Europe

of metropolitan areas in North Western

Dominique Lecomte IAURIF

he purpose of this article is to present an assessment of the economic positioning of metropolitan areas in North Western Europe in relation to each other, at the end of the 1990s, in both static (level values) and dynamic terms (trends). Given the conditions in which "regional" statistics are produced in Europe, it is difficult to compare the economic performance of metropolitan areas in these regions. The "regional" statistics produced annually by the national statistical offices and Eurostat relate to political and administrative entities that are totally irrelevant to metropolitan areas and their spheres of influence. These data therefore cannot be used for reliable comparative studies of economic trends in metropolitan areas. To produce meaningful comparative studies on this subject, it is first necessary to give satisfactory answers to three key questions.

Gobry/Dreif



It is of crucial importance to define the appropriate territories on which to base a comparative study of metropolitan areas. The economy of a metropolitan area is based mainly on corporate activity. When deciding where to locate and where to develop their activities, companies pay no attention whatsoever to the administrative boundaries of French regions, Belgian provinces, German Länder or British counties. They conduct their business in territories chosen on the basis of criteria such as the supply of labour, access to markets, transport-communication infrastructure, sub-contractors. services and research centres, as well as the availability of commercial property. In other words, they conduct their business within the limits of functional regions. Therefore, before comparing the economies of metropolitan areas, they must be defined on the basis of such criteria.

(1) Method

The scope of the territories called FURs was defined in two stages.

1 – Definition of the economic core of an urban region: it encompasses all the adjacent municipalities whose employment density exceeds seven jobs per hectare.

2 – Definition of the economic sphere of influence of an urban region: it takes in all the municipalities located outside the core economic area that have in common the fact that over 10% of their economically active population work on a daily basis in the economic core of the urban region of which the municipality forms part.

These definitions were produced using the data from the latest census material available when the study was launched, that is, in early 2000.

In the GEMACA study, the criterion used for defining the scope of regional territories was the labour pool or labour market area, also known as the job catchment area. The scope of the labour market area is very broad: it takes in almost all the infrastructures and services that companies need in order to conduct their business. These regional territories, called Functional Urban Regions (FURs), were defined on the basis of common criteria1 so as to make them as comparable as possible. Fourteen such territories were identified from all the FURs in North Western Europe with a population of over one million inhabitants, namely: Dublin, London, Birmingham, Manchester, Liverpool, Glasgow, Edinburgh, Paris, Lille, the Randstad (Amsterdam-Rotterdam), Brussels. Antwerp, Rhein-Ruhr (Düsseldorf-Cologne) and Rhein-Main (Frankfurt). From now on, in this article, the words region and metropolitan area are synonymous with FUR.

Defining the territories to be compared is relatively simple, but it raises a second much more difficult issue.

What statistics should we use?

As we have seen, FURs were defined on the basis of municipalities. Collecting comparable annual statistical data on functional city regions in six countries posed a major problem: such data did not exist at municipal level, with the notable exception of data collected in population census years. So, to take up this challenge, it was decided to

produce annual data at the level of each region as a whole, and not at municipal level. The GEMACA team did this in cooperation with the national statistical offices (NSO) of the countries concerned and Eurostat.

A great deal of the data thus produced originated from the Labour Force Surveys conducted every year by the NSOs, and coordinated by Eurostat. These large-scale surveys provided reliable statistical data at national level and at the level of the major regions. Eurostat was responsible for making the regional data from the various countries comparable with each other.

On the basis of the Labour Force Surveys for the period 1992 to 1999, the NSOs and Eurostat produced the statistical data required on households, the economically active population, the job market and unemployment. These statistics related to FURs in the case of four regions (Paris, Lille, Brussels and Antwerp), and to very similar territories in the case of the other regions concerned. However, some NSOs met with technical difficulties, so it was not possible to collect exhaustive data on every year and every region.

The production-related data (GDP) used to assess the economic positioning of the regions concerned related to all the statistical territorial units at the NUTS 3 level closest to the FURs. They were produced by Eurostat.

The third key question concerns the choice of indicators. Needless to say, a truly satisfactory answer to this question depends on the availability of the data.

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What indicators should we adopt?

