UK city-regions in growth and recession:

How are they performing at home and abroad?

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ACKNOWLEDGEMENTS

This report is an output of the research project, 'UK City-regions – How Competitive in a Global Economy? What Do The Secondary Data Tell Us?' The project is funded by the Economic and Social Research Council (Grant Reference: ES/K00414X/1) and is part of the Research Council's Secondary Data Analysis Initiative.

We would like to acknowledge advice and assistance from the following individuals in helping us put together some of the secondary data contained in this report:

Cecilia Campos, ONS
Lewis Dijkstra, DG-Regio, European Commission
Trevor Fenton, ONS
Daniel Sanchez-Serra, OECD

Any errors in analysis of the data are, of course, ours and ours alone.

KEY FINDINGS & MESSAGES

Why does the project matter?

This project about the economic performance of the UK's city-regions during the boom and current recession raises crucial wider questions about the UK. For example:

- Has it made any progress in rebalancing the economy?
- Has London become more or less dominant?
- Has devolution helped the Celtic city-regions?
- Has the gap between the north and south city-regions grown or shrunk?
- Have the gains of the boom been sustained or lost during the recession?
- How do we compare internationally?

What has it shown?

How did UK city-regions do in the boom?

- London still dominated. Many city-regions in the north improved - but did not close the gap with those in the south.
- Some of the Celtic city-regions particularly improved.
- The 'North-South' gap in performance widened but with exceptions.

How did they do in the recession?

- The recession has undone many of the gains of the growth years.
- London has performed strongly – but it has not sustained the exceptional gains of the boom.
- City-regions in the devolved administrations have had mixed performances, but Aberdeen and Edinburgh have retained their places among the UK's strongest.
- Many city-regions in the north have lost ground in comparison with the south.
- But some city-regions have performed better than expected - for example, Liverpool.

How did they compare internationally in the boom?

- The boom brought gains to many city-regions in Europe.
- Only London was in Europe's top 20, with productivity 50% above the EU average.
- Only Edinburgh and Bristol of the rest performed well on productivity in Europe. Most UK city-regions lagged behind Europe's strongest.
- All UK city-regions fell below the average annual growth in GDP per capita of the European group – including London. London's growth rate placed it 13th in the ranking of 27 European capital city-regions.
- In the OECD countries, which include North American, Far Eastern and South American city-regions, the picture changes. GDP per capita in 10 of the 15 UK city-regions grew at rates above the OECD average.
- When city-regions in 'Developing Asian-Pacific' countries (notably China and India), Latin America (notably Brazil) and the Middle East and Africa are added, the picture changes yet again. Growth was strongest in 'Developing Asia Pacific' city-regions with an average annual growth rate over two and a half times the global average.

- Over three quarters of Chinese city-regions had annual growth rates above 10% – underlining the growing shift in economic growth from the global West to countries - and their city-regions - in the global South and East.
- UK city-regions recorded moderate growth rates, with all UK city-regions in the top half of 300 global city-regions in pre-recession GDP per capita growth rates.

How do they compare internationally in the recession?

- The recession has hurt. GDP per capita fell in the great majority of European city-regions and in all UK city-regions between 2008 and 2010.
- When compared with city-regions in the OECD countries, the UK city-regions experienced a marked reversal in performance. The majority performed worse than the OECD average, compared with the growth years where the reverse was the case.
- In the wider global context, all metro-regions in China and India escaped the global recession and continued to grow. In marked contrast, all Western European and North American city-regions were hit hard by the recession with falls in GDP per capita in the worst recession year ranging between 1% and just over 10%. In the UK all city-regions experienced declines ranging between 2% and 6%.

How do they compare internationally now?

- London and Edinburgh consolidated their position in the top 20 percent of European city-regions 2000-10. The other UK city-regions fell down the rankings but remain in the middle group in Europe as a whole.
- In terms of levels of GDP per capita globally, Edinburgh and London still lead.
- Among the 300 global metro regions, the other 13 UK city-regions rank between 122 (Bristol) and 207 (Sheffield). While they rank above most city-regions in Developing Asia-Pacific and Latin American countries, they lag North American city-regions by a distance and, as a group, perform worse than those in the rest of Western Europe.

What does it mean for the UK?

- The established urban hierarchy in the UK was marginally challenged by the boom but has been reasserted during the recession and many northern city-regions are slipping.
- However, a set of third-tier southern and a powerful group of Celtic city-regions - Aberdeen, Edinburgh and Belfast in the devolved administrations – have performed very strongly.
- Since London and the devolved administrations have significant policy advantages over northern England, this emerging pattern is critical.
- Many city-regions made gains because of investment in the boom. Disinvestment during the recession could reduce our economic performance and increase regional divisions. We need an informed debate about the economic contribution of UK city-regions and public and private sector investment to rebalance our national economy and compete internationally.

1. INTRODUCTION & EXECUTIVE SUMMARY

1.1 What are we trying to do, how and why?

Our research questions and approach

1.1 This project, funded by the Economic and Social Research Council, explores the economic contribution that UK city-regions make to national and international economic competitiveness. This debate has been given added currency by the current coalition government's ambitions to rebalance the UK economy. It raises several key questions for our research: what is the current contribution of UK city-regions to national economic competiveness; how do they compare with their competitors internationally and what is their potential to increase their economic contribution in future?

1.2 We explore these questions through a set of specific research questions:

- How did different UK city-regions perform during the boom years between 1997/2000 and 2008?
- How have they performed during the recession since 2008?
- What difference was there in the economic performance of city-regions in different regions in the UK in the boom and recession?
- Did the gap in performance increase, stabilise or decrease during these two periods?
- How did UK city-regions compare with city-regions in Europe during the two periods?
- How do they compare with leading city-regions internationally?

Benchmarking economic performance - What is our approach?

1.3 This report presents findings from the benchmarking phase of the research. It sets the scene about the impact of the boom and recession upon UK city-regions in national and international contexts. It provides evidence from 46 city-regions in the UK, 149 in Europe, 275 in OECD countries and 300 across the globe on up to 4 key economic performance measures. Its ambition is modest - to set the scene about the impact of the boom and recession upon UK city-regions in national and international contexts. One caveat is important. We are benchmarking comparative performance. As a consequence we show where different city-regions stand in the UK, Europe and globally. But we are not essentially interested in ranking or in league tables. We are more concerned with identifying development paths and the way in which city-regions change their performance. We regard the direction of change rather than starting position as the most important dimension. A city-region could start and indeed remain at a relatively low ranking but still show significant improvement in key respects - for example the Liverpool city-region.

1.4 In Section 2 we measure performance at UK level using data on Gross Value Added (GVA), employment and unemployment rates and population. In Section 3 we compare the performance of UK city-regions with their European counterparts using Gross Domestic Product (GDP) per capita. In Section 4, we describe the performance of UK city-regions in a broader global context, again using data on GDP per capita. Section 5 presents final conclusions. City-region boundaries used in the different geographical levels of analysis can be found in Annex 1.

1.5 This is a long and detailed report. To help the reader through it we identify some of the key messages that have so far emerged.

1.2 What's emerging? The national story so far

UK city regions in the boom – the headlines

1.6 One key message from the boom was unevenness in economic performance. Some city regions remained where they were - but some improved their performance. London dominated. Many places in the north improved - but did not close the gap with those in the south. Some of the Celtic city-regions particularly improved. Many lagging city-regions improved their performance and picked up on productivity, employment, unemployment and population. But many still did not catch up with the higher performing places. And as we shall see many did not stay up when the recession came. The strongest third-tiers in the south outperformed many second-tier city-regions. But the impact of regional location was greater than size. And internationally, despite London's global status and Edinburgh's powerful performance, most UK city regions still lagged behind Europe's strongest.

1.7 London, a small group of second-tier and a larger group of third-tier city-regions were the leading group in productivity. London dominated. There was a large 'North-South' divide – but with individual exceptions in both regions. The strong did not always get stronger – although London and Edinburgh did. London grew fastest among leading city-regions – but some third-tiers performed stronger than second-tier. The 'North-South' gap in performance widened but with exceptions including some northern high performers and city-regions in the devolved administrations. In terms of total economic weight, there was a shift south, especially to London.

1.8 In terms of employment the second-tiers grew strongly with unemployment falling but successful southern third-tiers led the way. Employment rates were highest in the leading city-regions and in the south excluding London. Unemployment fell everywhere in the boom. In terms of population there was stronger growth in the south – but northern city-regions remained important population centres. Overall city-regions in the south did better – but some city-regions in Scotland and Northern Ireland also did well.

The recession – the headlines

1.9 The recession has undone many of the gains of the growth years. London has performed well but it has not sustained the exceptional gains of the boom. Many second-tier city-regions in the north have lost ground in comparison with city-regions in the south. Some third-tier city-regions have withstood the crisis better than some second-tier city-regions. But again that is much a result of regional location rather than size. Some city-regions in the devolved administrations have performed relatively well.

1.10 The emerging picture is uneven. Nowhere has been immune to the crisis. Many of the leading city-regions have been hit quite badly. The south has had a mixed performance. The north has also had a mixed performance overall. But some city-regions have performed better than expected on past performance - for example, Liverpool. London has had a relatively static performance on productivity but remains strong on output and employment. Second-tier city-regions have generally performed worse than national but with some exceptions. Many third-tier city-regions have remained in the leading group. But more than half have performed worse than national.

1.11 Productivity grew below the national rate in both the northern and southern city-regions in aggregate. But the north actually grew slightly faster than the south, albeit from a much lower base. The performance of city-regions in the devolved administrations really stands out with a combined growth rate above the national and London's. But, despite the slowdown in growth in southern city-regions, the gap in performance between them and their northern counterparts remains considerable. And in terms of population, output, employment and labour force southern city-regions have performed better on balance than those in the north, demonstrating stronger resilience in the crisis.

1.3 What's emerging? The European & global story so far

1.12 We have compared 149 European capital and second-tier city-regions in 29 countries on productivity. There are large regional disparities across Europe. The prosperous city-regions in the North, Central and West of Europe contrast with the less prosperous ones of the Central East, East and South East. Together, at the start of the period, the North, Central and West groupings housed over 80% of the leading city-regions. By contrast only 3 of the 27 city-regions in the former socialist Unitary states of Czech Republic, Hungary, Poland, Slovakia and Slovenia were 'leading', 3 were intermediate and the great majority were lagging. There were some shifts during the period. The lagging city-regions of East and South East Europe, and to a lesser extent, of Central East Europe had a rapid burst of growth in the eight year period. Those in transition to capitalist economies and integrating into the European economy had average growth rates 6 and 7 times those of the established West and North.

How do the UK city-regions compare 2000-8?

1.13 There were 78 'leading' European city-regions in our group of 149, whose productivity was above the European average. 10 of the 14 UK second-tier city-regions were in this category. But only London was ranked in the top quintile of the group - and then only just at 16th. Only 2 UK city-regions had GDP per capita above the average for the group: London and Edinburgh. All 14 UK city-regions fell below the average annual growth in GDP per capita for the 149, 3.1%, during the boom. Edinburgh, Glasgow and London came closest with annual average growth rates of 2.9%, 2.7% and 2.6% respectively. London, with its 2.6% annual average growth rate, ranked 13th out of the 27 European capitals.

European city-regions in recession – growth reversed

1.14 Most regions have seen overall growth rates transformed into decline. Productivity has fallen in real terms in 119 of the 149 city-regions. In Eastern Europe, the East and South East parts have done badly. The Central East has done better. And the relative 'catch-up' gains of city-regions in the East in the growth years has been slowed down or reversed by the crisis. The South of Europe has also seen a marked fall in growth during the crisis. There have been less pronounced reversals in growth in the North, West and Central regions of Europe.

UK city-regions in the European recession – all declining, some more than others

1.15 The crisis has had a polarised impact on the UK's 14 city-regions position in Europe. Real GDP per capita fell in all of them between 2008 and 2010 but with the annual decline in Nottingham (-2.8%) five and a half times that experienced by Bristol (-0.5%). The average annual decline for the 149 European city-regions was -1.4%. 4 of the 14 UK city-regions had declines less than this - Bristol, Belfast, Sheffield and Cardiff. But in 10 the drop was greater.

UK city-regions in Europe in 2010 – slipping back

1.16 The different patterns of growth and decline in boom and recession have produced, overall, a worsening of the economic position of UK city-regions in Europe. While the two highest ranked UK city-regions in GDP per capita, London and Edinburgh consolidated their position, all the rest fell down the rankings. Some fell relatively slightly, like Bristol and Glasgow. But others fell more sharply, like Bradford-Leeds, Birmingham and Nottingham.

UK city-regions' global performance in the growth years – mixed but some good performers

1.17 Between 2000 and 2008 most UK city-regions performed strongly, albeit from different starting points in the group of 275 OECD city-regions. Of the 15 UK city-regions, GDP per capita grew faster than the OECD average in 10: Portsmouth, Edinburgh, Glasgow, London, Newcastle, Bristol, Sheffield, Cardiff, Leeds and Liverpool; and below the OECD average in 5: Nottingham, Birmingham, Manchester, Leicester and Bradford.

1.18 However, over a longer period, 1993-2007, and in the broader global context set by the rapidly accelerating growth rates of city-regions in the 'Developing Asia Pacific' region and notably in China, the performance of UK city-regions in terms of GDP per capita growth was more modest. London was the fastest growing of the UK city-regions at 3.5% annually, reinforcing both its national and global standing. The other city-regions had GDP per capita growth rates squeezed between 2.6% and 3.3%. These growth rates put four in the second quintile of global growth, 7 in the third and 4 in the fourth, with rankings ranging from 81st to 134th out of 300 metro regions. Globally the fastest growing city-regions were all found in China. Indian and South Korean, and some Eastern European capitals, also grew quickly. The growth rates in these city-regions substantially exceeded those in the UK.

UK city-regions in the global recession

1.19 In the 2008-2010 recession years, GDP per capita fell in 195 of the 275 OECD city-regions (71%). It fell in all 15 UK city-regions. In 13, the fall was greater than the OECD average: Leeds, Nottingham, Leicester, Glasgow, Cardiff, Birmingham, London, Edinburgh, Liverpool, Manchester, Newcastle, Sheffield and Bradford. Only 2 - Portsmouth and Bristol - performed better than the OECD average.

1.20 This performance was reinforced in the broader global context of 300 metro-regions. In the worst recession year, GDP per capita in UK city-regions fell by between 2% and 6%. None were in the top quintile of global growth/decline in the recession and only two in the second quintile – Edinburgh and Glasgow. Eight were in the third quintile and four in the fourth, including London. Birmingham, with its decline of 6% fell into the fifth quintile. Global rankings in terms of growth/decline, ranged from 104th to 243rd. The performance of UK city-regions in this broader global context noticeably worsened over the recession.

1.21 The falls in GDP per capita in UK city-regions were typical of Western European city-regions as a whole. GDP per capita fell in real terms in at least one year in all Western European city-regions during the downturn and the same was true for all North American city-regions. In other global regions, Developed Asia-Pacific, Eastern Europe & Central Asia, Latin America, and the Middle East & Africa, the picture was slightly more mixed with only a majority of city-regions in these countries experiencing decline in at least one year. But standing out in sharp contrast was the Developing Asia-Pacific region, in which Chinese city-regions in particular experienced continued growth in every single year.

1.22 In terms of changes in global OECD rankings 2000-2010, the performance of the 15 UK city-regions is almost evenly divided. 7 moved up the rankings: Glasgow, Newcastle, Sheffield and, notably, Portsmouth, Edinburgh, London and Bristol. While 8 slipped down: Cardiff, Liverpool, Manchester and, notably, Leicester, Bradford, Nottingham, Birmingham and Leeds.

1.23 In the broader global context the gap in terms of relative wealth - measured by levels of GDP per capita in 2012 – between UK city-regions and those in the developing world remains significantly wide. For example in the 'Developing Asia Pacific' region, all Indian and most Chinese city-regions, with some notable exceptions, still remain among the poorest in global rankings despite their recent growth. UK city-regions compare less well overall with their North American and Western European counterparts. Only London and Edinburgh are in the top quintile. None are in the second. The rest are split relatively evenly between the third and fourth quintile. This distribution not only lags those in the rest of Western Europe and North America but also that in the 'Developed Asia Pacific' region.

1.4 So what is the balance sheet?

1.24 The boom brought gains to many city-regions in Europe. Many lagging and intermediate city regions improved their performance. But in most countries, especially the UK, they did not close the gap with the more successful city-regions, in particular the capitals. Our work shows that the size of a city-region does matter to its economic performance. But its regional location matters more. Northern city-regions overall have not done as well as those in the south and London. And city-regions in the devolved administrations have performed better than many in the midlands and northern England. The established urban hierarchy was marginally challenged by the boom but has been reasserted during the recession and many northern city-regions are slipping. However, a set of third-tier southern city-regions – including Cambridge, Milton Keynes, Reading and Swindon – and a powerful group of Celtic city-regions - Aberdeen, Edinburgh and Belfast in the devolved administrations – have performed very strongly. Given the policy debate about the need to rebalance the UK economy and the argument that London and the devolved administrations have significant policy advantages and tools over city-regions in northern England, this emerging pattern of performance cannot be ignored.

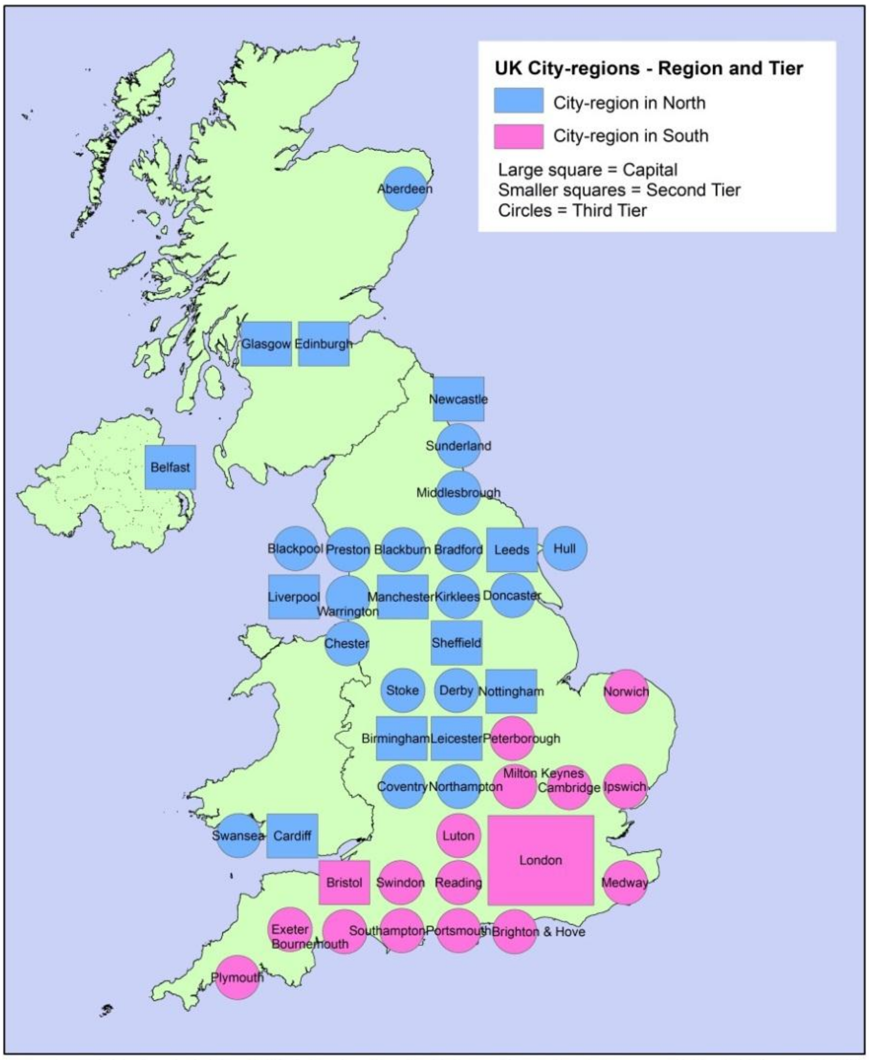
1.25 Similar patterns during the boom and recession can be found in Europe. The gains that investment achieved were obvious - if uneven. The risk now is that disinvestment during the recession across the UK and Europe will reinforce regional economic divisions. And all this is being played out in a global context in which city-regions in countries such as China are growing rapidly with the weight of global economic power shifting accordingly. For the UK the need for an informed debate about the economic contribution of its city-regions and the role of public and private sector investment remains as urgent as ever if we are to rebalance our national economy and compete with Europe and the rest of the world.

2 THE ECONOMIC PERFORMANCE OF UK CITY-REGIONS IN NATIONAL CONTEXT

2.1 The location and economic significance of the 46 UK city-regions

2.1 The study focuses on the 46 city-regions shown in Map 1 and grouped into a very broad 'North-South' geography defined by the Severn-Wash dividing line. 29 city-regions – 12 second- and 17 third-tier are north of this line. 17 city-regions – the capital, 1 second- and 15 third-tier – are below it. We use 2 sets of boundaries for the national analysis, one based on Local Authority definitions and, specifically for analysis of GVA, one based on the lowest level of the EU's 'NUTS' ('Nomenclature of Territorial Units for Statistics') regional classification, 'NUTS 3' regions, see Annex 1, Maps 21 and 22 respectively.

Map 1: The 46 UK City-regions - Tier & Region



Sources: Boundaries downloaded from UK Data Service. Contains Ordnance Survey data © Crown copyright and database right 2013.
Some city-region names have been simplified for presentational reasons.

2.2 The distribution of population, employment and population across these city-regions underlines their relative economic importance.

2.3 Population:

- The dominance of the capital, London, stands out. It accounted for 19% of total national (UK) population in 2011.
- The 13 second-tier city-regions together accounted for 27%.
- The 32 third-tier city-regions together accounted for c.18%.
- The 46 city-regions together accounted for around 64%.

2.4 Employees:

- London again dominates, accounting for 22% of total national (UK) in 2011.
- The 13 second-tier city-regions together accounted for 27%.
- The 32 third-tier city-regions together accounted for 18%.
- The 46 city-regions together accounted for around two-thirds - 67%.

2.5 Total GVA (using NUTS 3 approximations of the city-regions):

- London accounted for 28% of total national (UK) GVA in 2011.
- The 13 second-tier city-regions accounted for 24%.
- The 32 third-tier city-regions accounted for 21%.
- The 46 city-regions together accounted for 73% of total national (United Kingdom) GVA in 2011.

2.2 Economic performance in the growth years, 1997-2008

Indicators & analysis

2.6 For benchmarking city-regional economic performance in this period we use secondary data on Gross Value Added (GVA), employment, unemployment and population. We use data on GVA per capita and per job filled as measures of relative productivity and total GVA data as both a measure of performance and relative economic weight. We examine city-regional performance on each indicator separately and conclude with a balance sheet summarising performance across the indicators.

2.7 In the analysis, we make three basic comparisons, by:

- productivity – by levels of GVA per capita;
- size and place in the urban system and hierarchy – differentiating the capital and second- and third-tier city-regions;
- geography – identifying broad ‘North-South’ differences and, within this, differentiating the performance of city-regions in the devolved administrations of the UK.

2.2.1 GVA

GVA per capita: the three groupings

2.8 We use GVA per capita as a key measure of relative city-regional economic performance. The data for GVA are workplace-based and population residence-based, so GVA per capita measures are influenced by levels of workplace commuting. Given our definition of city-regions on relatively self-contained commuting patterns, however, we are comfortable that distortions caused by boundary definitions are minimised. We distinguish three city-regional groupings based on levels of GVA per capita compared with the national at the start of the period, 1997 (Figure 1):

(i) 18 'leading': with levels above the national average, ranging from 5% above (Cambridge and Portsmouth) to 63% above (Swindon);

(ii) 24 'intermediate': with levels between 75% and 100% of the national average, ranging from 1% below (Bournemouth and Leicester) to 23% below (Exeter); and

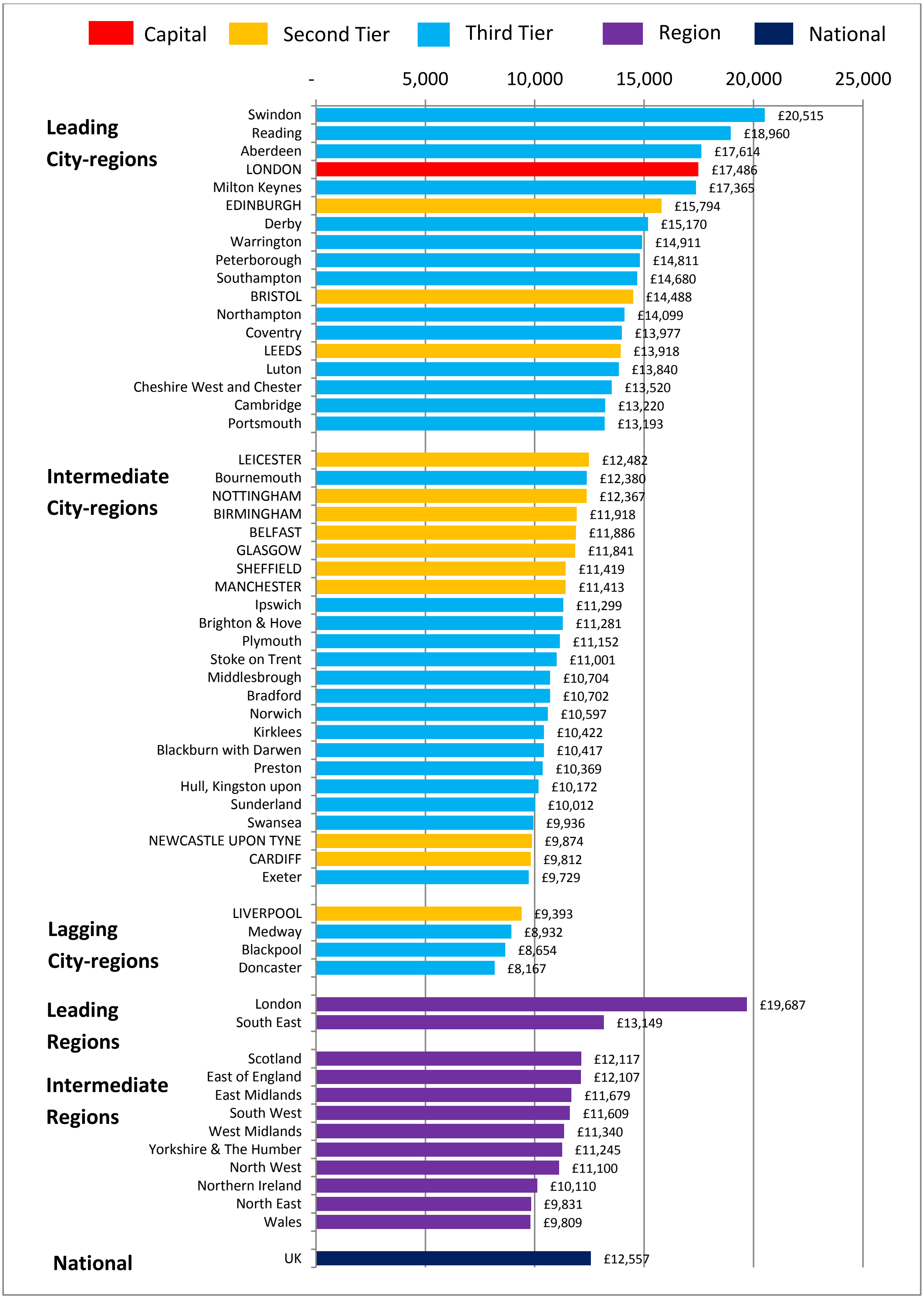
(iii) 4 'lagging': with levels less than 75% of the national average, ranging from just under 25% below (Liverpool) to 35% below (Doncaster).

London, a small group of second-tier and a larger group of third-tier city-regions made up the leading group in economic competitiveness in 1997

2.9 In terms of tiers, it is notable that:

- The leading group is made up of the capital city-region, 3 second-tier and 14 third-tier city-regions.
- London city-region is ranked fourth in the leading group behind three third-tier city-regions (Swindon, Reading and Aberdeen).
- Only three of the 13 second-tier city-regions are in the leading group (Edinburgh, Bristol and Leeds).
- The intermediate group comprises 9 second-tier and 15 third-tier city-regions.
- The majority of second-tier city-regions in the intermediate group (7 out of 9) are clustered towards the upper end of the range, the exceptions being Newcastle and Cardiff that fall in the bottom 3.
- The lagging group has one second-tier city-region (Liverpool) and 3 third-tier city-regions (Medway, Blackpool and Doncaster).

Figure 1: GVA per capita (£s), 1997



Source: ONS

'North-South' – but exceptions. The geography of the three groups at the start of the period.

2.10 In terms of geography, there is a very broad 'North–South' division in GVA per capita across the groups, albeit with notable exceptions (Map 2, p.13):

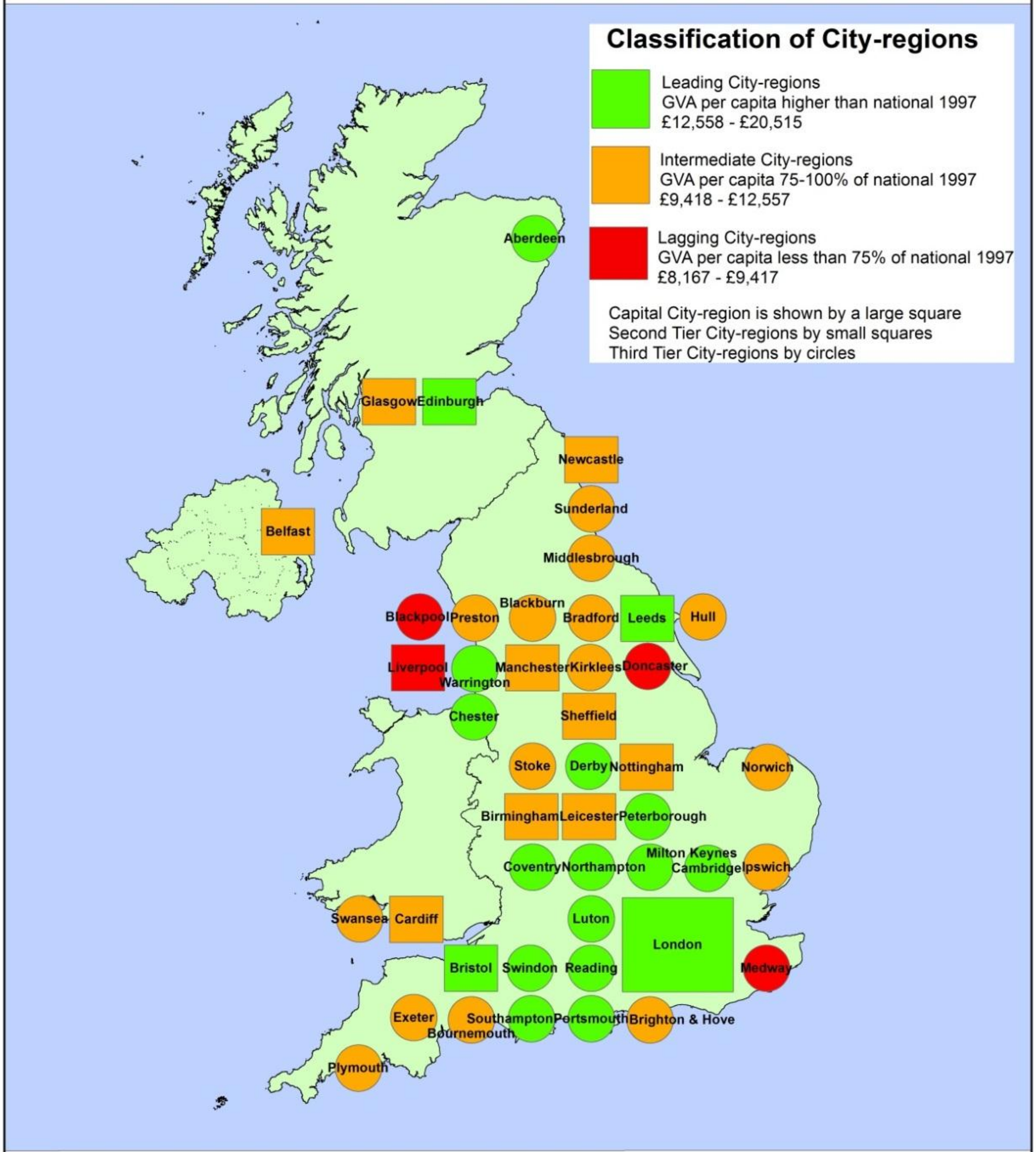
- 10 of the 18 city-regions in the **leading** group (56%) are located south of the Severn-Wash dividing line, including the capital city-region;
- the only second-tier city region in the south, Bristol, is in the leading group alongside just 2 of the 12 northern second-tier city-regions, Edinburgh and Leeds;
- this picture is reversed for the **intermediate** group with the majority of city-regions in the group - 18 of the 24 (75%) - located north of the Severn-Wash dividing line;
- these 18 northern city-regions are split evenly between second- and third-tier city-regions;
- three of the four city-regions in the **lagging group** – second-tier Liverpool and third-tier Blackpool and Doncaster - are in the north and one, third-tier Medway, in the south.

2.11 As Table 1 shows, three regions, all 'northern', had no 'leading' city-regions in 1997: the North East, Wales and Northern Ireland.

Table 1: UK city-regions by GVA per capita classification and region, 1997

Region	City-regions by GVA per capita classification 1997		
	Group 1: 'leading'	Group 2: 'intermediate'	Group 3: 'lagging'
North East	-	3	-
Yorkshire & the Humber	1	4	1
North West	2	3	2
East Midlands	2	2	-
West Midlands	1	2	-
East of England	3	2	-
South East	5	1	1
South West	2	3	-
Scotland	2	1	-
Wales	-	2	-
Northern Ireland	-	1	-
Total	18	24	4

Map 2: UK City-regions: Leading, Intermediate & Lagging - GVA per capita 1997



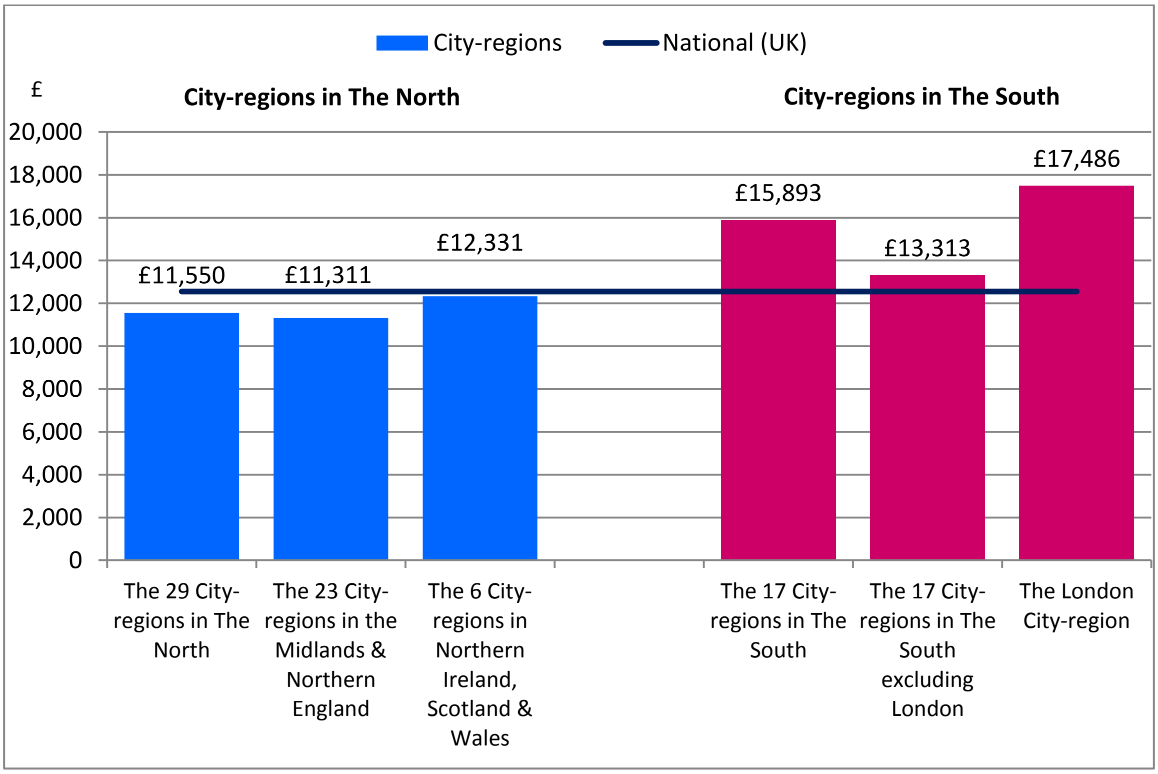
Sources: Boundaries downloaded from UK Data Service.
Contains Ordnance Survey data © Crown copyright and database right 2013.
GVA per capita data are from ONS. National data are for UK less extra regio.
Some city-region names have been simplified for presentational reasons.
City-regions are based on NUTS 3 approximations.

2.12 Figure 2 aggregates GVA per capita for our broad north-south division; differentiating, in the north, between city-regions in England and those in the devolved administrations and, in the south, between the capital city-region and the remainder.

London city-region dominates

2.13 The dominance of the capital city-region stands out, with a GVA per capita figure some 39% above the national in 1997. The southern city-regions together had a GVA per capita figure 27% above the national in 1997 but when London is removed from the group, this figure drops sharply to 6%. The northern city-regions, in contrast, together had a GVA per capita figure 8% below the national and nearly 10% in the case of the city-regions in the midlands and northern England. The six city-regions in the devolved administrations of Northern Ireland, Scotland and Wales together came closer to the national average with a figure 2% below.

Figure 2: GVA per capita, 1997: City-regions in the North and the South

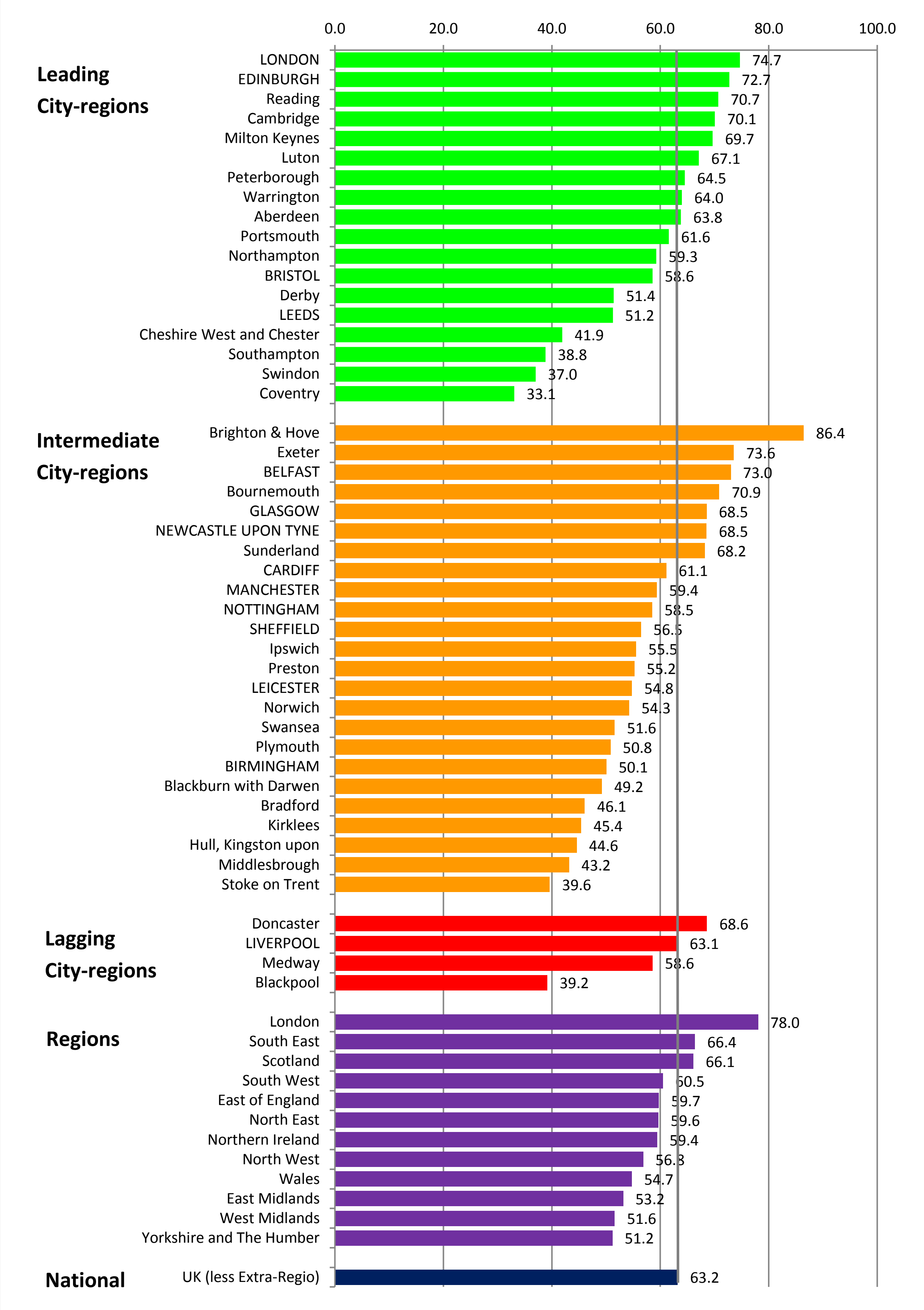


Source: ONS

Economic performance in the growth years, 1997-2008

2.14 Between 1993 and 2008 the country experienced the longest period of uninterrupted growth since the early 1970s recession that had itself ended the post second World War 'golden years' of growth. We have consistent GVA data for our city-regions for twelve of these fifteen years, 1997-2008. Over this period, GVA per capita grew nationally by 63%. Figure 3 shows the changes in GVA per capita for our 46 city-regions over the period by their GVA per capita classification in 1997.

Figure 3: GVA per capita, % change, 1997-2008



Source: ONS; City-regions are approximated using NUTS 3 boundaries. City groupings are based on GVA per capita in 1997.

The strong do not always get stronger

2.15 It is clear that there is no consistent relationship between high levels of GVA per capita at the start of the period and strong growth during it. City-regions that were leading at the start were more likely than the intermediate or lagging to have above national growth but there was variation:

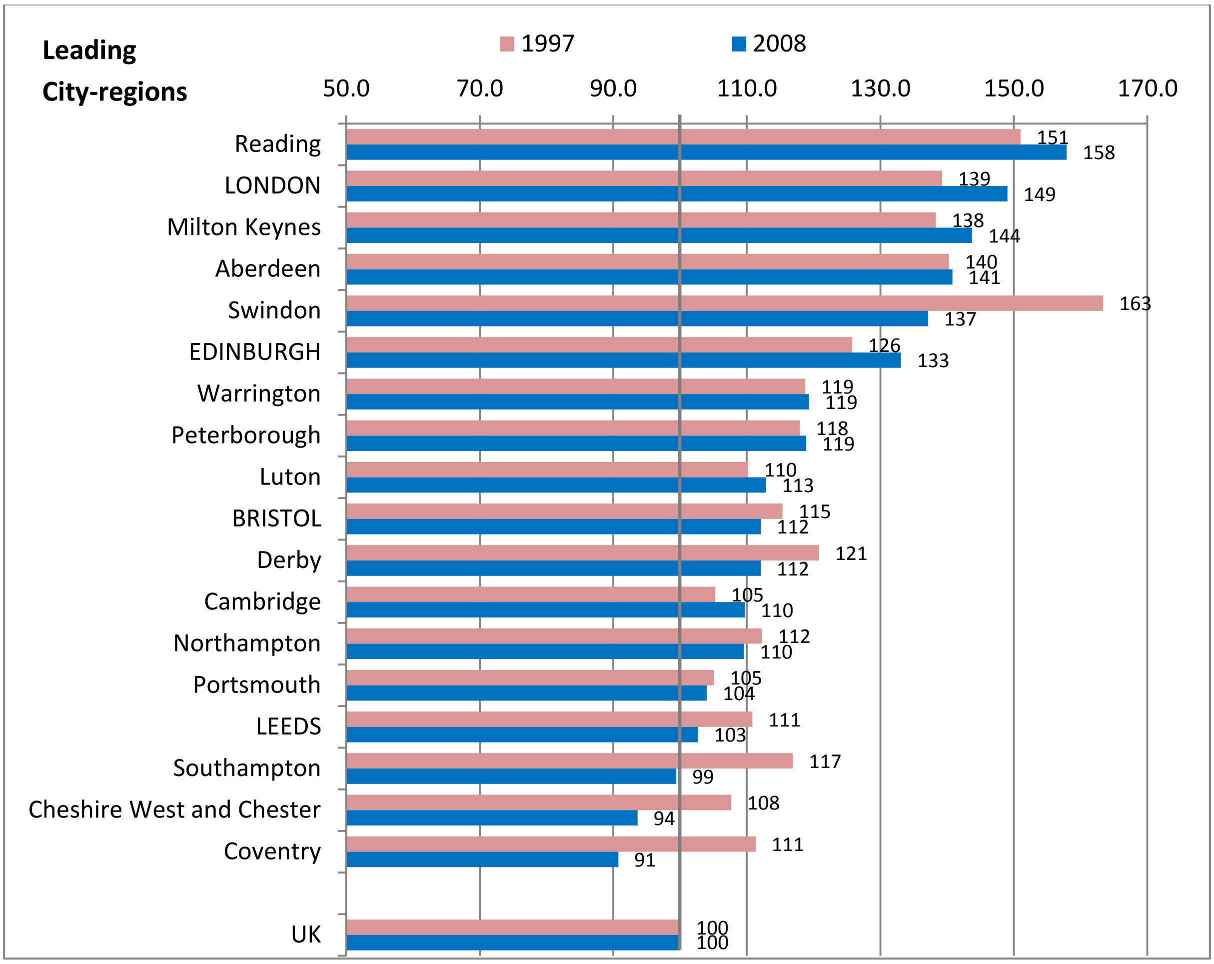
- one half of the 18 leading city-regions had growth rates above the national but one half did not;
- just under a third (7) of the 24 intermediate city-regions had above national growth;
- as did just one of the four city-regions in the lagging group.

Significant variation in performance within groups

2.16 Figures 4 to 6 show the changes in levels of GVA per capita expressed as indices relative to the national over the period for each of the three groups. The variation in performance within the groups is evident.

2.17 In the leading group (Figure 4) the shift varied from a drop of 26 percentage points in Swindon (from 63% above the national average in 1997 to 37% above in 2008) to an increase of 10 percentage points in the London city-region (from 39% above the national figure in 1997 to 49% above in 2008). Reading and Edinburgh each had an increase of 7 percentage points and Milton Keynes and Cambridge 5 and 4 percentage points, respectively. At the other end of the range, Coventry, Southampton and Cheshire West & Chester had falls of 21, 17 and 14 percentage points respectively, which saw them fall from the leading classification in 1997 to the intermediate one in 2008. Derby and Leeds also had falls of 9 and 8 percentage points respectively, but not enough to see them fall out of the group over the period. 15 of the 18 city-regions in the leading classification in 1997 remained in it in 2008.

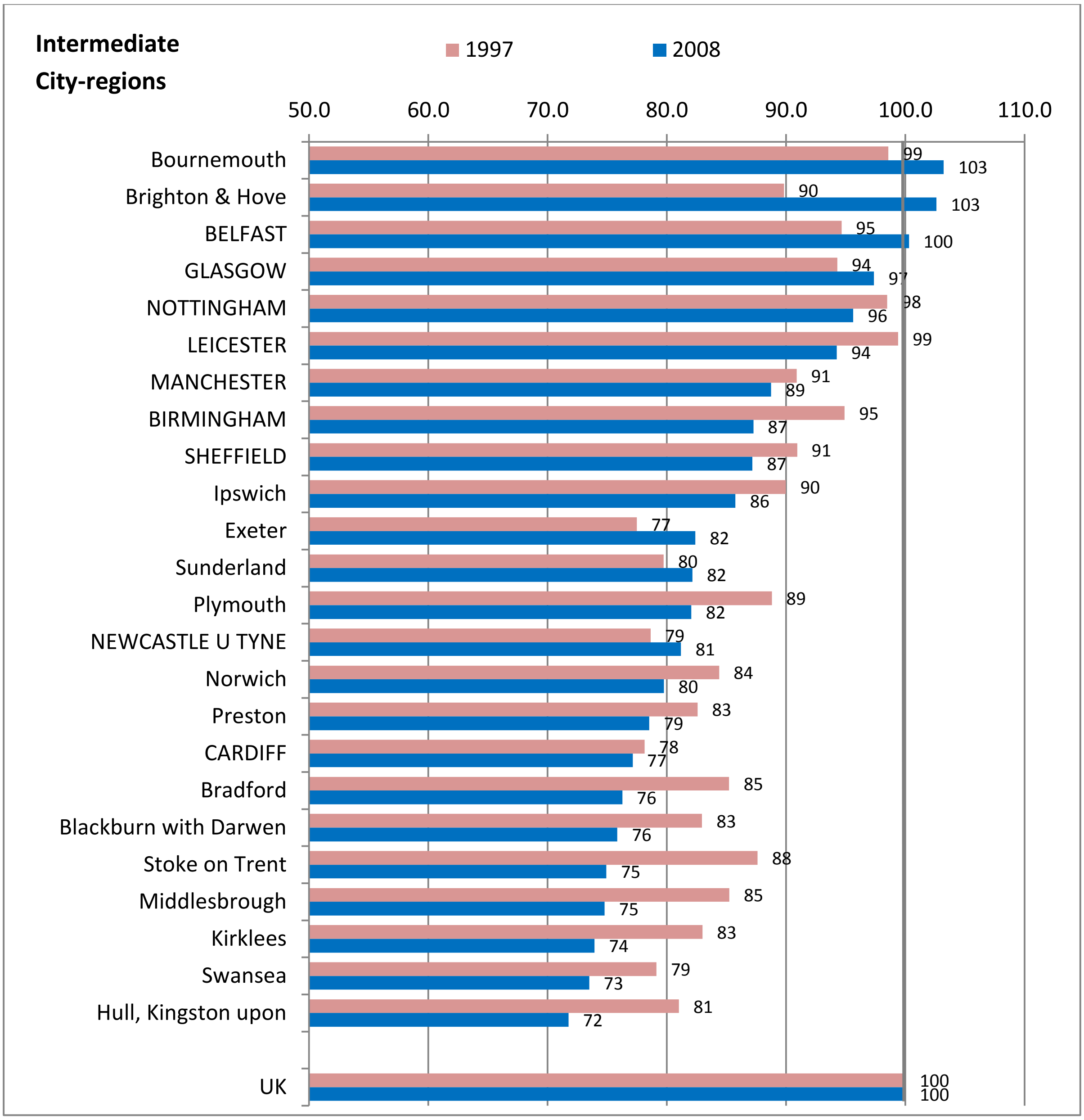
Figure 4: GVA per capita 1997 and 2008 – Leading City-regions, indexed to National, UK=100



Source: ONS

2.18 In the intermediate group (Figure 5), changes ranged from an increase of 13 percentage points in Brighton and Hove (from 10% below national in 1997 to 3% above in 2008) to a fall of 13 percentage points in Stoke on Trent (from 12% below national in 1997 to just over 25% below in 2008). Brighton and Hove's increase saw it move from its intermediate classification in 1997 to the leading group in 2008, along with Bournemouth and, just, Belfast as all three had GVA per capita levels above national at the end of the growth years. At the other end of the range, there were relatively big fall in relativities in Stoke on Trent (a fall of 13 percentage points), Middlesbrough (a 10 percentage points fall) and Kingston upon Hull, Kirklees and Bradford (each with falls of 9 percentage points) and Birmingham with a fall of 8 percentage points. 4 of these – Stoke on Trent, Middlesbrough, Kingston upon Hull and Kirklees – along with Swansea fell into the lagging category with levels below 75% of the national average in 2008.

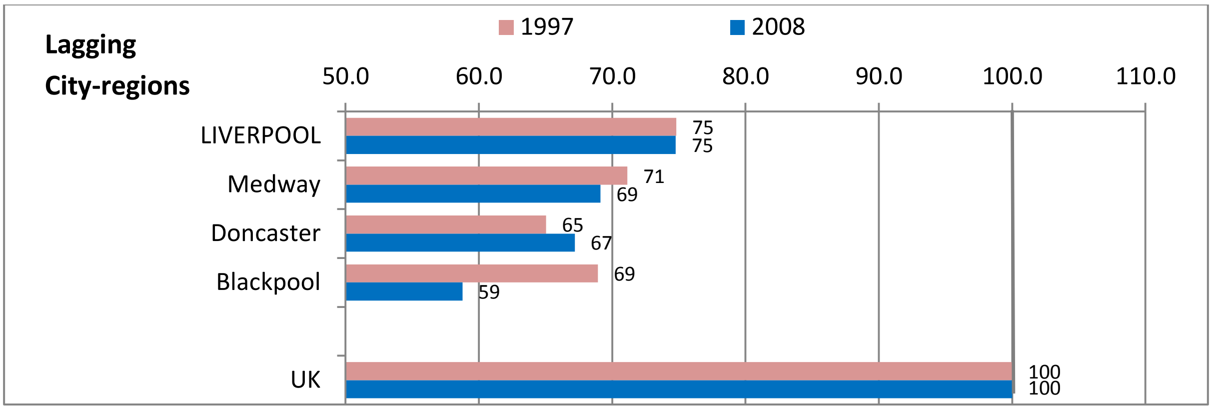
Figure 5: GVA per capita 1997 and 2008 – Intermediate City-regions, indexed to National, UK=100



Source: ONS

2.19 In the lagging group (Figure 6), Blackpool stands out with a fall of 10 percentage points in its relativity (from 31% to 41% below over the period). The 2 percentage point fall in Medway was mirrored by a similar increase in Doncaster while Liverpool saw its level unchanged at just fractionally below 75% of the national.

Figure 6: GVA per capita 1997 and 2008 – Lagging City-regions, indexed to National, UK=100



Source: ONS

2.20 Table 2 summarises what all these shifts in GVA per capita levels meant for the classification in 2008, at the onset of recession. As described above:

- 3 city-regions (Southampton, Cheshire West & Chester, and Coventry) fell out of the 1997 leading group into the 2008 intermediate group;
- 3 city-regions (Bournemouth, Brighton & Hove, and Belfast) moved from the intermediate group in 1997 to the leading group in 2008;
- 5 city-regions (Stoke on Trent, Middlesbrough, Kirklees, Swansea and Kingston upon Hull) moved from the intermediate group in 1997 to the 2008 lagging group.

Table 2: Changing GVA per capita classification, 1997 and 2008 - city-regions ranked by 2008 GVA per capita descending

City-region	North (N) – South (S)	1997	2008
Reading	S		
LONDON	S		
Milton Keynes	S		
Aberdeen	N		
Swindon	S		
EDINBURGH	N		
Warrington	N		
Peterborough	S		
Luton	S		
BRISTOL	S		
Derby	N		
Cambridge	S		
Northampton	N		
Portsmouth	S		
Bournemouth	S		
LEEDS	N		
Brighton & Hove	S		
BELFAST	N		
Southampton	S		
GLASGOW	N		

NOTTINGHAM	N		
LEICESTER	N		
Cheshire West and Chester	N		
Coventry	N		
MANCHESTER	N		
BIRMINGHAM	N		
SHEFFIELD	N		
Ipswich	S		
Exeter	S		
Sunderland	N		
Plymouth	S		
NEWCASTLE UPON TYNE	N		
Norwich	S		
Preston	N		
CARDIFF	N		
Bradford	N		
Blackburn with Darwen	N		
Stoke on Trent	N		
Middlesbrough	N		
LIVERPOOL	N		
Kirklees	N		
Swansea	N		
Hull, Kingston upon	N		
Medway	S		
Doncaster	N		
Blackpool	N		

Notes: Leading: green; intermediate: amber; lagging: red. Capital city-region in capital letters & bold; second-tier in capital letters

London grew fastest – but some third-tiers better performance than second-tier

2.21 Map 3 shows the geography of change in GVA per capita levels over the growth years by the GVA per capita classification and by tier or place in the urban system/hierarchy.

2.22 The map – and Figures 4 to 6 above - show that there is no direct relationship between size - in terms of place in the urban system - and growth:

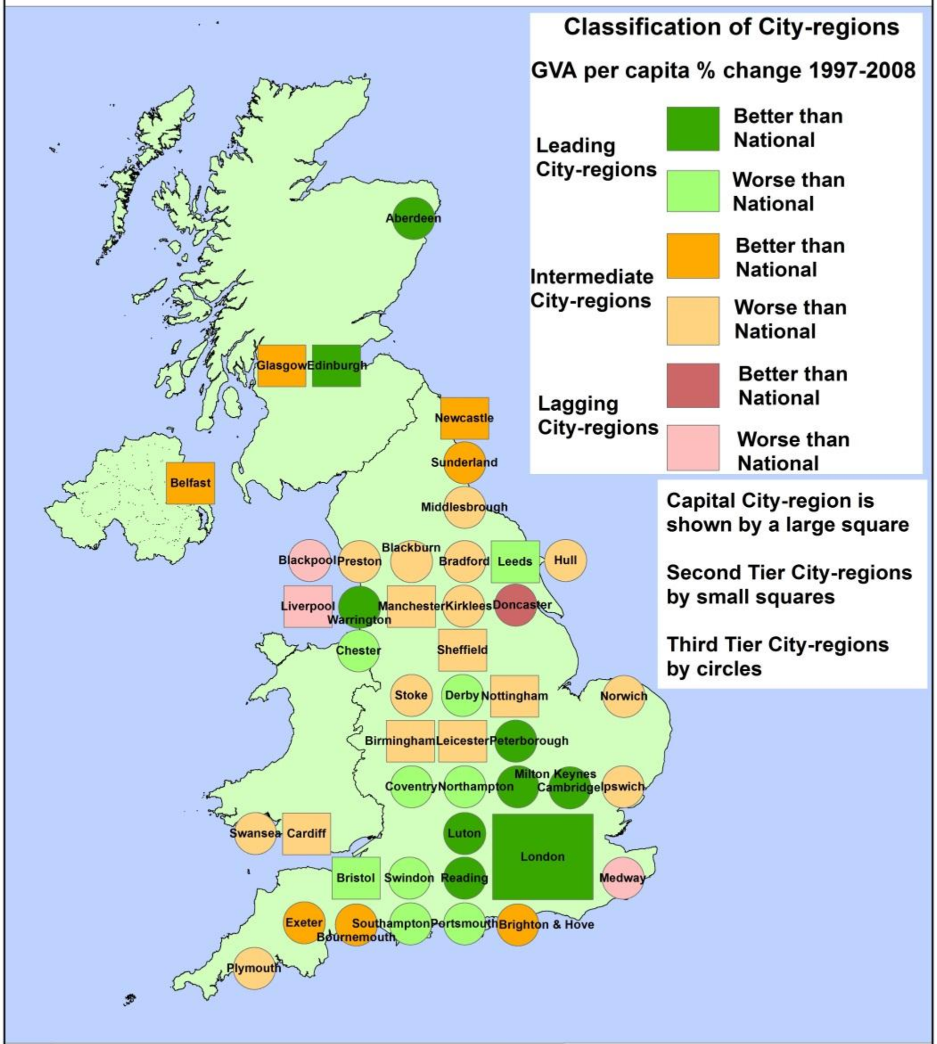
- while the capital city-region did have the fastest growth rate among the leading and the second fastest growth rate overall;
- only 4 of the 13 second-tier city-regions (31%) had above national growth and positive increases in their GVA per capita levels indexed to the UK (Edinburgh, Belfast, Glasgow and Newcastle upon Tyne) and
- more than a third of the 32 third-tier city-regions (12, 38%) had above national growth rates and positive increases in their GVA per capita levels indexed to the UK (Brighton & Hove, Reading, Milton Keynes, Bournemouth, Exeter, Cambridge, Luton, Sunderland, Doncaster, Aberdeen, Warrington and Peterborough).

'North-South' – the gap in performance widens but exceptions: northern high performers and city-regions in the devolved administrations

2.23 By geography, however, there was a more marked pattern:

- Only 8 of the 29 northern city-regions (28%) had above national rates of growth; while
- 9 of the 17 southern city-regions (53%) had above national rates of growth.
- The 'South' had a concentration of high performers with only one lagging city-region (Medway).
- The 'North' had some high performing but many intermediate and three lagging (Liverpool, Blackpool and Doncaster).

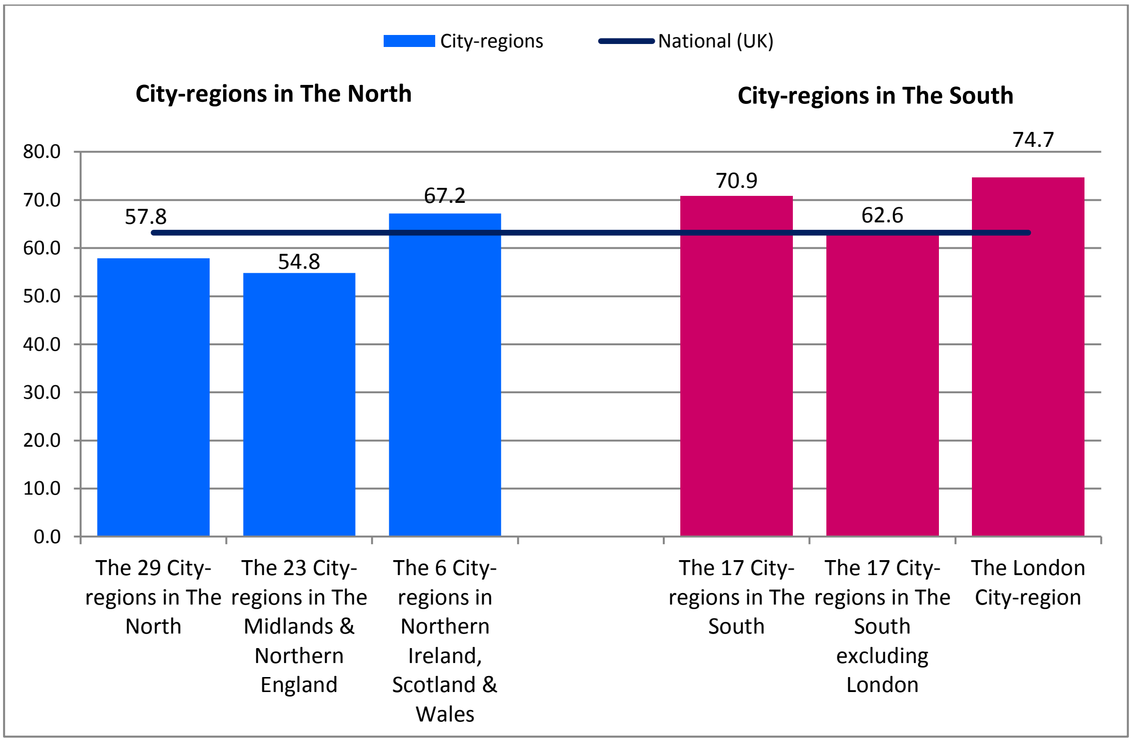
Map 3: UK City-regions: Leading, Intermediate, Lagging GVA per capita & Percentage Change 1997-2008



Sources: Boundaries downloaded from UK Data Service.
Contains Ordnance Survey data © Crown copyright and database right 2013.
GVA per capita data are from ONS. National data are for UK less extra regio.
Some city-region names have been simplified for presentational reasons.
City-regions are based on NUTS 3 approximations.

2.24 Figure 7 shows the percentage change in GVA per capita for the city-regions by our broad north-south division; again differentiating, in the north, between city-regions in England and those in the devolved administrations and, in the south, between the capital city-region and the remainder. GVA per capita grew below the national rate in the northern and above it in the southern city-regions. In the north, however, the 6 city-regions in the devolved administrations stand out with a combined growth rate above national and above that for the southern city-regions excluding London. The London city-region dominates change in the south – and nationally. Only one - southern - city-region had a higher growth rate, third-tier Brighton and Hove.

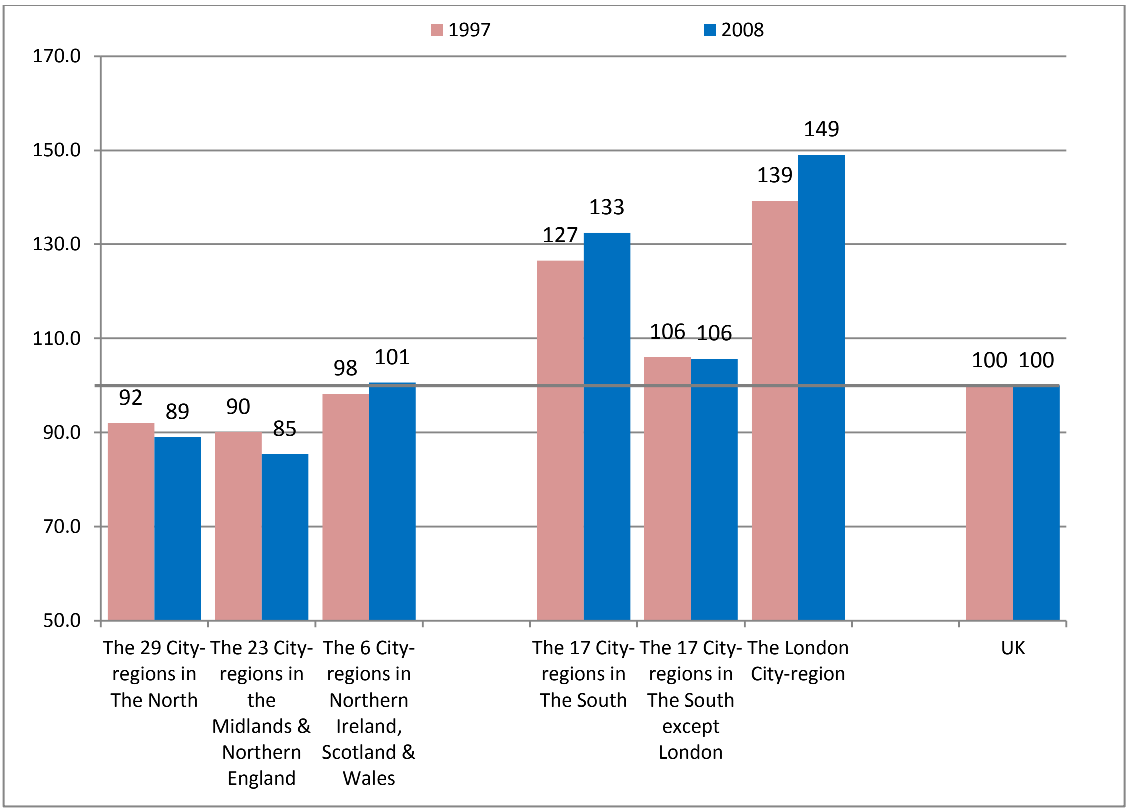
Figure 7: GVA per capita % change, 1997-2008: City-regions in the North and the South



Source: ONS

2.25 Figure 8 shows the change in GVA per capita indexed to the national figure for the same geographical breakdown. The relatively strong performance of the 6 city-regions in the devolved administrations in the north stands out. Together they shifted from around 2 percentage points below the national index to 1 percentage point above it. The national relativities for the city-regions in the midlands and northern England, in sharp contrast, fell – by nearly 5 percentage points. The improvement was in the southern city-regions and especially London, with the relativity indices rising, respectively, by nearly 6 and 10 points. The gaps between northern and southern city-regions widened accordingly: from 35 percentage points in 1997 to 44 percentage points in 2008.

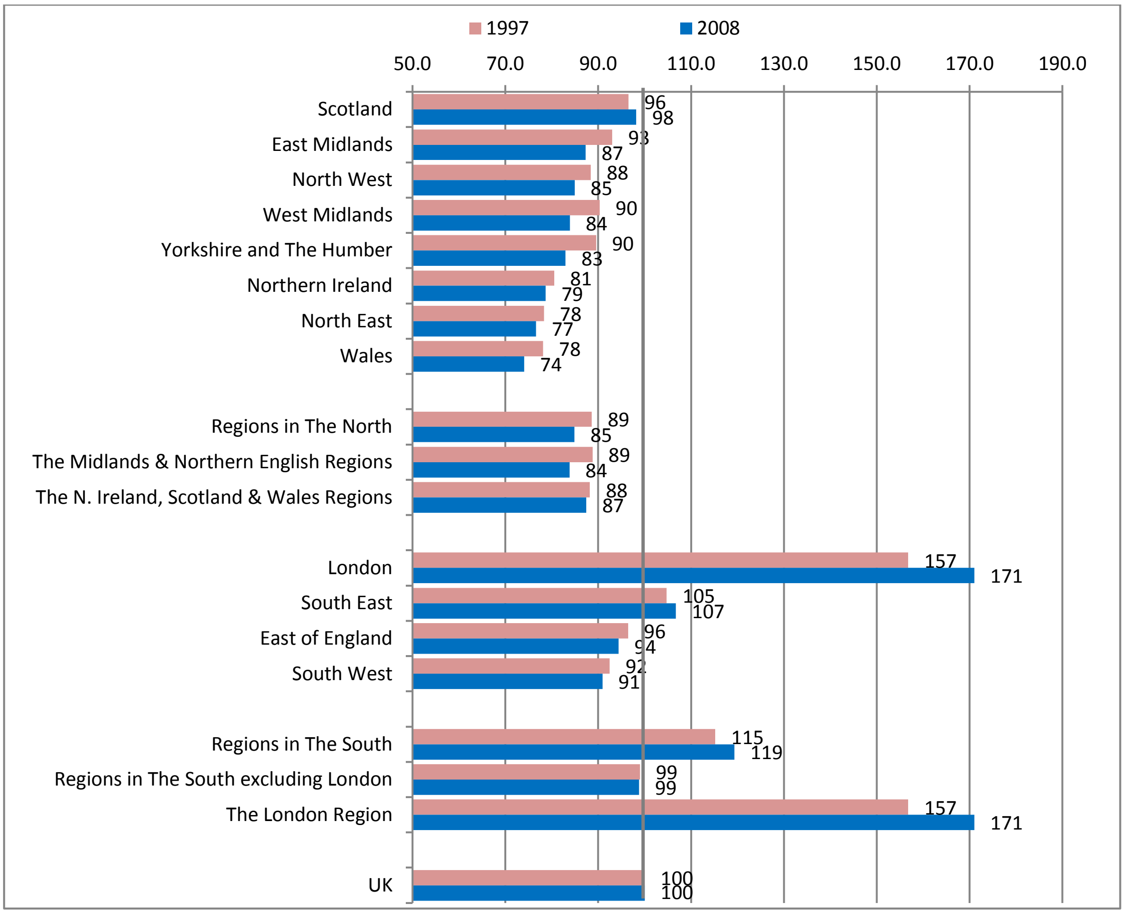
Figure 8: GVA per capita 1997 and 2008 – City-regions in the North & the South, indexed to National, UK=100



Source: ONS

2.26 Figure 9 provides the regional context for the city-regional changes. It summarises changes in regional GVA per capita indexed to the national figure for 1997 and 2008. The London region is Greater London, the more tightly-bound core of the larger London city-region in our analysis. The figure clearly shows the spatially unbalanced nature of productivity change. None of the northern regions had GVA per capita levels above the national in either 1997 or 2008, although Scotland came closest with its relativity increasing from 4% to just 2% below the national over the period. It was the only northern region with an above national increase in GVA per capita and positive increase in GVA per capita relativity in the 12-year period. While GVA per capita increased above national in the southern regions as a group, this performance was clearly driven by the South East and London regions, the only southern regions to have above national increases in GVA per capita and related positive increases in GVA per capita relativities. The London region increased its relativity by some 14 percentage points, from 57% above the national in 1997 to 71% above in 2008. The widening north-south gap is indicated in the difference in relativities between the northern and southern regions in the two years. In 1997, the gap was 26 percentage points – the northern regions having a figure 11% below the national and the southern regions a figure 15% above. In 2008 it had widened to 34 percentage points – the northern regions having a figure 15% below and the southern regions 19% above.

Figure 9: GVA per capita 1997 and 2008 in the Regions, indexed to National, UK=100



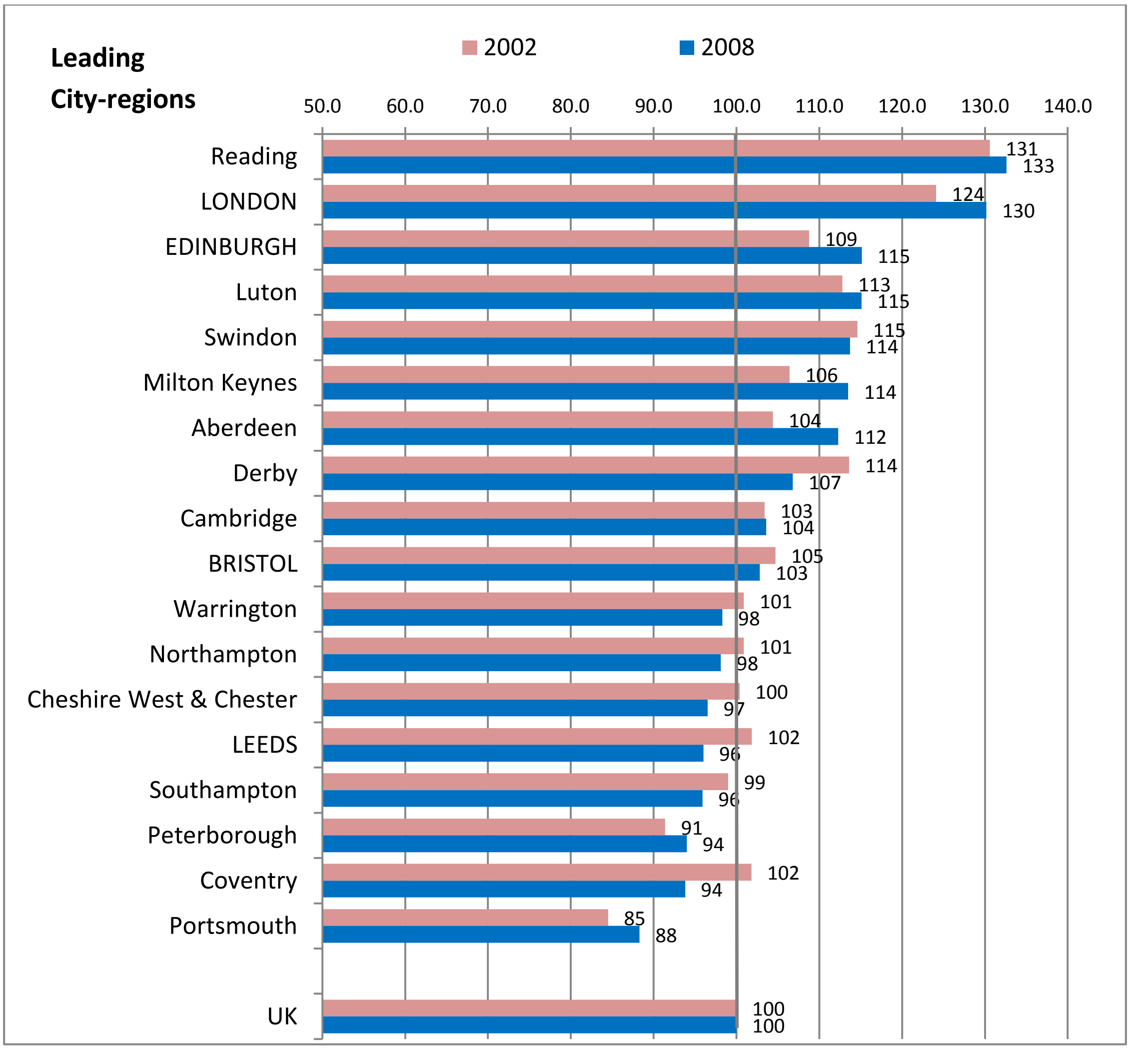
Source: ONS

Productivity – 'north-south' again

2.27 Data are available for comparing productivity in terms of employment as opposed to population, but only covering the period 2002-2008. The data are for GVA per job filled.

2.28 Figures 10 to 12 show GVA per job filled relative to the national figures in 2002 and 2008 for city-regions classified by GVA per capita in 1997. The two classifications are, unsurprisingly, closely related. In 2002, 15 of the 18 leading regions in terms of GVA per capita also had above national GVA per job filled, ranging from just above national (Cheshire West and Chester) to 31% above (Reading) (Figure 10).

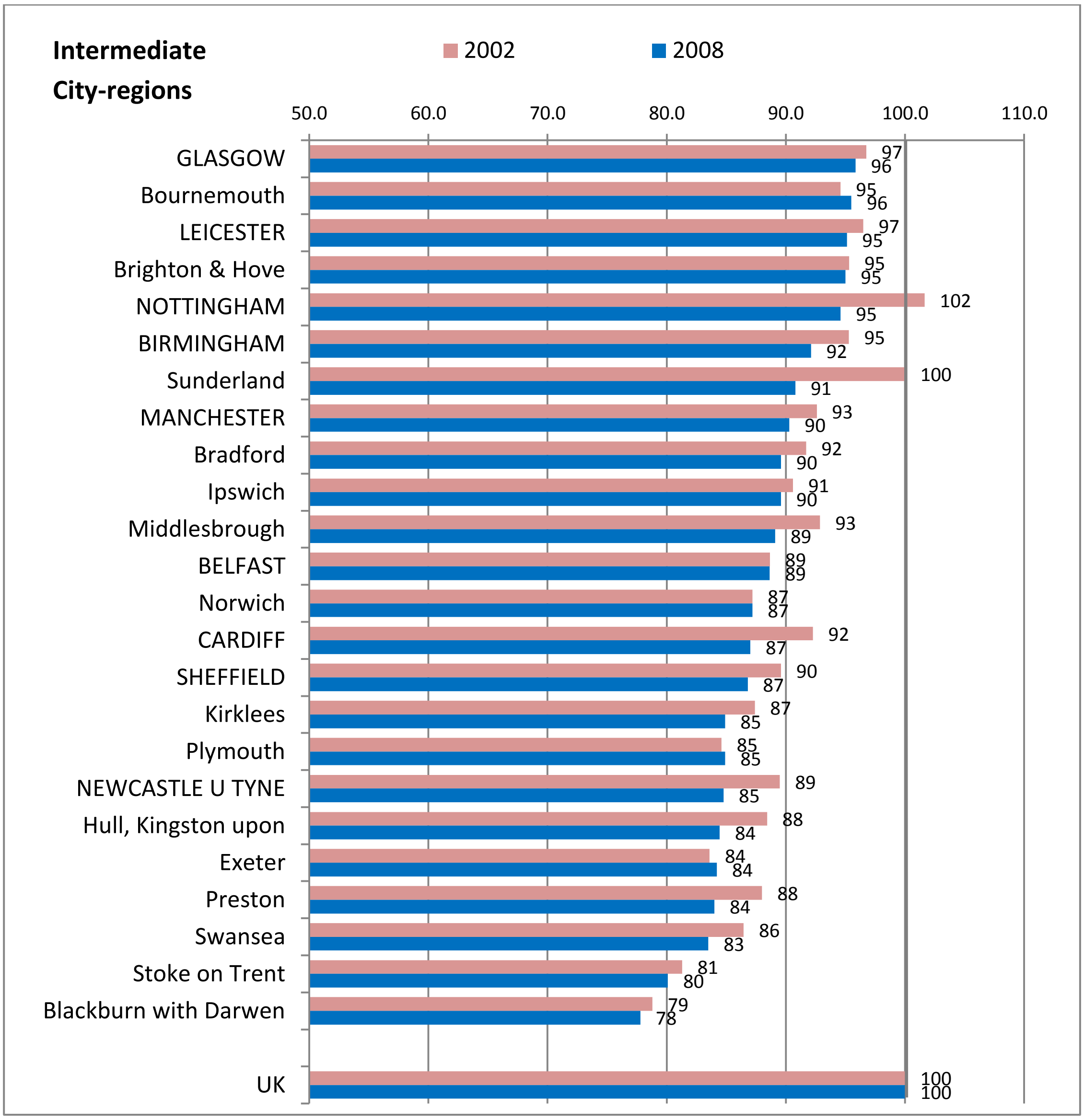
Figure 10: GVA per job filled 2002 & 2008 – Leading City-regions by GVA per capita classification 1997 & by Tier, UK=100



Source: ONS. Capital and second-tier in capitals.

2.29 Only one of the intermediate city-regions on GVA per capita had GVA per job filled above national in 2002 – Nottingham (Figure 11). The rest had GVA per job filled figures ranging from 21% below (Blackburn with Darwen) to the same as the national (Sunderland).

