

Regional indicators of socioeconomic well-being

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Abstract

The purpose of this Research Note is to examine the extent to which it is possible from the data in the European Union Statistics on Income and Living Conditions (EU-SILC) and in the European Labour Force Survey (LFS) to construct a composite index of well-being at regional level in the EU. The aim is to complement the European Pillar of Social Rights, which is at present under development, by providing a means of assessing disparities in the various aspects of socio-economic well-being across EU regions and of monitoring the process of convergence, or divergence, over time. It starts from a notion of well-being that is multi-dimensional. The dimensions considered here are income, or more especially, the extent of poverty and social exclusion, employment and access to good quality jobs, access to a decent education and training, health and access to healthcare, the state of housing and the availability of care services. In each case, the concern is to examine the extent to which it is possible to formulate reasonable indicators at NUTS 2 regional level of these dimensions from the data available in the EU-SILC and LFS.

Introduction

The aim of this Research Note is to examine indicators of various aspects of social and economic well-being at regional level in support of the construction of a composite regional 'Inclusive Society Index', which could provide a regional perspective on the development of a European Pillar of Social Rights which is at present underway. Up to now the Pillar has been conceived very much in national terms - 'as a reference framework to screen the employment and social performance of participating Member States, to drive reforms at national level'1 - and the focus of the consultation process which has taken place since it was announced has tended to focus on the differing situation in different countries as regards various aspects which the Pillar might cover. However, in his initial announcement, President Juncker referred to his desire 'to develop a European Pillar of Social Rights ... which can serve as a compass for renewed convergence within the euro area2'. Since disparities in both employment and social terms are as important between regions as between countries - for example, the gap in educational attainment between the País Vasco region and Andalucía in Spain is similar to the difference between Spain and Sweden³ - this implies a need to take account of developments at the regional level as well as at the national level. An indicator would, accordingly, potentially provide a means of monitoring developments at this level.

The importance of developing such an index is given added weight if it is accepted, as argued by OECD among many others⁴, that policies to improve social well-being and to tackle social exclusion are usually more effective when designed at regional or local level since they enable local characteristics and conditions to be taken into account.

The starting-point for the present paper is a note prepared jointly by DG Employment and DG Regional and Urban Policy, which sets out the different dimensions which the proposed index should ideally include. These are:

- Income
- Material deprivation
- Employment (having a job and quality of that job)
- Education and training
- Health
- Housing
- Access to childcare
- Entitlement to leave for caring reasons
- Decent replacement incomes (retirement, invalidity, unemployment)
- A safe environment
- A healthy environment (free of air pollution, noise, etc.)
- An absence of discrimination
- Access to justice.

More specifically, the concern here is with the aspects listed above which can be examined on the basis of either the EU Statistics on Income and Living Conditions (EU-SILC) or the European Labour Force Survey (LFS). This means, in practice, the first 6 items listed above. The EU-SILC also includes questions on the use of childcare but these

¹ http://ec.europa.eu/social/main.jsp?langId=en&catId=88&eventsId=1187&furtherEvents=yes

 $^{^{2} \, \}underline{\text{https://ec.europa.eu/commission/priorities/deeper-and-fairer-economic-and-monetary-union/towards-european-pillar-social-rights } \, \underline{\text{en}}$

³ Quoted in OECD, 2016b.

⁴ OECD 2016a.

stop short of covering access to care in any meaningful sense, since there are no questions addressed to those who do not make use of care services. Accordingly, it is not possible to examine the reasons why the people concerned do not do so and whether and how far they relate to lack of access to care or its availability. Nevertheless the use of childcare facilities is examined below on the basis of data in the LFS.

It should be noted that in the case of two of the dimensions, entitlement to leave for caring reasons and decent replacement incomes, there is not usually any regional variation in EU Member States since both are elements of the social protection system which generally applies nationally across all regions. The only variation comes indirectly from the conditions which apply to entitlement which are in many cases linked to employment and the length of time people have been in work (or the amount of social insurance contributions they have paid). If more people in a region are in precarious jobs or in ones which are relatively low paid, then their entitlement both to leave and benefits may well be less than in other regions.

In the case of both the EU-SILC and the LFS, the main aim is to assess the extent to which it is possible to use data from the two surveys in the construction of indicators of the different dimensions of the composite index, to identify the variables which seem suitable and to examine what they show in practice. Such an assessment is important to undertake since the use of EU-level surveys is very much the preferred option wherever possible as these are constructed on the basis of a common methodology and classification system, so that variables, such as income, are defined in the same way across countries. The use of national sources is, therefore, a last resort, to be taken up only when EU-level data are either not available or less reliable.

One important rider which should be highlighted in the case of both sources of data, however, is that they are based on surveys of private households, which means that people not living in such households, such as the homeless or those living in institutions or collective households are not covered. Since these people tend to have particularly low incomes and to be socially excluded in various ways, any indicators of well-being which leave them out of account is likely to give a misleading picture of the situation in a region, at least to some extent. This should be borne in mind when interpreting the results of the analysis set out below.

It is evident from the start that neither source of data is ideal for this purpose since they do not enable a detailed analysis to be made at the NUTS 2 level which is the usual one adopted for examining the situation in the different regions in the EU. This is because the data in both cases come from household surveys which cover only a sample of the people living in EU Member States. In the case of the EU-SILC, the sample size is relatively small and for many countries does not allow a breakdown at regional level which is representative of the population living there. Indeed, data at the NUTS 2 level are available only for four countries (the Czech Republic, Spain, France and Finland). In the other countries, data are provided at the NUTS 1 level or in a few cases (such as Germany) at a broader level of aggregation. The regional analysis of the aspects in question, therefore, is on a more aggregated basis than would be preferred. Nevertheless, it is instructive to see how far it is possible to go in this respect and how useful the results are.

The LFS, being based on a much bigger sample of households, does provide data at the NUTS 2 level for most countries, the two exceptions being Germany, where there is an unusually large number of NUTS 2 regions distinguished, and the UK. In both cases, data are provided at the NUTS 1 level instead. An attempt is, therefore, made to use the LFS as a data source wherever possible. This means not only in the case of access to employment and job quality but also in respect of access to education and training, information on participation in which, as well as on the highest attainment level, is collected as part of the survey.

The LFS, in addition, potentially enables the work intensity of households to be examined at regional level. This is one of the dimensions of the social objective targeted in the Europe 2020 - specifically, to reduce the number of people in the EU at risk of poverty and social exclusion, defined as those either with equivalised income below 60% of the national median⁵, or experiencing severe material deprivation or living in households with very low work intensity. As such, it is relevant to examine in its own right, especially if the aim is to consider the situation at regional level in relation to the Europe 2020 objective. But it is also relevant to examine as an indicator of low income, or, more specifically, of those of working age with income below the at-risk-of-poverty threshold, since unemployment, and the low household work intensity which it often leads to, is a major determinant of low income in most EU Member States. How far the LFS data enable reasonable estimates of both low household work intensity and low income to be made at regional level is one of the issues explored below.

Equally, the LFS potentially allows an examination of access to childcare, if only obliquely. In particular, it contains information on the reasons why people are neither working nor looking for work, one of which is because they are looking after children (or incapacitated adults) as a result of a lack of suitable care services or those that are available are not affordable. It also contains information on the reasons why people are working part-time rather than full-time, one of which again is because of a need to look after children (or adults) due to suitable care services not being available or affordable. Of course, this provides only an indirect indication of the accessibility of such services across regions. The data relate only, on the one hand, to those who are economically inactive who report that caring for children or adults is the main reason why they are not working or looking for employment and, on the other, to those working part-time for the same reason. They do not cover, for example, those who are employed and have to accept less preferred means of arranging care for their children because of the lack of suitable services.

One important general point to bear in mind is that the focus here is on examining how far it is possible to go on the basis of the LFS and EU-SILC data available in building a well-being index at the NUTS 2 regional level, or at least in developing indicators for certain aspects of it. There are, however, major disparities in these aspects within NUTS 2 regions which can be important to take account of as well. There are, therefore, pockets of deprivation in many otherwise prosperous regions, such as run-down areas in the suburbs of major cities where social well-being is very different from that in other parts and problems of social exclusion are particularly acute. It is difficult to make a specific allowance for such areas which may not be large enough to have a significant effect on the overall indicators estimated for the regions concerned as a whole. (A prominent example is the Ile de France region which includes Paris and has a population of around 11 million, which is the biggest NUTS 2 region in the EU and larger than most of the countries.)

Building an index of social well-being at the NUTS 2 regional level is an important extension to developing one at national level, but ideally it would need to go further, therefore, in order to pick up major social problems at local level.

Before examining the various indicators of the dimensions of social well-being that can be measured on the basis of the LFS or EU-SILC, there is a brief review of the literature on developing composite indexes of social well-being, or related concepts, at regional level. This is not intended to be in any way comprehensive but it covers recent attempts to construct similar composite measures to the one being examined here, indicating the aspects included and how they have been represented. It also considers the different ways in which indicators have been aggregated which is also a matter of some relevance

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⁵ Equivalised in the sense of adjusting household income to allow for difference in household size and composition.

since once the content of a composite index has been decided and suitable indicators identified, there remains the issue of how to combine them in a meaningful way. This is almost as important as what the index includes since the way that the different elements are combined can have a significant effect on the value of the index⁶.

Literature review

It is commonly agreed that social well-being is a multi-dimensional concept that, accordingly, needs to be assessed in terms of a range of indicators in order to assess the situation in any particular place, whether country, region or local area. The UNDP has developed a human development index containing indicators which include people's ability to live long, healthy and creative lives in an equitable society and in a sustainable way as well as their level of income. Social inclusion, it is argued, needs to be explicitly taken account of along with individual development, though also the local context which affects individual development and their ability to avoid social exclusion. This includes the employment opportunities open to them, their access to basic services and to education and training and the state of basic infrastructure and the local environment, as well as the extent of corruption and cronyism⁷.

The index of social exclusion developed in order to assess the extent of inclusion covers three dimensions, economic exclusion, exclusion from social services and exclusion from civic participation. Each dimension contains 8 indicators, which reflect the ways in which people are denied access to labour markets, education and health systems and to civic and social networks. An individual is, then, defined as being socially excluded if they are unable to have access in respect of at least 9 of the indicators, which implies that to be regarded as socially excluded someone must be deprived of access in at least two of the dimensions⁸.

An even broader measure, this time of deprivation, is the English Indices of Deprivation which divides deprivation into 7 dimensions or domains (income, employment, health, education, crime, access to services and the living environment) which are then applied to small local areas (3,248 in total) rather than regions⁹. The underlying concern is to identify unmet needs in each of these domains, caused by a lack of resources of different kinds, including financial but not only. This is done by reference to 38 indicators which are then combined by using what are termed 'appropriate weights', to calculate an Index of Multiple Deprivation, which is an overall measure of multiple deprivation experienced by people living in a particular area. The indicators consist, for example, of adults and children on income support, the number of unemployed, age and gender-standardised measures of morbidity and disability, the proportion of adults under 60 suffering from depression, the proportion of young people not remaining in education after the age of 16, over-crowded housing, the extent of homelessness, housing in poor conditions, the distance to travel to reach a doctor (a general practitioner), reported crimes and air quality.

⁸ More specifically, the economic dimension covers deprivation in respect of income and basic needs, access to employment, financial services and material assets, the lack of amenities that the household needs but cannot afford and housing space. The social services dimension contains indicators on access to, and the affordability of, education and healthcare services as well as public utilities. The civic and social life dimension includes indicators of access to political, cultural and social participation and support networks, as well as the frequency of social and civic participation.

⁶ See, for example, Saisana et al. (2005), McGillivray and Noorbakhsh (2006), Cherchye et al. (2007), Cherchye et al. (2008), Foster et al. (2009), and Decancq and Lugo (2013).

 $^{^{7}}$ See UN (2010) and UNDP (2011).

⁹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6871/1871208.pdf

Other studies have focused on a more limited number of dimensions of deprivation. Aasland and Flotten (2001) consider four dimensions (exclusion from formal citizenship rights, exclusion from labour market, exclusion from participation in civil society and exclusion from the social arena). Peleah and Ivanov (2013) cover three interlinked dimensions (exclusion from economic life, exclusion from social services and exclusion from civic life), defining social exclusion as the result of multiple and mutually reinforcing deprivation in some or all of these three dimensions. Like the UNDP and the English indices, they highlight the role of local conditions in affecting social exclusion.

Kahila et al. (2014) assess social exclusion in terms of risk factors measured by proxy indicators. They identify four domains (earning a living, access to basic services, social environment and political participation) and 10 dimensions (income earned by taxpayers, employment, health, education, housing, age, ethnic composition, migrant background, household structure and citizenship) which are measured by 50 indicators in total. Like the above studies, they emphasise the spatial aspect of social exclusion, one element of risk, for example, being associated with large urban areas, another with remote and sparsely populated areas, another with areas undergoing industrial restructuring and so on. Moreover, a high risk in one dimension does not necessarily imply a high risk in others, which complicates the task of constructing a meaningful composite index of exclusion, in the sense that a given value of the index may be a result of very different situations in the different dimensions.

The Bristol Social Exclusion Matrix (Levitas et al., 2007) adopts a similar approach. It is based on three areas of exclusion (resources, participation and quality of life) and 10 dimensions (material or economic resources, access to public and private services, social resources, economic participation, social participation, education and skills, political and civic participation, health and well-being, the living environment and crime). In addition, it also distinguishes four stages of the life cycle: childhood, youth, working-age and later life, which highlights the importance of recognising that a particular factor of deprivation can affect different age groups in different ways.

The construction of a meaningful composite index is, of course, ultimately dependent on the data available, which is likely to be limited, so necessitating the choice of less preferred indicators over more preferred ones or not allowing all the dimensions of an index to be covered adequately. This can result in the index being biased because of this (OECD, 2011a). It is also the case, as noted above, that some people most at risk of social exclusion are omitted completely from the household surveys used as a basis for the indicators (i.e. those in institutions or the homeless), but equally some groups which tend to be at relatively high risk are likely to be under-represented (i.e. ethnic minorities, those on low income and mobile populations) (Levitas et al., 2007). In addition, there is an issue of comparability, since the use of different data sources is likely to be necessary, as here, to cover all the dimensions of an index, and there is a real possibility that they are not consistent with each other. This is most obviously the case when national sources are combined with European-level ones (Kahila et al., 2014).

Nevertheless, the combination of different sources at present, however, is inevitable even within the same dimension given the scale of missing data. The World Bank in its mapping of poverty rates across a number of EU Member States (PovMap), for example, used a regression to combine data from the EU-SILC with population census microdata to generate estimates of poverty indicators in NUTS 3 regions. The use of such a method, however, is limited by the non-availability of census data for recent years and the difficulties of harmonising the definitions of variables from different datasets (Kahila et al., 2014).

Another possibility consists of replacing missing values in a composite indicator by data for another region of similar size or for a neighbouring one or by national data. Such an approach, however, is highly problematic and can seriously distort the results (OECD, 2011a).

Perhaps the best-known index of regional well-being available at present is that constructed by the OECD (and published in the *Regions at a glance* report) which attempts to monitor developments over time and which covers 11 dimensions but in most cases includes only one or two indicators for each one¹⁰. It is also limited to providing values for the index for regions and metropolitan areas for which data are available, which differ in size and nature across countries, and does not attempt to produce estimates for a standardised set of areas, such as NUTS 2 regions. The dimensions included are income, jobs, housing, health, education, access to services, the environment, safety, civic engagement and governance, community, and life satisfaction. In each cases, the focus is on outcomes rather than inputs (such as public expenditure on health or the number of doctors in relation to population), though it includes subjective indicators of satisfaction (with life and the local community) as well as objective ones.

The results show that while differences between OECD regions have narrowed as regards education levels and access to services over the past decade, they have widened in respect of income, air pollution and safety. They also show that life satisfaction and perceived social support depend to a significant extent on where a person lives, some 40% of the variation in self-reported life satisfaction being estimated to be accounted for by regional rather than individual characteristics (OECD, 2016b).

Combining indicators

There are a number of different approaches to aggregating indicators of various aspects of well-being or combining them in a composite index, though they all involve assigning weights, whether implicitly or explicitly to the indicators within a particular dimension of well-being or to the different dimensions themselves. The essential issue is how to decide these weights, which can be based either on some kind of data or evidence which throws light on their relative importance¹¹ or on judgements about this. In practice, even if evidence is collected on how individuals value different elements of well-being – access to healthcare, for example, as opposed to good quality housing – there is still the problem of deciding whose values to take, since it is well-documented that there is unlikely to be consensus between individuals on what constitutes a high level of well-being (Schokkaert, 2007). There is, accordingly, much scope for disagreement on the appropriate weights to attach to the different dimensions. One way of overcoming this is to leave people to assign their own weights, to produce values for the various indicators and allow people to apply the weights which they consider most appropriate. (This is essentially what the OECD does in respect of its *Better Life* index - OECD, 2011a.)

Another way is to choose a range of acceptable weights, the use of which may not change the overall result too much. Foster and Sen (1997), for example, argue that while it is not really possible to arrive at a commonly agreed set of weights in any precise sense, this may not be necessary to make broadly agreed judgements in many situations.

In practice, the most common approach is to adopt equal weights both for the indicators within any dimension and for aggregating the dimensions into a composite index. The one compelling argument for this is its simplicity or, alternatively, that since there is no

 10 Access to services, for example, is measured by the proportion of the population with unmet medical needs and the proportion of the population with access to broadband; education by the proportion of the workforce with upper secondary education; housing quality by the number of rooms per person and the proportion of disposable income spent on housing. See OECD (2011b), OECD (2014) and OECD (2016).

¹¹ For example, in the case of deprivation indices, it is often argued that the various items included should be weighted according to the share of household or individual expenditure that they make up since being deprived of an item which most are able to enjoy is more significant than being deprived of one which relatively few are able to afford.

reliable basis for choosing what weights to apply, then effectively the solution is not to weight at all.

A variant of this is the approach adopted by the Europe 2020 strategy which is to define a multi-dimensional concept of poverty or social exclusion and to count people as being in poverty (or, more precisely, at risk of poverty) or socially excluded if they are 'captured' under any one of these dimensions. In other words, people are counted if they have income below 60% of the national median, are identified as being severely materially deprived or live in a household with very low work intensity. The same approach could be adopted within any of the dimensions of a regional well-being index considered below.

A feature of such an approach is that it implicitly takes account of the interactions between the different indicators in the sense that someone who has low income, is materially deprived and lives in a low work intensity household is only counted once, whereas if an averaging approach is adopted they are counted in each of the three dimensions. This raises the issue of whether it is important to know the extent and depth of social exclusion, in terms of both the proportion of the population affected and how much they are excluded.

A further issue concerns the usefulness of a composite index which combines very disparate aspects, such as access to education and a healthy environment. If, for example, the index for two regions show similar values but one has severely restricted access to education but a healthy environment with minimal air pollution and the other has the opposite, it is not clear what can be concluded from the index. It might be argued that relatively low values of the index (a low level of well-being) would highlight the fact that there are well-being issues of some kind – or probably various kinds – which policy may need to tackle and that it is left to further investigation to identify the nature of these. But it may be that a particular region has severe problems in one or two dimensions which are effectively disguised by a high value of the index in all the other dimensions. This argues for a decomposed index rather than a composite one which enables the situation in the different dimensions to be seen, which, in addition, gets over the problem of choosing weights, at least between dimensions.

Outline

In what follows, the dimensions of the composite index listed above are examined in turn, starting with income and material deprivation, which together with household work intensity form the poverty and social exclusion target of the Europe 2020 strategy. They are, therefore, considered together. The analysis is based on data from the EU-SILC. Data, however, from the LFS on household work intensity are also examined and compared with those from the EU-SILC to see to what extent they provide a viable alternative to the latter, which would enable a more detailed breakdown of regions to be made and a more up-to-date indicator to be calculated.

Secondly, indicators of access to employment and job quality are examined on the basis of LFS data. This is linked to some extent to the income dimension insofar as employment and the types of job that people are employed in are major determinants of household income, particularly of those of working age, as well as employment being inextricably linked to work intensity. The indicators examined are

- monthly take-home pay (which in the LFS is expressed in terms of deciles), as an indicator of job quality;
- the relative number of employees in temporary jobs involuntarily;
- the full-time equivalent employment rate (to take account of the extent of parttime working as well as the number of people in work as such);

• the relative number of people living in zero or low-work intensity households, which reflects not only the extent of unemployment and inactivity but also the distribution of the jobless and those working relatively little across regions.

Thirdly, indicators of access to education are considered also largely on the basis of LFS data. The indicators in question are:

- the participation rate of 4-year olds in education, given the evidence that this is important for the education levels that people go on to attain;
- the rate of early school leaving (i.e. those leaving the education system with inadequate qualifications);
- the proportion of young people aged 30-34 with tertiary education;
- the rate of participation in continuing education or training (i.e. after completing initial education and vocational training).

Fourthly, health and access to healthcare are measured by 5 indicators derived from the EU-SILC:

- the relative number of people reporting to be in good or very good health;
- the proportion of people reporting a chronic illness or health problem;
- the proportion of people reporting being severely limited or limited in their daily activities because of health problems;
- the relative number of people reporting an unmet need for medical examination or treatment;
- the relative number of people reporting an unmet need for dental examination or treatment.

Fifthly, indicators of access to decent housing are also examined on the basis of the EU-SILC, these being:

- the proportion of people living in housing with leaking roof, damp walls/floors/foundations or rot in window frames or floors:
- the relative number living in housing with no internal bathroom or toilet;
- the proportion of people living in housing considered to be too dark or with not enough light;
- the proportion of people living in housing which is over-crowded.

Sixthly, a possible indicator of access to childcare (or adult-care, which can be just as important) is explored from data in the LFS on women reporting a lack of suitable and affordable care services as the reason for not being economically active or for working part-time instead of full-time.

At risk of poverty and social exclusion indicators

The last Cohesion Report (European Commission, 2014), published in 2014, contained an extensive section setting out the indicators which make up the Europe 2020 poverty and social exclusion target – being at risk of poverty, severely materially deprived or living in a low working-intensity household – at regional level¹². This was based on data, or estimates from a number of sources, including from Eurostat, the World Bank, which carried out a mapping of at-risk-of-poverty rates in 7 EU13 countries¹³ and an ESPON study which attempted to estimate at-risk-of-poverty rates at NUTS 3 level from a range

¹² See also Bubbico, R.L. and Dijkstra, L. (2011).

¹³ World Bank (2016a - 2016g).

of sources and using a number of different estimation methods (including regression techniques) to fill in the many gaps where 'real' data were not available¹⁴. The data in question relate to 2010-2011 and are based partly on Census of Population statistics which enable a much more detailed breakdown of regions than sample surveys.

So far as at-risk-of-poverty rates are concerned, for which the regional breakdown for 2010-2011 is the most detailed, the EU-SILC, as indicated above, contains data only for a limited number of NUTS 2 regions. Filling in the gaps is problematic, since the Census data now relate to a year which is probably too long ago to give a reasonable indication of the present situation, or at least a comparatively recent one. Regression techniques, which relate at-risk-of-poverty rates to other variables for which the data are available, such as the extent of agglomeration, the sectoral breakdown of economic activity or education attainment levels, seem to produce estimates of varying degrees of reliability and in many cases, are reported to fail to capture the extent of variation in rates between regions. However, it represents a potential option, though one which is explored here only in relation to the possible use of low household work intensity to estimate the missing data.

However, it is important to note a serious problem with estimating at-risk-of-poverty rates at regional level. This is the fact that they fail to take account of differences in price levels across regions and, therefore, in the purchasing power associated with any given level of income. As such they are liable to give a misleading indication of the income levels and the relative number of people at risk of poverty in any particular region as compared with another, especially if one of the regions contains a capital city or a large agglomeration where prices, especially of housing but not only, tend to be higher. Accordingly, just as in the case of comparing income levels between countries, some form of purchasing power adjustment is needed to make a meaningful comparison of income levels between regions. Such purchasing power estimates, however, are not available for EU regions. (There are equally very few countries in which regional price indicators exist to make the adjustment to income levels required.)

This limitation of the data available should be borne in mind when interpreting the figures for at-risk-of-poverty rates presented below. An implication is that material deprivation rates become more important since these take explicit account of any variation in regional price levels by measuring the affordability of a common set of particular items in different parts of a country. Accordingly, material derivation rates are perhaps the main indicator to focus on when assessing differences in poverty or social exclusion across regions, or at least, they should be examined in conjunction with at-risk-of-poverty rates.

The latest data at regional level from the EU-SILC are presented below for the proportion of the population identified as being materially deprived and living in low work intensity households as well as the at-risk-of-poverty rates. Each of the indicators is defined in the conventional way (see Box). They cover NUTS 2 regions where the data are available and NUTS 1 regions where they are not.

Definition of at-risk-of-poverty or social exclusion

The at-risk-of-poverty rate is defined as the relative number of people with income below 60% of the national median; the materially deprived as those unable to afford three of 9 items considered as important to have a reasonable standard of living, or four items in the case of the severely deprived; low work intensity households as those where the ratio of overall amount of time worked during the year by household members to the amount of time they would have worked if employed full-time throughout the year is less than 0.2. Those at-risk-of-poverty or social exclusion are those who fall into any one of these three groups.

The data relate to the 2013 income year in respect of those at risk of poverty and living in low work intensity households and to 2014 (i.e. at the time of the survey) for those

¹⁴ Czirfusz, M., Kovács, K. and G. Tagai (2013).

identified as being materially deprived. (Note that the year to which the first two indicators relate is usually referred to, especially by Eurostat, as the year of the survey – i.e. to 2014 – rather than the income year to which the data in practice relate (i.e. 2013). This tends to give the impression that the data are more up-to-date than they actually are and can be misleading when there are significant changes in the indicator. For example, the at-risk-of-poverty rate relating to the 2008 income year, which was only partly affected by the global recession, is usually labelled as 2009, the year which was fully affected.)

The lowest at-risk-of-poverty rates in the 2013 income year were in the Czech Republic in Strední Cechy (CZ2), the region surrounding Prague, and Praha (CZ1), the capital city itself, where the figure was only around 5% (though perhaps higher if the relatively high price levels in the capital city and the surrounding region are taken into account) (Table 1). There are five other regions, in which at-risk-of-poverty rates were below 10%, three of them in the Czech Republic.

