Regional economic indicators

with a focus on the relationship between skills and productivity

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Summary

This quarter, the focus section of the Regional Economic Indicators article explores the influence of workforce skills on the economic performance of the NUTS 1 regions. The regular part of the article then gives an overview of the economic activity of UK regions in terms of their gross value added (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.

Introduction

Previous Regional Economic Indicators (REI) articles have shown significant and persistent differences in economic performance and incomes between and within the UK regions and identified some of the factors that might account for such differences. These factors included productivity differences, employment and activity rates and industry structure.

This article explores the influence of workforce skills on the economic performance of the regions. HM Treasury identified skills as one of the five key drivers of productivity which in turn impacts on the economic performance of a region. Skills can influence productivity in two ways. Skills of workers influence productivity directly, as they define the capabilities that the labour force can contribute to the production process, and indirectly, where the contribution of skill is mediated through other drivers, for example, enterprise and innovation.

To examine the link between skill and productivity, skill needs to be measured. However, the concept of skills include many elements such as personal characteristics, skills developed through formal education and training, and skills developed through work experience and informal training which makes the direct measurement difficult. In empirical work, qualifications and occupation are two commonly used proxies for skills. Each of these proxies has its limitations. In this paper, occupation (as defined in the Standard Occupational Classification (SOC)) is used as an indicator of the level of skill in the employed workforce (see **Box 1**). This is because occupation as a proxy for skill appears to be a more comprehensive measure of skill than formal qualifications only[1].

Box 1 Skill levels in the Standard Occupational Classification

The Standard Occupational Classification is the classification of occupational information for the United Kingdom. Within the context of the classification occupations are classified into groups according to the concepts of 'skill specialisation' and 'skill level'.

Skill specialisation is defined as the field of knowledge required for competent, thorough and efficient conduct of the tasks. In some areas of the classification it refers also to the type of work performed (for example materials worked with, tools used, and so on).

Skill levels are approximated by the length of time deemed necessary for a person to become fully competent in the performance of the tasks associated with a job. This, in turn, is a function of the time taken to gain necessary formal qualifications or the required amount of work–based training. Apart from formal training and qualifications, some tasks require varying types of experience, possibly in other tasks, for competence to be acquired. Within the broad structure of the classification (major groups and sub-major groups) the sub–major groups have been aggregated into four skill–based occupation groups. (For detailed information, see (www.statistics.gov.uk/methods_quality/ns_sec/downloads/SOC2000_Vol1_V5.pdf).

The **first** skill level equates with the competence associated with a general education, usually acquired by the time a person completes his/her compulsory education and signalled via a satisfactory set of school–leaving examination grades. Competent performance of jobs classified at this level will also involve knowledge of appropriate health and safety regulations and may require short periods of work-related training.

Examples of occupations defined at this skill level within the SOC90 include postal workers, hotel porters, cleaners and catering assistants.

The **second** skill level covers a large group of occupations, all of which require the knowledge provided via a good general education as for occupations at the first skill level, but which typically have a longer period of work–related training or work experience. Occupations classified at this level include machine operation, driving, caring occupations, retailing, and clerical and secretarial occupations.

The **third** skill level applies to occupations that normally require a body of knowledge associated with a period of post–compulsory education but not to degree level. A number of technical occupations fall into this category, as do a variety of trades occupations and proprietors of small businesses. In the latter case, educational qualifications at sub–degree level or a lengthy period of vocational training may not be a necessary prerequisite for competent performance of tasks, but a significant period of work experience is typical.

The **fourth** skill level relates to what are termed 'professional' occupations and managerial positions in corporate enterprises or national/local government. Occupations at this level normally require a degree or equivalent period of relevant work experience.

Skill structure of the employed workforce

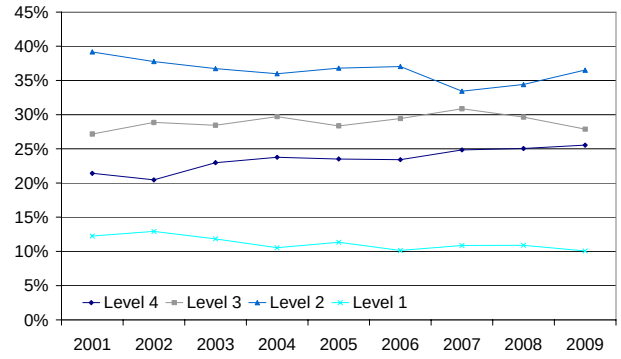
This section examines the skill structure of the employed workforce in the NUTS 1 regions and explores whether there are any systematic productivity differences between the regions that appear to be associated with the skill profile of their employed workforce. The analysis uses workplace based employment data, hours worked data and occupation data from the Labour Force Survey and covers a period between 2001 and 2009[2,3,4].

Skill structure can be defined in terms of percentage distribution of employment and hours worked across four skill groups discussed in the previous section. As the GVA per hour worked is the preferred indicator of productivity, the following analysis uses hours worked by the skill groupings.

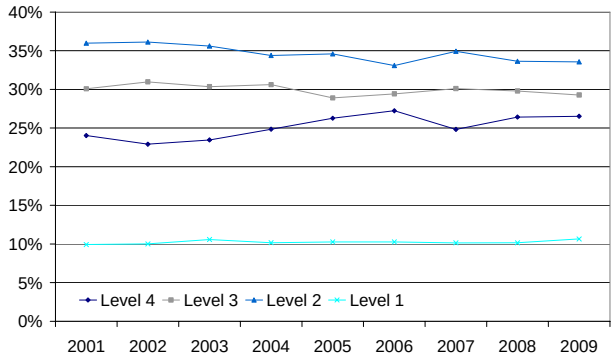
Figure 1 presents the distribution of the hours worked by each skill level in NUTS 1 regions and the UK between 2001 and 2009. The figure reveals that in all regions hours worked by the lowest skill group (level 1) accounted for the lowest proportion of the workforce and its share remained fairly stable in all the regions between 2001 and 2009. It is also evident that between 2001 and 2009 the structure of the workforce moved away from the relatively lower skilled (level 2) employment and towards higher skilled employment, namely 'professional' and 'managerial, employment (level 4) across the UK.

