

Who is poor in Europe?

Two different illustrations of poverty, using the monetary approach or the material and social deprivation approach

*Julien Blasco, François Gleizes**

Income poverty and material and social deprivation are two different approaches to poverty. The former, which is based on household income, is measured in a relative manner: the poverty line depends on the country's income level. The latter is based on living conditions and establishes a single threshold for all countries. The people identified by these two approaches to poverty are different, which has an impact on comparisons between European Union (EU) countries.

In 2016, 12.7% of the French population and 15.7% of the EU population find themselves in a situation of material and social deprivation. In turn, income poverty affects 13.6% of the French population and 17.3% of the European population. France has one of the lowest income poverty rates in the EU and an average material and social deprivation rate. There is a correlation between the two rates; however, certain countries have similar poverty rates according to one definition and very different rates according to the other definition.

Within a single country, the populations defined by these two poverty indicators only overlap partially: in France, less than 6% of the population is affected by the two forms of poverty. Nevertheless, in most EU countries, the populations exposed to either of these forms of poverty are relatively similar from the point of view of activity status, profession and family configuration. However, independent workers, farmers and young people are affected by income poverty much more than by material and social deprivation.

On the whole, the wealthier countries have lower material and social deprivation rates than the rest of the EU, although their income poverty rates remain close to the average. In addition, people in situations of material and social deprivation in those countries have a much higher income, but they have a level of life satisfaction around the same as their counterparts in poorer countries.

There are several ways to statistically define poverty. A first approach, called relative **income poverty**, defines poor households using an **equivalised disposable income** criterion that depends on the income distribution throughout the country. This definition raises at least two problems: it does not make it possible to understand the differences in situations that may correspond to the same equivalised income and it requires any international comparison of poverty to put the populations defined by the different poverty lines into perspective.

Another approach to poverty, which complements the foregoing approach, consists of measuring deprivation in terms of consumption and the financial difficulties of individuals. Thus, in the European Union (EU), a person is deemed to be in a situation of **material and social deprivation** if he/she declares that he/she does not have sufficient financial resources to access a certain number of goods and services, considered necessary for decent living conditions in Europe [Eurostat, 2018]. This approach, which is sometimes referred to as absolute, establishes a threshold in terms of the number of deprivations that is the same for all countries.

* Julien Blasco, François Gleizes, Insee.

These two methods of measuring poverty do not necessarily identify the same populations [Lollivier and Verger, 1998]. The European reference source EU SILC (*box 1*) on income and living conditions makes it possible to assess the differences and similarities between these two populations. It also makes it possible to observe how European poverty comparisons are affected by the selection of the indicator. In particular, it is questionable whether the absolute nature of the material deprivation threshold would make the poor populations identified more comparable from one country to another.

Material and social deprivation affects 12.7% of the French population and 15.7% of the EU population.

In 2016, 15.7% of the EU population find themselves in a situation of material and social deprivation, which equates to over 78 million people. Individuals are considered to be in a situation of material and social deprivation when, due to lack of financial resources, they face at least five material or social difficulties from a list of thirteen concerning, among other things, expenses relating to housing, clothing, food and leisure (*box 2*).

For international comparisons, the EU is divided into two main “regions”, based on the United Nations classification (*figure 1*). The first region brings together the countries of Northern and Western Europe¹, while the second is composed of the countries of Southern and Eastern Europe². This grouping is not only geographical, but also economic, because Northern and

Box 1

The EU SILC reference source

The purpose of the EU SILC reference source (Statistics on Income and Living Conditions) is to produce structural indicators on the distribution of household income and living conditions that are comparable for EU countries. It forms part of the Community action programme to combat social exclusion and provides the statistical material for the European Commission’s annual summary report on these issues. The surveys that make up the EU SILC reference source gather information on income for year N-1, while the variables on household material deprivation and living conditions relate to year N. This may explain differences with other publications on incomes, which use the year of income collection, not the year of the survey.

The regulations set out so-called “primary” areas that are addressed each year (demographics, income, social exclusion, work, housing, education and health) and so-called “secondary” areas, on topics that vary from year to year (material deprivation among children, debt, subjective

well being, etc.), which have been defined by the Commission since 2005.

The data used here are taken mainly from the SILC 2016 survey, except for the part concerning life satisfaction, which uses a secondary module from the SILC 2013 survey. Some of the results come from indicators calculated directly by Eurostat and downloaded from their website in September 2018, the rest are from calculations carried out by the authors on the micro data files. Slight discrepancies may exist.

For the majority of countries, the rate of missing values for the material and social deprivation indicator is less than 2%. Among the 7 countries for which it is higher than 2%, it is relatively higher in the first income quintile groups in the Netherlands and Sweden and, to a lesser extent, in France and Finland. The fact that this rate of missing values is higher for the lowest incomes causes an under estimation of the rate of material and social deprivation for these countries.

1. Respectively Denmark, Finland, Ireland, United Kingdom, Sweden and Germany, Austria, Belgium, France, Luxembourg and the Netherlands.

2. Respectively Cyprus, Croatia, Spain, Greece, Italy, Malta, Portugal, Slovenia and Bulgaria, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Czech Republic. Thus, this grouping differs from that used by the UN by including the Baltic States and Cyprus.

Western Europe, as defined above, includes the 11 countries with the highest median equivalised incomes in the EU.

The rate of material and social deprivation varies greatly depending on the country, ranging from less than 3% in Sweden to almost 50% in Romania. In this respect, the two regions of the EU exhibit large disparities: the rate of material and social deprivation in Northern and Western Europe is half that in Southern and Eastern Europe (10.7% and 21.3%, respectively). Thus, Southern and Eastern Europe brings together almost two thirds of Europeans in a situation of material and social deprivation, even though it contains less than half of the EU's population.

1. Rate of material and social deprivation by country in 2016



Sources: Eurostat, EU-SILC 2016 survey, data extracted in September 2018

The new material and social deprivation indicator

Established in 2017, the EU's material and social deprivation indicator is defined as the proportion of persons living in ordinary households (i.e. not in collective households or mobile homes) incapable of covering expenses linked to at least five of thirteen elements of daily life considered desirable, or even necessary, for an acceptable standard of living. The thirteen elements are as follows:

- having arrears in hire purchase instalments, rent or mortgage payments or electricity, water or gas bills;
- being unable to afford a one week annual holiday away from home;
- being unable to afford a meal with meat, chicken or fish (or vegetarian equivalent) at least every second day;
- being unable to face unexpected expenses for an amount close to the monthly poverty line (approximately EUR 1000 for France);
- being unable to afford a car for personal use;
- being unable to keep one's home adequately warm due to a lack of financial resources;
- being unable to replace worn-out furniture due to a lack of financial resources;
- being unable to afford new clothes;
- not having at least two pairs of properly fitting shoes due to a lack of financial resources;

- being unable to spend a small amount of money on oneself without having to ask anyone;
- being unable to get together with friends or family at least once a month for a drink or a meal due to a lack of financial resources;
- being unable to have a regular leisure activity due to a lack of financial resources;
- not having an internet connection due to a lack of financial resources.