At the other extreme, in Ciudad Autónoma de Ceuta (ES63) in Spain (on the north coast of Africa), the at-risk-of-poverty rate was 44%. In total, there are 8 regions where the rate was 30% or more. These include four regions in Spain (Extremadura, ES43, Andalucía, ES61 and Murcia, ES62 as well as Ceuta) and two in Italy (Sud, ITF, and Isole, ITG, the two which make up the south of the country). It is interesting to note that there is also one region in each of these countries (País Vasco, ES21 and Emilia Romagna, ITH) which had among the lowest at-risk-of-poverty rates.

Table 1 Regions with the lowest and highest values for the at-risk-of-poverty and social exclusion indicators, 2013-14 (% total population)

At-risk povert		Materia depriva rate		Severe materi depriva rate	al	Living in Jobless households Living in Low work poverty of social exclusion		work intensity		y or	
				10 regio	ns with	the lowe	est rates	;			
CZ02	5.3	SE3	2.1	SE3	0.4	SE1	5.8	SE1	7.9	CZ01	12.8
CZ01	5.3	SE1	3.0	SE2	0.7	SE2	7.1	CZ02	8.0	CZ02	13.2
CZ06	8.1	SE2	3.7	SE1	0.9	CZ01	7.3	CZ01	8.7	FI1B	15.0
FI1B	8.5	LU0	5.0	ES22	1.2	FI1B	7.7	RO3	8.9	SE1	15.7
CZ03	8.7	AT2	6.0	LU0	1.4	CZ02	7.9	RO2	9.0	CZ06	17.3
CZ05	9.4	BE2	6.3	AT2	2.2	ITH	8.0	CZ06	9.4	CZ03	18.4
FR51	9.6	ES22	6.4	FI1D	2.4	ES53	8.3	ITH	9.6	CZ05	19.1
HU1	10.0	FI1B	7.7	FR22	2.5	LU0	8.4	SK0	9.8	SE3	19.2
ES21	10.2	DK0	7.7	BE2	2.5	PL3	8.4	PL3	9.8	SE2	19.5
ITH	10.4	FI1C	7.7	ES41	2.6	CZ06	8.6	SE2	9.9	BE2	19.7
			:	10 regio	ns with t	the high	est rates	5			
RO4	28.3	RO4	38.4	ITG	23.2	ES12	19.3	ES13	24.0	RO4	45.1
ES42	28.4	EL5	40.1	RO4	23.8	EL3	19.7	IE0	24.4	ES43	47.1
BE1	30.9	ITG	41.1	RO3	23.9	CZ04	19.7	ES43	25.4	EL4	47.3
ITF	31.6	RO3	42.1	EL4	23.9	EL5	19.7	ES62	25.8	ITF	49.2
ES43	33.1	EL6	43.5	EL6	24.0	ITF	20.1	ES63	26.0	EL6	49.5
ES61	33.3	BG4	43.6	HU1	24.1	BE3	21.4	FR21	26.8	ES61	50.0
RO2	34.7	EL4	44.0	HU3	26.5	ITG	22.5	ITG	27.8	ES63	50.7
ITG	36.6	HU3	44.7	BG4	29.4	FR21	22.7	BE1	28.0	ES62	51.0
ES62	37.2	BG3	50.0	RO2	30.8	ES70	24.3	ES70	30.6	RO2	53.8
ES63	44.3	RO2	52.1	BG3	36.6	BE1	24.3	ES61	31.2	ITG	56.1

Note: No regional-level data for DE, NL, PT, SK, DK, IE and SI. The first three countries are excluded from the analysis while national-level data are used for the other 4 countries.

Source: Eurostat, EU-SILC and own calculations

The findings indicate that there is a huge variation in the at-risk-of-poverty rates across regions. The average rate in the 10% of regions, weighted by population, where the rate was lowest (those accounting for 10% of the total population in the regions with available data which had the lowest rates) was just below 10%. The average rate in the 10% of regions where the rate was highest, similarly weighted by population, was 33.5% (Table 2). At-risk-of-poverty rates in the latter were, therefore, around 3.5 times higher than in the former.

Table 2 Averages of the at-risk-of-poverty and social exclusion indicators for the 10% of regions with the lowest and highest values, 2013-14

	Average in lowest 10%	Average in highest 10%	Highest 10%/ Lowest 10%
At-risk-of-poverty rate	9.8	33.6	3.4
Material deprivation rate	6.5	44.2	6.8
Severe material deprivation rate	1.9	26.7	13.8
Living in Jobless households	7.9	21.0	2.7
Living in Low work intensity households	9.1	26.2	2.9
Social exclusion indicator (%)	18.5	51.4	2.8

Note: No regional-level data for DE, NL, PT, SK, DK, IE and SI. The first three countries are excluded from the analysis while national-level data are used for the other 4 countries.

Source: Eurostat EU-SILC and own calculations.

In 2014, the lowest material deprivation rates were in Sweden. In Norra Sverige (SE3), only 2% of the population were identified as materially deprived and in the other two NUTS 1 regions, Östra Sverige (SE1) and Södra Sverige (SE2), just 3-4% (Table 1). In the 10 regions with the lowest material deprivation rates, the proportion was below 8%. At the other extreme, in Severna i yugoiztochna (BG3) in Bulgaria and Macroregiunea doi (RO2) in Romania, half or more of the population was materially deprived. In 9 regions, the rate was 40% or more and in a tenth (in Macroregiunea patru in Romania) it was only just below 40%. The average material deprivation rate in the 10% of regions (again weighted by population) with the highest rates was almost 7 times higher than in the bottom 10% (Table 2).

It should be noted that there are no regions in the bottom 10 in terms of at-risk-of-poverty rates which are in the bottom 10 in terms of the material deprivation rate, reflecting the fact that the latter is related to absolute rather than relative income levels. On the other hand, there were three regions (two Romanian and one Italian) which were in the top 10 in the two rankings, suggesting that many of the lowest income regions also have relatively high levels of inequality.

There is some relationship between the rate of material deprivation and the rate of severe material deprivation (4 items not being affordable instead of three), 7 of the 10 regions with the lowest material deprivation rates being among the 10 regions with the lowest severe rates. At the other end of the scale, there is an even closer relationship, 9 of the 10 regions with the highest material deprivation rates being among the 10 with the highest severe rates. The extent of the difference between rates of severe material deprivation in the 10 regions where they were highest and those where they were lowest is much wider than for material deprivation, the ratio being almost twice as large (Table 2). This reflects in some degree the very small differences in the former between regions with high income levels, 14 of them having a rate of 3% or less and accordingly, the limited extent to which the indicator discriminates between regions.

There is also a close relationship, as would be expected, between jobless households, those with zero work intensity, and low work-intensity ones. With regard to the latter, which is one of the three elements of the Europe 2020 poverty and social exclusion target, the rates were highest in Andalucía (ES61) and Canarias (ES70) in Spain, where

more than 30% of the people were living in low work intensity households (Table 1). In six other regions, at least a quarter of the individuals were in low work intensity households; three of them in Spain; one in Italy; and one in France. Four of the Spanish regions (Extremadura, Andalucía, Murcia and Ceuta) and one Italian region (Isole – i.e. Sardegna and Sicilia) are also included among the 10 regions with the highest at-risk-of-poverty rates. Only one region, the Isole region in Italy, is included in the 10 with the lowest material deprivation rate.

Similarly, of the 10 regions with the smallest proportions of people living in low work-intensity households, (two Swedish, three Czech, two Romanian, an Italian, a Polish and a Slovakian), only the two Swedish ones were included in the 10 regions with the lowest material deprivation rates while all three Czech ones and the Italian one are included among the regions with the lowest at-risk-of-poverty rates. This suggests a closer relationship between low work intensity and the risk of poverty than with material deprivation, reflecting the fact that the effect of low work intensity on living standards varies with income levels across countries, whereas within countries, the effect is on relative income levels.

The proportion of population at risk of poverty or social exclusion, the Europe 2020 target, was smallest (13%) in the Praha and Strední Cechy regions of the Czech Republic, followed by Helsinki Uusimaa in Finland and Östra Sverige in Sweden (15-16%). The regions where the proportion was largest are Isole in Italy (56%), Macroregiunea doi in Romania (54%) and three of the four NUTS 2 regions in the NUTS 1 Sur region in Spain, Andalucía, Murcia and Ciudad Autónoma de Ceuta (50-51%) (Table 1). The average proportion in the 10% of regions where the figure was highest was almost three times the average in the 10% where it was lowest, much the same as the extent of the difference for low work intensity but smaller than for the risk of poverty or for severe material deprivation (Table 2).

The correlations between the different indicators show a close relationship between the poverty and social exclusion rate and the at-risk-of-poverty rate and a slightly less close relationship between the former and both the severe deprivation rate and the low household work intensity rate, the two relationships being very similar (Table 3). There is also a relatively close relationship between the at-risk-of-poverty rate and the low household work intensity rate and a slightly less close relationship between the former and the severe material deprivation rate. As indicated above, there is not much of a relationship between low household work intensity and material deprivation.

Table 3 Pearson's correlation coefficients between regional-level at-risk-of-poverty and social exclusion indicators for total population, 2013-14

	Material deprivation	Severe material deprivation	Jobless households	Low work intensity households	Social exclusion indicator
At risk of poverty	0.546***	0.480***	0.428***	0.581***	0.885***
Material deprivation		0.968***	0.229*	0.239*	0.736***
Severe material deprivation			0.178	0.167	0.683***
Jobless households				0.934***	0.598***
Low work intensity households					0.690***

Note: No regional-level data for DE, NL, PT, SK, DK, IE and SI. The first three countries are excluded from the analysis while national-level data are used for the other 4 countries.

*** Significant at the 0.01% level; * significant at the 10% level.

Source: Eurostat, EU-SILC and own calculations

The close correlation between the Europe 2020 indicator and the individual elements of this suggests that it may be possible simply to use the indicator to pick up regional variations in the risk of poverty, material deprivation and low household work intensity. Alternatively, the three elements could be included separately to cover the first two

dimensions of the suggested composite indicator. The correlations between them seem sufficiently close to give a meaningful measure. There are grounds, however, for including the 'simple' material deprivation indicator rather than the 'severe' one since the correlations with the other two indicators are closer and it varies more between the higher income regions.

There is a very strong relationship between the indicators calculated for the entire population and those calculated for working-age population, 18-64, the age group used in the calculation of low household work intensity (the correlation coefficient is 0.986). The correlations between the different indicators for this age group are, accordingly, similar to those examined above for the total population (Table 4). This suggests that any relationship between the income and material deprivation indicators and the employment indicators examined below, which are confined to working-age population for obvious reasons, tends to apply to the total population as well as population of working age.

Table 4 Pearson's correlation coefficients between regional-level at-risk-of-poverty and social exclusion indicators for population aged 18-64, 2013-14

poverty and social exclusion marcators for population aged to 01/2015 11								
	Material deprivation	Severe material deprivation	Jobless households	Low work intensity households	Social exclusion indicator			
At risk of poverty	0.556***	0.487***	0.428***	0.592***	0.894***			
Material deprivation		0.964***	0.208*	0.230*	0.744***			
Severe material deprivation			0.167	0.167	0.700***			
Jobless households				0.935***	0.589***			
Low work intensity households					0.686***			

Note: No regional-level data for DE, NL, PT, SK, DK, IE and SI. The first three countries are excluded from the analysis while national-level data are used for the other 4 countries.

*** Significant at the 0.1% level; * significant at the 10% level.

Source: Eurostat, EU-SILC and own calculations

Labour market and employment indicators

Five indicators have been selected to reflect variations in access to employment and job quality between regions, as listed above. All are based on data from the LFS and relate to working-age population, 15-64. All of the indicators are calculated for 2013 in order to relate to the same year as the EU-SILC. Unlike the latter source, they relate to NUTS 2 regions except in Germany and the UK, where they relate to NUTS 1.

The first indicator is average monthly take-home pay, assumed to be an indicator of job quality. This is expressed in the LFS in terms of deciles and the indicator used is the ratio of the average decile of take-home pay in each of the regions to the mean in the country. As such, it does not pick up differences between countries and it is questionable whether it should, for the same reasons as the at-risk-of-poverty rate being country-specific. The highest ratio was in Bratislavský kraj in Slovakia, followed by Praha in the Czech Republic, Ciudad Autónoma de Ceuta in Spain, Yugozapaden in Bulgaria, Közép-Magyarország in Hungary, Bucuresti-Ilfov in Romania and London in the UK (Table 5). All of these, apart from the Spanish region (which is unusual in being small – its population is just under 85,000 – and on the north coast of Africa), are capital city regions.

At the other end of the scale, the ratio was lowest in Severozapaden in Bulgaria, followed by Notio Aigaio in Greece, Murcia in Spain, Calabria in Italy, Mecklenburg-Vorpommern in Germany and Corse in France. All of these are lagging regions in the countries concerned.

The full-time equivalent employment rate is intended to pick up access to paid work. It takes accounts not only of the extent to which population of working age are in

employment but also the extent to which they are in part-time jobs rather than full-time ones¹⁵. The rate was highest in 2013 in Åland in Finland (72%) and the figure was also over 70% in Praha in the Czech Republic and Stockholm in Sweden. There were two other Czech regions in the top 10 regions ranked in these terms, including Stedni-Cechy, and two other Swedish ones, together with the capital city region in Slovakia, the Finnish capital city region and Brandenburg in Germany.

Table 5 Regions with the lowest and highest values for the labour market and employment indicators, 2013

empio	employment indicators, 2013										
Aver month emplo earnings	ly net oyee	Full- equiv employ rate	alent yment	Living in househo	,	work in	Living in low work intensity ouseholds (%) Living in low because of because of unavailable unavailal permanent job15-64 (%) Temporary contract contract because of because unavailable unavailal permanent job15-64 (%)		contract because of unavailable permanent		ract use of uilable anent
				10 regions	s with mo	st favour	able rates	;			
SK1	1.30	FI20	72.1	FI20	7.1	SK1	9.9	SI3	0.0	SI3	0.0
CZ11	1.23	CZ1	71.5	SK1	7.9	CZ2	10.2	SI4	0.0	SI4	0.0
ES63	1.22	SE11	70.1	ITH1	8.2	CZ1	10.3	RO42	0.3	RO42	0.3
BG41	1.18	SK1	69.0	DE20	8.3	FI20	10.9	RO41	0.5	RO41	0.4
HU10	1.17	FI1B	68.9	CZ1	8.3	CZ3	11.9	RO12	0.5	RO12	0.4
RO23	1.17	CZ2	68.7	DE10	8.4	CZ6	12.7	AT20	0.6	RO11	0.6
UK10	1.16	DE40	67.7	CZ2	8.7	DE20	13.0	RO11	0.7	AT20	0.7
ES22	1.15	CZ3	67.5	AT30	9.6	CZ5	13.2	AT30	0.7	AT30	0.7
ESZ1	1.14	SE32	67.4	ITH2	9.9	DE10	13.5	AT10	0.8	BG41	0.8
BE31	1.14	SE21	67.3	UKJ0	9.9	SK2	13.8	BG41	0.9	AT10	0.8
			10	regions \	with the I	east favou	ırable rat	es			
ES70	0.87	EL52	43.4	EL63	25.1	ITF5	36.8	ES52	22.6	ES52	20.8
RO22	0.86	ES43	42.9	ITF3	26.1	EL53	37.1	ES53	23.6	ES53	21.3
DEE0	0.86	ITF5	42.7	EL54	26.1	BE10	37.2	PT15	24.9	PL61	23.1
EL54	0.85	ES61	41.0	EL52	26.2	ES61	39.0	ES64	25.0	PL11	23.1
FR83	0.85	EL53	41.0	BE10	27.3	FR83	39.3	ES43	25.6	PT15	23.2
DE80	0.84	ITF4	39.1	EL51	28.1	ITF4	39.4	PL11	25.7	ES43	23.8
ITF6	0.84	ES64	36.9	ITG1	28.3	ITF3	43.8	PL61	25.9	ES64	25.0
ES62	0.84	ITF3	36.6	FR83	28.8	ITG1	45.3	ES62	26.1	ES62	25.2
EL42	0.84	ITF6	35.8	ITF6	29.0	ITF6	46.8	ES61	27.7	ES70	25.8
BG31	0.83	ITG1	35.7	ES64	30.2	ES64	48.4	ES70	27.7	ES61	26.0

Note: No regional-level data for NL, EE, CY, LV, LT, LU and MT. NL was excluded from the analysis while the other countries with population 5 million or less are assumed to be NUTS1 level. No monthly net employee earnings data for SE.

Source: Eurostat, EU-LFS and own calculations.

At the other extreme, the full-time equivalent employment rate was lowest in Sicilia and Calabria in Italy, where it was below 36%, followed by Puglia and Campania, also in Italy, as well as Ciudad Autónoma de Melilla in Spain, where the rate was below 40%. Two of the remaining 10 regions where the rate were lowest were in Spain (Castilla-la-Mancha and Extremadura), another was in Italy (Basilicata) and the other two were in northern Greece (Kentriki Makedonia and Dytiki Makedonia).

Low household work intensity is suggested as a complementary indicator to the full-time equivalent employment rate to pick up the extent to which employment is equally or

¹⁵ Part-time work may be a preferred option for many of those employed in such jobs and it is arguable that this should be taken into account in the indicator. This raises an issue, however, over the extent to which the people concerned (such as women with young children) are exercising a genuine preference instead of one which is constrained by other responsibilities and the lack of support to help them with these.

unequally distributed between households, the value of the indicator being higher the less equally it is distributed. The five regions where the proportion of people living in low work-intensity households was smallest were also included among the 8 regions where the full-time equivalent employment rate was highest (Bratislavský kraj in Slovakia, Strední Cechy, Praha and Jihozápad in the Czech Republic and Åland in Finland). The relationship between the two indicators is even closer at the bottom end of the scale: the 5 regions where the relative number living in low work-intensity households was highest are the same 5 regions where the full-time equivalent employment rate was lowest (Ciudad Autónoma de Melilla in Spain and Campania, Sicilia, Calabria and Puglia in Italy).

The proportion of employees in jobs with temporary contracts of employment because they cannot find a permanent job (i.e. involuntarily) is aimed at picking up the extent of job insecurity and the vulnerability of the people concerned as a result. There are two possible measures, one which covers all employees and one which is confined to those of 25 and over, which excludes younger people on the grounds that a large number of them have temporary contracts of employment because they are undergoing training or serving a probationary period. In practice, the two are very closely correlated (the correlation coefficient is 0.988 – see Table 7), so it does not matter much which one is chosen. The focus here is on the indicator which covers employees of working age (i.e. 15-64).

In 2013, the relative number of employees in temporary jobs involuntarily was lowest in the two Slovenian regions followed by three Romanian ones. In all of these, virtually no-one worked in a temporary job involuntarily, reflecting the extremely limited use of fixed-term contracts of employment in the two countries. Similarly, three of the four regions where the figures were the next lowest are in Austria, again because of the limited use of such contracts by employers. The other regions in Romania and Austria (as well as those in Bulgaria), all have small proportions of employees working in temporary jobs involuntarily.

At the other extreme, there are 7 Spanish regions among the 10 in which the proportion of employees working in temporary involuntarily was the largest in the EU, together with two Polish regions and one Portuguese one. Though the figures vary, the proportion is relatively large in all of the Polish and Portuguese regions. Accordingly, the extent of employment in temporary jobs tends to be related more to national circumstances – to the employment protection legislation in force and the regulations governing the use of fixed-term contracts – than to regional ones. The national circumstances differ markedly between countries. The proportion of employees in temporary jobs involuntarily in the 10% regions where the figure was highest was 22 times larger than that in the 10% of regions where it was smallest (Table 6).

Table 6 Averages of the labour market and employment indicators for the 10% of regions with the lowest and highest values, 2013

	Average in lowest 10%	Average in highest 10%	Highest 10%/ Lowest 10%
Net employee earnings	0.9	1.1	1.3
FTE employment rate (15-64)	41.7	66.4	1.6
% in jobless households	9.0	25.1	2.8
% in low work intensity households	13.6	38.1	2.8
% in temporary jobs involuntarily, 15-64	1.0	21.5	22.3
% in temporary jobs involuntarily, 25+	0.9	19.5	20.7

Note: No regional-level data for NL, which is excluded from the analysis. No monthly net employee earnings data for SE.

Source: Eurostat, LFS and own calculations

There is a moderate correlation between average monthly take-home pay and the full-time equivalent employment rate, suggesting that there is some tendency (though relatively weak) for earnings to be higher in regions where the employment rate is higher (which would be expected) (Table 7). Since the latter is closely correlated with the proportion of people living in low work-intensity households – and more so than with the proportion in jobless households – it follows that there is also some correlation, though a negative one, between monthly earnings and the proportion of people living in zero or low work-intensity households. In addition, there is a negative correlation as well, though weaker still, between monthly earnings and the relative number of employees in temporary jobs involuntarily. This suggests that there is a slight tendency for low earnings and the relatively widespread use of fixed-term contracts of employment to go together.

The proportion of employees in temporary jobs involuntarily is also negatively correlated with the full-time equivalent employment rate, indicating that the latter tends to be higher the smaller the former. This suggests that in regions where jobs are most in short supply, the use of fixed-term contracts of employment tends to be most widespread. It follows that there is also a correlation between the relative number of employees in temporary jobs and the proportion of people living in low work intensity households.

Table 7 Pearson's correlation coefficients between regional-level employment indicators for population aged 15-64, 2013

	FTE employment rate (15-64)	% in jobless households	% in low work intensity households	% in temporary jobs involuntarily (15-64)	% in temporary jobs involuntarily (25-64)
Net employee earnings	0.285***	-0.395***	-0.333***	-0.187**	-0.163*
FTE employment rate (15-64)		-0.811***	-0.935***	-0.483***	-0.512***
% in jobless households			0.918***	0.360***	0.355***
% in low work intensity households				0.429***	0.437***
% in temporary jobs involuntarily (15-64)					0.988***

Note: No regional-level data for NL, which is excluded from the analysis. No monthly net employee earnings data for SE.

Source: Eurostat, LFS and own calculations.

The use of the LFS to estimate household work intensity and atrisk-of-poverty rates in NUTS 2 regions

It is instructive to examine the possibility of using the LFS rather than the EU-SILC to estimate the relative number of people living in households with low work intensity, first, because it would enable NUTS 2 regions to be covered right across the EU and, secondly, because the data are more up-to-date. Thirdly, as shown below, it gives the possibility of enabling at-risk-of-poverty rates to be estimated for NUTS 2 regions in a reasonably reliable way.

As indicated above, the results of the EU-SILC regional-level analysis indicate a correlation between the proportion of people below the at-risk-of-poverty threshold (i.e. 60% of median equivalised disposable income in each country) and the proportion of people living in households with low work intensity. Here, the relationship between the low household work intensity rates calculated from the EU-SILC and those estimated from the LFS is examined in order to see how far it is possible to use the latter instead of the former in order to be able to take advantage of both the much larger sample-size of the survey, which enables regions in all countries to be covered at NUTS 2 level, and of

^{***} Significant at 0.1% level; **significant at the 5% level; * significant at 10% level.

the more timely nature of the data (see Box for a description of the differences between the measurement of work intensity using the two sources). The link between the proportion of individuals living in households with low work intensity according to the EU-LFS and the at-risk-of-poverty rates calculated from the EU-SILC data is explored as well, since, if reasonably close, it would make it possible to estimate the latter for all regions too.

The regional data available from the EU-SILC makes it possible to distinguish 108 regions across the EU at either NUTS 1 or NUTS 2 level (mainly the former), though for three countries, Germany, the Netherlands and Portugal, no regional data are available and these are excluded from the analysis. The LFS regional data have been grouped into the same 108 regions for comparing the data from the two sources.

Measuring household work-intensity from the EU-SILC and LFS

There are differences in the way that work intensity is calculated from the EU-SILC and the way that it is possible to estimate it using the LFS, given the data available. The first difference relates to the period covered. The EU-SILC contains data for the employment status of household members in each of the 12 months during the previous year. The EU-LFS records employment status at the time of the survey but not on a monthly basis. It cannot, therefore, identify people who work only part of the year and so tends to over-estimate the total employed in households by assuming that everyone employed at the time of the survey was also employed throughout the year. However, it also under-estimates it by assuming that all those not in work at the time of the survey were also not in work during the year. In some degree, therefore, the two assumptions offset each other.

Secondly, the EU-SILC contains data on the usual hours worked per week of those living in a household which can be used to weight those employed part-time when calculating work intensity. The LFS also contains this information for all members of a household, but, in practice, it is difficult to process with any degree of reliability because of the small number of observations in many cases. All that is possible on a comparable basis is to identify household members working part-time at the time of the survey and to assume that they each worked an average number of hours a week throughout the year, assumed in turn to be half of those worked by someone employed full-time. (The usual hours worked, on average, by part-timers relative to full-timers is, in practice, very close to a half – it averages 49% in the EU as a whole.) There will clearly be some people who worked full-time hours at times during the year, but there will also be those employed full-time at the time of the survey who worked part-time for some of the year, again the two tending to offset each other. This essential simplification of the measure means that those in work in a household either have a weight of 1 or 0.5 depending on whether they are employed full-time or part-time.

Thirdly, the EU-SILC measures the number in employment on the basis of the main activity status (employed, unemployed, inactive) reported for each month during the year by respondents (though with a requested bias towards employment if they worked a reasonable amount during the month). The LFS, on the other hand, measures employment on the basis of the standard ILO definition, i.e. working at least one hour per week, so that effectively anyone who did any work at all during the reference week is counted as being employed. A final minor difference is that the EU-SILC records employment status for all those aged 16 and over, the LFS, 15 and over. In both cases, the upper age limit is set here at 64 (which differs from the Europe 2020 indicator for which the upper limit is 59).

The Europe 2020 indicator of low household work intensity (termed 'very low') is based on a maximum threshold of 0.2 (i.e. the amount of hours worked by adults in the household during the year is 0.2 of the number of hours they would have worked in aggregate if they had all worked full-time throughout the year). In other words, anyone living in a household which falls below this level is counted as living in one with a very low work intensity. Since part of the aim here is to examine the relationship with the atrisk-of-poverty rate and not only to measure low work intensity *per se*, alternative thresholds are considered below, in particular, 0.30 and 0.35.

The findings indicate that the LFS low work intensity measure is strongly correlated with the EU-SILC measure whichever of the three thresholds is used. However, the closest

relationship is if the threshold is defined as 0.30 or 0.35 (the correlation coefficient is 0.87 in both cases - Table 8 and Figure 1, which show the results for 2013^{16})¹⁷.

