

National Assembly for Wales

Regional and Local Gross Value Added December 2011

This paper provides information on the regional and local area Gross Value Added (GVA) data released by the Office for National Statistics (ONS) on 14 December 2011.



Research
Service

The National Assembly for Wales is the democratically elected body that represents the interests of Wales and its people, makes laws for Wales and holds the Welsh Government to account.

The Research Service provides expert and impartial research and information to support Assembly Members and committees in fulfilling the scrutiny, legislative and representative functions of the National Assembly for Wales.

Research Service briefings are compiled for the benefit of Assembly Members and their support staff. Authors are available to discuss the contents of these papers with Members and their staff but cannot advise members of the general public. We welcome comments on our briefings; please post or email to the addresses below.

An electronic version of this paper can be found on the National Assembly's website at: www.assemblywales.org/research

Further hard copies of this paper can be obtained from:
Research Service
National Assembly for Wales
Cardiff Bay
CF99 1NA

Email: Research.Service@wales.gov.uk

© National Assembly for Wales Commission Copyright 2011

The text of this document may be reproduced free of charge in any format or medium providing that it is reproduced accurately and not used in a misleading or derogatory context. The material must be acknowledged as copyright of the National Assembly for Wales Commission and the title of the document specified.

Enquiry no: 11/ 2785

National Assembly for Wales

Regional and Local Gross Value Added December 2011

Ben Stokes

Paper number: 11/073



Research
Service

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 14 December 2011. It includes the 2010 GVA figures for Wales and the 2009 GVA figures for West Wales and the Valleys and East Wales. All the GVA figures in this paper are measured on a workplace basis. Regional GVA is an income-based measure of the economic output of an area, mainly composed of the wages and profits earned as a result of production.

The latest figures show that:

- Total headline GVA in Wales in 2010 was £45.5 billion, up 3.5 per cent on 2009. Total GVA for the United Kingdom increased by 3.2 per cent over the same period.¹ The share of total UK GVA accounted for by Wales has remained constant at 3.6 per cent for the last four years;
- GVA per head in Wales in 2010 was £15,145 or 74.0 per cent of the UK average. In 2010, Wales and the East Midlands had the largest increase in GVA per head at 3.3 per cent. The increase in GVA per head for the UK as a whole in 2010 was 2.4 per cent.
- GVA per head in Wales in 2010 relative to the UK average was **the lowest** of all the devolved countries and English regions and has been the lowest for the entire time period covered by the revised figures produced by the Office for National Statistics, 1997 to 2010;
- 2010 marks the only year during the period 1997 to 2010 where the GVA per head figure for Wales has increased relative to the UK average.²
- In 2009, West Wales and the Valleys had the lowest GVA per head (£12,561) of all NUTS 2 regions in the UK. This figure equates to 62.8 per cent of the UK average of £20,000. East Wales had a GVA per head of £18,274 in 2009 (91.4 per cent of the UK average);
- Of the twelve NUTS 3 regions in Wales, Cardiff & the Vale of Glamorgan had the highest levels of GVA per head in 2009 at 104.3 per cent of the UK average. This is the only NUTS 3 area in Wales where GVA per head is above the UK average. The lowest levels of GVA per head in Wales were in the Gwent Valleys at 53.3 per cent and the Isle of Anglesey at 57.2 per cent of the UK average. These areas accounted for two of the five NUTS 3 regions throughout the UK with the lowest GVA per head relative to the UK average. The Gwent Valleys had the lowest GVA per head in the UK in 2009.

¹ 2010 data are provisional. All UK data used in this paper exclude what is known as 'Extra-Regio': off-shore contributions to UK GVA that cannot be assigned to any region. See technical annex for further information.

² Using data to one decimal place.

Contents

1. Regional Gross Value Added (GVA)	1
2. Relative GVA - The median measure	3
3. Regional comparison.....	4
4. UK comparison.....	5
5. Sub-regional and local GVA	6
6. Technical Annex	12

Regional and Local Gross Value Added

1. Regional Gross Value Added (GVA)³

Table 1.1: GVA (a), Wales and the UK, 1997 to 2010⁴

Year	Wales (£ per head)	UK (£ per head) (b)	Per Head GVA in Wales as a percentage of UK GVA
1997	9,774	12,498	78.2
1998	10,242	13,222	77.5
1999	10,618	13,840	76.7
2000	10,962	14,363	76.3
2001	11,479	15,055	76.3
2002	12,027	15,849	75.9
2003	12,690	16,761	75.7
2004	13,300	17,604	75.6
2005	13,766	18,210	75.6
2006	14,407	19,165	75.2
2007	15,042	20,144	74.7
2008	15,122	20,450	73.9
2009	14,664	20,000	73.3
2010 (c)	15,145	20,476	74.0

(a) These headline regional GVA series have been calculated using a five-period moving average and are workplace-based.