This new indicator aims to improve the material **deprivation indicator** used, among other things, to calculate the risk of poverty or social exclusion (ARPE, [Beffy et al., 2014]), and is one of ten indicators for national monitoring of the French government's sustainable development objectives. This old indicator is composed of nine elements measured at household level, six of which are shared with the material and social deprivation indicator. Three items have been removed from the list (having a washing machine, a colour television and a telephone) because of their having too great a frequency in the population, meaning that they were not relevant for defining a state of material deprivation [Guio et al., 2012]. In addition, elements relating to social life have been added.

The deprivation rates measured by these two indicators are close: in 2016, the rate of material deprivation (old version) in the EU is 15.7%. In

Proportion of people in a situation of deprivation according to size in 2015

as a %

| | France | European Union | Northern and Western ¹ | Southern and Eastern Europe ¹ |
|---|-------------|----------------|-----------------------------------|--|
| Being unable to face unexpected expenses | 32.8 | 37.5 | 31.9 | 44.2 |
| Being unable to afford a one week holiday away from home | 24.0 | 34.4 | 23.4 | 48.0 |
| Being unable to afford to replace worn-out furniture | 23.7 | 29.4 | 20.4 | 41.1 |
| Being unable to spend a small amount of money on oneself without having to ask anyone | 14.7 | 16.0 | 11.7 | 19.4 |
| Being unable to afford to participate in a regular leisure activity | 12.6 | 15.6 | 12.3 | 21.8 |
| Having arrears in hire purchase instalments, rent or mortgage payments or electricity, water or gas bills | 8.9 | 11.5 | 8.6 | 16.0 |
| Being unable to afford to replace worn-out clothes by some new | 8.5 | 10.2 | 7.9 | 14.5 |
| Being unable to afford a meal with protein at least every second day | 7.3 | 8.5 | 5.8 | 11.3 |
| Being unable to afford two pairs of properly fitting shoes ¹ | 5.8 | 4.9 | 3.0 | 7.0 |
| Being unable to keep one's home adequately warm | 5.5 | 9.4 | 5.4 | 14.2 |
| Being unable to afford to get together with friends or family at least once a month for a drink or a meal | 5.3 | 10.7 | 8.0 | 15.7 |
| Being unable to afford a car for personal use | 2.5 | 7.9 | 5.7 | 10.0 |
| Being unable to afford an internet connection | 2.1 | 5.5 | 2.4 | 8.4 |

1. These figures, not published by Eurostat, are calculated by the authors. Coverage: European Union 28.

Source: Eurostat, EU SILC 2015 survey, data extracted in September 2018 and calculations by the authors.

Box 2 (continued)

France, it is 11.0%, in comparison with 12.7% for material and social deprivation. Among French people for whom both deprivation statuses can be calculated, 8.6% are considered to be in a situation of deprivation according to both definitions, 4.1% only according to the new definition and 2.3% only according to the old definition.

The different material and social difficulties are more or less frequent in the population, indicating varying degrees of severity of deprivation. The difficulty most frequently faced by Europeans is being unable to face unexpected expenses for an

amount close to the monthly poverty line (around EUR 1000 in France): this is the case, in 2015, for one third of French people and people living within the EU (*figure*). Then there is the fact that a quarter of French people and a third of Europeans are unable to afford a one week holiday away from home. In most countries, the vast majority of people in a situation of material and social deprivation face those difficulties (more than 80%). In contrast, the difficulty of being unable to afford an internet connection is faced by only 5% of Europeans and 2% of French people.

1. Which is 96.9% of the population.

In addition, the countries with the lowest rates of material and social deprivation are situated in Northern and Western Europe: the rates are 7% or lower in six of those countries (Austria, Denmark, Finland, Luxembourg, Netherlands and Sweden). The rates are higher for other countries in this group: ranging from 9.4% for Germany to 13.3% for Belgium, while Ireland is an outlier with a rate of 16.3%. The rates of material and social deprivation are more heterogeneous in the countries of Southern and Eastern Europe: they are 12% or less for some countries (Estonia, Malta, Poland, Czech Republic and Slovenia), but exceed 30% in Hungary and Greece and even reach 47% in Bulgaria and Romania.

With a material and social deprivation rate of 12.7%, France holds a middle-ranking position within the EU. Within Northern and Western Europe, it has the fourth-highest rate, greater than that of Germany and closer to that of Belgium or the United Kingdom.

Countries with a low rate of material and social deprivation also have the highest proportion of people who report that they are not experiencing any of the 13 difficulties selected to establish the indicator (*figure 2*). Such is the case for over 60% of the population of these countries, but for less than 15% of Romanians.

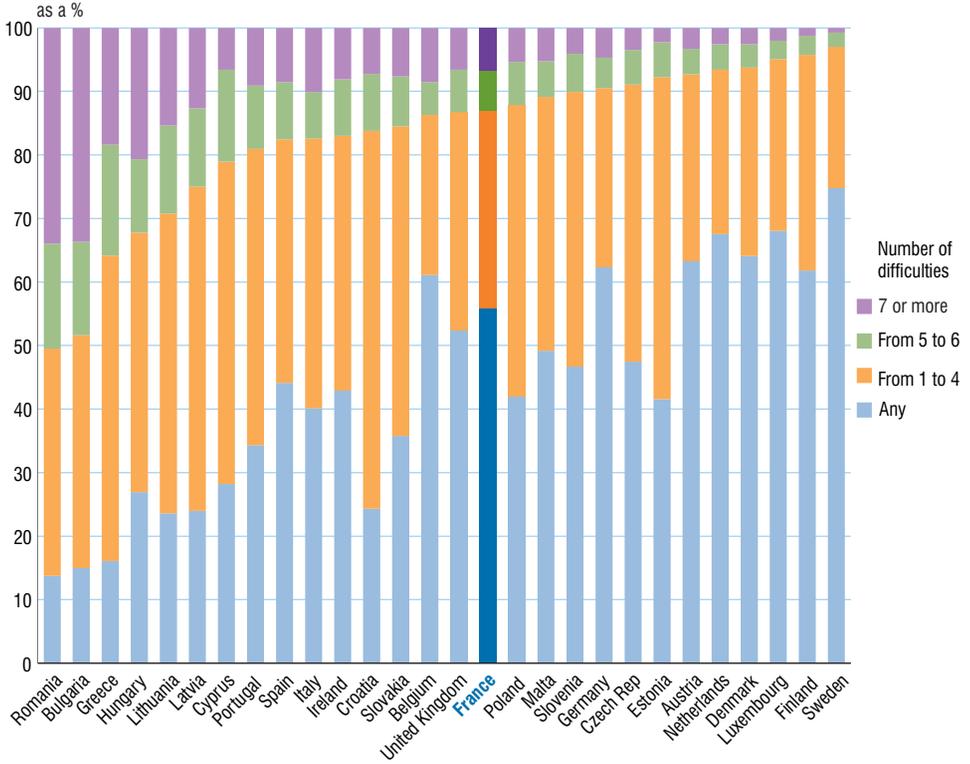
Income poverty affects 13.6% of the French population and 17.3% of the EU population