In the preceding article, Professor Ian Gordon underscores the fact that there is no reliable single indicator of the economic performance of metropolitan areas. He therefore suggests three performance indicators: first, export performance; second, output and employment growth; and third, productivity. But, in his view, none of these indicators is totally unbiased. Because of the lack of data on exports at the level of FURs (or similar territories), the first indicator cannot be used.

Our comparative assessment of the economic positioning of city regions is based on four main indicators: population, employment, production (output) and unemployment. This fourth indicator is required because, in our view, a region that does not feature full employment cannot be rated as a "high performance" territory. We emphasise that these four indicators are highly correlated. Therefore, in order to assess the economic positioning of the regions concerned in relation to each other, all four of them have to be taken into consideration.

The results of the assessment presented below have to be interpreted cautiously, for two reasons. First, allowances must be made for the fact that the economic cycles of European countries are not synchronous and particularly affect the major metropolitan areas. Therefore, the period over which inter-regional comparisons are made is debatable. Second, many of the data used were collected by sampling (Labour Force Surveys), so their degree of accuracy must not be exaggerated.

In order to compare
the economic positioning of the regions
four main indicators have been taken into
consideration: population, employment,
production and unemployment.

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Readers are therefore invited to focus more on proportions and trends rather than absolute figures.

Readers will find maps of the functional urban regions on pages 22-31.

Economic positioning of the regions in static terms (level values)

The size of metropolitan areas in terms of population, jobs and production

The size of a metropolitan area is a factor of support for the competitiveness of the companies located within its boundaries. The economic benefits of critical mass are numerous. Compared with smaller towns and cities, a large metropolis provides companies with a broader range of services, a more skilled and diversified labour force, a larger customer base, more specialised suppliers and greater scope for outsourcing. It also provides better access to knowledge, information, institutions, research, innovation, finance and more interpersonal communication due to greater proximity. Furthermore, in a large metropolis, it is easier to gain access to inter-city or international high-speed transport networks (high-speed trains, airports) and to broadband (high bit rate) communication networks. Finally, in a large metropolis, competitive pressure is greater, which encourages companies to innovate and to differentiate their products. All these benefits of large metropolitan areas make it easier for companies to enhance their productivity, the prerequisite for maintaining their European and global competitiveness and even, in some cases, for ensuring their very survival.

The size of the metropolitan areas in terms of population, jobs and GDP

	Population		Jobs in 1999		GDP in 1999		
FURs	Years	Population (thousands)	Share of national population	Jobs * at the place of residence (thousands)	Share of national total	GDP (billions of Euros)	Contribution to national GDP
London	1997	13 230	22.9 %	6 350	24.1 %	413.2	30.2 %
Paris	1999	11 750	20.5 %	4 890	21.6 %	395.2	29.3 %
RheinRuhr	1997	11 700	14.5 %	5 110	14.3 %	302.4	15.3 %
Randstad	1999	6 980	45.2 %	3 090	40.9 %	185.3	49.6 %
RheinMain	1997	4 010	5.0 %	1 700	4.7 %	132.7	6.7 %
Bruxelles	1999	3 670	35.9 %	1 390	35.1 %	96.4	40.9 %
Birmingham	1997	3 070	5.3 %	1 320	5.0 %	55.9	4.1 %
Manchester	1997	2 680	4.6 %	1 220	4.6 %	52.3	3.8 %
Lille	1999	1 940	na	640	na	na	na
Glasgow	1997	1 770	3.1 %	730	2.8 %	46.5	3.4 %
Antwerpen	1999	1 540	15.1 %	610	15.4 %	38.9	16.5 %
Liverpool	1997	1 370	2.4 %	530	2.0 %	22.6	1.7 %
Dublin	1996	1 300	36.6 %	670	43.2 %	42.3	47.5 %
Edinburgh	1997	830	1.4 %	400	1.5 %	20.8	1.5 %

* Year 2000 for UK FURs.

Sources: Population census, Labour Force Surveys and Eurostat

That said, large metropolitan areas also have drawbacks compared with smaller towns and cities. These obstacles to corporate high performance include greater congestion, pollution and insecurity, as well as the higher cost of land, which discourages inward investment in innovation and forces ordinary businesses to leave.

