

Regional Economic Performance Indicators – economic context note.

This document was written to help users understand why BIS is interested and publishes the Regional Economic Performance Indicators. It provides users with information to help them understand the relationships between a selection of the key indicators and growth and highlights some of the regional disparities that exist.

The overall performance of the economy can be shown using a number of indicators or drivers which, if they were analysed together, enable the compilation of an overall picture of performance. The drivers of regional economic performance are the same as national drivers, however, key differences in regional economic performance exist and a regional assessment across the range of drivers can help understand differences in regional economic performance.

Overall economic performance in the Regional Economic Performance Indicators is subdivided into:

- output and productivity;
- investment;
- innovation;
- skills;
- enterprise;
- exports;
- employment;
- earnings;
- deprivation;
- transport and;
- land.

This paper focuses upon some of the key indicators of economic performance rather than all of the above indicators. The relationship between economic performance and the indicators is complex. Some of the factors analysed may indicate the current performance of the economy while others may give more of an indication of future growth potential.

Output and Productivity

GVA per head is a measure of the economic activity in regions. GVA is used as a proxy of the amount of goods and services produced in an area (Indicator A(1)(i)) while the per head factor removes the impact of differing populations across regions (Indicator A(1)(ii) and A(1)(iii)).

¹ Data discussed here is on a workplace basis. Estimates of workplace based GVA allocate income to the region in which commuters work. GVA and GVA per head on a residence basis, where income is allocated to the

While other indicators are factors which impact on the performance of regional economies, this indicator provides a summary measure of economic performance. A high GVA per head indicates a regional economy which is performing well as it is producing a large amount of goods and services which have a high total value per person. Large differences exist in GVA per head across the English regions and Devolved Administrations. In 2009 GVA per head was highest in London at over 70 per cent above the UK average, compared to the lowest English region North East; over 20 per cent below the UK average.

While GVA per head gives an indication of the differing performance of the regional economies to date, it does not show the rate at which these economies have been growing. For example, while the North East has the lowest GVA/head of all the English regions, its average annual deflated growth between 2004 and 2009 is the second highest of all the English regions, after only London. While the North East's backdated performance has been poor, its performance is improving. The combination of the current value of goods and services produced per head and growth rates of the regional economies provides the most robust picture.

The GVA per head of areas is determined by how many people are in work, measured by employment, and how effective those in work are at adding value, measured by productivity. Productivity has been captured here using two measures of labour productivity: GVA per filled job (Indicator A(1)(iv)) and GVA per hour worked (Indicator A(1)(v)). Output per job gives an indication of the productivity of a workforce. However, measuring productivity based on jobs is problematic. Some people may have more than one job or may work part-time. Someone who works part-time is unlikely to be able to produce the same amount as a full-time worker as they work fewer hours. As a result, output per hour worked, which provides a measure of the amount produced in a fixed period of time (therefore overcoming the difficulties in interpreting output per job), is the preferred measure of labour productivity. If more output were produced in each hour worked, and working hours remained the same, output levels would increase overall and the general economic performance of regions would improve. However, if more output were produced per job filled, this could just indicate a move away from part-time working or people working two jobs. Of course, greater productivity may mean that if more can be produced in less time, less time is worked and the output level remains unchanged. For example, a highly productive pieceworker whose productivity increases may choose to earn the same wage by working fewer hours. Again, large differences exist in productivity between regions. Of the English regions in 2009, GVA per hour worked was highest in London (32 per cent above the UK level) and lowest in the North West (12 per cent below the UK level). The reasons for these differences are complex, for example, they will be affected by differing job types, industry sectors and skill levels. Even within broad industry sectors there are differences between GVA per workforce job across the regions (Indicator A(3)).

region in which commuters live, is presented in Indicator A2(i) and A2(ii). Only East of England, South East and London have different values for workplace and residence based measures.

