Economy



5



Introduction

This chapter presents a regional analysis of economic developments within the European Union (EU). It is principally based upon an analysis of gross domestic product (GDP), which is viewed as being one of the leading measures for studying economic development and growth. It also includes information concerning regional labour productivity and the distribution of income.

Economic accounts provide important information for the regional analysis of an economy. These statistics also serve as the basis for the allocation of expenditure under the EU's cohesion policy (see Cohesion policy — alignment with the Europe 2020 strategy within the introductory chapter for more details). Indeed, every region of the EU is covered by cohesion policy: however, most structural funds are directed to NUTS 2 regions where GDP per inhabitant is less than 75 % of the EU-28 average (the allocation of cohesion funds is based on a decision referring to average GDP per inhabitant during the three-year period from 2007 to 2009).

Measuring economic development

Economic development is commonly expressed in terms of GDP, which in the regional context may be used to measure macroeconomic activity and growth, as well as providing the basis for comparisons between regions. GDP is also an important indicator from the policy perspective, as it is crucial in determining the extent to which each EU Member State should contribute to the EU's budget and three-year averages of GDP are used to decide which regions should be eligible to receive support from the EU's structural funds.

GDP per inhabitant is often regarded as a proxy indicator for overall living standards. However, as a single source of information it should not be relied upon to inform policy debates, as GDP does not take account of externalities such as environmental sustainability or social inclusion, which are increasingly considered as important drivers for the quality of life.

A number of international initiatives have focused on this issue and in August 2009, the European Commission adopted a communication titled GDP and beyond: measuring progress in a changing world (COM(2009) 433 final), which outlined a range of actions to improve and complement GDP measures. This noted that there was a clear case for complementing GDP with statistics covering other economic, social and environmental issues, on which individuals' well-being critically depends. Recent developments on these complementary indicators are detailed in a staff working paper called Progress on 'GDP and beyond' actions (SWD(2013) 303 final), in which public interest in broader measures of GDP is confirmed, including at regional and local levels.

Economic policies

As noted in the introductory chapter, the EU's regional policy is designed to foster solidarity and cohesion, such that each region may achieve its full potential, improving competitiveness and employment, and bringing living standards in 'poorer' regions up to the EU average as quickly as possible.

Regional inequalities can be due to many factors, including: geographic remoteness or sparse population, social and economic change, or the legacy of former economic systems. These inequalities may manifest themselves, among others, in the form of social deprivation, poor-quality healthcare or education, higher levels of unemployment, or inadequate infrastructure.

The EU's regional policy aims to support the broader Europe 2020 agenda of promoting sustainable growth and job creation. Indeed, regional funding is investing in all EU regions, in line with the Europe 2020 goals. There is a strong focus on support for a variety of initiatives that are designed to boost economic performance, for example: innovation and research, sustainable development, and creating a friendly environment for small businesses to start-up.

More than one third of the EU's budget is devoted to cohesion policy, which aims to remove economic, social and territorial disparities across the EU, for example, by helping restructure declining industrial areas or diversify rural areas. In doing so, EU regional policy seeks to make regions more competitive, fostering economic growth and creating new jobs. The EU's regional policy is an investment policy supporting job creation, competitiveness, economic growth, improved quality of life and sustainable development. These investments support the delivery of the Europe 2020 strategy, while regional policy is also the expression of the EU's solidarity with less-developed countries and regions, as funds are concentrated on countries, regions and economic sectors where they can make the most difference.

For the period 2014–20, the EU's cohesion policy has been refocused with the objective of having maximum impact on growth and jobs. During the period 2014–20, the EU will invest a total of EUR 351 billion on Europe's regions. Investment will continue across all regions, but policy reforms have been adopted changing the levels of support according to newly-defined regional classifications:

- less developed regions (GDP < 75 % of the EU-27 average);
- transition regions (GDP 75 % 90 % of the EU-27 average); and,
- more developed regions (GDP > 90 % of EU-27 average).

The EU's regional policy seeks to help every region achieve its full potential, through improving competitiveness and raising the living standards of the poorest regions towards the EU average (convergence). Regional economic policy seeks to stimulate investment in the regions by improving



accessibility, providing quality services and preserving the environment, thereby encouraging innovation and entrepreneurship and the creation of jobs, while overcoming inequalities that may be manifest in social deprivation, poor housing, education and healthcare, higher unemployment or inadequate infrastructure provisions.

Main statistical findings

Up until the onset of the financial and economic crisis, the economic differences between European regions were being reduced, as 'poorer' regions generally moved closer to 'richer' regions through a process of convergence. However, the financial and economic crisis had a widespread effect on many regions, and the post-crisis period shows evidence of growing disparities, especially in some areas most severely affected by the crisis.