Figure 1 Skill share of total hours worked: NUTS 1 regions and the UK, 2001–2009

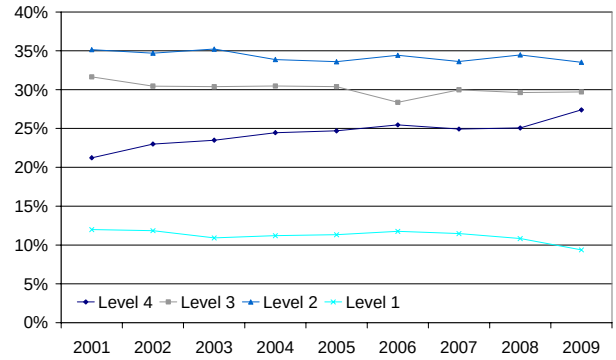
North East



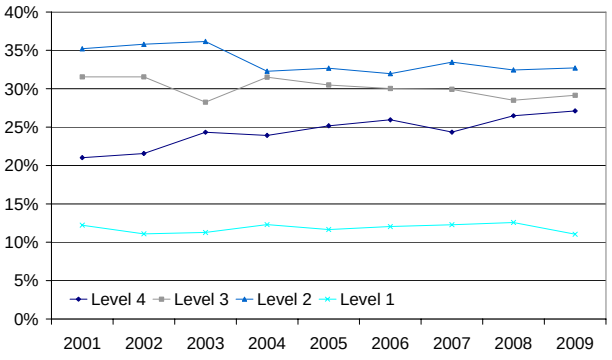
North West



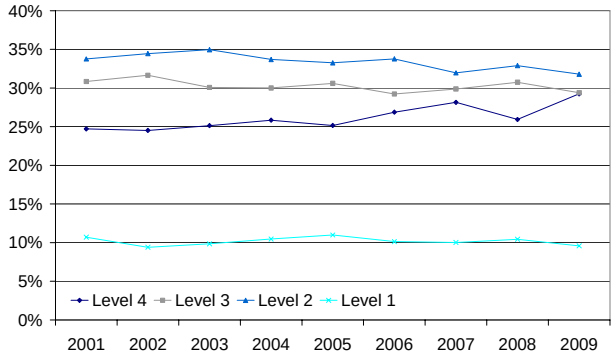
Yorkshire and the Humber



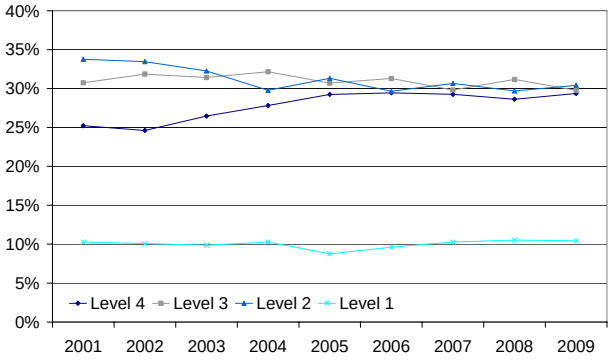
East Midlands



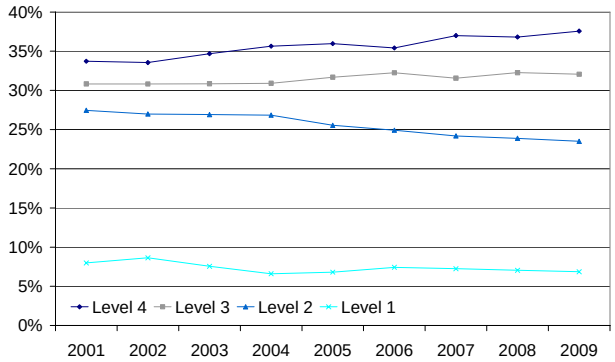
West Midlands



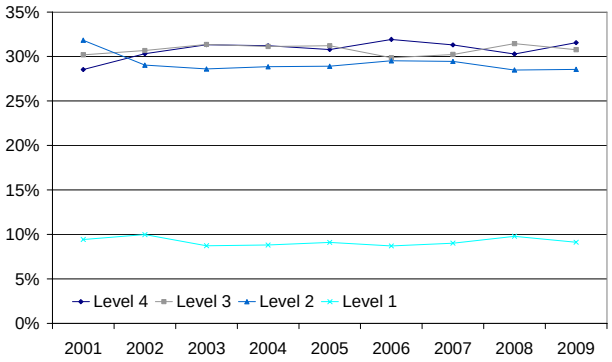
East of England



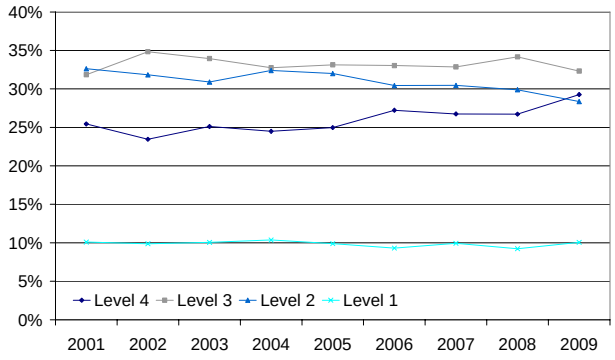
London



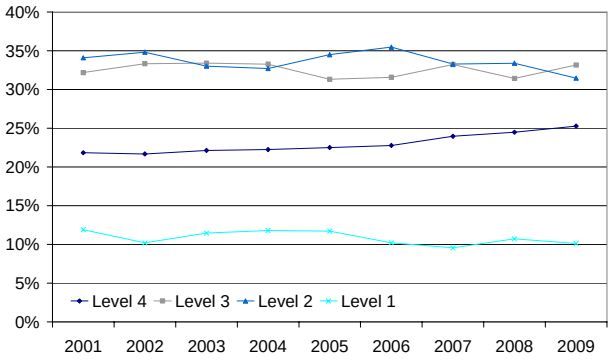
South East



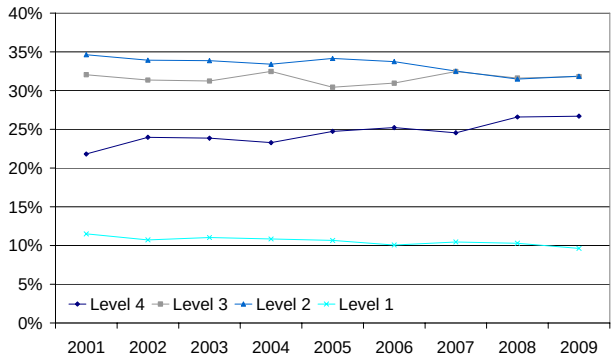
South West



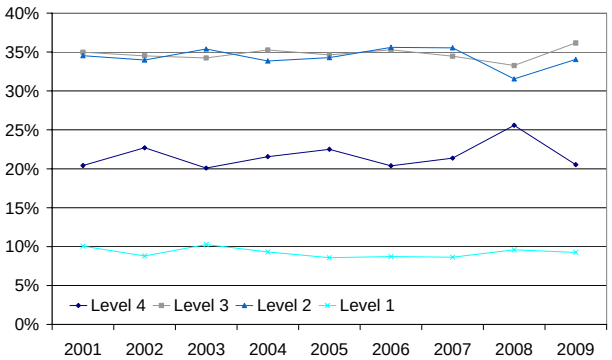
Wales



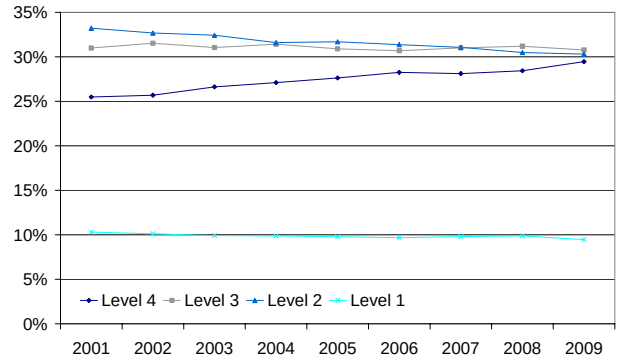
Scotland



Northern Ireland



United Kingdom



Source: Labour Force Survey

At the regional level, the general trend of faster growth in high skilled jobs occurred in every region, but the proportion of the hours worked in high skilled jobs increased faster in regions such as North East and Yorkshire and the Humber compared to the others. However, throughout the period London accounted for the largest share of hours with level 4 skills, followed by the South East. By 2009, the South West had the largest share of its hours accounted for by level 3 skills while the North East had the highest percentage of its workforce utilising level 2 skills over the same period

Table 1 shows the correlation coefficients of the skill composition in all the regions compared to the UK between 2001 and 2009. A three year average is used to smooth out short–term fluctuations and highlight longer term trends in the series. The correlation coefficient represents how closely the overall skill composition of worked hours in a region is related to the national skill structure. A correlation coefficient of 1 represents very strong similarity between the skill structure in the region and the UK. The figure shows that throughout the period considered, London had the least similar skill structure to the UK. For the remaining regions, the similarity between their skill composition and the UK was fairly strong. Northern Ireland, North East and Wales were slightly less similar than the remaining regions but the difference was small.

Table 1 Correlations of skill shares of the total hours worked in the NUTS 1 regions with those in the UK

Average correlations

	North East	North West	Yorkshire and Humber	East Midlands	West Midlands	East of England	London	South East	South West	Wales	Scotland	Northern Ireland
2001–2003	0.91	0.98	0.97	0.96	0.99	1.00	0.87	0.96	0.99	0.97	0.98	0.96
2004–2006	0.93	0.98	0.97	0.98	0.99	0.99	0.89	0.97	0.99	0.94	0.98	0.93
2007–2009	0.95	0.97	0.97	0.97	0.99	1.00	0.88	0.99	0.99	0.96	0.98	0.93

Source: Labour Force Survey

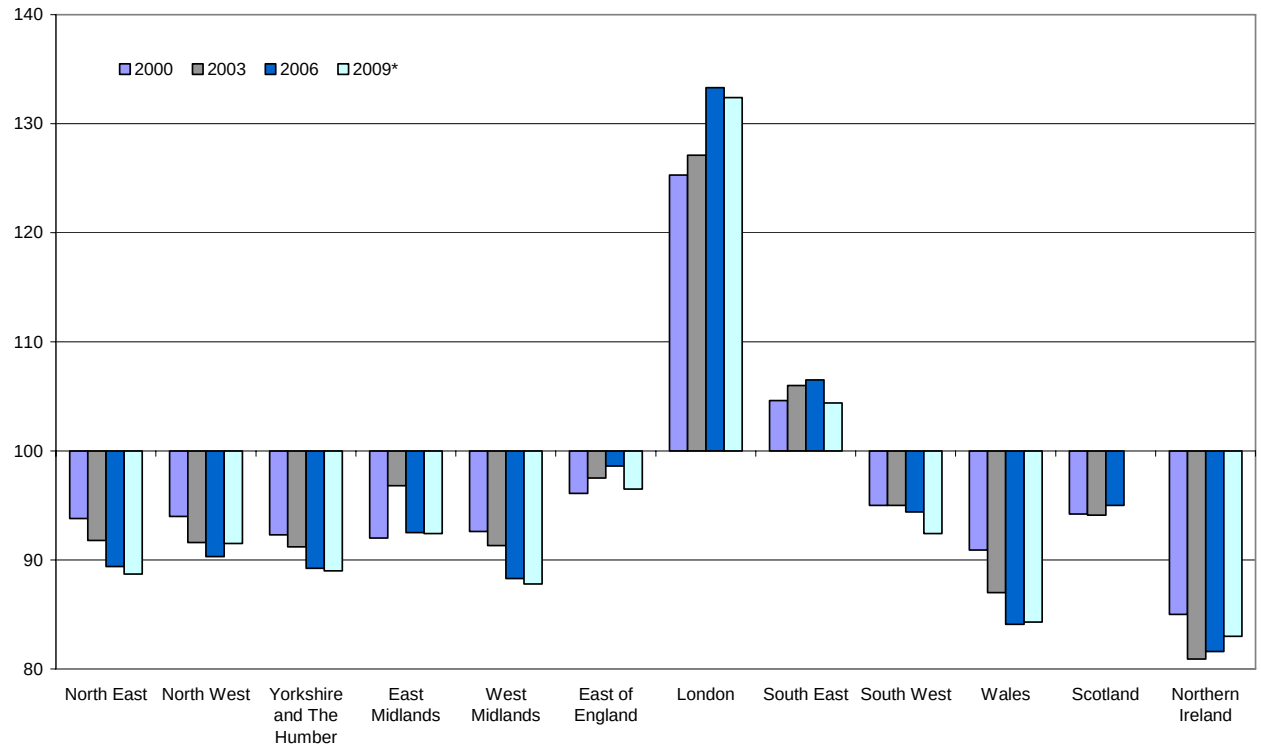
Skills and productivity

To determine whether the skill distribution of the worked hours in high productivity regions differ systematically from the national average and from low productivity regions, the association between skills and productivity must be considered. This section therefore examines the relationship between skills (indicated by the composition of worked hours by skill group) and productivity (workplace based Gross Value Added (GVA) per hour worked). It is important to stress, however, that the article only examines correlations between productivity and the skills at an aggregate level and does not attempt to quantify the relationship or establish causal links[5].

Figure 2 displays the GVA per hour worked index for NUTS 1 regions between 2001 and 2009. It shows that London, Northern Ireland and Wales had the largest differences from average national productivity throughout the period. Table 1 showed that these regions had less similar skill compositions compared to the UK average. Comparing the two tables it can be seen that London appears to be distinct from other regions in terms of both the high concentration of its workforce with high (level 4) skills and its high productivity performance. Northern Ireland and Wales, by contrast, had the lowest shares of level 4 skills and therefore a higher share of their workforce with either level 2 or level 3 skills (the share of level 1 skills was very similar across all regions).

