Regional economic indicators:

with a focus on sub-regional Gross Value Added using shift-share analysis

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Summary

This quarter, the Regional Economic Indicators article focuses on explaining the differences in sub-regional economic growth rates (Gross Value Added (GVA)) between 1995 and 2007 by using the shift-share method. The technique is based on the assumption that local economic growth is explained by the combined effect of three components: national growth, industry mix or structural effect, and local competitiveness. Thus, one can apply shift-share to determine how much each component contributes to local economic growth. The regular part of the article then gives an overview of the economic activity of UK regions in terms of their GVA, GVA per head and labour productivity. This is followed by a presentation of headline indicators of regional welfare, other drivers of regional productivity and regional labour market statistics. The indicators cover the nine Government Office Regions of England and the devolved administrations of Northern Ireland, Scotland and Wales. These 12 areas comprise level 1 of the European Nomenclature of Units for Territorial Statistics (NUTS level 1) for the UK. The term 'region' is used to describe this level of geography for convenience in the rest of this article.

Focus on differences in sub-regional economic growth (NUTS2 and NUTS3 regions)

The August edition of the Regional Economic Indicators (REI) article focussed on differences in economic growth in NUTS1 regions by using the shift-share method. This article takes this analysis to a lower geographical level by examining economic growth across UK sub-regions over the 1995 to 2007 period. It evaluates the performance of the 37 NUTS 2 sub-regions and the 133 NUTS3 areas by using the shift-share method. Looking at these lower geographical levels enables identification of those smaller areas which have been slowing down or accelerating the economic performance of NUTS 1 regions.

The shift-share is a popular technique in regional analysis that examines economic change in a region by splitting the growth of its GVA into three additive components: the reference area such as the national economy effect, the structural effect and regional competitiveness (see **Box 1**). By applying shift-share analysis to GVA growth in a region one can determine how much of the regional GVA growth may be attributed to the unique local factors and how much of it is due to the national business cycle and the national performance of specific industries.

Box 1 Shift–share

Shift–share analysis is a sectoral decomposition procedure widely used in regional analysis. Shift–share analysis is a method which examines growth (or decline) rates of a variable such as GVA or employment in a region by splitting it into three additive components:

1. A **growth effect** with respect to a reference area, which in regional applications is commonly the national economy (National Share (NS)). It indicates the regional growth that would occur if GVA in all industries within a region grew at the same rate as the growth rate of the national economy overall during the period of analysis. This component describes the change that would be expected due to the fact that a region is part of a dynamic national economy.

2. A **structural effect** (Industry Mix (IM)) which is measured on the basis of the deviation of each industry's national growth rate from the aggregate growth rate of the economy overall. It is the component of growth that is due to regional specialisation in industries. Thus, a local area, with an above–average share of output from the nation's high growth industries would have grown faster (indicated by a positive IM factor) than a local area with a high share of output from low–growth industries (indicated by a negative IM factor).

3. A **competitive effect** (Regional Shift (RS)) which compares a local area's growth rate in an industry sector with the growth rate for that same sector at the national level. The RS is perhaps the most important component. It highlights a local area's economic strengths by identifying its competitive industries. A competitive industry is defined as one that outperforms its counterpart at the national level (indicated by a positive factor). Regions that have positive (negative) regional shift effects have local advantages (disadvantages) for particular activities that affect the performance of particular industries. The advantages could be due to local firms having superior technology, management or market access, higher local labour productivity compared to other regions and/or lower wages. The RS factor does not tell what these advantages or disadvantages are. However, by looking at this factor it can be determined which industries are performing particularly well in the region.

The three components sum to the total shift, which is the actual growth or decline in a region's GVA. It should be born in mind that the shift–share technique is only a descriptive tool and it does not seek to explain the factors that influence the overall changes in local economies. Additionally, shift–share analysis is a 'snapshot' between two particular time periods and is on occasions sensitive to the time period chosen. However, the time period in this article covers a period of economic growth and sensitivity checks did not show significantly different results when the beginning and the end of time periods were changed.

Overall, shift–share analysis offers a simple, straightforward approach to separating out national and industrial contributions to GVA from local growth effects. The ability to separate local growth factors from national growth factors is an important aspect of understanding local economies. In particular, when used in combination with other analysis the technique offers a valuable tool to better understand a region's economic potential.

The August REI article showed that the largest contribution to regional GVA was made by national economic growth between 1995 and 2007. If the GVA in all the regions had grown at the same rate as the national GVA during this period, their GVA would have increased by 90 per cent. However, growth rates actually varied considerably among regions. This was explained by differences in the Industry Mix (IM) and Regional Shift (RS) components of the growth for NUTS1 regions.

Table 1 presents shift–share decomposition of the change in GVA in the ten NUTS3 areas with the largest GVA growth between 1995 and 2007. With the exceptions of Inner London–West and Surrey, local advantage captured by the RS component was the main factor explaining higher than average GVA growth rates with the effect of the industry mix on GVA growth relatively small. Indeed, the IM factor was even negative in Cambridgeshire CC and North and Northeast Somerset, South Gloucestershire despite the high levels of overall GVA growth in these sub–regions. Similarly, **Table 2** shows that lower than average GVA growth rates amongst the bottom ten performing NUTS3 regions over the same period were also mainly influenced by the region–specific factors. It was only in West Cumbria that the industry mix slowed down the GVA growth more than the region specific factors.

Table 1 **Shift–share decomposition of the change in workplace–based GVA at current prices in the top ten performing NUTS3 regions between 1995 and 2007**

Percentages

Region	National Share (NS)	Industry Mix (IM)	Regional Shift (RS)	Total change (per cent)
Inner London - East	89.8	15.2	34.8	139.9
Inner London - West	89.8	32.7	14.2	136.7
Peterborough	89.8	2.9	40.9	133.6
Berkshire	89.8	7.3	32.5	129.6
Milton Keynes	89.8	5.1	32.8	127.7
North and North East Somerset, South Gloucestershire	89.8	-2.7	36.9	124.1
Hampshire CC	89.8	1.8	29.4	121.0
Northamptonshire	89.8	-3.3	34.0	120.5
Cambridgeshire CC	89.8	-0.1	29.4	119.1
Surrey	89.8	16.4	9.8	116.0

Source: Office for National Statistics

Table A1 in the **Appendix** presents a shift–share decomposition of the change in GVA for all the NUTS2 and NUTS3 regions between 1995 and 2007. Like the top and bottom ten regions, a strong and positive relationship between the RS component and the GVA growth could be seen in most of the regions. For the 133 NUTS3 regions the correlation coefficient between these two variables is 0.9. The relationship between the GVA growth and the IM factor, however, is weaker as indicated by a correlation coefficient of 0.5. This implies that factors specific to a region play a more prominent

role in explaining GVA growth differences between regions than the industry composition of the regions.

Table A1 also shows that rates of GVA growth and IM and RS factors displayed much larger variations within regions compared to variations between NUTS1 regions. For example, the RS component ranged from 37.0 percentage points in Derby to -22.4 percentage points in Nottingham resulting in an overall positive contribution of 7.0 percentage points to GVA growth in East Midlands. In London, the high RS factor of Inner London offset Outer London's negative RS factor resulting in a positive overall local advantage for the whole region. Similarly, IM components at higher geographical levels masked significant variations within regions. For example, in the South East, Surrey and Brighton and Hove had the largest influence in this region's positive IM factor.

Overall, in NUTS3 areas the RS component ranged from -55.6 percentage points in Blackpool to +40.0 percentage points in Peterborough and the IM factor ranged from -31.9 percentage points in Flintshire and Wrexham to 32.7 in Inner London–West. In NUTS2 areas, the ranges for both factors were narrower compared to NUTS3 areas. The ranges for RS and IM components in NUTS2 regions were -22.7 to 23.4 and -20.4 to 27.2 respectively. It is interesting to note that most of the positive IM factors are observed in urban areas.

Table 2 Shift–share decomposition of the change in workplace–based GVA at current basic prices in the bottom ten performing NUTS3 regions between 1995 and 2007

Percentages

Region	National Share (NS)	Industry Mix (IM)	Regional Shift (RS)	Total change (per cent)
Inverclyde, East Renfrewshire and Renfrewshire	89.8	-11.6	-49.1	29.1
East Ayrshire and North Ayrshire Mainland	89.8	-23.2	-35.9	30.7
Stoke-on-Trent	89.8	-15.4	-39.5	34.9
Blackpool	89.8	1.4	-55.6	35.6
Gwynedd	89.8	-8.3	-42.7	38.8
Dudley and Sandwell	89.8	-14.8	-32.9	42.1
Hartlepool and Stockton-on-Tees	89.8	-19.9	-27.4	42.6
West Cumbria	89.8	-31.8	-15.2	42.9
Blackburn with Darwen	89.8	-21.5	-25.3	43.0
Northumberland	89.8	-16.7	-28.4	44.8

Source: Office for National Statistics

To shed further light on differences in the local competitiveness captured by the RS component, **Table 3** presents the GVA growth for each industry by NUTS2 region between 1995 and 2007. Where a region's growth rate for an industry is higher than the UK growth rate for the same industry then this means that the region has a positive RS component for that industry. A positive RS component can be considered as an indication of a region's competitive advantage for that industry.

