# **Statistics**

# in focus

**GENERAL AND REGIONAL STATISTICS** 

**ECONOMY AND FINANCE** 

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### Regions

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# Private household income in the regions of the European **Union, 2002**

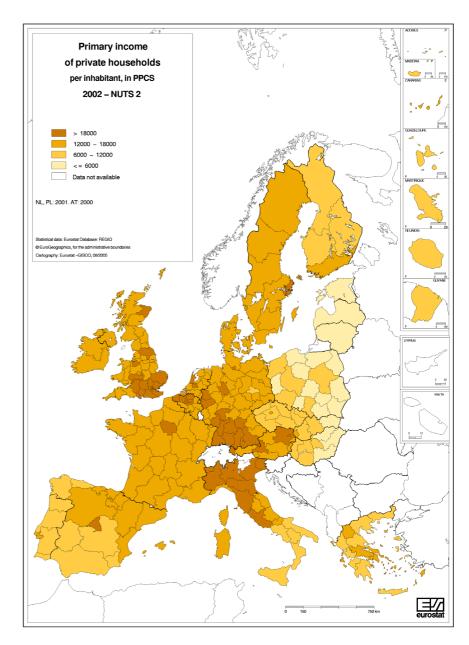


Figure 1: Primary income of private households (in PPCS) - NUTS level 2, 2002

According to the latest estimates for 2002, the regional values for primary income per inhabitant ranged from 4 439 PPCS in Lubelskie (Poland) to 27 754 PPCS in Inner London. In other words, primary income in the region with the highest value was more than six times greater than that of the region with the lowest. The region with the highest value in the new Member States was Prague in the Czech Republic with a primary income of 14 500 PPCS. This value was just below the EU average.

### 1. Introduction

The indicator most often used to measure the wealth of regions is regional gross domestic product (GDP). Generally speaking, GDP is expressed in purchasing power standards (PPS) per inhabitant in order to ensure that data can be compared between regions.

At regional level, GDP is calculated using the production approach. It is the total value of goods and services produced in a region by persons employed in that region. However, owing to a wealth of inter-regional flows and State interventions, the GDP generated in a given region does not in general tally with the income actually accruing to the inhabitants of the region. This being the case, a more accurate picture of a region's economic situation can be obtained only by adding the figures for income accruing to private households.

In market economies with State redistribution mechanisms, a distinction is made between two types of private-household income distribution.

The **primary** distribution of income shows the income of private households generated directly from market transactions, i.e. the purchase and

sale of factors of production and goods. First and foremost here 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 income from operating surplus and self-employment. Negative household income includes interest and rents payable. 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 State redistribution mechanism. All social benefits and transfers other than in kind are now added to primary income, and it is from this total that households must pay income and wealth taxes, pay social contributions and make transfers. The sum remaining after these transactions have been carried out, i.e. the balance, is known as the **disposable income** of private households.

It is only within the past few years that Eurostat has had regional data on these income categories for private households. These are recorded in the regional accounts at NUTS level 2.

### 2. London in the lead

Fig. 1 shows primary income in the NUTS 2 regions of the EU 25 countries. There are clear centres of prosperity in the south of England, Paris, Brussels, northern Italy, Vienna, Madrid, the western Netherlands, Stockholm, as well as in North Rhine-Westphalia, Baden-Württemberg and Bavaria. The north/south divide is clearly visible in both Italy and Spain, and the east/west divide in Germany.

In the new Member States, the primary income of households in most regions is still less than half the EU average. Regions with clear above-average levels of prosperity include the capital regions, particularly Prague, Bratislava, Közép-Magyarország (Budapest) and Mazowieckie (Warsaw). Prague is the only region in the new Member States where

primary income approaches the average of the 21 countries looked at here.

Table 1 shows the ten NUTS 2 regions with the highest and lowest primary income per inhabitant. Of the ten leading regions, five are in the United Kingdom, two in Belgium and one each in France, Germany and Italy. Compared with 2001, this group includes one more British region and one less German.

All ten of the regions with the lowest primary incomes are in the new Member States – six in Poland, one in Hungary, as well as Lithuania, Estonia and Latvia. The composition of this group has not changed since 2001.