Figure 2 GVA per hour worked: by NUTS1 region

Indices (UK# = 100)



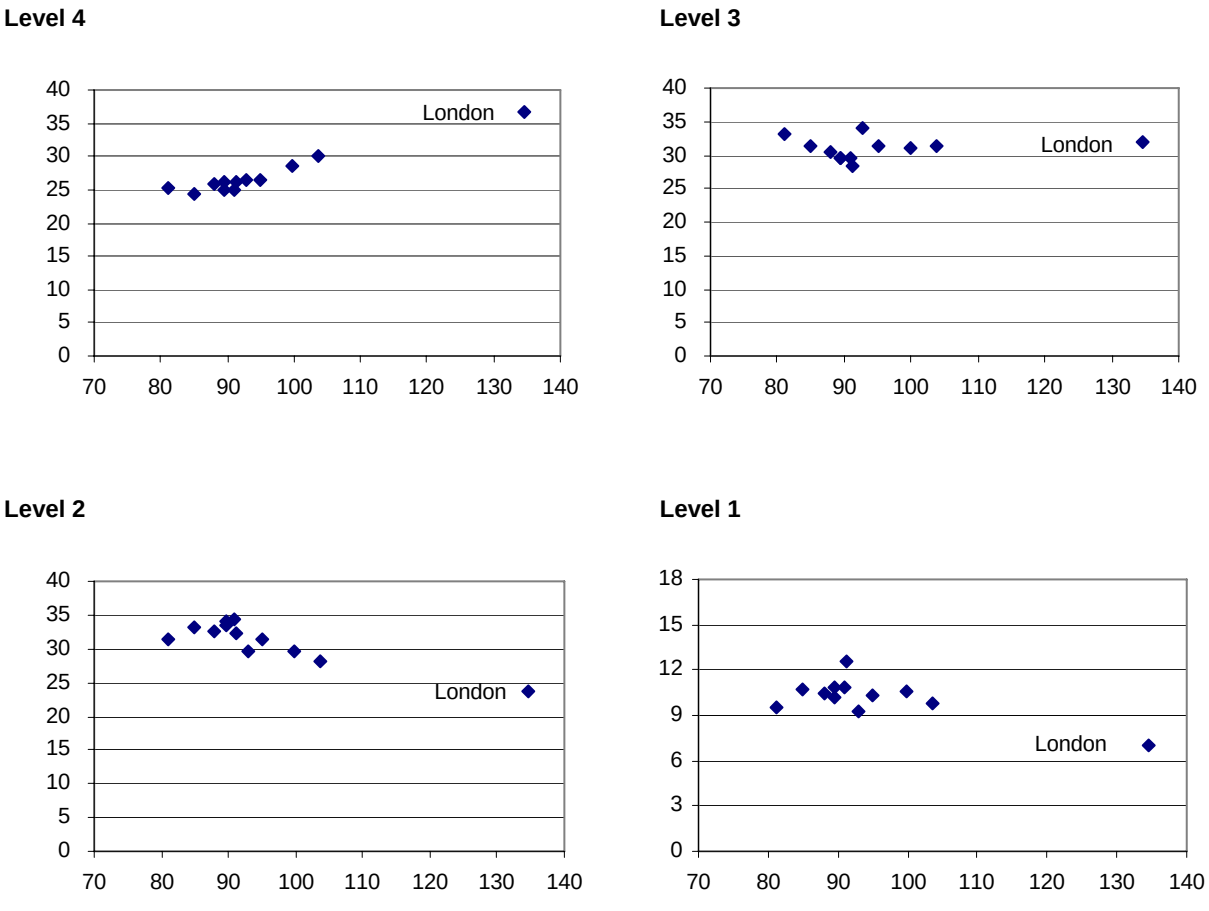
UK less Extra-regio and statistical discrepancy

* Provisional

Source: Productivity Statistical Bulletin, Office for National Statistics

Figure 3 shows the association between hours worked by each skill level and GVA per hour worked in all the regions in 2008. The figure reveals that regions with higher proportions of level 4 skills tend to have higher productivity levels. However, there is almost no relationship between level 3 skills and regional productivity. For example, South West had the highest proportion of hours worked by level 3 skills but it had a very similar GVA per hour worked to East Midlands which had the lowest share of level 3 skills in 2008. The figure also illustrates some negative correlation between productivity and lower level skills. However, excluding London, the relationship between the productivity and low skills is fairly weak. In particular, there is a considerable difference in productivity levels between regions which have similar proportions of hours worked by skill level 1. Similar results are obtained from the analysis of data between 2001 and 2007.

Figure 3 Hours worked* by four skill levels and GVA per hour worked#: by NUTS1 region, 2008



* Vertical axis (hours worked, % share of regional total)

\# Horizontal axis (GVA per hour worked, UK = 100)

Source: Office for National Statistics

Overall, Figure 3 suggests that there is some evidence of association between the skill structure of a region and its productivity level. It appears that regions with greater proportions of high qualified (level 4) workers have higher productivity levels. There is also some correlation between low productivity in a region and having a relatively low share of level 4 skills. However, for most regions, aside from London and the South East, the skill distributions of their workforce as measured by its occupational composition are relatively similar and as such are only likely to be contributing a small impact on productivity differences between these regions. Other factors such as investment, innovation and competition will also be impacting on the region's productivity. A discussion of these other productivity drivers can be found in the regular part of this regional indicators article.

Regional overview

Key figures on a regional basis indicate that:

- In 2009, London was the region with the highest productivity, in terms of GVA per hour worked, at 32 percentage points above the UK average. The South East was the only other region with a productivity performance above the UK average.
- Northern Ireland had the lowest productivity, at 17 percentage points below the UK average. Productivity was also greater than 10 percentage points below the UK average in Wales, West Midlands, North East, and Yorkshire and The Humber.
- In 2008, average Gross Disposable Household Income (GDHI) was above the UK average in three regions; London (by 28 per cent), the South East (by 13 per cent) and the East of England (by 4 per cent). The lowest average household incomes occurred in the North East where GDHI was 16 per cent below the UK average.
- In 2010, London residents had the highest gross median weekly pay, at £606.80, followed by the South East, at £547.80 and the East of England, at £523.30. These were the only regions above the UK average of £498.80. Residents of Northern Ireland (£442.20), and the North East (£443.10), recorded the lowest median earnings.
- The total value of goods exports increased year-on-year from all the UK regions in the nine months to September 2010 except for Wales (down by 3 per cent) and East Midlands (down by 1 per cent). West Midlands had the largest percentage increase in the value of goods exports (up by 33 per cent), followed by South West (up by 28 per cent) and North East (up by 24 per cent).
- The South East had the highest employment rate in the third quarter of 2010, at 75.2 per cent; Northern Ireland had the lowest rate, at 66.1 per cent, compared with the UK employment rate of 70.8 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. These include Gross Value Added (GVA), labour productivity, Gross Disposable Household Income (GDHI) and gross median weekly pay. The article then considers the drivers of regional productivity and finally a selection of regional labour market indicators.

Regional performance

GVA is a good measure of the economic output of a region. In December 2010, ONS published GVA estimates for 2009 and revised estimates for previous years. **Table 2** shows the regional economic performance in terms of workplace-based GVA.

Table 2 **Workplace–based gross value added at current basic prices: by NUTS1 region**

	UK#	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)													
2000	842,400	28,200	84,700	61,400	52,600	68,300	72,400	169,000	123,400	64,100	31,700	67,100	19,400
2009*	1,234,500	40,600	120,000	87,400	77,700	91,600	105,900	263,700	175,700	95,600	44,300	103,500	28,500
Share of UK# GVA (%)													
2000		3.4	10.1	7.3	6.2	8.1	8.6	20.1	14.7	7.6	3.8	8.0	2.3
2009*		3.3	9.7	7.1	6.3	7.4	8.6	21.4	14.2	7.7	3.6	8.4	2.3

UK less Extra-regio and statistical discrepancy

* Provisional

Source: Regional Accounts, Office for National Statistics

The estimates show that London had the highest regional GVA in 2009 at £263.7 billion and was responsible for 21.4 per cent of UK GVA. This share has risen from 20.1 per cent in 2000. As **Table 3** shows, London's industrial structure differs from other regions with 49 per cent of its GVA earned in the finance and business services sectors in 2008 compared to 23–35 per cent in finance and business services in other regions. Additionally only 6 per cent of London's GVA was derived from the production sectors whilst in other UK regions 13–21 per cent of output was earned across the production sectors. London also had the lowest share of its GVA earned via the public administration, education and health sectors.

Table 3 Workplace–based gross value added by industry group: by NUTS1 region, 2008

	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
Production[2]	15%	20%	18%	19%	21%	18%	16%	6%	13%	17%	19%	18%	18%
Construction	6%	7%	7%	7%	7%	7%	8%	4%	7%	7%	6%	7%	8%
Distribution, transport and communication[3]	22%	20%	22%	23%	24%	23%	24%	20%	24%	21%	20%	20%	21%
Business services and finance[4]	33%	24%	28%	27%	25%	27%	31%	49%	35%	29%	23%	28%	23%
Public administration, education, health[5]	19%	24%	20%	21%	18%	19%	17%	14%	16%	21%	26%	22%	26%
Other Services	5%	4%	4%	4%	4%	5%	5%	7%	5%	5%	6%	4%	4%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

1 UK less Extra-regio and statistical discrepancy

2 SIC 2003 sections A–E

3 SIC 2003 sections G–I

4 SIC 2003 sections J–K

5 SIC 2003 sections L–N

Source: Regional Accounts, Office for National Statistics

The second largest regional economy is the South East with GVA in 2009 of £175.7bn. Outside of London, the South East region has the highest share of output from finance and business services and the lowest share of its GVA from production sectors or from the public administration, education and health sectors. The South East's share of UK GVA has, however, declined over the 2000 – 2009 period from 14.7 per cent to 14.2 per cent.

The only regions, outside of London, that have increased their share of UK GVA over the 2000–2009 period are Scotland, the South West and East Midlands. The West Midlands, meanwhile, has witnessed the largest decline in share of UK GVA over this period with its share falling from 8.1 per cent in 2000 to 7.4 per cent in 2009.

An often 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 and GVA per head does not accurately measure either concept.

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

The net result is that GVA per head can often give a misleading picture of regional performance. For example, a region with a large amount of net out–commuting will usually have a relatively low GVA per head even if it has relatively high levels of labour productivity and average household incomes. Similarly, an urban area with a large amount of in–commuting may have a relatively high GVA per head that does not reflect the fact it actually has a low level of labour productivity and average household incomes.

