



National Assembly for **Wales**  
Cynulliad Cenedlaethol **Cymru**

## **Regional and Local Gross Value Added**

This paper provides information on the regional and local area Gross Value Added (GVA) data released by the Office for National Statistics (ONS) on 12 December 2008.

**December 2008**



# Regional and Local Gross Value Added

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## Executive Summary

This paper provides information on the regional and local area Gross Value Added (GVA) data released by the Office for National Statistics (ONS) on 12 December 2008. It includes the 2007 GVA figures for Wales and the 2006 GVA figures for West Wales & the Valleys and East Wales.

The latest figures show that:

- Total headline GVA in Wales in 2007 was £44.3 billion, up 5.1 per cent on 2006. This was the **lowest growth in total GVA of all the devolved countries and English regions**. GVA for the UK (excluding extra-regio) increased by 6.0 per cent.
- GVA per head in Wales in 2007 was £14,877 or 74.5 per cent of the UK average. Wales has **the lowest GVA per head of all the devolved countries and English regions**. It has been the lowest since 1998 when it fell below Northern Ireland.
- GVA per head in Wales is now 4.6 per cent higher than in 2006. The greatest growth in 2007 was London (6.5 per cent higher than in 2006), while Wales had the **lowest growth in GVA per head of all the devolved countries and English regions** (4.6 per cent). The growth in GVA per head for the UK as a whole<sup>1</sup> was 5.3 per cent.
- The figures show that GVA per head in Wales relative to the UK has fallen each year since 1995, except for between 2000 and 2001 when there was no change.
- In London, the South East and the East of England, GVA per head in 2007 was above the UK average, while all of the other devolved countries and English regions were below the UK average.

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<sup>1</sup> Excluding Extra-Regio GVA. All the statistics for GVA are not adjusted for inflation. Further technical points for consideration in interpreting data published in this paper can be found in the Technical Annex.



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## 1 Gross Value Added (GVA)

### 1.1 Regional Gross Value Added

**Table 1.1: Gross Value Added(a), Wales and the UK, 1989 to 2007<sup>2</sup>**

Year	Wales (£ per head)	UK (£ per head)(b)	Per Head GVA in Wales as a percentage of UK GVA
1989	6,821	8,116	84.0
1990	7,349	8,810	83.4
1991	7,582	9,167	82.7
1992	7,882	9,517	82.8
1993	8,233	9,996	82.4
1994	8,688	10,520	82.6
1995	9,155	11,047	82.9
1996	9,546	11,728	81.4
1997	9,935	12,431	79.9
1998	10,290	13,161	78.2
1999	10,631	13,780	77.1
2000	11,012	14,308	77.0
2001	11,554	15,006	77.0
2002	12,107	15,797	76.6
2003	12,742	16,709	76.3
2004	13,287	17,511	75.9
2005	13,693	18,093	75.7
2006	14,226	18,945	75.1
<b>2007 (c)</b>	<b>14,877</b>	<b>19,956</b>	<b>74.5</b>

Source: Office for National Statistics (ONS)

- (a) Estimates of regional GVA in this table are on a residence basis, where the income of commuters is allocated to where they live rather than their place of work. The headline regional GVA series have been calculated using a five-period moving average.
- (b) Excludes the GVA for Extra-Region that comprises compensation of employees and gross operating surplus which cannot be assigned to regions. Extra-region includes "continental shelf" activity relating to offshore oil and gas extraction, UK embassies overseas and armed forces stationed abroad.
- (c) Provisional.

The latest Gross Value Added (GVA) estimates published by the Office for National Statistics (ONS) show that<sup>3</sup>:

- GVA per head in Wales in 2007<sup>4</sup> was £14,877 or 74.5 per cent of the UK average. The figures show that GVA per head in Wales relative to the UK has fallen each year since 1995, except for between 2000 and 2001 when there was no change.

<sup>2</sup> The Regional GVA estimates (NUTS1) for 2007 have been released along with **revisions for the period 1989 to 2006**. These estimates update those published in December 2007. At the more detailed level of geography (NUTS2 and NUTS3) the estimates for 2006 have been released along with **revisions for the period 1995 to 2005**, updating the estimates published in December 2007.

<sup>3</sup> ONS First Release, *Regional, sub-regional and local GVA*, 12 December 2008:

<http://www.statistics.gov.uk/pfdir/gva1208.pdf>

The latest headline figures are also reported on the Welsh Assembly Government website at:

<http://wales.gov.uk/topics/statistics/headlines/econ2008/hdw200812121/?lang=en>

Further information on regional GVA can be found on the ONS web-site at:

<http://www.statistics.gov.uk/statbase/Product.asp?vlnk=14650>

<sup>4</sup> 2007 data are provisional



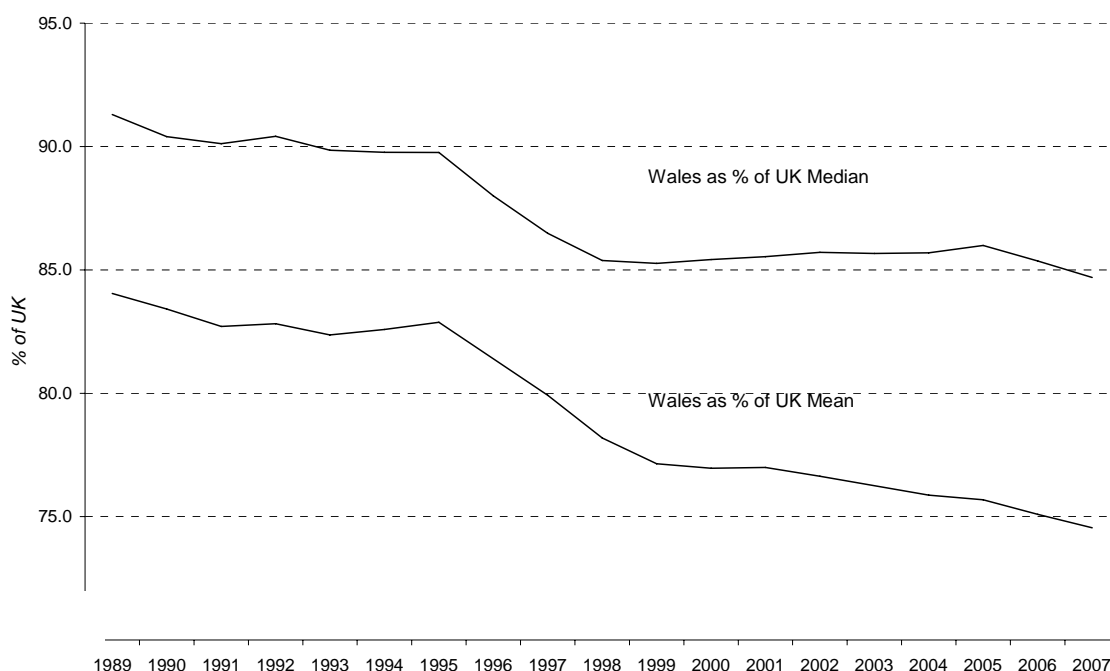
- GVA per head in Wales in 2007 relative to the UK average was the lowest of all the devolved countries and English regions and has been the lowest since 1998 when it fell below Northern Ireland.
- In London, the South East and the East of England, GVA per head in 2007 was above the UK average, while all other regions were below the UK average.
- GVA per head in Wales is now 4.6 per cent higher than in 2006. The greatest growth in 2007 was London (6.5 per cent higher than in 2006), while Wales had the lowest growth (4.6 per cent). The growth in GVA per head for the UK as a whole<sup>5</sup> was 5.3 per cent.

### 1.2 Relative GVA – The Median Measure

It is possible to compare GVA in Wales relative to other regions while making allowance for a relatively large increase or fall in GVA within a particular region which might skew the mean (average) measure. This is done using the median measure. The median represents the number that sits in the middle of a set of numbers, in this case the mean of the central two index numbers for UK relative GVA. GVA per head in Wales in 2007 was 84.7 per cent of the UK median.

Figure 1.1 shows per head GVA in Wales as a percentage of per head GVA for the UK mean and median over the period 1989 to 2007 and illustrates the decline in relative GVA in the late 1990s. Between 1999 and 2006 the median measure improved slightly but has fallen in the last two years. The mean measure has fallen each year since 2001.

**Figure 1.1: Gross Value Added, Wales as a percentage of UK mean and UK median**



Source: ONS

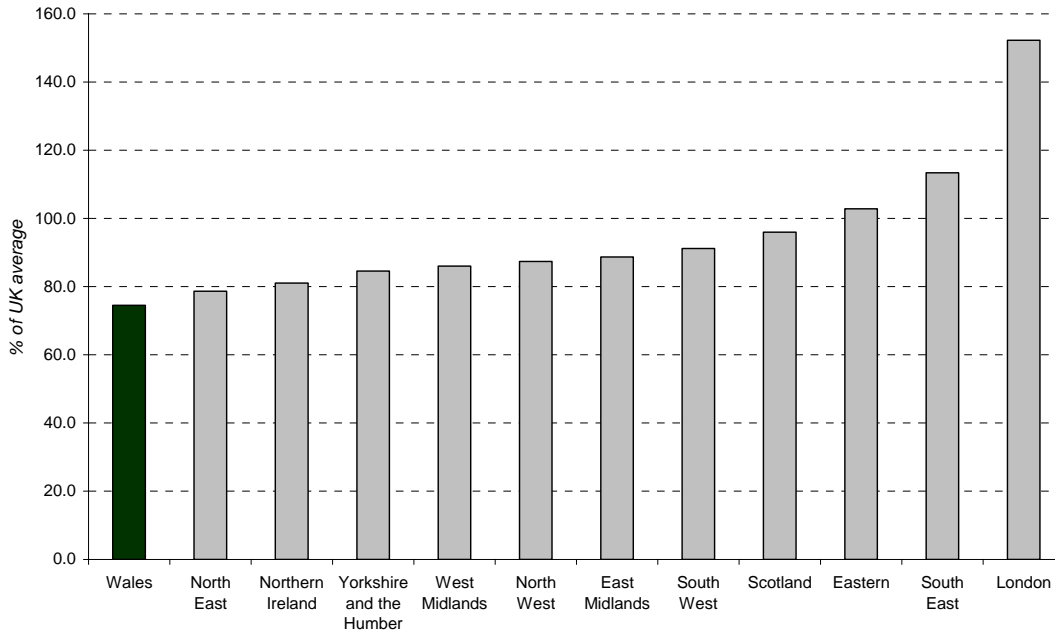
<sup>5</sup> Excluding Extra-Regio GVA. All the statistics for GVA are not adjusted for inflation. Further technical points for consideration in interpreting data published in this paper can be found in the Technical Annex.