Region	Primary income of private households per inhabitant 2002 (in PPCS)
Inner London (UK)	27754
Prov. Vlaams-Brabant (BE)	24082
Berkshire, Buckinghamshire and Oxfordshire (UK)	23895
Bedfordshire and Hertfordshire (UK)	23545
Île de France (FR)	23227
Oberbayern (DE)	22900
Outer London (UK)	22800
Prov. Brabant Wallon (BE)	22769
Surrey, East and West Sussex (UK)	22521
Lombardia (IT)	21848
Lietuva (LT)	5199
Észak-Alföld (HU)	5191
Eesti (EE)	4841
Opolskie (PL)	4823
Podlaskie (PL)	4812
Warmińsko-Mazurskie (PL)	4801
Świętokrzyskie (PL)	4780
Podkarpackie (PL)	4463
Latvija (LV)	4444
Lubelskie (PL)	4439

Table 1: EU regions with the highest/lowest primary income 2002

The primary incomes per inhabitant in the regions of the European Union continue to display a wide range. For 2002, the highest and lowest values

varied by a factor of 6.3. In 1999, the corresponding figure was 7.1. In other words, the last few years have seen the gap narrow slightly, particularly as a result of strong growth in some regions of Poland and the Baltic States.

Within the Member States, the range is much narrower, the values generally varying by a factor of 1.5 to 2. There are strikingly flat distributions in Ireland (factor of 1.2) and Austria, where the region with the highest primary income per inhabitant (Vienna) is only 30 % higher than that with the lowest (Carinthia). In terms of range, there are no significant differences between the old and new Member States.

However, a comparison of 2002 figures with those from 1999 shows a different picture. Whilst the regional range in the old Member States changed very little, regional variations in the new Member States have become considerably greater. One of the main reasons for this is the dynamic economic development in the capital regions, something that is also clearly reflected in GDP.

### 3. Primary income and GDP

	GDP	Primary income	
	per inhabitant	per inhabitant 2002	
Region	2002 in PPS	in PPCS	as % of
			GDP (in PPS)
Inner London (UK)	66761	27754	41.6
Bruxelles-Capitale (BE)	49645	18486	37.2
Luxembourg (LU)	45026	:	:
Hamburg (DE)	39766	21005	52.8
Île-de-France (FR)	37267	23227	62.3
Wien (AT)	36603	20365	55.6
Berkshire, Buckinghamshire &	34251	23895	69.8
Oxfordshire (UK)			
Provincia Autonoma Bolzano (IT)	33783	:	:
Stockholm (SE)	33488	20290	60.6
Oberbayern (DE)	33454	22900	68.5
Latvija (LV)	8249	4444	53.9
Východné Slovensko (SK)	8200	5546	67.6
Észag-Alföld (HU)	7990	5191	65.0
Opolskie (PL)	7917	4823	60.9
Eszag-Magyarország (HU)	7902	5480	69.4
Świętokrzyskie (PL)	7557	4780	63.2
Podlaskie (PL)	7435	4812	64.7
Warmińsko-Mazurskie (PL)	7217	4801	66.5
Podkarpackie (PL)	6891	4463	64.8
Lubelskie (PL)	6764	4439	65.6

Table 2: Primary income as % of GDP

There are many reasons why regional GDP per inhabitant often differs considerably from the income of private households. This is particularly true of the capital regions, e.g. Brussels or London, where the GDP per inhabitant is above average in the capital but comparatively low in the surrounding areas. The reason for this is that GDP is recorded at the place of production, but generated in part by employees living in the areas surrounding the capital.

The reverse effect is observed in the case of income that is partly allocated to capital cities' outlying regions, which are home to many of the people who work in the capitals. Consequently, the income per inhabitant as a proportion of GDP may be relatively higher than in the capital itself.



