.32*	*0.31*	*0.27*	*0.24*	*0.19*	*0.14*	*0.12*	*0.09*	*0.07*	*0.21*
In further and higher education	*0.34*	*0.14*	*0.10*	*0.12*	*0.09*	*0.08*	*0.13*	*0.08*	*0.05*	*0.04*	*0.12*
In other educational establishments	*0.02*	*0.03*	*0.04*	*0.03*	*0.03*	*0.03*	*0.04*	*0.03*	*0.06*	*0.14*	*0.04*
Composition (percentages)											
Household type											
Non-retired											
1 adult	25	20	20	15	19	17	18	17	22	24	20
1 adult men	*15*	*12*	*10*	*8*	*11*	*11*	*11*	*12*	*15*	*16*	*12*
1 adult women	*11*	*8*	*10*	*7*	*8*	*6*	*6*	*5*	*7*	*8*	*8*
2 adults	17	18	22	24	24	30	33	39	42	42	29
3 or more adults	10	7	10	13	13	14	18	17	12	7	12
1 adult with children	17	21	10	6	6	3	3	2	1	1	7
2 adults with 1 child	7	8	10	13	14	11	10	8	11	11	10
2 adults with 2 children	10	11	15	15	13	15	12	12	8	12	12
2 adults with 3 or more children	8	8	8	6	4	4	3	1	1	2	5
3 or more adults with children	6	7	6	7	7	6	4	4	2	1	5
Household tenure											
Rented	61	65	42	32	28	20	18	14	14	11	30
Local authority rented	*35*	*35*	*20*	*13*	*12*	*7*	*3*	*3*	*2*	*1*	*13*
Housing association or RSL	*9*	*15*	*7*	*6*	*4*	*3*	*3*	*1*	*1*	*1*	*5*
Other rented unfurnished	*7*	*8*	*8*	*6*	*5*	*3*	*3*	*4*	*3*	*4*	*5*
Rented furnished	*10*	*6*	*6*	*5*	*4*	*5*	*7*	*5*	*6*	*5*	*6*
Rent free	*1*	*1*	*1*	*2*	*3*	*2*	*2*	*1*	*1*	*1*	*1*
Owner occupied	39	35	58	68	72	80	82	86	86	89	70
With mortgage	*23*	*22*	*39*	*52*	*56*	*65*	*67*	*71*	*73*	*71*	*54*
Rental purchase	*0*	-	*1*	*0*	*1*	*0*	*1*	*1*	*0*	-	*0*
Owned outright	*16*	*13*	*18*	*15*	*15*	*15*	*14*	*14*	*13*	*18*	*15*
Age of chief economic supporter											
Under 25	14	7	4	3	6	4	4	3	2	1	5
Over 24 and under 35	22	23	18	18	22	24	26	25	27	23	23
Over 34 and under 45	27	31	31	27	26	28	26	27	28	35	28
Over 44 and under 55	20	17	25	26	24	26	24	30	30	25	25
Over 54 and under 65	16	16	17	20	16	15	17	14	11	15	16
Over 64 and under 75	1	3	3	4	6	3	3	2	1	2	3
Over 74	1	2	2	1	1	1	1	0	1	-	1
Employment status of chief economic supporter											
Self-employed	7	9	9	8	5	9	6	7	12	18	9
Full-time employee	13	26	48	63	73	75	81	84	82	77	62
Part-time employee	16	16	18	11	10	10	7	4	4	3	10
Unemployed	16	7	4	1	2	1	1	1	0	1	3
Unoccupied and under minimum NI age	47	39	18	12	7	3	3	2	1	1	13
Retired/unoccupied over minimum NI age	1	4	3	5	4	2	2	1	0	-	2
Other	0	0	0	-	-	-	-	-	-	-	0

TABLE 17A (Appendix 1): Household characteristics of quintile groups of NON-RETIRED households, 2001–02

	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	2.6	2.3	2.7
Adults	*1.8*	*2.0*	*2.0*	*2.1*	*1.9*	*2.0*
Men	*0.8*	*1.0*	*1.1*	*1.1*	*1.0*	*1.0*
Women	*1.0*	*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	1.8	1.6
Retired people	0.1	0.1	0.1	0.1	0.0	0.1
People in full-time education	1.08	0.82	0.61	0.46	0.34	0.66
In state primary schools	*0.50*	*0.38*	*0.28*	*0.19*	*0.11*	*0.29*
In state secondary schools	*0.31*	*0.29*	*0.22*	*0.13*	*0.08*	*0.21*
In further and higher education	*0.24*	*0.11*	*0.08*	*0.11*	*0.04*	*0.12*
In other educational establishments	*0.03*	*0.03*	*0.03*	*0.03*	*0.10*	*0.04*
Composition (percentages)						
Household type						
Non-retired						
1 adult	23	18	18	17	23	20
1 adult men	*13*	*9*	*11*	*12*	*16*	*12*
1 adult women	*9*	*9*	*7*	*6*	*7*	*8*
2 adults	18	23	27	36	42	29
3 or more adults	8	11	13	17	10	12
1 adult with children	19	8	5	2	1	7
2 adults with 1 child	7	12	12	9	11	10
2 adults with 2 children	10	15	14	12	10	12
2 adults with 3 or more children	8	7	4	2	2	5
3 or more adults with children	6	7	6	4	2	5
Household tenure						
Rented	63	37	24	16	12	30
Local authority rented	*36*	*17*	*10*	*3*	*1*	*13*
Housing association or RSL	*12*	*7*	*4*	*2*	*1*	*5*
Other rented unfurnished	*7*	*7*	*4*	*4*	*3*	*5*
Rented furnished	*8*	*5*	*4*	*6*	*6*	*6*
Rent free	*1*	*2*	*2*	*1*	*1*	*1*
Owner occupied	37	63	76	84	88	70
With mortgage	*22*	*46*	*61*	*69*	*72*	*54*
Rental purchase	*0*	*0*	*0*	*1*	*0*	*0*
Owned outright	*15*	*17*	*15*	*14*	*15*	*15*
Age of chief economic supporter						
Under 25	11	4	5	3	2	5
Over 24 and under 35	23	18	23	25	25	23
Over 34 and under 45	29	29	27	26	31	28
Over 44 and under 55	18	26	25	27	27	25
Over 54 and under 65	16	19	15	15	13	16
Over 64 and under 75	2	3	4	3	1	3
Over 74	1	2	1	0	1	1
Employment status of chief economic supporter						
Self-employed	8	9	7	7	15	9
Full-time employee	20	55	74	83	80	62
Part-time employee	16	15	10	6	4	10
Unemployed	11	3	1	1	0	3
Unoccupied and under minimum NI age	43	15	5	2	1	13
Retired/unoccupied over minimum NI age	2	4	3	1	0	2
Other	0	0	-	-	-	0

TABLE 18 (Appendix 1): Average incomes, taxes and benefits by decile groups of RETIRED households, 2001–02

	Decile groups of retired households ranked by equivalised disposable income										All such households
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Average per household (£ per year)											
Decile points (equivalised £)		*7 688*	*9 026*	*10 241*	*11 354*	*12 430*	*13 878*	*15 766*	*18 465*	*23 465*	
Number of households in the population ('000s)	637	642	639	639	639	639	638	639	642	640	6 394
Original income											
Wages and salaries	17	16	203	93	68	266	284	404	659	1 245	326
Imputed income from benefits in kind	9	-	6	-	10	-	-	17	-	20	6
Self-employment income	18	8	63	-	8	36	49	49	-	107	34
Occupational pensions, annuities	546	1 133	1 656	1 768	1 889	2 847	4 610	6 857	9 887	18 172	4 937
Investment income	335	338	420	421	721	661	758	1 216	2 500	12 212	1 958
Other income	20	63	88	73	50	70	62	85	24	655	119
Total	945	1 558	2 435	2 355	2 746	3 880	5 763	8 629	13 070	32 411	7 379
Direct benefits in cash											
Contributory											
Retirement pension	4 265	5 164	5 568	5 237	5 015	5 273	5 257	5 377	5 091	4 864	5 111
Job seeker's allowance (Contribution based)	12	11	7	-	-	-	-	-	-	-	3
Incapacity benefit	69	172	13	25	25	84	30	230	59	140	85
Widows' benefits	-	31	71	61	-	19	-	57	39	61	34
Statutory Maternity Pay/Allowance	-	-	-	-	-	-	-	-	-	-	-
Non-contributory											
Income support	149	204	265	426	429	412	524	349	162	101	302
Child benefit	15	3	13	13	15	5	6	7	-	-	8
Housing benefit	23	130	404	745	1 005	873	574	493	183	-	451
Job seeker's allowance (Income based)	3	24	16	-	-	-	-	-	-	-	4
Invalid care allowance	4	18	51	15	39	41	27	6	33	-	23
Attendance allowance	-	17	52	106	75	190	213	171	122	72	102
Disability living allowance	20	89	75	129	212	252	463	325	262	316	214
Disabled Persons Tax Credit	-	-	-	-	-	-	6	-	-	-	1
War pensions/War widows' pensions	21	45	28	5	168	40	33	265	532	159	130
Severe disablement allowance	13	-	20	36	24	10	39	21	68	-	27
Industrial injury disablement benefit	-	9	32	55	40	23	45	58	-	-	26
Student support	6	-	-	9	0	6	1	-	-	-	2
Government training schemes	-	10	8	-	-	-	-	-	-	-	2
Working Families Tax Credit	-	-	-	-	-	-	-	-	-	-	-
Other non-contributory benefits	328	208	255	213	241	238	254	221	254	248	246
Total cash benefits	4 928	6 136	6 877	7 075	7 289	7 466	7 473	7 581	6 808	6 079	6 771
Gross income	5 873	7 694	9 312	9 430	10 035	11 346	13 236	16 210	19 878	38 490	14 150
Direct taxes and Employees' NIC											
Income tax	90	120	183	206	229	363	650	1 182	1 955	5 770	1 075
less: Tax relief at source[1]	3	3	4	3	2	5	7	5	4	13	5
Employees' NI contributions	2	11	11	6	1	10	15	124	42	63	28
Local taxes[2]	908	858	884	855	827	837	861	963	1 008	1 130	913
less: Council tax benefit/Rates rebates	147	190	168	204	218	147	154	90	41	24	138
Total	850	796	905	860	837	1 057	1 366	2 175	2 959	6 926	1 873
Disposable income	5 022	6 898	8 407	8 570	9 198	10 288	11 870	14 035	16 919	31 564	12 277
Equivalised disposable income	*6 242*	*8 420*	*9 655*	*10 830*	*11 869*	*13 126*	*14 742*	*17 034*	*20 619*	*38 924*	*15 146*
Indirect taxes											
Taxes on final goods and services											
VAT	640	756	671	652	800	698	944	1 105	1 431	1 974	967
Duty on tobacco	85	134	116	120	151	81	136	149	88	111	117
Duty on beer and cider	23	32	20	28	39	48	59	40	40	38	37
Duty on wines & spirits	58	72	38	47	60	75	61	111	148	151	82
Duty on hydrocarbon oils	144	133	184	151	120	171	205	231	277	364	198
Vehicle excise duty	73	61	67	56	51	57	74	102	125	169	84
Television licences	43	49	53	53	45	56	58	56	58	64	53
Stamp duty on house purchase	28	25	27	19	20	17	26	37	52	108	36
Customs duties	14	15	15	16	17	17	19	22	25	35	20
Betting taxes	22	41	40	47	48	42	68	36	43	26	41
Insurance premium tax	22	19	18	15	17	20	23	38	42	78	29
Air passenger duty	13	11	5	10	9	17	15	11	22	39	15
Camelot National Lottery Fund	35	43	46	44	44	56	52	49	52	40	46
Other	5	7	2	2	2	3	5	8	21	28	8
Intermediate taxes											
Commercial and industrial rates	119	126	129	132	139	141	161	187	210	291	163
Employers' NI contributions	166	176	179	183	193	196	223	260	292	405	227
Duty on hydrocarbon oils	74	78	80	81	86	87	99	116	130	180	101
Vehicle excise duty	10	11	11	11	12	12	14	16	18	25	14
Other	94	99	101	103	109	110	126	147	164	228	128
Total indirect taxes	1 669	1 886	1 804	1 768	1 961	1 905	2 369	2 720	3 237	4 352	2 367
Post-tax income	3 353	5 012	6 603	6 802	7 237	8 384	9 501	11 315	13 683	27 212	9 910
Benefits in kind											
Education	73	58	61	66	27	89	24	74	19	25	52
National health service	4 085	3 794	3 861	3 501	3 638	3 281	3 395	3 525	3 561	3 308	3 595
Housing subsidy	24	26	55	63	75	102	56	58	11	12	48
Rail travel subsidy	2	7	3	11	3	3	6	13	6	25	8
Bus travel subsidy	71	76	85	82	79	81	64	73	66	50	73
School meals and welfare milk	5	1	4	3	2	-	1	-	-	-	2
Total	4 261	3 963	4 069	3 725	3 824	3 556	3 546	3 744	3 664	3 420	3 777
Final income	7 614	8 975	10 672	10 527	11 061	11 940	13 048	15 059	17 347	30 632	13 687

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

TABLE 18A (Appendix 1): Average incomes, taxes and benefits by quintile groups of RETIRED households, 2001–02

	Quintile groups of retired households ranked by equivalised disposable income					All such households
	Bottom	2nd	3rd	4th	Top	
Average per household (£ per year)						
Quintile points (equivalised £)	*9 026*	*11 354*	*13 878*	*18 465*		
Number of households in the population ('000s)	1 279	1 279	1 278	1 277	1 281	6 394
Original income						
Wages and salaries	16	148	167	344	952	326
Imputed income from benefits in kind	5	3	5	9	10	6
Self-employment income	13	31	22	49	53	34
Occupational pensions, annuities	840	1 712	2 368	5 734	14 029	4 937
Investment income	337	421	691	987	7 356	1 958
Other income	41	80	60	74	340	119
Total	1 251	2 395	3 313	7 196	22 741	7 379
Direct benefits in cash						
Contributory						
Retirement pension	4 715	5 402	5 144	5 317	4 977	5 111
Job seeker's allowance (Contribution based)	11	3	-	-	-	3
Incapacity benefit	121	19	54	130	100	85
Widows' benefits	15	66	9	29	50	34
Statutory Maternity Pay/Allowance	-	-	-	-	-	-
Non-contributory						
Income support	176	345	421	437	131	302
Child benefit	9	13	10	7	-	8
Housing benefit	77	574	939	534	132	451
Job seeker's allowance (Income based)	14	8	-	-	-	4
Invalid care allowance	11	33	40	16	17	23
Attendance allowance	9	79	132	192	97	102
Disability living allowance	54	102	232	394	289	214
Disabled Persons Tax Credit	-	-	-	3	-	1
War pensions/War widows' pensions	33	17	104	149	345	130
Severe disablement allowance	6	28	17	30	52	27
Industrial injury disablement benefit	4	43	31	51	1	26
Student support	3	5	3	1	-	2
Government training schemes	5	4	-	-	-	2
Working Families Tax Credit	-	-	-	-	-	-
Other non-contributory benefits	268	234	239	237	251	246
Total cash benefits	5 532	6 976	7 377	7 527	6 443	6 771
Gross income	6 784	9 371	10 690	14 723	29 184	14 150
Direct taxes and Employees' NIC						
Income tax	105	194	296	916	3 862	1 075
less: Tax relief at source[1]	3	4	4	6	9	5
Employees' NI contributions	6	8	5	70	53	28
Local taxes[2]	883	870	832	912	1 069	913
less: Council tax benefit/Rates rebates	168	186	183	122	33	138
Total	823	882	947	1 770	4 942	1 873
Disposable income	5 960	8 489	9 743	12 952	24 242	12 277
Equivalised disposable income	*7 331*	*10 242*	*12 497*	*15 888*	*29 772*	*15 146*
Indirect taxes						
Taxes on final goods and services						
VAT	698	661	749	1 025	1 702	967
Duty on tobacco	109	118	116	142	100	117
Duty on beer and cider	27	24	44	49	39	37
Duty on wines & spirits	65	43	67	86	149	82
Duty on hydrocarbon oils	139	167	146	218	320	198
Vehicle excise duty	67	62	54	88	147	84
Television licences	46	53	51	57	61	53
Stamp duty on house purchase	26	23	18	32	80	36
Customs duties	15	16	17	21	30	20
Betting taxes	32	43	45	52	35	41
Insurance premium tax	20	17	19	31	60	29
Air passenger duty	12	7	13	13	31	15
Camelot National Lottery Fund	39	45	50	50	46	46
Other	6	2	2	7	25	8
Intermediate taxes						
Commercial and industrial rates	123	130	140	174	250	163
Employers' NI contributions	171	181	194	242	348	227
Duty on hydrocarbon oils	76	81	87	108	155	101
Vehicle excise duty	11	11	12	15	21	14
Other	96	102	110	136	196	128
Total indirect taxes	1 778	1 786	1 933	2 544	3 794	2 367
Post-tax income	4 183	6 703	7 810	10 408	20 447	9 910
Benefits in kind						
Education	66	63	58	49	22	52
National health service	3 940	3 681	3 460	3 460	3 435	3 595
Housing subsidy	25	59	88	57	12	48
Rail travel subsidy	5	7	3	10	16	8
Bus travel subsidy	74	83	80	69	58	73
School meals and welfare milk	3	4	1	1	-	2
Total	4 112	3 897	3 690	3 645	3 542	3 777
Final income	8 294	10 600	11 501	14 053	23 989	13 687

