

Statistical bulletin

Regional gross disposable household income, UK: 1997 to 2016

Annual estimates of regional gross disposable household income (GDHI) for UK NUTS1, NUTS2, NUTS3 regions, local and combined authorities.



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1. Main points

- In 2016, England was the only country of the UK with a gross disposable household income (GDHI) per head above the UK average, but the strongest growth compared with 2015 was in Scotland, at 1.2%.
- Of the NUTS1 regions in 2016, London had the highest GDHI per head where, on average, each person had £27,151 available to spend or save; the North East had the lowest at £15,595 and this compares with a UK average of £19,432.
- Between 2015 and 2016, GDHI per head of population increased in all NUTS1 regions except the North East and North West, which fell by 0.6% and 0.2% respectively; the largest percentage increase was in the East of England at 1.3%.
- In 2016, Kensington & Chelsea and Hammersmith & Fulham was the NUTS3 local area with the highest GDHI per head (£58,816), more than three times the UK average; Nottingham had the lowest GDHI per head at £12,232.
- In terms of GDHI per head in 2016, all the top 10 NUTS3 local areas were in London or the South East NUTS1 regions; the bottom 10 were more widespread but were confined to the North West, Yorkshire and The Humber, East Midlands, West Midlands and Northern Ireland.
- Of the 10 combined authorities, six saw growth in GDHI per head between 2015 and 2016; the largest growth was in Cambridgeshire and Peterborough at 1.6% and the largest decline was in the Tees Valley at negative 1.6%.

2. Things you need to know about this release

What is gross disposable household income?

Gross disposable household income (GDHI) is the amount of money that all of the individuals in the household sector have available for spending or saving after they have paid direct and indirect taxes and received any direct benefits. GDHI is a concept that is seen to reflect the "material welfare" of the household sector.

Primary and secondary accounts

In the national accounts a distinction can be made between the two stages of income distribution.

The allocation of primary income account shows the income of households generated from employment and ownership of assets. Incomings, or resources, in this account include: compensation of employees (income from employment) and operating surplus (mainly rental, including the imputed rent of owner-occupiers). There is only one outgoing, or use, in this account, which is property income paid (for example, interest paid on mortgages or loans). Total incomings less total outgoings gives the balance of primary income.

The secondary distribution of income account mostly covers government redistribution of income. The incomings, or resources, in this account are: social benefits (for example, State Pension) and other current transfers received (such as non-life insurance claims). The outgoings, or uses, in this account include: current taxes on income and wealth, and social contributions paid (employee's pension and social security contributions). Total incomings less total outgoings gives the balance of secondary income.

GDHI is derived from summing the balances of primary and secondary income.

Gross disposable household income estimates

It should be noted that regional GDHI estimates relate to totals for all individuals within the household sector for a region rather than to an average household or family unit. The household sector comprises all individuals in an economy, including people living in traditional households as well as those living in institutions, such as retirement homes and prisons. The sector also includes sole trader enterprises (the self-employed) but now excludes non-profit institutions serving households (NPISH), for example, charities and most universities. Further details are in the What's changed in this release? section.

These estimates are produced at current prices, which means the effect of inflation has not been removed.

These regional GDHI estimates update those published in <u>May 2017 for the period 1997 to 2015</u> and are consistent with the <u>UK National Accounts</u>. The Blue Book: 2017. National aggregates for the components of GDHI are allocated to regions using the most appropriate regional indicator available. Provisional estimates for the year 2016 are released for the first time. These figures are provisional as national estimates have not been through supply and use balancing at the time of this publication. Additionally, where regional data for the latest year are unavailable, for example, in estimates of wages and salaries from Her Majesty's Revenue and Customs (HMRC), a forecast method has been used.

Further information on the components that make up GDHI and the methodology used to compile regional GDHI can be found in the <u>UK regional accounts methodology guide (PDF, 615.5KB)</u>.

Geographic levels for gross disposable household income estimates

GDHI estimates in this bulletin are available at four geographical levels, in accordance with the <u>Nomenclature of</u> <u>Units for Territorial Statistics (NUTS) classification</u>, which came into force on 1 January 2018. NUTS provides a single uniform breakdown for the production of regional statistics for the EU:

- NUTS1: Wales, Scotland, Northern Ireland and the nine English regions
- NUTS2: 41 sub-regions mainly groups of counties and unitary authorities
- NUTS3: 179 local areas principally individual counties and unitary authorities
- LAU1: 400 local authority or local council areas

Local authority data for the UK have also been published alongside the NUTS1, NUTS2 and NUTS3 estimates of GDHI. These local authority estimates can be aggregated to form other geographic breakdowns such as combined authorities and local enterprise partnerships (LEPs), which are available to download from the "View all data in this release" button. These data are also available on the <u>Nomis website</u>.