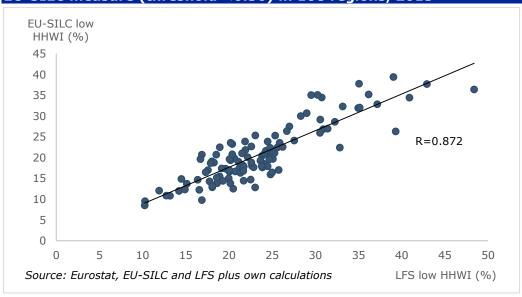
Table 8 Correlation coefficients between EU-SILC low work intensity rates with different thresholds and LFS low work intensity rate and between both and the at-risk-of-poverty rate for those aged 16-64, 2013

	LFS low household work intensity	At-risk-of-poverty rate
EU-SILC low household work intensity (<0.20)	0.805	0.599
EU-SILC low household work intensity (<0.30)	0.872	0.691
EU-SILC low household work intensity (<0.35)	0.867	0.728
LFS low household work intensity		0.700

Note: All correlation coefficients are significant at the 0.1% level.

Source: Eurostat, LFS and EU-SILC plus own calculations.

Figure 1 Relationship between LFS low household work intensity measure and EU-SILC measure (threshold <0.30) in 108 regions, 2013



At the same time, there is a relatively close relationship between the EU-SILC measure of low work intensity and the at-risk-of-poverty rate for those of working age, the closest relationship being with the threshold defined as 0.35 (the correlation coefficient is 0.73). However, the relationship between the LFS-based measure of low work intensity and the at-risk-of-poverty rate is almost as close (the correlation coefficient is 0.70).

The analysis can be extended further by taking explicit account of work intensity over the entire distribution of households rather than simply those at the bottom end and the relationship of this with the at-risk-of-poverty rate. In other words, although the at-risk-of-poverty rate tends be highest for those living in households with a very low work intensity, it is also the case that those living in households with a work intensity of, say, 0.5 have, on average, a significantly higher at-risk-of-poverty rate than those living in households where work intensity is 1 (i.e. where all adults are in full-time work

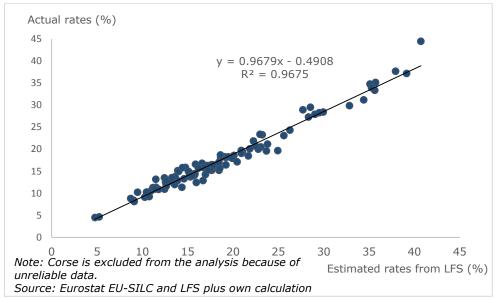
 $^{^{16}}$ Data for the years 2010-2012 show a similarly close relationship.

¹⁷ For a detailed analysis of the relationship between the proportion of those of working age living in low work intensity households as indicated by the LFS and that indicated by the EU-SILC, see Ward and Özdemir (2013) and Part 2 of Leventi, Navicke, Rastrigina, Sutherland, Özdemir and Ward (2013).

throughout the year). If the EU-SILC indicator of work intensity is used, then, of course, this should give a precise measure of the at-risk-of-poverty rate if the distribution of households by work intensity is broken down sufficiently. The question is how close is the relationship if the LFS is used to determine the distribution of work intensity across households and the EU-SILC at-risk-of-poverty rates are assumed to apply to each point on the distribution – or more precisely to each group of points since the LFS can give only a rough-and-ready measure of work intensity as noted above.

In practice, if households are divided into three groups according to the level of work intensity – those where it is low (i.e. less than 0.30), those where it is medium (0.30 to 0.69) and those where it is high (0.70 and above) – there is a very close relationship between the at-risk-of-poverty rates at regional level which are implied and the actual rates (Figure 2).

Figure 2 Relationship between at-risk-of-poverty rates of those aged 16-64 estimated on basis of LFS household work intensity measure and actual rates in 108 regions, 2013



The implication is that there is a close relationship too between the distribution of households in terms of work intensity as estimated from the LFS data and the actual distribution as indicated by the EU-SILC.

This close relationship can potentially be used for forward estimation purposes – i.e. for estimating regional at-risk-of-poverty rates for the latest year for which LFS data are available (2015) which is around two years later than the EU-SILC data are available (the present analysis is based on 2013 data; though 2014 data are becoming available, the LFS data for 2016 will soon be available too). There is, therefore, a strong correlation not only between the estimates of at-risk-of-poverty rates based on LFS data and the actual rates but also between the estimated change in rates between 2012 and 2013 in the different regions (based only on the change in household work intensity in the three groups selected) and the actual change (the correlation coefficient is 0.84).

The correlation, however, conceals the fact that for a number of regions, the estimates of the change in the at-risk-of-poverty rate are not particularly close to the actual change, in part because of changes in the at-risk-of-poverty rate associated with any particular level of household work intensity. Such changes can occur for a number of different reasons, not only because of a change in the extent of social support provided to the unemployed (as a result of benefit rates being raised or reduced or the extent of coverage of the unemployed being extended or restricted or in the composition of the unemployed (which tends to affect the level of benefits received) but also because of a

change in the median income of those of working-age (included in the measure) relative to that of those above working-age (so shifting the at-risk-of-poverty threshold and changing the number of people below it without necessarily any change in the income of those in low work intensity households)). Previous analysis at the national level has shown that the at-risk-of-poverty rates at different levels of household work intensity are not necessarily stable over time, though the period examined spanned the recession in 2008-2009 and the year immediately after, when the income of those of 65 and over in relation to those of working-age and of those not working and on social support relative to those in employment, changed significantly in a number of countries¹⁸.

An additional further factor affecting the estimates is the reliability of the EU-SILC data. For some countries, the LFS and the EU-SILC show different figures for changes in the work intensity of households over time even when the latter is defined on the same basis as the former (i.e. on the situation at the time of the survey without taking account of the employment status of household members during the preceding year and counting each part-time workers as half a full-time one irrespective of the number of hours worked). While this does not necessarily demonstrate that there is an issue with the reliability of the EU-SILC data as compared with the LFS, it is suggestive since the LFS is based on a much larger sample size and shows a much closer relationship for some countries with changes in the employment rate (i.e. an inverse relationship as would be expected)¹⁹. This is more difficult to deal with than the lack of stability of at-risk-of-poverty rates over the distribution of work intensity levels since there is no other source of data on these rates and, accordingly, they have to be assumed to be correct (or at least reasonably so).

A further unknown – and unknowable given the data at present available – is whether the same procedure as indicated above for the regions for which data exist in the EU-SILC can be applied to estimate at-risk-of-poverty rates at the NUTS 2 level across the EU. This essentially depends on two conditions being met. One is that the close relationship across the 108 regions which seems to exist between the distribution of households in terms of their work intensity as estimated from the LFS and the actual distribution as indicated by the EU-SILC also exists across NUTS 2 regions. The other is that the relationship between household work intensity and the at-risk-of-poverty rate evident for the 108 regions exists as well for NUTS 2 regions. There does not seem to be any compelling reason why both should not be the case.

Notwithstanding the limitations indicated above, the LFS seems to offer a promising means of estimating at-risk-of-poverty rates in NUTS 2 regions, so overcoming the lack of sufficiently detailed data at this level from the EU-SILC. It also represents a potential means of estimating rates for a later year than is available from the latter if only in indicative terms and accepting that for some regions, the estimates may diverge significantly from the outturn figures.

This would still leave material deprivation rates to be estimated at NUTS 2 level, which, as argued above, is important if only to take account of differences in price levels across regions.

Education-related indicators

There are four indicators suggested for assessing access to education and the quality of tuition provided. These are the proportion of children aged 0-4 in education, the rate of early school drop-outs, the proportion of 30-34 year olds with tertiary education and the

¹⁸ See Part 2 of Leventi, Navicke, Rastrigina, Sutherland, Özdemir and Ward (2013).

¹⁹ See Part 2 of Leventi, Navicke, Rastrigina, Sutherland, Özdemir and Ward (2013). Ireland and the UK are two countries in which there are significant differences between the LFS and EU-SILC in the estimates of household work intensity.

rate of participation of those aged 25-64 in continuing education or training. The last three indicators are based on LFS data and again relate to 2013 (although data are available up to 2015). The participation of children aged under 5 in education come from the Eurostat education statistics and relate to 2012 (the last year for which data are available).

The highest rate of participation in education of children of this age was in the small Spanish region of Ciudad Autónoma de Ceuta, where the rate was well over 100% reflecting the way that the data were collected (participation of 0-4 year-olds in education in the schools or pre-schools in the region being related to the population of children of this age, without allowing for the participation of children from outside the region or for children attending more than one facility) (Table 9). The next highest figure was in Drenthe in the Netherlands, followed by Provence Alpes Côte d'Azur in France and three Dutch regions, Limburg, Zeeland and Gelderland. Two Italian Regions, Campania and Calabria, the North-West of England and Castilla-la-Mancha in Spain make up the top 10. In addition to these, there are another 32 regions where the rate was 100% or higher.

Table 9 Regions with the lowest and highest values for the education indicators, 2012-13

Participation rate of 0-4 in education Early leav		Early leave	ers (18-24)	% of 30-34 with tertiary education		Participation rate of 25-64 in education or training	
		10 regions	where the r	ate is most f	favourable		_
ES63	112.7	PL21	2.3	ES21	63.0	DK01	35.2
NL13	108.7	CZ01	3.2	UKI0	62.6	SE11	31.3
FR82	106.8	PL33	3.3	DK1	59.3	SE23	30.2
NL42	106.3	FR83	3.6	ES30	58.3	DK04	30.0
NL34	105.6	CZ06	3.7	FI1B	58.0	DK03	29.5
NL22	104.7	SI01	3.8	SE11	58.0	SE22	29.5
ITF6	104.0	SI02	4.0	PL12	56.6	DK02	29.3
ITF3	103.6	HR04	4.2	FR10	56.0	SE12	29.3
UKD	103.6	AT11	4.6	BE31	55.5	FI1B	28.9
ES42	103.5	PL12	4.6	UKM0	55.3	DK05	28.0
		10 regions	where the r	ate is least f	avourable		
EL51	58.0	PT30	26.2	BG32	19.2	RO11	1.3
PL63	58.0	ES62	26.3	RO21	19.0	EL65	1.2
EL52	57.4	ES42	27.4	ITF3	18.2	RO12	1.1
PL32	56.7	ES70	27.5	RO31	17.7	EL64	1.0
FI19	53.1	ES61	28.7	ITG1	17.7	RO21	1.0
PL61	52.7	ES43	29.2	RO22	17.6	RO41	1.0
PL62	51.8	ES53	29.8	ITG2	17.4	BG32	0.9
FI1D	48.8	ES64	33.1	CZ4	16.6	EL41	0.9
UKM	46.7	ES63	33.5	PT20	13.8	BG31	0.8
EL30	30.8	PT20	35.8	ES63	13.3	RO22	0.8

Source: Eurostat Education statistics, LFS and own calculations.

At the opposite extreme, the participation rate was only 31% in the Attiki region of Greece (where Athens is located) and it was also less than 50% in Scotland in the UK and in Pohjois ja Itä Suomi in Finland. Another two Greek regions (Kentriki Makedonia and Anatoliki Makedonia, Thraki), four Polish regions (Pomorskie, Warminsko-Mazurskie, Kujawsko-Pomorskie and Podkarpackie) and another Finnish region (Länsi-Suomi) make up the bottom 10 regions in this regard.

The rate of early-school-leaving, or young people leaving the education system with inadequate qualifications (measured by the proportion of those aged 18-24 with only basic schooling who are not in education or training) was lowest to a large extent in

regions in the EU13, in Poland (three regions, including the capital city region), the Czech Republic and Slovenia (two regions each, again including the capital city region in each case) as well as one region in Croatia (Kontinentalna Hrvatska, again including the capital city). There are only two EU15 regions in the 10 with the lowest rates, Corse in France and Burgenland in Austria, both regions with relatively low levels of GDP per head.

Whereas in all these 10 regions, the rate of early-school leaving was less than 5%, the rate was over 25% in each of the 10 regions where it was highest. The rate was highest of all in the Portuguese island of Região Autónoma dos Açores (36%), but it was next highest in 8 Spanish regions, including all four of the regions in Sur, two regions in Centro (Castilla-la-Mancha and Extremadura) and the two island regions of Illes Balears and Canarias. The Portuguese island of Madeira makes up the 10 regions with the highest rates.

This suggests that the rate of early-school leaving varies more between countries than between regions within countries and reflects the education system which is in place and the opportunities it gives for young people to continue their schooling or training beyond 16. The extent of variation across the EU is reflected in the fact that the average rate in the 10% of regions where this was highest was 5 times more than in the 10% where it was lowest (Table 9).

Access to tertiary education would probably best be measured by the participation rate of young people, by the proportion of a particular age group entering university or other equivalent institutions. Unfortunately, there are no data readily available at EU level which picks this up. While there is an indicator of the number of young people aged 20-24 in tertiary education, this is constructed by relating the total number enrolled in tertiary education to the total population in the 20-24 age group. It shows a figure of over 200% for the Czech and Slovakian capital city regions and one of over 180% in Dytiki Ellada in Greece. Indeed, another 4 Greek regions were among the 10 where the rate was highest, each of which had a rate of over 120%. It is questionable, therefore, whether the indicator gives a picture of the situation which is at all meaningful.

Accordingly, instead of a participation rate, which is pushed up not only by the way in which it is calculated but also by the fact that in countries where there is almost unrestricted access to university, the participation rates do not reveal the quality of education received, the proportion of young people with tertiary qualifications is used here. This at least shows the relative number who have successfully completed a tertiary education programme, which many of those in countries where access is virtually unrestricted do not do. The age group chosen is 30-34 since any younger age group is likely to include a significant number in some countries who are still completing their tertiary education. The drawback of the measure as an indicator of access is that many of those with this level of qualification in a region may have been educated elsewhere and subsequently moved to the region for work.

This is the case, in particular, for capital city regions and it is significant that of the 10 regions in the EU where the proportion is highest, 7 are regions containing capital cities (London, Copenhagen, Madrid, Helsinki, Stockholm, Warsaw and Paris – the other three regions are País Vasco in Spain, Brabant Wallon in Belgium and Scotland in the UK). It is also almost certainly the case, however, that most of the people concerned were educated in these regions, so the degree to which the indicator is misleading is probably relatively small.

At the other extreme, the 10 regions where the proportion of 30-34 year-olds with tertiary education was smallest, in each case less than 20%, include three Romanian regions and three regions in the south of Italy, together with Ciudad Autónoma de Ceuta in Spain, the Portuguese island of Açores (in both of which the proportion was less than 15%), Severozápad in the Czech Republic and Severen tsentralen in Bulgaria. The average proportion of the age group with tertiary education in the 10 regions where this

was highest was around three times larger than in the regions where it was lowest, emphasising the extent of the difference across the EU (Table 10).

It is not only access to initial education and training which is important but also access to continuing training once people have left the initial education system and entered the labour market. This is essential for people to be able to upgrade or extend their skills and knowledge. The provision of such training, as reflected in the relative number of participants among those aged 25-64, varies markedly across the EU. The relative number is highest in the Nordic countries, 5 Danish regions, 4 Swedish ones and the Finnish capital city region making up the 10 where the proportion is highest. In all of them, close to 30% of the age group or more participated in education or training in the 4 weeks preceding the 2013 round of the LFS.

At the other end of the scale, only around 1% or less of 25-64 year-olds participated in education or training in the 10 regions where the rate was lowest. These were concentrated in 5 regions in Romania, three regions in Greece and 2 regions in Bulgaria. In all, there were 51 regions across the EU (accounting for 18 of total working-age population), mainly in the EU13 and southern EU15 countries, where the rate of participation in continuing training was less than 5%, while there were 24 where it was 20% or more, all of them in the Netherlands, France and three Nordic Member States. It should be noted that the figures were above 25% in the latter group of countries. The extent of the difference is further illustrated by the fact that average participation rate in the 10% regions where the rate was highest was 13 times more than in the 10% regions where it was lowest.

Table 10 Averages of the education indicators for the 10% of regions with the lowest and highest values, 2013

	Average in lowest 10%	Average in highest 10%	Highest 10%/ Lowest 10%
Participation rate of 0-4 in education (%)	56.7	103.6	1.8
Early-school leavers, 18-24 (%)	4.7	24.7	5.3
30-34 with tertiary education (%)	18.8	58.4	3.1
Participation rate of 25-64 in education or training (%)	1.8	24.0	13.3

Note: The participation rate of children aged 0-4 is for 2012. Regions are weighted by their population. Source: Eurostat Education statistics, LFS and own calculations.

There is not a particularly close relationship between the four education indicators across regions. The strongest correlation is between the proportion of 30-34 year-olds with tertiary qualifications and the participation rate of those aged 25-64 in continuing training (Table 11). This indicates that the more university-educated people there are in a region, the higher participation in continuing training tends to be, which suggests that much of continuing training is targeted at the more highly educated rather than at those with lower levels of education. Indeed, there is a negative correlation, though weaker, between the rate of early-school leaving and the participation rate in continuing training which supports this implication. In regions where the former is relatively high, this tends not to be compensated by an increased rate of continuing training. Those that have an inadequate level of educational qualifications, therefore, tend to have less access to education and training after they have entered the labour market rather than more. In a sense they are doubly penalised.

There is a positive correlation between the participation rate of children under 5 in education and the rate of early-school leaving, which is contrary to what might be expected, but it is relatively weak. Equally, there is no correlation at all between the former and the relative number of 30-34 year-olds with tertiary education, which is also contrary to expectations. There is a stronger correlation between the rate of participation of children in education and the proportion of 25-64 year-olds in continuing training,

which may simply reflect the relatively extensive provision of both in some countries and the limited provision of both in others.

Table 11 Pearson's correlation coefficients between regional-level education indicators, 2012-13

	Early-school leavers, 18-24 (%)	30-34 with tertiary education (%)	Participation of 25- 64 in education/training (%)
Participation rate of 0-4 in education (%)	0.250***	0.038	0.383***
Early-school leavers (%)		-0.322***	-0.205**
30-34 with tertiary education (%)			0.448***

Note: The participation rate of children aged 0-4 is for 2012; the other indicators relate to 2013. Source: Eurostat Education statistics, LFS and own calculations.

The moderate relationship between the four indicators of access to education suggest that all four need to be taken into account when assessing the relative situation in different regions and, therefore, included in any composite indicator. There is, however, a question-mark over the inclusion of the participation rate of children under 5 in an indicator of this kind, given both doubts over its validity (which produces rates of over 100%) and the nature of its relationship with the other indicators (its lack of correlation with the tertiary education indicator and its correlation with the wrong sign with the early

Health

schooling leaving indicator).

In the case of health, there are a range of indicators which could potentially be included in the index depending on where the focus should be – on health outcomes, the resources devoted to healthcare or the access of people to health services in case of need. As regards health outcomes, for which possible indicators could be perceived health status or, more objectively, life expectancy or, perhaps more relevantly, healthy life expectancy, these tend to reflect not only the extent and quality of healthcare in a particular region, but perhaps more importantly, life-styles and eating habits. If the concern is with the former more than the latter, then life expectancy indicators are not necessarily the most appropriate ones to include. At the same time, the use of perceived health status as an indicator runs the risk of introducing an element of non-comparability between regions to the extent that perceptions of a given level of health vary across the EU according to social norms and what people are accustomed to.

As regards the resources devoted to healthcare, which reflects the effort made to ensuring that people have access to a decent standard of care and treatment, the outcome depends on the efficiency and effectiveness with which resources are used as well as on the amount as such, while as regards access to health services, this, like health status, depends in some degree on individual perceptions. Accordingly, it suffers from the same kind of drawback of possible non-comparability across regions, though one which is arguably less serious since an objective element can be introduced by focusing on the unmet need for care and the reasons for this.

In practice, the EU-SILC contains data on the latter. It also contains responses to a set of three questions on self-perceived health which together with the responses to questions on the self-reported unmet need for medical care are included in the European Core Health Indicators²⁰. (In addition to the EU-SILC variables, the indicators cover a range of variables on health status, including, for example, the prevalence of various illnesses and ailments, such as diabetes or depression as well as drug-related deaths, infant mortality and healthy life expectancy; health determinants, including the prevalence of smoking,

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²⁰ The indicators are set out at: https://ec.europa.eu/health/indicators/echi_en.

the consumption of fruit and vegetables and the extent of physical activity; and health interventions, including cancer screening, the number of health professionals and expenditure on health services.)

The questions on health status included in the EU-SILC – which together make up the Minimum European Health Module (Eurostat 2016a) – are as follows:

- How is your health in general? To which the permissible responses are 'very good', 'good', 'fair', 'bad' or 'very bad'. The focus here is on those answering 'good' or 'very good'.
- Do you suffer from any chronic (long-term) illness or condition? The focus here is on those responding in the affirmative.
- Have you been limited in the activities which people usually do because of health problems for at least the past 6 months? To which the permissible responses are 'strongly limited', 'limited' or 'not limited', the focus here being on the first two.

Since, as noted above, the responses to these questions reflect a subjective assessment of respondents of their health status, there might be an issue of comparability across countries because of cultural factors or social norms. This may well be reinforced by slight differences in the way questions are phrased. Moreover, since, as also noted above, the homeless or people living in institutions, who are particularly likely to suffer health problems, are excluded from the survey, the data might overstate the relative number of people in good health. This may not cause too much of a problem as regards comparability across regions if the number concerned were reasonably evenly distributed across them, but this may well not be the case. In particular, there are likely to be more homeless people in cities than in rural areas.

Access to healthcare can be measured in terms of those reporting an unmet need for care, or, in the case of the EU-SILC, those reporting an unmet need for medical – and dental – examination or treatment. Such an unmet need can stem from a variety of causes, including the cost being too high, the service providers not being conveniently located, waiting times being too long, a lack of knowledge of administrative procedures, not being able to get time off work or being too apprehensive about seeking treatment. The EU-SILC enables the particular reasons responsible to be identified. Accordingly, it allows those resulting from the way that care is organised and funded, such as lack of affordability, facilities being difficult or too far away to reach or excessively long waiting times to be distinguished from others. The two indicators examined here, one relating to access to medical care and the other to access to dental care are defined in these terms. It is worth noting that such an indicator is also included in the health services chapter of the 'European Core Health Indicators'. It should be borne in mind, however, that the two indicators are based on self-reported unmet needs, and, accordingly, on the implicit assumption that these reflect problems in accessing healthcare.

The values of the 5 indicators for the 10 best- and worst- performing regions are set out in Table 13. The 10 regions where the proportion of people reporting to be in good health is largest include all three NUTS 1 Swedish regions, two Spanish regions (País Vasco and Cataluña), two of the three NUTS 1 Belgian regions (Brussels and Vlaanderen), Ireland (which is ranked highest of all), Cyprus and the Attiki region in Greece (where Athens is located). Conversely, the 10 regions with the smallest proportion of people reporting to be good health are mainly in Central and Eastern Europe, with the exception of Corse in France. They include two of the 6 NUTS 1 Polish regions (Poludniowo Zachodn in the north-west of the country and Centralny, where Warsaw is located), two Czech NUTS 2 regions and two of the three NUTS 1 Hungarian regions (all but the capital city region) and all three Baltic States, which have the lowest ranking of all.

Only one of the regions which are ranked among the top 10 in terms of general health, Attiki in Greece, is ranked in the top 10 in terms of the smallest proportion of people reporting a chronic illness. However, all three Swedish regions, Ireland and Cyprus are

ranked among the top 10 in terms of the smallest proportion of people reporting being limited in their activities.

Perhaps unexpectedly, the 10 highest ranking regions in terms of freedom from chronic illness include all four Romanian NUTS 1 regions, the two NUTS 1 Bulgarian regions, the southern and central Italian regions and the Madrid region in Spain. Two Spanish regions – Melilla on the North coast of Africa and Galicia – also feature among the 10 regions with the most people reporting a chronic illness, along with Corse and Estonia which are included in the regions ranked lowest in terms of general health. Two other French regions – Franche-Comté and Limousin – are included as well, but the most striking feature is the four Finnish regions which are included.

Table 13 Regions with the lowest and highest values for health indicators, 2014 (% of total population reporting in each case)

(% of total population reporting in each case)									
General health:		Chronic illness Limit		Limited in			need for	Unmet need for	
good/very good				medical care		dental care			
10 regions with the most favourable values									
IE0	82.5	RO4	15.8	MT0	10.1	AT2	0.0	AT2	0.2
SE1	80.9	RO2	18.9	SE1	10.5	ES63	0.0	AT3	0.3
SE3	79.8	BG4	19.0	SE3	11.8	ES64	0.0	AT1	0.6
ES22	79.5	RO3	19.8	SE2	12.7	AT3	0.1	SI0	0.7
SE2	79.3	RO1	20.0	UKI	16.8	ES51	0.1	CZ07	1.1
ES51	77.8	ITF	21.0	BG4	16.9	ES13	0.1	MT0	1.1
CY0	77.7	EL3	21.3	ES24	17.5	ES43	0.1	CZ06	1.3
BE2	77.5	BG3	21.9	IE0	17.7	SI0	0.2	CZ02	1.3
EL3	77.5	ITI	22.3	CZ01	18.1	ES41	0.2	LU0	1.4
BE1	77.1	ES30	22.4	CY0	18.3	ES42	0.2	CZ03	1.4
			10 regions	with the le	ast favoura	ble values			
PL5	57.0	ES64	42.9	ES62	31.8	ITG	8.8	EL6	10.5
PL1	57.0	FI1B	43.0	SK0	32.0	PL5	8.9	ES42	10.7
CZ06	56.8	FR63	43.9	FI19	32.7	RO3	9.0	ES61	11.6
HU2	56.5	ES11	44.8	ES11	33.1	EL6	10.5	ITG	12.2
FR83	55.7	FR43	44.8	AT2	34.1	EL4	11.0	RO2	12.6
CZ08	55.0	EE0	45.8	EE0	34.1	EE0	11.3	EL4	13.6
HU3	53.9	FI19	46.5	AT1	34.2	RO2	12.5	ITF	14.1
EE0	51.9	FI1C	47.1	FI1C	34.6	LV0	12.5	EL3	16.2
LV0	45.8	FI1D	47.8	FI1D	36.2	ITF	12.6	LV0	18.1
LT0	45.0	FR83	53.6	LV0	37.4	EL3	13.0	ES62	20.7

Note: No regional-level data for DE, NL, PT. Source: Eurostat, EU-SILC and own calculations

Three of the Finnish regions (Pohjois- ja Itä-Suomi, Etelä-Suomi, where Helsinki is located, and Länsi-Suomi) are also included among the 10 regions with the largest shares of the population reporting being limited in their activities, along with Estonia and Galicia (which appear among the regions with the most prevalence of chronic illness), as well as Latvia (ranked in the bottom 10 in terms of general health). They are joined by two Austrian regions (the eastern and southern parts of the country), another Spanish region (Murcia) and Slovakia.

