

9 June 2008

Correction

Regional Economic Indicators

Edition – May 2008

Errors have been corrected in this article since it was first published on 12 May 2008. A production error led to incorrect data published under the following table headings:

Table 6 - Unemployment rates for persons aged 16 and over: by NUTS1 region

- this table incorrectly displayed data for Unemployment rates for persons of working age: by NUTS 1 region

Table 9 - Claimant count rates: by NUTS1 region

- in this table UK Claimant Count Rates were displaced by three months

ONS apologises for any inconvenience caused.

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FEATURE

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Regional economic indicators

May 2008 with a focus on differences in sub-regional economic performances

SUMMARY

This quarter, the regional economic indicators (REI) article focuses on explaining the differences in sub-regional Gross Value Added (GVA) per head and the development of these differences in recent years. This time series analysis decomposes the differences into four explanatory factors: productivity, employment rate, commuting rate and activity rate. The regular part of the article then gives an overview of the economic activity of UK regions in terms of their GVA, their GVA per head and their labour productivity. This is followed by a presentation of headline indicators of regional welfare and of various drivers of regional productivity. At the end of this article labour market data are presented. 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 performances

The regional economic indicators shed light on the economic performance of the 12 NUTS1 regions of the UK. This analysis can be taken further to a lower level by examining performance within regions and comparing these sub-regions with each other. The focus section of this article looks at NUTS level 2 and NUTS level 3 sub-regions and evaluates their performance in terms of their Gross Value Added (GVA) per head. The NUTS level 2 geography is important because of its direct relevance to the Cohesion objective of the EU's Structural Funds. Looking at the lower NUTS 3 level enables identification of those smaller areas which are slowing down or accelerating the economic performance of the NUTS2 sub-regions.

GVA per head can be decomposed into four explanatory factors, as has already been done in the analysis in last year's August article:

- productivity (per filled job)
- employment rate
- commuting rate
- activity rate

While the analysis in the August 2007 article looked at this decomposition in 2004, the current analysis examines a time-series of these four components from 2001 to 2005. The analysis is done by applying a methodology developed by the Organisation for Economic Co-operation and Development (OECD),

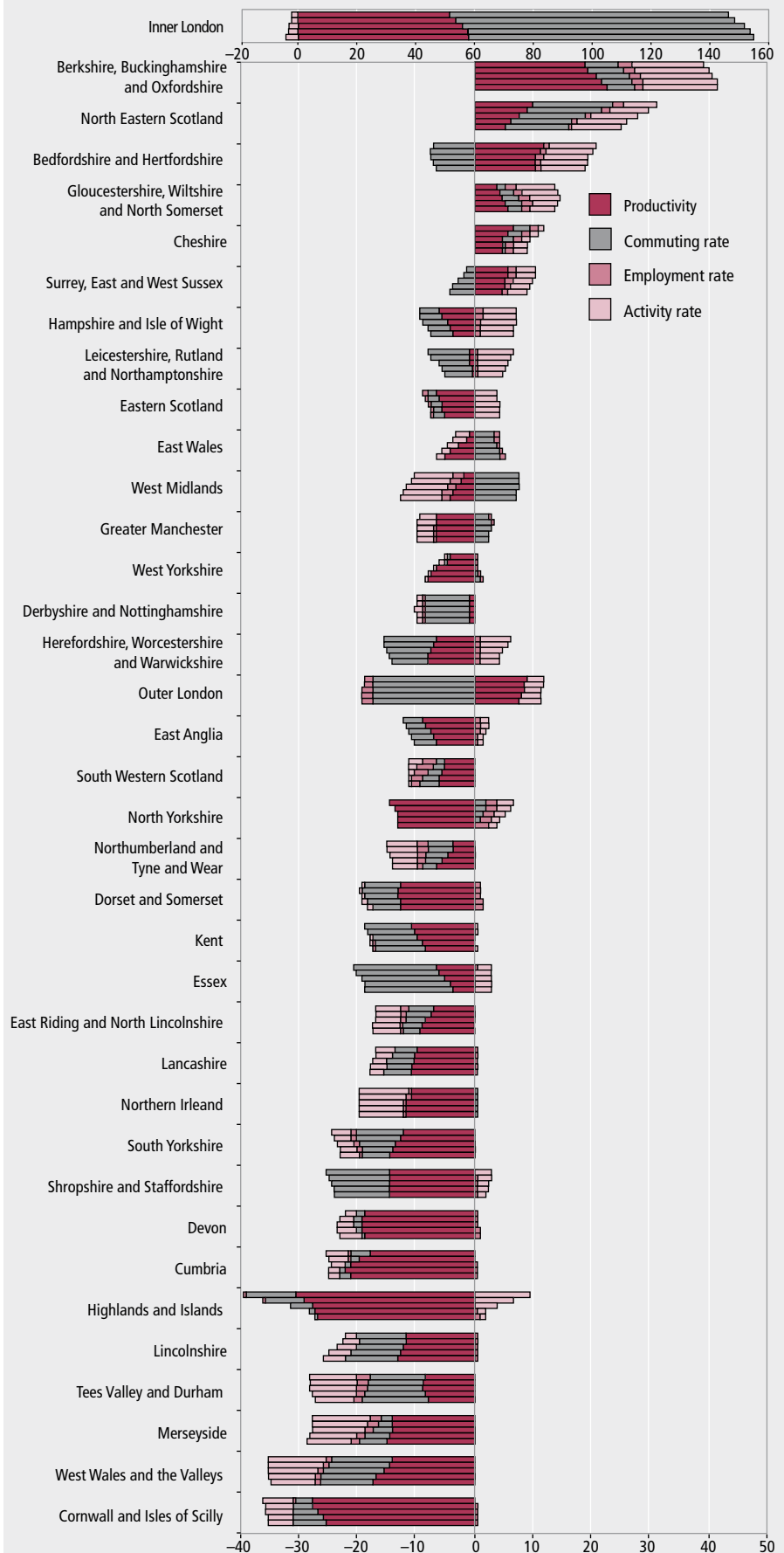
which is explained in Technical Note A at the end of this article. The underlying data come from various sources, in some cases different from those used in the regional analysis. Residence-based employment and unemployment were retrieved from the Annual Population Survey, while sub-regional workplace-based employment data were compiled using, among others data from the Annual Business Inquiry (ABI) and the Labour Force Survey (LFS). Revisions to LFS data, which include re-weighting of the latest population estimates, will be published on 14 May 2008. In order to ensure consistency, the data series were constrained to their regional totals where necessary. Additionally, the data have been smoothed using a five-period moving average (see Technical Note B).

The analysis in this edition looks at a four component breakdown at NUTS2 and NUTS3 level, where average labour productivity is defined as GVA per filled job. A five component breakdown of GVA per head, which incorporates the preferred productivity indicator of GVA per hour worked and the effect of 'hours worked per job' is possible and current work concentrates on the compilation of a compatible sub-regional NUTS2 data series, which is planned to be published in August.

Figure 1 shows all 37 NUTS2 sub-regions, ranked by their GVA per head performance in 2005 (consistent with the Regional Accounts estimates published in December 2007). On the basis of this ranking, their performance against the UK average is examined from 2001 to 2005,

Figure 1
Explaining the differences in GVA per head from the UK average in all NUTS2 areas, 2001–2005¹

Percentage difference from UK average



Note:

1 Top bars represent 2001; bottom bars represent 2005.

Source: Office for National Statistics

where the top bars represent 2001 and the bottom bars 2005. The UK average is represented by the vertical axis at zero, implying that those components that contribute negatively to the GVA per head of a sub-region are displayed to the left of the vertical axis, while those factors that increase sub-regional economic performance are shown to its right.

Figure 1 shows that the relatively high GVA per head of the seven best NUTS2 performers is largely explained by above average productivity performance. However, only three of these areas: Inner London; Berkshire, Buckinghamshire and Oxfordshire; and Gloucestershire, Wiltshire and North Somerset – have experienced an increase in productivity since 2001, thereby increasing their gap to the UK average. All other NUTS2 sub-regions, except for Outer London, which is ranked in the middle of the GVA per head scale, had below-average productivity from 2001 to 2005. Productivity in Outer London remains in the top five NUTS2 regions in the UK, although it has been decreasing since 2001, whereas this sub-region is ranked 17th in terms of GVA per head due to high levels of outward commuting into Inner London.

