FEATURE

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Regional gross disposable household income

SUMMARY

This article looks at estimates of regional gross disposable household income (GDHI) at current basic prices, published in May 2008. These data are published using the European Union Nomenclature of Units for Territorial Statistics (NUTS) regions. Data are published for the NUTS1, NUTS2 and NUTS3 levels for the period 1995 to 2006. There is an overview of the methodology used in the calculation of regional GDHI and the article concludes with Office for National Statistics (ONS) future plans for regional economic data.

Regional gross disposable household income (GDHI) is presented at the NUTS1, NUTS2 and NUTS3 levels. GDHI for 1995 (the year in which the time series using the current methodology starts) are compared with 2006 (the latest year for which data are available).

NUTS1 data

Total GDHI has been increasing in all NUTS1 regions (Table 1) at a similar rate between 2005 and 2006. The highest growth rate was Northern Ireland (4.0 per cent) and the lowest growth rate for NUTS1 regions

were the East of England and the South East (3.2 per cent). The UK growth rate was 3.5 per cent.

GDHI per head of population for the UK as a whole excluding Extra-regio was £13,802 in 2006. London had the highest GDHI per head (£16,939). The South East and East of England were also above the UK average at £15,367 and £14,548, respectively. All other regions had a GDHI per head below the UK average. The North East (£11,846) had the lowest GDHI per head, followed by Northern Ireland (£12,041) (see Map 1).

Table 1
GDHI: by NUTS1 region, 2006

Region	Total (£ billion) ¹	Share of UK (%) ¹	Growth on 2005 (%)	Per head (£) ²	Per head index (UK=100) ²	GVA per head index UK=100 ²
United Kingdom	836.2	100.0	3.5	13,778	100	100
North East	30.3	3.6	3.6	11,846	86	81
North West	86.7	10.4	3.6	12,655	92	87
Yorkshire and The Humber	64.3	7.7	3.6	12,504	91	86
East Midlands	56.1	6.7	3.5	12,853	93	91
West Midlands	67.3	8.1	3.3	12,546	91	89
East of England	81.8	9.8	3.2	14,584	106	95
London	127.3	15.2	3.8	16,939	123	155
South East	126.6	15.1	3.2	15,367	112	109
South West	70.1	8.4	3.5	13,673	99	94
England	710.4	85.0	3.5	13,994	102	102
Wales	36.5	4.4	3.5	12,312	89	77
Scotland	66.9	8.0	3.6	13,071	95	95
Northern Ireland	21.1	2.5	4.0	12,041	87	81
Extra-regio ³	1.4	0.2	2.6	n/a	n/a	n/a

Notes:

- Figures may not sum due to rounding.
- £ per head and per head index exclude Extra-regio.
- Parts of the UK economic territory that cannot be assigned to any particular region.

Box 1**Regional gross disposable household income: definition and methodology**

GDHI is the amount of money that individuals – the household sector – have available for spending or saving. This is money left after expenditure associated with income, for example, taxes and social contributions, property ownership and provision for future pension income. It is calculated gross of any deductions for capital consumption.

The household sector covers people living in traditional households as well as those living in institutions. The latter includes people living in retirement homes and prisons. The sector includes sole trader enterprises and non-profit institutions serving households (NPISHs), for example, most charities and universities.

Derivation of gross disposable household income

Total gross disposable household income is derived from the balances of primary and secondary income.

Balance of primary income
 + Balance of secondary income
 = Gross disposable household income

The primary income account

The account shows the income received by households for their role in the production process, and also property income (rent on land, dividends and interest) received and paid. The main source of household income is compensation of employees (wages and salaries and employers' social contributions).

The balance of primary income is the difference between total primary resources and uses.

Total primary resources
 – Total primary uses
 = Balance of primary income

Total primary resources consists of compensation of employees (wages and salaries); operating surplus (mainly rental, imputed or otherwise, in the household sector); mixed income (income from self-employment); and property income receipts.

Total primary uses represents property income paid.

