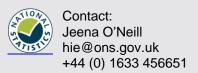


Statistical bulletin

# Effects of taxes and benefits on UK household income: 2012 to 2013

Analysis of how household incomes in the UK are affected by direct and indirect taxes and benefits received in cash or kind, and the changing levels of income inequality over time.



Release date: 26 June 2014

Next release: 29 June 2015

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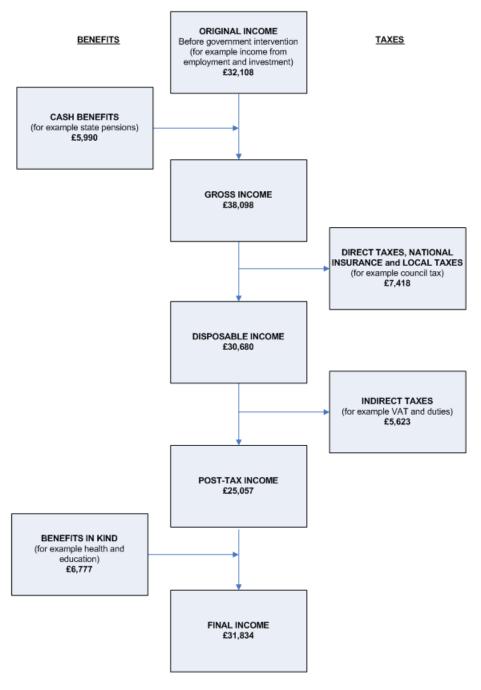
# 1. Main points

- Before taxes and benefits the richest fifth of households had an average income of £81,300 in 2012/13, almost 15 times greater than the poorest fifth who had an average income of £5,500
- Overall, taxes and benefits lead to income being shared more equally between households. After all taxes
  and benefits are taken into account the ratio between the average incomes of the top and the bottom fifth
  of households (£59,900 and £15,600 per year respectively) is reduced to four-to-one
- Fifty-two per cent of households received more in benefits (including in-kind benefits such as education) than they paid in taxes in 2012/13. This is equivalent to 13.8 million households
- The average disposable income in 2012/13 was unchanged from 2011/12, but it remains lower than at the start of the economic downturn, with equivalised disposable income falling by £1,200 since 2007/08 in real terms. The fall in income has been largest for the richest fifth of households (5.2%). In contrast, after accounting for inflation and household composition, the average income for the poorest fifth has grown over this period (3.5%)
- There was a slight increase in income inequality between 2011/12 and 2012/13, based on some inequality measures. Despite this, income inequality is broadly unchanged from other recent years
- Cash benefits made up 56.4% of the gross income of the poorest fifth of households (£7,200), compared with 3.2% (£2,700) of the income of richest fifth
- The richest fifth of households paid £29,500 in taxes (direct and indirect) compared with £4,700 for the
  poorest fifth, though both groups paid a similar proportion of their gross income (35.1% and 37.4%
  respectively)
- Average disposable income of retired households has risen 7.9% (£1,700) since 2007/08, after accounting
  for inflation and household composition. The rise in income was largest for the bottom fifth of retired
  households (14%). For non-retired households it has fallen 6.3% (£2,100). The fall in income has been
  smallest for the bottom fifth of non-retired households (2.0%)

# 2. Stages of redistribution

This release looks at how taxes and benefits affect the distribution of income and breaks this process into five stages. These are summarised below and in Diagram A:

- 1. Household members begin with income from employment, private pensions, investments and from other non-government sources. This is referred to as 'original income'
- 2. Households then receive income from cash benefits. The sum of cash benefits and original income is referred to as 'gross income'
- 3. Households then pay direct taxes. Direct taxes, when subtracted from gross income is referred to as 'disposable income'
- 4. Indirect taxes are then paid via expenditure. Disposable income minus indirect taxes is referred to as 'post-tax income'
- 5. Households finally receive a benefit from services (benefits in kind). Benefits in kind plus post-tax income is referred to as 'final income'



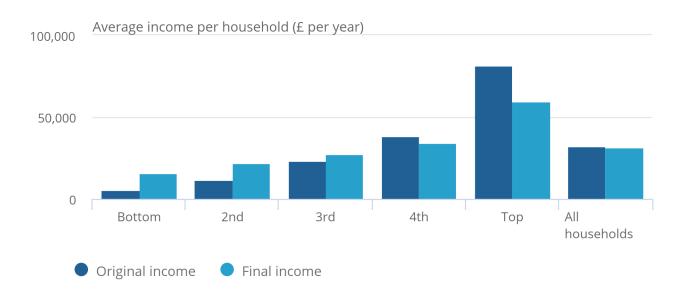
Source: Office for National Statistics

# 3. Summary of results for all households

The overall impact of taxes and benefits are that they lead to income being shared more equally between households. In 2012/13, before taxes and benefits, the richest fifth (those in the top income quintile group) had an average original income of £81,300 per year, compared with £5,500 for the poorest fifth – a ratio of nearly 15 to 1. This ratio is broadly unchanged from 2011/12, indicating that inequality of original income has not changed substantially between the two years, according to this measure. Original income includes earnings, private pensions 1 and investments.