The material and social deprivation indicator is based on an absolute number of material or social difficulties. In contrast, income poverty is understood in relation to the income distribution in each country: an individual is considered poor in terms of income if the equivalised income of his/her household is below a poverty line set at 60% of the national median equivalised income.

As median incomes differ greatly across the EU, so do poverty lines. In 2016, using the **purchasing power standard** (PPS), i.e. taking into account price differences between countries, an individual is considered poor in the sense of income if his/her equivalised income is less than 12,370 PPS in France. This threshold is more than four times higher than that of Romania and more than 25% lower than that of Luxembourg.

Income poverty affects 17.3% of the EU population and the national poverty rates range from 9.7% in the Czech Republic to 25.3% in Romania (*figure 3*). Therefore, the scale of the differences in rates of income poverty are lower than those observed in respect of rates of

2. Distribution of the population by number of material and social difficulties in 2016



Reading note: in France, in 2016, 55.9% of the population report not facing any of the 13 material and social difficulties, 31.1% face between 1 and 4 of them, 6.2% face 5 or 6 and 6.8% face 7 or more.

Notes: the countries are ranked in accordance with material and social deprivation rate, in descending order.

Sources: Eurostat, EU-SILC 2016 survey, calculations by the authors.

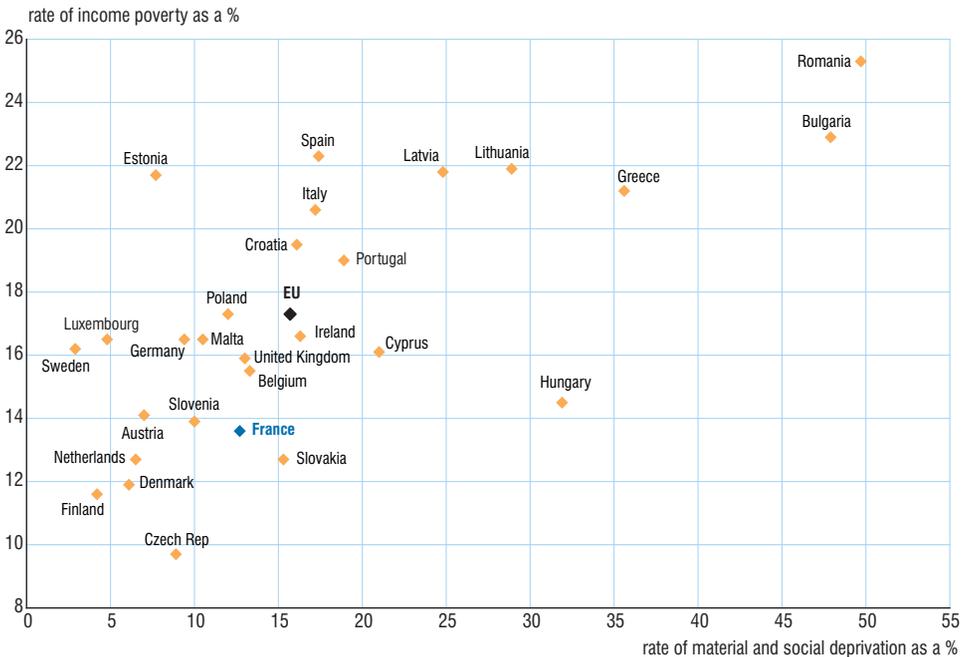
material and social deprivation. In France, the rate of income poverty is 13.6%, which is the sixth lowest in the EU and the fourth lowest in Northern and Western Europe.

The majority of the countries with the lowest income poverty rates, such as the Czech Republic, Finland or Denmark, also have low material and social deprivation rates. Symmetrically, most of the countries with the highest rates of material and social deprivation (such as Romania, Bulgaria or Greece) have very high income poverty rates.

However, certain countries with similar rates of income poverty have very different rates of material and social deprivation. For example, Hungary and Austria are very close in terms of income poverty rates (14.5% and 14.1%, respectively); however, material and social deprivation affects 31.9% of the population of Hungary, giving it the fourth highest rate in the EU, in comparison with only 7.0% of the population of Austria, which is one of the lowest rates in the EU.

The fact that a high rate of income poverty can be associated with a low rate of material and social deprivation (and vice versa) is a finding that is also verified over time. In France and Europe, the material deprivation rate and the income poverty rate have sometimes moved in opposite directions (box 3).

3. Rate of income poverty and rate of material and social deprivation in the EU in 2016



Reading note: in France, in 2016, the rate of material and social deprivation is 12.7% and the rate of income poverty is 13.6%.
Sources: Eurostat, EU-SILC 2016 survey, data extracted in September 2018.

Box 3

Development of the material deprivation rate and the income poverty rate in the EU since 2005

Over the last decade, the rates of material deprivation have not developed in the same way in the different EU countries. On average in the EU, the rate of material deprivation has increased as a result of the economic crisis, rising from 17.3% in 2009 to 19.6% in 2012 (figure). Over the period, it has increased by just over one point in Northern and Western Europe, mainly due to a strong increase in the United Kingdom, which is also observed in Ireland. In Southern and Eastern Europe, this increase is much more marked: the rate of material deprivation increases by 3.6 points over the period, due to the very strong increase in the countries of Southern Europe (in particular Spain, Greece and Italy) and in certain countries of Eastern Europe (the Baltic countries, Hungary and Bulgaria).

Over the period 2012-2016, the rate of material deprivation decreases within the EU, where it fell from 19.6% to 15.6%. The same is true in Northern and Western Europe (-2.1 points) and in Southern and Eastern Europe, where the decrease is particularly sharp (-6.0 points). Within this group, only Greece in 2016 has a higher level of material deprivation than in 2012.