The secondary distribution of income account

This account shows how the balance of primary income of households is modified by redistribution of payments of current taxes; payments of social contributions and receipts of benefits (other than in kind); and net other current transfers.

The balance of secondary income is derived as the difference of total secondary resources less uses.

Total secondary resources
 – Total secondary uses
 = Balance of secondary income

Total secondary resources consists of social benefits received and other current transfers received (for example, financial gifts and non-life insurance claims).

Total secondary uses consists of current taxes on income and wealth (income tax, council tax) and social contributions paid (employees' pension/social security contributions).

Regional GDHI estimates are published annually for the period 1995 to T-2 years (T being the year of publication) and are consistent with the National Accounts *Blue Book*. Component data are produced at the NUTS2 level and the balances of primary and secondary incomes are published for the NUTS3 regions. This breakdown is required by Eurostat (the Statistical Office of the European Union).

The national aggregate of GDHI is allocated to regions using a variety of regional indicators. Regional GDHI estimates are initially produced at the NUTS3 level and aggregated up to obtain NUTS2 and NUTS1 levels of data. These estimates are on a residence basis, that is, incomes of individuals are allocated to the region in which they live. The data referenced in this article are called headline GDHI, which are calculated using a five-period moving average. These adjusted figures remove some year-on-year volatility caused by sampling and non-sampling errors in the data sources. The unadjusted data are also published by ONS and are supplied to Eurostat.

Regional GDHI are produced at current basic prices, and so the effects of inflation are not taken into account in these data.

Data sources

The data are allocated at the regional level using the most appropriate indicators available and are drawn from a wide variety of survey and administrative sources. The main data sets used for the compilation of regional GDHI are HM Revenue & Customs (HMRC) pay-as-you-earn (PAYE), self-assessment tax and survey of personal incomes and other HMRC taxes data, and various benefit data sets.

These data are available by region and are used as indicator series to apportion the National Accounts household accounts components. The methods used are consistent with the guidance set out in the European System of Accounts 1995.

All the input data are subject to a rigorous quality assurance process to determine that they are the best indicators available.

Box 2

Regional classification

The Nomenclature of Units for Territorial Statistics (NUTS) provides a single uniform breakdown for the production of regional statistics for the European Union. Regional GDHI are produced at three levels of NUTS in the UK. These are:

- NUTS1: the devolved administrations of Scotland, Wales and Northern Ireland and the Government Office Regions of England
- NUTS2: 37 areas – sometimes referred to as subregions
- NUTS3: 133 areas – generally groups of unitary authorities or districts, also known as local areas
- Extra-region GDHI is that which cannot be assigned to regions, such as the GDHI of embassies and UK armed forces stationed overseas, along with the elements relating to activities on the continental shelf

Figure 1

Share of UK GDHI: by region, 2006

Figure 2

GDHI per head indices: by NUTS1 region

Indices (UK=100)

Table 1 also shows the gross value added (GVA) per head index figures for the NUTS1 regions in 2006. GVA is the value added by any given unit engaged in production and was examined in detail in Holmes (2008). The GVA data in this table are workplace based (that is, GVA is allocated to where people work) and the GDHI residence based. London also had the highest GVA per head index (155) and the largest differential between the GDHI and GVA per head indices, with a 32 percentage point difference (123 for GDHI compared with 155 for GVA).

Figure 1 shows that London (15.2 per cent) and the South East (15.1 per cent) had the largest share of total GDHI in 2006, while Northern Ireland (2.5 per cent), the North East (3.6 per cent) and Wales (4.4 per cent) had the smallest share.

Figure 2 shows that London had the highest regional GDHI per head of population index in 2006 (123), which was 23 per cent greater than the UK average and three points above the 1995 index (120). The North East (86) and Northern Ireland (87) had the lowest index, 14 and 13 index points below the UK average, respectively. Between 1995 and 2006, London and the South East were the only regions where per head indices rose. The South East's per head index rose from 111 to 112. All the other NUTS1 regions' per head indices were either the same between 1995 and 2006 or fell over this period.

