16

Trends in densely and thinly populated areas

Introduction

This chapter looks at the differences between thinly populated areas (or rural areas) and densely populated areas (or urban areas) in European countries. It covers five issues: severe material deprivation; income levels that put people at risk of poverty; difficulty accessing primary healthcare; broadband Internet connectivity; and crime, violence and vandalism. Only three of these show a consistent pattern: in urban areas, broadband connections and people reporting crime, violence and vandalism are more common; in rural areas, access to primary healthcare is more difficult. For the two poverty-related issues, the pattern is more mixed.

Main statistical findings

Severe material deprivation

Romania and Bulgaria have the highest proportions of their populations experiencing severe material deprivation, at 32 % and 42 % respectively. Such deprivation is especially high in rural areas, where the share is 11 and 15 percentage points respectively higher than in urban areas. For the six countries ranked below the top two — Latvia, Hungary, Lithuania, Poland, Slovakia and Greece — deprivation is more prevalent in rural areas than in urban areas, but the gap is significantly smaller.

In 19 out of the 22 remaining countries, severe material deprivation is higher in urban areas than in the countryside ([1]) (see Figure 16.1). In some countries, the difference is quite marked. Both in Belgium and Austria, severe material deprivation is 5 percentage points higher in densely populated areas than elsewhere. In short, for most Member States, especially the more developed ones, severe material deprivation is more of a problem in urban areas than in the countryside.

In the 10 central and eastern Member States, severe material deprivation tends to be higher, sometimes much higher, and the shares are higher in rural areas. This may also explain why these countries still have significant migration from rural to urban areas, which is not the case elsewhere.

At-risk-of-poverty

Although severe material deprivation was concentrated in urban areas in 19 out of the 30 countries examined, the at-risk-of-poverty rate is higher in rural than in urban areas in 24 out of 30 countries. However, the overall statistics can give a misleading impression.

While severe material deprivation is influenced by the local cost of living, the at-risk-of-poverty rate is set at the same level for an entire country. So the income of someone living in London is compared to the same threshold as that for someone living in rural Wales, although the cost of living is likely to be far higher in London. Furthermore, housing costs are not factored into disposable income. As housing costs tend to be higher in cities, and more people tend to rent in cities than in rural areas, it is likely that once income has been adjusted to take housing costs into account, a more accurate picture emerges. Other aspects of the cost of living, such as transport costs, also need to be factored in. Transport costs may be higher in rural areas, because of the need for a car, and longer trip distances than in urban areas, but the impact of these costs depends on income levels, as well as on the availability and cost of public transport.

Despite the caveats above, in the two countries where severe material deprivation was much higher in urban than in rural areas, Belgium and Austria, the risk of poverty in urban areas was also higher (see Figure 16.2). The risk of poverty in urban areas in the UK and Luxembourg was also significantly higher than in rural areas. In Romania and Bulgaria, the difference in poverty risk between rural and urban areas is even bigger than that for severe material deprivation.

The risk of poverty is lowest in intermediate density areas. These typically include smaller towns and the suburbs of cities. For example, in Germany, France, Switzerland and Sweden, people living in suburbs and towns were least at risk of poverty.