Investment

Investment is the purchase of new capital such as plant and machinery. When workers use high quality machinery, their productivity increases. Measuring manufacturing/ services/ other total investment as a percentage of regional GVA is used as an indicator of the levels of business investment in the regional economies (Indicator B(3)(i)-(iv)). This investment measure largely reflects business investment in tangible fixed assets, such as plant and machinery, buildings and land, though does include business investment in some intangible assets like software. Intangible investment (e.g. in design, R&D, brands, intellectual property, staff training etc) is viewed as being an increasingly large part of overall investment, and is currently partially captured by the innovation indicators. Indicators B(1)(i)-(iv) provides investment levels and Indicators B(2) (i)-(iv) provides the corresponding GVA levels.

Differences exist across regions but also between industries and by ownership.

Innovation

New ideas lead to the inception of new valuable products or new production methods which improve firms' productivity. Innovation is key to economic growth and research and development expenditure provides an insight to the level of investment in innovative activities carried out by private firms and from public funds.. Indicators C(1)(i) and (ii) show the level of business and gross domestic expenditure on research and development as a percentage of regional GVA.

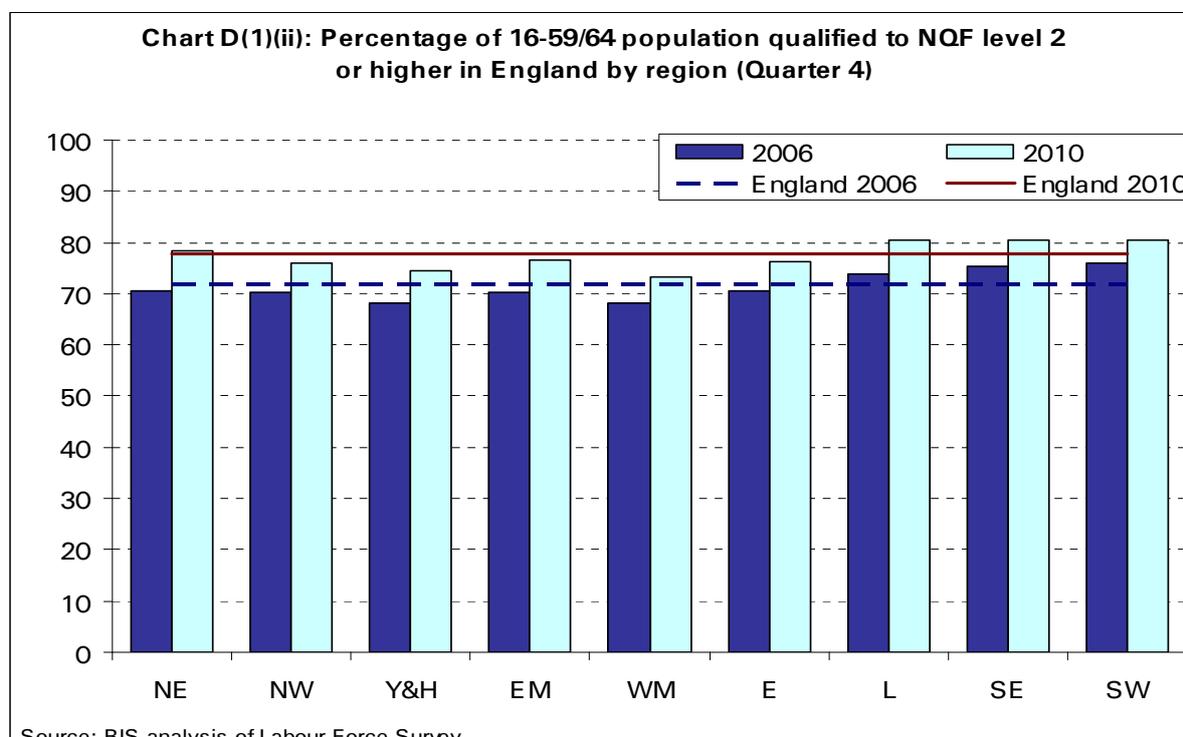
Although research and development investment carries a high level of risk, with no guarantee that any particular investment will see a return, analysis of firm-level data shows that firms that innovate perform more strongly than firms that do not. Innovation occurs in firms of all sizes and in all sectors, with 58% of UK firms being innovation active in 2008. It should be noted, however, that only half of these firms engaged in research and development, with investment in many other forms of innovation activities.