(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.

Source: ONS

³ The regional GVA estimates (NUTS 1) for 2010 have been released along with **revisions for the period 1997 to 2009, updating** those published in December 2010. At the more detailed level of geography (NUTS 2 and NUTS 3), the estimates for 2009 have been released along with **revisions for the period 1997 to 2008**, updating those published in December 2010. Previously revised data has been available back to 1989. The Office for National Statistics has advised that there are no plans at present to revise the series back to 1989.

⁴ Excluding extra-region GVA. All the statistics for GVA are not adjusted for inflation. GVA figures for NUTS 1 (Wales) in this paper are workplace-based, although the residence-based figures are the same. The figures for NUTS 2 and NUTS 3 regions are also workplace-based. **Points for consideration in interpreting data in this paper can be found in the Technical Annex.**

The latest workplace-based GVA estimates published by the Office for the National Statistics (ONS) show that: ⁵

- Total headline GVA in Wales in 2010 was £45.5 billion, up 3.5 per cent on 2009. Total GVA for the United Kingdom increased by 3.2 per cent over the same period; ⁶
- The share of total UK GVA accounted for by Wales has remained constant at 3.6 per cent for the last four years;
- GVA per head in Wales in 2010 was £15,145 or 74.0 per cent of the UK average;
- In 2010, Wales and the East Midlands had the largest increase in GVA per head at 3.3 per cent. The increase in GVA per head for the UK as a whole in 2010 was 2.4 per cent.
- 2010 marks the only year during the period 1997 to 2010 where the GVA per head figure for Wales has increased relative to the UK average. ⁷
- GVA per head in Wales in 2010 relative to the UK average was the lowest of all the devolved countries and English regions and has been the lowest for the entire time period covered by the revised figures produced by the Office for National Statistics, 1997 to 2010;
- In both London and the South East GVA per head in 2010 was above the UK average, whilst all other regions were below the UK average; and
- The average annual growth rate in GVA per head over the period 1997 to 2010 for the UK was 3.9 per cent. London had the highest average annual growth in GVA per head (4.6 per cent) followed by Scotland (4.1 per cent). Wales had the joint third lowest average annual growth rate over this period, along with the East Midlands and Northern Ireland (3.5 per cent).

⁵[Regional Gross Value Added data](#), Office for National Statistics website [accessed 14 December 2011]

⁶ 2010 data are provisional

⁷ Using data to one decimal place.