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, 2001–02

	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	1.5	1.5	1.7	1.5	1.4	1.4	1.5	1.5	1.5	1.6	1.5
Adults	*1.5*	*1.5*	*1.6*	*1.4*	*1.4*	*1.4*	*1.5*	*1.5*	*1.5*	*1.6*	*1.5*
Men	*0.6*	*0.6*	*0.7*	*0.5*	*0.6*	*0.6*	*0.6*	*0.6*	*0.7*	*0.7*	*0.6*
Women	*0.9*	*0.9*	*0.9*	*0.9*	*0.9*	*0.8*	*0.9*	*0.9*	*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	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Retired people	1.4	1.4	1.5	1.4	1.3	1.3	1.4	1.5	1.5	1.4	1.4
People in full-time education	0.02	0.02	0.02	0.02	0.01	0.02	0.01	0.02	0.00	0.00	0.01
Composition (percentages)											
Household type											
Retired											
1 adult	54	53	43	58	61	59	54	49	50	48	53
1 adult men	*15*	*8*	*10*	*11*	*14*	*18*	*16*	*12*	*15*	*18*	*14*
1 adult women	*39*	*45*	*33*	*48*	*47*	*41*	*38*	*37*	*36*	*31*	*39*
2 or more adults	46	47	57	42	39	41	46	51	50	52	47
Household tenure											
Rented	15	19	38	47	55	47	33	25	11	8	30
Local authority rented	*10*	*11*	*24*	*32*	*33*	*26*	*20*	*14*	*7*	*2*	*18*
Housing association or RSL	*2*	*2*	*6*	*9*	*14*	*14*	*8*	*7*	*2*	*2*	*7*
Other rented unfurnished	*1*	*1*	*4*	*2*	*3*	*2*	*3*	*3*	*1*	*3*	*2*
Rented furnished	-	*3*	*0*	*2*	*3*	*2*	*1*	*2*	*1*	-	*1*
Rent free	*1*	*1*	*4*	*2*	*3*	*3*	*2*	*0*	*1*	*2*	*2*
Owner occupied	85	81	62	53	45	53	67	75	89	92	70
With mortgage	*7*	*6*	*7*	*2*	*5*	*4*	*8*	*8*	*8*	*6*	*6*
Rental purchase	-	-	-	-	-	-	-	-	-	-	-
Owned outright	*79*	*75*	*55*	*51*	*40*	*49*	*59*	*67*	*81*	*86*	*64*
Age of chief economic supporter											
Under 25	-	-	-	-	-	-	-	-	-	-	-
Over 24 and under 35	-	-	-	-	-	-	0	-	-	-	0
Over 34 and under 45	-	-	-	0	-	-	-	-	-	1	0
Over 44 and under 55	1	2	1	1	1	0	1	2	2	1	1
Over 54 and under 65	12	10	9	9	11	12	13	12	12	21	12
Over 64 and under 75	31	38	44	46	37	48	43	46	44	42	42
Over 74	57	51	46	44	51	40	42	41	42	35	45
Employment status of chief economic supporter											
Self-employed	-	-	-	-	-	-	-	-	-	1	0
Full-time employee	-	-	-	-	-	-	-	-	-	-	-
Part-time employee	-	-	1	-	-	-	0	-	-	-	0
Unemployed	-	-	1	0	-	0	-	0	-	-	0
Unoccupied and under minimum NI age	9	8	6	4	5	6	9	8	11	17	8
Retired/unoccupied over minimum NI age	91	92	93	95	95	94	90	91	89	82	91

TABLE 19A (Appendix 1): Household characteristics of quintile groups of RETIRED households, 2001-02

	Quintile groups of retired households ranked by equivalised disposable income					All such households
	Bottom	2nd	3rd	4th	Top	
Average per household (number)						
People	1.5	1.6	1.4	1.5	1.5	1.5
Adults	*1.5*	*1.5*	*1.4*	*1.5*	*1.5*	*1.5*
Men	*0.6*	*0.6*	*0.6*	*0.6*	*0.7*	*0.6*
Women	*0.9*	*0.9*	*0.8*	*0.9*	*0.8*	*0.9*
Children	*0.0*	*0.0*	*0.0*	*0.0*	-	*0.0*
Economically active people	0.0	0.1	0.0	0.1	0.1	0.1
Retired people	1.4	1.4	1.3	1.4	1.5	1.4
People in full-time education	0.02	0.02	0.02	0.01	0.00	0.01
Composition (percentages)						
Household type						
Retired						
1 adult	53	51	60	51	49	53
1 adult men	*11*	*10*	*16*	*14*	*16*	*14*
1 adult women	*42*	*40*	*44*	*37*	*33*	*39*
2 or more adults	47	49	40	49	51	47
Household tenure						
Rented	17	42	51	29	10	30
Local authority rented	*11*	*28*	*29*	*17*	*4*	*18*
Housing association or RSL	*2*	*8*	*14*	*7*	*2*	*7*
Other rented unfurnished	*1*	*3*	*3*	*3*	*2*	*2*
Rented furnished	*1*	*1*	*2*	*1*	*0*	*1*
Rent free	*1*	*3*	*3*	*1*	*2*	*2*
Owner occupied	83	58	49	71	90	70
With mortgage	*6*	*4*	*5*	*8*	*7*	*6*
Rental purchase	-	-	-	-	-	-
Owned outright	*77*	*53*	*44*	*63*	*83*	*64*
Age of chief economic supporter						
Under 25	-	-	-	-	-	-
Over 24 and under 35	-	-	-	0	-	0
Over 34 and under 45	-	0	-	-	0	0
Over 44 and under 55	1	1	1	1	2	1
Over 54 and under 65	11	9	11	13	17	12
Over 64 and under 75	34	45	43	44	43	42
Over 74	54	45	46	42	39	45
Employment status of chief economic supporter						
Self-employed	-	-	-	-	0	0
Full-time employee	-	-	-	-	-	-
Part-time employee	-	0	-	0	-	0
Unemployed	-	0	0	0	-	0
Unoccupied and under minimum NI age	9	5	6	9	14	8
Retired/unoccupied over minimum NI age	91	94	94	91	86	91

TABLE 20 (Appendix 1): Average incomes, taxes and benefits by decile groups of NON-RETIRED households WITHOUT CHILDREN, 2001–02

	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 £)		*9 361*	*12 981*	*16 138*	*18 886*	*21 922*	*25 121*	*28 993*	*33 779*	*43 740*	
Number of households in the population ('000s)	1 122	1 126	1 125	1 122	1 128	1 122	1 126	1 121	1 128	1 127	11 248
Original income											
Wages and salaries	2 488	5 918	11 276	17 195	20 624	27 006	31 106	36 465	40 102	60 065	25 224
Imputed income from benefits in kind	10	46	91	103	188	251	597	715	904	1 653	456
Self-employment income	415	1 176	944	1 093	1 284	1 913	1 231	2 855	5 105	15 131	3 115
Occupational pensions, annuities	160	535	1 027	971	1 115	1 467	1 589	946	1 422	2 975	1 221
Investment income	222	229	357	246	377	504	661	700	1 328	4 155	878
Other income	304	151	161	102	156	246	95	131	93	282	172
Total	3 600	8 055	13 855	19 711	23 744	31 386	35 280	41 813	48 954	84 261	31 066
Direct benefits in cash											
Contributory											
Retirement pension	125	682	861	747	714	721	478	310	346	272	526
Job seeker's allowance (Contribution based)	119	68	19	26	26	29	3	14	2	3	31
Incapacity benefit	646	982	636	419	451	168	167	95	37	71	367
Widows' benefits	46	112	66	76	28	41	13	20	27	19	45
Statutory Maternity Pay/Allowance	-	-	-	-	1	-	-	-	-	-	0
Non-contributory											
Income support	485	748	468	336	181	55	17	-	11	22	232
Child benefit	8	11	8	6	8	30	20	7	6	-	10
Housing benefit	690	767	349	188	141	20	23	-	3	-	219
Job seeker's allowance (Income based)	349	100	60	8	2	5	1	0	3	3	53
Invalid care allowance	10	89	44	51	11	7	-	10	-	-	22
Attendance allowance	-	6	-	-	22	22	9	9	11	-	8
Disability living allowance	150	377	449	346	305	192	92	107	28	65	211
Disabled Persons Tax Credit	-	-	-	5	-	7	-	-	-	-	1
War pensions/War widows' pensions	1	-	25	28	16	117	16	-	-	4	21
Severe disablement allowance	49	109	20	88	39	62	18	-	-	-	39
Industrial injury disablement benefit	9	13	50	28	46	5	11	11	-	-	18
Student support	56	31	149	76	64	33	31	33	2	10	49
Government training schemes	31	5	12	43	10	3	1	2	-	0	11
Working Families Tax Credit	4	11	29	-	-	-	-	-	-	-	4
Other non-contributory benefits	32	95	90	54	59	42	28	21	54	21	50
Total cash benefits	2 812	4 205	3 337	2 523	2 124	1 560	928	641	539	495	1 916
Gross income	6 411	12 260	17 192	22 234	25 868	32 946	36 208	42 454	49 493	84 756	32 982
Direct taxes and Employees' NIC											
Income tax	308	769	1 505	2 401	3 038	4 295	5 202	6 453	8 306	16 550	4 883
less: Tax relief at source[1]	3	3	4	6	5	4	6	9	6	14	6
Employees' NI contributions	124	334	627	1 033	1 267	1 738	2 055	2 383	2 576	2 773	1 491
Local taxes[2]	762	818	873	896	875	963	989	997	1 072	1 176	942
less: Council tax benefit/Rates rebates	211	192	83	57	29	25	14	9	16	22	66
Total	979	1 726	2 918	4 267	5 146	6 967	8 226	9 815	11 933	20 463	7 244
Disposable income	5 432	10 534	14 274	17 966	20 722	25 979	27 982	32 639	37 560	64 293	25 738
Equivalised disposable income	*5 805*	*11 163*	*14 598*	*17 453*	*20 428*	*23 539*	*27 005*	*31 073*	*38 180*	*70 883*	*26 013*
Indirect taxes											
Taxes on final goods and services											
VAT	1 140	1 050	1 340	1 625	1 812	2 002	2 049	2 362	2 501	3 259	1 914
Duty on tobacco	419	351	383	488	456	389	302	278	234	183	348
Duty on beer and cider	105	117	122	168	174	196	172	194	175	155	158
Duty on wines & spirits	128	78	96	137	164	172	175	224	210	310	171
Duty on hydrocarbon oils	227	278	332	451	463	609	587	664	623	610	484
Vehicle excise duty	75	79	107	132	147	168	167	173	173	165	139
Television licences	95	92	97	102	101	100	105	104	102	105	100
Stamp duty on house purchase	38	45	41	52	55	73	93	101	144	271	91
Customs duties	23	23	25	30	32	37	37	42	45	56	35
Betting taxes	48	64	64	74	93	68	42	78	71	30	63
Insurance premium tax	18	20	28	36	39	46	48	58	61	73	43
Air passenger duty	9	13	14	23	22	19	23	41	51	43	26
Camelot National Lottery Fund	49	65	70	80	86	82	61	66	67	37	66
Other	7	5	5	22	11	14	19	20	11	25	14
Intermediate taxes											
Commercial and industrial rates	197	190	213	250	272	308	310	356	376	468	294
Employers' NI contributions	273	264	296	347	378	429	432	494	522	651	409
Duty on hydrocarbon oils	122	117	132	155	168	191	192	220	233	290	182
Vehicle excise duty	17	16	18	21	23	26	27	31	32	40	25
Other	154	149	167	196	213	242	243	279	295	367	230
Total indirect taxes	3 144	3 015	3 549	4 389	4 729	5 171	5 085	5 786	5 925	7 139	4 793
Post-tax income	2 287	7 519	10 724	13 578	15 993	20 809	22 897	26 853	31 635	57 154	20 945
Benefits in kind											
Education	2 128	513	355	345	322	542	431	325	108	146	521
National health service	1 218	1 578	1 620	1 570	1 527	1 644	1 400	1 387	1 319	1 205	1 447
Housing subsidy	78	75	57	33	33	19	24	23	8	7	36
Rail travel subsidy	26	17	15	17	19	23	50	33	44	78	32
Bus travel subsidy	24	28	27	29	31	30	24	20	24	21	26
School meals and welfare milk	-	-	-	-	-	-	-	-	-	-	-
Total	3 475	2 211	2 074	1 994	1 932	2 258	1 929	1 788	1 503	1 457	2 062
Final income	5 762	9 730	12 798	15 572	17 925	23 067	24 826	28 641	33 138	58 611	23 007