The statistics presented in this chapter for regional economic accounts are generally shown at the NUTS 2 level for the period up to 2011; information is provided at the more detailed NUTS 3 level for GDP per inhabitant. Data for Switzerland are only available at a national level, while statistics for the four French overseas regions are estimated.

Regional GDP per inhabitant

GDP is a measure of total economic activity, be that of a region, a country or a group of countries; it is widely used to analyse economic performance and cycles (such as recessions, recoveries and booms). GDP is initially calculated in national currencies, and then converted by purchasing power parities (PPPs) which take account of different price levels between EU Member States, allowing for a more meaningful comparison. By using PPPs (rather than market exchange rates) these indicators are converted into an artificial common currency called a purchasing power standard (PPS). The use of a PPS makes it possible to compare purchasing power across the regions of EU Member States that use different currencies and where price levels are different. For more information about the use of PPPs please refer to the data sources and availability section below

Average GDP per inhabitant fails to provide any indication as to the distribution of wealth between different population groups in the same region, nor does it measure the income ultimately available to private households in a region, as commuter flows may result in employees contributing to the GDP of one region (where they work), and to household income in another region (where they live).

) MEASURING WEALTH AND INCOME BY PLACE OF RESIDENCE OR PLACE OF WORK?

A regional comparison of the level of economic activity can be made by comparing regional GDP with the population of the region in question; this is where the distinction between place of work and place of residence becomes significant. GDP measures economic activity within national or regional boundaries, regardless of whether this was attributable to residents or non-residents. As a result, regional GDP per inhabitant is based upon a numerator that reflects the place of work (the GDP produced in the region) which is divided by a denominator whose value reflects the place of residence (the population living in the same region).

This drawback is particularly relevant when there are significant net commuter flows into or out of a region. Areas that are characterised by a considerable number of inflowing commuters often display regional GDP per inhabitant that is extremely high (when compared with surrounding regions). This is particularly the case for economic centres such as the regions of London (United Kingdom), Wien (Austria), Hamburg (Germany), Praha (Czech Republic) or Luxembourg. Because of this anomaly, high levels of GDP per inhabitant that are recorded for some regions with net commuter inflows do not necessarily translate into correspondingly high levels of income for the people living in the same region.

As such, it is sometimes of more interest to analyse measures which focus on the distribution of household income, in other words, to use a residential approach to study the distribution of wealth. As with the data for GDP per inhabitant, the values shown for income per inhabitant have been adjusted to reflect price level differences between countries; these statistics are presented using the purchasing power consumption standard (PPCS), an artificial currency unit obtained by converting the income of private households using purchasing power standards for final consumption expenditure. Note however, that these figures only present a restricted view of the welfare of a region, insofar as no measure is made of public goods and services that may be free at point of use, or may be part-funded by local or national administrations.



GDP in the EU-28 was valued at EUR 12 712 billion in 2011, which equated to an average level of 25 100 PPS per inhabitant. **Map 5.1** shows GDP per inhabitant in each NUTS 2 region as a percentage of the EU-28 average (EU-28 = 100), with values above this level portrayed as relatively 'rich' regions and those below as relatively 'poor'.

GDP per inhabitant was more than 11 times as high in Inner London as it was in the Nord-Est region of Romania in 2011

Among the NUTS 2 regions in 2011, GDP per inhabitant in PPS terms ranged from a high of 321 % of the EU-28 average in Inner London down to 29 % in the Nord-Est region of Romania. The GDP per inhabitant of Inner London was therefore slightly more than 11 times as high as in the Nord-Est region of Romania (having taken account of differences in price levels). As noted above, care should be taken in interpreting these figures, as GDP per inhabitant can be influenced by commuter flows and in regions such as Inner London, inflows of commuters push up the level of economic activity well beyond that which the resident population could attain.





Luxembourg city, Luxembourg

The capital region of Luxembourg is a single NUTS 2 region. It had one of the highest levels of GDP per inhabitant, some 266 % of the EU-28 average in 2011. This figure should be viewed with care, as although Luxembourg is generally considered as being one of the richest countries in the world (per inhabitant) much of its labour input is provided by commuters from the surrounding countries of Belgium, Germany and France. As such, some of the wealth generated in Luxembourg is repatriated to these countries, where commuters are likely to spend a proportion of their disposable income.

Photo: Marcin Szala

Among the 10 NUTS 2 regions that recorded the highest levels of GDP per inhabitant there were seven capital regions

The 10 regions in the EU-28 with the highest levels of GDP per inhabitant included seven capital regions: aside from Inner London, these were Luxembourg (a single region at this level of analysis), and the capital regions of Belgium, Slovakia, France, Sweden and the Czech Republic. Each of these regions is likely to report a level of GDP per inhabitant augmented as a result of net commuter inflows, with for example, headquarters of large enterprises and financial services often clustered in capital regions. Two of the three remaining regions in the top 10 were also characterised as largely urban areas: Hamburg and Oberbayern (which includes the city of Munich) in Germany, while the third was Groningen (a relatively small, university city in northeast of the Netherlands; this region has two relatively large sea ports, off-shore gas fields, and a specialisation in the production of energy and chemicals).