### 1.3 Regional Comparison

Figure 1.2 shows per head GVA in the UK nations and regions as a percentage of per head GVA for the UK in 2007.

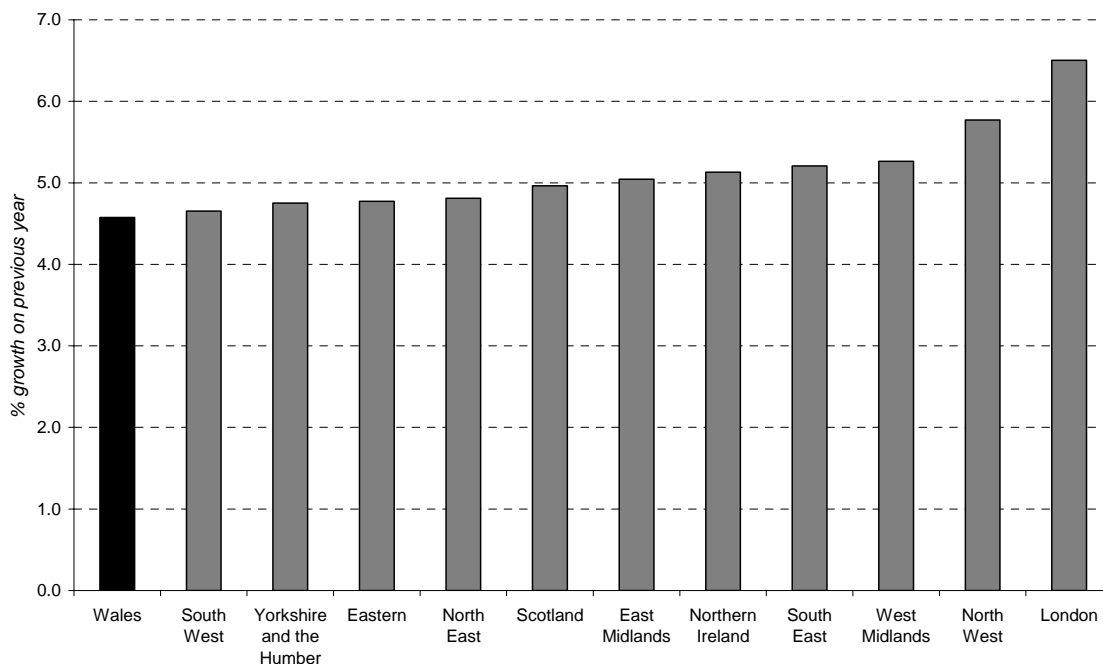
**Figure 1.2: Per head GVA, by UK nation and region, 2007**



Source: ONS

Figure 1.3 charts per head growth in the UK nations and regions between 2006 and 2007. Wales had the lowest per head growth rate among regions and nations of the UK in this period of 4.6 per cent. This compares to a UK (less extra regio) per head growth rate of 5.3 per cent.