Table 3 **Change in workplace-based GVA at current basic prices between 1995 and 2007: by NUTS2 region and by industry**

Northern England

Percentages

	Tees Valley and Durham	Northumberland and Tyne and Wear	Cumbria	Cheshire	Greater Manchester	Lancashire	Merseyside	East Riding and Northern Lincolnshire	North Yorkshire	South Yorkshire	West Yorkshire	UK
Agriculture, hunting and forestry and fishing	0.0	4.4	-7.7	-26.6	-31.4	-34.5	-14.2	-22.2	-12.8	-4.9	-10.6	-22.9
Mining and quarrying	12.0	19.5	68.9	65.7	31.1	25.3	-38.8	9.2	-11.3	-30.9	-24.0	12.6
Manufacturing	-16.3	24.8	18.8	18.2	-7.0	11.6	-7.2	31.4	35.3	17.5	-3.9	11.9
Electricity, Gas and Water Supply	114.0	52.1	135.7	5.6	-38.0	46.9	26.3	117.5	46.5	15.6	24.9	36.9
Construction	133.9	122.9	110.5	155.2	131.5	132.9	132.3	101.3	91.1	159.2	143.8	144.7
Wholesale and Retail Trade; Repair of Motor Vehicles, Motorcycles and Personal and Household Goods	80.1	79.3	61.7	74.1	80.4	64.0	64.6	64.0	93.2	83.3	79.6	89.3
Hotels and Restaurants	142.4	87.2	74.6	88.5	127.5	81.5	155.4	119.3	84.6	98.1	90.9	122.6
Transport, Storage and Communication	43.4	49.6	56.7	73.0	75.1	48.0	54.1	37.5	113.7	50.8	68.9	70.2
Financial Intermediation	105.7	176.2	1.1	269.4	185.4	45.2	115.7	21.6	188.2	164.6	186.7	158.8
Real Estate, Renting and Business Activities	98.1	150.1	88.2	139.5	143.2	147.3	124.4	80.8	181.5	177.9	131.5	155.8
Public Administration and Defence; Compulsory Social Security	65.6	68.8	57.3	57.3	61.5	48.5	113.3	51.2	28.2	81.5	90.9	63.1
Education	98.7	75.7	109.9	105.3	72.7	106.0	85.8	78.9	108.8	102.3	121.3	103.2
Health and Social Work	116.0	87.6	86.9	109.1	106.1	91.3	82.0	108.9	73.7	167.4	96.5	115.6
Other Community, Social and Personal Service Activities and Private Household with Employed Persons	44.7	95.3	135.6	75.5	125.2	63.7	87.6	94.3	102.6	96.7	95.0	130.9

Midlands and Eastern England

Percentages

	Derbyshire and Nottinghamshire	Leicestershire, Rutland and Northamptonshire	Lincolnshire	Herefordshire, Worcestershire and Warwickshire	Shropshire and Staffordshire	West Midlands	East Anglia	Bedfordshire and Hertfordshire	Essex	UK
Agriculture, hunting and forestry and fishing	-35.3	-19.3	-38.8	-6.4	-22.3	40.1	-30.7	-27.3	-29.7	-22.9
Mining and quarrying	13.1	68.6	-2.9	90.6	-20.4	-74.8	-26.3	3.8	1.7	12.6
Manufacturing	7.0	17.0	40.0	10.8	8.7	-19.9	34.4	5.8	25.3	11.9
Electricity, Gas and Water Supply	58.0	117.1	9.7	270.7	9.0	29.6	77.9	48.5	0.6	36.9
Construction	158.4	182.5	137.5	130.5	122.4	141.5	138.2	152.2	203.5	144.7
Wholesale and Retail Trade; Repair of Motor Vehicles, Motorcycles and Personal and Household Goods	84.1	95.2	89.7	87.1	85.4	70.8	91.2	125.3	134.4	89.3
Hotels and Restaurants	131.4	130.3	91.0	90.0	108.3	196.2	118.1	165.7	109.9	122.6
Transport, Storage and Communication	81.6	139.5	40.6	127.4	113.6	47.9	42.3	105.9	76.0	70.2
Financial Intermediation	154.5	145.0	53.7	101.2	126.2	103.3	187.0	123.9	103.2	158.8
Real Estate, Renting and Business Activities	157.0	168.4	142.5	168.5	152.9	116.2	170.5	160.0	134.3	155.8
Public Administration and Defence; Compulsory Social Security	77.0	107.1	89.1	21.2	62.5	112.5	83.7	56.5	69.1	63.1
Education	107.4	106.5	141.9	118.2	72.5	108.2	138.7	115.4	100.1	103.2
Health and Social Work	145.2	78.3	96.8	84.0	140.4	109.4	148.3	112.2	130.5	115.6
Other Community, Social and Personal Service Activities and Private Household with Employed Persons	118.7	162.2	85.9	147.4	113.1	175.4	112.3	155.0	138.9	130.9

London and Southern England
Percentages

	Inner London	Outer London	Berkshire, Buckinghamshire and Oxfordshire	Surrey, East and West Sussex	Hampshire and Isle of Wight	Kent	Gloucestershire , Wiltshire and North Somerset	Dorset and Somerset	Cornwall and Isles of Scilly	Devon	UK
Agriculture, hunting and forestry and fishing	-6.0	-26.2	-33.8	-24.1	-25.4	-32.2	-16.4	-16.3	-5.3	-14.9	-22.9
Mining and quarrying	-5.8	-67.2	289.8	-49.8	26.6	3.6	158.4	101.4	5.8	97.3	12.6
Manufacturing	28.3	-12.2	22.6	38.1	25.5	-0.9	41.6	27.5	80.6	-5.7	11.9
Electricity, Gas and Water Supply	42.7	-6.5	25.9	-21.3	36.6	44.6	106.2	-10.4	-22.7	18.8	36.9
Construction	148.3	155.5	140.3	173.7	138.5	172.0	138.4	162.2	193.4	194.5	144.7
Wholesale and Retail Trade; Repair of Motor Vehicles, Motorcycles and Personal and Household Goods	66.2	96.1	106.0	92.9	135.8	94.1	109.2	95.5	112.2	84.0	89.3
Hotels and Restaurants	154.2	145.6	167.5	119.6	118.5	144.4	128.0	148.1	108.7	110.6	122.6
Transport, Storage and Communication	46.7	74.8	83.1	51.1	150.0	77.8	95.6	60.8	246.0	98.5	70.2
Financial Intermediation	211.5	74.1	139.4	129.7	111.5	57.7	149.6	117.1	49.9	8.3	158.8
Real Estate, Renting and Business Activities	191.6	123.1	176.2	123.1	214.8	179.1	159.5	185.6	176.8	130.0	155.8
Public Administration and Defence; Compulsory Social Security	69.8	69.4	48.2	53.4	9.5	51.7	43.1	31.7	84.4	65.2	63.1
Education	127.4	121.1	110.5	133.4	129.3	99.0	120.9	108.6	102.5	119.9	103.2
Health and Social Work	112.0	147.0	124.4	119.0	138.1	103.9	121.3	137.5	131.3	119.8	115.6
Other Community, Social and Personal Service Activities and Private Household with Employed Persons	160.0	121.9	212.3	161.4	157.5	135.2	120.6	106.0	160.8	124.3	130.9

Wales, Scotland and Northern Ireland
Percentages

	West Wales and The Valleys	East Wales	Eastern Scotland	South Western Scotland	North Eastern Scotland	Highlands and Islands	Northern Ireland	UK
Agriculture, hunting and forestry and fishing	-73.4	-75.9	4.3	-4.6	-0.4	5.6	-19.4	-22.9
Mining and quarrying	-14.4	-9.5	-61.3	-40.8	42.3	-36.8	135.6	12.6
Manufacturing	-2.2	16.1	20.9	-2.5	54.4	57.3	43.2	11.9
Electricity, Gas and Water Supply	-2.8	1.5	62.6	48.9	-15.8	60.7	44.2	36.9
Construction	117.3	140.6	120.6	133.6	44.3	119.4	196.9	144.7
Wholesale and Retail Trade; Repair of Motor Vehicles, Motorcycles and Personal and Household Goods	80.3	113.6	77.2	75.3	55.6	86.6	129.7	89.3
Hotels and Restaurants	89.7	98.9	92.2	71.3	38.1	127.9	138.6	122.6
Transport, Storage and Communication	46.7	68.3	56.5	63.7	31.7	94.6	88.8	70.2
Financial Intermediation	48.4	168.2	230.7	115.1	45.1	39.0	132.5	158.8
Real Estate, Renting and Business Activities	118.8	143.7	158.1	144.8	123.9	87.9	239.8	155.8
Public Administration and Defence; Compulsory Social Security	119.3	28.4	59.9	76.5	51.5	87.7	26.4	63.1
Education	79.3	105.2	68.3	63.1	3.2	111.9	89.7	103.2
Health and Social Work	108.6	113.4	110.1	118.0	197.0	150.9	91.0	115.6
Other Community, Social and Personal Service Activities and Private Household with Employed Persons	97.0	132.1	159.9	74.1	65.7	112.4	109.0	130.9

Source: Office for National Statistics

In general, the more industries in which a region has a competitive advantage the more likely the region is to have a positive RS component overall. However, some regions that have a relatively low RS component may still have one or more industries with a higher than average GVA growth for that industry over the period considered. For example, both IM and RS components were negative in Cheshire, however, the region recorded the highest GVA growth rate in the financial intermediation sector among the NUTS2 regions between 1995 and 2007. Similarly, the hotels and restaurants sector in West Midlands (NUTS2) and the construction sector in Devon grew faster than their counterparts in other regions over the same period. Manufacturing was one of the few industries that performed well in Lincolnshire and North Eastern Scotland despite their overall negative RS factors.

Among the regions with positive RS factors Leicestershire, Rutland and Northamptonshire had the highest number of industries with higher than average growth rates. This was followed by Inner London and Gloucestershire, Wiltshire and North Somerset. At the lower end of the economic performance scale, West Wales and the Valleys had only one industry with a higher than average growth rate between 1995 and 2007.