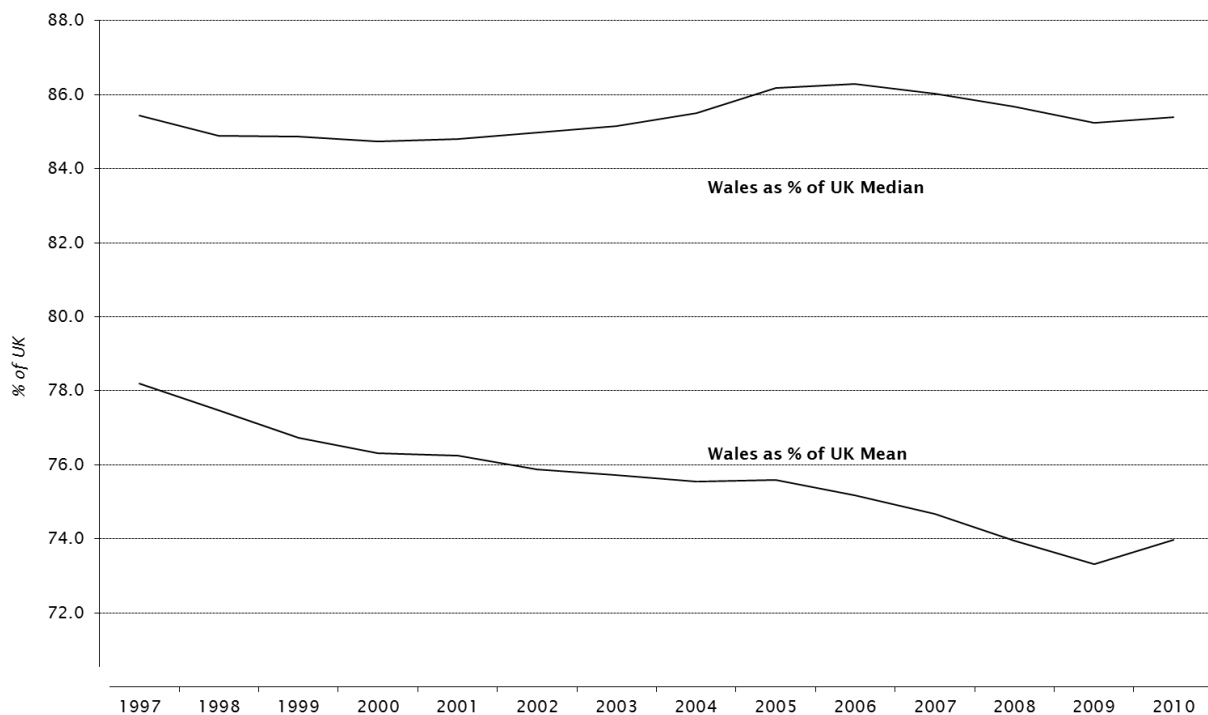
2. Relative GVA – The median measure

It is possible to compare GVA in Wales relative to other regions whilst making allowances 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 2010 was 85.4 per cent of the UK median.

Figure 2.1 shows workplace-based GVA per head in Wales as a percentage of GVA per head for the UK mean and median over the period 1997 to 2010. The data demonstrates that:

- The median measure has fluctuated within a relatively narrow band around 85 per cent since 1997; and
- The mean measure has fallen each year between 1997 and 2009, with the exception of 2005 when there was no change from the previous year.⁸ 2010 is the only year in which the mean measure has increased.

Figure 2.1: GVA per head, Wales as a percentage of UK mean and median (UK=100)



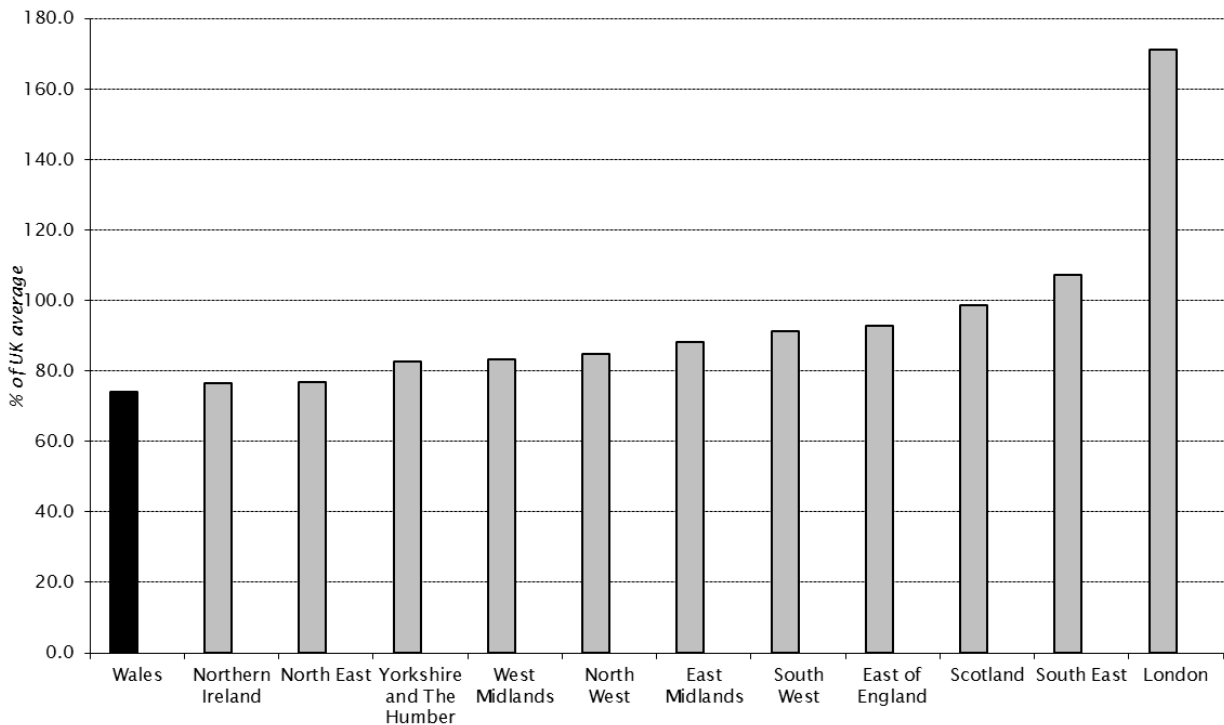
Source: ONS and Research Service calculations

⁸ Using data to one decimal place.