Concerning the NUTS2 sub-regions at the bottom of the GVA per head performance scale, it is clear that most of these display a combination of low productivity and high outward commuting, which explains low GVA per head of resident population. In addition, below average activity rates added significantly (by more than 20 per cent) to the low performance of: West Wales and the Valleys; Merseyside; Tees Valley and Durham; and Northern Ireland. Out of those NUTS2 sub-regions that received EU funds under Objective 1 (now the Cohesion Objective) over the period covered – namely Cornwall and the Isles of Scilly; West Wales and the Valleys; Merseyside; Highlands and Islands; and South Yorkshire – only Cornwall and the Isles of Scilly and Highlands and Islands experienced an increase in relative productivity between 2001 and 2005. The other three sub-regions showed declining relative productivity.

The commuting rate is another significant factor in explaining GVA per head differences. Here it is defined as the workplace based labour force as a proportion of the residence based labour force. Therefore, high inward commuting takes place when the workplace-based labour force is larger than the residence-based labour force. Outward commuting is the case when the workplace-based labour

force is smaller than the residence-based labour force.

The strongest inward commuting took place in Inner London. This explained more than half of the area's high GVA per head performance compared with the UK average, while the remainder was mostly explained by high productivity. Other NUTS2 sub-regions at the upper end of the GVA per head scale that experienced significant inward commuting were: Berkshire, Buckinghamshire and Oxfordshire; North Eastern Scotland; East Wales; and West Midlands. Most other NUTS2 sub-regions experienced outward commuting or a commuting rate only slightly above or below the UK average. The commuting rates at the other end of the economic performance scale showed large increases in out-commuting in: Cornwall and Isles of Scilly; Merseyside; and Tees Valley and Durham, while especially

Highlands and Islands and South Yorkshire experienced large declines in their out-commuting rates, thereby improving their GVA per head performances.

The employment rate is defined as workplace-based employment as a proportion of the workforce. While high relative employment rates suggest relatively low unemployment, below average employment rates are likely to occur in areas where GVA per head is low against the UK average. For most of the top GVA per head performers the employment rates were above the UK average from 2001 to 2005, underlining these regions' good economic performances. However, their impact compared to the impact of other components remained relatively small. At the bottom of the economic performance scale, the employment rate added positively to the GVA per head of certain NUTS2 sub-regions like: Dorset and Somerset;

Shropshire and Staffordshire; and Devon. Furthermore, several NUTS2 sub-regions that had below average employment rates in 2001 had improved against the UK average by 2005.

The activity rate had a significant impact on most NUTS2 sub-regions, whether they were at the top or the bottom of the economic performance scale. The activity rate measures the proportion of the population that is participating in the labour force. By looking at the top ten NUTS2 sub-regions, all except Inner London had an above average activity rate, which has been increasing significantly from 2001 to 2005 in Cheshire (by 82 per cent) and North Eastern Scotland (by 43 per cent). The activity rate of Inner London has been further declining below the average since 2001 (by 75 per cent).

The importance of an area's activity rate on its economic performance also becomes clear at the other end of the economic performance scale. Generally, low participation rates in the labour force contributed negatively to economic performance. Relatively high activity rates that contributed positively to GVA per head were evident in only two of the ten bottom NUTS2 sub-regions, Highlands and Islands and Shropshire and Staffordshire. However, both show strong declines since 2001, thereby converging to the UK average. Also Cumbria reduced its activity rate gap with the UK average. Lincolnshire and Devon on the other hand experienced a widening of the gap with a falling activity rate since 2001.

Having looked at the decomposed GVA per head performance of the NUTS2 sub-regions, it is worthwhile examining NUTS3 areas within these sub-regions where the variations can be just as large if not greater. The following elaborates on some outstanding performers in terms of productivity, employment, commuting and activity rates. Firstly, three NUTS2 areas at the top, and then three at the bottom of the GVA per head scale are discussed.

Figure 2 part(a) displays the economic performance of the NUTS2 sub-region of Hampshire, and the contrasts between the NUTS3 areas within Hampshire. The positive influence of the performance of Portsmouth and Southampton, which both have significant inward commuting and activity rates, was partly offset by Hampshire CC, which also experienced a high above average and increasing activity rate, but was slowed down in its GVA per head performance by strong outward commuting. The commuting

Figure 2
Explaining the differences within selected NUTS2 sub-regions, 2001–2005¹



Note:

1 Top bars represent 2001; bottom bars represent 2005.

Source: Office for National Statistics

rate for Southampton has been increasing since 2001 while its activity rate has been declining. Productivity was below the UK average in each NUTS3 area, but, with the exception of Portsmouth, productivity rates did improve. The Isle of Wight demonstrated the largest negative divergence in productivity from the UK average and large increases in outward commuting.

The above average GVA per head performance of Surrey, East and West Sussex is mainly driven by the economic performance of Surrey, which had an increasing and high above average productivity, while all other NUTS3 areas had low productivity compared with the UK average (part(b)). Productivity in Brighton and Hove worsened significantly from 2001 to 2005. East Sussex CC is the area that experienced the lowest GVA per head, which was mainly due to its relatively strong

and increasing outward commuting. Even though Surrey was the best performing NUTS3 area in terms of GVA per head, this performance has been deteriorating since 2001, especially due to declines in its activity and employment rates and an increase in outward commuting.

Inner London, which was by far the highest GVA per head performer at 151 percentage points above the UK average, shows a divide at the NUTS3 level between Inner London East and Inner London West (part(c)). Inner London West, which includes the City of London, contributed most to the high performance of Inner London. In 2005 it was 340 percentage points above the UK average. This high GVA per head was mainly caused by the area's large inward commuting. However, since 2001, inward commuting has been decreasing while productivity has been increasing continuously. The employment

rate remained around 5 percentage points above the UK average, while the activity rate in this NUTS3 area dropped significantly. Inner London East is also performing above the UK average but at a much lower level. Its net inward commuting is relatively low, though it has been increasing since 2001. Productivity has been increasing since 2001 with a slight decline in 2005. The employment and activity rates of Inner London East are both negative, implying that this part of Inner London is performing below the UK average in these two aspects.

Figure 3 part(a) shows the decomposed GVA per head of Merseyside and its four NUTS3 areas. The low GVA per head of Merseyside was driven by the low GVA per head of Sefton, Wirral and East Merseyside, which are among the lowest NUTS3 GVA per head performers in England. Liverpool, on the other hand, performed close to the UK average in terms of GVA per head with strong inward commuting. This high and stable commuting rate coincided with large out-commuting in the neighbouring NUTS3 areas. Sefton and Wirral also experienced large decreases in their productivity since 2001.

Part(b) shows the NUTS2 area of Cumbria, which experienced a worsening of its productivity at NUTS2 level. At the NUTS3 level it is revealed that this decline is mainly due to a strong decrease in West Cumbria's productivity. West Cumbria also experienced an increase in outward commuting, which further decreased its GVA per head. Even though East Cumbria's GVA per head was also below the UK average the area had strong and increasing inward commuting and an above average and increasing employment rate. Its productivity has also been improving since 2003, thereby reducing the gap with the UK average.

In South Yorkshire, Sheffield's GVA per head was close to the UK average (part(c)). Even though Sheffield experienced a worsening of its productivity from 2001 to 2005, it had an increasing commuting rate above average. The GVA per head performance of Barnsley, Doncaster and Rotherham, which form the other NUTS3 area within South Yorkshire, caused South Yorkshire to have a low GVA per head as productivity declined and the sub-region experienced large but declining out-commuting. Its below average activity rate is converging towards the UK average.

This analysis has shown the importance of identifying differences in economic performance at a sub-regional level.

Figure 3
Explaining the differences within selected NUTS2 sub-regions, 2001–2005¹



Note:
1 Top bars represent 2001; bottom bars represent 2005.
Source: Office for National Statistics

By decomposing GVA per head into four explanatory factors – productivity, employment rate, commuting rate and activity rate – this analysis has identified the economic performance of NUTS2 sub-regions and then shown the differences in the performance of NUTS3 areas within the NUTS2 sub-regions. The results have shown that larger geographical areas can hide remarkable differences at lower scales due to specific characteristics of the respective areas.