London: Europe's top economic region, ahead of Paris and the Rhine-Ruhr area

In terms of size (population, jobs and production), the differences between the 14 regions are very great: the population of the London area is 16 times that of Edinburgh and its output 20 times as large (see Table).

London, Paris and the Rhine-Ruhr regions are North Western Europe's three largest economic areas. Their populations range from 11.7 to 13.2 million inhabitants. According to the three criteria mentioned above, London is the top economic area in North Western Europe, and probably in Europe as a whole too. Close behind London come the Paris and Rhine-Ruhr areas. A study of the comparative level values of these three areas shows, first, that the percentage of the population of London that is economically active is relatively high, and, second, that there is a relatively large output gap between the Paris and Rhine-Ruhr areas, whereas they are of comparable size in terms of the other criteria.

Four regions have populations ranging from three to seven million inhabitants: the Randstad, the Rhine-Main region, Brussels and Birmingham. The populations of the seven other regions are less than 2.7 million inhabitants. The relative size of the Dublin area varies according to the criterion used: it comes 13th, just ahead of Edinburgh, in terms of population, but gains two places in terms of the number of jobs or of GDP, ahead of Antwerp and Liverpool.

national economies as a whole is very great: the Randstad accounts for 45% of the population of the Netherlands and 50% of Dutch GDP; Dublin 37% of the population and 47% of GDP; Brussels 36% of the population and 41% of GDP; London 23% of the population and 30% of GDP; and Paris 20% of the population and 29% of GDP.

The weight of five regions relative to their

In terms of size (population, jobs and production), London is the top economic area in North Western Europe, and probably in Europe as a whole too.

D. Lecomte/laurif



On a European and global scale, the economic vigour of the London and Paris areas is considerable. Thus, in 1999, the GDPs of London (EUR 413bn) and Paris (EUR 395bn) surpassed that of the OECD member country ranked 9th according to this criterion (the Netherlands, whose GDP amounted to EUR 374bn).

To complete this comparative overview of the regions in terms of level values, we shall now go into more detail by reviewing the following items: age structure of the population, level of education, participation rate, part-time work as a percentage of total employment, the relative weight of the industrial and service sectors, output per job, output per inhabitant and unemployment. Each of these indicators shows marked differences between the regions.

The competitive advantage of a young population

A young population helps to sustain the vigour of a regional economy. In 1999, the age structure of the 12 regions for which data existed was very different.

The Graph is an age stucture indicator showing the ratio of people aged 65 and over to people aged under 25 in 1999.

In 1999, the average ratio for all the regions was 47% in 1999. Between the youngest region and the oldest, the ratio varied from 24% to 66%. On average, the population of the 12 metropolitan areas was younger than that of Europe as a whole.

Dublin stood out sharply from the rest of the regions as having the youngest population: young people outnumbered elderly people by four to one.

The Paris, Lille, Manchester and London areas also stood out as young. The good ranking registered by Paris was mainly due to the fact that the over 65s represented a relatively small proportion of the total population of the region in 1999.

The populations of the city regions in Belgium and Germany were relatively old. In the most elderly region (the Rhine-Ruhr), the ratio of young to elderly people stood at only three to two.

Level of education

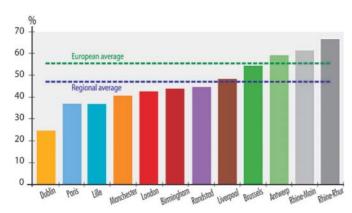
The population of metropolitan areas also differed from each other in 1999 by level of training. Labour Force Surveys provided data on the highest education obtained by the populations of 11 regions.

The Graph shows the percentage of the population aged 25 to 64 who were higher education graduates in 1999.

The proportion of the population who were higher education graduates was greater in the metropolitan areas than in the European Union as a whole (27% compared with 21%).

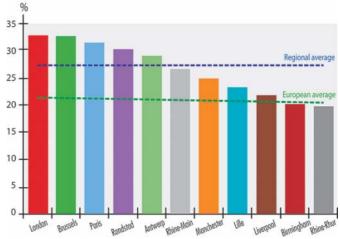
London and Brussels had the largest populations of university graduates. The number of university graduates was above the regional average in Paris, the Randstad and Antwerp. By contrast, the regions whose major urban development had occurred during the second industrial revolution (Manchester, Lille, Liverpool, Birmingham and the Rhine-Ruhr region) had smaller populations of university graduates than the rest.

