Economy and finance

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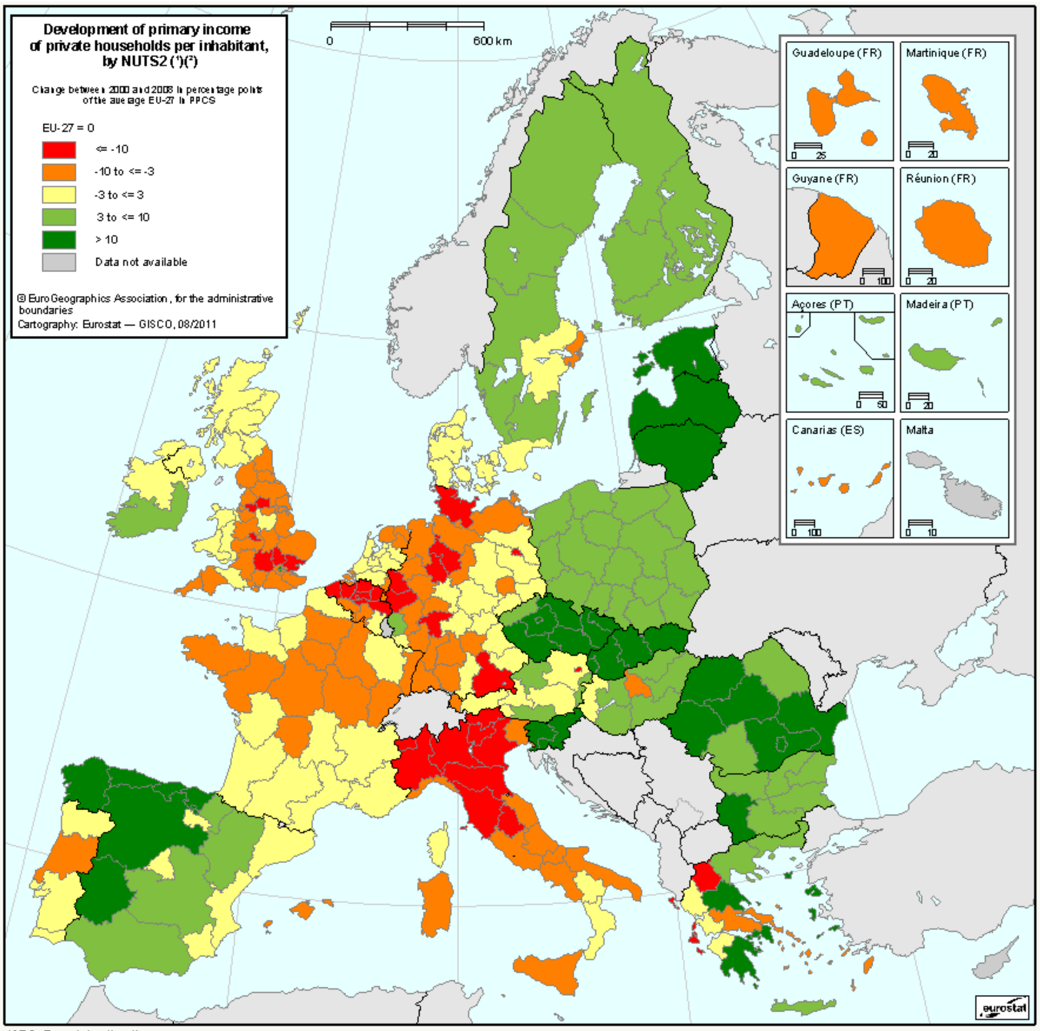
# Regional discrepancies in private household income continue to narrow in 2008

**Income of private households per capita (in purchasing power consumption standards — PPCS) differed widely across the regions of the EU for the most recent reference year 2008, but the discrepancies are narrowing. Many of the less prosperous regions on the EU periphery have been catching up rapidly since the year 2000, but it is not clear whether this trend will continue. However, early data from some Member States suggest that rural areas were affected by the recession in 2008 and 2009 to a lesser extent than high-income regions and areas with a high dependence on exports.**