A Spanish region (Aragón) features too among those with the smallest share of people reporting being limited, along with the Bulgarian region (ugozapadna i yuzhna tsentralna) where Sofia is located, the Czech capital city region of Praha, London in the UK and Malta. The regions where the proportion of people reporting an unmet need for medical care is smallest are dominated by Spanish NUTS 2 regions, 7 of which (including the Convergence regions of Extremadura and Castilla-La Mancha and the two 'Phasing-out' regions on the North African coast, the 'Phasing-in' region of Castilla y León as well as Cantabria and Cataluña) appear in the 10 best-performing ones in these terms. Two of

the three Austrian NUTS 1 regions (the southern and western parts) are included as well, along with Slovenia. Conversely, the 10 regions where the proportion reporting an unmet need is highest are all in the south of the EU15 – in the south of Italy (the Sud as well as the Isole NUTS 1 regions) and Greece (Attiki, Nisia Aigaiou, Kriti – the Aegean islands and Crete – and the central region of Kentriki Ellada) – or in the EU13 (two Romanian regions – the eastern part of the country and the south where Bucarest is located – the Polish north-western region and Estonia and Latvia again).

The three Greek regions, the two southern Italian ones, the eastern region of Romania and Latvia also feature in the lowest-ranking regions in terms of the unmet need for dental examination and treatment. They are joined by three Spanish regions, one of which, Castilla-La Mancha, appears among the highest-ranking regions in terms of medical care, the other two being Murcia and Andalucía.

At the other end of the scale, the best-performing regions in terms of access to dental care include the two Austrian regions (the western and southern parts) which are ranked among the best-performing regions in terms of medical care, and Slovenia, which is ranked similarly. They also include four Czech NUTS 2 regions, Malta and Luxembourg.

Table 14 shows the extent of the difference between the best-performing and worst-performing regions for each of the 5 indicators (in each case taking the top and bottom 10% weighted by their population). It indicates, for example, that the average value of the indicator for both those suffering from a chronic illness and being limited in their activities in the best-performing regions is twice that in the worst performing regions.

Table 14 Averages of the health indicators for the 10% of regions with the lowest and highest values, 2014

	Average in lowest 10%	Average in highest 10%	Highest 10%/ Lowest 10%
General health good/very good	55.5	78.5	1.4
Chronic illness	19.6	41.4	2.1
Limited in activities	16.4	32.1	2.0
Unmet need for medical care	0.2	11.6	54.6
Unmet need for dental care	1.5	13.7	9.1

Note: No regional-level data for DE, NL, PT. Regions are weighted by the size of their population. Source: Eurostat, EU-SILC and own calculations.

There is a moderately close relationship between the health status indicators, in the sense that regions with a relatively large proportion of people reporting to be in good general health also tend to have a relatively small proportion of people with a chronic illness or limited in their activities (Table 15). There is also a relatively close relationship between the two indicators of unmet need, implying that there is some tendency for those regions where there seem to be problems in accessing medical care also to show problems in access to dental care. In addition, there is some relationship, if weaker, between regions where there is a relatively high unmet need for medical care to be those where a relatively small share of the population report being in good health and a relatively large share report suffering from a chronic illness. This, of course, does not necessarily imply that there is a causal relationship running from problems of accessing medical care to poor health.

Table 15 Pearson's correlation coefficients between regional-level health indicators, 2014

	General health	Chronic illness	Limited in activities	Unmet need for medical care
Chronic illness	-0.398***			
Limited in activities	-0.486***	0.376***		
Unmet need for medical care	-0.214**	-0.282***	0.157	
Unmet need for dental care	-0.003	-0.169**	0.157	0.593***

Note: No regional-level data for DE, NL PT.

*** Significant at the 0.1%, level **, significant at the 5% level.

Source: Eurostat, EU-SILC and own calculations.

The relationships between the indicators suggest that there is a suitably close correlation between the indictors of health to enable them to be combined in a meaningful way to build a composite indicator. (This, for example, could take a similar form to the Europe 2020 poverty target, aggregating the relative number of people in each region who are identified as being in poor health, have a chronic illness or be limited in their activities.) It is problematic, however, to include the two unmet need indicators too, given the weaker correlation of the need for medical care with the health status ones and the lack of correlation at all as regards the unmet need for dental care. These two indicators could form a separate composite indicator, which reflects the state of the health services in the different regions, which could then be used in conjunction with the composite indicator of health status to obtain an overall view of the situation.

Housing

The EU-SILC includes information on several aspects of housing which could potentially be combined into a composite indicator to convey the regional state of housing quality. (The data included could also be used to construct an indicator of housing costs in relation to disposable income, which is included in the housing dimension of the OECD regional well-being indicator. There is, however, some difficulty in interpreting the results insofar as a given value of the measure does not necessarily represent the same level of affordability in different regions, since this will tend to depend on the level of income – i.e. people are likely to be able to afford to spend proportionately more on housing as their income increases.) Using this information, Eurostat has developed a measure of housing deprivation – i.e. the relative number of people living in poor quality housing – which could represent an indicator of housing for present purposes. The variables included are:

- A leaking roof, damp walls, floors or foundations or rot in window-frames or floors
- No bath or shower in the dwelling
- No indoor flushing toilet for sole use of the household
- Difficulties of keeping the house warm
- Problems because of being too dark and not having enough light.

These are combined in an indicator of housing deprivation which identifies people living in households which have any one of the above deficiencies. An additional variable is then added to these to form what is termed an indicator of severe housing deprivation (Eurostat, 2016c). This is the number of rooms in the household relative to the people living in it, which is used to construct an indicator of overcrowding by assuming that every household should have a minimum number of rooms given the size and composition of the household (see Box).

Indicator of housing over-crowding

Minimum requirements for housing to be considered as having sufficient space:

- one room for the household;
- one room per couple in the household;
- one room for each single person aged 18 or more;
- one room per pair of single people of the same gender between 12 and 17 years of age;
- one room for each single person between 12 and 17 years of age and not included in the previous category;
- one room per pair of children under 12 years of age

Such a measure has obvious limitations, in that it takes no account of the size of rooms (except for imposing a minimum size) and, therefore, could classify an open-planned house or apartment as being overcrowded irrespective of its size. Nevertheless, it has the merit of being objective²¹.

Table 16 shows the 10 regions with the highest and lowest values of the housing deficiency indicators listed above. It is not too surprising that four Finnish regions rank lowest in terms of the relative number of people living in households in need of repair or that the Swedish region where Stockholm is located, the Bourgogne region of France or even La Rioja in Spain are included in the 10 best-performing regions in these terms. It is less expected that two Czech regions (the capital city region and Jihozápad in the west of the country) and Slovakia are also included.

Table 16 Regions with the lowest and highest values for housing deficiency indicators, 2014 (% of people living in such households in each case)

Leaking roof/		Inability	ry to keep Lack of bat		bath or	th or Lack of indoor		Dwelling too	
damp walls house warm shower flushing toilet dark 10 regions with the lowest rates								TK .	
FI19	4.7	ES70	0.2	ES13	0.0	ES13	0.0	ES12	1.2
FI1D	4.9	SE3	0.5	ES21	0.0	ES21	0.0	CZ05	2.4
FI1C	5.1	LU0	0.6	ES22	0.0	ES22	0.0	CZ02	2.5
FI1B	5.1	SE1	0.7	ES63	0.0	ES23	0.0	ES13	2.5
CZ01	6.3	ES22	1.0	FR26	0.0	ES24	0.0	ES23	2.7
ES23	6.5	SE2	1.0	FR83	0.0	ES43	0.0	FI19	2.8
CZ03	6.6	FI19	1.3	UKF	0.0	ES63	0.0	ES41	2.9
SE1	6.8	FI1D	1.4	UKG	0.0	ES64	0.0	SK0	3.2
FR26	7.0	FI1C	1.4	ES61	0.0	FR26	0.0	FI1D	3.2
SK0	7.0	AT2	1.5	ES70	0.1	FR83	0.0	UKM	3.3
10 regions with the highest rates									
HU3	27.1	LT0	26.5	HU3	6.9	EE0	7.4	FR23	9.5
LV0	27.5	ITF	26.7	EE0	8.9	HU3	7.6	HU3	9.6
ITH	28.0	EL5	27.4	LT0	13.8	LT0	14.5	FR82	9.6
HU1	29.0	CY0	27.5	LV0	16.6	LV0	15.8	ES43	9.7
ES43	29.2	EL3	32.8	BG4	20.3	BG4	23.3	FR22	10.9
SI0	29.9	EL4	36.5	RO1	23.4	RO1	27.0	HU1	12.1
ES63	33.0	EL6	38.0	BG3	27.0	RO3	29.3	BE1	12.5
ES11	35.1	BG4	39.8	RO3	27.7	RO4	31.6	ES64	14.1
FR83	35.3	BG3	41.0	RO4	29.8	BG3	39.2	FR83	20.5
ES70	37.3	ITG	41.1	RO2	44.4	RO2	44.2	ES63	22.9

Note: No regional-level data for DE, NL, PT.

Source: Eurostat, EU-SILC and own calculations.

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²¹ Though overcrowding can be regarded very much as a subjective concept.

More expectedly perhaps, the 10 worst-performing regions in these terms are made up of four of regions in the EU13 – two in Hungary (including the capital city region), Latvia and Slovenia, four in Spain (Galicia, Extremadura, Ceuta on the northern coast of Africa, and Canarias), the north-east region of Italy and the French island of Corse.

Canarias, however, while having a relatively large number of houses in need of repair, also has the smallest proportion of people living in housing that they are unable to keep warm, which may have more to do with the climate than housing quality. The quality of housing rather than the climate underlies the fact that the three Swedish regions (all of the NUTS 1 ones), the three Finnish regions, Luxembourg and the southern region of Austria are all included among the 10 regions where the proportion reporting an inability to keep the house warm is the smallest, the Spanish region of Navarra being the remaining one.

The predominance of housing quality over climate is shown by the fact that the 10 regions in which the share of the population reporting an inability to keep the house warm is largest include 7 in the south of the EU – 4 Greek regions (including Attiki), the two southern Italian regions and Cyprus. The two Bulgarian NUTS 1 regions and Lithuania make up the worst-performing regions in these terms.

Spanish regions predominate as regards the ones in which the proportion of households without a bath, shower or indoor toilet is smallest, joined by two French regions, Bourgogne and Corse, and two UK regions, the East and West Midlands. Conversely, those in which the proportion of households without a bath, shower or indoor toilet is largest are made up exclusively of regions in the Central and Eastern Europe, all the Romanian and Bulgarian regions, all three Baltic States and the eastern part of Hungary (Alföld és Észak).

The Hungarian region also features among the 10 in which the proportion of people living in houses which are too dark is largest, along with the central northern region where Budapest is located. These are joined by three Spanish regions (the two on the North African coast and Extremadura), four French regions (Picardie, Haute-Normandie, Alpes Côte d'Azur and Corse) and Brussels in Belgium.

Conversely, four Spanish regions (Asturias, Cantabria, La Rioja and Castilla y León) appear among the 10 with the smallest proportion living in housing which is too dark. These are joined by two Czech regions, Slovakia, two Finnish regions and Scotland in the LIK

The extent of the difference between the best- and the worst-performing regions in respect of the 5 indicators of housing quality is summarised in Table 17. The difference is particularly marked as regards the ability to keep house warm, with almost a third of people in the 10% of regions in the worst-performing regions (again weighted by population) reporting an inability to do so as against only around 2% in the best-performing regions. Equally, almost no households reported a lack of a bath or indoor toilet in the case of most of the higher income regions, whereas the proportion is over 20% in the 10% of regions where the relative number of households with such a lack is largest. On the other hand, there is a relatively small difference between regions in respect of houses which are reported to be too dark.

Table 17 Averages of the housing quality indicators for the 10% of regions with the lowest and highest values, 2014

	Average in lowest 10%	Average in highest 10%	Highest 10%/ Lowest 10%
Leaking roof/damp walls	7.0	27.9	4.0
Inability to keep house warm	1.7	32.9	19.0
Lack of bath or shower	0.0	22.1	446.9
Lack of indoor toilet	0.1	24.1	479.8
Dwelling too dark	3.3	9.4	2.9

Note: No regional-level data for DE, NL, PT. Source: Eurostat, EU-SILC and own calculations.

The variables relating to housing quality can be combined into an overall indicator of housing deprivation, as Eurostat has done, defining the people deprived as those living in a household which is either in need of repair or difficult to keep warm or lacks a bath or indoor toilet or is too dark. The 10 regions which have the lowest level of housing deprivation, measured in this way, include four Finnish regions (all except the small island region of Åland), three Czech regions (in the west and north of the country), La Rioja in Spain, Slovakia and the southern region of Austria (Table 18). At the other end of the scale, the 10 regions where housing deprivation affects the largest proportion of people consist of three Spanish regions (Galicia, Canarias and Ceuta), three of the four NUTS 1 Romanian regions, one of the two Bulgarian NUTS 1 regions, Corse, Latvia and, perhaps unexpectedly, the Brussels region of Belgium.

Table 18 Regions with the lowest and highest values for housing deprivation indicators, 2014 (% of population affected)

Housing deprivation	Overcrowding Severe housing deprivat			on					
10 regions with the lowest rates									
Pohjois- ja Itä-Suomi (FI)	8.3	Cantabria (ES)	0.8	La Rioja (ES)	0.1				
Länsi-Suomi (FI)	8.7	Asturias (ES)	0.9	Cantabria (ES)	0.2				
La Rioja (ES)	8.8	País Vasco (ES)	1.0	Asturias (ES)	0.3				
Severozapad (CZ)	9.1	Vlaams Gewest (BE)	1.0	Champagne-Ardenne (FR)	0.4				
Jihozapad (CZ)	9.2	La Rioja (ES)	1.4	Wales (UK)	0.5				
Helsinki-Uusimaa (FI)	9.6	Aragon (ES)	1.8	Aquitaine (FR)	0.5				
Slovenska Republika (SK)	9.7	Galicia (ES)	2.1	País Vasco (ES)	0.5				
Severovychod (CZ)	9.9	Basse-Normandie (FR)	Basse-Normandie (FR) 2.3		0.5				
Etelä-Suomi (FI)	10.4	Auvergne (FR) 2.4		Vlaams Gewest (BE)	0.5				
Südösterreich (AT) 10.9 Castilla-La Mancha (ES)		2.6	2.6 Pays de la Loire (FR) 0.6						
		10 regions with the highest i	rates						
Région de Bruxelles (BE)	35.3	Poludniowo-Zachodni (PL) Yugozapadna i Yuzhna	43.6	Yugozapadna i Yuzhna Tsentralna (BG)	16.3				
Macroregiunea Trei (RO)	35.7	3 1	43.7	Latvija (LV)	18.0				
Galicia (ES)	36.5	Macroregiunea Patru (RO)	44.1	Macroregiunea Patru (RO) Alföld és Észak	18.2				
Latvija (LV)	38.2	Polnocno-Zachodni (PL)	45.0	Magyarország (HU)	18.4				
Macroregiunea Patru (RO)	38.5	Centralny (PL)	45.1	Corse (FR)	18.8				
Ciudad de Ceuta (ES)	38.6	Wschodni (PL)	46.1	Közép-Magyarország (HU)	18.8				
Canarias (ES)	39.4	Pólnocny (PL)	47.7	Macroregiunea Trei (RO)	19.0				
Corse (FR)	45.5	Macroregiunea Trei (RO)	49.1	Macroregiunea Unu (RO)	22.0				
Severna i Iztochna (BG)	46.2	Macroregiunea Doi (RO)	52.5	Severna i Iztochna (BG)	22.0				
Macroregiunea Doi (RO)	50.7	Macroregiunea Unu (RO)	62.4	Macroregiunea Doi (RO)	28.9				

Note: No regional-level data for DE, NL, PT. Source: Eurostat, EU-SILC and own calculations. The three Romanian regions also feature among the 10 in which overcrowding affects the largest proportion of households (or more precisely the people living in the households). The other Romania region is included among these as well, along with the second Bulgarian region, which includes the capital city. The other 5 regions which make up the 10 are 5 of the 6 NUTS 1 regions in Poland (all except the south region of Poludniowy).

At the other end of the scale, the 10 regions in which overcrowding affects the smallest proportion of people include 7 NUTS 2 Spanish regions, one of which is Galicia, which is ranked among the regions with the largest share of people suffering from housing deprivation. They also include La Rioja which is among the regions with the smallest share of people identified as being affected by housing deprivation. The other three regions which make up the 10 consist of two in France (Auvergne and Basse-Normandie) and the Vlaams-Gewest region of Belgium.

The indicator of overcrowding can be combined with that of housing deprivation to give the Eurostat indicator of 'severe housing deprivation', which identifies people living in housing which is not only of low quality and in a poor state of repair but is also too small in relation to the number of people living there. The 10 regions where the proportion of people concerned is the smallest include 5 Spanish regions, three French ones (though not the two in which overcrowding affects the smallest proportion of people), Wales in the UK and the Vlaams-Gewest region of Belgium.

Conversely, the 10 regions in which the relative number of people suffering from severe housing deprivation consist of all four Romanian regions, both of the NUTS 1 Bulgarian regions, two of the three NUTS 1 Hungarian regions, including the capital city one, Corse and Latvia.

Table 19 summarises the extent of differences across the EU in the three indicators. It shows that the biggest difference is in overcrowding, with almost half of the population in the 10% of regions where this is identified as affecting most people (regions again being weighted by their population size) living in housing which is too small for the size and composition of the household, as opposed to only 2% in the 10% of regions where the value of the indicator is lowest.

Table 19 Averages of the housing deprivation indicators for the 10% of regions with the lowest and highest values, 2014

With the lowest and highest values, 2014							
	Average in lowest	Average in highest	Highest 10%/				
	10%	10%	Lowest 10%				
Housing deprivation	11.0	38.2	3.5				
Overcrowding	2.3	49.3	21.7				
Severe housing deprivation	0.6	20.5	33.5				

Note: No regional-level data for DE, NL, PT. Regions are weighted by their population size.

Source: Eurostat, EU-SILC and own calculations.

Table 20 shows the relationship between both the two indicators of housing deprivation and the component elements which make it up. It indicates a moderate correlation between the proportion of people living in housing which is in need of repair (with a leaking roof, damp walls, etc.) and those living in housing which is difficult to keep warm and a slightly closer one between the former and the proportion of people whose housing is too dark. It also shows that there is no significant correlation between housing being in need of repair and having no bath or indoor toilet, but again a moderate one between housing which is difficult to keep warm and housing which lacks these basic amenities. It shows too that, as might be expected, there is a strong correlation between the housing which lacks a bath or shower and that which lacks an indoor toilet.

As might be expected as well, all of the component elements of the housing deprivation indicator are significantly correlated with the latter, while the overcrowding indicator is correlated with housing which is difficult to keep warm and, more closely with a lack of bath and indoor toilet. It is also significantly correlated with the composite housing deprivation indicator, but not so closely that it is not worth combining with this to produce the severe housing deprivation indicator, which in turn is significantly correlated with all of the component elements which it comprises. The latter indicator, therefore, seems a suitable candidate for an overall indicator of housing at regional level.

Table 20 Pea 2014	arson's	correlation	coeffici	ients bet	ween the	housing	indicators,
	Leaking roof, damp walls	Inability to keep house warm	Lack of bath or shower	Lack of indoor toilet	Dwelling too dark	Housing deprivation	Over- crowding
Inability to keep house warm	0.240**						
Lack of bath or shower	-0.024	0.280**					
Lack of indoor toilet	-0.014	0.317***	0.986***				
Dwelling too dark	0.554***	0.121	0.020	0.031			
Housing deprivation	0.784***	0.347***	0.561***	0.578***	0.571***		
Overcrowding	0.074	0.363***	0.608***	0.607***	0.125	0.370***	
Severe housing deprivation	0.319***	0.398***	0.753***	0.758***	0.334***	0.687***	0.875***

Note: No regional-level data for DE, NL, PT.

*** Significant at the 0.1% level; ** significant at the 5% level.

Source: Eurostat, EU-SILC and own calculations.

Access to childcare

The affordable, and convenient, availability of childcare is important for parents who want to be in paid employment. As indicated above, the EU-SILC does not contain suitable data for assessing this since it only includes information on the use of childcare of various kinds and the amount of time that it is used. This, therefore, indicates the number of parents with children of different ages who make use of childcare and, by implication, the number that do not, but it does not reveal whether the latter do not use it because it is not available or because they choose not to use it, preferring to stay at home and take care of their children themselves.

The LFS potentially provides more of an insight into the accessibility of care. The data concerned come from questions on, first, the reasons why people are not economically active (i.e. not working or actively looking for a job) or working part-time rather than full-time. One of the reasons specified is because they are caring for a child or adult. The two are not separately distinguished, so it is not possible to determine which applies, though this may not matter too much since the care services provided for adults in need of care are arguably just as important a basic service as childcare. Both are needed if people are to be free to choose whether they are employed or not and how they use their time. The further question, which is asked only to those responding that they are inactive or employed part-time for caring reasons, is whether they are doing so because suitable care services are not available or affordable. The answers to this question, therefore, provide an insight into the accessibility of care services.

The data concerned are not ideal since the question is asked only to those who are not economically active or are working part-time. It, therefore, excludes those in employment who might need to have recourse to a less preferred means of obtaining

care for their children, such as using a relative, friend or neighbour because suitable care services are not available. Nevertheless, since there are no other satisfactory data at present, it seems worth exploring.

One drawback is that because of the way that the question is asked in the LFS, i.e. because it is restricted to those reporting that they are inactive or employed part-time because of caring, small sample size becomes an issue in some of the smaller regions. In many regions in the EU13 countries especially, relatively few people are employed part-time and even fewer report doing so for caring reasons. The focus in any case is on women rather than men since in most regions hardly any of the latter report being inactive or in part-time work because of caring. Despite growing equality between men and women, therefore, it still remains the case that women rather than men have ultimate responsibility for caring for children or adults in need of care. The focus is also limited to women aged 20-49 which is the age group for which this responsibility is most present, at least for children.

The small sample size means that the data are unreliable for a few regions, in particular, most of the Bulgarian NUTS 2 regions, the French island of Corse, the Spanish Ceuta region, the Portuguese island of Madeira, three of the Romanian regions, the western part of Slovenia (Zahodna Slovenija) and the small Finnish island of Åland. In most of these cases, apart from the Romanian ones, the lack of suitable care services does not seem to be a major reason for women not working or being employed part-time – especially in Åland, where as in the other Finnish regions, care services are highly accessible – but this may be because caring is not a common reason for not working and relatively few women work part-time. These regions are, therefore, excluded from the table below and pose a potential problem if the LFS data were to be used as an indicator of the accessibility of care services.

According to the indicator, the 10 regions in which the relative number of women in the group reporting to be inactive or working part-time because of a lack of suitable care services is smallest include all 5 regions in Denmark, three of the 5 Finnish regions, Övre Norrland in the far north of Sweden and Brabant Wallon in Belgium (Table 21).

At the opposite end, the 10 regions in which the proportion of women reporting a lack of suitable care services is largest consist of four regions in the UK (including London as well as Northern Ireland), both Irish regions – the Southern and Eastern region which includes Dublin having the largest proportion of all – two regions in Hungary, one in Spain and one in Poland.

The indicator, at least in terms of the regions at the two extremes, seems to show a plausible picture, with regions in the Nordic countries having a low value, reflecting the more developed nature of care services there than elsewhere in the EU, and with the regions with a high value including those in the UK and Ireland where a lack of care services is a well-known issue.

At the same time, an examination of the full ranking of regions in terms of the indicator suggests that it is inevitably affected by social and cultural norms as well as by expectations. The value of the indicator, for example, is relatively low in Portugal, which reflects the relatively small proportion of women who stop working for any length of time to take care of children or who work part-time and who find other means of caring for their children apart from formal care services. Similarly, the value is lower in a number of southern Italian regions than in some Northern ones, which again may not reflect a wider availability of formal care services. To some extent, this reflects more generally the difficulty of assessing unmet need for a particular service, in this case childcare, in a situation where the service has not developed partly because ways of avoiding having to use the service – such as having recourse to parents or grandparents – exist instead, so that there is no significant expressed need as such.

Table 21 Regions with smallest and largest proportion of women aged 20-49 reporting being inactive or working part-time because of a lack of suitable or affordable care services, 2013 (% of women in age group)

	10 regions with lowest %	
DK01	Hovedstaden (DK)	0.1
DK02	Sjælland (DK)	0.1
DK03	Syddanmark (DK)	0.2
DK04	Midtjylland (DK)	0.2
FI1C	Etelä Suomi (FI)	0.2
DK05	Nordjylland (DK)	0.3
SE33	Övre Norrland (SE)	0.3
FI1B	Helsinki Uusimaa (FI)	0.4
FI19	Länsi Suomi (FI)	0.5
BE31	Brabant Wallon (BE)	0.6
	10 regions with the highest %	
UKK0	South West (UK)	5.7
HU31	Észak Magyarország (HU)	5.8
IE01	Border, Midland and Western (IE)	5.8
HU21	Közép Dunántúl (HU)	5.8
UKG0	West Midlands (UK)	5.8
PL42	Zachodniopomorskie (PL)	6.1
UKI0	London (UK)	6.2
ES24	Aragón (ES)	6.5
UKN0	Northern Ireland (UK)	6.6
IE02	Southern and Eastern (IE)	7.1

Note: NL excluded, no regional data. Source: Eurostat, LFS and own calculations.

Nevertheless, despite these apparent problems, which perhaps could be reduced by combining it with an indicator of childcare use, the results suggest that the indicator is a promising candidate for assessing access to childcare. There is a question, however, as to whether the apparent lack of care services which would enable women to work full-time rather than part-time should be given the same weight as a lack of services which means that women cannot take up paid employment at all. It is arguable that the latter is more important and should accordingly be assigned a larger weight.