Therefore, in assessing regional economic performance, ONS recommend that GVA per hour worked or GVA per filled job are used as productivity indicators and Gross Disposable Household Income (GDHI) per head is used as a measure of regional incomes.

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.

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.

Productivity estimates for 2009 and revised estimates for previous years were published in December 2010. These estimates make use of the GVA figures presented in Table 3, and updated 'filled jobs' and 'hours worked' estimates.

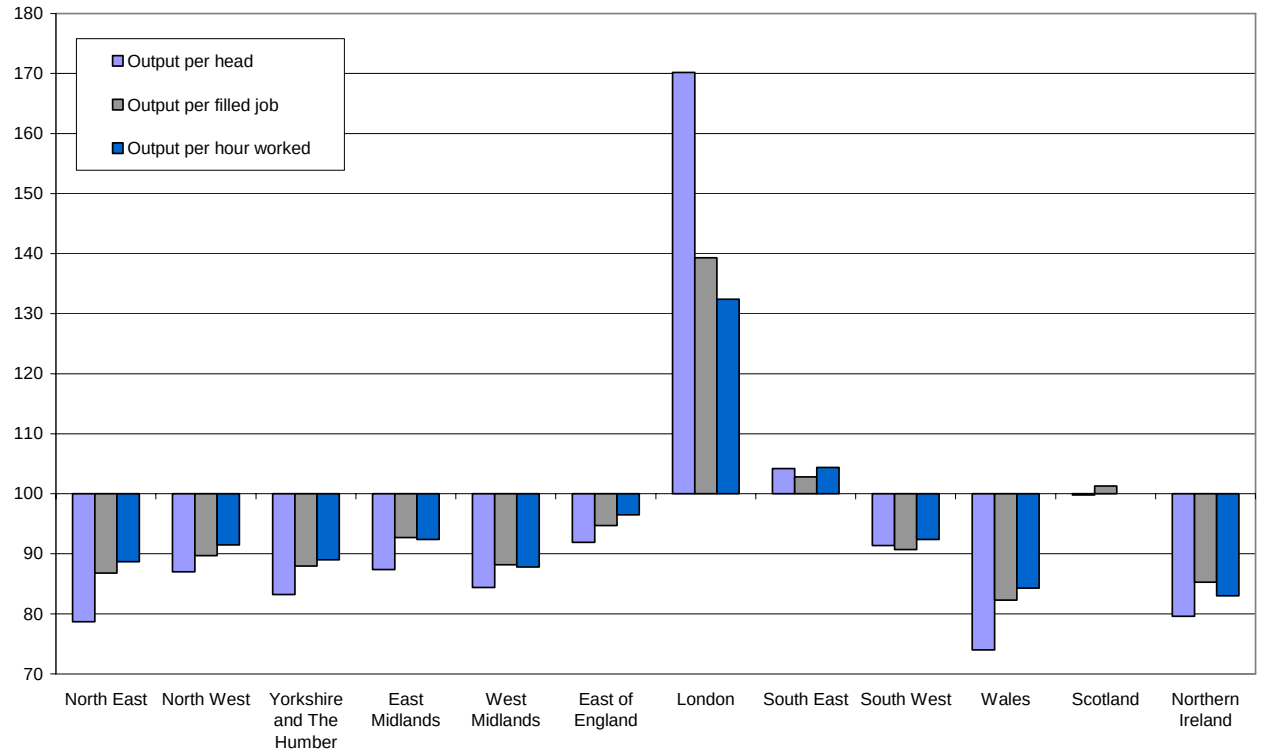
It should be noted that the productivity figures presented here use unsmoothed GVA as their output measure as opposed to headline GVA, which is calculated as a five-year moving average. The unsmoothed measure is used to ensure consistency with the labour input data (Dey–Chowdhury et al 2008).

Figure 4 shows that in 2009 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.

In terms of GVA per hour, which is the recommended productivity measure, the 2009 data showed London to have an average productivity level 32 per cent above the UK average. The South East was the only other region to have average productivity above the UK average whilst productivity in Scotland was the same as the UK average. Productivity was lowest in Northern Ireland and Wales (17 per cent and 16 per cent below the UK average respectively).

Figure 4 Comparison of regional economic indicators: by NUTS1 region, 2009*

Indices (UK# = 100)



UK less Extra-regio and statistical discrepancy

* Provisional

Source: Office for National Statistics

Figure 2 in the previous section of this article shows the regional GVA per hour worked productivity index on a time series basis from 2000 to 2009. There have been mixed results across the regions. Some regions have seen their productivity decline relative to the UK average throughout the period, for example, the North East, Yorkshire and Humber and the West Midlands. Wales has also seen a large decline in its relative productivity performance over the 2000 to 2009 period, although its 2009 performance was a slight improvement over 2006.

Compared to 2000, London's productivity relative to the UK has improved significantly despite a decline over the 2006 to 2009 period. Meanwhile, Scotland has also improved its productivity performance since 2000 with a particular improvement occurring between 2006 and 2009.

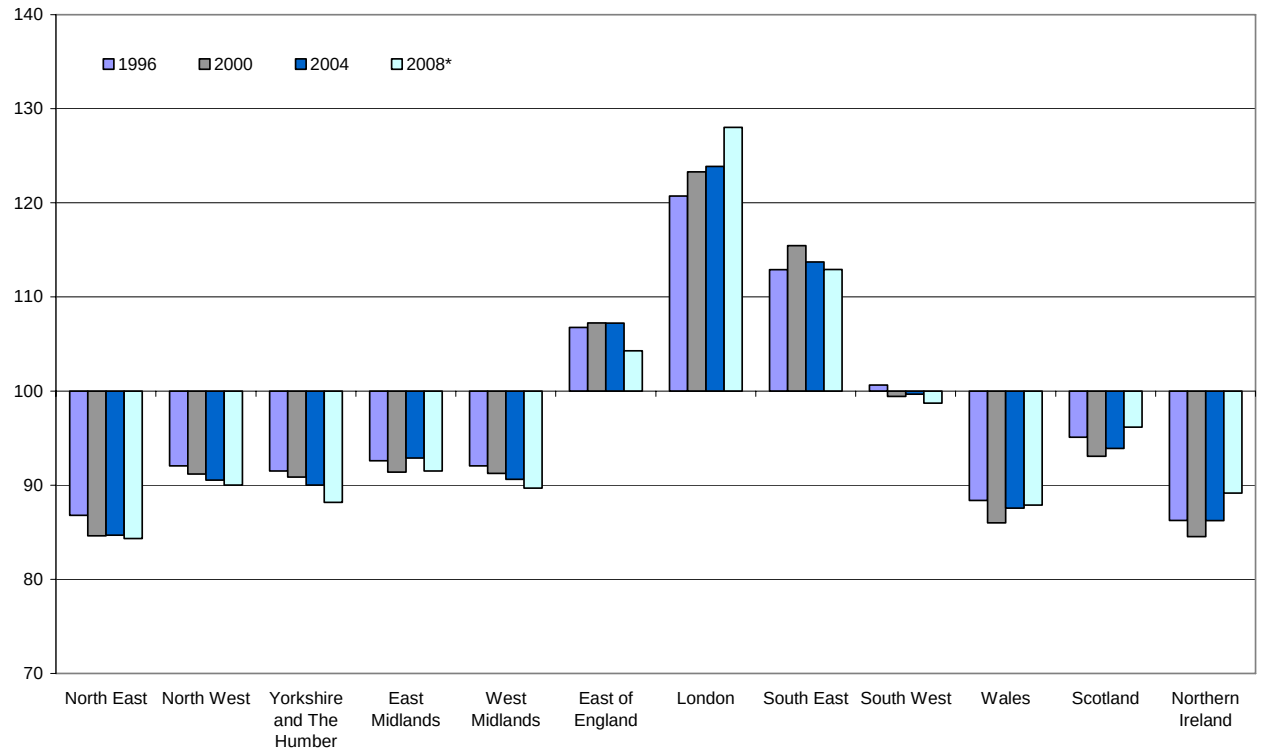
Income of residents

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.

Figure 5 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 5 Headline gross disposable household income per head: by NUTS1 region

Indices (UK# = 100)



UK less Extra-regio and statistical discrepancy

* Provisional

Source: Office for National Statistics

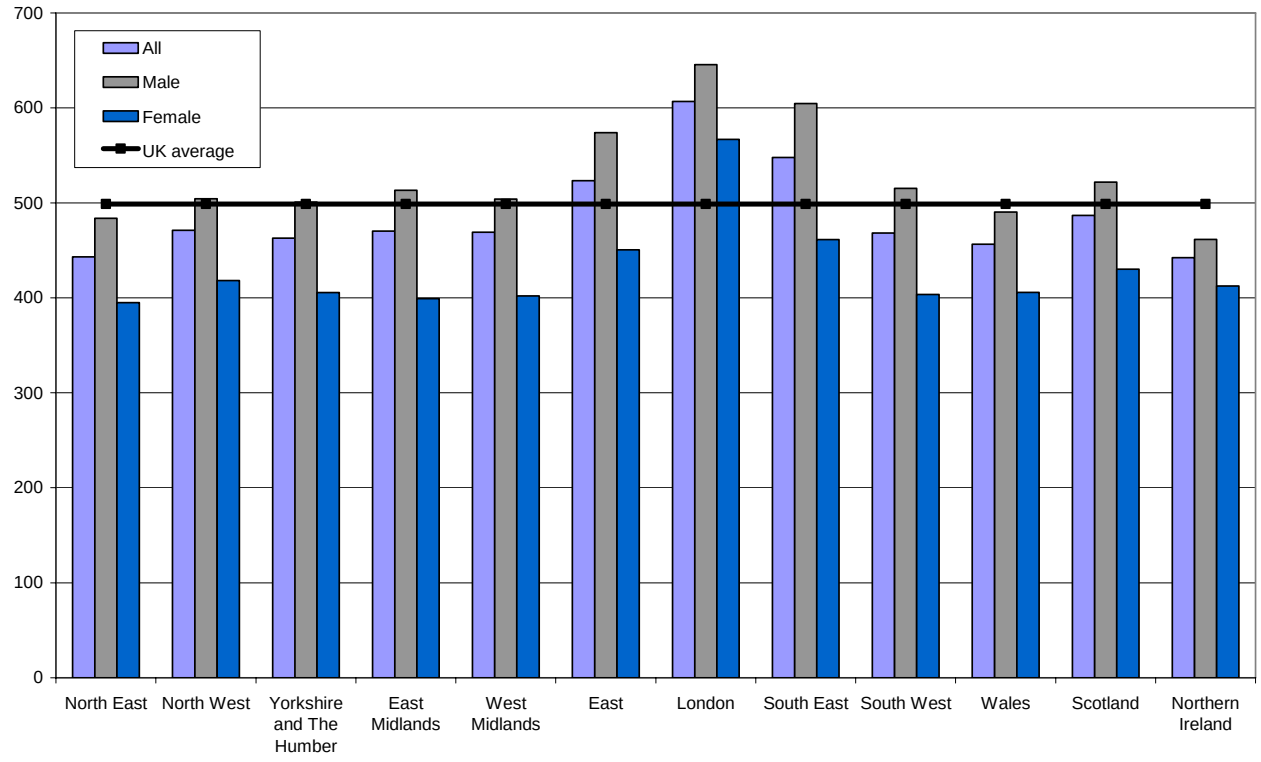
Gross median weekly earnings represent another indicator of regional welfare. **Figure 6** shows the gross median weekly pay for all full–time employees, split into female and male full–time employees, by region of residence in April 2010.