Regional overview

Key figures on a regional basis indicate that:

- in 2006, London was the region with the highest GVA per hour worked, 23.1 percentage points above the UK average. Northern Ireland had the lowest GVA per hour worked index measure, at 83.9 per cent of the UK average
- London and the South East had the highest levels of gross disposable household income (GDHI) per head in 2005, at £15,885 and £14,941, respectively, but among the lowest annual percentage growth rates, at 3.2 per cent and 3.6 per cent, respectively. The North East (£11,356), Northern Ireland (£11,564) and Wales (£11,851) had the lowest GDHI per head. GDHI figures up to 2006 will be published in May 2008
- the South West had the highest employment rate in the fourth quarter of 2007, at 79.3 per cent; Northern Ireland had the lowest rate, at 69.8 per cent, compared with the UK employment rate of 74.7 per cent

Headline indicators

This section presents a selection of regional economic indicators that provide an

overview of the economic activity of UK regions. Firstly, absolute GVA, as a measure of regional economic performance, and GVA per head, as a measure of regional productivity, are presented. Subsequently, two further labour productivity indicators, GVA per filled job and GVA per hour worked, are discussed. Due to large upward revisions to the regional GVA estimates, revisions to the population estimates and two methodological changes that were introduced in the February edition of this article, the three regional productivity indicators have been updated. The first methodological change caused the GVA per head series to now be presented on a workplace basis, rather than the previous residence-based measure. Secondly, the previously smoothed GVA series was replaced by an unsmoothed GVA series for the output measure used in the calculation of all the regional productivity series. More details on these changes can be found in the February article.

Regional performance

The February edition presented the latest data on economic performance in terms of workplace-based nominal GVA and GVA per head for all UK regions and devolved administrations (the article stated that the data in Table 1 and 2 were headline values; the data was however unsmoothed). It should be noted that these nominal figures do not take account of inflation or regional differences in prices. The data demonstrated that the regional breakdown of GVA changed little in 2006. London and the South East remained the regions with the largest share of UK GVA (19.2 per cent and 14.9 per cent, respectively) while Northern Ireland (2.4 per cent) and the North East (3.4 per cent) had the smallest.

Table 1 shows that all regions experienced annual nominal growth in

GVA and GVA per head in 2006. Compared with 2005, annual nominal growth in GVA was considerably higher for every UK region except for London, where the growth rate further declined. However, the 2006 growth rates were still below their 2004 levels for ten of the 12 regions. Only the East Midlands and the South East had higher growth rates in 2006 compared with 2004. In 2006, overall UK growth in nominal GVA was 5.1 per cent compared with 4.1 per cent in 2005 and 6.0 per cent in 2004. The East Midlands, the South East, Northern Ireland and Wales had the highest annual percentage growth (above 6.0 per cent) in 2006. While Northern Ireland and the North East had the smallest absolute values of GVA, their annual nominal growth in 2006 was higher than the growth of the region that had by far the largest value of GVA (London).

Due to the wide variations in geographical size among the UK regions, comparisons are generally expressed in terms of GVA per head of population, rather than absolute values. The February edition of this article demonstrated that in 2006, GVA per head for the UK was £18,631. London was the region with the highest GVA per head in 2006 at £28,813, well above (by 55 per cent) the UK average. GVA per head for the South East was also above the UK average (by 10 per cent), at £20,452 per head. Wales, the North East and Northern Ireland had the lowest GVA per head, at £14,462, £15,181 and £15,320, respectively. Despite these figures being less than 85 per cent of the UK average, Table 1 shows that annual nominal growth in these regions was high, at 5.7, 4.9 and 5.1 per cent, respectively. The East Midlands (5.8 per cent), Wales (5.7 per cent), the South East (5.6 per cent) and Scotland (5.4 per cent) were the best performers in terms of GVA per head growth rates in 2006.

Table 1

Annual nominal growth of workplace-based gross value added and gross value added per head: by NUTS1 region

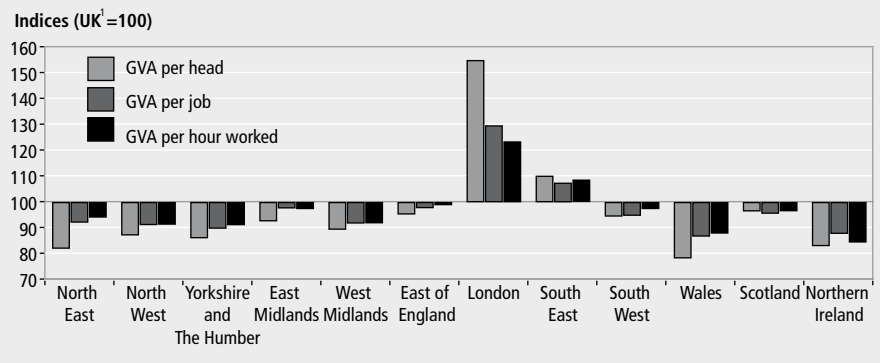
		Percentages												
		United Kingdom ¹	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East of England	London	South East	South West	Wales	Scotland	Northern Ireland
GVA annual percentage growth	2004	6.0	8.2	6.5	6.6	5.1	5.2	6.7	5.9	4.6	6.4	6.7	6.1	6.4
	2005	4.1	4.6	2.9	2.3	3.5	3.5	3.4	5.7	4.5	4.6	2.1	4.7	5.5
	2006 ²	5.1	5.2	3.6	4.6	6.7	4.8	4.6	4.4	6.3	5.1	6.1	5.9	6.2
GVA per head annual percentage growth	2006 ²	4.5	4.9	3.4	3.9	5.8	4.5	3.7	3.6	5.6	4.3	5.7	5.4	5.1

Notes:

- 1 UK less Extra-regio.
- 2 Provisional.

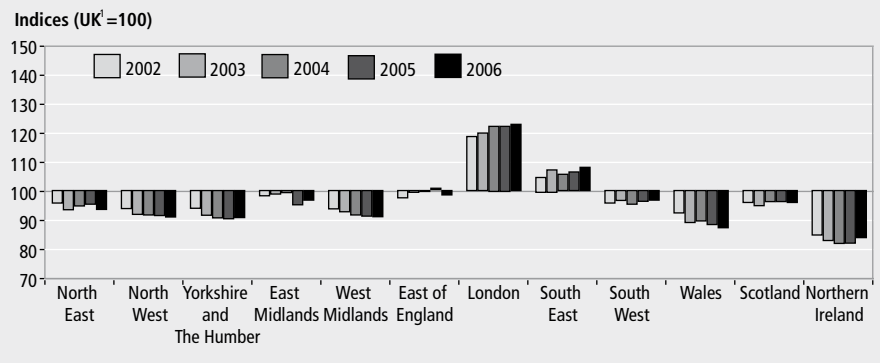
Source: Regional Accounts, Office for National Statistics

Figure 4
Comparison of regional economic indicators: by NUTS1 region, 2006



Note:
1 UK less Extra-regio and statistical discrepancy.
Source: Office for National Statistics

Figure 5
GVA per hour worked: by NUTS1 region



Note:
1 UK less Extra-regio and statistical discrepancy.
Source: Office for National Statistics

Labour productivity

Labour productivity indicators provide the most effective comparisons of regional economic performance. As mentioned above, since February 2008 the GVA per head measure is presented on a workplace basis instead of the previous residence basis. This switch mainly affects the estimates for London, the South East and the East of England as these regions experience significant levels of net commuting. Figure 4 compares estimates for GVA per head, GVA per filled job and GVA per hour worked for 2006. While GVA per head looks at the entire regional workplace-based population and GVA per filled job looks at regional workforce jobs, GVA per hour worked additionally takes into account any variations in labour market structures across regions, such as the proportions of full- and part-time workers or job share availability. Due to these reasons, GVA per hour worked is the preferred indicator of productivity. Figure 4 shows that GVA per hour worked exhibits fewer and smaller differences in regional economic performance when compared to the other

two indicators.

Figure 5 shows the regional GVA per hour worked productivity index on a time series basis. The regions that improved their productivity relative to the UK average between 2002 and 2006 were London, the South East, the South West, East of England and Scotland. The chart suggests that, since 2002, there has been some widening in the regional productivity differences between the highest and lowest performing regions. Productivity in London was the highest in all years and by 2006 was above the UK average by 4.2 percentage points more than it was in 2002. The opposite occurred in Wales, where productivity was among the lowest in 2006. In terms of the annual change in the GVA per hour worked indicator, six regions experienced declining productivity against the UK average in 2006: the East of England, the North East, Wales, the North West, Scotland and the West Midlands.