**Map 1: Development of primary income of private households per inhabitant, by NUTS2**




(1) BG, Eurostat estimation
(2) French overseas departments: Level NUTS1

*Source*: Eurostat (online data code: nama_r_ehh2inc)

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## Dynamic developments on the edges of the Union

Map 1 presents an eight-year comparison to illustrate how primary income per capita (in PPCS) in the NUTS 2 regions changed between 2000 and 2008 in relation to the average for the EU-27. First of all, the map shows strong dynamic processes on the periphery of the Union, particularly in Romania and Spain, Slovakia, the Czech Republic, the Baltic States, Slovenia and some regions of Finland. On the other hand, below-average trends in income are apparent in some of the EU-15 Member States, notably Belgium, Germany and Italy. Several areas in these Member States fell behind considerably compared to the average income of the EU.

There is clear evidence of a sustained catching-up process in the new Member States, in particular in Romania, the Czech Republic and Slovakia. With an increase of 53 percentage points, the region București-Ilfov (RO) achieved the highest relative improvement of all regions. On the other hand, income levels in some regions in Hungary increased by only a few percentage points compared to the EU average. In addition, there is a structural problem in most of the new Member States, which is leading to a further widening of the wealth gap between the capital regions and the less prosperous parts of the country.

On the whole, the period from 2000 to 2008 saw a flattening at the upper end of the regional income distribution band, mainly due to substantial relative falls in regions with high levels of income. At the same time, each of the 20 regions which had the lowest per capita income in 2000, and which were home to 8.4 % of the population, caught up further with the EU average.

## Regional differences persist, but they are smaller than the differences in GDP

Map 2 provides an overview of primary income in the 268 NUTS-2 regions for which data are available for the most recent reference year 2008. Centres of wealth are evident in the south and the north-east of the United Kingdom, Paris, northern Italy, Austria, Madrid and the north-east of Spain, Flanders, the western Netherlands, Stockholm, Nordrhein-Westfalen, Hessen, Baden-Württemberg and Bayern. Also, there is a north–south divide in Italy and a west–east divide in Germany, whereas income distribution is relatively uniform across regions in Denmark, France, Austria and Sweden.