3 . The fastest growing NUTS1 region, per head, is the East of England

UK total gross disposable household income (GDHI) in 2016 was £1,276 billion. Of that, 86.1% was in England, 7.7% was in Scotland, 3.9% was in Wales and Northern Ireland had the lowest share of total GDHI in 2016 at 2.3%. Table 1 provides an overview of GDHI for the four UK countries.

Table 1: Gross disposable household income¹, UK and constituent countries, 2016²

Countries of the UK	Population 3	GDHI per head (£) ¹	GDHI per head growth on 2015 (percentage)	GDHI per head index (UK=100)	Total GDHI (£ million)	Total GDHI growth on 2015 (percentage)	Share of the UK Population (percentage)	Share of UK total GDHI (percentage)
United Kingdom	65,648,054	19,432	0.7	100.0	1,275,698	1.5	100.0	100.0
England	55,268,067	19,878	0.6	102.3	1,098,599	1.5	84.2	86.1
Wales	3,113,150	15,835	0.7	81.5	49,296	1.2	4.7	3.9
Scotland	5,404,700	18,231	1.2	93.8	98,532	1.8	8.2	7.7
Northern Ireland	1,862,137	15,719	1.0	80.9	29,271	1.6	2.8	2.3

Source: Office for National Statistics

Notes:

- 1. Figures may not sum to totals as a result of rounding; per head (£) figures are rounded to the nearest pound sterling.
- 2. 2016 estimates are provisional.
- 3. Population estimates are sourced from Population estimates for UK.

Total GDHI estimates in pounds million (\pounds million) are divided by the resident population of a region to give GDHI per head in pounds (\pounds). Per head data take account of the entire resident population of regions, sub-regions and local areas; including both the working population and the economically inactive. GDHI per head are estimates of values for each person, not each household. This can be a useful way of comparing regions of different sizes.

The UK per head figure in 2016 was £19,432. Of the four UK countries, only England had a higher GDHI per head value at £19,878. Despite this, the strongest growth on 2015 was in Scotland, at 1.2%.

Northern Ireland had the lowest GDHI per head at £15,719, but of the four countries the lowest growth on 2015 was seen in England at 0.6%.

Table 2 provides an overview of GDHI for each of the NUTS1 regions. In 2016, GDHI per head was above the UK average of £19,432 in three of the 12 NUTS1 regions:

- London, at £27,151
- the South East, at £22,375
- the East of England, at £20,275

The lowest GDHI per head was in the North East at £15,595.

NUTS1 countries and regions	Population 3	GDHI per head (£) ¹	GDHI per head growth on 2015 (percentage)	GDHI per head index (UK=100)	Total GDHI (£ million)	Total GDHI growth on 2015 (percentage)	Share of the UK population (percentage)	Share of UK total GDHI (percentage)
United Kingdom	65,648,054	19,432	0.7	100.0	1,275,698	1.5	100.0	100.0
North East	2,636,589	15,595	-0.6	80.3	41,117	-0.1	4.0	3.2
North West	7,223,961	16,761	-0.2	86.3	121,079	0.5	11.0	9.5
Yorkshire and The Humber	5,425,370	16,365	1.0	84.2	88,788	1.7	8.3	7.0
East Midlands	4,725,390	17,042	0.4	87.7	80,528	1.4	7.2	6.3
West Midlands	5,810,773	16,766	0.9	86.3	97,423	1.9	8.9	7.6
East of England	6,129,005	20,275	1.3	104.3	124,263	2.2	9.3	9.7
London	8,769,659	27,151	1.1	139.7	238,102	2.3	13.4	18.7
South East	9,030,347	22,375	0.3	115.1	202,056	1.2	13.8	15.8
South West	5,516,973	19,077	0.0	98.2	105,245	0.9	8.4	8.2
Wales	3,113,150	15,835	0.7	81.5	49,296	1.2	4.7	3.9
Scotland	5,404,700	18,231	1.2	93.8	98,532	1.8	8.2	7.7
Northern Ireland	1,862,137	15,719	1.0	80.9	29,271	1.6	2.8	2.3

Table 2: Gross disposable household income (GDHI) ¹ by NUTS1 region, UK, 2016
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Source: Office for National Statistics

Notes:

1. Figures may not sum to totals as a result of rounding; per head (£) figures are rounded to the nearest pound sterling.