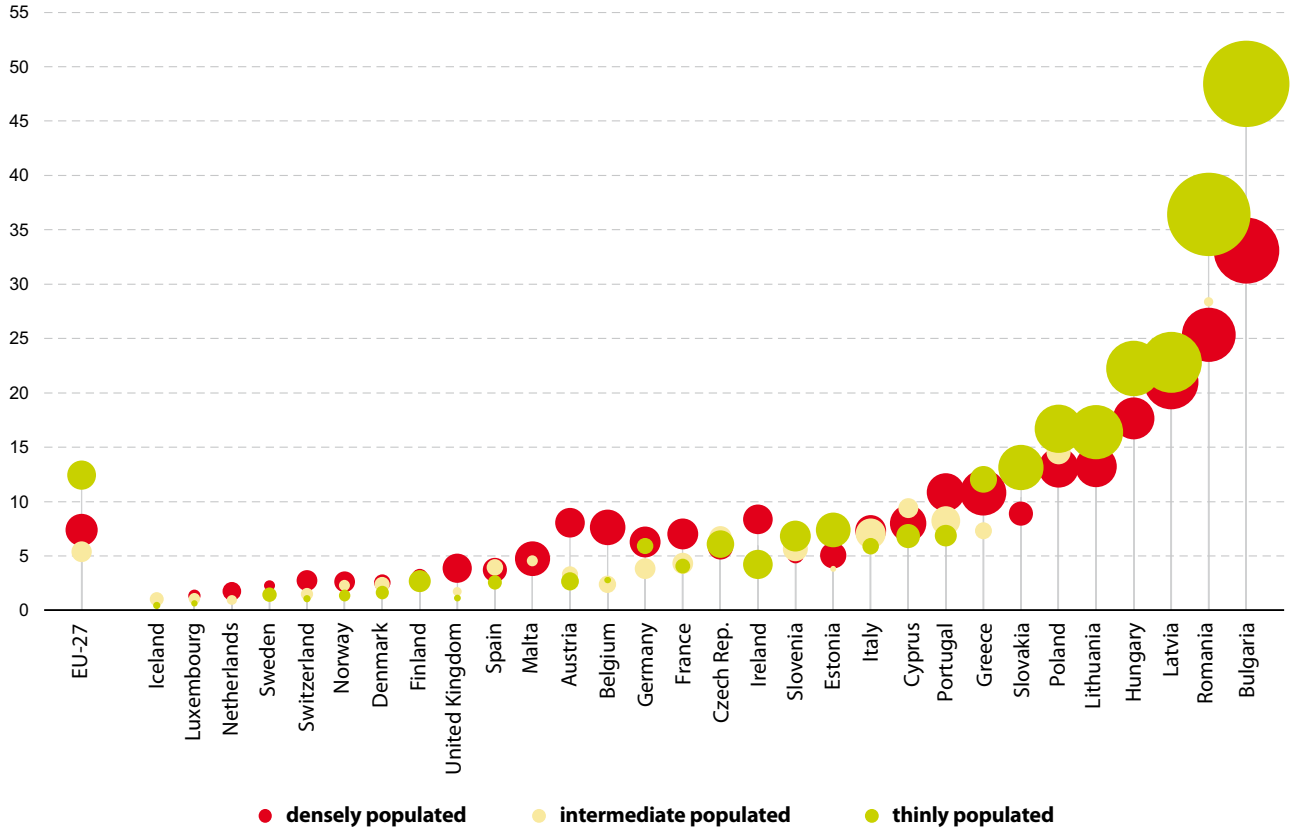
Access to primary healthcare

This is clearly a rural issue. In all countries, people living in rural areas report more difficulty in gaining access to primary healthcare than their counterparts in urban areas (see Figure 16.3). Rural dwellers have to travel longer distances to general practitioners and primary healthcare centres. Nevertheless, some countries have been able to minimise this problem. In Norway, Sweden and Finland the gap between urban and rural areas is negligible, but the overall share of people reporting difficult access is still quite high (between 12 % and 17 %). In France, the UK and the Netherlands, access is better, with only between 6 % and 9 % reporting problems, and the difference between urban and rural areas is small. In the Netherlands, a small, urbanised country, good access to primary healthcare could be expected, but the UK and particularly France, with large sparsely populated areas, have put in place systems to ensure good access even in relatively remote locations.

At the other end of the spectrum, Latvia, Malta, Italy, Slovakia and Italy score poorly, and more than 30 % of their

([1]) In Malta and the Netherlands, densely populated areas were compared with intermediate areas, as none of the population lives in thinly populated areas. In Iceland, intermediate density area was compared with thinly populated areas, as there are no densely populated areas.

Figure 16.1: Share of population severely materially deprived, by degree of urbanisation, 2009 (1) (%)



(1) 'Severely materially deprived' defined as living in a household lacking at least four out of nine important items.
Reading note: Countries ranked by share of total population severely materially deprived. Bubble size is severely materially deprived population in area as % of total population in all areas.

Source: EU-SILC.

population have difficulty accessing primary healthcare services. The gap between urban and rural areas in these countries also tends to be much larger. For example, in Romania, 40 % of the rural population has difficulty with access to primary healthcare services, compared to only 15 % in urban areas. The gap is also wide in Belgium and Malta, but both countries have a very small rural population, so these figures should be interpreted with a certain degree of caution. (The size of the bubbles in the graph is determined by the share of the total population living in these areas, multiplied by the share of population reporting difficulty. As a result, the rural bubbles for Belgium and Malta are quite small, even though a high share of the population in rural areas in both countries reports difficulties.)