Age indicator: the population of 65 year olds and over in relation to the population of under 25s



Source:1999 Labour Force Surveys

Higher education graduates as a percentage of the population aged 25 to 59



Source: 1999 Labour Force Surveys

Participation rate of the economically active population

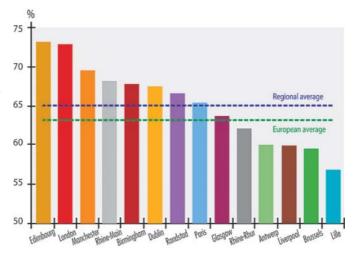
The participation rate of the economically active population is measured by the employment rate, that is, the percentage of residents aged from 15 to 65 years old who are effectively in employment. The employment rate indicates the job creation performance of a country or region.

In Labour Force Surveys, the jobs occupied by the population surveyed are counted as being at the employees' place of residence. So the job data for 1999 included jobs located both inside and outside the FURs, as some people employed within FURs did not reside there. The number of jobs occupied by the population residing in a given FUR therefore did not exactly match the total number of jobs in this region. However, as the FURs had been defined as the labour pools or the labour catchment areas of city regions, the differences between the number of "jobs filled" and the number of jobs located in the FURs concerned were relatively small.

In 1999, on average, the residents of European metropolitan areas who were of working age were more economically active than the population of Europe as a whole (65% participation rate compared with 62%). However, the average employment rate in European metropolitan areas was low compared with the United States (74.2 %) or Japan (74.4%). The regional differences in the employment rates recorded were great not only between the different North Western European countries, but also between different parts of each country, such as Edinburgh and Liverpool, the Rhine-Main and Rhine-Ruhr regions or between Paris and Lille. Thus, for example, the participation rate of the population of working age is 25% higher in Edinburgh than in Lille.

At a summit meeting in Lisbon in March 2000, Europe's political leaders set as a strategic objective the achievement of a 70% employment rate by 2010. In 1999, London and Edinburgh alone surpassed this rate.

Employment rate in 1999



Source: 1999 Labour Force Surveys

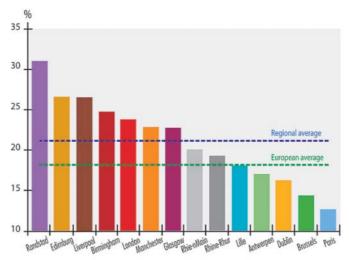
The percentage differentials are even more striking when expressed in absolute terms. To reach the same employment rate as London (71.3%), at constant population levels, Brussels needs to create 290,000 jobs, Paris 525,000 and the Rhine-Ruhr area 835,000.

Part-time employment

In 1999, part-time employment as a share of total employment was higher on average in the metropolitan areas than in Europe as a whole. But the rate differentials between regions were great, ranging from 31% in the Randstad to 13% in Paris.

The part-time employment rates recorded in Dublin and metropolitan areas in Germany and the United Kingdom were very close to the national rates. The situation was very different in the Randstad and Paris: in the Netherlands and France, the national rates (39% and 17% respectively) were much higher than in these two FURs.

Part-time employment as a percentage of total employment in 1999



Source: 1999 Labour Force Surveys

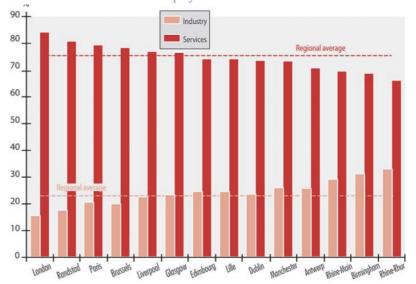
Development of the services sector

Over the last four decades, the main driver of employment growth in Europe has been the services sector. The number of jobs created in this sector over this period has grown nearly twice as fast as that of the total number of jobs create. The share of jobs in the industrial sector has therefore fallen sharply. These two structural trends have been particularly marked in the metropolitan areas because service sector job creation has tended to concentrate in large towns and cities. The share of service sector activity in the metropolitan areas of North Western Europe in 1999. The industrial activity includes the construction sector.