Many of the regions with relatively high average GDP per inhabitant (as shown by the darkest shade in **Map 5.1**) were capital regions or regions that neighboured capital regions. The remaining regions where GDP per inhabitant was at least 25.00 % above the EU-28 average were often located in a band starting in the Benelux countries, running across Germany, down into western Austria and subsequently on to northern Italy, although there were also a few isolated regions that stood alone with relatively high GDP per inhabitant, such as the País Vasco in northern Spain, the island region of Åland in Finland, Övre Norrland in the far north of Sweden and North Eastern Scotland (in the United Kingdom).

Between 2010 and 2011, the Austrian capital region fell out of the top 10

When compared with the regional ranking of GDP per inhabitant in 2010 the only changes concerned Oberbayern moving into the top 10 and the Austrian capital region of Wien falling out of the top 10 (to 11th place). At the other end of the ranking, the region with the lowest GDP per inhabitant in 2010 had been Severozapaden in Bulgaria; it recorded the second lowest level of GDP per inhabitant in 2011, the lowest place being taken by the Nord-Est region of Romania.



Map 5.1: Gross domestic product (GDP) per inhabitant, in purchasing power standard (PPS), by NUTS 2 regions, 2011 (¹) (% of the EU-28 average, EU-28 = 100)



(% of the EU-28 average, EU-28 = 100)

EU-2	8 = 100.00
	< 75.00
	75.00 - < 90.00
	90.00 - < 100.00
	100.00 - < 110.00
	110.00 - < 125.00
	>= 125.00
	Data not available





(¹) Switzerland: national level. Guadeloupe (FR91), Martinique (FR92), Guyane (FR93) and Réunion (FR94): estimates. Source: Eurostat (online data codes: nama_r_e2gdp and nama_r_e3popgdp)



The main beneficiaries of cohesion funds are those regions with average GDP per inhabitant less than 75.00 % of the EU average

Those regions which benefit most from cohesion funds have an average GDP per inhabitant that is less than 75.00 % of the EU-28 average. There were a total of 76 NUTS 2 regions which fell into this category in 2011; it should be noted that the basis of funding for the 2014–20 programming period has been fixed with respect to average GDP per inhabitant during the three-year period from 2007 to 2009. Among these 76 regions, just over a quarter (20 regions) recorded average GDP per inhabitant which was less than 50.00 % of the EU-28 average in 2011. They were located in eastern Europe, spread across four of the EU Member States, with six regions in Romania, five regions in each of Bulgaria and Poland, and four regions in Hungary. In the EFTA countries (only national data for Switzerland and no information for Liechtenstein), regional GDP per inhabitant was systematically above the EU-28 average, ranging from 103 % of the EU-28 average in Hedmark og Oppland to 189 % in Oslo og Akershus (both Norway). There were two other Norwegian regions with GDP per inhabitant more than 25.00 % above the EU-28 average (Agder og Rogaland and Vestlandet), while the national average for Swiss GDP per inhabitant was equivalent to 155 % of the EU-28 average. GDP per inhabitant was generally much lower in the candidate countries (no information for Montenegro or for Serbia) at 36 % of the EU-28 average in the former Yugoslav Republic of Macedonia, while in Turkey the range was from a low of 20 % in the south-eastern region of Van, Muş, Bitlis, Hakkari to a high of 80 % in İstanbul.

Figure 5.1: Regional disparities in gross domestic product (GDP) per inhabitant, in purchasing power standard (PPS), by NUTS 2 regions, 2011 (¹) (% of the EU-28 average, EU-28 = 100)



(!) The light purple shaded bar shows the range of the highest to lowest region for each country. The dark green bar shows the national average. The green circle shows the capital city region. The dark purple circles show the other regions. Switzerland: national level. Guadeloupe (FR91), Martinique (FR92), Guyane (FR93) and Réunion (FR94): estimates. Source: Eurostat (online data code: nama_r_e2gdp)



The German region of Berlin was the only capital region to record a level of GDP per inhabitant below its national average

Figure 5.1 presents the distribution of GDP per inhabitant in 2011. It shows that in the majority of the multi-regional EU Member States, capital regions were generally those with the highest average GDP per inhabitant; the only exceptions to this rule were Germany, Spain, Italy and the Netherlands. Of these, Berlin was the only capital region that recorded a level of GDP per inhabitant that was below its national average. In Spain, only the País Vasco had a higher level of average GDP per inhabitant than the Comunidad de Madrid. In Italy, the capital region of Lazio had the seventh highest level of GDP per inhabitant among Italian NUTS 2 regions. In the Netherlands, both Groningen and Utrecht recorded average GDP per inhabitant that was above that recorded for the capital region of Noord-Holland.