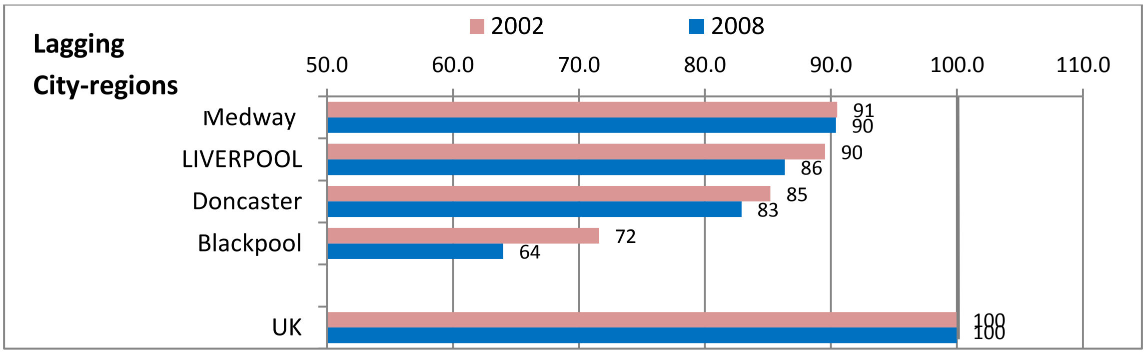
Figure 11: GVA per job filled 2002 & 2008 – Intermediate City-regions by GVA per capita classification 1997 & by Tier, UK=100



Source: ONS. Second-tier in capitals.

2.30 Unsurprisingly, all of the lagging city-regions had GVA per job filled levels below national, although it is notable that 3 of them had 'intermediate' levels. Only one – Blackpool – had a GVA per job filled less than 75% of the national average (Figure 12).

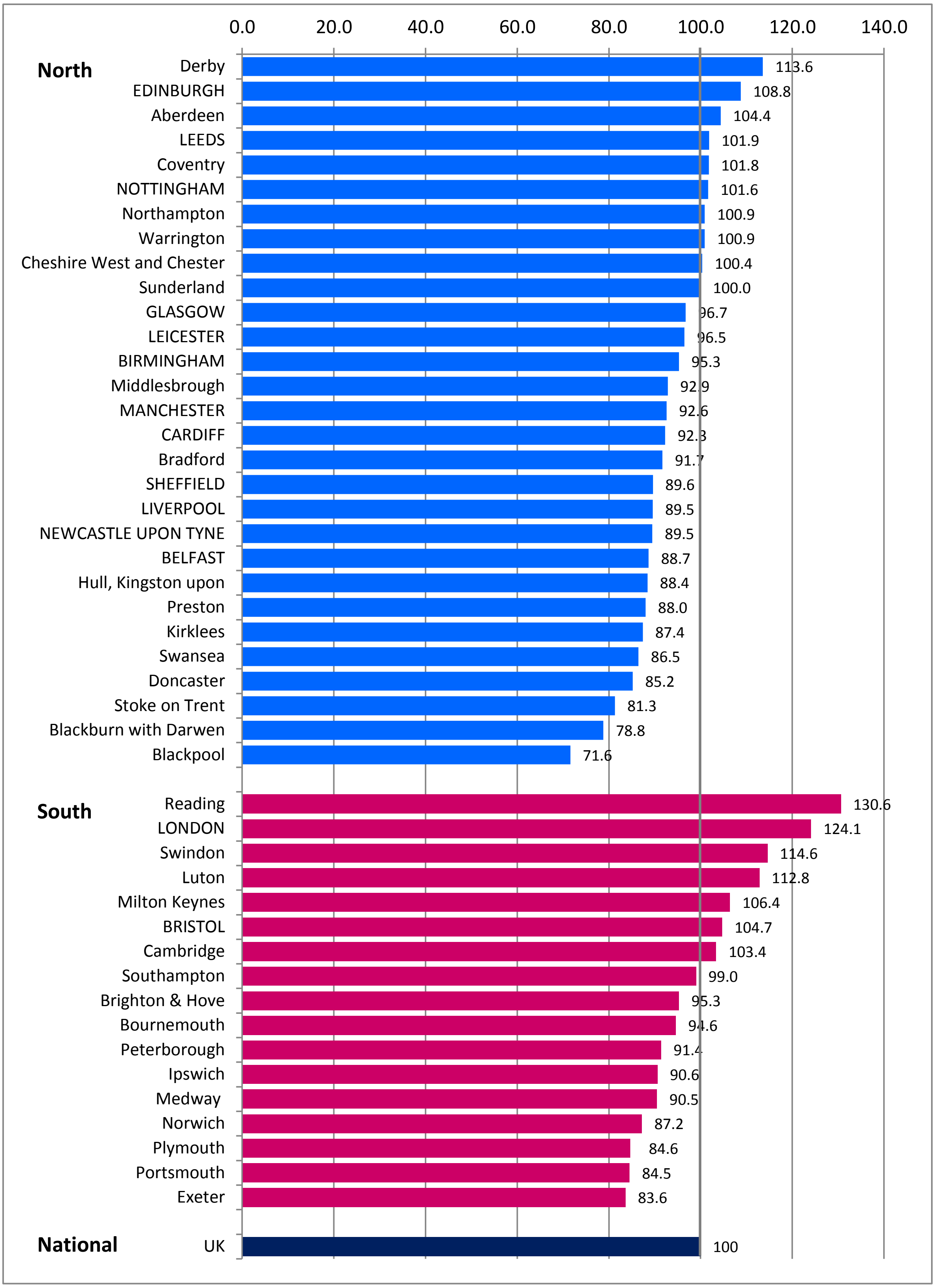
Figure 12: GVA per job filled 2002 & 2008 – Lagging City-regions by GVA per capita classification 1997& by Tier, UK=100



Source: ONS. Second-tier in capitals.

2.31 Figure 13 shows the geography of GVA per job filled. A north-south pattern is apparent. Only 9 of the 29 northern city-regions had above national levels in 2002 and only three of these with levels 3 percentage points or more above the national figure. Derby had the highest relativity at 14% above national. 7 of the 17 southern city-regions, in contrast had GVA per job filled levels above national and all by 3 percentage points or more. The highest was Reading with a level 31% above national, closely followed by London with a level 24% above national.

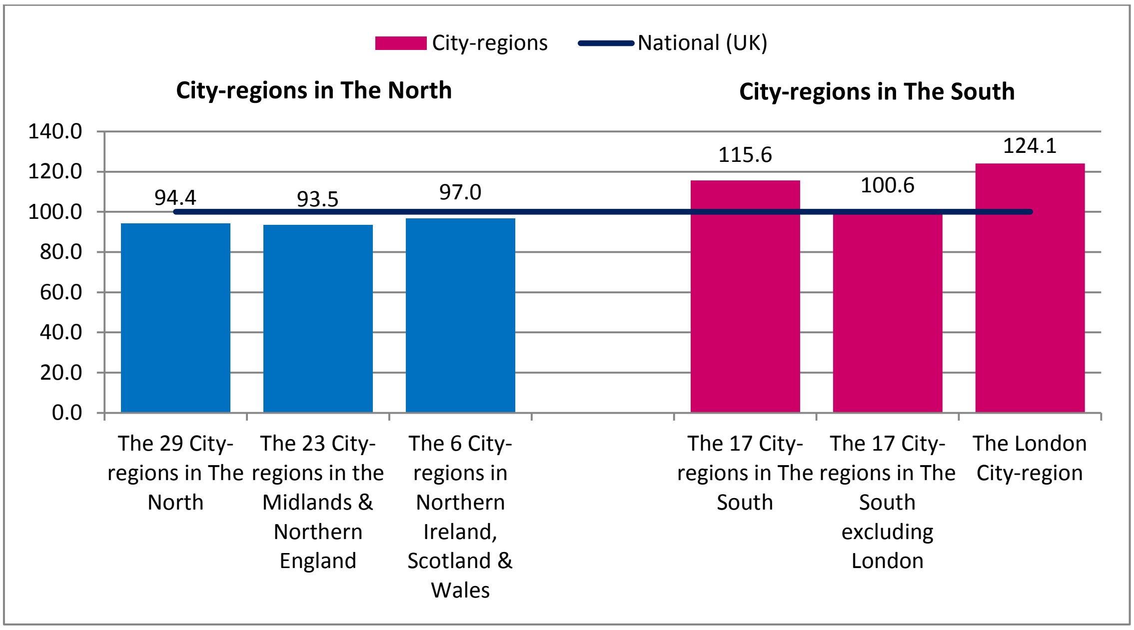
Figure 13: Nominal GVA per job filled, 2002, UK=100



Source: ONS

2.32 Figure 14, summarising the data for our broad North-South geography reinforces this picture. The 29 northern city-regions together had a GVA per job filled figure nearly 6 percentage points below national. Their southern counterparts had a figure nearly 16% above national – an overall gap of 21 percentage points.

Figure 14: Nominal GVA per job filled in city-regions in the North & the South, 2002, UK=100

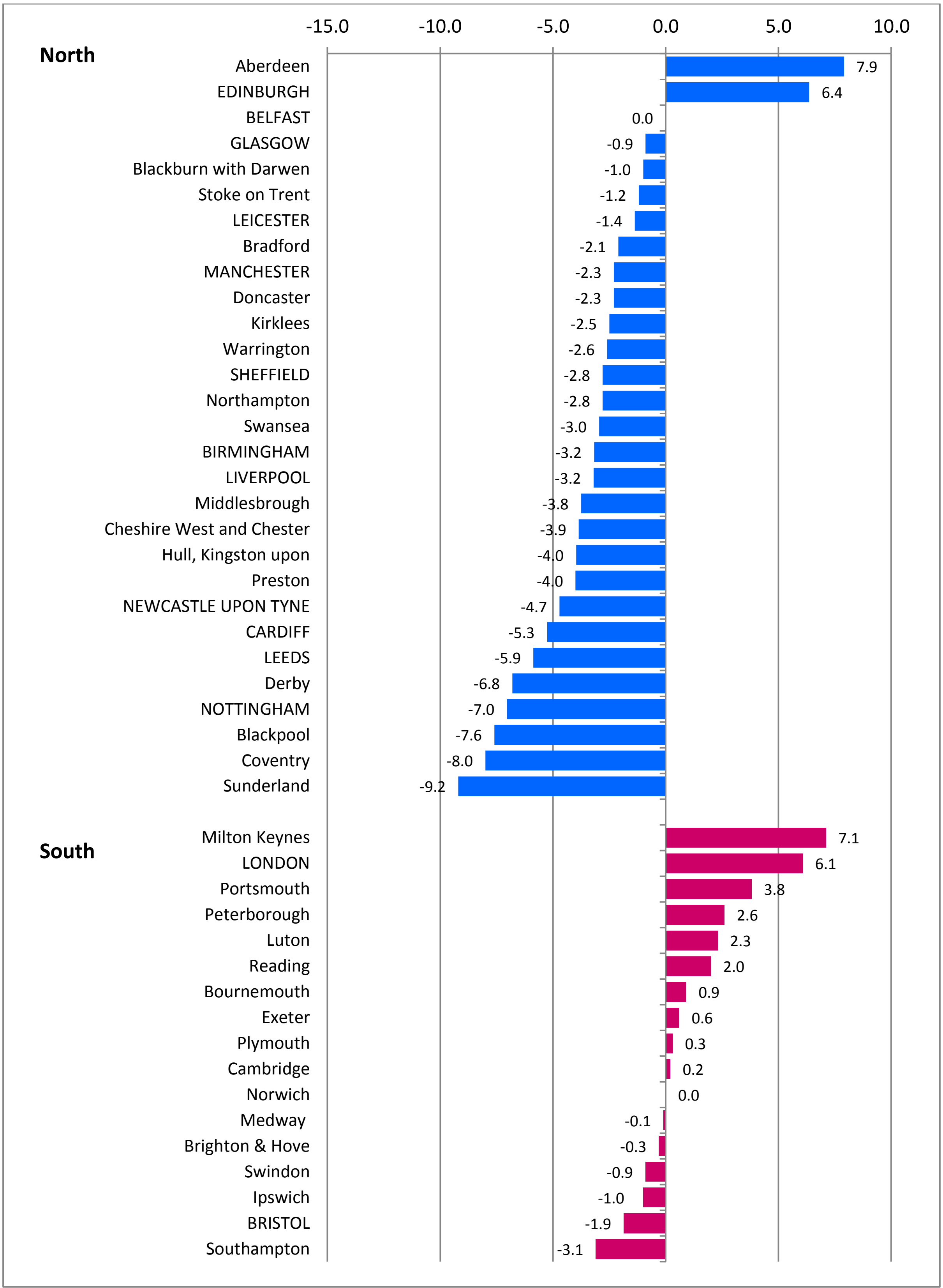


Source: ONS

Change in Productivity 2002-2008

2.33 Figure 15 shows percentage point change in GVA per job filled between 2002 and 2008 relative to national change. A north-south pattern is repeated. Only 2 of the 29 northern city-regions, both in Scotland – third-tier Aberdeen and second-tier Edinburgh – had increases above national. 10 of the 17 southern city-regions managed to increase productivity on this measure faster than the national average: including notably London and third-tier Milton Keynes, Portsmouth, Peterborough, Luton and Reading.

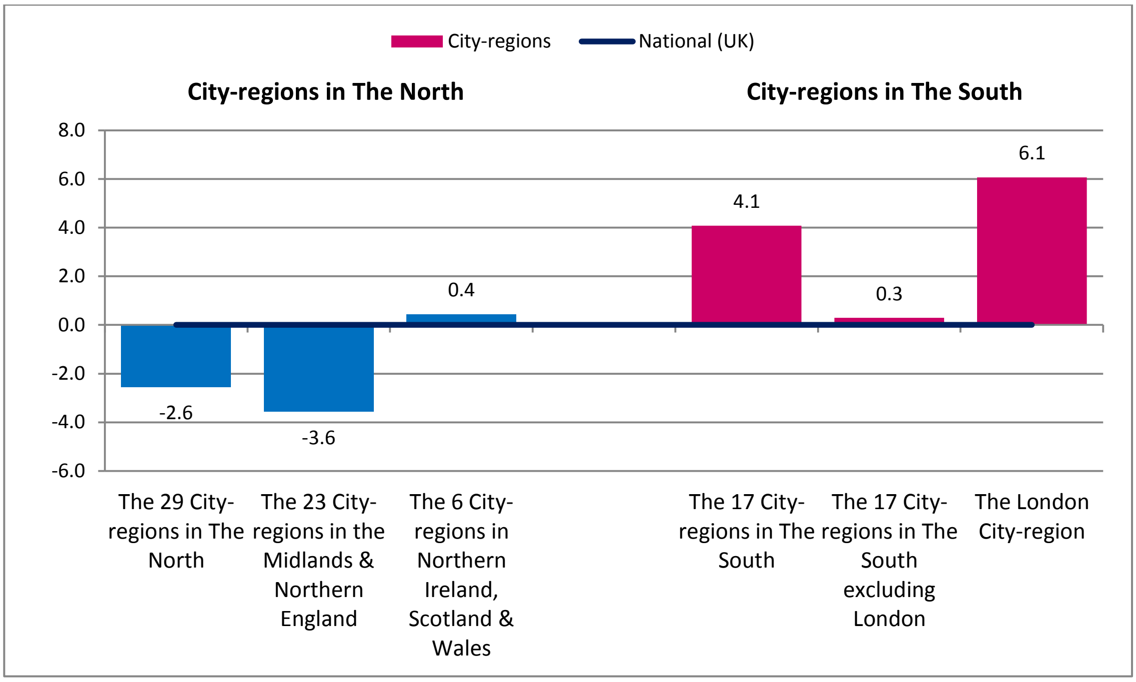
Figure 15: Nominal GVA per job filled, 2002-2008 percentage point change relative to UK=100



Source: ONS

2.34 Figure 16 summarises the change by our broad north-south geography. Productivity fell in the northern city-regions as a group and rose in the southern group. It is noticeable that the city-regions in the devolved administrations – driven, as already noted, by Aberdeen and Edinburgh - actually matched the slight increase for the southern city-regions when London is excluded.

Figure 16: Percentage point Change in Nominal GVA per job filled in city-regions in the North & the South, 2002-8, where UK=100

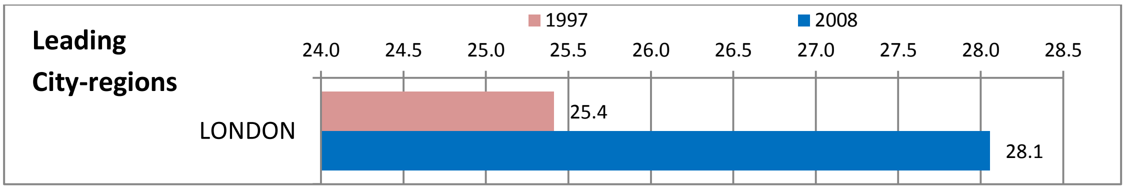


Source: ONS

Changing relative economic weight: a shift southwards

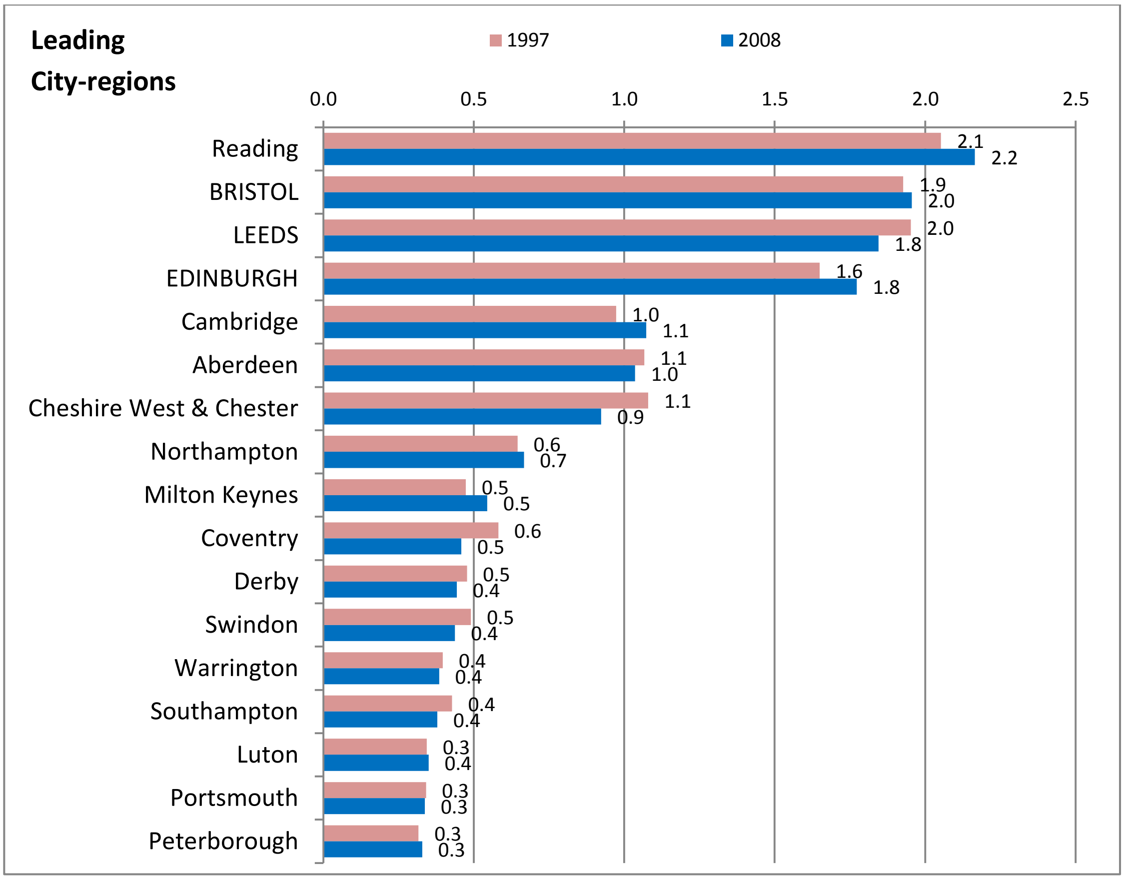
2.35 Figures 17-21 show the change in total GVA by city-regions classified by GVA per capita levels and tier in 1997. Total GVA increased between 1997 and 2008 above the national rate in half of the leading group with the highest percentage increase occurring in London. Overall the leading group's share of total national GVA increased from 40.6% to 43.2%. London's increase accounted for the lion's share (Figure 17).

Figure 17: Total GVA % share of National – Leading City-region – London, 1997 & 2008



Source: ONS

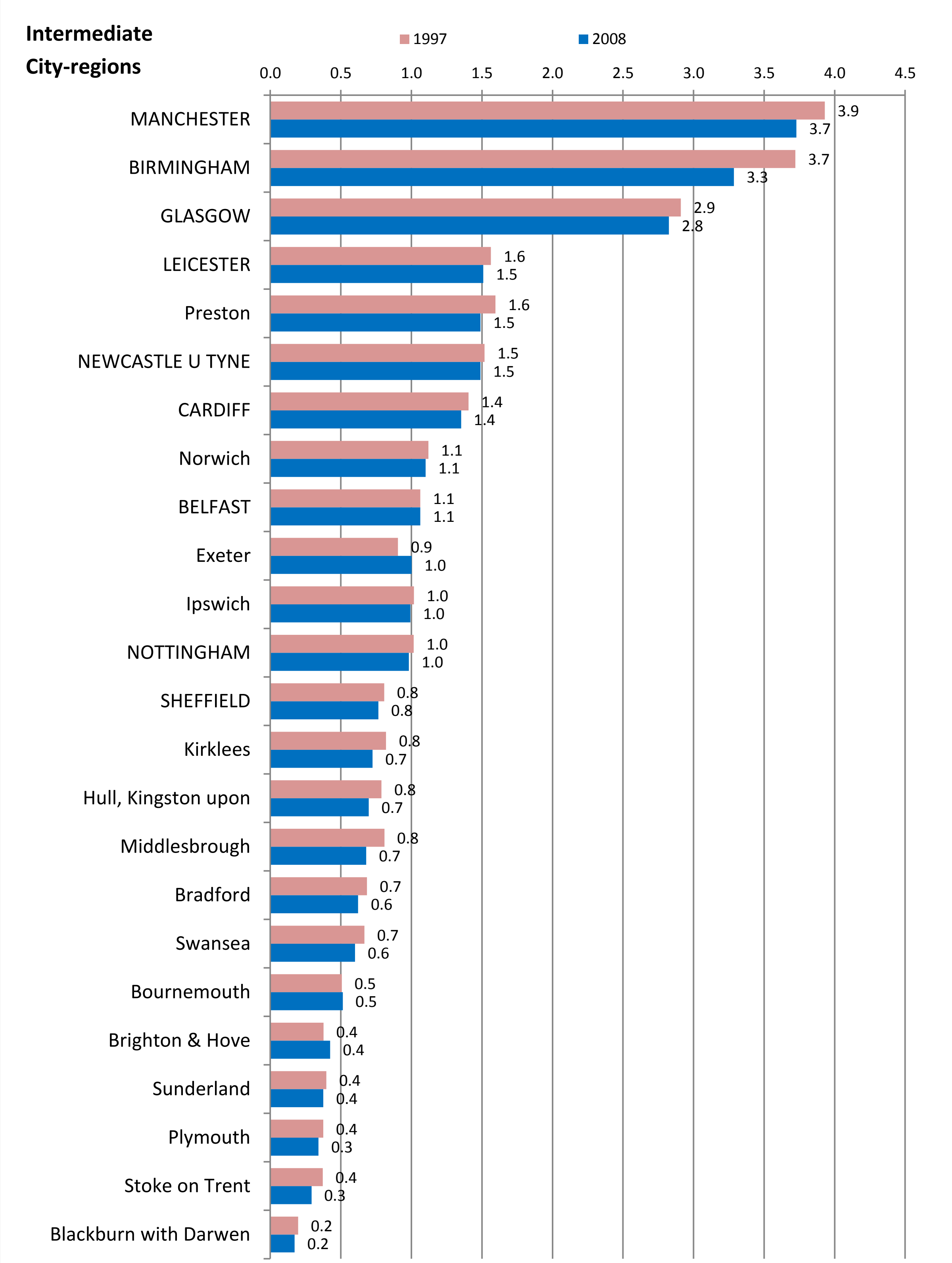
Figure 18: Total GVA % share of National – Leading City-regions except London & by tier, 1997 & 2008



Source: ONS; Second-tier city-regions are in capitals

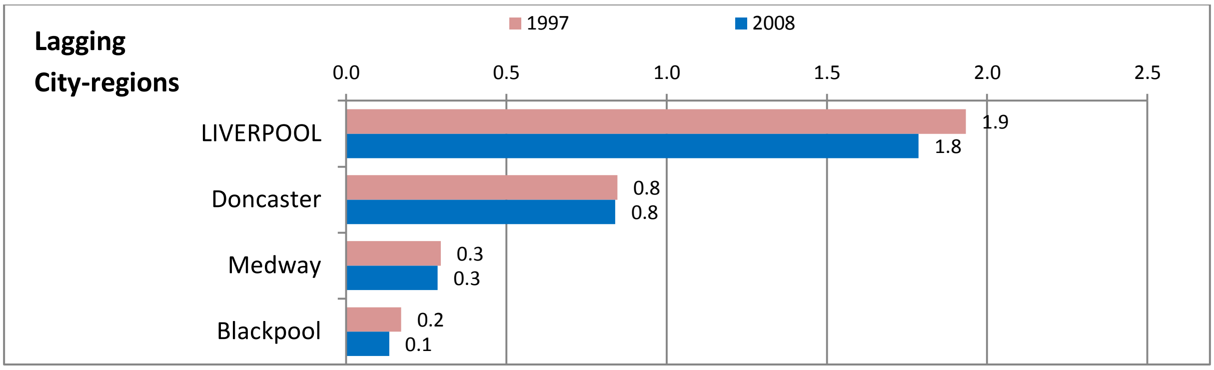
2.36 In contrast, total GVA only increased above national in 4 of the 24 intermediate city-regions and the group's share fell from 28.6% to 27.0%. None of the 4 lagging city-regions had an above national increase in total GVA and the lagging group's share of total GVA fell slightly, from 3.2% to 3.0%.

Figure 19: Total GVA % share of National – Intermediate City-regions & by Tier, 1997 & 2008



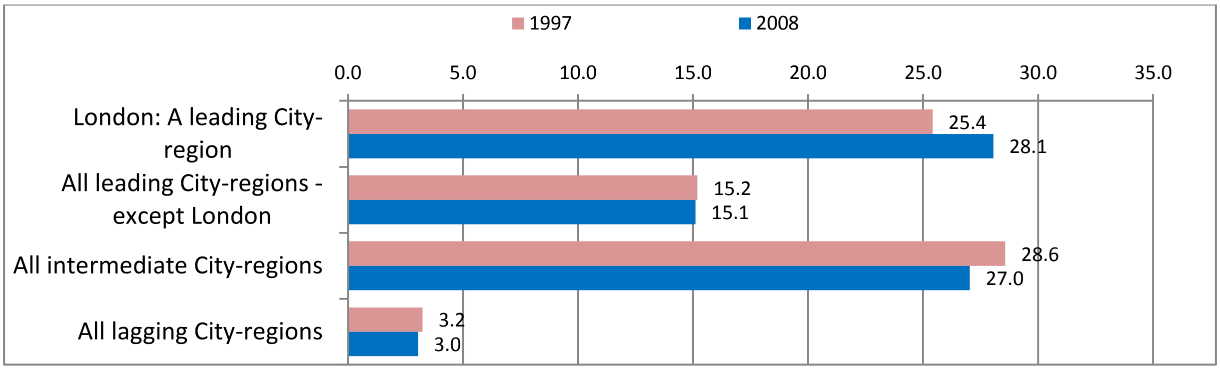
Source: ONS; Second-tier city-regions are in capitals

Figure 20: Total GVA % share of National – Lagging City-regions & by Tier, 1997 & 2008



Source: ONS; Second-tier city-regions are in capitals

Figure 21: Total GVA % share of National – Summary: London, Leading city-regions excluding London, Intermediate & Lagging City-regions (1997 classification), 1997 & 2008



Source: ONS

Changes in Total GVA 1997-2008

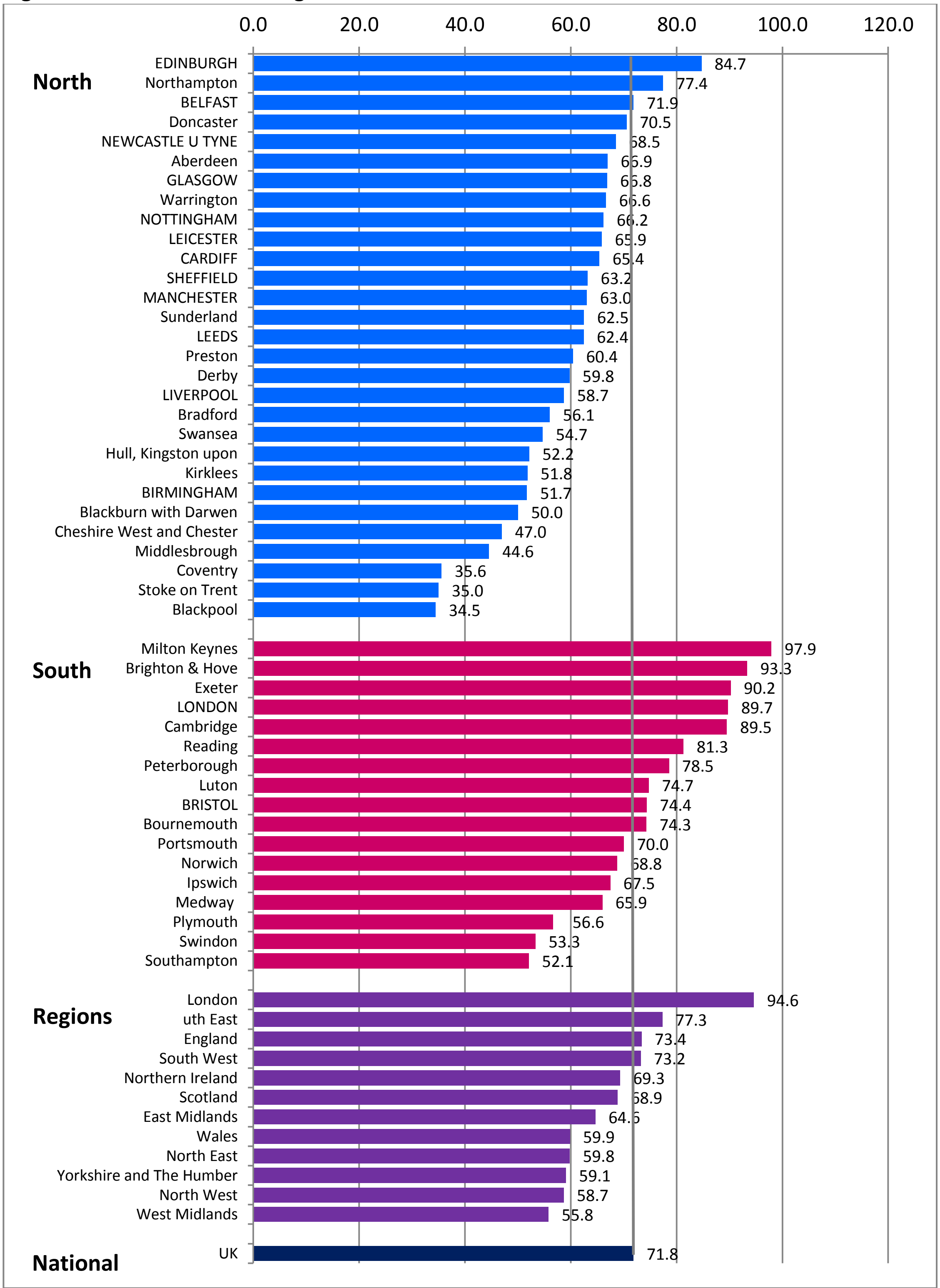
2.37 Figure 22 shows total GVA percentage changes in the period in the North and the South and by tier. The dominance of London again stands out – with an increase of nearly 90% - some 18 percentage points above the national change - and its share of total national GVA increasing from 25.4% to 28.1%.

2.38 The 13 second-tier city-regions together had a below national change in total GVA and their share of national GVA fell from 25.4% to 24.4%. Only 3 had above national change: Edinburgh, Bristol and Belfast.

2.39 Total GVA for the 32 third-tier city-regions together also grew below national and their share also fell slightly from 21.6% to 20.8%. 9 of the 32 had above national increases: Milton Keynes, Brighton and Hove, Exeter, Cambridge, Reading, Peterborough, Northampton, Luton and Bournemouth.

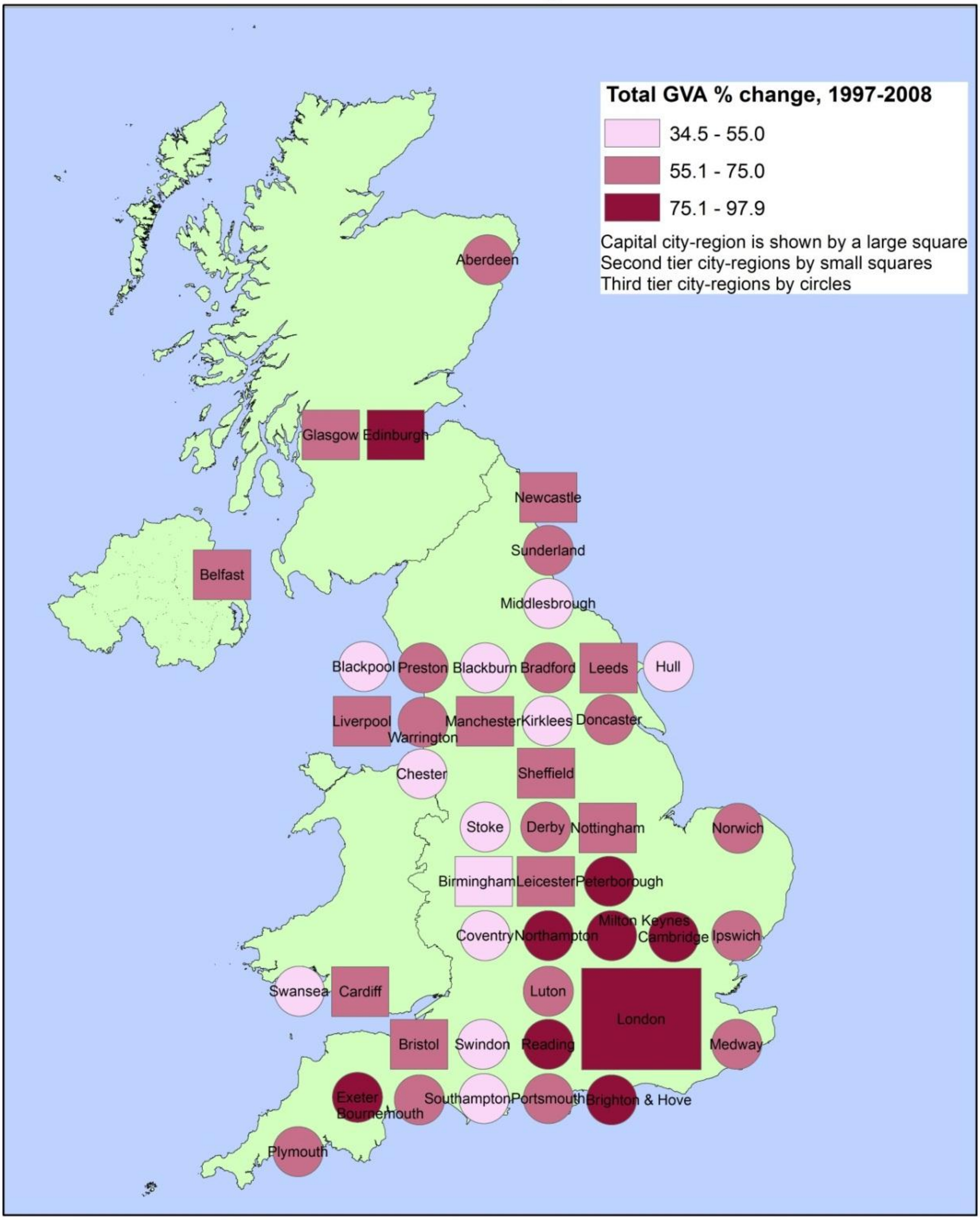
2.40 Figure 22 and Map 4 show the geography of change in total GVA over the period. The North-South divide is again apparent. Total GVA in only 3 of the 29 northern city-regions increased faster than national: second-tier Edinburgh and Belfast and third-tier Northampton. In contrast, total GVA increased faster than national in 10 of the 17 southern city-regions: London, second-tier Bristol and third-tier Milton Keynes, Brighton and Hove, Exeter, Cambridge, Reading, Peterborough, Luton and Bournemouth.

Figure 22: Total GVA % change 1997-2008



Source: ONS

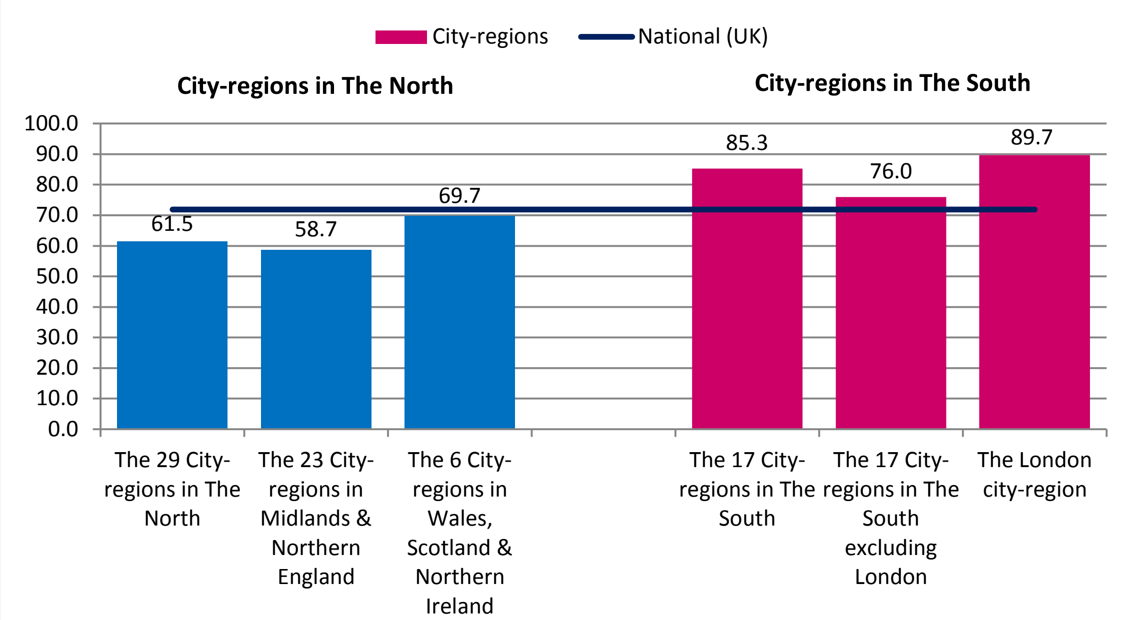
Map 4: UK City-regions
Total GVA % Change 1997-2008



Sources: Boundaries downloaded from UK Data Service. Contains Ordnance Survey data © Crown copyright and database right 2013. GVA data are from ONS. Some city-region names have been simplified for presentational reasons. City-regions are based on NUTS 3 approximations.

2.41 Figure 23 show total GVA change within and between north and south. The 6 city-regions in the northern devolved administrations had a higher combined growth rate than the northern city-regions as a whole but still below the national. Again London leads change in the south.

Figure 23: Total GVA, % change 1997-2008, City-regions in the North and the South



Source: ONS

2.42 Table 3 shows what the change meant in terms of city-regional shares of total national GVA. The share of the northern city-regions fell by 2 percentage points over the period, albeit with the share accounted for by the 6 city-regions in the northern devolved administrations remaining relatively stable. The southern city-regions and especially the London city-region increased their shares, by 2.9 and 2.7 percentage points respectively. The gap in shares between the northern and southern city-regions widened over the period – from 2.3 percentage points in 1997 to 7.3 percentage points in 2008 at the onset of recession.

Table 3: Total GVA, % share of UK, 1997 and 2008 – City-regions in the North and the South

	Total GVA Shares (% UK)		Change
	1997	2008	1997-2008
North			
The 29 city-regions	35.1	33.0	-2.1
The 23 city-regions in the Midlands and Northern England	26.3	24.3	-2.0
The 6 city-regions in Northern Ireland, Scotland and Wales	8.8	8.7	-0.1
South			
The 17 city-regions	37.4	40.3	2.9
The 17 city-regions in the south excluding London	11.9	12.2	0.3
London	25.4	28.1	2.7

2.2.2 Employment

A group of second-tier growing strongly - but third-tier leading the way

2.43 Figure 24 shows the different growth rates in the number of employees between 1997 and 2008. Employees grew nationally by 12% and in all but one city-region, ranging from a negligible 0.2% in Swindon to nearly 35% in Milton Keynes.

By GVA per capita classification:

- 11 of the 18 leading city-regions in levels of GVA per capita at the start of the period (61%) had above national increases in employment.
- Half of the 24 intermediate city-regions had above national increases in employment, although the group included the only city-region in which employment fell (Stoke on Trent).
- Although employment grew in all the lagging city-regions, none had employment growth above national.

By tier:

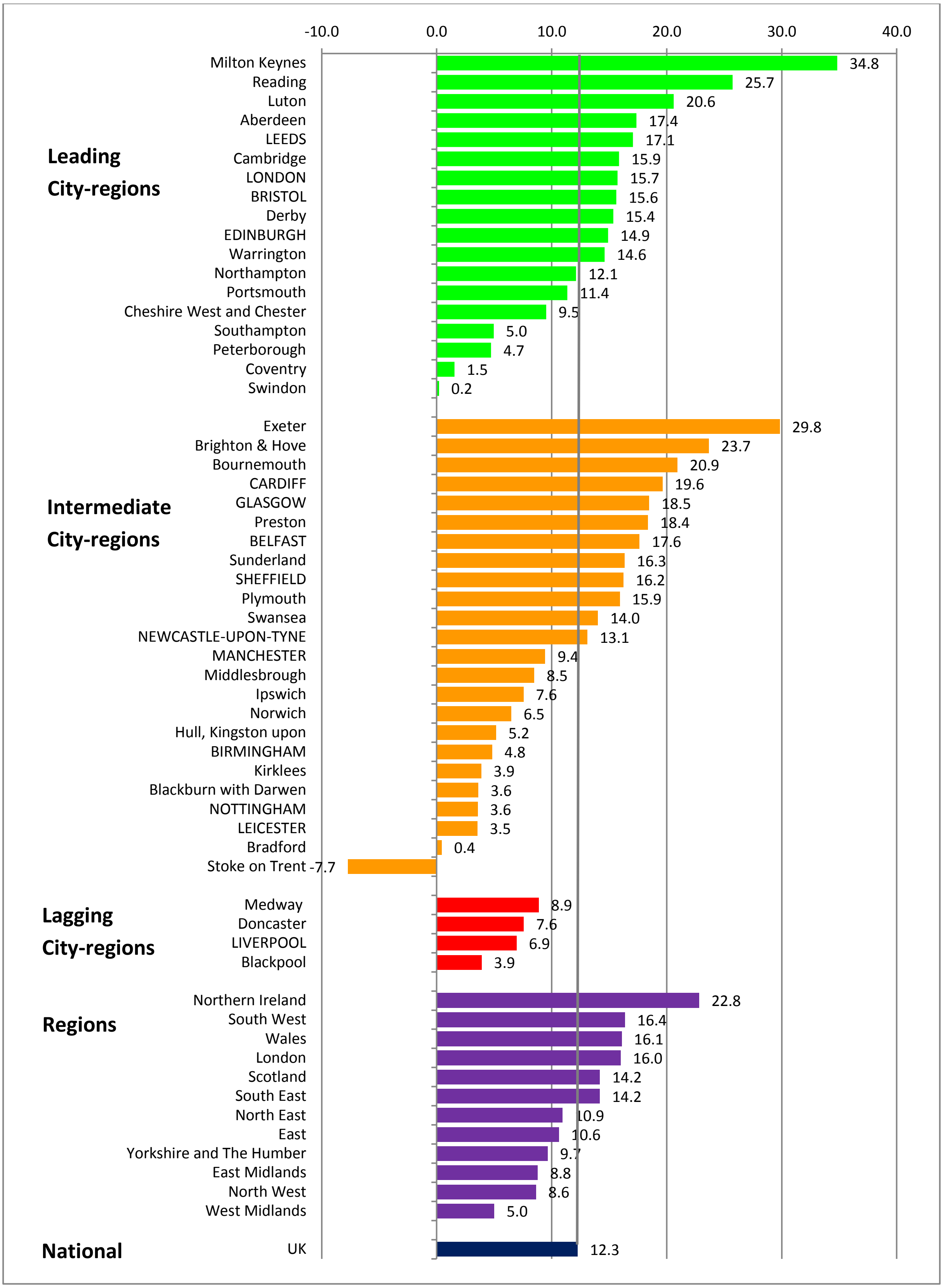
- Just over one half of the 46 city-regions had employee growth rates above the national: the capital, 9 of the 13 second-tier and 14 of the 32 third-tier.
- Employees in London grew faster than nationally – but less than national in 5 second-tier and 11 third-tier city-regions.

2.44 By geography:

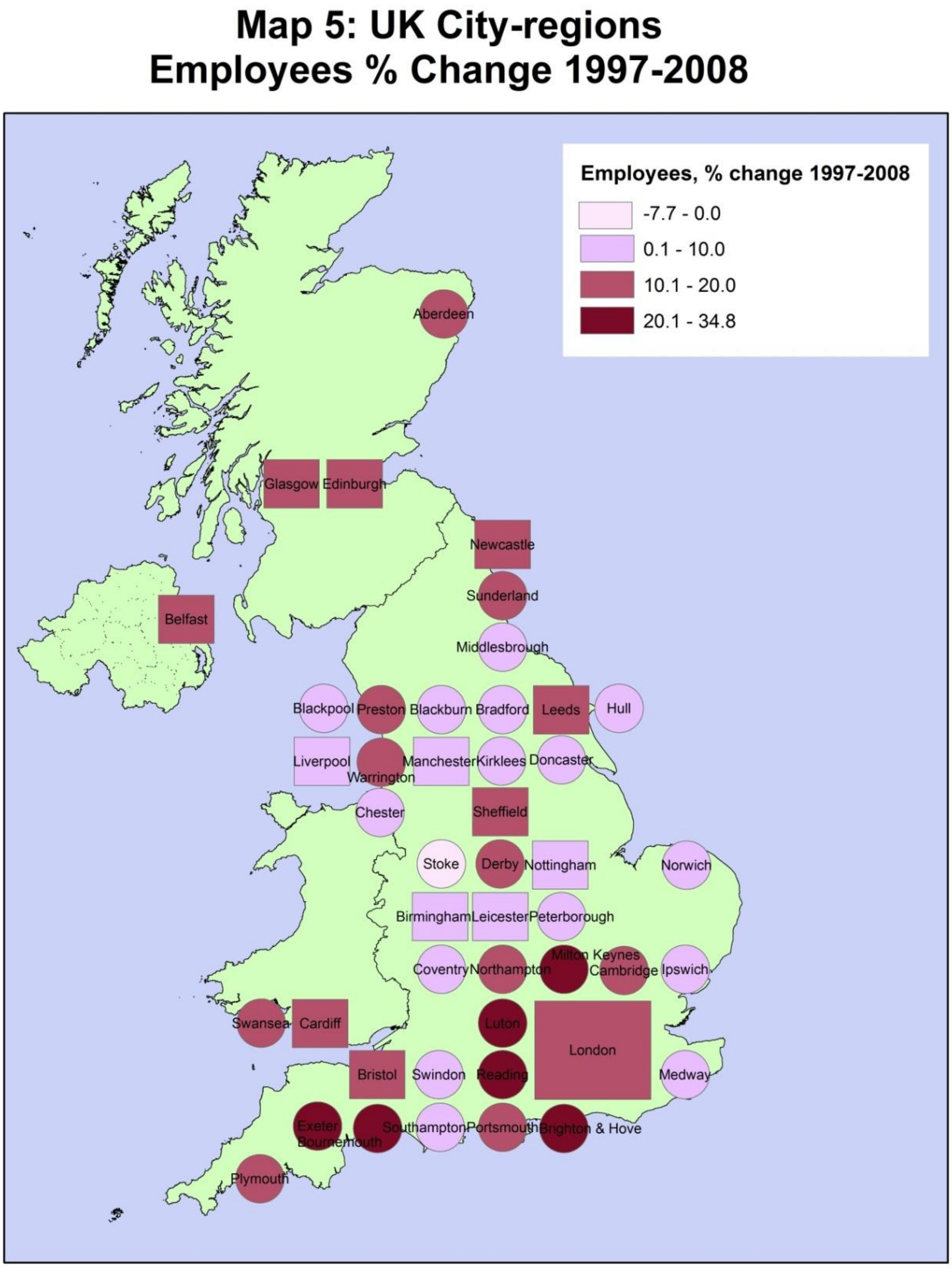
Map 5 shows the geography of employment change.

- 10 of the 17 southern city-regions (59%) had increases in employee numbers above the national rate.
- 6 southern third-tier regions – Milton Keynes, Exeter, Reading, Brighton & Hove, Bournemouth and Luton - led the way in terms of employee growth with the first three of these having growth rates more than double the national.
- 13 of the 29 northern city-regions (45%) had increases in employee numbers above the national rate.
- 7 of the 12 northern second-tier city-regions (58%) had employee growth rates above the national figure: Cardiff, Glasgow, Belfast, Leeds, Sheffield, Edinburgh and Newcastle upon Tyne – along with their southern counterpart, Bristol.

Figure 24: Total Employees, % change 1997-2008



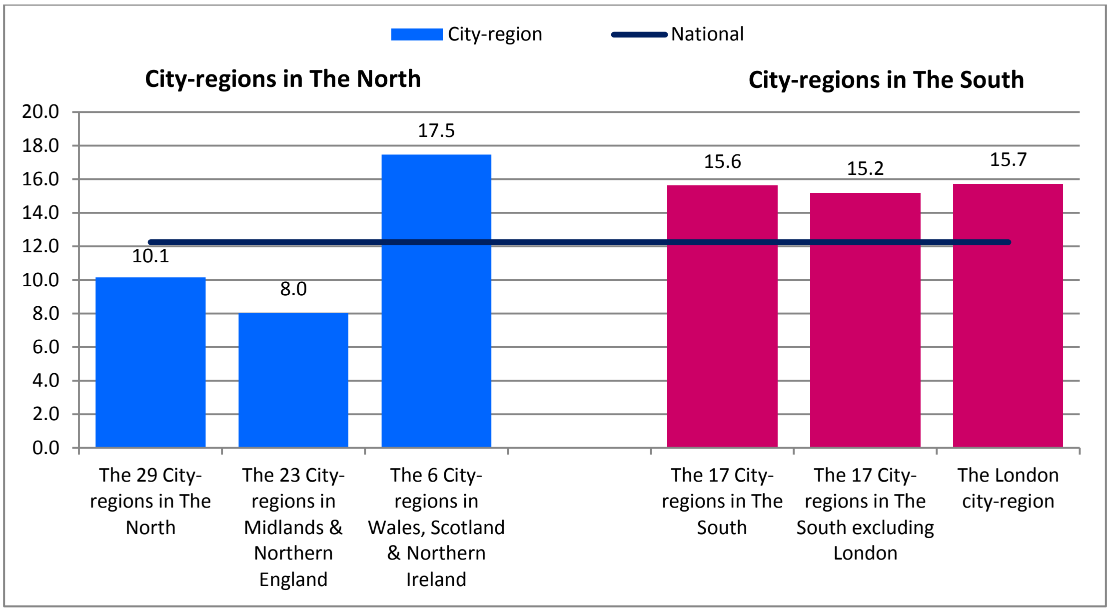
Sources: annual employment survey employee analysis; annual business inquiry employee analysis; data have been indexed; Note: London and second-tier city-regions in capitals.



Sources: Boundaries downloaded from UK Data Service. Contains Ordnance Survey data © Crown copyright and database right 2013.
Data sources are: annual employment survey employee analysis & annual business inquiry employee analysis.
Some city-region names have been simplified for presentational reasons.

2.45 Figure 25 shows employment change for our North-South geography. Employment in the northern city-regions grew slower than in their southern counterparts and especially in the 23 city-regions in the Midlands and Northern England. The city-regions in the devolved administrations were exceptions, growing faster as a group than the southern city-regions including the capital. And employment growth across the southern regions was relatively evenly balanced between the London city-region and the remainder.

Figure 25: Total Employees, % change 1997-2008, City-regions in the North and the South



Sources: annual employment survey employee analysis; annual business inquiry employee analysis; data have been indexed

2.46 Table 4 shows what employment growth over the period meant for regional shares of employment. Despite the growth of the city-regions in Northern Ireland, Scotland and Wales, the balance shifted southwards. While the northern city-regions still employed more than their southern counterparts in 2008 the gap between the two had narrowed from 6.7 percentage points in 1997 to 5.3 in 2008.

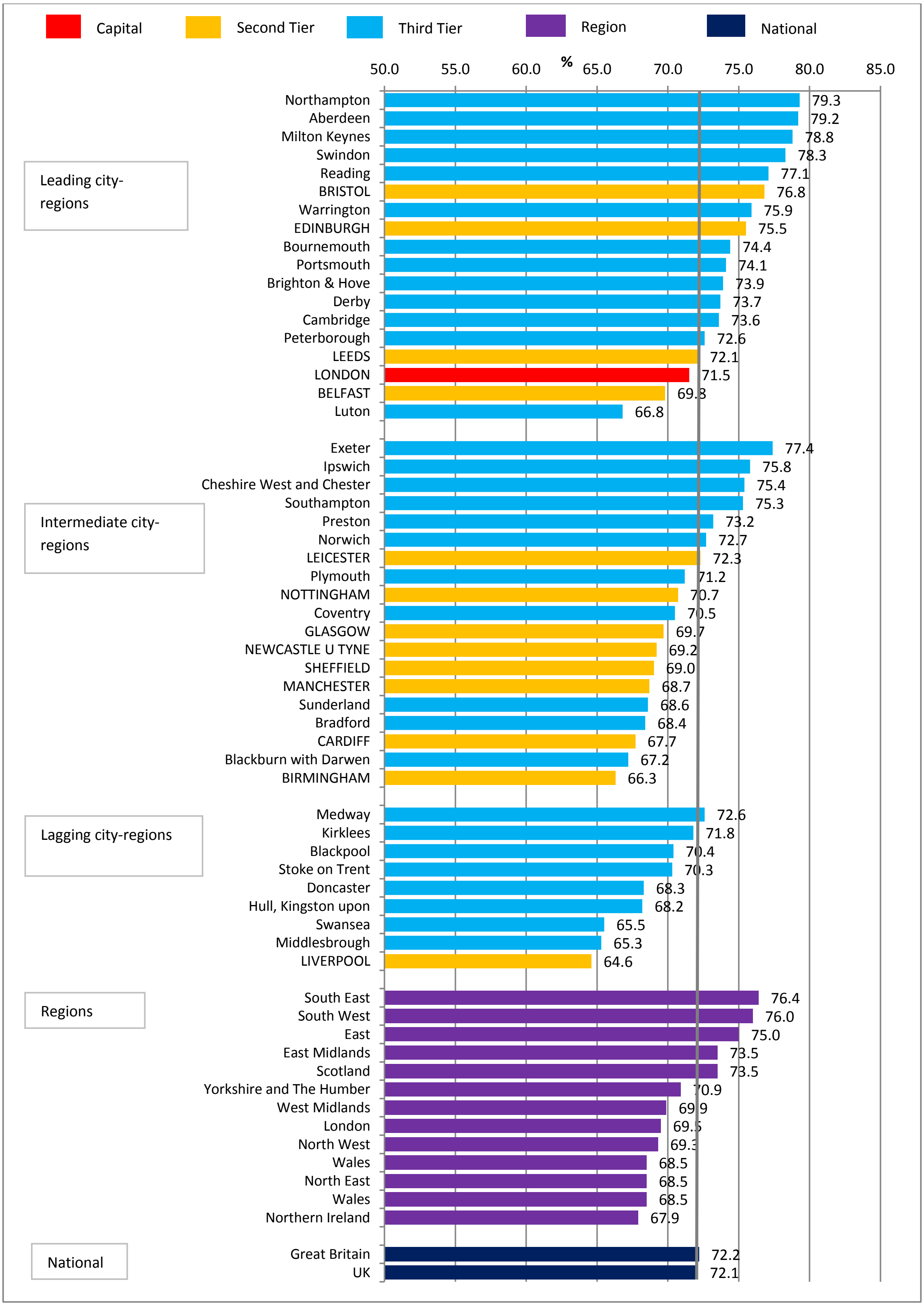
Table 4: Share of total employees 1997 and 2008 – City-regions in the North and the South

City-region	Share (%) UK		
	1997	2008	Change
North			
29 northern city- regions	36.9	36.3	-0.6
23 Midlands and Northern England city-regions	28.6	27.6	-1.0
6 Northern Ireland, Scotland and Wales city-regions	8.3	8.7	0.4
South			
17 southern city-regions	30.2	31.0	0.8
17 southern city-regions excluding London	9.4	9.5	0.1
London city-region	20.8	21.5	0.7

Employment rates – highest in leading city-regions and in the south excluding London

2.47 Employment rates reveal the balance between changes in working-age population and employment growth or decline. Figure 26 shows city-region, regional and national employment rates at the end of the growth period with city-regions grouped by GVA per capita classification. City-region rates ranged from a low of 64.6% in Liverpool to a high of 79.3% in Northampton. The Figure shows a clear relationship between levels of GVA per capita and employment rates. Using leading, intermediate and lagging groups based on 2008 GVA per capita figures, the great majority of leading city-regions (15 out of 18) had employment rates equal to or above the UK rate. In contrast, only 7 out of the 19 intermediate city-regions and just 1 of the 9 lagging city-regions had employment rates above the national. It is notable that London's employment rate was below national. In contrast 3 of the 4 second-tier leading city-regions - Bristol, Edinburgh and Leeds - had employment rates equal to or above the national, the exception being Belfast. Following the general pattern, 7 of the 8 intermediate second-tier city-regions had employment rates below national, the exception being Leicester. Second-tier Liverpool in the lagging group, as already noted, had the lowest employment rate of all, 7.5 percentage points below the national.

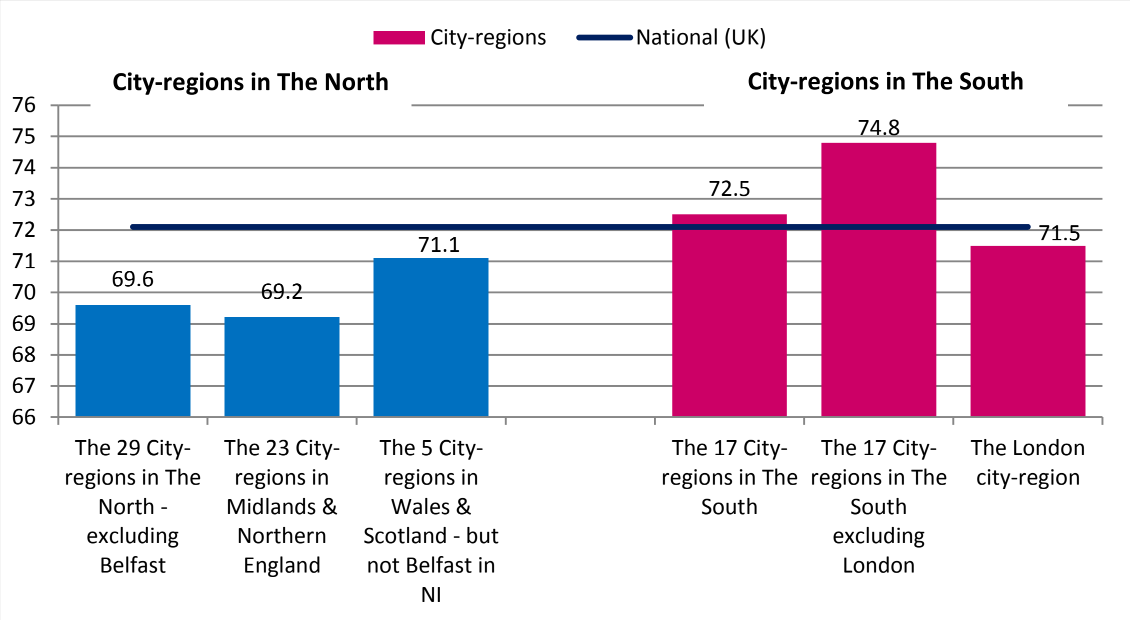
Figure 26: Employment Rates, 2008, & using GVA per capita 2008 groupings



Source: Nomis - Annual Population Survey

2.48 Figure 27 shows the employment rates in 2008 for our broad north-south geography. The northern city-regions together all had employment rates below the national average, although less so in the case of 5 of the city-regions in the devolved administrations. The southern city regions as a group have an employment rate above the national average but, as the figure show, this overall figure is pulled down by the London city-region, which had an employment rate below national.

Figure 27: Employment Rates, % of 16-64s, 2008, City-regions in the North and the South



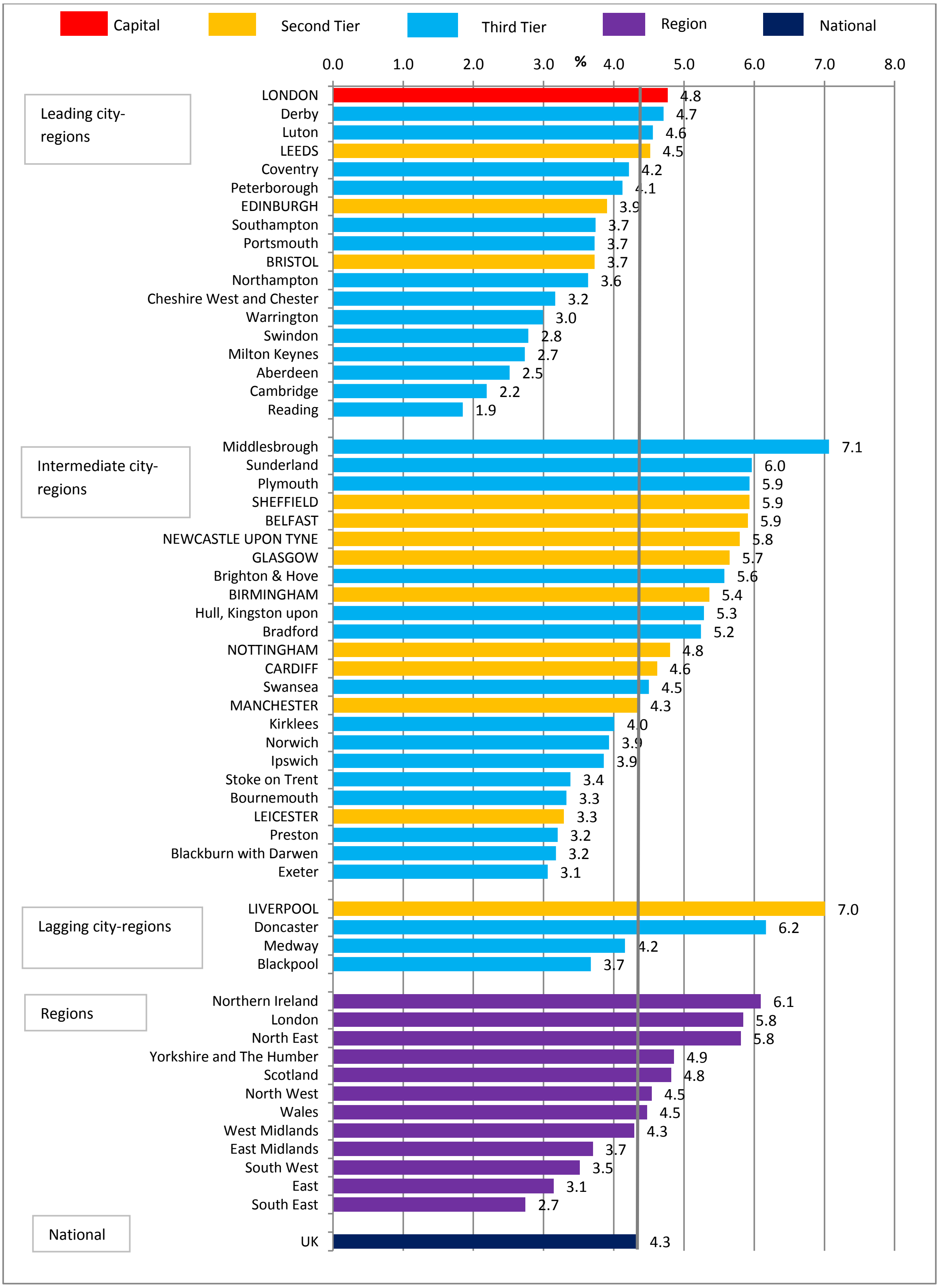
Source: Annual Population Survey

2.2.3 Unemployment

Unemployment falling everywhere – notably in London, a group of second-tier and most third-tier city-regions

2.49 Figure 28 shows city-regional unemployment rates (claimant counts) in 1997 by our GVA per capita classification. Rates range from 1.9% in 'leading' Reading to 7.1% in 'intermediate' Middlesbrough. Only 4 of the 18 leading city-regions, less than a quarter, had unemployment rates above the national average: London, Derby, Luton and Leeds. In contrast, unemployment rates in 15 of the 24 intermediate city-regions (63%) were equal to or above the national average. Surprisingly, 2 of the 4 lagging regions – Medway and Blackpool – had unemployment rates less than the national average. However, the other two – Liverpool and Doncaster – had the second and third highest rates of the 46 city-regions, 7.0% and 6.2%, respectively.

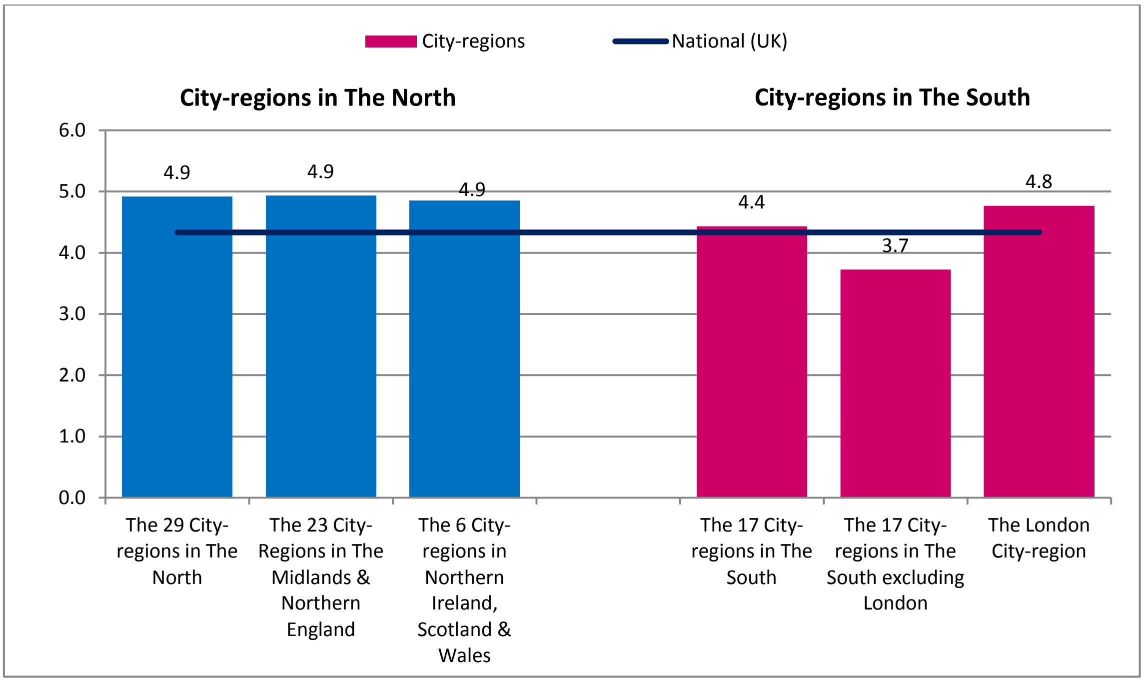
Figure 28: Claimant Count Rate, % of working age population, 1997, & using GVA per capita 1997 groupings



Source: Claimant Count with Rates and Proportions

2.50 Figure 29 summarises the claimant count data for The North and The South.

Figure 29: Claimant Count Rates, 1997, City-regions in the North and the South

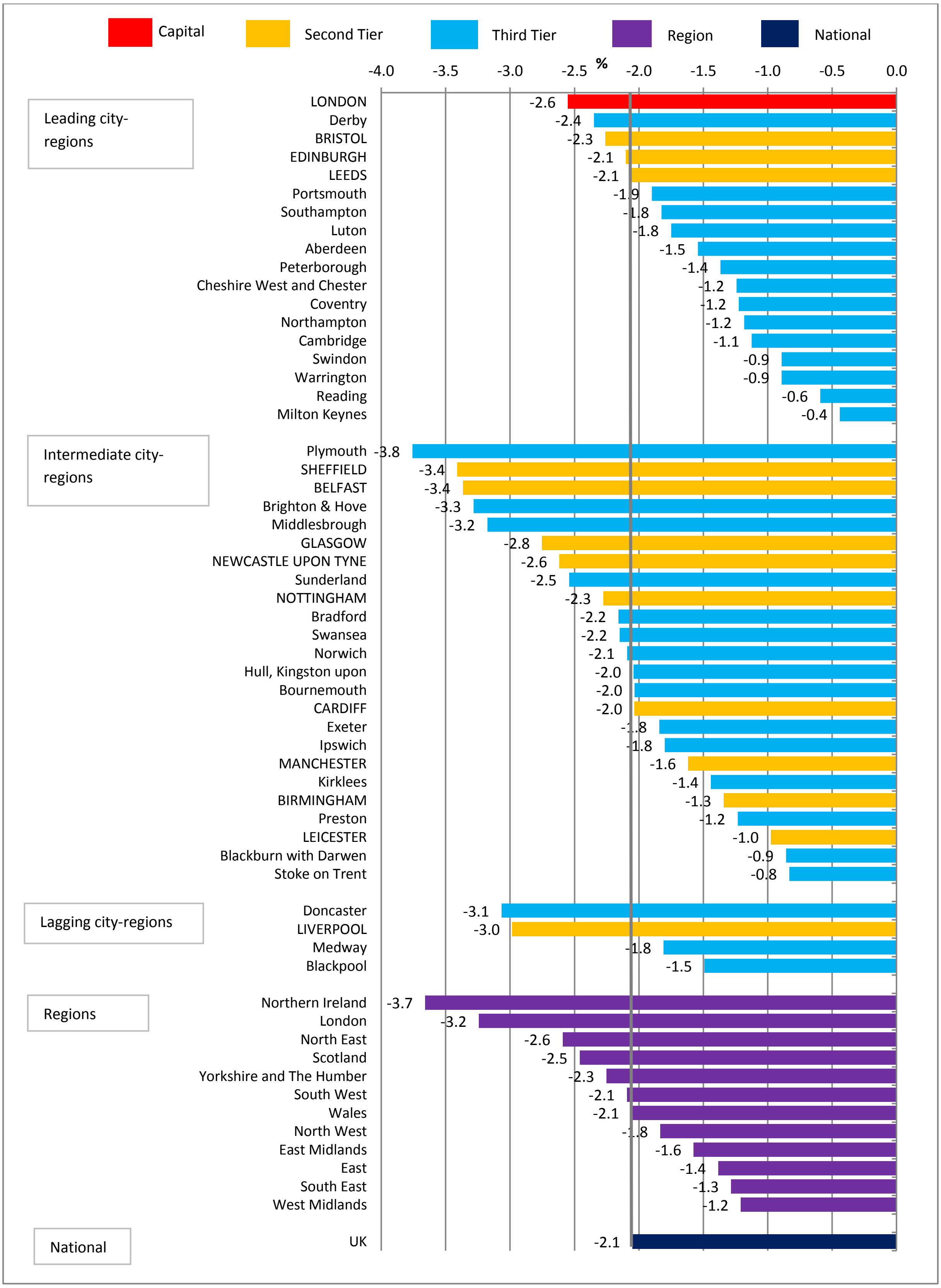


Source: Claimant count with rates and proportions

2.51 As Figure 30 and Map 6 show, the growth years saw claimant count rates fall in all city-regions, from 0.4 percentage points in leading Milton Keynes to 3.8 percentage points in intermediate Plymouth. Only 5 of the 18 leading city-regions had percentage point falls equal to or above the national: London, Derby, Bristol, Edinburgh and Leeds. By contrast, half of both the 24 intermediate and 4 lagging city-regions had falls equal to or above the national.

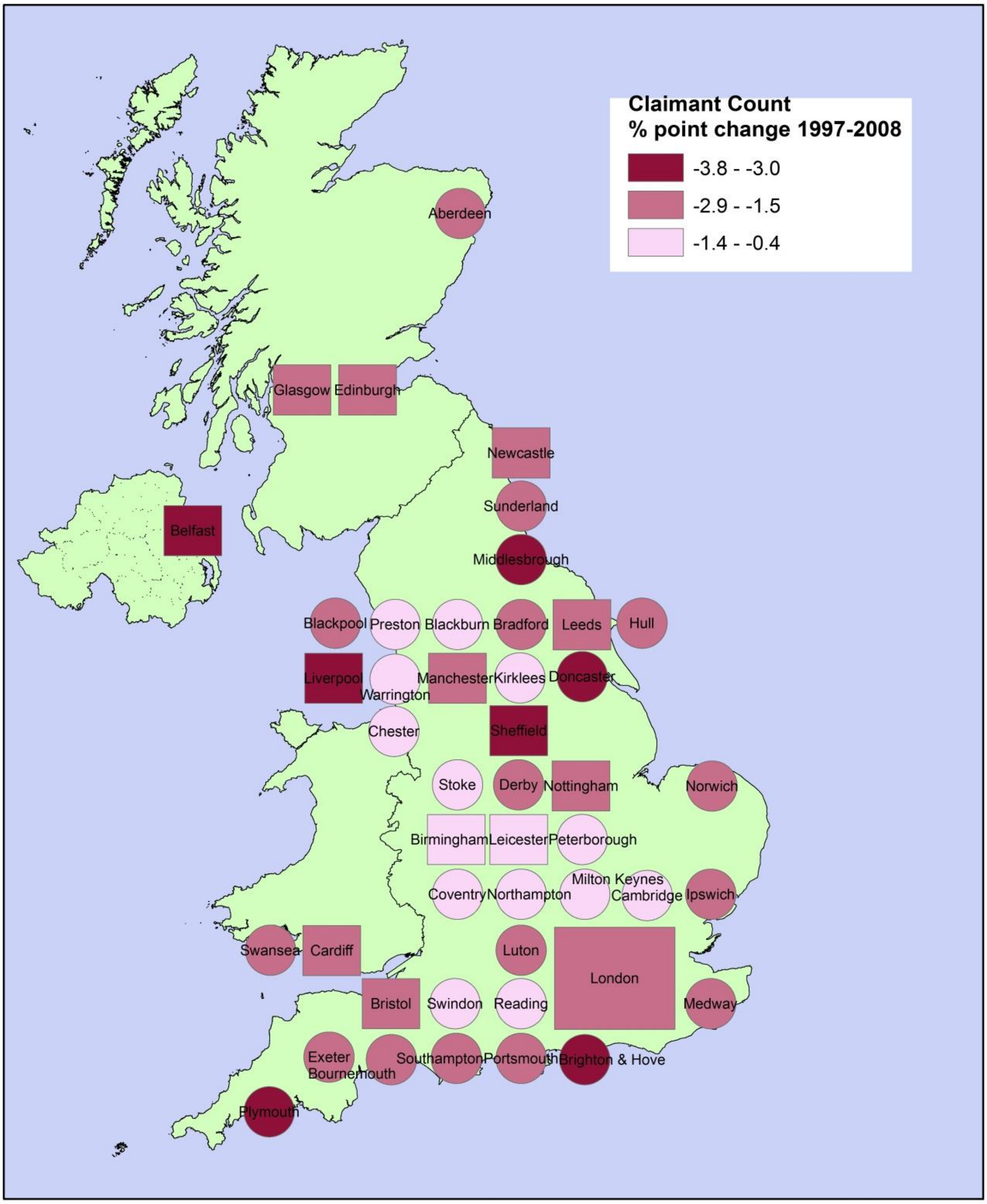
2.52 Across the country along with London, 5 of the 13 second-tier city-regions (just over a third) had falls in unemployment rates above the national. All of these were in the 'North' - Belfast, Sheffield, Newcastle upon Tyne, Glasgow and Liverpool. And Belfast and Sheffield had equal second highest falls nationally. The majority of third-tier city-regions had falls equal to or below the national (23 out of 32) with Plymouth recording the highest fall nationally. Only 2 of the 15 'Northern' third-tier city-regions had above national falls – Doncaster and Middlesbrough. Similarly, only 2 of the 15 'Southern' third-tier city-regions had above national falls – Brighton and Hove and Plymouth.

Figure 30: Claimant Count Rate, % of working age population, Percentage Point Change 1997-2008, & using GVA per capita 1997 groupings



Source: Claimant Count with Rates and Proportions

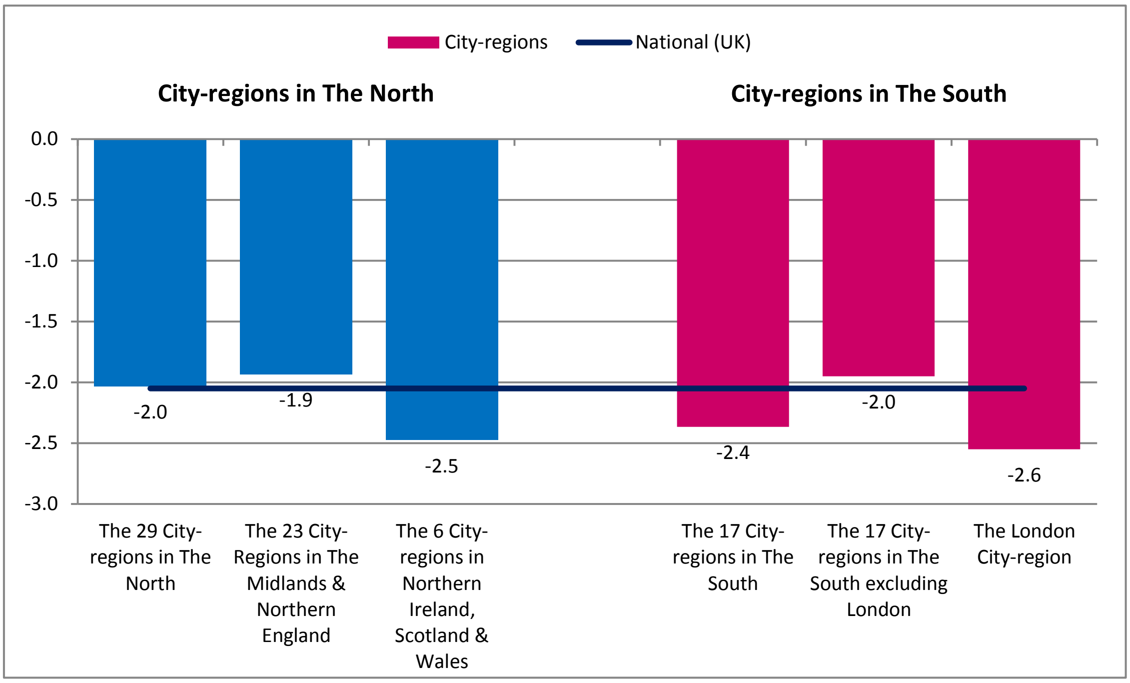
Map 6: UK City-regions
Claimant Count Percentage Point Change 1997-2008



Sources: Boundaries downloaded from UK Data Service. Contains Ordnance Survey data © Crown copyright and database right 2013. Data source: claimant count with rates and proportions. Some city-region names have been simplified for presentational reasons.

2.53 Figure 31 shows the change in claimant counts for our broad north-south geography. Claimant counts fell faster than nationally in the 6 city-regions in the devolved administrations in the north and nearly as fast as in the London city-region. With London excluded, the southern city-regions had the same decline as the northern city-regions as a whole.