Concluding remarks

The above analysis has been limited to considering the potential use of data from the LFS and EU-SILC to construct a composite indicator of regional well-being. It has, accordingly, focused on the dimensions or domains where this is a possibility – income, material deprivation, employment, education, health, housing and childcare. It has demonstrated that in each case, it is possible to identify indicators which provide a reasonable overview of the differences which exist across regions.

It is also apparent, however, that the lack of a breakdown of data from the EU-SILC at a suitable regional level – as a minimum at NUTS 2 level – is an obstacle which needs to be overcome if they are to be used for this purpose in relation to income, material deprivation, health and housing. Although it might be possible to make estimates of income and material deprivation from the more aggregate data at present available by using a combination of census of population data and regression analysis, this is far from satisfactory given that the census is now dated and the variables it is possible to include in the regressions are themselves limited. Providing more disaggregated regional data, however, is limited by the relatively small sample size of the EU-SILC survey, which makes it difficult to achieve a breakdown at the NUTS 2 level which ensures that the households surveyed give a reasonable representation of the population in each region.

Although some progress might be made by redesigning the sampling frame, there are limits to what can be achieved without enlarging the overall sample size. This, of course, would mean increasing the costs of carrying out the survey, which in the present fiscal climate and the tight constraints on public expenditure in place, would be difficult to get agreement on, irrespective of the potential gains in terms of the added ability to monitor developments at regional level and to devise better policies as a result.

Until the EU-SILC data are improved and extended – which is clearly unlikely to happen in the short or even medium-term – the general rule would be to use LFS data wherever possible. In particular, the analysis here demonstrates that, for the at-risk-of-poverty rate, at least, it is almost certainly possible to generate reasonable estimates from the household work intensity estimates which can be derived from the LFS household data. (It remains to verify that the analysis carried out on the basis of the regional data available in the EU-SILC also holds good for NUTS 2 regions.)

This would still leave open the problematic issue of comparing income or at-risk-of-poverty rates across regions when no allowance is being made for differences in regional price levels and, therefore, in the purchasing power of a given level of monetary income. The lack of a means of making such an allowance – of data on regional variations in prices – is equally important to rectify if meaningful indicators of regional well-being are to be produced. Until this is done, as emphasised above, indicators of material deprivation at regional level, which reflect underlying purchasing power, are an even more important complement to at-risk-of-poverty rates than is the case for inter-country comparisons.

The above analysis also demonstrates that the LFS data provide a potential means of assessing regional differences in access to care services, especially in countries where there is a recognised need.

In the case of all indicators, however, although the generation of indicators of well-being at NUTS 2 regional level would represent an important advance in monitoring the extent and nature of disparities and the process of convergence across the EU, it would still leave open the issue of variations within regions defined at this level of aggregation. The variations concerned, such as between inner city areas and other parts of a region, can be as important as variations between regions and so as far possible need to be taken into account both to obtain a realistic picture of the well-being situation and to identify policy needs.

An additional issue which equally needs to be taken into account when household surveys are used to portray the situation in any region, or indeed any country, is the population that is not included or under-represented. This is the homeless, those living in institutions and recent migrants who are likely to fall outside the sampling frame and whose well-being tends to be at a significantly lower level than those covered by the surveys. The indicators generated from the EU-SILC and LFS are, therefore, likely to overstate the overall level of well-being, perhaps to a negligible extent in many if not most regions but significantly in some.

A further general issue which remains and which has only briefly been touched on here is the meaningfulness – and value – of combining the indicators of the different dimensions of well-being into a composite index. As noted above, it is likely to be difficult to interpret variations in such an index across regions when they can be a result of very different differences in the value of the component indicators. This is linked to some extent to the issue of weighting, of deciding the relative importance of the different domains, of whether the same importance should be attached, for example, to the availability of care services as to income or education. However, even if a set of weights were commonly agreed, it would still remain the case that a given value of the index can be associated with very different values of the component indicators, which would need to be examined

if policy implications were to be derived from it. This argues for the combination of indicators within each of the dimensions or domains (along the lines of the Europe 2020 poverty target, for example) but not necessarily across dimensions, even if there may be calls for a simple measure of well-being at regional level.

Bibliography

Aasland, A. and Fløtten, T. (2001), "Ethnicity and Social Exclusion in Estonia and Latvia" in Europe-Asia Studies, 53 (7): 1023-1049.

Bubbico, R.L. and Dijkstra, L. (2011), "The European regional Human Development and Human Poverty Indices", Regional Focus, 02/2011. http://ec.europa.eu/regional policy/sources/docgener/focus/2011 02 hdev hpov indice s.pdf

Cherchye, L. et al. (2007), "Creating Composite Indicators with DEA and Robustness Analysis: the Case of the Technology Achievement Index", Journal of the Operational Research Society, 59: 239–251.

Cherchye L., Ooghe, E., and T.V. Puyenbroeck (2008), "Robust Human Development Rankings", Journal of Economic Inequality, 6: 287–321.

Czirfusz, M., Kovács, K. and G. Tagai (2013), Work Package 2.6: "Development and mapping of social exclusion indicators, TiPSE – The Territorial Dimension of Poverty and Social Exclusion in Europe", ESPON Applied Research 2013/1/24. https://www.espon.eu/export/sites/default/Documents/Projects/AppliedResearch/TIPSE/DFR/Annex 4 SocialExclusionIndicatorsMethodologyAndDescription Working Paper 6.pd

Decancq K. and Lugo, M.A. (2013), "Weights in Multidimensional Indices of Well-Being: An Overview", Econometric Reviews, 32, 7-34.

European Commission (2014), Investment for jobs and growth: promoting development and good governance in EU regions and cities, Sixth report on economic, social and territorial cohesion, Brussels.

Eurostat (2016a): Self-perceived health statistics. Statistics explained. http://ec.europa.eu/eurostat/statistics-explained/index.php/Self-perceived health statistics

Eurostat (2016b): Unmet health care needs statistics. Statistics explained. http://ec.europa.eu/eurostat/statistics-explained/index.php/Unmet health care needs statistics

Eurostat (2016c): Housing conditions. Statistics explained. http://ec.europa.eu/eurostat/statistics-explained/index.php/Housing statistics

Foster, J. E., McGillivray, M. and S. Suman (2009), "Rank Robustness of Composite Indices", OPHI Working Papers, 26, University of Oxford. http://www.ophi.org.uk/wp-content/uploads/ophi-wp-26b.pdf

Foster, J.E., and A. K. Sen (1997), "On Economic Inequality", Oxford University Press, Oxford.

Kahila, P. et al. (2014), "TiPSE – The Territorial Dimension of Poverty and Social Exclusion in Europe", ESPON Applied Research 2013/1/24. https://www.espon.eu/export/sites/default/Documents/Projects/AppliedResearch/TIPSE/DFR/TIPSE Draft Final Report.pdf

Leventi, C., Navicke, J.,. Rastrigina, O., Sutherland, H., Őzdemir, E. and Ward, T. (2013), "Nowcasting: Estimating developments as regards the risk of poverty and income distribution in 2012 and 2013", Social Situation Monitor, Research Note 1/2013. http://ec.europa.eu/social/keyDocuments.jsp?advSearchKey=Nowcasting&mode=advancedSubmit&langId=en&policyArea=&type=0&country=0&year=2013

Levitas, R. et al. (2007), "The Multidimensional Analysis of Social Exclusion", Department of Sociology and the School of Social Policy, Bristol Institute of Social Affairs, University of Bristol.

http://dera.ioe.ac.uk/6853/1/multidimensional.pdf

McGillivray, M. and Noorbakhsh, F. (2006), "Composite Indices of Human Well-being: Past, Present and Future", M. McGillivray (Ed.) Human Well-Being: Concept and Measurement. Basingstoke: Palgrave Macmillan, 113-134.

OECD (2011a), "A composite index for monitoring regional development in OECD regions", Working Party on Territorial Indicators, GOV/TDPC/TI(2011)7. http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=GOV/TDPC/TI(2011)7&docLanguage=En

OECD (2011b), "Interpreting OECD Regional Indicators", in OECD Regions at a Glance 2011, OECD Publishing.

http://www.keepeek.com/Digital-Asset-Management/oecd/urban-rural-and-regional-development/oecd-regions-at-a-glance-2011/interpreting-oecd-regional-indicators reg glance-2011-3-en#.V N9MclQH-h

OECD (2014), "How's life in your region? Measuring Regional and Local Well-Being for Policy Making", OECD Publishing.

http://www.keepeek.com/Digital-Asset-Management/oecd/urban-rural-and-regional-development/how-s-life-in-your-region 9789264217416-en#page4

OECD (2016), "OECD Regions at a Glance 2016", OECD Publishing. http://www.keepeek.com/Digital-Asset-Management/oecd/governance/oecd-regions-at-a-glance-2016 reg glance-2016-en#.V TImslQFld#page1

Peleah, M. and Ivanov, A. (2013), "Measuring intersecting inequalities through the Social Exclusion Index: A proposal for Europe and Central Asia", Working paper 22, Seminar on "The way forward in poverty measurement", 2-4 December 2013, Geneva. https://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.15/2013/WP 22 UN DP D En.pdf

Saisana, M., Saltelli, A. and S. Tarantola (2005), "Uncertainty and Sensitivity Analysis as Tools for the Quality Assessment of Composite Indicators", Journal of the Royal Statistical Society, Ser. A 168: 1–17.

Schokkaert, E. (2007): "Capabilities and satisfaction with life", Journal of Human Development, 8(5).

UN (2010), "Analysing and Measuring Social Inclusion in a Global Context", Department of Economic and Social Affairs of the United Nations Secretariat. http://www.un.org/esa/socdev/publications/measuring-social-inclusion.pdf

UNDP (2011), "Beyond Transition: Towards Inclusive Societies", Regional Bureau for Europe and CIS.

Ward, T. and Őzdemir, E. (2013), "Measuring low work intensity – an analysis of the indicator", ImProve (Poverty, Social Policy and Innovation) Working Paper. http://improve-research.eu/?page_id=37

World Bank (2016a), "Pinpointing poverty in Poland", Poverty in Europe, Washington, D.C., World Bank Group.

http://documents.worldbank.org/curated/en/236151468000626055/Pinpointing-poverty-in-Poland

World Bank (2016b), "Pinpointing poverty in Romania", Poverty in Europe, Washington, D.C., World Bank Group.

 $\frac{\text{http://documents.worldbank.org/curated/en/294291467994713348/pdf/104013-BRI-PUBLIC-ADD-SERIES-Poverty-in-Europe-DOI-10-1596-K8686.pdf}$

World Bank (2016c), "Pinpointing poverty in Latvia", Poverty in Europe, Washington, D.C., World Bank Group.

 $\underline{\text{http://documents.worldbank.org/curated/en/160181467994713098/Pinpointing-poverty-in-Latvia}$

World Bank (2016d), "Pinpointing poverty in Estonia", Poverty in Europe, Washington, D.C., World Bank Group.

 $\frac{http://documents.worldbank.org/curated/en/707811467987907678/Pinpointing-poverty-in-Estonia}{(in-Estonia)}$

World Bank (2016e), "Pinpointing poverty in Slovenia", Poverty in Europe, Washington, D.C., World Bank Group.

http://documents.worldbank.org/curated/en/760821468000626419/pdf/104015-BRI-PUBLIC-ADD-SERIES-Poverty-in-Europe-DOI-10-1596-K8688.pdf

World Bank (2016f), "Pinpointing poverty in Slovakia", Poverty in Europe, Washington, D.C., World Bank Group.

http://documents.worldbank.org/curated/en/100241468184791505/pdf/104014-BRI-PUBLIC-ADD-SERIES-Poverty-in-Europe-DOI-10-1596-K8687.pdf

World Bank (2016g), "Pinpointing poverty in Hungary", Poverty in Europe, Washington, D.C., World Bank Group.

 $\frac{\text{http://documents.worldbank.org/curated/en/497871467995074765/pdf/104010-BRI-PUBLIC-ADD-SERIES-Poverty-in-Europe-DOI-10-1596-K8683.pdf}{}$

Annex

Table A.1. Proportion of people identified as being socially excluded according to various indicators in EU regions, 2013-14 (% of population)

	At risk	Material	Severe		Low work	Social
	of	deprivation	material	Jobless	intensity	exclusion
	poverty	rate	deprivation	households	households	indicator
	rate		rate		(<0.20)	
BE1	30.9	24.2	15.1	24.3	28.0	42.8
BE2	11.1	6.3	2.5	12.6	14.3	19.7
BE3	18.3	17.5	8.9	21.4	24.0	31.9
BG3	23.8	50.0	36.6	13.3	16.7	43.5
BG4	19.7	43.6	29.4	10.8	13.2	35.6
CZ01	5.3	13.8	5.9	7.3	8.7	12.8
CZ02	5.3	11.7	3.7	7.9	8.0	13.2
CZ03	8.7	11.8	3.4	10.4	11.3	18.4
CZ04	14.1	28.8	13.5	19.7	22.5	29.7
CZ05	9.4	12.8	5.3	10.2	10.9	19.1
CZ06	8.1	13.4	4.5	8.6	9.4	17.3
CZ07	12.1	15.6	7.7	10.7	11.7	23.2
CZ08	16.0	27.0	11.9	16.4	17.9	28.9
DK0	12.1	7.7	3.2	16.1	17.5	23.0
EE0	21.8	15.7	6.2	9.4	10.9	26.2
IE0	15.6	22.8	8.5	18.9	24.4	31.9
EL3	15.6	35.2	20.0	19.7	22.7	37.9
EL4	27.2	44.0	23.9	18.3	23.3	47.3
EL5	25.4	40.1	20.5	19.7	23.6	44.7
EL6	26.1	43.5	24.0	17.8	22.3	49.5
ES11	15.4	13.5	5.5	15.4	18.9	29.8
ES12	16.7	12.3	5.1	19.3	22.8	33.6
ES13	20.6	13.8	3.5	19.0	24.0	38.5
ES21	10.2	8.4	4.8	14.5	16.9	23.1
ES22	11.9	6.4	1.2	8.8	10.8	19.8
ES23	16.2	13.0	5.6	9.9	13.8	25.7
ES24	16.2	11.5	4.2	9.5	13.6	25.7
ES30	14.7	13.4	4.8	10.6	13.4	24.4
ES41	20.4	9.8	2.6	17.0	22.2	34.3
ES42	28.4	16.8	8.7	14.6	19.2	41.8
ES43	33.1	11.9	3.8	14.9	25.4	47.1
ES51	15.8	16.9	6.3	11.8	15.3	27.6
ES52	26.2	25.6	11.3	16.0	21.1	40.9
ES53	17.9	20.3	9.8	8.3	11.1	28.8
ES61	33.3	24.4	9.5	18.9	31.2	50.0
ES62	37.2	30.1	11.8	18.5	25.8	51.0
ES63	44.3	32.6	12.4	14.0	26.0	50.7
ES64	19.2	22.1	7.4	17.7	18.7	28.4
ES70	27.6	20.5	7.2	24.3	30.6	43.3
FR10	10.6	13.0	6.7	11.1	12.9	22.7
FR21	13.7	10.9	3.9	22.7	26.8	34.3
FR22	14.4	12.3	2.5	12.8	14.3	27.6
FR23	11.1	10.2	5.1	13.9	14.8	25.1
FR24	15.4	12.1	5.7	13.2	14.1	27.0
FR25	14.2	10.1	3.4	15.3	17.7	24.5
FR26	12.2	9.1	3.8	14.1	15.3	24.1
FR30	19.0	13.5	5.5	15.8	19.6	31.8
FR41	13.4	12.3	4.9	14.7	15.8	25.7
FR42	12.5	12.6	5.2	13.4	15.2	25.4
FR43	16.1	8.8	4.8	15.8	16.8	27.5
FR51	9.6	9.9	4.1	16.3	17.4	24.2
FR52	11.2	12.0	5.2	13.2	15.6	23.1
FR53	13.0	11.7	3.7	13.8	15.2	26.8

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FR61	13.4	9.8	2.7	17.6	19.7	29.9
FR62	15.6	12.5	4.4	14.5	19.4	29.1
FR63	17.2	11.2	3.5	14.3	19.6	31.2
FR71	10.7	11.2	3.3	15.3	17.0	24.1
FR72	13.5	7.8	3.3	13.2	14.1	23.4
FR81	20.3	16.6	5.2	16.8	18.8	36.8
FR82	15.5	12.2	5.3	15.6	18.2	27.9
FR83	19.1	17.2	10.0	16.6	21.0	29.3
HR0	19.4	33.8	13.9	16.2	18.8	32.5
ITC	11.1	17.2	8.1	10.2	11.5	24.8
ITF	31.6	33.2	18.3	20.1	23.5	49.2
	36.6			22.5		
ITG		41.1	23.2		27.8	56.1
ITH	10.4	14.1	5.8	8.0	9.6	20.7
ITI	15.4	17.1	7.4	11.4	13.9	27.2
CY0	14.4	36.5	15.3	9.6	12.7	30.5
LV0	21.2	34.6	19.2	10.3	12.2	31.7
LT0	19.1	28.3	13.6	11.0	12.9	28.6
LU0	16.4	5.0	1.4	8.4	10.5	25.1
HU1	10.0	37.5	24.1	15.9	18.9	37.2
HU2	12.5	37.5	21.5	13.6	17.2	35.4
HU3	20.6	44.7	26.5	15.6	20.0	44.7
MT0	15.9	20.2	10.2	12.6	14.4	27.3
AT1	16.7	11.4	5.7	12.8	15.6	28.2
AT2	12.9	6.0	2.2	11.2	12.6	20.0
AT3	11.7	8.7	3.0	9.8	12.1	20.8
PL1	14.1	20.5	9.8	10.5	11.5	26.8
PL2	13.5	23.1	9.2	12.0	12.9	27.3
PL3	22.5	24.7	11.9	8.4	9.8	30.7
PL4	16.2	20.8	9.4	9.5	11.1	27.4
PL5	15.2	22.0	12.6	11.8	12.6	27.8
PL6	21.2	22.0	10.5	10.8	13.0	31.7
RO1	21.0	35.4	20.5	9.1	10.7	37.3
RO2	34.7	52.1	30.8	9.0	9.0	53.8
RO3	17.6	42.1	23.9	8.6	8.9	35.8
RO4	28.3	38.4	23.8	13.5	13.5	45.1
SI0	14.5	17.2	6.6	12.9	14.6	25.4
SK0	12.6	21.8	9.5	9.0	9.8	21.2
FI19	13.1	8.2	3.2	11.3	13.8	20.3
FI1B	8.5	7.7	2.7	7.7	10.3	15.0
FI1C	14.5	7.7	2.7	12.1	14.7	21.8
FI1D	16.3	7.8	2.4	14.0	17.7	25.5
SE1	12.6	3.0	0.9	5.8	7.9	15.7
SE2	16.5	3.7	0.7	7.1	9.9	19.5
SE3	17.5	2.1	0.4	8.7	11.0	19.2
UKC				16.6		35.8
	23.5	22.8	13.0		20.0	
UKD	20.2	20.2	10.7	15.2	18.8	33.4
UKE	18.2	16.6	7.3	10.6	14.2	26.9
UKF	18.7	14.5	6.0	11.1	14.5	29.2
UKG	20.5	17.0	7.1	12.8	15.8	31.0
UKH	12.7	10.4	5.2	10.6	14.2	23.9
UKI	16.4	20.6	11.0	12.9	15.6	30.4
UKJ	11.3	10.8	5.0	8.9	11.4	20.3
UKK	16.0	15.5	6.9	12.1	14.4	26.1
UKL	18.3	16.1	6.2	18.4	20.8	31.4
UKM	14.7	13.6	6.4	11.6	14.3	25.4
UKN	22.5	17.5	6.8	18.5	21.2	32.5

Note: No regional-level data for DE, NL, PT. Source: Eurostat, EU-SILC and own calculations.

EL42

3.86

52.1

21.3

27.2

21.0

20.1

Table A.2. Employment indicators for those aged 15-64 in EU regions, 2013 Women aged Temporary Temporary Average Living in contract contract 20-49 P-T monthly Full-time Living in low work because of because of employed or net equivalent jobless intensity unavailable unavailable inactive employee employment households households permanent permanent because of lack earnings rate (%) (%) (%) of care services job-15-64 job-25+ decile (%)(%)**BE10** 5.77 47.8 27.3 37.2 9.8 9.1 2.9 BE21 5.64 57.2 14.6 24.4 4.5 3.7 2.8 4.9 BF22 5.12 56.2 13.2 23.6 6.6 3.1 BE23 5.79 62.2 12.1 19.5 4.9 3.8 2.9 60.6 10.7 19.5 4.2 BE24 6.09 3.4 2.2 60.7 14.0 20.5 5.1 3.8 BE25 5.29 1.8 BE31 6.38 57.1 13.1 21.4 5.6 4.7 0.6 BE32 5.32 48.7 24.5 33.0 8.0 6.0 1.8 **BE33** 5.21 50.3 22.4 32.9 9.9 8.5 1.4 **BE34** 5.59 55.9 14.8 22.9 7.9 6.0 1.4 **BE35** 5.42 51.8 20.0 30.3 7.4 5.9 1.2 BG31 4.53 53.9 23.2 27.2 4.9 4.6 0.4 BG32 4.98 55.4 22.9 26.0 4.0 3.7 1.3 5.20 55.9 6.4 5.8 BG33 20.0 24 2 0.6 BG34 5.84 57.1 22.4 6.3 5.9 18.8 1.2 BG41 6.44 0.9 0.8 64.3 11.8 14.5 1.2 4.95 58.4 4.2 BG42 17.9 22.1 4.0 1.4 CZ1 6.80 71.5 8.3 10.3 3.7 3.8 3.2 CZ2 5.91 68.9 8.7 10.2 4.1 3.7 4.2 CZ3 5.47 67.5 9.9 11.9 6.7 5.9 0.9 CZ4 5.39 63.4 15.0 16.9 6.2 5.6 2.8 CZ5 5.39 65.5 10.7 13.2 9.9 8.6 1.8 CZ6 5.06 65.7 9.9 12.7 8.7 7.4 2.3 C77 5.17 64.2 12.2 14.2 8.3 6.9 2.8 CZ8 5.15 63.1 13.7 16.7 8.4 6.7 0.7 DK1 5.90 64.4 12.4 17.3 5.0 4.5 0.1 5.64 63.8 15.0 3.5 3.1 DK2 19.1 0.1 DK3 5.30 61.9 14.0 19.1 4.0 3.2 0.2 DK4 5.26 62.8 13.4 18.5 4.6 4.0 0.2 DK5 5.13 62.7 14.2 19.9 4.7 4.5 0.3 5.73 63.9 8.4 13.5 1.3 4.7 DE10 1.4 5.76 65.9 DE20 8.3 13.0 1.3 1.2 3.0 DE30 5.37 59.0 18.9 25.6 4.3 4.2 1.1 5.09 67.7 12.8 17.3 3.0 2.9 DE40 1.8 3.0 5.33 57.2 15.9 DE50 24.4 3.1 2.6 5.86 2.3 DE60 63.8 13.8 18.5 2.2 1.7 DE70 5.77 62.0 10.4 16.8 2.1 1.9 5.0 DE80 4.60 62.6 16.9 22.1 4.0 3.8 0.8 DE90 5.43 62.0 11.5 17.3 1.8 1.6 3.6 DEA0 5.55 58.9 13.2 20.0 1.7 1.5 2.9 DEB0 5.53 61.8 10.0 16.5 1.4 1.3 2.8 DEC0 5.52 60.0 13.4 20.4 1.5 1.5 1.9 DED0 4.79 65.6 13.9 18.5 3.1 2.9 1.7 14.8 DEE0 4.75 65.9 19.3 3.3 3.1 1.1 17.1 5.60 62.2 11.2 1.6 1.5 DEF0 3.6 67.0 2.5 2.5 DEG0 4.79 13.6 18.5 1.7 65.4 EE0 5.62 11.4 14.9 1.1 1.0 1.4 5.2 IE1 4.45 50.6 19.2 32.1 6.0 5.8 IE2 4.92 54.1 16.4 27.9 5.2 4.5 7.1 **EL30** 4.86 46.8 23.4 35.0 3.7 3.4 3.3 **EL41** 5.06 49.4 23.1 30.5 9.4 9.3 4.5