Figure 1: The effects of taxes and benefits on household income by quintile groups, ALL households, 2012/13

Figure 1: The effects of taxes and benefits on household income by quintile groups, ALL households, 2012/13



**Source: Office for National Statistics** 

#### Notes:

1. Households are ranked by their equivalised disposable incomes, using the modified OECD scale

# Impact of cash benefits

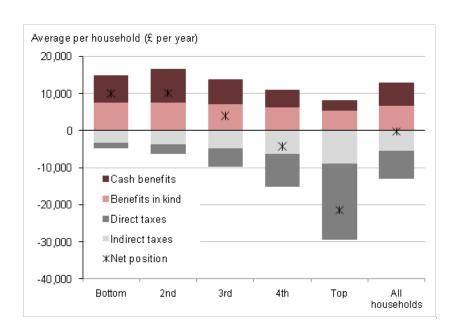
In contrast to original income, the amount received from cash benefits such as tax credits, Housing Benefit and Income Support tends to be higher for poorer households than for richer households. The highest amount of cash benefits was received by households in the second quintile group, £8,800 per year compared with £7,200 for households in the bottom group. This is largely because more retired households are located in the second quintile group, compared with the bottom group, and in this analysis the state pension is classified as a cash benefit.

The distribution of cash benefits between richer and poorer households has the effect of reducing inequality of income. After cash benefits were taken into account, the richest fifth had an average income that was roughly six and a half times the poorest fifth (gross incomes of £84,000 per year compared with £12,700, respectively), a proportion that was broadly unchanged on the previous year.

Looking at individual cash benefits, the average amount of tax credits received by the poorest fifth of houses fell between 2011/12 and 2012/13. This may be partly explained by some of the changes which occurred to tax credits in this year, including an increase in the weekly working hours requirement in Working Tax Credit from 16 to 24 for couples with children, the introduction of a disregard for within-year falls in income (which would previously have triggered increases in tax credit entitlements), and reductions in backdating of claims.

Another key change to tax credits was the withdrawal of the family element of Child Tax Credit at lower income levels than before. This is likely to have contributed to reductions in income from tax credits further up the income distribution.

Figure 2: Summary of the effects of taxes and benefits on ALL households, 2012/13



**Source: Office for National Statistics** 

#### Notes:

1. Households are ranked by their equivalised disposable incomes, using the modified OECD scale

# Impact of direct taxes

On average, households paid £7,400 per year in direct taxes, equivalent to 19% of their gross income. Richer households pay both higher amounts of direct tax and higher proportions of their income in direct taxes (Income Tax, National Insurance, and Council Tax and Northern Ireland rates). As a result, direct taxes also reduce inequality of income.

The richest fifth of households paid on average £20,300 per year in direct taxes, the vast majority of which was Income Tax. This corresponds to 24% of their gross income, broadly unchanged from other recent years.

The average direct tax bill for the poorest fifth was £1,300 per year, of which the largest component was Council Tax/rates. This was equivalent to 10% of gross household income for this group, unchanged from last year.

The richest fifth of households had disposable incomes that were around five and a half times that of the poorest fifth (£63,600 per year and £11,400, respectively), a similar ratio to 2011/12.

## Impact of indirect taxes

The amount of indirect tax (such as VAT, and duties on alcohol and fuel) each household pays is determined by their expenditure rather than their income. The richest fifth of households paid just over two and a half times as much indirect tax as the poorest fifth (£9,100 and £3,500 per year, respectively). This reflects greater expenditure on goods and services subject to these taxes by higher income households. However, although richer households pay more in indirect taxes than poorer ones, they pay less as a proportion of their income. This means that indirect taxes act to increase inequality of income.

In 2012/13, the richest fifth of households paid 14% of their disposable income in indirect taxes. This is unchanged from 2011/12. The bottom fifth of households paid 31% of their disposable income in indirect taxes, an increase from 2011/12.

When expressed as a percentage of expenditure, the proportion paid in indirect tax declines less sharply as income rises. The bottom fifth of households paid 20% of their expenditure in indirect taxes compared with 17% for the top fifth. The figure for the poorest fifth is a decrease on last year, when the proportion was 21%, while the figure for the richest fifth is broadly unchanged. The combination of an increase in indirect taxes as a percentage of disposable income and a decrease as a percentage of expenditure for the bottom fifth of households is explained by the average disposable income for this group falling slightly between 2011/12 and 2012/13 after adjusting for inflation, but average expenditure increasing.

When looking at the total proportion of income paid in taxes (both direct and indirect) there is considerably less variation across the income distribution. Overall, 37% of the gross income of the poorest fifth of households was accounted for by direct and indirect taxes, while the richest fifth paid 35% of their income in taxes. Both are unchanged from 2011/12. The lowest effective total tax rate was for the second poorest fifth of households, who paid 30% of their gross income in tax. After indirect taxes, the richest fifth had post-tax household incomes that were nearly seven times those of the poorest fifth (£54,500 compared with £7,900 per year, respectively). This is a very slight increase from 2011/12, when the ratio was closer to six to one.