Figure 31: Claimant Count 1997-2008, percentage point change, City-regions in the North & the South



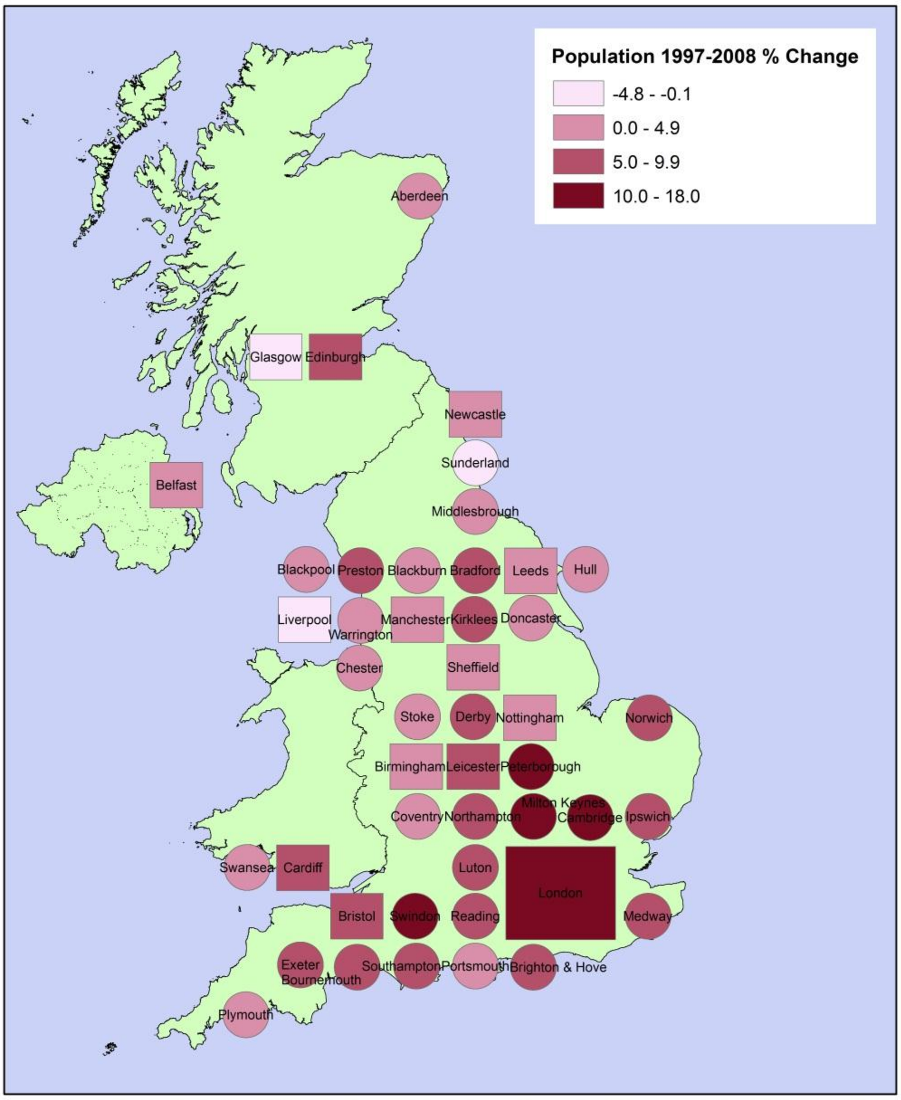
Source: Claimant count with rates and proportions

2.2.4 Population

A shift southwards but northern city-regions still important population centres

2.54 Map 7 shows population change in UK city-regions 1997-2008. Population growth has been particularly strong in the South.

Map 7: UK City-regions
Population 1997-2008 % Change



Sources: Boundaries downloaded from UK Data Service. Contains Ordnance Survey data © Crown copyright and database right 2013.
Data source: Mid Year Population Estimates. Some city-region names have been simplified for presentational reasons.

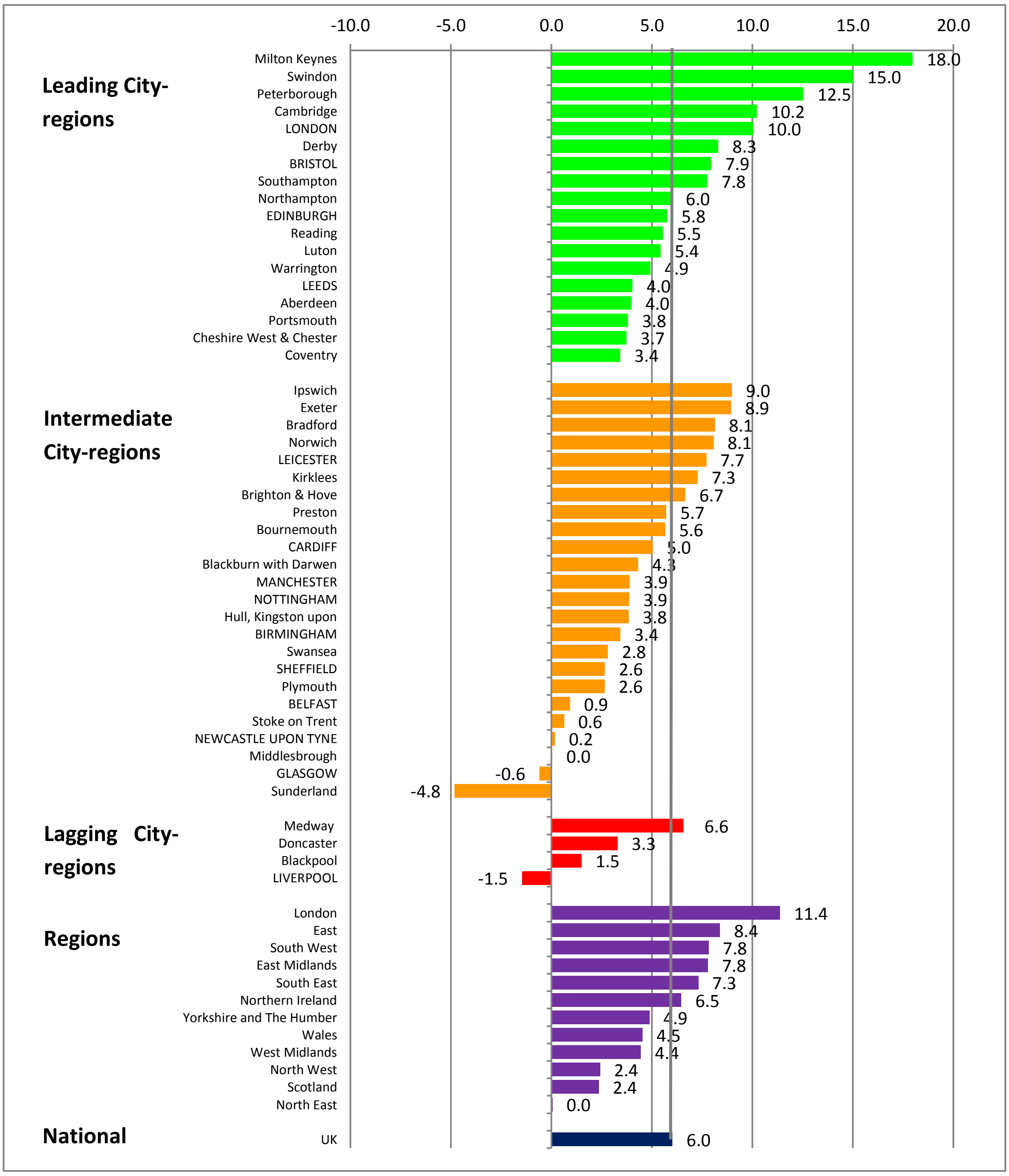
2.55 Figure 32 shows population change for the city-regions classified by GDP per capita over the growth decade. 8 of the 18 leading city-regions (44%) had population increases above the national average, with Milton Keynes' 18% increase contrasting with the 5% decline of intermediate Sunderland and the 2% decline of lagging Liverpool. Only 7 of the 24 intermediate city-regions (29%) and one of the 4 lagging city-regions, Medway, had population increases above the national average.

2.56 By tier and geography:

3 city-regions had growth rates more than twice the national: all third-tier and all in the south (Milton Keynes, Swindon and Peterborough). Population fell in 3 city-regions: 2 second-tier (Glasgow and Liverpool) and 1 third-tier (Sunderland), all in the north.

2.57 In total, 16 city-regions had growth rates above national: London, 2 second-tier (Bristol and Leicester) and 13 third-tier. 4 were in the north and 12 in the south. 30 city-regions had below-national growth rates: 11 second-tier and 19 third-tier. 25 were in the north and 5 in the south.

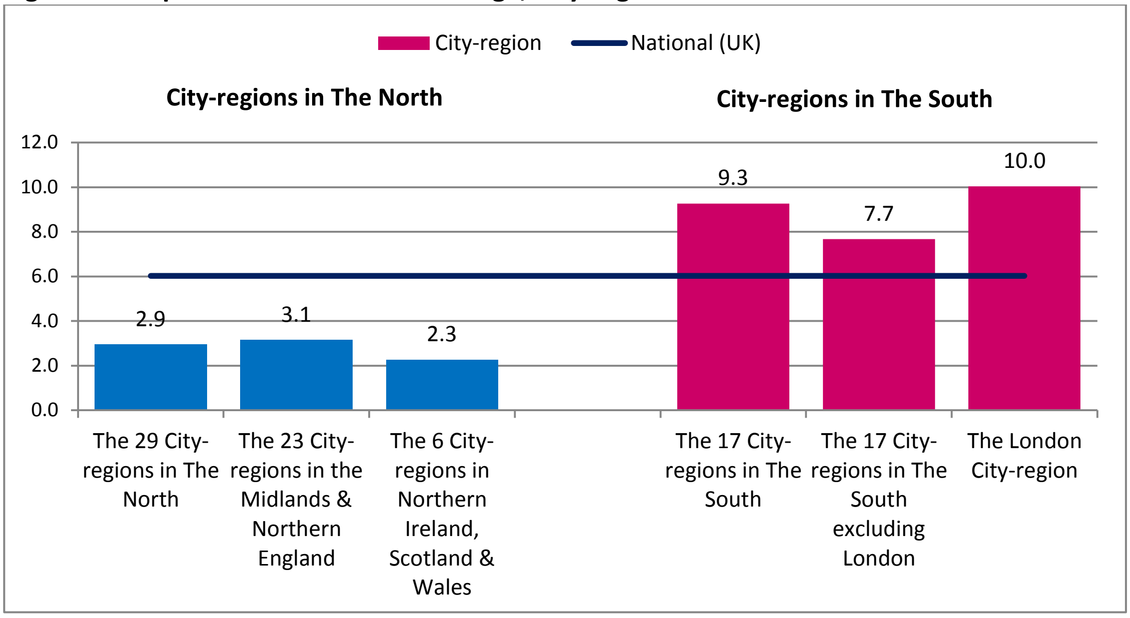
Figure 32: Total Population, % change, 1997-2008



Source: Mid-year population estimates

2.58 Figure 33 shows population change for our broad north-south geography. The gap is wide – with the 2.9 percentage increase for the northern city-regions as a whole less than a third of the 9.3 percentage increase of the southern city-regions. Growth in the 6 city-regions in the northern devolved administrations, at just 2.3 per cent, was even lower than that for the northern city-regions as a whole.

Figure 33: Population 1997-2008 % change, City-regions in the North and the South



Source: Mid-year population estimates

2.59 As Table 5 shows, the different population growth rates over the period produced a slight shift in shares of population in favour of the southern city-regions but their northern counterparts still had a higher share of national population in 2008 – still some 9 percentage points higher.

Table 5: Total Population, % shares of UK, City-regions in the North and the South, 1997 and 2008

	Total Population Shares (% UK)		Change
	1997	2008	1997-2008
North			
The 29 City-regions in The North	37.4	36.4	-1.1
The 23 City-regions in the Midlands & Northern England	29.2	28.4	-0.8
The 6 City-regions in Northern Ireland, Scotland & Wales	8.3	8.0	-0.3
South			
The 17 City-regions in The South	26.9	27.7	0.8
The 17 City-regions in The South excluding London	8.7	8.8	0.1
The London City-region	18.1	18.8	0.7

2.2.5 Summary

2.60 For overall benchmarking of city-region performance over the growth years, 1997-2008, we use a simple 'traffic lights' measure of both the baseline and change over the period. For benchmarking at the start of the period – as a crude measure of relative economic strength - we classify and score as follows:

- GVA per capita, 1997:
  - above national ('leading') – 'green' (score 1);
  - between 75% and 100% national ('intermediate') – 'amber' (score 2);
  - less than 75% national ('lagging') – 'red' (score 3).
- GVA per job filled; employment rates; unemployment rates (claimant counts) - 1997:
  - above national – 'green' (score 1);
  - below national, top half of distribution including median value – 'amber' (score 2);
  - below national, bottom half of distribution – 'red' (score 3).

2.61 A city-region classified 'green' in all 4 categories would thus score 4. At the other extreme, a city-region classified 'red' on all 4 categories would score 12.

2.62 For change, 1997-2008, we classify and score changes in population, GVA per capita, total GVA, GVA per job filled, employment change, unemployment rates (claimant counts), as follows:

- above national – 'green' (score 1);
- below national, top half of distribution including median value – 'amber' (score 2);
- below national, bottom half of distribution – 'red' (score3).

2.63 A city-region classified 'green' in all 6 categories would thus score 6. At the other extreme, a city-region classified 'red' on all 6 categories would score 18.

A southern bias in strong performance – but city-regions in Scotland also feature

2.64 Table 6 shows the relative economic strength of city-regions in 1997 with city-regions ranked by overall score for the 3 categories. The links between performance on GVA, employment and unemployment are clear. The leading city-regions in GVA per capita (green on the list) generally had relatively high employment and relatively low unemployment rates. But there are exceptions. Derby, Luton and Leeds were all less strong (amber) on unemployment. Cheshire West and Chester was amber and Peterborough red on employment rates. The capital, London, was amber on both its employment and unemployment rates.

Table 6: The balance sheet, 1997

City-region	GVA per capita, 1997	GVA per job filled 2002	Employment Rates, 1997	Claimant Count 1997	Total score
Aberdeen					4
BRISTOL					4
Cambridge					4
Coventry					4
EDINBURGH					4
Milton Keynes					4
Northampton					4
Reading					4
Swindon					4
Warrington					4
Cheshire West & Chester					5
Derby					5
LEEDS					5
Luton					5
Southampton					5
Bournemouth					6
Ipswich					6
LEICESTER					6
LONDON					6
Portsmouth					6
Exeter					7
Medway					7
Norwich					7
NOTTINGHAM					7
Peterborough					7
Preston					7
BIRMINGHAM					8
Blackburn with Darwen					8
Blackpool					8
Bradford					8
Brighton & Hove					8
Kirklees					8
MANCHESTER					8
Stoke on Trent					8
CARDIFF					9
Hull, Kingston upon					9
SHEFFIELD					9
Sunderland					9
GLASGOW					10
Middlesbrough					10
Swansea					10
BELFAST					11
LIVERPOOL					11
NEWCASTLE UPON TYNE					11
Plymouth					11
Doncaster					12

2.65 Table 7 reorganises the list by tier and region. 10 relatively strong city-regions stand out: second-tier Edinburgh and third-tier Aberdeen, Coventry, Northampton and Warrington in the 'North'; and second-tier Bristol and third-tier Cambridge, Milton Keynes, Reading and Swindon in the 'South'. These leading city-regions in terms of GVA per capita and GVA per job filled all had employment rates above and unemployment rates below national averages.

2.66 At the other end of the spectrum is Doncaster, lagging in terms of both GVA per capita and per job filled and with employment rates below and unemployment rates above national averages.

Table 7: The balance sheet, 1997 - by tier and region

Economic strength		'North'		'South'		
	Score	**Second-Tier**	**Third-Tier**	**Capital**	**Second-Tier**	**Third-Tier**
←Strong to weak→	4	Edinburgh	Aberdeen Coventry Northampton Warrington	-	Bristol	Cambridge Milton Keynes Reading Swindon
	5	Leeds	Cheshire West & Chester Derby	-	-	Luton Southampton
	6	Leicester	-	London	-	Bournemouth Ipswich Portsmouth
	7	Nottingham	Peterborough Preston	-	-	Exeter Medway Norwich
	8	Birmingham Manchester	Blackburn with Darwen Blackpool Bradford Kirklees Stoke on Trent	-	-	Brighton & Hove
	9	Cardiff Sheffield	Hull, Kingston upon Sunderland	-	-	-
	10	Glasgow	Middlesbrough Swansea	-	-	-
	11	Belfast Liverpool Newcastle upon Tyne	-	-	-	Plymouth
	12		Doncaster	-	-	-

2.67 Table 8 shows performance between 1997 and 2008 on change in population, GVA per capita and per job filled, total GVA, employment and unemployment.

2.68 Three city-regions performed strongly on all 6 categories: London and third-tier Cambridge and Exeter. In sharp contrast, second-tier Birmingham and third-tier Coventry in the Midlands performed poorly on all 6 categories and two third-tier on 5 out of the six categories: Blackpool and Stoke on Trent. In between there was a mix of overall performance.

Table 8: The balance sheet, change 1997-2008, % change in indicators

City-region	Population 1997-2008	GVA per capita, 1997-2008	Total GVA, 1997-2008	GVA per job filled 2002-2008	Total Employees 1997-2008	claimant count rates 1997-2008	Total score
Cambridge							6
Exeter							6
LONDON							6
Bournemouth							7
Brighton & Hove							7
EDINBURGH							7
Aberdeen							8
BRISTOL							8
Luton							8
Milton Keynes							8
BELFAST							9
Norwich							9
Reading							9
GLASGOW							10
Peterborough							10
Portsmouth							10
Derby							11
Doncaster							11
Ipswich							11
Medway							11
SHEFFIELD							11
Warrington							11
CARDIFF							12
NEWCASTLE UPON TYNE							12
Northampton							12
Plymouth							12
Preston							12
Sunderland							12
LEEDS							13
LEICESTER							13
MANCHESTER							13
NOTTINGHAM							13
Southampton							13
Swansea							13
Bradford							14
Hull, Kingston upon							15
Kirklees							15
LIVERPOOL							15
Swindon							15
Blackburn with Darwen							16
Cheshire West & Chester							16
Middlesbrough							16
Blackpool							17
Stoke on Trent							17
BIRMINGHAM							18
Coventry							18

2.69 Table 9 groups overall performance by tier and region. Comparing this table with Table 7 above, it is clear that there was not a simple correlation between relative economic strength at the start of the period and performance across it. A number of well-placed city-regions in 1997 did perform strongly over the period as a whole: notably second-tier Edinburgh and third-tier Cambridge. But some, third-tier Coventry and Swindon for example, did the opposite: Coventry was 'red' on all 6 change categories. Swindon was 'red' on 4.

Table 9: The balance sheet, change 1997-2008 – by tier and region

		'North'		'South'		
Economic performance	**Score**	**Second-Tier**	**Third-Tier**	**Capital**	**Second-Tier**	**Third-Tier**
←Strong to weak→	6	-	-	London	-	Cambridge Exeter
	7	Edinburgh	-	-	-	Bournemouth Brighton & Hove
	8	-	Aberdeen	-	Bristol	Luton Milton Keynes
	9	Belfast	-	-	-	Norwich Reading
	10	Glasgow	Peterborough	-	-	Portsmouth
	11	Sheffield	Derby Doncaster Warrington	-	-	Ipswich Medway
	12	Cardiff Newcastle u Tyne	Northampton Preston Sunderland	-	-	Plymouth
	13	Leeds Leicester Manchester Nottingham	Swansea	-	-	Southampton
	14	-	Bradford	-	-	-
	15	Liverpool -	Kirklees Hull, Kingston upon	-	-	Swindon
	16	-	Blackburn with Darwen Cheshire West & Chester Middlesbrough	-	-	-
	17	-	Blackpool Stoke on Trent	-	-	-
	18	Birmingham	Coventry	-	-	-

2.3 Economic performance in recession and austerity, post 2008

Uneven impact. But nowhere immune to the crisis

2.3.1 GVA

GVA per capita

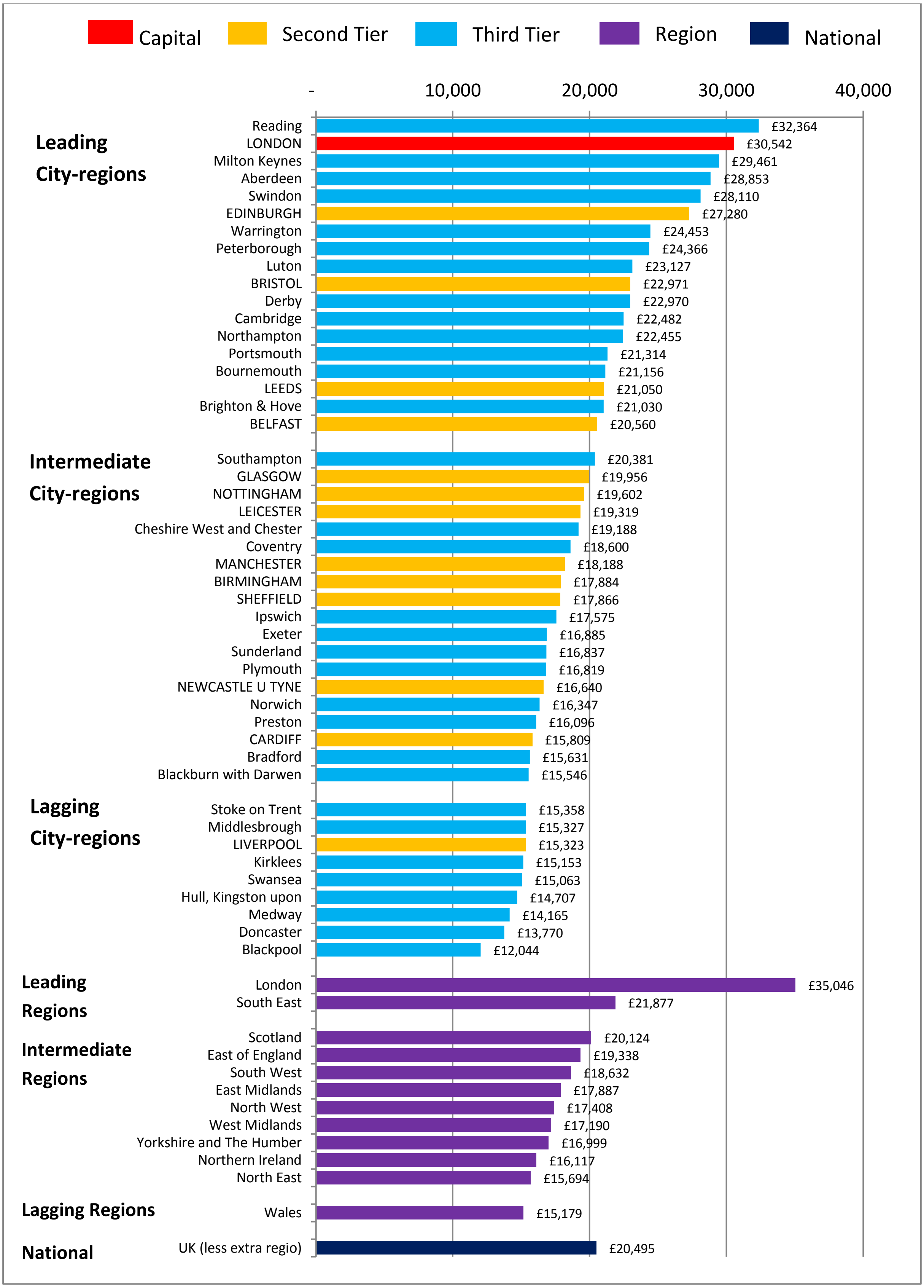
2.70 The recession has undone many of the gains of the growth years. London has not fallen behind but it has not sustained the exceptional gains of the boom. Some places in the north - both second- and third-tier - have lost ground in comparison with places in the south, but others in the north have held up. Some third-tier city-regions have withstood the crisis better than some second-tier city-regions. Some city-regions have performed better than expected on past performance - for example, Liverpool. London has had a relatively static performance. Second-tier city-regions have generally performed worse than national but with some exceptions. Many third-tier city-regions have remained in the leading group but more than half have performed worse than national.

2.71 Productivity grew below the national rate in both the northern and southern city-regions. But the north actually grew slightly faster than the south albeit from a much lower starting point. The slackening in growth of the London city-region stands out. But really standing out is the performance of the 6 city-regions in the devolved administrations, which together have had a combined growth rate in the recession above the nation and London. But, despite the slowing down in growth in the southern city-regions as a whole, the gap in relative performance with their northern counterparts remains considerable.

2.72 Figure 34 groups the 46 city-regions on levels of GDP per capita compared with the national at the onset of the recession in 2008:

- 18 'leading' – with levels above national average: the capital, London, 13 third-tier and 4 second-tier (Edinburgh, Bristol, Leeds and Belfast);
- 19 'intermediate' – with levels between 75% and 100% of national average: 8 second-tier and 11 third-tier; and
- 9 'lagging' – with levels less than 75% of national average: 1 second-tier and 8 third-tier.

Figure 34: GVA per capita, £s, 2008

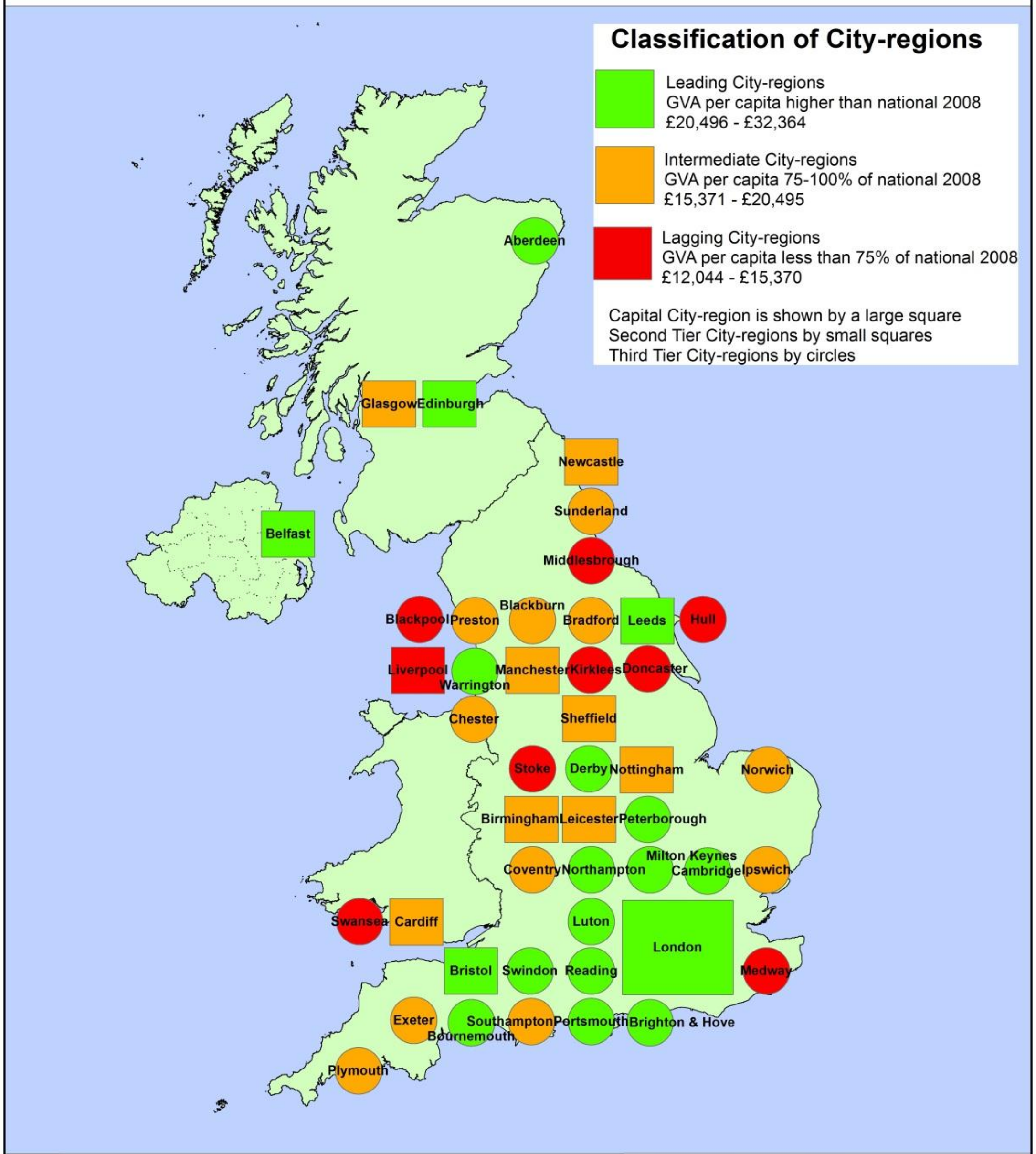


Source: ONS

The regional geography at the onset of recession

2.73 Map 8 shows the classification of the 46 city-regions by GVA per capita levels at the onset of recession in 2008.

Map 8: UK City-regions: Leading, Intermediate & Lagging - GVA per capita 2008



Sources: Boundaries downloaded from UK Data Service.
Contains Ordnance Survey data © Crown copyright and database right 2013.
GVA per capita data are from ONS. National data are for UK less extra regio.
Some city-region names have been simplified for presentational reasons.
City-regions are based on NUTS 3 approximations.

2.74 For the **'leading' group**

- The majority, 11 of the 18 (61%), are located south of the Severn-Wash dividing line, including the capital and the second tier Bristol city-region;
- the 'Northern' contingent includes, in Scotland, Aberdeen and Edinburgh, 'oil town' and 'capital' respectively; Belfast In Northern Ireland along with the second-tier Leeds city-region and third-tier Warrington, Derby and Northampton;
- the group only contains four second-tier city-regions: Edinburgh, Bristol, Leeds and Belfast.

2.75 For the **'intermediate group'**

- the picture is reversed with the majority, nearly three quarters - 14 of the 19 (74%) - located north of the Severn-Wash dividing line;
- of these 14, 8 are second-tier and 6, third-tier city-regions.

2.76 8 of the 9 city-regions in the **'lagging' group** are in the 'north': the second-tier, Liverpool and third-tier Blackpool in the North West; Stoke on Trent in the West Midlands; Middlesbrough in the North East; Kirklees, Kingston upon Hull and Doncaster in Yorkshire and the Humber and Swansea in Wales. The Medway city-region in the south east is the exception.

2.77 At the onset of the recession, then, the North East and Wales still had no leading city-region and the West Midlands had seen the leading city-region it had in 1997 - Coventry - fall into the intermediate group (Table 10).

Table 10: GVA per capita – City-regions by OECD classification and UK region, 2008

Regional geography	City regions by OECD classification, 2008		
Region	Group 1: 'leading'	Group 2: 'intermediate'	Group 3: 'lagging'
North East	-	2	1
Yorkshire & the Humber	1	2	3
North West	1	4	2
East Midlands	2	2	-
West Midlands	-	2	1
East of England	3	2	-
South East	5	1	1
South West	3	2	-
Scotland	2	1	-
Wales	-	1	1
Northern Ireland	1	-	-
Total	18	19	9

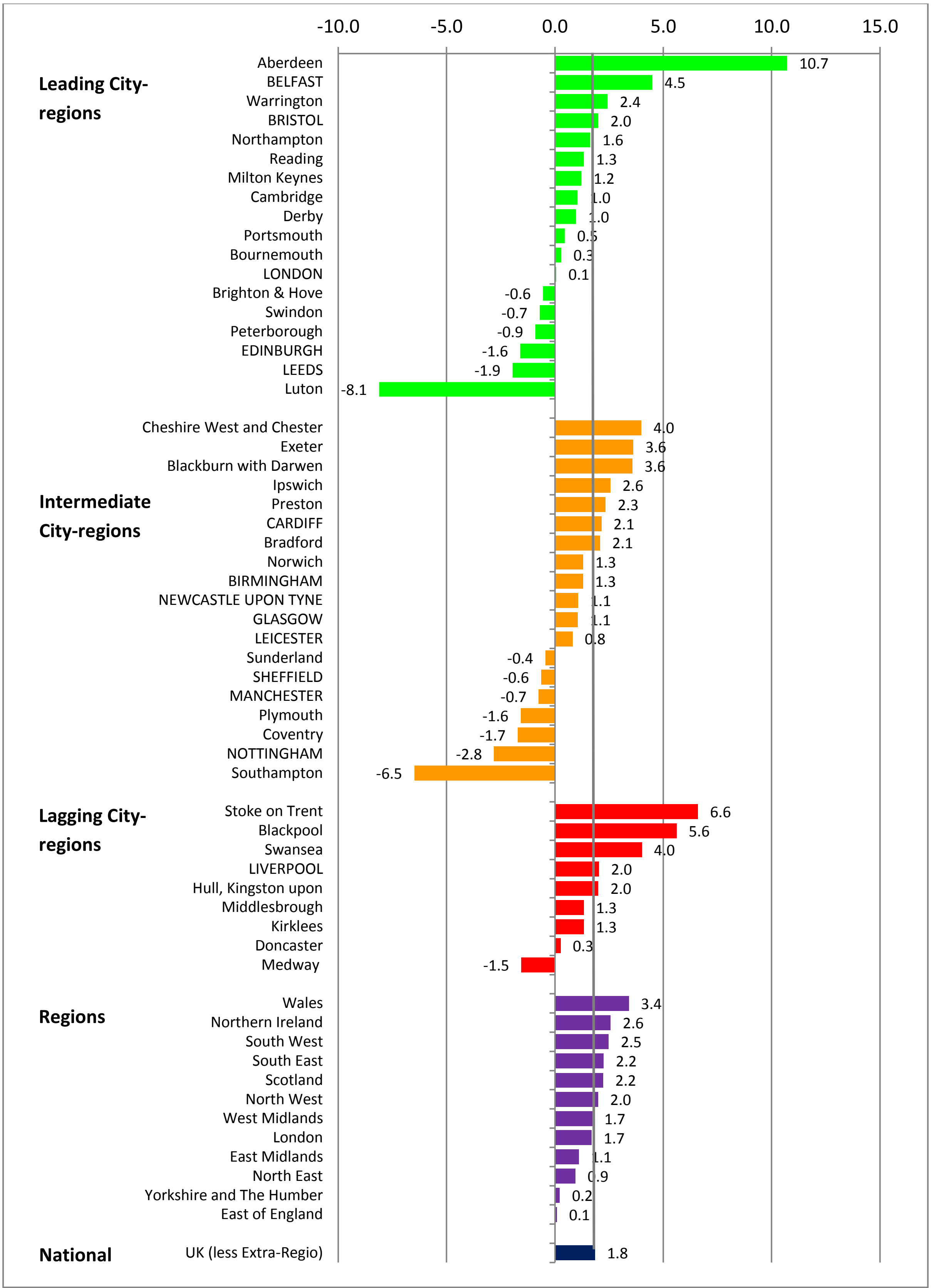
The boom is over

2.78 The recession and austerity have seen, in some cases quite dramatic, changes in economic performance as shown in Figure 35, which ranks growth in GVA per capita for our 46 city-regions over the three recession years by their GVA per capita classification in 2008. GVA per capita increased nationally by just 1.8% over the three years

2.79 While there is again no strong relationship between levels of GVA per capita at the start of the period and growth during it, there is some evidence of city-regions in the intermediate and lagging groups performing relatively better than those in the leading group:

- only four of the 18 leading city-regions (22%) had growth rate above the national – compared with one half in the growth period;
- 7 of the 19 city-regions (37%) in the intermediate group had growth rates above national, a higher proportion than in the growth decade; and
- notably, 5 of the 9 city-regions in the lagging group (56%) had growth rates above national.

Figure 35: GVA per capita, % change, 2008-2011

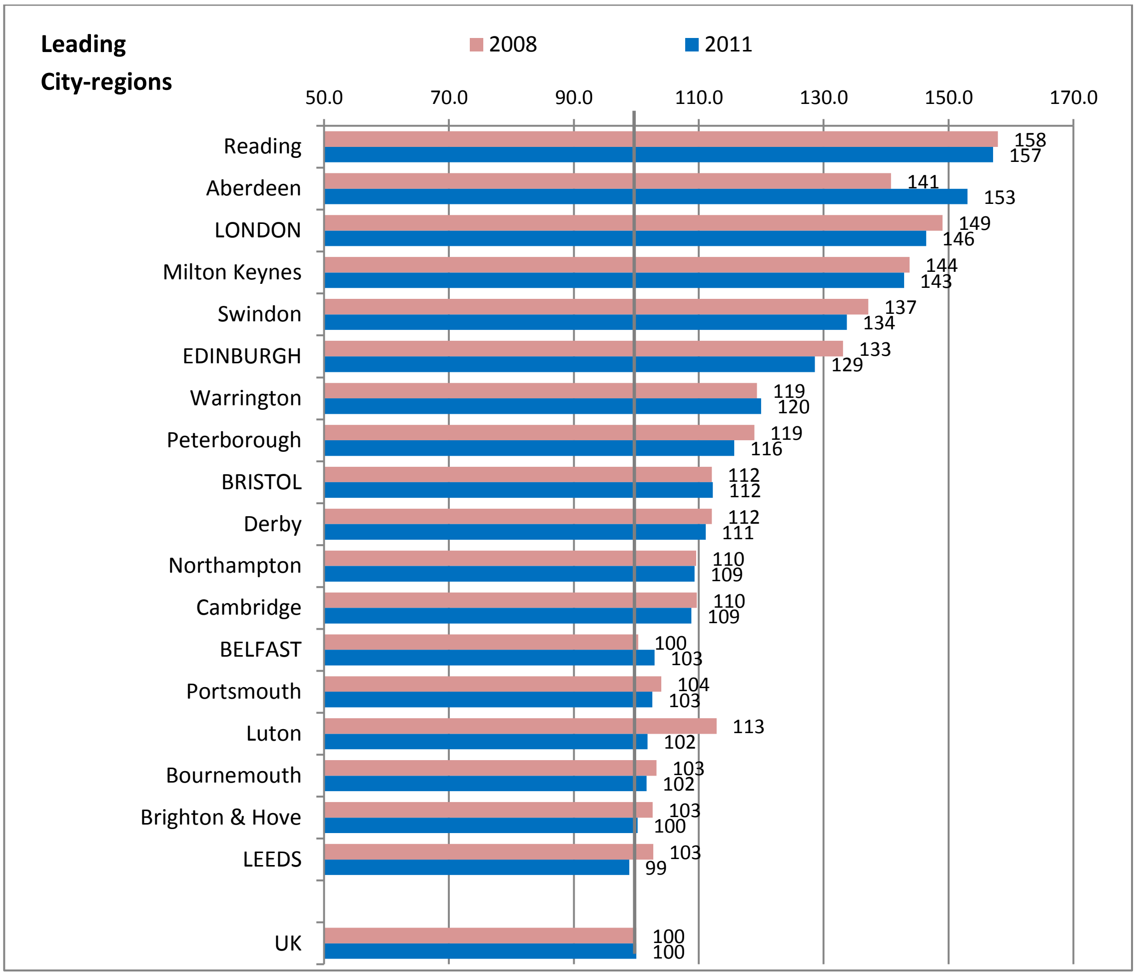


Source: ONS; City-regions are approximated using NUTS 3 boundaries, see Annex 1; 2011 data are provisional. City-region groupings are based on GVA per capita in 2008.

2.80 Figures 36 to 38 show the changes in levels of GVA per capita expressed as indices relative to the national over the period for each of the three groups. The variation in performance within the groups is less marked than in the earlier growth period but is still evident.

2.81 In the leading group (Figure 36) the shift varied from a fall of 11 percentage points in Luton (from 13% above the national average in 2008 to just 2% above in 2011) to an increase of 12 percentage points in Aberdeen (from 41% above the national figure in 2008 to 53% above in 2011). Relativities in Edinburgh and Leeds fell in each by 4 percentage points respectively, enough in Leeds' case to see it fall out of the group in 2011. The London city-region also saw a slowdown in its productivity with its relativity falling by 3 percentage points alongside Swindon and Peterborough. At the other end of the range, Belfast consolidated its position in the group with an above national growth rate and its relativity increasingly 3 percentage points. Despite the general slowdown in growth, all but one of the 18 leading group – Leeds, as already noted - retained their leading classification in 2011.

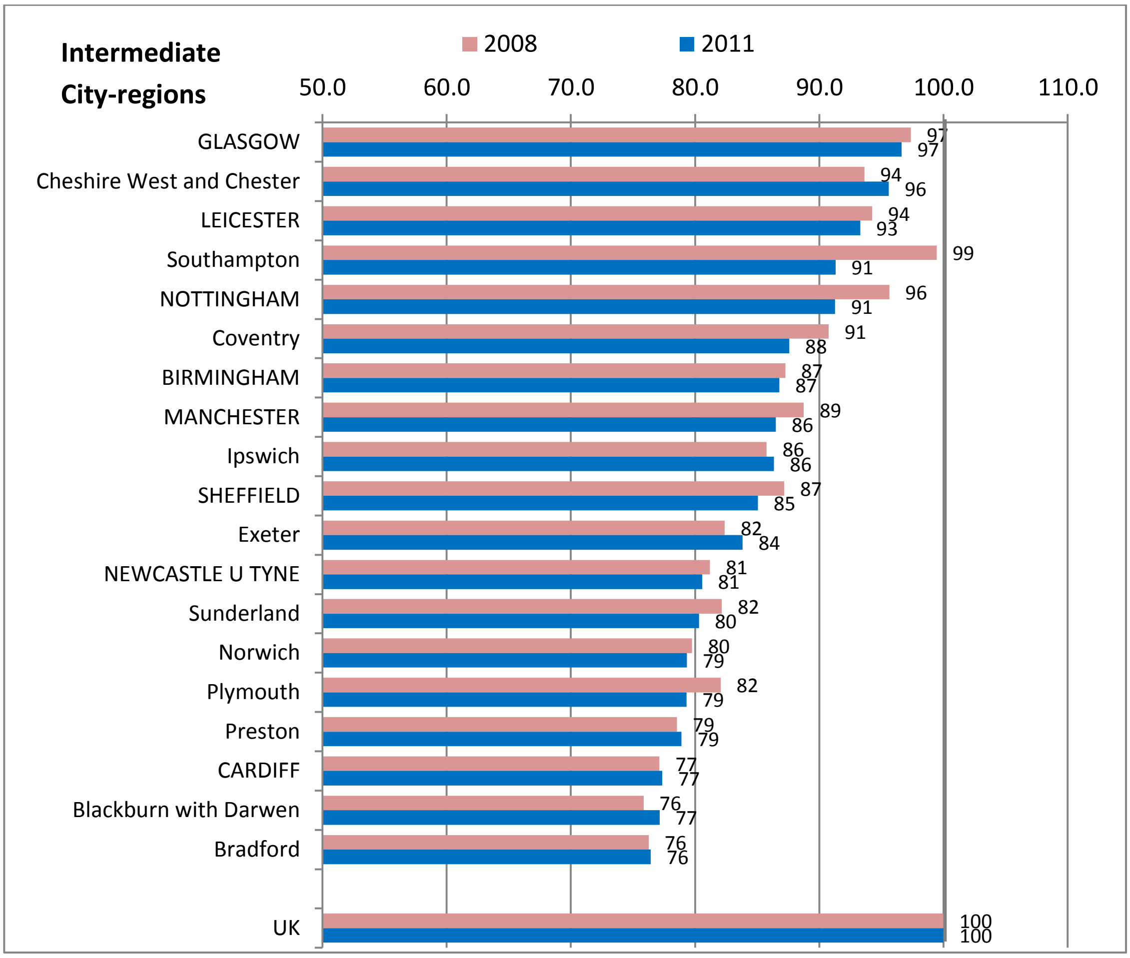
Figure 36: GVA per capita 2008 and 2011 – Leading City-regions, indexed to National, UK=100



Source: ONS

2.82 In the intermediate group (Figure 37), changes ranged from an increase of just 2 percentage points in Cheshire West and Chester (from 6% below national in 2008 to 4% below in 2011) to a fall of 8 percentage points in Southampton (from 1% below national in 2008 to 9% below in 2008). Nottingham saw its relativity decline by 5 percentage points and Coventry by 3 percentage points. All of the group have retained their intermediate classification.

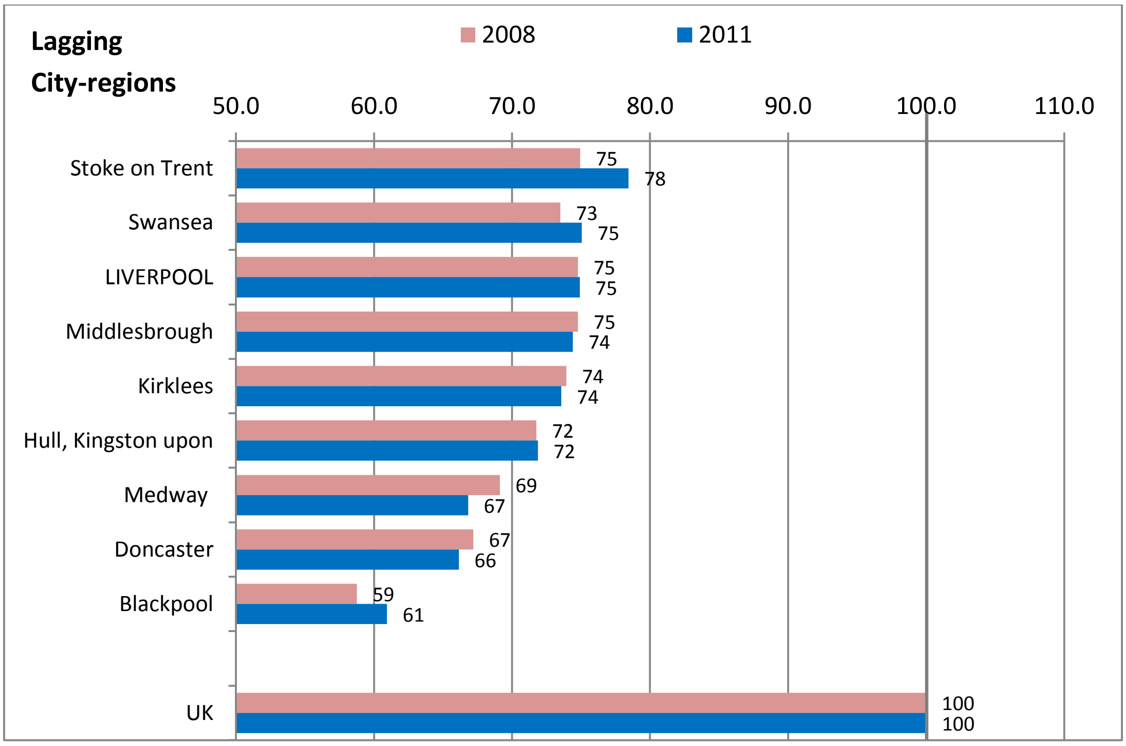
Figure 37: GVA per capita 2008 and 2011 – Intermediate City-regions, indexed to National, UK=100



Source: ONS

2.83 In the lagging group (Figure 38), the range of change was more compressed, from an increase of 3 percentage points In Stoke on Trent (from 25% to 22% below national over the period) to a 2 percentage points fall in Medway (from 31% to 33% below national). The above national increases in both Stoke on Trent and Swansea have seen them both change classification from lagging to intermediate in the three years. Liverpool saw its relativity remain unchanged at just over 25% below national.

Figure 38: GVA per capita 2008 and 2011 – Lagging City-regions, indexed to National, UK=100



Source: ONS

2.84 Table 11 summarises what all these shifts in GVA per capita levels meant for the classification three years into the recession. As described above, between 2008 and 2011:

- 1 city-region (Leeds) fell out of the 2008 leading group into the 2011 intermediate group; and
- 2 city-regions (Stoke on Trent and Swansea) moved from the lagging group in 2008 to the 2011 intermediate group, reversing the shift over the growth years.

Table 11: Changing leading, intermediate & lagging group geography 1997, 2008 and 2011, city-regions ranked by 2011 GVA per capita descending

City-region	North (N) – South (S)	1997	2008	2011
Reading	S	Leading	Leading	Leading
Aberdeen	N	Leading	Leading	Leading
LONDON	S	Leading	Leading	Leading
Milton Keynes	S	Leading	Leading	Leading
Swindon	S	Leading	Leading	Leading
EDINBURGH	N	Leading	Leading	Leading
Warrington	N	Leading	Leading	Leading
Peterborough	S	Leading	Leading	Leading
BRISTOL	S	Leading	Leading	Leading
Derby	N	Leading	Leading	Leading
Northampton	N	Leading	Leading	Leading
Cambridge	S	Leading	Leading	Leading
BELFAST	N	Intermediate	Leading	Leading
Portsmouth	S	Leading	Leading	Leading
Luton	S	Leading	Leading	Leading
Bournemouth	S	Intermediate	Leading	Leading
Brighton & Hove	S	Intermediate	Leading	Leading
LEEDS	N	Leading	Leading	Intermediate
GLASGOW	N	Intermediate	Intermediate	Intermediate
Cheshire West & Chester	N	Leading	Intermediate	Intermediate
LEICESTER	N	Intermediate	Intermediate	Intermediate
Southampton	S	Leading	Intermediate	Intermediate
NOTTINGHAM	N	Intermediate	Intermediate	Intermediate
Coventry	N	Leading	Intermediate	Intermediate
BIRMINGHAM	N	Intermediate	Intermediate	Intermediate
MANCHESTER	N	Intermediate	Intermediate	Intermediate
Ipswich	S	Intermediate	Intermediate	Intermediate
SHEFFIELD	N	Intermediate	Intermediate	Intermediate
Exeter	S	Intermediate	Intermediate	Intermediate
NEWCASTLE UPON TYNE	N	Intermediate	Intermediate	Intermediate
Sunderland	N	Intermediate	Intermediate	Intermediate
Norwich	S	Intermediate	Intermediate	Intermediate
Plymouth	S	Intermediate	Intermediate	Intermediate
Preston	N	Intermediate	Intermediate	Intermediate
Stoke on Trent	N	Intermediate	Lagging	Intermediate
CARDIFF	N	Intermediate	Intermediate	Intermediate
Blackburn with Darwen	N	Intermediate	Intermediate	Intermediate
Bradford	N	Intermediate	Intermediate	Intermediate
Swansea	N	Intermediate	Lagging	Intermediate
LIVERPOOL	N	Lagging	Lagging	Lagging
Middlesbrough	N	Intermediate	Lagging	Lagging
Kirklees	N	Intermediate	Lagging	Lagging
Hull, Kingston upon	N	Intermediate	Lagging	Lagging
Medway	S	Lagging	Lagging	Lagging
Doncaster	N	Lagging	Lagging	Lagging
Blackpool	N	Lagging	Lagging	Lagging

❖ Note: Capital city-region in capital letters & bold; second-tier in capital letters

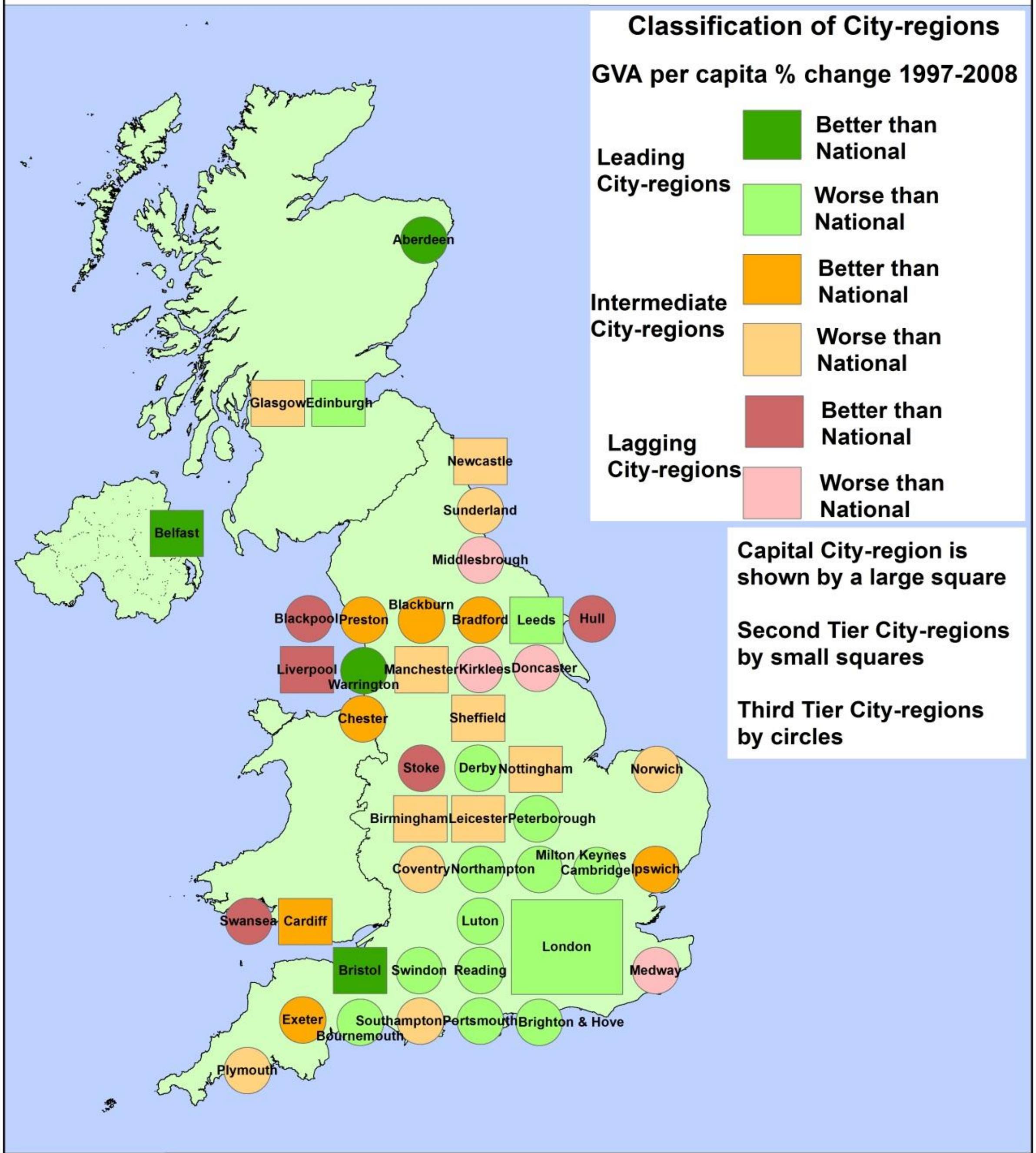
Key	
(green)	Leading
(amber)	Intermediate
(red)	Lagging

2.85 Map 9 shows the geography of change in GVA per capita levels over the recession by the GVA per capita classification and by tier.

2.86 The map - and Figures 35 to 38 - again show the lack of a strong relationship between size - in terms of place in the urban system - and growth:

- growth in the capital city-region has stagnated - a sharp reversal of its performance in the growth period when it had the highest growth rate in the leading group;
- only 4 of the 13 second-tier city-regions (31%) had above national growth and positive increases in their GVA per capita levels indexed to the UK (Belfast, Cardiff, Bristol and Liverpool);
- the remaining 9 second-tier city-regions in this group had below national growth and 5 of these (Nottingham, Leeds, Edinburgh, Manchester and Sheffield) had negative growth;
- while more than a third of the 32 third-tier city-regions (12, 38%) had above national growth rates and positive increases in their GVA per capita levels indexed to the UK, 20 had below national growth rates and 9 of these (Sunderland, Brighton & Hove, Swindon, Peterborough, Medway, Plymouth, Coventry, Southampton and Luton) had negative growth.

Map 9: UK City-regions: Leading, Intermediate, Lagging GVA per capita & Percentage Change 2008-2011



Sources: Boundaries downloaded from UK Data Service.
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GVA per capita data are from ONS. National data are for UK less extra regio.
2011 data are provisional. Some city-region names have been simplified for presentational reasons. City-regions are based on NUTS 3 approximations.

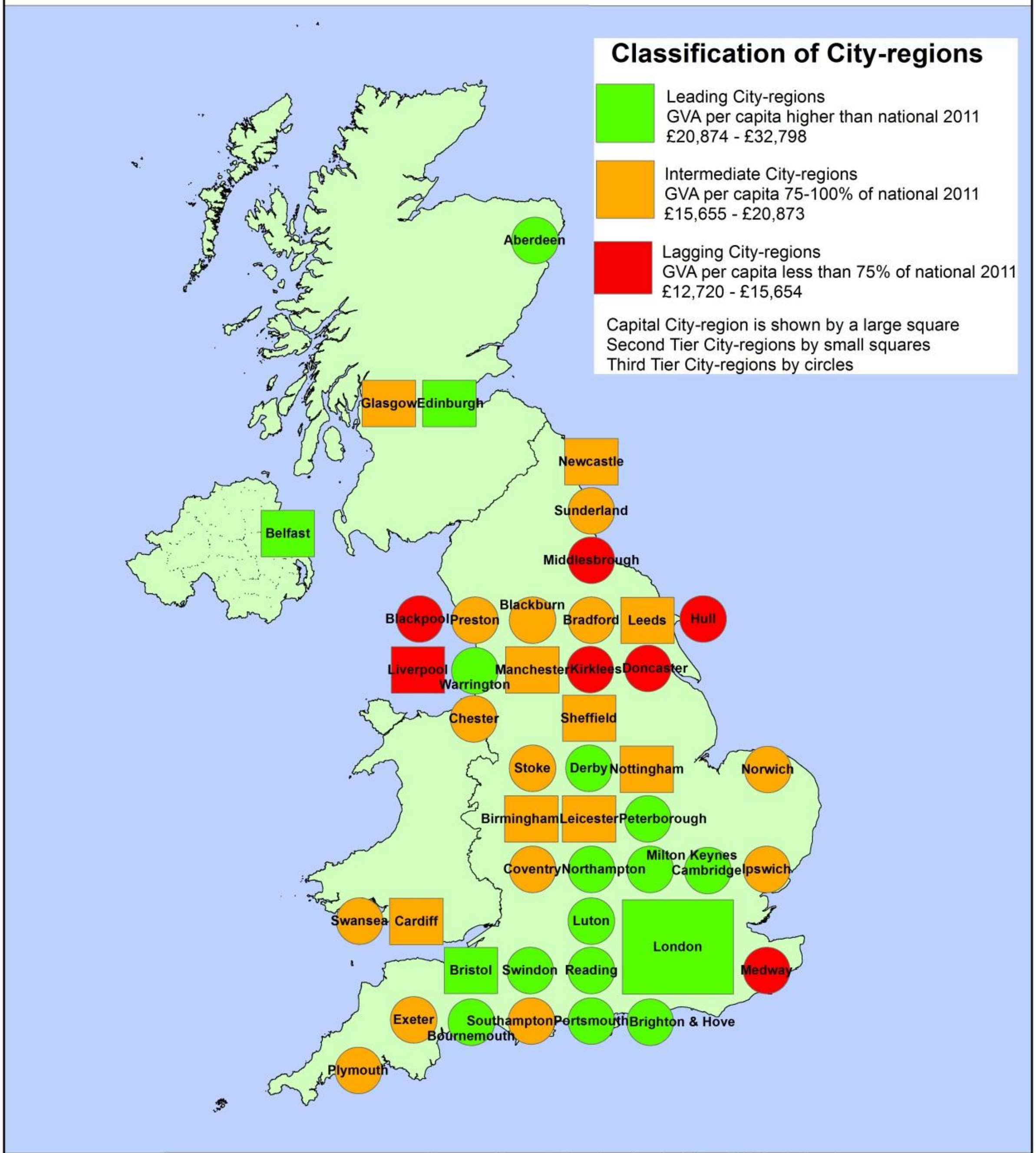
2.87 By geography, however, there was a complicated pattern:

- growth across the northern city-regions ranged from nearly 11% in Aberdeen to the 3% fall in Nottingham;
- 13 of the 29 northern city-regions (45%) had above national rates of growth, a higher proportion than in the growth years (28%) but, of the 16 with below national growth, 7 had negative growth (Sunderland, Sheffield, Manchester, Edinburgh, Coventry, Leeds and Nottingham);
- Growth across the southern city-regions ranged from 4% in Exeter to an 8% decline in Luton;
- only 3 of the 17 southern city-regions (18%) had above national rates of growth, a lower proportion than in the growth years (53%) and, of the 14 with below national growth. 7 had negative growth (Brighton & Hove, Swindon, Peterborough, Medway, Plymouth, Southampton and Luton).

2.88 Map 10 shows the picture in 2011:

- overall, the south still has a concentration of the leading group of city-regions by GVA per capita levels and intermediate and lagging city-regions are relatively more concentrated in the north - albeit with city-regions in Scotland (Edinburgh and Aberdeen) and Northern Ireland (Belfast) being notable exceptions: and
- the capital city-region retains its leading status.

Map 10: UK City-regions: Leading, Intermediate & Lagging - GVA per capita 2011



Sources: Boundaries downloaded from UK Data Service.
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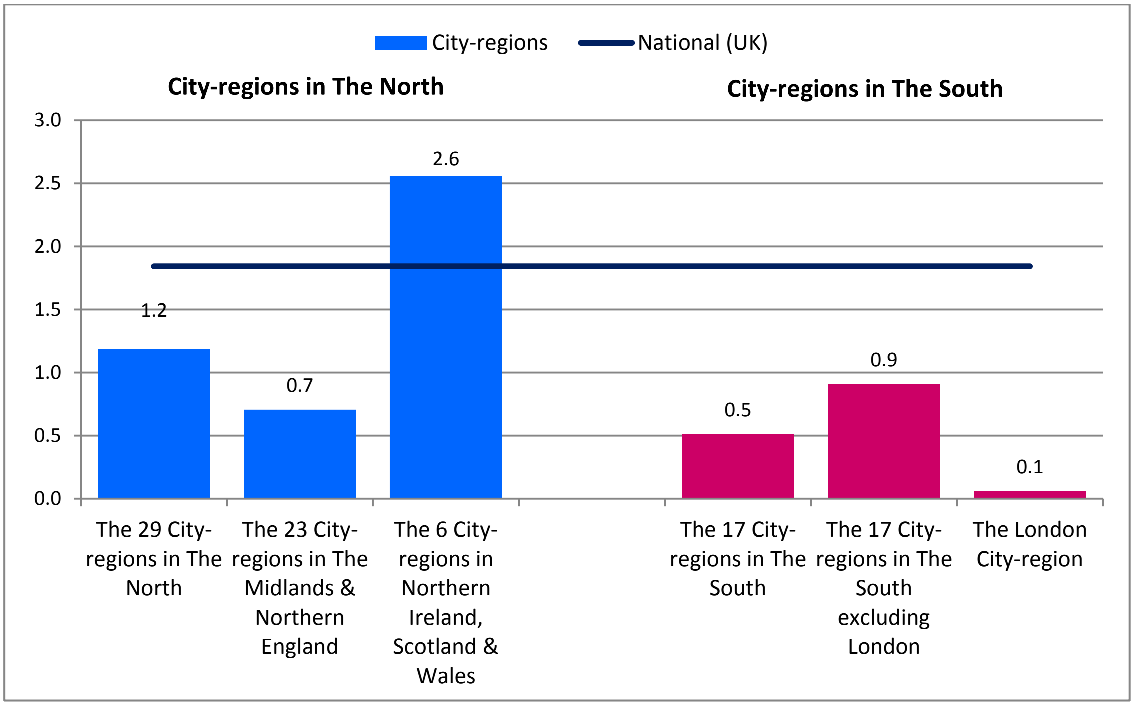
GVA per capita data are from ONS. 2011 figures are provisional.
National data are for UK less extra regio.
Some city-region names have been simplified for presentational reasons.
City-regions are based on NUTS 3 approximations.

2.89 Figure 39 shows the percentage change in GVA per capita for the city-regions by our broad north-south division again differentiating in the north, between city-regions in England and those in the devolved administrations and in the south, between the capital city-region and the remainder. The picture is different to that of the growth years. GVA per capita grew below the national rate in both the northern and southern city-regions in aggregate but with the former actually growing slightly faster than the latter although from a much lower start point. The slackening in growth of the London city-region stands out. So too does the performance of the 6 city-regions in the northern devolved administrations, which together have had a combined growth rate in the recession above national and above that for the southern city-regions including London.

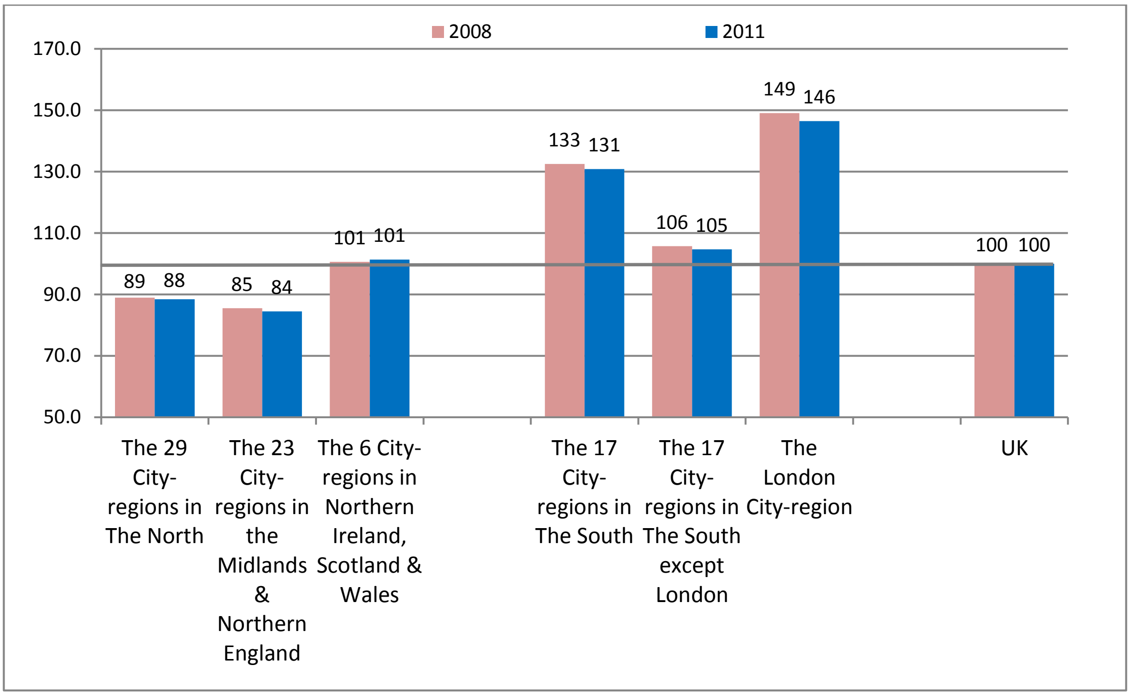
Figure 39: GVA per capita % change 2008-2011, City-regions in the North & the South



Source: ONS; 2011 GVA data are provisional

2.90 Figure 40 shows the change in GVA per capita indexed to the national figure for the same geographical breakdown. It serves as a reminder that, despite the slowing down in growth in the southern city-regions as a whole, the gap in relative performance with their northern counterparts remains considerable. Despite their relatively strong performance in the three recession years, the 6 city-regions in the northern devolved administrations together remain around 1 percentage point above the national average. The national relativities for the city-regions in the midlands and northern England have fallen, albeit by only a single percentage point (to 16% below the national). The slight fall in the relativity indices for the southern city-regions has meant that the gap between northern and southern city-regions has narrowed very slightly from 44 to 43 percentage points in the three years of the recession.

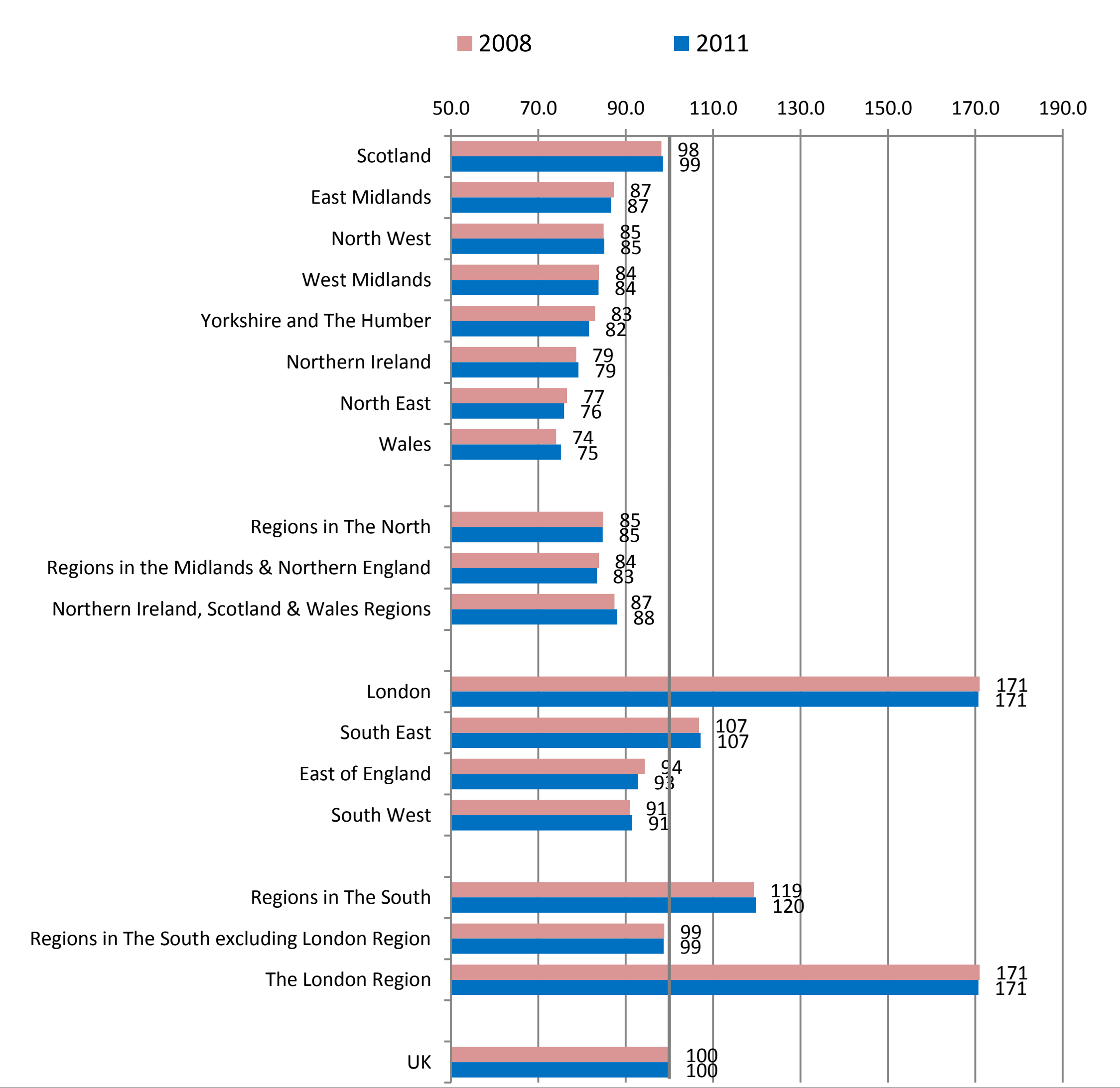
Figure 40: GVA per capita 2008 and 2011 – City-regions in the North & the South, indexed to National, UK=100



Source: ONS; 2011 data are provisional

2.91 Figure 41 provides the regional context for the city-regional changes, summarising changes in regional GVA per capita indexed to the national figure for 2008 and 2011. Despite having above national increases in GVA per capita over the three years the relativities in the North West of England, Scotland, Northern Ireland and Wales barely shifted with just 1 percentage point increases in Scotland and in Wales. In the south, the above national increases in GVA per capita in the South West and South East were mirrored by below national increases in the East of England and the London region. But these different rates of growth did little to change their relativities. In 2011, GVA per capita remained 71% above the national rate for the London region and 7% for the South East. The north-south gap that had widened in the 12 years of growth has widened by a further percentage point in 3 years of recession. In 2008, the gap was, as already noted, 34 percentage points – the northern regions having a figure 15% below and the southern regions 19% above. In 2011, the gap had shifted to 35 percentage points - with the northern city-regions regions still having a figure 15% below and the southern regions 20% above.

Figure 41: GVA per capita 2008 and 2011 in the Regions, indexed to National, UK=100

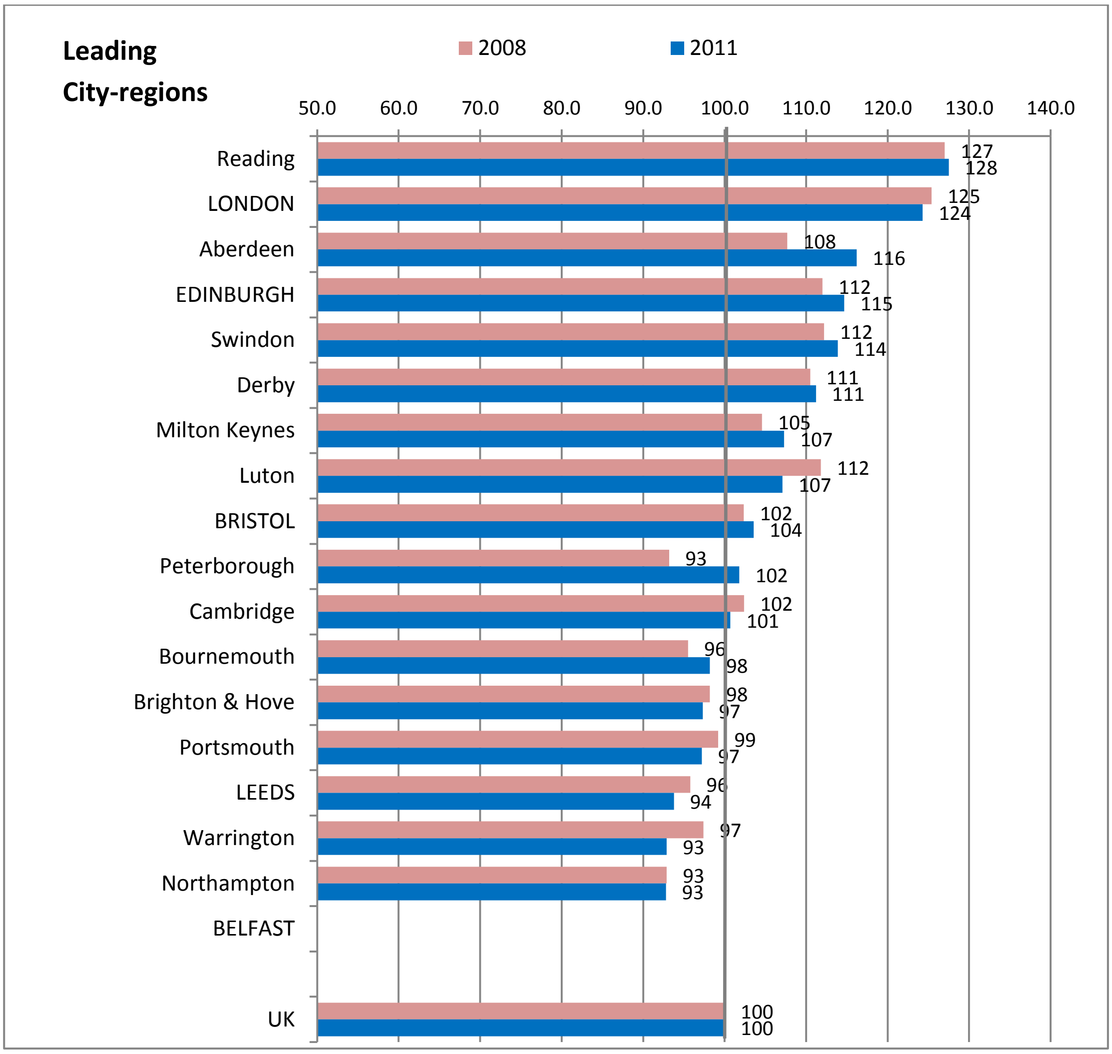


Source: ONS; 2011 data are provisional

Productivity – GVA per hour worked

2.92 We have a different measure of employment-related productivity for the recession, namely nominal GVA per hour worked. Figures 42 to 44 show GVA per hour worked relative to the national figures in 2008 and 2011 for city-regions classified by GVA per capita in 2008. The two classifications are less closely related than they were for GVA per capita and GVA per job filled in 2002. We do not have data for Belfast, but of the 17 leading city-regions in terms of GVA per capita only 10 had levels of GVA per job filled above national in 2008 – ranging from 2% above in Bristol and Cambridge to 27% above in Reading (Figure 42). 2008 to 2011, 8 leading city-regions increased their productivity, 2 stayed the same, and 7 saw their GVA per hour worked fall.

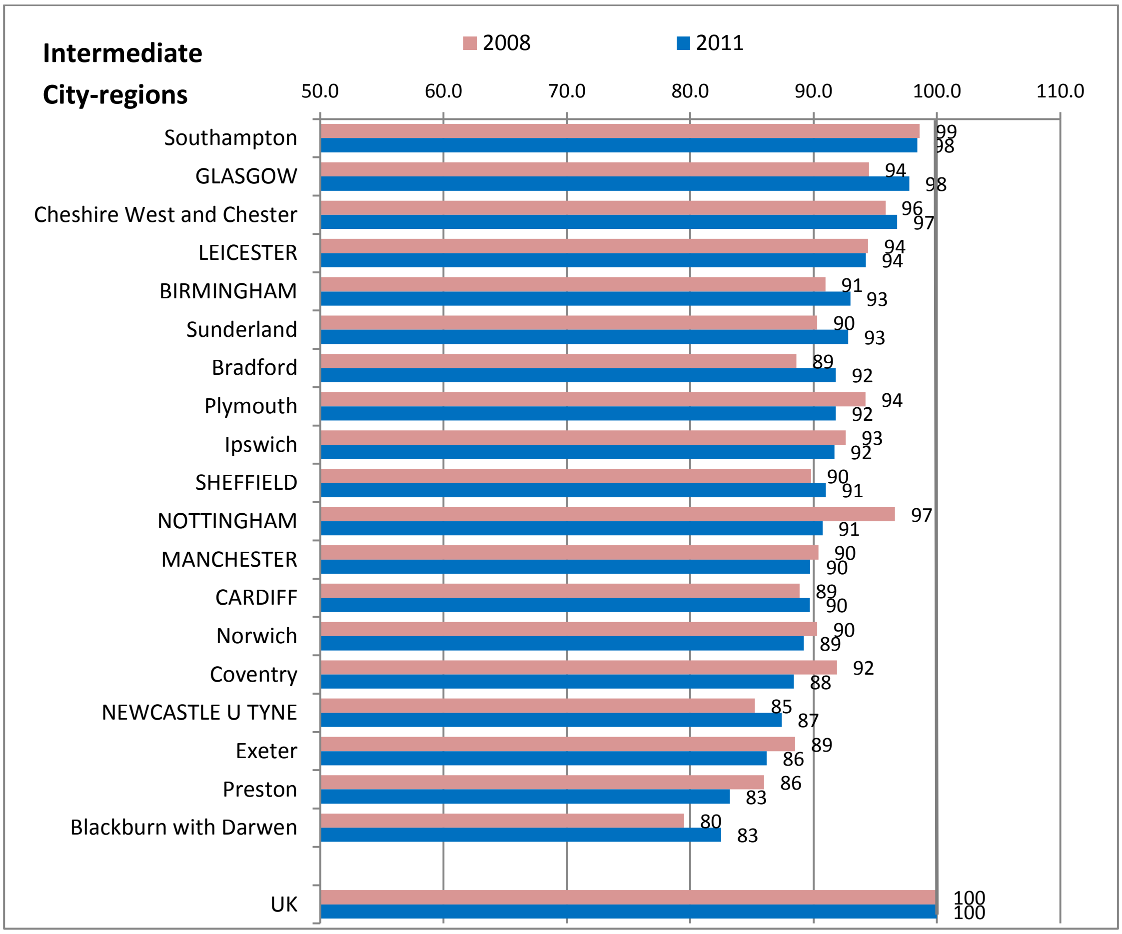
Figure 42: GVA per hour worked 2008 and 2011, Leading City-regions, indexed to National, UK=100



Source: ONS. London and second-tiers in capital.

2.93 Intermediate city-regions on GVA per capita also had intermediate levels of GVA per hours worked in 2008 – with figures ranging from 20% below national in Blackburn with Darwen to just 1% below national in Southampton. 2008-11 9 of the 19 intermediate city-regions saw their productivity increase, but all remained below national. In 8 city-regions GVA per hour worked fell and in 2 city-regions it stayed the same.