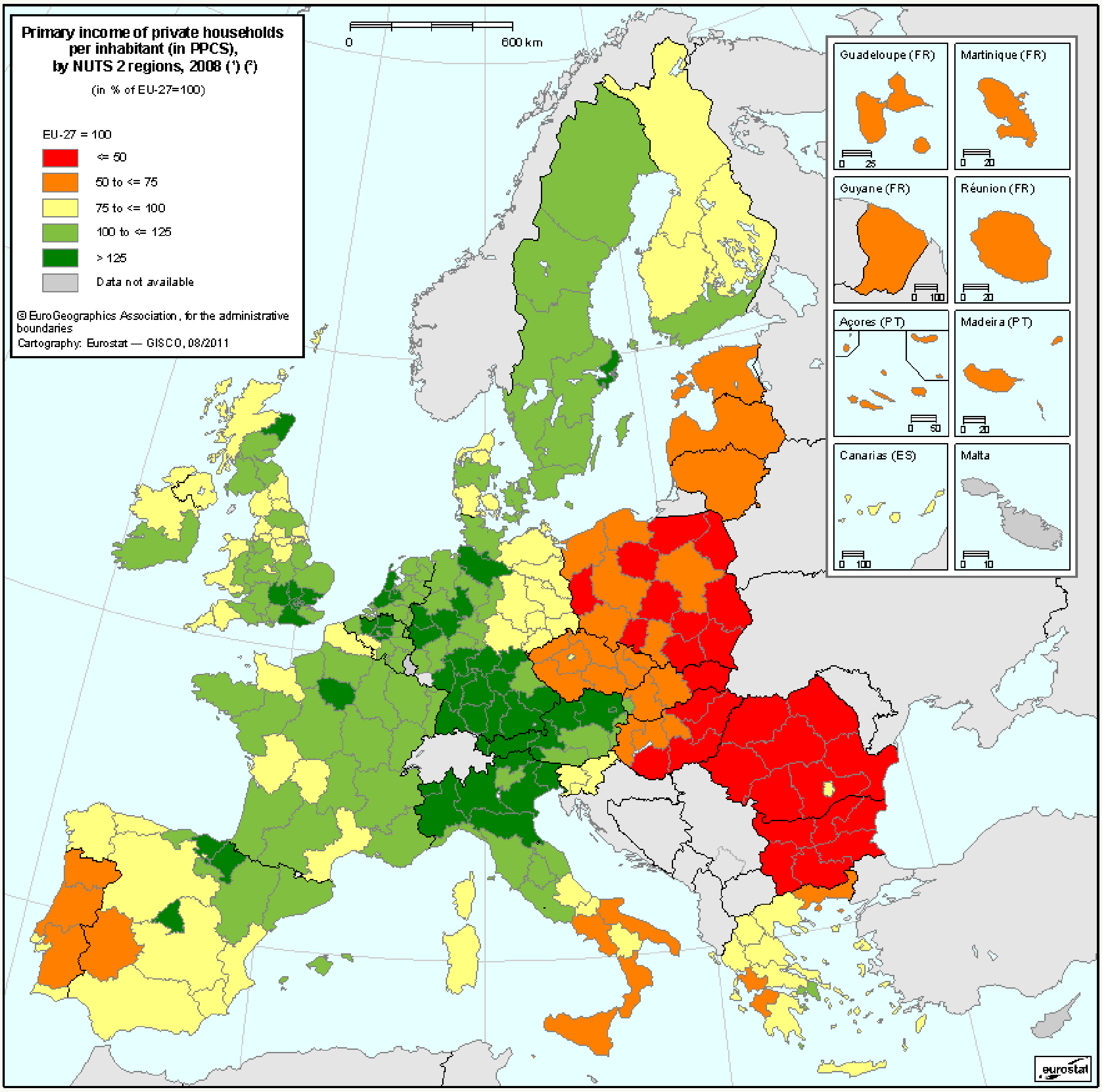
In the new Member States, it is mainly the capital regions that have relatively high income levels, particularly Bratislava (SK), where income per capita exceeds the EU-27 average, and Praha (CZ), Bucuresti-Ilfov (RO) and Zahodna Slovenija (SI), which achieve more than 90 %. Four regions, which include the capital regions of Poland and Hungary, have levels between 66.7 and 75.0% of the EU-27 average. In all other regions of the new Member States, the primary income of private households remains below two thirds of the EU average.

The regional values range from 3 648 PPCS per capita in Severozapaden (BG) to 36 805 PPCS in Inner London (UK), i.e. there is a factor of 10.1:1 between the top and bottom of the ranking. However, this is a smaller range than for regional GDP, where the corresponding factor is 13.2 : 1

If the income ranking is analysed in more detail, it can be seen that the top 20 regions are spread over seven Member States. This group contains seven regions in Germany and six in the UK, along with two each in Belgium and Italy, and one each in France, the Netherlands and Sweden. The 20 regions at the tail end of the ranking are all located in the new Member States. In addition, there is a considerable geographical concentration: the list contains seven of the eight Romanian regions and all six Bulgarian regions, along with six of the 16 Polish and one of the seven Hungarian regions.

The regional spread of income within the individual Member States is obviously much lower than for the EU as a whole, and varies considerably from one country to another. The smallest differences are in Austria, Slovenia and Denmark (factors around 1.2 : 1). The highest spread is in Romania (a factor of 3.8 : 1), followed by France and the United Kingdom (both 2.6). Capital regions have the highest income per capita in 14 of the 21 Member States concerned; in the new Member States their prominent position is even more pronounced than in the EU-15 countries.

**Map 2: Primary income of private households per inhabitant (in PPCS), by NUTS 2 regions, 2008**




(¹) EU-27, BG, Eurostat estimation
(²)French overseas departments: Level NUTS1

*Source*: Eurostat (online data code: nama_r_ehh2inc)

## The 8-year trend: The weakest regions catch up quickly

In 2008, the highest and lowest primary incomes per capita in the EU regions differed by a factor of 10.1: 1. Eight years earlier, in 2000, this factor had been 14.3. This shows that the gap between the opposite ends of the distribution narrowed considerably over the period 2000-2008, due to both the dynamic catch-up process in Bulgaria and Romania and below-average income growth in many wealthier areas of the EU. This development mirrors the trend in regional GDP where, over the same period, the corresponding gap narrowed from a factor of 17.2 to 12.0: 1. However, as this approach looks only at the extreme values, it is clear that the majority of shifts between regions are not taken into account.

