

Gross Disposable Household Income for Bristol April 2018

Summary



The Gross Disposable Household Income (GDHI) per head for Great Britain grew significantly slower post-recession (£379 per annum 2008-15) than it did pre-recession (£491 per annum 1997-07).



Between 1997 and 2007 the average annual growth¹ of GDHI per head was 3.8% which compares with 1.6% for inflation (CPI²). Post-recession³, GDHI grew at an average of 2.2% per year which compares with 2.5% for inflation.



At the national level, 75% of GDHI is accounted for by "Compensation of Employees"⁴ (CoE). Pre-recession, CoE per head grew at an annual average of 5.5% per year and post-recession at 1.9% per year.



For Bristol, GDHI per head grew at an annual average 3.4% per year pre-recession and 2.8% per year post-recession.



For Bristol, about 80% of GDHI was CoE. Pre-recession, CoE per head grew an annual average of 4.9% per year and post-recession at 3.3% per year.



Pre-recession, GDHI per head and CoE per head for the British Core Cities grew more quickly than inflation. Bristol grew fifth fastest.



Post-recession, GDHI per head and CoE per head of the British Core Cities grew more slowly than pre-recession. Bristol grew faster than any other Core City and slightly faster than inflation.

¹ Sum of growth for each year divided by the number of years

² Consumer Price Index

³ 2010 to 2015

⁴ Earnings

BRISTOL Economic Briefing

Gross Disposable Household Income for Bristol April 2018

The Picture for Great Britain.

Gross Disposable Household Income (GDHI) for Great Britain⁵ grew steadily in the period 1997 to 2015. Pre- and post-recession trend growth of GDHI for GB is shown in the table opposite. Clearly there is no significant difference between the pre- (£32m/yr) and post- (£32m/yr) recession trends. Compensation of

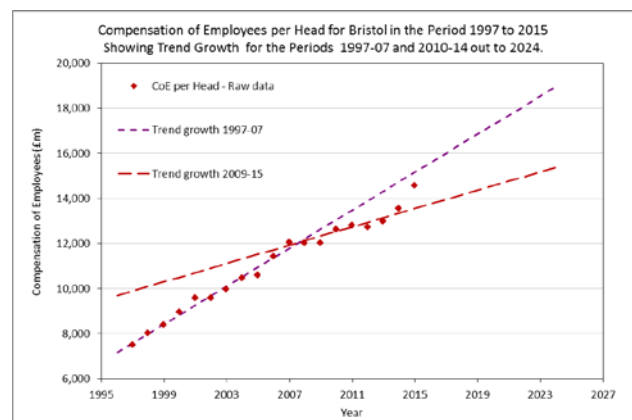
Variable	GB: Trend Growth for Years		Change	Sum of 95% Conf Limits ⁸
	1997-07	2008-15		
GDHI	32.3 (£bn/yr)	31.5 (£bn/yr)	0.8	3.8
GDHI/head	491 ((£/hd)/yr)	379 ((£/hd)/yr)	112	60.4
CoE	32.5 (£bn/yr)	19.5 (£bn/yr)	13.0	4.0
CoE/head	511 ((£/hd)/yr)	216 ((£/hd)/yr)	295	60.3

of Employees⁶ (CoE) which accounts for 75% of GDHI in GB grew significantly more slowly post-recession. Both GDHI per head and CoE per head grew significantly more slowly post-recession. The data⁷ is shown in the above table and there is a clear difference between the change in trend growth and the sum of the relevant 95% confidence limits. Pre-recession, average annual growth rates of GDHI per head and CoE per head compare favourably with consumer price inflation. Between 1997 and 2007 inflation (CPI) grew at an average of 1.6% per annum, significantly slower the average annual growth of both GDHI per head (3.8%) and CoE per head (5.5%). However as is clear from the data table above, post-recession the reverse is true.

Variable for the GB	Average Annual Change Between Years Inclusive	
	1997 to 2007	2011 to 2015
GDHI per Head	3.78	2.18
CoE per Head	5.54	1.80
Inflation (CPI)	1.56	2.28

The Picture for Bristol.