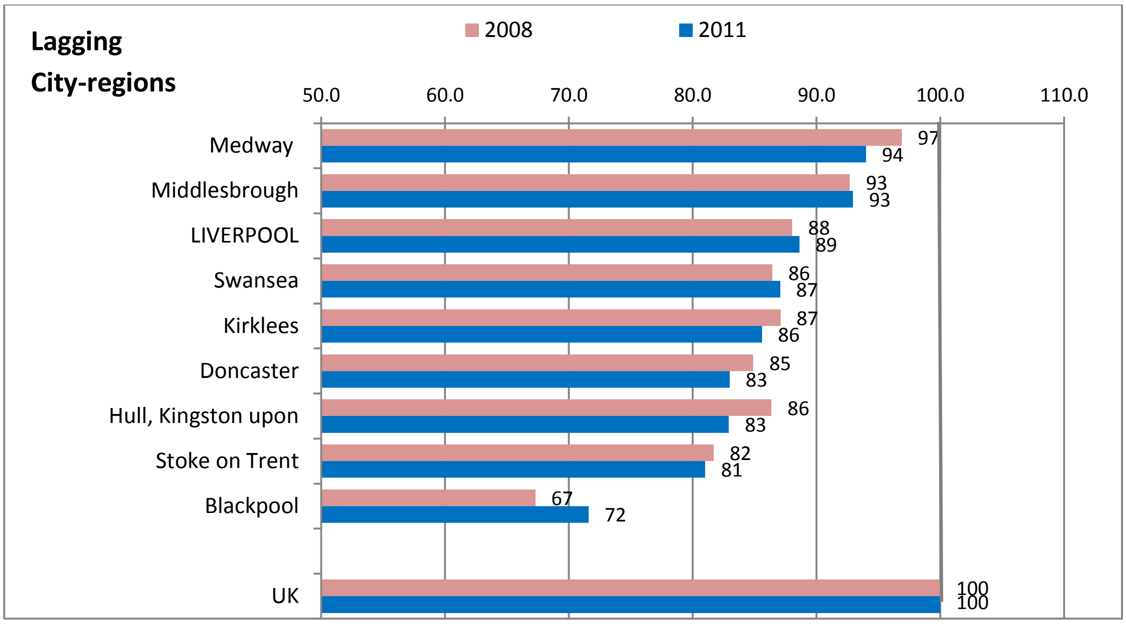
Figure 43: GVA per hour worked 2008 and 2011, Intermediate City-regions, indexed to National, UK=100



Source: ONS. Second-tiers in capitals.

2.94 8 of the 9 lagging city-regions on GVA per capita had 'intermediate' levels of GVA per hour worked in 2008, the exception, as with GVA per job filled in 2002, was Blackpool with a level 33% below national (Figure 44). 2008-11 productivity increased in 3 city-regions, stayed the same in 1 and fell in 5.

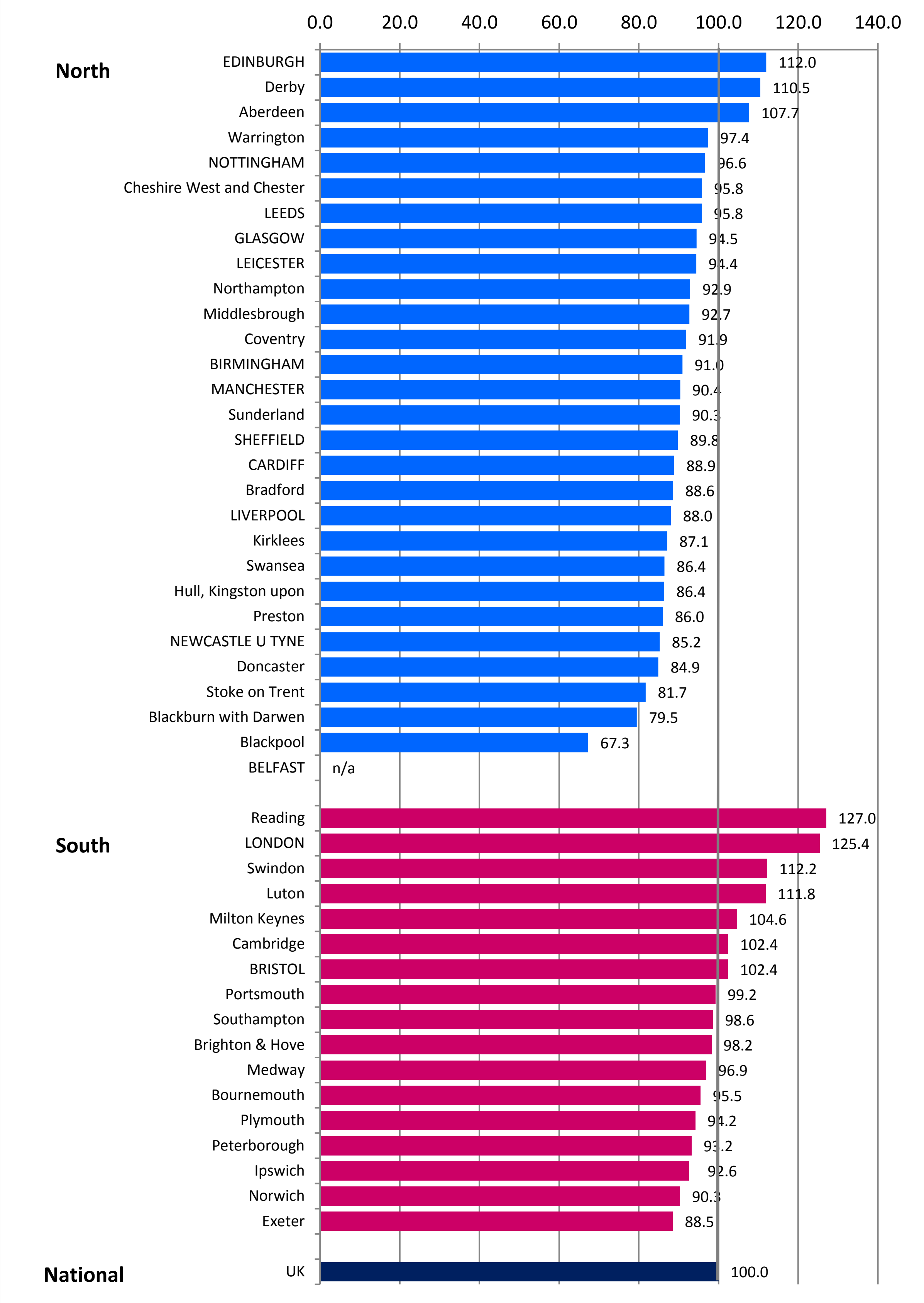
Figure 44: GVA per hour worked 2008 and 2011, Lagging City-regions, indexed to National, UK=100



Source: ONS. Second-tier in capitals.

2.95 Figure 45 shows the geography of GVA per hour worked. A similar north-south pattern to that noted for GVA per job filled in the 2002-2008 period is discernible. Only 3 of the 29 northern city-regions had above national levels in 2008: the same 3 that had the highest levels of GVA per job filled in 2002 - Edinburgh, Derby and Aberdeen. 7 of the 17 southern city-regions had GVA per hour worked levels above national: the same 7 that had above national levels of GVA per job filled in 2002 – London city-region, second-tier Bristol and third-tier Reading, Swindon, Luton, Milton Keynes and Cambridge.

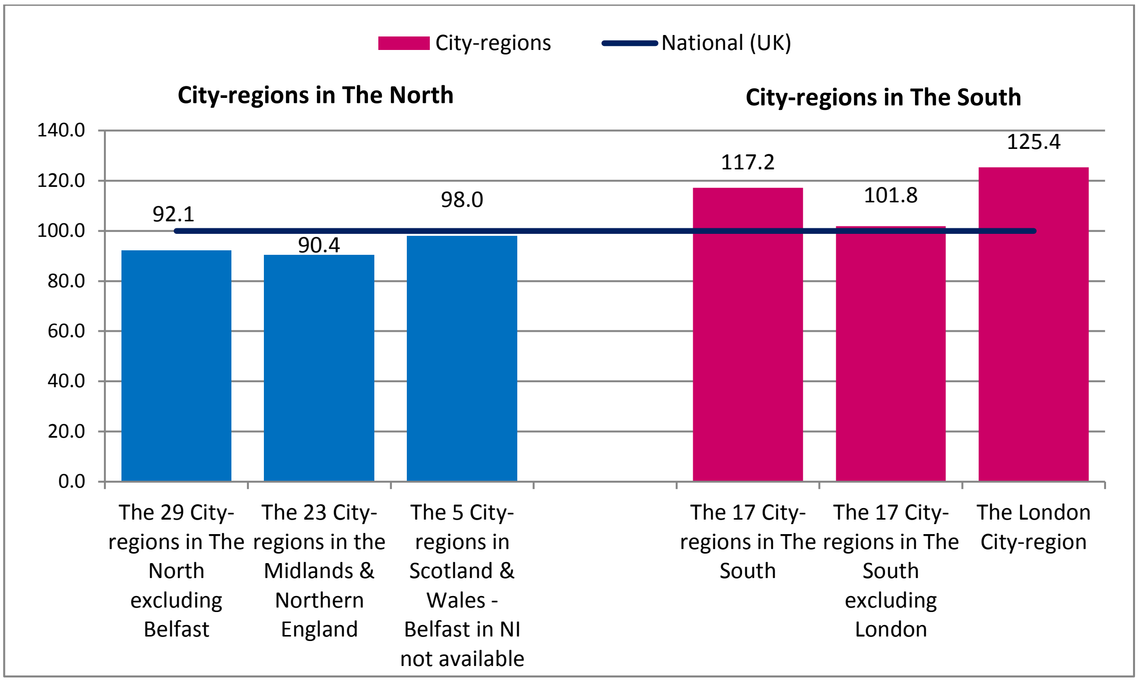
Figure 45: Nominal GVA per hour worked, 2008, indexed to national, UK=100



Source: ONS. London and second-tiers in capitals.

2.96 As Figure 46 shows, the gap in GVA per hour worked between the northern and southern city-region groupings was 25 percentage points, with the former having a level 8% below national and the latter one 17% above.

Figure 46: Nominal GVA per hour worked, 2008, in city-regions in the North and the South, indexed to national, UK=100

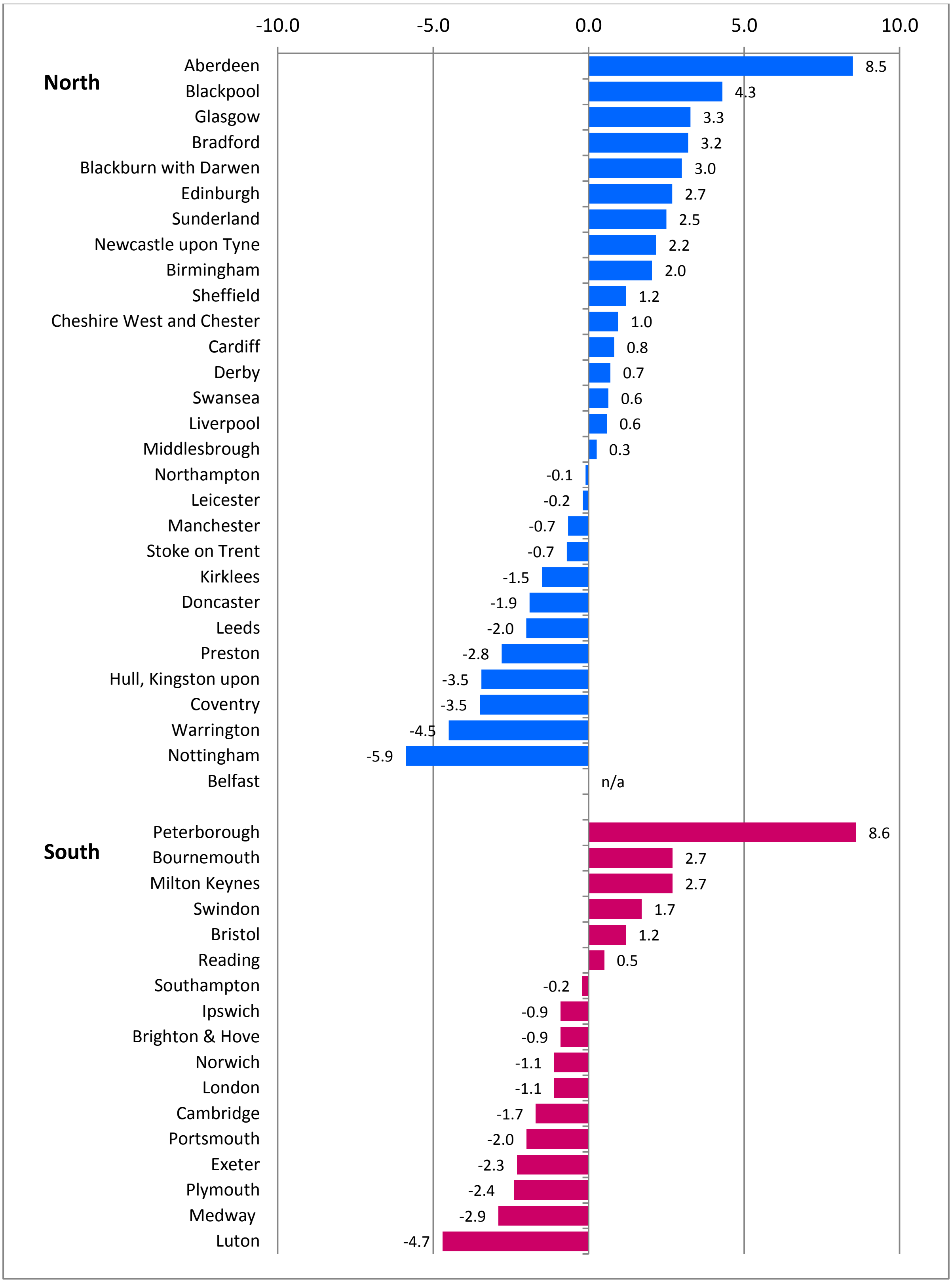


Source: ONS

Change in Productivity 2008-11

2.97 There is an interesting regional contrast in terms of productivity change in the recession years with that in the growth years, 2002-2008. While only 2 of the 29 northern city-regions had increases above national in GVA per job filled in that period, 16 had above national increases in the recession – 8 second-tier including lagging Liverpool and 8 third-tier including lagging Blackpool, Swansea and Middlesbrough (Figure 47). The number of southern city-regions with increases above national in employment-based productivity has fallen from 10 in the 2002-2008 period to 6 in the recession years. The recession has increased pressure on productivity change in both North and South.

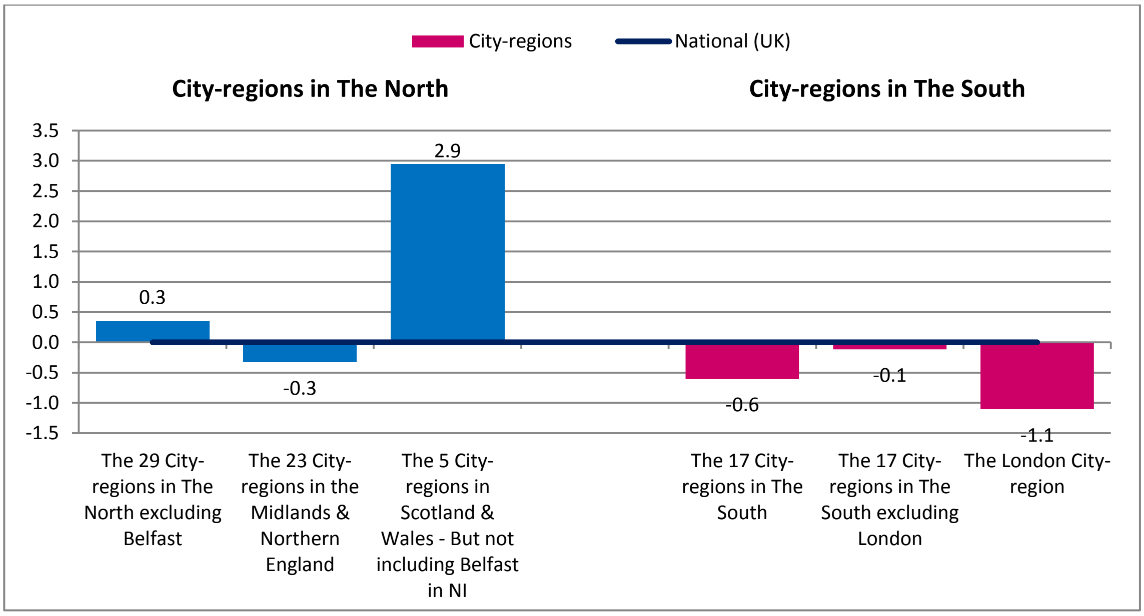
Figure 47: Nominal GVA per hour worked 2008-2011, percentage point changes relative to UK=100



Source: ONS

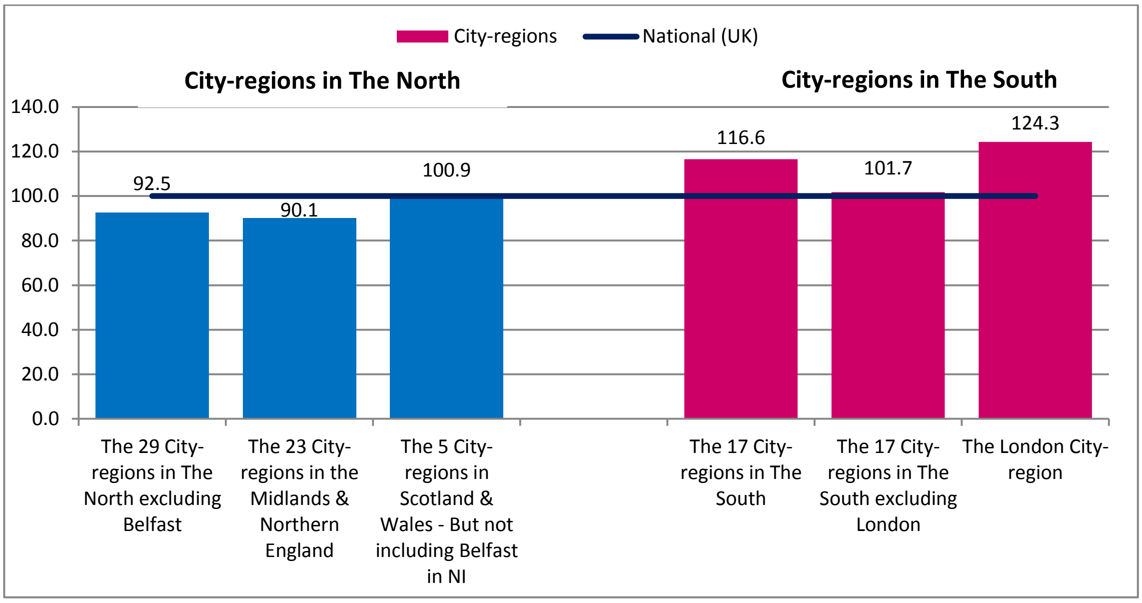
2.98 Figure 48 shows the picture for our broad North-South geography. The northern city-regions – and notably the Scottish and Welsh city-regions - have strengthened their relative position. As Figure 49 shows, the gap in GVA per hour worked between the northern and southern city-region groupings has been reduced from 25 percentage points in 2008 to 24 percentage points in 2011.

Figure 48: Nominal GVA per hour worked 2008-2011, percentage point changes relative to UK=100, in city-region in the North and the South



Source: ONS

Figure 49: Nominal GVA per hour worked, 2011, where UK=100, in city-regions in the North and the South



Source: ONS

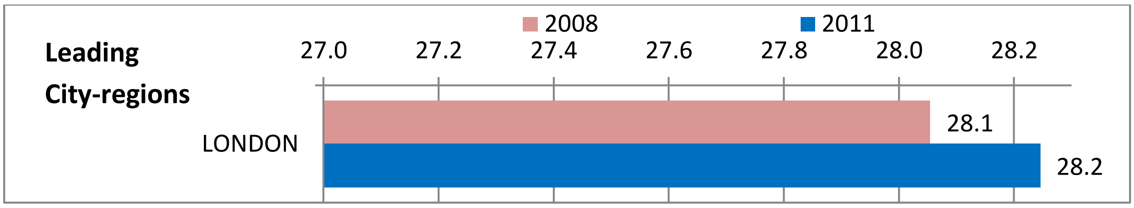
Total GVA

London still dominates. North south gap increases slightly

2.99 Figures 50 – 54 show the change in total GVA between 2008 and 2011 by city-regions classified by GVA per capita levels and by tier in 2008. While growth varied across city-regions, the total shares of the three groups remained largely unaltered. Thus, total GVA increased above the national rate in 8 of the 18 city-regions in the leading group (44%) while overall the group's share of total national GVA increased from 43.4% to 43.7%.

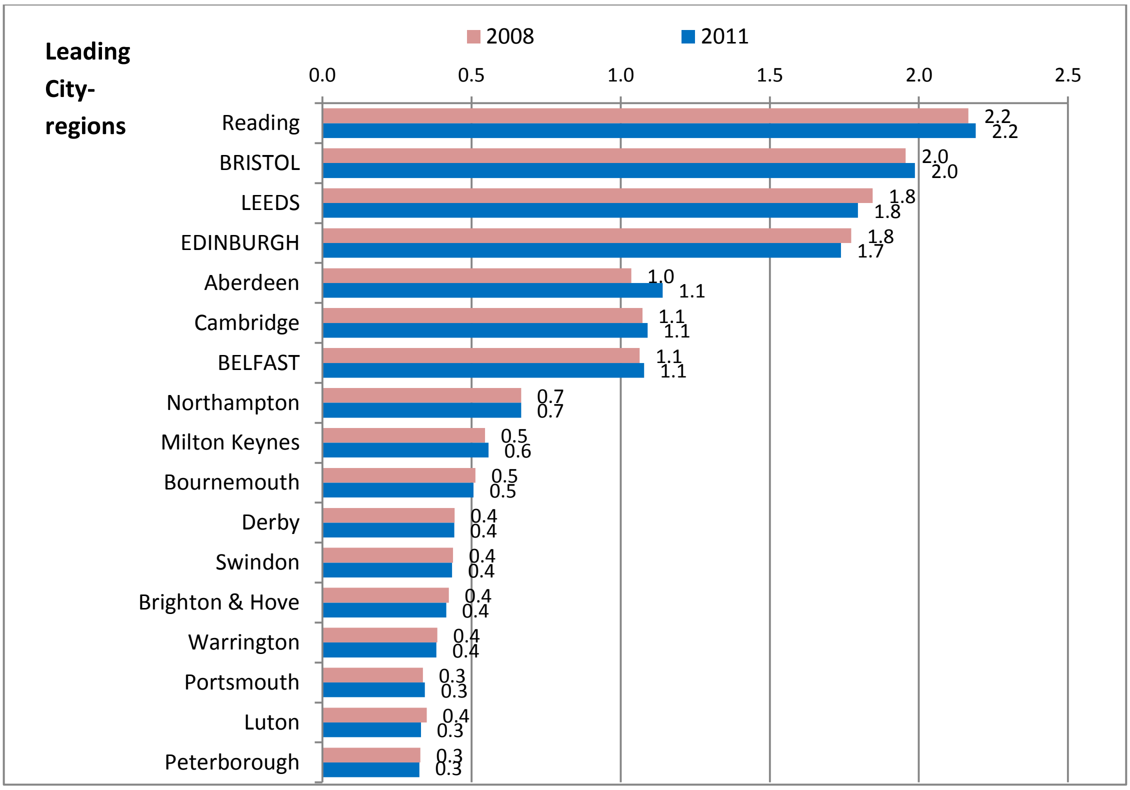
2.100 Similarly, total GVA increased above national in one third of the 19 intermediate city-regions but the group's overall share only slipped from 23.8% to 23.6%. And, despite 3 of the 9 lagging city-regions having an above national increase in total GVA, the group's share of total GVA remained at 6.0%.

Figure 50: Total GVA, % share of National 2008 & 2011, Leading City-regions - London



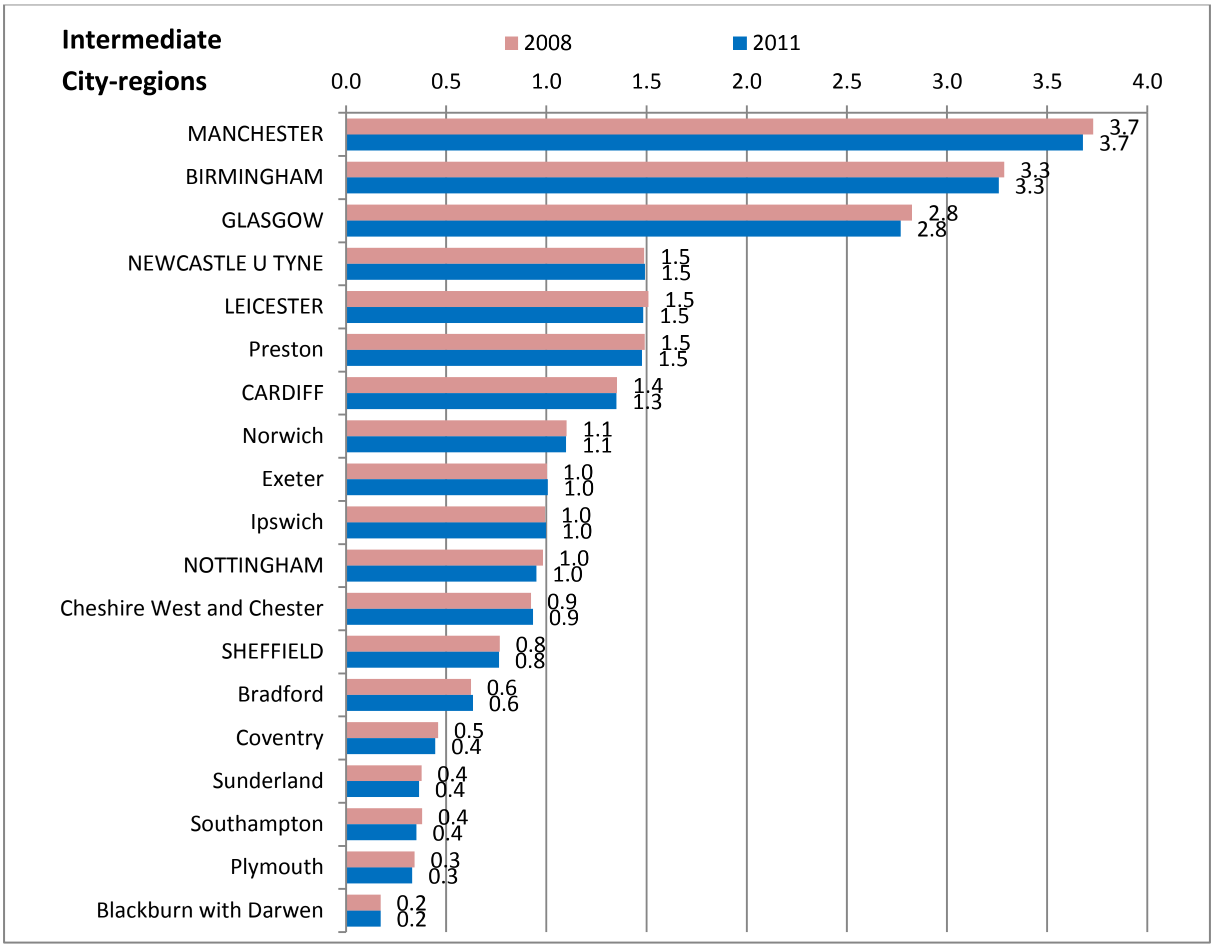
Source: ONS

Figure 51: Total GVA, % share of National 2008 & 2011, Leading City-regions except London, & by Tier



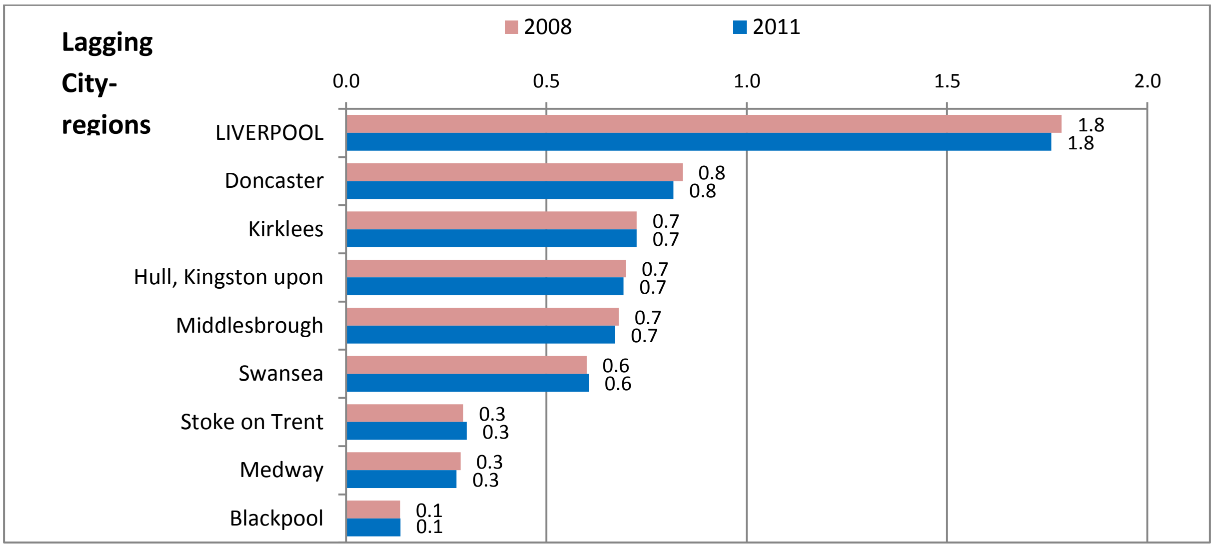
Source: ONS; Second-tier city-regions are in capitals

Figure 52: Total GVA % share of National 2008 & 2011, Intermediate City-regions & by Tier



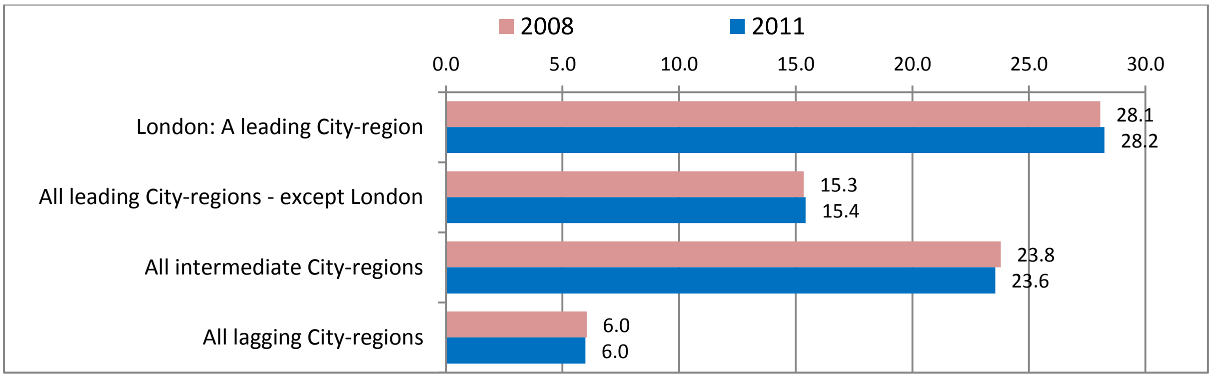
Source: ONS; Second-tier city-regions are in capitals

Figure 53: Total GVA % share of National 2008 & 2011, Lagging City-regions & by Tier



Source: ONS; Second-tier city-regions are in capitals

Figure 54: Total GVA, % share of National 2008 & 2011, Summary: London, Leading excluding London, Intermediate & Lagging City-regions (2008 classification)



Source: ONS

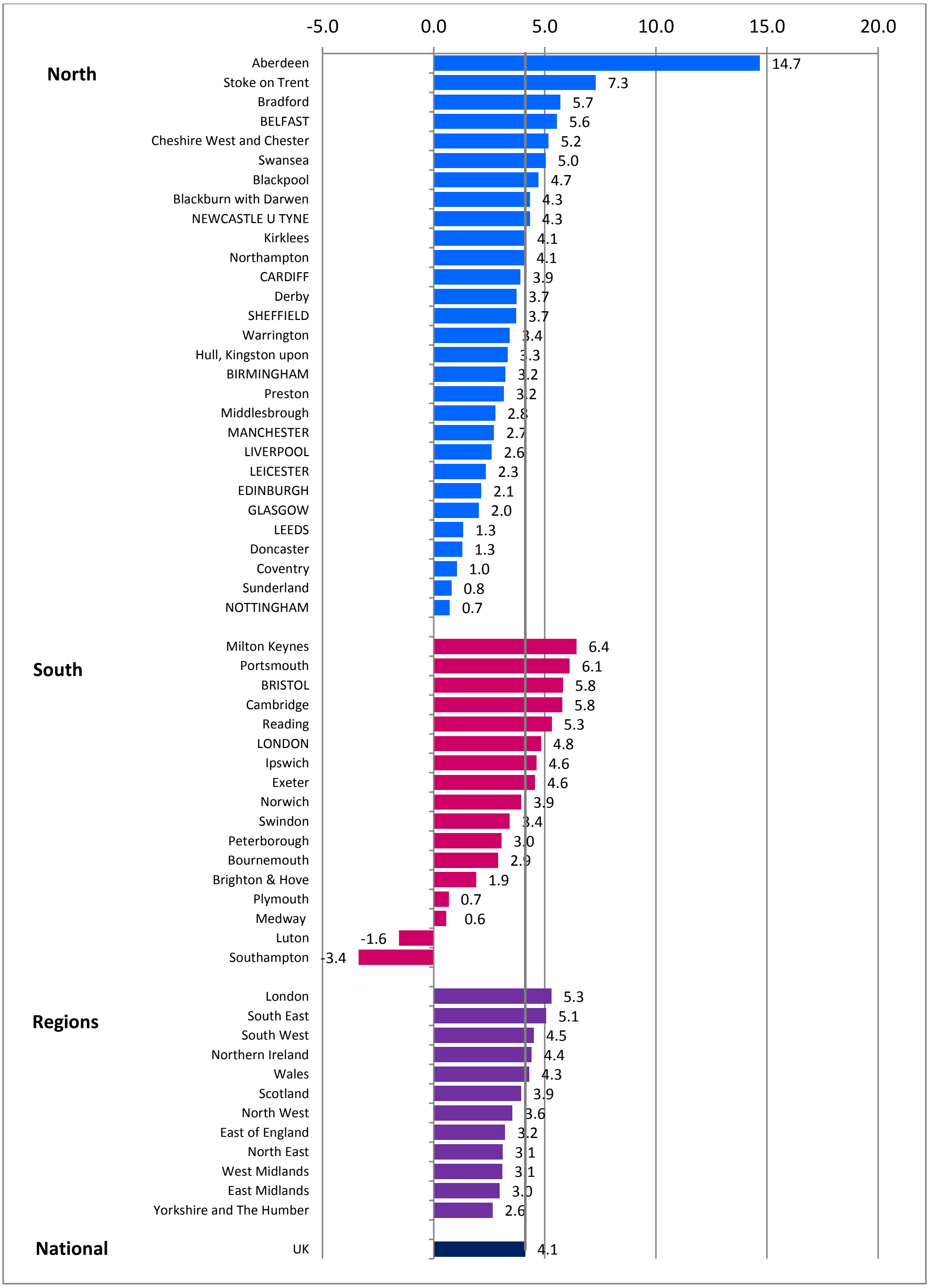
2.101 London retains its dominance – albeit with an increase only slightly above the national change and its share stabilising at 28.2%. The other remaining leading city-regions also fractionally increased their share from 15.3% to 15.4%.

2.102 The 13 second-tier city-regions together had a below national change in total GVA and their share of national GVA fell, albeit only slightly, from 24.4% to 24.1%. Only 3 had above national change: Belfast, Bristol and, just, Newcastle upon Tyne.

2.103 Total GVA for the 32 third-tier city-regions together grew very slightly above the national and their share increased, again very slightly, from 20.8% to 20.9%. 13 of the 32 had above national increases: Aberdeen, Blackburn with Darwen, Blackpool, Bradford, Cambridge, Cheshire West and Chester, Exeter, Ipswich, Milton Keynes, Portsmouth, Reading, Stoke on Trent and Swansea.

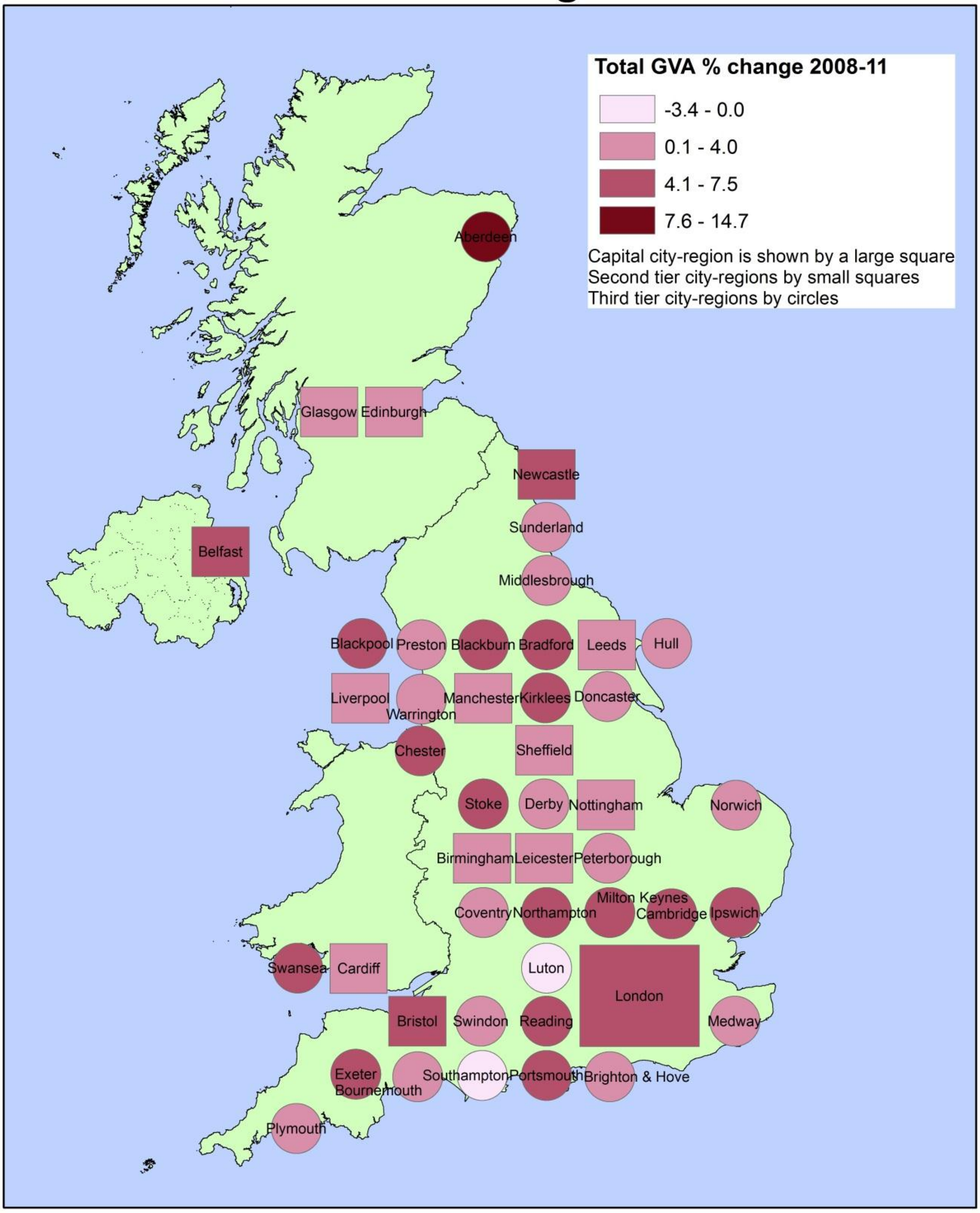
2.104 Figure 55 and Map 11 show the geography of change in total GVA over the period. Total GVA in 9 of the 29 northern city-regions increased faster than national: second-tier Belfast and Newcastle upon Tyne and third-tier Aberdeen. Stoke on Trent, Bradford, Cheshire West and Chester, Swansea, Blackpool and Blackburn with Darwen. Total GVA increased faster than national in 8 of the 17 southern city-regions: London, second-tier Bristol and third-tier Milton Keynes, Portsmouth, Cambridge, Reading, Ipswich and Exeter.

Figure 55: Total GVA % change 2008-2011



Source: ONS

Map 11: UK City-regions Total GVA - % Change 2008-2011



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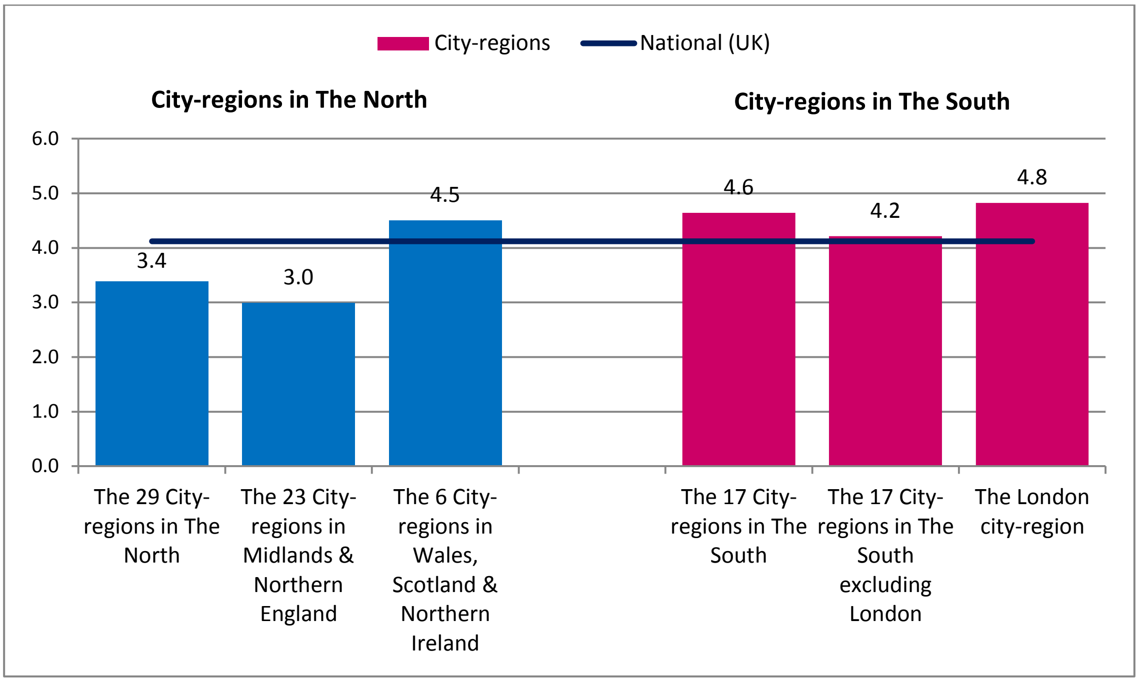
2.105 Figure 56 shows total GVA change within and between north and south. The 6 city-regions in the northern devolved administrations had a higher combined growth rate than the national and northern city-regions as a whole and are roughly on a par with the southern city-regions as a group. The continued growth in the London city-region is also apparent.

Figure 56: Total GVA, % change 2008-2011, City-regions in the North and the South



Source: ONS

2.106 Table 12 shows that the change has had little impact on city-regional shares of total national GVA. The share of the northern city-regions has shifted only very slightly to 32.7% and that of the city-regions in the northern devolved administrations has stayed at 8.7%. Similarly, the shares of the southern city-regions and, within these, the London city-region have increased only very slightly – from 40.3% to 40.5% for the former and from 28.1% to 28.2% for the latter. The gap in shares between the northern and southern city-regions widened over the period – from 7.3 percentage points at the onset of recession to 7.8 percentage points three years in.

Table 12: Total GVA, % share UK 2008 and 2011, City-regions in the North and the South

	Total GVA Shares (% UK)		Change
	2008	2011	2008-2011
North			
The 29 city-regions	33.0	32.7	-0.3
The 23 city-regions in the Midlands and Northern England	24.3	24.0	-0.3
The 6 city-regions in Northern Ireland, Scotland and Wales	8.7	8.7	0.0
South			
The 17 city-regions	40.3	40.5	0.2
The 17 city-regions in the south excluding London	12.2	12.2	0.0
London	28.1	28.2	0.1

2.3.2 Employment

Employee numbers only grew in London, which increased its share of employees over the recession years – but surprising variations in some of the falls in both north and south

Employee numbers fell at more than double the national rate in 14 city-regions – 3 second-tier and 11 third-tier; 10 northern and 4 southern

The decline in employee numbers in the southern city-regions as a whole - excluding London - nearly matched that of their northern counterparts

London stands out for its growth and Glasgow for its decline

2.107 Figure 57 shows the percentage change in number of employees in the recession years, 2008-2012. Employee numbers fell nationally by 2.6% and fell in all but two city-regions: with London being the only city-region to see a rise (by 1.5%) and Aberdeen with the numbers remaining stable. Employee numbers fell in the remaining 44 city-regions; ranging from the relatively negligible fall (-0.1%) in Blackburn with Darwen to an 11.2% decline in Glasgow (four times the national rate.

By GVA per capita classification:

- 8 of the 18 leading city-regions in levels of GVA per capita at the start of the period (44%) had better than national performances – growth in London, stability in Aberdeen and below national decreases in six others. In the growth years, 1997-2008, the proportion had been higher with 11 of 18 (61%) performing better than national.

- Employee numbers fell in 5 of the 19 intermediate city-regions at below the national rate (26%) – again, a relative worse per romance than in the growth years, when half of the intermediate city-regions had had above national increases in employee numbers.
- 2 of the 9 lagging city-regions (22%) stand out for having below national falls in employee numbers – Liverpool and Stoke on Trent. This performance contrasts with that of the growth years, when none of the lagging city-regions had above national growth rates.

By tier:

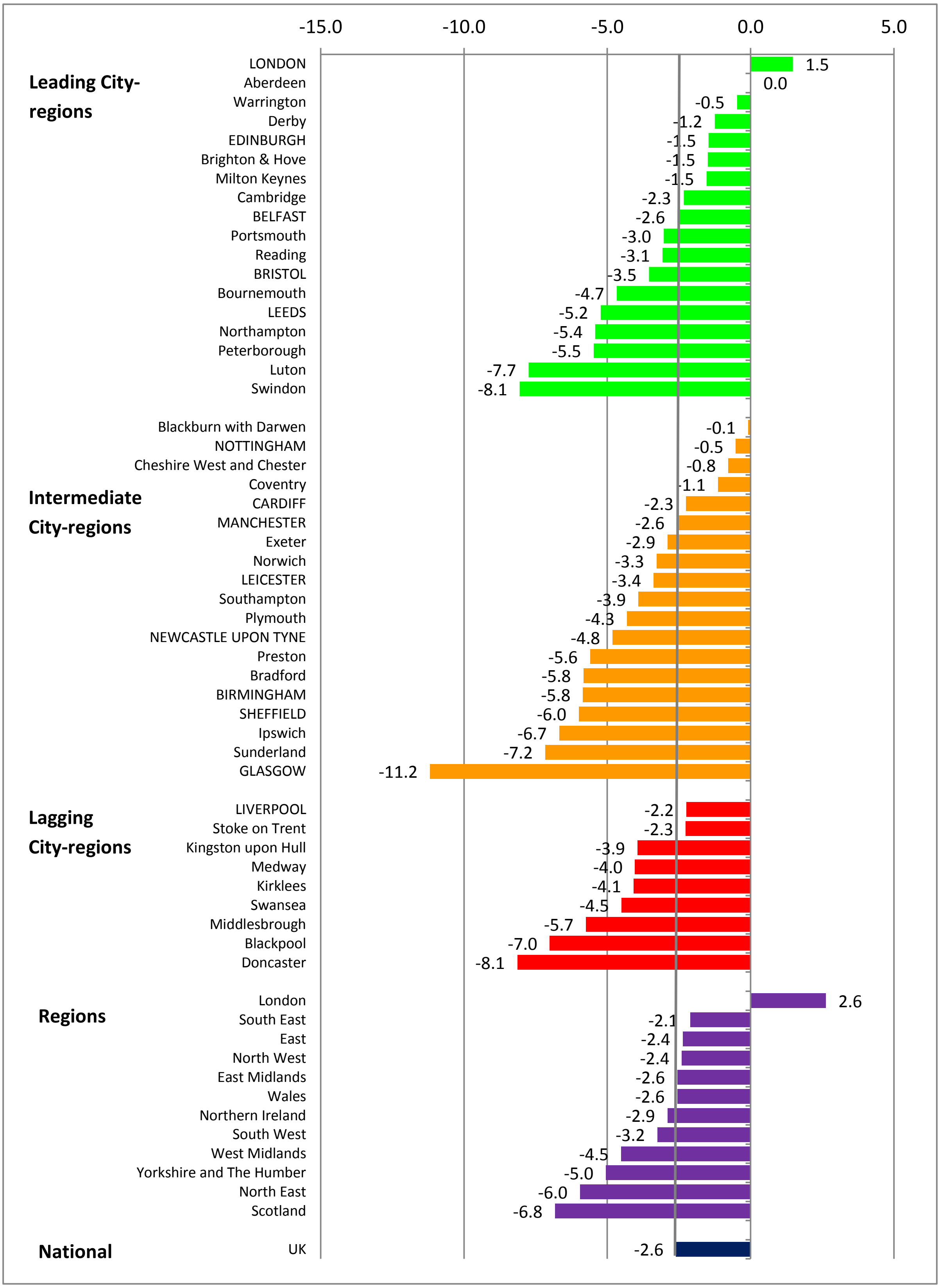
- London, as already noted, was the only city-region in which employee numbers increased.
- Only 3 of the 13 second-tier city-regions had lower than national falls in employees: Edinburgh, Nottingham and, as already noted, Liverpool. Of these 3, Nottingham stands out with a decline in employee numbers at one fifth the national rate. By contrast, employee numbers fell at more than twice the national rate in Birmingham, Sheffield and Glasgow.
- Employee numbers fell at rates below the national in just 9 of the 32 third-tier city-regions. Of these, Blackburn with Darwen and Warrington stand out: the former for its relatively negligible decline and the latter for its fall, like Nottingham, at one fifth the national rate. By contrast, 11 third-tier city-regions had falls at more than twice the national rate – 7 in the north and 4 in the south.

By geography:

Map 12 shows the geography of employment change.

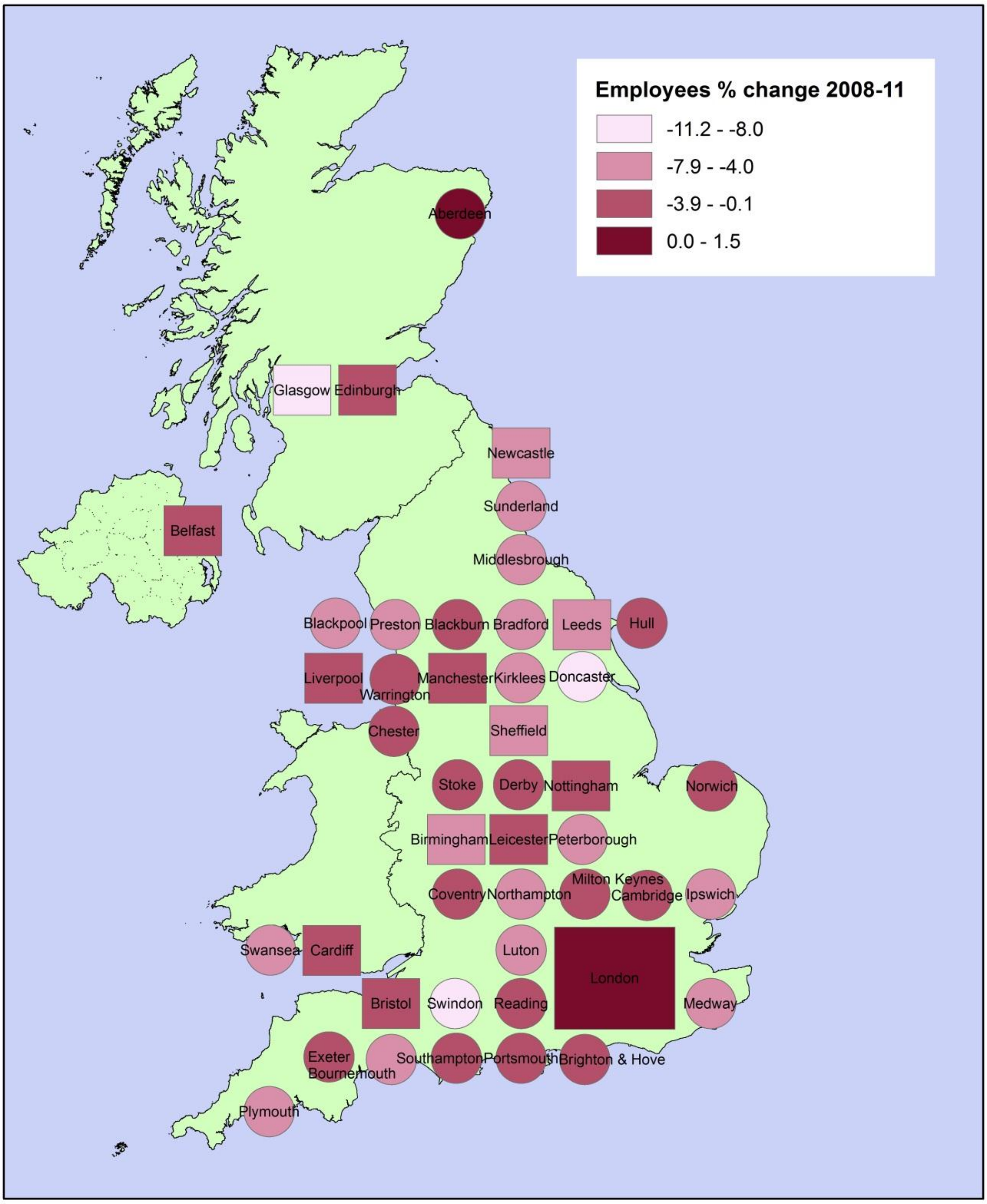
- Just 4 of the 17 southern city-regions (24%) – London, Brighton and Hove, Milton Keynes and Cambridge – performed better than nationally.
- The exceptional growth in London clearly stands out.
- Just 11 of the 29 northern city-regions (38%) performed better than nationally: 4 second-tier (Edinburgh, Nottingham, Cardiff and, surprisingly given its recent history, Liverpool) and 7 third-tier (Aberdeen, Blackburn with Darwen, Warrington, Cheshire West and Chester, Coventry, Derby and Stoke on Trent).
- The exceptional decline of Glasgow – at over 4 times the national rate - also stands out.

Figure 57: Total Employees % change 2008-2012



Sources: business register and employment survey - 2010 consistent with earlier years; & business register and employment survey; Belfast & Northern Ireland data are 2008-2011; UK 2008-12 includes 2008-11 Northern Ireland data

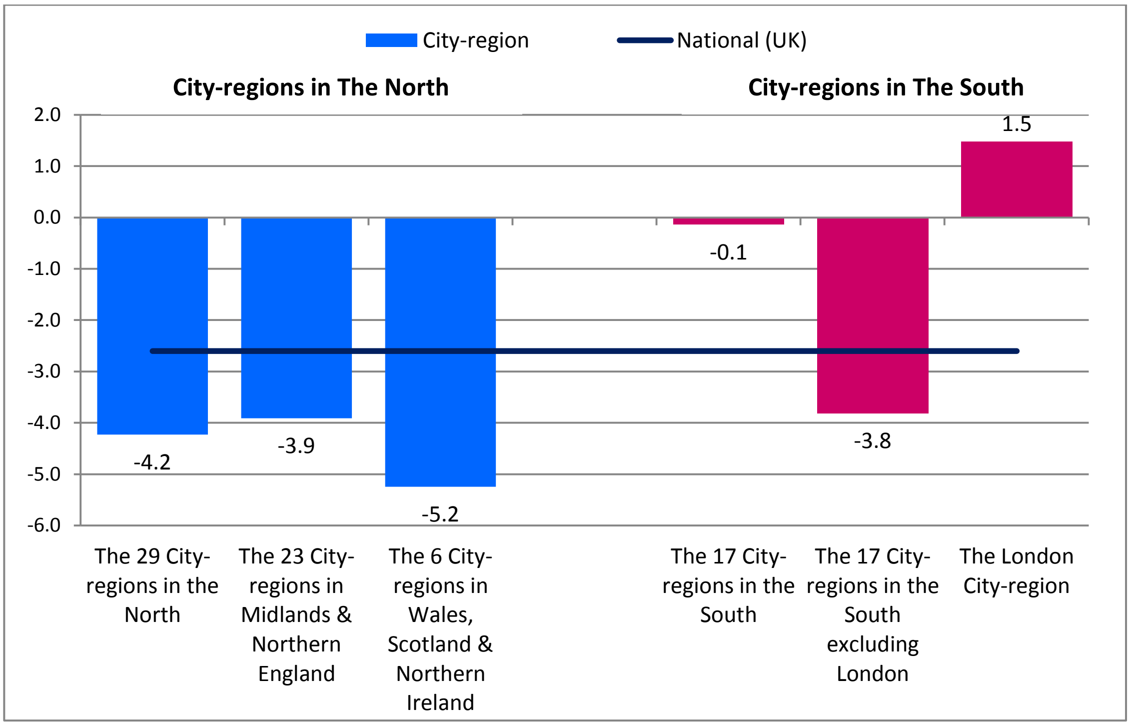
Map 12: UK City-regions Employees % Change 2008-2012



Sources: Boundaries downloaded from UK Data Service. Contains Ordnance Survey data © Crown copyright and database right 2013.
Data sources: business register and employment survey. Some city-region names have been simplified for presentational reasons.
Belfast city-region data are for 2008-11

2.108 Figure 58 shows percentage changes in employee numbers in city-regions in the north and the south. The percentage fall in the 17 southern city-regions was negligible, when London's growth is included. Excluding London, the fall in the southern city-regions was on a par with that for the 23 city-regions in the Midlands and northern England. The Celtic city-regions experienced the largest percentage decline, primarily due to the substantial fall in Glasgow.

Figure 58: Employees % change 2008-2012, City-regions in the North and the South



Sources: business register and employment survey - 2010 consistent with earlier years; & business register and employment survey

2.109 Table 13 shows the changing shares of national employees by the northern and southern city-regions over the recession years, 2008-2012. London city-region's share of employees has increased 2008-12. Shares in northern city-regions and city-regions in the south excluding London have fallen.

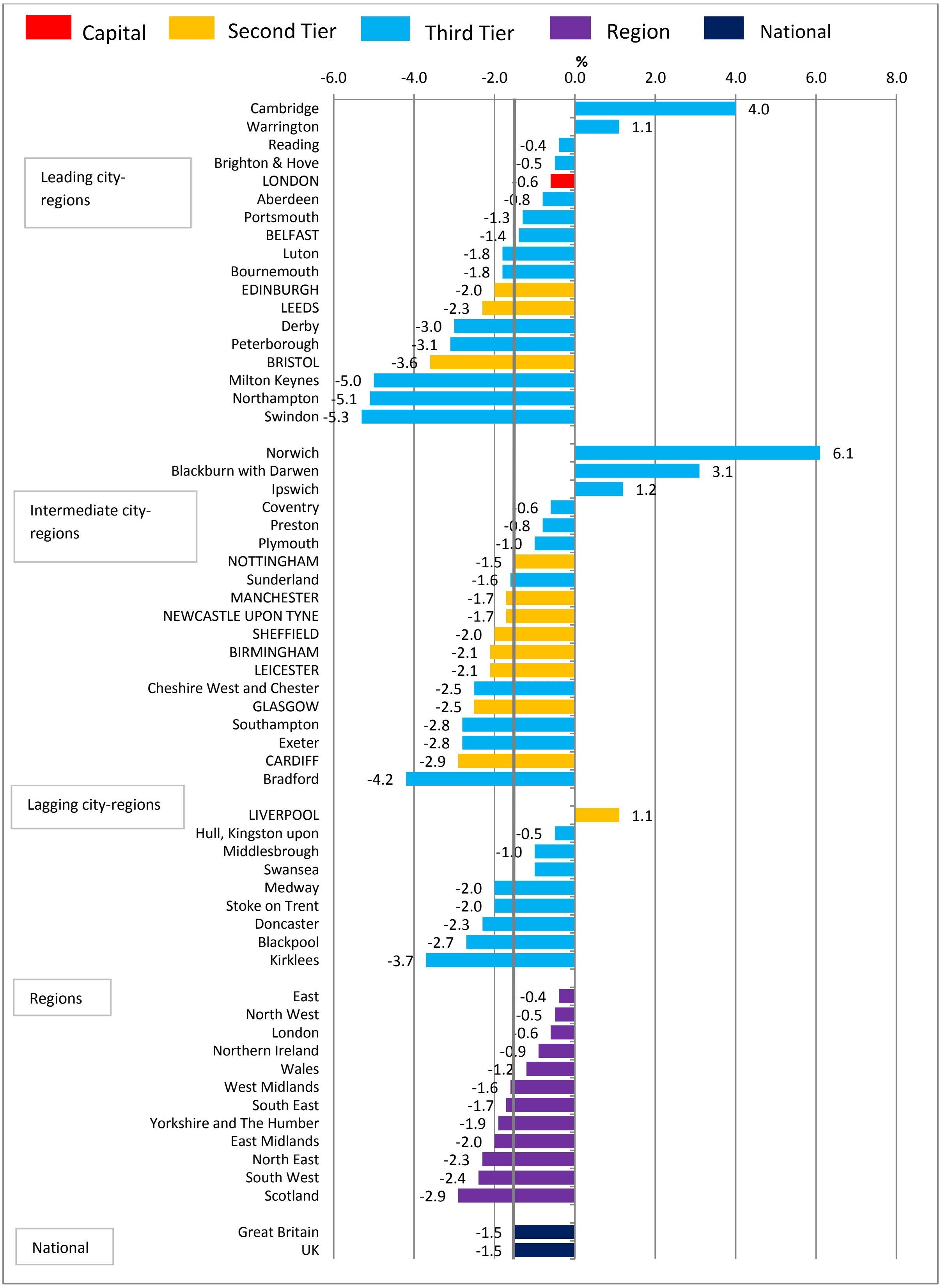
Table 13: Total employees, % share of UK, 2008 & 2012, City-regions in the North & South

	Share (%) UK		
	2008	2012	Change
North			
29 northern city-regions	36.1	35.5	-0.6
23 Midlands & Northern England city-regions	27.5	27.1	-0.4
6 Northern Ireland, Scotland & Wales city-regions	8.6	8.4	-0.2
South			
17 southern city-regions	31.0	31.8	0.8
17 southern city-regions excluding London	9.5	9.3	-0.1
London city-region	21.6	22.5	0.9

Employment rates – falling nearly everywhere – and lowest in north

2.110 Figure 59 shows the percentage point changes in employment rates between 2008 and 2012. Employment rates in the great majority of city-regions – 39 of the 45 – fell. They fell in 15 of the 17 city-regions that were in the leading group at the start of the period, the exceptions being Cambridge and Warrington. And for 10 of these 15, including all 3 leading second-tier city-regions, the falls were greater than national. Employment rates also fell in 16 of the 19 of the intermediate city-regions. Only Nottingham of the 8 second-tier city-regions in the group had a fall in its employment rate that equalled the national. The falls in the rest were greater. Employment rates in 8 of the 9 lagging city-regions also fell, the notable exception being Liverpool.

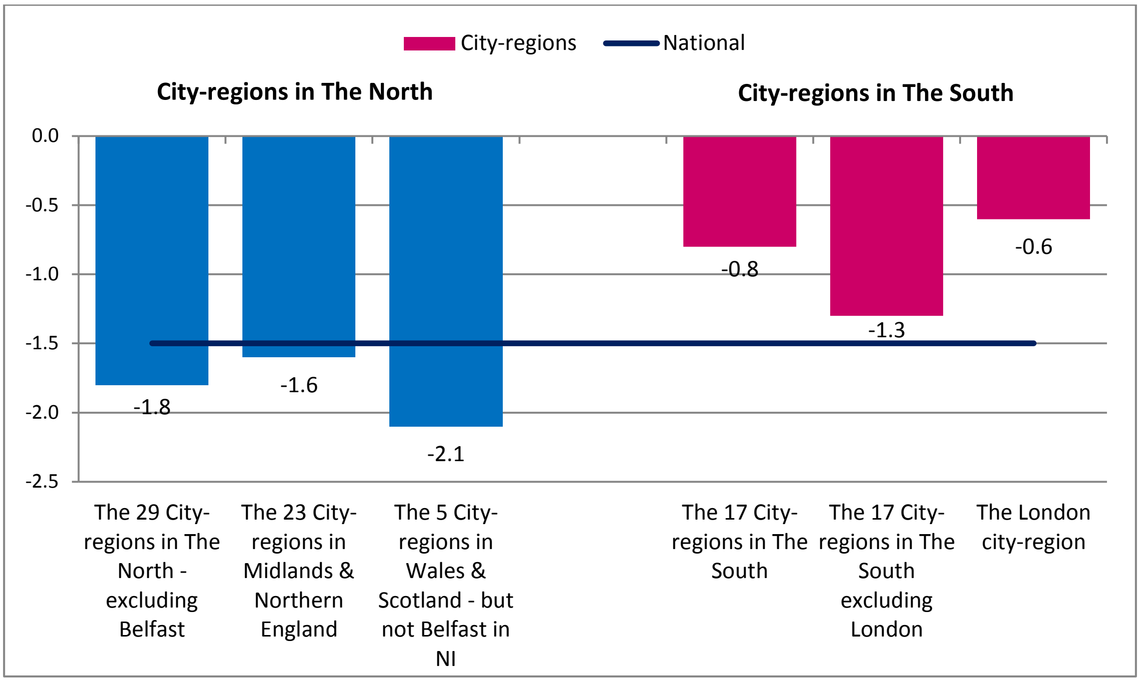
Figure 59: Employment Rates, Percentage Point Change 2008-2012, by GVA per capita 2008 groupings



Source: Annual Population Survey

2.111 Figure 60 shows change in employment rates 2008-12 for the city-regions by broad north-south geographies. Employment rates in city-regions in the north – which were lower to begin with – have experienced the greater falls.

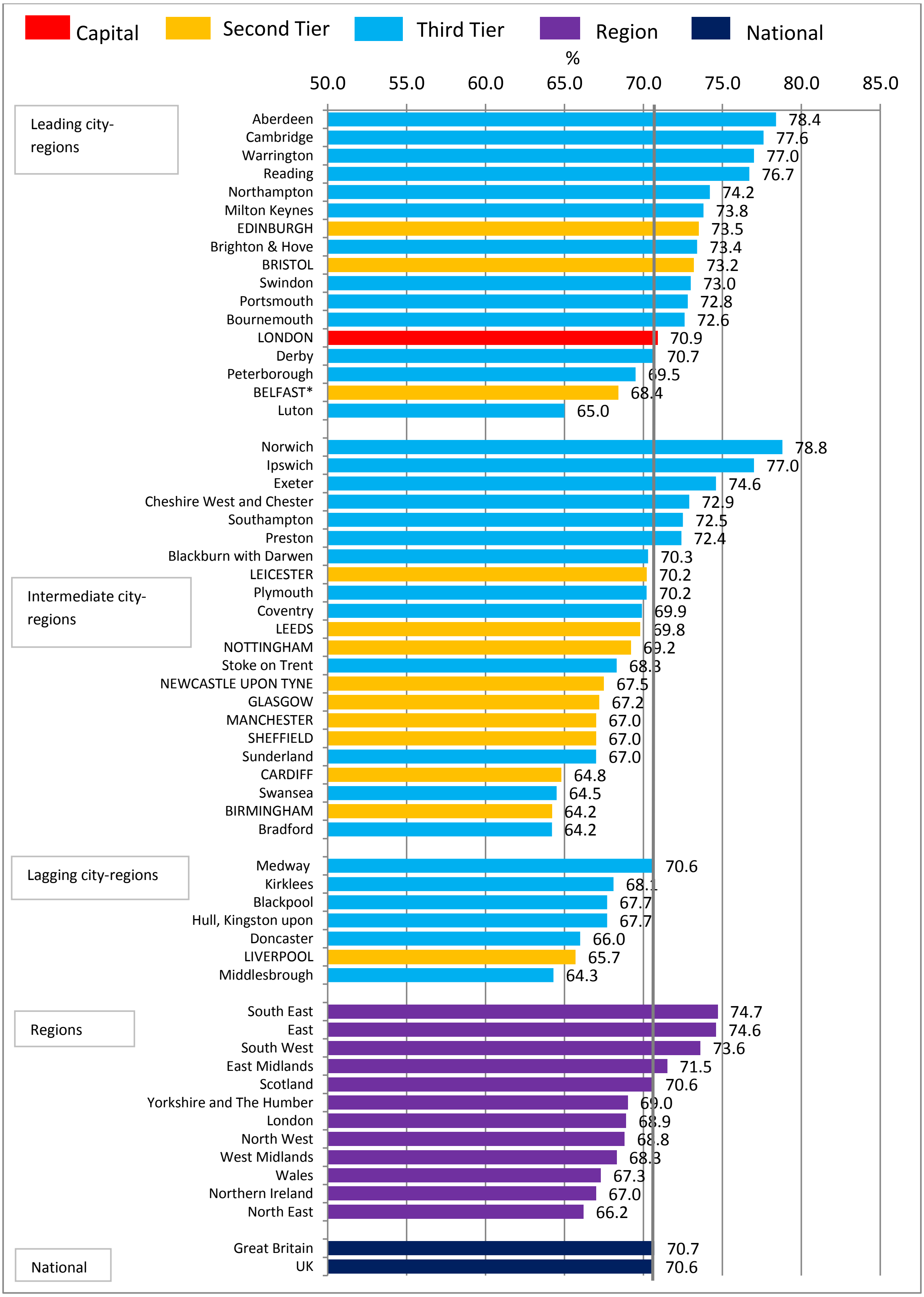
Figure 60: Employment Rates – Percentage Point Change 2008-2012, City-regions in the North and the South



Source: Annual Population Survey

2.112 Figure 61 shows the employment rates in 2012. The majority of leading city regions – 14 out of 17 – like four years previously, had employment rates equal to or above the national rate. Both second-tier city-regions in the leading group – Bristol and Edinburgh – had above national employment rates. Employment rates in only 6 of the 19 intermediate city-regions were above national. All 9 second-tier city-regions in the intermediate group had employment rates that were below national. Medway's employment rate was again the only one from the lagging group equal to or above the national.

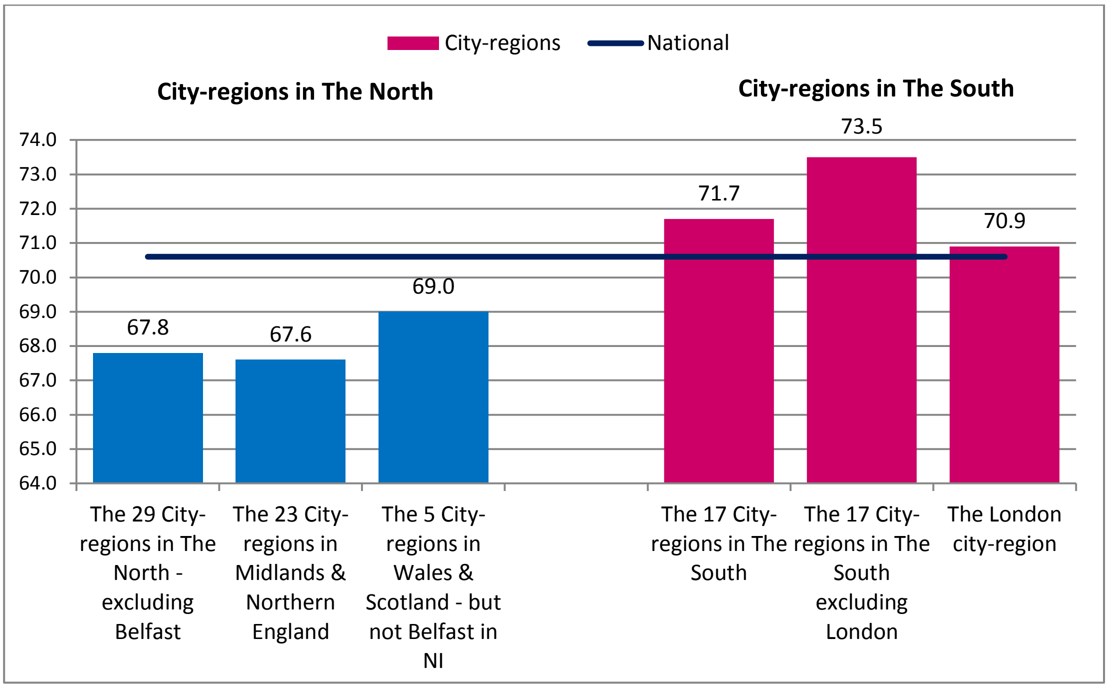
Figure 61: Employment Rates, 2012, using GVA per capita 2011 groupings



Source: Annual Population Survey; * Belfast data are for 2011

2.113 Figure 62 summarises employment rates in City-regions in north and south in 2012. Employment rates are lower than national for city-regions in the north. However in the south rates are higher than national.

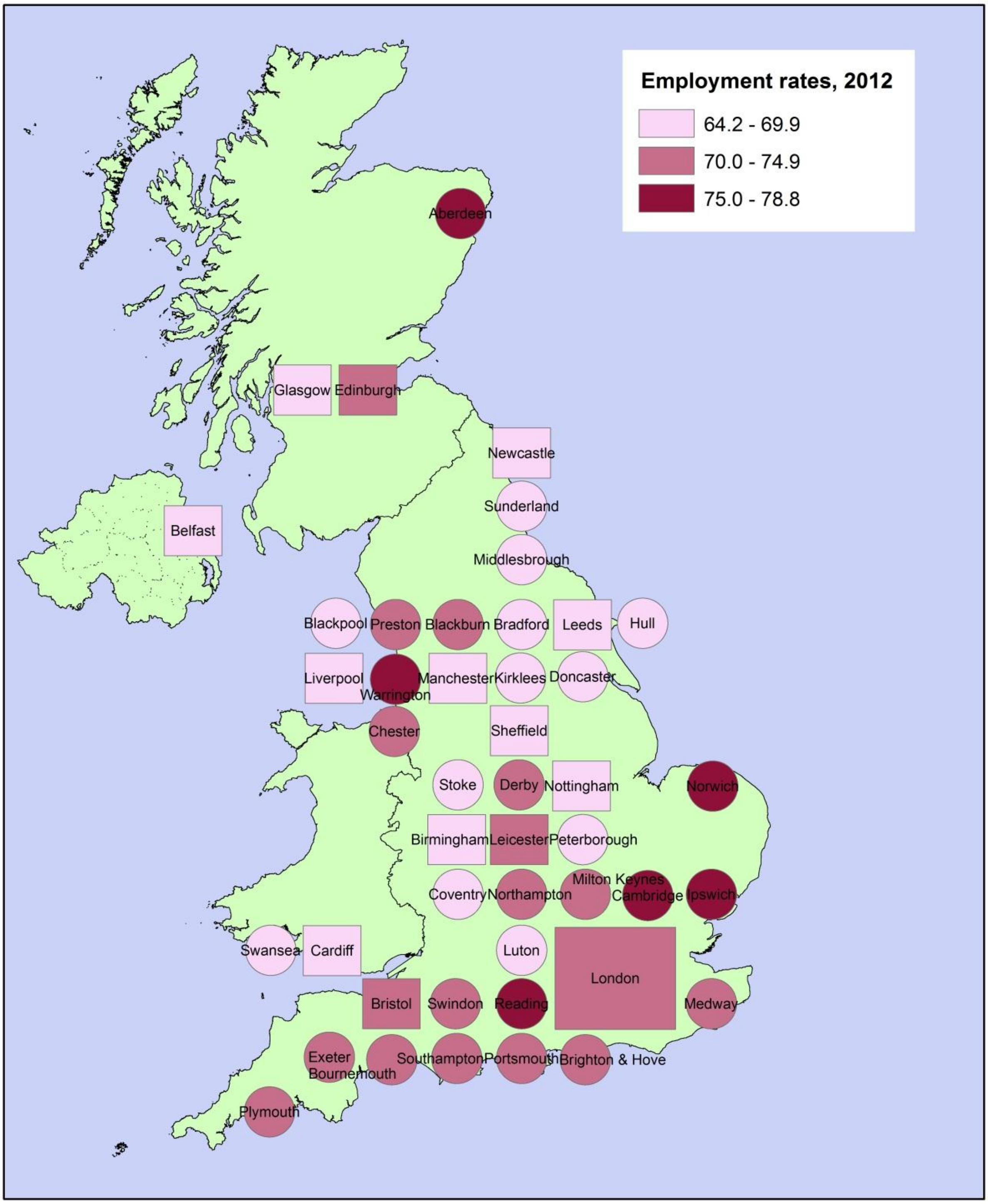
Figure 62: Employment Rates 2012, City-regions in the North & the South



Source: Annual Population Survey

2.114 Map 13 shows the broad geography of city-region employment rates in 2012. The highest rates are in third-tier city-regions in both 'North' and 'South' and in 2 second-tier city-regions in the 'North' and 'South', Edinburgh and Bristol, respectively. With the sole exception of Luton, the lowest employment rates are in a mix of second- and third-tier city-regions in the 'North'.

Map 13: UK City-regions Employment Rates, 2012



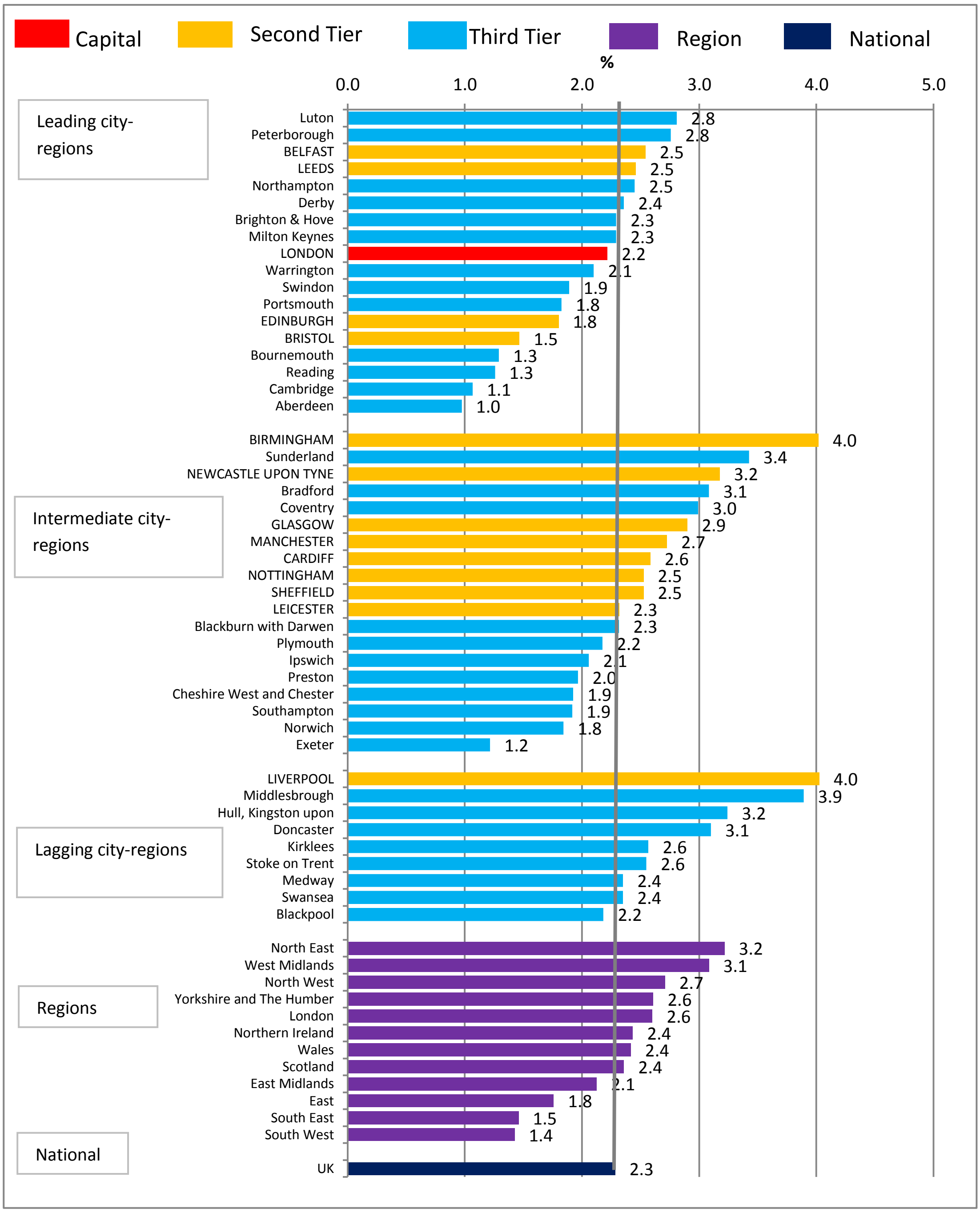
Sources: Boundaries downloaded from UK Data Service. Contains Ordnance Survey data © Crown copyright and database right 2013. Employment rate data are from Annual Population Survey. Some city-region names have been simplified for presentational reasons.