Sub-regional (NUTS2) GDHI data

Within the 37 subregions (mainly groups of counties) of the UK, Inner London had

the highest household income per head (£18,808) in 2006 while the West Midlands had the lowest household income per head (£11,636).

In 2006, 13 of the 37 regions were above the UK household income per head (see Map 2), including all those within London and the South East. All areas within the North East, East Midlands, Wales and Scotland were below the UK average.

Table 2 also shows the GVA per head indices for the top and bottom five regions of GDHI per head for 2005 (the latest year in which GVA data are available for the NUTS2 and NUTS3 regions). Inner London had the highest GVA per head index, 152 per cent higher than the UK average, and is by far the largest percentage point differential between the GVA and GDHI per head indices, although Inner London has the highest per head indices in both cases.

Figure 3 and Figure 4 compare the top five and bottom five ranked subregions in 2006 and 1995 (the year in which the current time series began). The top five ranked subregions remained the same in 1995 and 2006 and there was little change in the bottom five subregions. The largest movement of a GDHI per head index between 1995 and 2006 was in Inner London, rising from 129 to 137.

Local area (NUTS3) GDHI data

The NUTS3 regions with the highest GDHI per head in 2006 were Inner London West (£25,745), Surrey (£18,893), Buckinghamshire County Council (£18,063), Hertfordshire (£17,054) and Outer London West and North West (£16,749). These estimates compare with the UK average GDHI per head of £13,802. Nottingham (£10,215), Kingston upon Hull (£10,316), Blackburn with Darwen (£10,497), Stoke on Trent (£10,659) and Leicester (£10,750) were the NUTS3 areas with the lowest GDHI per head in 2006.

Table 3 also contrasts GDHI with the 2005 GVA data for the NUTS3 regions. Inner London West had both the highest

Table 2

Top five and bottom five GDHI per head: by NUTS2 regions, 2006

Region	Share of UK (%)	GDHI (£ million) ¹	Per head (£) ¹	Per head index (UK=100) ¹	GVA per head index for 2005 ¹	GVA per head UK ranking
United Kingdom¹	100.0	836.2	13,778	100	100	n/a
Top five GDHI per head						
Inner London	6.7	55.9	18,808	137	252	1
Surrey, East and West Sussex	5.2	43.3	16,569	120	105	7
Berkshire, Buckinghamshire and Oxfordshire	4.2	34.8	16,089	117	141	2
Bedfordshire and Hertfordshire	3.1	26.1	15,842	115	112	5
Outer London	8.5	71.3	15,715	114	92	15
Bottom five GDHI per head						
Northern Ireland	2.5	21.0	12,041	87	81	27
West Wales and the Valleys	2.7	22.6	11,986	87	65	36
Northumberland and Tyne and Wear	2.0	16.7	11,978	87	87	21
Tees Valley and Durham	1.6	13.5	11,687	85	73	34
West Midlands	3.6	30.3	11,636	84	95	12

Note:

1 £ per head and per head index exclude Extra-region, while the total £ million for the UK includes Extra-region.

Figure 3

Top and bottom five GDHI per head indices: by NUTS2 region, 2006

Indices (UK=100)

Figure 4

Top and bottom five GDHI per head indices: by NUTS2 region, 1995

Indices (UK=100)

GVA (439) and GDHI (187) per head index. Nottingham had a low GDHI per head index of 74, but a high GVA per head index of 138, the eighth highest NUTS3 region in the UK and 38 per cent above the UK average. In comparison, the GDHI per head index for Nottingham was 26 per cent below the UK average. Leicester also had a GVA per head index above the national average (113), but a GDHI index below the UK average (78).

Figure 5 and Figure 6 compare the top five and bottom five ranked local area

(NUTS3) regions in 2006 and 1995. The top five ranked subregions had only one minor change when comparing 1995 and 2006, with Outer London South being fifth in 1995 and Outer London West and North West fifth in 2006. There was some change in the bottom five subregions, with the two Northern Ireland regions in the bottom five, West/South West Northern Ireland and North of Northern Ireland, moving out of the bottom five by 2006. Their per head indices increased from 77 to 80 and from 72 to 79 between 1995 and 2006, respectively.