Table 1: Taxes as a percentage of gross income, disposable income and expenditure for ALL households by quintile groups, 2012/13

		Quintile groups of ALL households <sup>1</sup>							
	Bottom	2nd	3rd	4th	Тор	All households			
(a) Percentages of gross income									
Direct taxes	10	11	16	20	24	20			
Indirect taxes	28	19	17	15	11	15			
All taxes	37	30	33	35	35	34			
(b) Percentages of disposable income									
Indirect taxes	31	22	20	19	14	18			
(c) Percentages of expenditure <sup>2</sup>									
Indirect taxes	20	20	20	19	17	19			

Source: Office for National Statistics

Notes:

- 1. Households are ranked by equivalised disposable income, using the modified-OECD scale
- 2. Calculated to be consistent with disposable income. See Further Analysis and Methodology section for the definition of expenditure

## Impact of benefits in kind

This publication also considers the effect on household income of certain benefits received in kind. Benefits in kind are goods and services provided by the Government to households that are either free at the time of use or at subsidised prices, such as education and health services. These goods and services can be assigned a monetary value based on the cost to the Government which is then allocated as a benefit to individual households. The poorest fifth of households received the equivalent of £7,600 per year from all benefits in kind, compared with £5,400 received by the top fifth. This is partly due to households towards the bottom of the income distribution having, on average, a larger number of children in state education. After the impact of benefits in kind is taken into account, the ratio of the richest fifth of households' final income to the poorest fifth's is reduced to less than four-to-one (£59,900 per year and £15,600, respectively).

Overall, 52% of households received more in benefits (including in-kind benefits such as education) than they paid in taxes (direct and indirect) in 2012/13, unchanged from the previous year. This is equivalent to 13.8 million households.

Table 2: Summary of the effects of taxes and benefits by quintile groups on ALL households, 2012/13

Quintile groups of ALL households 1

	Bottom	2nd	3rd	4th	Тор	All households	Ratio Top/Bottom quintile
Original income	5,536 1	1,9522	23,069	38,697	31,284	32,108	14.7
plus cash benefits	7,154	8,817	6,622	4,691	2,666	5,990	0.4
Gross income	12,6902	0,7692	29,692	43,388	33,950	38,098	6.6
less direct taxes and employees' NIC	1,256	2,257	4,620	8,635	20,322	7,418	16.2
Disposable income	11,4341	8,5122	25,072	34,753	63,628	30,680	5.6
less indirect taxes	3,488	3,986	5,029	6,474	9,140	5,623	2.6
Post-tax income	7,946 1	4,5272	20,043	28,279	54,488	25,057	6.9
plus benefits in kind	7,646	7,617	7,026	6,193	5,403	6,777	0.7
Final income	15,5922	2,1432	27,069	34,472	59,890	31,834	3.8
Household type (percentages)							
Retired	34	41	29	21	11	27	
Non-retired	66	59	71	79	89	73	
All household types	100	100	100	100	100	100	

Source: Office for National Statistics

Notes:

## Notes for Summary of results for all households

1. Private pensions include all non-state pensions whether occupational or personal

<sup>1.</sup> Households are ranked by equivalised disposable income, using the modified-OECD scale

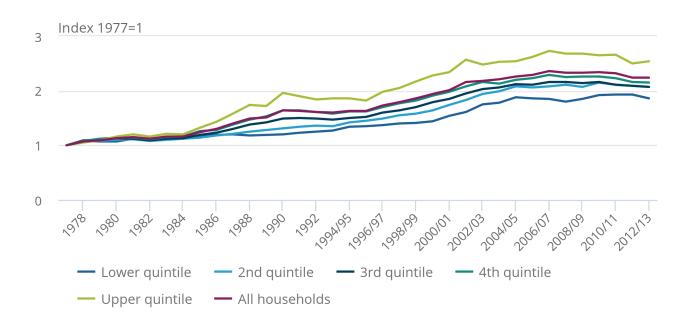
# 4. Longer-term trends in household income

The average household disposable income was £30,700 in 2012/13. After taking account of inflation and changes in household structures over time, the average disposable income was 2.24 times higher in 2012/13 than in 1977. Most of this growth in average incomes occurred during the late 1980s and late 1990s.

However, incomes have not grown evenly across the income distribution. The average disposable income for the richest fifth of households in 2012/13 was just over two and a half (2.53) times higher than in 1977, once inflation and household composition were accounted for. The average income of the poorest fifth of households has also grown over this time, but the rate of growth has been slower (1.86 times higher in 2012/13 than 1977).

Figure 3: Growth in equivalised household disposable income, 1977 to 2012/13

Figure 3: Growth in equivalised household disposable income, 1977 to 2012/13



**Source: Office for National Statistics** 

#### Notes:

1. Households are ranked by their equivalised disposable incomes, using the modified-OECD scale

Since the start of the recent economic downturn, household incomes have fallen, with the average disposable income falling by £1,200 (or 4.0%) between 2007/08 and 2012/13, after accounting for inflation and household structure. Most of this fall occurred between 2009/10 and 2011/12, with the average income in 2012/13 unchanged from the previous year.

The level of change since 2007/08 has varied considerably across the income distribution. The largest fall in incomes over this period has been for the richest fifth of households, whose disposable income has fallen by £3,300 (or 5.2%) in real terms. This has been largely driven by a fall in average income from employment (including self-employment). The average income of the middle fifth of households fell by £1,100 (or 4.3%) over this same period, after adjustments for inflation and household composition.