The rate of income poverty does not necessarily develop in the same way as the material deprivation rate. From 2007 to 2012, the two rates developed in a similar manner. However, while the rate of material deprivation falls from 2013 onwards, the rate of income poverty continues to rise until reaching a peak in 2016. This contrasting development could be explained by the improvement in the median equivalised income in several countries, improving

1. The old definition is used here, in order to be able to go back earlier than 2013 (box 2).

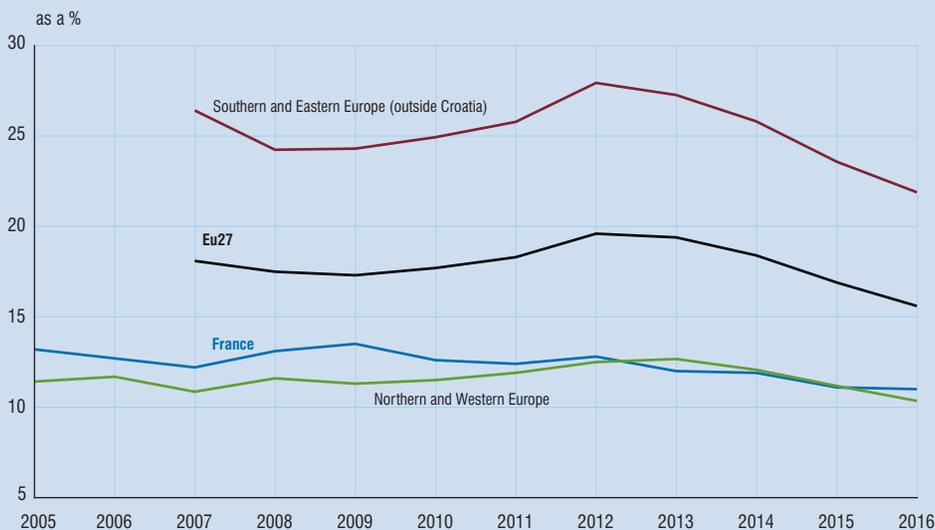
Box3 (continued)

living conditions but automatically raising the income poverty line.

In France, the rate of material deprivation has fallen almost continuously from 2009 to 2016, decreasing from 13.5% to 11.0%. The rate of income poverty was close to the rate of material deprivation, in terms of both level and development, until 2009, when a gap opened up: the income poverty rate rises and then stabilises at around

13.6%. This same divergence has been observed and commented on based on the French indicator of poverty in living conditions [Pan Ké Shon, 2015]. The reasons for this are not well known, particularly because of the complexity of this latter indicator. This could be explained by, among other things, the subjective part of self-assessment of living conditions and the fact that households tend to adapt their assessments in times of difficulty.

Rate of material deprivation since 2005



Coverage: 27 European Union Member States.

Notes: Croatia has been excluded from the coverage to ensure consistent coverage since 2007. Before 2007, there is no data available for Romania and Bulgaria.

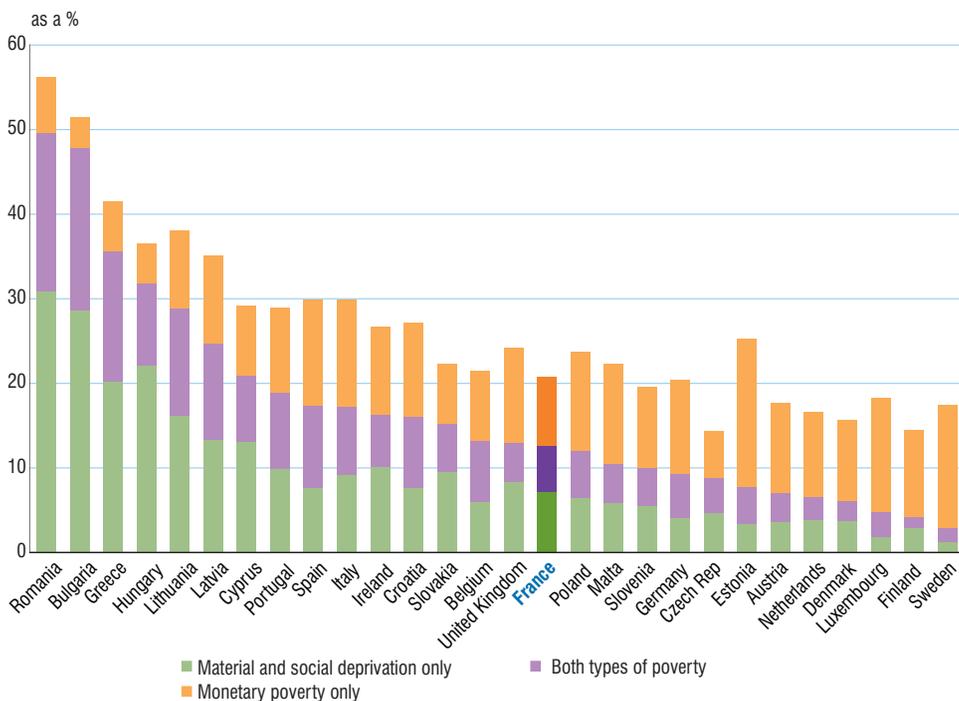
Sources: Eurostat, EU-SILC 2005 to 2016 surveys, data extracted in September 2018.

In France, 5.5% of the population is affected by both income poverty and material and social deprivation

Though the rates of income poverty and material and social deprivation may be close in many EU countries, the individuals that find themselves in each of these two situations are not necessarily the same. In France, in 2016, 43% of people in a situation of material and social deprivation are also in a situation of monetary poverty, which represents 5.5% of the total population (figure 4).

Among individuals affected by at least one of the two types of poverty, the proportion of people in both situations ranges from one in ten in Finland to just over one in three in Bulgaria. Thus, in all EU countries, the individuals affected by both forms of poverty are a minority in comparison with those affected by only one of them.

4. Proportion of people in a situation of income poverty and material and social deprivation in 2016



Reading note: in 2016, 20.8% of French people are affected by one of the two types of poverty, of which 7.2% of French people are only in a situation of material and social deprivation, 8.1% are only in a situation of income poverty and 5.5% are affected by both types of poverty.

Notes: the countries are ranked in accordance with material and social deprivation rate, in descending order. For individuals whose material and social deprivation situation is not known, the material and social deprivation rate of the country in question is applied. This method tends to underestimate the proportion of those affected by both types of poverty, in particular where the non-response rate of the poor population is relatively high, such as in Sweden or the Netherlands.

