

## **Sub-Regional Productivity - GVA per hours worked**

### Summary

The Office of National Statistics has recently produced an article<sup>1</sup> on labour productivity in England in 2008, which has highlighted that Hartlepool and Stockton-on-Tees ranked as the 52<sup>nd</sup> most productive sub-region in England out of a total of 93, with Gross Value Added (GVA) per hour worked at 90% of the UK average. The sub-region also compares favourably within the Tees Valley, with productivity much higher than that of Darlington's.

### Methodology and Definitions

The article focuses on GVA per hour worked as an indicator of sub-regional economic performance. GVA per hour worked is the preferred measure of productivity because it takes into account the hours worked per job and how these may differ across sub-regions due to different industrial structures and different levels of part-time working.

**GVA** is the difference between the value of goods and services produced and the cost of raw materials and other inputs which are used up in production.

**GVA per hour worked** is calculated by adding together the sum of employee hours, self-employment hours (taken from the Annual Population Survey), hours worked in government training schemes and hours worked by HM Armed Forces to provide a total estimate for each sub-region. The total is then multiplied by the level of employee jobs for each sub-region taken from the Annual Business Inquiry.

### Geography

Nomenclature of Units for Territorial Statistics (NUTS) geographies are used which has been developed to allow comparison across the EU. Each NUTS 3 sub-region covers the same area as either a single local authority or a combination of two or more adjacent authorities. In the Tees Valley, there are three NUTS 3 areas; Stockton and Hartlepool, South Teesside (which consists of Middlesbrough and Redcar and Cleveland) and Darlington.

### Results

The highest productivity levels are found in Inner London, followed by Berkshire, Surrey and Swindon. Due to the very high productivity levels in London, only 23 out of the 93 sub-regions had a GVA per hour worked above the UK average in 2008 (the UK average being 100) of which only 3 of these 23 sub regions were found in the North or Midlands (Solihull, Cheshire CC, and Derby).

Given the skewed nature of the distribution it is worth comparing the 93 sub-regions with the mid ranking sub-region (the median, which ranks as 47<sup>th</sup>) which is Tyneside and comparing its performance to the UK average. In 2008, Tyneside had a GVA per hour of 91.3% of the UK average, which is only marginally above that of Hartlepool and Stockton on Tees at 90.0 % of the UK average.

The table below shows the GVA per hour worked for a selection of the sub-regions in England. The top 2 sub-regions are included to illustrate how their high productivity can skew the results. Southampton ranks 24<sup>th</sup> and is the first sub-region to fall below the UK average, whilst Blackpool has the lowest productivity levels. At only 10% below the UK average, Hartlepool and Stockton-on-Tees GVA per hour worked (90.0) in 2008 fell just below that of South Teesside (Middlesbrough and Redcar and Cleveland) and was considerably better than Darlington's. Hartlepool and Stockton productivity was also only slightly below that of Sunderland and Tyneside and fared much better than Durham or Northumberland's. However as Northumberland is a rural sub-region it would be expected to have a lower productivity rate. It is worth noting that whilst GVA per hour worked in 2008 in Hartlepool and Stockton is less than in 2004, this is a trend that has occurred in the majority of sub-regions.

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<sup>1</sup> Sub-Regional Productivity, Office for National Statistics, 10 October 2011

GVA per hour worked, England 2004- 2008

UK Average = 100

<b>NUT3 Sub-Region</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2008 Rank</b>
Inner London - West	149.1	150.5	153.2	153.8	156.2	1st (highest)
Inner London - East	134.3	133.9	133.1	132.9	132.6	2nd
Southampton	97.6	98.0	98.5	98.7	99.4	24th
Sunderland	101.4	99.8	96.9	96.3	92.3	42nd
Tyneside	91.3	91.2	91.1	91.2	91.3	47th* (mean)
South Teesside	92.9	92.2	91.6	91.4	91.1	48th
<b>Hartlepool and Stockton-on-Tees</b>	<b>91.3</b>	<b>90.7</b>	<b>90.0</b>	<b>89.4</b>	<b>90.0</b>	<b>52nd</b>
Darlington	87.6	87.3	86.9	86.7	86.5	68th
Durham CC	86.1	85.5	84.9	84.8	85.1	74th
Northumberland	84.9	84.1	82.1	81.9	78.2	88th
Blackpool	75.6	74.2	71.4	70.9	67.0	93rd (lowest)