By contrast, the average income of the poorest fifth has risen by £400 (or 3.5%) since 2007/08. This is mainly due to an increase in the average income from employment for this group, along with an increase in the average amount received in certain cash benefits such as tax credits and Jobseeker's Allowance. The increase in average income from employment is associated with the changing make-up of this group since 2007/08. While the proportion of households in the bottom fifth whose 'chief economic supporter' is either in employment or unemployed has increased, the proportion whose 'chief economic supporter' is retired has fallen. This reflects an ongoing pattern of retired households moving up the overall income distribution, due to their incomes growing at a faster rate than those of non-retired households (see <a href="Incomes of Retired Households">Incomes of Retired Households</a>, 1977-2010/11 for further details and analysis).

Further analysis of longer-term trends in household income, including more detailed examination of different population groups and components of income, will be published later in the year.

# 5. Retired households

Retired households are those where the income of retired household members accounts for the majority of the total household gross income (see the background note for the definition of a retired person). Retired households have different income and expenditure patterns to their non-retired counterparts.

Retired households are much more likely to be towards the bottom of the income distribution than at the top of the distribution. Whereas retired households made up 34% and 41% of the bottom and second quintile groups respectively, they only made up 11% of the richest fifth in 2012/13. However, the relative position of retired households has improved over time. For example, ten years previously (2002/03), retired households made up 41% of the bottom fifth and 7% of the top fifth of the income distribution.

Among retired households, there is a higher degree of income inequality before taxes and benefits than for non-retired households. One way of looking at income inequality is to see what proportion of income is received by the richest fifth (20%) of households. In 2012/13, the richest fifth of retired households received 58% of total original income for all retired households. In comparison, the richest fifth of non-retired households received 47% of total income for that group.

Another widely used measure of inequality in the distribution of household income is the Gini coefficient. Gini coefficients can vary between 0 and 100 and the lower the value, the more equally household income is distributed. In 2012/13, the Gini coefficient for original income was 62% for retired households, compared with 46% for non-retired households.

Taxes and benefits have a particularly significant redistributive effect on the income of retired households, meaning that, in contrast, disposable income inequality is much lower for retired households than for non-retired households. Cash benefits play by far the largest part in bringing about this reduction, due principally to the state retirement pension. Retired households' Gini coefficient for disposable income was 26% in 2012/13, compared with 34% for non-retired households. The corresponding coefficients for 2011/12 were 26% and 33%, respectively.

As highlighted in the section on Changes to Benefits and Taxes in 2012/13, State Pension rose by 5.2% in April 2012. This rise contributed to the average equivalised disposable income for retired households rising by £200 a year after accounting for inflation. Since 2007/08, the average disposable income for retired households has risen 7.9% (£1,700) in real terms, compared with a 6.3% (£2,100) fall for non-retired households.

On average, the poorest fifth of retired households received £8,100 per year from cash benefits in 2012/13. Those in the other quintile groups received, on average, between £10,600 and £12,700 per year. Cash benefits represent half (50%) of retired households' total gross income on average, a proportion which is higher for poorer households and lower for richer households (79% for the poorest fifth of retired households and 26% for the richest fifth). Of the total value of retired households' cash benefits, just over three-quarters (78%) was due to State Pension, on average.

Retired households derive significantly higher benefits from the National Health Service (NHS) than non-retired households, on average. The benefit in kind from the NHS is spread fairly evenly across the income range of retired households and in 2012/13 it was worth an average of £5,700 per year, per household. The benefit derived from the NHS makes up 96% of the total benefit in kind received by retired households, on average. This is in comparison to £3,400 (47%) for non-retired households.

Table 3: Summary of the effects of taxes and benefits on RETIRED households by quintile groups, 2012 /13

	Quintile groups of ALL households <sup>1</sup>								
	Bottom	2nd	3rd	4th	Тор	All retired households	Ratio Top/Bottom quintile		
Original income	2194	3771	5792	11912	30984	10931	14		
plus Total cash benefits	8130	10562	12008	12675	11034	10882	1		
Gross income	10324	14332	17800	24586	42019	21812	4		
less Direct taxes	1044	1117	1427	2678	6676	2588	6		
Disposable income	9280	13216	16373	21908	35343	19224	4		
less Indirect taxes	2863	2744	3425	4352	6224	3922	2		
Post-tax income	6417	10472	12948	17556	29119	15302	5		
Final income	12017	16211	19126	23886	34942	21237	3		
Cash benefits as a percentage of gross income	79	74	67	52	26	50			
State Pension as a percentage of cash benefits	83	77	73	75	83	78			

Source: Office for National Statistics

Notes

The extent to which retired households are major beneficiaries from redistribution through the tax and benefit system can be further seen by comparing average incomes of the top and bottom fifths of retired households. Before taxes and benefits, the richest fifth of retired households had an average total original income of £31,000 per year. This is over 14 times that of the poorest fifth (£2,200 per year). The richest fifth of retired households had an average disposable income of £35,300 per year in 2012/13, almost four times that of the poorest fifth (£9,300 per year). After all taxes and benefits, the ratio between the top and bottom fifths was further reduced to almost three-to-one (final incomes of £35,000 and £12,000 per year, respectively), unchanged on the ratio for the two previous years.