The city regions that have benefited the most from the ongoing structural trends have been those with high rates of service sector employment. These regions are also those that are likely to suffer the least from further desindustrialisation.

In two of the regions, London and the Randstad, service sector employment as a percentage of total employment exceeds 80%. In three regions - Rhine-Ruhr, Birmingham and Rhine-Main - the rate of service sector employment is less than 70%.

Service and industrial sector employment in 1999



Source: 1999 Labour Force Surveys

Apparent labour productivity

The economic output of a country or region is measured by its Gross Domestic Product (GDP). This is the sum of the value added by the various economic sectors, plus taxes and less product subsidies. Apparent labour productivity is the ratio of gross domestic product to the number of jobs. The regional estimates for 1999 relate to 13 FURs defined as "adjusted NUTS 3 areas", that is, the NUTS 3 areas that most

closely match the FURs, the definition of which is based on municipalities.

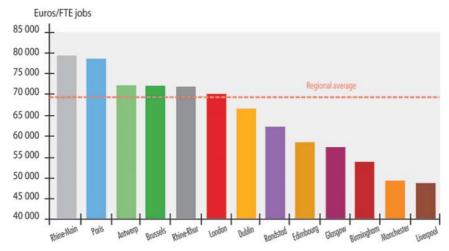
The numerator shows the value of GDP in euros, and the denominator the estimated number of full-time job equivalents ("fte jobs") to take into account the fact that the rates of part-time employment as a share of total employment vary considerably from one region to another.

In 1999, in the 13 FURs, GDP per "fte job" averaged EUR 69,000.

The Rhine-Main and Paris FURs were those with the highest productivity rates, which were nearly 15% higher than the average for the regions concerned.

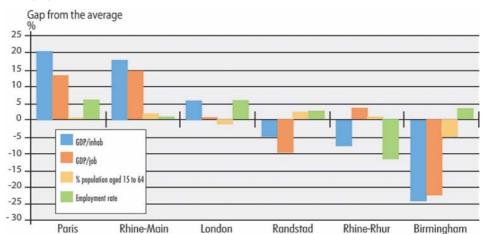
By contrast, the productivity rates of the Randstad, Edinburgh, Glasgow, Birmingham, Manchester and Liverpool FURs were 10 to 30% lower than the average for all 13 regions.

GDP per full-time job equivalent in 1999



Source: Eurostat and GEMACA estimates

GDP per inhabitant, GDP per job, % population 15-64 years old and employment rate in 1999



Source: Eurostat and GEMACA estimates

Production per inhabitant

The best indicator of a FUR's economic performance is output per inhabitant (GDP/inhab.). GDP indicates a FUR's capacity for wealth creation.

GDP per inhabitant is made up of three components:

- productivity (GDP/fte job);
- the population of working age as a percentage of the overall population;
- and the employment rate (fte jobs / population of working age).

The Graph shows values for these components in 1999. Each region is positioned in relation to the average for all 13 FURs. In the graph, the number of regions represented is limited to six in order to make it clearer.

Three of the FURs have a GDP per inhabitant rate that is higher than the average. The Paris and RhineMain FURs lead the field, with Paris slightly ahead of RhineMain (21% above the average for the 13 regions). This outperformance by Paris can be explained by its relatively high productivity per job and fte employment rate. The third criterion, the percentage of the population aged 15 to 64, is close to the average.

The good performance of the Rhine-Main region in 1999 was based on the high level of productivity per job, whereas the two other components were close to the average.

London comes third with GDP per inhabitant 6% above the average. The gap between London, on the one hand, and Paris and the Rhine-Main region, on the other, can be explained by London's lower productivity per job.

The GDP per inhabitant of the three other city regions in the graph are lower than the average. The gaps in relation to the average are as follows:

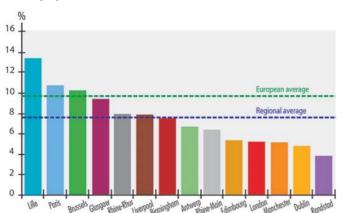
 the Randstad is 5% below the average because of its relatively mediocre labour productivity;

- the Rhine-Ruhr region is 8% below the average because the participation rate of the population of working age is low;
- Birmingham is 24% below the average because of poor productivity and the small percentage of the total population that is of working age.