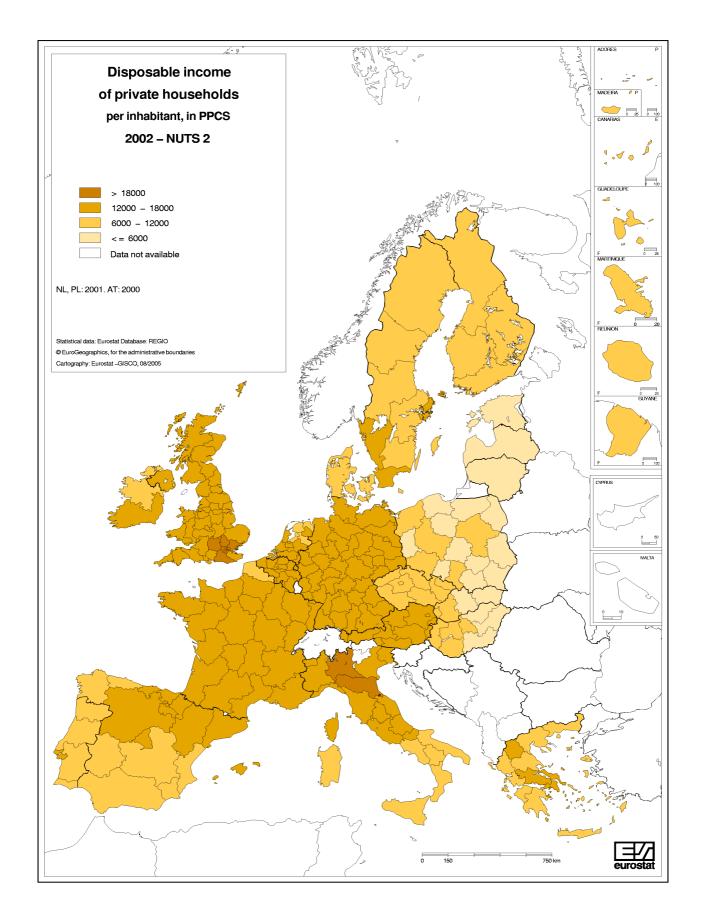


Figure 2:Disposal income of private households per inhabitant in PPCS – 2002 - NUTS 2



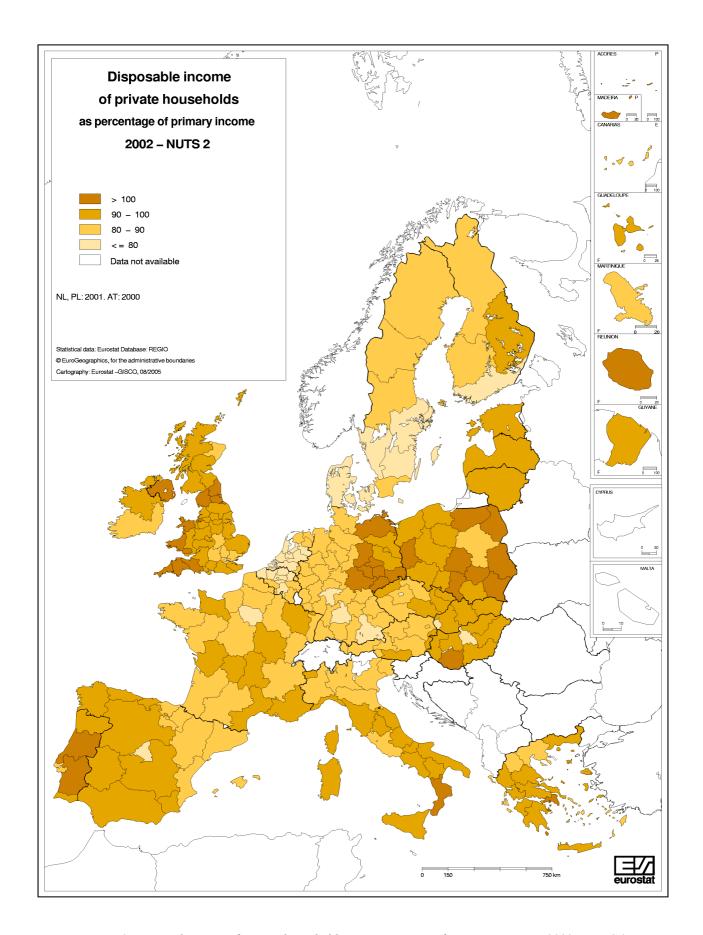


Figure 3: Disposal income of private households as a percentage of primary income – 2002 -  $NUTS\ 2$ 