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, 2001–02

	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 £)	*8 293*	*10 216*	*12 452*	*14 748*	*16 891*	*19 152*	*21 995*	*26 374*	*35 096*		
Number of households in the population ('000s)	726	724	723	728	724	727	727	725	723	730	7 256
Original income											
Wages and salaries	2 591	4 948	11 191	17 289	20 752	26 557	30 379	36 383	44 703	75 514	27 031
Imputed income from benefits in kind	70	51	111	104	297	416	699	782	1 179	1 898	561
Self-employment income	433	602	769	1 372	2 213	1 574	2 794	2 995	5 372	21 445	3 957
Occupational pensions, annuities	34	23	154	213	179	217	302	477	326	97	202
Investment income	83	78	71	224	139	162	481	479	819	1 790	432
Other income	200	320	306	406	310	412	348	291	414	698	370
Total	3 410	6 021	12 601	19 608	23 891	29 338	35 003	41 406	52 814	101 441	32 553
Direct benefits in cash											
Contributory											
Retirement pension	24	127	131	119	75	148	16	164	31	-	83
Job seeker's allowance (Contribution based)	92	43	11	14	6	10	4	4	11	0	20
Incapacity benefit	375	440	306	158	221	156	116	40	32	-	184
Widows' benefits	29	36	47	103	29	19	49	22	29	29	39
Statutory Maternity Pay/Allowance	17	-	5	36	36	3	103	70	153	398	82
Non-contributory											
Income support	1 903	2 983	1 536	520	698	251	47	1	41	11	799
Child benefit	1 360	1 401	1 297	1 303	1 187	1 184	1 154	1 107	1 081	1 067	1 214
Housing benefit	1 135	1 707	1 124	471	440	155	24	11	-	-	507
Job seeker's allowance (Income based)	456	121	43	91	11	37	4	7	1	-	77
Invalid care allowance	26	74	89	117	86	25	-	10	14	-	44
Attendance allowance	-	16	-	13	-	13	-	11	-	-	5
Disability living allowance	139	163	332	356	366	219	47	51	69	42	179
Disabled Persons Tax Credit	-	-	-	34	16	1	-	11	26	-	9
War pensions/War widows' pensions	22	-	-	-	5	41	-	-	17	-	8
Severe disablement allowance	-	16	25	46	51	92	-	-	8	-	24
Industrial injury disablement benefit	20	12	25	11	31	-	-	23	-	-	12
Student support	113	125	13	83	34	97	6	38	10	10	53
Government training schemes	74	15	12	9	8	63	42	-	0	-	22
Working Families Tax Credit	425	665	704	738	343	423	171	192	88	-	377
Other non-contributory benefits	67	40	21	22	11	14	4	8	2	1	19
Total cash benefits	6 276	7 984	5 721	4 245	3 655	2 949	1 787	1 770	1 612	1 579	3 758
Gross income	9 686	14 006	18 322	23 854	27 545	32 287	36 790	43 176	54 426	103 020	36 311
Direct taxes and Employees' NIC											
Income tax	349	459	1 266	2 138	2 849	3 499	4 774	6 356	8 560	21 926	5 218
less: Tax relief at source[1]	1	1	1	2	3	1	3	2	4	6	2
Employees' NI contributions	137	234	618	996	1 274	1 592	1 893	2 271	2 587	2 761	1 436
Local taxes[2]	890	854	856	921	979	990	1 064	1 138	1 237	1 356	1 029
less: Council tax benefit/Rates rebates	290	267	168	70	65	29	8	6	22	39	96
Total	1 085	1 279	2 570	3 982	5 034	6 051	7 721	9 758	12 358	25 998	7 584
Disposable income	8 601	12 727	15 752	19 871	22 511	26 237	29 070	33 418	42 069	77 021	28 728
Equivalised disposable income	*5 950*	*9 201*	*11 301*	*13 601*	*15 773*	*18 042*	*20 559*	*23 954*	*29 744*	*57 678*	*20 580*
Indirect taxes											
Taxes on final goods and services											
VAT	1 330	1 303	1 468	1 764	1 962	2 106	2 451	2 723	3 058	4 362	2 253
Duty on tobacco	351	394	371	466	339	350	330	236	275	145	326
Duty on beer and cider	52	74	81	106	104	132	136	119	146	116	107
Duty on wines & spirits	69	51	71	103	98	150	121	168	185	234	125
Duty on hydrocarbon oils	304	292	388	486	544	560	620	682	808	774	546
Vehicle excise duty	70	77	99	126	146	152	164	197	204	212	145
Television licences	102	102	103	103	104	105	106	105	108	109	105
Stamp duty on house purchase	40	40	49	54	95	88	111	141	166	339	112
Customs duties	29	29	31	35	37	38	44	50	56	72	42
Betting taxes	32	36	56	93	41	80	45	48	56	44	53
Insurance premium tax	24	20	28	37	42	45	51	58	73	91	47
Air passenger duty	9	4	9	16	13	27	29	31	38	50	23
Camelot National Lottery Fund	40	51	57	72	67	75	66	71	61	39	60
Other	13	7	9	15	13	11	39	26	15	54	20
Intermediate taxes											
Commercial and industrial rates	242	241	258	295	307	315	369	418	465	607	352
Employers' NI contributions	337	335	358	410	427	438	514	581	646	843	489
Duty on hydrocarbon oils	150	149	160	183	190	195	229	259	288	376	218
Vehicle excise duty	21	21	22	25	26	27	32	36	40	52	30
Other	190	189	202	231	241	247	290	328	364	475	276
Total indirect taxes	3 407	3 413	3 819	4 622	4 795	5 140	5 748	6 276	7 051	8 994	5 327
Post-tax income	5 194	9 314	11 933	15 249	17 716	21 097	23 321	27 142	35 018	68 027	23 401
Benefits in kind											
Education	5 946	5 591	5 043	5 120	4 576	4 456	4 061	3 747	3 503	2 468	4 453
National health service	2 756	2 598	2 697	2 747	2 461	2 456	2 641	2 702	2 627	3 023	2 671
Housing subsidy	132	164	100	80	36	29	22	9	5	2	58
Rail travel subsidy	15	16	18	12	9	23	23	34	68	64	28
Bus travel subsidy	33	29	25	31	25	29	22	21	19	18	25
School meals and welfare milk	237	218	115	61	40	24	14	4	4	2	72
Total	9 120	8 617	7 997	8 052	7 149	7 016	6 803	6 517	6 227	5 576	7 307
Final income	14 313	17 930	19 930	23 301	24 865	28 113	30 124	33 659	41 245	73 603	30 708

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

TABLE 22 (Appendix 1): Distribution of households[1] by household type, 2001–02

	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	101	410	511	397	236	179	415
2nd	116	356	472	617	148	112	260
3rd	167	590	757	471	153	94	248
4th	144	391	535	409	157	162	319
5th	118	210	327	363	151	141	292
6th	54	227	281	254	226	145	371
7th	58	138	196	179	227	117	344
8th	52	71	123	151	252	130	382
9th	27	57	84	98	328	141	468
Top	33	59	92	78	368	180	548
All households in population ('000s)	869	2 509	3 378	3 016	2 246	1 401	3 647

	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	274	176	203	113	168	146	85	2 489
2nd	241	95	368	92	140	98	106	2 488
3rd	256	102	198	127	133	112	87	2 491
4th	339	160	120	153	242	112	100	2 489
5th	441	229	118	237	263	100	118	2 488
6th	478	241	108	274	270	72	142	2 491
7th	649	318	75	234	304	82	110	2 490
8th	793	351	53	216	275	47	99	2 489
9th	913	380	27	214	217	31	61	2 492
Top	992	176	26	248	251	44	35	2 490
All households in population ('000s)	5 374	2 227	1 296	1 907	2 264	845	944	24 898

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], 2001–02

	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	6 404	4 318	4 854	10 207	19 272	15 565	17 848
plus: Cash benefits	5 645	5 899	5 833	7 821	1 801	1 803	1 802
Gross income	12 049	10 217	10 688	18 028	21 073	17 368	19 650
less: Direct taxes and employees' NIC	1 820	1 240	1 389	2 415	4 646	3 800	4 321
Disposable income	10 229	8 977	9 299	15 613	16 427	13 568	15 329
Equivalised disposable income	*16 768*	*14 687*	*15 222*	*15 061*	*26 930*	*22 242*	*25 129*
less: Indirect taxes	1 805	1 439	1 533	3 301	2 859	2 688	2 793
Post-tax income	8 424	7 538	7 766	12 312	13 568	10 880	12 535
plus: Benefits in kind	2 744	3 247	3 118	4 516	850	937	883
Final income	11 168	10 785	10 883	16 828	14 418	11 816	13 419

	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	35 419	42 209	8 654	36 586	40 465	33 026	37 816	25 416
plus: Cash benefits	1 751	2 503	6 438	2 057	2 635	5 155	4 960	3 700
Gross income	37 170	44 712	15 091	38 643	43 100	38 181	42 776	29 116
less: Direct taxes and employees' NIC	8 480	9 048	1 776	8 694	9 501	8 205	8 156	5 964
Disposable income	28 690	35 664	13 316	29 949	33 599	29 976	34 620	23 152
Equivalised disposable income	*27 954*	*22 775*	*13 585*	*24 749*	*23 448*	*16 991*	*18 097*	*21 639*
less: Indirect taxes	5 174	7 149	2 932	5 353	5 772	5 948	6 936	4 326
Post-tax income	23 516	28 515	10 383	24 595	27 827	24 028	27 684	18 827
plus: Benefits in kind	1 812	4 597	6 461	4 334	7 421	12 550	9 511	4 031
Final income	25 328	33 112	16 845	28 930	35 248	36 578	37 195	22 858

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 households (ranked by UNADJUSTED disposable income), 2001–02

	Decile groups of all households ranked by UNADJUSTED disposable income										All households
	Bottom	2nd	3rd	4th	5th	6th	7th	8th	9th	Top	
Average per household (£ per year)											
Decile points (£ per year)	*6 687*		*8 920*	*11 492*	*14 491*	*17 956*	*21 953*	*26 786*	*33 063*	*43 639*	
Number of households in the population ('000s)	2 486	2 493	2 490	2 488	2 488	2 494	2 487	2 490	2 492	2 490	24 898
Original income											
Wages and salaries	647	1 214	3 189	5 738	10 587	16 730	22 581	29 211	39 616	64 050	19 356
Imputed income from benefits in kind	14	26	32	43	105	196	343	584	803	1 563	371
Self-employment income	205	162	371	558	863	1 232	1 803	2 237	3 471	14 787	2 569
Occupational pensions, annuities	414	968	1 517	2 122	2 628	2 235	2 162	2 196	1 809	2 730	1 878
Investment income	254	278	349	704	648	766	698	1 016	1 379	4 163	1 025
Other income	102	115	143	237	229	223	142	215	324	433	216
Total	1 636	2 764	5 602	9 403	15 060	21 382	27 730	35 459	47 402	87 726	25 416
Direct benefits in cash											
Contributory											
Retirement pension	2 065	2 810	2 747	2 514	1 906	1 130	915	792	497	367	1 574
Job seeker's allowance (Contribution based)	43	44	19	37	7	17	9	7	15	6	20
Incapacity benefit	303	286	387	302	301	239	230	209	106	51	241
Widows' benefits	57	43	58	35	56	58	33	16	40	8	40
Statutory Maternity Pay/Allowance	1	4	2	2	8	11	24	33	54	102	24
Non-contributory											
Income support	409	849	860	721	495	364	191	168	61	36	415
Child benefit	101	152	220	337	342	467	501	489	516	480	361
Housing benefit	501	1 057	813	592	335	146	112	49	19	-	362
Job seeker's allowance (Income based)	129	52	85	111	23	23	17	18	16	2	48
Invalid care allowance	-	13	29	59	54	49	44	17	15	-	29
Attendance allowance	7	44	78	83	32	14	14	8	17	15	31
Disability living allowance	34	164	277	322	365	264	236	195	105	64	202
Disabled Persons Tax Credit	-	-	-	10	4	2	3	5	-	7	3
War pensions/War widows' pensions	8	26	90	83	43	81	27	41	47	5	45
Severe disablement allowance	12	25	24	25	58	60	46	43	9	-	31
Industrial injury disablement benefit	9	9	36	33	16	32	18	21	-	-	19
Student support	14	31	19	36	42	89	46	46	42	14	38
Government training schemes	10	13	10	13	2	3	26	23	18	1	12
Working Families Tax Credit	11	38	101	216	260	204	152	60	48	-	112
Other non-contributory benefits	131	170	140	132	110	73	63	38	34	22	91
Total cash benefits	3 845	5 829	5 993	5 661	4 458	3 326	2 707	2 278	1 663	1 238	3 700
Gross income	5 480	8 593	11 595	15 063	19 518	24 708	30 437	37 737	49 064	88 964	29 116
Direct taxes and Employees' NIC											
Income tax	155	240	600	1 066	1 863	2 776	3 751	5 118	7 590	16 864	4 002
less: Tax relief at source[1]	2	2	3	3	4	5	5	4	5	12	5
Employees' NI contributions	40	59	184	320	639	1 062	1 428	1 864	2 434	2 964	1 099
Local taxes[2]	769	775	832	866	920	947	1 011	1 032	1 151	1 296	960
less: Council tax benefit/Rates rebates	185	242	178	116	70	37	32	28	19	27	93
Total	777	830	1 435	2 132	3 348	4 743	6 152	7 982	11 151	21 085	5 964
Disposable income	4 703	7 763	10 160	12 931	16 170	19 965	24 284	29 755	37 913	67 879	23 152
Indirect taxes											
Taxes on final goods and services											
VAT	722	677	896	1 196	1 425	1 738	2 054	2 408	2 886	3 893	1 770
Duty on tobacco	194	192	229	232	337	337	362	362	333	246	282
Duty on beer and cider	41	44	58	77	87	120	141	179	190	182	112
Duty on wines & spirits	56	61	77	83	93	124	155	204	195	301	135
Duty on hydrocarbon oils	144	127	213	282	374	462	539	618	721	808	429
Vehicle excise duty	56	44	68	96	117	138	156	174	194	219	126
Television licences	68	68	79	83	91	97	100	103	103	105	90
Stamp duty on house purchase	35	20	31	46	51	74	91	103	128	252	83
Customs duties	16	16	20	24	28	31	38	42	49	67	33
Betting taxes	29	35	39	44	59	77	78	56	71	59	55
Insurance premium tax	16	14	22	28	32	39	45	57	65	87	40
Air passenger duty	7	9	6	16	17	20	26	27	47	47	22
Camelot National Lottery Fund	32	37	46	55	64	71	72	73	85	57	59
Other	4	5	4	13	7	15	18	26	16	35	14
Intermediate taxes											
Commercial and industrial rates	136	135	169	202	231	260	315	354	412	559	277
Employers' NI contributions	189	188	234	281	322	361	438	493	573	777	385
Duty on hydrocarbon oils	84	84	104	125	143	161	195	219	255	346	172
Vehicle excise duty	12	12	14	17	20	22	27	30	35	48	24
Other	106	106	132	158	181	204	247	278	323	438	217
Total indirect taxes	1 946	1 875	2 442	3 057	3 679	4 352	5 096	5 807	6 478	8 525	4 326
Post-tax income	2 757	5 889	7 718	9 874	12 491	15 613	19 189	23 948	31 436	59 354	18 827
Benefits in kind											
Education	750	658	1 110	1 507	1 419	1 854	2 018	2 020	2 088	2 043	1 547
National health service	2 252	2 576	2 556	2 634	2 347	2 223	2 248	2 167	2 276	2 272	2 355
Housing subsidy	63	94	80	65	53	33	24	20	10	13	45
Rail travel subsidy	9	9	11	13	14	14	21	36	45	78	25
Bus travel subsidy	38	48	54	51	38	28	32	27	30	31	38
School meals and welfare milk	13	27	41	46	26	29	13	10	5	3	21
Total	3 125	3 412	3 851	4 315	3 898	4 181	4 355	4 280	4 453	4 439	4 031
Final income	5 883	9 301	11 570	14 190	16 390	19 793	23 544	28 228	35 889	63 793	22 858

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, 2001–02

(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	3 127	1 852	-	-	-	4 979
2nd	1 497	1 603	1 352	527	-	4 979
3rd	331	1 188	2 046	924	492	4 981
4th	23	325	1 351	2 261	1 017	4 977
Top	-	12	231	1 268	3 472	4 982
All households	4 978	4 981	4 980	4 978	4 982	24 898

(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	1 476	740	270	-	-	-	-	-	-	-	2 486
2nd	595	316	775	806	-	-	-	-	-	-	2 493
3rd	221	795	378	74	616	406	-	-	-	-	2 490
4th	181	320	540	611	65	265	527	-	-	-	2 488
5th	22	208	299	346	804	199	38	505	66	-	2 488
6th	10	90	142	402	348	694	362	19	426	-	2 494
7th	2	16	70	192	416	368	676	494	66	188	2 487
8th	2	3	13	51	194	373	467	624	556	208	2 490
9th	-	-	4	8	44	166	381	618	800	471	2 492
Top	-	-	-	-	-	21	40	228	579	1 623	2 490
All households	2 489	2 488	2 491	2 489	2 488	2 491	2 490	2 489	2 492	2 490	24 898

TABLE 26 (Appendix 1): Percentage shares of equivalised total original, gross, disposable and post-tax incomes by quintile groups for ALL households[1], 1979 to 2001–02[2]

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Original income												
Bottom	2	2	3	3	3	3	2	3	2	2	2	2
2nd	10	9	9	8	8	7	7	7	7	7	7	7
3rd	18	18	17	17	17	17	17	16	16	16	16	15
4th	27	26	26	26	26	26	27	26	25	26	26	25
Top	43	44	46	46	47	47	47	49	50	50	49	51
All households	100	100	100	100	100	100	100	100	100	100	100	100
Gross income												
Bottom	9	8	8	9	9	9	8	8	7	7	7	7
2nd	13	12	12	12	12	12	12	11	11	11	11	10
3rd	18	18	17	17	17	17	17	16	16	16	16	16
4th	24	23	23	23	23	23	24	23	23	23	23	23
Top	37	38	39	38	39	39	40	41	43	43	42	44
All households	100	100	100	100	100	100	100	100	100	100	100	100
Disposable income												
Bottom	9	9	9	9	9	10	9	9	8	8	8	7
2nd	13	13	13	13	13	13	13	12	12	11	12	11
3rd	18	18	17	17	17	17	17	17	16	16	17	16
4th	23	23	23	23	23	23	23	23	23	23	23	23
Top	36	37	38	37	38	37	38	40	41	42	41	43
All households	100	100	100	100	100	100	100	100	100	100	100	100
Post-tax income												
Bottom	10	9	9	9	9	9	9	8	8	7	7	6
2nd	13	13	13	13	13	13	13	12	12	11	11	10
3rd	18	17	17	17	17	17	17	16	16	16	16	15
4th	23	23	22	22	22	22	23	22	22	22	23	23
Top	37	38	39	39	39	38	39	41	43	44	43	45
All households	100	100	100	100	100	100	100	100	100	100	100	100