Regional overview

Key figures on a regional basis indicate that:

- in 2008 London was the region with the highest productivity, in terms of GVA per hour worked, at 33 percentage points above the UK average and diverged further from it while Northern Ireland had the lowest productivity, at 19 percentage points below the UK average
- South East and East of England were the only other regions with a productivity performance above the UK average (4.0 and 0.7 percentage points respectively) in 2008
- the total value of goods exports increased in all the regions except in East Midlands, Wales and Northern Ireland between June 2009 and June 2010. London and West Midlands had the largest percentage increase in the value of goods exports (up by 8.2 and 8.1 per cent respectively)
- the South East had the highest employment rate in the second quarter of 2010, at 74.6 per cent; Northern Ireland had the lowest rate, at 66.4 per cent, compared with the UK employment rate of 70.5 per cent

Headline indicators

In order to gain an overview of the economic performance of UK regions, this article discusses a selection of economic indicators. Currently, the most widely used indicator of regional economic performance is Gross Value Added (GVA) per head. Policymakers frequently use GVA per head as a headline indicator of regional productivity and of regional incomes when comparing and benchmarking regions that differ in geographical size, economic output and population. However, as Dunnell (2009) has explained, productivity and income are very different concepts.

GVA per head is calculated as the simple ratio of the economic activity in a region divided by the number of people living in a region, while productivity is defined as the ratio of GVA divided by the labour input (jobs or hours worked) used to create it. GVA per head does not take account of:

- people commuting in and out of regions to work
- regional differences in the percentages of residents who are not directly contributing to GVA, such as young people or pensioners, and
- different labour market structures across regions, such as full- and part-time working arrangements

Therefore, GVA per hour worked or GVA per filled job are more appropriate productivity indicators. It needs to be noted that these indicators also depend on pricing thus productivity can fall/rise with decreasing/increasing prices. As regional price deflators do not yet exist, GVA estimates used in productivity figures are in nominal, not real terms, therefore it is not possible to isolate volume changes from price changes.

Similarly, Gross Disposable Household Income (GDHI) per head is a better measure of regional incomes than GVA per head. For example, due to commuting, residents might derive their incomes from economic activity in another region, which is not captured by GVA per head of their region. They may also have sources of income which are unrelated to current work, such as pensions and investment incomes. GDHI, therefore, is one of the determinants of the welfare of the people in the region.

Regional performance

GVA is a good measure of the economic output of a region. In December 2009, ONS published GVA estimates for 2008 and revised estimates for previous years. **Table 4** shows the regional economic performance in terms of workplace-based GVA and GVA per head and their respective average annual growth over the period 1998 to 2008. Although GVA per head is not a good indicator of regional productivity or income, it does take account of variations in geographical size among UK regions and therefore allows better comparisons than using GVA in total.

The estimates show that London had the highest GVA (£266.8 billion) and GVA per head (£35,000) in 2008, followed by the South East (£182.1 billion and £21,700, respectively). London's GVA per head was 71 per cent above the average for the UK, while that of South East was 6 per cent above the average. The North West generated the third highest GVA (£119 billion), but was eighth in terms of its GVA per head (£17,300). Northern Ireland had the lowest GVA in 2008, while Wales had the lowest GVA per head (26 per cent below the UK average).

In terms of average annual percentage growth of nominal GVA between 1998 and 2008, London, East of England, South West, South East and Northern Ireland had the highest GVA growth. Average annual percentage growth of GVA in these regions was equal to or above the UK growth. The lowest growth occurred in West Midlands and North West. Average annual percentage growth of GVA per head between 1998 and 2008 was higher than the UK average in London, Scotland, South East, South West and Northern Ireland, while West Midlands and Yorkshire and The Humber grew slowest over the same period.

Table 4 **Workplace-based GVA and GVA per head at current basic prices: by NUTS1 region**

£

	UK ¹	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East of England	London	South East	South West	Wales	Scotland	Northern Ireland
GVA (£ million)													
1998	769,500	26,600	78,500	58,000	49,900	63,200	66,700	146,800	109,200	58,900	29,700	64,600	17,400
2008 ²	1,259,600	40,700	119,000	88,500	80,100	94,700	111,700	266,800	182,100	98,500	45,400	103,400	28,700
Average annual percentage growth 1998–2008 ²	5.1	4.3	4.2	4.3	4.8	4.1	5.3	6.2	5.2	5.3	4.3	4.8	5.1
GVA per head (£)													
1998	13,200	10,400	11,600	11,700	12,100	12,000	12,600	20,800	13,800	12,100	10,200	12,700	10,400
2008 ²	20,500	15,800	17,300	17,000	18,100	17,500	19,500	35,000	21,700	18,900	15,200	20,000	16,200
Average annual percentage growth 1998–2008 ²	4.5	4.3	4.1	3.8	4.1	3.8	4.5	5.3	4.6	4.6	4.1	4.6	4.5

Notes

1 UK less Extra-region and statistical discrepancy.

2 Provisional.

Source: Regional Accounts, Office for National Statistics

Labour productivity

To compare regions in terms of productivity, GVA per hour worked is the preferred indicator. At lower levels of geography, 'hours worked' estimates are not yet available and GVA per filled job should be used. These two measures of productivity divide GVA by the labour input, namely hours worked in all jobs or the number of jobs used to create it.

GVA per hour worked and GVA per filled job take account of commuting effects and different age profiles, and the former also accounts for variations in labour market structures, such as full- and part-time working arrangements and job share availability.

Productivity estimates for 2008 and revised estimates for previous years were published in February 2010. These estimates make use of the GVA figures presented in Table 4, and updated 'filled jobs' and 'hours worked' estimates.

It should be noted that the productivity figures presented here use unsmoothed GVA as their output measure as opposed to headline GVA, which is calculated as a five-year moving average. The unsmoothed measure is used to ensure consistency with the labour input data (Dey–Chowdhury et al 2008), but raises some concerns about increased volatility of productivity estimates compared to those based on headline GVA. The question of whether to smooth productivity figures after dividing unsmoothed GVA by labour data, and presenting these as headline estimates, is one which will be addressed by ONS in the coming months.

Figure 1 shows that in 2008 GVA per filled job and GVA per hour worked exhibited smaller differences from the UK average than the catch-all indicator GVA per head. This is mainly due to commuting patterns. London, for example, has a very high GVA per head, mainly due to incoming workers generating a high GVA, which is then divided by a much lower resident population. Productivity indicators, on the other hand, divide regional GVA by the jobs or hours worked used to create it.

Figure 2 shows the regional GVA per hour worked productivity index on a time series basis from 2000 to 2008. In 2008, London, the South East and the East of England were the only three regions with a productivity performance above the UK average. The East of England saw the strongest improvement in its relative performance from below the UK average in 2000 to above average in 2008. London continued to improve its relative performance, therefore diverging further from the UK average. Relative productivity in the South East weakened slightly in 2008, but it remained above the UK average over the period. Northern Ireland and Wales had the lowest relative productivity compared to the UK average in 2008. Relative productivity in most regions diverged from the UK average between 2000 and 2008. The strongest divergence below the UK average productivity over this period was experienced in the North West, Wales and Northern Ireland. This indicates that these regions' productivity grew by less than the UK average, therefore widening the productivity gap between regions.

Figure 1 Regional economic indicators: by NUTS1 region, 2008¹

Indices (UK² = 100)

Notes

1. Provisional
2. UK less Extra-region statistical discrepancy

Source: Office for National Statistics

Figure 2 GVA per hour worked: by NUTS1 region

Indices (UK¹ = 100)

Notes

1. UK less Extra-region statistical discrepancy

* Provisional

Source: Office for National Statistics

Income of residents

Figure 3 presents indices of GDHI per head for 1996, 2000, 2004 and 2008, showing movements in regional household income relative to the UK average over time. It is evident that the GDHI per head is above the UK average only in the regions of the 'Greater South East'. Of these regions, London has consistently had the highest GDHI per head since 1996 and is diverging from the national average. The South East and East of England, on the other hand, are getting closer to the national average as they experienced relatively lower growth in household income compared to the national average between 2000 and 2008. Most of the regions with relatively lower household income diverged further from the national average while improvements against national average are evident in the devolved administrations between 2000 and 2008.

Figure 3 **Headline gross disposable household income per head: by NUTS1 region**

Indices (UK¹ = 100)

Notes

1. UK less Extra-region statistical discrepancy

* Provisional

Source: Office for National Statistics

Gross median weekly earnings represent another indicator of regional welfare. **Figure 4** shows the gross median weekly pay for all full-time employees, split into female and male full-time employees, living in each region in April 2009.

As in previous years, London was the region with the highest gross median weekly pay, at £598.60, followed by the South East, at £536.60 and the East of England, at £509.40. These were the only regions above the UK average of £488.70. North East (£438.80), Northern Ireland (£440.80), and Wales (£449.90) recorded the lowest earnings in April 2009.

Females across the UK regions received lower pay than males. In Northern Ireland, the discrepancy was smallest, while it was largest in the South East and East of England. In terms of annual average percentage growth over the four years to 2009, pay for females outperformed that for males except in the South West. The highest annual average growth rate for male pay was observed in the North East while Scotland had the highest annual average growth rate for male pay between 2005 and 2009.

Figure 4 Gross median weekly pay of all full-time employees¹: by NUTS1 region, April 2009

£

Note

1. Residents of the respective region

Source: Annual Survey of Hours and Earnings, Office for National Statistics

Drivers of productivity

HM Treasury and the Department for Business, Innovation and Skills (BIS) have identified five key drivers of productivity – investment, innovation, enterprise, competition and skills – that can help explain differences in productivity across regions.

Alongside these five key drivers, other factors, such as connectivity, industrial structure and region-specific assets can have a strong influence on regional productivity performance.

This article uses expenditure on Research and Development (R&D) by businesses as a measure of innovation; the numbers of business births and deaths and survival rates as an indicator for enterprise; UK regional trade in goods serves as a measure of competition; and the qualifications of the current working-age population and those of young people, who represent the future workforce, to provide an indicator for the skills driver.

Innovation

Innovation is a necessary, although not sufficient, condition for economic success and is therefore recognised as an important driver of productivity. Innovation comprises, among others, the development of new technologies that increase efficiency and the introduction of new, more valuable goods and services. It also includes intangibles such as new methods of working and improvements to services.