These effects are illustrated in Table 2, which gives the EU regions with the highest and lowest GDPs per inhabitant. A comparison of GDP and primary income (cf. Table 1) shows that the regions with the highest/lowest primary incomes per inhabitant do not necessarily also have the highest/lowest GDPs: just four of the ten regions with the highest primary incomes per inhabitant also appear in the top ten GDPs per inhabitant. It can also be seen that regions with large numbers of commuters have a particularly low ratio of primary income to GDP. For example, this figure is just 37.2 % for Bruxelles-Capitale, 41.6 % for Inner London and 52.8 % for Hamburg. For NUTS 2 regions which do not have large numbers of transre-

gional commuters, values of 60 % to 70 % would be more normal.

At the bottom end of the scale, where every one of the regions is from one of the new Member States, this effect is less pronounced. Of the ten regions with the lowest primary income, only two are not in the corresponding GDP group. With the exception of Latvia, the ratio of primary income to GDP lies in a relatively narrow band of between 60 % and 70 %. One thing this indicates is that transregional commuting in the economically less developed regions of the new Member States does not yet play as important a role as it does in the EU-15 countries.

### 4. Range narrowed by State interventions

Unlike primary income, disposable income is largely the result of State interventions and of transfer payments (cf. methodological notes below). As a result of taxes withheld by the State, disposable income is generally lower than primary.

Fig. 2 also shows that State interventions in the form of tax levies and social contributions have a considerable levelling effect on income. There is a clear regional rebalancing of incomes in Germany as a whole, southern and central Italy, the United Kingdom, France, Belgium, Spain and the Czech Republic. As a result of State redistributions, the region with the highest income per inhabitant in the EU has five – rather than 6.25 - times the income of the region with the lowest.

Region	Disposable income per inhabitant 2002 in PPCS
Inner London (UK)	21550
Surrey, East and West Sussex (UK)	20479
Bedfordshire and Hertfordshire (UK)	19674
Berkshire, Buckinghamshire & Oxfordshire (UK)	19538
Outer London (UK)	18992
Emilia-Romagna (IT)	18332
Lombardia (IT)	18304
Essex (UK)	18230
Valle d'Aosta (IT)	17980
North Yorkshire (UK)	17765
Észag-Alföld (HU)	5063
Świętokrzyskie (PL)	5012
Podlaskie (PL)	4922
Warmińsko-Mazurskie (PL)	4889
Opolskie (PL)	4793
Eesti (EE)	4783
Lietuva (LT)	4763
Lubelskie (PL)	4750
Podkarpackie (PL)	4589
Latvija (LV)	4332

Table 3: EU regions with the highest/lowest disposable income 2002

A country-based analysis shows that in most Member States the disparity between the regions in terms of disposable income is around one-eighth to one-sixth lower than it is for primary income. Interestingly enough, in both Germany and the United Kingdom, regional distributions are levelled by around 28 %, which is higher than in any other of the Member States, whilst the corresponding figure for France is just 18 % (including overseas departments) or 16 % (excluding them). In terms of

the way in which fiscal and social contribution systems affect the regional distribution of income, Germany and the United Kingdom have much more in common than Germany and France. At the other end of the scale, Austria and Ireland show very little levelling (6 % and 7 % respectively), though this is not really surprising, as in both these Member States primary income is already fairly evenly distributed.

After distribution, the regional range in disposable income in Austria is just 22%, and in Ireland as low as 11 %. These are in marked contrast to particularly high values for the Czech Republic (80 %), Hungary (79 %) and Italy (75 %).

Fig. 3 shows that State interventions in the form of taxes and social contributions combined with other transfers mean that disposable income may exceed primary. In 2002, this was the case in 32 of the 248 EU regions looked at here. The regions concerned are in the United Kingdom (nine regions) and in Poland and eastern Germany (eight each), almost all of them being economically weaker regions of the EU. As Table 4 shows, disposable income in all but one of these regions exceeds primary income by no more than 10 %. The exception is Dél-Dunántúl in Hungary, where a particularly high proportion of other current transfers means that disposable income exceeds primary income by 24 %. By contrast, all other regions of Hungary have values of under 100 %.