By contrast, the capital regions of the Czech Republic, Ireland, Greece, Hungary, Poland, Portugal, Romania, Slovenia and Slovakia were the only regions from these EU Member States where GDP per inhabitant rose above the EU-28 average in 2011; in Bulgaria every region, including the capital region, recorded an average level of GDP per inhabitant that was below the EU-28 average.

Sweden was the only multi-regional Member State to report that all of its regions had GDP per inhabitant above EU-28 average

Sweden was the only multi-regional EU Member State to report that each of its NUTS 2 regions had an average level of GDP per inhabitant that was above the EU-28 average in 2011; the same was true for level 2 regions in Norway. In Denmark, Ireland (where there are only two regions at the NUTS 2 level), Austria and Finland, there was only a single region where average GDP per inhabitant fell below the EU-28 average.

The majority of regions in both France and the United Kingdom recorded average levels of GDP per inhabitant that were below the EU-28 average in 2011, although their national averages were pulled up by the relatively high values

in each capital region. For example, the average level of GDP per inhabitant in Inner London was 2.2 times as high as in Berkshire, Buckinghamshire and Oxfordshire (the region with the second highest level of GDP per inhabitant in the United Kingdom). Such differences between capital regions and the region with the second highest level of GDP per inhabitant were even greater (in relative terms) in Slovakia and the Czech Republic, as Bratislavský kraj had an average that was 2.6 times as high as in Západné Slovensko, while that in Praha was 2.3 times as high as in Jihovýchod.

A more detailed regional analysis: GDP per inhabitant for NUTS 3 regions

Wealth of capital regions is even more pronounced at finer level of detail

Map 5.2 presents information on GDP per inhabitant for 2011 at the more detailed NUTS 3 level; understandably the overall patterns are similar to those shown for NUTS 2 regions in Map 5.1. Nevertheless, there were a number of NUTS 3 regions where GDP per inhabitant displayed an atypical pattern in relation to the higher level (NUTS 2) regions to which they belong. These differences often result from commuting inflows from surrounding areas into central NUTS 3 regions, characterised by a concentration of economic activity in the most built-up areas. For example, in the NUTS 2 Polish capital region of Mazowieckie, the city of Warsaw (Miasto Warszawa, NUTS 3) recorded average GDP per inhabitant (in PPS) that was almost double the EU-28 average, while none of the remaining NUTS 3 regions within this NUTS 2 region registered a level above the EU-28 average.

Across NUTS 3 regions, GDP per inhabitant ranged from 612 % of the EU-28 average in Inner London - West (the United Kingdom) to 21 % of the EU-28 average in Vaslui (Romania); as such, between the two ends of this range there was a factor of nearly 30 to 1 in 2011 (which was slightly higher than a year before in 2010, as GDP per inhabitant rose at a faster pace in Inner London - West).



Map 5.2: Gross domestic product (GDP) per inhabitant, in purchasing power standard (PPS), by NUTS 3 regions, 2011 (¹) (% of the EU-28 average, EU-28 = 100)

Guadeloupe (FR) Martinique (FR) 2 Guyane (FR) Réunion (FR) Açores (PT) Madeira (PT) Canarias (ES) Malta 0 100 Machi <eurostat

(% of the EU-28 average, EU-28 = 100)

EU-28	8 = 100.00
	< 75.00
	75.00 - < 90.00
	90.00 - < 100.00
	100.00 - < 110.00
	110.00 - < 125.00
	>= 125.00
	Data not available

Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat Cartography: Eurostat — GISCO, 06/2014



(') Turkey: by NUTS 2 regions. Iceland and Switzerland: national level. Guadeloupe (FR91), Martinique (FR92), Guyane (FR93) and Réunion (FR94): estimates. Source: Eurostat (online data codes: nama_r_e3gdp and nama_r_e3popgdp)



German regions dominated a ranking of GDP per inhabitant at the NUTS 3 level

There were 28 NUTS 3 regions which recorded average GDP per inhabitant that was at least double the EU-28 average in 2011. They were headed by Inner London - West (which had an average level of GDP per inhabitant that was 3.5 times as high as Inner London - East), followed by Wolfsburg, Kreisfreie Stadt (home to the headquarters of the Volkswagen group) where average GDP per inhabitant was more than four times as high as the EU-28 average. The 28 regions where GDP per inhabitant was at least double the EU-28 average were principally located in Germany, 21 of the 28 regions, while the list also included the capital regions of Belgium, France, Luxembourg (a single region at this level of analysis), the Netherlands and the United Kingdom, as well as the French region of Hauts-de-Seine (which neighbours Paris) and the Dutch region of Overig Groningen.