Broadband Internet connection

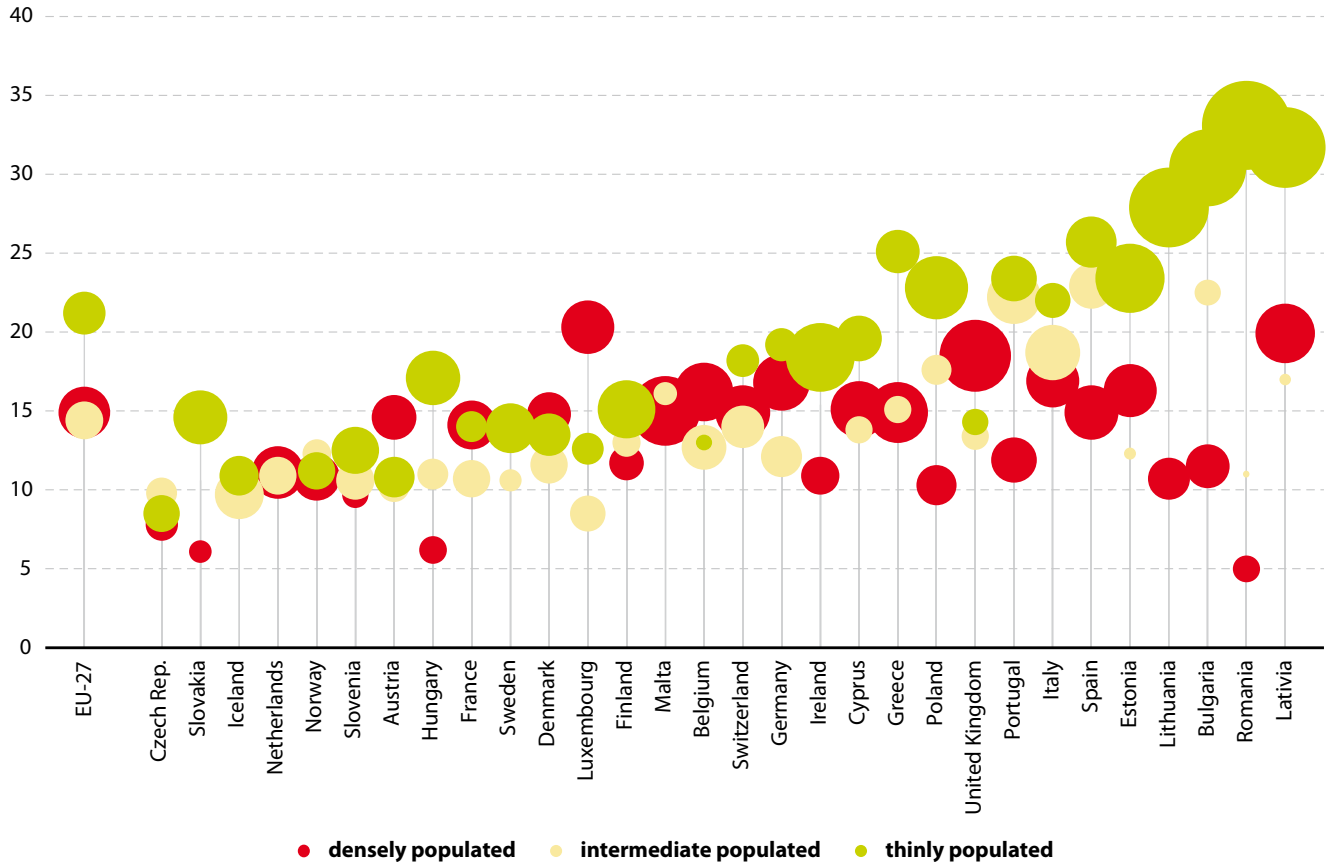
In 28 out of 30 countries, broadband Internet connections are more prevalent in urban than in rural areas (see Figure 16.4). Only in the UK and Luxembourg are broadband Internet connections more prevalent in rural areas, by 2 percentage points.

The gap between urban and rural areas is over 25 percentage points in Latvia, Romania and, despite its IT industry, Ireland. In Spain, Portugal, Greece, Croatia and Bulgaria, the gap is between 20 and 25 percentage points. In some countries, this gap is partly due to the lack of broadband coverage in rural areas. According to Europe's Digital Competitiveness Report 2010 (2), coverage in rural areas in Latvia and Romania is only 67 % and 45 % respectively. Overall, broadband coverage for the EU's rural population is high at 80 %, with shares below 50 % only in Cyprus, Romania and Bulgaria.

In Ireland's rural areas, broadband connections were available to 82 % of the population, but only 42 % actually had a connection. This shows that other issues, such as

(2) 'Europe's digital competitiveness report 2010', Commission staff working document SEC(2010) 627, Publications Office of the European Union, Luxembourg, 2010 (http://ec.europa.eu/information_society/digital-agenda/documents/edcr.pdf).

Figure 16.2: Share of population at risk of poverty, by degree of urbanisation, 2009
(%)



Reading note: Countries ranked by share of population at risk of poverty. Bubble size is population at risk of poverty in area as a % of total population in all areas.

Source: EU-SILC.

differences in broadband costs, disposable income, e-skills or the use to which broadband connections are put, may also differ between urban and rural areas. These differences may also account for the gap between urban and rural areas to a greater extent than broadband coverage.