<sup>1.</sup> Households are ranked by equivalised disposable income, using the modified-OECD scale

# 6. Non-retired households

Taxes and benefits also lead to income being shared more equally between non-retired households, though the effect is smaller than for retired households. Before taxes and benefits, there is less inequality of non-retired households' income than for retired households. However, after the process of redistribution, inequality of post-tax income (as measured, for example, by the Gini coefficient) is greater than that for retired households. In 2012 /13 the Gini coefficient for post-tax income was 38% for non-retired households compared with 31% for retired households. The equivalent Gini for non-retired households was 37% in 2011/12. This means that, according to post-tax income, inequality has increased slightly since 2011/12 for non-retired households.

In 2012/13, the average original income for non-retired households was £40,100 per year. As might be expected, the original income of non-retired households showed a relatively strong relationship to the number of economically active people they contained. On average, households in each of the top three quintile groups contained almost twice as many economically active people as those in the lowest group.

Cash benefits provided 47% of gross income for non-retired households in the bottom fifth, falling to less than 2% for non-retired households in the richest fifth. Their payment results in a significant reduction in income inequality. The patterns for direct and indirect taxes are similar to those described for all households.

Of those benefits in kind for which a value can be assigned to households, the largest two categories for non-retired households are education and health. The poorest fifth of non-retired households received the highest value from benefits in kind, on average £8,700 per year in 2012/13. This is mainly due to the relatively high average number of children per household in this part of the income distribution.

Table 4: Summary of the effects of taxes and benefits by quintile groups on NON-RETIRED households, 2012/13

	Quintile groups of Non-Retired households <sup>1</sup>							
	Bottom	2nd	3rd	4th	Тор	All households	Ratio Top/ Bottom quintile	
Original income	7624	19427	32761	48512	92069	40078	12	
plus cash benefits	6742	6123	3813	2392	1675	4149	0	
Gross income	14366	25550	36574	50904	93744	44228	7	
less direct taxes $^{\rm 2}$ and employees' NIC	1410	3439	6809	11010	23513	9236	17	
Disposable income	12956	22111	29766	39895	70231	34992	5	
less indirect taxes	3911	4718	5930	7059	9700	6264	3	
Post-tax income	9045	17393	23836	32836	60530	28728	7	
plus benefits in kind	8722	8525	7167	5926	5130	7094	1	
Final income	17767	25918	31003	38762	65660	35822	4	
Number of individuals per household								
Children <sup>3</sup>	1	1	1	1	0	1		
Adults	2	2	2	2	2	2		
Men	1	1	1	1	1	1		
Women	1	1	1	1	1	1		
People	3	3	3	3	2	3		
People in full-time education	1	1	1	1	0	1		
Economically active people	1	1	2	2	2	2		
Retired people	0	0	0	0	0	0		

Source: Office for National Statistics

#### Notes:

- 1. Households are ranked by equivalised disposable income, using the modified-OECD scale
- 2. These are: Income Tax (after deducting tax credits), Employees' National Insurance contributions and Council Tax/Northern Ireland rates (after deducting discounts, Council Tax benefits and rates rebates)
- 3. Children are defined as people aged under 16 or aged between 16 and 19, not married nor in a Civil Partnership, nor living with a partner; and living with parent(s)/guardian(s); and and receiving non-advanced further education or in unwaged-government training

# 7. Longer-term trends in income inequality

Analysis of these data over time shows that, overall, income inequality, as measured by the Gini coefficient, increased considerably during the 1980s, but since then the changes have been smaller in scale.

As described above, the Gini coefficient is a measure of income inequality. Gini coefficients can vary between 0 and 100 and the lower the value, the more equally household income is distributed.

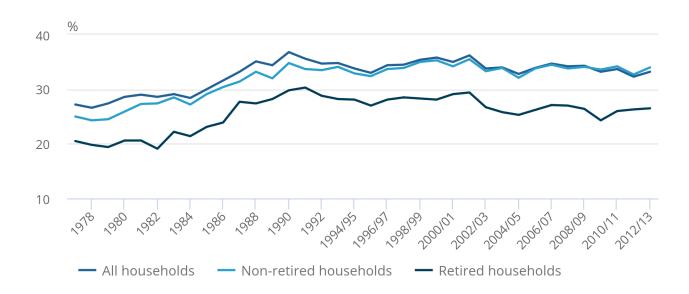
Looking at the results for all households, the 1980s were characterised by a large increase in inequality of disposable income, particularly during the second half of that decade. Following that rise, inequality of disposable income reduced slowly from 1990 until the mid-1990s, although it did not fully reverse the rise seen in the previous decade. In the late 1990s, income inequality rose slightly before falling once again in the early 2000s.

In recent years the trend has been broadly flat. The Gini coefficient for disposable income in 2012/13 was 33.2%, a slight increase from its 2011/12 value of 32.3%, but in line with the longer term trend.

Inequality of disposable income for retired households has followed a similar trend, increasing significantly during the 1980s and peaking at 30.3% in 1991. Since then the broad trend has been downwards, though income inequality levels remain above those seen in the late 1970s and early 1980s. There has been more year-on-year variation in the Gini coefficients for retired households than for the overall population, though this is primarily a consequence of the smaller sample size on which these estimates are based. In 2012/13, the Gini coefficient for disposable income amongst retired households was 26.5%, broadly unchanged from the previous year (26.3%).