As in previous years, London residents had the highest gross median weekly pay, at £606.80, followed by the South East, at £547.80 and the East of England, at £523.30. These were the only regions above the UK average of £498.80. Residents of Northern Ireland (£442.20), and the North East (£443.10), recorded the lowest earnings in April 2010.

Females across the UK regions received lower pay than males. The discrepancy was smallest amongst residents of Northern Ireland and London, while it was largest for residents of the South East. However, in terms of annual average percentage growth over the four years to 2010, pay for females outperformed that for males in all UK regions.

Figure 6 Gross median weekly pay of all full–time employees*: by NUTS1 region, April 2010

£



* Residents of the respective region

Source: Annual Survey of Hours and Earnings (ASHE), 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

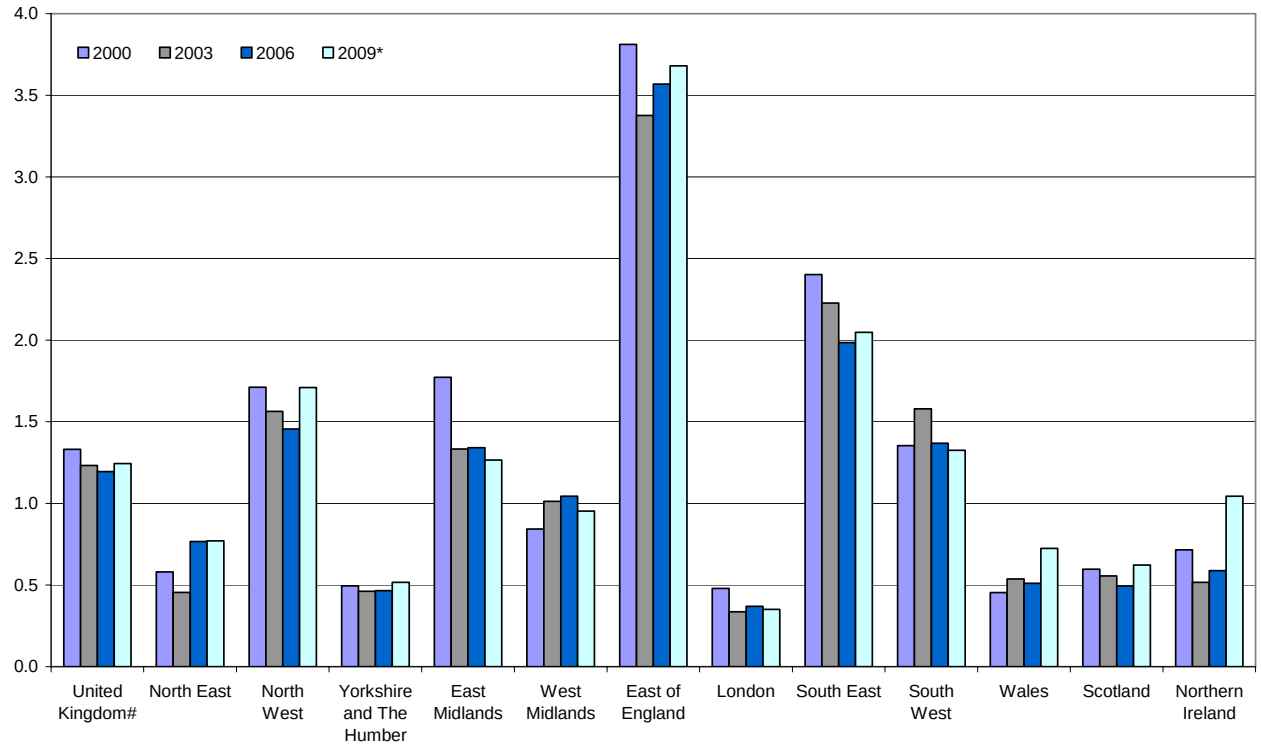
The OECD definition excludes education, training and any other related scientific, technological, industrial, administrative or supporting activities. However, innovation depends on a wider set of inputs than R&D, including skills training, design, software and organisational investment by firms. HM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

Figure 7 presents statistics on Business Enterprise Research and Development (BERD), that were published in December 2010 and which are consistent with internationally agreed standards. It shows business expenditure on R&D as a percentage of workplace-based GVA. 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, with spending equivalent to 3.7 per cent of its regional GVA in 2009. The South East region had the second highest percentage (2.0 per cent) followed by the North West (1.7 per cent). These three regions together accounted for 61 per cent of the total expenditure on R&D in the UK in 2009.

London had the lowest R&D expenditure as a share of its regional GVA in 2009 (0.4 per cent). Yorkshire and The Humber had the second lowest share in the UK in 2009, at 0.5 per cent. 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 7 Business expenditure on R&D as a percentage of workplace–based GVA: by NUTS1 region

Percentages



UK less Extra-regio and statistical discrepancy

* Provisional

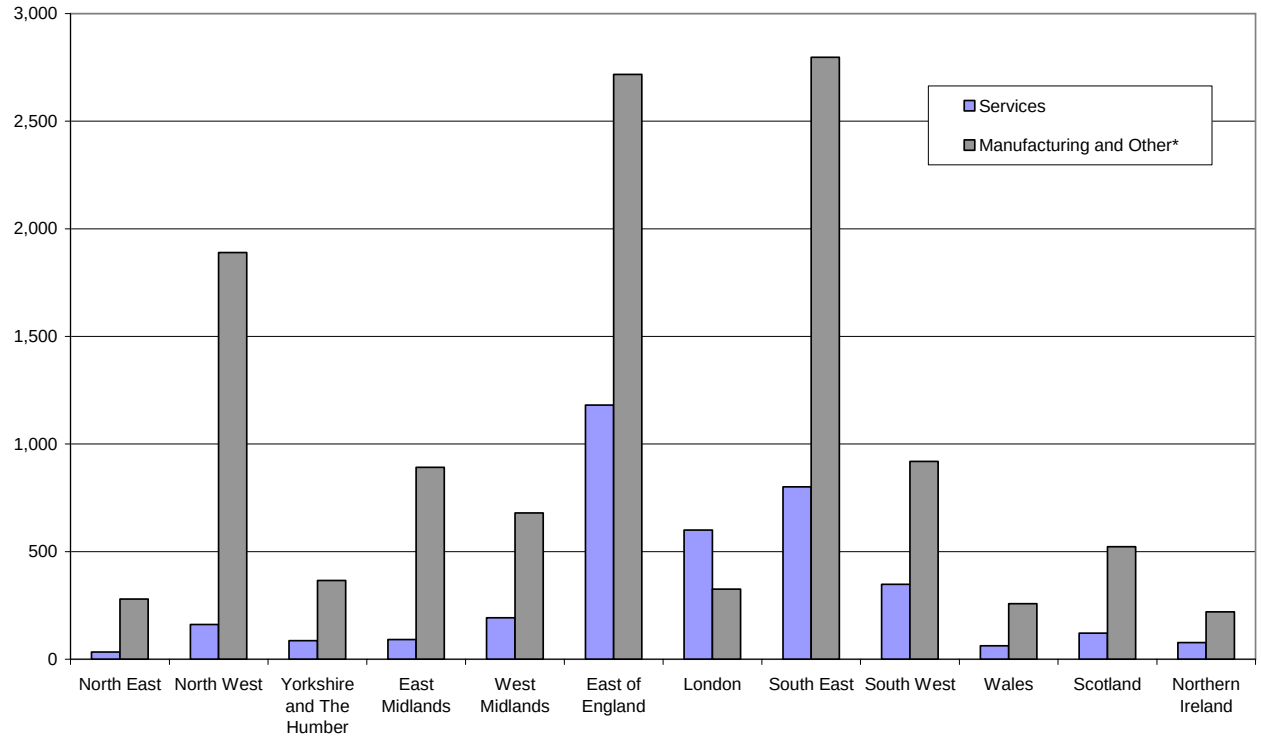
Source: Regional Accounts and Business Enterprise Research & Development, Office for National Statistics

Approximately three quarters of the R&D expenditure in the UK was made in the manufacturing sector in 2009. In the North West this share was 92 per cent and all other regions outside London had at least 69 per cent of R&D expenditure on manufacturing. **Figure 8** shows however that in London the majority of R&D expenditure was on service industries.

In absolute terms, the largest expenditure on services R&D occurred in the East of England whilst the largest expenditure on manufacturing R&D occurred in the South East.