Welfare

Gross disposable household income (GDHI) by region gives an indication of

regional welfare. While the latest available regional GDHI estimates go up to 2005, new estimates up to 2006 will be published on 9 May 2008 and discussed in the August edition of this article. The regional GDHI data are available at www.statistics.gov.uk/statbase/Product.asp?vlnk=14651. GDHI estimates are published at current basic prices and so do not take inflation effects or regional price differences into account. In order to make reliable comparisons of regional income levels, the analysis needs to take account of the population distribution both within and across regions. Therefore, GDHI per head, which is a residence-based measure, is used as an indicator of the welfare of people living in a region.

Table 2 shows GDHI estimates from 2000 to 2005. In 2005, London (£15,885), the South East (£14,941) and the East of England (£14,198) were the only regions where GDHI per head was greater than the UK average. However, Table 2 also shows that London and the South East were the regions which had the lowest percentage growth of this indicator between 2000 and 2005 (18.2 and 19.4 per cent, respectively). The three regions that had a level of GDHI lower than £12,000 per head (the North East, Northern Ireland and Wales) had among the largest improvements over this five-year period (at 22.6, 24.7 and 25.6 per cent growth, respectively). Also, the East Midlands saw large growth in its GDHI per head indicator between 2000 and 2005 (at 25.6 per cent).

Gross median weekly earnings represent another indicator for regional welfare. The latest estimates have been published in November 2007. These estimates take account of a small number of methodological changes which improve the quality of results. These include changes to the sample design itself, as well as the introduction of an automatic occupation coding tool, called ACTR.

Figure 6 shows the 2007 gross median weekly pay for all full-time employees and a breakdown into its gender components, female and male full-time employees, in each region. These three bars for each region can be compared to the UK average gross median weekly pay. Figure 6 shows that in terms of all employees, only London and the South East had a gross median weekly pay above the UK average of £456.7. However, when looking at male full-time employees, the gross median weekly pay was higher than the UK average in nine of the 12 NUTS1 regions. The gross median weekly pay for female full-time employees

Table 2
Headline gross disposable household income per head at current basic prices: by NUTS1 region

	£ per head and percentages												
	United Kingdom 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
2000	10,906	9,261	9,979	9,964	9,972	9,949	11,681	13,439	12,509	10,806	9,433	10,168	9,270
2001	11,588	9,810	10,560	10,514	10,628	10,547	12,509	14,223	13,320	11,508	10,070	10,800	9,819
2002	11,930	10,147	10,874	10,834	11,008	10,854	12,909	14,495	13,652	11,868	10,456	11,199	10,176
2003	12,409	10,576	11,304	11,306	11,559	11,303	13,376	15,039	14,104	12,367	10,932	11,682	10,668
2004	12,773	10,920	11,673	11,687	11,993	11,670	13,722	15,396	14,424	12,718	11,322	12,047	11,086
2005 ²	13,279	11,356	12,186	12,197	12,522	12,133	14,198	15,885	14,941	13,258	11,851	12,554	11,564
Percentage change													
2000 to 2005	21.8	22.6	22.1	22.4	25.6	22.0	21.5	18.2	19.4	22.7	25.6	23.5	24.7

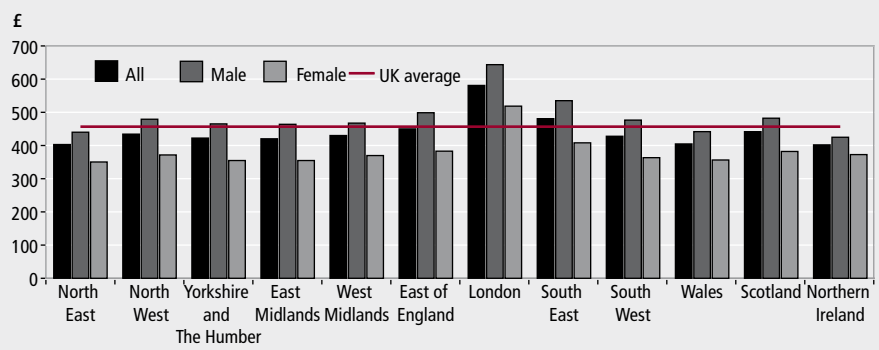
Notes:

1 UK less Extra-regio.

2 Provisional.

Source: Office for National Statistics

Figure 6
Gross median weekly pay of full-time employees: by NUTS1 region, 2007



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

was only above the UK average in London and substantially below it in all other regions. Concerning the gross median weekly pay for all full-time employees, Northern Ireland (£401.9), the North East (£402.9) and Wales (£404.7) showed the lowest earnings in 2007.

Drivers of productivity

The following indicators represent the drivers of productivity as identified by HM Treasury and Business, Enterprise and Regulatory Reform (BERR). These drivers include innovation, enterprise, competition

and skills. Investment, which influences the physical capital stock and consequently the quantity that can be produced by one unit of labour, is another driver of productivity. However, due to quality concerns regarding the regional allocations of investment (net capital expenditure), this variable is not included.

Innovation is measured by business expenditure on Research and Development (R&D); the enterprise driver is measured by net change of VAT registrations and de-registrations and business survival rates; competition is measured in terms

of UK regional trade in goods, and the qualifications of the current working age population and those of young people 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 can imply the development of new technologies that increase efficiency and new, more valuable goods and services. It also includes intangibles such as new methods of working and improvements to services.

R&D is one of the determinants to the innovation process and defined by the OECD 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 the stock of knowledge to devise new applications'. Statistics on Business Expenditure on Research and Development (BERD), consistent with these internationally agreed standards, were published in November 2007 and provide estimates of business expenditure on R&D for NUTS1 regions up to 2006.

Table 3 presents expenditure on R&D performed in UK businesses by region in

Table 3
Expenditure on research and development performed in UK businesses: by NUTS1 region

	£ million and percentages												
	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
2006	14,306	293	1,627	386	977	933	3,570	980	3,279	1,316	222	579	145
2006 percentage growth ¹	7.5	1.4	-14.0	12.2	-2.4	29.8	8.6	82.2	8.0	5.4	-4.7	-1.2	6.6

Note:

1 Year-on-year.

Source: Office for National Statistics

2006. It also shows the percentage growth from the previous year. The East of England and the South East had the highest business expenditure on R&D in 2006 and were the only regions to have expenditures higher than £3 billion. Northern Ireland, Wales and the North East remained the regions with the lowest R&D expenditure. London had the highest annual percentage growth in 2006, at 82.2 per cent. The West Midlands and Yorkshire and The Humber were the regions with the second highest growth in 2006, at 29.8 and 12.2 per cent, respectively, despite being ranked low when comparing their absolute expenditure on R&D with other regions and the UK average. R&D expenditure declined in the North West, Wales, the East Midlands and Scotland. The greatest decline of 14.0 per cent took place in the North West.

Analysing R&D as a percentage of GVA is a measure commonly used in international comparisons and can further explain the above trends. **Figure 7** shows that since 2001 the East of England has been the region with the highest share of R&D expenditure in terms of GVA, with 3.6

per cent in 2006. London had the lowest share in 2006 (0.45 per cent) followed by Yorkshire and The Humber (0.47 per cent), Wales (0.52 per cent) and Northern Ireland (0.54 per cent). The very low share for London may not be suggestive of low levels of innovation but could reflect how regional industry composition affects R&D as an indicator of innovation. London has a large concentration of service industries, but service industries may not be R&D intensive (within the OECD definition) if, for example, they rely heavily on human capital. If innovation occurs in other forms it may not be captured by the R&D measure.

The large increase in R&D expenditure in London and the West Midlands in 2006 (identified in Table 3) is also reflected when R&D expenditure is analysed as a percentage of GVA, with these regions' percentage shares both increasing by 0.2 percentage points in 2006. Despite this increase, London remains the region with the lowest business expenditure on R&D as a percentage of GVA as pointed out above.