Crime, violence and vandalism

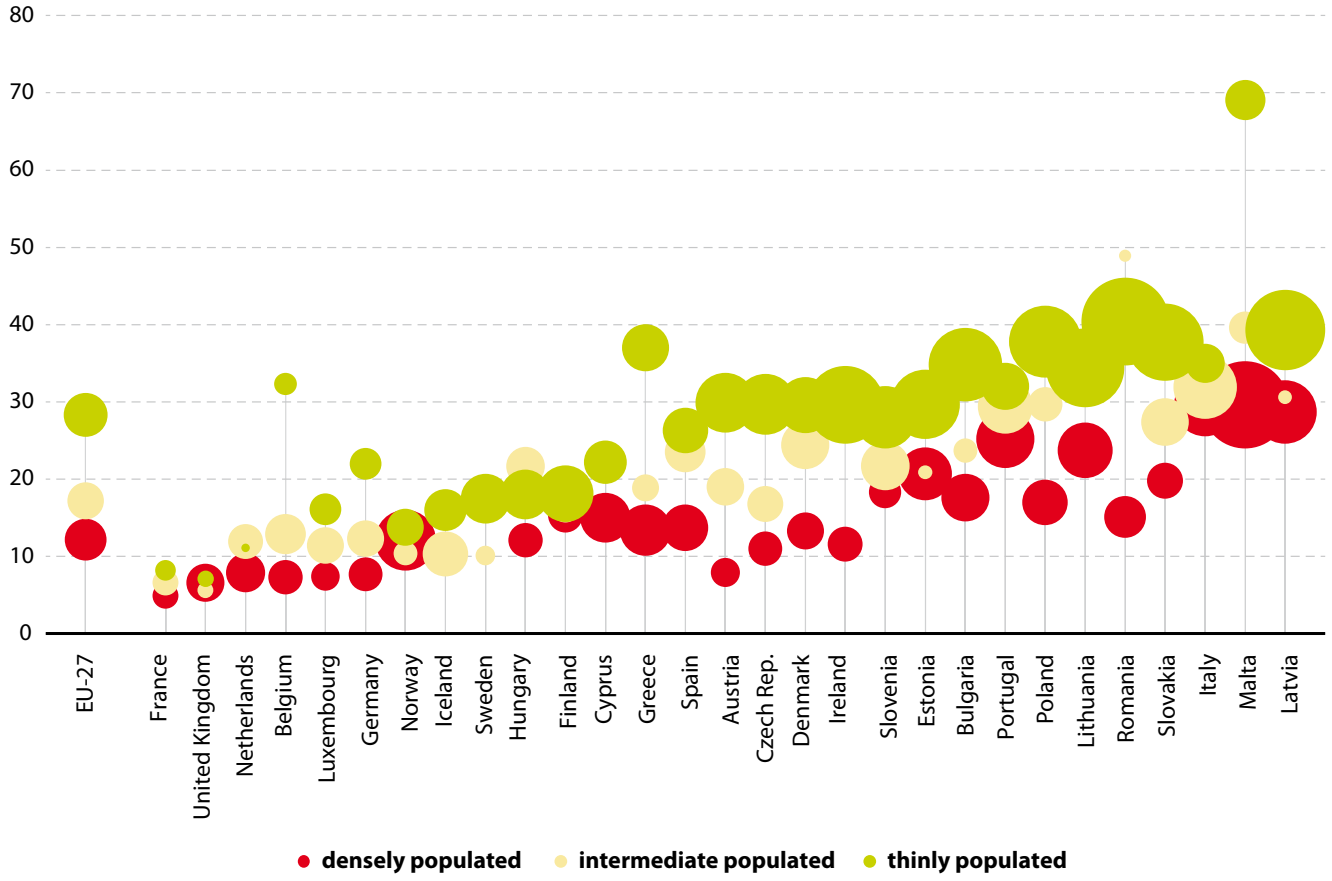
The urban population tends to have better access to primary healthcare and broadband connections, but it also witnesses more crime, violence and vandalism (see Figure 16.5). In every country, the share of people reporting these problems in their neighbourhoods is highest in urban areas. The EU averages highlight this clearly. In urban areas, 23 % report these issues, compared to only 8 % in rural areas. This is also holds true for environmental concerns, such as grime, air pollution and noise (for data on these issues see the fifth cohesion report).

The four countries where more than 20 % of the population reported crime, violence and vandalism are Bulgaria, Latvia, the United Kingdom and the Netherlands. The four countries where those reporting them accounted for less than 7 % of the population are Iceland, Norway, Lithuania and Poland. The fact that both the top four and the bottom four are a mix of countries with a high level of GDP per head and others with some of the lowest levels of GDP per head in Europe is significant. It implies either that such issues are completely independent of the level of economic development in a country, or that they take on different meanings, depending on the context and respondents' expectations. The way in which questions have been translated may also influence respondents, as it may be difficult to capture the exact same nuance in all languages.