3. Regional comparison

Figure 3.1 shows workplace-based GVA per head in the UK nations and regions as a percentage of GVA per head for the UK in 2010. In both London and the South East GVA per head in 2010 was above the UK average, while all of the other devolved countries and English regions were below the UK average

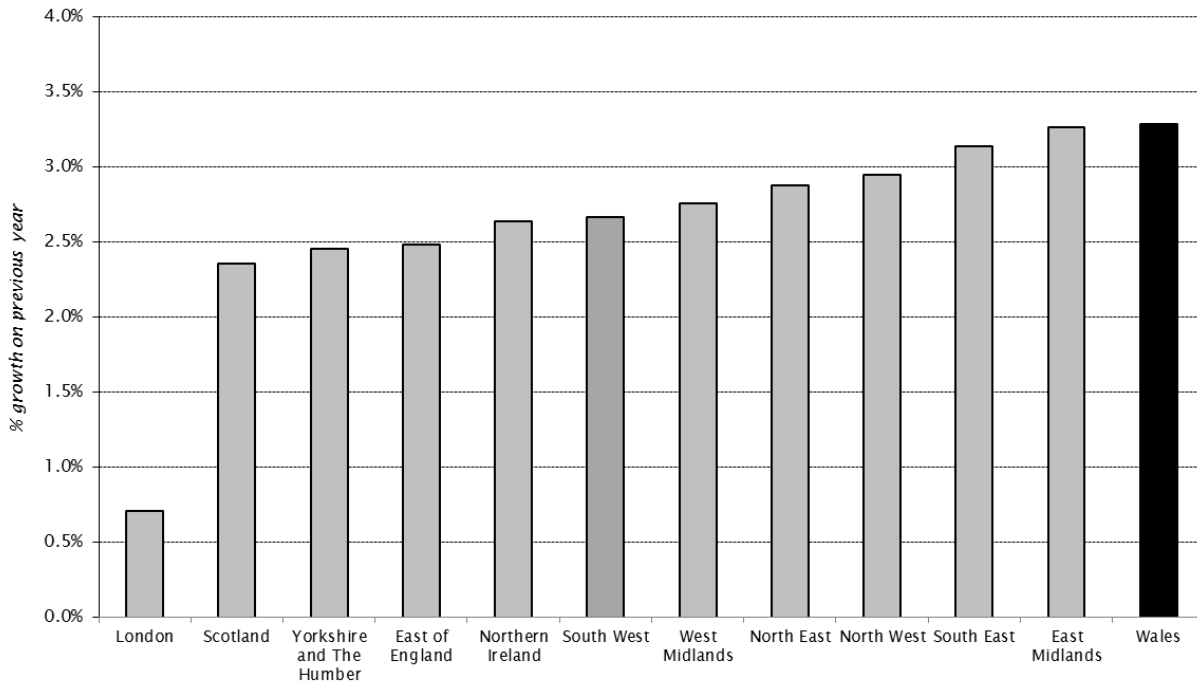
Figure 3.1: GVA per head, by UK nations and regions, 2010 UK=100



Source: ONS

Figure 3.2 charts change in workplace-based per head GVA in the UK nations and regions between 2009 and 2010. Wales and the East Midlands had the largest increase in GVA per head at 3.3 per cent. The increase in GVA per head for the UK as a whole was 2.4 per cent.