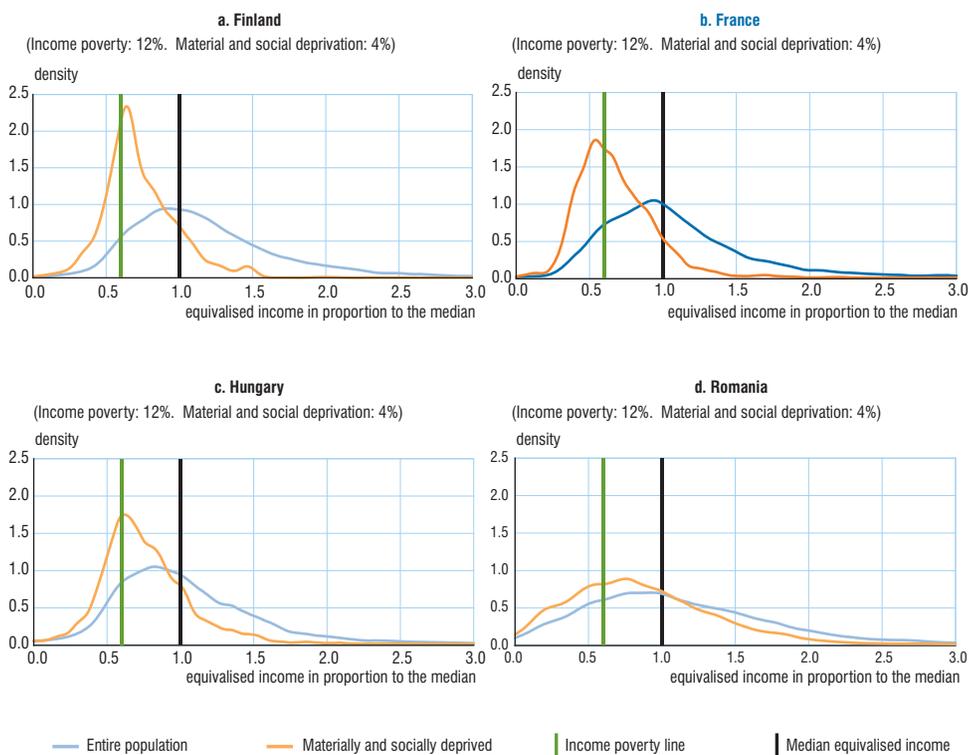
Sources: Eurostat, EU-SILC 2016 survey, calculations by the authors.

Not surprisingly, among people classed as poor according to either of the two definitions, the relative share of the two types of poverty varies from country to country. In Romania, Bulgaria, Greece and Hungary, less than one poor person in seven is in a situation of income poverty and not in a situation of material and social deprivation. Conversely, in the countries with lower rates of material and social deprivation, such as Sweden, Luxembourg or Finland, more than 70% of poor people are only in a situation of income poverty. In France, the poor population breaks down as follows: 35% are people only in a situation of material and social deprivation, 39% are people only in a situation of income poverty and 27% are people affected by both types of poverty.

The countries with the lowest proportion of people affected by either form of poverty are the Czech Republic and Finland (less than 15%). In contrast, this proportion of the population exceeds 50% in Romania and Bulgaria, most of whom are people in a situation of material and social deprivation. In France, 20.8% of the population is affected by at least one of the two forms of poverty.

Although not all of the people affected by material and social deprivation are poor in the income sense, their income is much lower than that of the rest of the population. In the majority of EU countries, more than 80% of them have an equivalised income below the median. The distribution of their equivalised incomes is also more restricted than among the rest of the population, with a majority of people generally concentrated around the income poverty line (figure 5). In France, 90% of people in a situation of material and social deprivation live below the median equivalised income, and less than 2% of them have an equivalised income greater than 1.5 times the median (in comparison with 20% of the total population).

5. Distribution equivalised incomes of the population and of people in a situation of material and social deprivation



Reading note: the blue curve shows the distribution equivalised incomes for the entire population, while the orange curve show that of the population in a situation of material and social deprivation. The area beneath each of the curves has a value of 1. In France, 44% of people in a situation of material and social deprivation have an equivalised income below the income poverty line, 90% have an equivalised income below the median and less than 2% have an equivalised income greater than 1.5 times the median.

Notes: Finland, Hungary and Romania are represented because these countries are cases where the rates of income poverty and material and social deprivation are, respectively, low for both, low for income poverty and high for the other and high for both.

Sources: Eurostat, EU-SILC 2016 survey, calculations by the authors.

The socio demographic contours of the two types of poverty are relatively similar

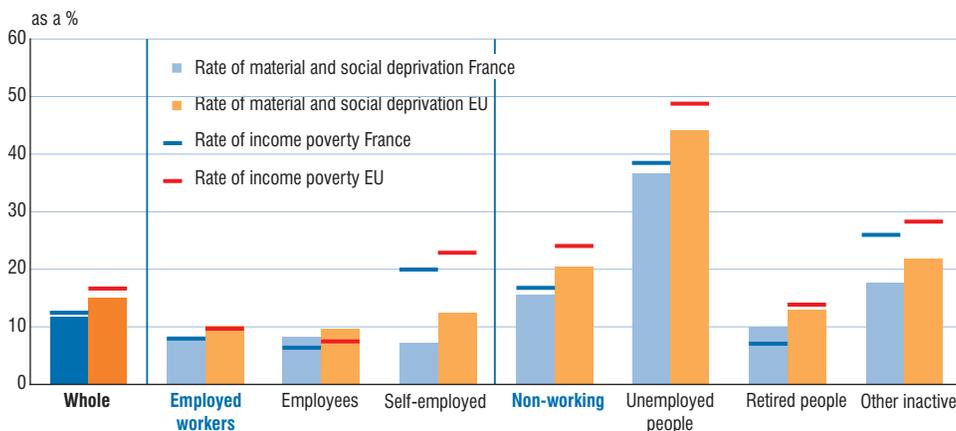
Although the individuals affected by income poverty and social and material deprivation are not necessarily the same, these two populations share many socio demographic characteristics. Thus, whether in terms of activity status, profession or family configuration, the differences in the poverty rates of the different population groups are of the same order according to both definitions.

On average in the EU and for both types of poverty, **employed workers** are slightly less affected than **retired people**³ and, on average, four times less than **unemployed people** (figure 6). From the point of view of profession, the rate of poverty among managers and intermediate professions are similar and much lower than those for workers. The types of family most affected are single-parent families, for whom the poverty rates are three times higher than for couples without children (34.0% and 11.7% for income poverty and 32.0% and 10.5% for material and social deprivation, respectively).

However, the socio demographic profiles of people experiencing income poverty or material and social deprivation are not strictly the same. The first notable difference concerns the age of the affected populations. In most EU countries, the rates of income poverty for 16-24 year olds are much higher than for other age groups, which is not the case for material and social deprivation. This could be explained by intra-family assistance for young people, which is not included in income measurements, and the fact that they would suffer less from material conditions they consider transitional.