The political debate can have a strong influence on the number of people reporting these issues. For example, in the Netherlands, the political debate has focused intensely on public safety since the murders of film director Theo van Gogh and politician Pim Fortuyn. This may in part explain why such a high share of people identified crime, violence and vandalism as major concerns in the Netherlands.

In Italy and Portugal, the gap between urban and rural areas is more than 20 percentage points. The gap is the smallest in Cyprus, Iceland and Norway.

Figure 16.3: Share of population with difficult access to primary healthcare, by degree of urbanisation, 2007 (%)



Reading note: Countries ranked by share of population with difficult access to primary healthcare. Bubble size is population reporting difficult access to primary healthcare in area as % of population in all areas.

Source: EU-SILC.

Data sources and availability

The bubble graphs shown in this chapter have been refined to condense a large amount of information into a single graph. This shows:

- country name (horizontal axis);
- country ranking according to national shares (horizontal axis);
- shares for the three types of areas per country (three colour-coded bubbles);
- the share of the population in the area multiplied by the share of population in the area with the issue (bubble size); for the issues which reflect problems, the bubble size reflects the relative importance of the problem per area in a country.

This type of graph can also be time-animated, so that the bubbles change over time, adding another dimension to a graph which is already rich in data.

The data on broadband access presented in this chapter is derived from annual surveys on ICT usage in households and by individuals. It is published online by Eurostat (table isoc_pibi_hba).

The remaining four graphs are based on custom extractions from the EU Survey on Income and Living Conditions (EU-SILC).

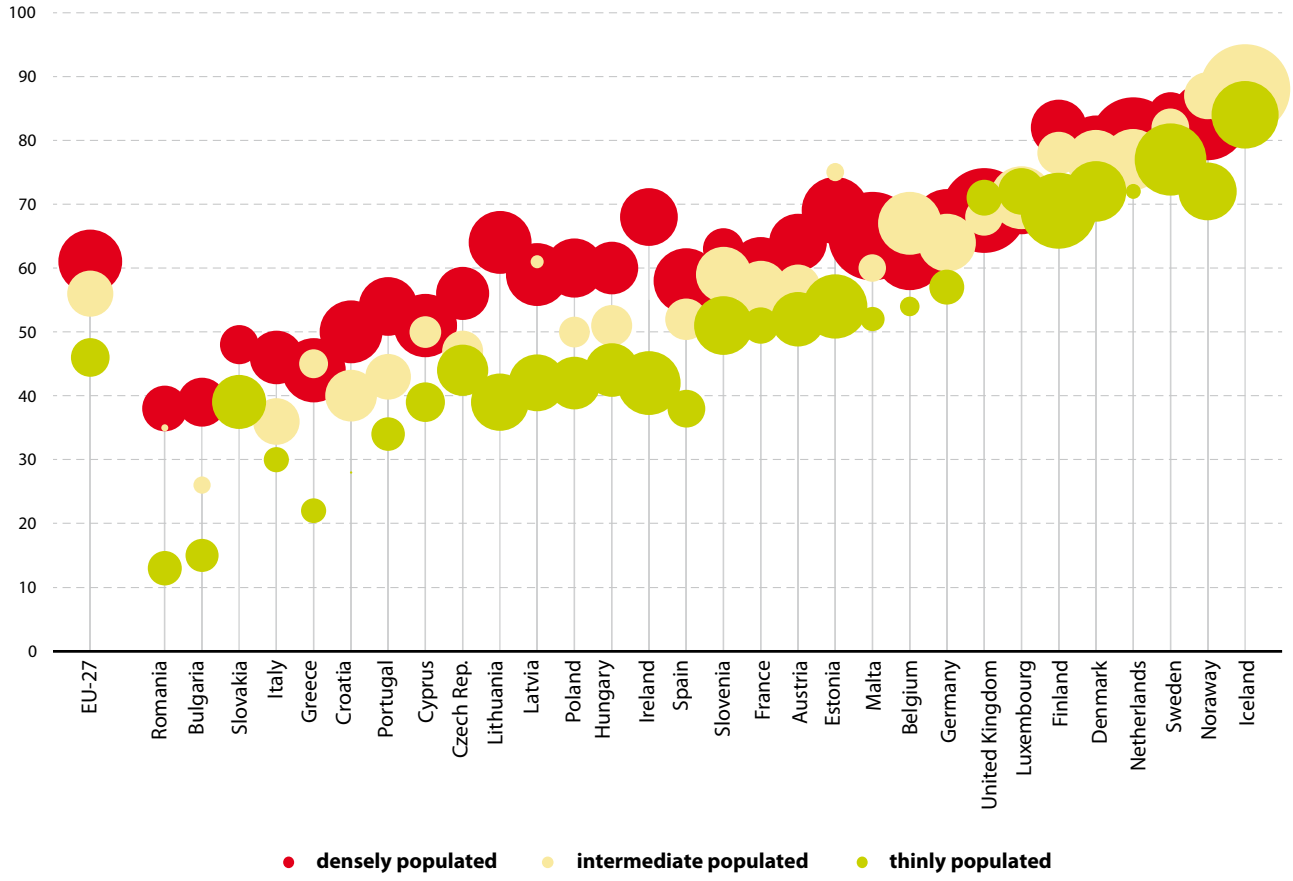
Areas by degree of urbanisation are defined as part of the EU Labour Force Survey (EU-LFS).