2. 2016 estimates are provisional.

3. Population estimates are sourced from population estimates for UK.

GDHI per head of population increased in all NUTS1 regions except for the North East and North West, which fell by 0.6% and 0.2% respectively. The largest percentage increase was in the East of England at 1.3%, followed by Scotland at 1.2%. The smallest percentage increase was in the South East at 0.3%, whilst the South West region remained flat.

In 2016, the <u>Consumer Prices Index including owner occupiers' housing costs (CPIH)</u> inflation rate was 1.0%. Using this measure of inflation, this suggests that only the East of England, Scotland, London, Yorkshire and The Humber and Northern Ireland kept pace with or exceeded the rate of inflation. All other regions of the UK saw a decrease in the "real terms" value of their disposable income.

4. Analysis of NUTS1 regions

To understand what is driving the difference between regions in these gross disposable household income (GDHI) figures we can look at the components of income. These form two stages, the allocation of primary income and the distribution of secondary income.

Figure 1 shows the components of the allocation of primary income account on a per head of population basis and how they varied across NUTS1 regions in 2016. The allocation of primary income account shows how the household sector generated income. Users should note that the non-profit institutions serving households (NPISH) sector is no longer included in line with changes in the <u>UK National Accounts</u>, <u>The Blue Book: 2017</u>.

Incomings are from compensation of employees (income from employment), mixed income (from selfemployment), operating surplus (mainly rental, imputed or otherwise) and property income received from financial assets. There is only one outgoing (represented as negatives in Figure 1) in this account, which is property income paid (for example, mortgage interest payments, rent on land). It should be noted that GDHI is calculated before other housing costs such as rental and mortgage capital repayments (including imputed rental of owneroccupiers) although rental income is included from the perspective of the landlord (or owner).

Figure 1: Components per head of the allocation of primary income account, UK, 2016¹ Figure 1: Components per head of the allocation of primary income account, UK, 2016^1^



Source: Office for National Statistics

Notes:

1. 2016 estimates are provisional.

As with GDHI, London received the largest incomings in the form of primary income. Compensation of employees was by far the largest component of primary income and accounted for £20,719 per head in London. The North East, the region with the lowest GDHI per head, received £11,951 per head from compensation of employees. Wales had a similar balance of primary income to Northern Ireland, having a similar contribution from compensation of employees, but a smaller amount from mixed income and a larger amount from operating surplus. The outgoing in this account, property income paid, accounted for only a very small amount in each region, in part representing the current very low interest rates on mortgages.

In line with the change in the <u>UK National Accounts, The Blue Book: 2017</u> to separate the households and nonprofit institutions serving households (NPISH) sectors, the opportunity was taken at the national level to make improvements to the collection of the households data, in particular, for dividends. A new data source and method was incorporated to produce an overall dividends estimate for the households sector, which has the impact of much larger estimates than previously published for the property income received component. Further details are explained in the national accounts article <u>Improving the household</u>, <u>private non-financial corporations and nonprofits institutions serving households sectors' non-financial account</u>.

Table 3 shows a comparison of property income received in 2015 as published in May 2017 and May 2018. As a result of an increase in dividends at national level, there has been an increase in property income across all NUTS1 regions. The largest increases were in the South East and South West at 4.0%, and the East of England at 3.8%, with little variation across the English regions.

	 	ublished M	av 2017		Published May 2018			
		Balance	PIR ³ as a	_	Balance	PIR as a	_	Change in pp of PIR of
NUTS regions	Property income received	of primary incomes	percentage of balance of primary incomes	Property income received	of primary incomes	percentage of balance of primary incomes	Change in PIR (percentage)	balance of primary incomes 4
North East	2036	16655	12.2	2424	16611	14.6	19.1	2.4
North West	2290	17614	13.0	2937	18048	16.3	28.3	3.3
Yorkshire and The Humber	2300	17094	13.5	2882	17515	16.5	25.3	3.0
East Midlands	2415	18237	13.2	3104	18841	16.5	28.5	3.2
West Midlands	2272	17486	13.0	2902	18086	16.0	27.7	3.1
East of England	2960	22143	13.4	3955	23053	17.2	33.6	3.8
London	4064	31147	13.0	5420	33319	16.3	33.4	3.2
South East	3230	24656	13.1	4416	25790	17.1	36.7	4.0
South West	2809	19913	14.1	3689	20418	18.1	31.3	4.0
Wales	2158	16364	13.2	2547	16292	15.6	18.0	2.4
Scotland	2543	20026	12.7	3088	20253	15.2	21.4	2.5
Northern Ireland	2231	16450	13.6	2522	16633	15.2	13.0	1.6