**Figure 1.3 Growth in per head GVA, by UK nation and region, 2006 to 2007**

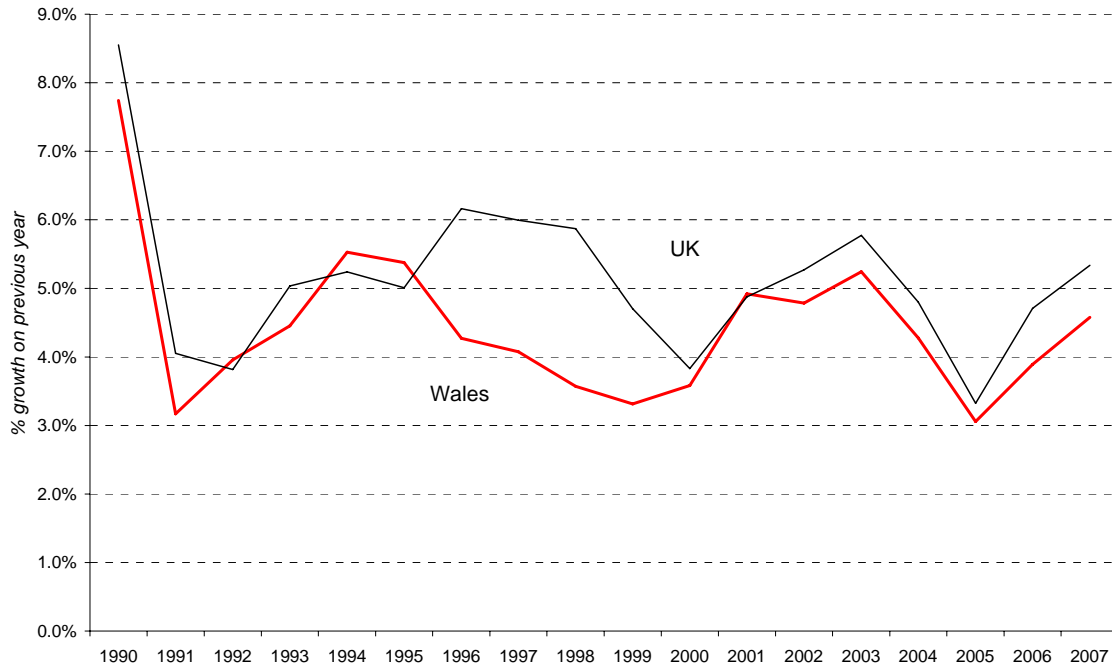


Source: ONS

#### 1.4 Per Head Growth Rates

Figure 1.4 charts per head growth in Wales against the UK for the years 1990 to 2007.

**Figure 1.4: Per head GVA growth, Wales and UK, 1990 to 2007**



Source: ONS

Figure 1.4 shows a consistently lower rate of per head growth in Wales compared to the UK as a whole in the late 1990s, which explains the high rate of relative decline in Welsh per head GVA over that period. The subsequent closing of the gap in the growth rates explains why the rate of relative decline has slowed over recent years.

## 2 Sub-regional and local GVA - 2006

**Table 2.1: Per Head Gross Value Added (GVA), Wales, by NUTS<sup>6</sup> level 1, 2 and 3 area, 2006(a)(b)(c)**

NUTS levels	Gross Value Added (£ per head)	Per Capita GVA as a percentage of UK GVA
<b>Wales</b>	<b>14 226</b>	<b>75</b>
<b><i>West Wales and the Valleys</i></b>	<b>12 071</b>	<b>64</b>
Isle of Anglesey	10 560	56
Gwynedd	12 972	68
Conwy and Denbighshire	11 529	61
South West Wales	11 711	62
Central Valleys	11 347	60
Gwent Valleys	10 987	58
Bridgend and Neath Port Talbot	12 402	65
Swansea	15 255	81
<b><i>East Wales</i></b>	<b>17 984</b>	<b>95</b>
Monmouthshire and Newport	18 537	98
Cardiff and Vale of Glamorgan	20 087	106
Flintshire and Wrexham	16 442	87
Powys	13 258	70

Source: Office for National Statistics

- (a) GVA at current basic prices
- (b) Sub-regional estimates are on a workplace basis
- (c) Excluding Extra-regio and statistical discrepancy

The per head GVA figure for Wales as a whole is calculated on a residence basis, where the income of commuters is allocated to where they live rather than their place of work. However, it should be noted that the GVA estimates compiled at the NUTS 2 and at NUTS 3 levels are on a workplace basis. The estimates of NUTS 3 GVA per head are calculated by dividing the estimate of workplace GVA for an area by the resident population for that area. Estimates of GVA per head will be high in areas with high levels of inward commuting and a low resident population, and will be low in areas with significant levels of outward commuting and high resident populations. Hence changes in commuting patterns between areas over time may result in changes in per capita GVA in neighbouring NUTS3 areas. Furthermore, as GVA estimates are partly based on sample surveys, the results for smaller (NUTS3) regions are subject to a greater degree of uncertainty than those for larger regions.

<sup>6</sup> The Nomenclature of Units for Territorial Statistics (NUTS) is a hierarchical classification of administrative areas, used across the European Union for statistical purposes. Wales is one of 12 NUTS 1 areas in the UK. A breakdown of NUTS 2, 3 and Local Authority (LAU) 1 areas can be found on the ONS web-site at: [http://www.statistics.gov.uk/geography/nuts\\_wales.asp](http://www.statistics.gov.uk/geography/nuts_wales.asp)

The latest estimates show that:

- In 2006, West Wales & the Valleys had the second lowest GVA per head (£12,071) of all NUTS2 regions in the UK. These figures compare to the UK average<sup>7</sup> of £18,945. East Wales had a GVA per head of £17,984 in 2006.
- Per head GVA in West Wales & the Valleys declined relative to the UK average between 1995 and 2000 from 73 per cent to 64 per cent. Per head GVA in West Wales & the Valleys has remained fairly stable since this time.
- Between 1995 and 2003 per head GVA in East Wales was more or less equal to the UK average. However, it has declined in recent years to stand at 95 per cent.
- Of the 12 NUTS3 regions in Wales, Cardiff & Vale of Glamorgan had the highest level of GVA per head in 2006 at 106 per cent of the UK average, whilst the lowest levels were the Isle of Anglesey with 56 per cent, the Gwent Valleys with 58 per cent and the Central Valleys with 60 per cent.
- The Isle of Anglesey, the Gwent Valleys and the Central Valleys were also in the bottom five NUTS3 regions with the lowest GVA per head relative to the UK. Anglesey has the lowest GVA per head in the UK.
- Between 1995 and 2006, only two NUTS3 areas in the West Wales and the Valleys area showed an improvement in GVA per head relative to the UK (the Isle of Anglesey by one percentage point and Swansea by two percentage points). The remaining NUTS3 areas in West Wales and the Valleys all saw significant declines in GVA per head relative to the UK over this period. The largest fall relative to the UK is for Bridgend & Neath Port Talbot (84 per cent to 65 per cent).
- Between 1995 and 2006, one NUTS3 area in East Wales (Monmouthshire & Newport) showed an improvement in GVA per head relative to the UK, whilst the remaining three areas showed a relative decline (Flintshire & Wrexham showed the largest fall of 22 percentage points).

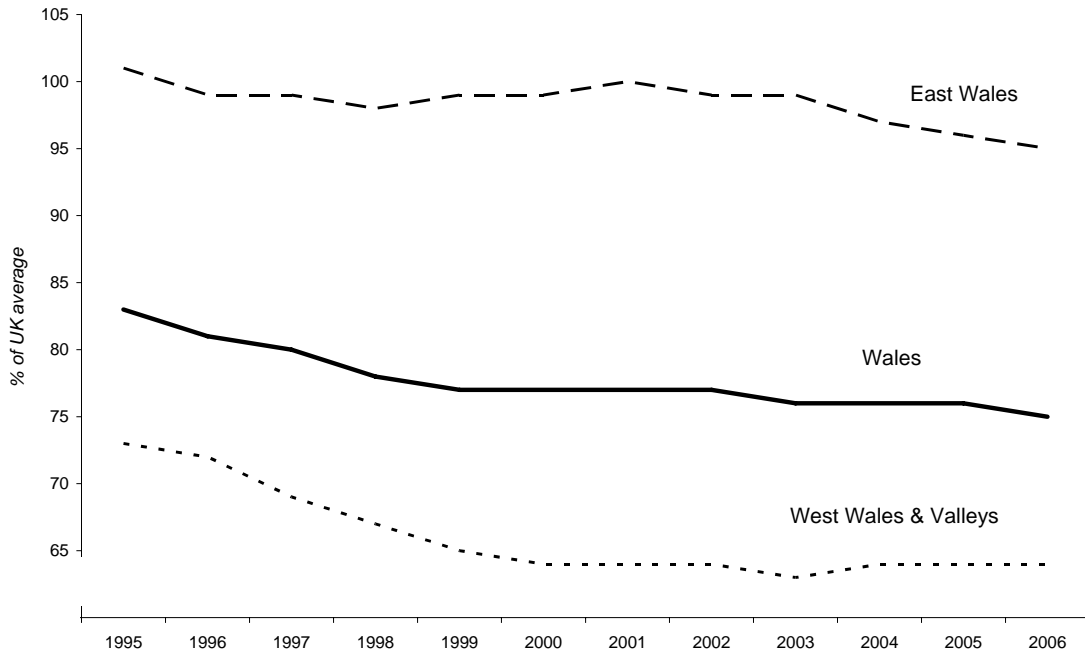
Figure 2.1 graphs GVA per head for the period 1995 to 2006 for the Wales NUTS 1 and 2 regions relative to the UK average.

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<sup>7</sup> Excluding Extra-Regio GVA