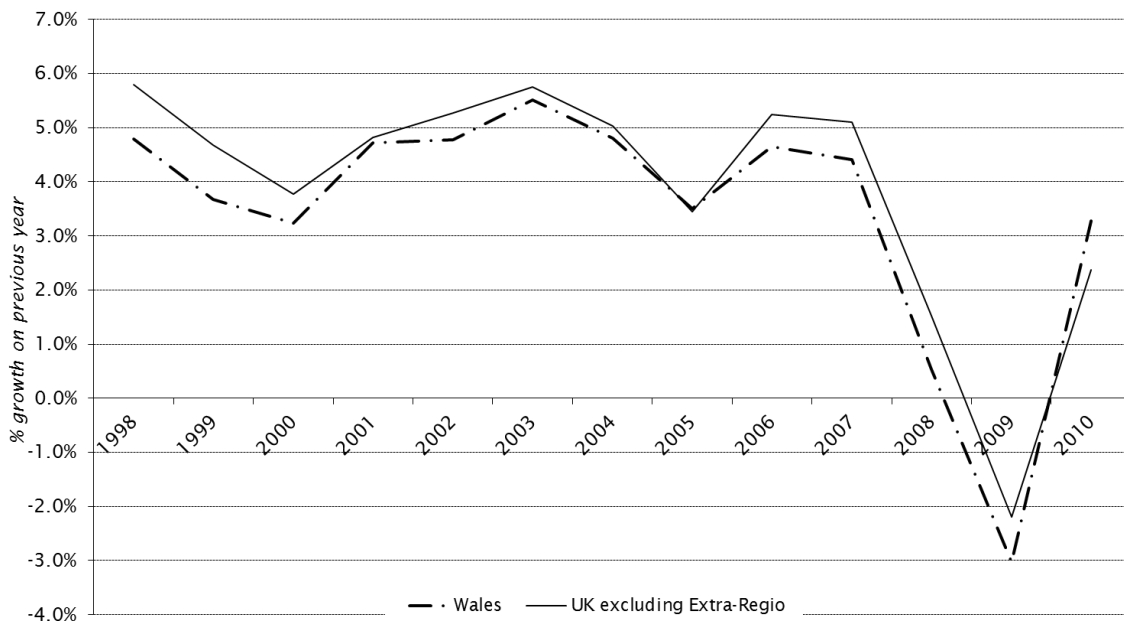
Figure 3.2: Change in GVA per head, by UK nations and regions, 2009 to 2010



Source: ONS

4. UK comparison

Figure 4.1: Annual percentage change in GVA per head, Wales and the UK, 1998 to 2010⁹



Source: ONS

⁹ See GVA and inflation in the Technical Annex for points for consideration when interpreting GVA per head data.

Figure 4.1 shows there has been a lower rate of GVA per head growth in Wales compared to the UK as a whole in almost every year since 1997, with 2005 and 2010 being the exceptions.¹⁰ The gap was particularly wide in the late 1990s, which explains the high rate of relative decline in Welsh GVA per head over that period.

5. Sub-regional and local GVA

Table 5.1: GVA per head, Wales, by NUTS 1, 2 and 3 areas, 2009 (a)(b)(c) UK=100¹¹

NUTS levels	GVA per head (£)	As a percentage of UK GVA per head (%)
Wales	14,664	73.3
<i>West Wales and the Valleys</i>	12,561	62.8
Isle of Anglesey	11,441	57.2
Gwynedd	14,032	70.2
Conwy and Denbighshire	12,324	61.6
South West Wales	11,948	59.7
Central Valleys	11,849	59.2
Gwent Valleys	10,654	53.3
Bridgend and Neath Port Talbot	14,263	71.3
Swansea	14,974	74.9
<i>East Wales</i>	18,274	91.4
Monmouthshire and Newport	19,229	96.1
Cardiff and the Vale of Glamorgan	20,864	104.3
Flintshire and Wrexham	16,061	80.3
Powys	12,313	61.6

(a) GVA at current basic prices.

(b) Estimates are on a workplace basis.

(c) Excluding extra-regio

Source: ONS

It should be noted that the GVA estimates compiled at the NUTS 2 and at NUTS 3 levels are also 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.

¹⁰ Using data to one decimal place.

¹¹ 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 twelve NUTS 1 areas in the UK, whilst West Wales and the Valleys and East Wales are NUTS 2 areas.

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. Changes in commuting patterns between areas over time may result in changes in GVA per head in neighbouring NUTS 3 areas.

Furthermore, as GVA estimates are partly based on sample surveys, the results for smaller (NUTS 3) regions are subject to a greater degree of uncertainty than those for larger regions.