Enterprise

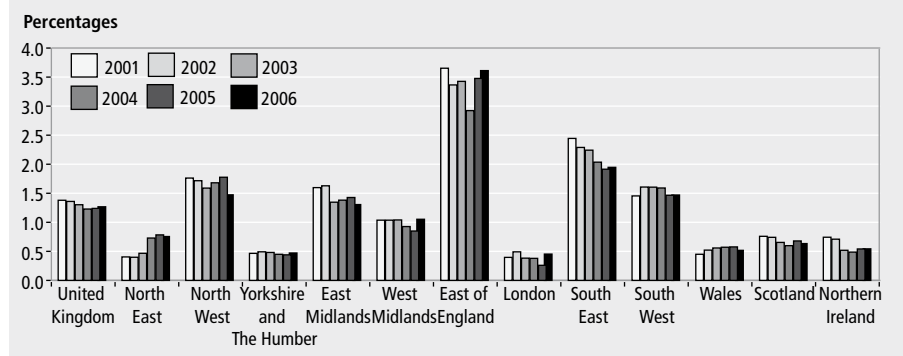
Enterprise is a driver of productivity as it stands for the presence of a positive entrepreneurial culture; for the ease of starting-up and overcoming the barriers to enterprise; for a sustainable stock of enterprise activity in an economy and the ability of firms to grow. VAT registrations and de-registrations are the best official guide to the pattern of business start-ups and closures. They are an indicator of the level of entrepreneurship and of the health of the business population. Many factors influence the pattern of business start-ups. Among these, the most important is economic growth, which encourages new ventures and creates demand for business. **Figure 8** shows the net changes in VAT registered businesses for UK regions in the years 2002 to 2006. Estimates for 2006 and revisions to previous years were published in November 2007 by BERR.

Figure 8 shows positive net changes in VAT registrations and de-registrations from 2002 to 2006 for all UK NUTS1 regions, meaning that more enterprises were registered than de-registered during that period. All regions exhibited an increasing, positive net change from 2002 onwards, except Northern Ireland which had a declining but still positive net change since 2002. London and the South East had the highest net change in 2006, with 7,250 and 6,015, respectively. The lowest net change in 2006 was experienced by Northern Ireland, the North East and Wales (575, 1,155 and 1,305, respectively).

Half of the regions (East of England, Northern Ireland, the West Midlands, Wales, the North East and the North West) saw a smaller net increase in 2006 compared with 2005. However, the other half experienced a larger net increase in 2006 than in 2005, leaving the UK average with a larger net increase of 935 in 2006 than in 2005.

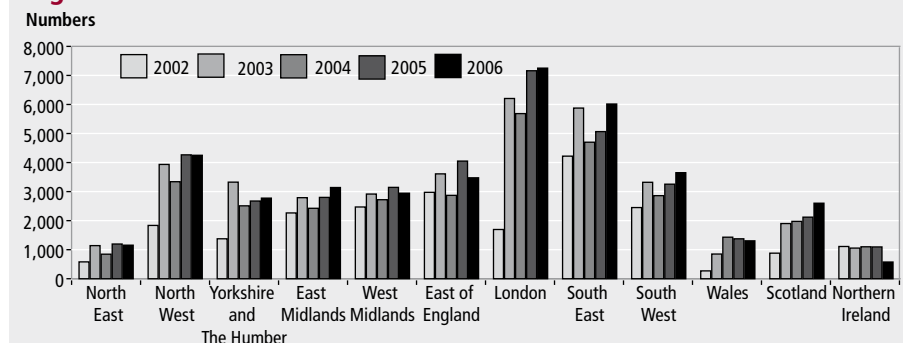
It should be noted that regions with high registration rates tend to also have high de-registration rates. Part of the reason for this is, of course, the sheer difference in the sizes of the regions – regions with larger populations and economies would be expected to have higher absolute numbers of registrations and de-registrations if all other factors were equal. However, this could also be due to the effects of market sorting (when competitive entrants push the unproductive ones out of a market) being more significant in some regions than others. This could also partly be due to the industrial mix in each region, with some sectors prone to higher rates of turnover

Figure 7
Business expenditure on R&D as a percentage of headline workplace based GVA: by NUTS1 region



Source: Office for National Statistics

Figure 8
Net change¹ in VAT registrations and de-registrations: by NUTS1 region



Note:

1 Net change is the net gain or loss in the stock of registered enterprises each year – equal to registrations less deregistrations.

Source: Department for Business, Enterprise and Regulatory Reform

than others.

The regional variations were linked geographically in that five of the six regions with a net change over 3,000 are situated next to each other (London, East of England, East Midlands, South East and South West), with the exception (the North West) interestingly being situated next to the North East – the region with the lowest net change in England.

Business survival rates data on the proportion of businesses that remain registered for VAT three years after their initial registration have not been updated since the last article. These estimates may be updated again around February 2009. Although there has been a general increase in business survival rates since 1995, these rates vary greatly between regions. Northern Ireland had the highest survival rate (78.5 per cent) for businesses registered in 2002 and London had the lowest (66.9 per cent).

Competition

Vigorous competition enhances productivity by encouraging firms to strive for efficiency gains. According to the HM Treasury's definition, trade in goods and

services as a percentage of GDP serves as an indicator for competition.

HM Revenue & Customs (HMRC) publishes regional trade statistics on export trade in goods to the European Union (EU) and non-EU by statistical value. Trade in goods by definition excludes 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. New estimates for the fourth quarter of 2007 were published in March 2008, presented here in **Table 4**.

The total value of UK exports for 2007 dropped by 10.2 per cent compared with 2006. The value of UK exports to the EU decreased by 16.9 per cent over this period. The only UK region that increased its exports to the EU was Northern Ireland, with a 3.7 per cent increase. The value of UK exports to countries outside the EU increased slightly by 0.7 per cent. Exports to non-EU destinations from seven UK regions decreased in 2007 compared with 2006. The regions that increased their exports to non-European destinations were the North East (by 38.2 per cent), Scotland (by 18.3 per cent), Yorkshire and The Humber (by 20.5 per cent), Northern

Ireland (by 11.0 per cent) and the South East (by 1.3 per cent).

In terms of the latest quarter estimates (2007 Q4) compared with the previous quarter, only London and Wales saw a decline in their value of exports to the EU, while all other regions had an increase in their EU exports, with the North East having the strongest increase of 16.2 per cent.

The value of exports to countries outside the EU in quarter four of 2007 increased for all regions, except Scotland, which saw a decline of 0.5 per cent. In the North East and Yorkshire and The Humber, the value of exports in the fourth quarter of 2007 increased by more than 20 per cent. Also, the West Midlands, the South East and Northern Ireland saw strong increases in their value of exports of over 10 per cent.

Figure 9 shows the value of export goods as a percentage of headline workplace-based regional GVA. This basis of interpreting the results is more useful than looking at the absolute numbers because it takes into account the differing sizes of regional economies. In 2006, exports from the East Midlands accounted for the highest percentage of GVA (23.9 per cent), which