At the other extreme, GDP per inhabitant was less than 30 % of the EU-28 average in 24 NUTS 3 regions. Aside from the Nógrád region of northern Hungary, all of these were located in Bulgaria (15 regions) or Romania (8 regions).

Changes in GDP per inhabitant, 2008–11

During the financial and economic crisis, GDP per inhabitant in the EU-28 dropped from a high of 25 000 PPS in 2008 to 23 500 PPS in 2009 before partially recovering to 24 400 PPS in 2010 and then moving on to a level that was slightly above its pre-crisis peak, with an average of 25 100 PPS in 2011. Those regions that expanded relatively fast, whose GDP per inhabitant increased by more than 5.0 percentage points compared with the EU-28 average, are shown in the darkest shade in **Map 5.3** which shows the extent to which GDP per inhabitant changed between 2008 and 2011 (expressed in relation to the EU-28 average).

National economic fortunes appear to play a significant role in determining regional economic performance

It is interesting to note that despite wide variations in average levels of GDP per inhabitant between the regions of some EU Member States, there was a relatively uniform pattern to changes in economic activity over the period from 2008 to 2011. Among the multi-regional EU Member States, GDP per inhabitant grew at a faster pace than the EU-28 average in every region of Belgium, Bulgaria, Germany, Hungary, Austria, Poland and Slovakia (aside from one region where GDP per inhabitant grew at the same rate as in the EU); the majority of regions in France also saw their GDP per inhabitant rise (when compared with the EU-28 average). By contrast, there were systematic declines in GDP per inhabitant (in relation to the EU-28 average) across each region of Ireland, Greece, Spain, Croatia, the Netherlands, Portugal, Slovenia and the United Kingdom; aside from Abruzzo and the Provincia Autonoma di Bolzano/Bozen each of the Italian regions also recorded a reduction in their level of GDP per inhabitant (relative to the EU-28 average).

Fastest regional economic growth in the Slovakian and Polish capitals and south-west Germany

The highest growth rates for GDP per inhabitant between 2008 and 2011, relative to the EU-28 average, were recorded in the capital regions of Slovakia and Poland, as Bratislavský kraj and Mazowieckie posted increases of 18.9 and 17.3 percentage points. There were nine other regions where GDP per inhabitant grew by at least 10.0 percentage points more than the EU-28 average: eight of these were located in Germany (the majority from the southern region of Bayern), while the remaining region was also from Poland, Dolnośląskie, which lies in the south-west of the country and has Wroclaw as its largest city.

At the other end of the range, a total of 69 regions recorded a fall of at least 5.0 percentage points in their GDP per inhabitant between 2008 and 2011 (relative to the EU-28 average). Among these, there were 20 regions that posted reductions of at least 10.0 percentage points: they were principally situated across Greece (10 regions) and the United Kingdom (8 regions), although there were also sizeable contractions in activity in the Illes Balears (Spain) and Groningen (the Netherlands).



Map 5.3: Change of gross domestic product (GDP) per inhabitant, in purchasing power standard (PPS), by NUTS 2 regions, 2008–11 (¹)

(percentage points difference between 2011 and 2008; in relation to the EU-28 average)



(percentage points difference between 2011 and 2008; in relation to the EU-28 average)







(') Turkey: 2009–11. Switzerland: national level. Guadeloupe (FR91), Martinique (FR92), Guyane (FR93) and Réunion (FR94): estimates. Source: Eurostat (online data code: nama_r_e2gdp)



Labour productivity

Within regional accounts, labour productivity is defined as gross value added in euros at basic prices per person employed; **Map 5.4** presents this indicator for NUTS 2 regions in 2011 with the results shown in relation to the EU-28 average. If there are significant flows of commuters between regions, it is likely that those regions characterised as having net inflows of commuters will display lower levels of gross value added per person employed than their corresponding ratios for GDP per inhabitant — in other words, the gap between regions is likely to be narrowed when analysing labour productivity. Regional labour productivity measures would ideally take account of the total number of hours worked (rather than a simple count of persons employed), however, this measure is currently incomplete for a number of EU Member States.