The largest movement of household per head indices between 1995 and 2006 was in Inner London West, increasing from 177 in 1995 to 187 in 2006. This region moved from being 77 per cent to 87 per cent above the UK average.

Figure 7 shows the variation within NUTS regions. The graph represents the constituent NUTS3 region with the highest and lowest GDHI per head in each NUTS1 region in 2006. London shows the biggest contrast, with Inner London West having the highest GDHI per head (£25,745) and Outer London East and North East the lowest (£13,985). The region with the least variation was Wales, with Monmouthshire and Newport having the highest GDHI per head (£13,161) and South West Wales the lowest (£11,388).

Revisions

The May 2008 GDHI estimates include some revisions to earlier published estimates for the period 1995 to 2005.

The main reasons for revisions are:

- revisions to the UK National Accounts (*Blue Book* 2007), which go back to 2004
- replacing provisional estimates with actual data, for example, latest available HMRC PAYE data replaces previously used estimates back to 2004/05
- further changes due to replacing estimates with actual data and methodological improvements

Future work plans

ONS plans to publish regional GVA for 1989 to 2007 at the NUTS1 level and 1995 to 2006 for NUTS2 and NUTS3

Table 3

Top five and bottom five GDHI per head: by NUTS3 region, 2006

Region	GDHI (£ million) ¹	Per head (£) ¹	Per head index (UK=100) ¹	GVA per head index for 2005 ¹	GVA per head UK Ranking
United Kingdom¹	836.2	13,778	100	100	n/a
Top five GDHI per head					
Inner London West	28.2	25,745	187	439	1
Surrey	20.5	18,893	137	130	11
Buckinghamshire County Council	8.8	18,063	131	121	16
Hertfordshire	18.1	17,054	124	124	14
Outer London West and North West	29.6	16,749	122	115	20
Bottom five GDHI per head					
Leicester	3.1	10,750	78	113	24
Stoke on Trent	2.6	10,659	77	79	83
Blackburn with Darwen	1.5	10,497	76	78	86
Kingston upon Hull	2.6	10,316	75	89	49
Nottingham	2.9	10,215	74	138	8

Note:

¹ £ per head and per head index exclude Extra-regio, while the total £m for the UK includes Extra-regio.

Figure 5

Top and bottom five GDHI per head indices: by NUTS3 region, 2006

Indices (UK=100)

Figure 6

Top and bottom five GDHI per head indices: by NUTS3 region, 1995

Indices (UK=100)

Figure 7

Highest and lowest NUTS3 GDHI per head: by NUTS1 region, 2006

in December 2008. These data will be consistent with the National Accounts *Blue Book* 2008. A full industrial breakdown will be restored when the supply and use framework has been published at the national level.

It is also planned to publish regional GDHI estimates at the NUTS1, 2 and 3 levels from 1995 to 2007 (consistent with the National Accounts *Blue Book* 2008) in spring 2009.

It is planned to publish experimental estimates of GVA, using a production approach, at the NUTS1 level in December 2009. This will present constant prices estimates consistent with National Accounts *Blue Book* 2009.

Notes

- 1 The full Regional Accounts gross disposable household income publication can be accessed on the National Statistics website at www.statistics.gov.uk/statbase/product.asp?vlnk=14651
- 2 The full Regional Accounts gross value added publication can be accessed on the National Statistics website at www.statistics.gov.uk/statbase/product.asp?vlnk=14650
- 3 A guide to the regional geographies can be accessed on the National Statistics website at www.statistics.gov.uk/geography/gazetteer.asp

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APPENDIX

Map 1

Gross disposable household income per head: by NUTS1 area, 2006

Map 2

Gross disposable household income per head: by NUTS2 area, 2006

Map 3

Gross disposable household income per head: by NUTS3 area, 2006