	1991	1992	1993	1993–4	1994–5	1995–6	1996–7	1997–8	1998–9	1999–00	2000–01	2001–02
Original income												
Bottom	2	2	2	2	2	3	2	2	3	2	2	3
2nd	7	6	6	6	6	7	7	7	7	7	7	7
3rd	16	15	15	14	15	15	15	15	15	15	15	14
4th	26	26	25	25	25	25	25	25	25	25	25	24
Top	50	50	52	52	51	50	51	51	52	52	50	52
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	6	6
2nd	10	11	11	11	11	11	11	11	11	11	11	11
3rd	16	16	16	16	16	16	16	16	16	16	16	15
4th	23	23	23	23	23	23	23	23	23	23	23	22
Top	44	43	44	44	43	43	44	44	44	44	44	45
All households	100	100	100	100	100	100	100	100	100	100	100	100
Disposable income												
Bottom	7	7	8	8	8	8	8	8	7	7	7	7
2nd	11	11	12	12	12	12	12	12	12	12	12	12
3rd	16	16	16	16	16	17	16	16	16	16	16	16
4th	23	23	23	23	23	23	23	23	23	23	23	22
Top	42	42	42	42	41	40	42	42	42	42	42	43
All households	100	100	100	100	100	100	100	100	100	100	100	100
Post-tax income												
Bottom	7	7	7	7	7	7	7	7	6	6	6	6
2nd	11	11	11	11	11	12	11	11	11	11	11	11
3rd	16	16	16	16	16	16	16	16	16	16	16	15
4th	23	23	22	22	22	23	22	22	22	22	22	22
Top	44	44	44	44	43	43	44	44	45	45	44	46
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, 1979 to 2001–02[2]

	Gini coefficients (per cent)				Ratios for disposable income	
	Equivalised income					
	Original	Gross	Disposable	Post-tax	P90/P10	P75/P25
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
2001/02	53	39	36	40	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 Expenditure and Food Survey (EFS). 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.

Expenditure and Food Survey (EFS)

2. The estimates in this analysis are based mainly on data derived from the EFS, which replaced the Family Expenditure Survey (FES) from 2001–02. The EFS is an annual survey of the expenditure and income of private households. People living in hotels, lodging houses, and in institutions such as old peoples' homes are excluded. Each person aged 16 and over keeps a full record of payments made during 14 consecutive days and answers questions about hire purchase and other payments; children aged 7 to 15 keep a simplified diary. The respondents also give detailed information, where appropriate, about income (including cash benefits received from the state) and payments of income tax. Information on age, occupation, education received, family composition and housing tenure is also obtained. The survey covers the whole 12-month period.

3. One of the main purposes of the EFS 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 2001–02*, published by TSO in January 2003, shows detailed results on expenditure and income from the 2001–02 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 EFS in 2001–02 was 7,500 (about 1 in every 3,300 households). The response rate was 61 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, January 1996). In addition, response in Greater London is noticeably lower than in other areas.

5. The results in the analysis 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. The grossing has not yet been revised to take account of results from the 2001 Census.

6. The EFS 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). EFS 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 used is the household, and not the family, individual or benefit unit. A household is defined in the EFS from 2001–02, and in the FES from 2000–01, 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 until 1999–2000, the 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 was 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 (none in 2001–02) 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 24 below) = Disposable income.

Stage three:

Disposable income *minus* indirect taxes = Post-tax income.

Stage four:

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

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

15. Furthermore, to avoid double counting and to make it consistent with the estimate of income from cash benefits (see paragraph 20), this annualised estimate has to be 'abated' for the number of weeks likely to be lost due to unemployment, sickness, etc. This figure is taken as the number of weeks so lost in the 12 months prior to interview. It should be noted that regardless of whether the respondent is currently working or unemployed the treatment is essentially the same, 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. The Inland Revenue website 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 EFS. 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 EFS.

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 EFS 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 EFS 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 and winter fuel payments.

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 EFS.

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 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 2001–02, 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 EFS 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 EFS 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 EFS.

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 EFS) 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 analysis, being assumed to be fully shifted to the consumer. Their allocations between different categories of household 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 3 and 9 of the main analysis, we have constructed a measure of expenditure on goods and services from data from the EFS. 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 substantial amounts in the bottom half 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 EFS 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 EFS 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 analysis, 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 EFS. 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 analysis, 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 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 EFS 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 analysis (apart from the Gini coefficients which have to be ranked afresh for each different definition of income).

Diagram **2**

Lorenz curve for a typical income distribution

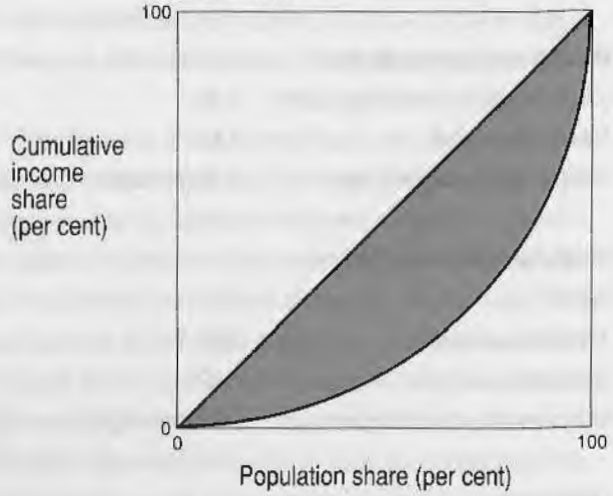
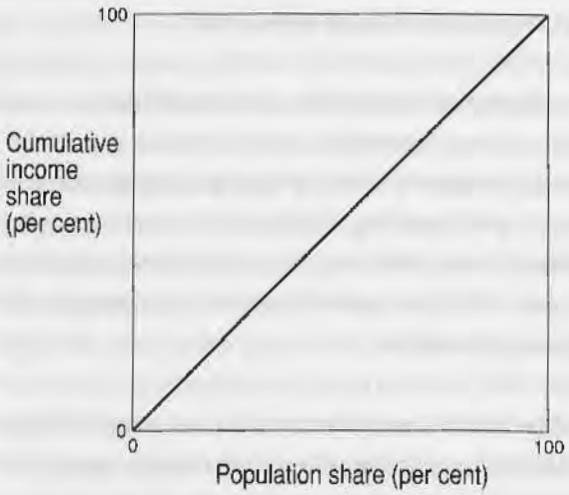


Diagram **3**

Complete income equality



50. It is important to note that most monetary values shown in the analysis are ordinary (i.e. un-equivalised) £ per year, not equivalised £ per year. Where equivalised values do appear (e.g. the quintile points in Table 16A of Appendix 1), they are shown in *italics*.

Gini coefficient

51. The Gini coefficient is the most widely used summary measure of the degree of inequality in an income distribution. It can more easily be understood by considering a Lorenz curve of the income distribution, (see Diagram 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 analysis 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 analysis 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 EFS. 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 analysis. More detail about the effect of weighting can be obtained from the ONS on request.

Sampling errors and reliability

55. As the EFS 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 EFS 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 EFS 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 EFS work is for 'gross normal weekly household income'. The standard error of the mean for N households is given by:

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

where the design factor is 1.1 for 2001–02, and S^2 is the estimate of the population variance.

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 analyses

61. This analysis is the latest in an annual series covering the years from 1957 onwards. From 1987 onwards, the analyses 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 analysis was published on the Internet in April, and in the May 2002 edition of *Economic Trends*. A list of the previous articles was included in the article published in March 1997.

62. The results in all analyses are intended to be free standing: they were not designed for direct comparison with other years except where some limited comparisons were made in them. 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 analysis gives such a comparison for the years 1979 to 2001–02.

Developing a pilot Social Accounting Matrix for the United Kingdom

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Summary

This article summarises the development of a UK Social Accounting Matrix (SAM) by the Office for National Statistics (ONS). The methodology improves on previous work carried out by ONS in 1996 (Hughes 1996) by developing a SAM which is both more detailed and consistent with the European System of Accounts (ESA95).

A SAM is an analytical framework in which social and economic data are integrated and harmonised. As with all accounts the SAM balances. By expanding the detail of the breakdown, for example four household types are defined to disaggregate the household sector, we introduce an element of social analysis. The matrix representation of economic and social statistics has the advantage that both sides of a transaction are identified, both who pays and who receives.

The current work uses a top-down approach. It was constructed in two stages. The first step was to create a National Accounting Matrix (NAM) by representing the traditional UK National Accounts in matrix form. The second stage disaggregated certain cells of the matrix using household surveys expanding the NAM into a full SAM.

Introduction

A Social Accounting Matrix (SAM) links together the (mainly) macro-statistics of National Accounts with the (mainly) micro-statistics of the labour market and of households to show the inter-relationships between economic and social statistics. To achieve this, statistics from household surveys have to be integrated into the National Accounts framework, which requires the adoption of common units, definitions and classifications.

The UK has a long history of producing Social Accounting Matrices (SAM). Several SAMs have been produced by academics, amongst them Richard Stone who worked on National Accounting from 1940 onwards, earning him his Nobel Prize in 1984 (Deaton 1987). An official SAM was produced by ONS in 1996 for the year 1993. The SAM presented in this article improves on this work as it is the first UK Social Accounting Matrix to be produced according to regulations in the 1995 revision of the European System of Accounts (Eurostat, 1995) (hereafter ESA95), and provides a more detailed social breakdown. This pilot SAM for the UK is constructed for the year 1996 based on the 2002 *Blue Book*. It uses a top-down approach, that is to say control totals are taken from the National Accounts and broken down to the required level of detail using shares based on other (micro-)data sources.

The UK has been a member of a Eurostat Leadership Group on Social Accounting Matrices. As part of the work of the group, each country involved has produced a pilot SAM for 1996 or 1997. The group has produced a Handbook on Social Accounting Matrices (Eurostat, forthcoming) that provides more technical detail about the construction of SAMs than can be covered in this article.[1]

The rest of this article is set out as follows. The next section gives the background to the SAM with particular reference to the existing National Accounts. The following section goes through the methods of creating the SAM. The penultimate section presents the results and the final section contains the concluding remarks.

Background

Social Accounting Matrices and National Accounts are built upon the same framework. Although their presentation is different (National Accounts are presented in T-accounts and the SAM in a matrix form), the concepts, classifications and accounts are the same.[2] The current work therefore builds on the standard tables of the National Accounts: Supply and Use tables and Sector Accounts and the methodologies underpinning these.

ONS produces Supply and Use tables annually as part of National Accounts. These tables present the goods and services account and the production account in matrix form. The matrix representation

records how supplies of different kinds of goods and services originate from domestic industries and imports and how these supplies are allocated between various intermediate or final uses, including exports. Supply and Use tables can be used as a framework for reconciling and balancing the various expenditure, income and production estimates assembled for the accounts, including the determination of the level of Gross Domestic Product (GDP) (ONS 1998). They also provide the basis for Input-Output tables. These tables can be used to evaluate the impact on individual industry groups of fiscal and economic policy decisions, using multiplier modelling (Pyatt and Round 1979).

The sequence of sector accounts describe the economic process from the generation of income, through its distribution and re-distribution and finally to its accumulation in the form of assets. Traditionally the sequence starts with the production account, but the sequence can be started anywhere. The process is known as the circular flow of income, and its concept underlies National Accounts. One of the advantages of a SAM is that its presentation clearly illustrates how this economic process is embedded in the National Accounts.

There are benefits for National Accounting in developing a SAM. The SAM offers a matrix representation of the accounts beyond the goods and services and production accounts. This presents extra information on the flow of funds and who pays what to whom. This extra information can be used to extend and improve the multiplier modelling to incorporate the behaviour of the non-production part of the economy.

A second advantage of a Social Accounting Matrix is its social breakdown. A large number of economic interactions happen within the household sector. National Accounts cannot show these as it treats the household sector as one group. The SAM breaks the cells involving 'returns for labour' and the household sector into smaller groups to show the effect of the differential behaviour of these groups. For example, compensation of employees can be broken down to show how they relate to the characteristics of those people who are supplying the labour and the household sector can be expanded to show how disposable income or final consumption varies by household type.

Our Social Accounting Matrix is a labour oriented one, that is labour input is broken down by education and gender, and the household sector is broken down according to main source of income. It is possible to construct Labour Accounts using micro data from the labour market which show the supply and demand for labour in one balanced framework. National Accounts already contain some labour market information. A labour-oriented SAM provides the framework to confront the National Accounts labour market information with the Labour Accounts, thus fostering greater integration between the two.

Although SAMs have some advantages over the traditional presentation of National Accounts for cross-sectional data, they do not lend themselves to presenting time series as easily.

SAMs are unfamiliar to many. Users need to familiarise themselves with the concepts and conventions of SAMs before they can appreciate the added value that they offer. Box 1 provides an introduction to how to read a SAM.

Box 1. How to read a SAM

In the traditional T-account presentation, the National Accounts are shown as an ordered set of **accounts**. In the SAM the accounts are shown as successive rows and columns in a matrix. The rows display the resources and the columns display the uses. Each transaction is shown only once. We will refer to each transaction as a **cell** and reference it by its row and column number. The production account provides a simple example (see Table 1). The row shows the resources – the output of the resident industries at basic prices (Cell 2,1). The column shows the uses-intermediate consumption (Cell 1,2), consumption of fixed capital (Cell 8,2) and the balancing item, net value added (Cell 3,2).

The SAM can also be viewed as a family of matrices at three different levels, each of which is embedded in the level above. Table 1 shows the highest level of aggregation, an aggregate National Accounts matrix showing the total for each cell. For example, current transfers within the UK (Cell 5,5) amounted to £512,537 million in 1996. Adding on the transfers from the rest of the world (Cell 5,10) £16,069 million, we get total resources of the UK from current transfers, £528,600 million. This total corresponds to the total resources from D.5, D.6 and D.7 in the Secondary Distribution of Income Account (Table 1.6.4 on page 56 in the *Blue Book* (ONS 2002a)).

Each of the cells in this level, can be expanded into a (sub-) matrix to show the transactions taking place within the account. The most suitable unit to use to show the transactions varies from account to account. The different units chosen for each account (industry, product, primary input category, institutional sector and financial asset) are shown as **classifications** in Table 1. In essence, this **National Accounts Matrix (NAM)**[3] gives a representation of National Accounts in matrix form, but it contains additional detail in that it shows who pays what to whom. Table 2

continues the current transfers, Cell (5,5), example. It shows the amounts transferred between the different institutional sectors. For example, the household sector paid out £146,564 million in transfers to general government, mainly in the form of taxes and social contributions and general government paid out £112,095 million to the household sector, mainly in the form of benefits.

Certain cells in the NAM can be further expanded to show the part played by groups of actors within different sectors. This expansion, which provides the link between the macro-data of National Accounts and the micro-data about labour and households, gives the SAM in its most disaggregated form. Table 3 shows this expansion for current transfers, Cell (5,5). With the household sector broken down, we can see that 82 per cent of the money transferred from households to general government (£119,409 million out of £145,564 million) came from households with wages and salaries as main source of income. In contrast, 39 per cent of the money transferred from general government to households (£44,059 million out of £112,095 million) went to those households with retirement income as the main income source and a further 30 per cent (£33,579 million) went to households with transfer income as the main source.

In the matrix presentation, the row and column totals have to balance to ensure that total resources (row sums) equal total uses (column sums). This gives rise to the balancing items, shaded in Table 1, which link successive accounts.

Method

The current work uses a top-down approach. It was constructed in two stages. The first step was to create a National Accounting Matrix (NAM) by representing the traditional UK National Accounts in matrix form. The second stage disaggregated certain cells of the matrix, using household surveys, expanding the NAM into a full SAM.