Financial hubs record some of the highest labour productivity

The highest level of gross value added per person employed in 2011 was recorded in Inner London (the same region that had the highest level of GDP per inhabitant). Relatively high levels of labour productivity may be linked to the efficient use of labour (without using more inputs), or may result from the mix of activities that make-up a particular economy (as some activities have higher levels of productivity than others). For example, the financial services sector plays a particularly important role in the economy of London and this activity is characterised as having particularly high levels of productivity. Luxembourg (one region at this level of analysis) and Southern and Eastern Ireland (which includes Dublin) - both of which specialise in financial services - were also present among the top 10 regions for labour productivity. The remainder of the top 10 was constituted by four Dutch regions (which included the capital region of Noord-Holland and the most competitive region in the EU — Utrecht — alongside Groningen and Zeeland), as well as the capital regions of Île de France, Région de Bruxelles-Capitale / Brussels Hoofdstedelijk Gewest and Stockholm.

Labour productivity lower in those Member States that joined the EU in 2004 or later

There was not a single region from the Member States that joined the EU in 2004 or later that had a level of gross value added per person employed above the EU-28 average. Cyprus (one region at this level of analysis) and the two capital regions of Bratislavský kraj and Praha recorded the highest levels of gross value added per person employed among the NUTS 2 regions from these 13 Member States, at approximately 80 % of the EU-28 average in 2011. There were 45 NUTS 2 regions where gross value added per person employed was less than half the EU-28 average in 2011. These were principally spread across eastern and northern Europe, with the exception of the Centro region of Portugal. Every Bulgarian and Hungarian region, the three Baltic Member States (each a single region at this level of analysis), all Polish and Romanian regions except for the capital regions of Mazowieckie and București - Ilfov, four regions from the Czech Republic and two regions from Slovakia recorded labour productivity that was less than 50 % of the EU-28 average (as shown by the lightest shade in **Map 5.4**).

Primary household income

In recent years there has been growing discussion over the quality of life in Europe, with many people of the opinion that their overall standard of living has deteriorated since the onset of the financial and economic crisis, in particular as a result of falling real wages, increased unemployment, additional burdens of taxes or social charges, lower levels of benefits, or rapidly rising prices (for example, for energyrelated products).

Map 5.5 provides an overview of primary income per inhabitant in NUTS 2 regions for 26 of the EU Member States; there are no data available for Croatia or Malta. In 2011, primary income ranged from a high of 32 600 PPCS per inhabitant in Inner London (the United Kingdom) down to 3 200 PPCS in the Nord-Est region of Romania, a factor of 10.2 to 1; as such, the highest and lowest values were recorded in the same regions that reported the highest and lowest levels of GDP per inhabitant.

High levels of primary income in southern Germany and more generally in and around capital cities

There were 13 regions which recorded primary income per inhabitant that was at least 25 000 PPCS in 2011. The majority (eight) of these 13 regions were located in Germany, including the second highest figure which was recorded in Oberbayern (the only other region to report primary income per inhabitant above 30 000 PPCS). The seven other German regions were principally located in the south of the country, with the exception of Hamburg. Aside from Inner London, the four remaining non-German regions to record primary income per inhabitant of at least 25 000 PPCS were the two regions which surround the Belgian capital (Prov. Vlaams-Brabant and Prov. Brabant Wallon), and the capital regions of Île de France (which had the third highest level of primary income per inhabitant) and Luxembourg (a single region at this level of detail). As with the information already shown for GDP per inhabitant, one of the most striking features of Map 5.5 is the relatively high level of primary income per inhabitant that is registered in regions either containing or surrounding capital cities.



Map 5.4: Gross value added (GVA) at basic prices, per person employed, by NUTS 2 regions, 2011 (¹) (% of the EU-28 average, EU-28 = 100)



(% of the EU-28 average, EU-28 = 100)

EU-	28 = 100.0
	< 50.0
	50.0 - < 75.0
	75.0 - < 100.0
	100.0 - < 125.0
	125.0 - < 150.0
	>= 150.0
	Data not available

Administrative boundaries	s: © EuroGeographics © UN-FAO © Turkstat
Cartography: Eurostat	GISCO, 06/2014



(1) Norway and the former Yugoslav Republic of Macedonia: 2010. Switzerland: national level. Guadeloupe (FR91), Martinique (FR92), Guyane (FR93) and Réunion (FR94): estimates. Source: Eurostat (online data codes: nama_r_e3vab95r2, nama_gdp_c, nama_r_e3em95r2 and nama_r_e2em95hr2)



Map 5.5: Primary income of private households, in purchasing power consumption standard (PPCS), by NUTS 2 regions, 2011 (¹) (PPCS per inhabitant)



(PPCS per inhabitant) EU-28 = 21 400

< 10 000
10 000 - < 15 000
15 000 - < 20 000
20 000 - < 25 000
>= 25 000
Data not available





(1) Guadeloupe (FR91), Martinique (FR92), Guyane (FR93), Réunion (FR94) and Cyprus: 2009. Italy and Norway: forecasts. *Source:* Eurostat (online data codes: nama_r_ehh2inc and nama_inc_c)



At the other end of the range, there were 40 NUTS 2 regions that reported primary income per inhabitant that was less than 10 000 PPCS (the latest data for the French overseas region of Guyane are for 2009). Bulgarian and Romanian regions accounted for 9 out of the 10 regions with the lowest levels of primary income per inhabitant across the EU in 2011; the other region was Latvia (a single region at this level of analysis). The remaining 30 regions with primary income per inhabitant below 10 000 PPCS included the other two Baltic Member States (also single regions), further regions from Bulgaria and Romania, as well as several regions from Hungary and Poland and a single region from Slovakia. There were also two regions from each of Greece and Portugal, as the effects of the financial and economic crisis lowered incomes in these countries by a considerable amount.