2.3.3 Unemployment

Gains in boom reversed. North losing out

2.115 Figure 63 shows unemployment rates in 2008 for the city-regions classified by GVA per capita levels. At the onset of recession there were actually more city-regions with unemployment rates equal to or above the national there were in 1997, in the growth period. In 1997, the figure was 21 out of the 46. In 2008, it was 28.

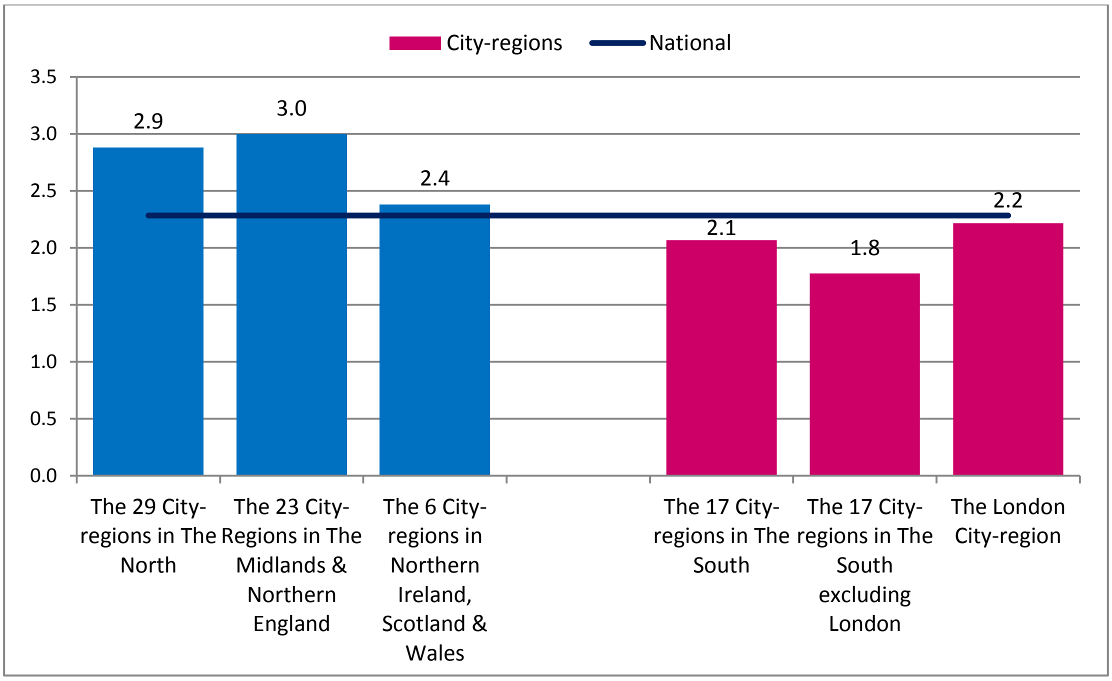
Figure 63: Claimant Count Rate, % of working age population, 2008, using GVA per capita 2008 groupings



Source: Claimant Count with Rates and Proportions

2.116 Figure 64 summarises claimant count rates for city-regions in north and south. Rates are highest in city-regions in the Midlands and Northern England.

Figure 64: Claimant Count Rates 2008, in City-regions in the North and the South

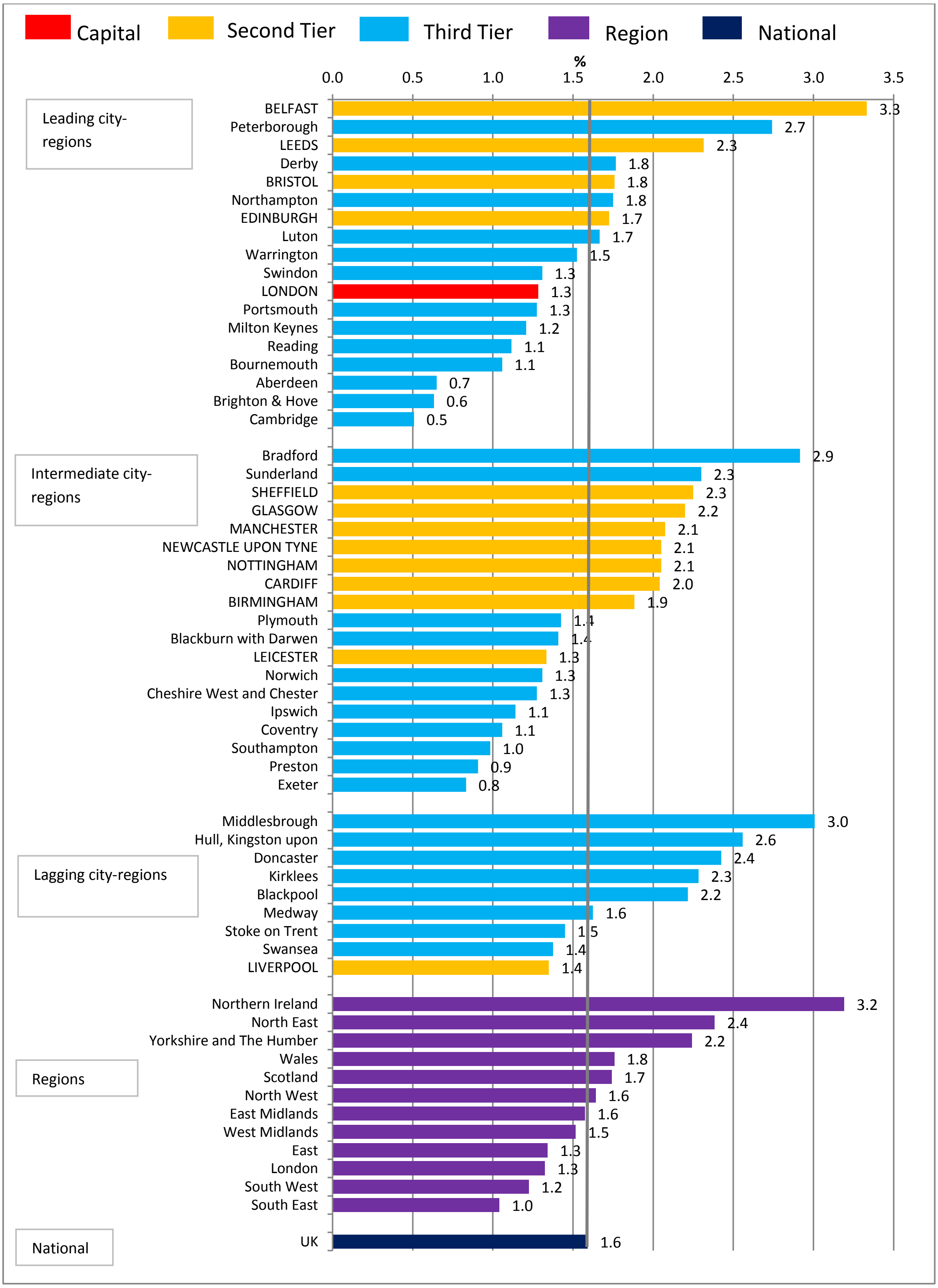


Source: Claimant count with rates and proportions

2008-13 – Unemployment increases

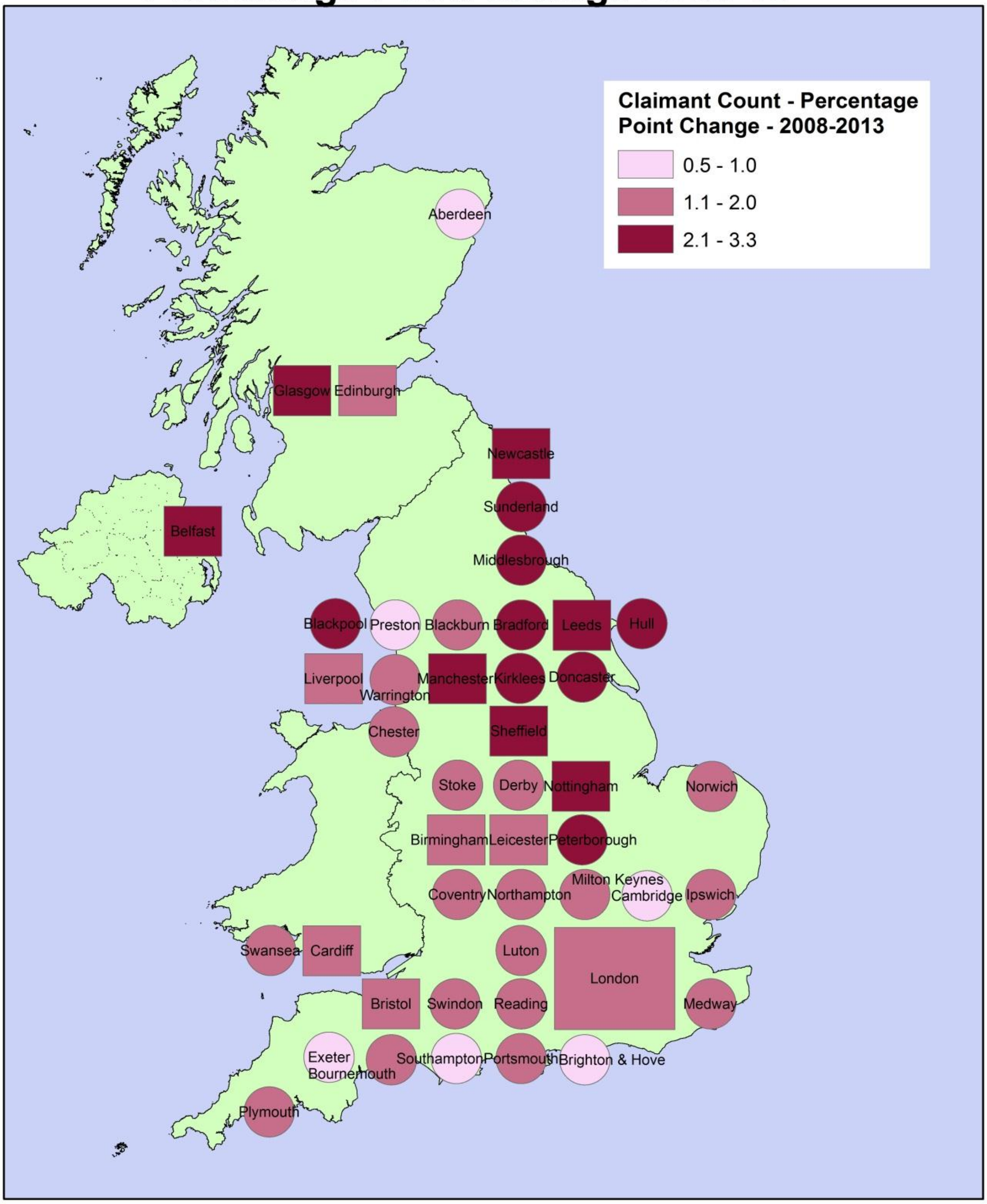
2.117 The fall in unemployment rates in the decade leading up to the recession has been completely reversed. Between 2008 and January-April 2013, unemployment rates increased in all city-regions, ranging from just 0.5 percentage points in Cambridge to 3.3 percentage points in Belfast (Figure 65 and Map 14). Across the country, London had an increase below the national average. The majority of second-tier city-regions had above national increases – with the notable exceptions of Liverpool and Leicester in the 'North'. Second-tier Belfast had the highest national increase. The majority of third-tier city-regions had below national increases - 20 out of 32. More of the 'Southern' third-tier city-regions had below national increases - 12 out of 15 than their Northern counterparts - 8 out of 17.

Figure 65: Claimant Count Rates, % of working age population, Percentage Point Change 2008-2013, using GVA per capita 2008 groupings



Source: Claimant Count with Rates and Proportions; 2013 figures are for January-April

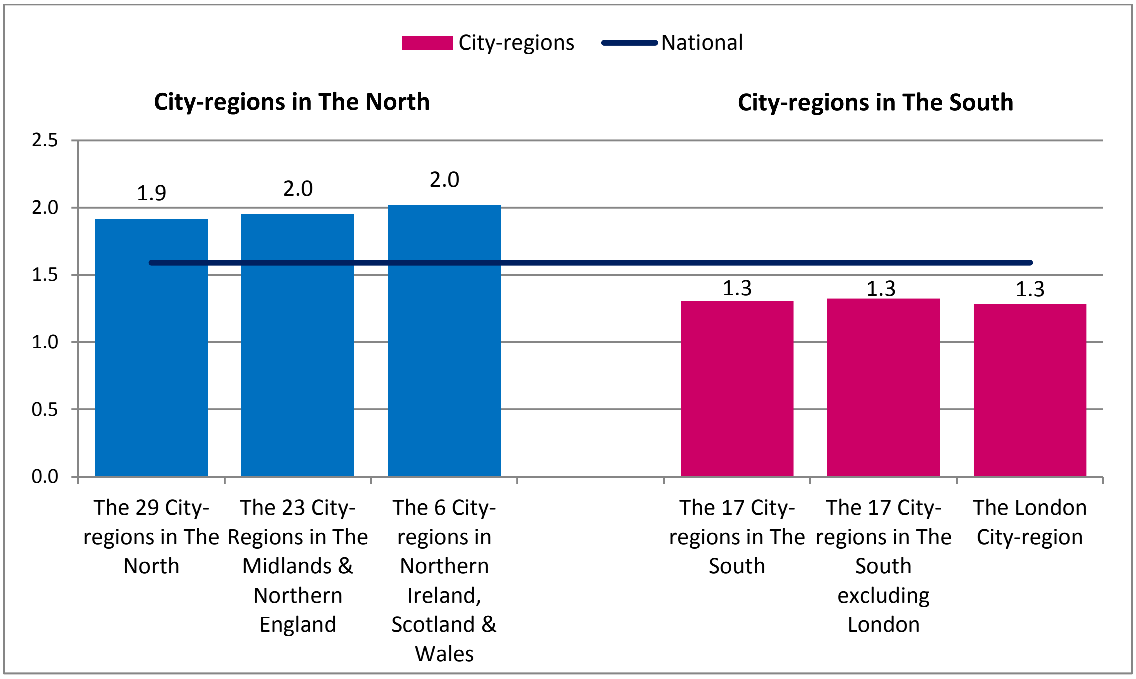
Map 14: UK City-regions Claimant Count Rate Percentage Point Change 2008-13



Sources: Boundaries downloaded from UK Data Service. Contains Ordnance Survey data © Crown copyright and database right 2013. Claimant Count rate data are from the Claimant Count with Rates and Proportions data set. 2013 data refer to January-April figures. Some city-region names have been simplified for presentational reasons.

2.118 Figure 66 summarises claimant count changes for city-regions in the north and the south. The largest increases have occurred among city-regions in the north.

Figure 66: Claimant Count Rates, Percentage Point Change 2008-2013, in City-regions in the North and the South

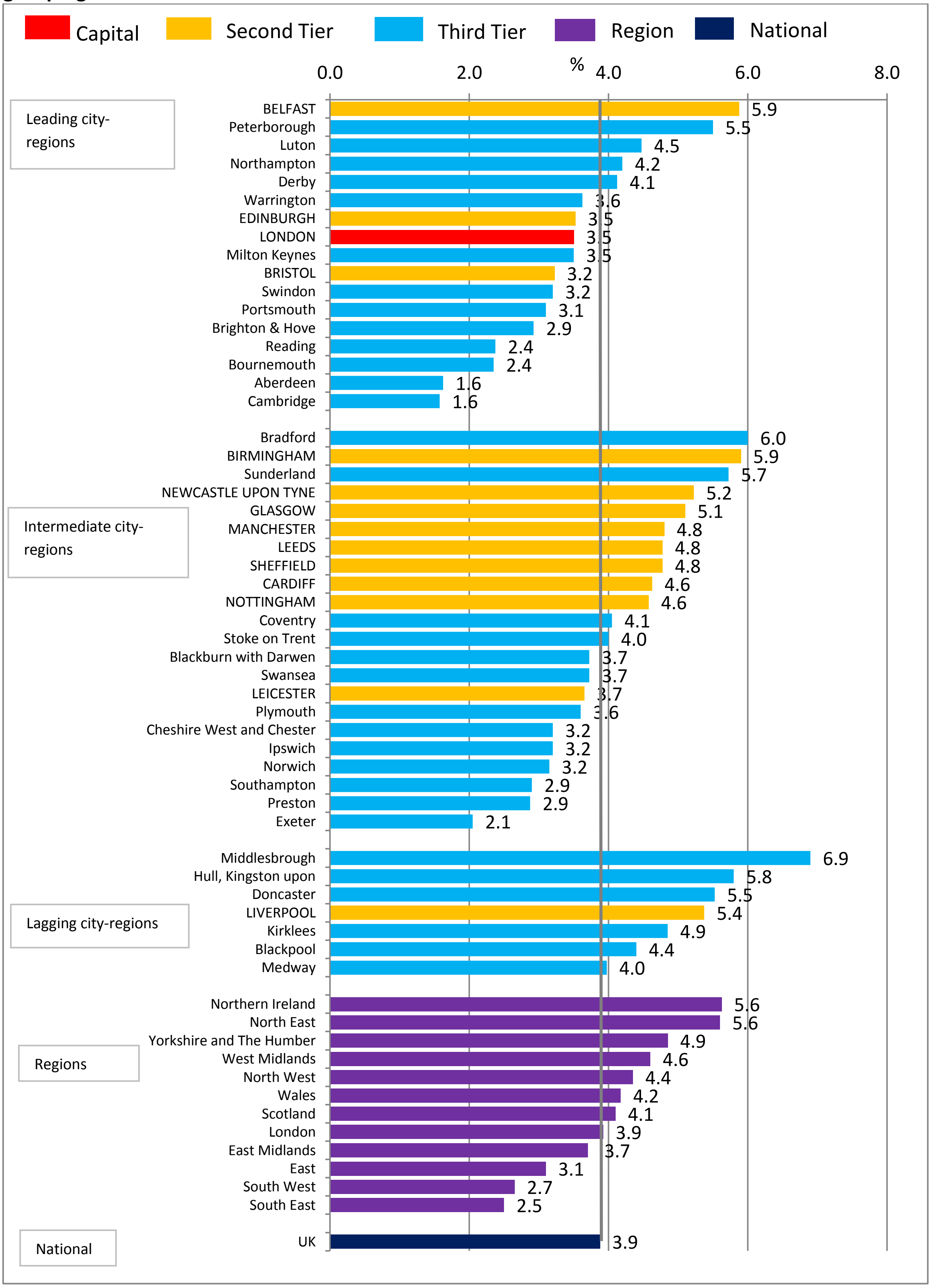


Source: Claimant count with rates and proportions; 2013 figures are for January-April

2.119 The significance of this increase is shown in Figure 67 and Map 15. National unemployment has more than doubled, from 1.6% in 2008 to 3.9% in the first quarter of 2013, while city-region unemployment rates range from just 1.6% in Cambridge to 6.9% in Middlesbrough. Figure 67 also shows the broad 'North-South Divide' in regional unemployment rates. Of the 8 'Northern' regions, the East Midlands is the only one with an unemployment rate below the national. In contrast, all 4 'Southern' regions had unemployment rates equal to or below the national, with the lowest in the South East.

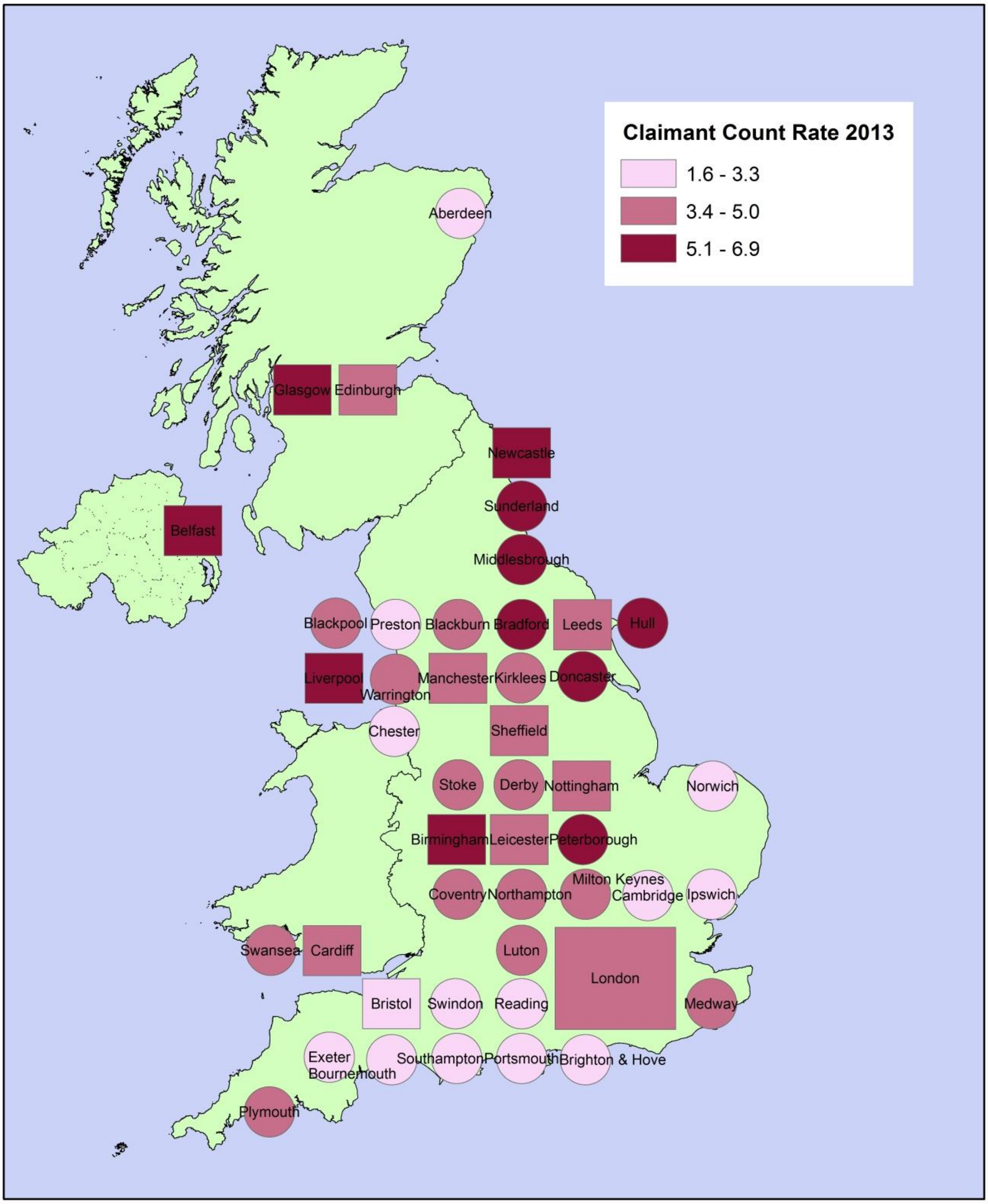
2.120 This regional 'North-South' divide also has a city-regional dimension. Across the country, London's unemployment rate is below the national while the majority of second-tier city-regions have unemployment rates above it. Third-tier city-regions have unemployment rates relatively evenly split above and below national. There is a North-South contrast, however. Unemployment rates in the majority of 'Northern' third-tier city-regions are above national (11 out of 17; 65%) while they are below national in the large majority of 'Southern' third-tier city-regions (12 out of 15; 80%). Aberdeen is a Northern exception with the second lowest rate nationally after Cambridge.

Figure 67: Claimant Count Rates, % of working age population, 2013, using GVA per capita 2011 groupings



Source: Claimant Count with Rates and Proportions; 2013 figures are for January-April

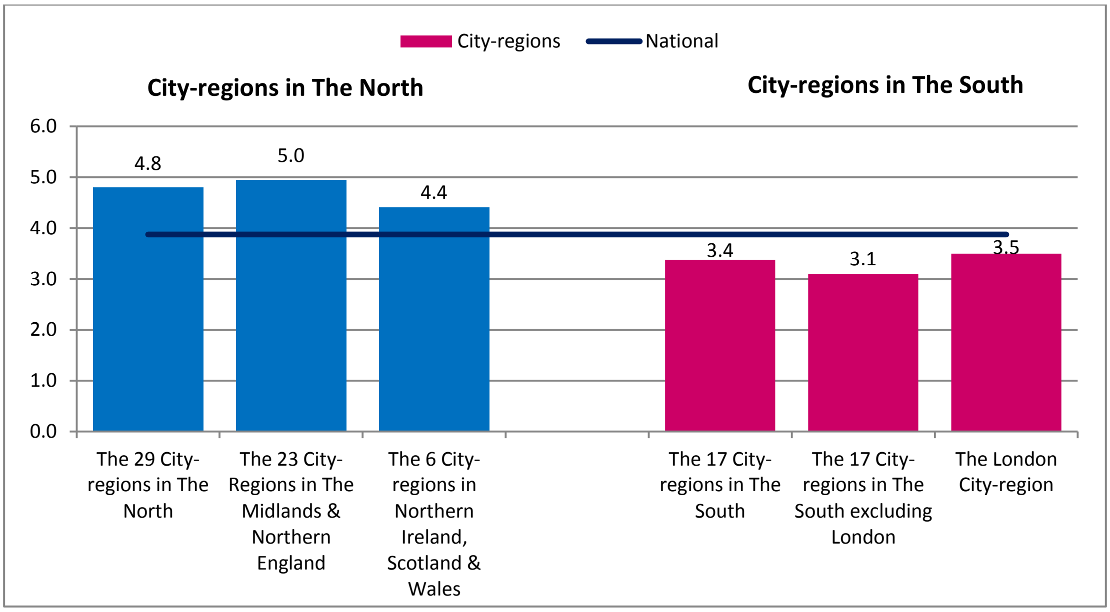
Map 15: UK City-regions
Claimant Count Rate January-April 2013



Sources: Boundaries downloaded from UK Data Service. Contains Ordnance Survey data © Crown copyright and database right 2013.
Data are from the Claimant Count with Rates and Proportions data set. Some city-region names have been simplified.
City-regions are based on NUTS 3 approximations.

2.121 Figure 68 summarises these claimant count data for city-regions in north and south. Rates in the northern city-regions are above national. Rates in the southern city-regions are below national.

Figure 68: Claimant Count Rates, January-April 2013, City-regions in the North and the South



Source: Claimant count with rates and proportions

2.3.4 Population

Leading city-regions growing fastest – South growing faster than north

2.122 Map 16 shows population change for the city-regions between 2008 and 2012. Figure 69 shows this change for the three GDP per capita groupings.

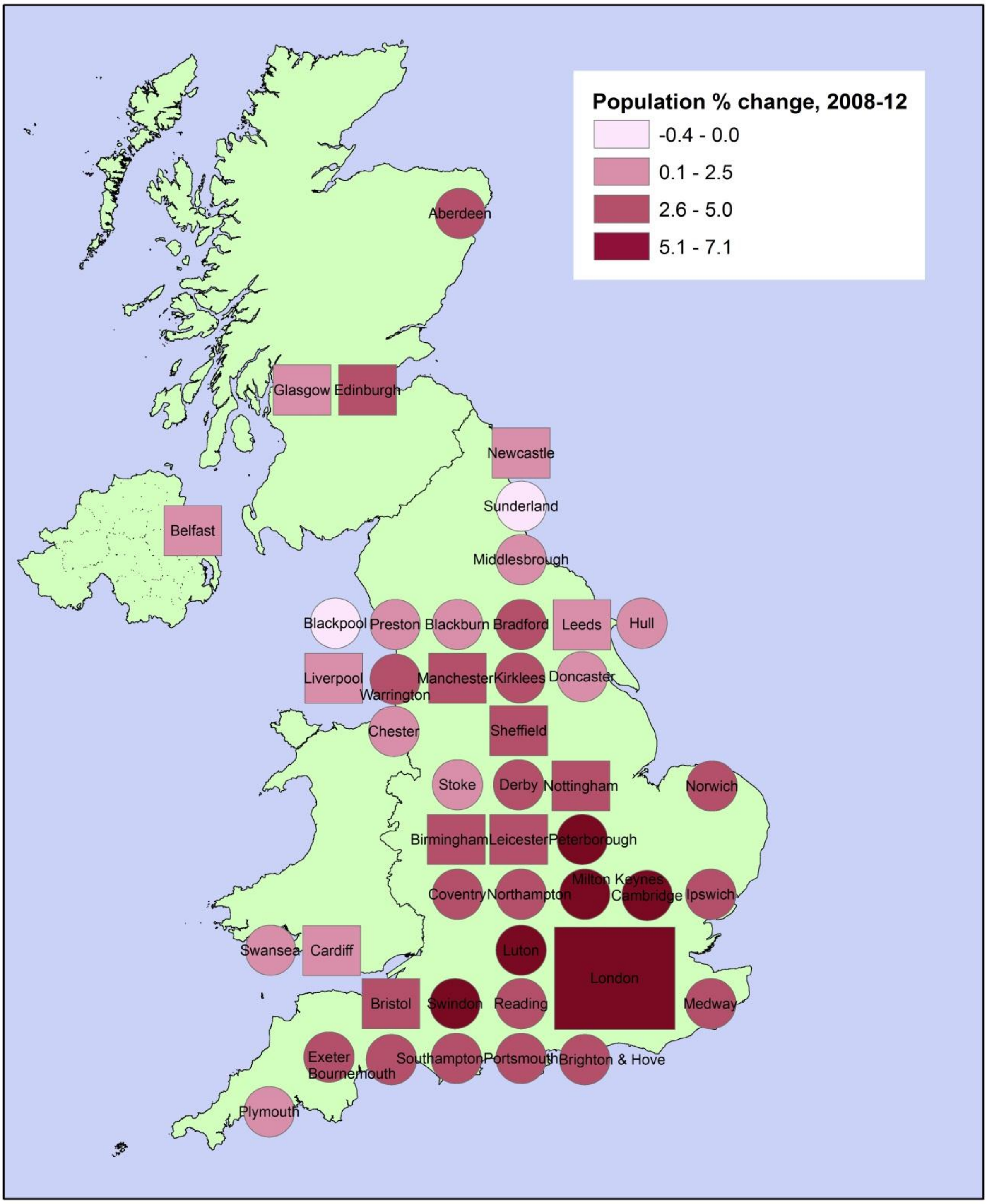
2.123 As in the preceding growth decade, the majority of the 18 leading city-regions have had population increases above the national average (14, 78%). Milton Keynes had the highest population increase between 1997 and 2008 and, along with Luton, has had the largest percentage increase in the recession. A larger proportion of intermediate city-regions have had population increases above national in the recession than in the preceding growth decade (7 of the 19; 37%). And 2 of the 9 lagging regions have had increases above national: second-tier Kirklees in the north and Medway in the south.

2.124 3 city-regions have had growth rates more than twice the national: all third-tier and all in the south (Luton, Milton Keynes and Cambridge). Population has fallen in 2 city-regions: both third-tier and in the north (Sunderland and Blackpool).

2.125 23 city-regions had above-national growth: London, 5 second-tier (Edinburgh, Leicester, Bristol, Nottingham and Sheffield) and 17 third-tier. 6 were in the north and 11 in the south.

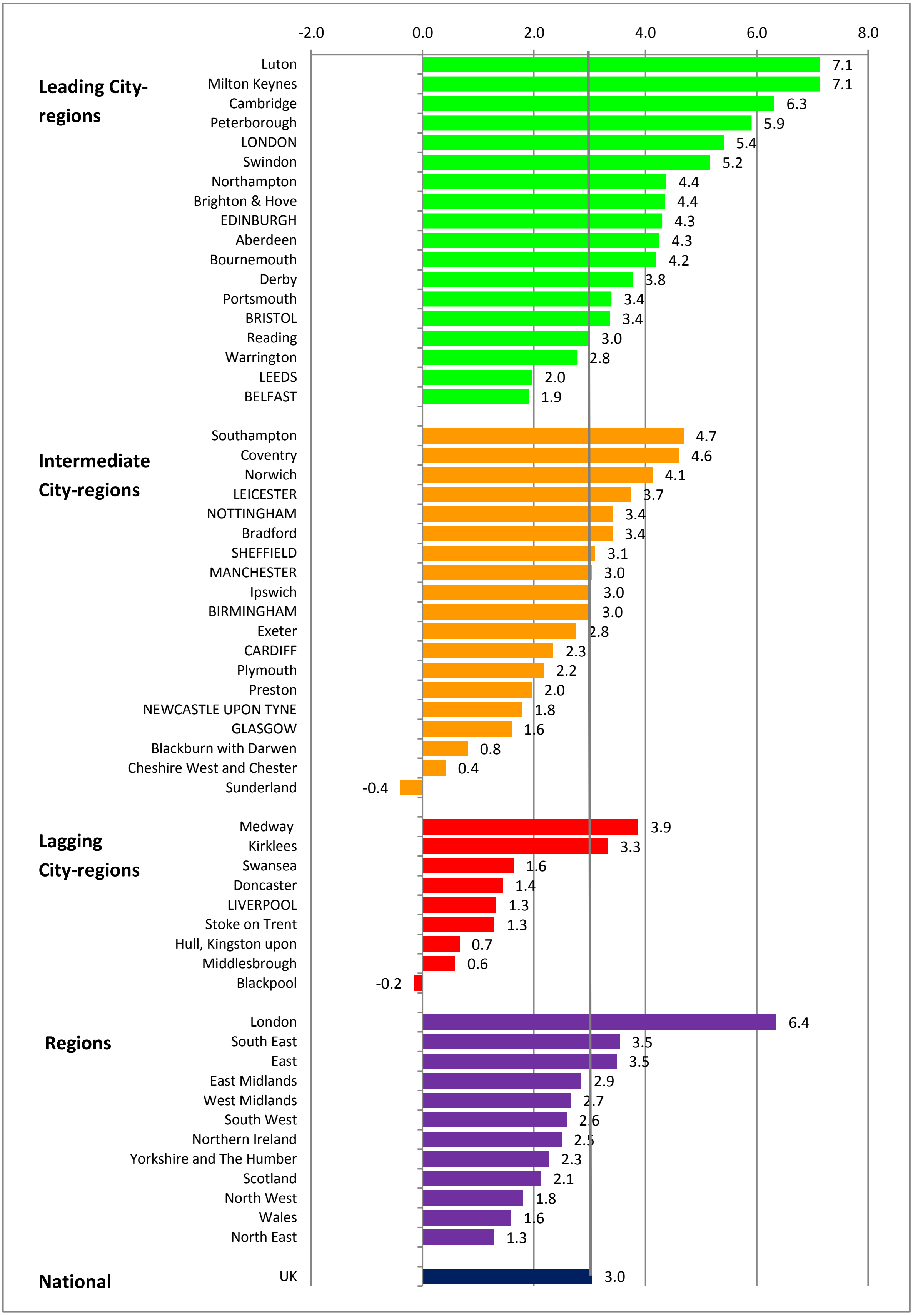
2.126 23 city-regions have growth rates equal to or below national in the recession: 8 second-tier and 15 third-tier; 19 in the north and 4 in the south.

Map 16: UK City-regions Population % Change 2008-2012



Sources: Boundaries downloaded from UK Data Service. Contains Ordnance Survey data © Crown copyright and database right 2013. Data source: Mid Year Population Estimates. Some city-region names have been simplified for presentational reasons.

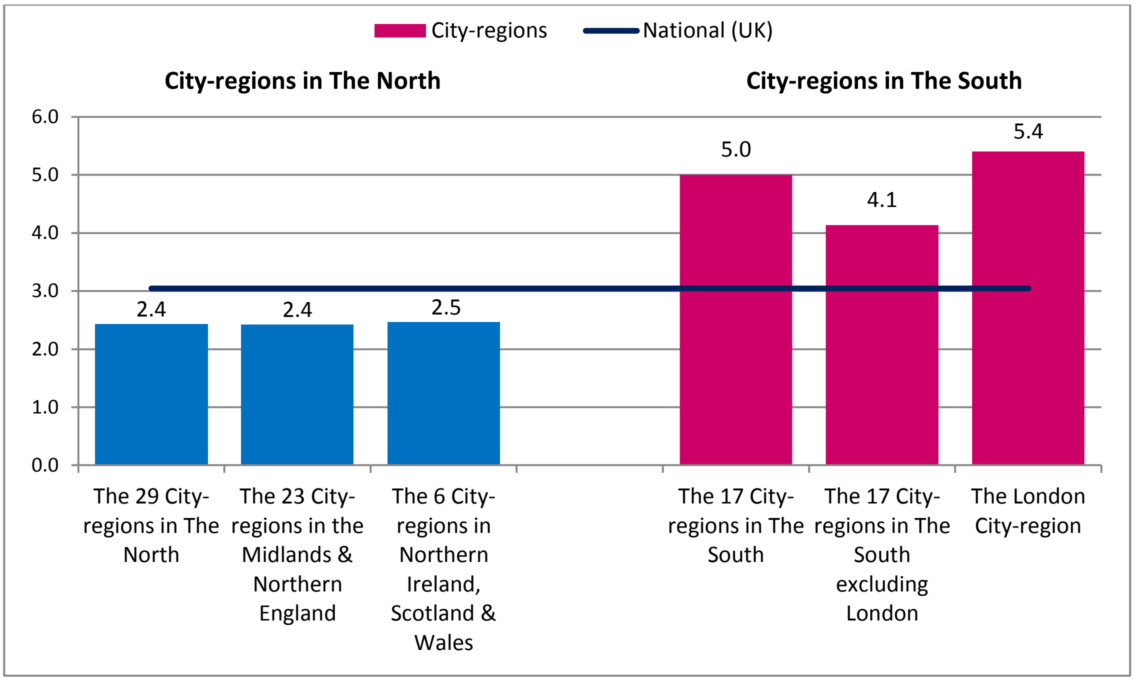
Figure 69: Total Population, % change, 2008-2012



Source: Mid-Year Population Estimates

2.127 Figure 70 summarises the 2008-12 population change data for city-regions in north and south. The relatively strong population growth in the southern city-regions and the London city-region, in particular, is evident.

Figure 70: Population 2008-2012 % change, City-regions in the North and the South



Source: Mid-year population estimates

2.3.5 Summary

2.128 It is clear that the recession has undone many of the gains of the growth years. London has performed well but it has not sustained the exceptional gains of the boom. Some third-tier city-regions have withstood the crisis better than some second-tier city-regions. Again regional location has been significant.

2.129 Using the 'traffic lights' measurement, the links between performance on GVA, employment and unemployment are again clear (Table 14). At the onset of recession, the leading city-regions in GVA per capita (green on the list) generally had relatively high employment and relatively low unemployment rates, albeit again with exceptions. Second-tier Liverpool and third-tier Doncaster and Kingston upon Hull were 'red' in all categories.

Table 14: The balance sheet, 2008

City-region	GVA per capita, 2008	GVA per hour worked 2008	Employment rates, 2008	Claimant Count 2008	Total score
Aberdeen					4
BRISTOL					4
Cambridge					4
EDINBURGH					4
Reading					4
Swindon					4
Bournemouth					5
Derby					5
LONDON					5
Milton Keynes					5
Portsmouth					5
Warrington					5
Brighton & Hove					6
Cheshire West & Chester					6
Ipswich					6
Northampton					6
Southampton					6
Exeter					7
LEEDS					7
LEICESTER					7
Norwich					7
Peterborough					7
Plymouth					7
Preston					7
BELFAST					8
Luton					8
Medway					8
NOTTINGHAM					8
Blackpool					9
Coventry					9
GLASGOW					9
SHEFFIELD					9
BIRMINGHAM					10
Blackburn with Darwen					10
Kirklees					10
NEWCASTLE UPON TYNE					10
Stoke on Trent					10
Bradford					11
CARDIFF					11
MANCHESTER					11
Middlesbrough					11
Sunderland					11
Swansea					11
Doncaster					12
Hull, Kingston upon					12
LIVERPOOL					12

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2.130 Table 15 organises the list by tier and region. 6 economically relatively strong city-regions stand out: second-tier Edinburgh and third-tier Aberdeen in the 'North'; and second-tier Bristol and third-tier Cambridge, Reading and Swindon in the 'South'. These leading city-regions in terms of GVA per capita all had employment rates above and unemployment rates below national average.

Table 15: The balance sheet, 2008, by tier and region

Economic strength		'North'		'South'		
	Score	Second-Tier	Third-Tier	Capital	Second-Tier	Third-Tier
←Strong to weak→	4	Edinburgh	Aberdeen	-	Bristol	Cambridge Reading Swindon
	5	-	Derby Warrington	London	-	Bournemouth Milton Keynes Portsmouth
	6	-	Cheshire West & Chester Northampton	-	-	Brighton & Hove Ipswich Southampton
	7	Leeds Leicester	Preston	-	-	Exeter Norwich Peterborough Plymouth
	8	Belfast Nottingham	-	-	-	Medway Luton
	9	Glasgow Sheffield	Blackpool Coventry	-	-	-
	10	Birmingham Newcastle upon Tyne	Blackburn with Darwen Kirklees Stoke on Trent	-	-	-
	11	Cardiff Manchester	Bradford Middlesbrough Sunderland Swansea	-	-	-
	12	Liverpool	Doncaster Hull, Kingston upon	-	-	-

2.131 Table 16 shows performance over the recession years in terms of change in population, GVA per capita, total GVA, GVA per hour worked, employment and unemployment. Only one city-region performed strongly ('green') on all 6 change categories: third-tier Aberdeen. None performed very weakly ('red') on all 6 but three did on 4 categories: second-tier Leeds and third-tier Luton and Sunderland.

Table 16: The balance sheet - change 2008-2011/12/13

City-region	Population 2008-2012	GVA per capita, 2008-2011	Total GVA 2008-2011	GVA per hour worked 2008-2011	Total Employees 2008-2012	Claimant count rates 2008-JanApr2013	Total score
Aberdeen							6
Milton Keynes							7
Blackburn with Darwen							8
Cambridge							8
Cheshire West & Chester							8
BRISTOL							9
CARDIFF							9
Derby							9
LIVERPOOL							9
LONDON							9
NEWCASTLE UPON TYNE							9
Stoke on Trent							9
Swansea							9
Bradford							10
Exeter							10
Ipswich							10
BELFAST							11
BIRMINGHAM							11
Bournemouth							11
Brighton & Hove							11
Kirklees							11
LEICESTER							11
Northampton							11
Norwich							11
Portsmouth							11
Reading							11
Swindon							11
Warrington							11
Blackpool							12
Coventry							12
EDINBURGH							12
MANCHESTER							12
Preston							12
Southampton							12
Hull, Kingston upon							13
Medway							13
Middlesbrough							13
NOTTINGHAM							13
Peterborough							13
SHEFFIELD							13
GLASGOW							14
Luton							14
Plymouth							14
Sunderland							14
Doncaster							15
LEEDS							16

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2.132 Table 17 groups overall performance by tier and region. Comparing this table with Table 15, it is again clear that there was not a simple correlation between relative economic strength at the start of the period and performance across it. A number of well-placed city-regions in 2008 did perform strongly over the period as a whole: notably third-tier Aberdeen in the north and Milton Keynes in the south. But some similarly well-placed performed less well: notably second-tier Edinburgh and Leeds and third-tier Warrington in the north and second-tier Reading and Swindon in the south. By contrast, second-tier Liverpool and Cardiff and third-tier Blackburn with Darwen and Swansea in the north performed more strongly over the period than their pre-recession position would have suggested.

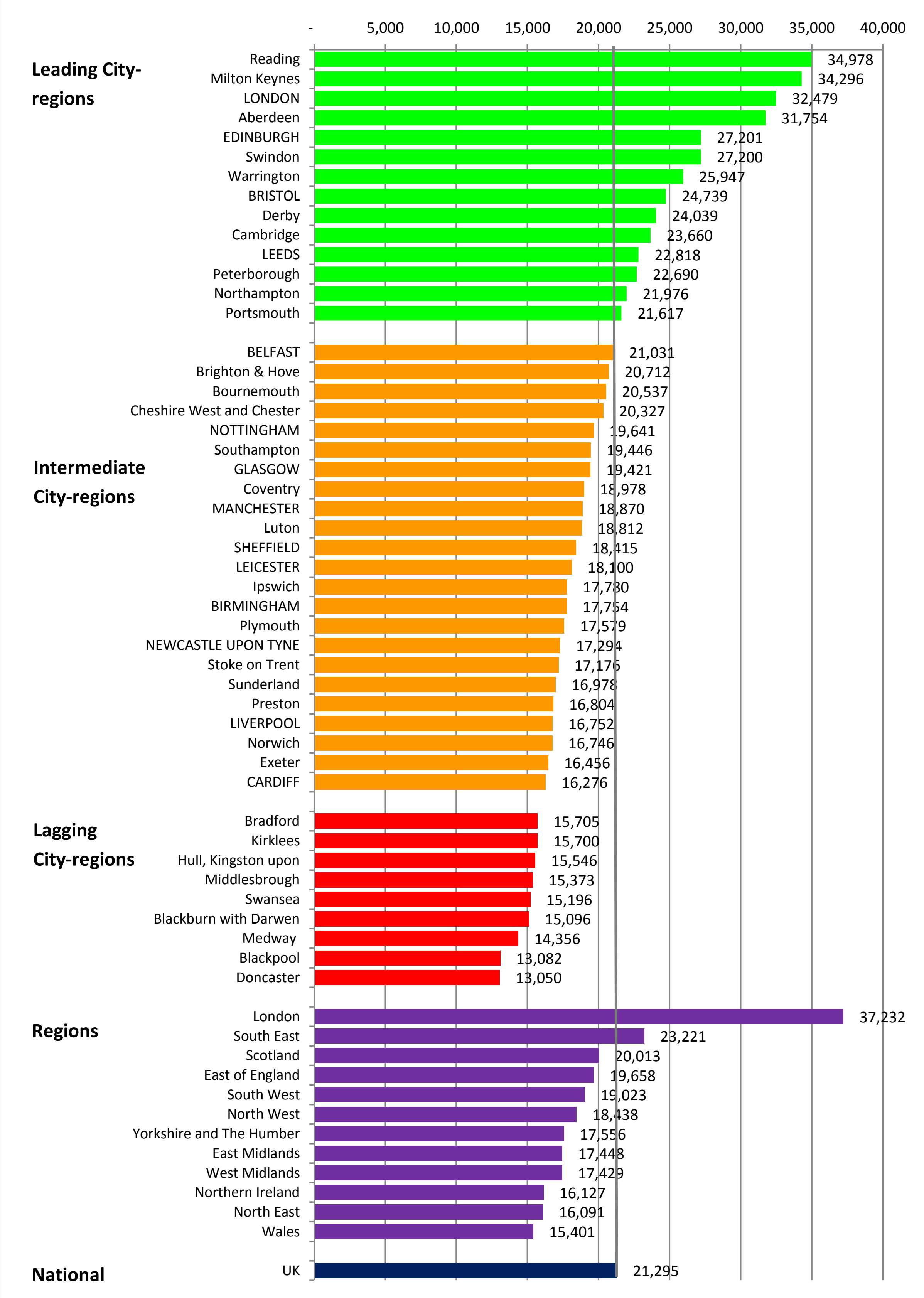
Table 17: The balance sheet - change 2008-2011/12/13, by tier & region

		'North'		'South'		
Economic performance	**Score**	**Second-Tier**	**Third-Tier**	**Capital**	**Second-Tier**	**Third-Tier**
←Strong to weak→	6	-	Aberdeen	-	-	-
	7	-	-	-	-	Milton Keynes
	8	-	Blackburn with Darwen Cheshire West & Chester	-	-	Cambridge
	9	Cardiff Liverpool Newcastle upon Tyne	Derby Stoke on Trent Swansea	London	Bristol	-
	10	-	Bradford	-	-	Exeter Ipswich
	11	Belfast Birmingham Leicester	Kirklees Northampton Warrington	-	-	Bournemouth Brighton & Hove Norwich Portsmouth Reading Swindon
	12	Edinburgh Manchester	Blackpool Coventry Preston	-	-	Southampton
	13	Nottingham Sheffield	Hull, Kingston upon Middlesbrough	-	-	Medway Peterborough
	14	Glasgow	Sunderland	-	-	Luton Plymouth
	15	-	Doncaster	-	-	
	16	Leeds	-	-	-	
	17	-	-	-	-	-
	18	-	-	-	-	-

The latest picture

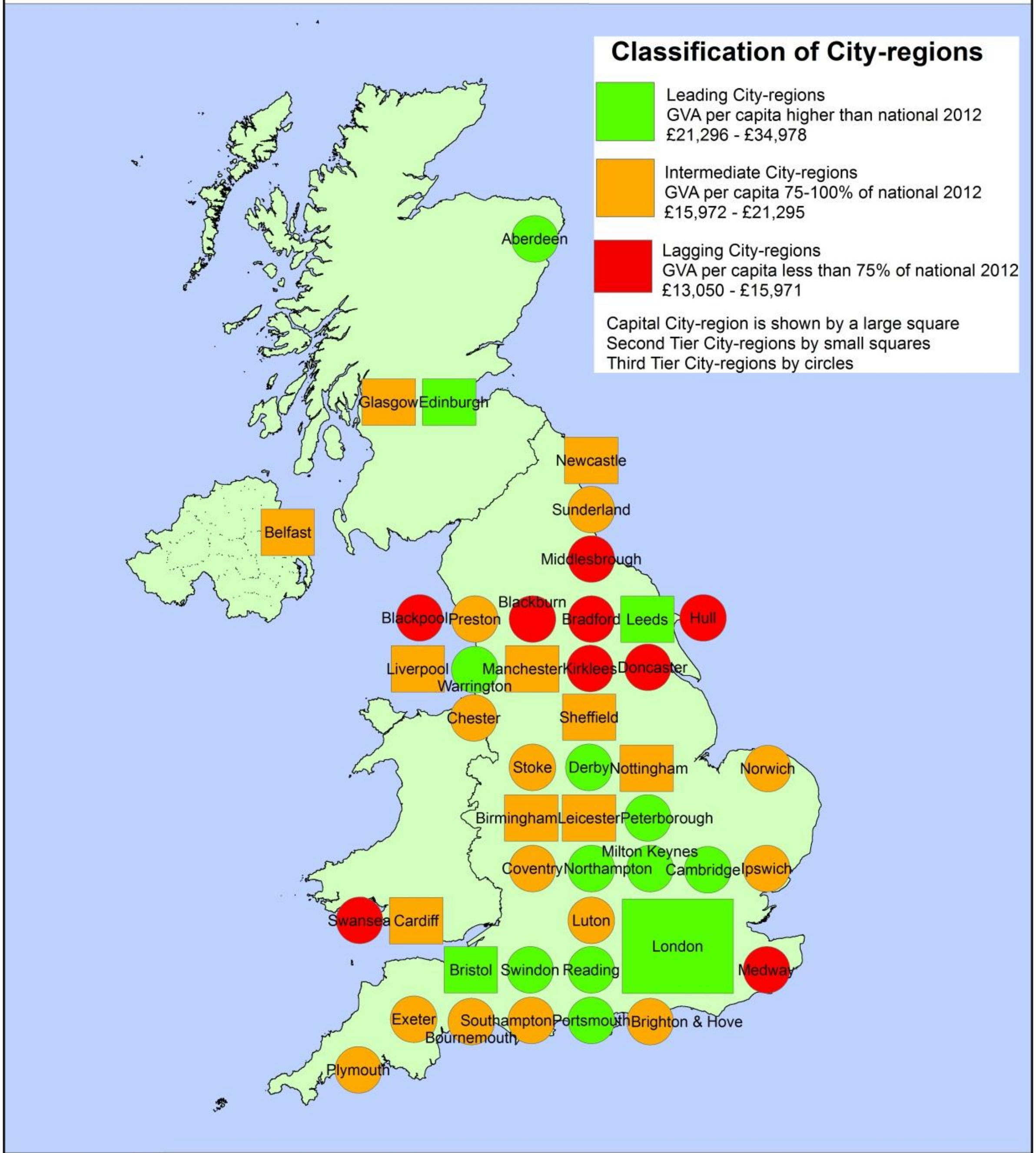
2.133 ONS has just published regional GVA data for 2012. These data are compiled on a slightly different basis to the GVA data presented elsewhere in this report. The main change is a shift from 5 year weighted averages to unsmoothed annual figures. We consider it important to present the latest available data to give the most up-to-date picture of city-regional economic performance. Figure 71 and Map 17 show the classification of city-regions that the latest GVA per capita data for 2012 generate.

Figure 71: GVA per capita, £s, 2012



Source: ONS

Map 17: UK City-regions: Leading, Intermediate & Lagging - GVA per capita 2012



Sources: Boundaries downloaded from UK Data Service. Contains Ordnance Survey data © Crown copyright and database right 2014. GVA per capita data are from ONS. The GVA figures are based on the income approach. 2012 figures are provisional. A number of methodological changes have been incorporated in the production of these latest 2012 figures. National data are for UK less extra regio & statistical discrepancy. Some city-region names have been simplified for presentational reasons. City-regions are based on NUTS 3 approximations.

2.134 Tables 18 and 19 compare city-region rankings for 1997 with those based on the latest 2012 data. The tables show a reshuffling of rankings and changes in classification over the 15 years of growth and recession with some city-regions:

- retaining their leading position: London, second-tier Edinburgh, Bristol and Leeds and third-tier Reading, Milton Keynes, Aberdeen, Swindon, Derby, Warrington, Peterborough, Northampton and Cambridge
- shifting notably up the rankings: second-tier Newcastle, Liverpool and Belfast; and third-tier Brighton & Hove and Cambridge
- moving from intermediate to leading: Portsmouth
- moving from lagging to intermediate: Liverpool
- shifting notably down the rankings: second-tier Leicester and Birmingham and third-tier Middlesbrough, Southampton, Coventry, Luton, Blackburn with Darwen and Bradford
- moving from leading to intermediate: third-tier Southampton, Coventry, Luton and Cheshire West and Chester
- moving from intermediate to lagging: Middlesbrough, Bradford, Kirklees, Blackburn with Darwen, Kingston upon Hull and Sunderland
- retaining their lagging classification and rooted to the bottom of the rankings: third-tier Medway, Blackpool and Doncaster

Table 18: City-regions ranked by GVA per capita and by grouping, 1997 and 2012

City-region	GVA per capita 1997	Rank	Group 1997	City-region	GVA per capita 2012	Rank	Group 2008
Swindon	20,515	1	Leading	Reading	34,978	1	Leading
Reading	18,960	2	Leading	Milton Keynes	34,296	2	Leading
Aberdeen	17,614	3	Leading	**LONDON**	32,479	3	Leading
LONDON	17,486	4	Leading	Aberdeen	31,754	4	Leading
Milton Keynes	17,365	5	Leading	EDINBURGH	27,201	5	Leading
EDINBURGH	15,794	6	Leading	Swindon	27,200	6	Leading
Derby	15,170	7	Leading	Warrington	25,947	7	Leading
Warrington	14,911	8	Leading	BRISTOL	24,739	8	Leading
Peterborough	14,811	9	Leading	Derby	24,039	9	Leading
Southampton	14,680	10	Leading	Cambridge	23,660	10	Leading
BRISTOL	14,488	11	Leading	LEEDS	22,818	11	Leading
Northampton	14,099	12	Leading	Peterborough	22,690	12	Leading
Coventry	13,977	13	Leading	Northampton	21,976	13	Leading
LEEDS	13,918	14	Leading	Portsmouth	21,617	14	Leading
Luton	13,840	15	Leading	BELFAST	21,031	15	Intermediate
Cheshire West & Chester	13,520	16	Leading	Brighton & Hove	20,712	16	Intermediate
Cambridge	13,220	17	Leading	Bournemouth	20,537	17	Intermediate
Portsmouth	13,193	18	Intermediate	Cheshire West & Chester	20,327	18	Intermediate
LEICESTER	12,482	19	Intermediate	NOTTINGHAM	19,641	19	Intermediate
Bournemouth	12,380	20	Intermediate	Southampton	19,446	20	Intermediate
NOTTINGHAM	12,367	21	Intermediate	GLASGOW	19,421	21	Intermediate
BIRMINGHAM	11,918	22	Intermediate	Coventry	18,978	22	Intermediate
BELFAST	11,886	23	Intermediate	MANCHESTER	18,870	23	Intermediate
GLASGOW	11,841	24	Intermediate	Luton	18,812	24	Intermediate
SHEFFIELD	11,419	25	Intermediate	SHEFFIELD	18,415	25	Intermediate
MANCHESTER	11,413	26	Intermediate	LEICESTER	18,200	26	Intermediate
Ipswich	11,299	27	Intermediate	Ipswich	17,780	27	Intermediate
Brighton & Hove	11,281	28	Intermediate	BIRMINGHAM	17,754	28	Intermediate

Plymouth	11,152	29	Intermediate	Plymouth	17,579	29	Intermediate
Stoke on Trent	11,001	30	Intermediate	NEWCASTLE UPON TYNE	17,294	30	Intermediate
Middlesbrough	10,704	31	Intermediate	Stoke on Trent	17,175	31	Intermediate
Bradford	10,702	32	Intermediate	Sunderland	16,978	32	Intermediate
Norwich	10,597	33	Intermediate	Preston	16,804	33	Intermediate
Kirklees	10,422	34	Intermediate	LIVERPOOL	16,752	34	Intermediate
Blackburn with Darwen	10,417	35	Intermediate	Norwich	16,746	35	Intermediate
Preston	10,369	36	Intermediate	Exeter	16,456	36	Intermediate
Hull, Kingston upon	10,172	37	Intermediate	CARDIFF	16,276	37	Intermediate
Sunderland	10,012	38	Intermediate	Bradford	15,705	38	Lagging
Swansea	9,936	39	Intermediate	Kirklees	15,700	39	Lagging
NEWCASTLE U TYNE	9,874	40	Intermediate	Hull, Kingston upon	15,546	40	Lagging
CARDIFF	9,812	41	Intermediate	Middlesbrough	15,373	41	Lagging
Exeter	9,729	42	Intermediate	Swansea	15,196	42	Lagging
LIVERPOOL	9,393	43	Lagging	Blackburn with Darwen	15,096	43	Lagging
Medway	8,932	44	Lagging	Medway	14,356	44	Lagging
Blackpool	8,654	45	Lagging	Blackpool	13,082	45	Lagging
Doncaster	8,167	46	Lagging	Doncaster	13,050	46	Lagging

Source: ONS; City-regions: LONDON, capitals in bold; 2nd-tier in capitals

Table 19: City-regions GVA per capita rank and grouping, 1997 and 2012

City-region	Rank 2007	Group 1997	Rank 2012	Group 2012
Swindon	1	Leading	6	Leading
Reading	2	Leading	1	Leading
Aberdeen	3	Leading	4	Leading
LONDON	4	Leading	3	Leading
Milton Keynes	5	Leading	2	Leading
EDINBURGH	6	Leading	5	Leading
Derby	7	Leading	9	Leading
Warrington	8	Leading	7	Leading
Peterborough	9	Leading	12	Leading
Southampton	10	Leading	20	Intermediate
BRISTOL	11	Leading	8	Leading
Northampton	12	Leading	13	Leading
Coventry	13	Leading	22	Intermediate
LEEDS	14	Leading	11	Leading
Luton	15	Leading	24	Intermediate
Cheshire West & Chester	16	Leading	18	Intermediate
Cambridge	17	Leading	10	Leading
Portsmouth	18	Intermediate	14	Leading
LEICESTER	19	Intermediate	26	Intermediate
Bournemouth	20	Intermediate	17	Intermediate
NOTTINGHAM	21	Intermediate	19	Intermediate
BIRMINGHAM	22	Intermediate	28	Intermediate
BELFAST	23	Intermediate	15	Intermediate
GLASGOW	24	Intermediate	21	Intermediate
SHEFFIELD	25	Intermediate	25	Intermediate
MANCHESTER	26	Intermediate	23	Intermediate
Ipswich	27	Intermediate	27	Intermediate
Brighton & Hove	28	Intermediate	16	Intermediate
Plymouth	29	Intermediate	29	Intermediate
Stoke on Trent	30	Intermediate	31	Intermediate
Middlesbrough	31	Intermediate	41	Lagging
Bradford	32	Intermediate	38	Lagging

Norwich	33	Intermediate	35	Intermediate
Kirklees	34	Intermediate	39	Lagging
Blackburn with Darwen	35	Intermediate	43	Lagging
Preston	36	Intermediate	33	Intermediate
Hull, Kingston upon	37	Intermediate	40	Lagging
Sunderland	38	Intermediate	32	Lagging
Swansea	39	Intermediate	42	Intermediate
NEWCASTLE U TYNE	40	Intermediate	30	Intermediate
CARDIFF	41	Intermediate	37	Intermediate
Exeter	42	Intermediate	36	Intermediate
LIVERPOOL	43	Lagging	34	Intermediate
Medway	44	Lagging	44	Lagging
Blackpool	45	Lagging	45	Lagging
Doncaster	46	Lagging	46	Lagging

Source: ONS; City-regions: LONDON, capitals in bold; 2nd-tier in capitals

2.135 We have incorporated the latest 2012 GVA per capita figures in the balance sheets in Table 20 and 21, which show the relative economic strength of the city-regions at the latest dates for which we have data – variously 2011, 2012 and 2013.

Table 20: The balance sheet, 2011/12/13

City-region	GVA per capita, 2012	GVA per hour worked, 2011	employment rates - working age - 2012	Claimant Count, Jan-Apr 2013	Total score
Aberdeen					4
BRISTOL					4
Cambridge					4
EDINBURGH					4
LONDON					4
Milton Keynes					4
Reading					4
Swindon					4
Derby					5
Portsmouth					5
Warrington					5
Bournemouth					6
Brighton & Hove					6
Cheshire West & Chester					6
Ipswich					6
Northampton					6
Southampton					6
Exeter					7
LEEDS					7
LEICESTER					7
Norwich					7
Peterborough					7
Plymouth					7
Preston					7
Luton					8
Blackburn with Darwen					9
Coventry					9
Medway					9
NOTTINGHAM					9
Stoke on Trent					9
BELFAST					10
BIRMINGHAM					10
BLACKPOOL					10
CARDIFF					10
GLASGOW					10
MANCHESTER					10
SHEFFIELD					10
Sunderland					10
Swansea					10
Bradford					11
Hull, Kingston upon					11
Kirklees					11
LIVERPOOL					11
Middlesbrough					11
NEWCASTLE UPON TYNE					11
Doncaster					12

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Table 21: The balance sheet, 2011/12/13 – by tier and region

Economic strength		'North'		'South'		
	Score	Second-Tier	Third-Tier	Capital	Second-Tier	Third-Tier
←Strong to weak→	4	Edinburgh	Aberdeen	London	Bristol	Cambridge Milton Keynes Reading Swindon
	5	-	Derby Warrington	-	-	Portsmouth
	6	-	Cheshire W. & Chester Northampton	-	-	Bournemouth Brighton & Hove Ipswich Southampton
	7	Leicester Leeds	Preston	-	-	Exeter Norwich Peterborough Plymouth
	8	-	-	-	-	Luton
	9	Nottingham	Blackburn with Darwen Coventry Stoke on Trent	-	-	Medway
	10	Belfast Birmingham Cardiff Glasgow Manchester Sheffield	Blackpool Sunderland Swansea	-	-	-
	11	Liverpool Newcastle upon Tyne	Bradford Kirklees Hull, Kingston upon Middlesbrough	-	-	-
	12	-	Doncaster	-	-	-

2.136 Comparing Table 21 with Table 7 (p.55), which showed the position in 1997, provides a broad picture of change:

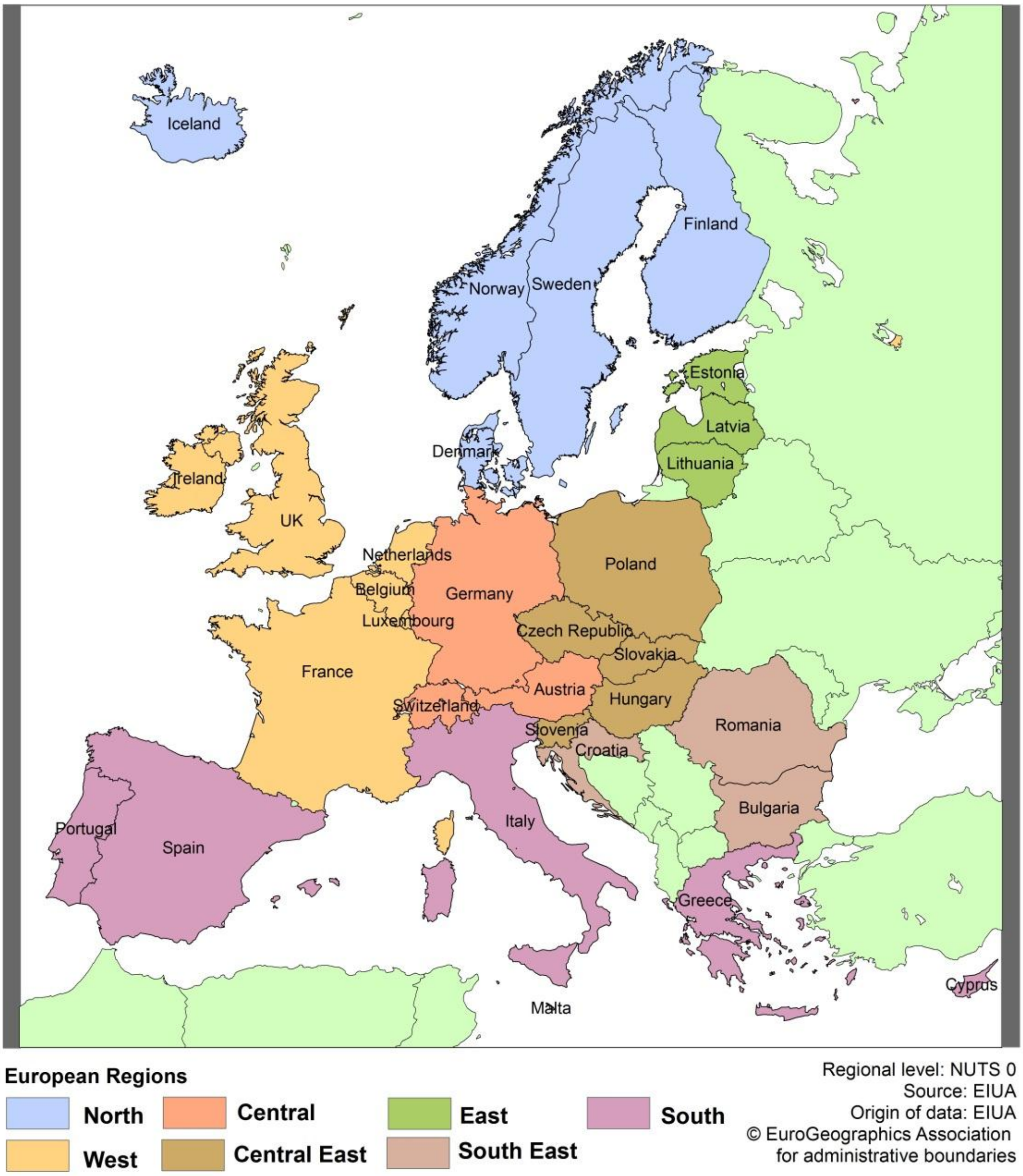
- ❖ a group that has retained its relative economic strength:
  - second-tier Bristol and Edinburgh
  - third-tier Aberdeen in the north and Cambridge, Milton Keynes, Reading and Swindon in the south
- ❖ a strengthening capital city-region
- ❖ strengthening third-tier city-regions: Plymouth and Brighton and Hove in the south
- ❖ northern second-tier city-regions losing position: Birmingham, Leeds, Manchester and Nottingham
- ❖ third-tier city-regions losing position: Coventry, Bradford and Kirklees in the north and Luton in the south

3. THE ECONOMIC PERFORMANCE OF UK CITY-REGIONS IN EUROPEAN CONTEXT

3.1 European city-region classification

3.1 We turn now to positioning our UK city-regions in a European context. We concentrate on benchmarking the 149 capitals and second-tier city-regions. We use data on GDP per capita for two periods, given data availability: 2000-2008 and 2008-2010. Using the same classification system as the one we used for the UK benchmarking – on the basis of the GDP per capita average for the EU27 countries– we identify 78 ‘leading’, 26 ‘intermediate’ and 45 ‘lagging’ city-regions (Table 22) across 7 broad geographical groupings and 29 European countries (Map 18). For boundary definitions of the 14 UK city-regions in this benchmarking exercise, see Annex 1, Map 23.

Map 18: Regional Grouping of European Countries



Big regional disparities – city-regions in prosperous North, Central and West vs. poorer city-regions in Central East, East and South East

3.2 The broad regional disparities in prosperity are notable with the prosperous city-regions in the North, Central and West contrasting with the less prosperous city-regions of the Central East, East and South East:

- All 13 city-regions of 'Nordic' Unitary states of Denmark, Finland, Iceland, Norway and Sweden were 'leading';
- 17 of the 20 city-regions (85%) of the Central Federal states of Austria and Germany were 'leading' and none 'lagging';
- 34 of the 44 city-regions in the Western Federal state of Belgium and Unitary states of France, Ireland, Luxembourg, Netherlands and the United Kingdom (77%) were 'leading' and none 'lagging' in a European context;
- Together, the North, Central and West groupings housed 64 of the 78 'leading city-regions (82%).

3.3 By contrast:

- Only 3 of the 27 city-regions in the Central East former socialist Unitary states of Czech Republic, Hungary, Poland, Slovakia and Slovenia (11%) were 'leading', the same number intermediate and 21 (78%) lagging;
- All 3 city-regions in the Eastern former socialist Baltic States of Estonia, Latvia and Lithuania and all 3 city regions in the South Eastern former socialist Unitary states of Bulgaria, Croatia and Romania were 'lagging';
- Only 11 of the 27 city-regions in the Southern regionalised states of Italy and Spain and the Unitary states of Cyprus, Greece, Malta and Portugal (41%) were 'leading', while 10 were intermediate (37%) and 6 were 'lagging' (22%);
- Together the Central East, East, South East and South groupings house all 45 lagging city-regions.

Table 22: European city-regions by geographical grouping, country and classification, 2000

	Geographical grouping & country	Leading City-regions	Intermediate City-regions	Lagging City-regions	Total
North	Denmark	4	0	0	4
	Finland	3	0	0	3
	Norway	3	0	0	3
	Sweden	3	0	0	3
	Total	**13**	**0**	**0**	**13**
Central	Austria	5	0	0	5
	Germany	12	3	0	15
	Total	**17**	**3**	**0**	**20**
Central East	Czech Republic	1	0	4	5
	Hungary	0	1	5	6
	Poland	0	2	10	12
	Slovakia	1	0	1	2
	Slovenia	1	0	1	2
	Total	**3**	**3**	**21**	**27**
East	Estonia	0	0	2	2
	Latvia	0	0	2	2
	Lithuania	0	0	3	3
	Total	**0**	**0**	**7**	**7**
South	Cyprus	0	1	0	1
	Greece	0	2	0	2
	Italy	7	2	3	12
	Malta	0	1	0	1
	Portugal	1	1	0	2
	Spain	3	3	3	9
	Total	**11**	**10**	**6**	**27**
South East	Bulgaria	0	0	3	3
	Croatia	0	0	2	2
	Romania	0	0	6	6
	Total	**0**	**0**	**11**	**11**
West	Belgium	4	1	0	5
	France	11	5	0	16
	Ireland	2	0	0	2
	Luxembourg	1	0	0	1
	Netherlands	6	0	0	6
	United Kingdom	10	4	0	14
	Total	**34**	**10**	**0**	**44**
All	Total	**78**	**26**	**45**	**149**

European leading city-regions in 2000

10 UK second-tier city-regions in European leading group on productivity in 2000 – but only London in top twenty

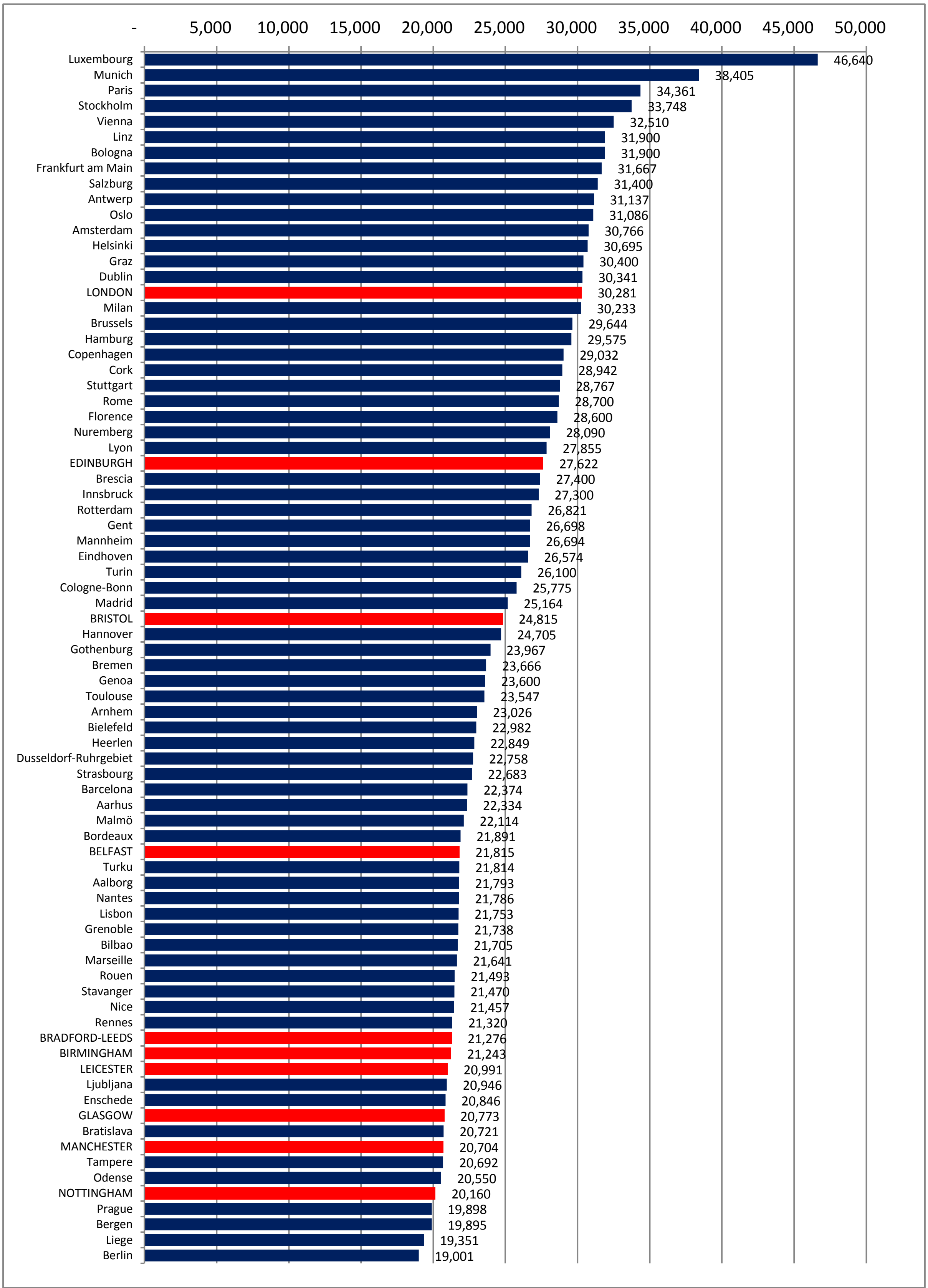
Only London and Edinburgh with GDP per capita levels above the leading group average – remaining 8 UK city-regions below leading group average

4 UK city-regions in European intermediate group on productivity

3.4 Figure 72 shows the 78 leading city-regions – from Luxembourg with a PPS figure of 46,640 at the top of the league to Berlin with a PPS figure at the EU27 average of 19,001 at the bottom.

3.5 10 UK city-regions are 'leading' spread across the distribution in terms of ranking from 16th (London) to 74th (Nottingham). Only 2 UK city-regions have GDP per capita figures above the average for the group as a whole (25,602): the two 'capitals', London and Edinburgh. Bristol comes next, just below the group average (ranked 37th) followed by Belfast (ranked 52nd). There is then another gap to Bradford-Leeds (64); Birmingham (65); Leicester (66); Glasgow (69) and Nottingham (74).

Figure 72: Leading European City-regions, GDP per capita in PPS, 2000

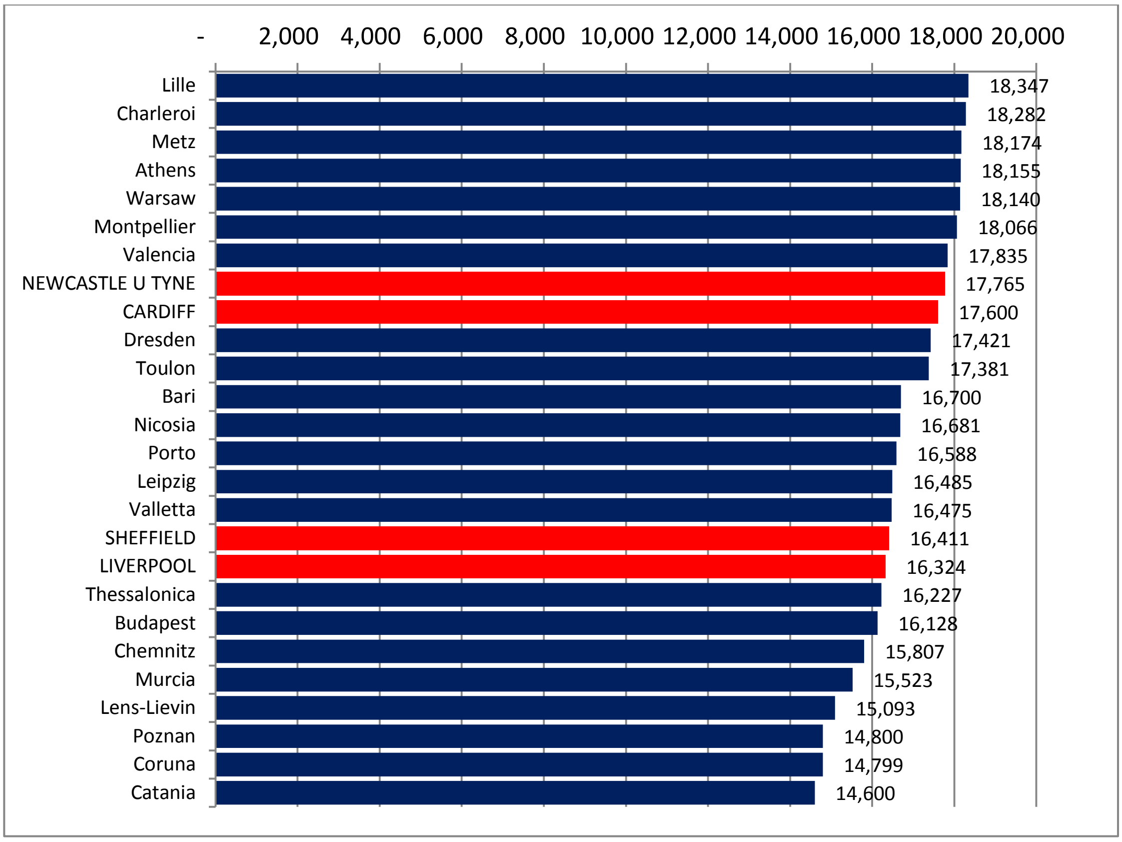


Source: Eurostat

Intermediate European city-regions in 2000

3.6 Figure 73 shows the 26 intermediate city-regions. 4 UK city-regions fell in this grouping: 2 above the group average (of 16,762) – Newcastle upon Tyne and Cardiff (8 and 9); and 2 below – Sheffield and Liverpool (17 and 18).