NUTS 2

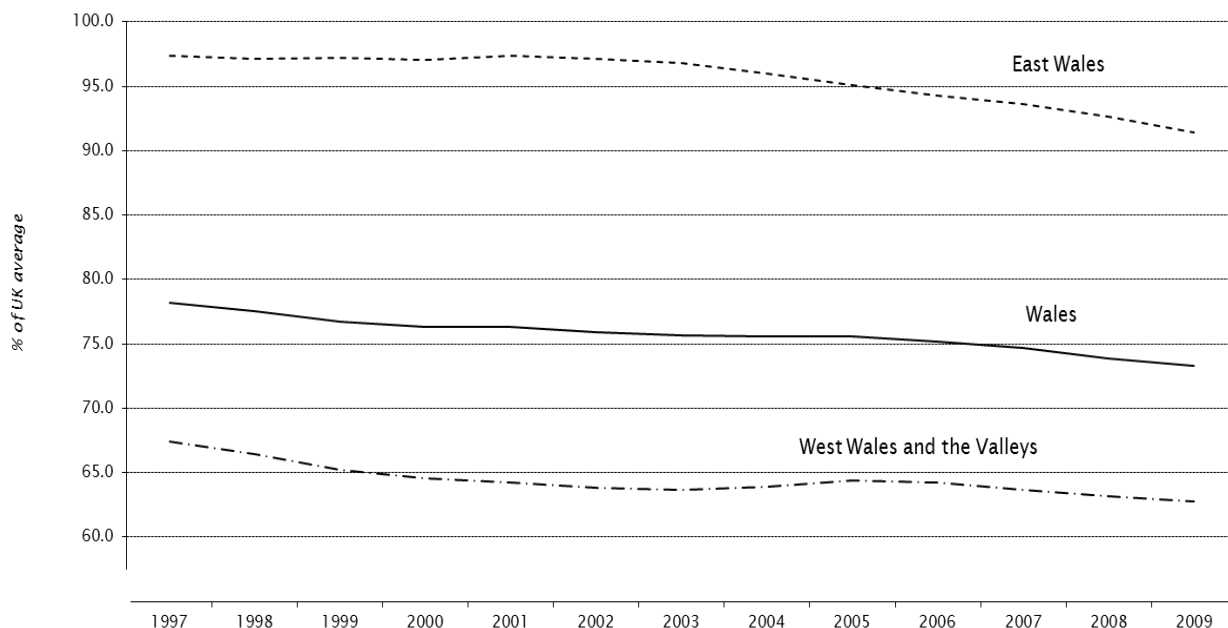
The latest estimates for Wales' NUTS 2 areas show that:

- In 2009, West Wales and the Valleys had the lowest GVA per head (£12,561) of all NUTS 2 regions in the UK. This figure equates to 62.8 per cent of the UK average of £20,000. East Wales had a GVA per head of £18,274 in 2009 (91.4 per cent of the UK average);¹²
- Between 1997 and 2009 GVA per head in West Wales and the Valleys declined relative to the UK average in every year except two (2004 and 2005 saw relative improvements of 0.2 percentage points and 0.5 percentage points respectively). During the period 1997 to 2009 GVA per head in West Wales and the Valleys fell from 67.4 per cent to 62.8 per cent of the UK average.
- Between 1997 and 2009 GVA per head in East Wales also declined relative to the UK average in every year except two (1999 and 2001 saw relative improvements of 0.1 percentage points and 0.4 percentage points respectively). During the period 1997 to 2009 GVA per head in East Wales fell from 97.4 per cent to 91.4 per cent of the UK average.

¹² Excluding Extra-Regio GVA

Figure 5.1 graphs GVA per head for the period 1997 to 2009 for the Wales NUTS 1 and 2 regions relative to the UK average.

Figure 5.1: GVA per head, NUTS 1 and 2 areas of Wales UK=100



Source: ONS

NUTS 3

- Of the twelve NUTS 3 regions in Wales, Cardiff & the Vale of Glamorgan had the highest levels of GVA per head in 2009 at 104.3 per cent of the UK average. This is the only NUTS 3 area in Wales where GVA per head is above the UK average;
- The lowest levels of GVA per head in Wales were in the Gwent Valleys at 53.3 per cent and the Isle of Anglesey at 57.2 per cent of the UK average. These areas accounted for two of the five NUTS 3 regions throughout the UK with the lowest GVA per head relative to the UK average. The Gwent Valleys had the lowest GVA per head in the UK in 2009;
- Between 1997 and 2009, the Isle of Anglesey and Gwynedd were the only NUTS 3 areas in West Wales and the Valleys that saw increases in GVA per head relative to the UK. In the same period, only one NUTS 3 area in East Wales (Cardiff and the Vale of Glamorgan) showed an improvement in GVA per head relative to the UK.
- Between 1997 and 2009, the largest percentage point fall relative to the UK of all NUTS 3 areas in Wales was for Flintshire and Wrexham (99.0 per cent to 80.3 per cent).