R&D represents one of the determinants to the innovation process and is defined by the Organisation for Economic Co-operation and Development (OECD) in its Frascati Manual, which proposes a standard practice for surveys on R&D, as 'creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to create new applications'. The OECD definition of R&D covers the following:

- basic research: experimental and theoretical work to obtain new knowledge of the underlying foundation of phenomena and observable facts, without any particular application or use in view
- applied research: work undertaken to acquire new knowledge, which is directed primarily towards a specific practical aim, and
- experimental development: systematic work, drawing on existing knowledge, which is directed at producing new materials, products or devices, installing new processes, systems and services, or at improving substantially those already produced or installed

The OECD definition excludes education, training and any other related scientific, technological, industrial, administrative or supporting activities. However, innovation depends on a wider set of inputs than R&D, including skills training, design, software and organisational investment by firms. HM Treasury Economics Working Paper No. 1 (see Giorgio Marrano et al 2007) quantifies these broader knowledge economy inputs at UK level; more work is needed before these factors can be measured effectively at regional level.

Figure 5 presents statistics on Business Enterprise Research and Development (BERD), which are consistent with internationally agreed standards. Figures for 2008 published on 11 December 2009 show business expenditure on R&D as a percentage of workplace-based GVA in 2000, 2002, 2004, 2006 and 2008. This is a measure commonly used in regional comparisons as it takes account of the size of regional economies. The figure shows that, since 2000, the East of England has been the region with by far the highest percentage of R&D expenditure in terms of GVA, with 3.7 per cent in 2008. The North West and the South East regions had the second highest

percentage (1.9 per cent) which has, however, been declining in the South East since 2000. These three regions together also accounted for 62 per cent of the total expenditure on R&D in 2008.

London had the lowest R&D expenditure as a share of its regional GVA in 2008 (0.4 per cent). Yorkshire and the Humber, Wales and Scotland had the second lowest shares in the UK in 2008, at 0.5 per cent each. London's very low share of expenditure on R&D does not necessarily suggest low levels of innovation but may be due to it having a large concentration of service industries, which may be less R&D intensive (within the OECD definition) if, for example, they rely heavily on human capital. It may also reflect the choice businesses make over locating their R&D activities.

Figure 5 Business expenditure on R&D as a percentage of workplace-based GVA: by NUTS1 region

Percentages

Notes

* Provisional

UK less Extra-region statistical discrepancy

Source: Regional Accounts and Business Enterprise Research & Development, Office for National Statistics

Approximately three-quarters of the R&D expenditure in the UK was made in the manufacturing sector in 2008. **Figure 6** shows that in most regions except in the Greater South East the share of the R&D expenditure on manufacturing was over 80 per cent of their respective expenditure. The figure also shows that East of England accounted for 26 per cent of the total R&D expenditure in the UK in 2008 and had the highest level of R&D expenditure on both manufacturing and services. This may suggest that some London R&D occurs in the surrounding regions such as Cambridge technology start-ups.

Figure 6 Business expenditure on R&D by NUTS1 region: broad industry groups, 2008

£ millions

Note

* Other includes agriculture, hunting and forestry, fishing, extractive industries, electricity, gas and water supply and construction. The expenditure on other industries across the UK was less than 2 per cent of the total expenditure.

Source: Business Enterprise Research & Development, Office for National Statistics

Enterprise

Enterprise is another driver of productivity. It is defined as the seizing of new business opportunities by both start-ups and existing firms. New enterprises can bring innovative processes and technologies to the market, forcing existing ones to improve their productivity in order to remain competitive. A relatively large proportion of enterprises joining and leaving the stock can be seen as desirable, as new enterprises entering the market are considered to bring innovative processes and technologies that drive up productivity and force unproductive enterprises to leave the market.

The February 2009 edition of this article focused on business demography in UK regions, using the newly published ONS series of enterprise births and deaths, which includes enterprises registered for VAT *and* also those registered for pay-as-you-earn (PAYE). It needs to be noted that enterprise statistics relate to the place of registration of the enterprise, even though the enterprise may consist of more than one local unit, possibly in different regions.

Figure 7 shows the number of births and deaths of enterprises as a proportion of the active enterprise stock in 2008. The difference between the two represents the net change, which is calculated as a proportion of total stock. In 2008, across all regions, the net changes were positive due to higher proportions of enterprises joining the stock than leaving it. These proportions were largest in London (4.7 per cent), followed by the North East (2.4 per cent). The lowest rate of net change was in Wales (0.6 per cent).

These rates were mainly driven by small enterprises with fewer than 5 employees which is approximately 80 percent of the total enterprise stock

Figure 7 Enterprise births, deaths and net change as a percentage of enterprise stock: by NUTS1 region, 2008¹

Percentages

Note

1. Provisional

Source: Business Demography, Office for National Statistics

As well as analysing births and deaths of enterprises, it is useful to look at how long these enterprises survive. The Business Demography series contains data showing the number of years survived by enterprises born in the years 2003 to 2005.

Figure 8 shows the proportion of enterprises born in 2003, 2004 and 2005 that survived for at least three years each. It shows that, overall in the UK, survival rates increased from 63.6 per cent of enterprises born in 2003 to 65.3 per cent of those born in 2004 and went back down slightly to 64.7 per cent of those born in 2005.

Figure 8 Percentage of units surviving three years: by year of birth and NUTS1 region

Percentages

Source: Business Demography, Office for National Statistics

Patterns were similar across regions. In most regions enterprises born in 2004 had the highest three-year survival rates compared to 2003 and 2005. Northern Ireland had the highest three-year survival rates which were above the UK average for the enterprises born in all three years while London stands out as the region with the lowest rates. Figure 7 has shown that London had the highest percentage of births and deaths of enterprises and that survival rates were relatively low. They could be an indication of London's ability to exploit short-term business opportunities. At the same time, it may suggest that many of the new enterprises born will not provide long-term growth and employment.

Competition

Vigorous competition enhances productivity by creating incentives to innovate and ensure that resources are allocated to the most efficient firms. It also forces existing firms to organise work more effectively through imitations of organisational structures and technology. One indicator of competition is the volume of exports. Even though exports do not represent competition within a region, they still provide an indication of how international regions are in their outlook, and how able they are to face global competition.

HM Revenue & Customs (HMRC) publishes statistics on regional trade in goods to the EU and non-EU destinations by statistical value. Trade in goods by definition excludes trade in intangibles and services. The statistical value of export trade is calculated as the value of the goods plus the cost of movement to the country's border.

Table 5 presents the latest quarterly estimates up to the end of June 2010. The total value of UK goods exports to all destinations increased by 4.0 per cent between June 2009 and June 2010. The total value of goods exports increased in all the regions except in East Midlands (down by 9.1 per cent) and Wales and Northern Ireland (down by 15.6 and 14.3 per cent respectively). London had the largest percentage increase in the value of goods exports (up by 8.2 per cent), followed by West Midlands (up by 8.1 per cent) and East of England (up by 6.5 per cent) during the same period.

As the European Union (EU) is the main export destination for UK goods, the table separates exports to EU and non-EU destinations. In the UK as a whole, the value of exports to the EU was up by 2.6 per cent between June 2009 and June 2010. However, with the exception of London (up by 11.6 per cent), East of England (up by 9.4 per cent) and North East (up by 4.9 per cent), all the regions recorded decreases in the value of goods exports to the EU. Wales reported the largest drop, down by 9.0 per cent.

The total value of the UK exports to the rest of the world increased by 5.7 per cent from June 2009 to June 2010, with the highest increase occurring in the West Midlands (up by 20.8 per cent). The East Midlands, Wales and Northern Ireland were the only regions that had a decrease in the value of their goods exports to the rest of the world during the same period.

The number of exporters in the UK for the June 2010 quarter compared with the same quarter last year, decreased by 1.9 per cent to 49,719. Northern Ireland had the largest decrease of 7.3 per cent¹. There were no regions where the number of exporters increased.

Figure 9 shows the value of exports of goods as a percentage of workplace-based regional GVA in 2000, 2004 and 2008, which takes account of the differing sizes of regional economies. In 2008, the value of goods exports relative to the size of the regional economy was greatest in the North East and lowest in London. It needs to be noted that these figures show exports of goods as a percentage of headline GVA which also includes services and therefore is likely to underestimate the export performance of some regions with a large share of services industries such as London.

In terms of this indicator's change over time, exports relative to GVA were lower in all the regions in 2004 than in 2000, with some recovery in 2008 except in East Midlands, London and Scotland. In Scotland, exports as a percentage of regional GVA dropped significantly between 2000 and 2004, but remained fairly stable over the four years to 2008. The North East had the largest increase in relative export performance, followed by Northern Ireland between 2004 and 2008.