The main published National Accounts sources (ONS 2002a, 2002b, 2002c) provided the bulk of the information for the NAM. However, other sources were needed. Data on capital consumption came from West and Clifton-Fearnside (1999). A range of unpublished data series underlying the National Accounts also had to be used. Examples of these are the Dividends and Interest Matrix used to get interest flows and the Perpetual Inventories Method used to get net capital formation.

In the UK National Accounts, Non-profit institutions serving households (NPISH) transactions are not published separately, but are combined with those of the Household sector. This decision, which is in accordance with the National Statistics Code of Practice and its associated quality requirements, reflects the lack of data currently available to accurately distinguish between the two sectors. However, some provisional information is available for certain parts of the NPISH and Household accounts. It is this provisional data that has informed the process of separation of the NPISH flows from the published account for this particular exercise, thereby resulting in a separate Household sector upon which framework the first version of a UK SAM is dependent.

Users need to be aware that the basis of these estimates is weak. and that they should be regarded as experimental and used with caution. ONS is working to produce improved estimates for NPISH for the National Accounts but it will be a few years before these are ready for inclusion in National Statistics.

To extend the NAM to a SAM requires further breakdown of individuals into their worker types and households into groups classified by their main source of income. The main data sources used to provide the further breakdown are the Labour Force Survey (LFS) and the Family Expenditure Survey (FES), now the Expenditure and Food Survey (EFS). The LFS provides information about the age, educational qualifications, industry and hours worked of all in employment (including the self-employed) and the earnings of employees. The FES, which is the UK household budget survey, provides information about other forms of income (such as self-employment income and investment income), transfers and expenditure.

From National Accounts to NAM

When the National Accounts are presented in the form of T-accounts in the *Blue Book* (BB), they show both resources and uses by the type of transaction and the actors involved at a fairly high level of aggregation. The NAM shows rather more – it shows the amount paid by one sector to another. In other words we need to know not just how much interest is received by and paid out by the sector but also which sector it is received from and paid out to. This requires us to drill down[4] beneath the published accounts until we can find a level of disaggregation at which a single sector either pays out or receives all of the funds. Once we know how much is paid from whom to whom for each component within an account we can sum together the component parts to show the flows between the sectors for the whole account.

There are three redistribution accounts (property income, current transfers and capital transfers), with three cells in each. There is a cell on the diagonal: for example Cell (4,4) gives the property income payments to and from UK residents only. This diagonal cell is complemented by two other cells: Cells (4,10) and (10,4) that display

Table 1 Aggregate National Accounts Matrix

£ million

ACCOUNT		*1. Goods and services*	*2. Production*	*3. Generation of income*	*4. Allocation of primary income*	*5. Secondary distribution*	*6. Use of disposable income*	*7. Capital*	*8. Gross fixed capital information*	*9. Financial*	*10. Rest of the world current*	*11. Rest of the world capital*	*Statistical adjustment*	**12. Total**
	Classifications	products	industries	primary input categories	institutional sectors	institutional sectors	institutional sectors	institutional sectors	industries	financial assets				
1. Goods and services	products	Trade and transport margins 0	Intermediate consumption 775,797				Final consumption expenditure 638,964	Changes in inventories* 1,613	Gross fixed capital formation 125,762		Exports of goods and services 223,091			**1,765,227**
2. Production	industries	Output (basic prices) 1,455,417												**1,455,417**
3. Generation of income	primary input categories		NET VALUE ADDED (basic prices) 589,981								Compensation of employees from the ROW 911			590,892
4. Allocation of primary income	institutional sectors	Taxes *less* subsidies on products 78,123		GENERATED INCOME, NET (basic prices) 590,074	Property income 269,643						Property income and taxes *less* subsidies on production from the ROW 91,621			**1,029,461**
5. Secondary distribution of income	institutional sectors				NATIONAL INCOME, NET 669,891	Current transfers 512,537					Current transfers from the rest of the world 16,069			**1,198,497**
6. Use of disposable income	institutional sectors					DISPOSABLE INCOME, NET 667,989	Adjustment for the change in net equity of households on pension funds reserves 14,824				Adjustment for the change in net equity of households on pension funds reserves from ROW 0			**682,813**
7. Capital	institutional sectors						SAVING, NET 29,027	Capital transfers** 14,693		Net incurrence of liabilities 550,187		Capital transfers from the ROW 1,367	2,458	**597,732**
8. Gross fixed capital formation	industries		Consumption of fixed capital 89,639					Net fixed capital formation 36,123						**125,762**
9. Financial	financial assets							Net acquisitions of financial assets 544,672				Net lending of the ROW 5,515		**550,187**
10. Rest of the world, current		Imports of goods and services (c.i.f.) 231,687		Compensation of employees to the ROW 818	Property income and taxes *less* subsidies on production to the ROW 89,927	Current transfers to the ROW 17,971	Adjustment for the change in net equity equity of households on pension funds reserves to the ROW –2							**340,401**
11. Rest of the world, capital								Capital transfers to the ROW 631			Current external balance 8,709		–2,458	**6,882**
12. Total		**1,765,227**	**1,455,417**	**590,892**	**1,029,461**	**1,198,497**	**682,813**	**597,732**	**125,762**	**550,187**	**340,401**	**6,882**		

* Including acquisitions *less* disposals of valuables.

** Including acquisitions *less* disposals of non-produced non-financial assets.

Table 2 Cell (5,5) current transfers among residents £ million

Secondary distribution of income (Institutional sectors)	Secondary distribution of income (Institutional sectors)					
	Non-financial corporations	Financial corporations	General government	Households	Non-profit institutions serving households	**Total**
Non-financial corporations	0	5,503	537	3,209	0	**9,249**
Financial corporations	5,508	1,726	371	74,337	247	**82,189**
General government	22,249	2,352	59,458	146,564	–2,559	**228,064**
Households	4,329	59,522	112,095	660	3,051	**179,657**
Non-profit institutions serving households	335	312	9,558	3,173	0	**13,378**
Total	**32,421**	**69,415**	**182,019**	**227,943**	**739**	**512,537**

Table 3 Cell (5,5) current transfers among residents £ million

Secondary distribution of income (Institutional sectors)	Secondary distribution of income (Institutional sectors)								
	Non-financial corporations	Financial corporations	General government	Households				Non-profit institutions serving households	**Total**
				Wages and salaries	*Mixed income (including property income)*	*Income in connection with old age (retirement)*	*Other transfers income (including other households)*		
Non-financial corporations	0	5,503	537	3,046	118	22	23	0	**9,249**
Financial corporations	5,508	1,726	371	53,419	13,504	5,759	1,656	247	**82,189**
General government	22,249	2,352	59,458	119,409	16,527	8,688	1,940	–2,559	**228,064**
Households classified by main source of income									
Wages and salaries	1,122	16,357	22,714	116	0	0	0	1,294	**41,603**
Mixed income (including property income)	523	11,238	11,743	0	73	0	0	399	**23,976**
Income in connection with old age (retirement)	2,476	30,761	44,059	236	–8	231	0	745	**78,500**
Other transfers income (including other households)	209	1,166	33,579	4	0	0	7	613	**35,578**
Non-profit institutions serving households	335	312	9,558	1,618	460	674	420	0	**13,378**
Total	**32,421**	**69,415**	**182,019**	**177,848**	**30,674**	**15,374**	**4,047**	**739**	**512,537**

the property income payments to and receipts from the rest of the world, respectively. It can be seen in Table 1 that a similar pattern is followed in current transfers and capital transfers.

Table 4 summarises the compilation of the NAM cell by cell. Where the compilation was straightforward – usually because it required only published data – the table contains only a reference to where the data are taken from. The compilation of Cell (3,2), which required more assumptions than the rest, is described below.

Cell 3.2 – Net Value Added by Industry and Primary Input Category

In this cell, the net value added in each industry is allocated to the inputs: labour and capital. The compilation requires the correct allocation of returns to labour and capital and adjustments for the consumption of capital. In calculating these splits, data on gross operating surplus, compensation of employees and other taxes on production come from BB 2.1 Use table. The capital consumption total comes from BB Table 1.6.2 -K.1. For the industry breakdown of capital consumption see the note for Cell (8,2). The gross mixed income total and net mixed income totals come from BB Table 1.6.2. Gross mixed income by industry is an unpublished series which we used to calculate net mixed income and net operating surplus by industry.

To move to net mixed income and net operating surplus by industry, the capital consumption data by industry is broken down into two components, the part related to gross mixed income and the part related to gross operating surplus. First the ratio of gross mixed income to gross operating surplus is calculated to get a proxy for the size of mixed income in the industry. Then this ratio is applied to the capital consumption data. This gives a proportion for the relative weight of capital consumption from mixed income activity by industry. However, the total is about twice the size of the economy total. (This arises because this method does not take into account the fact that part of net mixed income is compensation of labour, and so overestimating capital consumption.)

From NAM to SAM

Going from a NAM to a SAM involves disaggregating certain cells. These cells are (3,2), (4,3), (4,4), (4,10), (10,4), (5,5), (5,10), (10,5), (1,6), (6,6) and (7,6). This SAM is a labour oriented one. This means that individuals are categorised according to their sex and their educational attainment, in Cell (3,2). Households are categorised according to their main income source in the rest of the cells listed.

The labour input is classified by the sex and educational attainment of the individuals who supply their labour. Educational attainment is shown at three levels: lower (corresponding to ISCED[5] levels 1 and 2), middle (ISCED 3 and 4) and higher (ISCED 5 and 6). The LFS collects all the information about employment status, industry, education level and earnings for employees necessary to provide this disaggregation.

In the pilot SAM, households are classified into four groups according to their main source of income: wages and salaries; mixed income (including property income)[6]; income in connection with old age; and other transfer income. This disaggregation can be provided by the FES which collects details about income and the source of income for each adult household member.

Wages and salaries income consists of wages and salaries and income in kind (company cars, for example). Mixed income (including property income) consists of imputed rentals, self-employment income and investment income. Income related to old age is defined as occupational pensions and those benefits related to old age. Other transfer income is made up of the remaining benefits and other income such as inter-household transfers through alimony and child maintenance payments. Estimates for each of these income components are available from the FES except for imputed rentals, which had to be estimated separately (see Box 2).

Table 5 shows what information (usually an FES variable) has been used to distribute the National Accounts aggregate across the household sector. It also indicates how good a fit there is between the National Accounts category and the FES variable.

Household expenditure data by household type and industry group have been produced using National Accounts household final consumption expenditure (HHFCE) data alongside household survey data and supply-use product group mappings. Estimates of expenditure by household type have been created by applying estimates of expenditure on goods and services by household type, from the Family Expenditure Survey, to UK HHFCE estimates. The allocation of expenditure across industry group has been generated using supply-use product mappings for National Accounts HHFCE estimates.[7]

Table 4 Compilation of NAM

Cell	Description
1.1	All data come from *Blue Book* Table 2.1 (BB 2.1).
1.2	All data come from BB 2.1 Use Table.
1.6	All data come from BB 2.1 Use Table.
1.7	Changes in inventories and acquisition *less* disposals of valuables (including transfer costs). Only sector and industry totals are available. Industry totals come from BB 2.1 whereas sector totals come from BB 1.7, P.52 and P.53. Due to a complete lack of data to fill in the individual cells, this cell has been left empty apart from the totals.
1.8	All data come from IO Table 6. Dwellings, transfer costs, adjustment for sales by final demand and valuables are given its own column, as these are not allocated to industries. The columns do not contain sales by final demand, and are therefore total consumption at purchaser prices rather than total inputs.
1.10	All data come from BB 2.1 Use Table.
2.1	Column totals come from BB 2.1 Supply Table, Row totals come from 2.1 Use Table. Diagonals are filled in using information from IO Table 1. This gives total output for all 123 industries and principal product as a percentage of total industry total output. These are multiplied together. Off-diagonals have been left blank due to their potential disclosive nature. There are two cases where the diagonal entry would have been larger than the product total. In both cases the differences are small enough to be attributable to the percentages being rounded to the nearest whole number. Also in both cases the numbers are restricted to the product total. This is consistent with numbers from the IO Table 1, which state that for these groups 100 per cent of total gross output of products are principal products.
3.2	See previous page.
3.10	Data are from BB Table 1.7 D.1 (CDID KTMN).
4.1	The industry breakdown of taxes paid is from BB 2.1 Supply Table and Table 1.7 D.21–31 confirms that this amount goes to government. There is a sum of money that goes through General Government to external sources. These are consequently paid by general government to the rest of the world in (10,4) except for VAT to the EU. ESA95 stipulates that, although VAT is organised by the general government, it is a direct transfer to the rest of the world. As there is a product breakdown of VAT, there is not a breakdown of the part that goes to the EU. To solve this, a dummy account is introduced which subtracts the amount of the VAT. It is subsequently reintroduced in 10-1 through a dummy account where this tax is added in.
4.3	Data are from BB Table 6.13 plus additional information from the equivalent tables for the other sectors (3.1.3; 4.1.3; 5.1.3).
4.4	Column and row totals are from BB 6.1.4 plus additional information from the equivalent tables for the other sectors, D.4 split into subcategories of (D.41, D.42, D.43, D.44 and D.45). The subcategories D.43 (Reinvested earnings on foreign direct investment), D.44 (Property income attributed to insurance policy holders) and D.45 (Rent on land and sub-soil assets) can be filled in by looking at disaggregated series. D.41 (Interest). The Dividends and Interest Matrix provides detailed information on interest received and paid according to the instrument earning the interest. D.42 (Distributed Income of Corporations). This can be further broken down into D.421(Dividends) and D.422(Distribution of income from Quasi-corporations) We could divide out the income from quasi corporation, but there were no systems in place to allow us to break down D.421. D.421 has therefore been left in a dummy account showing only total resources and total uses for each sector.
4.10	Mainly results from 4.4 except that, in addition, this cell includes total taxes *less* subsidies on production and imports paid to the rest of the world. This is paid by general government. The sum paid is the difference between government resources in the allocation of primary income account from these taxes *less* subsidies (NVCC–NMYF) and the taxes and subsidies received by general government in 1.7 D.21–D.31.
5.4	Data are from BB 1.7 B.5g net of K.1. The numbers are entered into the matrix on the diagonal.
5.5	Data are from BB 6.1.4 plus additional information from the equivalent tables for the other sectors, D.5 D.6 D.7 D.6 and D.7 are split into subgroups D.61 D.62 D.71 D.72 D.73 D.74 and D.75. Drilling down, each of these series can be disaggregated and the from-whom-to-whom relationships become apparent through this exercise.
5.10	Results from 5.5.
6.5	Data are from BB 6.1.4 plus additional information from the equivalent tables for the other sectors, (The numbers can also be taken from 1.7 B.6g and net it with K.1.) Data are entered on the diagonal.
6.6	Data are from BB 1.7 D.8. This cell only involves households and the financial sector.
6.10	Data are from BB 1.7 D.8 Uses.
7.6	Data are from BB 1.7 B.8g, net of K.1. Data are entered on the diagonal.
7.7	Data are from BB 6.1.4 plus additional information from the equivalent tables for the other sectors, D.91 D.92 D.99 and K.2. Drilling down, each of these series can be disaggregated and the from-whom-to-whom relationships become apparent through this exercise. Acquisitions less disposals of non-produced, non-financial assets are such that the negative number from government is equal to the sum of the other numbers and is entered as government payments.
7.9	Data are from BB 1.7 F.2 to F.7 Resources.
7.11	Results from 7.7
8.2	The data are derived by taking proportions from *Economic Trends* March 1999 (this Table gives capital consumption by industry, but is not consistent with the 1999 *Blue Book*) and applying these proportions to *Blue Book* total (BB 1.7 K.1). This only gives industry totals, and not by product and industry, so the entries have been made on the diagonal. Dwellings and transfer costs are given a separate column and row as they are not allocated to industries consistent with (1,8).
8.7	Data on the structure of the cell are supplied from the Perpetual Inventories Model, and then fitted to the national accounts totals using the RAS technique.
9.7	Data are from BB 1.7 F.2 to F.7 uses (cell 7a by 9g is the sum of other accounts receivable and statistical discrepancy).
9.11	Data are from BB 1.7 F.2 to F.7 Uses *minus* Resources.
10.1	Data are from BB 2.1 Supply Table.
10.3	All data are from BB Table 1.7 D.1 (CDID KTMO).
10.4	Results from 4.4.
10.5	Results from 5.5.
10.6	Data are from BB 1.7 D.8 Resources.
11.7	Results from 7.7.
11.10	This is a balancing item in the spreadsheet worked out from other cells. The amount 600 equals the amount in BB 1.7 B.12.