The concept of 'degree of urbanisation' was defined in the context of the LFS. Three types of area are defined, using a criterion of geographical contiguity in combination with a minimum population threshold, based on local administrative units level 2 (LAU2) and 2001 census data.

Densely populated area

This is a contiguous set of LAU2s, each of which has a density of more than 500 inhabitants per km^2, where the total population for the set is at least 50 000 inhabitants.

Figure 16.4: Share of households with broadband connection, by degree of urbanisation, 2009 (%)



Reading note: Countries ranked by share of population with access to broadband in total population. Bubble size is % of total population.

Source: EU-SILC.

Intermediate area

This is a contiguous set of LAU2s, not belonging to a densely populated area, each of which has a density superior to 100 inhabitants per km², and either with a total population for the set of at least 50 000 inhabitants or adjacent to a densely populated area.

Thinly populated area

This is a contiguous set of LAU2s belonging neither to a densely populated nor to an intermediate area. A set of LAU2s totalling less than 100 km², not reaching the required density but entirely enclosed within a densely populated or intermediate area, is considered as part of that area. If it is enclosed within a densely populated area and an intermediate area, it is considered to be part of the intermediate area.

A GIS layer with this information can be downloaded here:

http://epp.eurostat.ec.europa.eu/portal/page/portal/gisco_Geographical_information_maps/geodata/reference

Exceptions: France, Greece, Finland and Ireland

A number of countries have opted to use a modified or updated classification. Map 16.1 includes these classifications.

France

The French National Statistical Institute (INSEE) has used a different methodology to define the degree to which its communes are urbanised.