If we classify the regions according to their primary income per capita (in PPCS) in relation to the EU-27 average and take into account their population, we obtain a much more comprehensive picture of developments across the entire distribution. Table 1 sets out the respective figures for primary income and also provides a comparison with regional GDP. The data in both parts of the table exclude Cyprus, Luxembourg and Malta, because household income data is not yet available for these Member States.

**Table 1: Shares of resident population in economically stronger and weaker regions: Primary Household Income vs. GDP**

| Percentage of population of EU-27* resident in regions with a **primary income** per capita of | 2000 | 2008 |
|---|---|---|
| > 125% of EU-27=100 | 32.3 | 26.1 |
| > 100% to 125% of EU-27=100 | 24.4 | 28.5 |
| > 75% to 100% of EU-27=100 | 15.6 | 20.3 |
| < 75% of EU-27=100 | 27.7 | 25.1 |
| *of which: < 50% of EU-27=100* | *17.6* | *10.4* |
| **Percentage of population of EU-27* resident in regions with a per capita GDP of** | **2000** | **2008** |
| > 125% of EU-27=100 | 24.6 | 19.6 |
| > 100% to 125% of EU-27=100 | 27.8 | 30.1 |
| > 75% to 100% of EU-27=100 | 20.3 | 26.4 |
| < 75% of EU-27=100 | 27.3 | 23.9 |
| *of which: < 50% of EU-27=100* | *14.1* | *8.8* |

*excluding Cyprus, Luxembourg and Malta

*Source*: Eurostat (online data codes: nama_r_ehh2inc, nama_r_e2gdp)

In 2000, it can be seen that the regional concentration of primary household income was considerably stronger than for GDP. This applies in particular to the upper end of the distribution, with almost one third of the EU population living in high-income areas with income values per capita in excess of 125 % of the EU average, compared to a quarter of the population in terms of GDP.

Looking at the development between 2000 and 2008, the table shows substantial convergence at both ends of the distribution, and this is true for both primary household income and GDP. If we focus on the population in regions with a primary income of less than 75 % of the EU average, the share of these regions in the total population decreased from 27.7 % to 25.1 %, which corresponds to about 9 million – or 1 in 15 – inhabitants of these regions. For regional GDP the share decreased from 27.3 to 23.9 %, i.e. by 12.6 million – or almost 1 in 10 - inhabitants and therefore to a greater extent than for household income. This finding would thus suggest that the expanding production in economically less prosperous regions did not translate into a corresponding increase in the income of households resident there.

As a result of many high-income areas falling behind and low-income areas catching up, the central part of the distribution, i.e. regions with a primary household income per capita between 75 % and 125 % of the EU average, grew strongly from 40.0 % to 48.8 %, i.e. by one quarter or 50 million people. On the other hand, as regards GDP, the central range already included 48.1 % of the population in 2000, so the increase was slightly smaller than for income, to 56.5 %, i.e. by 21 % or 49 million people.

A more detailed analysis shows that many regions with an income level of less than 75 % of the EU-27 average made considerable progress, even though they were unable to exceed the 75 % threshold. Consequently, between 2000 and 2008, the population living in regions with a primary household income of less than 50 % of the average fell from 17.6 % to 10.4 %, i.e. by 40 % or 33 million people. In terms of regional GDP, the corresponding share decreased from 14.1 to 8.8 %, i.e. by 35 % or 24 million people. This means that the catch-up process in the economically weakest areas of the EU has been considerably stronger in primary household income than in GDP.