Figure 73: Intermediate European City-regions, GDP per capita in PPS, 2000

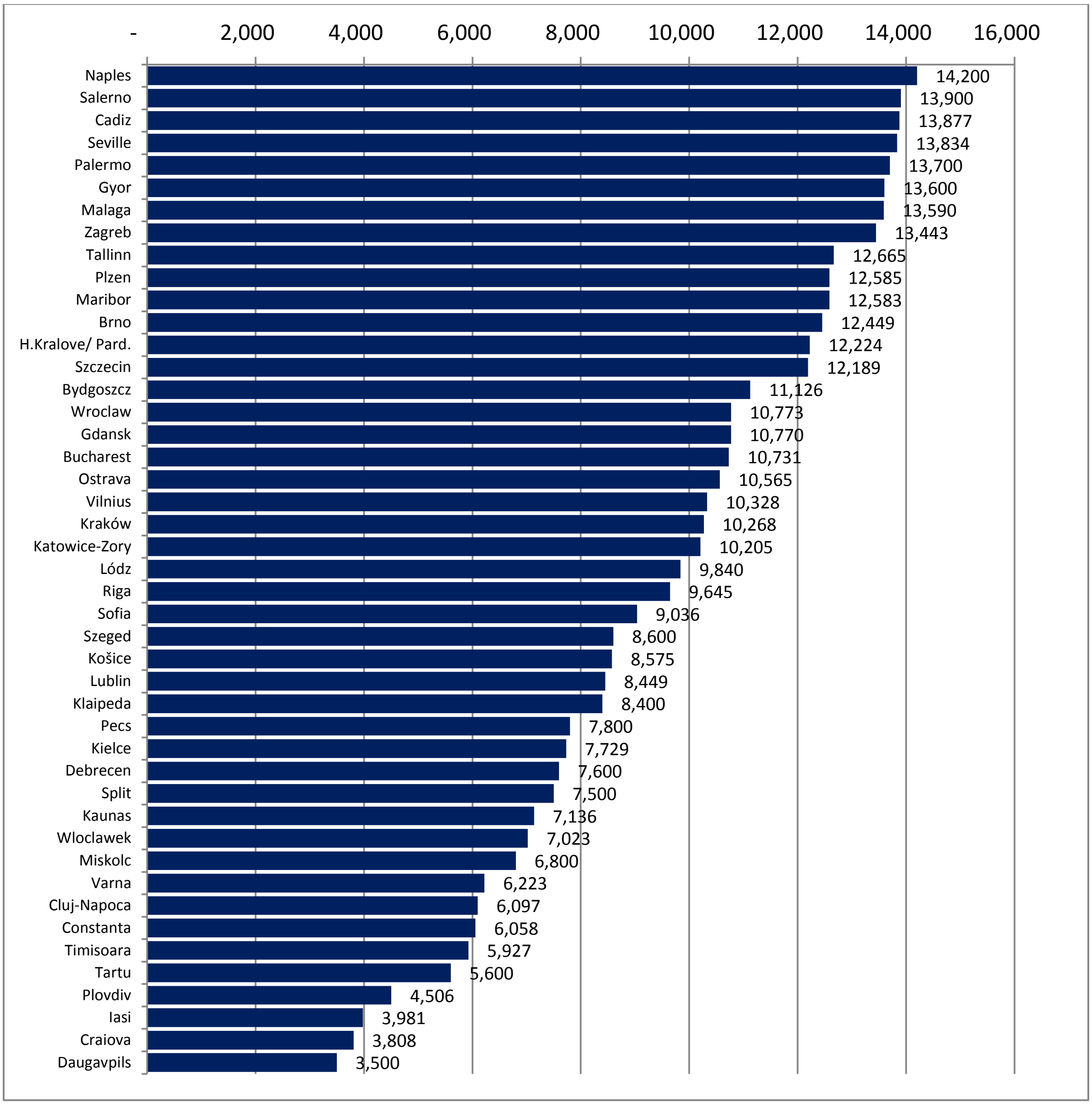


Source: Eurostat

Lagging European city-regions in 2000

3.7 Figure 74 shows the 45 lagging city-regions. The dominance of the group by city-regions from the former socialist states of Central East, East, South East and South Europe stands out. None of the UK's second-tier city-regions falls into this group.

Figure 74: Lagging European City-regions, GDP per capita in PPS, 2000

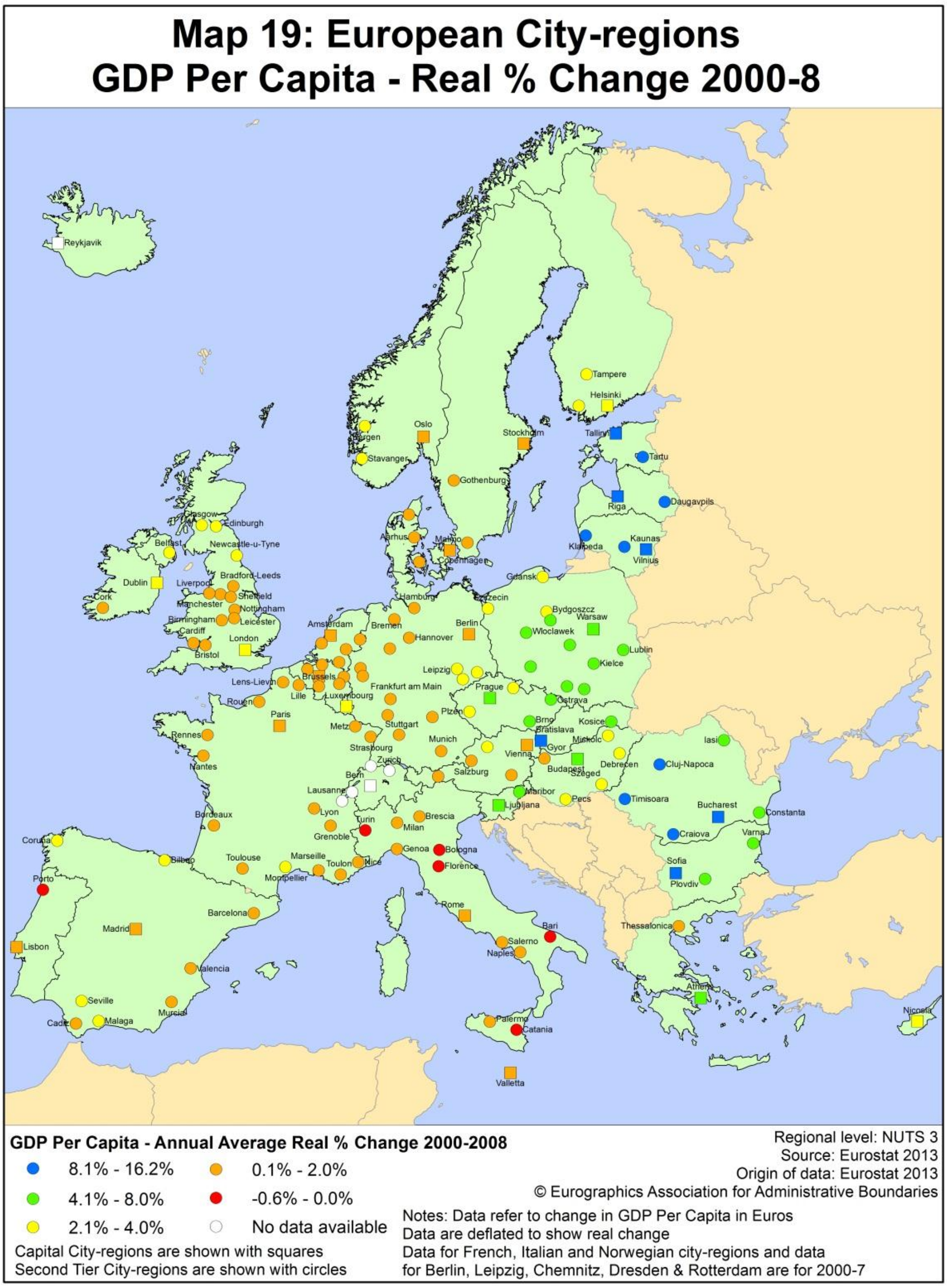


Source: Eurostat

3.2 Economic Performance in the growth years, 2000-2008

Burst of growth in East and South East– growth rates up to 7 times rates of West and North

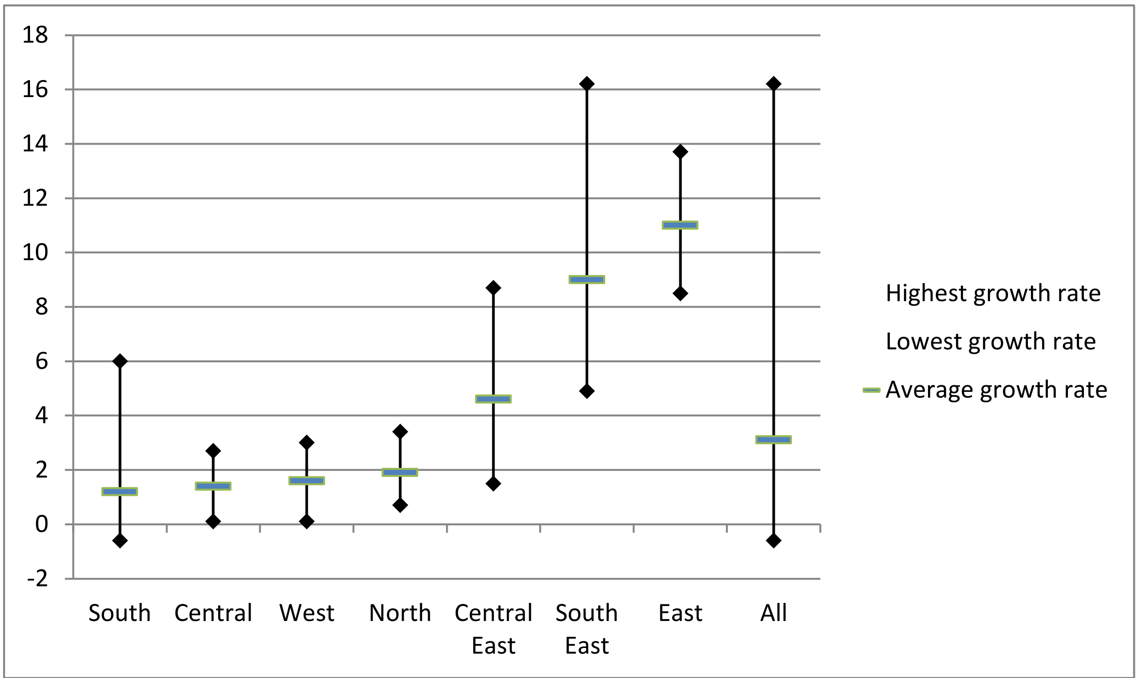
3.8 Map 19 shows real GDP per capita change for the 149 city-regions for which we currently have data.



Map 19: European City-regions GDP Per Capita - Real % Change 2000-8

3.9 There is a marked geographical pattern with the lagging city-regions of East and South East Europe, and to a lesser extent, those of Central East Europe showing a rapid burst of growth in the eight year period. As Figure 75 shows, the city-regions in the East and South East in transition to capitalist economies and integrating into the European economy had average growth rates 6 and 7 times those of the established West and North. The growth was from a small base, but significant nevertheless.

Figure 75: GDP per capita annual average % change 2000-2008, city-region averages and range by broad European geographies



Source: Eurostat

UK city-regions in the growth years

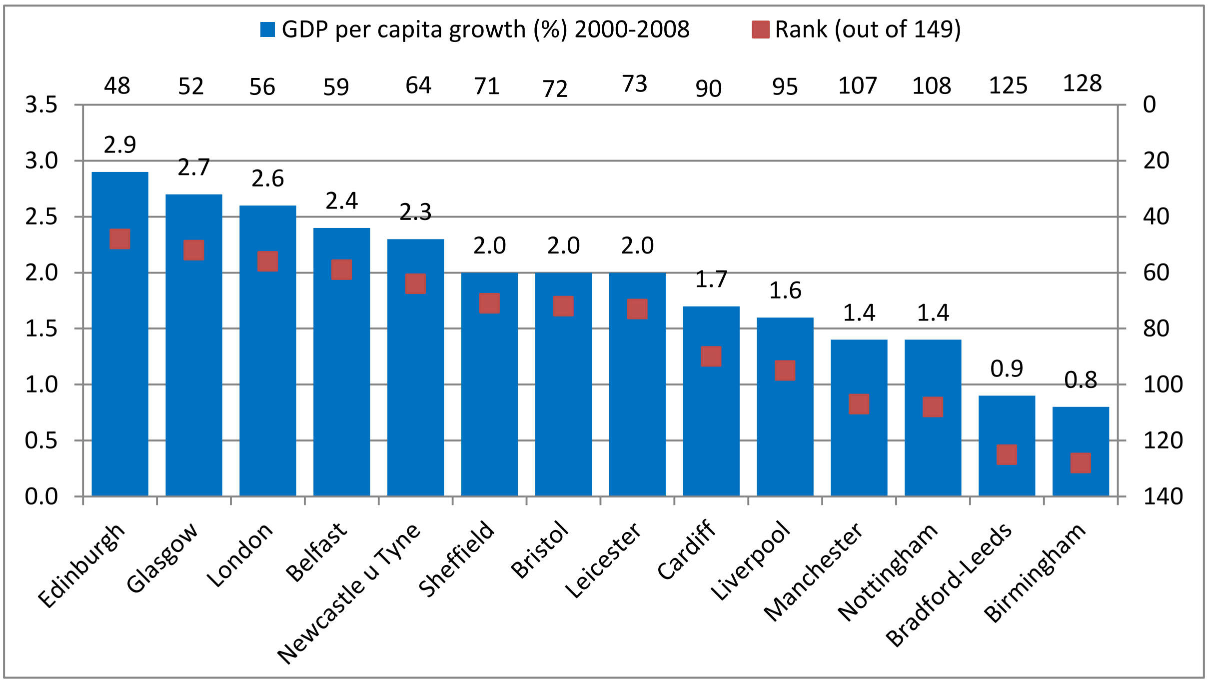
Growth in productivity below European average for London and all UK second-tiers

Best performing – Edinburgh, Glasgow, London and Belfast

3.10 In terms of growth rates, the UK's 14 city-regions all fell below the average for all 149 city-regions (3.1%). Edinburgh, Glasgow and London came closest with annual average growth rates of 2.9%, 2.7% and 2.6% respectively. Ranking the 149 city-regions in descending order of change and into quintiles:

- 4 UK city-regions were in the second quintile - Edinburgh, Glasgow, London and Belfast
- 5 in the third quintile - Newcastle upon Tyne, Sheffield, Bristol, Leicester and Cardiff
- 3 in the fourth quintile - Liverpool, Manchester and Nottingham; and
- 2 in the fifth quintile - Bradford-Leeds and Birmingham (Figure 76).

Figure 76: GDP per capita annual average % change 2000-2008, & rank of growth rates out of 149 European city-regions



Source: Eurostat; data are deflated to show real change

3.11 With its 2.6% annual average growth rate, London was ranked 13th out of the 27 European capital city-regions.

Capitals vs. Second-Tier in the Growth Years

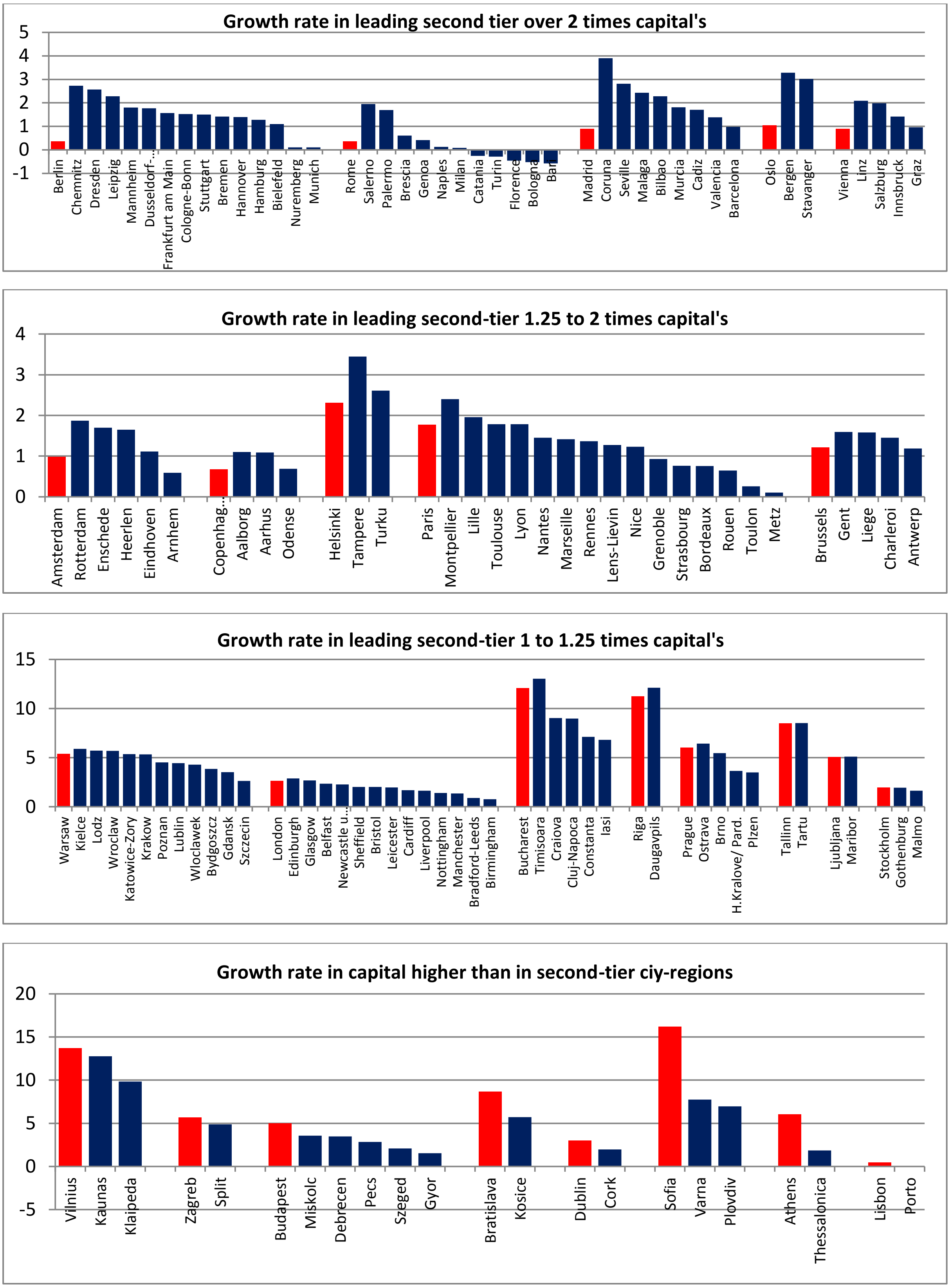
Leading second-tiers performing strongly in terms of growth rates

But in UK just 2 of 13 second-tier city regions grew faster than the capital

3.12 Figure 77 compares performance in capitals with second-tier city-regions in the 26 countries where there is at least 1 second-tier. It shows the relatively strong performance of leading second-tier city regions in most countries:

- In 5 countries the leading second-tier's growth rate was more than twice that of the capital
- In a further 13 countries the leading second-tier's growth rate was 1 to 2 times that of the capital
- In only 8 countries did the capital grow faster than all second-tier city-regions: 5 in eastern Europe, 2 in southern Europe and 1 in western Europe
- In UK just 2 of 13 second-tier city-regions grew faster than the capital

Figure 77: GDP per capita in Euros, annual average % changes 2000-8



Source: Eurostat

3.3 Economic performance in recession and austerity, post 2008

Growth in productivity turned sharply into decline for all city-regions – including city-regions in North, West and Central regions; 'catch-up' gains of city-regions in growth years in East reversed; big falls in city-regions in South; Central East city-regions more resilient

3.13 Map 20 shows real GDP per capita change for the years 2008-2010 for the 142 city-regions for which we currently have data. The pervasiveness of the global recession stands out with GDP per capita falling in 119 of the 142 city-regions.

Map 20: European City-regions
GDP Per Capita - Real % Change 2008-10

GDP Per Capita - Annual Average Real % Change 2008-2010

- 2.6% - 3.8%
- 0.1% - 2.5%
- -2.5% - 0.0%
- -5.0% - -2.6%
- -8.9% - -5.1%
- No data available

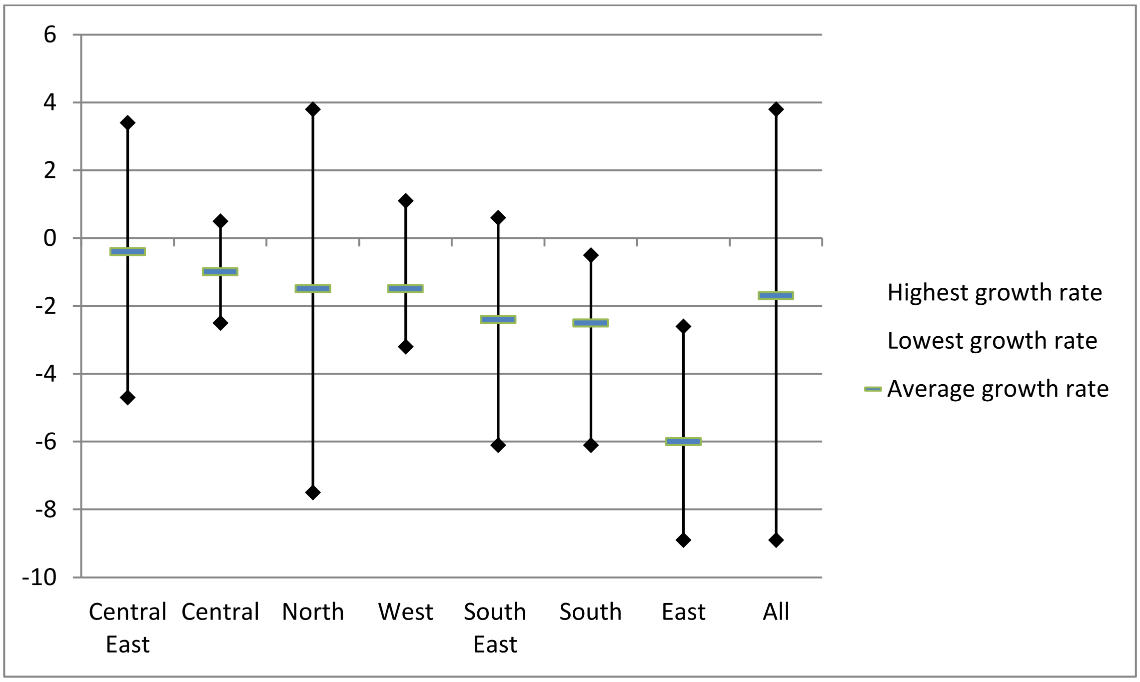
Capital City-regions are shown with squares
Second Tier City-regions are shown with circles

Regional level: NUTS 3
Source: Eurostat 2013
Origin of data: Eurostat 2013

Notes: Data refer to change in GDP Per Capita in Euros
Data are deflated to show real change
Italian city-region data, where available, are based on NUTS 2 estimates for 2008
Dutch city-region data for 2008 are provisional

3.14 The crisis has seen a transformation of the geography of the 2000-2008 growth years. All regions have seen overall growth rates transformed into decline. A notable feature has been the bifurcation of city-regional growth in Eastern Europe between, on the one hand the East and South East and, on the other, the Central East. The South has seen a marked fall in growth post crisis. Less pronounced, but still reversals in growth have occurred in the North, West and Central regions (Figure 78).

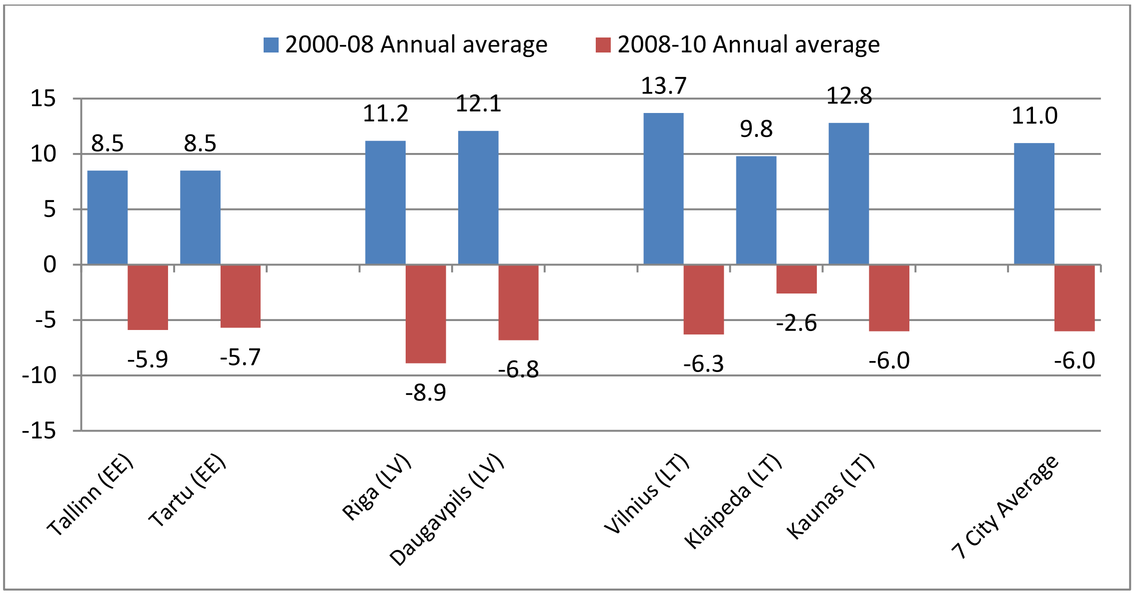
Figure 78: GDP per capita annual average % change 2008-2010, city-region averages and range by broad European geographies



Source: Eurostat

3.15 The relative 'catch-up' gains of city-regions in the East has been slowed down or reversed by the crisis. As Figure 79 shows, the average annual growth of 11% in the East in the growth years was transformed into an annual average decline of 6% with the recession. But there were some big differences in relative performance at the level of individual city-regions. The 8.9% annual average fall in Riga in Latvia was nearly three and half times the annual average fall of 2.6% in Klaipeda in Lithuania.

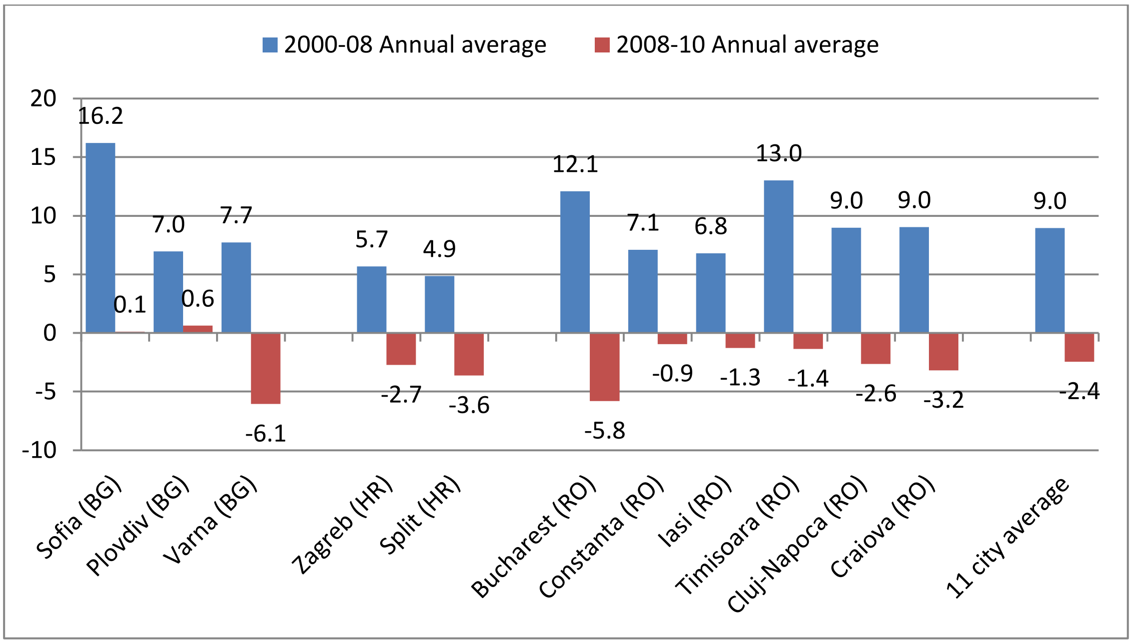
Figure 79: Growth and decline in GDP per capita in Euros, Real change, Annual Averages, 2000-2008 and 2008-10: City-regions in East Europe



Source: Eurostat

3.16 As in the East, the gains of city-regions in the **South East** have been slowed down or reversed by the crisis. As Figure 80 shows the average annual growth of 9% in the growth years was transformed into an annual average decline of 2.4% with the recession. All but 2 of the 11 city-regions in the region – Sofia and Plovdiv in Bulgaria – saw GDP per capita fall in real terms.

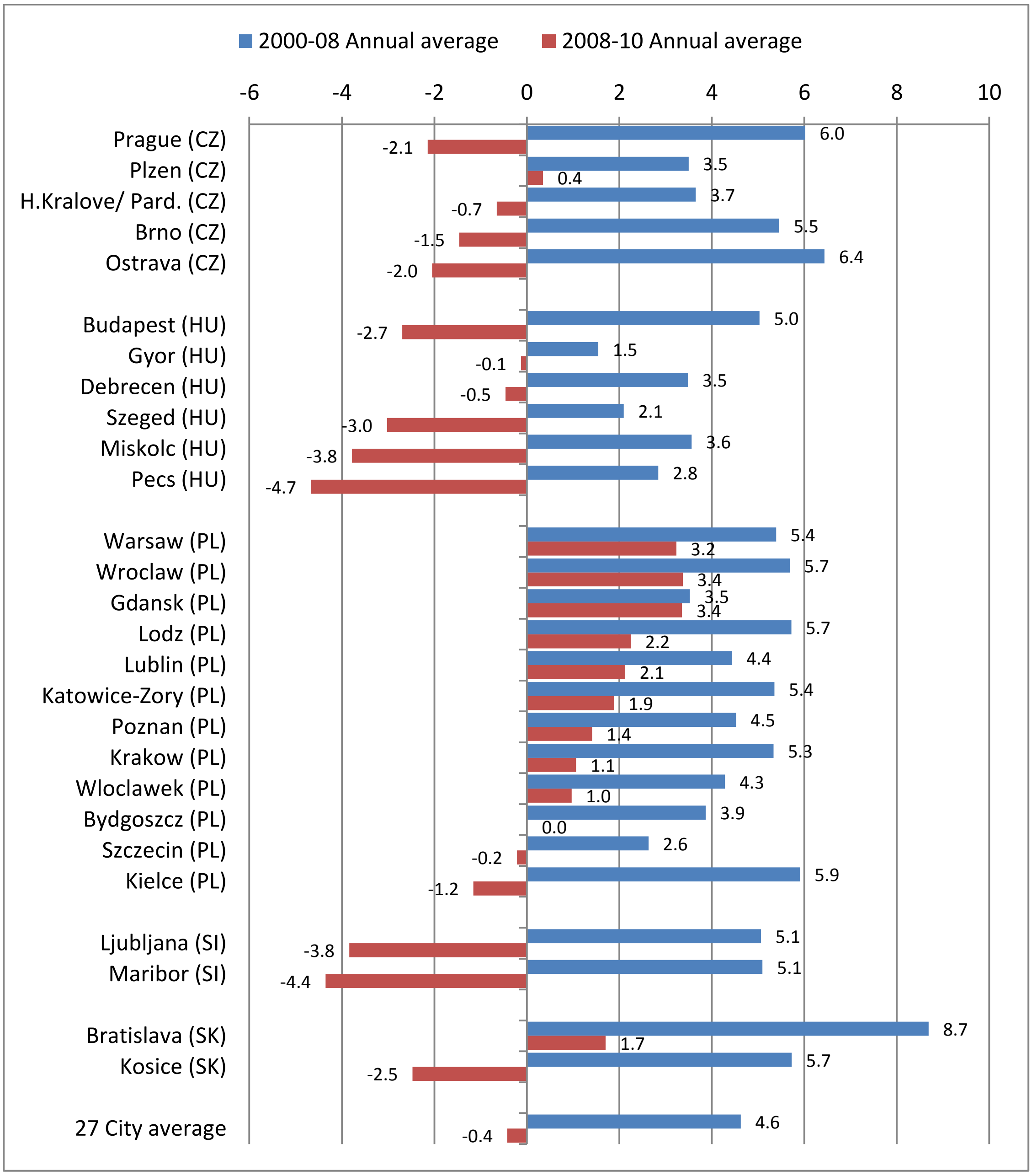
Figure 80: Growth and decline in GDP per capita in Euros, Real change, Annual Averages, 2000-2008 and 2008-10: City-regions in South East Europe



Source: Eurostat

3.17 The impact of the recession in Central East has been less pronounced than in either the East or South East, with the annual average 4.6% growth in the growth years transformed into an annual average fall of -0.4% (Figure 81). As a group it appears to have been more resilient than the East. But there was variation in performance at individual city-region level, ranging from the annual decline of 4.7% in Pecs, in Hungary to the annual growth of 3.4% in Wroclaw and Gdansk in Poland.

Figure 81: Growth and decline in GDP per capita in Euros, Real change, Annual Averages, 2000-2008 and 2008-10: City-regions in Central East Europe

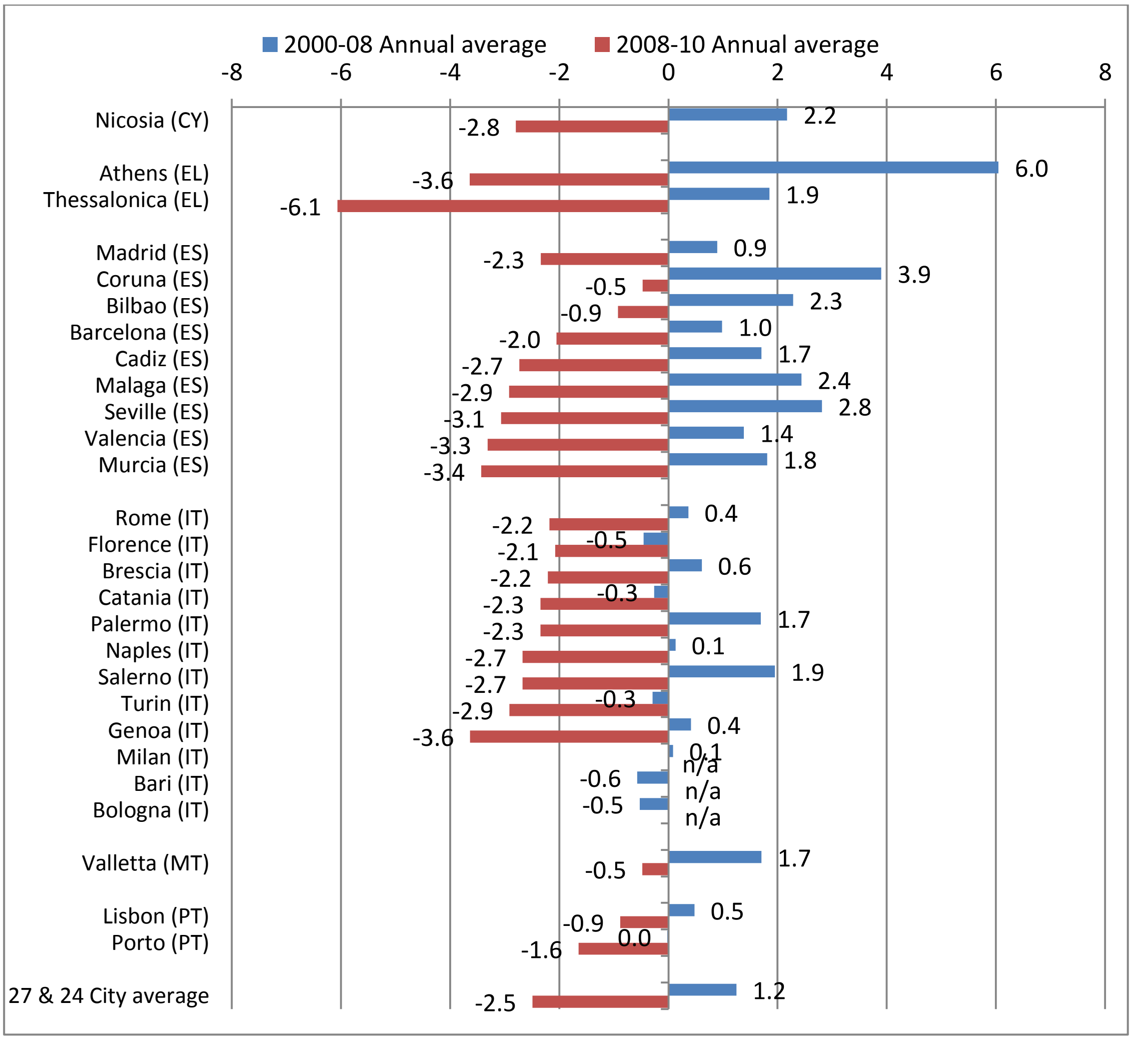


Source: Eurostat

3.18 The growth rates shown in Figure 81 meant that a number of city-regions in the region saw a relative improvement in their competitive position over the 2000 to 2010 period as a whole. Prague in the Czech Republic and Warsaw in Poland shifted from intermediate to leading city-regions on the basis of their GDP per capita in 2010 and Wroclaw in Poland shifted from lagging to intermediate. The other 24 city-regions remained lagging.

3.19 The relatively strong performance of Central East city-regions contrasts visibly with that of city-regions in the **South** (Figure 82). The South saw an annual average growth rate of 1.2% in the growth years and an annual average decline of 2.5% post-crisis (Figure 80). The majority of city-regions retained their GDP per capita classification over the two periods (Figure 80). Just one city-region - Catania in Italy – fell from intermediate to lagging by 2010. In contrast, two Spanish city-regions - Malaga and Seville - shifted in the opposite direction from lagging to intermediate. The capital of Greece, Athens, improved from intermediate to leading.

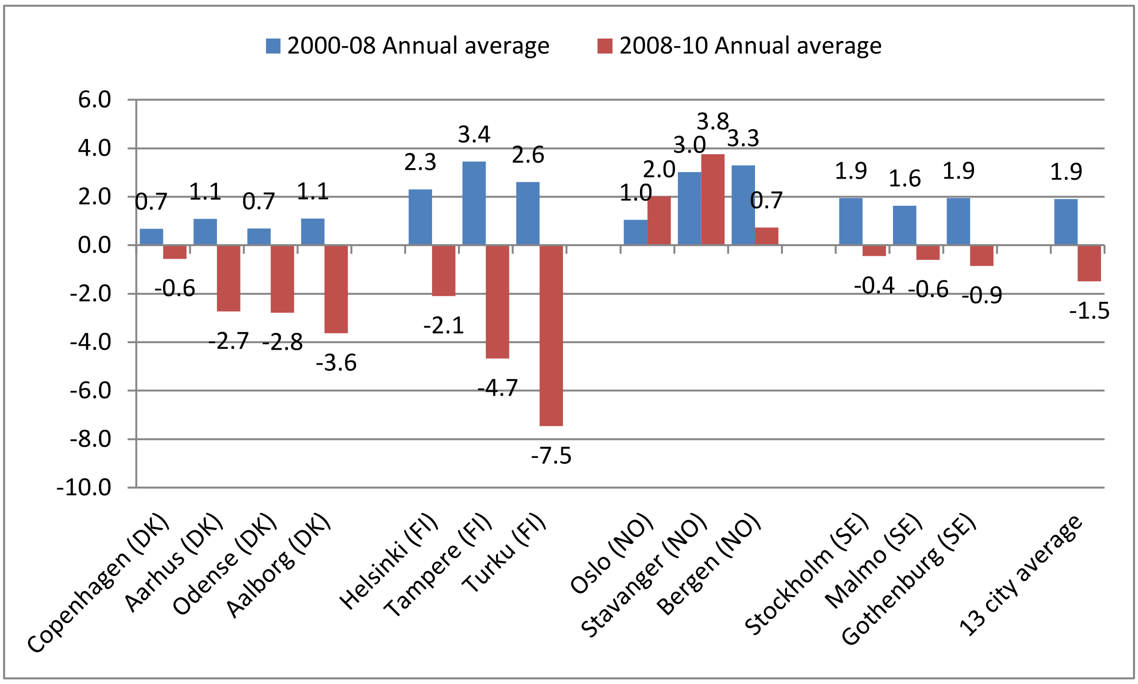
Figure 82: Growth and decline in GDP per capita in Euros, Real change, Annual Averages, 2000-2008 and 2008-10: City-regions in South Europe



Source: Eurostat

3.20 Overall, the decline in growth was less pronounced in the **North**, with the annual 1.9% increase in the growth years transformed into an annual decline of 1.5% with the crisis (Figure 83). There was, nevertheless, a wide range of performance at individual city-region level – from the significant annual falls in Turku and Tampere in Finland (-7.5% and -4.7%, respectively) and Aalborg, Odense and Aarhus in Denmark (-3.6%, -2.8% and -2.7%, respectively) contrasting with significant annual gains in Stavanger and Oslo in Norway (+3.8% and +2.0%, respectively).

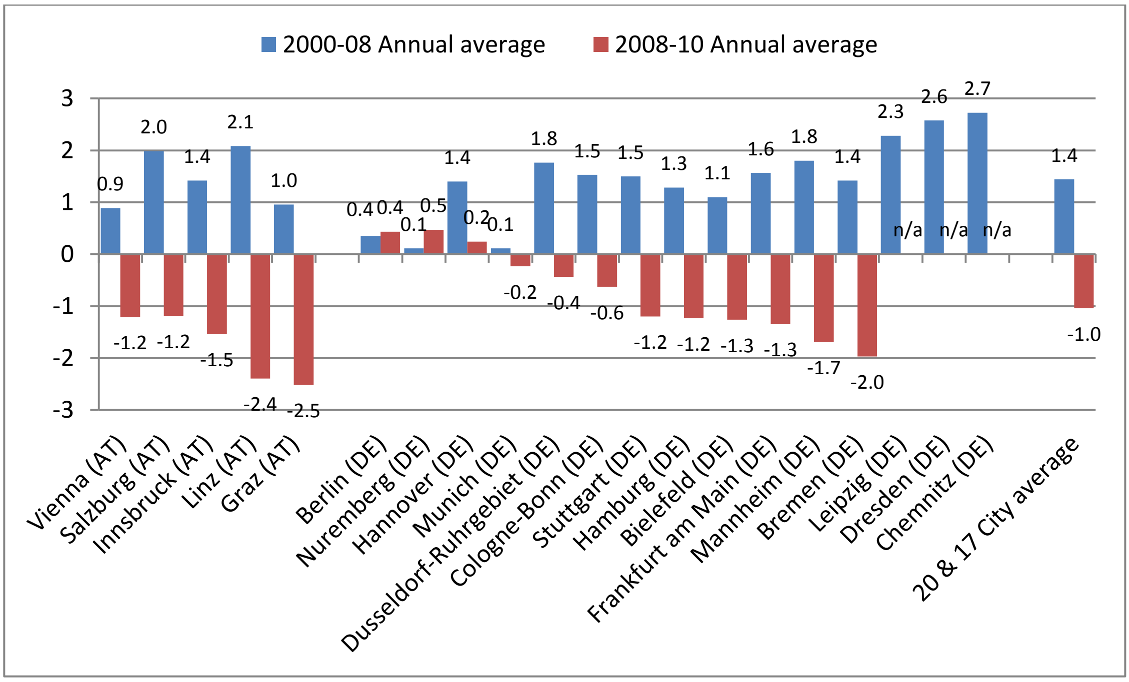
Figure 83: Growth and decline in GDP per capita in Euros, Real change, Annual Averages, 2000-2008 and 2008-10: City-regions in North Europe



Source: Eurostat

3.21 The crisis has had a less diverse impact on city-regions in the established **Central** region than in Eastern and Southern Europe. The annual 1.4% average growth in the growth years has been transformed into -1.0% annual average decline post crisis (Figure 84). Impact ranged from the 2.5% annual decline in Graz, Austria to the small 0.5% annual growth experienced by Nuremburg in Germany.

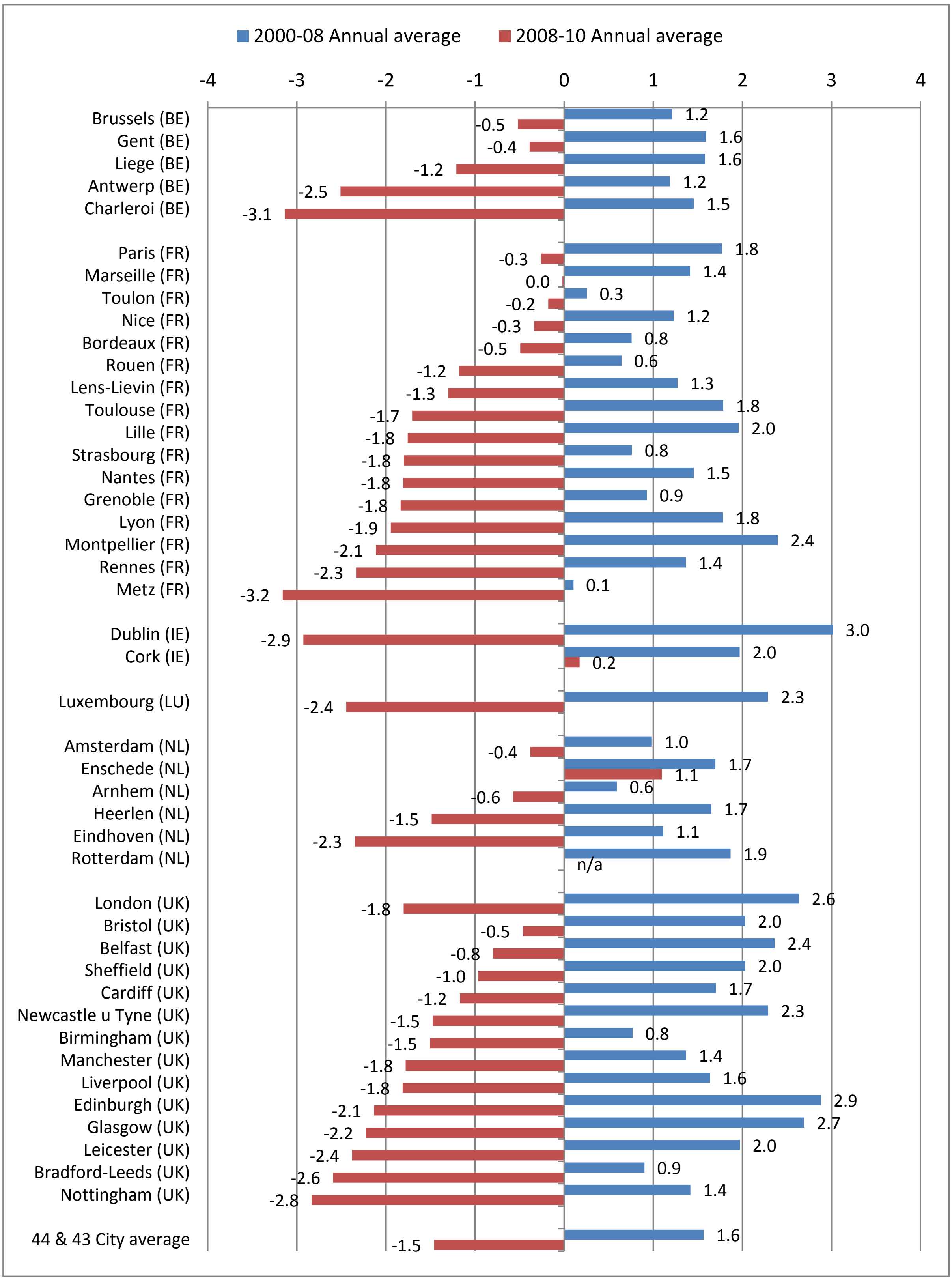
Figure 84: Growth and decline in GDP per capita in Euros, Real change, Annual Averages, 2000-2008 and 2008-10: City-regions in Central Europe



Source: Eurostat

3.22 The decline in annual average growth rates for city-regions in the **West** was on a par with that of the North and just slightly worse than that for the Central region. An average annual growth rate of 1.6% was mirrored with the crisis in an annual average decline of 1.5% (Figure 85). Post crisis performance ranged from the 3.2% annual decline experienced by Metz in France to the 1.1% annual growth of Enschede in the Netherlands.

Figure 85: Growth and decline in GDP per capita in Euros, Real change, Annual Averages, 2000-2008 and 2008-10: City-regions in West Europe



Source: Eurostat

UK city-regions in the recession, 2008-2010

Productivity falling in all UK city-regions. Only 4 with declines less than European average – Bristol, Belfast, Sheffield and Cardiff. None in the top thirty European city-regions for lowest falls

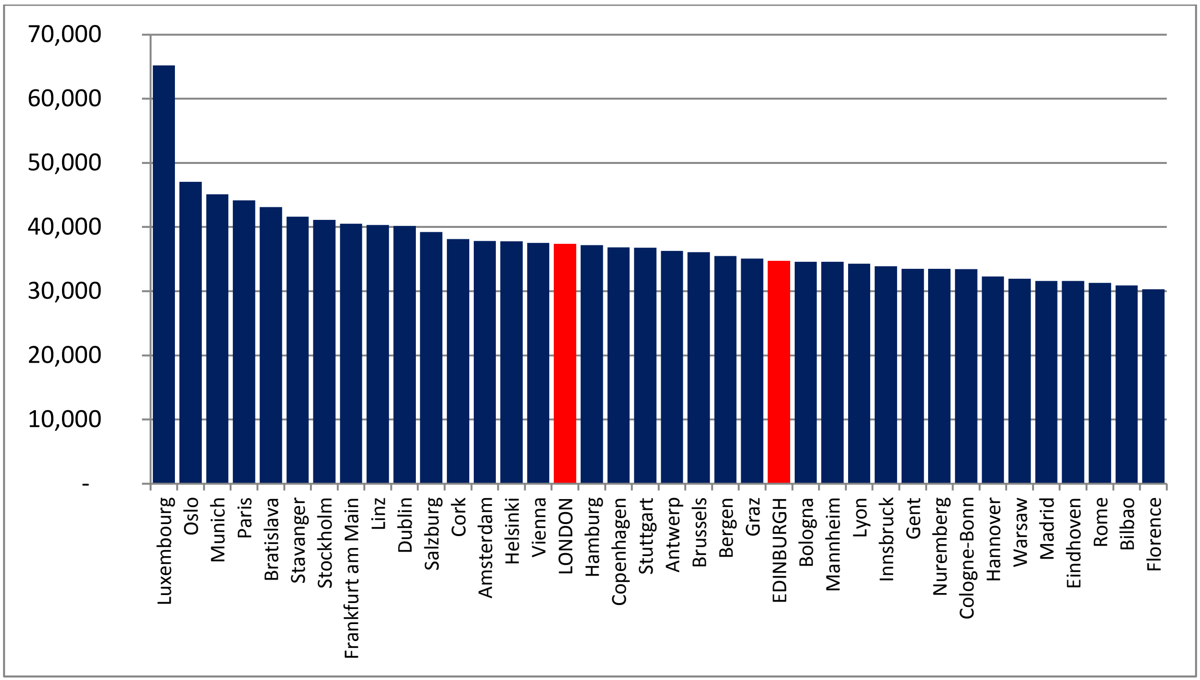
3.23 The crisis has had a polarised impact on the UK's 14 city-regions. All saw GDP per capita fall between 2008 and 2010 but with the annual decline in Nottingham (-2.8%) five and half times that experienced by Bristol (-0.5%). The average annual decline for the 142 European city-regions was -1.4%. 4 UK city-regions had declines less than this (Bristol, Belfast, Sheffield and Cardiff). The remaining ten had declines above this figure – in ascending order: Newcastle upon Tyne, Birmingham, Manchester London, Liverpool, Edinburgh, Glasgow, Leicester, Bradford-Leeds and Nottingham (Table 23). In ranking terms: 4 were in the second quintile (Bristol, Belfast, Sheffield and Cardiff); 6 in the third quintile (Newcastle upon Tyne, Birmingham, Manchester, London, Liverpool and Edinburgh); and 4 in the fourth quintile (Glasgow, Leicester, Bradford-Leeds and Nottingham).

Table 23: GDP per capita annual average % change 2008-2010 – UK city-region rankings

Rank (out of 142)	Rank quintile	City-region	GDP per capita growth (%) 2008-2010 annual average
35	2	Bristol	-0.5
45	2	Belfast	-0.8
50	2	Sheffield	-1.0
52	2	Cardiff	-1.2
65	3	Newcastle upon Tyne	-1.5
67	3	Birmingham	-1.5
73	3	Manchester	-1.8
75	3	London	-1.8
77	3	Liverpool	-1.8
86	3	Edinburgh	-2.1
90	4	Glasgow	-2.2
96	4	Leicester	-2.4
102	4	Bradford-Leeds	-2.6
113	4	Nottingham	-2.8

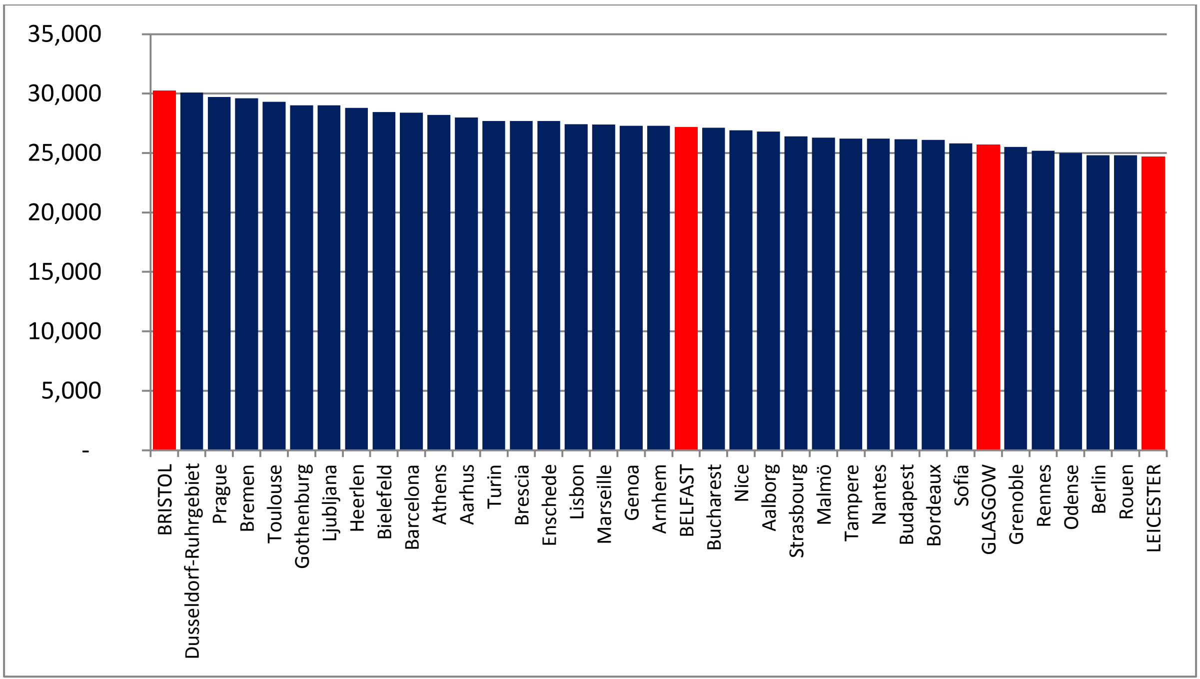
3.24 Figures 86 to 89 show the rankings of leading, intermediate and lagging city-regions in 2010. Birmingham, Bradford-Leeds, Manchester and Nottingham now appear in the intermediate city-region rankings, having slipped from their leading classification in 2000.

Figure 86: Leading European City-regions – Top 38, GDP per capita in PPS, 2010



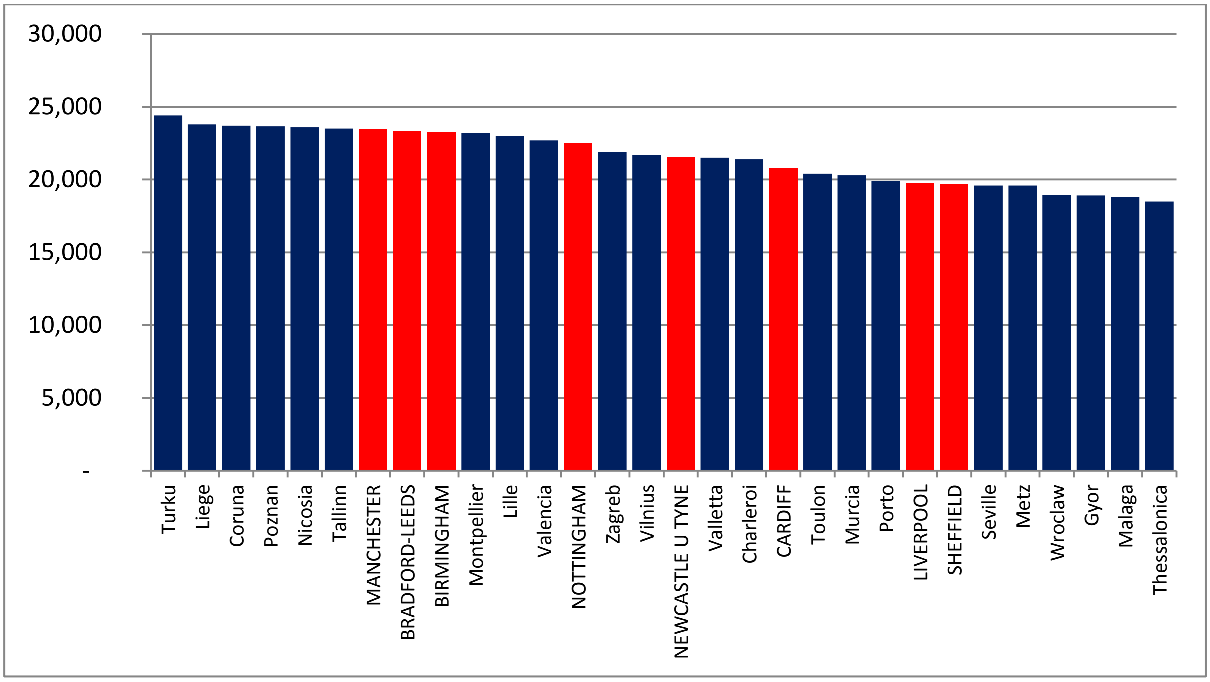
Source: Eurostat

Figure 87: Leading European City-regions– Next 37, GDP per capita in PPS, 2010



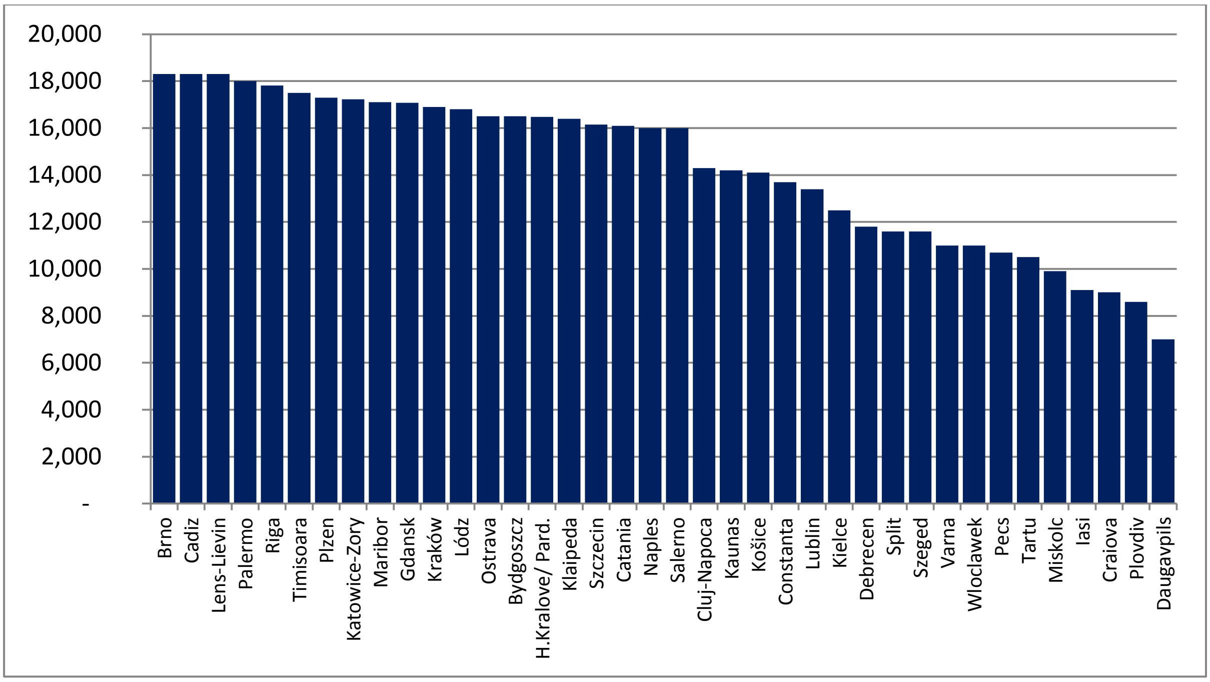
Source: Eurostat

Figure 88: Intermediate European City-regions, GDP per capita in PPS, 2010



Source: Eurostat

Figure 89: Lagging European City-regions, GDP per capita in PPS, 2010



Source: Eurostat

3.4 London and UK second-tier city-regions in national & European context

London, Edinburgh and Bristol performing well – many others faltering

UK city-regions in Europe in 2010 – slipping back

3.25 The different patterns of growth and decline in boom and recession have produced, in total, a worsening of the economic position of UK city-regions in Europe. While the two highest ranked city-regions in GDP per capita, London and Edinburgh consolidated their position, all the rest fell down the rankings. Some fell relatively slightly, like Glasgow and Bristol - but others more sharply, like Bradford-Leeds, Birmingham and Nottingham (Table 24).

Table 24: UK city-regions European GDP per capita rankings, 2000 and 2010

City-region	2000 ranking	2010 ranking	Change in ranking 2000-10
London	16	16	0
Edinburgh	26	24	+2
Bristol	35	39	-4
Belfast	50	58	-8
Glasgow	67	69	-2
Leicester	64	75	-11
Manchester	69	82	-13
Bradford-Leeds	62	83	-21
Birmingham	63	84	-21
Nottingham	72	88	-16
Newcastle upon Tyne	84	91	-7
Cardiff	85	94	-9
Liverpool	91	98	-7
Sheffield	90	99	-9

Source: Eurostat

3.26 Table 25 sums up the GDP per capita classifications for London and the 13 second-tier city-regions at the beginning and end of the different periods of analysis. 3 city-regions have retained leading status nationally and at European level: Bristol, Edinburgh and London. 3 city-regions have retained leading status at European level and intermediate status nationally: Belfast, Glasgow and Leicester. 4 city-regions have seen a backward shift from leading to intermediate status at European level: Birmingham, Leeds, Manchester and Nottingham. 4 city-regions have kept their intermediate classification at European levels: Cardiff, Liverpool, Newcastle upon Tyne and Sheffield. None of the UK city-regions were 'lagging' in a European context and Liverpool, the only UK second-tier city-region that 'lagged' in a national context in 1997, had achieved intermediate status by 2012 nationally and retained its intermediate status in Europe in both 2000 and 2010.

Table 25: London and UK second-tier city-regions national and European GDP per capita classifications

'Green' = leading; 'Amber' = intermediate; 'Red' = lagging

City-region	GDP per capita classification: UK		GDP per capita classification: Europe	
	1997	2012	2000	2010
Belfast	Amber	Amber	Green	Green
Birmingham	Amber	Amber	Green	Amber
Bristol	Green	Green	Green	Green
Cardiff	Amber	Amber	Amber	Amber
Edinburgh	Green	Green	Green	Green
Glasgow	Amber	Amber	Green	Green
Leeds (Bradford-Leeds, Europe)	Green	Green	Green	Amber
Leicester	Amber	Amber	Green	Green
Liverpool	Red	Amber	Amber	Amber
London	Green	Green	Green	Green
Manchester	Amber	Amber	Green	Amber
Newcastle upon Tyne	Amber	Amber	Amber	Amber
Nottingham	Amber	Amber	Green	Amber
Sheffield	Amber	Amber	Amber	Amber

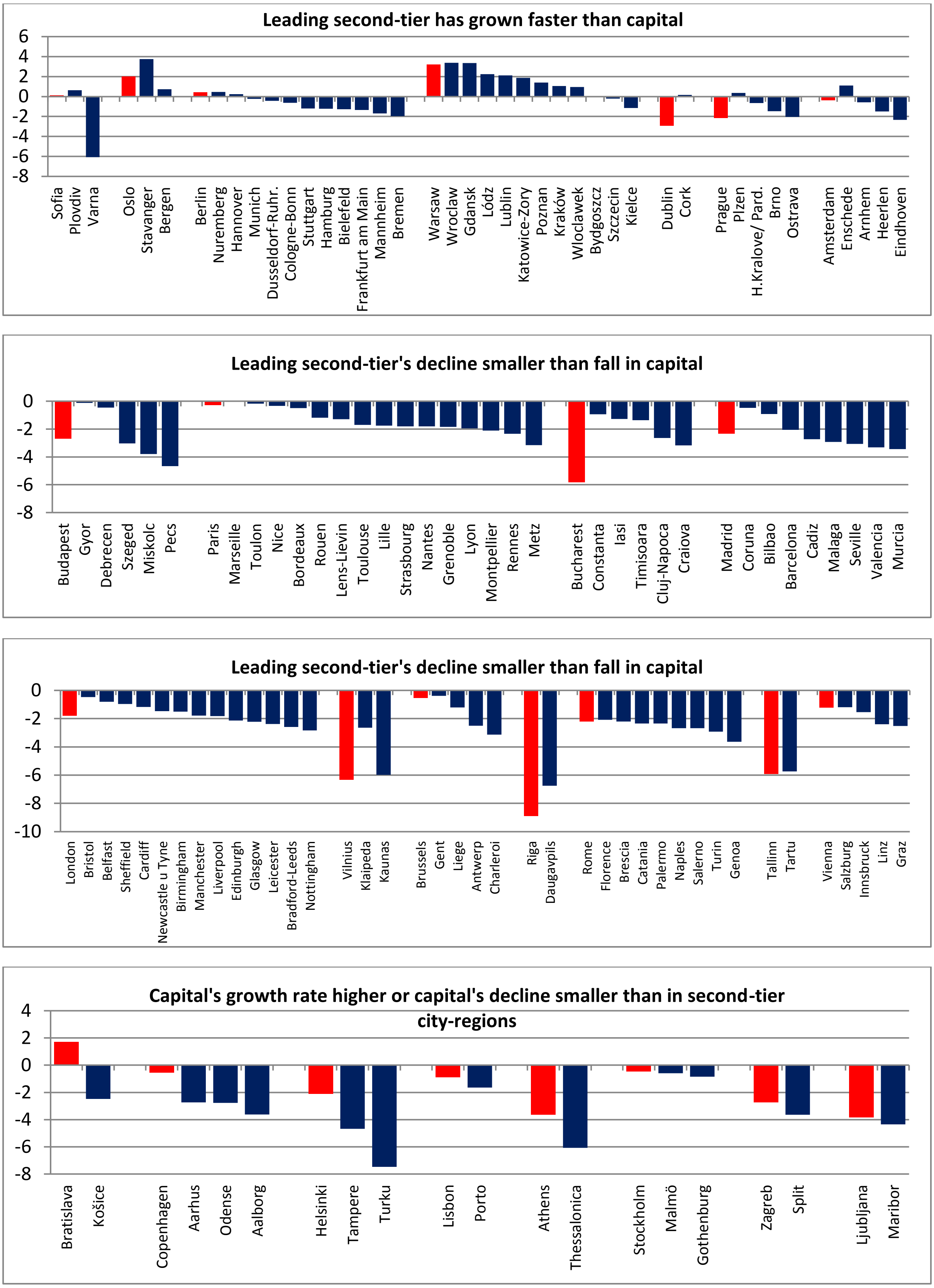
Capitals vs. Second-Tier in Recession

Leading European second-tier city-regions still outperforming capitals in most countries in terms of rates of growth/decline. 7 of 13 UK second-tier city-regions had declines less than the capital

3.27 Figure 90 compares performance in capitals with second-tier city-regions in the 26 countries where there is at least 1 second-tier. It shows the relatively strong performance of leading second-tier city-regions in most countries:

- In 18 countries the leading second-tiers performed better than their capitals
- In only 8 countries did the capital grow faster than second-tier city-regions: 3 in northern Europe, 2 in southern Europe, 2 in Central East and 1 in South East Europe
- In the UK 7 second-tier city-regions had declines less than the capital

Figure 90: GDP per capita in Euros, annual average % changes 2008-10



Source: Eurostat

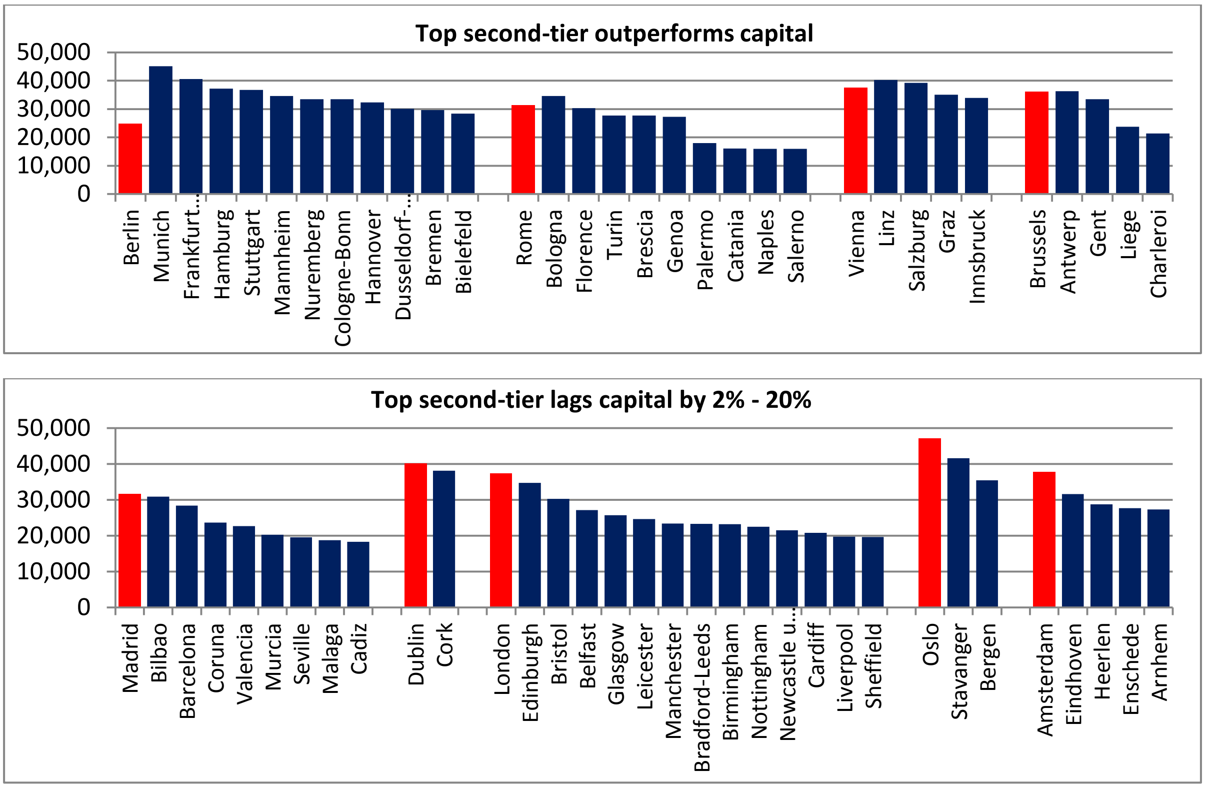
Gaps between capitals and leading second tier in 2010

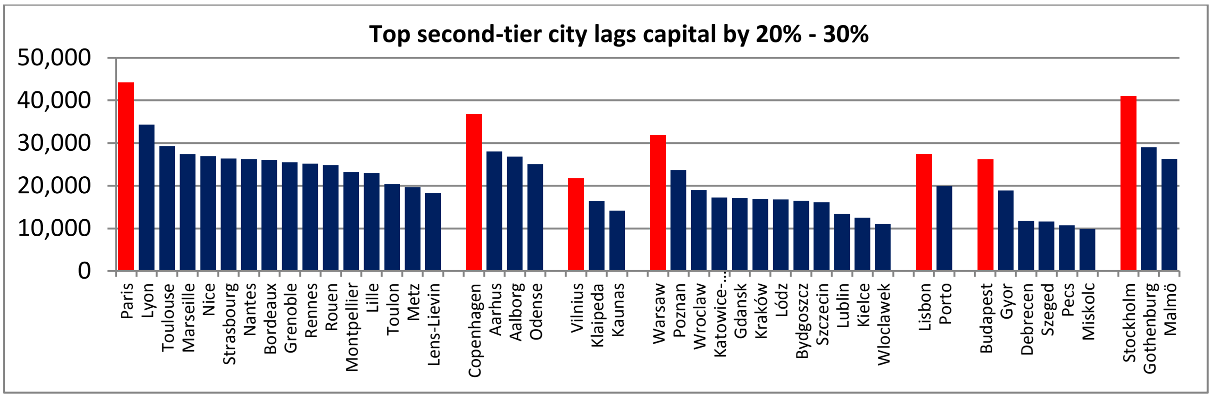
Despite the relatively strong performance of leading second-tier city-regions during both growth and recession, the gap between them and the capitals in most countries remains significant.

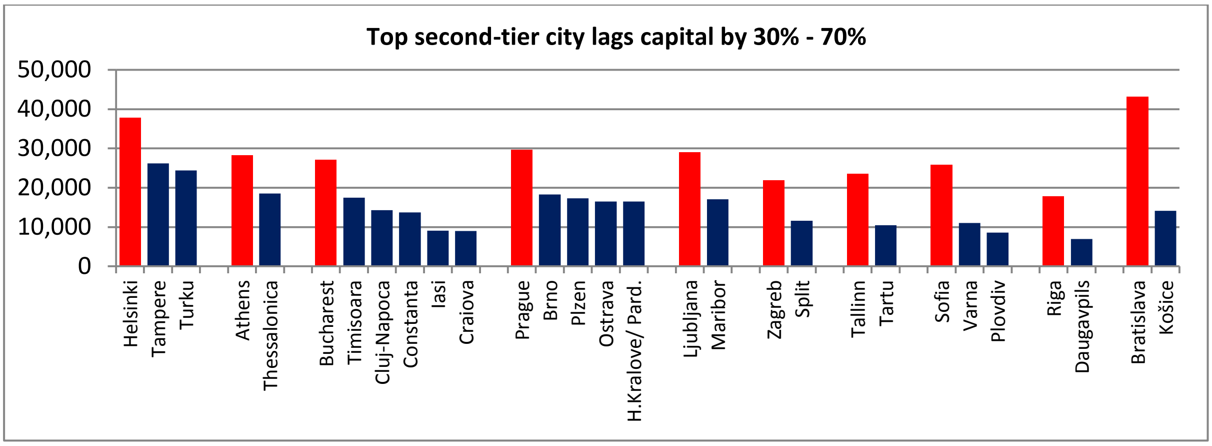
3.28 Figure 91 shows the gaps in GDP per capita between capitals and second-tier in 2010, the last year for which we have data, by country. It shows:

- In only 4 countries does a leading second-tier outperform the capital: Germany, Italy, Austria and Belgium.
- In 5 countries the leading second-tier lags the capital by between 2% and 20%: Spain, Ireland, the UK, Norway and the Netherlands.
- In 7 countries the leading second-tier lags the capital by between 20% and 30%: France, Denmark, Lithuania, Poland, Portugal, Hungary and Sweden.
- In 10 countries the leading second-tier lags the capital by between 30% and 70%: Finland, Greece, Romania, Czech Republic, Slovenia, Croatia, Estonia, Bulgaria, Latvia and Slovakia.

Figure 91: GDP per capita in PPS 2010, capitals and second-tier by country







Source: Eurostat

3.5 Summary

3.29 At the start of the growth years, 10 of the 14 UK second-tier city-regions were in the group of 78 'leading' European city-regions. But only London was ranked in the top quintile of the group - and then only just at 16th. Only 2 UK city-regions had GDP per capita above the average for the group: London and Edinburgh. All 14 UK city-regions fell below the average annual growth in GDP per capita for the 149, 3.1%, during the boom. Edinburgh, Glasgow and London came closest with annual average growth rates of 2.9%, 2.7% and 2.6% respectively. London, with its 2.6% annual average growth rate, ranked 13th out of the 27 European capitals.

3.30 Most regions have seen overall growth rates transformed into decline. Productivity has fallen in real terms in 119 of the 149 city-regions. In Eastern Europe, the East and South East parts have done badly. The Central East has done better. And the relative 'catch-up' gains of city-regions in the East in the growth years has been slowed down or reversed by the crisis. The South of Europe has also seen a marked fall in growth during the crisis. There have been less pronounced reversals in growth in the North, West and Central regions of Europe.

3.31 The crisis has had a polarised impact on the UK's 14 city-regions position in Europe. Real GDP per capita fell in all of them between 2008 and 2010 but with the annual decline in Nottingham (-2.8%) five and a half times that experienced by Bristol (-0.5%). The average annual decline for the 149 European city-regions was -1.4%. 4 of the 14 UK city-regions had declines less than this - Bristol, Belfast, Sheffield and Cardiff. But in 10 the drop was greater.

3.32 The different patterns of growth and decline in boom and recession have produced, overall, a worsening of the economic position of UK city-regions in Europe. While the two highest ranked UK city-regions in GDP per capita, London and Edinburgh consolidated their position, all the rest fell down the rankings. Some fell relatively slightly, like Bristol and Glasgow. But others fell more sharply, like Bradford-Leeds, Birmingham and Nottingham.

4. THE ECONOMIC PERFORMANCE OF UK CITY-REGIONS IN GLOBAL CONTEXT

4.1 Grouping city-regions globally

4.1 We are using 2 databases for the benchmarking at global level: the OECD Metropolitan Area Database and The Brookings Institution's Global Metro Monitor 2012. Each offer slightly differing geographical coverage.

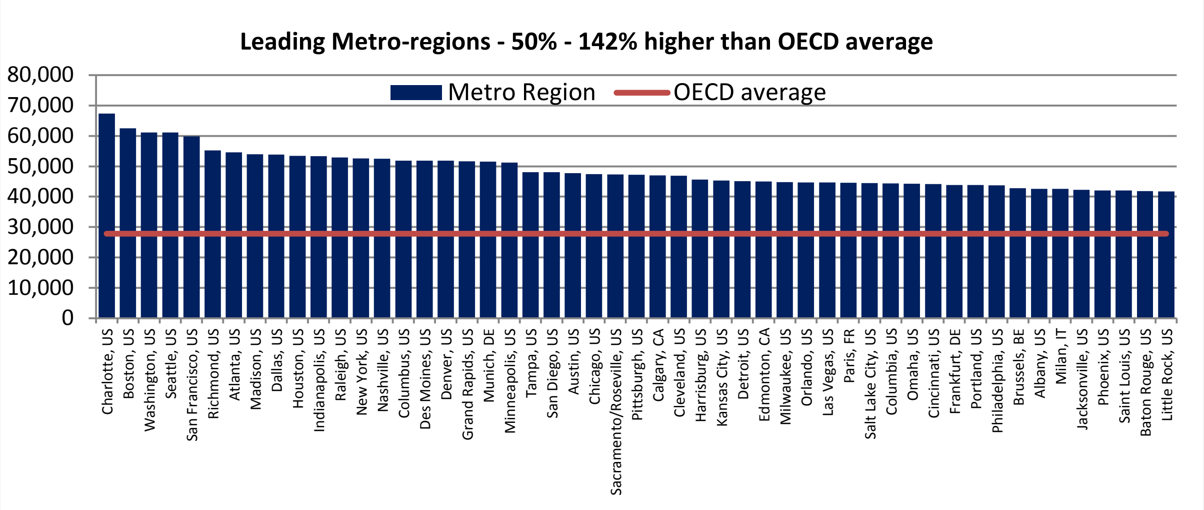
4.2 First we examine the OECD data. Data are available for the growth years, 2000-2008, and for the first two years of the recession, 2008-10. They cover 28 countries and 275 city-regions, comprising 114 European city-regions from 22 countries; 112 North American city-regions from 3 countries (Canada, United States of America and Mexico); 46 Far Eastern city-regions from 2 countries (Japan and South Korea); and 3 South American city-regions from 1 country (Chile). The group of 15 UK city-regions is similar to those included in the European benchmarking exercise but with some exceptions. Belfast is missing, Bradford-Leeds is treated as two separate city-regions and Portsmouth is added. Map 24 in Annex 1 presents the boundary definitions of these 15 city-regions.