Table 5 **UK regional trade in goods – statistical value of exports: by NUTS1 region¹**

£ millions

Exports	United Kingdom	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East of England	London	South East	South West	Wales	Scotland	Northern Ireland
EU Exports													
2008 Q3	35,737	1,620	3,282	1,913	2,012	2,138	3,222	2,853	5,102	1,700	1,647	1,534	871
2008 Q4	32,677	1,447	2,861	1,828	1,908	1,996	2,898	2,389	5,171	1,557	1,329	1,512	856
2009 Q1	31,225	1,334	3,094	1,611	1,907	1,797	2,824	2,445	4,911	1,671	1,188	1,331	791
2009 Q2	29,408	1,311	2,959	1,464	1,801	1,697	2,902	2,398	4,361	1,575	1,179	1,229	764
Total to June 2009	129,046	5,712	12,196	6,816	7,629	7,628	11,846	10,084	19,545	6,504	5,343	5,607	3,283
2009 Q3	30,365	1,352	2,901	1,473	1,703	1,642	2,951	2,818	4,557	1,453	1,163	1,342	720
2009 Q4	32,807	1,488	2,933	1,747	1,823	1,895	3,536	2,537	4,901	1,504	1,264	1,440	771
2010 Q12	34,561	1,530	2,829	1,798	1,789	1,889	3,274	3,023	4,844	1,644	1,149	1,229	735
2010 Q2 ²	34,675	1,623	2,996	1,750	1,698	1,956	3,203	2,878	4,672	1,642	1,287	1,478	769
Total to June 2010	132,408	5,993	11,658	6,768	7,013	7,382	12,964	11,256	18,975	6,243	4,863	5,489	2,996
Non-EU exports													
2008 Q3	28,265	1,357	2,936	1,707	1,914	2,142	2,267	3,577	5,173	1,373	1,312	2,103	623
2008 Q4	28,181	1,112	2,807	1,522	2,089	1,900	2,252	3,749	5,430	1,306	1,298	2,224	806
2009 Q1	22,909	977	2,766	1,260	1,958	1,209	1,893	2,711	4,090	1,149	1,074	1,978	510
2009 Q2	24,813	881	2,540	1,263	1,995	1,504	2,002	2,934	4,722	1,164	1,241	2,337	606
Total to June 2009	104,167	4,327	11,048	5,752	7,955	6,755	8,414	12,970	19,415	4,993	4,925	8,641	2,545

2009 Q3	25,050	1,014	3,383	1,365	1,751	1,588	1,954	2,883	4,654	1,078	933	2,502	454
2009 Q4	28,687	1,273	3,272	1,510	1,786	2,268	2,328	3,172	5,910	1,122	968	2,809	525
2010 Q12	26,292	1,014	2,722	1,364	1,701	1,914	1,985	3,934	5,134	1,697	894	1,874	442
2010 Q2 ²	30,051	1,345	3,209	1,795	1,913	2,391	2,337	3,710	5,734	1,842	1,009	2,318	564
Total to June 2010	110,079	4,646	12,586	6,034	7,151	8,161	8,605	13,698	21,431	5,739	3,803	9,504	1,985
	5.7%	7.4%	13.9%	4.9%	-10.1%	20.8%	2.3%	5.6%	10.4%	15.0%	-22.8%	10.0%	-22.0%
Total Exports													
2008 Q3	64,002	2,977	6,218	3,620	3,926	4,280	5,489	6,429	10,275	3,074	2,959	3,637	1,495
2008 Q4	60,857	2,560	5,667	3,351	3,997	3,897	5,150	6,138	10,601	2,863	2,627	3,736	1,661
2009 Q1	54,134	2,311	5,860	2,870	3,865	3,006	4,717	5,155	9,001	2,820	2,262	3,309	1,302
2009 Q2	54,221	2,191	5,499	2,727	3,796	3,200	4,904	5,331	9,084	2,740	2,420	3,566	1,370
Total to June 2009	233,214	10,039	23,244	12,568	15,584	14,384	20,260	23,054	38,960	11,497	10,268	14,248	5,828
2009 Q3	55,415	2,366	6,283	2,838	3,454	3,230	4,906	5,700	9,211	2,531	2,096	3,844	1,175
2009 Q4	61,494	2,761	6,205	3,258	3,610	4,162	5,864	5,709	10,812	2,626	2,232	4,249	1,296
2010 Q12	60,853	2,544	5,550	3,162	3,489	3,803	5,258	6,957	9,978	3,341	2,043	3,103	1,177
2010 Q2 ²	64,726	2,969	6,205	3,544	3,611	4,347	5,540	6,588	10,405	3,484	2,296	3,796	1,333
Total to June 2010	242,488	10,639	24,244	12,802	14,164	15,542	21,568	24,955	40,407	11,983	8,666	14,992	4,981

Notes

1 Components may not sum to totals as Regional Trade Statistics includes estimates made for EU trade below the Intrastat threshold which are included in the 'unknown' region and not displayed in this table.

2 Provisional

Source: Office for National Statistics

Figure 9 Value of total export goods as a percentage of workplace-based GVA: by NUTS1 region

Percentages

* Provisional

UK less Extra-region statistical discrepancy

Source: HM Revenue and Customs, Regional Trade Statistics, Office for National Statistics

Skills

The skills of workers influence productivity as they define the capabilities that the labour force can contribute to the production process. The concept of skills includes attributes of the workforce, such as 'softer' or interpersonal skills, which are difficult to measure or to compare in different situations or over time. Therefore, qualifications are often used as proxy indicators. By examining the qualifications, such as degree or equivalent, of the current workforce as well as those of young people, who represent the future capabilities of the labour market, a view of how skills are changing over time and their potential impact on productivity can be analysed. However, as characteristics of local economies dictate which labour skills are required, comparability between regions might be difficult. An alternative approach is to compare the percentage of the working-age population that has no recognised qualifications.

Figure 10 shows the proportion of the working-age population in 2009 that had no qualifications in each region. Compared to the UK average of 12.6 per cent, Northern Ireland had the highest proportion of the population with no qualifications (9.7 percentage points above the UK average); whereas the South West and the South East had the lowest proportions, 3.9 and 3.5 percentage points below the UK average, respectively.

Figure 10 **Working-age population with no qualifications: by NUTS1 region, 2009¹**

Percentages

Note

¹ For summary of qualifications and equivalents see www.statistics.gov.uk/statbase/Product.asp?vlnk=836.

Source: Labour Force Survey, Office for National Statistics

Above average proportions of working-age people without a qualification do not necessarily mean that regions have the most unqualified workforce. Due to differing regional skill requirements, people with recognised qualifications might migrate into other regions, where demand for their qualifications is high, while those without any recognised qualifications might migrate out of these other regions. Also, if employers have a strong demand for lower skills and a good supply of appropriate workers, a low skill equilibrium is created in a region.

Regional Skills Partnerships (RSPs) are groups brought together by Regional Development Agencies in each region of England in response to the National Skills Strategy. RSPs aim to strengthen regional structures to make skills provision more relevant to the needs of employers and individuals, covering private, public and voluntary sectors of the economy. They also aim to give regions the flexibility to tackle their own individual challenges and priorities.

Table 6 presents the RSP core indicators, which help to monitor the health of regional and local labour markets and progress towards national skills targets such as those documented in the Leitch Report. These core indicators will be supported by local, more specific, indicators identified by individual RSPs. The choice of '19 to 64 year olds' for some of the indicators in Table 6 has been influenced by: the increased emphasis on education and training after the age of 16; the plan

to raise the standard school leaving age to 18; and alignment with indicators specified in the Local Area Agreements.

Table 6 Regional Skills Partnerships core indicators: by NUTS1 region

Percentages

Skills outcome indicators	Time period	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East of England	London	South East	South West	England
Percentage of employers with business or training plan, or budget for training	2007	70.6	69.2	69.6	67.9	67.5	67.3	70.0	70.6	68.4	69.1
Percentage of staff with skill gaps	2007	6.3	5.3	4.8	6.8	5.4	7.8	6.7	5.8	6.2	6.1
Skill shortage vacancies (SSVI) as percentage of all vacancies	2007	18.8	17.6	20.1	20.2	15.5	19.6	26.1	22.5	20.9	20.9
Percentage of KS4 pupils achieving 5+ A* to C GCSE (inc Maths and English)	2008/09	48.1	49.9	47.3	49.9	48.5	51.9	54.0	53.7	51.8	49.8
Percentage of 19 year olds qualified to Level 2 or above ¹	2008	75.9	74.3	73.2	73.1	74.9	77.0	77.0	79.6	77.0	76.7
Percentage of 19 year olds qualified to Level 3 or above ¹	2008	43.7	46.1	44.4	46.0	46.9	52.4	51.9	56.9	51.0	49.8
Percentage of 19 to 64 year olds with Level 2+	2009	67.6	68.4	67.9	68.2	65.2	68.6	71.5	73.4	72.7	69.7
Percentage of 19 to 64 year olds with Level 3+	2009	45.5	47.6	47.8	47.6	44.7	47.6	55.6	53.6	51.7	49.9
Percentage of 19 to 64 year olds with Level 4+	2009	25.4	28.7	28.2	27.3	26.4	29.0	41.7	34.7	30.9	31.4
Percentage of 19 to 64 year olds with no qualifications	2009	14.4	13.6	12.6	12.7	15.9	11.0	11.4	8.6	8.2	11.7
Percentage of working-age population who undertook job-related training in last 13 weeks	2008	20.9	18.9	19.4	20.2	19.4	18.7	18.2	22.2	23.1	20.0
Percentage of 17 year olds in education or work-based learning	2008	80.0	80.0	76.0	77.0	80.0	79.0	89.0	79.0	79.0	80.0

Note

¹ Provisional data from DCSF matched datasets.

Source: Office for National Statistics; Labour Force Survey; Department of Business Enterprise and Regulatory Reform; Department for Children, Schools and Families; Department for Innovation Universities and Skills; National Employers Skills Survey 2007.

In order to assess the future capabilities of the labour force, the percentage of pupils achieving five or more grades A* to C at GCSE level or equivalent in each English region can be used as an indicator². Recent focus on literacy and numeracy has led to a new measure being published, of five or more GCSEs grade A* to C in subjects including English and Mathematics. **Figure 11** shows the percentage of pupils achieving at least five grades A* to C at GCSE level or equivalent in any subjects, and in subjects including English and Mathematics. In 2008/2009, the England average for pupils in all schools achieving five or more grades A* to C in any subjects was 70.0 per cent, while it was down to 50.9 per cent if the subjects included English and Mathematics. These were increases of 4.7 and 3.3 percentage points from 2007/08, respectively. Across all English regions, the percentage of pupils achieving at least five grades A* to C in subjects including English and Mathematics was substantially lower compared with achieving the same in any subjects. Also, regional differences were more pronounced when subjects included English and Mathematics.

Figure 11 Pupils achieving five or more grades A* to C at GCSE level or equivalent in (i) all subjects and (ii) subjects including English and Mathematics: by NUTS1 region, 2008/09^{1,2}

Percentages

Notes:

1 Revised data, includes attempts and achievements by these pupils in previous academic years.

2 The England average includes all schools, not only local authority maintained schools.

Source: Department for Children, Schools and Families

In the North East the percentage of pupils achieving five or more grades A* to C in any subjects was 2.8 percentage points above the England average, but the percentage dropped 2.8 points below the average when the subjects included English and Mathematics. The opposite held for the South West and the East of England, where the proportion of pupils achieving at least five grades A* to C increased above the England average if the subjects included English and Mathematics while it dropped below national average for achieving five or more grades A* to C in any subject. London and South East were the only two regions which performed above national average on both measures.