Source: Office for National Statistics

Notes:

1. May not sum due to rounding.

2. All figures are per head.

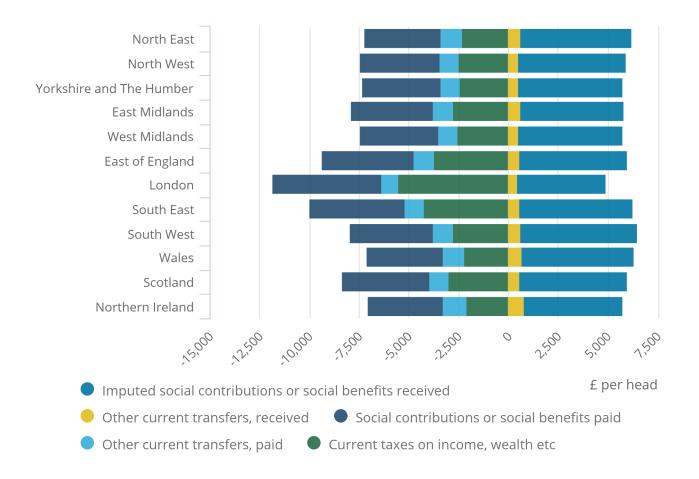
3. PIR equals property income received.

4. pp equals percentage points.

The secondary distribution of income account follows the allocation of primary income account; this is shown in Figure 2. The secondary distribution of income account mostly relates to government redistribution of income. Incomings are from social benefits (for example, State Pension, Jobseeker's Allowance) and other current transfers received (such as financial gifts or non-life insurance claims). The outgoings (represented as negatives in Figure 2) in this account are current taxes on income and wealth, social contributions paid (employee's pension and social security contributions) and other current transfers paid (such as non-life insurance premiums).

Figure 2: Components per head of the distribution of secondary income account by NUTS1 region, UK, 2016¹

Figure 2: Components per head of the distribution of secondary income account by NUTS1 region, UK, 2016^1^



Source: Office for National Statistics

Notes:

1. 2016 estimates are provisional.

We would expect to see current taxes on income strongly correlated with the incomings in the allocation of primary income account. The region paying the largest amount of current taxes on income and wealth was London at £5,551 per head, while Northern Ireland paid the least at £2,060 per head.

The main incoming of this account was imputed social contributions or social benefits received, of which the vast majority related to social benefits. This component saw very little variation across regions; the South West received the largest amount, at £5,881 per head, and London received the least, at £4,454 per head. One factor contributing to this is the fact that London has the lowest proportion of retired people in its population.

Further information on the components that make up GDHI and the methodology used to compile regional GDHI can be found in the <u>UK regional accounts methodology guide (PDF, 615.5KB)</u>.

5. The highest disposable income NUTS3 local areas remain in London and the South East

The 10 NUTS3 local areas with the highest gross disposable household income (GDHI) per head and the 10 with the lowest GDHI per head in 2016 are displayed in Table 4. The top seven are unchanged in their ranking from the previous year.

Table 4: Top 10 and bottom 10 gross disposable household income (GDHI) per head by NUTS3 local areas, UK, 2016^{1,2}

NUTS3 Areas	Population 3	GDHI per head (£) ¹	GDHI per head growth on 2015 (percentage)	GDHI per head index (UK=100)	Total GDHI (£ million)	Total GDHI growth on 2015 (percentage)
United Kingdom	65,648,054	19,432	0.7	100.0	1,275,698	1.5
Top 10 GDHI per head						
Kensington & Chelsea and Hammersmith & Fulham	338,556	58,816	-1.3	302.7	19,912	-2.0
Westminster	241,974	50,910	-1.2	262.0	12,319	0.5
Camden and City of London	256,408	45,225	0.2	232.7	11,596	2.6
Wandsworth	321,497	37,288	2.8	191.9	11,988	3.5
Hounslow and Richmond upon Thames	463,457	31,505	3.7	162.1	14,601	4.3
West Surrey	782,888	28,467	-0.3	146.5	22,287	0.4
Haringey and Islington	504,133	28,188	-0.8	145.1	14,211	0.8
Barnet	384,774	27,455	-0.5	141.3	10,564	1.1
East Surrey	398,068	27,263	-1.0	140.3	10,852	-0.3
Bromley	327,580	27,169	1.0	139.8	8,900	1.7
Bottom 10 GDHI per head						
Stoke-on-Trent	253,659	14,075	1.5	72.4	3,570	2.3
Derry City and Strabane	150,142	14,036	0.8	72.2	2,107	1.3
Wolverhampton	258,017	13,926	0.3	71.7	3,593	1.5
Walsall	278,887	13,791	-1.5	71.0	3,846	-0.4
Kingston upon Hull, City of	260,035	13,380	2.1	68.9	3,479	2.7
Manchester	541,319	13,184	0.0	67.8	7,137	2.1
Sandwell	322,631	13,164	-0.6	67.7	4,247	0.5
Leicester	349,513	12,848	2.0	66.1	4,490	3.6
Blackburn with Darwen	148,462	12,450	-0.4	64.1	1,848	0.0
Nottingham	324,779	12,232	-1.3	62.9	3,973	0.5