Unemployment rate

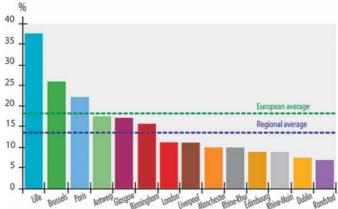
In Europe, 16 million people were unemployed in 1999, that is, 9.4% of the working population. In the 14 regions, the average unemployment rate (7.6%) was lower than in the European Union as a whole. However, there were very significant differences between these regions, with unemployment rates ranging from 3.9% to 13.4%.

Unemployment rate in 1999



Source: 1999 Labour Force Surveys (year 2000 for UK regions)

Unemployment rate among young people in 1999



Source: 1999 Labour Force Surveys (year 2000 for UK regions)

In three regions - the Randstad, Dublin and Manchester - the unemployment rate was less than 5%. In three others - Lille, Paris and Brussels - it was over 10%. And in Paris, it was twice as high as in London.

In all these regions, the young were the most affected by unemployment, particularly in Lille, Brussels and Paris, where the unemployment rate in the 15 to 25 age group exceeded 20%.

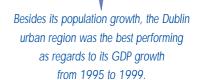
This comparative study of the economic positioning of city regions in North Western Europe in static terms (level values) has highlighted the existence of considerable differences between them regarding their size and their internal characteristics.

Let us now compare their economic positioning in dynamic terms by considering four key trends: population growth, employment growth, production (output) growth and unemployment. This is followed by an overview.



Economic positioning of the regions in the 1990s in dynamic terms (trends)

Owing to the unavailability of statistical data on certain regions, the period over which the annual trends in population, jobs and unemployment are calculated can vary from one city to another. Readers who wish to know exactly over which periods the trends have been calculated can refer to the table on page 76.



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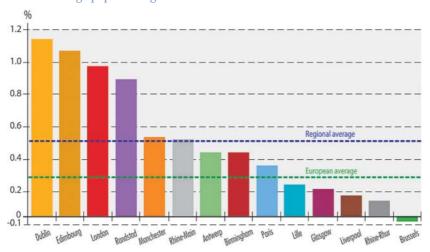
Population growth

The Graph shows the trend in population growth in the FURs over the 1990s.

The total population of the 14 city regions grew at a faster average annual rate (+0.47%) than the total population of Europe (+0.3%). The development of city regions ("metropolisation") therefore continued in the 1990s, but at a very different pace from one FUR to another.

- Four regions stood out from the rest in terms of very vigorous population growth. Their total population grew at twice the average rate for the 14 regions. These four regions were Dublin, Edinburgh, London and the Randstad.
- In five regions, the population grew at less than half the average rate for the 14 regions. These demographically less dynamic regions were Lille, Glasgow, Liverpool, the Rhine-Ruhr region and Brussels.
- In the rest of the 14 city regions, the population grew at relatively moderate rates of between 0.3% and 0.5%.

Annual average population growth



Sources: population census data and GEMACA estimates

Eight FURs recorded faster population growth than Paris, notably London, whose growth rate was three times that of Paris. Between 1990 and 1999, the population of the Paris metropolitan area grew at an annual average rate of 0.32%. This resulted from two contradictory factors: strong natural growth, estimated at +0.79% per annum, and a net migration loss, estimated at -0.47% par annum.

Employment growth

Labour-Force Surveys provide estimates of the number of jobs, which are counted as being located where the employees live. The data available for all the FURs relate to the years 1994 and 1999 (year 2000 for city regions in the UK).

Over this period, employment in the 14 FURs grew at an average annual growth rate of 0.9%, that is, almost the same rate as Europe as a whole (1.0%). In spite of being in the same international economic environment, the job creation rates of these regions differed considerably.