Investment

Investment in physical capital, such as machinery, equipment and buildings, enables workers to produce more and higher quality output. Therefore, investment can have a significant positive impact on productivity. Due to quality concerns regarding the regional allocations of investment, which is recorded at the level of the enterprise and not at the local level, this article does not currently include data on investment.

Nevertheless, as Dunnell (2009) has pointed out, inflows of foreign direct investment (FDI) projects and estimated numbers of associated jobs by region can serve as a narrow indicator of investment. However, FDI does not cover all investment in a region and there is no requirement to notify UK Trade & Investment when undertaking FDI.

The labour market

Table 7 shows the seasonally adjusted employment rate, the number of people aged from 16 to 64 in employment, expressed as a proportion of their population, from the Labour Force Survey (LFS).

In quarter two (April to June) of 2010, the UK employment rate was 70.5 per cent, down 0.3 percentage points from a year ago and up 0.3 percentage points from quarter one (January to March) of 2010. Regional rates varied from 74.6 per cent in the South East to 66.4 per cent in Northern Ireland.

Six out of the twelve UK regions experienced annual falls in the employment rate, the largest of which was in the East Midlands at 2.1 percentage points followed by Scotland at 1.9 percentage points. The North East and Northern Ireland increased by 2.6 and 2.4 percentage points respectively.

Table 7 **Employment¹ rates for persons of working age: by NUTS1 region**

Per cent, seasonally adjusted

		United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East of England	London	South East	South West	England	Wales	Scotland	Northern Ireland
2007	Apr-Jun	72.6	69.7	70.8	71.2	73.7	70.8	75.2	68.9	76.9	75.9	72.7	69.9	74.9	68.8
	Jul-Sep	72.7	69.7	70.5	71.2	73.5	71.3	75.2	69.8	77.1	76.2	72.9	69.4	74.1	68.0
	Oct-Dec	72.9	69.6	70.9	71.8	73.3	71.4	76.0	69.4	77.2	77.0	73.1	69.4	74.2	67.9
2008	Jan-Mar	73.0	68.3	70.2	72.1	74.2	71.4	75.5	70.3	77.6	76.7	73.2	69.6	74.3	68.1
	Apr-Jun	72.9	68.4	70.1	71.4	73.5	70.6	75.6	70.8	77.7	76.5	73.1	70.1	74.3	68.6
	Jul-Sep	72.5	68.2	69.8	71.4	73.7	70.0	75.3	70.1	77.0	76.5	72.7	68.4	73.9	68.0
	Oct-Dec	72.2	68.0	69.3	70.4	73.8	69.7	75.5	70.4	76.5	76.0	72.4	68.6	73.3	66.6
2009	Jan-Mar	71.7	67.7	69.6	69.6	73.4	68.5	75.6	69.2	76.0	75.6	71.9	68.6	73.2	64.8
	Apr-Jun	70.9	65.2	69.1	69.1	73.2	68.4	74.9	67.9	75.4	74.4	71.1	67.7	72.1	64.0
	Jul-Sep	70.7	66.1	68.9	69.2	72.8	68.3	74.9	67.9	74.9	73.5	71.0	67.1	71.8	64.3
	Oct-Dec	70.5	67.0	68.4	68.8	72.2	68.8	73.8	67.9	75.1	73.4	70.8	67.0	71.5	65.5
2010	Jan-Mar	70.3	66.9	68.9	68.9	71.1	68.8	73.4	67.5	74.9	73.0	70.6	66.8	70.0	65.9
	Apr-Jun	70.5	67.8	69.1	69.7	71.0	69.3	73.4	68.0	74.6	73.8	70.9	66.7	70.2	66.4

Note

1 Includes employees, self-employed, participants on government-supported training schemes and unpaid family workers.

Source: Labour Force Survey, Office for National Statistics

Table 8 shows the unemployment rate (according to the internationally-consistent International Labour Organisation definition) for persons aged 16 and over from the LFS. The UK rate in the second quarter of 2010 was 7.8 per cent, unchanged from a year ago and down 0.2 percentage points from the last quarter. Regionally, the rates ranged from 9.4 per cent in the North East to 6.1 per cent in both the South East and South West.

Over the year the unemployment rate rose in eight of the twelve regions. Scotland had the largest increase at 1.3 percentage points followed by Wales at 1.2 percentage points. The West Midlands had the largest decrease at 2.4 percentage points followed by the North East and North West which both decreased by 0.5 percentage points.

Table 9 shows economic inactivity rates for persons aged from 16 to 64 from the LFS. The UK rate in the second quarter of 2010 was 23.4 per cent, down 0.2 percentage points from the previous quarter and up 0.3 percentage points on a year earlier. Across the regions, rates varied from 20.5 per cent in the South East to 28.8 per cent in Northern Ireland.

Compared with a year earlier, four regions had a decrease in the inactivity rate, and thus a corresponding increase in the activity rate. Northern Ireland and the North East both had the largest annual fall of 2.6 percentage points. Seven regions had an increase in the economic inactivity rate over the year. The largest annual rise was in the East Midlands at 2.2 percentage points. Wales' rate was unchanged on the year.

Table 10 shows the number of employee jobs, not seasonally adjusted, from the Employers Surveys. The number of UK workforce jobs in June 2010 was 30,801,000 a decrease of 196,000 over the year since. In percentage terms, this was a 0.2 per cent decrease.

There were annual increases in three regions. The largest percentage increase was in the East Midlands (0.5 per cent) whilst the largest percentage decrease was in the West Midlands (2.1 per cent).

Table 11 shows the claimant count rate (referring to people claiming Jobseeker's Allowance benefits as a proportion of the workforce). The UK rate was 4.5 per cent in September 2010, unchanged from August 2010, and down 0.4 percentage points on a year earlier. This national rate masks large variations between regions and component countries of the UK. For September 2010, the North East had the highest claimant count rate in the UK at 6.7 per cent. The North East was followed by Northern Ireland (6.5 per cent) and the West Midlands (5.8 per cent). The lowest claimant count was measured in both the South East and South West at 3.0 per cent. The claimant count rate was 4.8 per cent in Scotland, 4.4 per cent in England and 5.1 per cent in Wales.

Northern Ireland (up by 0.5 per cent) is the only region showing a percentage increase in the claimant count rate compared with a year ago. The largest decrease was in the West Midlands at 0.9 percentage points.

Table 8 **Unemployment rates for persons aged 16 and over: by NUTS1 region**

Per cent, seasonally adjusted

		United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East of England	London	South East	South West	England	Wales	Scotland	Northern Ireland
2007	Apr-Jun	5.4	6.4	5.9	5.5	5.0	6.6	4.6	7.2	4.2	4.0	5.5	5.8	4.6	3.6
	Jul-Sep	5.3	6.2	6.0	5.4	5.7	6.4	5.1	6.1	4.6	3.9	5.4	5.2	5.0	3.9
	Oct-Dec	5.2	5.7	5.8	5.4	5.3	5.9	4.4	6.7	4.4	3.7	5.3	5.1	4.9	4.3
2008	Jan-Mar	5.2	6.5	6.0	5.0	5.4	6.2	4.5	6.8	3.9	3.7	5.3	5.2	4.7	4.5
	Apr-Jun	5.3	7.5	6.4	6.1	5.6	6.2	4.6	6.7	4.1	3.8	5.5	5.2	4.2	3.9
	Jul-Sep	5.9	8.2	6.7	6.8	5.8	6.6	4.8	7.3	4.7	4.2	6.0	6.6	4.8	4.2
	Oct-Dec	6.4	8.4	7.8	6.7	6.3	8.0	5.5	7.3	5.0	4.8	6.5	7.1	5.3	5.3
2009	Jan-Mar	7.1	8.2	7.9	8.0	7.1	9.3	6.0	8.2	5.3	5.9	7.2	7.6	5.9	6.2
	Apr-Jun	7.8	9.9	8.6	8.9	7.3	10.6	6.4	8.9	5.8	6.4	7.9	7.8	7.0	6.5
	Jul-Sep	7.9	9.6	8.6	8.7	7.4	10.0	6.4	9.1	6.2	6.5	7.9	8.8	7.3	7.1
	Oct-Dec	7.8	9.2	8.5	9.1	7.2	9.3	6.5	9.2	6.2	6.4	7.8	8.6	7.6	6.0
2010	Jan-Mar	8.0	9.4	8.6	9.7	7.3	9.3	6.6	9.1	6.3	6.2	7.9	9.3	8.1	6.8
	Apr-Jun	7.8	9.4	8.1	9.1	7.4	8.3	6.8	9.3	6.1	6.1	7.7	9.0	8.4	6.6