2.9

EL43	4.03	49.4	21.2	30.5	19.3	18.7	4.8
EL51	4.37	46.0	28.1	34.3	5.7	5.5	2.9
EL52	4.45	43.4	26.2	35.4	9.3	9.1	3.9
EL53	4.98	41.0	24.9	37.1	17.0	15.0	1.5
EL54	3.87	46.2	26.1	33.2	7.8	7.6	1.9
EL61	4.24	45.9	21.5	29.8	10.2	9.8	2.9
EL62	4.00	54.6	18.5	23.0	14.6	12.5	3.3
EL63	4.53	44.6	25.1	36.1	6.5	6.1	2.1
EL64	4.31	46.5	23.9	32.0	5.8	5.3	3.7
EL65	4.45	52.4	18.8	26.8	12.5	12.1	5.2
ES11	5.20	51.5	16.9	25.9	19.3	18.0	4.3
ES12	5.74	47.8	21.3	30.9	20.1	18.6	1.9
ES13	5.56	51.4	17.7	27.0	15.2	14.8	3.7
ES21	6.29	55.2	15.3	21.9	17.4	16.5	3.3
ES22	6.35	55.8	14.4	25.8	16.5	15.0	4.2
ES23	5.49	54.1	14.5	21.2	19.3	17.8	3.0
ES24	5.52	53.4	14.2	24.0	18.2	16.7	6.5
ES30	6.13	57.4	12.5	21.6	13.7	12.6	3.8
ES41	5.54	52.2	17.2	26.7	16.8	15.6	3.5
ES42	5.33	46.5	17.5	31.4	20.6	18.7	4.6
ES43	4.88	42.9	24.2	36.2	25.6	23.8	2.1
ES51	5.74	54.6	15.4	23.8	17.5	15.6	3.6
ES52	5.22	47.1	20.0	32.3	22.6	20.8	3.4
ES53	5.28	57.1	13.2	20.7	23.6	21.3	2.8
ES61	4.95	41.0	24.8	39.0	27.7	26.0	2.5
ES62	4.64	46.1	18.8	33.2	26.1	25.2	5.4
ES63	6.71	47.4	18.4	30.3	15.4	15.3	3.4
ES64	6.07	36.9	30.2	48.4	25.0	25.0	1.3
ES70	4.79	43.9	23.6	35.1	27.7	25.8	1.2
FR10	6.26	62.4	12.8	19.6	7.8	6.7 7.2	2.8
FR21 FR22	5.13 5.25	54.1 57.0	21.4 15.9	28.3 25.1	9.3 10.3	7.2 8.8	1.4 2.0
FR23	5.42	56.4	18.3	24.4	9.2	7.5	2.3
FR24	5.14	58.8	17.7	24.4	8.4	6.6	2.8
FR25	5.11	56.7	18.9	25.6	9.0	7.0	1.7
FR26	5.19	60.3	14.9	22.6	10.6	8.9	2.5
FR30	5.03	50.8	23.4	30.5	10.7	8.7	3.2
FR41	5.44	55.3	16.6	26.2	8.4	7.3	4.2
FR42	5.40	59.7	15.9	23.6	7.9	6.7	2.2
FR43	5.45	57.3	17.4	21.9	8.4	7.0	3.9
FR51	5.00	60.0	16.7	22.2	8.1	6.0	1.8
FR52	5.39	61.4	15.1	20.6	8.3	7.3	2.0
FR53	5.04	58.7	20.0	24.7	11.9	8.1	1.9
FR61	5.30	59.2	16.0	24.5	8.4	7.1	1.4
FR62	5.57	64.1	14.9	20.4	8.6	7.7	1.6
FR63	4.90	61.0	15.7	24.1	8.8	6.1	2.2
FR71	5.73	60.8	13.9	20.2	8.0	6.8	2.5
FR72	4.91	59.2	17.8	24.8	6.5	5.9	1.9
FR81	5.20	52.0	24.0	32.8	10.3	8.9	2.5
FR82	5.56	57.7	15.9	24.3	9.3	8.1	3.9
FR83	4.71	50.8	28.8	39.3	22.5	10.0	0.0
HR3	5.84	50.2	17.2	26.5	6.3	5.8	4.9
HR4	5.42	51.5	15.2	24.8	7.7	6.5	3.5
ITC1	5.61	57.2	14.0	21.8	7.5	6.7	1.7
ITC2	6.04	60.7	12.7	18.3	9.8	9.1	1.3
ITC3	5.77	55.1	14.9	23.1	6.1	5.4	3.5
ITC4	5.86	59.3	10.8	18.7	6.0	5.3	2.0
ITF1	5.37	51.0	14.6	26.4	11.7	10.7	1.1
ITF2	5.21	43.9	20.7	35.5	10.3	9.9	2.6

ITF3 ITF4 ITF5 ITF6 ITG1 ITG2 ITH1 ITH2 ITH3 ITH4 ITH5 ITI1 ITI2 ITI3 ITI4 CY0 LV0 LT0	5.13 4.91 5.17 4.61 4.93 5.17 6.17 5.88 5.53 5.83 5.72 5.31 5.30 4.99 5.58 5.24 5.21 5.64 5.40	36.6 39.1 42.7 35.8 35.7 43.5 64.1 59.7 57.9 57.7 61.2 58.5 55.6 55.3 52.4 57.9 62.7	26.1 22.9 20.1 29.0 28.3 21.8 8.2 9.9 10.2 13.2 11.1 11.6 13.7 11.6 14.8 12.2	43.8 39.4 36.8 46.8 45.3 35.7 15.1 17.8 18.7 20.7 18.5 19.2 21.6 20.0 25.7	12.9 16.9 12.2 19.7 15.7 13.8 9.4 12.3 8.3 8.5 9.7 8.4 8.1	11.9 16.1 11.7 19.0 15.1 12.9 8.7 11.2 7.3 7.7 9.0 7.8 7.4	2.9 2.5 1.9 2.6 2.6 1.4 1.6 2.0 3.6 1.9 1.8 2.4 1.8
ITF5 ITF6 ITG1 ITG2 ITH1 ITH2 ITH3 ITH4 ITH5 ITI1 ITI2 ITI3 ITI4 CY0 LV0	5.17 4.61 4.93 5.17 6.17 5.88 5.53 5.83 5.72 5.31 5.30 4.99 5.58 5.24 5.21 5.64	42.7 35.8 35.7 43.5 64.1 59.7 57.9 57.7 61.2 58.5 55.6 55.3 52.4 57.9 62.7	20.1 29.0 28.3 21.8 8.2 9.9 10.2 13.2 11.1 11.6 13.7 11.6 14.8 12.2	36.8 46.8 45.3 35.7 15.1 17.8 18.7 20.7 18.5 19.2 21.6 20.0 25.7	12.2 19.7 15.7 13.8 9.4 12.3 8.3 8.5 9.7 8.4 8.1	11.7 19.0 15.1 12.9 8.7 11.2 7.3 7.7 9.0 7.8 7.4	1.9 2.6 2.6 1.4 1.6 2.0 3.6 1.9 1.8 2.4
ITF6 ITG1 ITG2 ITH1 ITH2 ITH3 ITH4 ITH5 ITI1 ITI2 ITI3 ITI4 CY0 LV0	4.61 4.93 5.17 6.17 5.88 5.53 5.83 5.72 5.31 5.30 4.99 5.58 5.24 5.21 5.64	35.8 35.7 43.5 64.1 59.7 57.9 57.7 61.2 58.5 55.6 55.3 52.4 57.9 62.7	29.0 28.3 21.8 8.2 9.9 10.2 13.2 11.1 11.6 13.7 11.6 14.8	46.8 45.3 35.7 15.1 17.8 18.7 20.7 18.5 19.2 21.6 20.0 25.7	19.7 15.7 13.8 9.4 12.3 8.3 8.5 9.7 8.4 8.1	19.0 15.1 12.9 8.7 11.2 7.3 7.7 9.0 7.8 7.4	2.6 2.6 1.4 1.6 2.0 3.6 1.9 1.8 2.4
ITG1 ITG2 ITH1 ITH2 ITH3 ITH4 ITH5 ITI1 ITI2 ITI3 ITI4 CY0 LV0	4.93 5.17 6.17 5.88 5.53 5.83 5.72 5.31 5.30 4.99 5.58 5.24 5.21 5.64	35.7 43.5 64.1 59.7 57.9 57.7 61.2 58.5 55.6 55.3 52.4 57.9 62.7	28.3 21.8 8.2 9.9 10.2 13.2 11.1 11.6 13.7 11.6 14.8 12.2	45.3 35.7 15.1 17.8 18.7 20.7 18.5 19.2 21.6 20.0 25.7	15.7 13.8 9.4 12.3 8.3 8.5 9.7 8.4 8.1	15.1 12.9 8.7 11.2 7.3 7.7 9.0 7.8 7.4	2.6 1.4 1.6 2.0 3.6 1.9 1.8 2.4
ITG1 ITG2 ITH1 ITH2 ITH3 ITH4 ITH5 ITI1 ITI2 ITI3 ITI4 CY0 LV0	4.93 5.17 6.17 5.88 5.53 5.83 5.72 5.31 5.30 4.99 5.58 5.24 5.21 5.64	35.7 43.5 64.1 59.7 57.9 57.7 61.2 58.5 55.6 55.3 52.4 57.9 62.7	28.3 21.8 8.2 9.9 10.2 13.2 11.1 11.6 13.7 11.6 14.8 12.2	45.3 35.7 15.1 17.8 18.7 20.7 18.5 19.2 21.6 20.0 25.7	15.7 13.8 9.4 12.3 8.3 8.5 9.7 8.4 8.1	15.1 12.9 8.7 11.2 7.3 7.7 9.0 7.8 7.4	2.6 1.4 1.6 2.0 3.6 1.9 1.8 2.4
ITG2 ITH1 ITH2 ITH3 ITH4 ITH5 ITI1 ITI2 ITI3 ITI4 CY0 LV0	5.17 6.17 5.88 5.53 5.83 5.72 5.31 5.30 4.99 5.58 5.24 5.21 5.64	43.5 64.1 59.7 57.9 57.7 61.2 58.5 55.6 55.3 52.4 57.9 62.7	21.8 8.2 9.9 10.2 13.2 11.1 11.6 13.7 11.6 14.8	35.7 15.1 17.8 18.7 20.7 18.5 19.2 21.6 20.0 25.7	13.8 9.4 12.3 8.3 8.5 9.7 8.4 8.1 9.2	12.9 8.7 11.2 7.3 7.7 9.0 7.8 7.4	1.4 1.6 2.0 3.6 1.9 1.8 2.4
ITH1 ITH2 ITH3 ITH4 ITH5 ITI1 ITI2 ITI3 ITI4 CY0 LV0	6.17 5.88 5.53 5.83 5.72 5.31 5.30 4.99 5.58 5.24 5.21 5.64	64.1 59.7 57.9 57.7 61.2 58.5 55.6 55.3 52.4 57.9 62.7	8.2 9.9 10.2 13.2 11.1 11.6 13.7 11.6 14.8 12.2	15.1 17.8 18.7 20.7 18.5 19.2 21.6 20.0 25.7	9.4 12.3 8.3 8.5 9.7 8.4 8.1 9.2	8.7 11.2 7.3 7.7 9.0 7.8 7.4	1.6 2.0 3.6 1.9 1.8 2.4
ITH2 ITH3 ITH4 ITH5 ITI1 ITI2 ITI3 ITI4 CY0 LV0	5.88 5.53 5.83 5.72 5.31 5.30 4.99 5.58 5.24 5.21 5.64	59.7 57.9 57.7 61.2 58.5 55.6 55.3 52.4 57.9 62.7	9.9 10.2 13.2 11.1 11.6 13.7 11.6 14.8 12.2	17.8 18.7 20.7 18.5 19.2 21.6 20.0 25.7	12.3 8.3 8.5 9.7 8.4 8.1 9.2	11.2 7.3 7.7 9.0 7.8 7.4	2.0 3.6 1.9 1.8 2.4
ITH3 ITH4 ITH5 ITI1 ITI2 ITI3 ITI4 CY0 LV0	5.53 5.83 5.72 5.31 5.30 4.99 5.58 5.24 5.21 5.64	57.9 57.7 61.2 58.5 55.6 55.3 52.4 57.9 62.7	10.2 13.2 11.1 11.6 13.7 11.6 14.8	18.7 20.7 18.5 19.2 21.6 20.0 25.7	8.3 8.5 9.7 8.4 8.1 9.2	7.3 7.7 9.0 7.8 7.4	3.6 1.9 1.8 2.4
ITH4 ITH5 ITI1 ITI2 ITI3 ITI4 CY0 LV0	5.83 5.72 5.31 5.30 4.99 5.58 5.24 5.21 5.64	57.7 61.2 58.5 55.6 55.3 52.4 57.9 62.7	13.2 11.1 11.6 13.7 11.6 14.8	20.7 18.5 19.2 21.6 20.0 25.7	8.5 9.7 8.4 8.1 9.2	7.7 9.0 7.8 7.4	1.9 1.8 2.4
ITH5 ITI1 ITI2 ITI3 ITI4 CY0 LV0	5.72 5.31 5.30 4.99 5.58 5.24 5.21 5.64	61.2 58.5 55.6 55.3 52.4 57.9 62.7	11.1 11.6 13.7 11.6 14.8 12.2	18.5 19.2 21.6 20.0 25.7	9.7 8.4 8.1 9.2	9.0 7.8 7.4	1.8 2.4
ITI1 ITI2 ITI3 ITI4 CY0 LV0	5.31 5.30 4.99 5.58 5.24 5.21 5.64	58.5 55.6 55.3 52.4 57.9 62.7	11.6 13.7 11.6 14.8 12.2	19.2 21.6 20.0 25.7	8.4 8.1 9.2	7.8 7.4	2.4
ITI2 ITI3 ITI4 CY0 LV0	5.30 4.99 5.58 5.24 5.21 5.64	55.6 55.3 52.4 57.9 62.7	13.7 11.6 14.8 12.2	21.6 20.0 25.7	8.1 9.2	7.4	
ITI3 ITI4 CY0 LV0	4.99 5.58 5.24 5.21 5.64	55.3 52.4 57.9 62.7	11.6 14.8 12.2	20.0 25.7	9.2		ו א.ו
ITI4 CY0 LV0	5.58 5.24 5.21 5.64	52.4 57.9 62.7	14.8 12.2	25.7			
CY0 LV0	5.24 5.21 5.64	57.9 62.7	12.2			8.5	1.7
LV0	5.21 5.64	62.7			8.4	7.7	1.7
	5.64		17 /	20.1	16.7	16.2	4.7
LT0		(1)	12.4	16.4	3.0	2.8	4.0
	5 40	61.2	15.4	20.0	1.7	1.5	1.8
LU0	5.40	59.4	11.0	18.9	3.5	3.2	1.3
HU10	6.40	61.0	14.3	18.9	3.6	3.5	4.1
HU21	5.32	59.3	13.7	17.5	4.7	4.0	5.8
HU22	5.40	60.4	14.0	18.3	3.8	3.5	5.2
HU23	4.96	53.1	20.1	26.0	11.5	10.9	5.0
HU31	5.08	50.4	23.3	29.7	12.8	11.8	5.8
HU32	4.81	51.6	20.6	27.7	14.7	13.6	4.2
HU33	4.93	54.5	19.2	25.4	11.7	11.0	4.4
MT0	5.33	56.8	11.4	19.1	3.9	3.2	0.7
AT10	5.68	60.2	14.2	21.1	0.8	0.8	3.9
AT20	5.36	61.3	12.5	18.6	0.6	0.7	3.7
AT30	5.42	64.4	9.6	15.1	0.7	0.7	3.7
PL11	5.81	59.7	13.8	18.5	25.7	23.1	2.3
PL12	6.88	63.6	11.6	17.3	14.7	13.0	3.9
PL21	6.10	57.1	13.5	22.3	14.8	12.6	3.8
PL22	6.30	56.0	16.9	24.9	14.2	12.3	3.4
PL31	5.57	58.0	14.8	20.6	15.7	14.3	2.8
PL32	5.30	54.0	13.7	24.2	20.8	18.9	4.1
PL33	5.43	56.5	15.3	20.8	22.2	20.0	2.6
PL34	5.73	59.6	14.6	20.4	15.6	13.3	2.3
PL41	5.95	60.3	11.3	17.6	17.2	14.8	3.5
PL42	5.99	55.5	17.2	23.7	18.5	16.8	6.1
PL43	5.77	56.7	16.0	22.4	19.7	17.2	3.9
PL51	6.25	56.4	18.0	22.7	17.3	15.9	3.7
PL52	5.90	57.7	16.4	23.3	15.6	13.8	1.7
PL61	5.52	56.2	15.9	22.8	25.9	23.1	3.5
PL62	5.71	53.4	19.5	26.0	20.8	18.8	4.2
PL63	6.22	57.2	16.1	23.3	19.9	18.3	3.7
PT11	4.96	54.6	14.1	22.6	17.7	15.6	1.3
PT15	5.84	58.6	14.0	19.8	24.9	23.2	1.4
PT16	5.30	59.9	10.8	16.6	17.6	15.5	0.9
PT17	6.29						
		57.2	15.9	22.0	18.8	17.1	1.2
PT18	5.61	58.2	13.5	19.4	20.1	18.3	1.2
PT20	5.43	52.2	14.7	25.5	15.1	12.7	3.0
PT30	5.61	51.6	14.2	26.7	18.3	16.2	0.5
RO11	5.14	60.1	12.0	19.6	0.7	0.6	2.2
RO12	5.08	53.3	20.3	25.8	0.5	0.4	1.8
RO21	5.27	61.9	13.6	19.7	2.7	2.3	2.9
RO22	4.68	52.6	17.9	27.2	1.9	1.7	3.9
RO31	5.33	55.4	14.0	23.1	1.8	1.5	4.7
RO32	6.35	62.1	11.7	17.2	1.2	1.1	2.1

RO41	5.77	59.6	15.7	21.8	0.5	0.4	2.6
RO42	5.79	57.5	14.5	21.6	0.3	0.3	2.4
SI3	5.32	58.3	15.4	19.9			1.4
SI4	5.68	62.1	12.6	15.9			0.5
SK1	6.57	69.0	7.9	9.9	1.3	1.1	2.8
SK2	5.05	61.0	10.0	13.8	4.1	3.3	2.3
SK3	4.67	56.1	13.5	21.8	8.1	7.3	1.2
SK4	4.53	53.4	15.0	23.0	8.8	7.3	2.2
FI19	5.16	62.1	14.6	18.3	10.6	8.9	0.5
FI1B	6.01	68.7	11.1	14.5	7.8	6.8	0.4
FI1C	5.27	63.0	14.6	17.9	10.7	8.5	0.2
FI1D	5.08	60.3	14.8	20.2	12.9	11.3	0.8
FI20	5.44	72.1	7.1	10.9	13.2	12.2	0.0
SE11		70.1	10.7	14.5	8.4	6.7	1.1
SE12		64.9	16.0	20.1	10.1	7.3	1.0
SE21		67.3	12.3	16.0	8.8	6.2	0.6
SE22		64.6	16.2	20.9	9.9	7.7	0.9
SE23		67.3	13.4	16.8	8.8	6.5	0.9
SE31		66.4	16.2	19.6	10.4	7.6	0.6
SE32		67.4	16.3	19.5	10.4	8.0	0.6
SE33		66.8	19.2	21.5	11.0	8.2	0.3
UKC0	5.15	56.4	17.5	25.3	3.3	2.8	5.4
UKD0	5.24	58.3	16.6	24.9	2.0	1.7	4.3
UKE0	5.11	59.3	14.2	22.6	2.3	1.6	4.6
UKF0	5.37	60.1	14.1	21.3	2.0	1.6	3.9
UKG0	5.32	58.0	17.4	25.0	2.0	1.6	5.8
UKH0	5.69	63.5	11.0	17.3	1.9	1.6	4.1
UKI0	6.39	61.5	13.5	21.5	2.3	2.0	6.2
UKJ0	5.78	63.5	9.9	16.6	1.8	1.3	4.3
UKK0	5.24	62.6	12.8	19.3	2.3	1.5	5.7
UKL0	5.10	57.9	16.7	24.8	2.2	1.8	3.7
UKM0	5.46	60.3	15.7	21.7	2.1	1.8	3.9
UKN0	5.05	57.9	14.4	23.0	3.0	2.8	6.6

Note: No regional data for NL.

Source: Eurostat, LFS and own calculations.

Table A.3. Education indicators in EU regions, 2013 (% in each case)

Table A.5	. Education indicators	s III EU Tegio	115, 2015 (70 III et	ich case)
	Participation rate of 0-4	Early leavers	Proportion of 30-34	Participation rate of 25-
	in education	18-24	with tertiary education	64 in education/training
BE10	99.3	17.7	45.8	11.2
BE21	98.8	10.2	43.5	6.3
BE22	100.4	9.6	39.3	6.3
BE23	99.9	5.5	46.1	7.6
BE24	91.4	5.9	49.8	8.3
BE25	99.8	5.7	40.2	6.4
BE31	96.7	8.5	56.5	9.2
BE32	98.7	17.9	31.6	4.0
BE33	92.3	14.7	40.2	6.1
BE34	102.4	11.3	37.3	5.9
BE35	96.7	13.2	43.9	4.6
BG31	82.9	18.2	20.7	0.8
BG32	86.7	15.9	21.0	0.9
BG33	79.8	14.3	30.3	1.9
BG34	73.1	19.8	26.1	1.4
BG41	80.8	4.8	39.6	3.5
BG42	77.5	15.0	21.8	1.5
CZ01	81.7	3.2	46.8	6.9
CZ02	76.4	4.8	23.4	7.6
CZ03	85.4	5.9	24.9	8.7
CZ04	75.6	9.4	13.6	6.9
CZ05	84.7	6.4	21.9	9.7
CZ06	85.8	3.7	31.0	10.7
CZ07	86.8	4.9	24.4	7.1
CZ08	81.3	5.7	20.9	9.2
DK01	97.6	7.5	58.8	35.2
DK02	98.0	10.1	31.7	29.3
DK03	96.1	7.4	30.4	29.5
DK04	99.0	8.4	40.7	30.0
DK05	98.6	7.7	32.3	28.0
DE1	96.1	7.5	38.6	9.6
DE2	94.7	7.1	38.0	7.6
DE3	93.9	12.2	42.8	10.8
DE4	96.4	10.6	24.7	6.4
DE5	94.3	14.9	32.7	8.4
DE6	91.0	11.6	39.0	9.6
DE7	96.1	10.1	35.6	9.0
DE8	95.5	9.7	24.1	7.5
DE9	96.3	10.8	25.9	6.8
DEA DEB	96.5 98.8	11.6	29.0	7.5 8.3
	98.8 96.6	13.0	30.6 27.2	8.3 5.6
DEC	96.1	13.6 6.6	27.2 36.9	9.1
DED DEE	95.6	9.9	20.6	6.8
DEF	94.3	10.1	25.8	8.2
DEG	97.1	7.8	23.8 27.7	
EE0	97.1 87.4	7.8 9.7	42.5	8.1 12.4
IE01	90.9	9.7	42.5 48.4	5.1
IE01 IE02	90.9 99.4	7.9	53.9	7.0
EL30	30.8	7.9 6.8	53.9 44.0	7.0 4.9
EL30 EL41	84.2	10.9	22.1	0.9
EL41 EL42	67.0	22.1	27.2	1.6
EL42 EL43	64.9	22.1 14.4	27.2 25.8	2.0
EL43	58.0	21.8	23.8	2.7
EL51	56.0 57.4	8.1	22.8 37.5	2.7
LLJZ	57.4	0.1	37.3	2.0

EL53	82.8	8.9	30.4	4.5
EL54	65.3	10.4	33.5	1.8
EL61	62.0	7.7	29.8	2.4
EL62	78.7	14.7	18.9	3.1
EL63	68.6	9.6	28.1	3.2
EL64	79.1	16.6	22.0	1.0
EL65	72.5	14.0	22.2	1.2
ES11	99.3	20.2	43.4	10.1
ES12	101.8	19.1	50.2	8.9
ES13	95.5	12.1	46.4	10.7
ES21	102.8	9.9	61.3	12.9
ES22	102.0	12.9	48.4	12.2
ES23	97.7	21.7	42.4	9.8
ES24	103.1	18.9	43.2	11.2
ES30	96.8	19.7	54.2	11.1
ES41	100.3	19.2	40.2	10.8
ES42	103.5	27.4	35.2	9.6
ES43	100.6	29.2	33.4	9.5
ES51	96.4	24.7	46.2	7.6
ES52	96.7	21.7	41.0	11.4
ES53	94.0	29.8	33.8	9.3
ES61	99.0	28.7	32.7	9.2
ES62	97.0	26.3	29.3	9.9
ES63	112.7	33.5	13.2	11.5
ES64	101.3	33.1	32.4	9.7
ES70	95.0	27.5	35.8	8.9
FR10	101.4	9.9	52.8	18.4
FR21	98.2	12.0	33.0	13.6
FR22	99.6	14.5	30.7	13.3
FR23	98.8	9.6	34.2	18.8
FR24	101.1	8.0	38.0	17.7
FR25	99.6	7.3	38.7	16.4
FR26	96.9	10.6	32.1	16.9
FR30	100.8	12.1	43.6	17.4
FR41	97.6	10.5	38.5	18.6
FR42	100.2	9.4	47.3	21.8
FR43	97.1	8.4	39.5	17.0
FR51	100.0	6.8	43.5	20.4
FR52	98.4	5.7	41.5	21.4
FR53	96.8	9.7	31.5	16.0
FR61	100.9	9.1	39.4	19.2
FR62	99.4	5.9	58.1	23.7
FR63	97.2	9.5	34.4	21.1
FR71	100.9	8.4	47.6	23.0
FR72	101.1	9.6	37.3	17.5
FR81	102.5	14.7	36.7	15.7
FR82	106.8	11.6	42.9	17.5
FR83	98.0	3.6	15.7	11.3
HR03		5.0	29.0	2.6
HR04	05.0	4.2	24.0	3.4
ITC1	95.0	15.7	23.3	7.4
ITC2	97.8	19.6	18.8	7.6
ITC4	97.1 02.4	14.8	27.5	7.2
ITC4	92.4	15.3	25.7	8.1
ITF1	98.2	10.8	24.0	7.1
ITF2	96.1	15.3	23.6	7.7
ITF3 ITF4	103.6	21.9	16.4	5.4
	100.9 97.5	19.9	20.8 21.3	5.6
ITF5	9/.5	14.9	21.3	6.0