As for activity status, there are significant differences within the category of employed workers. Thus, in the majority of EU countries, self-employed people have an income poverty rate that is much higher than their rate of material and social deprivation, with the latter often being of the same order as that of employees (figure 6).

6. Rate of material and social deprivation and rate of income poverty by most frequent activity in France and the EU since 2016



Coverage: people aged 16 or over.

Reading note: in France, in 2016, the rate of material and social deprivation for employees is 8.3% and the rate of income poverty is 6.3%.

Sources: Eurostat, EU-SILC 2016 survey, data extracted in September 2018.

3. There is a clear distinction between the countries of Northern and Western Europe and those of Southern and Eastern Europe in terms of material and social deprivation among retired people: in all the countries of the first group, retired people have a deprivation rate of less than 10%, while it is over 10% for all those of the second Group, with the exception of the Czech Republic.

From the point of view of profession, a similar gap can be observed among farmers for whom the rate of material and social deprivation (although relatively high compared to other professions) is consistently lower than their income poverty rate. For both the self-employed and farmers, the measurement of income may be incomplete, resulting in an overestimation of the income poverty indicator. Similarly, greater financial resources or on-farm consumption could also better protect these categories from material deprivation.

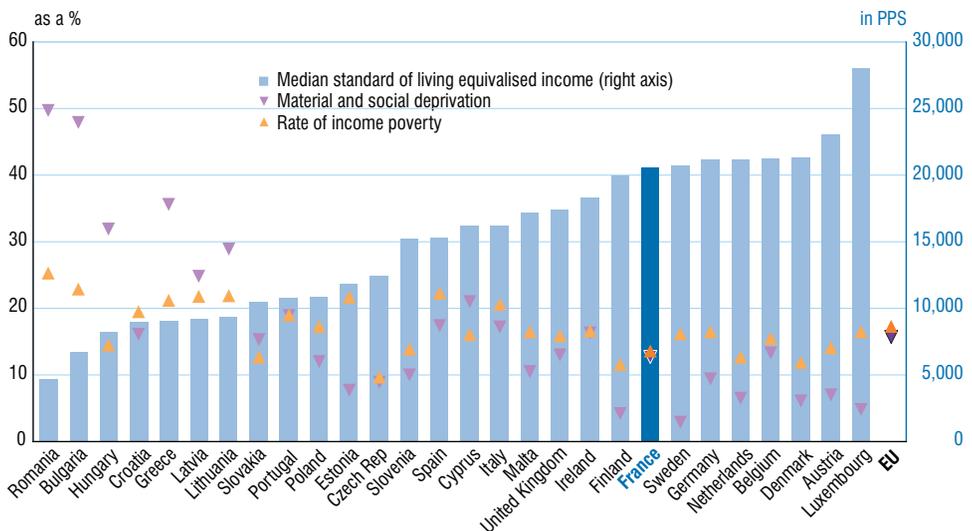
In France, the differences between categories of individuals are around the EU average. In contrast, the situation for retired people in France is particular: while their rate of income poverty is the lowest of the Northern and Western European countries (7.0%), their rate of material and social deprivation is the highest among that group of countries (9.9%). The latter indicator provides context for the observation that this category of the population would be, *a priori*, in a more favourable situation.

There is a close correlation between a country's rate of material and social deprivation and its median equivalised income

The populations in situations of material and social deprivation and income poverty do not necessarily overlap and a country's rate of income poverty may be very different, depending on the definition used.

Within the EU, there is a strong negative correlation between a country's rate of material and social deprivation and its median equivalised income (*figure 7*): all countries with a median equivalised income above 17,000 PPS, which is 12 of the 28 Member States, have a rate of material and social deprivation lower than 15% (with the exception of Ireland). In addition, six of the seven countries with a median equivalised income lower than 10,000 PPS have a deprivation rate higher than 24%.

7. Median equivalised income, rate of income poverty and rate of material and social deprivation in 2016



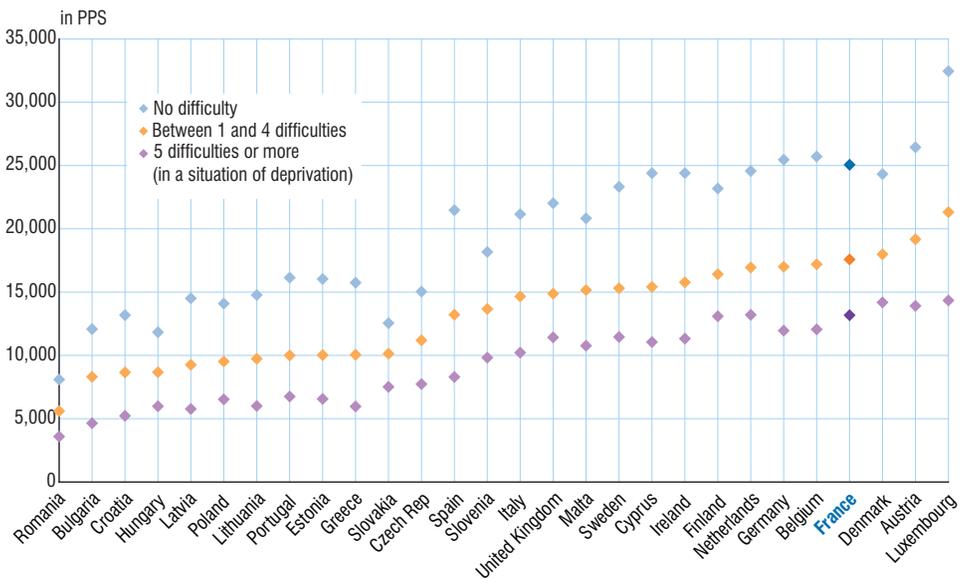
Reading note: in France, in 2016, the rate of material and social deprivation is 12.7% , the median equivalised income is 20,624 PPS and the rate of income poverty is 13.6%.
Sources: Eurostat, EU-SILC 2016 survey, data extracted in September 2018.

However, this relationship is not consistent: Estonia and the Czech Republic have some of the lowest rates of social and material deprivation in the EU, despite relatively low median equivalised incomes. Slovenia, Malta and Poland are the only countries in Southern and Eastern Europe with a lower rate of material and social deprivation than France.