Source: Office for National Statistics

Notes:

1. Figures may not sum due to rounding; per head (£) figures are rounded to the nearest pound sterling.

2. 2016 estimates are provisional.

3. Population estimates are sourced from Population estimates for UK.

Of the 179 NUTS3 local areas, Kensington & Chelsea and Hammersmith & Fulham was the NUTS3 area with the highest GDHI per head, unchanged from the previous year and more than three times the UK average. Westminster and then Camden and City of London followed, each with more than double the UK average GDHI per head; each of these regions showed positive growth in the total operating surplus component. GDHI is calculated before other housing costs such as rental and mortgage capital repayments (including imputed rental of owner-occupiers) although rental income is included from the perspective of the landlord (or owner). GDHI will therefore be inflated in areas with higher housing costs, such as London and the South East.

All of the top 10 NUTS3 local areas were in London or the South East NUTS1 regions, the top five of which were in London. The bottom 10 local areas were all within the north and midland regions of England, except for Derry City and Strabane in Northern Ireland.

Nottingham had the lowest GDHI per head in 2016, at 37.1% below the UK average. This was followed by Blackburn with Darwen and Leicester.

Despite being the highest performing local area in terms of GDHI per head, Kensington & Chelsea and Hammersmith & Fulham showed a decline in growth between 2015 and 2016 of 1.3%. GDHI per head increased in 125 of the 179 NUTS3 local areas between 2015 and 2016. The largest percentage increases were in:

- Hounslow and Richmond upon Thames (London region), at 3.7%
- Barking & Dagenham and Havering (London region), at 3.6%
- Caithness & Sutherland and Ross & Cromarty (Scotland region), at 3.5%

There was strong growth in the compensation of employees (CoE) component in each of these regions, which contributed to their growth in GDHI per head.

In 2016, the Consumer Prices Index including owner occupiers' housing costs (CPIH) inflation rate was 1.0% and there were 72 NUTS3 areas showing growth above this in terms of GDHI per head.

GDHI per head decreased in 54 local areas. The largest decreases were in:

- West Kent (South East region), at negative 2.7%
- Northumberland (North East region), at negative 2.7%
- Aberdeen City and Aberdeenshire (Scotland region), at negative 2.5%

Between 2015 and 2016, in terms of total GDHI all three regions showed a fall in growth between these years.

6. What was the average disposable household income in your local area?

Figure 3 shows how gross disposable household income (GDHI) per head varied across NUTS3 local areas in the years 1997 to 2016.

Download the data

7. Focus on combined authorities

Over the past few years, the UK government has granted devolved powers to nine combined authority areas in addition to the longer-standing Greater London Authority. In 2010, the government established a Greater Manchester Combined Authority as an indirectly elected strategic authority for Greater Manchester. In 2014, indirectly elected combined authorities were established for the metropolitan counties of South Yorkshire, called the Sheffield City Region Combined Authority, and West Yorkshire.

Also in 2014, two combined authorities were established that each covered a metropolitan county and adjacent non-metropolitan districts: the Liverpool City Region Combined Authority for Merseyside and the Borough of Halton unitary authority, and the North East Combined Authority for Tyne and Wear and the unitary authorities of County Durham and Northumberland. In 2016, a combined authority was formed for the metropolitan county of the West Midlands, so that all metropolitan counties are now covered by combined authorities.

The first combined authority that did not cover a metropolitan county was Tees Valley, formed in 2016. It covered the area of the former county of Cleveland (now four unitary authorities in the ceremonial counties of Durham and North Yorkshire), together with the unitary authority of Darlington. Two further combined authorities were formed in 2017: West of England, comprising Bristol and two of the three adjacent unitary authorities in Gloucestershire and Somerset; and Cambridgeshire and Peterborough.

