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# **Housing Quality Deficiencies and** the Link to Income in the EU

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Policy Briefs are a publication series providing a synthesis of topics of research and policy advice on which European Centre researchers have been working recently.

The quality of housing is a key element of a person's quality of life. This is particularly so in case of fundamental housing deficiencies, which are thus considered significant indicators of deprivation. If low housing quality is coupled with income poverty, it reinforces social disadvantage. Although Western European countries have seen a great improvement in housing conditions in the last three decades, there is evidence that relative housing deprivation has increased recently (Ranci, 2010).

Here we aim to address the following questions, based on data from EU-SILC 2007, including a special module on housing.

- · Are basic needs for elementary housing facilities now met across Europe?
- Do richer nations fare better with better-quality housing stock?
- · Do housing deficiencies primarily affect the poor, thus creating cumulative social exclusion? Do the housing deficiencies reach those with incomes above the poverty threshold?
- What is the role of subjective aspirations in terms of the self-assessed needs for amenities and housing space?
- Is the recently accepted indicator of space shortage a useful measure of basic needs?

The results are based on a long-term research project completed within the European Observatory on the Social Situation, financed by the European Commission.

#### Data

Nationally representative survey In the European context, the European Union Community Statistics on of 24 EU Member States Income and Living Conditions (EU-SILC) are the primary source for data on housing indicators. In addition, a special module on housing quality was included in the 2007 wave of the survey. The survey covers 24 EU Member States. While the survey was carried out in 2007, the data on income relate to the preceding year, 2006. The total number of individuals



covered is around 514,000 (after omitting the non-EU countries), with samples over 10,000 observations in each country. Estimations based on less than 25 observations have been omitted from the presented tables and figures.

The indicator of poverty is the so-called "at-risk-of-poverty rate", which is part of the portfolio of indicators adopted by the Laeken European Council. It shows the share of persons with an equivalized disposable income below the at-risk-of-poverty threshold, which is set at 60% of the national median equivalized disposable income after social transfers.

The housing quality variables are listed in Annex 1. Note that in our analysis we omitted air-conditioning facilities, as we think it is not possible to decide in which country or region it is a basic amenity, if at all.

# Inadequate installations and facilities

Most frequent problem: What are the most typical housing quality shortfalls? As shown by Table dampness of dwelling I, there are relatively few dwellings without bath or shower, or indoor flushing toilet. Note that a relatively larger share of the dwellings are said to be too dark, and even more are said to suffer from dampness or a leaking roof. Note that the indicator of "adequate plumbing or water installations" is somewhat broader than the other two related indicators, and also refers to pipes, taps, drainage and outlets. In addition, it is related to the general needs of the household, so it can be regarded as a selfassessed indicator.

Housing quality is correlated Similarly, dark flats seem to occur just as often in richer than in poorer with the nation's affluence countries.<sup>2</sup> In contrast, the prevalence of other, objective indicators, including dampness or the lack of indoor toilet or shower is multiple times higher among the poorest countries of Europe than in the more affluent ones. The Baltic States seem to stand out in particular: over one fifth of the population lives in dwellings which are damp, and 15-22% are affected by the lack of bath or shower or indoor flushing toilet. According to our calculations, this is concentrated particularly in rural areas. These are the countries, together with Poland, Hungary, and the Mediterranean Portugal, Italy, Cyprus and Greece where over 15% of the people do not find their dwelling comfortably warm during winter. Note, however, that a fixed heating may not be a basic necessity in some regions (over three fourth of the Portuguese do not have a fixed heating). Thus, housing quality tends to be correlated with the nation's affluence, in particular in the case of objective indicators, with the low-income Baltic States faring particularly poorly in many respects.



Table I: Proportion of population reporting problems with quality of housing

	Leaking roof, damp walls	Too dark	No bath/ shower	No indoor flushing toilet	No adequate plumbing/ water installations	No adequate electrical installations	No fixed heating	Dwelling not comfortably warm during winter
EU*	17,5	8,1	1,5	1,7	8,0	7,6	9,1	13,3
LU	14,5	4,9	0,3	0,6	9,2	6,1	0,6	8,9
UK	14,5	11,0	0,2	0,8	9,6	9,3	0,7	5,4
CY	30,1	6,4	1,4	1,4	8,3	8,2	17,1	27,5
AT	9,4	5,7	1,0	1,5	1,3	2,2	3,7	2,7
IE	14,9	9,2	0,7	0,6	6,1	9,2	1,0	:
NL	18,3	5,2	0,3	:	5,9	1,6	0,4	4,9
DE	13,1	4,4	0,6	1,2	6,2	5,0	15,8	12,0
DK	10,6	4,6	0,8	:	5,4	3,6	0,0	10,3
BE	14,2	8,6	1,0	0,7	3,1	4,8	7,9	6,0
SE	6,3	6,7	0,6	:	4,8	3,9	:	6,3
FR	14,2	8,4	0,8	0,9	15,1	11,1	1,4	10,6
FI	4,9	5,3	1,3	0,8	5,8	5,2	0,5	9,1
IT	21,1	8,3	0,3	0,2	8,3	14,1	2,9	18,4
SI	17,5	9,7	1,0	1,1	2,5	1,2	0,5	3,5
ES	18,0	10,5	0,3	0,2	4,7	5,3	26,9	12,3
EL	19,4	7,5	1,2	3,2	7,1	5,2	9,8	16,0
PT	19,5	17,2	3,6	3,2	13,4	14,0	86,9	55,7
CZ	15,6	4,4	0,8	1,2	5,6	8,3	0,3	9,8
SK	6,1	3,7	1,4	2,9	5,3	5,0	0,2	13,0
EE	21,6	7,2	17,7	15,0	11,7	9,7	:	15,9
HU	19,2	10,5	4,5	6,4	2,7**	0,2	1,0	15,4
LT	25,2	10,6	18,3	20,2	12,0	10,0	0,5	17,9
PL	37,5	9,1	7,1	6,2	8,3	4,1	:	23,3
LV	26,3	12,0	22,1	19,5	16,6	12,3	1,3	20,2