As income poverty is defined in relation to each country's income level, its rate reflects the way in which the country's incomes are distributed. Therefore, there is a less pronounced link with the median equivalised income, though a correlation remains. Thus, some very high-income countries have rates of income poverty around the average (Luxembourg, Germany, Sweden), while other intermediate-income countries (Italy, Spain) have very high rates of income poverty, above 20%. In addition, certain countries have relatively low rates of income poverty, despite relatively low median equivalised incomes: Hungary, Slovenia, Slovakia and the Czech Republic, which have median equivalised incomes ranging from 8270 PPS to 15,250 PPS, are among the 11 countries with the lowest rates of income poverty in the EU, below 16%.

The proportion of people in a situation of material and social deprivation appears to be determined in large part by the income level of the country, which is the expected result with a concept of poverty comparable between countries. However, in PPS, the equivalised income of people in a situation of material and social deprivation varies greatly from one country to the next (figure 8). In Romania, for example, people in a situation of deprivation have a median equivalised income four times lower than in Luxembourg, which is a difference of around the same magnitude as for people who are not in a situation of deprivation⁴. Therefore, although these populations may be defined by a common deprivation criterion, they are not comparable in terms of income.

8. Median equivalised income by number of material and social difficulties in 2016



Notes: the countries are ranked in accordance with equivalised income, in ascending order, for the group "between 1 and 4 difficulties".

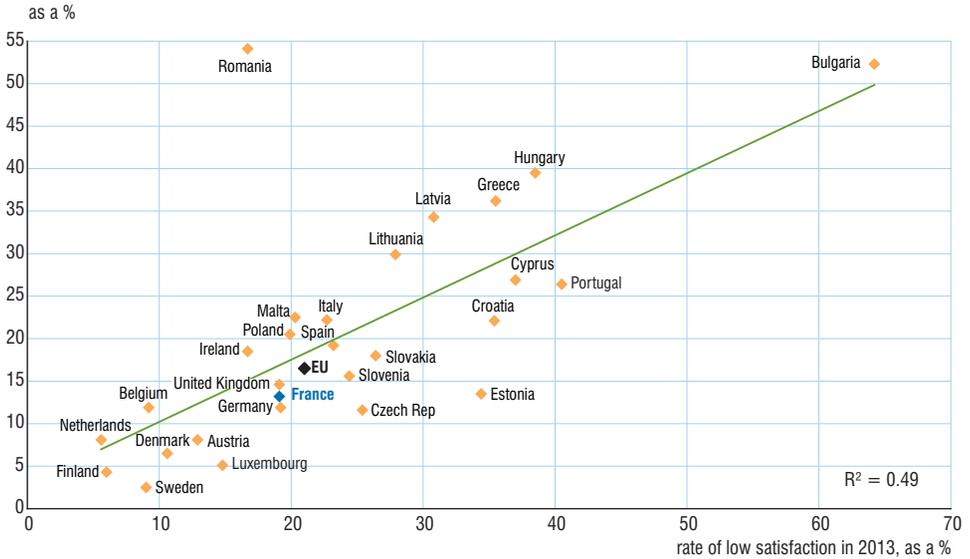
The group "5 difficulties or more" corresponds to people in a situation of material and social deprivation.

Sources: Eurostat, EU-SILC 2016 survey, calculations by the authors

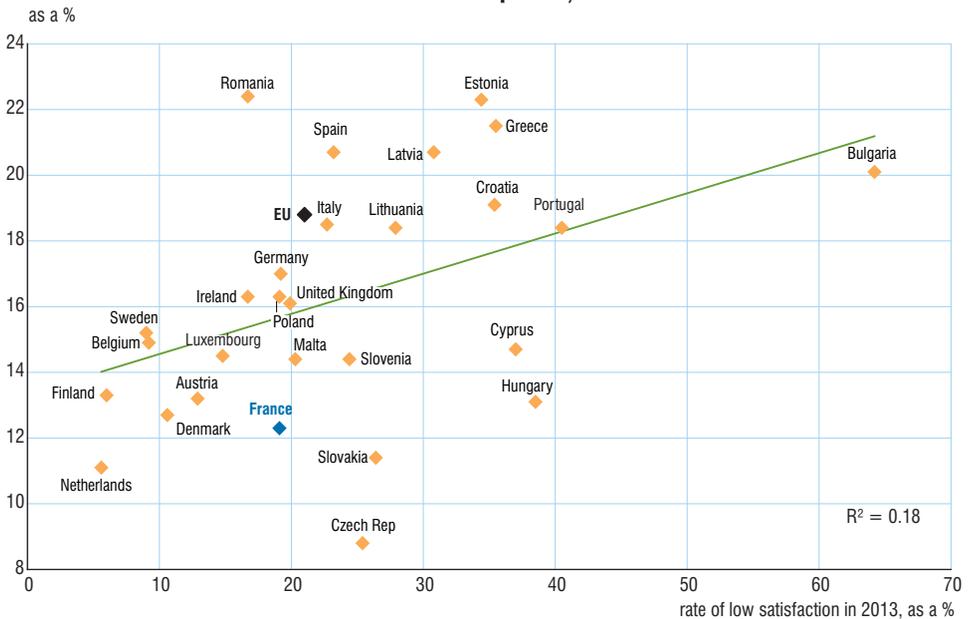
4. The fact that there may be such differences in equivalised incomes, expressed in PPS, between people in a situation of deprivation in different countries seems to contradict the idea that, using this artificial currency, a single income makes it possible to obtain the same goods and services in all countries. This could be explained by a different assessment of deprivation in different countries, or by the fact that the PPS imperfectly corrects differences in purchasing power for this category of the population.

9. Proportion of low life satisfaction and rate of poverty for the population in 2014

a. Material and social deprivation



b. Income poverty



Coverage: people aged 16 or over.

Reading note: in France, among those aged 16 or over, 19.1% report low satisfaction in 2013 and, in 2014, 12.3% are in a situation of income poverty, while 13.2% are in a situation of material and social deprivation.

Notes: the proportion of people reporting low life satisfaction is the proportion of people who give a score out of 10 of 5 or lower. Deprivation data are not available for all countries in the SILC 2013 survey.

The determination coefficient R^2 , equal to the square of the correlation between the two measurements, is equal to 0.49 between the rate of material and social deprivation and the low satisfaction rate, and equal to 0.18 between the rate of income poverty and the low satisfaction rate.

Sources: Eurostat, EU-SILC 2013 and 2014 surveys, data extracted in September 2018.

Material and social deprivation explains the dissatisfaction with life of certain Europeans better than income poverty

In the 2013 SILC reference source, data concerning individuals' assessments of their subjective well being were collected from households. These data include, among other things, an assessment of individuals' satisfaction with the life they are currently living. This subjective assessment is scored from 0 to 10, with 0 indicating total dissatisfaction and 10 indicating complete satisfaction. Here, we are interested in the portion of the population reporting low satisfaction, i.e. with a score between 0 and 5 [Eurostat, 2015].