- Two regions achieved remarkable results:
 - Dublin was by far the most dynamic region, with a job growth rate of 6.5% a year, i.e. seven times the average for the 14 regions. Around 180,000 jobs were created in the region over the period, that is, as many as in London or Paris, which are 10 times larger.
 - The Randstad also obtained remarkable results, by creating three times more jobs per year than the average. Around 410,000 jobs were created in the region, i.e. more than the combined total achieved by the London and Paris metropolitan areas.
- Edinburgh, Manchester and Antwerp created 50% more jobs than the average for the 14 regions.
- In four regions, the employment growth rates were 50% lower than the average.
 These least dynamic city regions were Lille, Birmingham, the Rhine-Ruhr region and the Rhine-Main region.

- Employment growth in the Brussels, Paris (0.8%) Glasgow and London (0.5%) metropolitan areas were relatively moderate.

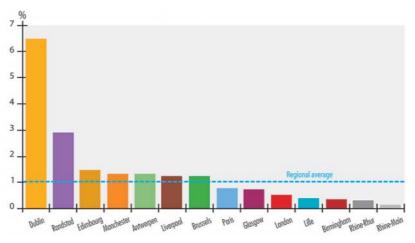
Production growth from 1995 to 1999

Two indicators allow us to compare the trends in regional output in different countries:

- volume GDP growth, i.e. unaffected by inflation:
- GDP in purchasing power parity terms, i.e. adjusted for differences in prices between countries, and expressed per inhabitant in order to make more meaningful comparisons possible with regions whose population numbers are changing.

Owing to a break in 1995 in the series of statistics, due in part to a change in the rules governing the European system of integrated economic accounts (SEC 95), the period on which are based the regional trends shown below covers the years 1995 to 1999. The data relate to 13 FURs defined on the basis of their "NUTS 3 adjusted areas". The data for the Lille FUR are not available.

Annual average employment growth rate from 1994 to 1999 (2000 for UK regions)



Sources: 1994 and 1999 Labour Force Surveys (year 2000 for UK regions)

Changes in GDP per inhabitant from 1995 to 1999 in purchasing

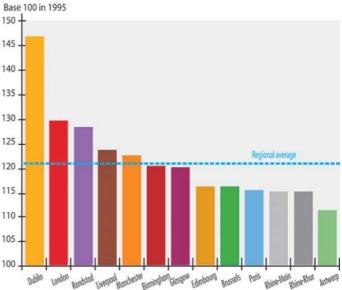
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Volume GDP growth

power parity terms

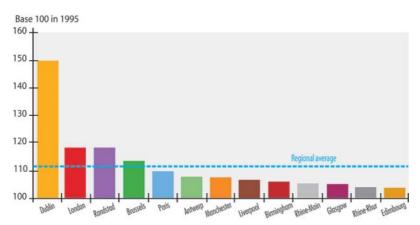
Volume GDP growth between 1995 and 1999 in the 13 regions averaged 10.8%, a slightly smaller increase than the average for EU15 member countries (12.6%). Growth in output over the period was very variable from one city region to another.

- Three regions achieved remarkable results: Dublin, London and the Randstad. In these regions, output grew 50% more than the average for the 13 regions. We have already highlighted Dublin's outstanding performance: volume GDP growth rose by 50% over four years.
- The city regions in Germany and Scotland produced mediocre performances, being 50% below the average for the FURs.
- In the other regions, GDP grew at a rate close to the average. The Paris area's GDP (9%) grew half as fast as that of London or the Randstad (18%).



Source: Eurostat and GEMACA estimates

Changes in the volume index of GDP from 1995 to 1999



Source: Eurostat and GEMACA estimates

GDP growth per inhabitant in purchasing power parity terms

In purchasing power parity terms, GDP per inhabitant grew between 1995 and 1999 by 21% on average in the 13 regions, i.e. at almost the same rate as the average for the EU's 15 member states (20%).

Over the period, the differences in GDP growth per inhabitant were not so great as the differences in volume GDP growth. The results of nine regions are relatively closely clustered together within a 15 to 24% range.

The remarkable performances recorded by Dublin, London and the Randstad in terms of the volume GDP index are confirmed when price differentials and population growth are taken into account. These three city regions lead the pack.

The trend in unemployment from 1994 to 1999/2000

Unemployment fell sharply in the United States in the 1990s, whereas in Europe it was still a major problem at the end of the decade in 1999.