Figure 4: Gini coefficients, 1997 to 2012/13

Figure 4: Gini coefficients, 1997 to 2012/13



**Source: Office for National Statistics** 

Notes:

1. Households are ranked by equivalised disposable income, using the modified-OECD scale

# 8. Changes to taxes and benefits in 2012/13

This section provides information and analysis on some of the main changes to taxes and benefits in 2012/13.

## Child and working tax credits

There were a number of changes made to tax credits: One of these relates to the withdrawal of the family element of Child Tax Credit (CTC). In 2012/13, the £545 family element was withdrawn immediately after the child element. Previously, the family element was protected until income reached the upper income limit of £40,000.

Another key change was an increase in the weekly working hours requirement for Working Tax Credit. From 2012 /13, couples with children must work 24 hours between them, up from 16 hours.

It is likely that the increase in working hours requirement will have had the largest impact on the bottom quintile. By contrast the withdrawal of the family element of CTC at lower income levels will have had a larger impact further up the distribution.

Other changes include a new disregard which meant that tax credits would not be adjusted until income fell by more than £2,500 compared to the previous year, along with a reduction in the maximum period of backdating of a new claim or an increased award to one month (down from three months).

## State pension

The pension 'triple lock' guarantees an increase to State Pension every year by the higher of inflation, average earnings or a minimum of 2.5%. This meant that in April 2012, State Pension increased by 5.2% (CPI inflation for September 2011), more than if it had been linked to average earnings.

It is the fourth (second-richest) quintile of retired households who, on average, received the highest income from State Pension in 2012/13. However, State Pension makes up the highest proportion of the gross income of the poorest fifth of retired households.

## Child benefit

From the 6 April 2011, there was a freeze on the rates for Child Benefit for three years.

Starting 7 January 2013, where at least one spouse or partner in a household has income in excess of £50,000, a High Income Child Benefit charge is applied. For incomes above £60,000, the High Income Child Benefit charge is equal to the amount of Child Benefit received. Those affected by the charge can either elect to stop getting Child Benefit ('opt out') or pay any tax charge through self-assessment.

This change has had a limited impact on household incomes in 2012/13 due to its introduction late in the year, along with the fact that households will not have paid the high income benefit charge for the first time until completing their self-assessment during the 2013/14 financial year.

#### Income tax

There was an increase in the Personal Allowance, that is, the amount that individuals can receive in income without having to pay tax. This meant that:

- People aged under 65 received an increase from £7,475 to £8,105
- People age 65-74 received an increase from £9,940 to £10,500
- Over 75's received an increase from £10,090 to £10,660

As in previous years, the Personal Allowance is reduced by £1 for every £2 of additional taxable income over £100,000)

In addition, there was a reduction in the threshold for the higher rate tax bracket from £35,000 to £34,371. Combined with the Personal Allowance, this meant that people paid the higher rate of 40% on any taxable income above £42,476 (up to £150,000).

The increase in the Personal Allowance had a relatively small impact on the bottom fifth of households due to the smaller proportion of people with taxable incomes over the previous Personal Allowance of £7,475, in that group. Also, in higher quintiles, there are more households with two or more people with taxable incomes meaning that more than one person in the house will potentially be affected by the increased allowance. The decrease in the threshold for higher rate Income Tax contributed to higher income individuals receiving a smaller benefit from this change, relative to the size of their income.

## **National insurance contributions**

People in an occupational pension scheme or with an appropriate stakeholder or personal pension scheme are able to 'contract out' of the State Second Pension and pay a reduced rate of National Insurance contributions. This contracted out rebate was reduced from 1.6% to 1.4% in April 2012.

Additionally, the Class 2 National Insurance contributions rate for self-employed increased from £2.50 per week to £2.65.

## **Council Tax**

In 2012/13, 85% of eligible local authorities in England benefited from a Council Tax freeze grant. This meant that the average Council Tax per dwelling increased by 0.4% on 2011/12.

Council Tax levels were also frozen in Scotland. In Wales, the average band D Council Tax increased by 2.2% compared with 2011/12. There was also a 2.2% increase in domestic rates in Northern Ireland.

As Council Tax is regressive, with the bottom quintile paying the largest amount as a proportion of their gross income, it will be households in this group that have benefitted most in relative terms from any freeze. However, the absolute savings will be higher at the top of the income distribution.

## **Company cars**

Since 2002, tax charges on company cars have been based on the car's list price and official CO2 emission figure. The CO2 figure is converted to a percentage multiplier and applied to the list price for tax purposes. This determines the taxable benefit charge for the year. The tax bands in 2012/13 were changed to reflect falling average emissions for new cars in the UK.

There was a change to the Company Car Fuel Benefit Charge in 2012. This affected employees with company cars who received free fuel from their employers, and did not pay their employer back for the private use element of the fuel. The multiplier used to calculate the cash equivalent of the benefit of free fuel provided to employees increased from £18,800 to £20,200. The van fuel benefit charge multiplier was frozen at £550. All these changes mainly affect the upper end of the income distribution.