Source: Labour Force Survey

Table 9 Economic inactivity rates for persons of working age: by NUTS1 region

Per cent, seasonally adjusted

		United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East of England	London	South East	South West	England	Wales	Scotland	Northern Ireland
2007	Apr-Jun	23.2	25.7	24.8	24.7	22.4	24.1	21.1	25.7	19.7	20.9	23.1	25.8	21.5	28.6
	Jul-Sep	23.2	25.6	25.0	24.7	22.0	23.7	20.7	25.7	19.1	20.6	22.9	26.7	22.0	29.2
	Oct-Dec	23.1	26.1	24.6	24.0	22.5	24.1	20.4	25.5	19.2	20.0	22.8	26.9	22.0	29.0
2008	Jan-Mar	23.0	26.9	25.2	24.0	21.5	23.7	20.8	24.5	19.3	20.4	22.7	26.6	22.1	28.6
	Apr-Jun	22.9	26.0	25.0	24.0	22.1	24.6	20.7	24.0	19.0	20.4	22.6	25.9	22.4	28.5
	Jul-Sep	23.0	25.6	25.1	23.3	21.6	25.0	20.8	24.3	19.2	20.1	22.6	26.7	22.4	29.1
	Oct-Dec	22.8	25.7	24.7	24.5	21.2	24.2	20.0	23.9	19.5	20.2	22.5	26.0	22.5	29.6
2009	Jan-Mar	22.8	26.1	24.3	24.2	20.9	24.3	19.5	24.5	19.6	19.6	22.4	25.7	22.1	30.8
	Apr-Jun	23.1	27.6	24.4	24.1	21.0	23.3	19.8	25.4	19.9	20.5	22.7	26.5	22.4	31.4
	Jul-Sep	23.2	26.8	24.6	24.1	21.4	23.9	19.9	25.3	20.1	21.3	22.9	26.3	22.5	30.6
	Oct-Dec	23.4	26.1	25.1	24.2	22.1	24.0	21.0	25.2	19.9	21.5	23.1	26.5	22.5	30.2
2010	Jan-Mar	23.5	26.1	24.4	23.5	23.2	24.1	21.3	25.6	20.0	22.0	23.2	26.2	23.6	29.1
	Apr-Jun	23.4	25.0	24.7	23.1	23.2	24.3	21.2	25.0	20.5	21.3	23.0	26.5	23.2	28.8

Source: Labour Force Survey

Table 10 **Employee jobs¹: by NUTS1 region**

Thousands, not seasonally adjusted

	United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East of England	London	South East	South West	England	Wales	Scotland	Northern Ireland
Jun 08	31,780	1,166	3,427	2,543	2,169	2,684	2,818	4,809	4,431	2,690	26,737	1,400	2,739	878
Jun 09	30,997	1,174	3,355	2,485	2,092	2,610	2,803	4,788	4,280	2,649	26,236	1,350	2,545	840
Sep 09	30,873	1,173	3,331	2,490	2,120	2,591	2,790	4,709	4,281	2,632	26,117	1,341	2,556	832
Dec 09	30,753	1,168	3,320	2,474	2,105	2,570	2,812	4,680	4,266	2,611	26,006	1,346	2,539	835
Mar 10	30,730	1,164	3,305	2,484	2,099	2,557	2,803	4,684	4,267	2,610	25,973	1,372	2,518	841
Jun 10	30,801	1,162	3,311	2,486	2,102	2,556	2,810	4,751	4,264	2,612	26,054	1,341	2,539	836

Notes

1. Employee jobs are a measure of jobs rather than people. For example, if a person holds two jobs, each job will be counted in the Employee Jobs total. Employee Jobs figures come from quarterly surveys of employers carried out by ONS and administrative sources.

Source: Employer Surveys

Table 11 **Claimant count rates¹: by NUTS1 region**

Per cent, seasonally adjusted

		United Kingdom	North East	North West	Yorkshire and the Humber	East Midlands	West Midlands	East of England	London	South East	South West	England	Wales	Scotland	Northern Ireland
2009	Sep	5.0	7.1	5.7	6.0	5.1	6.7	4.2	4.6	3.6	3.5	4.9	5.7	4.8	6.0
	Oct	5.0	7.2	5.7	6.1	5.2	6.7	4.2	4.7	3.6	3.5	5.0	5.7	4.8	6.0
	Nov	5.0	7.1	5.7	6.1	5.1	6.6	4.2	4.7	3.6	3.5	4.9	5.7	4.9	6.0
	Dec	4.9	7.1	5.6	6.0	5.1	6.5	4.1	4.6	3.5	3.4	4.9	5.6	4.9	6.1
2010	Jan	5.0	7.2	5.7	6.1	5.1	6.5	4.2	4.7	3.5	3.4	4.9	5.6	5.0	6.2
	Feb	4.9	7.0	5.5	5.9	4.9	6.3	4.0	4.6	3.4	3.3	4.8	5.5	4.9	6.2
	Mar	4.8	6.8	5.3	5.8	4.8	6.2	4.0	4.5	3.3	3.2	4.7	5.4	4.9	6.2
	Apr	4.7	6.7	5.2	5.7	4.7	6.0	3.9	4.5	3.2	3.1	4.6	5.2	4.8	6.2
	May	4.6	6.5	5.1	5.6	4.5	5.9	3.8	4.4	3.1	3.0	4.5	5.1	4.8	6.2
	Jun	4.5	6.6	5.1	5.5	4.5	5.8	3.7	4.4	3.0	3.0	4.4	5.0	4.8	6.3
	Jul	4.5	6.6	5.1	5.5	4.5	5.8	3.7	4.4	3.0	2.9	4.4	5.0	4.9	6.4
	Aug	4.5	6.6	5.1	5.5	4.4	5.8	3.7	4.4	3.0	3.0	4.4	5.1	4.9	6.5
	Sep	4.5	6.7	5.1	5.5	4.5	5.8	3.8	4.4	3.0	3.0	4.4	5.1	4.8	6.5

Note

1. Count of claimants of Jobseeker's Allowance expressed as a percentage of the total workforce – workforce jobs plus claimants.

Source: Jobcentre Plus administrative system.

Notes

1 UK Regional Trade in Goods Statistics, Quarter 2 2010, HM Revenue and Customs at www.uktradeinfo.com/index.cfm?task=td_regstats_press

2 For a summary of all different levels of qualifications see 'Notes and definitions' at www.statistics.gov.uk/statbase/product.asp?vlnk=836

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Appendix

Table A1 Shift-share decomposition of the change in workplace-based gross value¹ added at current prices between 1995 and 2007: by NUTS1², NUTS2³ and NUTS3⁴ regions

Table Note

	National Share (NS)	Industry Mix (IM)	Regional Shift (RS)	Total change (per cent)
NUTS Level 1				
<i>NUTS Level 2</i>				
<i>NUTS Level 3</i>				
North East	89.8	-8.5	-14.4	66.9
<i>Tees Valley and Durham</i>	<i>89.8</i>	<i>-13.8</i>	<i>-22.7</i>	<i>53.4</i>
Hartlepool and Stockton-on-Tees	89.8	-19.9	-27.4	42.6
South Teesside	89.8	-5.8	-26.7	57.2
Darlington	89.8	-1.6	-16.1	72.1
Durham CC	89.8	-16.8	-19.2	53.8
<i>Northumberland and Tyne and Wear</i>	<i>89.8</i>	<i>-4.5</i>	<i>-6.3</i>	<i>79.1</i>
Northumberland	89.8	-16.7	-28.4	44.8
Tyneside	89.8	3.2	-5.3	87.7
Sunderland	89.8	-13.6	10.8	87.0
North West	89.8	-6.0	-11.3	72.5
<i>Cumbria</i>	<i>89.8</i>	<i>-20.4</i>	<i>-15.3</i>	<i>54.1</i>
West Cumbria	89.8	-31.8	-15.2	42.9
East Cumbria	89.8	-12.0	-14.1	63.6
<i>Cheshire</i>	<i>89.8</i>	<i>-10.2</i>	<i>-2.6</i>	<i>77.0</i>
Halton and Warrington	89.8	-6.0	0.0	83.8
Cheshire CC	89.8	-13.0	-2.9	73.9
<i>Greater Manchester</i>	<i>89.8</i>	<i>0.0</i>	<i>-11.5</i>	<i>78.3</i>

Greater Manchester South	89.8	7.0	0.2	97.0
Greater Manchester North	89.8	-10.7	-30.3	48.8
<i>Lancashire</i>	<i>89.8</i>	<i>-13.9</i>	<i>-16.4</i>	<i>59.5</i>
Blackburn with Darwen	89.8	-21.5	-25.3	43.0
Blackpool	89.8	1.4	-55.6	35.6
Lancashire CC	89.8	-15.1	-10.3	64.4
<i>Merseyside</i>	<i>89.8</i>	<i>0.5</i>	<i>-19.5</i>	<i>70.8</i>
East Merseyside	89.8	-14.2	3.1	78.8
Liverpool	89.8	6.7	-14.6	81.9
Sefton	89.8	6.5	-48.3	48.0
Wirral	89.8	-2.7	-25.9	61.2
Yorkshire and The Humber	89.8	-7.0	-5.5	77.3
<i>East Yorkshire and North Lincolnshire</i>	<i>89.8</i>	<i>-16.9</i>	<i>-16.4</i>	<i>56.5</i>
Kingston upon Hull, City of	89.8	-8.2	-28.0	53.6
East Riding of Yorkshire	89.8	-19.1	-9.4	61.3
North and North East Lincolnshire	89.8	-19.5	-15.3	55.0
<i>North Yorkshire</i>	<i>89.8</i>	<i>-5.9</i>	<i>1.1</i>	<i>85.0</i>
York	89.8	1.9	-2.3	89.5
North Yorkshire CC	89.8	-10.7	4.2	83.3
<i>South Yorkshire</i>	<i>89.8</i>	<i>-6.1</i>	<i>5.3</i>	<i>89.1</i>
Barnsley, Doncaster and Rotherham	89.8	-9.6	12.6	92.8
Sheffield	89.8	0.2	-4.9	85.1
<i>West Yorkshire</i>	<i>89.8</i>	<i>-4.2</i>	<i>-9.2</i>	<i>76.4</i>
Bradford	89.8	-9.4	-15.0	65.4
Leeds	89.8	3.4	-5.4	87.8
Calderdale, Kirklees and Wakefield	89.8	-10.5	-9.3	70.0
East Midlands	89.8	-12.0	7.0	84.8
<i>Derbyshire and Nottinghamshire</i>	<i>89.8</i>	<i>-13.8</i>	<i>2.1</i>	<i>78.1</i>
Derby	89.8	-15.8	37.0	111.0
East Derbyshire	89.8	-11.1	10.4	89.1