Disposable income

Figure 5.2 presents information on disposable incomes of private households, in other words, 'in-pocket' income that people can spend or save (once they have paid their taxes and social security contributions and after they have received their social benefits). The highest disposable income per inhabitant in 2011 was recorded in Luxembourg (a single region at this level of analysis), at 23 800 PPCS. This was just above the levels recorded in Oberbayern (Germany) and Inner London (the United Kingdom); these three regions were the only ones across the EU to record disposable income per inhabitant in excess of 23 000 PPCS in 2011.

Luxembourg recorded the highest level of disposable income in 2011

The highest level of disposable income per inhabitant in Luxembourg was 5.5 times as high as that in the Nord-Est region of Romania (4 300 PPCS); as such, when compared with the same ratio for primary income, inequalities were almost halved as the difference between the highest and lowest regions for primary income per inhabitant was a ratio of 10.2 to 1. Indeed, the disposable income per inhabitant of most regions is generally lower than the corresponding figure for primary income per inhabitant as a result of state intervention (redistribution). This is particularly true in regions which are characterised as having some of the highest earners (often capital regions), as tax and social security contributions usually increase as a function of income.

Figure 5.2 shows that capital regions often accounted for the highest levels of disposable income, although this pattern was less apparent among those EU Member States with the highest levels of disposable income. In Belgium and Germany, disposable income per inhabitant for the capital region was below the national average, while in Austria it was at a similar level to the national average. The capital regions of Spain, Italy, the Netherlands and Finland recorded disposable income per inhabitant that was above their respective national averages, although there was at least one other region in each of these countries which recorded a higher level of disposable income per inhabitant.

Figure 5.2: Disposable income of private households, in purchasing power consumption standard (PPCS), by NUTS 2 regions, 2011 (¹)



(1) The light purple shaded bar shows the range of the highest to lowest region for each country. The dark green bar shows the hational average. The green circle shows the capital city region. The dark purple circles show the other regions. Guadeloupe (FR91), Martinique (FR92), Guyane (FR93) and Réunion (FR94): 2009. Italy and Norway: forecasts. Croatia, Cyprus and Malta: not available.

Source: Eurostat (online data code: nama_r_ehh2inc)



Map 5.6: Change of disposable income of private households, in purchasing power consumption standard (PPCS), by NUTS 2 regions, 2008–11 (¹) (difference between 2011 and 2008 in PPCS per inhabitant)

Guadeloupe (FR) Martinique (FR) لد 25 Guyane (FR) Réunion (FR) 0 20 100 Açores (PT) Madeira (PT) Canarias (ES) Malta 0 100 Liechtenstein <eurostat

(difference between 2011 and 2008 in PPCS per inhabitant)





(¹) Italy and Norway: forecasts. Source: Eurostat (online data code: nama_r_ehh2inc)

Administrative boundaries: © EuroGeographics © UN-FAO © Turkstat Cartography: Eurostat — GISCO, 06/2014





Other than in capital regions, there was a relatively uniform distribution to disposable income across the regions of most EU Member States

Aside from capital regions, the distribution of disposable income per inhabitant was often within a relatively narrow range across all of the regions from the same EU Member State. This was particularly true in Austria and the Nordic Member States, which displayed quite uniform distributions. By contrast, and again excluding capital regions, the largest variations in disposable income per inhabitant across regions of the same EU Member State were recorded in France and Italy; the former, at least in part, due to relatively low values in its overseas regions and the latter due to a considerable divide in incomes between the north and south of the country.

A comparison between primary income and disposable income shows the levelling influence that state intervention can often play, with the convergence of disposable income per inhabitant between 'rich' and 'poor' regions. For example, in Belgium those inhabitants of the relatively wealthy region of Prov. Vlaams-Brabant in Belgium saw their primary income per inhabitant reduced by PPCS 7 100, while the inhabitants of the Prov. Hainaut (a former industrial heartland that was specialised in coal mining and iron and steel production) saw their primary income reduced, on average, by PPCS 1 900. In a similar manner, there was a transfer of income from the northern regions to southern regions of Italy, and such transfers were also apparent towards predominantly rural areas of central and western Spain, towards former industrial heartlands and remote western regions of the United Kingdom, and towards eastern regions of Germany, Hungary and Poland.