Figure 8 Business expenditure on R&D by NUTS1 region: broad industry groups, 2009

£ million



* 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 only 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

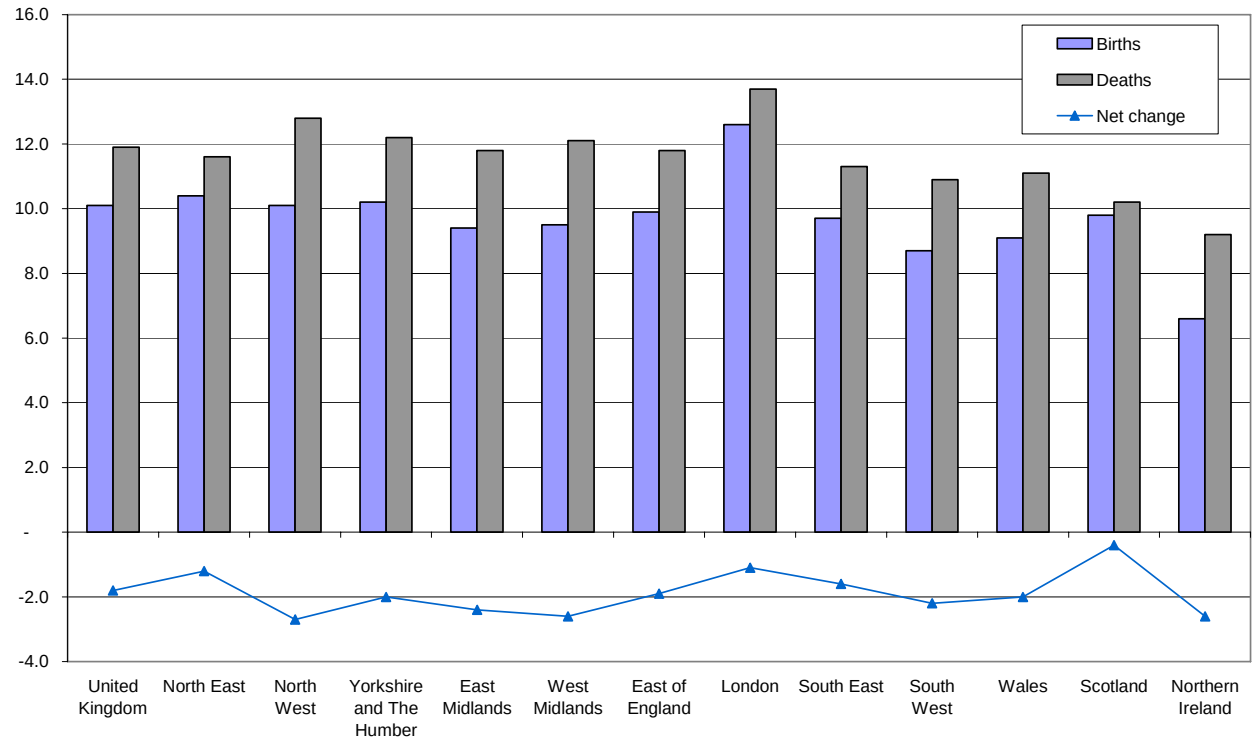
processes and technologies that drive up productivity and force unproductive enterprises to leave the market.

The ONS series of enterprise births and deaths 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 9 shows the number of births and deaths of enterprises as a proportion of the active enterprise stock in 2009. The difference between the two represents the net change, which is calculated as a proportion of total stock. In 2009, across all regions, the net changes were negative due to higher proportions of enterprises leaving the stock than joining it. This is the opposite of the case in most previous years and reflected the impact of the recession. The net decline was largest in the North West, West Midlands and Northern Ireland. The smallest net decline in 2009 was in Scotland. These rates were mainly driven by small enterprises with fewer than 5 employees which account for approximately 80 per cent of the total enterprise stock.

Figure 9 Enterprise births, deaths* and net change as a percentage of enterprise stock: by NUTS1 region, 2009

Percentages



* Provisional

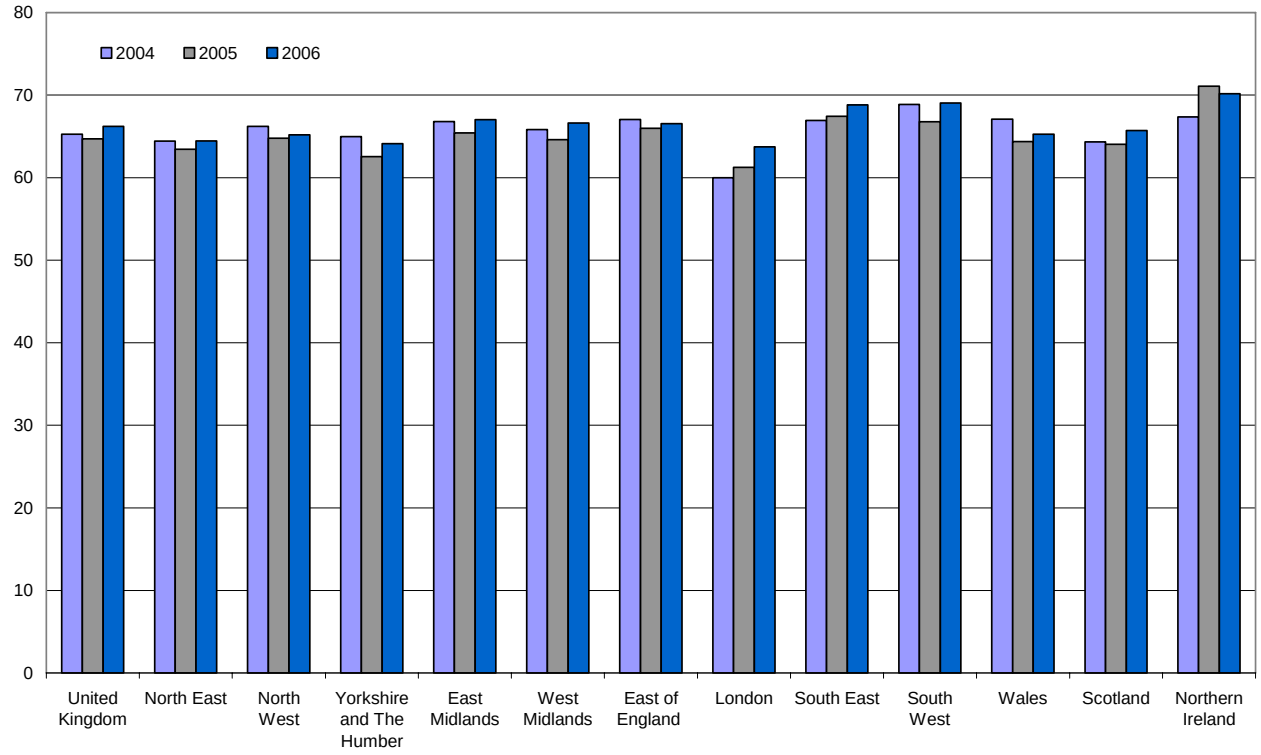
Source: Business Demography, Office for National Statistics

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 2004 to 2006.

Figure 10 shows the proportion of enterprises born in 2004, 2005 and 2006 that survived for at least three years each. It shows that, overall in the UK, three-year survival rates fell from 65.3 per cent of enterprises born in 2004 to 64.7 per cent of those born in 2005 before increasing to 66.2 per cent of those born in 2006.

Figure 10 Percentage of units surviving three years: by year of birth and NUTS1 region

Percentages



Source: Business Demography, Office for National Statistics

Northern Ireland had the highest three year survival rates for enterprises born in 2006 at 70.2 per cent. The South East and South West also had survival rates significantly above the UK average. London, by contrast, had the lowest three year survival rate at 63.7 per cent for enterprises born in 2006, as was the case in previous years. However, the gap between London and other regions was closer for enterprises born in 2006 than in previous years. Yorkshire and Humber and the North East had the next lowest survival rates for enterprises born in 2006.

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 4 presents the latest quarterly estimates up to the end of September 2010. The total value of UK goods exports to all destinations increased by 16.0 per cent between January–September 2009 and January–September 2010. The total value of goods exports increased in all the regions except in Wales (down by 3 per cent) and East Midlands (down by 1 per cent). West Midlands had the largest percentage increase in the value of goods exports (up by 33 per cent), followed by South West (up by 28 per cent) and North East (up by 24 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. For the UK as a whole, the value of exports to the EU was up by 13 per cent year–on–year in the nine months to September 2010 whilst exports to non–EU regions rose by 21 per cent. There was a particularly strong year–on–year increase in exports to non–EU regions from the West Midlands (59 per cent) and South West (65 per cent)

The number of exporters in the UK for the September 2010 quarter compared with the same quarter last year increased in all regions except Northern Ireland[6].

Table 4 UK regional trade in goods – statistical value of exports*: by NUTS1 region

£ 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 Q4	32,677	1,442	2,859	1,826	1,904	1,993	2,895	2,377	5,156	1,562	1,329	1,519	840
2009 Q1	31,224	1,334	3,094	1,611	1,907	1,797	2,824	2,445	4,911	1,671	1,187	1,331	791
2009 Q2	29,403	1,311	2,959	1,464	1,801	1,697	2,902	2,398	4,361	1,575	1,179	1,229	764
2009 Q3	30,364	1,352	2,901	1,473	1,703	1,642	2,951	2,818	4,558	1,453	1,163	1,342	720
Jan to Sep 2009	90,991	3,996	8,954	4,547	5,412	5,135	8,677	7,660	13,830	4,700	3,530	3,902	2,276
2009 Q4	32,806	1,488	2,933	1,747	1,823	1,895	3,536	2,537	4,901	1,504	1,264	1,440	771
2010 Q1	34,753	1,532	2,833	1,799	1,787	1,898	3,284	3,031	4,868	1,647	1,149	1,230	746
2010 Q2	35,521	1,632	3,015	1,794	1,729	1,972	3,224	2,895	4,718	1,659	1,290	1,486	783