Table 4

UK regional trade in goods – statistical value of exports: by NUTS1 region

	£ million												
	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 ¹ exports													
2006 Q1	42,239	1,363	3,480	2,138	2,877	2,740	3,367	4,344	5,347	1,785	1,482	1,701	782
2006 Q2	46,100	1,449	4,774	2,292	3,248	3,652	3,510	5,576	5,185	1,748	1,517	1,858	814
2006 Q3	31,854	1,285	3,063	1,580	2,483	2,677	2,647	2,181	4,295	1,587	1,368	1,709	804
2006 Q4	31,086	1,398	2,566	1,694	2,152	2,171	2,793	2,164	4,708	1,641	1,307	1,694	835
Total 2006	151,279	5,495	13,883	7,704	10,759	11,241	12,318	14,266	19,536	6,762	5,674	6,962	3,235
2007													
2007 Q1 ²	31,655	1,299	2,780	1,755	2,289	2,251	3,150	2,216	4,583	1,719	1,433	1,568	841
2007 Q2 ²	31,192	1,281	2,931	1,696	2,030	2,313	3,002	2,031	4,574	1,576	1,402	1,627	843
2007 Q3 ²	30,518	1,324	2,756	1,632	2,032	2,029	2,867	2,143	4,448	1,653	1,306	1,363	827
2007 Q4 ²	32,319	1,539	2,805	1,667	2,038	2,248	3,121	2,078	4,776	1,709	1,299	1,460	843
Total 2007	125,684	5,444	11,273	6,749	8,389	8,841	12,140	8,468	18,382	6,658	5,439	6,019	3,355
Non-EU exports													
2006 Q1	22,745	703	2,502	1,145	1,788	1,803	1,999	3,846	3,570	939	865	1,613	431
2006 Q2	24,312	701	2,633	1,247	1,830	1,797	2,058	4,147	3,965	1,071	952	1,766	483
2006 Q3	21,910	713	2,301	1,254	1,742	1,534	1,826	3,137	3,655	1,074	981	1,624	460
2006 Q4	23,575	848	2,421	1,313	1,791	1,579	2,022	3,939	3,531	1,113	947	1,495	505
Total 2006	92,542	2,965	9,857	4,959	7,151	6,712	7,905	15,069	14,721	4,197	3,745	6,498	1,880
2007													
2007 Q1 ²	21,194	807	2,261	1,247	1,622	1,479	1,777	3,484	3,112	917	839	1,683	469
2007 Q2 ²	23,925	1,009	2,484	1,564	1,654	1,607	2,004	3,458	4,003	992	957	1,991	521
2007 Q3 ²	22,969	1,021	2,417	1,402	1,685	1,595	1,843	3,402	3,667	1,100	851	2,012	520
2007 Q4 ²	25,147	1,261	2,449	1,763	1,784	1,798	2,001	3,594	4,125	1,156	931	2,002	577
Total 2007	93,235	4,098	9,610	5,975	6,745	6,479	7,626	13,938	14,907	4,165	3,578	7,688	2,087

Notes:

1 EU data refer to EU25 up to 2006 Q4 and EU27 from 2007 Q1.

2 Provisional.

Source: UK Regional Trade in Goods Statistics, HM Revenue & Customs

marks a steady increase since 2004. The region where exports accounted for the smallest percentage of GVA (12.2 per cent) in 2006 was the South West, although the percentage has been rising continuously since 2002. The most significant drop was in Scotland, where exports in 2006 accounted for 6.3 percentage points less in terms of GVA than they did in 2002.

Skills

The skills of workers are important to

productivity as they define the capabilities that the labour force can put into the production process. It is useful to be able to analyse skills from two perspectives: the qualifications of the current working age population and the qualifications of young people representing the future capabilities of the labour force.

The latest estimates on the highest qualifications (degree or equivalent) of the working age population (males aged 16 to 64 and females aged 16 to 59) are

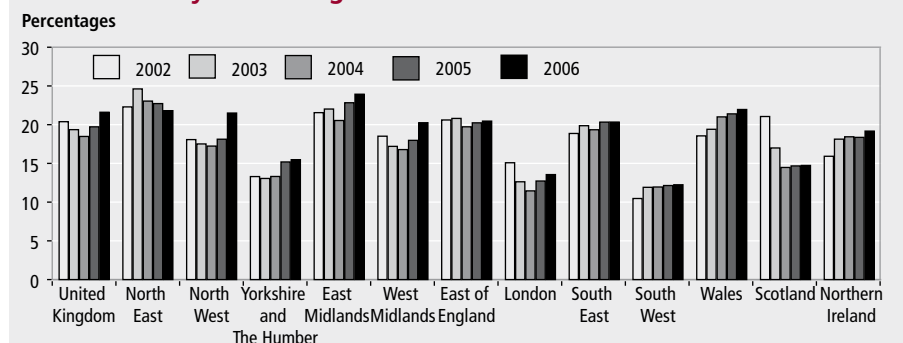
based on the second quarter 2007 LFS estimates. However, the characteristics of the local economies will dictate what labour skills are required and thus affect the comparability of these estimates. Therefore, it is best to look at the percentage of the working age population which has no qualification. **Figure 10** compares these proportions of each region against the UK average. Northern Ireland had the highest proportion with no qualifications (8.2 percentage points above the UK average), whereas the opposite was the case in the South East and the South West (3.9 and 3.8 percentage points lower than the UK average). This does not necessarily mean that these regions have the most qualified working age population, but does indicate where there is a larger proportion of the working population with no qualifications. This may be due to the skill requirements dictated by the regional economies; it could mean that a significant number of those with qualifications have migrated out of these regions; and it may also reflect a higher proportion of those who have migrated into these regions having no qualifications.

In order to assess the future capabilities of the labour force data on the percentage of pupils achieving five or more grades A* to C at GCSE level or equivalent in each English region in 2006/07 are illustrated in **Figure 11**. Equivalent level qualifications are defined in Notes and Definitions on the ONS Regional Snapshot web pages. The regional breakdown for these data in England is only available for pupils at Local Authority maintained schools, although information for the devolved administrations is based on all schools. Given this, it is possible to calculate two averages for all English regions: one based on just Local Authority maintained schools and one for all schools, as is presented in Figure 11. This shows that the average was higher when calculated on all schools, reflecting the higher results obtained by pupils in non-Local Authority establishments. Within Local Authority maintained schools in English regions, the South East, the East of England, London, the North East and the North West performed above the England average for these schools, while Yorkshire and The Humber was the lowest performing region in England.

The labour market

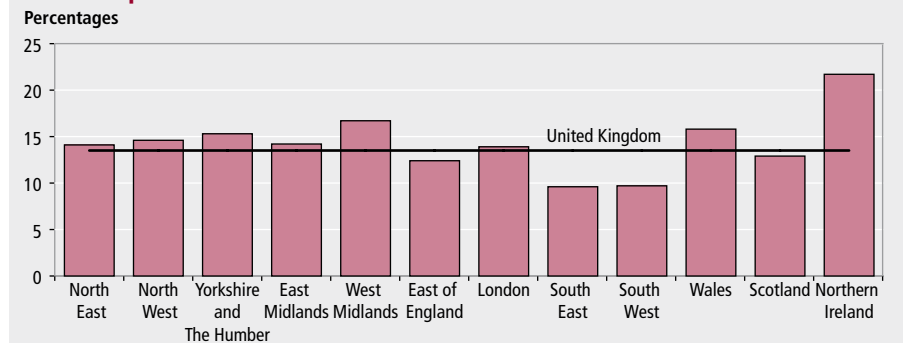
Table 5 shows the seasonally adjusted employment rate, the number of people of working age in employment, expressed as a

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



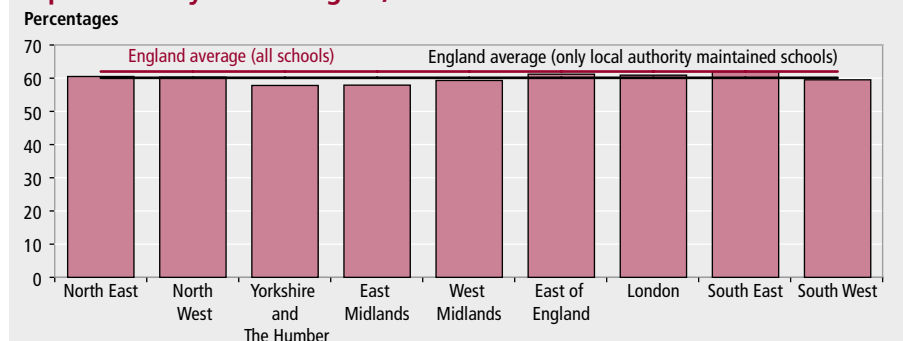
Source: HM Revenue & Customs, Regional Trade Statistics and Office for National Statistics

Figure 10
Working age population with no qualifications: by NUTS1 region, second quarter 2007



Source: Department for Innovation, Universities and Skills; Labour Force Survey, Office for National Statistics

Figure 11
Pupils achieving five or more grades A* to C at GCSE level or equivalent: by NUTS1 region, 2006/07¹



Note:

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

Source: Department for Children, Schools and Families

proportion of the population, from the LFS.

In quarter four (October to December) of 2007, the UK employment rate was 74.7 per cent, up 0.2 percentage points from a year ago and up 0.3 percentage points from quarter three (July to September) of 2007. Regional rates varied from 79.3 per cent in the South West to 69.8 per cent in Northern Ireland.

Eight regions had an increase in the employment rate over the year. The East of England had a rise of 1.0 percentage points and the rate for the South West increased by 0.9 percentage points. Four regions experienced falls in the employment rate. The East Midlands had an annual fall of 0.8

percentage points and Wales decreased by 0.3 percentage points.