Although most NUTS 2 regions reported that disposable income per inhabitant was lower than primary income per inhabitant, there were 51 regions which benefitted from social benefits and other transfers to such a degree that their disposable income per inhabitant was higher than their primary income. Such a situation occurred in all but one of the 13 Greek regions (Notio Aigaio was the exception), seven regions from the United Kingdom, six from Poland, five each from Bulgaria, Portugal and Romania, four from Hungary, two from Germany, and one each from Ireland, Spain, France, Italy and Slovakia.

Highest gains in disposable income were recorded in Germany and Poland

Map 5.6 shows the change in disposable income per inhabitant across NUTS 2 regions between 2008 and 2011; note there is no information available for Croatia, Cyprus, Malta and the French overseas regions. The most visible pattern in the map is the relatively high gains made in disposable incomes across Germany and Poland, two of the EU Member States least affected by the financial and

economic crisis. The highest increase in disposable income across any of the NUTS 2 regions for which data are available was recorded for the Polish capital region of Mazowieckie.

Aside from German and Polish regions, the only other regions with increases in disposable income of at least PPCS 1 500 per inhabitant between 2008 and 2011 (as shown by the darkest shade) were the Bulgarian region of Yugoiztochen and the capital regions Hungary, Slovakia and Finland.

Disposable income fell by more than 1 000 PPCS in all but one Greek region

There were 29 regions across the EU-28 where disposable income per inhabitant fell by more than 1 000 PPCS between 2008 and 2011 (as shown by the lightest shade on **Map 5.6**). The biggest contractions in disposable income were felt in some of the EU Member States most affected by the financial and economic crisis: almost all Greek regions (Notio Aigaio was again the only exception); otherwise, the biggest reductions were recorded in the United Kingdom (eight regions, including both Inner and Outer London), Spain (four regions) and the capital regions of Ireland and Romania.



Royal castle square, Warsaw

The capital region of Poland had the highest growth in disposable income across EU-28 NUTS 2 regions during the period 2008 to 2011. The disposable income of each inhabitant in this region rose, on average, by PPCS 2 600.

Another Polish region, Śląskie, was also present among the three EU regions with the highest increases in disposable income, while income rose by at least PPCS 1 000 in all but two of the 16 Polish NUTS 2 regions.

Photo: Shalom Alechem



Data sources and availability

The European system of national and regional accounts (ESA) provides the methodology for regional accounts in the EU. ESA 95 is fully consistent with worldwide guidelines for national accounts, the 1993 system of national accounts (1993 SNA). Following international agreement on an updated version of the SNA in 2008, the ESA was also revised. These revisions are reflected in a Regulation of the European Parliament and of the Council on the European system of national and regional accounts in the European Union (No 549/2013). Further information on the transition from ESA 95 to ESA 2010 is presented on Eurostat's website.

Indicator definitions

Gross domestic product (GDP) is the central measure of national accounts, summarising the economic position of a country or region. It can be calculated using different approaches: the output approach; the expenditure approach; and the income approach. However, at the regional level the expenditure approach cannot be used, because it would require the measurement of regional exports and imports; this is not possible in the EU Member States.

The primary income of private households is that generated directly from market transactions. This generally includes income from paid work and self-employment, as well as income received in the form of interest, dividends and rents; interest and rents payable are recorded as negative items.

Disposable income is derived from primary income by adding all social benefits and monetary transfers (from state redistribution) and subtracting taxes on income and wealth as well as social contributions and similar transfers; as such, it reflects 'in-pocket' income.

Purchasing power parities

Regional GDP is calculated in the local currency of the region (and therefore the country) in question. GDP can be converted into a common currency to make it more easily comparable — for example, converting into euros or dollars.

Exchange rates reflect many factors relating to supply and demand in currency markets, such as international trade, inflation forecasts and interest rate differentials. However, exchange rates do not reflect all the differences in price levels between countries. To compensate for this, GDP can be converted using conversion factors known as purchasing power parities (PPPs) to an artificial common currency, called a purchasing power standard (PPS); this makes it possible to compare the purchasing power of different national currencies. Even within a currency union, such as the euro area, a single currency continues to display different purchasing power across countries, depending on national price levels.

In broad terms, the use of PPS series rather than the eurobased series tends to have a levelling effect, as those regions with very high GDP per inhabitant in euro terms also tend to have relatively high price levels (for example, the cost of living in central Paris or London is generally higher than the cost of living in rural areas of the EU). Calculations for GDP per inhabitant that are based on PPS series, instead of euro series, can result in considerable differences when ranking regions.