Figure 2.1: Per head GVA, NUTS 1 and 2 areas of Wales



Source: Office for National Statistics

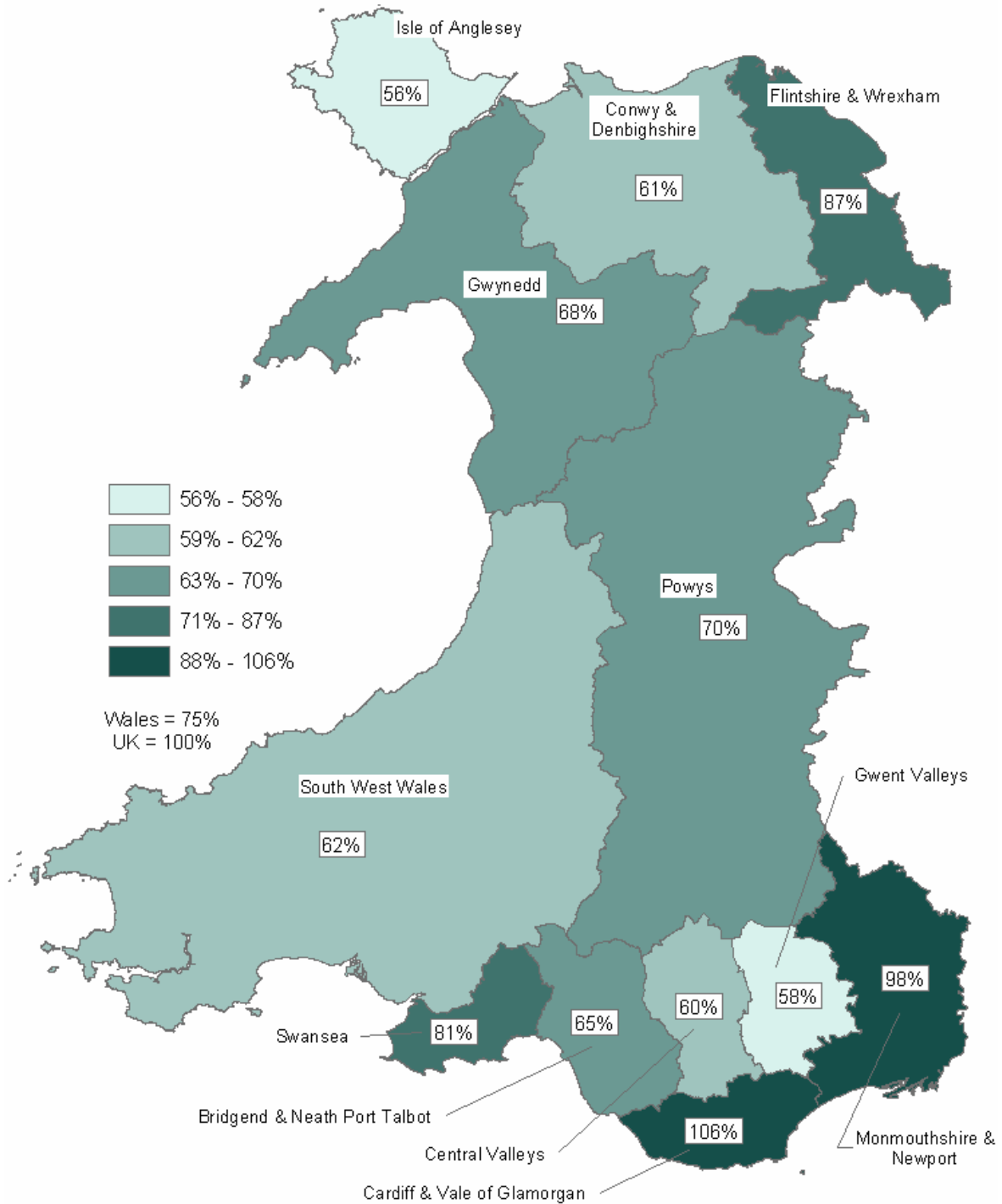
Map 2.1 shows the latest per head GVA as a percentage of UK GVA estimates for 2006 by NUTS3 area.

As Map 2.2 shows, between 1995 and 2006, the largest percentage increases in GVA per head were in Monmouthshire & Newport and Swansea. The smallest percentage increases were in Bridgend & Neath Port Talbot and Flintshire & Wrexham.

Map 2.3 shows that between 1999 and 2006 the largest percentage increases in GVA per head were in the Isle of Anglesey and Swansea. The smallest percentage increases were in Bridgend & Neath Port Talbot and Flintshire & Wrexham.