South and West Derbyshire	89.8	-23.9	-17.1	48.8
Nottingham	89.8	3.2	-22.4	70.6
North Nottinghamshire	89.8	-22.1	20.8	88.5
South Nottinghamshire	89.8	-9.7	9.9	90.0
<i>Leicestershire, Rutland and Northamptonshire</i>	<i>89.8</i>	<i>-8.5</i>	<i>13.4</i>	<i>94.7</i>
Leicester	89.8	-6.3	-20.5	62.9
Leicestershire CC and Rutland	89.8	-15.1	13.6	88.3
Northamptonshire	89.8	-3.3	34.0	120.5
<i>Lincolnshire</i>	<i>89.8</i>	<i>-15.8</i>	<i>-3.9</i>	<i>70.1</i>
West Midlands	89.8	-8.5	-11.9	69.5
<i>Herefordshire, Worcestershire and Warwickshire</i>	<i>89.8</i>	<i>-7.7</i>	<i>2.4</i>	<i>84.5</i>
Herefordshire County of	89.8	-22.5	4.7	72.1
Worcestershire	89.8	-7.4	-12.4	70.0
Warwickshire	89.8	-4.6	17.4	102.6
<i>Shropshire and Staffordshire</i>	<i>89.8</i>	<i>-12.1</i>	<i>-3.5</i>	<i>74.2</i>
Telford and Wrekin	89.8	-20.7	2.1	71.1
Shropshire CC	89.8	-8.5	-10.1	71.2
Stoke-on-Trent	89.8	-15.4	-39.5	34.9
Staffordshire CC	89.8	-9.7	11.8	91.9
<i>West Midlands</i>	<i>89.8</i>	<i>-7.0</i>	<i>-19.0</i>	<i>63.8</i>
Birmingham	89.8	2.9	-18.1	74.6
Solihull	89.8	10.0	15.9	115.7
Coventry	89.8	-16.8	-13.2	59.8
Dudley and Sandwell	89.8	-14.8	-32.9	42.1
Walsall and Wolverhampton	89.8	-19.8	-22.2	47.8
East of England	89.8	-2.0	9.5	97.3
<i>East Anglia</i>	<i>89.8</i>	<i>-5.4</i>	<i>10.3</i>	<i>94.7</i>
Peterborough	89.8	2.9	40.9	133.6
Cambridgeshire CC	89.8	-0.1	29.4	119.1
Norfolk	89.8	-6.2	-1.5	82.0
Suffolk	89.8	-11.4	-1.5	76.9

<i>Bedfordshire and Hertfordshire</i>	89.8	2.1	8.2	100.1
Luton	89.8	-12.3	16.4	93.9
Bedfordshire CC	89.8	-4.6	-11.6	73.6
Hertfordshire	89.8	7.1	13.3	110.1
<i>Essex</i>	89.8	1.1	5.0	95.9
Southend-on-Sea	89.8	13.2	-27.5	75.5
Thurrock	89.8	-23.3	1.4	67.9
Essex CC	89.8	2.4	9.5	101.7
London	89.8	20.0	7.7	117.5
<i>Inner London</i>	89.8	27.2	20.8	137.8
Inner London - West	89.8	32.7	14.2	136.7
Inner London - East	89.8	15.2	34.8	139.9
<i>Outer London</i>	89.8	6.7	-9.8	86.7
Outer London - East and North East	89.8	2.7	-20.1	72.4
Outer London - South	89.8	10.9	-24.0	76.6
Outer London -West and North West	89.8	8.3	3.7	101.8
South East	89.8	4.6	8.1	102.5
<i>Berkshire, Buckinghamshire and Oxfordshire</i>	89.8	5.4	13.7	108.9
Berkshire	89.8	7.3	32.5	129.6
Milton Keynes	89.8	5.1	32.8	127.7
Buckinghamshire CC	89.8	4.1	-17.9	76.0
Oxfordshire	89.8	2.6	4.6	97.0
<i>Surrey, East and West Sussex</i>	89.8	12.3	-6.3	95.8
Brighton and Hove	89.8	16.4	-16.9	89.3
East Sussex CC	89.8	5.0	-22.0	72.8
Surrey	89.8	16.4	9.8	116.0
West Sussex	89.8	6.0	-15.9	79.9
<i>Hampshire and Isle of Wight</i>	89.8	1.2	20.8	111.8
Portsmouth	89.8	1.3	22.4	113.5
Southampton	89.8	6.8	-19.7	76.9

Hampshire CC	89.8	1.8	29.4	121.0
Isle of Wight	89.8	-1.4	5.8	94.2
<i>Kent</i>	<i>89.8</i>	<i>-3.6</i>	<i>-3.2</i>	<i>83.0</i>
Medway	89.8	-1.7	-6.1	82.1
Kent CC	89.8	-3.6	-3.2	83.0
South West	89.8	-0.9	4.9	93.8
<i>Gloucestershire, Wiltshire and North Somerset</i>	<i>89.8</i>	<i>1.6</i>	<i>11.6</i>	<i>103.0</i>
Bristol City of	89.8	20.6	-14.4	96.0
North and North East Somerset, South Gloucestershire	89.8	-2.7	36.9	124.1
Gloucestershire	89.8	-2.1	9.5	97.3
Swindon	89.8	-0.4	23.6	113.0
Wiltshire CC	89.8	-5.6	0.4	84.6
<i>Dorset and Somerset</i>	<i>89.8</i>	<i>-3.1</i>	<i>4.9</i>	<i>91.6</i>
Bournemouth and Poole	89.8	10.3	2.3	102.4
Dorset CC	89.8	-1.3	0.0	88.5
Somerset	89.8	-13.2	10.1	86.7
<i>Cornwall and Isles of Scilly</i>	<i>89.8</i>	<i>-2.8</i>	<i>23.4</i>	<i>110.4</i>
<i>Devon</i>	<i>89.8</i>	<i>-6.0</i>	<i>-9.1</i>	<i>74.7</i>
Plymouth	89.8	-9.6	-19.5	60.8
Torbay	89.8	0.9	-42.7	48.0
Devon CC	89.8	-5.3	0.8	85.3
Wales	89.8	-10.9	-13.7	65.2
<i>West Wales and the Valleys</i>	<i>89.8</i>	<i>-12.9</i>	<i>-19.2</i>	<i>57.6</i>
Isle of Anglesey	89.8	-19.0	13.0	83.8
Gwynedd	89.8	-8.3	-42.7	38.8
Conwy and Denbighshire	89.8	-0.6	-26.1	63.1
South West Wales	89.8	-14.3	-15.8	59.8
Central Valleys	89.8	-20.4	-22.8	46.6
Gwent Valleys	89.8	-19.3	-18.7	51.8
Bridgend and Neath Port Talbot	89.8	-24.5	-4.1	61.2
Swansea	89.8	2.7	-22.3	70.2

<i>East Wales</i>	89.8	-8.1	-4.4	77.2
Monmouthshire and Newport	89.8	-3.3	5.2	91.7
Cardiff and Vale of Glamorgan	89.8	9.3	-6.1	93.0
Flintshire and Wrexham	89.8	-31.9	-5.2	52.7
Powys	89.8	-24.3	-16.8	48.8
Scotland	89.8	-4.4	-8.2	77.3
<i>Eastern Scotland</i>	89.8	-2.3	1.4	88.9
Angus and Dundee City	89.8	-6.9	-23.4	59.5
Clackmannanshire and Fife	89.8	-13.4	0.9	77.3
East Lothian and Midlothian	89.8	-12.8	11.6	88.6
Scottish Borders	89.8	-22.7	-10.0	57.1
Edinburgh, City of	89.8	14.7	-1.6	102.9
Falkirk	89.8	-19.6	29.7	99.9
Perth & Kinross and Stirling	89.8	-1.6	11.8	100.0
West Lothian	89.8	-22.2	22.8	90.4
<i>South Western Scotland</i>	89.8	-4.8	-14.8	70.3
East and West Dunbartonshire and Helensburgh & Lomond	89.8	-1.8	-36.8	51.2
Dumfries and Galloway	89.8	-20.9	-14.0	54.8
East Ayrshire and North Ayrshire Mainland	89.8	-23.2	-35.9	30.7
Glasgow City	89.8	10.9	-11.0	89.8
Inverclyde, East Renfrewshire and Renfrewshire	89.8	-11.6	-49.1	29.1
North Lanarkshire	89.8	-10.0	34.9	114.7
South Ayrshire	89.8	-12.6	-14.3	62.8
South Lanarkshire	89.8	-14.5	10.5	85.8
<i>North Eastern Scotland</i>	89.8	-5.2	-20.9	63.7
Aberdeen City, Aberdeenshire	89.8	-5.2	-20.9	63.7
<i>Highlands and Islands</i>	89.8	-10.3	4.2	83.7
Caithness & Sutherland and Ross & Cromarty	89.8	-6.2	2.5	86.1
Inverness & Nairn and Moray, Badenoch & Strathspey	89.8	-12.7	24.5	101.6
Lochaber, Skye & Lochalsh and Argyll and the Islands	89.8	-9.1	-18.2	62.4
Eilean Siar (Western Isles)	89.8	-6.6	7.1	90.3
Orkney Islands	89.8	-25.5	-8.1	56.2
Shetland Islands	89.8	-19.3	-9.8	60.8

Northern Ireland	89.8	-9.4	12.9	93.3
Belfast	89.8	10.3	-2.3	97.7
Outer Belfast	89.8	-6.2	17.5	101.0
East of Northern Ireland	89.8	-20.5	13.1	82.4
North of Northern Ireland	89.8	-13.8	5.3	81.3
West and South of Northern Ireland	89.8	-16.6	32.0	105.2

Notes

1 Unadjusted workplace based GVA at current basic prices

2 Estimates of the NUTS1 shift-share factors are based on 16 industries

3 Estimates of the NUTS2 shift-share factors are based on 15 industries

4 Estimates of the NUTS3 shift-share factors are based on 6 broad industry groups

Source: Office for National Statistics