The benefits of research and development do not only accrue to the firms which make the investment, there are spillovers to consumers and competing firms as well as to firms in other industries and areas. In terms of regional indicators, therefore, it is important to note that the benefits of research and development will not solely accrue to the region in which the activity takes place. Of the English regions gross domestic expenditure on research and development as a percentage of GVA is highest in the East of England (4.6 per cent), compared to London where it is lowest (1.1 per cent).

Skills

A more highly skilled workforce is generally more productive and, hence, more likely to produce a higher value of output and hence a higher performing regional economy. In addition, highly skilled workers are more likely to find employment. Skill levels across regions can be captured using the proportion of the population aged 19-59/64 qualified to NQF level 2+, NQF level 3+ and NQF level 4+ (Indicators D(1)(i)-(iv)). While NQF level 2+ shows the more basic skills level (those with 5 or more GCSE), NQF level 4+ shows a higher skills level (those with Higher Education qualifications). Skill levels give an indication of the value of output workers can produce per hour worked and are generally considered to be a major factor in producing economic growth. Higher value added sectors generally require a workforce with a higher skill level. In line with the level of GVA

per head, in 2010 Q4 the share of the population aged 19-59/64 with NQF Level 2 and above was highest in London and lowest in the West Midlands across England. However, between 2006 and 2010, the increase in the share of the population qualified to this level was highest in the North East and lowest in the South West. This illustrates the importance of considering the current level but also changes over time.



Enterprise

The number of enterprise births gives an indication of the enterprising culture of a region and of growth potential. It is often cited as an important statistic in assessing the performance of the economy and the likelihood that this performance will be sustained (Indicator E(1)(i)). Birth rates vary by region and industry.

Due to the differing size of regions enterprise births are often assessed in comparison to the adult population in the area (Indicator E(1)(ii)). Of the English regions, in 2009, London has by far the highest rate of enterprise births per 10,000 adult population, with the North East having the lowest. Survival rates are also important (Indicator E(1)(iii)) and 3 year survival rates for businesses registered in 2006 were actually higher in the North East than in London, which had the lowest survival rate of all regions.

Exports

The competitiveness of the UK regional economies can be examined through the value of exports of goods as a percentage of regional GVA (Indicator F(1)(ii)). Regions which have exports forming a large proportion of the regional output can generally be considered to be more competitive. Those goods which are of high quality and are good value for money will be more desirable to those overseas. Exchange rate fluctuations will

have negligible impacts between regions as the UK as a whole has one exchange rate. However, one thing that must be borne in mind is that some regions, such as London, tend to be more focussed on services as opposed to goods which are less homogeneous across borders. As a result, this indicator must be used with caution. Trade is allocated to regions based on the recorded postcode of the trader; HMRC attempts to mitigate the distortions of headquarter effects by using additional survey information, but the data will not always reflect the location of original manufactures of exported goods.

Employment

Employment is the number of people actively producing goods and services divided by the number of people who could potentially be producing goods and services for a given age group. A rise in the employment level will led to a rise in total output, so long as productivity² remains unchanged. The 16-64 employment rate is often used as a factor in showing the economic performance of regions (Indicator G(1)(ii)). Regions with lower employment rates will not be making productive use of a larger section of their working age population.

Employment rates differ across regions and in Q1 2010 London was the English region with the lowest employment rate. London's high GVA exists because of high productivity levels³ amongst those in employment, this more than offsets its low employment rate.

² Output per worker

³ Output per worker