	Disposable income
Region	as a percentage of
	primary income 2002
Dél-Dunántúl (HU)	124.0
Cornwall and Isles of Scilly (UK)	110.3
Chemnitz (DE)	109.9
West Wales and The Valleys (UK)	109.4
Dessau (DE)	109.2
Halle (DE)	107.5
Devon (UK)	107.1
Lubelskie (PL)	107.0
Magdeburg (DE)	105.1
Leipzig (DE)	105.1
Świętokrzyskie (PL)	104.9
Dresden (DE)	104.7
Merseyside (UK)	104.0
Centro (PT)	103.0
Podkarpackie (PL)	102.8
Alentejo (PT)	102.6
Podlaskie (PL)	102.3
Mecklenburg-Vorpommern (DE)	102.2
Northern Ireland (UK)	102.0
Thüringen (DE)	101.8
Warmińsko-Mazurskie (PL)	101.8
Łódzkie (PL)	101.8
Dorset and Somerset (UK)	101.7
Calabria (IT)	101.6
Northumberland and Tyne and Wear (UK)	101.1
Tees Valley and Durham (UK)	100.8
Réunion (FR)	100.7
Attiki (GR)	100.4
Cumbria (UK)	100.3
Śląskie (PL)	100.3
Lubuskie (PL)	100.2
Região Autónoma da Madeira (PT)	100 1

Table 4: EU regions with the highest disposable income in relation to primary income, 2002

On closer inspection, above-average social benefits in many economically weak regions of the EU mean that disposable income is about the same as primary. There are also other transfers, e.g. from individuals formerly resident in a region who have moved to other regions and send back remittances to family members. Generally speaking, such payments account for between 6 % and 10 % of disposable income.

A comparison of figures for 2002 and 1999 brings out longer-term trends and basically shows that, in 1999, only 26 regions had disposable incomes that were higher than primary incomes. Between 1999 and 2002, social benefits as a portion of disposable income have shown such a marked increase in four Polish and three British regions that disposable income now outstrips primary. By contrast, other transfer payments received over the same period have remained largely unchanged.

### 5. Property income of major significance

The income of private households comes not just from employment (self or otherwise) or social benefits from the State - it also comes from property. This basically means income from interest accruals, dividends and other payments from joint stock companies, as well as withdrawals from the income of guasi-corporations.

which play a particularly important role in the case of partnerships and sole proprietorships. Then there are leases for undeveloped plots of land. It should, however, be noted that rents for buildings do not form part of property income, but are included in the gross value added of branch K.

Fig. 4 shows the relative importance of property income in the 207 regions of 20 EU Member States for which data are available. As can be seen, in around a third of the regions, property income accounts for over 15 % of primary income, whilst in over half of all regions the corresponding figure is between 5 % and 15 %. There are particularly high figures in Italy, Austria, the United Kingdom, Belgium, the Netherlands, Latvia and Lithuania. Only 13 regions have values of under 5 %, most of these being in Sweden and, to a lesser extent, in Slovakia, the Czech Republic and Estonia.

Region	Change of Property Income as share of primary Income: 2002 compared to 1997 in percentage points
Lietuva (LT)	5.1
Guyane (FR)	3.0
Martinique (FR)	2.8
Latvija (LV)	2.5
Eesti (EE)	1.8
Közép-Magyarország (HU)	1.6
Corse (FR)	1.4
Réunion (FR)	1.4
Etelä-Suomi (FI)	1.4
Áland (FI)	1.2
Nyugat-Dunántúl (HU)	-6.1
Peloponnisos (GR)	-6.1
Dytiki Ellada (GR)	-6.2
Kriti (GR)	-6.4
Dytiki Makedonia (GR)	-6.6
Região Autónoma da Madeira (PT)	-6.6
Ipeiros (GR)	-7.0
Notio Aigaio (GR)	-8.3
Attiki (GR)	-10.2
Voreio Aigaio (GR)	-11.1

Table 5: Change of share of property income – 2002 compared to 1997

However, when interpreting these results, we should bear in mind that the level of property income is very much influenced by national factors. One major factor is the self-employed as a percentage of total persons in employment, as this has a major impact on the level of withdrawals from the income of quasi-corporations (variable D.422 of the ESA95). For example, property income in the Italian region of Emilia-Romagna is 42 % of primary income, whilst in the Swedish region of Mellersta Norrland it is just 3.2 %. However, this is put into perspective when we look at the number of self-employed in the two regions —

28 % in Emilia-Romagna, but just 5 % in Mellersta Norrland.