Table 5 Variables used to break down the household sector

Type of income	National Accounts Category Description	Amount (£ billion)	Variable used for breakdown	Notes
Net generated income – Cell (4,3)				
Resources				
D.11	Wages and salaries	352	FES Wages and salaries	
D.12	Employers' social contributions	53	FES Wages and salaries	Assumes employers' contributions (12 per cent of total) are proportional to wages + salaries
B.2	Net operating surplus	26	Imputed rent	
B.3	Net mixed income – self-employment income for sole traders	42	FES income from self-employment	FES estimate includes income from partnerships (see D.422)
Property income – Cells (4,4), (4,10) and (10,4)				
Resources				
D.41	Interest	23	FES investment income	FES understates investment income by about 40 per cent
D.421	Dividends	14	FES investment income	
D.422	Income withdrawals from quasi-corporations	19	FES income from self-employment	FES estimate includes income for sole traders (see B.3)
D.44	Income attributable to insurance policy holders	48	FES expenditure of life and non-life insurance	NA assumes insurance reserves belong to policy holders
D.45	Rent – land + sub-soil assets	0.1	FES income from self-employment	Insignificant amount with counterpart in Uses
Uses				
D.41	Interest	37	FES mortgage interest payments	Assumes other debts are proportional to housing debts.
D.45	Rent – land + sub-soil assets	0.2	FES income from self-employment	Insignificant amount with counterpart in Resources
Transfer income – Cells (5,5), (5,10) and (10,5)				
Resources				
D.61	Social contributions	0.3	Pro-rated by number of households	Refund of over-payment from households. Insignificant amount
D.621	Social security benefits	42	FES contributory benefits	Good match
D.622+D.623	Private funded and unfunded employee social benefits	57	FES income from occupational pensions	FES understates by around 20 per cent
D.624	Social assistance benefits from central government	43	FES non-contributory benefits	Good match. Housing benefit excluded from total as paid through local authority
D.624	Social assistance benefits from local government + NPISH	14	FES housing benefit and council tax rebates	
D.72	Non-life insurance claims	19	FES expenditure on non-life insurance	Counterpart in Uses
D.75	Miscellaneous transfers	6	Pro-rated by number of households	No information. Offset by counterpart in Uses.
Uses				
D.51	Income tax	78	FES net income tax	
D.59	Other taxes including car tax, council tax	13	FES net local taxes	
D.6111 and D.612	Employers social contributions and imputed social contributions	53	FES wages and salaries	Counterpart in D.12
D.6112 and D.6113	Social contributions from employees, self-employed and non-employed to government	23	FES employees National Insurance contributions	
D.6112	Social contributions from employees to financial corporations	38	FES contributions to pension funds and expenditure on life assurance	
D.62	Social benefits	0.3	Pro-rated by number of households	Refund of over-payment to households. Insignificant amount
D.71	Non-life insurance claims	19	FES expenditure on non-life insurance	
D.75	Miscellaneous transfers	5	Pro-rated by number of households	No information. Offset by counterpart in Resources

Box 2 Imputing Rentals for a Social Accounting Matrix

Owner-occupiers are treated in National Accounts as landlords renting to themselves, paying a shadow rent called imputed rental. As landlords, they are taking part in production and imputed rentals are part of households' gross operating surplus. Having received the imputed rental, owner-occupier households pay out imputed rentals as part of their final consumption expenditure.

We need to allocate the gross operating surplus and final consumption expenditure across household types and to do this we need to estimate imputed rentals per household. As gross operating surplus is part of household income we also need to include it as income when we classify households. Mixed income(including property income) includes imputed rentals, and we add on imputed rentals to income in this category. This moves some households from the wages and salaries, retired or other income categories into the mixed income (including property income) category.

As with the rest of household income, we used the FES to allocate National Accounts totals of owner-occupier rent across household types. To do this we estimate a rental equation. The FES data from financial years 1996–97 to 2000–01 were used. This comprises over 33,000 household observations, of which about two-thirds are owner-occupiers. After excluding those in non-private rental accommodation, those in rent-free accommodation, those purchasing their house through a rental purchase and those having been in their rented property from before 1989, rents below £25 per week and rents over £400 per week, we had a remaining sample of 2,640 observations. We used a regression equation based on dwelling characteristics only, and these values were then fitted using the characteristics of each owner-occupied dwelling. To adjust for the fact the we had restricted rents to those within a certain band, we ran a truncated regression (Greene 1993).

Our variables were region, number of rooms, council tax band, whether a property was rented furnished or unfurnished, whether it was in an urban or rural location, whether it was a house or a flat and a time dummy to account for changing rental prices over time. Our regions were North East, Yorkshire and Humberside, North West, East Midlands, West Midlands, East Anglia, Greater London, South East, South West, Wales, Scotland and Northern Ireland.

Because Northern Ireland does not have council tax bands, the regression was first run excluding Northern Ireland. We then ran the regression again including Northern Ireland but dropping the council tax variable, and used this second set of results to fit imputed rentals to owner occupiers in Northern Ireland.

The result of this exercise was the following split of the gross operating surplus by household type.

Household category	Per cent of national total of gross operating surplus
Wages and salaries	*57*
Mixed Income (including property income)	*21*
Retirement Income	*18*
Other Income	*3*

Results

The SAM resulting from the work contains a large amount of information. We have elected to focus on four parts of the matrix. These are primary allocation of income, distribution of income, consumption and savings. The results in Table 8 are presented on a per household basis. The estimates are not adjusted for household size and composition by using an equivalence scale.

Primary allocation of Income

Table 6 shows the results of calculating Cell (3,2) The cell allocates to the different factors of production the net value added by industry. Compensation of employees is broken down by gender and education. This table shows, for instance, that just over 10 per cent of all compensation of employees (£43,604 million out of £405,469 million) goes to men with primary/lower education and that the group receiving the largest part of compensation of employees is men with upper or post secondary levels of education. These numbers make no allowance for the number of employees in each category or the number of hours worked. However, by combining SAM results with volume measures, Table 7 presents wages per hour by gender, education level and industry.

These estimates show that men earn 24 per cent more per hour than women (£11.24 compared with £9.15). In terms of education, those with higher education earn over 50 per cent more than those in the middle education group who, in turn, earn about 15 per cent more than those in the lower education group. These returns from education show up for each of the industry groups.

Comparison between the industry groups show that hourly earnings are highest in group C–E (mining, quarrying; manufacturing; electricity, gas and water supply) where hourly earnings are 21 per cent higher than for all industries (£12.26 compared with £10.43). This is followed by group L–P, at 9 per cent above the overall average and group J–K at 7 per cent below the average. Group A–B has the lowest hourly earnings at 54 per cent of the average. These results vary from those obtained using purely the LFS and an article in *Labour Market Trends* (Stuttard and Frogner 2003) goes into this in detail.

Distribution of Income

Table 8 shows how income is distributed and redistributed across households at both aggregate level and on a per household basis. Since the households are classified according to their major source of income, it is not surprising that the different household types derive their income in different ways. The 50 per cent of households that are mainly dependent on wages and salaries receive 95 per cent of all compensation of employees. The 15 per cent of households mainly dependent on mixed income (including property income) receive 89

Table 6 Cell (3,2) a detailed value added matrix **£ million**

Generation of income (value added categories)			Production (NACE-rev. 1 Industries)						
			Agriculture, foresty, fishing (NACE A/B)	Mining, quarrying, manufacturing, electricity, gas and water supply (NACE C/D/E)	Construction (NACE F)	Trade, repair, hotels and restaurants, transport, storage and communication (NACE G/H/I)	Financial intermediation, real estate, renting and business activities (NACE J/K)	Public administration and defence, education, health and social work, services n.e.c. (NACE-L/M/N/O/P)	**Total**
Compensation of employees	**Male**	Primary/lower secondary (ISCED 1–2)	873	16,560	2,316	15,094	3,856	4,904	**43,604**
		Upper or post secondary (ISCED 3–4)	1,176	44,113	8,575	38,096	16,340	19,927	**128,226**
		Tertiary (ISCED 5–6)	449	26,069	4,019	13,184	23,173	29,376	**96,271**
	Female	Primary/lower secondary (ISCED 1–2)	172	5,308	238	7,457	2,837	7,503	**23,515**
		Upper or post secondary (ISCED 3–4)	344	9,039	928	17,349	13,217	20,415	**61,292**
		Tertiary (ISCED 5–6)	76	4,133	249	4,538	7,402	36,163	**52,561**
Net mixed income			2,073	2,537	13,112	8,560	9,644	6,188	**42,113**
Net operating surplus			4,537	42,396	3,570	26,704	79,627	12,337	**169,172**
Other taxes less subsidies on production			–112	3,519	344	6,620	2,131	2,446	**14,948**
Total			**9,587**	**153,675**	**33,351**	**137,602**	**158,227**	**139,260**	**631,702**

Table 7 Compensation per hour **£ per hour**

Type of labour			Economic activity (NACE-rev. 1 Industries)						
			Agriculture, foresty, fishing (NACE A/B)	Mining, quarrying, manufacturing, electricity, gas and water supply (NACE C/D/E)	Construction (NACE F)	Trade, repair, hotels and restaurants, transport, storage and communication (NACE G/H/I)	Financial intermediation, real estate, renting and business activities (NACE J/K)	Public administration and defence, education, health and social work, services n.e.c. (NACE-L/M/N/O/P)	**Total**
Employees	**Male**	Primary/lower secondary (ISCED 1–2)	4.99	10.33	7.35	8.30	7.86	8.13	**8.71**
		Upper or post secondary (ISCED 3–4)	5.26	11.94	8.83	9.32	8.95	10.51	**10.09**
		Tertiary (ISCED 5–6)	10.74	19.05	12.85	15.73	14.13	15.64	**15.83**
	Female	Primary/lower secondary (ISCED 1–2)	5.22	8.01	7.56	6.63	6.93	6.83	**7.00**
		Upper or post secondary (ISCED 3–4)	5.56	9.70	7.89	7.58	7.57	8.18	**8.02**
		Tertiary (ISCED 5–6)	9.55	16.20	8.29	11.67	11.01	13.77	**13.21**
Total			**5.69**	**12.35**	**9.18**	**9.08**	**9.85**	**11.16**	**10.46**

per cent of all mixed income and income withdrawals from quasi-corporations. This group includes retired households, whose property income exceeds their income from state and private pensions. It is then to be expected that this group will receive a disproportionate amount of income from interest and dividends. The other two groups get most of their income through transfers. The 22 per cent of households that are classified as retired receive 61 per cent of all social security (or contributory) benefits mainly in the form of the state retirement pension and 69 per cent of all private social benefits through occupational pensions. The 14 per cent of households in the "other" group are mainly dependent on transfer income not associated with old age. This group is the largest recipient of social assistance (i.e. non-contributory benefits) paid out by central government or local government (51 per cent).

In terms of uses of income, the households in the first two groups (those mainly dependent on wages and salaries and those mainly dependent on self-employment income) pay out 95 per cent of the interest for the household sector as they are much more likely to be owner-occupiers with a mortgage. These two groups also pay out 93 per cent of all income tax and nearly all of the contributions made to government or non-government social insurance schemes.

Consumption

Table 8 presents consumption of the different groups, both in total and on a per household basis. There are no unexpected results here. Other income households are consuming the least; only £11,455 per household, 56 per cent of the average for all households. The retired also consume less than average on a household basis they have lower expenditure on housing; not surprisingly as they are more likely to own their house outright, and transport, where costs are often associated with working. They account for 14 per cent of all consumption. Waged and salaried households consume the most both in total and on a per household basis. In total, waged and salaried households account for 63 per cent of all consumption.

Savings

Having calculated disposable income and consumption, it is not immediately possible to derive savings as the difference between the two, as an adjustment needs to be made to reallocate some amounts between sectors.

Contributions to and pensions from private funded schemes are treated as current transfers and affect disposable income. Logically they should be seen as acquisition and disposal of financial assets as the pension reserves are considered to be owned by the households with claims on them. To reconcile these two approaches it is necessary to add back pension contributions to, and subtract pension receipts from, household disposable income, so that measured saving reflects any change in households' net equity in pension funds.

This adjustment is shown in Cell (6,6) of the SAM. Once this adjustment is made we reach the final balance in our accounts, an

Table 8 Household Accounts

			Aggregate (£ million)						Per household (£ per year)				
			Wages & Salaries	Mixed Income	Retirement Income	Other transfer Income	Total	NPISH	Wages & Salaries	Mixed Income	Retirement Income	Other transfer Income	**Total**
Households mainly dependent on:													
Number of households									11,539	3,458	5,100	3,172	23,269
Type of income													
Net generated income – Cell (4,3)													
Resources	D.11	Wages and salaries	334,341	12,999	2,371	2,573	352,285	–	28,975	3,760	465	811	15,140
	D.12	Employers' social contributions	50,414	2,003	429	432	53,277	–	4,369	579	84	136	2,290
	B.2	Net operating surplus	14,715	5,609	4,621	780	25,725	1,078	1,275	1,622	906	246	1,106
	B.3	Net mixed income	3,983	37,688	346	96	42,113	–	345	10,900	68	30	1,810
	Total		**403,454**	**58,299**	**7,767**	**3,880**	**473,400**	**1,078**	**34,964**	**16,862**	**1,523**	**1,223**	**20,345**
Property income – cells (4,4), (4,10) and (10,4)													
Resources	D.41	Interest	7,019	10,945	4,774	165	22,903	923	608	3,166	936	52	984
	D.421	Dividends	4,205	6,557	2,860	99	13,720	572	364	1,896	561	31	590
	D.422	Income withdrawals from quasi-corporations	1,843	17,438	160	44	19,485	–	160	5,043	31	14	837
	D.44	Income attributable to insurance policy holders	31,677	10,836	4,023	1,252	47,788	19	2,745	3,134	789	395	2,054
	D.45	Rent – land + sub-soil assets	9	86	1	0	96	7	1	25	0	0	4
	Total		**44,753**	**45,861**	**11,818**	**1,561**	**103,992**	**1,584**	**3,878**	**13,264**	**2,317**	**492**	**4,469**
Uses	D.41	Interest	30,232	5,534	592	1,118	37,476	966	2,620	1,601	116	353	1,611
	D.45	Rent – land + sub-soil assets	20	188	2	0	210	–	2	54	0	0	9
	Total		**30,252**	**5,722**	**593**	**1,119**	**37,686**	**983**	**2,622**	**1,655**	**116**	**353**	**1,620**
Net national income – cell (5,4)													
(4,3) + (4,4) + (4,10) – (4,4) – (10,4)			**417,955**	**98,439**	**18,991**	**4,322**	**539,707**	**1,679**	**36,221**	**28,471**	**3,724**	**1,362**	**23,194**
Transfer income – cells (5,5), (5,10) and (10,5)													
Resources	D.61	Social contributions	164	49	72	45	330	99	14	14	14	14	14
	D.621	Social security benefits	5,638	6,208	26,101	4,501	42,448	–	489	1,796	5,118	1,419	1,824
	D.622+ D.623	Private funded and unfunded employee social benefits	10,080	6,346	39,695	996	57,117	–	874	1,835	7,783	314	2,455
	D.624	Social assistance benefits from central government	13,477	3,555	5,150	21,145	43,328	0	1,168	1,028	1,010	6,666	1,862
	D.624	Social assistance benefits from local government + NPISH	1,338	546	3,856	7,978	13,719	–	116	158	756	2,515	590
	D.72	Non-life insurance claims	11,216	4,081	3,256	560	19,113	247	972	1,180	638	177	821
	D.75	Miscellaneous transfers	2,928	877	1,294	805	5,905	14,122	254	254	254	254	254
	Total		**44,841**	**21,662**	**79,426**	**36,031**	**181,960**	**14,468**	**3,886**	**6,265**	**15,573**	**11,358**	**7,820**
Uses	D.51	Income tax	60,712	11,225	5,622	138	77,696	–2,559	5,261	3,246	1,102	43	3,339
	D.59	Other taxes	6,626	2,091	2,674	1,404	12,795	–	574	605	524	442	550
	D.6111 and D.612	Employers social contributions and imputed social contributions	50,414	2,003	429	432	53,277	–	4,369	579	84	136	2,290
	D.6112 and D.6113	Social contributions to government	21,221	2,006	112	104	23,443	–	1,839	580	22	33	1,007
	D.6112	Social contributions to financial corporations	26,073	8,795	2,388	972	38,228	–	2,260	2,544	468	306	1,643
	D.62	Social benefits	164	49	72	45	330	569	14	14	14	14	14
	D.71	Non-life insurance claims	11,216	4,081	3,256	560	19,113	247	972	1,180	638	177	821
	D.75	Miscellaneous transfers	2,558	766	1,131	703	5,158	3,032	222	222	222	222	222
	Total		**178,982**	**31,017**	**15,684**	**4,357**	**230,040**	**1,289**	**15,511**	**8,971**	**3,075**	**1,374**	**9,886**
Net disposable income – cell (6,5)													
(5,4) + (5,5) + (5,10) – (5,5) – (10,5)			**283,814**	**89,084**	**82,733**	**35,995**	**491,627**	**14,858**	**24,596**	**25,765**	**16,222**	**11,347**	**21,128**
Adjustment for increase in net equity in pension funds (6,6)			34765	4968	–25304	396	14824	–	3,013	1,437	–4,961	125	637
Final consumption (1,6)			296,648	75,521	65,292	36,339	473,800	18,385	25,708	21,843	12,802	11,455	20,362
Savings – cell (7,6) (6,5) – (1,6) + (6,6)			**21,931**	**18,531**	**–7,863**	**52**	**32,651**	**–3,527**	**1,901**	**5,360**	**–1,542**	**16**	**1,403**