Some of these combined authorities cover areas that match the existing Nomenclature of Units for Territorial Statistics (NUTS) regions and sub-regions. The Greater London Authority matches the London NUTS1 region. The combined authorities of Greater Manchester, West Midlands, Sheffield City Region, and West Yorkshire all match NUTS2 sub-regions. Since a boundary change incorporated the Borough of Halton into Merseyside, the Liverpool City Region now also matches a NUTS2 sub-region. Three of the remaining four combined authorities can be constructed from whole NUTS3 areas, and estimates for the West of England can be built from local authority data.

Table 5 shows summary statistics for each of the UK combined authorities for 2016. Between 2015 and 2016, in gross disposable household income (GDHI), the fastest growth of 2.3% was observed in three combined authorities: Greater London, West of England and Cambridgeshire and Peterborough. The largest decline was in the Tees Valley at negative 1.2%.

At the combined authority level, Greater London had the largest GDHI per head at £27,151, while the West Midlands had the lowest at £14,731. Six combined authorities grew in GDHI per head between 2015 and 2016, with the strongest growth in Cambridgeshire and Peterborough at 1.6%. Four combined authorities declined in GDHI per head over this period, with the largest fall in Tees Valley at negative 1.6%.

Table 5: Summary of gross disposable household income (GDHI) statistics for UK combined authorities, 2016^{1,2}

Combined Authority	Population 3	Total GDHI (£ million)	Annual growth in total GDHI (percentage)	GDHI per head (£) 1	Annual growth in GDHI per head (percentage) ¹
Greater London	8,769,659	238,102	2.3	27,151	1.1
West Midlands	2,870,551	42,286	1.5	14,731	0.2
Greater Manchester	2,780,844	44,263	0.7	15,917	-0.3
West Yorkshire	2,295,025	36,571	1.7	15,935	1.0
North East	1,965,637	30,985	0.2	15,763	-0.3
Liverpool City Region	1,538,461	24,499	0.5	15,924	-0.2
Sheffield City Region	1,385,413	21,252	1.9	15,340	1.1
West of England	919,589	17,992	2.3	19,566	1.1
Cambridgeshire and Peterborough	841,310	17,002	2.3	20,209	1.6
Tees Valley	670,952	10,132	-1.2	15,101	-1.6

Source: Office for National Statistics

Notes:

1. Figures may not sum due to rounding; per head (£) figures are rounded to the nearest pound sterling.

2. 2016 estimates are provisional.

3. Population estimates are sourced from Population estimates for UK

Figure 4 shows the component composition of the allocation of primary income account for each of the UK combined authorities in 2016.

Figure 4: Components per head of the allocation of primary income account for UK combined authorities, 2016¹

Figure 4: Components per head of the allocation of primary income account for UK combined authorities, 2016^1^



Source: Office for National Statistics

Notes:

1. 2016 estimates are provisional.

Greater London had by far the largest operating surplus per head (£4,920) and compensation of employees per head (£20,719) of the UK combined authorities. The West of England, and Cambridgeshire and Peterborough also stand out as having higher values than the other combined authorities, which all had similar values for the components of the primary income account.

Figure 5 shows the component composition of the distribution of secondary income account for each of the UK combined authorities in 2016.

Figure 5: Components per head of the distribution of secondary income account for UK combined authorities, 2016¹

Figure 5: Components per head of the distribution of secondary income account for UK combined authorities, 2016^1^



Source: Office for National Statistics

Notes:

1. 2016 estimates are provisional.

Similar to the NUTS1 regions, we see a strong correlation between taxes on income and compensation of employees, so Greater London, Cambridgeshire and Peterborough, and the West of England have the largest negative values in the distribution of secondary income account. Social benefits received shows less variation between combined authorities, with Tees Valley, Liverpool City Region and the North East having the largest values per head, and Greater London having the smallest.

8 . Links to related statistics

Regional gross value added

While gross disposable household income (GDHI) estimates can be considered a measure of prosperity, regional gross value added (GVA) data provide an indication of the economic activity happening within a region.

Historically, we have produced estimates of regional GVA using the income approach (as National Statistics) and the production approach (as Experimental Statistics). In the <u>latest GVA publication</u>, published 20 December 2017, we have taken the strengths from both approaches and used them to produce a new balanced measure of regional GVA, known as GVA(B). This will give users a single measure of economic activity within a region, therefore avoiding any confusion from having two different estimates of the same thing. Estimates of <u>GVA</u> <u>calculated using the balanced method (GVA(B))</u> for NUTS1, NUTS2 and NUTS3 levels of geography are published annually in December. GVA(B) data for NUTS geographies are also available on the <u>Nomis website</u>.