#### Alcohol and tobacco duties

#### Alcoholic drinks

The duty rates on alcoholic drinks increased by 2 per cent above the rate of inflation. This added 3 pence to the price of a pint of beer, 2 pence to the price of a litre of cider, 11 pence to the price of a bottle of wine and 41 pence to the price of a bottle of spirits.

The above inflation increases in alcohol duty are not obvious in the figures on average amounts paid in duty by households, as the duty rises appear to have been cancelled out by falling consumption. This is consistent with figures on consumption from <a href="Drink Habits Amongst Adults">Drink Habits Amongst Adults</a>, 2012 which showed a 2% fall in alcohol consumption between 2011 and 2012.

#### Tobacco

For all tobacco products, the duty rates were increased by 5 per cent above the rate of inflation. This added 37 pence to the price of 20 cigarettes and 12 pence to the price of a pack of five small cigars.

# 9. Future plans for publication

There has been strong user demand for ONS to investigate the feasibility of improving the timeliness of some of the key income series published within the Effects of Taxes & Benefits release.

The figures within this bulletin on indirect taxes and benefits in kind take longer to produce than the other components of income (original income, cash benefits and direct taxes) due to the large number of external data sources used. As it should be possible to produce and fully quality assure figures up to and including disposable income by an earlier date it is proposed that this publication will be separated out into two separate releases.

ONS therefore plans to publish a new short bulletin in February/March 2015. The aim of this release will be to provide users with key income statistics for 2013/14 at the earliest opportunity, along with longer term trends (going back to 1977), which are an important aspect of the Effects of Taxes & Benefits series. The statistics in this release will potentially include measures such as median disposable income, inequality measures such as the Gini, and breakdowns of the components of disposable income by quintile and decile groups.

The full Effects of Taxes & Benefits on Household Income 2013/14 data and release, including indirect taxes and benefits in kind will be published in June/July 2015.

This approach is consistent with the Code of Practice for Official Statistics, particularly Principle 1, Practice 4, which says that statistical reports should be published according to a timetable that takes account of user needs.

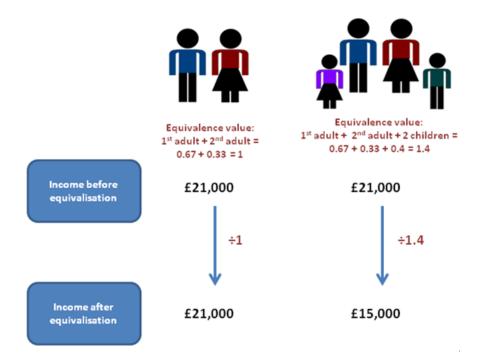
ONS welcomes any comments from users of this data on the measures, indicators and comparisons that they would like to be included in this new publication.

# 10. Background notes

- 1. Today's analysis, along with 'The effects of taxes and benefits on household income, 2012/13: Further analysis and methodology' can be found on the Office for National Statistics website.
- 2. This analysis has been undertaken each year since the early 1960s. Historical tables, including data from 1977 onwards are also published today, along with an implied deflator for the household sector, which can be applied to adjust for the effects of inflation. Differences in the methods and concepts used mean that it is not possible to produce consistent tables for the years prior to 1977 and only relatively limited comparisons are possible for these early years. All comparisons with previous years are also affected by sampling error (for more details see the methodology article).

#### 3. Glossary

**Equivalisation**: Income quintile groups are based on a ranking of households by equivalised disposable income. Equivalisation is the process of accounting for the fact that households with many members are likely to need a higher income to achieve the same standard of living as households with fewer members. Equivalisation takes into account the number of people living in the household and their ages, acknowledging that whilst a household with two people in it will need more money to sustain the same living standards as one with a single person, the two person household is unlikely to need double the income.



This analysis has used the <u>modified-OECD equivalisation scale (165.7 Kb Pdf)</u> since 2009/10. Previously the McClements Scale was used.

4. Gini coefficients: The most widely used summary measure of inequality in the distribution of household income is the Gini coefficient. The lower the value of the Gini coefficient, the more equally household income is distributed. A Gini coefficient of 0 would indicate perfect equality where every member of the population has exactly the same income, whilst a Gini coefficient of 100 would indicate that one person would have all the income.

5. **Income quintiles**: Households are grouped into quintiles (or fifths) based on their equivalised disposable income. The richest quintile is the 20% of households with the highest equivalised disposable income. Similarly, the poorest quintile is the 20% of households with the lowest equivalised disposable income.



- 6. Household income: This analysis uses several different measures of household income. Original income (before taxes and benefits) includes income from wages and salaries, self-employment, private pensions and investments. Gross income includes all original income plus cash benefits provided by the state. Disposable income is that which is available for consumption, and is equal to gross income less direct taxes. Post-tax income is calculated by estimating the payment of indirect taxes, and deducting these from disposable income. Final income is calculated as post-tax income plus benefits in kind received from the state.
- 7. **Retired persons and households**: A retired person is defined as anyone who describes themselves (in the Living Costs & Food survey) as 'retired' or anyone over minimum National Insurance pension age describing themselves as 'unoccupied' or 'sick or injured but not intending to seek work'. 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.