**Table 2: Shares of resident population in economically stronger and weaker regions: Disposable Household Income vs. Primary Household Income**

| Percentage of population of EU-27* resident in regions with a **disposable income** per capita of | 2000 | 2008 |
|---|---|---|
| > 125% of EU-27=100 | 28.8 | 20.6 |
| > 100% to 125% of EU-27=100 | 32.2 | 38.6 |
| > 75% to 100% of EU-27=100 | 15.2 | 19.7 |
| < 75% of EU-27=100 | 23.8 | 21.1 |
| *of which: < 50% of EU-27=100* | *14.6* | *8.1* |
| **Percentage of population of EU-27* resident in regions with a primary income per capita of** | **2000** | **2008** |
| > 125% of EU-27=100 | 32.3 | 26.1 |
| > 100% to 125% of EU-27=100 | 24.4 | 28.5 |
| > 75% to 100% of EU-27=100 | 15.6 | 20.3 |
| < 75% of EU-27=100 | 27.7 | 25.1 |
| *of which: < 50% of EU-27=100* | *17.6* | *10.4* |

*excluding Cyprus, Luxembourg and Malta

*Source*: Eurostat (online data code: nama_r_ehh2inc)

Table 2, which is based on the same method as Table 1, compares the development of primary income between 2000 and 2008 with that of disposable income, i.e. it also shows the way in which state intervention has impacted on regional convergence.

It appears that already in 2000 the share of the EU population living in areas below the 75% threshold of disposable income was 4 percentage points or almost 19 million people lower than for primary income. During the eight years from 2000 to 2008, this difference increased to 20 million people; there was thus a measurable, but very small accelerating effect of state intervention on convergence at the lower end of the distribution.

The situation is different, however, for the high-income regions. Whereas the population receiving a primary income of more than 125 % of the EU average decreased by 26 million people, the corresponding decrease for disposable income was 36 million; this corresponds to a difference of 10 million people or two percentage points of the entire population.

We can thus conclude that state intervention had the effect of accelerating the regional convergence of household income during the eight-year period from 2000 to 2008, and that this was mainly due to a levelling influence in high income areas.

## State support of income is strongest on the eastern periphery

The intervention of the state, in particular through taxes, social benefits and contributions, leads to a relative increase in household income in less affluent regions and to a relative decrease in prosperous areas. On average, the balance of taxes and contributions versus benefits is negative, so average disposable income per capita in the EU is 13.1 % lower than primary income. As a result of the levelling effects, the range between the top and bottom of the ranking for the EU regions falls from a factor of 10.1:1 for primary income to 7.0:1 for disposable income.

In order to assess the economic situation in individual regions, it is important to know not just the levels of primary and disposable income, but also their relationship to each other. Map 3 shows this ratio, which gives an idea of the effect of state intervention and other transfer payments. On average, disposable income in the EU-27 amounts to 86.9 % of primary income. The figure was 86.4 % in 2000, so during the eight-year period the net effect of state intervention and other transfers remained almost unchanged.

Increasing levels of relative income as a result of state intervention can be found particularly in some regions of Italy and Portugal, in the west of the United Kingdom, eastern Germany, Bulgaria, Romania and eastern Poland.