ITG1 99.2 25.4 16.9 ITG2 98.2 24.3 17.0 ITH1 95.1 16.4 24.2 1 ITH2 97.6 10.8 23.3 1 ITH3 94.2 10.0 19.3 ITH4 96.0 11.1 27.0 1 ITH5 91.9 15.1 28.0 1 ITI1 95.2 16.2 23.1 1 ITI2 96.7 11.5 28.0 3 ITI3 96.7 13.2 22.9 3 ITI4 92.6 12.2 27.7 3 CY0 72.0 9.1 47.8 40.7 LV0 87.1 9.8 40.7 47.8 LV0 87.1 9.8 40.7 40.0 HU10 89.1 7.6 46.0 46.0 HU21 95.4 10.1 27.3 40.0 HU22 94.0 10.1 26.3 3	5.9 1.7 1.7 1.7 1.8 1.7 1.8 1.9 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
ITG2 98.2 24.3 17.0 ITH1 95.1 16.4 24.2 1. ITH2 97.6 10.8 23.3 1. ITH3 94.2 10.0 19.3 ITH4 96.0 11.1 27.0 1. ITH5 91.9 15.1 28.0 1. ITI1 95.2 16.2 23.1 1. ITI2 96.7 11.5 28.0 1. ITI3 96.7 13.2 22.9 1. ITI4 92.6 12.2 27.7 2. CY0 72.0 9.1 47.8 40.7 LV0 87.1 9.8 40.7 1. LT0 75.0 6.3 51.3 1. LU0 97.9 6.1 52.5 1. HU10 89.1 7.6 46.0 46.0 HU21 95.4 10.1 27.3 40.0 HU22 94.0 10.1 26.3 26.3	7.8 3.4 0.0 7.2 0.4 3.7 0.1 3.5 7.4 3.3 7.5 5.7
ITH1 95.1 16.4 24.2 1. ITH2 97.6 10.8 23.3 1. ITH3 94.2 10.0 19.3 ITH4 96.0 11.1 27.0 1. ITH5 91.9 15.1 28.0 1. ITI1 95.2 16.2 23.1 1. ITI2 96.7 11.5 28.0 1. ITI3 96.7 13.2 22.9 1. ITI4 92.6 12.2 27.7 2. CY0 72.0 9.1 47.8 40.7 LV0 87.1 9.8 40.7 40.7 LT0 75.0 6.3 51.3 51.3 LU0 97.9 6.1 52.5 15. HU10 89.1 7.6 46.0 46.0 HU21 95.4 10.1 27.3 40.0 HU22 94.0 10.1 26.3 26.3	3.4).0 7.2).4 3.7).1 3.5 7.4 3.3 7.5 5.7
ITH2 97.6 10.8 23.3 10.1 ITH3 94.2 10.0 19.3 ITH4 96.0 11.1 27.0 11.1 ITH5 91.9 15.1 28.0 17.1 17.1 17.1 17.2 17.2 28.0 17.2 28.0 17.2 17.2 17.2 17.2 17.2 17.2 27.7 17.2 <t< td=""><td>0.0 7.2 0.4 8.7 0.1 8.5 7.4 8.3 7.5 5.7</td></t<>	0.0 7.2 0.4 8.7 0.1 8.5 7.4 8.3 7.5 5.7
ITH3 94.2 10.0 19.3 ITH4 96.0 11.1 27.0 16.1 ITH5 91.9 15.1 28.0 17.1 17.1 17.1 17.2 17.2 28.0 17.2 27.2 17.2 17.2 17.2 27.7 17.2 17.2 27.7 17.2 17.2 17.2 27.7 17.2 <	7.2 0.4 3.7 0.1 3.5 7.4 3.3 7.5 5.7
ITH4 96.0 11.1 27.0 16 ITH5 91.9 15.1 28.0 17 ITI1 95.2 16.2 23.1 17 ITI2 96.7 11.5 28.0 28.0 ITI3 96.7 13.2 22.9 ITI4 92.6 12.2 27.7 27.7 CY0 72.0 9.1 47.8 LV0 87.1 9.8 40.7 LT0 75.0 6.3 51.3 LU0 97.9 6.1 52.5 15 HU10 89.1 7.6 46.0 46.0 HU21 95.4 10.1 27.3 40.0 HU22 94.0 10.1 26.3 40.0	0.4 3.7 9.1 3.5 7.4 3.3 7.5 5.7
ITH5 91.9 15.1 28.0 ITI1 95.2 16.2 23.1 ITI2 96.7 11.5 28.0 ITI3 96.7 13.2 22.9 ITI4 92.6 12.2 27.7 CY0 72.0 9.1 47.8 LV0 87.1 9.8 40.7 LT0 75.0 6.3 51.3 LU0 97.9 6.1 52.5 15 HU10 89.1 7.6 46.0 46.0 HU21 95.4 10.1 27.3 40.0 HU22 94.0 10.1 26.3 40.0	3.7 9.1 3.5 7.4 3.3 7.5 5.7
ITI1 95.2 16.2 23.1 ITI2 96.7 11.5 28.0 ITI3 96.7 13.2 22.9 ITI4 92.6 12.2 27.7 CY0 72.0 9.1 47.8 LV0 87.1 9.8 40.7 LT0 75.0 6.3 51.3 LU0 97.9 6.1 52.5 15 HU10 89.1 7.6 46.0 46.0 HU21 95.4 10.1 27.3 40.0 HU22 94.0 10.1 26.3 40.0	9.1 3.5 7.4 3.3 7.5 5.7
ITI2 96.7 11.5 28.0 ITI3 96.7 13.2 22.9 ITI4 92.6 12.2 27.7 CY0 72.0 9.1 47.8 LV0 87.1 9.8 40.7 LT0 75.0 6.3 51.3 LU0 97.9 6.1 52.5 15 HU10 89.1 7.6 46.0 46.0 HU21 95.4 10.1 27.3 40.0 40.1 40.0	3.5 7.4 3.3 7.5 5.7 5.8
ITI3 96.7 13.2 22.9 ITI4 92.6 12.2 27.7 CY0 72.0 9.1 47.8 LV0 87.1 9.8 40.7 LT0 75.0 6.3 51.3 LU0 97.9 6.1 52.5 15 HU10 89.1 7.6 46.0 46.0 HU21 95.4 10.1 27.3 40.0 40.0 40.0 HU22 94.0 10.1 26.3 40.0	7.4 3.3 7.5 5.7 5.8
ITI4 92.6 12.2 27.7 CY0 72.0 9.1 47.8 LV0 87.1 9.8 40.7 LT0 75.0 6.3 51.3 LU0 97.9 6.1 52.5 18 HU10 89.1 7.6 46.0 60.0	7.5 5.7 5.8
CY0 72.0 9.1 47.8 LV0 87.1 9.8 40.7 LT0 75.0 6.3 51.3 LU0 97.9 6.1 52.5 18 HU10 89.1 7.6 46.0 60.0	7.5 5.7 5.8
LTO 75.0 6.3 51.3 LUO 97.9 6.1 52.5 13 HU10 89.1 7.6 46.0 9 HU21 95.4 10.1 27.3 9 HU22 94.0 10.1 26.3	5.8
LU0 97.9 6.1 52.5 13 HU10 89.1 7.6 46.0 9 HU21 95.4 10.1 27.3 9 HU22 94.0 10.1 26.3	
HU10 89.1 7.6 46.0 HU21 95.4 10.1 27.3 HU22 94.0 10.1 26.3	۱ ۱
HU21 95.4 10.1 27.3 HU22 94.0 10.1 26.3	,.U
HU22 94.0 10.1 26.3	9.3
	9.4
HU23 06.1 15.6 24.6	1.7
11025	3.3
HU31 94.6 19.0 21.5	5.7
HU32 95.6 15.1 26.8	7.1
HU33 94.8 10.4 24.2	5.1
MTO 101.8 20.5 26.0	7.2
NL11 102.7 7.2 49.0 2	0.3
NL12 101.5 10.7 34.3 1	7.5
NL13 108.7 8.9 28.3 1	5.0
NL21 99.3 7.3 35.3 1	7.4
NL22 104.7 11.3 40.0 15	3.8
NL23 96.0 9.9 28.1 1 ^e	9.5
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	3.2
	3.4
	1.0
	2.4
	5.0
	3.8
	3.1
	3.3
	1.9
	2.4
	3.3
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	2.4
	2.4 2.6 2.5
	2.4 2.6 2.5 3.7
PL61 52.7 7.0 32.2	2.4 2.6 2.5

l ni ca	F1 0	10.2	20.0	2.5
PL62	51.8	10.3	30.8	2.5
PL63	58.0	8.0	42.6	5.0
PT11	96.0	19.5	31.3	8.2
PT15	90.0	20.5	27.1	8.0
PT16	97.5	14.5	25.7	9.5
PT17	86.8	18.2	35.7	13.1
PT18	99.4	20.3	22.0	8.2
PT20	91.8	35.8	16.2	6.3
PT30	94.7	26.2	26.6	8.4
RO11	86.3	15.4	20.2	1.3
RO12	86.1	17.9	21.3	1.1
RO21	74.9	22.5	18.6	1.0
RO22	80.2	20.7	15.1	0.8
RO31	79.2	21.8	16.4	1.9
RO32	69.1	7.0	46.2	1.6
RO41	85.3	16.1	19.6	1.0
RO42	79.1	13.5	21.4	1.7
SI01	87.7	3.8	36.4	10.6
SI02	91.1	4.0	44.3	13.5
SK01	89.2	4.7	53.9	6.9
SK02	81.4	5.2	20.3	3.1
SK03	72.7	6.5	25.7	2.6
SK04	59.8	7.9	23.3	1.8
FI19	53.1	8.4	42.5	23.9
FI1B	73.1	9.2	54.5	28.9
FI1C	58.0	10.6	37.1	24.4
FI1D	48.8	9.3	40.6	23.2
FI20	91.6	17.1	30.4	27.2
SE11	93.6	7.5	56.2	31.3
SE12	94.6	8.0	47.6	29.3
SE21	94.6	6.6	38.7	27.0
SE22	94.3	6.1	49.9	29.5
SE23	94.0	6.8	46.8	30.2
SE31	94.2	8.1	35.9	26.2
SE32	96.5	5.0	39.7	26.7
SE33	94.5	6.6	45.1	27.9
UKC	102.7	11.3	35.3	14.3
UKD	103.6	11.3	43.4	15.0
UKE	102.4	16.1	40.9	15.3
UKF	102.2	13.3	39.4	16.3
UKG	102.6	17.5	36.9	13.4
UKH	102.0	12.1	42.2	15.3
UKI	100.7	7.9	63.9	17.5
UKJ	101.9	11.3	48.1	16.8
UKK	102.5	11.9	46.4	17.2
UKL	102.6	14.2	41.2	16.3
UKM	46.7	10.9	52.7	15.3
UKN	99.8	15.8	40.8	11.5
Note: The participat	tion rate of children aged ()-4 are for 2012	. No regional-level data for part	ticination rate of

Note: The participation rate of children aged 0-4 are for 2012 . No regional-level data for participation rate of children aged 0-4 in HR.

Source: Eurostat Education statistics, LFS and own calculations.

Table A.4 Indicators of health and unmet healthcare needs in EU regions, 2014 (% of population)

(/0 01	population)				
	General health good/very good	Chronic illness	Limited in activities	Unmet need for medical care	Unmet need for dental care
AT1	69.5	37.6	34.2	0.2	0.6
AT2	66.5	35.7	34.1	0.0	0.2
AT3	71.5	33.7	30.9	0.1	0.3
BE1	77.1	23.6	21.5	5.9	7.4
BE2	77.5	22.7	22.1	1.4	2.4
BE3	70.0	29.6	28.4	3.4	5.5
BG3	63.5	21.9	19.0	7.7	9.0
BG4	68.4	19.0	16.9	3.5	4.4
CY0	77.7	32.0	18.3	4.7	8.6
CZ01	68.2	24.3	18.1	1.2	2.3
CZ02	64.9	28.9	20.5	0.4	1.3
CZ02	61.7	27.9	21.8	1.8	1.4
CZ04	61.4	30.9	25.5	1.7	1.5
CZ04	60.2	32.5	25.9	2.0	2.1
CZ03	56.8	37.2	26.2	0.6	1.3
CZ07	57.6	32.7	24.8	0.6	1.1
CZ08	55.0	38.1	26.6	0.6	2.3
DK0	72.4	28.0	28.2	1.4	4.4
EE0	51.9	45.8	34.1	11.3	8.6
EL3	77.5	21.3	20.3	13.0	16.2
EL4	68.8	26.9	26.6	11.0	13.6
EL5	71.9	25.3	25.1	8.6	10.4
EL6	71.8	25.1	27.1	10.5	10.5
ES11	57.5	44.8	33.1	0.7	6.5
ES12	69.8	29.0	24.0	0.3	6.2
ES13	72.8	27.0	27.9	0.1	6.3
ES21	75.4	35.0	22.0	0.4	5.8
ES22	79.5	29.9	19.9	0.3	4.8
ES23	72.4	33.7	22.7	1.2	7.4
ES24	76.6	25.1	17.5	0.8	2.7
ES30	76.7	22.4	19.4	0.3	5.6
ES41	71.3	26.7	23.1	0.2	4.5
ES42	71.3	33.1	26.6	0.2	10.7
ES43	66.3	37.9	22.2	0.1	6.1
ES51	77.8	25.2	21.2	0.1	6.1
ES52	72.3	31.2	26.2	0.6	7.2
ES53	76.9	26.4	24.5	1.7	5.8
ES61	73.4	29.6	24.7	1.5	11.6
ES62	64.5	39.6	31.8	0.7	20.7
ES63	73.3	34.5	19.1	0.0	5.6
ES64	72.8	42.9	22.1	0.0	5.6
ES70	68.8	31.0	19.7	0.9	6.7
FI19	66.9	46.5	32.7	4.0	4.9
FI1B	75.1	43.0	28.1	2.8	3.6
FI1C	68.0	47.1	34.6	3.0	2.6
FI1D	66.3	47.8	36.2	3.3	3.3
FR10	71.3	31.6	20.4	3.5	7.4
FR21	60.3	41.7	28.6	2.6	6.4
FR22	68.3	38.5	26.3	1.7	4.1
FR23	70.7	35.3	24.0	2.6	5.2
					7.7
FR24	67.8	36.3	24.4	4.7	
FR25	68.2	41.9	26.9	2.9	4.0
FR26	61.4	41.6	30.3	2.5	4.0
FR30	68.8	38.7	27.3	2.1	4.9

FR41	65.5	38.9	27.4	2.5	5.0
FR42	74.4	35.0	18.8	4.0	4.6
FR43	64.5	44.8	31.6	3.9	6.5
FR51	67.3	38.2	27.1	2.3	4.9
FR52	69.6	36.4	23.1	2.2	4.0
FR53	65.1	36.8	26.5	2.8	5.0
FR61	66.1	38.9	26.2	2.1	3.5
FR62	66.8	34.3	22.6	1.2	6.3
FR63	59.6	43.9	28.4	1.2	3.8
FR71	69.0	38.2	23.5	3.2	5.3
FR72	63.8	39.1	23.6	1.5	6.4
FR81					
	71.4	35.0	28.9	2.4	5.8
FR82	70.1	36.7	25.8	3.9	6.8
FR83	55.7	53.6	20.5	0.9	8.4
HR0	58.1	30.6	28.9	3.3	2.2
HU1	61.7	34.4	21.1	2.6	5.4
HU2	56.5	35.1	26.4	1.7	2.8
HU3	53.9	41.2	30.5	3.1	4.0
IE0	82.5	27.1	17.7	3.7	5.9
ITC	66.5	28.3	30.7	4.4	8.6
ITF	66.1	21.0	28.6	12.6	14.1
ITG	65.7	22.7	28.6	8.8	12.2
ITH	70.2	27.8	30.2	3.3	8.1
ITI	71.2	22.3	26.0	6.7	9.2
LV0	45.8	40.6	37.4	12.5	18.1
LT0	45.0	32.3	25.8	3.7	4.4
LU0	72.9	22.6	23.8	0.8	1.4
мто	74.8	28.1	10.1	1.1	1.1
PL1	57.0	36.8	25.4	8.3	6.0
PL2	58.4	34.9	26.4	7.6	4.0
PL3	58.0	31.5	23.0	7.9	4.9
PL4	59.1	33.2	22.9	7.2	4.7
PL5	57.0	32.4	20.5	8.9	5.1
PL6	60.1	33.4	24.9	6.9	4.1
RO1	72.7	20.0	28.7	7.6	8.4
RO2	69.0	18.9	25.4	12.5	12.6
RO3	69.7	19.8	25.0	9.0	8.4
RO4	73.0	15.8	20.6	6.9	5.7
SE1	80.9	34.6	10.5	1.3	4.8
SE2	79.3	35.1	12.7	1.7	3.5
SE3	79.8	35.6	11.8	1.5	2.8
SI0	64.8	32.2	29.8	0.2	0.7
SK0	64.7	30.3	32.0	2.1	2.4
UKC	67.1	35.5	24.6	1.5	2.9
UKD	66.4	39.2	25.9	1.7	3.3
UKE	65.8	36.3	23.3	3.0	4.0
UKF	69.0	35.8	23.3	2.1	3.4
UKG	70.3	33.0	23.1	1.5	2.0
UKH	69.4	36.8	23.9	2.6	2.4
UKI	75.0	22.7	16.8	1.6	2.6
UKJ	73.0	35.4	21.9	2.9	3.5
UKK	70.7	39.4	25.4	2.1	4.1
UKL	70.2	31.3	22.6	2.4	1.8
UKM	69.8	36.2	24.0	1.5	2.0
UKN	67.8	28.1	23.7	1.8	1.9
J1111	on data for DE NI	and DT		1.0	1.7

Note: No regional data for DE, NL and PT. Source: Eurostat, EU-SILC and own calculations.

	Leaking roof/damp walls	Unable to keep house warm	Lack of bath or shower	Lack of indoor toilet	Dwelling too dark
AT1	11.6	4.6	0.5	2.0	7.4
AT2	7.7	1.5	0.1	0.2	3.9
AT3	9.4	2.4	0.2	0.1	4.5
BE1	25.6	11.4	2.9	3.7	12.5
BE2	14.4	2.4	0.7	1.1	4.5
BE3	20.5	8.8	1.5	4.7	8.5
BG3	14.3	41.0	27.0	39.2	7.8
BG4	12.0	39.8	20.3	23.3	5.9
CY0	25.5	27.5	1.1	1.1	3.9
CZ01	6.3	4.8	2.2	2.5	4.8
CZ02	9.3	4.1	1.1	1.7	2.5
CZ03	6.6	5.6	0.6	0.9	3.4
CZ04	7.7	13.9	0.2	0.3	3.7
CZ05	8.4	4.4	0.4	0.5	2.4
CZ06	14.4	5.7	0.3	0.8	4.7
CZ07	10.9	5.6	0.5	1.4	4.1
CZ08	8.4	6.2	1.2	1.4	4.6
DK0	15.0	2.9	2.3	0.6	4.2
EE0	15.9	1.7	8.9	7.4	5.8
EL3	12.5	32.8	0.1	0.1	6.7
EL4	17.7	36.5	1.2	0.8	9.5
EL5	14.2	27.4	0.3	0.1	6.3
EL6	13.1	38.0	2.0	1.4	5.5
ES11	35.1	14.1	0.2	0.2	4.1
ES12	15.0	12.5	1.3	0.1	1.2
ES13	9.9	8.7	0.0	0.0	2.5
ES21	13.2	6.2	0.0	0.0	3.5
ES22	10.8	1.0	0.0	0.0	4.9
ES23	6.5	7.8	0.1	0.0	2.7
ES24	7.6	4.6	0.2	0.0	5.9
ES30	12.9	8.2	0.9	0.9	6.9
ES41	11.5	4.6	0.2	0.2	2.9
ES42	15.3	14.3	1.7	1.6	4.2
ES43	29.2	7.3	0.1	0.0	9.7
ES51	7.8	9.3	0.1	0.1	4.8
ES52	12.1	18.8	0.2	0.2	4.8
ES53	24.5	7.7	1.0	1.0	4.4
ES61	24.3	15.8	0.0	0.1	5.7
ES62	24.3 13.7	19.5	1.0	1.0	4.6
ES63	33.0	13.2	0.0	0.0	22.9
ES64	23.7	14.4	1.7	0.0	14.1
ES70	37.3	0.2	0.1	0.7	6.9
FI19	4.7	1.3	1.3	1.1	2.8
FI1B	5.1	1.8	0.8	0.6	4.2
FI1C	5.1	1.4	1.8	1.2	4.2
FI1D	4.9	1.4	0.8	0.6	3.2
FR10	13.3	5.6	1.8	1.8	3.2 8.6
FR21	13.3	7.2	0.6	0.6	7.0
FR21	11.6 17.4	1.7	2.9	3.0	10.9
FR23	18.8	2.9 6.0	0.9	0.4	9.5
FR24	16.2		0.3	0.4	9.1
FR25	11.9	5.7	1.0	1.1	8.7
FR26	7.0	7.5	0.0	0.0	5.3
FR30	18.3	7.3	1.7	1.5	9.4
FR41	10.0	6.4	1.4	1.4	7.2