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
2010 Q3	32,194	1,437	2,765	1,720	1,735	1,849	3,088	2,792	4,410	1,486	1,211	1,266	751
Jan to Sep 2010	102,468	4,601	8,613	5,313	5,251	5,719	9,596	8,718	13,996	4,792	3,650	3,982	2,280
Non–EU exports													
2008 Q4	28,181	1,112	2,807	1,522	2,089	1,900	2,252	3,749	5,430	1,306	1,297	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	24,812	881	2,540	1,263	1,995	1,504	2,002	2,934	4,722	1,164	1,241	2,337	606
2009 Q3	25,050	1,013	3,383	1,365	1,751	1,588	1,954	2,883	4,654	1,078	933	2,502	454
Jan to Sep 2009	72,771	2,871	8,688	3,888	5,703	4,301	5,849	8,527	13,466	3,391	3,248	6,817	1,570
2009 Q4	28,686	1,273	3,272	1,510	1,786	2,268	2,328	3,172	5,910	1,122	967	2,809	525
2010 Q1	26,300	1,014	2,722	1,364	1,701	1,914	1,985	3,934	5,133	1,697	894	1,874	442
2010 Q2	30,082	1,345	3,209	1,795	1,913	2,391	2,337	3,711	5,734	1,842	1,009	2,318	564
2010 Q3	31,762	1,539	3,534	1,860	2,140	2,548	2,313	3,862	5,845	2,066	1,025	2,536	574
Jan to Sep 2010	88,144	3,898	9,465	5,019	5,754	6,853	6,635	11,507	16,712	5,605	2,928	6,728	1,580
Total Exports													
2008 Q4	60,857	2,555	5,666	3,349	3,993	3,893	5,147	6,126	10,586	2,868	2,626	3,742	1,645
2009 Q1	54,133	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	54,216	2,191	5,499	2,727	3,796	3,200	4,904	5,331	9,084	2,740	2,420	3,566	1,370
2009 Q3	55,415	2,365	6,283	2,838	3,454	3,230	4,905	5,700	9,211	2,531	2,096	3,844	1,175
Jan to Sep 2009	163,764	6,867	17,642	8,436	11,115	9,437	14,526	16,187	27,296	8,091	6,778	10,719	3,846
2009 Q4	61,492	2,761	6,205	3,257	3,610	4,162	5,864	5,709	10,812	2,626	2,231	4,249	1,296
2010 Q1	61,052	2,546	5,555	3,163	3,488	3,812	5,269	6,965	10,001	3,344	2,043	3,104	1,188
2010 Q2	65,603	2,977	6,224	3,589	3,641	4,363	5,561	6,606	10,452	3,500	2,299	3,804	1,347
2010 Q3	63,956	2,976	6,299	3,580	3,875	4,397	5,401	6,654	10,255	3,552	2,236	3,803	1,325
Jan to Sep 2010	190,611	8,499	18,078	10,332	11,004	12,572	16,231	20,225	30,708	10,396	6,578	10,711	3,860

*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.

Growth rates, Jan–Sep 2009 to Jan–Sep 2010

	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	13%	15%	-4%	17%	-3%	11%	11%	14%	1%	2%	3%	2%	0%
Non–EU exports	21%	36%	9%	29%	1%	59%	13%	35%	24%	65%	-10%	-1%	1%
Total Exports	16%	24%	2%	22%	-1%	33%	12%	25%	12%	28%	-3%	0%	0%

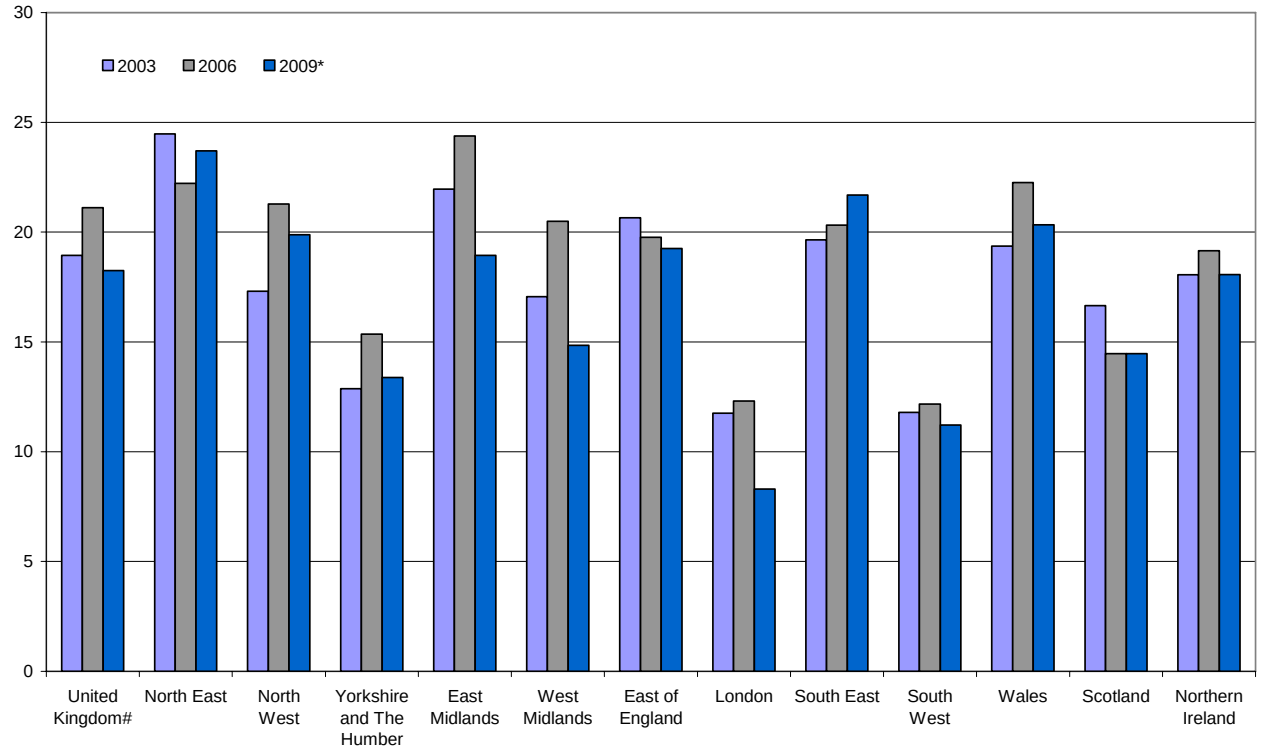
Source: Regional Trade Statistics, HM Revenue and Customs

Figure 11 shows the value of exports of goods expressed as a percentage of workplace–based regional GVA in 2003, 2006 and 2009, therefore taking into account the differing sizes of the regional economies. In 2009, 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 only and therefore are 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 regions in 2009 compared to 2006 except for the South East and North East.

Figure 11 Value of total export goods as a percentage of workplace–based GVA: by NUTS1 region

Percentages



UK less Extra–regio and statistical discrepancy

* Provisional

Source: Office for National Statistics

Skills

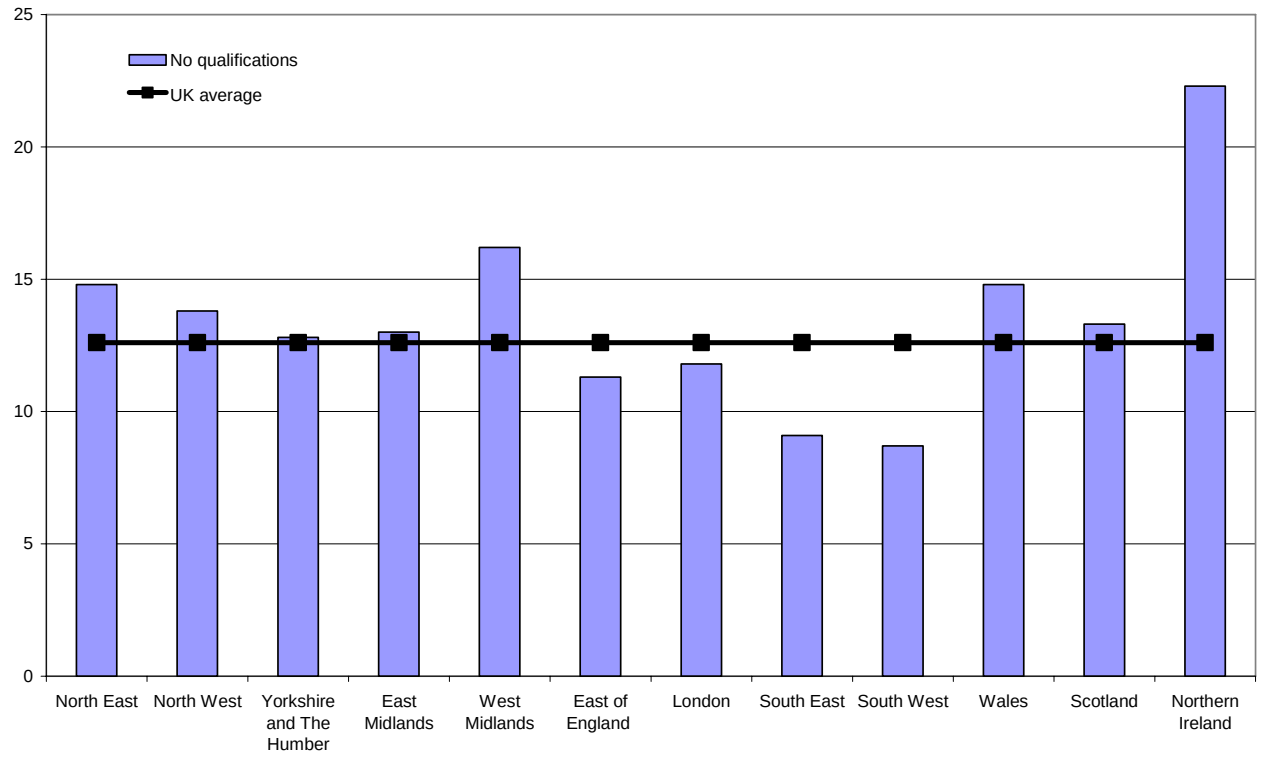
The focus section of this article explored the influence of skills on the productivity of the NUTS 1 regions using occupation as an indicator of the level of skill in the employed workforce. This section complements the analysis by considering qualifications as an indicator of skill. By examining the 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 12 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 12 Working–age# population with no qualifications: by NUTS1 region, 2009

Percentages



Males aged 16 to 64 and females aged 16 to 59.

* 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 5 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 5 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)	2009/10	52.6	54.9	51.7	53.1	53.9	55.6	57.3	57.1	55.2	53.1
Percentage of 19 year olds qualified to Level 2 or above*	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*	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

* 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.