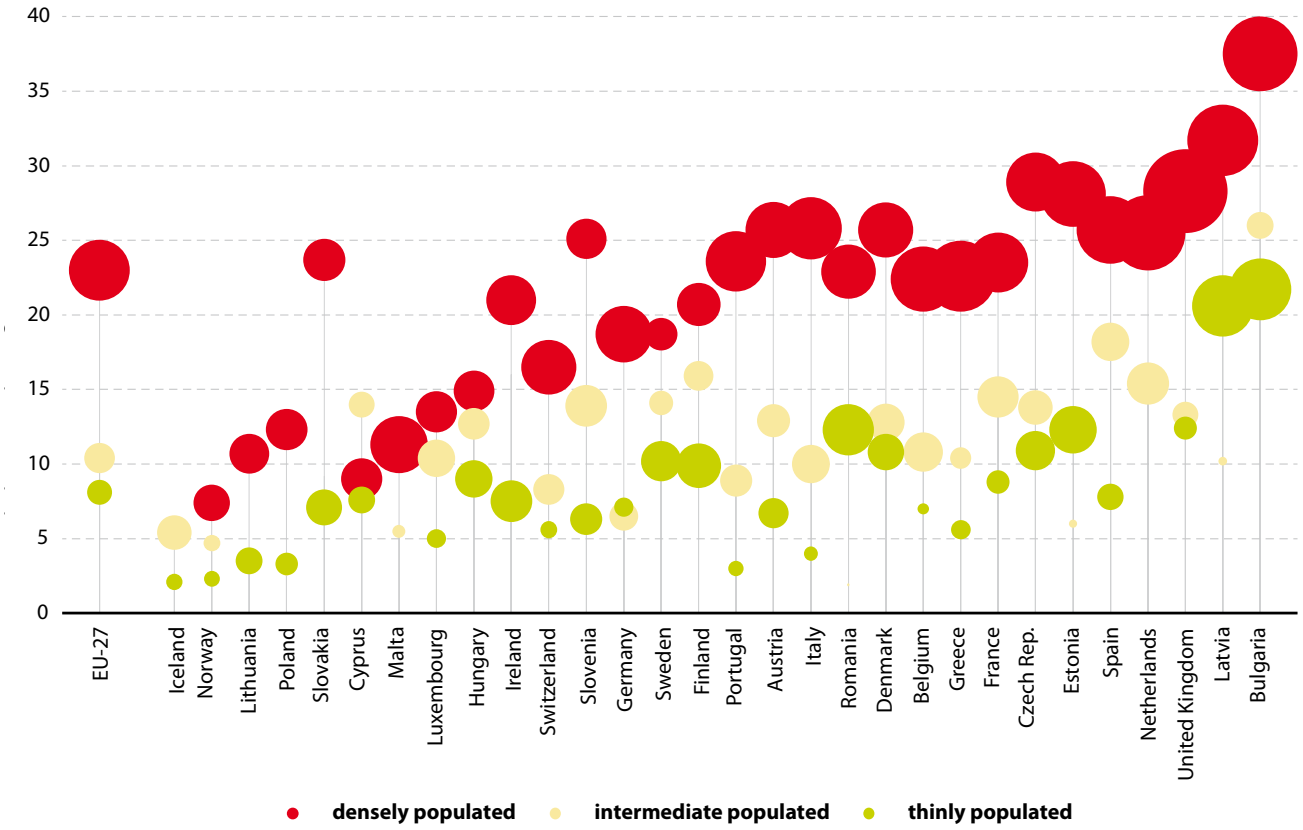
Greece

The definition as described above has been applied to the LAU1 level by Eurostat as it did not have the Greek LAU2 digital boundaries. However, Greece has classified its LAU2 regions according to this methodology.

Finland

Finland has applied this methodology to a more recent set of LAU2 boundaries.

Figure 16.5: Share of population reporting crime, violence or vadalism, by degree of urbanisation, 2009 (%)



Reading note: Countries ranked by share of population having problems. Bubble size is population reporting crime, violence or vandalism in area as % of total population in all areas.
Source: EU-SILC.

Ireland

Ireland has also used an approach which differs from that described above. It has classified LAU1s instead of LAU2s. As a result, the following cities (LAU1) are classified as densely populated: Cork City, Dublin, Galway, Limerick and Waterford. The remainder of the country is thinly populated.

For more information on these exceptions please see: https://circabc.europa.eu/d/d/workspace/SpacesStore/b65ef11a-ade2-40e2-8696-e5224e28b59d/CNTR_DEGURBA.zip

Revision of the degree of urbanisation

The European Commission has revised the original degree of urbanisation, using population grid cells as the main criteria instead of LAU2s. This improves the accuracy and the comparability of this classification. The main criteria in the new methodology are:

(1) Thinly-populated area (alternative name: rural area):

more than 50 % of the population lives in rural grid cells.

(2) Intermediate density area (alternative name: towns and suburbs):

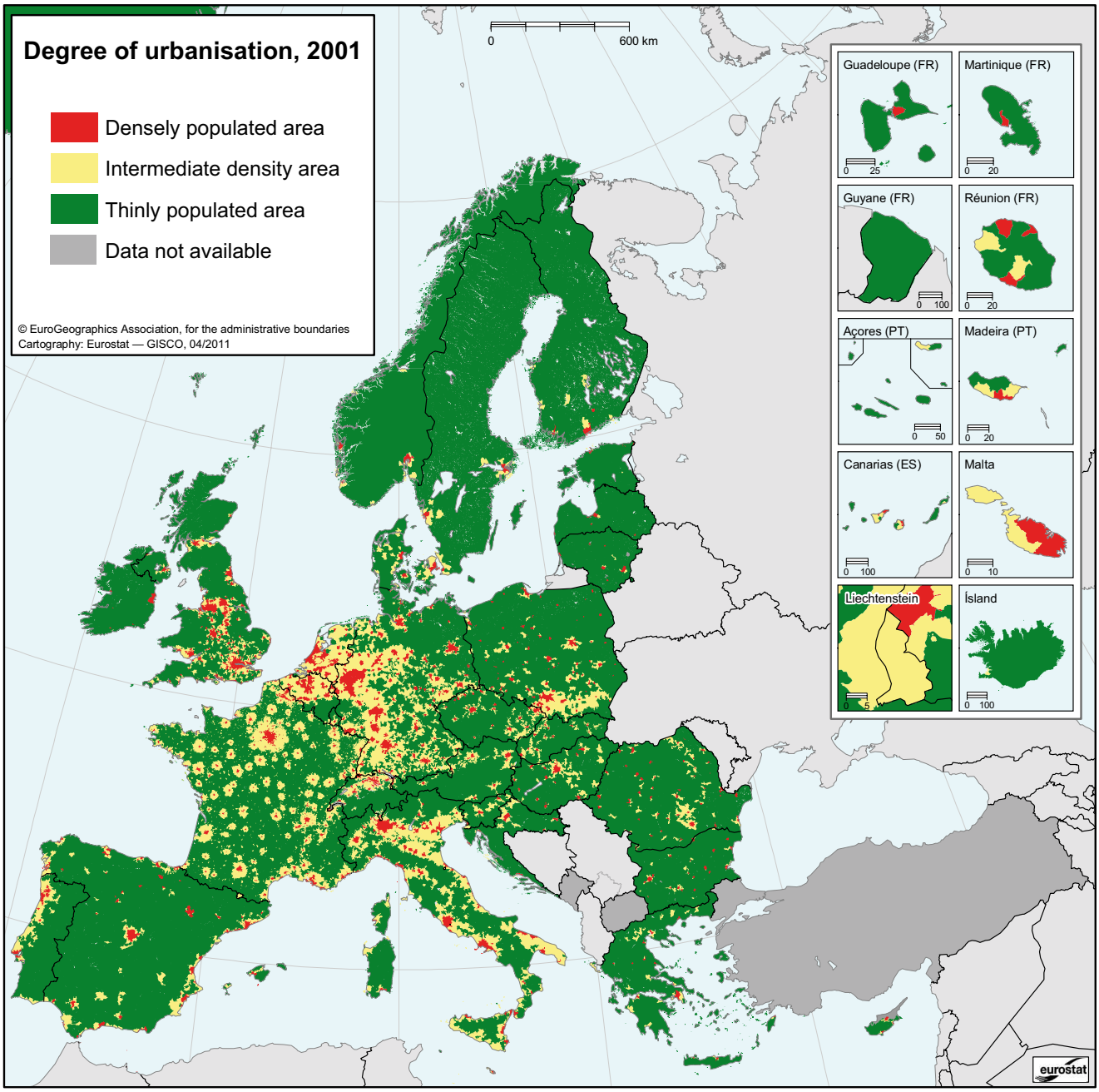
less than 50 % of the population lives in rural grid cells and less than 50 % live in high-density clusters.