FR42 14.7 4.2 1.7 1.2 5.9 FR43 12.9 4.1 2.1 1.4 5.3 FR51 9.5 5.3 1.5 1.4 6.5 FR52 16.4 8.5 1.0 0.9 7.0 FR53 11.6 6.8 2.1 2.1 5.3 FR61 10.9 6.7 0.5 0.5 8.8 FR62 15.2 5.5 1.9 1.8 6.6 FR63 9.8 6.9 0.5 0.3 4.4 FR71 10.3 4.7 1.0 1.0 7.3 FR81 10.4 6.3 4.7 1.0 1.0 7.3 FR82 18.1 7.4 1.8 2.0 9.6 FR83 35.3 5.9 0.0 0.0 0.0 20.5 FR83 35.3 5.9 0.0 0.0 0.0 20.5 HU1 29.0 12.8 2.0 4.0 12.1 HU2 24.5 7.7 3.6 4.2 5.9 HU1 29.0 12.8 2.0 4.0 12.1 HU2 24.5 7.7 3.6 4.2 5.9 HU1 29.0 TRT 13.7 6.9 7.6 9.6 TTT 12.7 0.7 2.2 6.8 TTT 13.7 6.9 7.6 9.6 TTT 22.7 11.7 0.7 2.2 6.8 TTT 24.3 26.7 0.4 0.7 7.8 TTT 25.0 11.1 0.3 0.3 7.7 UV0 27.5 16.8 16.6 15.8 8.9 UV0 27.5 16.8 16.6 15.8 8.9 LU0 15.0 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.9 FR01 11.0 0.2 1.1 10.0 1.0 7.9 TTT 11.0 0.3 0.3 7.7 UV0 27.5 16.8 16.6 15.8 8.9 LU0 15.0 0.6 0.8 0.8 0.8 5.6 MT0 11.0 0.2 1.1 0.3 0.3 7.4 PL1 9.3 8.7 5.8 5.1 5.9 PL2 8.4 8.8 2.8 2.2 4.9 PL3 7.6 11.0 0.5 2.1 0.6 0.3 7.4 PL1 9.3 8.7 5.8 5.1 5.9 PL3						
FRS1	FR42	14.7	4.2	1.7	1.2	5.9
FRS2	FR43	12.9	4.1	2.1	1.4	5.3
FRS3	FR51	9.5	5.3	1.5	1.4	6.5
FR61	FR52	16.4	8.5	1.0	0.9	7.0
FR61	FR53	11.6	6.8	2.1	2.1	5.3
FR62	FR61				0.5	8.8
FR63					1.8	
FR71						
FR72 11.0 4.5 1.2 0.8 8.3 FR81 10.4 6.3 4.7 4.5 6.3 FR81 10.4 6.3 4.7 4.5 6.3 9.6 FR82 18.1 7.4 1.8 2.0 9.6 FR83 35.3 5.9 0.0 0.0 0.0 20.5 HR0 11.7 9.7 3.5 3.5 5.5 5.5 HU1 29.0 12.8 2.0 4.0 12.1 HU2 24.5 7.7 3.6 4.2 5.9 1.2 HU3 27.1 13.7 6.9 7.6 9.6 FR83 27.1 FR84 27.1 13.7 6.9 7.6 9.6 FR84 27.1 FR84 27.1 13.7 6.9 7.8 FR84 27.1						
FR81			4.5			
FR82 18.1 7.4 1.8 2.0 9.6 FR83 35.3 5.9 0.0 0.0 0.0 20.5 FR83 35.3 5.9 0.0 0.0 0.0 20.5 5.5 HR80 11.7 9.7 3.5 3.5 3.5 5.5 HU1 29.0 12.8 2.0 4.0 12.1 HR20 24.5 7.7 3.6 4.2 5.9 FR83 27.1 13.7 6.9 7.6 9.6 IEO 14.5 8.9 0.4 0.2 5.7 ITC 22.7 11.7 0.7 2.2 6.8 ITG 27.0 41.1 0.6 0.0 7 7.8 ITG 27.0 41.1 0.6 0.0 7.9 ITH 28.0 9.8 0.3 0.1 6.2 ITT 25.0 11.1 0.3 0.3 7.7 ITC 18.9 26.5 13.8 14.5 6.3 ILUO 15.0 0.6 0.8 0.8 0.8 5.6 MRT0 11.0 22.1 0.6 0.3 7.4 PL1 9.3 8.7 5.8 5.1 5.9 PL2 8.4 8.8 2.8 2.2 4.9 PL2 8.4 8.8 2.8 2.2 4.9 PL4 11.6 9.2 3.2 2.9 4.0 PL4 11.6 9.2 3.2 2.9 4.0 PL4 11.6 9.2 3.2 2.9 4.0 PL5 12.2 I2.4 2.5 2.3 5.2 PL6 13.8 IS.8 IS.8 IS.8 IS.8 IS.9 IS.9 IS.9 IS.9 IS.9 IS.9 IS.9 IS.9						
FR83						
HRO 11.7 9.7 3.5 3.5 5.5 HU1 29.0 12.8 2.0 4.0 12.1 HU1 29.0 12.1 13.7 6.9 7.6 9.6 15.0 14.5 8.9 0.4 0.2 5.7 HU3 27.1 13.7 6.9 7.6 9.6 15.0 14.5 8.9 0.4 0.2 5.7 HT 22.7 11.7 0.7 2.2 6.8 HT 24.3 26.7 0.4 0.7 7.8 HT 24.3 26.7 0.4 0.7 7.8 HT 25.0 11.1 0.6 0.0 7.9 HT 28.0 9.8 0.3 0.1 6.2 HT 25.0 11.1 0.3 0.3 0.3 7.7 LV 0 27.5 16.8 16.6 15.8 8.9 LT 0 18.9 26.5 13.8 14.5 6.3 LU 0 15.0 0.6 0.8 0.8 0.8 5.6 MT 0 11.0 22.1 0.6 0.3 7.4 PL 1 9.3 8.7 5.8 5.1 5.9 PL 2 8.4 8.8 2.8 2.2 4.9 PL 3 7.6 11.0 6.1 5.9 4.0 PL 3 14.0 PL 4 11.6 9.2 3.2 2.9 4.0 PL 5 12.2 12.4 2.5 2.3 5.2 PL 6 9.4 6.7 4.9 3.4 5.6 RO 1 10.9 10.5 23.4 27.0 5.8 RO 2 16.0 11.0 44.4 44.2 6.9 RO 3 10.3 13.4 27.7 29.3 5.4 RO 4 13.8 15.8 29.8 31.6 4.7 SE 1 6.8 0.7 1.5 1.1 5.5 SE 1 6.8 0.7 1.5 1.1 5.5 SE 1 6.8 0.7 1.5 1.1 5.2 SKO 7.0 6.1 2.2 3.0 3.2 UKC 18.2 13.7 0.2 0.4 4.4 11. 0.7 6.8 SE 3 8.4 0.5 1.3 0.9 6.5 SI 0 29.9 5.6 1.2 1.1 5.2 SKO 7.0 6.1 2.2 3.0 3.2 UKC 18.2 13.7 0.2 0.4 4.4 11. 0.7 6.8 UKB 11.7 10.8 1.1 0.7 6.8 UKB 11.9 10.0 0.0 0.0 0.0 3.5 UKH 14.2 5.9 1.4 1.1 5.8 UKB 11.8 6.3 UKJ 16.9 5.8 1.2 1.2 1.2 6.0 UKK 18.9 12.2 0.7 0.5 5.7 UKK 18.2 10.7 0.1 0.2 5.7 UKK 18.2 10.7 0.1 0.2 5.7 UKK 18.2 10.7 0.1 0.2 5.7 UKK 14.0 8.0 0.2 0.2 3.3						
HU1						
HU2						
HU3 27.1 13.7 6.9 7.6 9.6 IEO 14.5 8.9 0.4 0.2 5.7 ITC 22.7 11.7 0.7 2.2 6.8 ITF 24.3 26.7 0.4 0.7 7.8 ITG 27.0 41.1 0.6 0.0 7.9 ITH 28.0 9.8 0.3 0.1 6.2 ITH 25.0 11.1 0.3 0.3 7.7 LVO 27.5 16.8 16.6 15.8 8.9 LTO 18.9 26.5 13.8 14.5 6.3 LUO 15.0 0.6 0.8 0.8 5.6 MT0 11.0 22.1 0.6 0.3 7.4 PL1 9.3 8.7 5.8 5.1 5.9 PL2 8.4 8.8 2.8 2.2 4.9 PL3 7.6 11.0 6.1 5.9 4.0 PL4 11.6 9.2 3.2 2.9 4.0 PL5 12.2 12.4 2.5 2.3 5.2 PL6 9.4 6.7 4.9 3.4 5.6 RO2 16.0 11.0 44.4 44.2 6.9 RO3 10.3 13.4 27.7 29.3 5.4 RO4 13.8 15.8 29.8 31.6 4.7 SE2 7.4 1.0 1.0 1.0 0.6 5.4 SE3 8.4 0.5 1.3 0.9 6.5 SE2 7.4 1.0 1.0 1.0 0.6 5.4 SE3 8.4 0.5 1.3 0.9 6.5 SE2 7.4 1.0 1.0 1.0 0.6 5.4 SE3 8.4 0.5 1.3 0.9 6.5 SE2 7.4 1.0 1.0 1.0 0.6 5.4 SE3 8.4 0.5 1.3 0.9 6.5 SE2 7.4 1.0 1.0 1.0 0.6 5.4 SE3 8.4 0.5 1.3 0.9 6.5 SE2 7.4 1.0 1.0 1.0 0.6 5.4 SE3 8.4 0.5 1.3 0.9 6.5 SE2 7.4 1.0 1.0 1.0 0.6 5.4 SE3 8.4 0.5 1.3 0.9 6.5 SE2 7.4 1.0 1.0 0.0 0.6 5.4 SE3 8.4 0.5 1.3 0.9 6.5 SE2 7.4 1.0 1.0 1.0 0.6 5.4 SE3 8.4 0.5 1.3 0.9 6.5 SE2 7.4 1.0 1.0 1.0 0.6 5.4 SE3 8.4 0.5 1.3 0.9 6.5 SE2 7.4 1.0 1.0 0.0 0.6 5.4 SE3 8.4 0.5 1.3 0.9 6.5 SE2 7.4 1.0 1.0 0.0 0.6 5.4 SE3 8.4 0.5 1.3 0.9 6.5 SE2 7.4 1.0 1.0 0.0 0.6 5.4 SE3 8.4 0.5 1.3 0.9 6.5 SE2 7.4 1.0 1.0 0.0 0.6 5.4 SE3 8.4 0.5 1.3 0.9 6.5 SE2 7.4 1.0 1.0 0.0 0.6 5.4 SE3 8.4 0.5 1.3 0.9 6.5 SE2 7.4 1.0 1.0 0.0 0.6 5.4 SE3 8.4 0.5 1.3 0.9 6.5 SE2 7.4 1.0 1.0 0.0 0.0 0.0 0.0 0.0 SE4 SE5 SE6						
IEO 14.5 8.9 0.4 0.2 5.7 ITC 22.7 11.7 0.7 2.2 6.8 ITF 24.3 26.7 0.4 0.7 7.8 ITF 24.3 26.7 0.4 0.7 7.8 ITG 27.0 41.1 0.6 0.0 7.9 ITH 28.0 9.8 0.3 0.1 6.2 ITT 25.0 11.1 0.3 0.3 7.7 LV0 27.5 16.8 16.6 15.8 8.9 LT0 18.9 26.5 13.8 14.5 6.3 LU0 15.0 0.6 0.8 0.8 5.6 MT0 11.0 22.1 0.6 0.3 7.4 PL1 9.3 8.7 5.8 5.1 5.9 PL2 8.4 8.8 2.8 2.2 4.9 PL3 7.6 11.0 6.1 5.9 4.0 PL4 11.6 9.2 3.2 2.9 4.0 PL4 11.6 9.2 3.2 2.9 4.0 PL5 12.2 12.4 2.5 2.3 5.2 PL6 9.4 6.7 4.9 3.4 5.6 RO1 10.9 10.5 23.4 27.0 5.8 RO2 16.0 11.0 44.4 44.2 6.9 RO2 16.0 11.0 44.4 44.2 6.9 RO3 10.3 13.4 27.7 29.3 5.4 RO4 13.8 15.8 29.8 31.6 4.7 SE1 6.8 0.7 1.5 1.1 5.5 SE2 7.4 1.0 1.0 0.6 5.4 SE2 7.4 1.0 1.0 0.6 5.4 SE2 7.4 1.0 1.0 0.6 5.4 SE3 8.4 0.5 1.3 0.9 6.5 SI0 29.9 5.6 1.2 1.1 5.2 SK0 7.0 6.1 1.7 10.8 1.1 0.7 6.8 UKE 16.2 9.1 1.3 0.6 4.2 UKF 16.5 9.2 0.0 0.0 0.0 4.4 UKG 13.9 10.0 0.0 0.0 0.0 3.5 UKK 18.9 12.2 10.6 1.8 1.8 1.8 6.3 UKJ 16.9 5.8 1.2 UKL 14.2 5.9 1.4 1.1 5.8 UKI 24.2 10.6 1.8 1.8 1.8 6.3 UKJ 16.9 5.8 1.2 UKL 14.2 5.9 1.4 1.1 5.8 UKK 18.9 12.2 0.7 0.5 5.7 UKM 14.0 8.0 0.2 0.2 0.2 3.3						
ITC						
ITF						
ITG						
ITH 28.0 9.8 0.3 0.1 6.2 ITI 25.0 11.1 0.3 0.3 7.7 LVO 27.5 16.8 16.6 15.8 8.9 LTO 18.9 26.5 13.8 14.5 6.3 LUO 15.0 0.6 0.8 0.8 0.8 5.6 MTO 11.0 22.1 0.6 0.3 7.4 PL1 9.3 8.7 5.8 5.1 5.9 PL2 8.4 8.8 2.8 2.2 4.9 PL3 7.6 11.0 6.1 5.9 4.0 PL4 11.6 9.2 3.2 2.9 4.0 PL5 12.2 12.4 2.5 2.3 5.2 PL6 9.4 6.7 4.9 3.4 5.6 RO2 16.0 11.0 44.4 44.2 6.9 RO3 10.3 13.4 27.7 29.3 5.4 RO4 13.8 15.8 29.8 31.6 4.7 SE1 6.8 0.7 1.5 1.1 5.5 SE2 7.4 1.0 1.0 0.6 5.4 SE3 8.4 0.5 1.3 0.9 6.5 SIO 29.9 5.6 1.2 1.1 5.2 UKC 18.2 13.7 0.2 0.4 5.4 UKC 18.2 13.7 0.2 0.4 5.4 UKG 13.9 10.0 0.0 0.0 0.0 3.5 UKK 14.2 5.9 1.4 1.1 5.8 UKI 24.2 10.6 1.8 1.8 1.8 6.3 UKI 24.2 10.6 1.8 1.8 1.8 6.3 UKI 24.2 10.6 1.8 1.2 1.2 6.0 UKK 18.9 12.2 0.7 0.5 4.5 UKL 18.2 10.7 0.1 0.2 5.7 UKK 18.9 12.2 0.7 0.5 4.5 UKL 18.2 10.7 0.1 0.2 5.7 UKM 14.0 8.0 0.2 0.2 3.3						
ITT						
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Note: No regional data for DE, NL and PT. Source: Eurostat, EU-SILC and own calculations.

Table A.6 Housing deprivation indicators in EU regions, 2014 (% of population)

Tubic Aid	riousing acprivat	ion marcatoro m	o regions, 2014 (%
	Housing deprivation	Overcrowding	Severe housing deprivation
AT1	18.6	20.1	6.5
AT2	10.9	11.6	2.1
AT3	12.4	13.1	2.5
BE1	35.3	7.7	4.1
BE2	18.0	1.0	0.5
BE3	29.4	2.9	1.1
BG3	46.2	43.3	22.0
BG4	31.7	43.7	16.3
CY0	27.4	3.4	2.1
CZ01	11.4	22.1	3.2
CZ02	12.2	14.5	2.9
CZ02	9.2	20.9	3.5
CZ04	9.1	21.8	2.9
CZ05	9.9	15.6	2.4
CZ06	17.2	19.3	5.9
CZ07	13.2	20.2	5.4
CZ08	12.3	30.0	4.7
DK0	19.1	8.3	2.5
EE0	24.6	14.6	4.4
EL3	15.9	29.3	5.6
EL4	22.3	24.0	7.8
EL5	17.2	28.5	6.0
EL6	15.9	26.6	6.5
ES11	36.5	2.1	1.3
ES12	15.7	0.9	0.3
ES13	12.1	0.8	0.2
ES21	15.9	1.0	0.5
ES22	15.5	2.9	1.0
ES23	8.8	1.4	0.1
ES24	12.1	1.8	0.8
ES30	17.9	6.5	1.3
ES41	12.9	2.7	0.5
ES42	19.8	2.6	1.6
ES43	33.8	3.8	0.7
ES51	11.4	7.6	1.2
ES52	15.0	3.0	1.0
ES53	25.7	9.7	3.3
ES61	26.3	7.5	3.2
ES62	17.9	3.4	2.5
ES63	38.6	29.0	11.7
ES64	25.6	14.6	4.9
ES70	39.4	12.1	6.5
	8.7	5.1	0.6
FI19			
FI1B	9.6	9.4	0.9
FI1C	10.4	6.5	1.0
FI1D	8.3	7.5	0.7
FR10	19.3	14.4	3.6
FR21	16.8	3.5	0.4
FR22	25.4	9.6	4.1
FR23	23.0	5.0	1.5
FR24	22.6	7.7	4.4
FR25	17.2	2.3	0.7
FR26	11.6	3.3	2.4
FR30	25.4	6.3	3.0
FR41	17.8	4.8	3.2

FR42	20.1	12.2	2.1
FR43	16.5	2.7	2.7
FR51	14.9	3.3	0.6
FR52	19.9	4.4	1.7
FR53	15.8	2.6	1.1
FR61	16.6	3.5	0.5
FR62	21.2	4.0	1.5
FR63	12.0	3.8	3.3
FR71	15.1	7.4	2.2
FR72	18.3	2.4	0.6
FR81	18.0	5.5	2.6
FR82	23.5	13.0	4.9
FR83	45.5	18.8	18.8
HR0	17.2	42.8	9.1
HU1	33.1	41.1	18.8
HU2	26.4	43.1	15.3
HU3	32.6	42.5	18.4
IE0	17.9	3.3	1.0
ITC	27.0	24.9	8.3
ITF	26.8	35.9	12.5
ITG	29.4	27.5	10.7
ITH	30.4	19.0	7.8
ITI	27.4	28.9	9.9
LV0	38.2	40.1	18.0
LT0	29.5	28.9	11.5
LU0	19.4	7.3	2.3
MT0	16.8	4.6	1.4
PL1	16.3	45.1	11.4
PL2	12.8	41.4	8.0
PL3	13.8	46.1	9.3
PL4	15.6	45.0	10.8
PL5	17.3	43.6	11.0
PL6	15.3	47.7	10.7
RO1	31.7	62.4	22.0
RO2	50.7	52.5	28.9
RO3	35.7	49.1	19.0
RO4	38.5	44.1	18.2
SE1	12.7	13.0	2.9
SE2	12.6	10.3	2.1
SE3	15.0	7.6	1.7
SI0	32.1	15.0	6.6
SK0	9.7	38.8	5.0
UKC	21.3	5.5	1.9
UKD	18.5	4.2	1.3
UKE	19.5	3.9	2.3
UKF	18.8	5.1	1.0
UKG	16.0	5.2	2.2
UKH	19.2	5.4	1.4
UKI	27.6	22.6	8.5
UKJ	22.0	5.4	2.1
UKK	21.5	6.9	2.8
UKL	21.6	3.4	0.5
UKM	16.0	5.1	1.5
UKN	14.2	4.0	0.9
Mata. Ma.	regional data available for	DE NI 1 DT	

Note: No regional data available for DE, NL and PT. Source: Eurostat, EU-SILC and own calculations.

Table A.7 Codes and Names of the NUTS-1 and NUTS-2 regions

Table	A.7 Codes and Names of the NUTS-1 and NUTS-2
Code	Region Name
BE	Belgium
BE1	Région de Bruxelles Capitale / Brussels Hoofdstedelijk Gewest
BE10	Région de Bruxelles Capitale / Brussels Hoofdstedelijk Gewest
BE2	Vlaams Gewest
BE21	Prov. Antwerpen
BE22	Prov. Limburg (BE)
BE23	Prov. Oost Vlaanderen
BE24	Prov. Vlaams Brabant
BE25	Prov. West Vlaanderen
BE3	Région wallonne
BE31	Prov. Brabant Wallon
BE32	Prov. Hainaut
BE33	Prov. Liège
BE34	Prov. Luxembourg (BE)
BE35	Prov. Namur
BG	Bulgaria
BG3	Severna i yugoiztochna Bulgaria
BG31	Severozapaden
BG32	Severen tsentralen
BG33	Severoiztochen
BG34	Yugoiztochen
BG4	Yugozapadna i yuzhna tsentralna Bulgaria
BG41	Yugozapaden
BG42	Yuzhen tsentralen
CZ	Czech Republic
CZ0	Ceská republika
CZ01	Praha Chuada (Casha)
CZ02 CZ03	Strední Cechy
CZ03	Jihozápad Severozápad
CZ04	Severovýchod
CZ06	Jihovýchod
CZ07	Strední Morava
CZ08	Moravskoslezsko
DK	Denmark
DK0	Danmark
DK01	Hovedstaden
DK02	Sjælland
DK03	Syddanmark
DK04	Midtjylland
DK05	Nordjylland
DE	Germany (until 1990 former territory of the FRG)
DE1	Baden Württemberg
DE11	Stuttgart
DE12	Karlsruhe
DE13	Freiburg
DE14	Tübingen
DE2	Bayern
DE21	Oberbayern
DE22	Niederbayern
DE23	Oberpfalz
DE24	Oberfranken
DE25	Mittelfranken
DE26	Unterfranken
DE27	Schwaben
DE3	Berlin

DE30 Berlin DE4 Brandenburg DE40 Brandenburg DE5 Bremen DE50 Bremen DE6 Hamburg DE60 Hamburg DE7 Hessen DE71 Darmstadt DE72 Gießen DE73 Kassel DE8 Mecklenburg Vorpommern DE80 Mecklenburg Vorpommern DE9 Niedersachsen DE91 Braunschweig DE92 Hannover DE93 Lüneburg DE94 Weser Ems DEA Nordrhein Westfalen DEA1 Düsseldorf DEA2 Köln DEA3 Münster DEA4 Detmold DEA5 Arnsberg DEB Rheinland Pfalz DEB1 Koblenz DEB2 Trier DEB3 Rheinhessen Pfalz DEC Saarland DEC0 Saarland DED Sachsen DED2 Dresden DED4 Chemnitz DED5 Leipzig Sachsen Anhalt DEE DEE0 Sachsen Anhalt DEF Schleswig Holstein DEF0 Schleswig Holstein DEG Thüringen DEG0 Thüringen EE Estonia EE0 Eesti EE00 Eesti ΙE Ireland Éire/Ireland IE0 IE01 Border, Midland and Western IE02 Southern and Eastern EL Greece EL5 Voreia Ellada EL51 Anatoliki Makedonia, Thraki EL52 Kentriki Makedonia EL53 Dytiki Makedonia EL54 **Ipeiros** EL1 Voreia Ellada (NUTS 2010) EL11 Anatoliki Makedonia, Thraki (NUTS 2010) EL12 Kentriki Makedonia (NUTS 2010)

EL13

EL14

EL6

Dytiki Makedonia (NUTS 2010) Thessalia (NUTS 2010)

Kentriki Ellada

- EL61 Thessalia
- EL62 Ionia Nisia
- EL63 Dytiki Ellada
- EL64 Sterea Ellada
- EL65 Peloponnisos
- EL2 Kentriki Ellada (NUTS 2010)
- EL21 Ipeiros (NUTS 2010)
- EL22 Ionia Nisia (NUTS 2010)
- EL23 Dytiki Ellada (NUTS 2010)
- EL24 Sterea Ellada (NUTS 2010)
- EL25 Peloponnisos (NUTS 2010)
- EL3 Attiki
- EL30 Attiki
- EL4 Nisia Aigaiou, Kriti
- EL41 Voreio Aigaio
- EL42 Notio Aigaio
- EL43 Kriti
- ES Spain
- ES1 Noroeste (ES)
- ES11 Galicia
- ES12 Principado de Asturias
- ES13 Cantabria
- ES2 Noreste (ES)
- ES21 País Vasco
- ES22 Comunidad Foral de Navarra
- ES23 La Rioja
- ES24 Aragón
- ES3 Comunidad de Madrid
- ES30 Comunidad de Madrid
- ES4 Centro (ES)
- ES41 Castilla y León
- ES42 Castilla-La Mancha
- ES43 Extremadura
- ES5 Este (ES)
- ES51 Cataluña
- ES52 Comunidad Valenciana
- ES53 Illes Balears
- ES6 Sur (ES)
- ES61 Andalucía
- ES62 Región de Murcia
- ES63 Ciudad Autónoma de Ceuta (ES)
- ES64 Ciudad Autónoma de Melilla (ES)
- ES7 Canarias (ES)
- ES70 Canarias (ES)
- FR France
- FR1 Île de France
- FR10 Île de France
- FR2 Bassin Parisien
- FR21 Champagne-Ardenne
- FR22 Picardie
- FR23 Haute-Normandie
- FR24 Centre (FR)
- FR25 Basse-Normandie
- FR26 Bourgogne
- FR3 Nord Pas-de-Calais
- FR30 Nord Pas-de-Calais
- FR4 Est (FR)
- FR41 Lorraine
- FR42 Alsace

FR43 Franche-Comté FR5 Ouest (FR) Pays de la Loire FR51 FR52 Bretagne Poitou-Charentes FR53 FR6 Sud-Ouest (FR) FR61 Aquitaine FR62 Midi-Pyrénées FR63 Limousin FR7 Centre Est (FR) FR71 Rhône Alpes FR72 Auvergne FR8 Méditerranée FR81 Languedoc-Roussillon FR82 Provence-Alpes-Côte-d'Azur FR83 Corse FRA Départements d'outre mer FRA1 Guadeloupe FRA2 Martinique FRA3 Guyane FRA4 La Réunion FRA5 Mayotte FR9 Départements d'outre mer (NUTS 2010) FR91 Guadeloupe (NUTS 2010) FR92 Martinique (NUTS 2010) FR93 Guyane (NUTS 2010) FR94 Réunion (NUTS 2010) Croatia HR HR0 Hrvatska HR03 Jadranska Hrvatska HR04 Kontinentalna Hrvatska ΙT Italy ITC Nord Ovest ITC1 Piemonte Valle d'Aosta/Vallée d'Aoste ITC2 ITC3 Liguria ITC4 Lombardia ITH Nord Est ITH1 Provincia Autonoma di Bolzano/Bozen ITH2 Provincia Autonoma di Trento ITH3 Veneto ITH4 Friuli Venezia Giulia ITH5 Emilia Romagna ITI Centro (IT) ITI1 Toscana ITI2 Umbria Marche ITI3 Lazio ITI4 ITF Sud ITF1 Abruzzo ITF2 Molise ITF3 Campania ITF4 Puglia ITF5 Basilicata ITF6 Calabria ITG Isole ITG1 Sicilia ITG2 Sardegna

CY

Cyprus

CY0 **Kypros** CY00 Kypros LV Latvia Latvija LV0 LV00 Latvija LT Lithuania LT0 Lietuva LT00 Lietuva LU Luxembourg LU0 Luxembourg LU00 Luxembourg HU Hungary HU1 Közép Magyarország HU10 Közép Magyarország HU2 Dunántúl HU21 Közép Dunántúl Nyugat Dunántúl HU22 HU23 Dél Dunántúl Alföld és Észak HU3 HU31 Észak Magyarország HU32 Észak Alföld HU33 Dél Alföld MT Malta MT0 Malta MT00 Malta NLNetherlands NL1 Noord Nederland NL11 Groningen NL12 Friesland (NL) NL13 Drenthe NL2 Oost Nederland NL21 Overijssel NL22 Gelderland NL23 Flevoland NL3 West Nederland NL31 Utrecht Noord Holland NL32 NL33 Zuid Holland NL34 Zeeland NL4 Zuid Nederland NL41 **Noord Brabant** NL42 Limburg (NL) ΑT Austria AT1 Ostösterreich AT11 Burgenland (AT) AT12 Niederösterreich AT13 Wien AT2 Südösterreich AT21 Kärnten AT22 Steiermark AT3 Westösterreich AT31 Oberösterreich AT32 Salzburg AT33 Tirol AT34 Vorarlberg PLPoland PL1 Region Centralny

PL11

PL12

Lódzkie

Mazowieckie

- PL2 Region Poludniowy
- PL21 Malopolskie
- PL22 Slaskie
- PL3 Region Wschodni
- PL31 Lubelskie
- PL32 Podkarpackie
- PL33 Swietokrzyskie
- PL34 Podlaskie
- PL4 Region Pólnocno Zachodni
- PL41 Wielkopolskie
- PL42 Zachodniopomorskie
- PL43 Lubuskie
- PL5 Region Poludniowo Zachodni
- PL51 Dolnoslaskie
- PL52 Opolskie
- PL6 Region Pólnocny
- PL61 Kujawsko Pomorskie
- PL62 Warminsko Mazurskie
- PL63 Pomorskie
- PT Portugal
- PT1 Continente
- PT11 Norte
- PT15 Algarve
- PT16 Centro (PT)
- PT17 Área Metropolitana de Lisboa
- PT18 Alentejo
- PT2 Região Autónoma dos Açores (PT)
- PT20 Região Autónoma dos Açores (PT)
- PT3 Região Autónoma da Madeira (PT)
- PT30 Região Autónoma da Madeira (PT)
- RO Romania
- RO1 Macroregiunea unu
- RO11 Nord Vest
- RO12 Centru
- RO2 Macroregiunea doi
- RO21 Nord Est
- RO22 Sud Est
- RO3 Macroregiunea trei
- RO31 Sud Muntenia
- RO32 Bucuresti Ilfov
- RO4 Macroregiunea patru
- RO41 Sud Vest Oltenia
- RO42 Vest
- SI Slovenia
- SIO Slovenija
- SI03 Vzhodna Slovenija
- SI01 Vzhodna Slovenija (NUTS 2010)
- SI04 Zahodna Slovenija
- SI02 Zahodna Slovenija (NUTS 2010)
- SK Slovakia
- SK0 Slovensko
- SK01 Bratislavský kraj
- SK02 Západné Slovensko
- SK03 Stredné Slovensko
- SK04 Východné Slovensko
- FI Finland
- FI1 Manner Suomi
- FI19 Länsi Suomi
- FI1B Helsinki Uusimaa

- FI1C Etelä Suomi
- FI1D Pohjois ja Itä Suomi
- FI2 Åland
- FI20 Åland
- SE Sweden
- SE1 Östra Sverige
- SE11 Stockholm SE12 Östra Mellansverige
- SE2 Södra Sverige
- SE21 Småland med öarna
- SE22 Sydsverige
- SE23 Västsverige
- SE3 Norra Sverige
- SE31 Norra Mellansverige
- SE32 Mellersta Norrland
- SE33 Övre Norrland
- UK United Kingdom
- UKC North East (UK)
- UKC1 Tees Valley and Durham
- UKC2 Northumberland and Tyne and Wear
- UKD North West (UK)
- UKD1 Cumbria
- UKD3 Greater Manchester
- UKD4 Lancashire
- UKD6 Cheshire
- UKD7 Merseyside
- UKE Yorkshire and The Humber
- UKE1 East Yorkshire and Northern Lincolnshire
- UKE2 North Yorkshire
- UKE3 South Yorkshire
- UKE4 West Yorkshire
- UKF East Midlands (UK)
- UKF1 Derbyshire and Nottinghamshire
- UKF2 Leicestershire, Rutland and Northamptonshire
- UKF3 Lincolnshire
- UKG West Midlands (UK)
- UKG1 Herefordshire, Worcestershire and Warwickshire
- UKG2 Shropshire and Staffordshire
- UKG3 West Midlands
- UKH East of England
- UKH1 East Anglia
- UKH2 Bedfordshire and Hertfordshire
- UKH3 Essex
- UKI London
- UKI1 Inner London (NUTS 2010)
- UKI2 Outer London (NUTS 2010)
- UKI3 Inner London West
- UKI4 Inner London East
- UKI5 Outer London East and North East
- UKI6 Outer London South
- UKI7 Outer London West and North West
- UKJ South East (UK)
- UKJ1 Berkshire, Buckinghamshire and Oxfordshire
- UKJ2 Surrey, East and West Sussex
- UKJ3 Hampshire and Isle of Wight
- UKJ4 Kent
- UKK South West (UK)
- UKK1 Gloucestershire, Wiltshire and Bristol/Bath area
- UKK2 Dorset and Somerset

UKK3	Cornwall and Isles of Scilly
UKK4	Devon
UKL	Wales
UKL1	West Wales and The Valleys
UKL2	East Wales
UKM	Scotland
UKM2	Eastern Scotland
UKM3	South Western Scotland
UKM5	North Eastern Scotland
UKM6	Highlands and Islands
UKN	Northern Ireland (UK)
UKN0	Northern Ireland (UK)