Such structural anomalies can also be observed in the new Member States. For example, property income in Latvia and Lithuania accounts for around 21 % of primary income, but just 4 % in Estonia. Though these disparities appear at first sight to be quite astonishing, they are less so when the portion of self-employed is taken into account – 15 % in Latvia and 22 % in Lithuania, but just 8 % in Estonia.

In addition to the percentage of self-employed, individual components of property income are also influenced by differences between national taxation systems, which may make particular types of capital investment more or less attractive. In Sweden, for instance, interest accruals account for just 16 % of property income, which is itself already low, whilst the corresponding figure for Belgium is around 52 %.

There are also telling differences between Member States in terms of the types of capital investment preferred by private households. In Italy, for instance, income from dividends (variable D.421 of the ESA95) is as high as 7.4 % of primary income, in Greece just 1.0 %, whilst the corresponding figure for the Czech Republic is as high as 3.4 %.

Given the structural differences between the Member States, it comes as no surprise that there is a greater variation in property income between the Member States than within individual countries.

At national level, property income in Italy is almost 40 % that of primary, making it nine times higher than in Sweden (4.4 %).

At regional level, the range within the Member States is much narrower, from a factor of 2.5 between regions with the highest and lowest portions of property income in Greece to a barely measurable 1% in Ireland. In four of the 16 Member States for which NUTS level 2 data are available, the highest portion of property income at regional level is more than twice the lowest - this is the case in Greece, France, Portugal and Spain. At the other end of the scale, the regional differences are particularly small in Ireland (1% range), Austria (11%) and Italy (17%).

On closer inspection, it might initially come as a surprise to learn that, with the exception of Slovakia, Sweden, Austria and Portugal, the capital regions do not head the league table even though they do for primary income in most Member States. This apparent contradiction is attributable to the considerable impact of the self-employed on property income. A comparison of the proportion of selfemployed and property income as a percentage of primary income bears this out. In the capital regions, where the self-employed as a proportion of the total employed is generally very low in most countries, property income is also generally lower than the national average in percentage terms. Unfortunately, it is not possible to provide any greater level of detail, since the ESA95 data at regional level do not break property income down into interest accruals, dividends and withdrawals from the income of quasi-corporations.

Further findings can be arrived at by comparing data from 2002 with those from 1997, which shows trends over a period of five years. Table 5 shows the 10 regions with the highest increases and decreases in property income. Significantly, four of the ten regions in the leading group are in the new Member States. These are the three Baltic States and Közép-Magyarország, Hungary's capital region. Three of these four regions have simultane-

ously seen a fall in the number of self-employed - the fall being almost nine percentage points in Lithuania. The only one to record an increase – of 0.4 % - was Estonia. The welcome conclusion is that in some parts of the new Member States a palpable process of private wealth creation is now under way.

With the exception of Madeira (Portugal) and the Hungarian Region of Nyugat-Dunántúl, all the regions at the bottom end of the table in are Greece. This is basically attributable to the sharp fall in income accruals following the introduction of the euro, and to the marked decrease in income from dividends and profits. There was also a countrywide fall in the number of self-employed.

No great importance should be attached to the fact that the Hungarian region of Nyugat-Dunántúl also appears in this group. This is an economically highly developed region bordering Austria which even in 2000 still had what was easily the highest percentage of property income in the entire country. The number of self-employed also fell. As a result of the decrease shown in Table 5, property income as a percentage of primary income in Nyugat-Dunántúl was 6.4 % in 2002, i.e. almost exactly the Hungarian average.