Estimates of GVA(B) are available in both current prices (including the effect of inflation) and chained volume measures (excluding the effects of inflation).

We are continuing to produce and publish the individual datasets for <u>GVA (income approach)</u> and <u>GVA (production approach)</u> to allow users access to the data in their unbalanced form.

Regional and subregional productivity

Gross value added (GVA) per head can be a useful way of comparing regions of different sizes. This is particularly the case where there are no large net-commuting effects, when GVA per head can act as a good proxy for measures of economic performance such as productivity. However, it is not such a good proxy for those areas with high net in-commuting or out-commuting. This is because it compares a workplace measure of economic output (GVA), which includes the contribution of in-commuters, with a residence-based denominator (population). For such areas it is advisable to refer to <u>ONS regional and subregional productivity data</u> for a direct measure of economic performance.

Economic statistics for devolved administrations

The devolved administrations of Wales, Scotland and Northern Ireland each produce economic statistics for their countries. Scottish Government publishes disposable household income as part of the <u>Scottish National Accounts</u>. <u>Programme (SNAP)</u>. We work with the devolved administrations through the Inter-Administration Committee (IAC) and its subsidiary the Devolved Economic Statistics Co-ordination group (DESC).

Small area income estimates

The <u>small area model-based income estimates</u> provide average weekly household income at the middle layer super output area (MSOA) level in England and Wales. They are calculated using a model-based method, which uses a combination of data from the Family Resources Survey, the 2011 Census and a number of administrative data sources.

A guide to sources of data on earnings and income

There is a guide available that outlines the <u>different data sources and outputs that feed into the analysis of</u> <u>earnings and income</u> within the UK.

9. What's changed in this release?

In keeping with the UK National Accounts' commitment to meeting the European Commission definition of <u>gross</u> <u>national income</u> and the new <u>European System of Accounts 2010: ESA 2010</u>, there have been changes made to the UK National Accounts measure of gross disposable household income (GDHI). These impact upon the regional GDHI estimates in the form of different national totals for the various components of income, even where no explicit changes to the regional allocation have been needed.

One of the changes is the separate measurement of the households and non-profit institutions serving households (NPISH) sectors. Prior to the <u>UK National Accounts</u>, <u>The Blue Book: 2017</u>, estimates were produced for the combined households and NPISH sectors. As such, our previous estimates of GDHI were produced for the combined households and NPISH sectors. In the UK National Accounts, estimates for the households and NPISH sectors were presented separately for the first time in Blue Book 2017. In line with Blue Book 2017, our regional estimates for GDHI have been produced for the households sector only.

During the improvements to separate the measurements of the sectors in the UK National Accounts, <u>the</u> <u>opportunity was taken to improve the measurement of both sectors</u>. In Blue Book 2017 a new data source and method was incorporated for the production of an overall dividends estimate for the households sector. As a result, the dividends estimates for the households sector are much larger than the estimates previously published for the combined sector.

Another change that was incorporated in Blue Book 2017, which resulted in a change to our methods, is a new approach for the treatment of private actual rentals, which brings consistency with the <u>methods for imputed</u> rentals introduced in Blue Book 2016. It also removes the discontinuity in the current price data at 2010, which was due to an interim solution in place since Blue Book 2014. A change was also made to the allocation of rent on rent-free dwellings.

Our GDHI publication has also been affected by changes to <u>Nomenclature of Units for Territorial Statistics (NUTS)</u> boundaries. In January 2018, there were changes to the NUTS boundaries in Scotland and Northern Ireland. In Scotland a fifth NUTS2 area, Southern Scotland, was created by taking parts from the Eastern Scotland and South Western Scotland NUTS2 areas. In Northern Ireland changes were made to the NUTS3 areas due to local government re-organisation, with the new NUTS3 areas now matching the 11 local authorities. Our GDHI estimates have been produced in accordance with the January 2018 <u>NUTS regions</u>.

10. Future work plans

In December 2017 we produced <u>balanced gross value added (GVA) in "real" measures</u> for NUTS1 and NUTS2 regions for the first time; in December 2018, we intend to extend this to produce "real" measures of GVA for NUTS3 regions and local authorities.