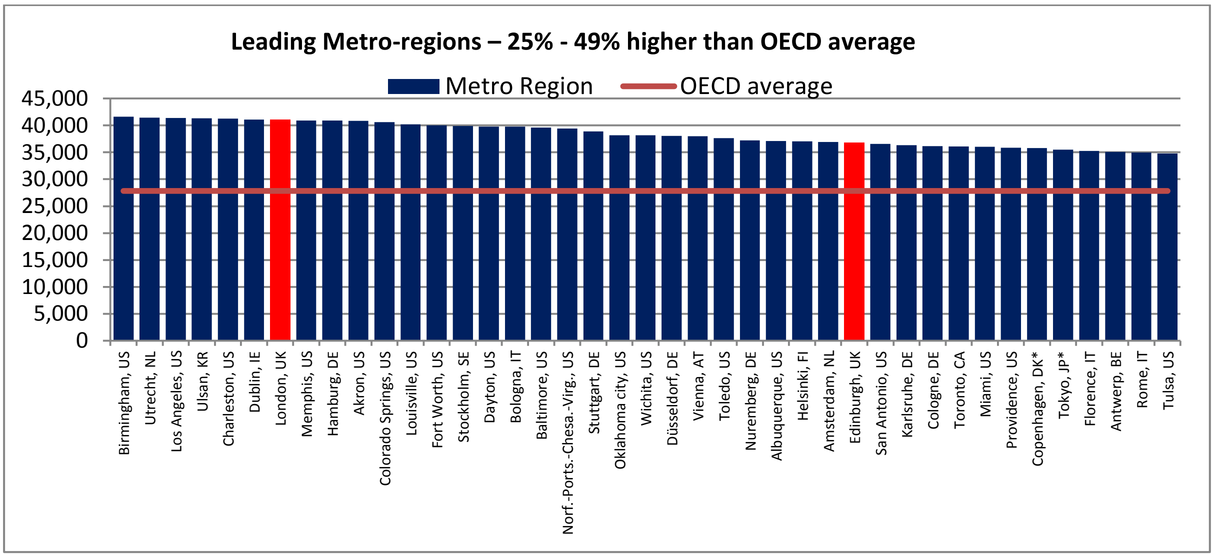
4.2 Economic performance in the growth years: OECD city-regions, 2000-2008

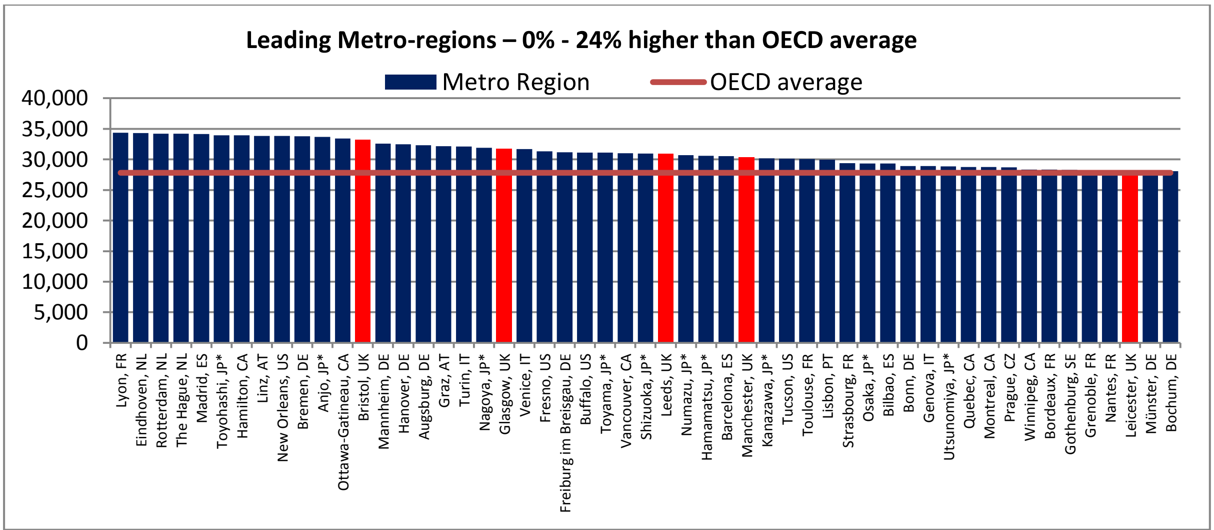
Between 2000 and 2008 GDP per capita grew faster than the OECD average in 10 UK city-regions and below in 5.

4.3 Figures 92-94 rank the OECD metro regions by GDP per capita levels in 2000. Using the same methodology as that used in the UK and European benchmarking, 145 were 'leading', 67 'intermediate' and 59 'lagging'. 7 UK city regions were in the 'leading' group' and 8 in the 'intermediate' group. None were 'lagging'. In the 'leading' group, London and Edinburgh were in the middle range, placed 58 and 80 in the rankings and Bristol, Glasgow, Leeds, Manchester and Leicester in the lower range, ranked between 105 and 143 (Figure 92). Portsmouth ranked highest in the 'intermediate' group (157 in the overall ranking) and Newcastle the lowest (205 overall) (Figure 93).

Figure 92: GDP per capita, PPPs, 2000, Leading Metro-Regions

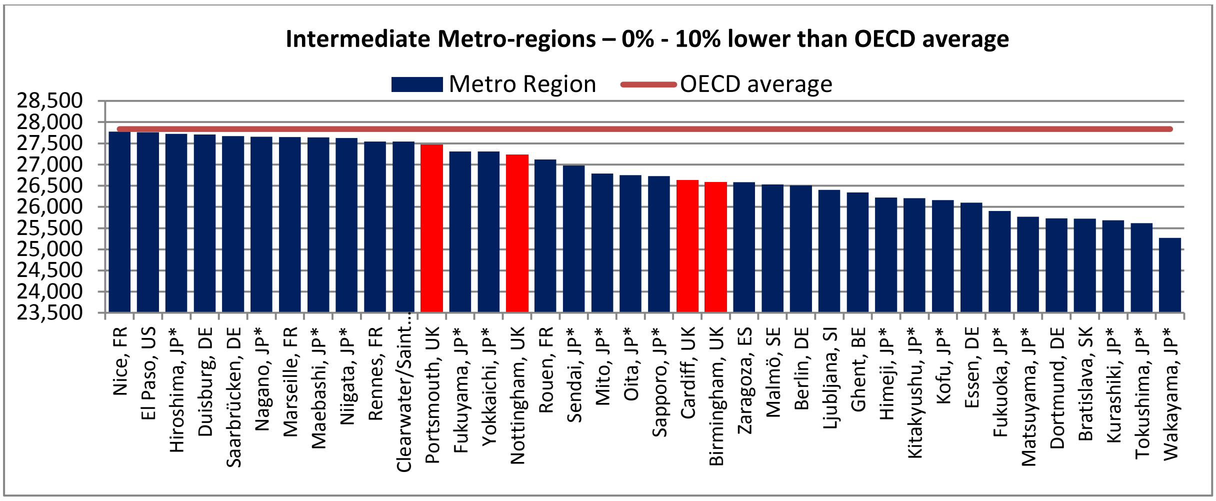


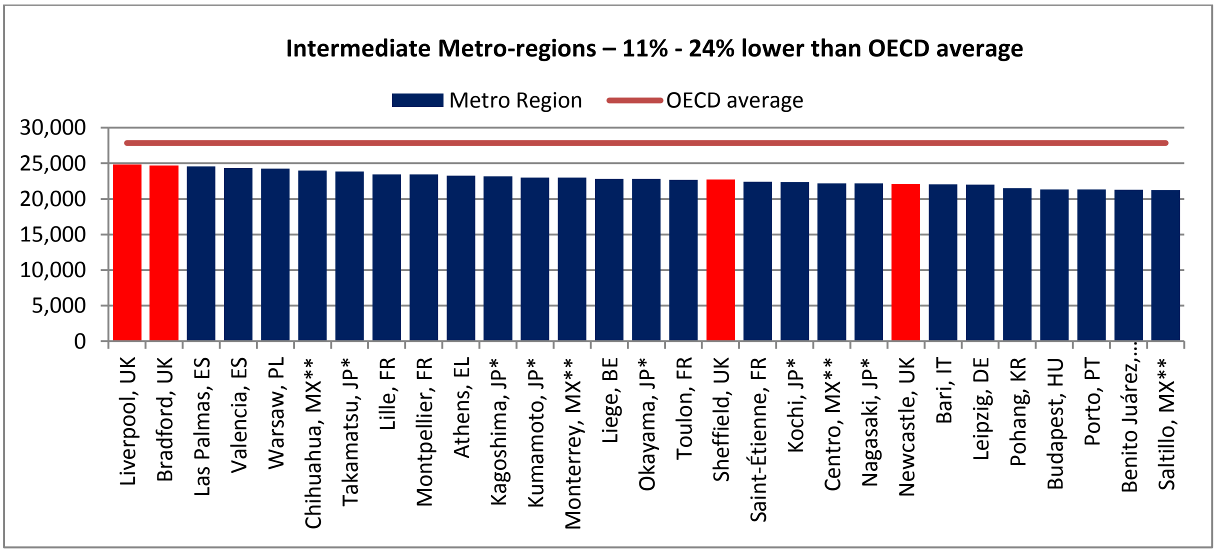




Source: OECD; Notes: * indicates a 2001 data value; ** indicates a 2003 data value

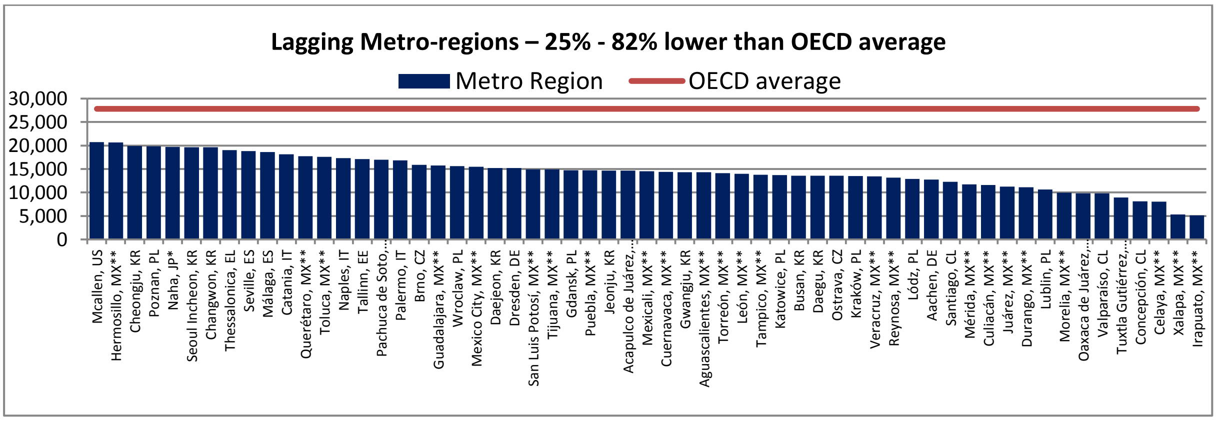
Figure 93: GDP per capita, PPPs, 2000, Intermediate Metro-Regions





Source: OECD; Notes: * indicates a 2001 data value; ** indicates a 2003 data value

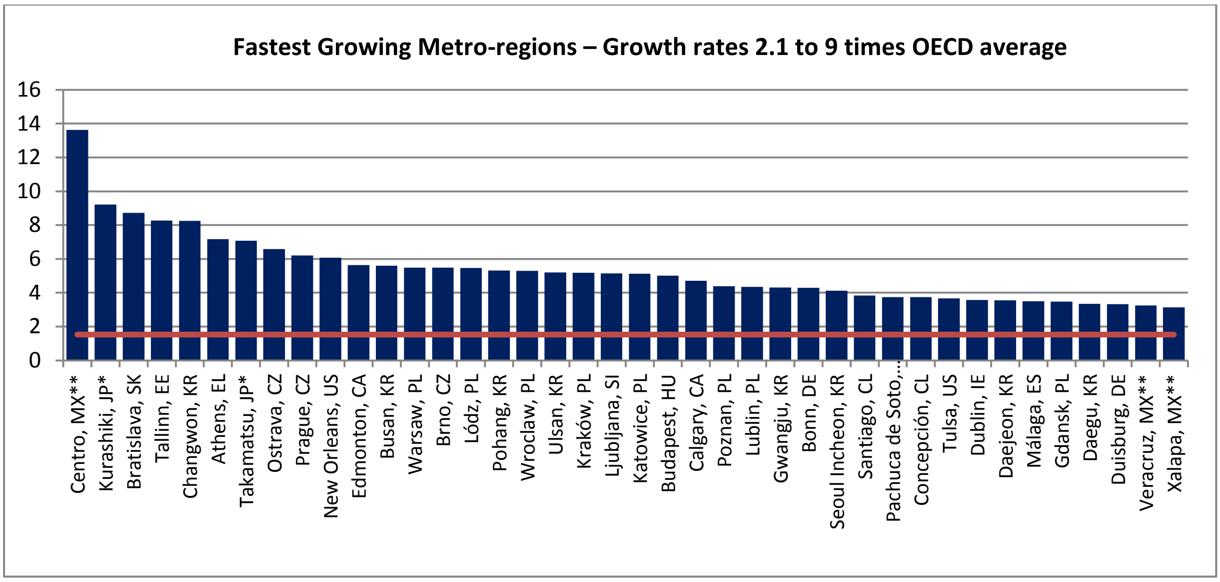
Figure 94: GDP per capita, PPPs, 2000, Lagging Metro-Regions

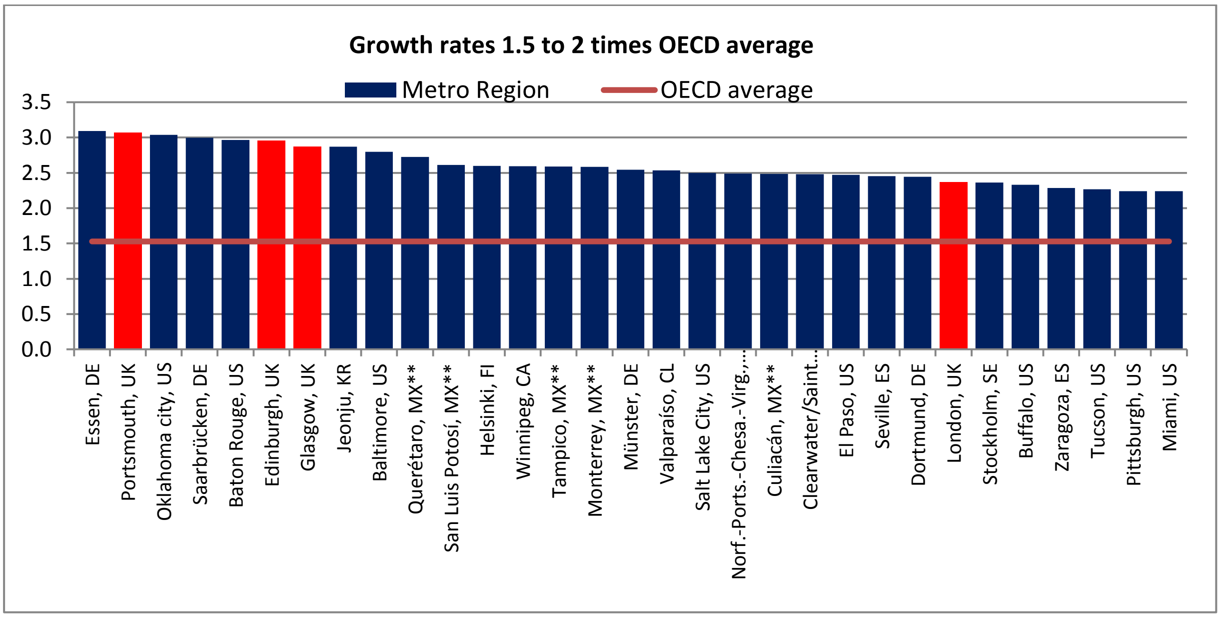


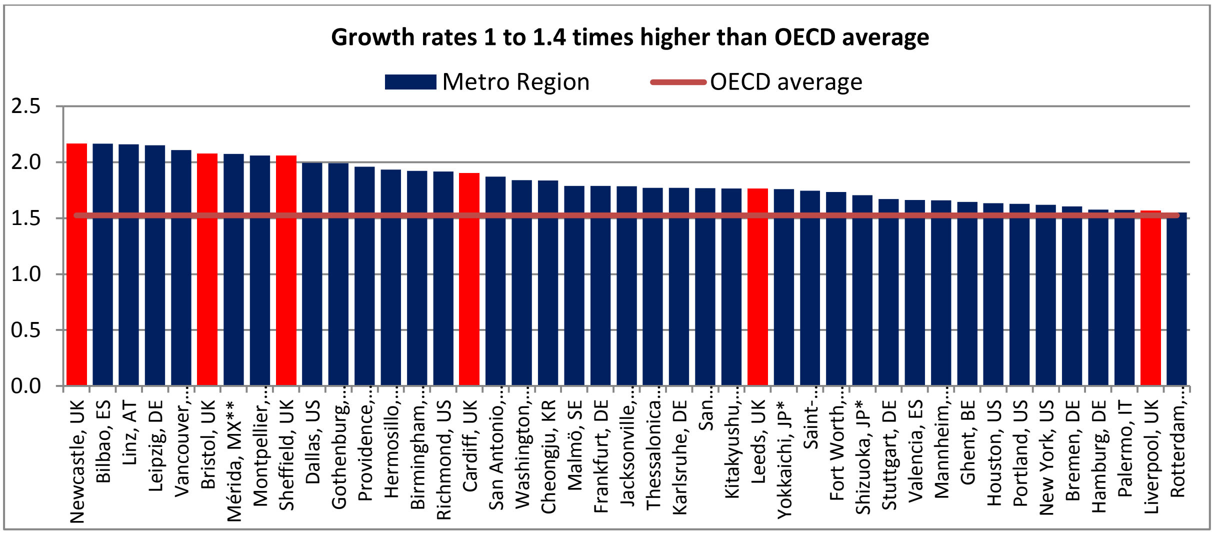
Source: OECD; Notes: * indicates a 2001 data value; ** indicates a 2003 data value

4.4 Figures 95 and 96 rank metro regions by growth in GDP per capita over the boom years, 2000-2008. Just over two fifths had growth rates above the OECD average, including 10 of the 15 UK city-regions (Figure 95). However, the 10 UK city-regions fell into the lower two thirds of the group - from Portsmouth (ranked 40) to Liverpool (ranked 113).

Figure 95: GDP per capita, real annual average % change, 2000-8, Metro-regions growing faster than OECD average



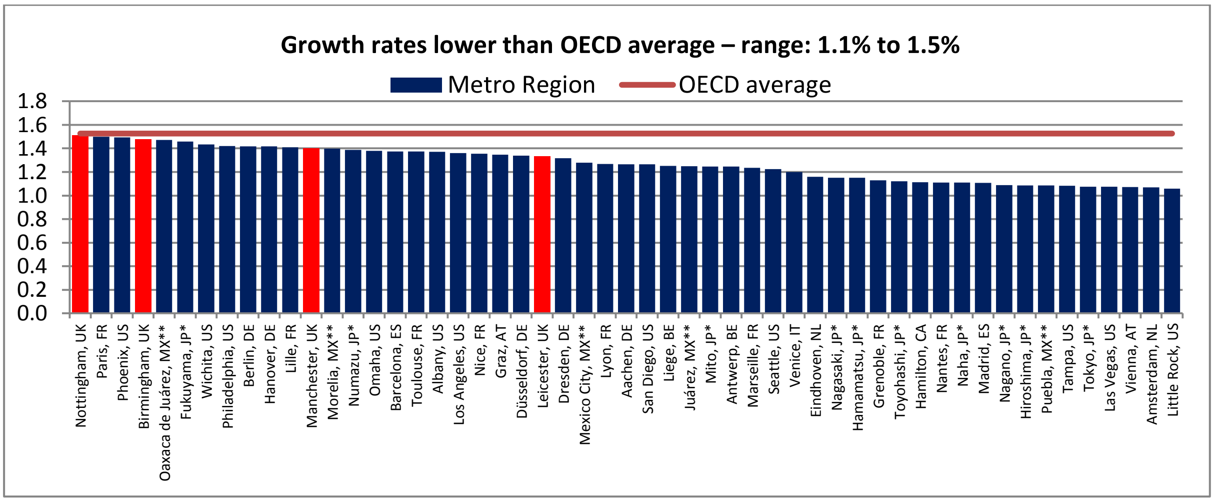


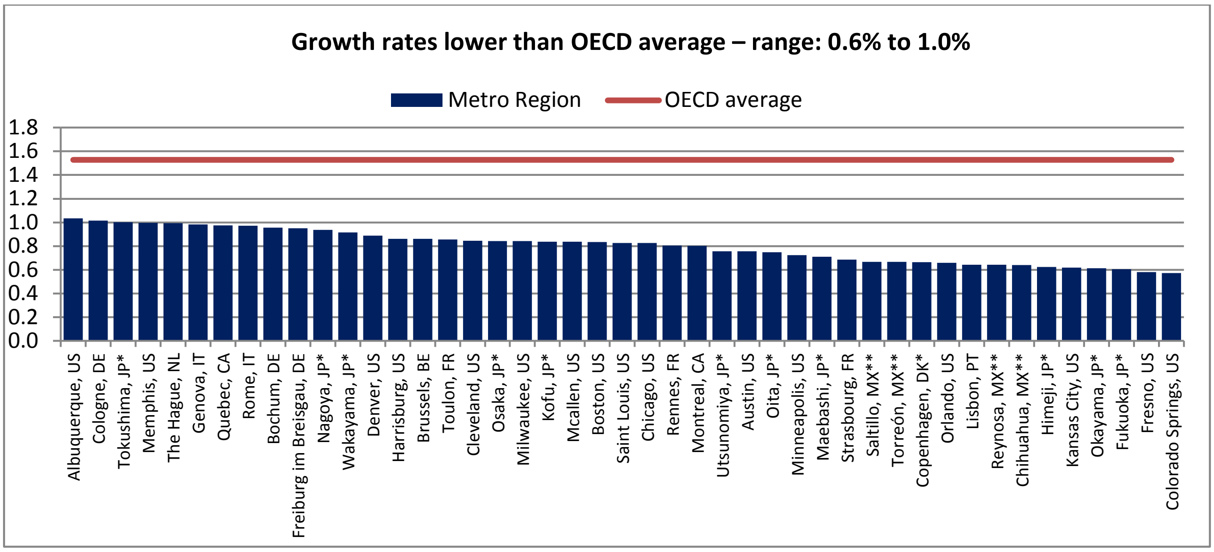


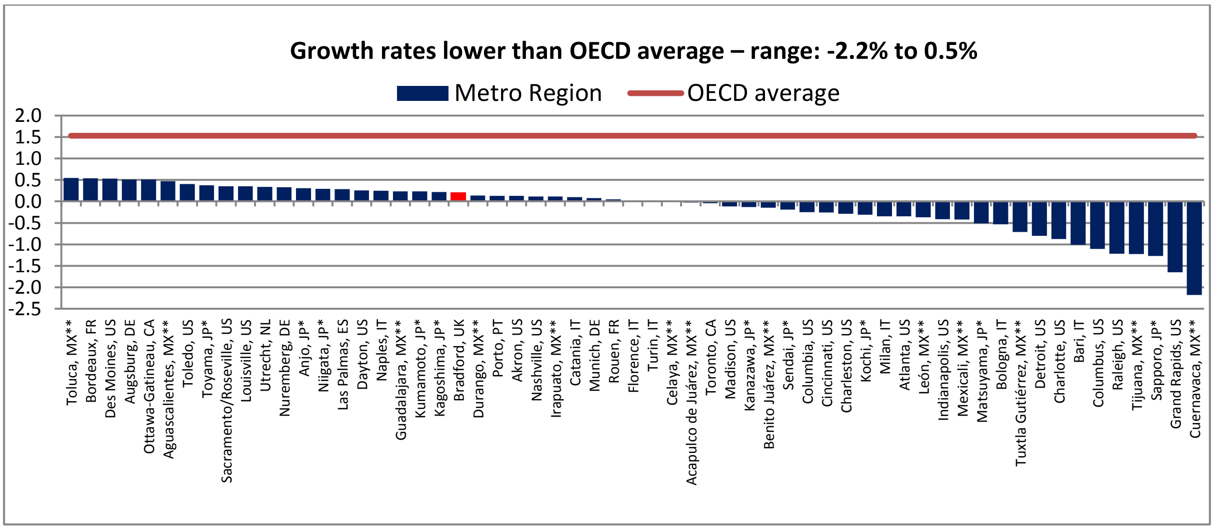
Source: OECD; Notes: * indicates a 2001-8 annual average data value; ** indicates a 2003-8 annual average data value

4.5 Just under three fifths of the metro regions had growth rates below the OECD average between 2000 and 2008 including 5 UK city-regions: Nottingham, Birmingham, Manchester, Leicester and Bradford (Figure 96). With the exception of Bradford, the growth rates of these UK city-regions were clustered at the top end of the overall group.

Figure 96: GDP per capita, real annual average % change, 2000-8, Metro-regions growing slower than OECD average







Source: OECD; Notes: * indicates a 2001-8 annual average data value; ** indicates a 2003-8 annual average data value

4.3 Economic performance in recession: OECD city-regions, 2008-10

GDP per capita fell in 195 of the 275 global city-regions (71%) in the 2008-2010 recession years.

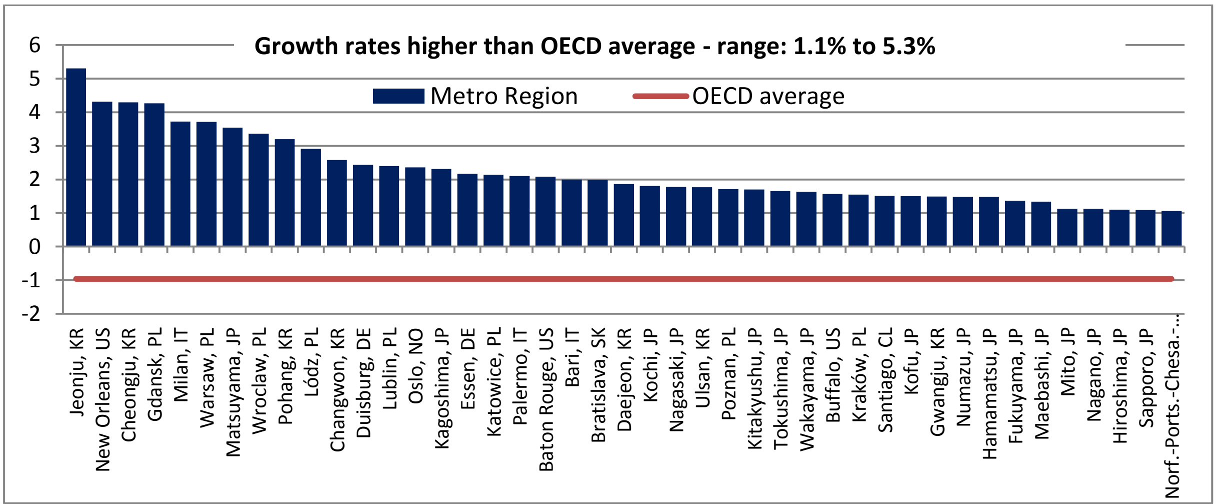
GDP per capita fell in all 15 UK city-regions:

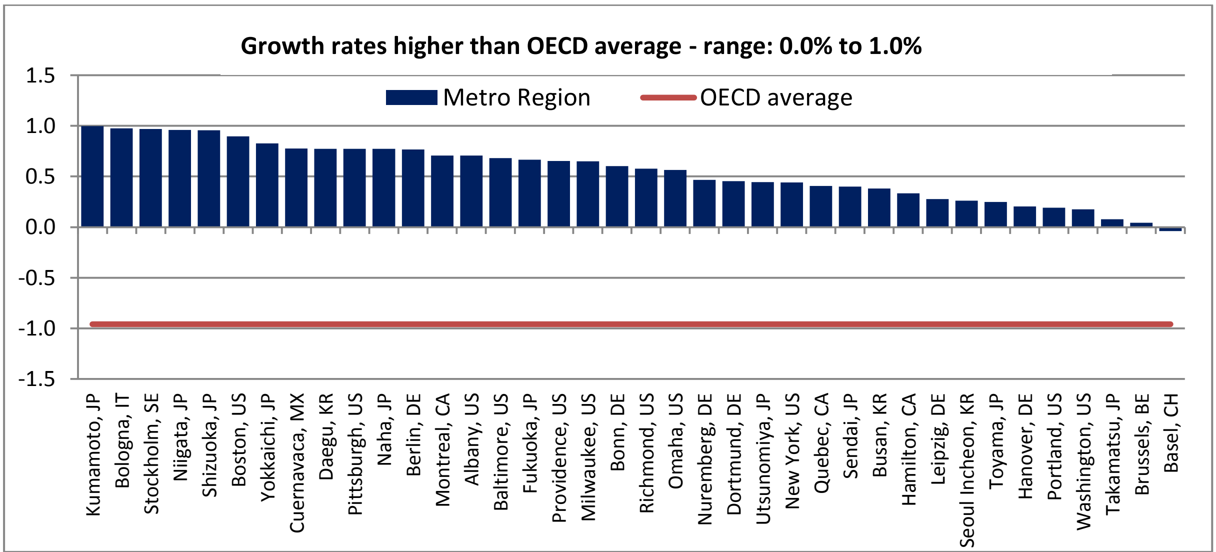
- *in 13, above the OECD average decline: Birmingham, Bradford, Cardiff, Edinburgh, Glasgow, Leeds, Leicester, Liverpool, London, Manchester, Newcastle, Nottingham and Sheffield; and*
- *in only 2, below the OECD average decline: Bristol and Portsmouth.*

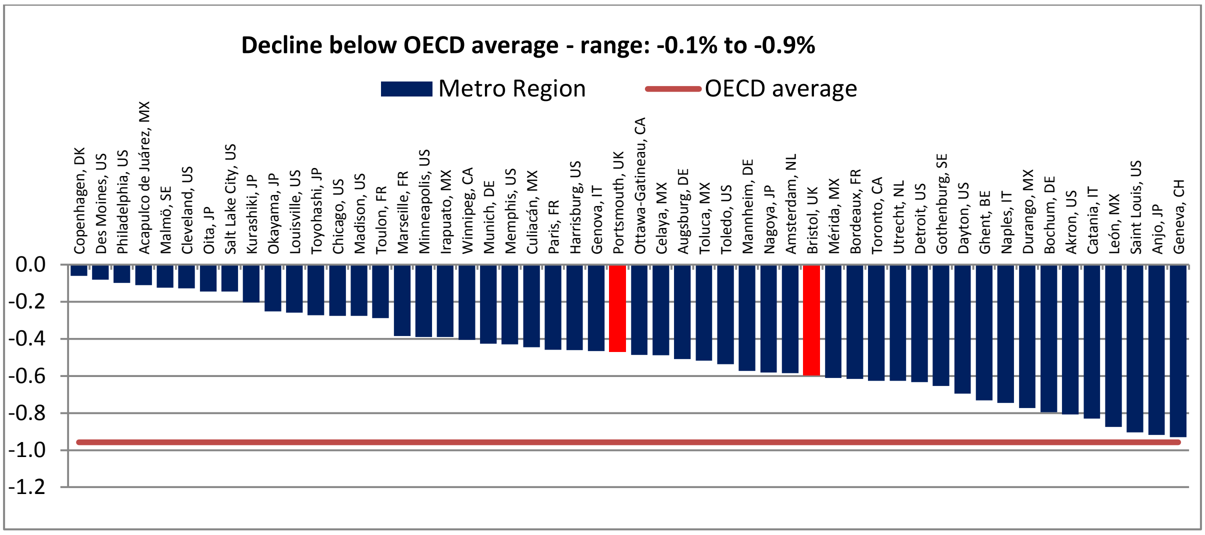
This was a marked reversal of the performance in the growth years when the majority of UK city-regions (10 out of the 15) had growth rates in GDP per capita above the OECD average.

4.6 Figures 97 and 98 rank metro regions by growth and decline in GDP per capita over the recession years, 2008-2010. The recession is clearly visible in city-regional economic performance. Between 2008 and 2010, GDP per capita fell in real terms in 195 of the 275 global city-regions, i.e. in seven out of 10. It also fell in real terms in all 15 UK city-regions and in only 2 of them – Portsmouth and Bristol – at rates below the average OECD fall (Figure 97).

Figure 97: GDP per capita, real annual average % change, 2008-10, Metro-regions growing or declining below OECD average



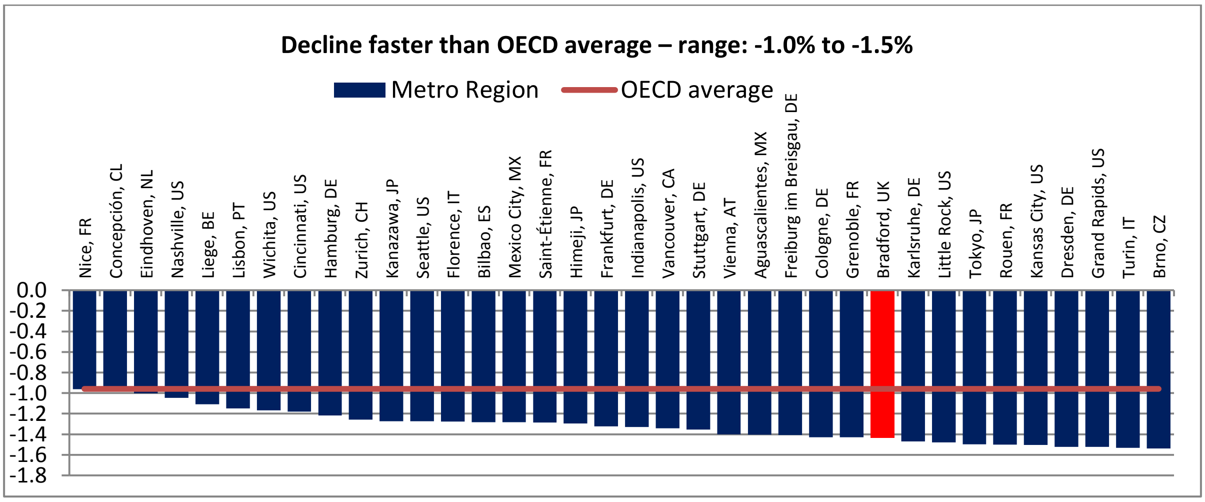


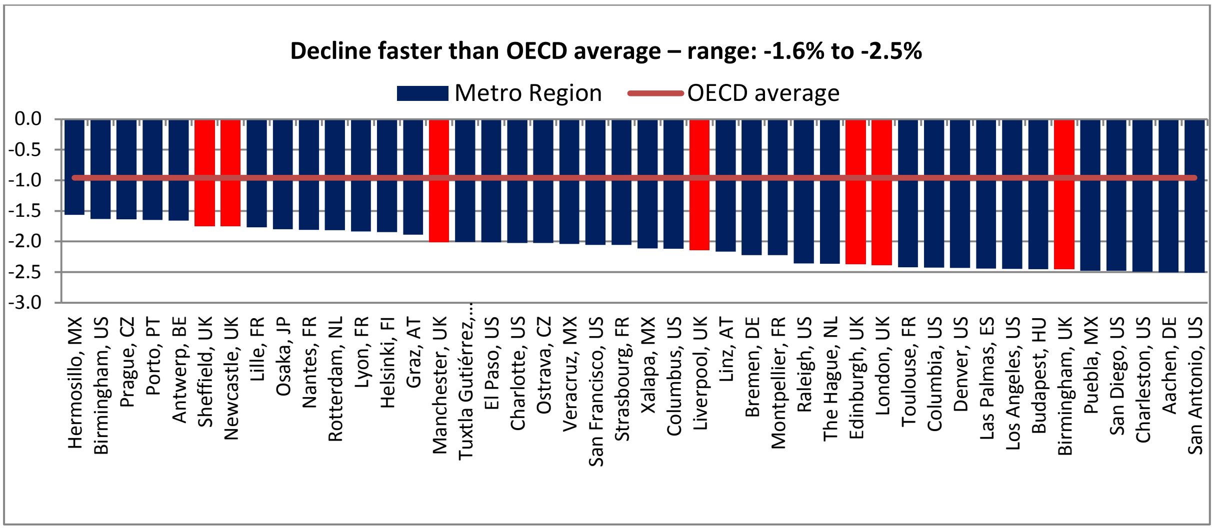


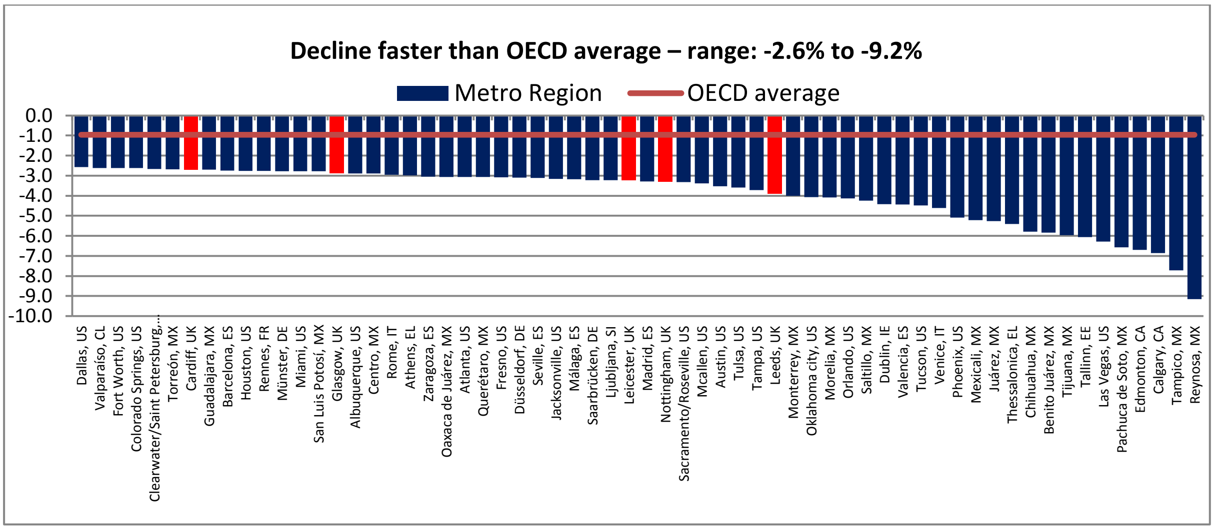
Source: OECD

4.7 Figure 98 positions the 13 UK city-regions in the 141 in which GDP per capita fell at or faster than the OECD average between 2008 and 2010. Decline ranged from -1.4% to -3.9%, with the 2 Yorkshire and Humber city-regions, Bradford and Leeds acting as the bookends of this performance.

Figure 98: GDP per capita, real annual average % change, 2000-8, Metro-regions declining faster than OECD average







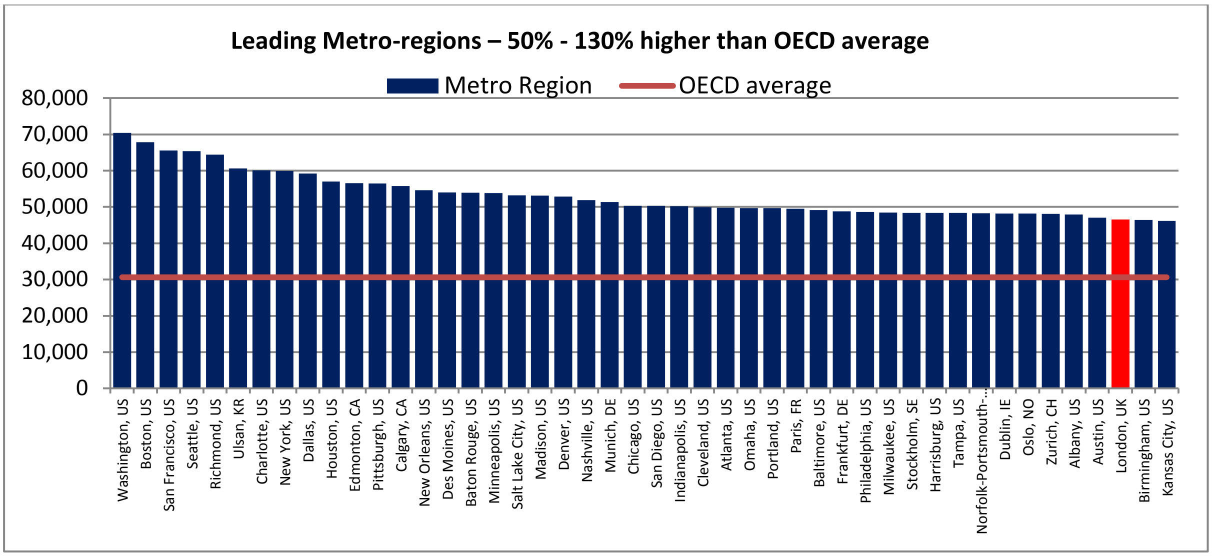
Source: OECD

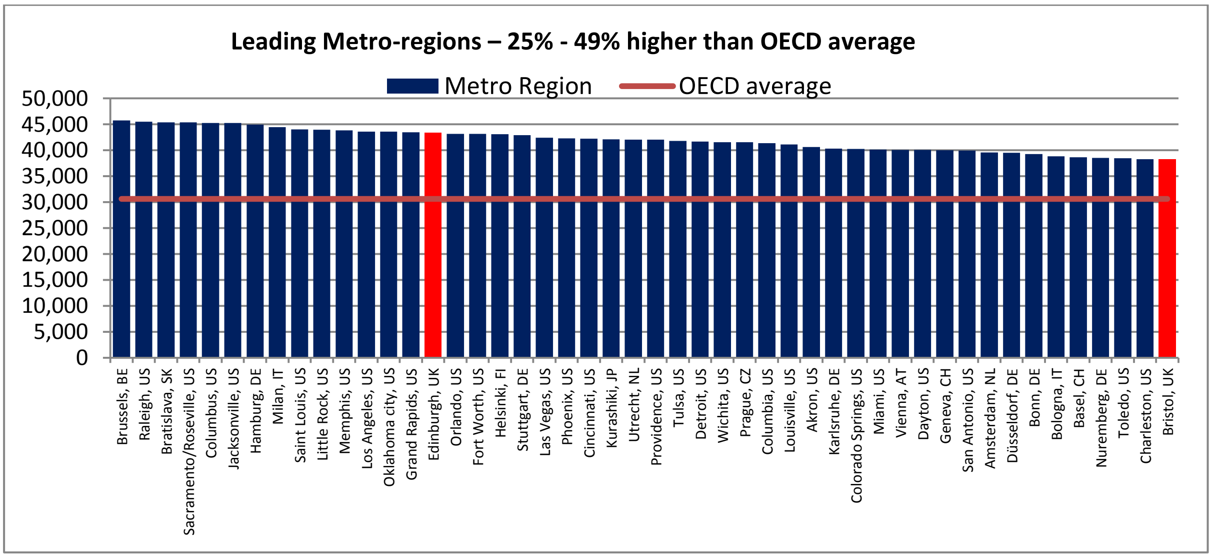
In terms of changes in global rankings in GDP per capita between 2000 and 2010, the performance of the 15 UK city-regions is almost evenly divided:

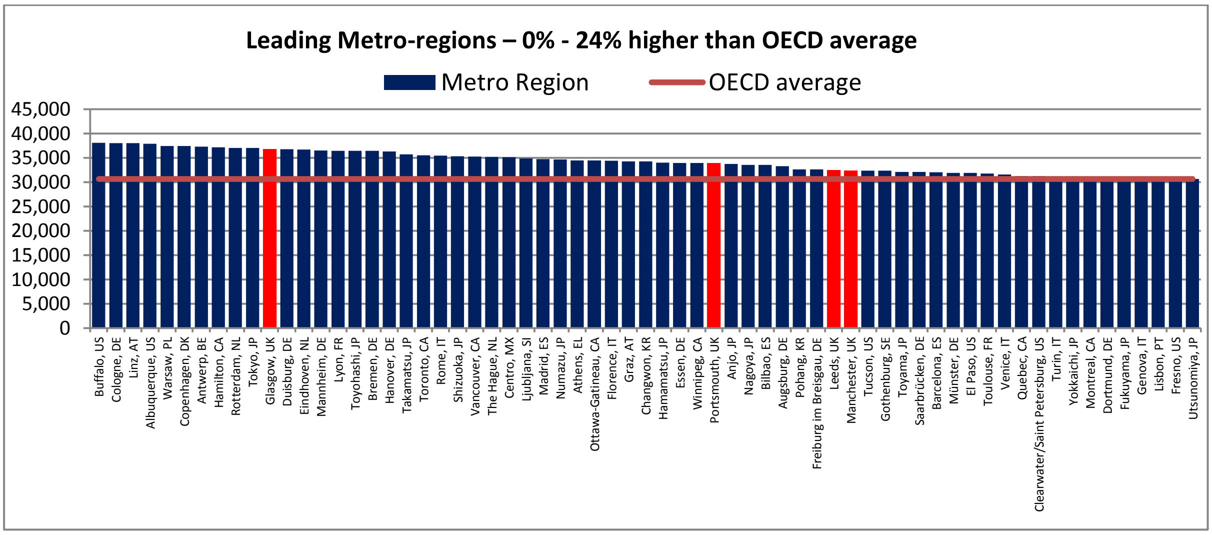
- *7 have moved up the rankings: Glasgow, Newcastle, Sheffield and, notably, Portsmouth, Edinburgh, London and Bristol; while*
- *8 have slipped down the rankings: Cardiff, Liverpool, Manchester and, notably, Leicester, Bradford, Nottingham, Birmingham and Leeds.*

4.8 Figures 99-101 show levels of GDP per capita in 2010 by the 'leading', 'intermediate' and 'lagging' classification. After 8 years of growth and 2 of decline, UK city regions were still relatively evenly split between 'leading' and 'intermediate'. Of the UK city-regions in the 'leading' group, London still had the highest level of GDP per capita followed by Edinburgh and then Bristol, Glasgow, Portsmouth, Leeds and Manchester (Figure 99).

Figure 99: GDP per capita, PPPs, 2010, Leading Metro-Regions



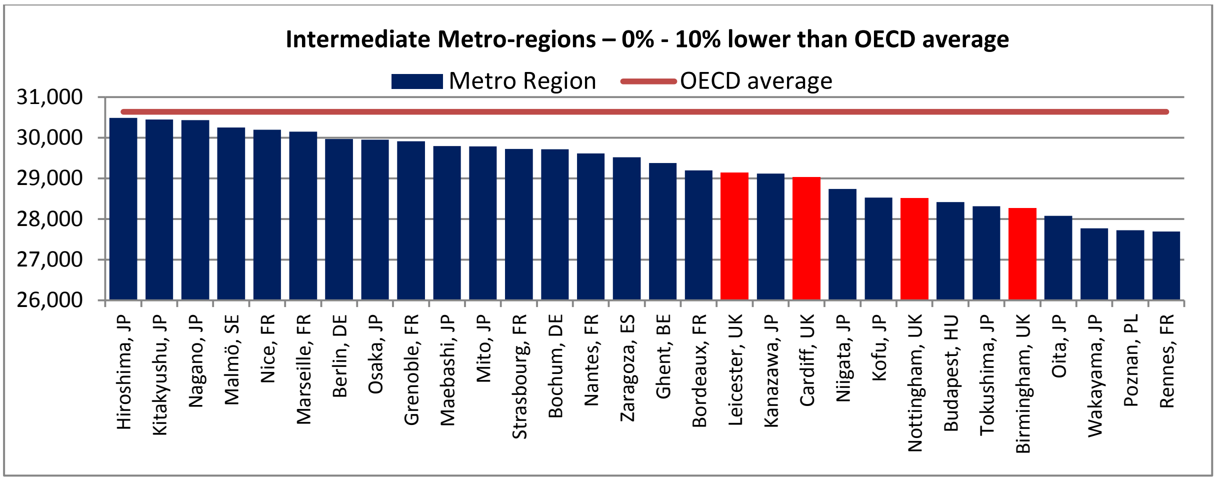


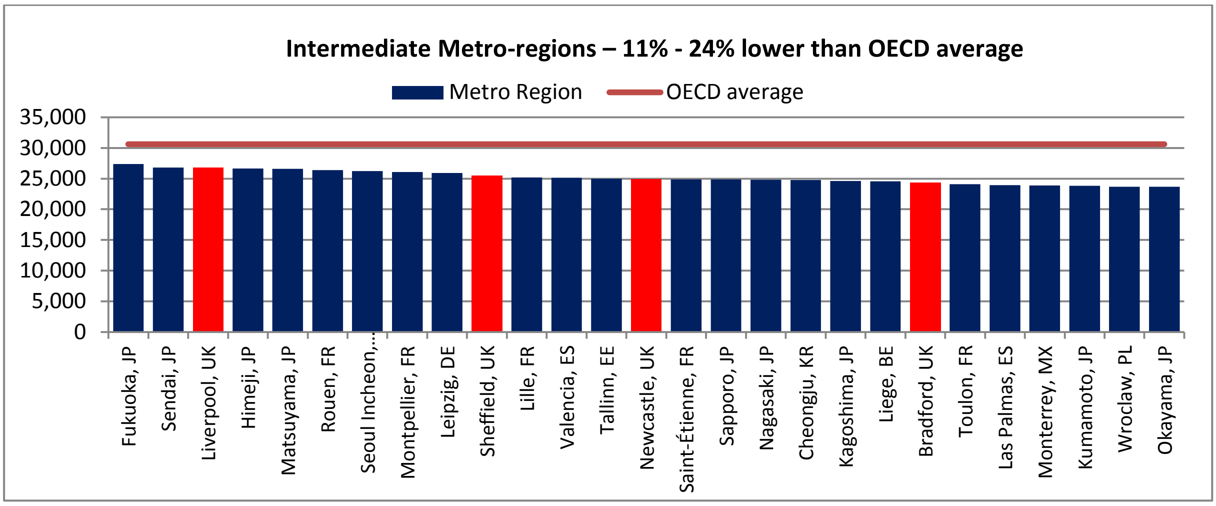


Source: OECD

4.9 In the 'intermediate' group in 2012, Leicester had the highest GDP per capita followed by Cardiff, Nottingham, Birmingham, Liverpool, Sheffield, Newcastle and Bradford (Figure 100).

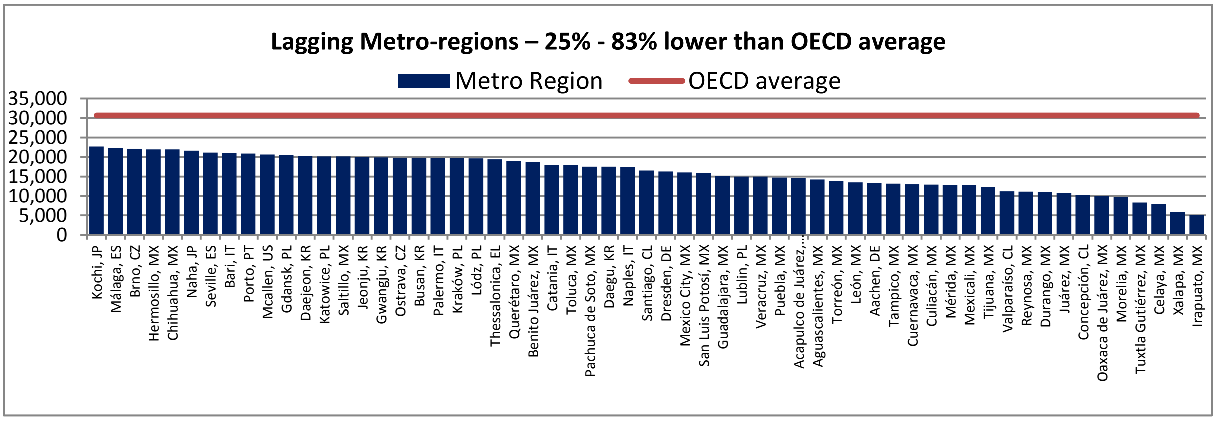
Figure 100: GDP per capita, PPPs, 2010, Intermediate Metro-Regions





Source: OECD

Figure 101: GDP per capita, PPPs, 2010, Lagging Metro-Regions



Source: OECD

4.10 Table 26 summarises the changes in global classification and rankings for the 15 UK city-regions in 2000, 2008 and 2010. London is the highest ranked UK city-region in 2010, in 44th position out of 275. The performance of the 15 UK city-regions is almost evenly divided. 7 have moved up the global rankings between 2000 and 2010; most notably Portsmouth, Edinburgh, London and Bristol. In contrast, 8 have slipped down the global rankings; with Leicester, Bradford, Nottingham, Birmingham and Leeds experiencing the largest falls.

Table 26: GDP per capita in PPPs – Global classification and rankings – UK city-regions

'Green' = leading; 'Amber' = intermediate; 'Red' = lagging

City-region	GVA per capita classification 2000	GVA per capita classification 2008	GVA per capita classification 2010	2000 Rank (out of 271)	2008 Rank (out of 275)	2010 Rank (out of 275)	Change in ranking 2000-2010
London				58	36	44	+14
Edinburgh				80	59	61	+19
Bristol				105	95	94	+11
Glasgow				112	92	105	+7
Portsmouth				157	133	131	+26
Leeds				120	123	138	-18
Manchester				124	137	139	-15
Leicester				143	153	177	-34
Cardiff				166	162	179	-13
Nottingham				160	166	182	-22
Birmingham				167	177	185	-18
Liverpool				184	187	192	-8
Sheffield				200	198	199	+1
Newcastle				205	202	203	+2
Bradford				185	207	210	-25

Source: OECD

4.4 The even bigger territorial picture: Global Metro Monitor, 1993-2012

4.11 The OECD database is extensive. However, we were able to construct an even fuller picture, including city-regions in rapidly developing countries and notably in the so-called 'BRICs' (Brazil, Russia, India and China), by using the Global Metro Monitor database created by The Brookings Institution. Table 27 shows coverage by country of the 300 city-regions analysed in this section alongside those in the OECD database. While the coverage of Western European city-regions is reduced, 74 city-regions in 'Developing Asian-Pacific' and 'Middle East & Africa' are added, notably in China and India in the former and in South Africa in the latter. In 'Eastern Europe and Central Asia', city-regions in Turkey, Russia, Bulgaria, Kazakhstan and Romania are added at the expense of those in Estonia, Slovenia and Slovakia. 13 Brazilian city-regions In Latin America are also added. The boundaries for the UK Metro areas can be found in Annex 1 (Map 25).

Table 27: Global Region, Country & Number of Metro-regions in OECD & Global Metro Monitor Databases

Global Region	Country	OECD - # of Metro-regions	Global Metro Monitor – # of Metro-regions
Developed Asia-Pacific	Japan	36	12
Developed Asia-Pacific	South Korea	10	6
Developed Asia-Pacific	Taiwan	0	6
Developed Asia-Pacific	Australia	0	5
Developed Asia-Pacific	Hong Kong	0	1
Developed Asia-Pacific	Macau	0	1
Developed Asia-Pacific	New Zealand	0	1
Developed Asia-Pacific	Singapore	0	1
Developed Asia-Pacific	Total	46	33
Developing Asia-Pacific	China	0	48
Developing Asia-Pacific	India	0	6
Developing Asia-Pacific	Malaysia	0	2
Developing Asia-Pacific	Indonesia	0	1
Developing Asia-Pacific	Philippines	0	1
Developing Asia-Pacific	Thailand	0	1
Developing Asia-Pacific	Total	0	59
Eastern Europe and Central Asia	Turkey	0	4
Eastern Europe and Central Asia	Poland	8	3
Eastern Europe and Central Asia	Russia	0	2
Eastern Europe and Central Asia	Bulgaria	0	1
Eastern Europe and Central Asia	Czech Republic	3	1
Eastern Europe and Central Asia	Hungary	1	1
Eastern Europe and Central Asia	Kazakhstan	0	1
Eastern Europe and Central Asia	Romania	0	1
Eastern Europe and Central Asia	Estonia	1	0
Eastern Europe and Central Asia	Slovenia	1	0
Eastern Europe and Central Asia	Slovakia	1	0
Eastern Europe and Central Asia	Total	15	14
Latin America	Brazil	0	13
Latin America	Colombia	0	3
Latin America	Mexico	33	3
Latin America	Argentina	0	1
Latin America	Chile	3	1
Latin America	Peru	0	1
Latin America	Puerto Rico	0	1
Latin America	Total	36	23
Middle East and Africa	South Africa	0	5
Middle East and Africa	Egypt	0	2
Middle East and Africa	Israel	0	2
Middle East and Africa	Saudi Arabia	0	2
Middle East and Africa	United Arab Emirates	0	2
Middle East and Africa	Kuwait	0	1
Middle East and Africa	Morocco	0	1
Middle East and Africa	Total	0	15

North America	United States	70	76
North America	Canada	9	6
North America	Total	79	82
Western Europe	United Kingdom	15	15
Western Europe	Germany	24	14
Western Europe	France	15	9
Western Europe	Italy	11	9
Western Europe	Spain	8	7
Western Europe	Netherlands	5	3
Western Europe	Switzerland	3	3
Western Europe	Austria	3	2
Western Europe	Belgium	4	2
Western Europe	Portugal	2	2
Western Europe	Sweden	3	2
Western Europe	Denmark	1	1
Western Europe	Finland	1	1
Western Europe	Greece	2	1
Western Europe	Ireland	1	1
Western Europe	Luxembourg	0	1
Western Europe	Norway	1	1
Western Europe	Total	99	74
All regions	Overall Total	275	300

Source: The Brookings Institution - Global Metro Monitor 2012; & OECD

What happened in the boom?

Growth in GDP per capita in the growth period between 1993 and 2007 was dominated by city-regions in 'Developing Asia Pacific' countries – with an average annual growth rate over two and a half times the average for the 300 metro regions city regions as a whole.

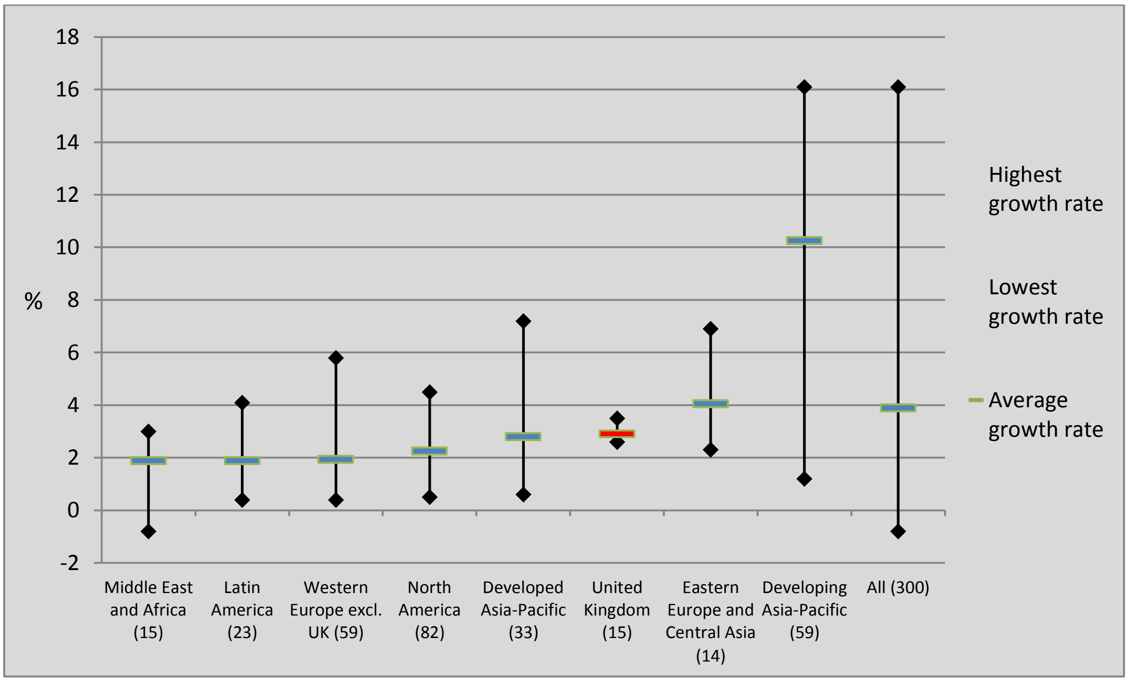
Over three quarters of Chinese city-regions had annual growth rates above 10%.

The next fastest rates of growth were in the remaining Chinese city-regions along with a number in India and a small group of capital city-regions from east European countries.

London was the fastest growing UK city-region with an annual growth rate of 3.5%. The others had growth rates between 2.6% and 3.3%. Four were in the second quintile of global growth, 7 in the third and 4 in the fourth, with rankings ranging from 81st to 134th.

4.12 Figure 102 summarises city-regional GDP per capita growth in the 15 years leading up to the global recession across the Global Metro Monitor broad geographical groupings. It shows the unweighted average of annual growth rates and the range, from highest to lowest. It should be noted that this measure of change does not reflect the baseline from which the city-regions were starting. We will return to levels of GDP per capita at the end of this chapter. What stands out is the spectacular growth performance of city-regions in 'Developing Asia Pacific' countries. The average annual growth rate for these 59 city-regions was over two and a half times the average for the 300 city regions as a whole and the highest performing city-region in this grouping – Dongguan in China - had an annual growth rate 4 times the overall average. Only one other geographical grouping – 'Eastern Europe and Central Asia' – had an average growth rate above the aggregate city-regional average, and then only just. While the average annual growth rate for the 15 UK city-regions was below the overall average, it was still above that for the rest of Western Europe and the other 4 regional groupings.

Figure 102: GDP per capita, real annual average growth rates, 1993-2007, range and average by World Regions & UK



Source: The Brookings Institution Global Metro Monitor 2012

4.13 Table 28 ranks the 300 metropolitan regions by average annual GDP growth rates, breaking down – and reinforcing - the aggregate picture for the geographical groupings. The fastest growing places were not in Western Europe or North America but in China. Over three quarters of the 48 Chinese metropolitan regions had annual average growth rates in GDP per capita above 10%. No other metropolitan regions anywhere in the world matched this. Half of the 21 next fastest growing city regions - with growth rates between 5.1% and 10% - were also Chinese but joined by a small number of Indian city-regions and, notably, a few capital-city regions from east European countries as they made the transition to market economies. The 15 UK city regions fall into the moderate growth category with London the fastest growing UK city-region at 3.5% annually, and the rest squeezed between 2.6% and 3.3%. Overall, the rankings ranged from 81st (London) to joint 134th (Birmingham, Leicester and Nottingham-Derby), putting the 15 in the top half of the distribution.

Table 28: GDP per capita, real annual average % growth, 1993-2007, 300 Metropolitan Areas

Rank	Metropolitan Area	ann av %	Rank	Metropolitan Area	ann av %	Rank	Metropolitan Area	ann av %
1	Dongguan, CN	16.1	51	Mumbai, IN	6.1	97=	Boston, US	3.1
2	Huhehaote, CN	15.6	52	Sofia, BG	6.0	97=	Los Angeles, US	3.1
3	Baotou, CN	15.5	53=	Bucharest, RO	5.8	97=	Sheffield, UK	3.1
4	Suzhou, CN	14.5	53=	Dublin, IE	5.8	104=	Kuwait City, KW	3.0
5	Zhongshan, CN	14.2	55	Prague, CZ	5.5	104=	Bridgeport, US	3.0
6	Qingdao, CN	13.9	56	Chennai, IN	5.4	104=	Durham, US	3.0
7	Hefei, CN	13.8	57=	Delhi, IN	5.1	104=	Raleigh, US	3.0
8	Jinan, CN	13.4	57=	Hyderabad, IN	5.1	104=	Stockholm, SE	3.0
9	Yantai, CN	13.3	59	Kolkata, IN	5.0	109=	Hong Kong, HK	2.9
10	Nantong, CN	13.2	60=	Macau, MO	4.8	109=	Melbourne, AU	2.9
11=	Foshan, CN	13.0	60=	Tainan, TW	4.8	109=	Bursa, TR	2.9
11=	Wuxi, CN	13.0	60=	Cracow, PL	4.8	109=	Alexandria, EG	2.9
13	Zibo, CN	12.8	63	San Jose, US	4.5	109=	Cairo, EG	2.9
14=	Changzhou, CN	12.7	64=	Bangalore, IN	4.4	109=	Brighton, UK	2.9
14=	Ningbo, CN	12.7	64=	Nanning, CN	4.4	109=	Manchester, UK	2.9
14=	Tangshan, CN	12.7	66	Portland, US	4.3	109=	Newcastle, UK	2.9
14=	Wenzhou, CN	12.7	67	Kaohsiung, TW	4.2	109=	Portsmouth-Southampton, UK	2.9
18	Hangzhou, CN	12.5	68=	Katowice-Ostrava, PL	4.1	118=	Istanbul, TR	2.8
19	Dongying, CN	12.4	68=	Santiago, CL	4.1	118=	Saint Petersburg, RU	2.8
20	Wuhan, CN	12.3	70=	Taipei, TW	4.0	118=	Grande Vit., BR	2.8
21	Xiamen, CN	12.2	70=	Taoyuan, TW	4.0	118=	Baton Rouge, US	2.8
22=	Guangzhou, CN	12.0	70=	Budapest, HU	4.0	118=	Buffalo, US	2.8
22=	Nanjing, CN	12.0	70=	Athens, EL	4.0	118=	Luxembourg-Trier, LU/DE	2.8
24=	Dalian, CN	11.9	74=	Hsinchu, TW	3.9	118=	Eindhoven, NL	2.8
24=	Nanchang, CN	11.9	74=	Seoul-Incheon, KR	3.9	118=	Oslo, NO	2.8
24=	Shenyang, CN	11.9	74=	Taichung, TW	3.9	118=	Bristol, UK	2.8
24=	Tianjin, CN	11.9	77	Singapore, SG	3.8	118=	Cardiff-Newport, UK	2.8
28=	Changchun, CN	11.7	78	Gwangju, KR	3.7	118=	Liverpool, UK	2.8
28=	Changsha, CN	11.7	79=	Perth, AU	3.6	129=	Daegu, KR	2.7
28=	Shijiazhuang, CN	11.7	79=	San Diego, US	3.6	129=	Tucson, US	2.7
28=	Zhengzhou, CN	11.7	81=	Manila, PH	3.5	129=	Saragossa, ES	2.7
32	Chongqing, CN	11.5	81=	Helsinki, FI	3.5	129=	Seville, ES	2.7
33=	Anshan, CN	11.4	81=	London, UK	3.5	129=	Leeds-Bradford, UK	2.7
33=	Fuzhou, CN	11.4	84	George Town, MY	3.4	134=	Ankara, TR	2.6
33=	Xuzhou, CN	11.4	85=	Brisbane, AU	3.3	134=	Baixada Sant., BR	2.6
36	Chengdu, CN	11.2	85=	Austin, US	3.3	134=	Manaus, BR	2.6
37	Haerbin, CN	10.9	85=	Des Moines, US	3.3	134=	Jeddah-Mecca, SA	2.6
38=	Xi'an, CN	10.0	85=	Phoenix, US	3.3	134=	Dallas, US	2.6
38=	Zhuhai, CN	10.0	85=	Riverside, US	3.3	134=	Providence, US	2.6
40	Shenzhen, CN	9.9	85=	Edinburgh, UK	3.3	134=	San Francisco, US	2.6
41	Taiyuan, CN	9.2	91=	Lima, PE	3.2	134=	Virginia Beach, US	2.6
42	Shanghai, CN	9.1	91=	Oxnard, US	3.2	134=	Madrid, ES	2.6
43	Beijing, CN	8.7	91=	Salt Lake City, US	3.2	134=	Malaga, ES	2.6
44	Daqing, CN	8.2	91=	Bilbao, ES	3.2	134=	Birmingham, UK	2.6
45	Shantou, CN	8.1	91=	Gothenburg, SE	3.2	134=	Leicester, UK	2.6
46	Kunming, CN	7.9	91=	Glasgow, UK	3.2	134=	Nottingham-Derby, UK	2.6
47	Gumi, KR	7.2	97=	Kuala Lumpur, MY	3.1	147=	Miami, US	2.5
48=	Wulumuqi, CN	6.9	97=	Almaty, KZ	3.1	147=	Sacramento, US	2.5
48=	Warsaw, PL	6.9	97=	Moscow, RU	3.1	147=	Linz, AT	2.5
50	Busan-Ulsan, KR	6.5	97=	Albuquerque, US	3.1	147=	Barcelona, ES	2.5

Source: The Brookings Institution Global Metro Monitor 2012

Table 28 Continued: GDP per capita, real annual average % growth, 1993-2007, 300 Metropolitan Areas

Rank	Metropolitan Area	ann av %	Rank	Metropolitan Area	ann av %	Rank	Metropolitan Area	ann av %
147=	Valencia, ES	2.5	195=	Jacksonville, US	2.0	245=	Bordeaux, FR	1.5
152=	Daejon, KR	2.4	195=	Madison, US	2.0	245=	Marseille, FR	1.5
152=	East Rand, SA	2.4	195=	Memphis, US	2.0	245=	Nice, FR	1.5
152=	Tel Aviv, IL	2.4	195=	Montreal, CA	2.0	245=	Genoa, IT	1.5
152=	Denver, US	2.4	195=	Philadelphia, US	2.0	255=	Auckland, NZ	1.4
152=	Greensboro, US	2.4	195=	Arnhem-Nijmegen, NL	2.0	255=	Campinas, BR	1.4
152=	Little Rock, US	2.4	207=	Belo Horizonte, BR	1.9	255=	Columbia, US	1.4
152=	New York, US	2.4	207=	Cali, CO	1.9	255=	Columbus, US	1.4
152=	San Antonio, US	2.4	207=	Guadalajara, MX	1.9	255=	Toulouse, FR	1.4
152=	Tampa, US	2.4	207=	Recife, BR	1.9	255=	Bremen, DE	1.4
152=	Copenhagen-Malmö, DK/SE	2.4	207=	Pretoria, SA	1.9	255=	Frankfurt am Main, DE	1.4
152=	Rotterdam-Amsterdam, NL	2.4	207=	St. Louis, US	1.9	255=	Karlsruhe, DE	1.4
163=	Sydney, AU	2.3	207=	Vancouver, CA	1.9	255=	Stuttgart, DE	1.4
163=	Izmir, TR	2.3	207=	Lille, FR	1.9	255=	Genève-Ann. CH/FR	1.4
163=	Baltimore, US	2.3	207=	Lyon, FR	1.9	265=	Kumamoto, JP	1.3
163=	Calgary, CA	2.3	207=	Nantes, FR	1.9	265=	Detroit, US	1.3
163=	Minneapolis, US	2.3	207=	Saarbrucken, DE	1.9	265=	Strasbourg, FR	1.3
163=	New Haven, US	2.3	218=	Durban, SA	1.8	268=	Hiroshima, JP	1.2
163=	Orlando, US	2.3	218=	Birmingham, US	1.8	268=	Kitakyushu, JP	1.2
163=	Worcester, US	2.3	218=	Cincinnati, US	1.8	268=	Jakarta, ID	1.2
163=	Leipzig-Halle, DE	2.3	218=	Dayton, US	1.8	268=	Porto Alegre, BR	1.2
172=	Buenos Aires, AR	2.2	218=	Las Vegas, US	1.8	268=	Sao Paulo, BR	1.2
172=	Haifa, IL	2.2	218=	Milwaukee, US	1.8	268=	Louisville, US	1.2
172=	Fresno, US	2.2	218=	Aachen-Liège, BE	1.8	268=	Bologna, IT	1.2
172=	Hartford, US	2.2	218=	Paris, FR	1.8	268=	Florence, IT	1.2
172=	Indianapolis, US	2.2	218=	Nürnberg-Fürth, DE	1.8	268=	Naples, IT	1.2
172=	Nashville, US	2.2	218=	Lisbon, PT	1.8	268=	Porto, PT	1.2
172=	Pittsburgh, US	2.2	228=	Hamamatsu, JP	1.7	278=	Tulsa, US	1.1
172=	Washington, US	2.2	228=	Shizuoka, JP	1.7	278=	Köln-Düsseldorf, DE	1.1
172=	Vienna-Bratislava, AT/SK	2.2	228=	Medellin, CO	1.7	278=	Milan, IT	1.1
181=	Adelaide, AU	2.1	228=	Riyadh, SA	1.7	278=	Verona, IT	1.1
181=	Curitiba, BR	2.1	228=	Allentown, US	1.7	282=	Rome, IT	1.0
181=	San Juan, PR	2.1	228=	New Orleans, US	1.7	282=	Turin, IT	1.0
181=	Johannesburg, SA	2.1	228=	Zurich, CH	1.7	282=	Basel-Mulh., CH/FR	1.0
181=	Charlotte, US	2.1	235=	Nagoya, JP	1.6	285=	Niigata, JP	0.9
181=	Cleveland, US	2.1	235=	Fortaleza, BR	1.6	285=	Tokyo, JP	0.9
181=	Harrisburg, US	2.1	235=	Cape Town, SA	1.6	285=	Salvador, BR	0.9
181=	Ottawa, CA	2.1	235=	Atlanta, US	1.6	285=	Hamburg, DE	0.9
181=	Rochester, US	2.1	235=	Kansas City, US	1.6	285=	Hannover, DE	0.9
181=	Seattle, US	2.1	235=	Oklahoma City, US	1.6	290=	Rio de Janeiro, BR	0.8
181=	Syracuse, US	2.1	235=	Omaha, US	1.6	290=	Bielefeld-Detm., DE	0.8
181=	Toronto, CA	2.1	235=	Richmond, US	1.6	292=	Osaka-Kobe, JP	0.7
181=	Brussels, BE	2.1	235=	Braunschweig-Wol. DE	1.6	292=	Sendai, JP	0.7
181=	Munich, DE	2.1	235=	Venice-Padova, IT	1.6	294	Sapporo, JP	0.6
195=	Bangkok, TH	2.0	245=	Okayama, JP	1.5	295=	Bakersfield, US	0.5
195=	Monterrey, MX	2.0	245=	Bogota, CO	1.5	295=	Honolulu, US	0.5
195=	Casablanca, MA	2.0	245=	Brasilia, BR	1.5	297=	Mexico City, MX	0.4
195=	Albany, US	2.0	245=	Grand Rapids, US	1.5	297=	Berlin, DE	0.4
195=	Chicago, US	2.0	245=	Houston, US	1.5	299	Abu Dhabi, AE	-0.4
195=	Edmonton, CA	2.0	245=	Knoxville, US	1.5	300	Dubai, AE	-0.8

Source: The Brookings Institution Global Metro Monitor 2012

What happened in the recession?

The global recession was marked by its uneven impact and particularly between developed west and developing east.

'Developing Asia-Pacific' was the only grouping of metro regions with a positive overall average growth rate in the recession. All the others had average declines in the worst recession year ranging from -2.9% (for the 'Latin America' grouping) to -5.5% for the metro regions in 'Eastern Europe and Central Asia'.

All metro regions in China and India in the 'Developing Asia-Pacific' group escaped the global recession and continued to grow.

In marked contrast, all Western European and North American city-regions were hit hard by the recession. GDP per capita fell in all 156 metro-regions In 'Western Europe' and 'North America', with falls in GDP per capita in the worst recession year ranging between 1% and just over 10%.

GDP per capita fell in all UK city regions by between 2% (Edinburgh) and 6% (Birmingham) in the worst recession year with a fall of 5.3% in London. In terms of relative performance 10 of the 15 city-regions fell in the middle third of global city-regional performance and 5 in the bottom third. Generally strong performers, London and Bristol, actually fell into the bottom third.

4.14 The Brookings data identify the lowest annual change in GDP per capita – growth or decline - that the 300 city regions experienced in the recession years between 2007 and 2011. Table 29 shows the distribution by global region and country. The geographical unevenness of the impact of global financial crisis and subsequent economic downturn is clear. GDP per capita fell in all 156 metro-regions in 'Western Europe' and 'North America'. The great majority of metro regions in countries in the 'Developed Asia-Pacific', 'Eastern Europe & Central Asia', 'Latin America', and 'Middle East & Africa', also experienced falls. In marked contrast, GDP per capita continued to grow even in the worst recession year in 55 of the 59 metro regions in the 'Developing Asia-Pacific' geographical grouping, including all 48 Chinese and all 6 Indian metro regions. Growth in GDP per capita in these metro regions continued uninterrupted in the global recession years.

Table 29: GDP per capita – Minimum Year of Growth 2007-11, real change: Metro Areas that were stable or grew & those that declined by Global Region & Country

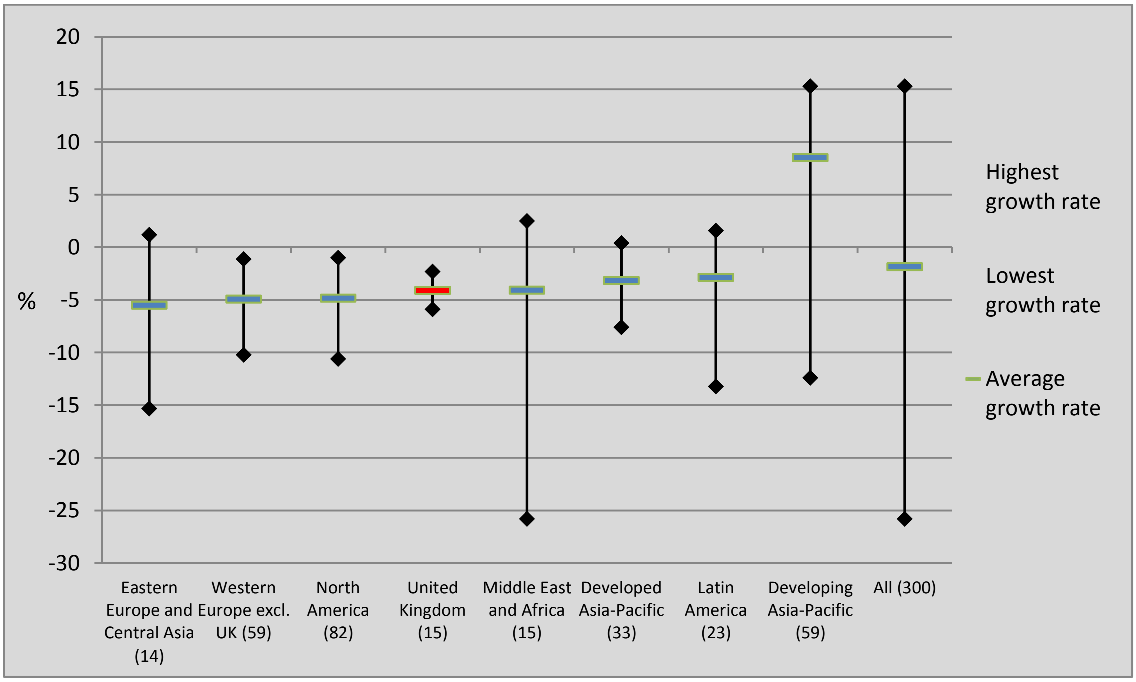
Global Region	Country	GDP per capita – growth or stable	GDP per capita decline
Developed Asia-Pacific	Japan	0	12
Developed Asia-Pacific	South Korea	2	4
Developed Asia-Pacific	Taiwan	1	5
Developed Asia-Pacific	Australia	2	3
Developed Asia-Pacific	Hong Kong	0	1
Developed Asia-Pacific	Macau	0	1
Developed Asia-Pacific	New Zealand	0	1
Developed Asia-Pacific	Singapore	0	1
Developed Asia-Pacific	**Total**	**5**	**28**
Developing Asia-Pacific	China	48	0
Developing Asia-Pacific	India	6	0
Developing Asia-Pacific	Malaysia	0	2
Developing Asia-Pacific	Indonesia	1	0
Developing Asia-Pacific	Philippines	0	1
Developing Asia-Pacific	Thailand	0	1
Developing Asia-Pacific	**Total**	**55**	**4**
Eastern Europe and Central Asia	Turkey	0	4
Eastern Europe and Central Asia	Poland	2	1
Eastern Europe and Central Asia	Russia	0	2
Eastern Europe and Central Asia	Bulgaria	0	1
Eastern Europe and Central Asia	Czech Republic	0	1
Eastern Europe and Central Asia	Hungary	0	1
Eastern Europe and Central Asia	Kazakhstan	0	1
Eastern Europe and Central Asia	Romania	0	1
Eastern Europe and Central Asia	**Total**	**2**	**12**
Latin America	Brazil	5	8
Latin America	Colombia	1	2
Latin America	Mexico	0	3
Latin America	Argentina	1	0
Latin America	Chile	0	1
Latin America	Peru	0	1
Latin America	Puerto Rico	0	1
Latin America	**Total**	**7**	**16**
Middle East and Africa	South Africa	0	5
Middle East and Africa	Egypt	2	0
Middle East and Africa	Israel	0	2
Middle East and Africa	Saudi Arabia	2	0
Middle East and Africa	United Arab Emirates	0	2
Middle East and Africa	Kuwait	0	1
Middle East and Africa	Morocco	1	0
Middle East and Africa	**Total**	**5**	**10**

North America	United States	0	76
North America	Canada	0	6
North America	**Total**	**0**	**82**
Western Europe	United Kingdom	0	15
Western Europe	Germany	0	14
Western Europe	France	0	9
Western Europe	Italy	0	9
Western Europe	Spain	0	7
Western Europe	Netherlands	0	3
Western Europe	Switzerland	0	3
Western Europe	Austria	0	2
Western Europe	Belgium	0	2
Western Europe	Portugal	0	2
Western Europe	Sweden	0	2
Western Europe	Denmark	0	1
Western Europe	Finland	0	1
Western Europe	Greece	0	1
Western Europe	Ireland	0	1
Western Europe	Luxembourg	0	1
Western Europe	Norway	0	1
Western Europe	**Total**	**0**	**74**
All regions	**Overall Total**	**74**	**226**

Source: The Brookings Institution, Global Metro Monitor 2012

4.15 Figure 103 summarises performance by geographical grouping in the recession. 'Developing Asia-Pacific' stands out as the only grouping to have a positive overall average growth rate in the worst years. All the rest had average declines ranging from -2.9% (for the 'Latin America' grouping) to -5.5% for the metro regions in 'Eastern Europe and Central Asia'**.** The average for the UK metro regions was -4.1%.