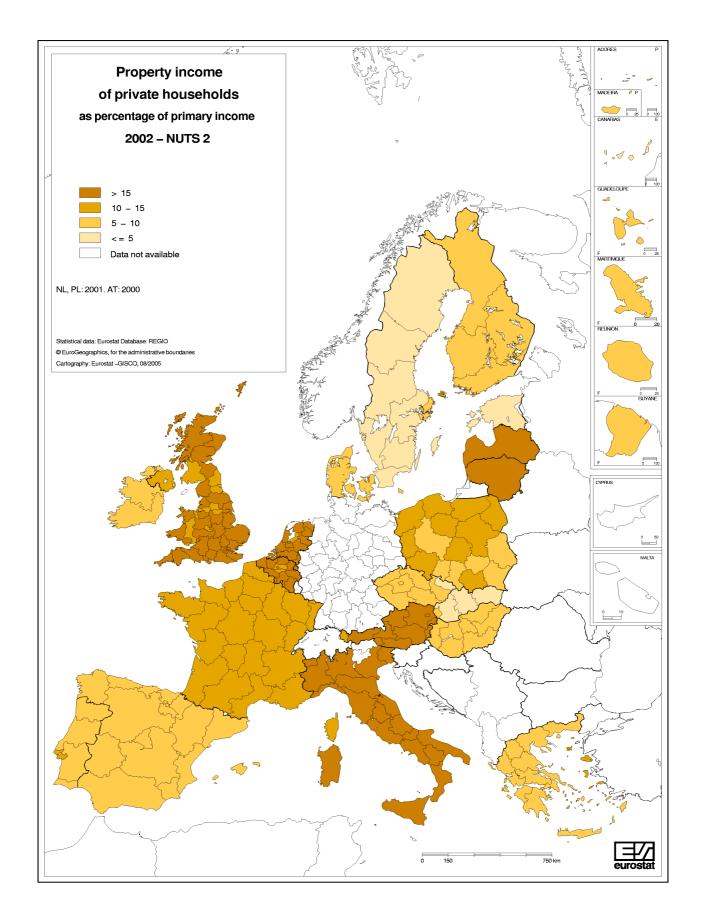


Figure 4: Property income of private households as percentage of primary income – 2002 – NUTS 2



### > ESSENTIAL INFORMATION - METHODOLOGICAL NOTES

Prior to an analysis of household income, a decision must be made about the unit in which data are to be expressed if comparisons between regions are to be meaningful. For interregional comparisons, regional GDP is generally expressed in purchasing power standards (PPS), the aim being to allow a volume-based comparison. Consequently, data on the income of private households should be treated in the same way to ensure that these can be compared with regional GDP and with one another.

However, there is a problem here. PPS are designed for GDP as a whole. Calculations are based on the expenditure approach, PPS being broken down on the expenditure side only, e.g. into PPS for the consumption expenditure of private households or PPS for capital goods. However, the expenditure approach cannot be used in regional accounts, as this would call for data on regional import and export flows. These data are not available at regional level, so regional accounts are calculated using the production approach only.

Consequently, income components and PPS do not tally exactly. PPS exist for private consumption only.

Assuming that these conceptual differences do not play a significant role, Eurostat recalculates the income components of private households using PPS consumption components. These are known as PPCS (purchasing power consumption standards). The resultant ratio of disposable income to GDP is not quite accurate from a methodological point of view, as a PPCS value is divided by a PPS value. However, the inaccuracy may be considered negligible.

Eurostat does not yet have a complete set of data at NUTS 2 level. Data are still not available for the following regions: Provincia Autonoma Bolzano and Provincia Autonoma Trento in Italy, Cyprus, Luxembourg, Malta and Slovenia. 21 Member States provided data on a total of 248 regions at NUTS level 2. For Poland, not all data up to 2002 are available. For France and the Netherlands, data go up to 2001 only, and for Austria to 2000 only.

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

### Primary distribution of the income of private households account

Use	S	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 Currrent taxes on income,	
wealth, etc.	B.5 Primary income
D.61 Social contributions	D.62 Social benefits other than social
	benefits in kind
D.7 Other current transfers	D.7 Other current transfers
B.6 Balance of disposable income	



### Further information:

### **Databases**

<u>EUROSTAT Website/General and regional statistics/Regions/Economic accounts - ESA95/Household accounts - ESA95/Allocation of primary income account of households at NUTS level 2</u>

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