Table 5.2: Change in GVA per head, Wales, by NUTS level 3 area, 1997 – 2009 (a)(b)(c) UK=100

NUTS 3 levels	GVA per head as a percentage of UK average (1997)	GVA per head as a percentage of UK average (2009)	Percentage point change (1997 - 2009)
Isle of Anglesey	49.6	57.2	7.6
Gwynedd	70.0	70.2	0.2
Conwy and Denbighshire	65.7	61.6	-4.1
South West Wales	62.3	59.7	-2.6
Central Valleys	64.5	59.2	-5.3
Gwent Valleys	61.4	53.3	-8.1
Bridgend and Neath Port Talbot	82.6	71.3	-11.3
Swansea	76.1	74.9	-1.2
Monmouthshire and Newport	99.3	96.1	-3.2
Cardiff and the Vale of Glamorgan	101.4	104.3	2.9
Flintshire and Wrexham	99.0	80.3	-18.7
Powys	76.9	61.6	-15.3

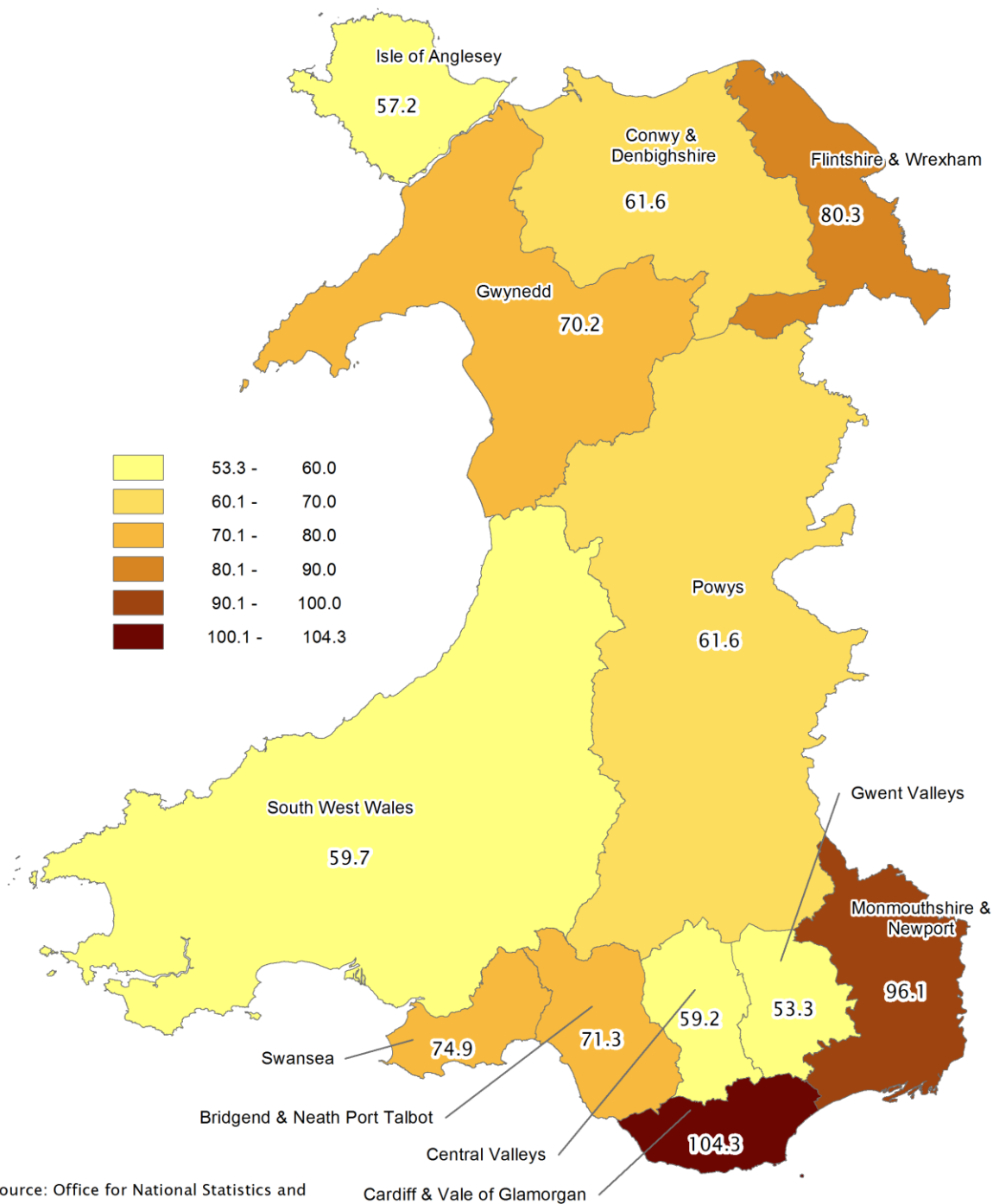
(a) GVA at current basic prices.

(b) Estimates are on a workplace basis.

(c) Excluding extra-regio and statistical discrepancy.