(3) Densely populated area (alternative names: cities/urban centres/urban areas):

at least 50 % lives in high-density clusters ([3]).

([3]) In addition, each high-density cluster should have at least 75 % of its population in densely-populated LAU2s. This also ensures that all high-density clusters are represented by at least one densely-populated LAU2, even when this cluster represents less than 50 % of the population of that LAU2.

Map 16.1: Degree of urbanisation, 2001



Sources: Eurostat, NSI.

In the above, the following definitions are used.

Rural grid cells: grid cells outside urban clusters.

Urban clusters: clusters of contiguous ([4]) grid cells of 1 km² with a density of at least 300 inhabitants per km² and a minimum population of 5 000.

High-density cluster: contiguous ([5]) grid cells of 1 km² with a density of at least 1 500 inhabitants per km² and a minimum population of 50 000.

For more information, see the new Eurostat LFS guidance note on degree of urbanisation. This revised classification will be implemented from reference year 2012 onwards.

Severe material deprivation

The severe material deprivation rate is the share of people who cannot afford to pay for at least four of the following:

- unexpected expenses;
- one week's annual holiday away from home;
- arrears (mortgage or rent, utility bills or hire purchase instalments);
- a meal with meat, chicken or fish every other day;
- heating to keep the home adequately warm;
- a washing machine;
- a colour TV;
- a telephone;
- a personal car.

At-risk-of-poverty

The at-risk-of-poverty rate relies on a relative income definition. A person counts as 'poor' if they live in households where equivalised disposable income is below the threshold of 60 % of the national equivalised median income. Given the nature of the retained threshold, and the fact that having an income below this threshold is neither a necessary nor a sufficient condition of having a low standard of living, this indicator is referred to as a measure of poverty risk.

Access to primary healthcare

Access is assessed in terms of physical and technical access and opening hours, but not in terms of quality, price or similar aspects. Physical access has to be assessed in terms of distance, but also takes into account infrastructure and equipment; for example, if the nearest health provider is far away, so it takes too much time to get there, or if getting there is impossible due to lack of means of transport.

Primary healthcare is understood to mean a general practitioner, primary health centre, or a casualty department or similar where first-aid treatment is available.

Broadband Internet connection

An Internet connection through xDSL-technology, a cable network upgraded for Internet traffic or through other broadband technologies.

Reporting crime, violence or vandalism in the area

The question in EU SILC is:

Do you have any of the following problems with your dwelling/accommodation:

Crime, violence or vandalism in the area? Yes/No

Context

The Lisbon Treaty has included territorial cohesion alongside economic and social cohesion as an objective for the EU. This new concept was presented in a Green Paper in 2008 and the debate has been synthesised in the sixth Progress Report on Cohesion in 2009. The fifth Cohesion Report explains the main issues related to territorial cohesion and how these could be transposed into policy proposals. One of the main issues related to territorial cohesion is the need for data on different territorial levels, particularly for lower levels of geography. The classification of the degree of urbanisation provides a unique insight into trends at the local level, and highlights the differences between urban and rural areas.

([4]) Contiguity for urban clusters includes the diagonal (i.e. cells with only the corners touching). Gaps in the urban cluster are not filled (i.e. cells surrounded by urban cells).
([5]) Contiguity does not include the diagonal (i.e. cells with only the corners touching) and gaps in the cluster are filled (i.e. cells surrounded by a majority of high-density cells).