Figure 103: GDP per capita, lowest annual growth rates, single year figure, real % change, 2007-2011, range and average by World Regions & UK



Source: The Brookings Institution Global Metro Monitor 2012

4.16 Table 30 ranks performance in the recession years. The remarkable growth rates of the Chinese city regions - with rates of between 10% and 15% in specific years – again stand out. All 15 UK metro-regions had significant falls. Edinburgh, as already noted, was least affected with a drop of just over 2%. London had a fall of 5.3% in its worst year and Birmingham had the biggest single year fall of 5.9%. In relation to the 300 metro regions as a whole, performance ranged from Edinburgh in equal 104th to Birmingham in equal 243rd. 10 of the 15 UK city-regions were in the bottom half of the distribution, including London.

Table 30: GDP per cap, Lowest Single Year Real Annual % Change, 2007-11, 300 Metropolitan Areas

Rank	Metropolitan Area	% ch.	Rank	Metropolitan Area	% ch.	Rank	Metropolitan Area	% ch.
1	Hefei, CN	15.3	51	Jakarta, ID	3.2	98=	Providence, US	-2.0
2	Baotou, CN	14.3	52=	Dongguan, CN	3.0	102	Sofia, BG	-2.1
3	Changchun, CN	13.8	52=	Mumbai, IN	3.0	103	Washington, US	-2.2
4=	Changsha, CN	13.6	54	Alexandria, EG	2.5	104=	Virginia Beach, US	-2.3
4=	Chongqing, CN	13.6	55	Cairo, EG	2.1	104=	Lisbon, PT	-2.3
6	Dalian, CN	13.3	56	Riyadh, SA	1.7	104=	Edinburgh, UK	-2.3
7	Xi'an, CN	13.1	57	Brasilia, BR	1.6	107=	Auckland, NZ	-2.4
8	Nanning, CN	12.7	58	Bangalore, IN	1.5	107=	Bangkok, TH	-2.4
9	Nanchang, CN	12.4	59	Recife, BR	1.4	109=	Little Rock, US	-2.5
10=	Haerbin, CN	12.3	60	Jeddah-Mecca, SA	1.3	109=	Bordeaux, FR	-2.5
10=	Shenyang, CN	12.3	61=	Taiyuan, CN	1.2	111=	Zurich, CH	-2.6
12	Xuzhou, CN	12.2	61=	Warsaw, PL	1.2	111=	Glasgow, UK	-2.6
13	Wuhan, CN	12.1	63=	Salvador, BR	1.0	113=	Prague, CZ	-2.7
14=	Dongying, CN	12.0	63=	Casablanca, MA	1.0	113=	Pretoria, SA	-2.7
14=	Fuzhou, CN	12.0	65	Buenos Aires, AR	0.8	113=	Buffalo, US	-2.7
16	Anshan, CN	11.9	66	Cracow, PL	0.7	113=	Hartford, US	-2.7
17	Nantong, CN	11.7	67=	Taichung, TW	0.4	113=	Omaha, US	-2.7
18=	Foshan, CN	11.5	67=	Cali, CO	0.4	118=	Sao Paulo, BR	-2.8
18=	Wulumuqi, CN	11.5	69=	Adelaide, AU	0.2	118=	Richmond, US	-2.8
18=	Yantai, CN	11.5	69=	Campinas, BR	0.2	118=	Vienna-Brati., AT/SK	-2.8
21=	Changzhou, CN	11.4	71=	Seoul-Incheon, KR	0.1	121=	Taipei, TW	-2.9
21=	Zibo, CN	11.4	71=	Fortaleza, BR	0.1	121=	Rio de Janeiro, BR	-2.9
23	Wuxi, CN	11.3	73=	Daejon, KR	0.0	121=	Tel Aviv, IL	-2.9
24=	Huhehaote, CN	11.1	73=	Melbourne, AU	0.0	121=	Pittsburgh, US	-2.9
24=	Qingdao, CN	11.1	75	Sydney, AU	-0.2	121=	Oslo, NO	-2.9
26	Suzhou, CN	10.9	76	Bogota, CO	-0.3	126=	Manaus, BR	-3.0
27	Chengdu, CN	10.8	77	Perth, AU	-0.4	126=	Oklahoma City, US	-3.0
28	Daqing, CN	10.7	78	Kuala Lumpur, MY	-0.6	128=	Brussels, BE	-3.1
29=	Nanjing, CN	10.6	79=	Tainan, TW	-0.7	128=	Marseille, FR	-3.1
29=	Tangshan, CN	10.6	79=	Haifa, IL	-0.7	128=	Leipzig-Halle, DE	-3.1
31	Tianjin, CN	10.5	81=	Macau, MO	-0.9	128=	Manchester, UK	-3.1
32=	Guangzhou, CN	10.2	81=	Katowice-Ostrava, PL	-0.9	128=	Newcastle, UK	-3.1
32=	Jinan, CN	10.2	83	Durham, US	-1.0	133=	Hong Kong, HK	-3.2
34	Zhengzhou, CN	9.6	84=	Kaohsiung, TW	-1.1	133=	East Rand, SA	-3.2
35	Shantou, CN	9.2	84=	Berlin, DE	-1.1	133=	Boston, US	-3.2
36=	Hangzhou, CN	9.1	86	Brisbane, AU	-1.2	133=	Rochester, US	-3.2
36=	Zhongshan, CN	9.1	87	Lima, PE	-1.3	137=	Johannesburg, SA	-3.3
38	Shijiazhuang, CN	8.8	88	Manila, PH	-1.4	137=	Portland, US	-3.3
39	Delhi, IN	8.7	89	Porto Alegre, BR	-1.5	137=	Paris, FR	-3.3
40	Ningbo, CN	8.3	90=	Gwangju, KR	-1.7	140=	Albany, US	-3.4
41	Wenzhou, CN	7.5	90=	Montreal, CA	-1.7	140=	Edmonton, CA	-3.4
42	Shenzhen, CN	6.2	90=	Stockholm, SE	-1.7	142=	Gumi, KR	-3.5
43	Xiamen, CN	6.0	93=	Santiago, CL	-1.8	142=	Durban, SA	-3.5
44	Hyderabad, IN	5.2	93=	Madison, US	-1.8	142=	Nice, FR	-3.5
45	Shanghai, CN	4.7	95=	Busan-Ulsan, KR	-1.9	142=	Arnhem-Nijm., NL	-3.5
46	Kolkata, IN	4.5	95=	Medellin, CO	-1.9	146=	Cape Town, SA	-3.6
47	Chennai, IN	4.4	95=	Albuquerque, US	-1.9	146=	Baton Rouge, US	-3.6
48	Beijing, CN	4.3	98=	Curitiba, BR	-2.0	146=	Lille, FR	-3.6
49	Kunming, CN	4.2	98=	Baltimore, US	-2.0	146=	Toulouse, FR	-3.6
50	Zhuhai, CN	3.3	98=	Ottawa, CA	-2.0	146=	Nottingham-Derby, UK	-3.6

Source: The Brookings Institution Global Metro Monitor 2012

Table 30 Continued: GDP per cap, Lowest Single Year Real Annual % Change, 2007-11, 300 Metropolitan Areas

Rank	Metropolitan Area	% ch.	Rank	Metropolitan Area	% ch.	Rank	Metropolitan Area	% ch.
151=	Milwaukee, US	-3.7	198=	Lyon, FR	-4.8	251=	Ankara, TR	-6.2
151=	New York, US	-3.7	198=	Munich, DE	-4.8	251=	Orlando, US	-6.2
151=	Oxnard, US	-3.7	203=	Kumamoto, JP	-4.9	253	Florence, IT	-6.3
151=	Hannover, DE	-3.7	203=	Bakersfield, US	-4.9	254=	Sapporo, JP	-6.5
151=	Cardiff-Newport, UK	-3.7	203=	Columbia, US	-4.9	254=	Bridgeport, US	-6.5
151=	Leicester, UK	-3.7	203=	St. Louis, US	-4.9	254=	Jacksonville, US	-6.5
151=	Liverpool, UK	-3.7	207=	Daegu, KR	-5.0	254=	Copenhagen-Mal.DK/SE	-6.5
158=	Hsinchu, TW	-3.8	207=	San Antonio, US	-5.0	258=	Guadalajara, MX	-6.6
158=	Toronto, CA	-3.8	207=	Strasbourg, FR	-5.0	258=	Birmingham, US	-6.6
158=	Rotterdam-Amsterdam, NL	-3.8	207=	Rome, IT	-5.0	258=	Dayton, US	-6.6
161=	Hiroshima, JP	-3.9	211=	Louisville, US	-5.1	261=	Austin, US	-6.7
161=	Singapore, SG	-3.9	211=	Raleigh, US	-5.1	261=	Sacramento, US	-6.7
161=	Houston, US	-3.9	211=	Sheffield, UK	-5.1	261=	Saarbrucken, DE	-6.7
161=	Vancouver, CA	-3.9	214	New Orleans, US	-5.2	264	Belo Horizonte, BR	-6.8
161=	Nantes, FR	-3.9	215=	Hamamatsu, JP	-5.3	265=	Miami, US	-6.9
161=	Frankfurt am Main, DE	-3.9	215=	Shizuoka, JP	-5.3	265=	Athens, EL	-6.9
161=	Hamburg, DE	-3.9	215=	Knoxville, US	-5.3	267=	Bologna, IT	-7.0
161=	Bilbao, ES	-3.9	215=	Leeds-Bradford, UK	-5.3	267=	Turin, IT	-7.0
169=	Taoyuan, TW	-4.0	215=	London, UK	-5.3	269	San Francisco, US	-7.2
169=	Allentown, US	-4.0	220=	Kitakyushu-Fukuo., JP	-5.4	270=	Sendai, JP	-7.4
169=	Genève-Annemasse, CH/FR	-4.0	220=	Kansas City, US	-5.4	270=	Grand Rapids, US	-7.4
172=	San Juan, PR	-4.1	220=	San Diego, US	-5.4	272=	Milan, IT	-7.5
172=	Philadelphia, US	-4.1	220=	Tampa, US	-5.4	272=	Valencia, ES	-7.5
172=	Salt Lake City, US	-4.1	220=	Köln- Düsseldorf, DE	-5.4	274=	Niigata, JP	-7.6
172=	San Jose, US	-4.1	220=	Saragossa, ES	-5.4	274=	Tucson, US	-7.6
172=	Linz, AT	-4.1	226=	Nashville, US	-5.5	274=	Gothenburg, SE	-7.6
172=	Aachen-Liège, BE	-4.1	226=	Nürnberg-Fürth, DE	-5.5	277=	Almaty, KZ	-7.7
172=	Bremen, DE	-4.1	226=	Bristol, UK	-5.5	277=	Atlanta, US	-7.7
179=	Syracuse, US	-4.2	229=	Osaka-Kobe, JP	-5.6	277=	Tulsa, US	-7.7
179=	Genoa, IT	-4.2	229=	Tokyo, JP	-5.6	277=	Braunschweig, DE	-7.7
179=	Brighton, UK	-4.2	229=	Cincinnati, US	-5.6	281	Riverside, US	-7.9
179=	Portsmouth-Southampton, UK	-4.2	229=	Eindhoven, NL	-5.6	282=	Stuttgart, DE	-8.1
183=	Budapest, HU	-4.3	229=	Malaga, ES	-5.6	282=	Verona, IT	-8.1
183=	Izmir, TR	-4.3	229=	Seville, ES	-5.6	284	New Haven, US	-8.2
183=	Indianapolis, US	-4.3	235=	Nagoya, JP	-5.7	285	Grande Vitoria, BR	-8.4
186=	Harrisburg, US	-4.4	235=	Charlotte, US	-5.7	286	Monterrey, MX	-9.0
186=	Honolulu, US	-4.4	235=	Dublin, IE	-5.7	287	Las Vegas, US	-9.2
188=	Denver, US	-4.5	238=	Saint Petersburg, RU	-5.8	288=	Istanbul, TR	-9.7
188=	Memphis, US	-4.5	238=	Calgary, CA	-5.8	288=	Phoenix, US	-9.7
188=	Madrid, ES	-4.5	238=	Cleveland, US	-5.8	290	Bucharest, RO	-9.8
191=	Okayama, JP	-4.6	238=	Los Angeles, US	-5.8	291=	Bursa, TR	-10.0
191=	Greensboro, US	-4.6	238=	Luxembourg-Tr. LU/DE	-5.8	291=	Des Moines, US	-10.0
191=	Seattle, US	-4.6	243=	Mexico City, MX	-5.9	293	Helsinki, FI	-10.2
191=	Basel-Mulhouse, CH/FR	-4.6	243=	Naples, IT	-5.9	294	Detroit, US	-10.6
195=	Fresno, US	-4.7	243=	Birmingham, UK	-5.9	295	Kuwait City, KW	-11.1
195=	Worcester, US	-4.7	246=	Bielefeld-Detmold, DE	-6.0	296	George Town, MY	-12.4
195=	Porto, PT	-4.7	246=	Karlsruhe, DE	-6.0	297	Abu Dhabi, AE	-12.8
198=	Chicago, US	-4.8	246=	Barcelona, ES	-6.0	298	Baixada Santista, BR	-13.2
198=	Columbus, US	-4.8	249=	Dallas, US	-6.1	299	Moscow, RU	-15.3
198=	Minneapolis, US	-4.8	249=	Venice-Padova, IT	-6.1	300	Dubai, AE	-25.8

Source: The Brookings Institution Global Metro Monitor 2012

Where are we now?

Despite their accelerating growth metro regions in the global east have still some significant catching up to do in terms of levels of wealth.

Metro regions in North America have the highest average GDP per capita, followed by those in 'Western Europe' and the 'Developed Asia Pacific'.

Despite their recent spectacular growth, metro regions in the 'Developing Asia-Pacific' still have the second lowest average GDP per capita figure of the seven geographical groupings.

More than half (54%) of city-regions in the 'Developing Asia-Pacific' group of countries are in the bottom 20% of global city-regions in terms of GDP per capita in 2012. Just under 2% are in the top 20%. Levels of wealth are still well below those in city-regions in the developed West.

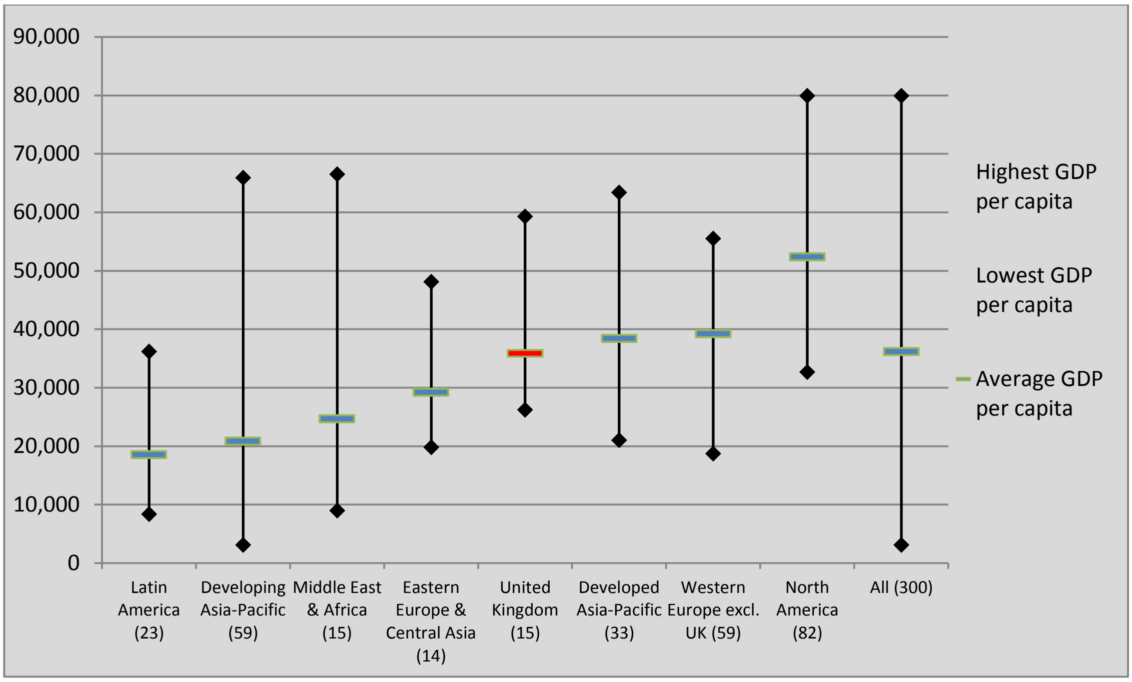
More than half of North American city-regions are in the top 20% of global city-regions measured in terms of GDP per capita in 2012. And over 90% of them are in the top 40%.

Only 14% of Western European city-regions excluding the UK are in the top 20% in GDP per capita rankings and 37% in the top 40%.

UK city-regions are relatively weak – 2 of the 15 (13%) are in the top 20% but none are in the second quintile. The remaining 13 (87%) are concentrated in the third and fourth quintiles with none in the fifth. This distribution not only lags those in Western Europe and North America by a large margin but also that in the 'Developed Asia Pacific' region.

4.17 Figure 104 summarises forecast metro-region levels of GDP per capita in 2012 by geographical grouping. The global wealth hierarchy endures. Metro regions in 'North America' have the highest average level, followed by those in 'Western Europe' and the 'Developed Asia Pacific'. Next in order come metro regions in 'Eastern Europe and Central Asia' and 'Middle East and Africa'. And, despite their recent accelerating growth, metro regions in the 'Developing Asia-Pacific' grouping still have the second lowest average figure, above the 'Latin America' grouping. The UK metro regions' average figure is just below that for the 'Developed Asia-Pacific' grouping and below that for metro regions in the rest of 'Western Europe'.

Figure 104: GDP per capita, PPPs, 2012 (forecast), range and average by World Regions & UK



Source: The Brookings Institution Global Metro Monitor 2012

4.18 Table 31 ranks the 300 metro regions by forecast levels of GDP per capita in 2012 and Figure 105 shows the distribution of metro regions by quintile in each of these groupings. Despite the impact of the recession more than half of US city-regions are in the top 20% globally, and over 90% are in the top 40%. 'Developed Asia-Pacific' has the second highest share of city-regions in the top 40% followed very closely by 'Western Europe excluding UK'. The fast growing 'Developing Asia-Pacific' region still has a relatively small share of its city-regions in the top 40% - just 5%.

4.19 The performance of UK city-regions in global terms and in comparison with Western Europe excluding UK is relatively weak. It has 13% in the top 20% quintile; none in the second quintile; 40% in the third; and 47% in the fourth. So it lags 'Western Europe' overall, Canada and the USA by a large margin, and also lags the 'Developed Asia-Pacific' region. Rankings range from 22nd (Edinburgh) to 207th (Sheffield).

Table 31: GDP per capita, $s, PPPs, 2012 (forecast), 300 Metropolitan Areas

Ra-nk	Metropolitan Area	GDP pc, $s, PPPs	Rank	Metropolitan Area	GDP pc, $s, PPPs	Rank	Metropolitan Area	GDP pc, $s, PPPs
1	Hartford, US	79,900	51=	Edmonton, CA	52,000	100=	Suzhou, CN	43,400
2	San Jose, US	76,900	51=	London, UK	52,000	102=	Birmingham, US	43,200
3	Washington, US	71,500	53	Omaha, US	51,700	102=	Columbia, US	43,200
4	Bridgeport, US	70,100	54	Frankfurt am Main,DE	51,600	102=	Detroit, US	43,200
5	Boston, US	69,300	55	Milwaukee, US	51,500	105=	Bilbao, ES	43,100
6	Durham, US	69,200	56	Virginia Beach, US	51,300	105=	Hannover, DE	43,100
7	San Francisco, US	69,000	57	Oxnard, US	50,800	107=	Eindhoven, NL	42,900
8	Abu Dhabi, AE	66,500	58	Zurich, CH	50,600	107=	Miami, US	42,900
9	Dongguan, CN	65,900	59	Austin, US	49,800	109	Fresno, US	42,800
10	Seattle, US	65,200	60=	Atlanta, US	49,400	110	Taipei, TW	42,500
11	Houston, US	64,200	60=	Orlando, US	49,400	111	Ottawa, CA	42,400
12	Perth, AU	63,400	62=	Cleveland, US	49,000	112	Gumi, KR	42,200
13	New York, US	63,200	62=	Columbus, US	49,000	113	Dayton, US	41,800
14	Des Moines, US	62,800	64	Raleigh, US	48,900	114	San Antonio, US	41,500
15	Singapore, SG	62,500	65=	Hong Kong, HK	48,700	115=	Melbourne, AU	41,400
16	Calgary, CA	61,600	65=	Hamburg, DE	48,700	115=	Tokyo, JP	41,400
17	Salt Lake City, US	61,200	67	Sacramento, US	48,300	117	Vancouver, CA	41,100
18	Madison, US	60,800	68=	Kansas City, US	48,100	118	Lyon, FR	41,000
19	Portland, US	60,700	68=	Memphis, US	48,100	119=	Hamamatsu, JP	40,800
20	Albany, US	60,500	68=	Nashville, US	48,100	119=	Nagoya, JP	40,800
21	Los Angeles, US	60,400	68=	Prague, CZ	48,100	119=	Shizuoka, JP	40,800
22	Edinburgh, UK	59,300	72	Vienna-Bratisl. AT/SK	47,800	122	Bristol, UK	40,600
23	San Diego, US	59,200	73	Helsinki, FI	47,700	123=	Albuquerq., US	40,500
24	Rochester, US	59,100	74=	Grand Rapids, US	47,500	123=	Brisbane, AU	40,500
25	New Orleans, US	58,800	74=	Knoxville, US	47,500	125=	Allentown, US	40,300
26	Baton Rouge, US	58,500	76	Bakersfield, US	47,400	125=	Köln-Düssel. DE	40,300
27=	Buffalo, US	58,200	77	Las Vegas, US	47,100	127	Bremen, DE	40,100
27=	Macau, MO	58,200	78	St. Louis, US	47,000	128=	Madrid, ES	40,000
29	Syracuse, US	58,000	79	Linz, AT	46,700	128=	Taichung, TW	40,000
30	Minneapolis, US	57,300	80	Providence, US	46,400	130	Basel-Mul. CH/FR	39,800
31=	Denver, US	56,800	81	Rotterdam-Amsterdam, NL	46,000	131	Copenhagen-Malmö, DK/SE	39,300
31=	Harrisburg, US	56,800	82=	Cincinnati, US	45,900	132	Bologna, IT	39,200
33	Kuwait City, KW	56,100	82=	Warsaw, PL	45,900	133	Gothenburg, SE	38,900
34	Baltimore, US	55,700	84=	Worcester, US	45,600	134	Rome, IT	38,800
35	Oslo, NO	55,500	84=	Brussels, BE	45,600	135	Taoyuan, TW	38,600
36	Dallas, US	55,300	84=	Genève-Anne. CH/FR	45,600	136=	Guangzhou, CN	38,200
37	Chicago, US	55,000	87	Stuttgart, DE	45,500	136=	Tucson, US	38,200
38	New Haven, US	54,600	88=	Oklahoma City, US	45,400	138	Braunschweig, DE	38,100
39	Munich, DE	54,500	88=	Sydney, AU	45,400	139=	Bielefeld-Det., DE	38,000
40=	Charlotte, US	54,200	90	Foshan, CN	45,100	139=	Glasgow, UK	38,000
40=	Greensboro, US	54,200	91	Phoenix, US	45,000	139=	Wuxi, CN	38,000
42	Honolulu, US	54,000	92=	Little Rock, US	44,900	142=	Dongying, CN	37,900
43=	Paris, FR	53,900	92=	Tulsa, US	44,900	142=	Milan, IT	37,900
43=	Stockholm, SE	53,900	94	Moscow, RU	44,800	142=	Toulouse, FR	37,900
45=	Philadelphia, US	53,800	95=	Jacksonville, US	44,700	145	Tel Aviv, IL	37,800
45=	Richmond, US	53,800	95=	Louisville, US	44,700	146	Kaohsiung, TW	37,500
47	Indianapolis, US	52,600	97	Nürnberg-Fürth, DE	44,300	147=	Arnhem-Nijmegen, NL	37,100
48=	Pittsburgh, US	52,500	98	Toronto, CA	43,900	147=	Portsmouth-Southampton, UK	37,100
48=	Luxembourg-Trier, LU/DE	52,500	99	Tampa, US	43,800	147=	Zhongshan, CN	37,100
50	Dublin, IE	52,100	100=	Karlsruhe, DE	43,400	150	Adelaide, AU	37,000

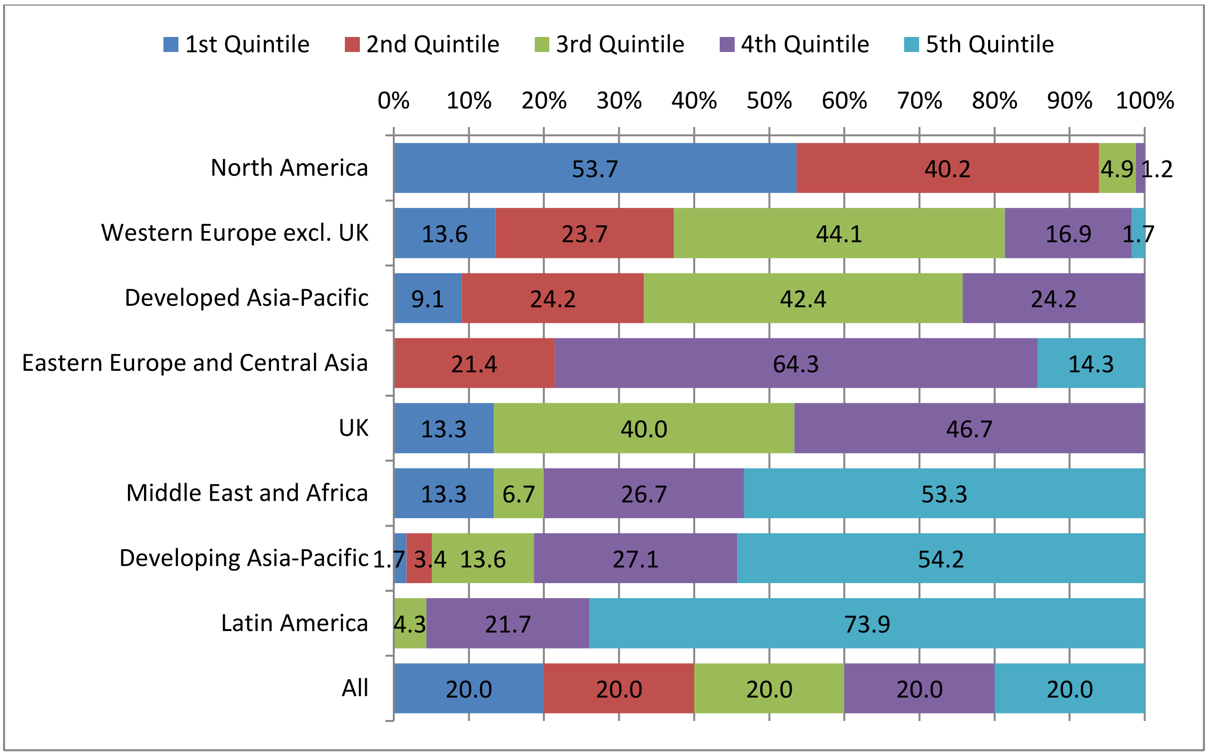
Source: The Brookings Institution Global Metro Monitor 2012

Table 31 Continued: GDP per capita, $s, PPPs, 2012, 300 Metropolitan Areas

Ra-nk	Metropolitan Area	GDP pc, $s, PPPs	Rank	Metropolitan Area	GDP pc, $s, PPPs	Rank	Metropolitan Area	GDP pc, $s, PPPs
151	Busan-Ulsan, KR	36,900	201	Auckland, NZ	29,200	251	Tangshan, CN	19,100
152	Hiroshima, JP	36,700	202	Leipzig-Halle, DE	28,900	252	Jinan, CN	18,900
153	Tainan, TW	36,500	203	Liverpool, UK	28,400	253	Porto Alegre, BR	18,800
154	Hsinchu, TW	36,400	204	Dalian, CN	28,200	254	Naples, IT	18,700
155	Barcelona, ES	36,300	205	Valencia, ES	28,100	255	Wulumuqi, CN	18,200
156=	Brasilia, BR	36,200	206	Shenzhen, CN	28,000	256=	Anshan, CN	18,100
156=	Montreal, CA	36,200	207	Sheffield, UK	26,200	256=	East Rand, SA	18,100
158	Saarbrucken, DE	36,100	208	Buenos Aires, AR	26,100	258	Pretoria, SA	17,700
159	Strasbourg, FR	35,600	209	Ningbo, CN	26,000	259	Johannesburg, SA	17,400
160	Bordeaux, FR	35,400	210	Hangzhou, CN	25,800	260	Lima, PE	17,300
161=	Nantes, FR	35,300	211	Daejon, KR	25,600	261	Belo Horizonte, BR	17,200
161=	Venice-Padova, IT	35,300	212	Changzhou, CN	25,400	262	Guadalajara, MX	16,900
163=	Marseille, FR	35,200	213	Cracow, PL	25,200	263=	Baixada Sant. BR	16,800
163=	Osaka-Kobe, JP	35,200	214	Nanjing, CN	25,000	263=	Zhengzhou, CN	16,800
165	Daqing, CN	35,100	215=	Bucharest, RO	24,900	265	Rio de Janeiro, BR	16,300
166	Florence, IT	34,600	215=	Seville, ES	24,900	266	Bogota, CO	15,900
167=	Brighton, UK	34,500	217	Huhehaote, CN	24,600	267=	Cape Town, SA	15,700
167=	Leicester, UK	34,500	218	Gwangju, KR	24,200	267=	Chengdu, CN	15,700
167=	Nice, FR	34,500	219	Kuala Lumpur, MY	23,900	269	Salvador, BR	15,000
170=	Manchester, UK	34,400	220	Sao Paulo, BR	23,700	270	Fuzhou, CN	14,700
170=	Okayama, JP	34,400	221=	Bangkok, TH	23,400	271	Taiyuan, CN	14,600
170=	Xiamen, CN	34,400	221=	Riyadh, SA	23,400	272	Manaus, BR	14,200
173	Saragossa, ES	34,100	223	Malaga, ES	23,200	273	Nantong, CN	13,800
174	Verona, IT	34,000	224=	Changsha, CN	22,900	274	Nanchang, CN	13,700
175=	Kitakyushu-Fukuoka, JP	33,700	224=	George Town, MY	22,900	275	Changchun, CN	13,400
175=	Niigata, JP	33,700	226=	Dubai, AE	22,800	276=	Manila, PH	13,000
177	Zhuhai, CN	33,600	226=	Istanbul, TR	22,800	276=	Xi'an, CN	13,000
178	Baotou, CN	33,400	228	Qingdao, CN	22,600	278	Durban, SA	12,600
179	Berlin, DE	33,300	229	Katowice-Ostr., PL	22,500	279	Haerbin, CN	11,500
180	Genoa, IT	33,000	230	Shenyang, CN	22,400	280	Kunming, CN	11,200
181=	Budapest, HU	32,800	231	Jeddah-Mecca, SA	22,300	281	Shijiazhuang, CN	11,100
181=	Turin, IT	32,800	232	Tianjin, CN	21,800	282	Wenzhou, CN	11,000
183	Riverside, US	32,700	233=	Campinas, BR	21,400	283	Cali, CO	10,500
184	Aachen-Liège, BE	32,400	233=	Santiago, CL	21,400	284=	Medellin, CO	10,100
185=	Nottingham-Derby, UK	32,200	233=	Shanghai, CN	21,400	284=	Cairo, EG	10,100
185=	Seoul-Incheon, KR	32,200	236	Wuhan, CN	21,300	286	Recife, BR	9,800
187	Lisbon, PT	31,500	237	Ankara, TR	21,200	287	Delhi, IN	9,500
188	Haifa, IL	31,200	238	Daegu, KR	21,000	288	Xuzhou, CN	9,400
189	Monterrey, MX	31,100	239=	Porto, PT	20,600	289	Casablanca, MA	9,200
190	Birmingham, UK	30,900	239=	Saint Petersburg, RU	20,600	290	Chongqing, CN	9,100
191	Leeds-Bradford, UK	30,800	241=	Beijing, CN	20,300	291	Alexandria, EG	9,000
192	Sofia, BG	30,700	241=	Zibo, CN	20,300	292	Fortaleza, BR	8,400
193	Athens, EL	30,500	243	Curitiba, BR	20,200	293	Nanning, CN	8,100
194	Sendai, JP	30,000	244=	Izmir, TR	19,900	294	Jakarta, ID	7,200
195	Almaty, KZ	29,800	244=	Mexico City, MX	19,900	295	Shantou, CN	6,700
196	Newcastle, UK	29,700	244=	San Juan, PR	19,900	296	Mumbai, IN	5,900
197	Kumamoto, JP	29,600	247	Bursa, TR	19,800	297	Chennai, IN	4,900
198=	Cardiff-Newport, UK	29,500	248=	Grande Vitoria, BR	19,600	298	Hyderabad, IN	4,100
198=	Lille, FR	29,500	248=	Hefei, CN	19,600	299	Bangalore, IN	4,000
200	Sapporo, JP	29,400	248=	Yantai, CN	19,600	300	Kolkata, IN	3,100

Source: The Brookings Institution Global Metro Monitor 2012

Figure 105: GDP per cap, $s, in PPPs, 2012 (forecast) – World Regions' Metro-regions' ranks, % Split by Quintile, ranked by share in 1st & 2nd Quintiles



Source: The Brookings Institution, Global Metro Monitor 2012

Metro regions: population size and GDP per capita

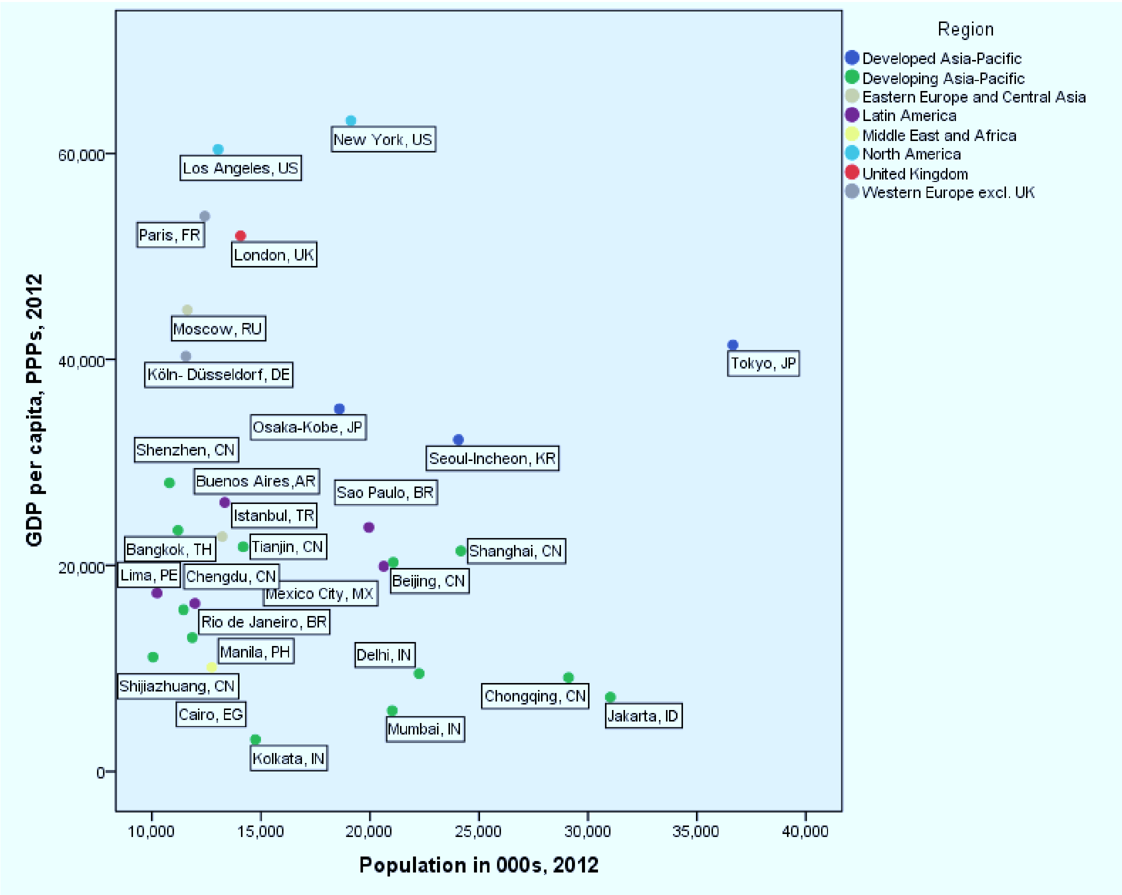
More than half of the 29 mega Metropolitan Areas with populations between 10 million and 37 million are in the 'Developing' and 'Developed Asia-Pacific'. London is ranked 15th in this group in population size but fourth in levels of GDP per capita, underlining its relative economic weight.

All the other UK city-regions fall into the group with populations below 10 million and – with the notable exception of Edinburgh - cluster around the middle level of GDP per capita in the group.

In terms of GDP per capita levels, most UK metro regions are in the middle or low ranges in 'Western Europe' but above the majority of metro regions in 'Developing Asia-Pacific', 'Latin America' and 'Middle East and Africa'.

4.20 Figures 106 and 107 chart metro regions by population, forecast GDP per capita levels and geographical grouping in 2012. Figure 106 singles out the 29 metro regions with populations above 10 million; with Shijiazhuang the smallest at just over 10 million and Tokyo the largest with a population of 36.7 million. More than half of these mega Metropolitan Areas are in the 'Developing' and 'Developed Asia-Pacific', accounting for 13 and 3 of the 29 respectively. 'Latin America' has 5, 'Western Europe' 3, 'North America' and 'Eastern Europe and Central Asia' 2 each and the 'Middle East and Africa' has 1. The UK's only member of the 29 is London, ranked 15th in population but fourth in levels of GDP per capita, underlining its relative economic weight. To put London and the other UK city-regions in perspective, however, the 2 largest metro regions in terms of population – Tokyo and Jakarta – together have a combined population larger than that of the UK as a whole (68 million compared with 63 million).

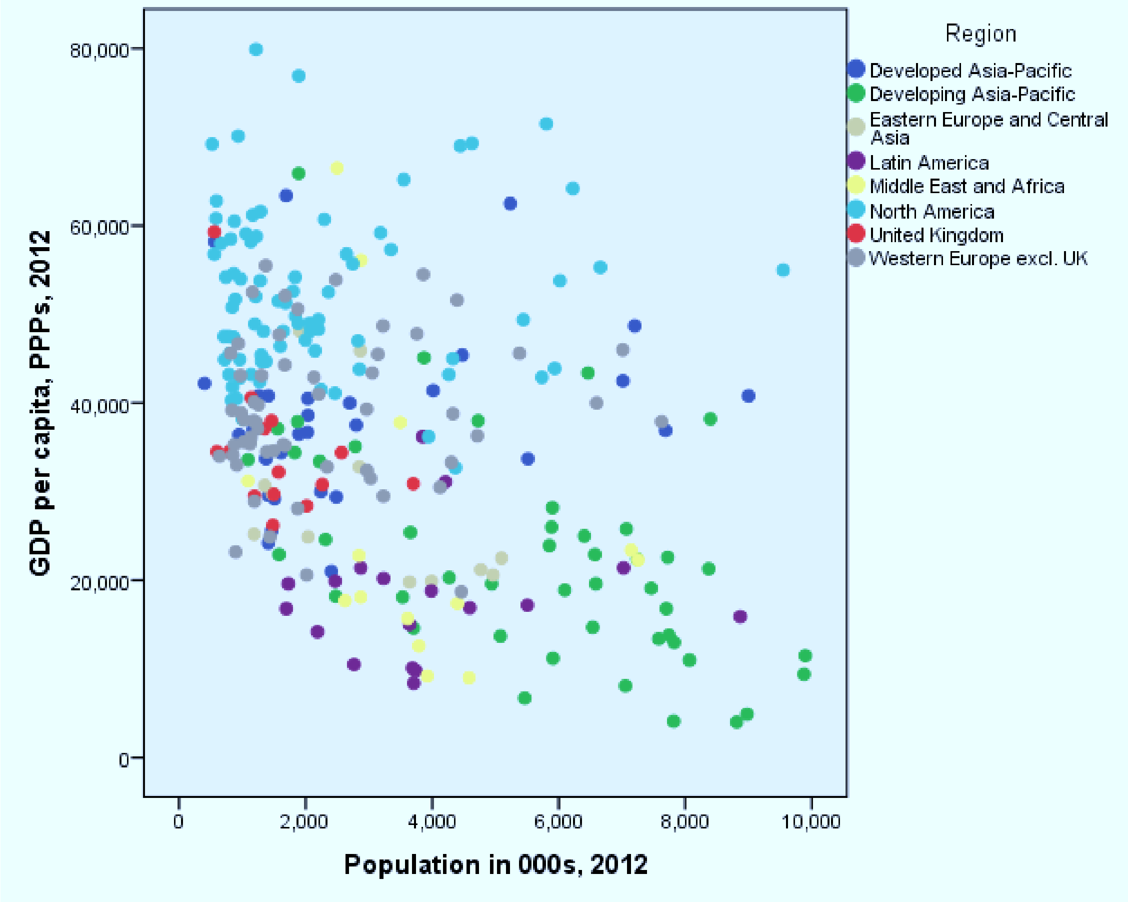
Figure 106: Levels of GDP per capita and population for the 29 metro regions with populations over 10 million



4.21 Figure 107 charts the remaining 271 metro regions with populations less than 10 million by levels of GDP per capita and by geographical grouping; with Gumi in South Korea the smallest with a population of just 0.4 million and Haerbin in China the largest with a population of 9.9 million. The generally relatively high levels of GDP per capita in metro regions in 'North America' and to a lesser extent in 'Western Europe' mirror the relatively low levels in the 'Developing Asia-Pacific' city-regions.

4.22 With one exception - Edinburgh – the UK city-regions in this group are clustered towards the middle level of GDP per capita globally and in the middle or low ranges of metro regions in 'Western Europe' but still above the majority of metro regions in the 'Developing Asia-Pacific', Latin America' and 'Middle East and Africa'.

Figure 107: Levels of GDP per capita for the 271 metro regions with populations under 10 million



4.23 Figures 106 and 107 both show that there is no simple positive correlation between population size and levels of GDP per capita. Table 32 attempts to capture this contrast by comparing the rankings of the top 5 metro regions in the two categories: population and levels of GDP per capita.

Table 32: Comparing the global rankings of the top 5 in population and GDP per capita levels

Metro regions	Geographical grouping	Population ranking (2012)	GDP per capita ranking (2012)
The top 5 largest in population			
Tokyo, JP	Developed Asia-Pacific	1	115
Jakarta, ID	Developing Asia-Pacific	2	294
Chongqing, CN	Developing Asia-Pacific	3	290
Shanghai, CN	Developing Asia-Pacific	4	233=
Seoul-Incheon, KR	Developed Asia-Pacific	5	185
Top 5 in levels of GDP per capita			
Hartford, US	North America	238	1
San Jose, US	North America	184	2
Washington, US	North America	73	3
Bridgeport, US	North America	268	4
Boston, US	North America	88	5

4.5 Summary

4.24 Between 2000 and 2008 most UK city-regions performed strongly, albeit from different starting points in the group of 275 OECD city-regions. Of the 15 UK city-regions, GDP per capita grew faster than the OECD average in 10: Portsmouth, Edinburgh, Glasgow, London, Newcastle, Bristol, Sheffield, Cardiff, Leeds and Liverpool; and below the OECD average in 5: Nottingham, Birmingham, Manchester, Leicester and Bradford.

4.25 However, over a longer period, 1993-2007, and in the broader global context set by the rapidly accelerating growth rates of city-regions in the 'Developing Asia Pacific' region and notably in China, the performance of UK city-regions in terms of GDP per capita growth was more modest. London was the fastest growing of the UK city-regions at 3.5% annually, reinforcing both its national and global standing. The other city-regions had GDP per capita growth rates squeezed between 2.6% and 3.3%. These growth rates put four in the second quintile of global growth, 7 in the third and 4 in the fourth, with rankings ranging from 81st to 134th out of 300 metro regions. Globally the fastest growing city-regions were all found in China. Indian and South Korean, and some Eastern European capitals, also grew quickly. The growth rates in these city-regions substantially exceeded those in the UK.

4.26 In the 2008-2010 recession years, GDP per capita fell in 195 of the 275 OECD city-regions (71%). It fell in all 15 UK city-regions. In 13, the fall was greater than the OECD average: Leeds, Nottingham, Leicester, Glasgow, Cardiff, Birmingham, London, Edinburgh, Liverpool, Manchester, Newcastle, Sheffield and Bradford. Only 2 - Portsmouth and Bristol - performed better than the OECD average.

4.27 This performance was reinforced in the broader global context of 300 metro-regions. In the worst recession year, GDP per capita in UK city-regions fell by between 2% and 6%. None were in the top quintile of global growth/decline in the recession and only two in the second quintile – Edinburgh and Glasgow. Eight were in the third quintile and four in the fourth, including London. Birmingham, with its decline of 6% fell into the fifth quintile. Global rankings in terms of growth/decline, ranged from 104th to 243rd. The performance of UK city-regions in this broader global context noticeably worsened over the recession.

4.28 The falls in GDP per capita in UK city-regions were typical of Western European city-regions as a whole. GDP per capita fell in real terms in at least one year in all Western European city-regions during the downturn and the same was true for all North American city-regions. In other global regions, Developed Asia-Pacific, Eastern Europe & Central Asia, Latin America, and the Middle East & Africa, the picture was slightly more mixed with only a majority of city-regions in these countries experiencing decline in at least one year. But standing out in sharp contrast was the Developing Asia-Pacific region, in which Chinese city-regions in particular experienced continued growth in every single year.

4.29 In terms of changes in global OECD rankings 2000-2010, the performance of the 15 UK city-regions is almost evenly divided. 7 moved up the rankings: Glasgow, Newcastle, Sheffield and, notably, Portsmouth, Edinburgh, London and Bristol. While 8 slipped down: Cardiff, Liverpool, Manchester and, notably, Leicester, Bradford, Nottingham, Birmingham and Leeds.

4.30 In the broader global context the gap in terms of relative wealth - measured by levels of GDP per capita in 2012 – between UK city-regions and those in the developing world remains significantly wide. For example in the ‘Developing Asia Pacific’ region, all Indian and most Chinese city-regions with some notable exceptions, still remain among the poorest in global rankings despite their recent growth. UK city-regions compare less well overall with their North American and Western European counterparts. Only London and Edinburgh are in the top quintile. None are in the second. The rest are split relatively evenly between the third and fourth quintile. This distribution not only lags those in the rest of Western Europe and North America but also that in the ‘Developed Asia Pacific’ region.

5. CONCLUSIONS

5.1 We have drawn on secondary data to explore the relative economic performance of UK city-regions nationally and internationally in both growth and recession. The overriding message is one of uneven development with some significant geographical patterns discernible.

UK city-regions in the national context

5.2 Within the UK, London dominated productivity growth in the boom years along with a small group of second-tier and a larger group of third-tier city-regions. London grew fastest among leading city-regions – but some third-tiers performed more strongly than second-tier. The 'north-south' gap in productivity performance widened over the years of growth but there were some notable exceptions with a number of northern high performers and city-regions in the devolved administrations. While some northern second-tier city-regions had very strong employment growth, they were overshadowed by a group of southern third-tiers. Unemployment fell everywhere. Some of the northern city-regions – both second – and third-tier had some of the highest falls in unemployment rates. Excluding London, the southern city-regions had the same decline in unemployment rates as their northern counterparts as a whole. Population growth was stronger in the southern city-regions but northern city-regions continued to be important population centres.

5.3 In the UK, many of the fears of the impact of the recession on city-regions have been borne out. Nowhere has been immune. Many of the leading city-regions have been badly affected. London has performed strongly but it has not sustained the exceptional gains of the boom. Second-tier city-regions have generally performed worse than national but with some exceptions. Some city-regions in the devolved administrations have performed relatively well. However, despite the slowing down of productivity in the southern city-regions as a whole, the gap in relative performance with their northern counterparts remains large, and on a range of measures – population, output, employment and labour market – the south has outperformed the north.

UK city-regions in Europe

5.4 There have been significant regional differences in the economic performance of European city-regions and within the latter in the relative performance of UK city-regions across boom and recession. In the growth years only 2 UK city-regions – London and Edinburgh – started out with GDP per capita figures above the average for the leading group of city-regions and all 14 UK city-regions had below average productivity change between 2000 and 2008. The recession has had a significant impact on the relative performance and European standing of UK city-regions. Productivity has fallen in all of them and only 4 of the 14 city-regions have had a below average decline. Overall, the economic position of UK city-regions in Europe – with the exceptions of London and Edinburgh – has worsened.

5.5 In the boom, leading second-tier city-regions had GVA per capita growth rates above their capitals in 18 of the 26 European countries that we compared. The UK was one of these countries, but with only 2 of its 13 second-tiers having growth rates above London's, both in Scotland: Edinburgh and Glasgow. In the recession, leading second-tier city-regions have still been outperforming capitals in terms of rates of growth/decline – again, in 18 of the 26 European countries. In the UK, just over half of the second-tiers – 7 of 13 – had rates of decline in the recession years less than London's.

5.6 Despite the relatively strong performance of leading second-tier city-regions in both growth and recession, however, the gap between second-tiers and capitals still remains significant in most countries. The top second-tier city-region outperforms the capital in terms of GDP per capita in only 4 countries and the UK is not one of them. The UK falls into the group of 5 European countries in which its leading second-tier, Edinburgh, lags behind the capital in GDP per capita by between 2% and 20% – in Edinburgh's case by 7%.

UK city-regions' global performance

5.7 Globally between 2000 and 2008 most UK city-regions performed strongly, albeit from different starting points in the group of 275 OECD city-regions. Of the 15 UK city-regions, GDP per capita grew faster than the OECD average in 10: Portsmouth, Edinburgh, Glasgow, London, Newcastle, Bristol, Sheffield, Cardiff, Leeds and Liverpool; and below the OECD average in 5: Nottingham, Birmingham, Manchester, Leicester and Bradford. Whilst the UK city-regions performed relatively well as a group, globally the fastest growing city-regions were all found in China. Indian and South Korean, and some Eastern European capitals, also grew quickly. The growth rates in these city-regions substantially exceeded those in the UK.

5.8 The recession has hurt. GDP per capita fell in 195 of the 275 global city-regions (71%) in the 2008-2010 recession years. It fell in all 15 UK city-regions. In 13, the fall was greater than the OECD average: Leeds, Nottingham, Leicester, Glasgow, Cardiff, Birmingham, London, Edinburgh, Liverpool, Manchester, Newcastle, Sheffield and Bradford. Only 2 – Portsmouth and Bristol – performed better than the OECD average. In terms of changes in global rankings 2000-10, the performance of the 15 UK city-regions is almost evenly divided. 7 have moved up the rankings: Glasgow, Newcastle, Sheffield and, notably, Portsmouth, Edinburgh, London and Bristol. While 8 slipped down: Cardiff, Liverpool, Manchester and, notably, Leicester, Bradford, Nottingham, Birmingham and Leeds.

5.9 The falls in GDP per capita in UK city-regions were typical of Western European city-regions as a whole. GDP per capita fell in real terms in at least one year in all Western European city-regions during the downturn and the same was true for all North American city-regions. In other global regions, Developed Asia-Pacific, Eastern Europe & Central Asia, Latin America, and the Middle East & Africa, the picture was slightly more mixed with only a majority of city-regions in these countries experiencing decline in at least one year. But standing out in sharp contrast was the Developing Asia-Pacific region. Here Chinese and Indian city-regions have experienced continued growth in every single year. It is important to be mindful of the differing start points of the city-regions in the various countries, for example all Indian and most Chinese city-regions, despite their high percentage rises still remain among the poorest in terms of GDP per capita in the global rankings. For the UK city-regions GDP per capita levels in 2012 range from London and Edinburgh, who are among the best performing in the world, to a large group of UK city-regions that, when compared with North American and Western European counterparts, are among the weaker performing.

So what is the balance sheet?

5.10 The boom brought gains to many city-regions in Europe. Many lagging and intermediate city regions improved their performance. But in most countries, especially the UK, they did not close the gap with the more successful city-regions, in particular the capitals. Our work shows that the size of a city-region does matter to its economic performance. But its regional location matters more. Northern city-regions overall have not done as well as those in the south and London. And city-regions in the devolved administrations have performed better than many in the north. The established urban hierarchy was marginally challenged by the boom but has been reasserted during the recession and many northern city-regions are slipping. However, a set of third-tier southern city-regions and a powerful group of Celtic city-regions - Aberdeen, Edinburgh and Belfast in the devolved administrations – have performed very strongly. Given the policy debate about the need to rebalance the UK economy and the argument that London and the devolved administrations have significant policy advantages and tools over city-regions in northern England, this emerging pattern of performance cannot be ignored.

5.11 Similar patterns during the boom and recession can be found in Europe. The gains that investment achieved were obvious - if uneven. The risk now is that disinvestment during the recession across the UK and Europe will reinforce regional economic divisions. And all this is being played out in a global context in which city-regions in countries such as China are growing rapidly with the weight of global economic power shifting accordingly. For the UK the need for an informed debate about the economic contribution of its city-regions and the role of public and private sector investment remains as urgent as ever if we are to rebalance our national economy and compete with Europe and the rest of the world.

Annex 1: City-region boundaries

This annex explains the city-region boundary definitions used in this report.

Four sets of boundaries have been used, reflecting four aims:

(i) To capture the 'functional urban area' of the city-regions, i.e. their core plus surrounding areas linked by commuting flows

(ii) To choose a geographic scale at which a comprehensive set of data was available

(iii) To select boundaries that were similar at national and international scales

(iv) To select boundary definitions that worked well, not just for larger capital and second-tier city-regions, but also for smaller third-tier city-regions

National Analysis

For the national analysis, **Urban Audit 'Larger Urban Zone' (LUZ)** boundary definitions have been used. There is no standard set of city-region boundaries that are routinely used in the UK. These LUZ definitions, drawn up by DG-Regio, approximate the 'functional urban region' or city-region for cities across Europe. They aim to capture both economic core and functional extent. They have Local Authority and ward-based boundary definitions for city-regions in the UK that are more sensitive to the extent of a city-region than definitions that are based on the lowest level of the EU's 'NUTS' ('Nomenclature of Territorial Units for Statistics') regional classification, 'NUTS 3' regions, which have populations between 150,000 and 800,000. Local Authority data are widely available at the national level. The latest set of Urban Audit boundary definitions have been used, see Map 21.

LUZs comprise a core city, defined on the basis of population density, plus inclusion of surrounding Local Authorities determined on the basis of out-commuting rates. A principle of spatial contiguity is also applied, plus consultation between DG-Regio and experts in national statistical offices. For further details see *'Cities in Europe – The New OECD-EC Definition',* Dijkstra, L. & Poelman, H. (2012)

The national analysis also includes substantial examination of Gross Value Added (GVA) data sets. These data are published at NUTS 3 level. To include GVA data, NUTS 3 approximations of the LUZs were required. To be included in these NUTS 3-based approximations, a LUZ had to contain more than 50% of the population of the NUTS 3 in question. Map 22 shows the boundaries of the 46 city-regions using this method.

European Analysis

For the European analysis, **Eurostat's metro-region** boundary definitions have been used. Eurostat is the leading data source at European level and it publishes its data at metro-region level, which are NUTS 3 based, and for NUTS 3 regions, which can be aggregated to metro-region boundaries. Data are available for a wide range of indicators. The NUTS 3 building block geographies are typically larger than the Local Authority building blocks that make up LUZs, and consequently are more prone to over- or under-bounding. However the virtue of comprehensive data availability at NUTS 3 level makes these boundaries the ones to use, see Map 23.

Eurostat's **Metro-regions** were defined by DG-Regio in conjunction with OECD. Metro-regions are NUTS 3 approximations of an earlier set of Larger Urban Zones (see *'Regional Focus, No.1, 2009, Metropolitan Regions in the EU',* Dijkstra, L. (2009), European Commission, for more details). They therefore share the same roots as LUZs, i.e. they aim to capture the functional urban region or city-region and are defined on the basis of self-contained labour markets.

Global Analysis

For the global analysis two sets of boundaries have been used: **(i) OECD's metropolitan areas**, see Map 24, and **(ii) Global Metro Monitor Metro Areas**, see Map 25. These are our principal data sources for the global analysis.

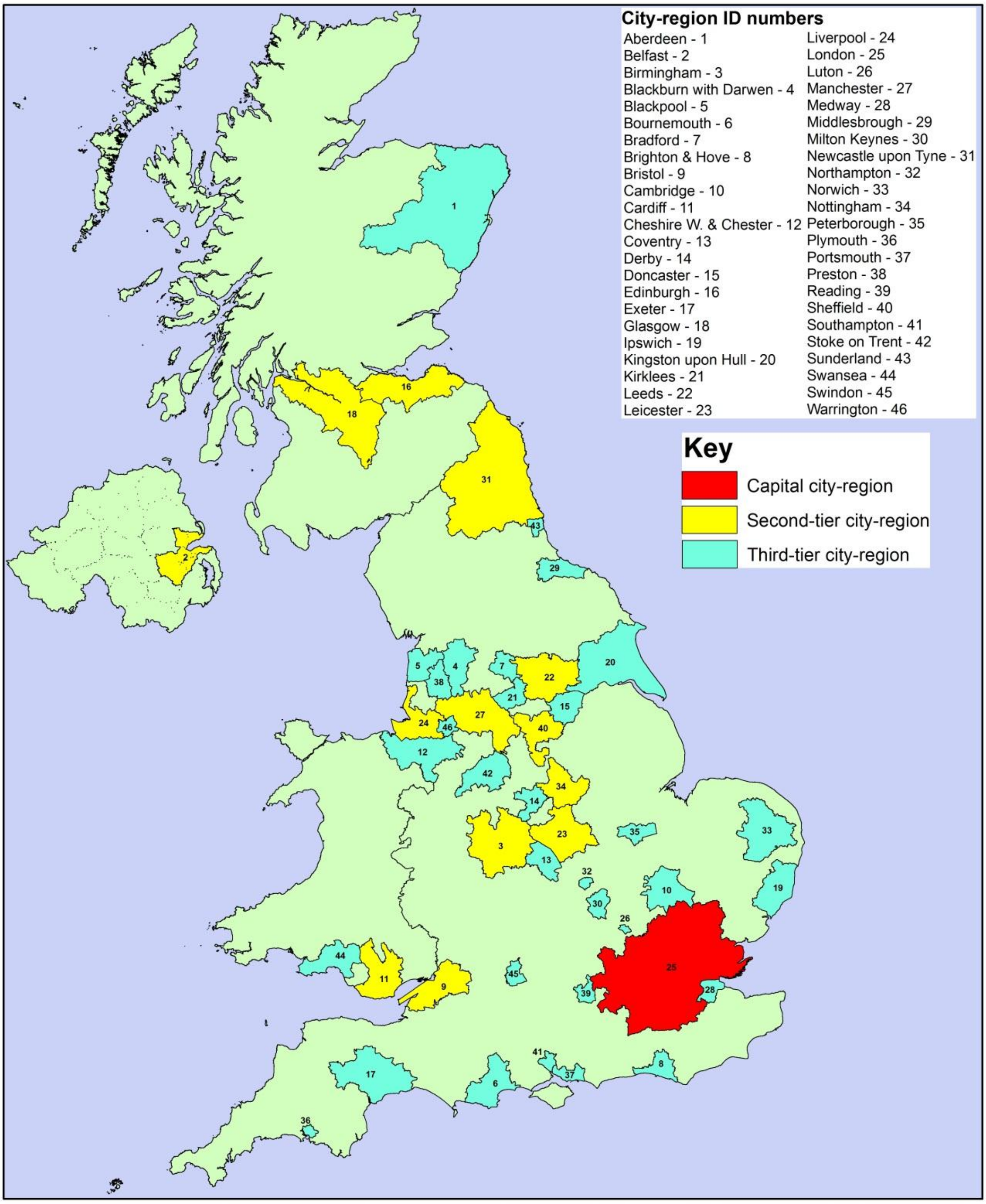
OECD publishes data for 275 metropolitan areas in 28 OECD countries across Europe, North & South America and the Far East. The definitions of UK metropolitan areas are expressed in terms of 2001 Census wards and are based on 1 km grid square population density thresholds. GDP data at OECD's 'Territorial Level 3' (TL3) level have been apportioned using a population-weighted 1km grid.

OECD **metropolitan areas** are identified using 1km grid square population density disaggregated Corine Land Cover data. First, contiguous or highly interconnected densely inhabited urban cores are identified. Second, interconnected urban cores that are part of the same functional areas are identified. Third the commuting belt or hinterland of the urban core is calculated. See '*Redefining "Urban" – A New Way to Measure Metropolitan Areas'*, OECD, 2012, for more details.

The Brookings Institution's Global Metro Monitor provides data on the 300 largest metropolitan economies in the world, drawn from the McKinsey Global Institute's Cityscope 2.0 database. It includes city-regions from 55 countries across 7 global regions: Developed Asia-Pacific; Developing Asia-Pacific; Eastern Europe and Central Asia; Latin America; Middle East and Africa; North America; and Western Europe.

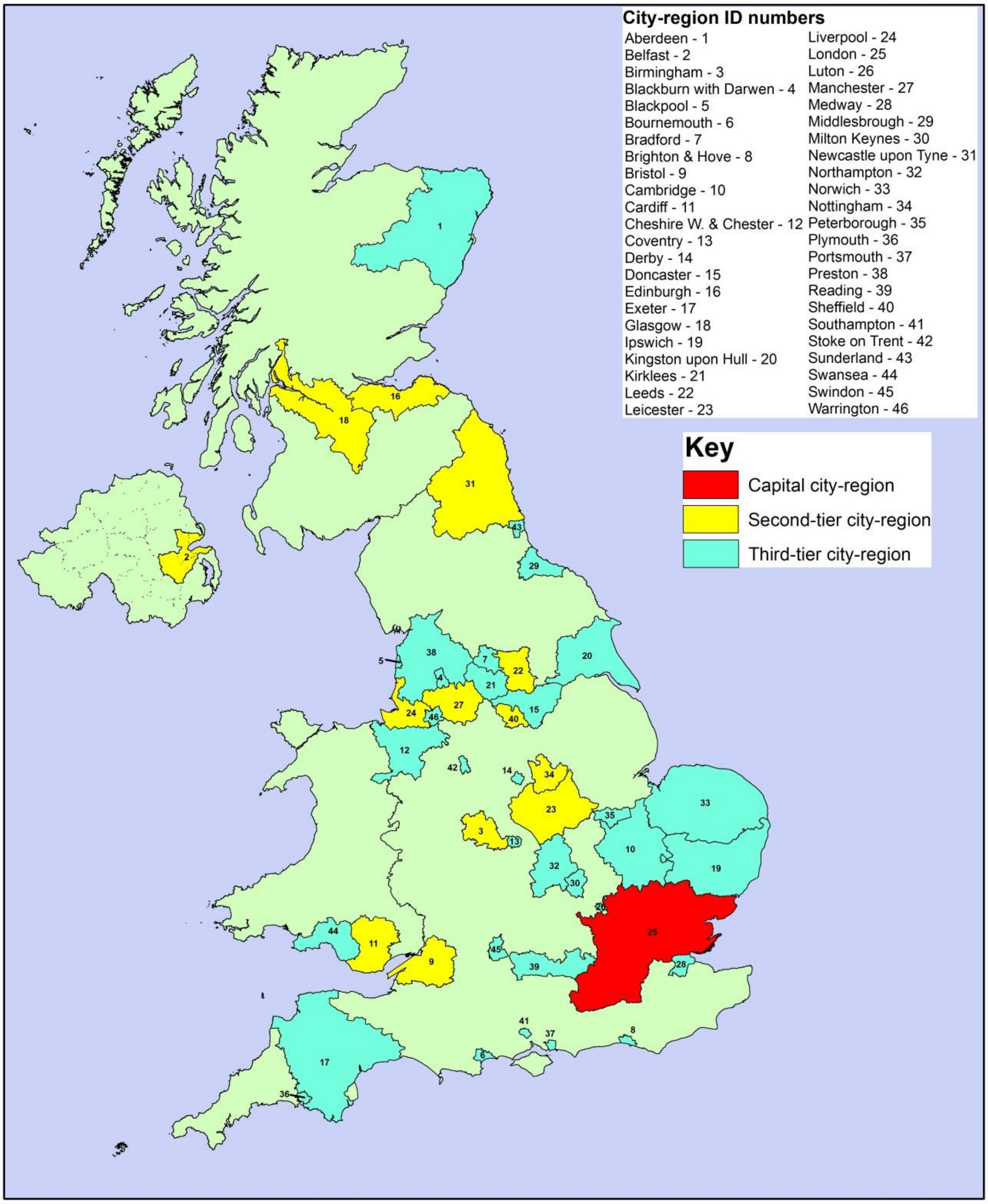
Global Metro Monitor **Metro Areas** have been selected primarily on the basis of size of metropolitan economy. The definition of Metro Areas are economic regions with one or several cities plus surrounding areas linked by economic and commuting ties. Boundary definitions for UK city-regions are from the European Observation Network for Territorial Development and Cohesion (ESPON). These are metro areas with one or more functional urban area of more than 500,000 inhabitants, plus linked surrounding areas based on municipal level commuting data. United States metro areas use federal Office of Management and Budget (OMB) definitions. Metropolitan areas outside the United States and Europe use official definitions where possible. See *'Global Metro Monitor 2012'* by The Brookings Institution, 2012, for more details.

Map 21: The 46 UK City-regions by Local Authority Boundaries



Sources: Boundaries downloaded from UK Data Service. Contains Ordnance Survey data © Crown copyright and database right 2013.

Map 22: The 46 UK City-regions by NUTS 3 Boundaries



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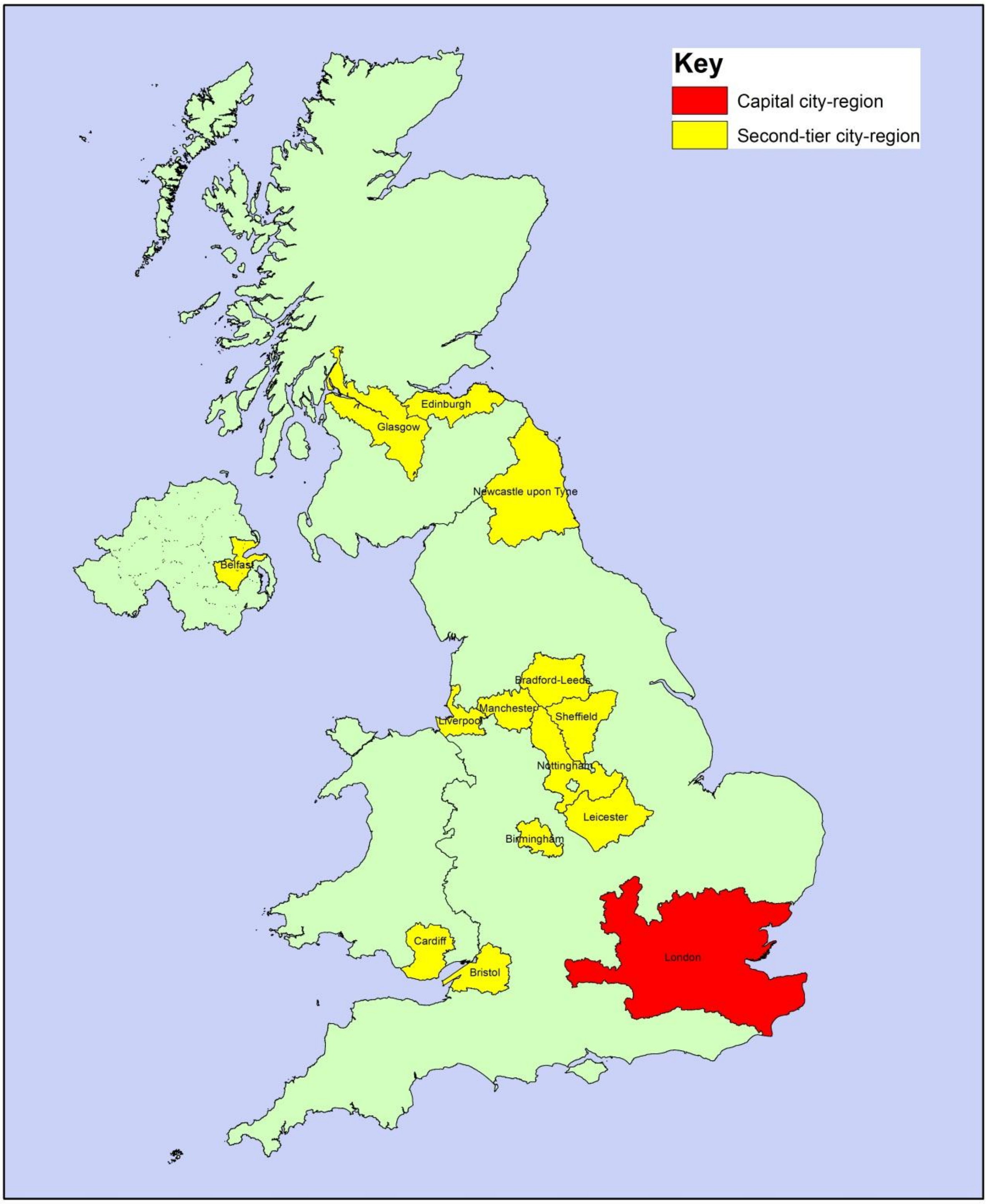
Map 23: European Analysis - The 14 UK City-regions Eurostat Definitions by NUTS 3 Boundaries



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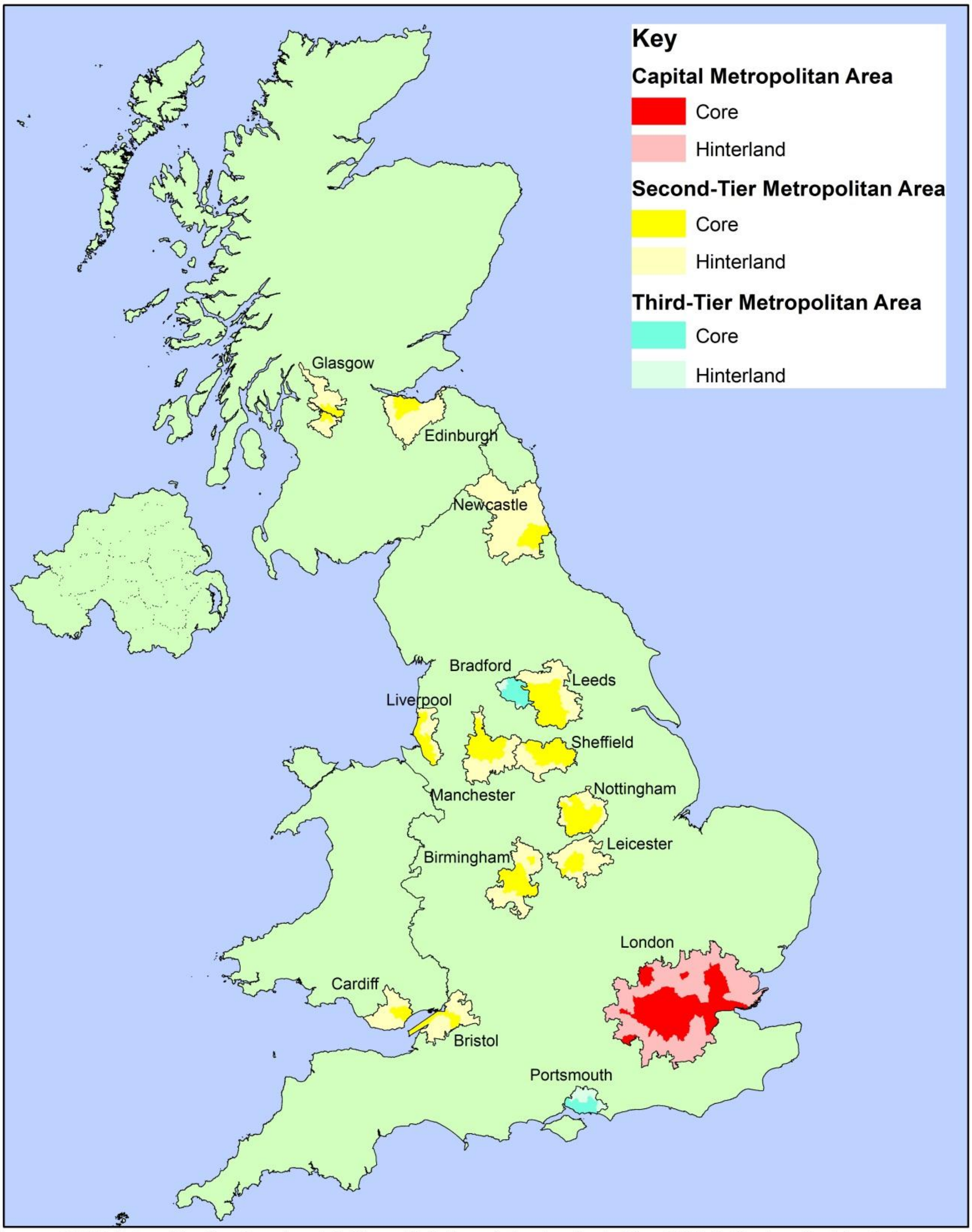
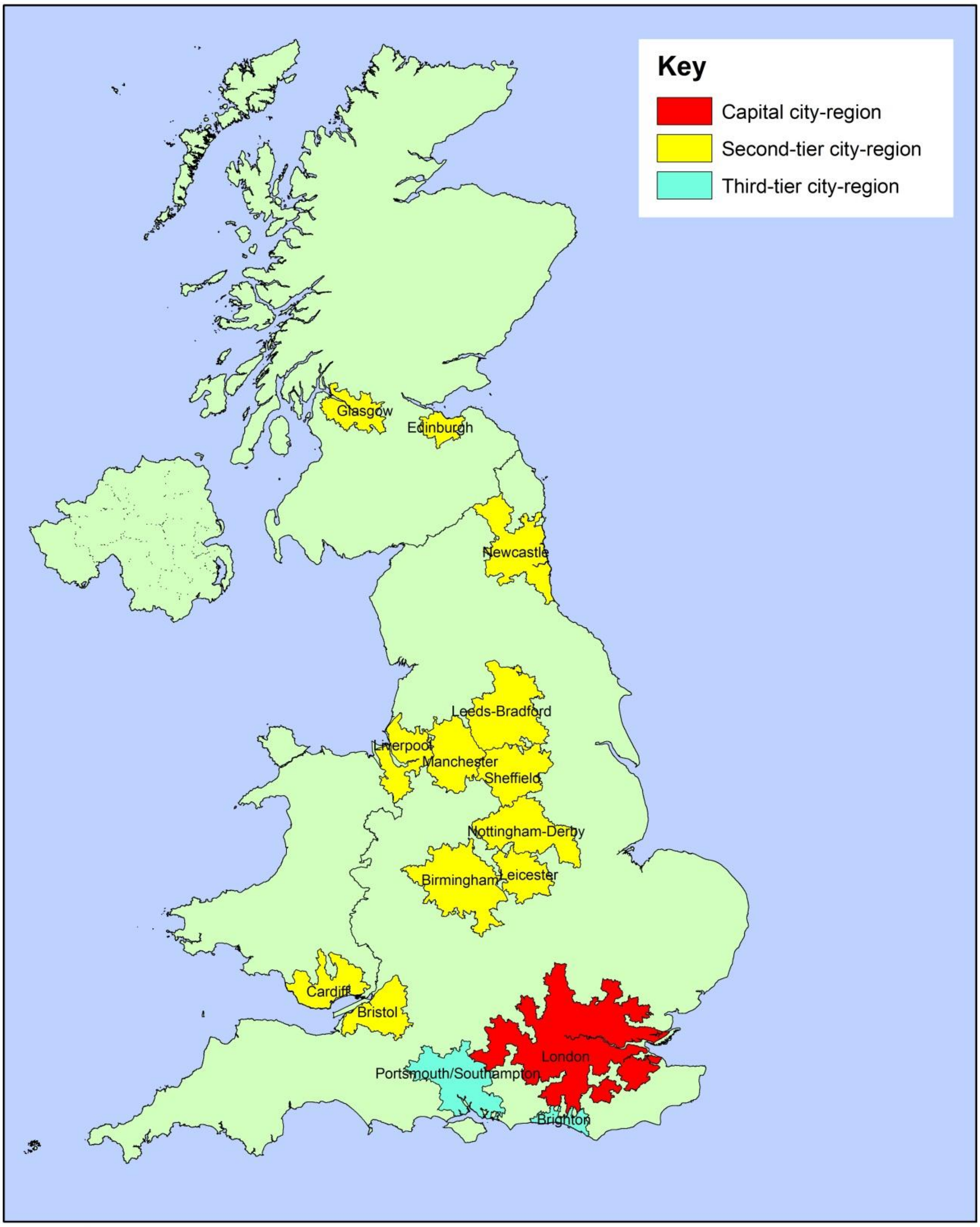
Map 24: Global Analysis - The 15 UK City-regions OECD Boundary Definitions



Sources: OECD Metropolitan Area boundary definitions; Digital boundaries downloaded from UK Data Service. Contains Ordnance Survey data © Crown copyright and database right 2013. EIUA classification: Capital, Second-Tier and Third-Tier.

Map 25: Global Analysis - The 15 UK City-regions Global Metro Monitor Boundary Definitions



Sources: The Brookings Institution Global Metro Monitor 2012; Didier Peeters, Free University of Brussels, IGEAT;
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Some city-region names have been simplified for presentational reasons.

Annex 2: List of Figures, Maps & Tables

Figures

Maps

Tables

March 2014