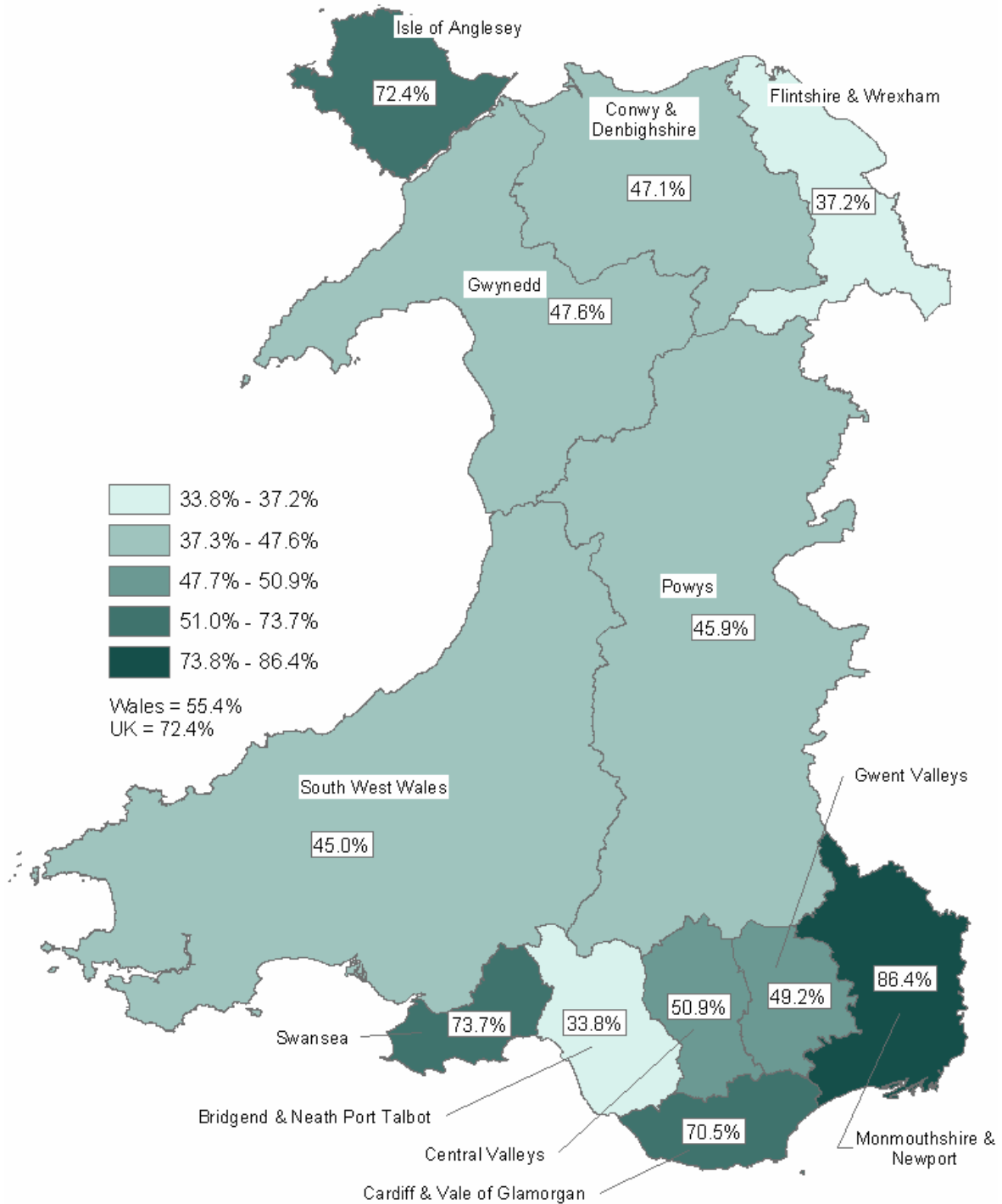


**Map 2.1: Gross Value Added per head as a percentage of UK per head GVA 2006, by NUTS3 area**



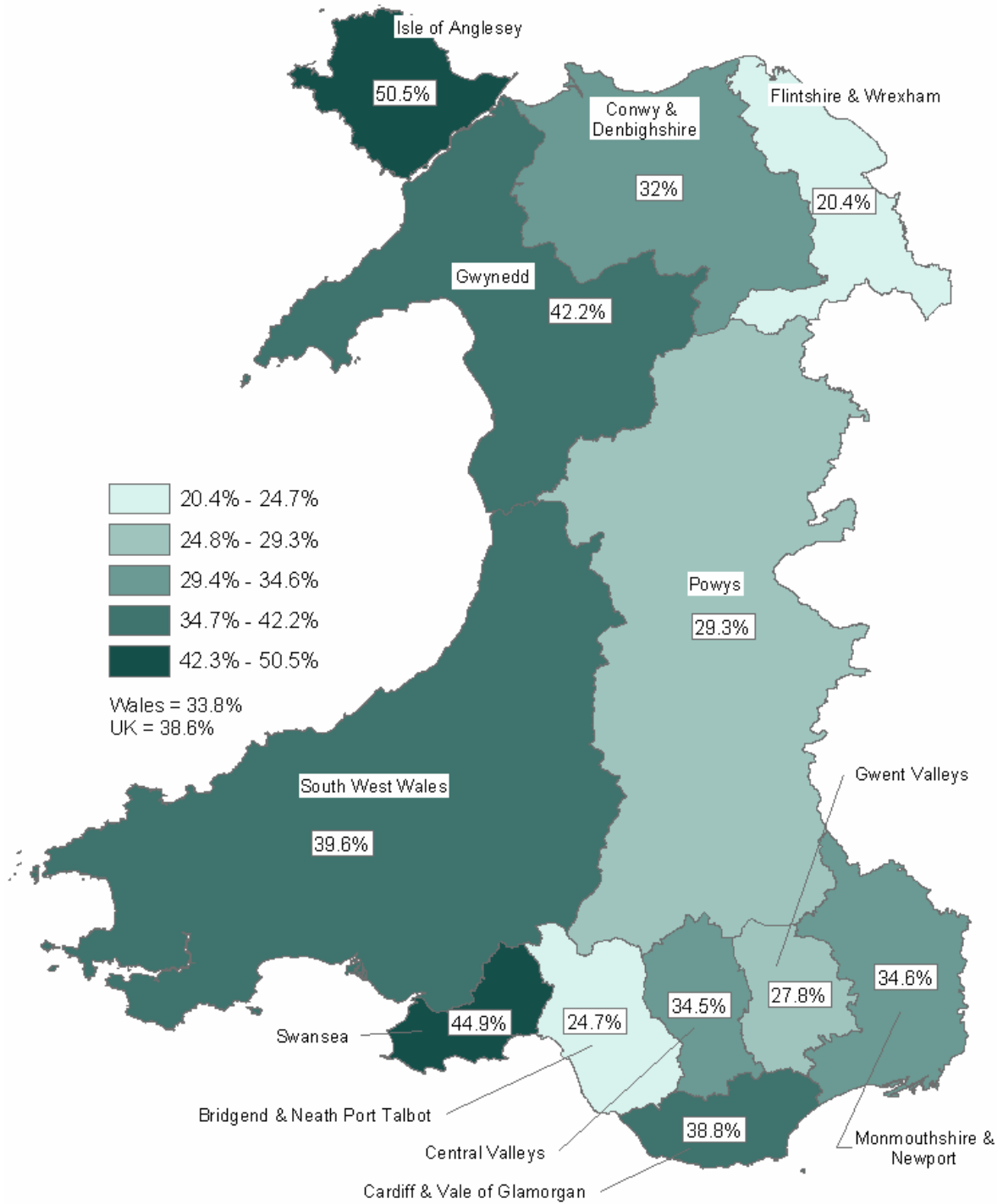


**Map 2.2: Percentage change in Gross Value Added per head, 1995-2006, by NUTS3 areas**





**Map 2.3: Percentage change in Gross Value Added per head, 1999-2006, by NUTS3 areas**



## **Technical Annex**

Gross Value Added (GVA) measures the contribution to the economy of each individual producer, industry or sector in the United Kingdom. The GVA generated by any unit engaged in production activity can be calculated as the residual of the units' total output less intermediate consumption (that is, goods and services used up in the process of producing the output), or as the sum of the factor incomes generated by the production process. GVA also allows for regional analysis and productivity comparisons to be made.

Some technical issues to bear in mind when considering GVA estimates are outlined below.

- **Regional (NUTS1) GVA** is currently calculated on both a workplace and a residence basis. Residence-based GVA allocates the incomes of commuters to where they live (and is done so due to the residence-based administrative underlying data), whereas workplace-based GVA allocates their incomes to where they work.
- **NUTS2 and NUTS3 GVA** are estimated on a workplace basis. The estimates of NUTS3 GVA per head are calculated by dividing the estimate of workplace GVA for an area by the resident population for that area. Estimates of GVA per head will be high in areas with high levels of inward commuting and a low resident population (such as Inner London and Edinburgh). Conversely, estimates of GVA per head will be low in areas with significant levels of outward commuting and high resident populations.
- **Gross Value Added (GVA) and Gross Domestic Product (GDP)** - Under the European System of Accounts 1995 (ESA95), the term GVA is used to denote estimates that were previously known as gross domestic product (GDP) at basic prices. Under ESA95 the term GDP denotes GVA plus taxes (less subsidies) on products, i.e. at market prices. Regional accounts are currently only published at basic prices, so the figures are now referred to as GVA rather than GDP as in previous publications.