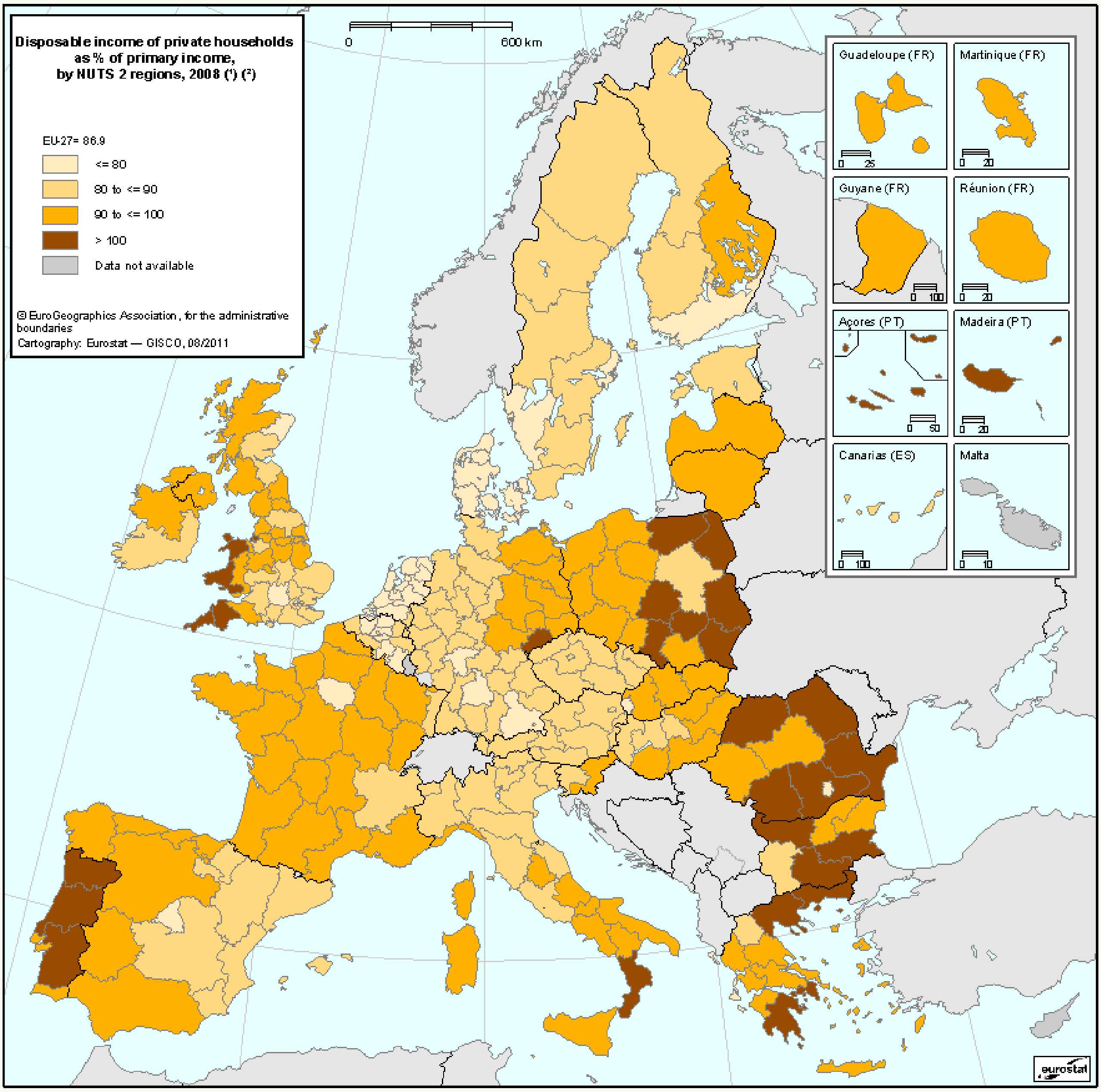
The lowest values are to be found in the capital regions of the more affluent Member States, in particular Hovedstaden (Denmark) at 67.0 % and Utrecht (Netherlands) at 67.3 %; the highest values are found in rural regions away from economic centres, such as Nord Est at 120.3 % and Sud-Vest Oltenia (both in Romania). In general, the EU-15 Member States have somewhat lower values than the new Member States.

In the 24 EU Member States examined here, disposable income exceeds primary income in a total of 30 regions. Almost 57 million people or 11.4 % of the population live in these areas.

In 2000, this applied to 25 regions with 49 million people or 10.2 % of the population. We can thus conclude that the regions with a particularly strong state support of household income have increased over the eight-year period 2000 to 2008 in both absolute and relative terms. Map 3 shows that the weak regions of the Member States in question are particularly concerned, and that these are concentrated on the eastern periphery of the EU.

When interpreting these results, however, it should be borne in mind that monetary social benefits from the state are not the only factor that may cause disposable income to exceed primary income. Other transfer payments (e.g. transfers from people working in other regions) can also play a role in some cases.

## Map 3: Disposable income of private households as % of primary income, by NUTS 2 regions, 2008




(¹)BG, Eurostat estimation
(²)French overseas departments: Level NUTS1

*Source*: Eurostat (online data code: nama_r_ehh2inc)

## METHODOLOGICAL NOTES

In market economies with state redistribution mechanisms, a distinction is made between two stages of private-household income distribution. The primary distribution of income shows the income generated directly from market transactions, i.e. the purchase and sale of factors of production and goods. The largest aggregate is compensation of employees, i.e. income from the sale of labour as a factor of production. Private households may also have property income, particularly from interest, dividends and rents. Then there is also income from operating surplus and self-employment. Interest and rents payable are recorded as negative items for households at the stage of primary distribution. The balance of all these transactions is known as the primary income of private households.