estimate of savings. Waged and salaried households on a per household basis save £1,901 whilst mixed income households save £5,360. It is plausible that mixed income households save more than waged and salaried households as their income is both higher on a per household basis and more variable. The Bank of England (2001) found that savings ratios go up as income rises. Guariglia (1998) found that savings ratios are positively correlated with earnings variability. Her analysis had to use earnings rather than income, but still shows a link between variability and savings which corresponds to the predictions from the permanent income hypothesis which states that individuals try to smooth their consumption over time. The retired spend a fair amount of their savings; £1,542 per household per year. This is not surprising as the retired would be expected to save earlier in life, and are now living off the income from their savings. A large part of this negative saving is related to the money taken out of pension funds. With annuities, this spending of savings does not lead to future reductions in income, it simply means that the claim on the total funds of the retired is reduced, and so it is, in a sense, only theoretical.

Other income households make a smaller contribution to the household sector. They receive little income, their expenditure is low, and they have on average a neutral savings balance (the per household estimate is £16). This category of household may be more volatile in membership with spells of unemployment making households enter and then leave the category. Also, dependence on transfers may mean that households have little collateral, so the potential for negative savings is limited. We believe that a neutral savings balance is plausible.

Conclusion

The UK pilot SAM is a first attempt at merging the results of social surveys with National Accounts. These results are indicative of the value of such analyses but there is a need to recognise some of the shortcomings of the present analysis. In particular, it has been necessary to make a number of assumptions in disaggregation because of the top-down approach used here. However, the process of construction has been a valuable exercise as it has exposed areas where the data used in National Accounts are not consistent with the micro data from other surveys (Stuttard and Frogner 2003). The SAM does yield some interesting findings and provides, as a diagnostic, plausible savings estimates for the different household types. Cell (7,6) shows that the average household saved £1,403 in 1996, with waged and salaried households and mixed income (including property income) households having savings of £1,901 and £5,360 per year, and households mainly dependent on income related to old age spend £1,542 of their savings per year, whereas those mainly dependent on transfer income balance their income and expenditure and save £16 per year.

Notes

1. It should be noted that developing countries have previously taken the lead in developing SAMs. This is because the SAMs framework allows for National Accounts to be produced using relatively little information. The SAM has the advantage of providing a framework to confront different data sets, even when the data sets are quite sparse.

2. A T-account presentation displays all the resources on one side (usually left) and all the uses on the other (usually right), and the two sides add up to the same amount.

3. The difference between a NAM and a SAM can, in a simplified form, be described as the level of disaggregation. The social part of the analysis comes from breaking down the household sector. This means that what we call a NAM can be seen as a SAM at a more aggregate level, the highest level of aggregation being the UK total shown in Table 1. In fact different authors use Social Accounting and National Accounting interchangeable for what is now mainly known as National Accounts.

4. Each published series in the National Accounts is made up of sub-series, the process of breaking down the aggregate series into its components is referred to as drilling down.

5. ISCED stands for International Standard Classification of Education.

6. Property income is included with mixed income purely for thhe purpose of classifiying households. The two concepts are treated separately in National Accounts.

7. The household final consumption expenditure COICOP to Input–Output product allocations have been reviewed and changed in *Blue Book* 2002, and will be changed again in *Blue Book* 2003. This change will include substantial changes, and hence impact on the allocations in Cell (1,6) in Table 1.

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Revisions to quarterly GDP growth

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Summary

This article examines the latest results of GDP Revisions Analysis, updating the previous article published in July 2002.

This Revisions Analysis investigates the change from the first estimate to the latest official estimate of the quarterly growth in GDP at constant prices. The present article examines the bias and dispersion of the quarterly revisions at the different stages of the National Accounts process for the period of 1993 Q1 to 1999 Q4.

The average revisions show a positive bias of 0.189 percentage points between the first and the latest estimates of GDP growth.

The results of the Revisions Analysis by stages provide evidence that two stages were significantly different from zero: Blue Book One and Post Blue Book Two.

The mean revision for the Blue Book Two stage is relatively low and statistically non-significant. However, the largest revisions occurred at this stage, with a high dispersion, and with a tendency for revisions to offset one another in different quarters.

Introduction

National Accounts (NA) provides a measurement of the economy. It is a complex system that draws together many different types of data sources and balances them against each other to produce an estimate of Gross Domestic Product (GDP), using three different approaches: Production, Expenditure, and Income.

GDP, the main economic indicator, encapsulates what we would like to know about the size and growth of the economy, and what it can deliver. The NA system tries to ensure that GDP, as a statistical estimate, tells as accurate a story as possible.

In order to achieve timeliness, NA estimates are published first as preliminary quarterly estimates, and are then subjected to revisions when more comprehensive data become available. In addition, methodological changes in the NA processes might also lead to further revisions of the estimates.

This article focuses on the results of the latest Revisions Analysis of the growth rates of GDP at constant 1995 prices. This article is one of a series of articles published in *Economic Trends* that aim to regularly monitor the reliability of the estimates. Reliability of the statistical estimates is one of the dimensions of internationally agreed definitions of quality in statistics (*see* Akritidis, 2002).

For the purpose of this article, the reliability of the preliminary estimates of quarterly GDP growth refers to how consistent they are with the latest estimates of GDP growth. Information on reliability is obtained by measuring biases that occur in the revisions to preliminary estimates until the latest estimates.

Methodology of the Revisions Analysis

The Revisions Analysis is based on the methodology introduced by Richardson (2002). It looks at revisions by stages of the GDP compilation process, where different methods or different data are used at each stage. The stages are as follows:

1. **Preliminary Estimate (M1)** – Month One, when the estimate is prepared on the basis of a limited proportion of survey data from short-term indicator surveys on the production side;

2. **Quarterly National Accounts (M3)** – Month Three, when fuller survey data for the components of each of the Expenditure, Output, and Income measures are available from short-term Indicator and other surveys, but production remains the main source;
3. **Blue Book One (BB1)** – the first time the estimate appears in the Blue Book, typically after new and more comprehensive annual data sources have become available, around three to twelve months after publication of the corresponding M1 estimate;
4. **Blue Book Two (BB2)** – the stage at which Input-Output Supply and Use balancing[1] is applied to the estimate for the first time, around 12–18 months after it is first published based on definitive annual benchmark sources: the ONS Annual Business Inquiry and Inland Revenue income estimates (*see* Mahajan, 1997; Mahajan and Penneck, 1999);
5. **Post Blue Book Two (Post-BB2)** – the Input-Output Supply and Use balancing is run for the second time or more, and longer run methodological changes may be introduced to the current data and back series, including revised benchmark data (e.g., Inland Revenue data).

The impact of Total Revisions on the GDP growth rates at constant 1995 prices can be shown as in Figure 1. This shows the revisions between the Preliminary (Month One) estimate and the latest (Post Blue Book Two) estimate from the first quarter of 1993 to the fourth quarter of 1999. 1993 was the first time that the preliminary estimate was published. Taking the analysis as far as the fourth quarter of 1999 ensures that all data have had at least three years to mature.

Figure 1 shows that the largest Total Revisions (approximately 0.5 percentage points) occurred between 1993 Q1 and 1994 Q3. In 1999 Q4 the GDP growth rate was revised upwards by 0.4 percentage points. This is the largest upward revision since that of 0.5 percentage points for 1998 Q1.

Figure 2 shows the contribution of revisions by stages. The largest single total revision since it was first published occurred in 1994 Q3, when GDP was revised up by 0.7 percentage points. This was mainly due to revisions applied at the Post Blue Book Two stage (Post-BB2). Post-BB2 stage also made the greatest contribution to the total revisions in 1999 Q4 – an upward change of 0.4 percentage points.

It is interesting to note that the revisions applied at each of the four stages tend to partly offset each other. For example, in 1999 Q3 the GDP growth was revised:

- **Down** by 0.1 percentage point in the Quarterly National Accounts (M3);
- **Upwards** by 0.2 percentage points in the Blue Book One (BB1);
- **Upwards** again by 0.2 percentage points in the Blue Book Two (BB2);
- **Downwards** by 0.1 in Post Blue Book Two (Post-BB2).

Figure 1

Total Revisions

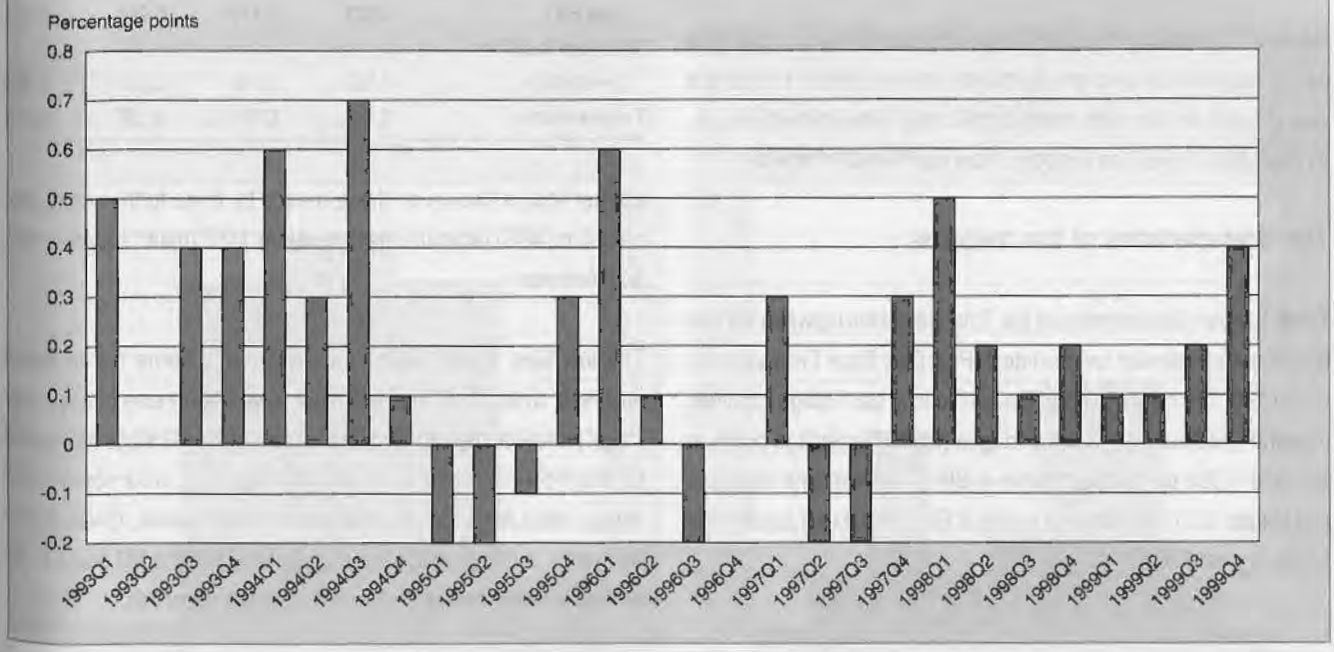
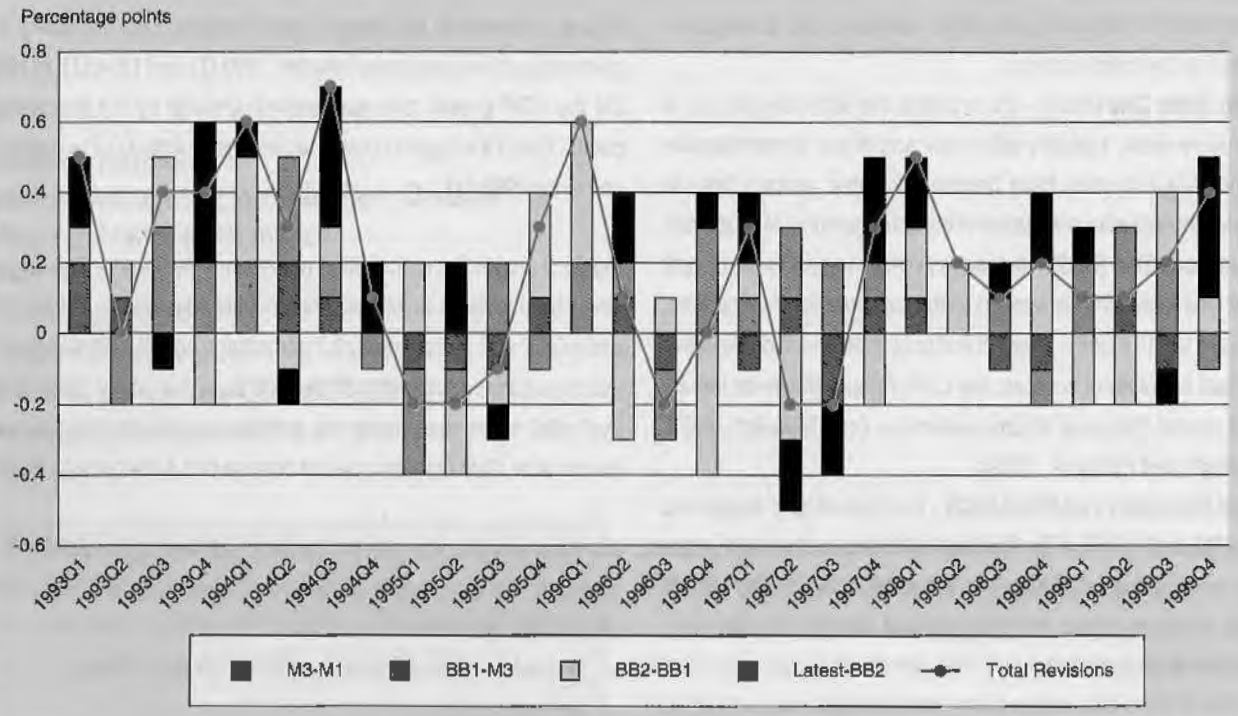


Figure **2**

Contributions of revisions by stages



Figures 1 and 2 indicate that it is necessary to check the revisions applied to GDP growth between 1993 Q1 and 1999 Q4 for possible biases.

In line with previous ONS articles, a given revisions stage is considered to be biased when, in the long run, its mean revision is different from zero.

However, it must be noted that the average revisions over the finite period may be non-zero simply due to random effects. Hence it is vital to check whether the mean *significantly* differs from zero - i.e., by more than it could be expected from mere random effects.

The characteristics of the revisions

Table 1 shows that the mean of the Total Revisions between the first (Preliminary) estimate and the latest (Post Blue Book Two) estimate was 0.189. The contribution of the revisions at each stage indicates moderate positive biases in two stages (0.007 percentage points in M3, and 0.021 percentage points in BB2), and extreme biases in two stages (0.071 percentage points in BB1, and 0.089 percentage points in post-BB2).