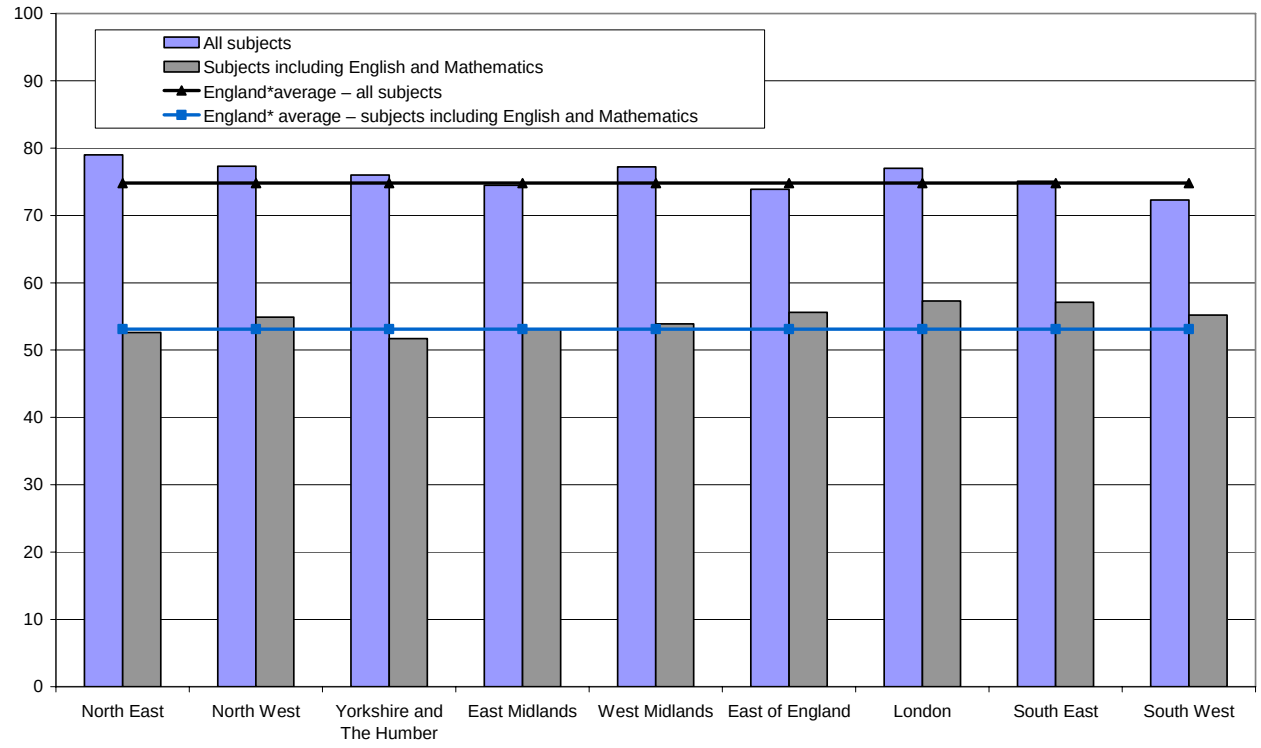
In order to assess the future capabilities of the labour force, the percentage of pupils achieving five or more grades A* to C at GCSE level or equivalent in each English region can be used as an indicator[2] or alternatively the percentage of pupils achieving five or more GCSEs grade A* to C in subjects including English and Mathematics can be used. **Figure 13** shows these results for 2009/2010[7].

The North East had the highest share of pupils achieving five or more A* to C grades across all subjects in 2009/2010 at 79.0 per cent. However, this did not reflect achievement in English and Mathematics as the North East had the second lowest rate of achievement of five or more GCSEs grade A* to C in subjects including English and Mathematics (52.6 per cent).

The highest rate of achievement of five or more GCSEs grade A* to C in subjects including English and Mathematics occurred in London (57.3 per cent) followed by South East (57.1 per cent). The lowest achievement rate occurred in Yorkshire and The Humber (51.7 per cent).

Figure 13 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, 2009/10#

Percentages



Provisional data

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

Source: Department for Children, Schools and Families

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 6 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).

Table 6 Employment* 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	London	South East	South West	England	Wales	Scotland	Northern Ireland
2007	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
	Jul-Sep	70.8	68.1	69.4	68.4	70.8	69.4	73.9	68.7	75.2	74.5	71.2	67.1	70.7	66.1

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

Source: Labour Force Survey, Office for National Statistics

In quarter three (July to September) of 2010, the UK employment rate was 70.8 per cent, up 0.1 percentage points from a year ago and up 0.3 percentage points from quarter two (April to June) of 2010. Regional rates varied from 75.2 per cent in the South East to 66.1 per cent in Northern Ireland.

Seven out of the twelve UK regions experienced an annual increase in the employment rate, the largest of which was in the North East at 2.0 percentage points followed by Northern Ireland at 1.8 percentage points. Conversely the East Midlands and Scotland decreased by 1.9 and 1.1 percentage points respectively.

Table 7 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 third quarter of 2010 was 7.7 per cent, down 0.1 percentage points from a year ago and down 0.1 percentage points from the last quarter. Regionally, the rates ranged from 9.0 per cent in the North East, Yorkshire and The Humber and London to 5.5 per cent in the South West.

Over the year the unemployment rate fell in seven of the twelve regions. The West Midlands had the largest decrease at 1.3 percentage points followed by the South West at 1.1 percentage points. Scotland increased by 1.2 percentage point and the East Midlands by 0.6 percentage points.

Table 7 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	London	South East	South West	England	Wales	Scotland	Northern Ireland
2007	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
	Jul-Sep	7.7	9.0	8.1	9.0	8.0	8.7	6.6	9.0	6.2	5.5	7.7	8.1	8.5	7.0

Source: Labour Force Survey, Office for National Statistics

Table 8 shows economic inactivity rates for persons aged from 16 to 64 from the LFS. The UK rate in the third quarter of 2010 was 23.2 per cent, down 0.2 percentage points from the previous quarter and down 0.1 percentage points on a year earlier. Across the regions, rates varied from 19.8 per cent in the South East to 28.8 per cent in Northern Ireland.

Compared with a year earlier, six 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 1.8 percentage points. Five regions had an increase in the economic inactivity rate over the year. The largest annual rise was in the East Midlands at 1.5 percentage points. West Midlands' rate was unchanged on the year.

Table 8 Economic inactivity rates for persons of working age: by NUTS 1 region

Per cent, seasonally adjusted

		United Kingdom	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Northern Ireland
2007	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
	Jul-Sep	23.2	25.0	24.3	24.7	22.9	23.9	20.7	24.5	19.8	21.1	22.8	26.7	22.6	28.8

Source: Labour Force Survey, Office for National Statistics

Table 9 shows the number of workforce jobs, seasonally adjusted, from the Employers Surveys. The number of UK workforce jobs in September 2010 was 30,703,000, an increase of 9,000 over the quarter.

Over the quarter there were decreases in three regions. The largest decrease was in London at 33,000 whilst the largest increase was in the South East at 18,000.

Table 9 Workforce jobs*: by NUTS1 region

Thousands, seasonally adjusted

	United Kingdom	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Northern Ireland
Sep 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
Sep 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
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	30,694	1,159	3,303	2,477	2,100	2,545	2,811	4,695	4,256	2,612	25,958	1,333	2,539	836
Sep 10	30,703	1,141	3,318	2,477	2,101	2,535	2,813	4,662	4,274	2,614	25,935	1,348	2,553	840

* Workforce 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.

Source: Employer surveys

Table 10 shows the claimant count rate (referring to people claiming Jobseeker's Allowance benefits as a proportion of the workforce).

Table 10 Claimant count rates*: by NUTS1 region

Per cent, seasonally adjusted

		United Kingdom	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East	London	South East	South West	England	Wales	Scotland	Northern Ireland
2009	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	4.4	5.8	3.8	4.4	3.0	3.0	4.4	5.1	4.8	6.5
	Oct	4.5	6.7	5.1	5.5	4.4	5.7	3.7	4.4	3.0	3.0	4.4	5.0	4.9	6.5
	Nov	4.5	6.6	5.0	5.5	4.4	5.7	3.7	4.4	2.9	3.0	4.4	5.0	4.9	6.5
	Dec	4.5	6.6	5.0	5.5	4.4	5.7	3.7	4.4	2.9	3.0	4.3	5.0	5.0	6.5

*Count of claimants of Jobseeker's Allowance expressed as a percentage of the total workforce - i.e. workforce jobs plus claimants.

Source: Jobcentre Plus administrative system

The UK rate was 4.5 per cent in December 2010, unchanged from November 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 December 2010, the North East had the highest claimant count rate in the UK at 6.6 per cent. The North East was followed by Northern Ireland (6.5 per cent) and the West Midlands (5.7 per cent). The lowest claimant count was measured in the South East at 2.9 per cent. The claimant count rate was 5.0 per cent in Scotland, 4.3 per cent in England and 5.0 per cent in Wales.

Scotland (up by 0.1 percentage points) and Northern Ireland (up by 0.4 percentage points) are the only regions showing an increase in the claimant count rate compared with a year ago. The largest decrease was in the West Midlands at 0.8 percentage points.

Notes

1. However, it should be noted that some occupation's classifications, particularly at high levels of aggregation, can embrace some heterogeneous skills. Variations in the tasks performed occur between one place of employment and another and consequently not all definitions can be expected to coincide exactly with specific jobs in a particular establishment or in a given locality and time.
2. The analysis used April-June data from the LFS for each year between 2001 and 2009.
3. Construction of a longer data series on occupation based skills was not possible due to changes in the classifications between SOC 1990 and SOC 2000.
4. Hours worked series consist of the sum of employee, self-employment, and Government supported trainees (GST) hours worked and do not include Her Majesty's Forces (HMF). Therefore, the sum of the hours worked estimates for all regions is not identical to the estimates produced in the national hours worked process.
5. As the analysis uses aggregate data, it only provides a basis for exploratory analysis. It establishes only a correlation between the skills and productivity and does not reflect the influence of other factors on productivity and/or skills. Consequently, it does not quantify what fraction of variation in productivity between the regions is associated with variation in skills. Without considering a full set of variables that may determine productivity and micro-level data such as firm level, it is not possible to isolate the specific effects of skills on productivity from other possible influences.
6. UK Regional Trade in Goods Statistics, Quarter 3 2010, HM Revenue and Customs at www.uktradeinfo.com/index.cfm?task=td_regstats_press
7. 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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