Primary income is used as a basis for calculating the secondary distribution of income, which shows the effects of the state redistribution mechanism. All social benefits and transfers other than in kind are now added to primary income; from this total households pay income and wealth taxes and social contributions and make transfers. The balance remaining after these transactions is the disposable income of private households. These data are recorded in the regional accounts at NUTS level 2.

In order to analyse household income, data are to be expressed in a unit which allows meaningful comparisons between regions. For inter-regional comparisons, regional GDP is generally expressed in purchasing power standards (PPS), the aim being to allow a volume-based comparison. Data on the income of private households should be treated accordingly. Therefore, data on income of private households are recalculated using PPS consumption components for the aggregate E011 (household final consumption expenditure). These are known as PPCS (purchasing power consumption standards).

Member States transmit regional household accounts data in accordance with Regulation No 1392/2007 of the European Parliament and of the Council to Eurostat within 24 months after the end of the reference year. For the reference year 2008 this deadline was respected by most of the Member States. Eurostat does not yet have a complete data set at NUTS 2 level. For the reference year 2008, 23 Member States provided data at NUTS 2 level. Data are still not available for Cyprus, Luxembourg and Malta. Data for the French overseas departments are only available at NUTS1, i.e. for the aggregate of all four departments. Data for Bulgaria for 2008 are not available and had to be estimated using the regional structure from 2007; the same nominal growth rate as for GDP was assumed for the national income data. Data for Bulgaria, Ceuta and Melilla in Spain and Hungary are available as from 2000 and for Slovenia as from 1999. Because of the limited availability of data, the EU-27 values for primary and disposable income were estimated. For this purpose, the share of the missing Member States in household income (in PPCS) for EU-27 was assumed to be the same as for GDP (in PPS). For the reference year 2008 this share was 0.5 %. Including Bulgaria and the French overseas department this publication covers 268 of the 271 NUTS2 regions of the EU.

The regions of the Member States are available on Eurostat's website. The aggregate 'new Member States' includes the following 12 countries: Bulgaria, Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Romania, Slovenia and Slovakia. EU-27 = European Union of 27 Member States from 1 January 2007: Belgium (BE), Bulgaria (BG), the Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta ( MT), the Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE) and the United Kingdom (UK).

Data that reached Eurostat after 8 July 2011 are not included in this publication. All data are available online on Eurostat's website (see page 8 for the link).

In the European System of Accounts, the distribution of income accounts is defined as follows:

| Primary distribution of the income of private households account | |
|---|---|
| **Uses** | **Resources** |
| D.4 Property income | B.2/B.3 Operating surplus/mixed income |
| | D.1 Compensation of employees |
| B.5 Balance of primary incomes | D.4 Property income |

| Secondary distribution of the income of private households account | |
|---|---|
| **Uses** | **Resources** |
| D.5 Current taxes on income, wealth, etc. | B.5 Primary income |
| D.61 Social contributions | D.62 Social benefits other than social transfers in kind |
| D.7 Other current transfers | D.7 Other current transfers |
| B.6 Balance of disposable income | |

**From primary to adjusted income**

Disposable income as defined in the ESA is not the ideal indicator for measuring the resources that are put at the disposal of private households. The reason is that certain social services and benefits are provided free of charge in some Member States, whereas in others households have to pay for them. Therefore the ESA variable B.6 "Disposable Income" should be adjusted by Social Transfers in Kind (ESA variable D.63); the resulting adjusted disposable income (ESA variable B.7) gives a much more accurate picture of the real income situation of households.

However, social transfers in kind are very difficult to measure, and there is no regional data available in the EU. Therefore comparisons among regions are limited to disposable income (ESA variable B.6). Users should bear in mind that this variable underestimates the real income situation of households in countries with highly developed welfare systems.

## Further information

Eurostat Website: http://ec.europa.eu/eurostat

Data on 'National accounts'
http://epp.eurostat.ec.europa.eu/portal/page/portal/national_accounts/data/database

Further information about 'National accounts'
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