Table 1: Revisions at each stage of the quarterly constant-price GDP growth estimate

1993 Q1–1999 Q4	Mean	m(ABS)	MSE	Variance
Month Three (M3)				
less Month One (M1)	0.007	0.079	0.010	0.010
Blue Book One (BB1)				
less M3	0.071	0.157	0.033	0.028
Blue Book Two (BB2)				
less BB1	0.021	0.179	0.044	0.044
Post Blue Book Two				
(Post-BB2)	0.089	0.146	0.037	0.029
Total revisions	**0.189**	**0.561**	**0.107**	**0.071**

Further light is thrown on these means by three further analyses, namely m(ABS) (absolute mean revision), MSE (mean square error), and Variance.

The low bias of M3 revisions is apparently borne out in these analyses, where its figures are much lower than those of any other stage. However, the source data available at the M3 stage are limited to short-term indicators, quarterly surveys, and some data extrapolated from the latest available benchmarks. Given these limitations, it seems reasonable to assume that the M3 stage must be biased, even though the analyses do not show this.

As would be expected, the stages with big biases (BB1 and Post-BB2) also have high mean absolute biases and high mean squared errors.

The BB2 stage shows how important it is to look beyond a mean when assessing bias. The mean revision of the BB2 stage (0.021 percentage points) is relatively low, which would seem to indicate no extreme bias. However, the fact that it had the highest value (0.179 percentage points) of m(ABS) reveals that there are relatively large revisions applied at this stage even though they mainly offset one another (see also Figure 2).

The mean square error (MSE) is a measure that confines the notion of the bias and the dispersion of the revised quarters at the specific stage of revisions. The BB2 stage had the highest MSE value (0.044 percentage points) of any stage, suggesting that the largest revisions occurred at this stage. The BB2 also had the highest variance (0.044 percentage points), indicating that it had a greater spread of revisions.

Frequency distributions of the revisions

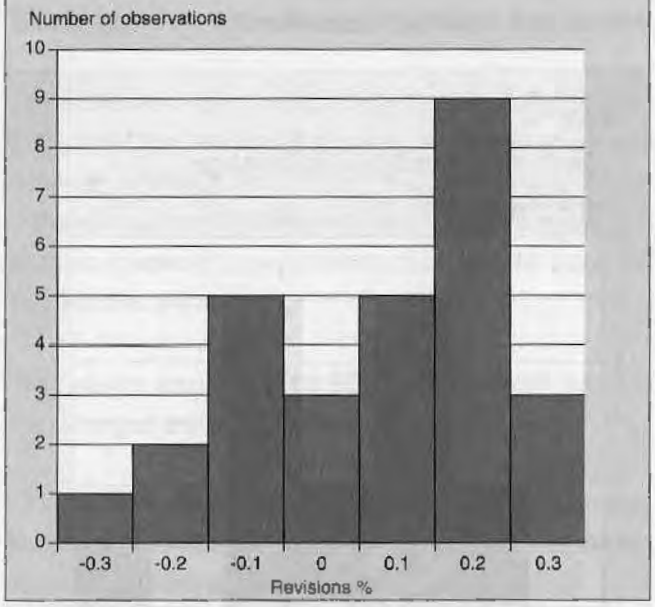
The frequency distributions of the revisions for the period of 1993 Q1–1999 Q4 are presented in Figures 3–7. The horizontal axis records the values (appropriately rounded) of the revisions. The vertical axis records the frequency of revisions.

Figure 3 shows the histogram of revisions at the Month 3 stage, where the interval is a constant of 0.1 percentage points. The dispersion at this stage was small and clearly clustered around the mean.

A slightly higher dispersion of the revisions occurred at the Blue Book One stage. At this stage the data are compiled from additional annual source data. Figure 4 shows that the revisions applied at this stage have a positive bias, with the mode of revisions occurring at the 0.2 percentage points' interval (9 observations).

Figure 4

Blue Book One stage



As was shown in Table 1, the largest dispersion of revisions occurred about 2 years after the first estimate was published. During the Blue Book Two stage a complete set of annual source data becomes available, and the supply-use input-output tables are produced. Figure 5 shows the revisions at the Blue Book Two stage, where the intervals of 0.1 and 0.2 percentage points each recorded 6 observations.

Figure 3

Revisions at Month 3 stage

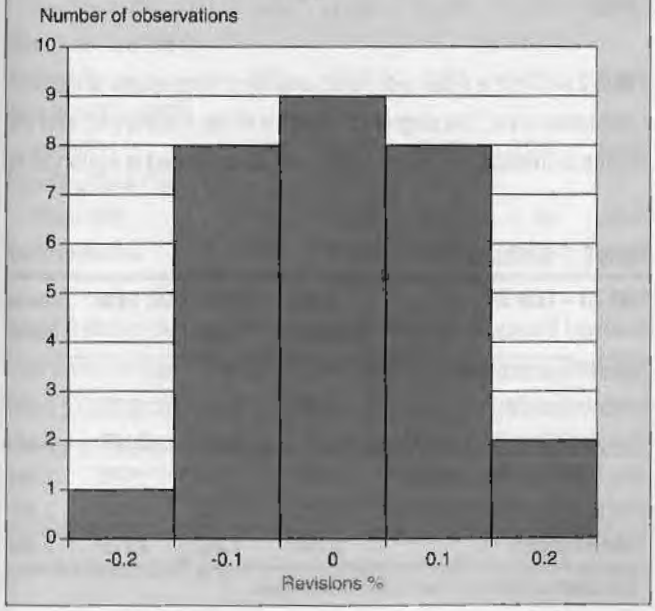
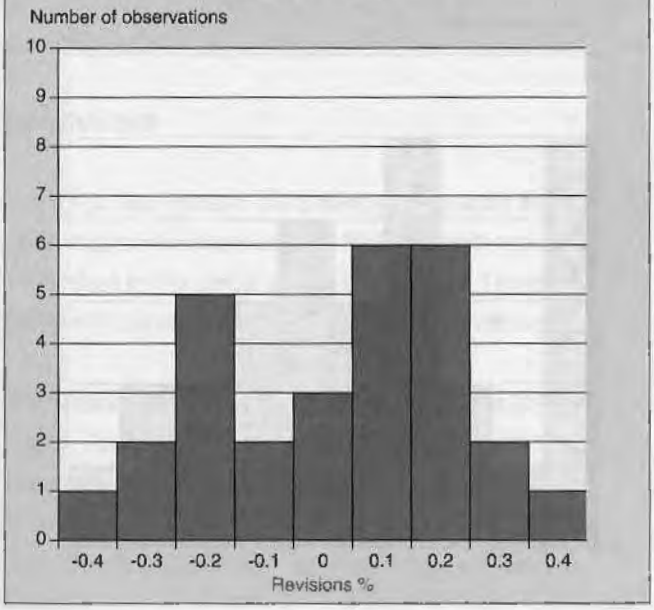


Figure 5

Revisions at Blue Book Two stage



The post-Blue Book Two stage was dominated by positive revisions, and the dispersion intervals were between –0.2 and 0.4 percentage points. Figure 6 shows bimodality[2] of revisions occurred in 0 and 0.2 intervals, each containing 7 observations.

Figure **6**

Revisions at Post Blue Book Two stage

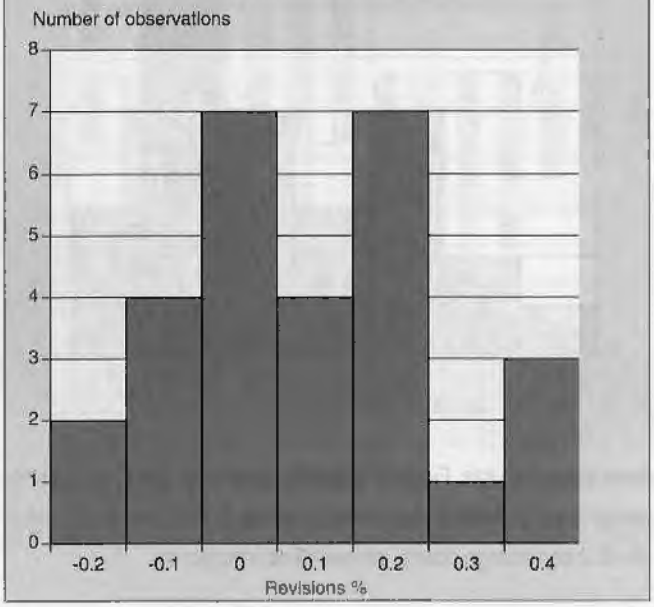
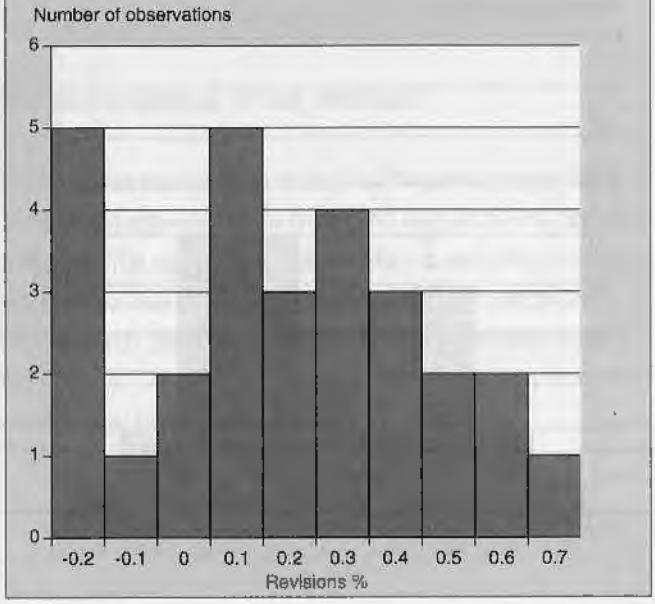


Figure 7 shows that the frequency distribution of the Total Revisions was a mainly positive bias, with dispersion between –0.2 and 0.7 percentage points.

Figure **7**

Total Revisions



Tests of statistical significance

A widely used method to test whether the observed mean is statistically significant from zero is the statistic *t (t-stat)*. The null hypothesis says that, for a given stage, there is no material difference between the mean of its revisions and a hypothesised mean of zero – i.e., that there is no material bias in that stage's revision.

An alternative hypothesis can be formulated. In the present case, the null hypothesis is two-tailed, which states that the mean is not equal to zero.

If the observed *t-stat* is more extreme than the critical value determined by the appropriate *t* distribution, the null hypothesis is rejected. The critical value depends on the significance level of the test (the probability of erroneously rejecting the null hypothesis).

The test *t-stat* is given by the following equation:

$$t = \frac{\bar{x} - \mu_x}{\sqrt{\frac{\sigma_x^2}{n}}}$$

Where:

$\bar{x}$ – the mean revision at a particular stage;

μ_x – the hypothesised value of the mean, zero in this case;

σ_x^2 – the variance of the revisions at a particular stage;

n – the number of observations (quarters).

It is standard practice to use a test statistic *t* adjusted for the existence of a serial correlation between quarters (*see* Appendix A for more details).

The virtue of the adjusted t-statistic (*adj. t-stat*) is that it takes into account the concept that the revision applied to GDP growth in a given quarter is dependent upon its previous value (*see* Priestley, 1981).

Table 2 shows the *t-stat*, *adj. t-stat*, and the critical values at the 0.95 confidence level. The degree of freedom of the *t-stat is* n-1, and the degree of freedom of the *adj. t-stat* is n*, as described in Appendix A.

Table 2: T-statistics

1993 Q1 – 1999 Q4	t -stat (sample)	Critical Value	adj. t-stat	Critical Value
Month Three (M3) *less* Month One (M1)	0.372	2.052	0.372	2.048
Blue Book One (BB1) *less* M3	2.257*	2.052	2.127*	2.048
Blue Book Two (BB2) *less* BB1	0.541	2.052	0.719	2.064
Post Blue Book Two (Post-BB2)	2.768*	2.052	3.346*	2.056
Total Revisions	**3.749***	**2.052**	**2.778***	**2.064**

* Statistically significant at the 0.95 confidence level.

The two tests of the *t-stat* in Table 2 indicate that the BB1 and Post-BB2, as well as, the Total Revisions are all statistically significant at the 0.95 confidence level. This clearly indicates the presence of bias in these revisions.

It is worthwhile mentioning that the evidence of positive bias in the Blue Book One stage has emerged only since the previous article (Richardson, 2002). This is because there were more quarters with high upwards revisions in the present analysis than in the earlier analysis (*see* Figure 2).

Evidence for the relationships between the revisions and the quarterly GDP growth

Other useful statistics, important for analysing the relationships between the revisions and the quarterly GDP growth are:

- Ratio of the number of Upwards versus Downwards revisions (U/D), compared to the estimated GDP growth rates at the different revisions stages;
- Correlation coefficient (R) of revisions in a given stage with the latest GDP growth;
- Relative mean ratio –r(Mean) – the ratio of a stage is the mean of its revisions divided by its mean GDP growth rates. Accordingly, the relative absolute mean is defined rm(ABS) (Oeller and Hansson 2002);
- Relative Standard Deviation ratio r(SD) – the ratio of a stage is given by the standard deviation of its revisions divided by standard deviation of GDP growth rates.

Table 3: Correlation coefficient and relative revisions

1993 Q1–1999 Q4	U/D	R	r(Mean)	rm(ABS)	r(SD)
Month Three (M3)					
less Month One (M1)	10/9	0.150	0.012	0.127	0.436
Blue Book One (BB1)					
less M3	17/8	0.309	0.103	0.228	0.541
Blue Book Two (BB2)					
less BB1	15/10	0.320	0.030	0.251	0.660
Post Blue Book Two					
(Post-BB2)	15/6	0.248	0.112	0.189	0.545
Total revisions	**20/6**	**0.660**	**0.257**	**0.796**	**0.848**

Table 3 shows that the two stages with the largest upward biases in their revisions also have high U/D ratio – BB1 with 17/8, and Post-BB2 with 15/6. In contrast, the two stages with lower upward biases in their revisions have lower U/D ratios – M3 with 10/9, and BB2 with 15/10.

All this seems to have an effect on the correlation of the revisions with the latest GDP growth. The correlation coefficient (R) indicates M3 as having the lowest correlation with GDP growth. Much higher correlations with the GDP growth are shown by the next revisions stage. These are highest in BB1 (0.309) and BB2 (0.320), and lower, but still high, in Post-BB2.

The above shows the importance of the revisions occurring at the BB2 stage. During this stage a complete set of annual source data becomes available from surveys and censuses, and from administrative records. These are then processed through the Input and Output framework to ensure a balance between the Supply and Demand sides of the economy.

The revisions applied after the BB2 stage are limited mainly to methodological changes.

Other important statistics for the revisions analysis are relative ratios, such as: relative mean ratio – r(Mean), relative ratio of absolute mean revisions - rm(ABS) and relative standard deviation – r(SD).

The r(mean) ratio for the Total Revisions was 0.257, which means that the GDP growth indicated by the preliminary estimate was on average 26 per cent too low. For example, a preliminary estimate showing quarterly GDP growth of 0.6 per cent will on average change by 0.2 percentage point after the latest revisions. (Oeller and Hansson, 2002)

However, the analysis of the relative ratios by stage of revisions seems to confirm a tendency in BB2 mentioned earlier. This tendency is that although the BB2's relative mean of absolute revisions – rm(ABS) is high, the corresponding value of the relative mean revisions – r(Mean) is low. This indicates that the revisions applied at this stage are thoroughly investigated and balanced. However, the relative standard deviation – r(SD) reveals that this sophisticated revisions process causes the revisions to offset one another in different quarters.

Conclusions

The article has indicated the presence of a positive bias of 0.189 percentage points in the revisions to the GDP growth rates at constant 1995 prices for the period of 1993 Q1–1999 Q4. This is consistent with the finding in the earlier ONS work by Richardson (2002).

The results of the Revisions Analysis provided evidence that two stages, Blue Book One and Post Blue Book Two, are significantly different from zero at the 0.95 confidence level. This is a slightly different picture than that presented by Richardson for the period of 1993 Q1–1998 Q4.