We are looking into the viability of disaggregating local authority data further down into output areas for gross disposable household income (GDHI) and workplace zones for GVA. Recent acquisition of Value Added Tax (VAT) data from Her Majesty's Revenue and Customs (HMRC) has brought the GVA strand closer, and we are currently investigating methods and systems. The GDHI strand is dependent on the Office for National Statistics (ONS) gaining access to the HMRC Pay As You Earn (PAYE) data.

Work is ongoing following the <u>feasibility study on regional household final consumption expenditure (HFCE)</u>. Producing this at a regional level would expand the suite of household accounts by measuring spending on consumer goods and services. It would also pave the way for a regional savings ratio. Further work has been carried out during 2017 to examine data sources and concepts, and we aim to publish an article and hopefully a first set of experimental estimates of regional HFCE for NUTS1 level countries and regions in late 2018. If the development proves to be a success we will then move into regular production and publication from 2019, and will look to expand the geographic content to smaller areas.

We have been working with Southampton University to assess the feasibility of producing regional consumer price indices using the current Consumer Prices Index dataset. This research culminated in Southampton University publishing a report in <u>November 2017</u>. The report highlighted the challenges associated with using the current dataset and put forward recommendations to investigate methods that might improve the quality of regional consumer price indices. During 2018, Southampton University will follow up on some of the recommendations in the report and look at potential models that can be used to reduce some of the volatility identified. It is expected this report will be published towards the end of 2018.

We are investigating making further use of administrative data in the future production of small area income statistics. This could help make the estimates available at smaller geographic levels and increase the robustness of the estimates, which has declined in recent editions of the model-based estimates due to an increase in variability of the underlying survey data.

Work has also been progressing on the development of quarterly output indicators for the nine English regions. Along with the existing quarterly indicators produced by the devolved administrations of Scotland, Wales and Northern Ireland, this will complete the coverage of the UK and provide users with timely indicators of economic growth at the NUTS1 level. The English region measures are planned to be revealed for public consultation during the summer of 2018, with a view to a first live publication by the end of 2018.

Further details about our development programme are available in the article <u>Supporting devolution</u>: <u>developments in regional and local statistics</u>.

11. Quality and methodology

Quality

The <u>Regional gross disposable household income (GDHI) Quality and Methodology Information report</u> contains important information on:

- the strengths and limitations of the data and how it compares with related data
- uses and users of the data
- how the output was created
- the quality of the output including the accuracy of the data

Figures for 2016 are provisional as national estimates have not been through supply and use balancing at the time of this publication. The figures used in this process are consistent with those published in the <u>UK National</u> <u>Accounts, The Blue Book: 2017</u>.

Methodology

Various <u>guidance and methodology</u> documents relating to regional GDHI are available. The <u>UK regional accounts</u> <u>methodology guide (PDF, 615.5KB)</u> provides an overview of the methodology used to compile regional accounts outputs. Quality and methodology information (QMI) reports are available, covering the relevance, accuracy, timeliness, accessibility and coherence of each of the regional accounts outputs. Other historical guidance and methodology documents are also available.

Revisions

Revisions to regional GDHI estimates in this statistical bulletin cover the period 1997 to 2015. Very few statistical revisions arise as a result of errors in the popular sense of the word. All estimates, by definition, are subject to statistical error but in this context the word refers to the uncertainty in any process or calculation that uses sampling, estimation or modelling.

Most revisions reflect either the adoption of new statistical techniques or the incorporation of new information that allows the statistical error of previous estimates to be reduced. Only rarely are there avoidable errors such as human or system errors and such mistakes are made clear when they are discovered and corrected.

The main reasons for revisions are detailed in the What's changed in this release? section of this statistical bulletin.

We have published revisions triangles detailing the changes between publications.

A summary of revisions to regional GDHI estimates for 2015 are shown in Table 6.

2015	Total revision (percentage)	Revision due to national estimates (percentage)	Revision due to other regional dataset changes (percentage)
UK	1.0	1.0	0.0
North East	-3.2	-1.0	-2.2
North West	-0.7	0.1	-0.8
Yorkshire and The Humber	-0.4	-0.2	-0.2
East Midlands	0.3	0.4	-0.1
West Midlands	0.4	0.1	0.4
East of England	1.1	1.7	-0.6
London	6.1	2.4	3.6
South East	2.3	2.7	-0.4
South West	-0.3	1.6	-1.8
Wales	-3.8	-1.0	-2.8
Scotland	-1.6	-0.2	-1.5
Northern Ireland	-2.2	-2.1	-0.1

Source: Office for National Statistics

Notes:

1. May not sum due to rounding.