Trend analysis of the GDHI, GDHI per head, CoE⁹ and CoE per head for Bristol show clearly¹⁰ that only CoE per head was significantly affected by the 2008 recession. The chart opposite shows CoE per head for Bristol. The trend growth of CoE per head in the period 2010 to 2014 was under half that for the period 1997 to 2007. The pre- and post-recession trend growths were £422 per head per year and £203 per head per year respectively. However, with a 7.6% annual increase between 2014 and 2015,



⁵ The results of the trend growth analysis for the United Kingdom are the same as the results for Great Britain

⁶ Earnings

⁷ Charts of GDHI and CoE per head are shown in Appendix 1

⁸ Margin that added to and subtracted from the result gives the limits between which 95% of the results would occur.

⁹ For Bristol, in 2015 CoE was 81.2% of GDHI and 80% on average for the period 1997 to 2015

¹⁰ The results of the analysis are shown in Appendix 2

which is the highest annual increase¹¹ growth of CoE per head for Bristol on record, may be accelerating. In 2015, CoE per head for Bristol was 4% below the level that would have been expected if the 2008 recession had not occurred and CoE per head had continued to grow at the trend rate for the period 1997 to 2007.

Comparison with the British Core Cities

GDHI and GDHI per head for six¹² of the ten Core Cities grew significantly more slowly post the 2008 recession than before. CoE also grew more slowly for six¹³ of the ten Core Cities post-recession and CoE per head¹⁴ for eight¹⁵ of the ten. On average Compensation of Employees accounts for 74% or more of GDHI for all ten Core Cities and must therefore be the most important component of income for the vast majority of families. Thus for ease of discussion GDHI, GDHI per

head and CoE will not be considered further. The table opposite shows the results of trend analysis for Great Britain and the British Core Cities comparing the measured and projected values of CoE per head¹⁶ for 2015. Clearly the actual CoE per head, for GB and all ten Core Cities, is lower than would have been expected if the 2008 recession had not occurred and the trend growth for 1997 to 2007 had continued. Bristol performed best with the smallest percentage difference and Nottingham second; seven of the ten Core Cities have performed better than Great Britain as a whole. Only Manchester, Cardiff and Sheffield performed worse.

Area Name	Value of CoE per Head 2015		% Difference
	Actual	1997-07 trend	
Bristol	14,573	15,159	4.0
Birmingham	10,466	11,599	10.8
Cardiff	13,969	17,495	25.2
Glasgow	13,471	15,029	11.6
Leeds	13,366	15,093	12.9
Liverpool	11,089	12,355	11.4
Manchester	10,179	12,375	21.6
Newcastle	16,020	18,491	15.4
Nottingham	10,194	10,961	7.5
Sheffield	11,667	13,935	19.4
Great Britain	14,360	16,755	16.7

Questions about the contents of this briefing should be addressed to:

Stephen Usmar,
Economic Intelligence Officer,
Economic Development,
Bristol City Council.

email: stephen.usmar@bristol.gov.uk

Phone: 0117 9222925

¹¹ For the duration, 1997 to 2015, of the time series

¹² Cardiff, Glasgow, Leeds, Liverpool, Manchester and Sheffield.

¹³ Cardiff, Glasgow, Leeds, Manchester, Nottingham and Sheffield.

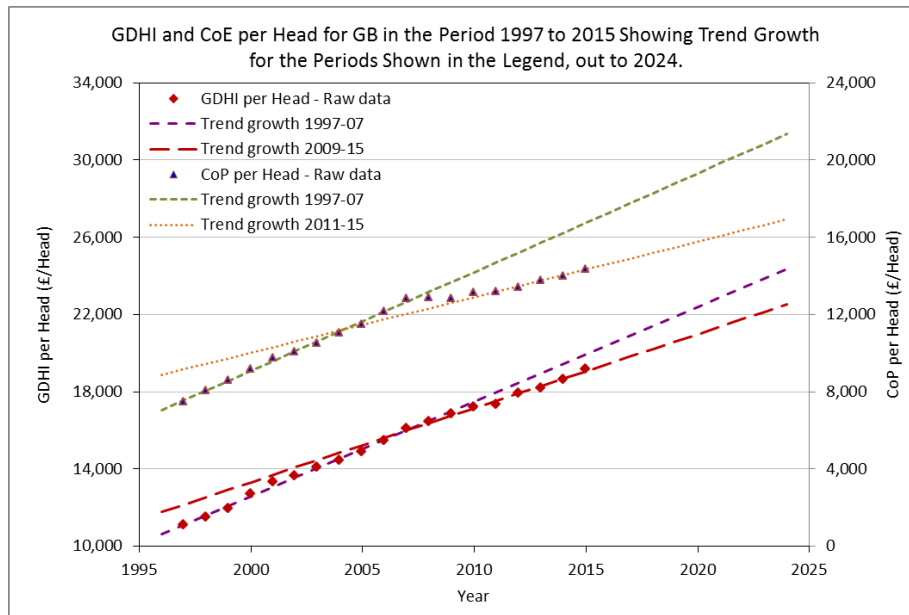
¹⁴ See Appendix 3 for details of the trend analysis of GDHI, GDHI/head, CoE and CoE/head