Table 6 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 fourth quarter of 2007 was 5.2 per cent, down 0.2 percentage points from the previous quarter and down 0.3 percentage points on a year earlier. Regionally, the rates ranged from 6.6 per cent in London to 3.7 per cent in the South West.

Over the year, the unemployment rate had decreased in eight regions. Five regions had a fall of 0.5 percentage points or more:

London, down 1.2 percentage points, and the North East, down 0.9 percentage points. The unemployment rate rose in two regions. The North West had an increase of 0.6 percentage points while the South East showed a rise of 0.3 percentage points.

Table 7 shows economic inactivity rates for persons of working age from the LFS. The UK rate in the fourth quarter of 2007 was 21.0 per cent, down 0.2 percentage points from the previous quarter and unchanged on a year earlier. Across the regions, rates varied from 17.2 per cent in the South East to 27.1 per cent in Northern Ireland.

Compared with a year earlier, six

Table 5
Employment¹ rates for persons of working age: by NUTS1 region

		Percentages, 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
2004	Oct–Dec	74.9	69.9	74.1	74.4	76.1	74.9	78.8	69.4	79.1	78.7	75.2	72.2	75.1	69.2
2005	Jan–Mar	74.9	70.3	73.3	74.4	76.3	74.7	78.8	70.0	78.9	78.8	75.2	71.7	75.3	68.8
	Apr–Jun	74.7	70.2	73.3	74.2	76.5	74.4	78.7	69.4	79.0	78.8	75.0	71.4	75.0	68.5
	Jul–Sep	74.8	69.7	73.5	74.7	77.2	74.1	78.5	69.7	78.8	78.3	75.1	72.3	75.2	69.8
	Oct–Dec	74.5	70.1	72.9	74.4	77.1	73.4	77.5	69.5	78.8	77.8	74.7	71.8	75.4	68.7
2006	Jan–Mar	74.6	70.9	73.4	74.2	77.0	73.8	77.4	70.0	78.8	78.1	74.9	71.5	75.3	69.5
	Apr–Jun	74.6	71.7	73.3	74.1	76.9	73.8	76.9	69.6	79.0	78.4	74.9	71.5	74.8	70.1
	Jul–Sep	74.5	70.9	73.5	73.5	77.1	73.9	77.0	69.7	78.9	77.8	74.8	72.1	75.2	69.0
	Oct–Dec	74.5	71.2	73.0	73.9	76.5	73.2	77.1	69.8	78.7	78.4	74.7	71.8	76.1	69.5
2007	Jan–Mar	74.3	70.9	72.5	72.7	76.0	72.7	77.4	70.1	78.2	78.0	74.3	71.7	76.6	70.5
	Apr–Jun	74.4	71.2	72.6	73.1	75.9	72.6	77.2	69.9	78.5	78.0	74.4	72.2	77.1	70.6
	Jul–Sep	74.4	72.0	72.2	73.2	75.7	72.9	77.0	70.6	78.7	78.5	74.6	71.2	76.5	69.9
	Oct–Dec	74.7	71.9	72.9	73.6	75.7	73.3	78.1	70.2	78.9	79.3	74.9	71.5	76.5	69.8

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 6
Unemployment rates for persons aged 16 and over: by NUTS1 region

		Percentages, 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
2004	Oct–Dec	4.7	6.4	4.6	4.6	4.2	4.7	3.8	7.1	3.5	3.3	4.6	4.2	5.7	4.6
2005	Jan–Mar	4.7	5.8	4.8	4.4	4.3	4.7	3.8	6.7	3.7	3.6	4.6	4.6	5.5	4.8
	Apr–Jun	4.8	6.8	4.4	4.8	4.2	4.7	3.9	7.1	3.8	3.2	4.7	4.6	5.4	4.9
	Jul–Sep	4.8	6.6	4.5	4.6	4.4	4.7	4.2	6.6	4.0	3.7	4.7	4.6	5.5	4.3
	Oct–Dec	5.1	6.5	4.9	5.5	4.6	5.3	4.5	7.3	4.2	4.0	5.2	4.9	5.2	4.5
2006	Jan–Mar	5.2	6.6	4.9	5.4	5.0	5.2	4.8	7.6	4.5	3.6	5.3	4.8	5.3	4.4
	Apr–Jun	5.5	6.1	5.3	5.8	5.4	5.7	5.0	7.8	4.7	3.7	5.5	5.7	5.4	4.2
	Jul–Sep	5.6	6.9	5.6	6.1	5.3	6.1	5.0	7.9	4.5	3.9	5.7	5.4	5.0	4.7
	Oct–Dec	5.5	6.5	5.3	6.0	5.8	6.5	4.5	7.8	4.3	3.8	5.6	5.2	5.3	4.2
2007	Jan–Mar	5.5	6.8	5.8	6.3	5.5	6.5	4.7	7.2	4.6	4.0	5.6	5.5	5.0	4.2
	Apr–Jun	5.4	6.5	5.8	5.7	5.0	6.8	4.6	7.4	4.2	4.0	5.5	5.6	4.5	3.7
	Jul–Sep	5.4	6.4	6.0	5.5	5.8	6.5	5.2	6.2	4.5	4.1	5.5	5.4	4.9	3.8
	Oct–Dec	5.2	5.6	5.9	5.3	5.2	5.7	4.5	6.6	4.6	3.7	5.2	5.1	4.9	4.2

Source: Labour Force Survey, Office for National Statistics

regions had a decrease in the inactivity rate, and thus a corresponding increase in the working-age activity rate. The East of England and the South West had the largest annual fall of 0.9 percentage points. Five regions had an increase in the economic inactivity rate over the year. The largest annual rise was in the East Midlands with 1.3 percentage points.

Table 8 shows the number of employee jobs, not seasonally adjusted, from the Employers Surveys. The number of UK employee jobs was 27,321,000, an increase of 186,000 over the year since December 2006. In percentage terms, this was a 0.7 per cent increase.

There were annual increases in ten regions. The largest percentage rises were in Northern Ireland (1.8 per cent).

Table 9 shows the claimant count rate (referring to people claiming Jobseeker's

Allowance benefits as a proportion of the workforce). The UK rate was 2.5 per cent in March 2008, unchanged from February 2008, but 0.3 percentage points down on a year earlier. This national rate masks large variations between regions and component countries of the UK. For March 2008, the North East had the highest claimant count rate in the UK at 3.9 per cent. The North East was followed by the West Midlands (3.4 per cent), the North West (3.0 per cent) and Yorkshire and The Humber (2.9 per cent). The lowest claimant counts were measured in the South East (1.4 per cent) and the South West (1.4 per cent). The claimant count rate was 2.5 per cent in Scotland, 2.7 per cent in Wales and 2.8 per cent in Northern Ireland.

Compared with a year earlier, all regions had a lower claimant count rate. The largest decrease was 0.5 percentage points, which

occurred in London.

ACKNOWLEDGEMENTS

The authors are grateful to Sumit Dey-Chowdhury for his assistance.

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Table 7
Economic inactivity rates for persons of working age: by NUTS1 region

		Percentages, 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
2004	Oct–Dec	21.3	25.3	22.3	21.9	20.5	21.3	18.0	25.2	17.9	18.6	21.1	24.5	20.2	27.4
2005	Jan–Mar	21.4	25.3	23.0	22.1	20.2	21.6	18.0	24.9	18.0	18.2	21.1	24.7	20.1	27.6
	Apr–Jun	21.4	24.6	23.2	21.9	20.1	21.8	18.1	25.1	17.8	18.5	21.2	25.1	20.6	27.8
	Jul–Sep	21.3	25.2	22.9	21.6	19.2	22.2	18.0	25.2	17.8	18.6	21.1	24.1	20.4	26.9
	Oct–Dec	21.4	24.9	23.3	21.2	19.0	22.4	18.7	25.0	17.7	18.9	21.1	24.4	20.4	27.9
2006	Jan–Mar	21.1	23.9	22.7	21.5	18.8	22.0	18.6	24.1	17.5	18.9	20.8	24.8	20.4	27.3
	Apr–Jun	21.0	23.5	22.5	21.2	18.6	21.6	18.9	24.3	17.1	18.4	20.6	24.0	20.8	26.7
	Jul–Sep	21.0	23.8	22.0	21.6	18.5	21.2	18.9	24.1	17.4	18.9	20.6	23.6	20.8	27.5
	Oct–Dec	21.0	23.7	22.8	21.3	18.7	21.6	19.1	24.1	17.7	18.4	20.8	24.1	19.7	27.4
2007	Jan–Mar	21.2	23.8	22.9	22.3	19.5	22.2	18.6	24.3	18.0	18.6	21.1	23.9	19.3	26.3
	Apr–Jun	21.2	23.8	22.7	22.4	20.1	21.9	18.9	24.5	17.9	18.6	21.1	23.3	19.1	26.6
	Jul–Sep	21.2	23.1	23.0	22.4	19.5	21.9	18.6	24.7	17.5	18.1	21.0	24.5	19.5	27.3
	Oct–Dec	21.0	23.7	22.4	22.1	20.0	22.1	18.2	24.7	17.2	17.5	20.8	24.6	19.5	27.1