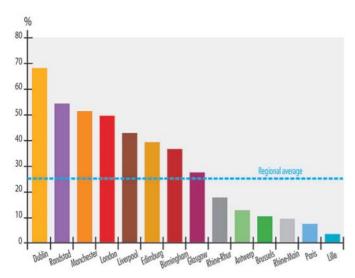
From 1994 to 1999 (2000 in the United Kingdom), the average unemployment rate across the 14 city regions fell from 10.3% in 1994 to 7.6%, i.e. a 26% reduction.

But the changes in the unemployment rate varied a great deal from one FUR to another.

- In Dublin, the Randstad, Manchester, London, Liverpool and Edinburgh, unemployment fell by over 50% more than the average for all 14 regions.
 Dublin, which had the highest rate in 1994, recorded the biggest drop in unemployment.
- Compared with the other city regions, the fall in unemployment in Birmingham, Glasgow and the Rhine-Ruhr regions was close to the average.
- The French, German and Rhine-Main city regions underperformed: their unemployment rates did not diminish significantly, as they fell by half as much as the average.



Changes in unemployment rate from 1994 to 1999 (2000 for UK regions)



Source: Labour Force Surveys

From 1994 and 1999-2000, the Randstad recorded a fall in unemployment by over 50% more than the average. The Randstad was then the best performing in the group of city regions that have more than seven million inhabitants.

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Comparing the economic vigour of North Western Europe's city regions

To arrive at an overall assessment of the comparative economic vigour of the metropolitan areas in North Western Europe, all the indicators reviewed above have to be taken into consideration, because they are close interrelated. The Table provides an overall view, showing how the city regions are positioned in relation to each other in terms of the relative changes in the four indicators used.

The comparative economic vigour of North Western European FURs

	Population growth	Employment growth	Volume GDP growth	Reduction in unemployment	Rating of economic vigour					
Regions with 7 million inhabitants and over										
Randstad	1	1	1	1	4					
London	1	=	1	1	3					
Paris	=	=	=	-1	-1					
RheinRuhr	-1	-1	-1	=	-3					
Regions with 2 to 4 million inhabitants										
Manchester	=	1	=	1	2					
Birmingham	=	-1	=	=	.1					
Bruxelles	-1	=	=	-1	-2					
RheinMain	=	-1	-1	-1	-3					
Regions with less than 2 million inhabitants										
Dublin	1	1	1	1	4					
Edinburgh	1	1	-1	1	2					
Antwerpen	=	1	=	-1	=					
Liverpool	-1	=	=	1	=					
Glasgow	-1	=	-1	=	-2					
Lille	-1	-1	na	-1	?					

For each indicator, the regions were rated by comparison with the average trend for the 14 regions as follows:

- 1 when growth is 50 % higher than the average;
- = when growth is close to the average for the 14 regions;
- -1 when growth is less than 50% of the average.

The last column on the right, headed "Rating of economic vigour", shows the cumulative result of the four indicators, and provides an overall rating of the comparative economic performances of North Western Europe's city regions over the period. The regions are listed in three groups based on population size.

In the group of city regions that have seven million inhabitants and over:

- the Randstad has the best performance record, as it outperformed the average for the 14 regions on all four counts;
- London comes second with three scores that exceed the average by over 50%;
- the Paris area's two rivals significantly outperform the French capital, whose economic vigour is rated as "average" by three indicators; nor has this region significantly reduced its unemployment
- the Rhine-Ruhr region was the worstperforming of all the major regions.

In the group of city regions with two to four million inhabitants:

- Manchester was the best performing, as it both created more jobs and cut the number of unemployed more than the
- overall, Birmingham, Brussels and the Rhine-Main region underperformed the average for the 14 regions.

In the group of city-regions with populations of less than two to four million inhabitants:

- Dublin performed very well according to each indicator. In the 1990s, It was economically much more vigorous than the other regions;
- Edinburgh scores well according to three indicators, but its GDP growth was 50% lower than the average;
- the overall results for Antwerp and Liverpool were "moderate".
- Glasgow and Lille (whose positioning is based on three indicators) are outdistanced.

At the beginning of this article, we advised readers to interpret its contents with caution. However, there is no doubt that London. Dublin. the Randstad. Manchester and Edinburgh were the bestperforming economic areas in North Western Europe over the period studied.