¹⁵ Bristol, Cardiff, Glasgow, Leeds, Liverpool, Manchester, Newcastle and Sheffield.

¹⁶ Charts for CoE per head of all of the British Core Cities (except Bristol) are shown in Appendix 4

Appendix 1

The chart below shows the raw data and trend growth for GDHI per Head and CoE per head. Clearly post-recession growth was significantly slower than pre-recession.



Appendix 2

Results of the trend analysis of GDHI, GDHI per head, CoE and CoE per head for Bristol

Variable	Bristol: Trend Growth for Years		Change	Sum of 95% Conf Limits	Significant Change?
	1997-07	2010-14			
GDHI	186	220	-33	45	no
GDHI/Head	397	324	73	105	no
CoE	190	151	39	77	no
CoE/Head	422	203	219	165	yes

Appendix 3

Table A3.1: Results of the trend analysis of GDHI for the British Core Cities

Variable	GDHI: Trend Growth for Years		Change	Sum of 95% Conf Limits	Significant Change?
	1997-07	2010-14			
Bristol	186	220	-33	45	no
Birmingham	304	213	91	128	no
Cardiff	512	80	432	90	yes
Glasgow	460	185	275	108	yes
Leeds	388	210	178	64	yes
Liverpool	393	289	104	93	yes
Manchester	375	212	163	73	yes
Newcastle	502	304	198	210	no
Nottingham	221	283	-63	156	no
Sheffield	374	199	175	148	yes

Table A3.2: Results of the trend analysis of GDHI per head for the British Core Cities

Variable	GDHI/Head: Trend Growth for Years		Change	Sum of 95% Conf Limits	Significant Change?
	1997-07	2010-14			
Bristol	397	324	73	105	no
Birmingham	304	213	91	128	no
Cardiff	512	80	432	90	yes
Glasgow	460	185	275	108	yes
Leeds	388	210	178	64	yes
Liverpool	393	289	104	93	yes
Manchester	375	212	163	73	yes
Newcastle	502	304	198	210	no
Nottingham	221	283	-63	156	no
Sheffield	374	199	175	148	yes

Table A3.3: Results of the trend analysis of CoE for the British Core Cities

Variable	CoE: Trend Growth for Years		Change	Sum of 95% Conf Limits	Significant Change?
	1997-07	2010-14			
Bristol	190	151	39	77	no
Birmingham	294	312	-18	117	no
Cardiff	192	28	164	63	yes
Glasgow	258	162	97	79	yes
Leeds	310	126	184	106	yes
Liverpool	169	141	28	41	no
Manchester	237	156	81	28	yes
Newcastle	138	116	22	28	no
Nottingham	84	121	-37	36	yes
Sheffield	202	122	80	74	yes

Table A3.4: Results of the trend analysis of CoE per head for the British Core Cities

Variable	CoE/Head: Trend Growth for Years		Change	Sum of 95% Conf Limits	Significant Change?
	1997-07	2010-14			
Bristol	422	203	219	165	yes
Birmingham	261	197	64	123	no
Cardiff	543	-149	692	130	yes
Glasgow	478	212	267	147	yes
Leeds	393	86	307	150	yes
Liverpool	372	238	134	94	yes
Manchester	453	181	272	63	yes
Newcastle	528	228	300	96	yes
Nottingham	262	283	-21	132	no
Sheffield	363	126	237	161	yes

Appendix 4