Source: Labour Force Survey, Office for National Statistics

Table 8
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
Dec 03		26,399	1,014	2,978	2,196	1,773	2,324	2,310	3,935	3,619	2,140	22,288	1,121	2,307	683
Dec 04		26,727	1,015	3,029	2,249	1,802	2,345	2,301	3,963	3,651	2,176	22,531	1,163	2,337	696
Dec 05		27,051	1,064	2,968	2,232	1,840	2,361	2,336	4,039	3,731	2,201	22,771	1,184	2,386	709
Dec 06		27,135	1,059	3,012	2,233	1,865	2,378	2,385	4,024	3,672	2,219	22,847	1,191	2,384	714
Mar 07		26,881	1,047	2,986	2,223	1,839	2,358	2,347	3,998	3,631	2,195	22,624	1,182	2,362	713
Jun 07		27,030	1,050	3,002	2,238	1,841	2,371	2,360	4,018	3,657	2,208	22,744	1,192	2,377	717
Sep 07 ²		27,106	1,053	3,002	2,237	1,859	2,375	2,373	4,027	3,664	2,222	22,813	1,195	2,380	717
Dec 07		27,321	1,068	3,028	2,247	1,864	2,389	2,397	4,077	3,706	2,232	23,007	1,188	2,400	727

Notes:

1 Employee jobs figures are of 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. Employees jobs figures come from quarterly surveys of employers carried out by ONS and administrative sources.

2 Revised.

Source: Employer Surveys

Table 9
Claimant count rates¹: by NUTS1 region

		Percentages, 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
2003		3.0	4.5	3.2	3.3	2.8	3.5	2.1	3.6	1.7	1.9	2.9	3.3	3.7	4.1
2004		2.7	4.0	2.8	2.8	2.5	3.3	2.0	3.5	1.6	1.6	2.6	3.0	3.4	3.6
2005		2.7	3.9	2.9	2.9	2.5	3.4	2.1	3.4	1.6	1.6	2.6	3.0	3.2	3.3
2006		2.9	4.1	3.3	3.3	2.8	3.9	2.3	3.4	1.8	1.8	2.9	3.1	3.1	3.2
2007		2.7	4.0	3.1	3.0	2.6	3.7	2.1	3.0	1.6	1.6	2.6	2.8	2.8	2.8
2007	Mar	2.8	4.1	3.2	3.2	2.8	3.8	2.2	3.2	1.7	1.7	2.8	2.9	2.9	2.9
	Apr	2.8	4.1	3.2	3.1	2.7	3.7	2.2	3.2	1.7	1.6	2.7	2.9	2.9	2.9
	May	2.7	4.0	3.1	3.1	2.7	3.7	2.2	3.1	1.6	1.6	2.7	2.8	2.8	2.9
	Jun	2.7	4.0	3.1	3.1	2.7	3.7	2.1	3.0	1.6	1.6	2.6	2.8	2.8	2.8
	Jul	2.7	4.0	3.1	3.0	2.6	3.6	2.1	3.0	1.6	1.6	2.6	2.8	2.7	2.7
	Aug	2.6	3.9	3.1	3.0	2.6	3.6	2.1	3.0	1.6	1.5	2.6	2.8	2.7	2.7
	Sep	2.6	3.9	3.1	3.0	2.6	3.6	2.0	2.9	1.5	1.5	2.6	2.8	2.7	2.7
	Oct	2.6	3.9	3.1	2.9	2.5	3.6	2.0	2.8	1.5	1.5	2.5	2.7	2.6	2.7
	Nov	2.5	3.9	3.0	2.9	2.5	3.5	2.0	2.8	1.5	1.4	2.5	2.7	2.6	2.7
	Dec	2.5	3.8	3.0	2.9	2.4	3.5	1.9	2.8	1.5	1.4	2.5	2.7	2.6	2.7
2008	Jan	2.5	3.8	3.0	2.8	2.4	3.4	1.9	2.7	1.5	1.4	2.4	2.7	2.5	2.7
	Feb	2.5	3.9	3.0	2.9	2.4	3.4	1.9	2.7	1.5	1.4	2.4	2.7	2.5	2.8
	Mar	2.5	3.9	3.0	2.9	2.4	3.4	1.9	2.7	1.4	1.4	2.4	2.7	2.5	2.8

Note:

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

Source: Jobcentre Plus administrative system

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Technical Note A**Methodology for decomposing GVA per head**

This methodology developed by the Organisation for Economic Co-operation and Development (OECD) decomposes Gross Value Added (GVA) per head into four components of average labour productivity, employment rates, activity rates and commuting rates.

$$\frac{GVA_i}{P_i} = \frac{GVA_i}{EW_i} * \frac{EW_i}{LFW_i} * \frac{LFW_i}{LFR_i} * \frac{LFR_i}{P_i} \quad (1)$$

This multiplicative model can then be transformed into an additive model by taking logarithms of each term, which allows the above GVA per capita formula to be decomposed into the expression (2) below. Using an additive model enables the contributing effect of each component to be calculated, which means it is possible to identify what is determining a region's level of GVA per head.

$$\log\left(\frac{GVA_i}{P_i}\right) = \log\left(\frac{GVA_i}{EW_i}\right) + \log\left(\frac{EW_i}{LFW_i}\right) + \log\left(\frac{LFW_i}{LFR_i}\right) + \log\left(\frac{LFR_i}{P_i}\right) \quad (2)$$

This model is used to explain the estimate of GVA per head for a particular sub-region. However, it can also be extended to decompose the difference in GVA per head of each sub-region compared to the UK average. By definition, the logarithm of the difference between the GVA per head of a sub-region and the UK average will equal the sum of the logarithms of the difference of each component from the UK average. This is shown in (3).

$$\begin{aligned} & \log\left(\frac{GVA_i}{P_i}\right) - \log\left(\frac{GVA_{UK}}{P_{UK}}\right) \quad \text{where } i \text{ denotes the sub-region} \\ & = \left[\log\left(\frac{GVA_i}{EW_i}\right) - \log\left(\frac{GVA_{UK}}{EW_{UK}}\right) \right] \\ & + \left[\log\left(\frac{LFR_i}{P_i}\right) - \log\left(\frac{GVA_{UK}}{EW_{UK}}\right) \right] \\ & + \left[\log\left(\frac{LFW_i}{LFR_i}\right) - \log\left(\frac{LFW_{UK}}{LFR_{UK}}\right) \right] \\ & + \left[\log\left(\frac{LFR_i}{P_i}\right) - \log\left(\frac{LFR_{UK}}{P_{UK}}\right) \right] \end{aligned} \quad (3)$$

Using these terms, it is then possible to decompose the differences in GVA per head for each of the sub-regions relative to the UK by looking at the differences in each of the four components. This shows the relative effect of each component in terms of what is driving the differences between a sub-region's estimate of GVA per head and the UK average.

Technical Note B**Smoothing of component estimates**

To produce a five-period moving average, symmetric weights are applied to the underlying data (as used in Regional Accounts). The weights are designed so that they are centred on the value for the actual year meaning that this year is given more weight. Instead of forecasting (or backcasting) for end points of the time series, asymmetric weights are applied to the data.

Weights					
	2001	2002	2003	2004	2005
2001	11/27	11/27	5/27		
2002	7/27	10/27	7/27	3/27	
2003	1/9	2/9	3/9	2/9	1/9
2004		3/27	7/27	10/27	7/27
2005			5/27	11/27	11/27