In 2013, among EU residents aged 16 or over, 21.0% of the population reported low satisfaction with their lives. In France, this proportion is 18.9%, a rate close to that of the United Kingdom and Germany and greater than all of the other countries in Northern and Western Europe.

This raises the question of who among the people classed as in situations of income poverty or material and social deprivation have the closest low satisfaction rates between the different EU countries. In this respect, the Easterlin paradox suggests that an individual's satisfaction is determined not only by his or her own equivalised income, but also by his or her relative position within a reference population [Godefroy and Lollivier, 2014]. According to this theory, being in a situation of income poverty (which is relative, by definition) should be a strong determining factor in experiencing low life satisfaction. In contrast, if satisfaction were determined solely by the individual's living conditions, then material and social deprivation should be more closely linked to low satisfaction.

In general, the proportion of dissatisfied people is highest in the countries with the highest rates of income poverty and material and social deprivation (*figure 9*). However, the correlation is significantly stronger for material and social deprivation. Romania is an exception because, although it has a very high rate of material and social deprivation, its low satisfaction rate is close to the EU average and very far from that of other countries with high levels of material and social deprivation.

The same result can be found at individual level: with similar socio demographic characteristics and country of residence, an individual is more likely to report being dissatisfied if he or she is in a situation of material and social deprivation than if he or she is in a situation of income poverty. Therefore, though their equivalised incomes vary greatly from one country to another, Europeans in situations of material and social deprivation seem to be much more homogeneous in terms of life satisfaction than people in situations of income poverty. ■

Appendix

Median equivalised income, rate of material and social deprivation and rate of income poverty by country in 2016

| | Median equivalised income | | Material and social deprivation | | Income poverty | |
|----------------|---------------------------|------------------|---------------------------------|--------------------------|----------------|--------------------------|
| | In PPS | Descending order | Rate as a % | Ranked by ascending rate | Rate as a % | Ranked by ascending rate |
| Luxembourg | 27,973 | 1 | 4.8 | 3 | 16.5 | 14 |
| Austria | 23,112 | 2 | 7.0 | 6 | 14.1 | 8 |
| Denmark | 21,333 | 3 | 6.1 | 4 | 11.9 | 3 |
| Belgium | 21,313 | 4 | 13.3 | 15 | 15.5 | 10 |
| Netherlands | 21,195 | 5 | 6.5 | 5 | 12.7 | 4 |
| Germany | 21,179 | 6 | 9.4 | 9 | 16.5 | 15 |
| Sweden | 20,752 | 7 | 2.9 | 1 | 16.2 | 13 |
| France | 20,624 | 8 | 12.7 | 13 | 13.6 | 6 |
| Finland | 19,995 | 9 | 4.2 | 2 | 11.6 | 2 |
| Ireland | 18,330 | 10 | 16.3 | 18 | 16.6 | 17 |
| United Kingdom | 17,369 | 11 | 13.0 | 14 | 15.9 | 11 |
| Malta | 17,204 | 12 | 10.5 | 11 | 16.5 | 16 |
| Italy | 16,213 | 13 | 17.2 | 19 | 20.6 | 21 |
| Cyprus | 16,178 | 14 | 21.0 | 22 | 16.1 | 12 |
| Spain | 15,333 | 15 | 17.4 | 20 | 22.3 | 26 |
| Slovenia | 15,249 | 16 | 10.0 | 10 | 13.9 | 7 |
| Czech Rep | 12,476 | 17 | 8.9 | 8 | 9.7 | 1 |
| Estonia | 11,870 | 18 | 7.7 | 7 | 21.7 | 23 |
| Poland | 10,854 | 19 | 12.0 | 12 | 17.3 | 18 |
| Portugal | 10,799 | 20 | 18.9 | 21 | 19.0 | 19 |
| Slovakia | 10,469 | 21 | 15.3 | 16 | 12.7 | 5 |
| Lithuania | 9,360 | 22 | 28.9 | 24 | 21.9 | 25 |
| Latvia | 9,234 | 23 | 24.8 | 23 | 21.8 | 24 |
| Greece | 9,063 | 24 | 35.6 | 26 | 21.2 | 22 |
| Croatia | 8,982 | 25 | 16.1 | 17 | 19.5 | 20 |
| Hungary | 8,271 | 26 | 31.9 | 25 | 14.5 | 9 |
| Bulgaria | 6,746 | 27 | 47.9 | 27 | 22.9 | 27 |
| Romania | 4,728 | 28 | 49.7 | 28 | 25.3 | 28 |

Coverage: European Union of 28.

Sources: Eurostat, EU-SILC 2016 survey, data extracted in September 2018.

Definitions

Employed, unemployed, retired or otherwise inactive: in the EU SILC reference source, people aged 16 or over must report the number of months spent during the previous year on a list of activity statuses. They are then classified according to their most frequent activity as either employed (including remunerated and unremunerated employment) or jobless (including unemployed, retired and other inactive people).

Equivalised disposable income: household disposable income, relative to the number of consumption units (CUs). Therefore, the equivalised disposable income is the same for all individuals in the same household. Disposable income includes income from work (net of social security contributions), income from wealth, transfers from other households and social security benefits (including retirement pensions and unemployment benefits), net of direct taxes. A household's consumption units are calculated according to the so-called "OECD-modified" equivalence scale, which assigns 1 CU to the first adult in the household, 0.5 CUs to other people aged 14 or over and 0.3 CUs to children aged under 14. The median equivalised income is the line that splits the population into two equal parts, one above the line and one below it.

Income poverty: a person is considered poor in the income sense when his or her equivalised income is below the poverty line of his or her country. Using the relative terms approach, the poverty line is determined in relation to the distribution of equivalised incomes throughout the entire population. In Europe, a poverty line of 60% of the median equivalised income is preferred.

Material deprivation (old European indicator): the old European indicator of material deprivation, measured by the EU SILC reference source and calculated since 2009, is the basis on which the material and social deprivation indicator has been defined. A household is considered to be in a situation of material deprivation if it encounters at least 3 difficulties from a list of 9 material difficulties concerning housing, durable goods or certain financial difficulties.

Material and social deprivation: a definition of poverty based on the living conditions of the individual. In the EU SILC reference source, a person is considered to be in a situation of material and social deprivation when he or she reports facing at least 5 difficulties from a list of thirteen concerning, among other things, housing, clothing, food and leisure.

Purchasing Power Standard (PPS): an artificial currency unit that eliminates differences in price levels between countries. Thus, in theory, one PPS allows the same volume of goods and services to be purchased in all countries

For more information

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