#### 8. Users and uses of these statistics

The statistics contained within this release are of particular interest to HM Treasury (HMT), HM Revenue and Customs (HMRC) and the Department for Work and Pensions (DWP) in determining policies on taxation and benefits and in preparing Budget and pre-budget reports. Analyses by HMT based on this series, as well as the underlying LCF dataset, are published alongside the Budget. A dataset, based on that used to produce these statistics, is used by HMT in conjunction with the Family Resources Survey (FRS) in their Intra-Governmental Tax and Benefit Microsimulation Model (IGOTM). This is used to model possible tax and benefit changes before policy changes are decided and announced.

- 9. In addition to policy uses in Government, the statistics are frequently used and referenced in research work by academia, think tanks and articles in the media. These pieces often examine the impact of Government policy, or are used to advance public understanding of tax and benefit matters. The data used to produce this release is made available to other researchers via the UK Data Service.
- 10. These statistics allow for analysis of the distributional impact of government policy on taxes and benefits. They are the only statistics available that are able to give such a complete picture of the distribution of income including indirect taxes and benefits in kind. The 2009 report by the Commission on the Measurement of Economic Performance and Social Progress by Stiglitz, Sen and Fitoussi identified income distribution, in addition to measures of average income, as an important factor in the measurement of well-being, giving a more complete picture of the standards of living experienced by individuals.

#### 11. Quality and methodology information

A Quality and Methodology Information document (101.8 Kb Pdf) for these statistics is available on the ONS website.

12. The primary source of the estimates reported in this release is the Living Costs and Food survey (LCF). As the LCF is a sample survey, the estimates produced from it will be subject to sampling error. While each sample is designed to produce the 'best' estimate of the true population value, a number of equal sized samples covering the population would generally produce varying population estimates. A 95% confidence interval is a range within which the true population would fall for 95% of the times the sample survey was repeated. It is a standard way of expressing the statistical accuracy of a survey based estimate. If an estimate has a high error level, the corresponding confidence interval will be very wide. Estimates of the confidence intervals are provided in the table below:

Table 5: 95% confidence intervals for gross and disposable income of households, and as a percentage of the published estimate, 2012/13

Average per household (£ per year)			Gross incom	ne	Disposable income		
		Lower bound	Published estimate	Upper % bound ±	Lower bound	Published estimate	Upper % bound ±
All households	Bottom decile group	9,269	9,743	10,2174.9	8,173	8,628	9,083 5.3
	Mean	36,978	38,098	39,2182.9	29,870	30,680	31,4902.6
	Top decile group	100,329	107,224	114,1196.4	75,169	80,240	85,3116.3
Retired households	Bottom decile group	7,929	8,379	8,8295.4	6,986	7,414	7,842 5.8
	Mean	21,010	21,812	22,6143.7	18,597	19,224	19,851 3.3
	Top decile group	48,610	52,594	56,5787.6	40,454	43,431	46,4086.9
Non-retired households	Bottom decile group	9,658	10,293	10,9286.2	8,503	9,110	9,7176.7
	Mean	42,727	44,228	45,7293.4	33,909	34,992	36,0753.1
	Top decile group	110,802	119,780	128,7587.5	82,155	88,769	95,3837.5

Source: Office for National Statistics

Notes:

1. Ranked by equivalised disposable income

#### 13. Related statistics and analysis

Further analysis of these statistics is planned for this year, including a number short articles analysing particular groups or components of income in more detail.

14. Over the last number of years, articles published by ONS based on these data have included:

50 Years of the Effects of Taxes and Benefits on Household Income

Middle Income Households, 1977-2011/12

Household Energy Spending in the UK, 2002-2012

Income, Expenditure and Personal Well-being, 2011/12

15. The Department for Work and Pensions (DWP) publishes analysis each year on household income in their publication Households Below Average Income (HBAI). This release is based on data from the Family Resources Survey (FRS) and focuses on the lower part of the income distribution. The next edition of this publication, including data for 2012/13, will be released 1 July 2014. Due to HBAI being based on a different survey, along with some methodological differences, HBAI and ETB estimates can differ slightly from each other. However, historical trends are broadly similar across the two sources.

16. This release adds to the evidence base amassed as part of the ONS Measuring National Well-being programme. The programme aims to produce accepted and trusted measures of the well-being of the nation - how the UK as a whole is doing.

Measuring National Well-being is about looking at 'GDP and beyond'. It includes headline indicators in areas such as health, relationships, job satisfaction, economic security, education, environmental conditions and measures of 'personal well-being' (individuals' assessment of their own well-being).

Find out more on the Measuring National Well-being website pages.

- 17. ONS allows a list of agreed officials to have access to data 24 hours before publication.
- 18. Follow ONS on Twitter and receive up to date information about our statistical releases.
- 19. Like ONS on Facebook to receive our updates in your newsfeed and to post comments on our page.
- 20. Details of the policy governing the release of new data are available from the Media Relations Office.
- 21. National Statistics are produced to high professional standards set out in the Code of Practice for Official Statistics. They undergo regular quality assurance reviews to ensure that they meet customer needs. They are produced free from any political interference.
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- 22. Details of the policy governing the release of new data are available by visiting <a href="www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html">www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html</a> or from the Media Relations Office email: <a href="media.relations@ons.gov.uk">media.relations@ons.gov.uk</a>

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