- **Per Head Measurement** - The wide variation in the size of the regions of the UK makes it difficult to compare the regions' economic performance using cash totals; comparisons are therefore usually expressed in terms of amounts per head of the population. However, it is important to note that the growth in totals may be quite different to the growth per head in regions where the population has increased or decreased. Furthermore, the level per head is determined both by the average amount of cash of the working population and by the proportion of dependants. Ideally the age structure of the population should therefore be taken into account when comparing figures on a per head basis.
- **GVA and Inflation** - All the items in regional accounts are measured in current prices, which means that increases over time reflect inflation as well as real growth. Trends in total GVA per head of population cannot be analysed easily without deflating the data. However, there are no regional price indices that could be used to remove the effect of inflation from the figures. Comparisons of trends can therefore be based either on the difference between regional increases at current prices or on movements in the



amount relative to the UK average. Both approaches would be misleading if the rate of inflation in any region were different from the national average.

- **Extra-Regio** - The contribution to GVA of UK embassies abroad and UK forces stationed overseas is included in Extra-Regio, along with the elements relating to activities taking place on the continental shelf. As these cannot be assigned to specific regions they are assigned as "Extra-Regio GVA".
- **Accuracy** - GVA estimates are partly based on sample surveys and the quality of the results therefore varies according to sample size. This means that the results for smaller regions are subject to a greater degree of uncertainty than those for larger regions.