Source: ONS

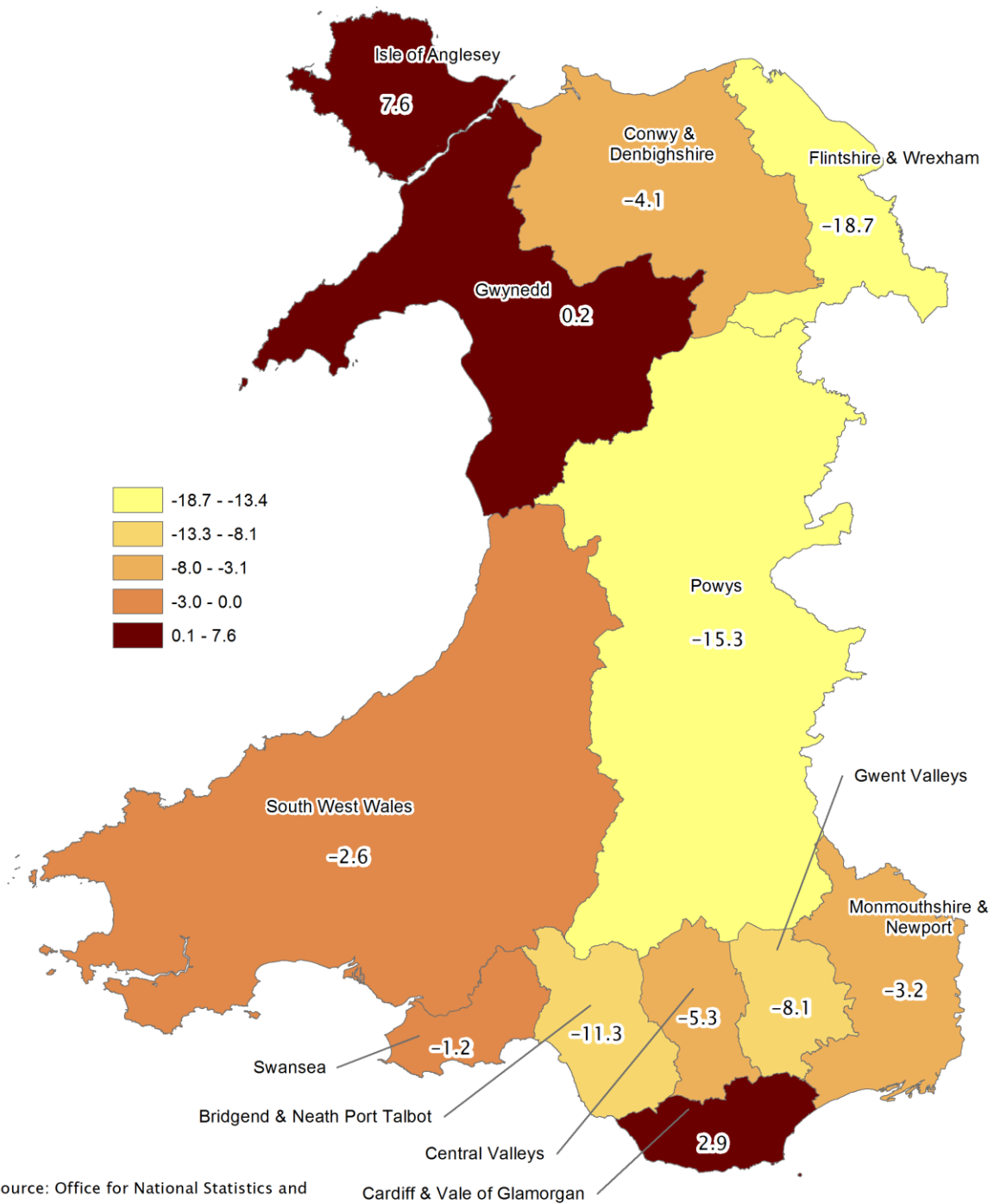
Map 5.1: GVA per head as a percentage of UK GVA per head in 2009, by NUTS 3 area (UK=100)



Source: Office for National Statistics and Research Service

© Crown copyright and database rights 2011.
Ordnance Survey 100047295

Map 5.2: GVA per head as a percentage of UK GVA per head: Percentage point change between 1997 and 2009, by NUTS 3 areas



Source: Office for National Statistics and Research Service

© Crown copyright and database rights 2011.

Ordnance Survey 100047295

6. 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 (NUTS 1) 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. **All the figures in this paper are for workplace-based GVA.**
- **NUTS 2 and NUTS 3 GVA are estimated 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 (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. This 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.