Source: Own calculations based on EU-SILC 2007

Notes:

Italics: low number of observations (25-49).

Estimations based on less than 25 observations were omitted.

<sup>\*</sup> BG, MT and RO are not included in any of the EU figures as they are not part of the dataset. Countries ordered by median (equivalized) disposable income per capita, adjusted for purchasing power parity.

<sup>\*\*</sup> In the Hungarian questionnaire, the question about "plumbing/water installations" refers to the availability of running water in the dwelling, which is different from other countries.



Self-assessed needs The self-assessed indicators of adequate plumbing and electrical instalvary less across Europe lations appear to vary less by the level of average wealth per country than the more objective indicators. Richer countries do not necessarily perform well relatively in terms of housing deficiencies. A relatively high proportion (6-10%) of people in countries with a high average purchasing power, like Luxembourg, the UK and Cyprus, report a lack of adequate installations (Table 1). On the other hand, in less affluent nations, such as Slovenia, Spain or Slovakia, such problems range from 2 to 5%. There are only 5 countries where the proportion for both indicators is 10% or more (France, Portugal and the three Baltic States).

> Overall, Austria, Denmark, Sweden and Finland fare the best in terms of housing quality (considering all indicators presented in Table 1), both compared to the EU average and relative to other countries.

The poor live worse The poor tend to be more exposed to housing deficiencies, thus suffering from cumulative disadvantage. This general tendency holds for all indicators of housing quality in the overall majority of countries.

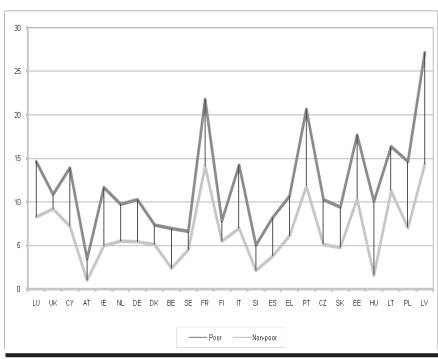
> The proportion reporting having no bath or shower or indoor flushing toilet for their own sole use is uniformly larger among those at risk of poverty than those with higher incomes. While in much of Europe the problem is socially insignificant (below 1%), the proportion concerned is much above 10% only in Hungary, Poland and the three Baltic States. In Latvia and Lithuania, it rises to as high as 40% of those with income below the poverty threshold, and in Estonia, to around 30%. In all three countries, the issue also affects the non-poor, of whom 10% do not have one of these facilities either.

The proportion reporting problems with the state of their housing in the form of a leaking roof, damp walls/floors/foundation, or rot in window frames/floor is uniformly higher among those with income below the poverty threshold than among those above. In Poland, it is well over half of the former group, in each of the three Baltic States and Cyprus, almost 40%. Even among those with income above the poverty threshold, the proportion reporting such problems is over 20% in three of the four countries (all except Estonia) and around a third in Poland.

More of those with income below the poverty threshold report that their housing does not have enough light in all countries except Sweden where the proportions concerned are similar. The difference between the two groups is also small (less than 2 percentage points) in Denmark,



Figure I: Proportion of population reporting no adequate plumbing or water installations - among the poor and non-poor population



Notes: Countries ordered by median (equivalized) disposable income per head, adjusted for purchasing power parity. Poor: refers to those at risk-of-poverty, with income below 60% of the national median equivalized income. Non-poor: refers to those with income above the poverty threshold.

Source: Own calculations based on EU-SILC 2007.

> Finland and the Netherlands, where relatively few report such problems, as well as in Spain, where 10-12% do so.

Inadequate facilities tend to be more widespread among the poor population. The proportion of those with income below the poverty line reporting inadequate plumbing reaches 20% in Portugal, Latvia, and France. Again, 20% or more of the poor are affected by inadequate electrical installations in Portugal and Latvia, as well as in Italy.

# **Environmental problems**

The quality of housing has not only to do with the houses or apartments in which people live but also with the environment in which they are situated. To live in noisy or polluted surroundings or to face a high risk of crime or vandalism can be as distressing as living in a house in need of repair or in one which is cramped or too dark. In practice, however, the subjective nature of environmental problems and the differing attitudes towards them make it difficult to compare circumstances not only across countries but also between individuals and social groups within the same country. At the same time, it is arguably the subjective views of people that matter in this respect since they affect their well-being.



Noise is the most prevalent The proportion of people reporting problems of noise from neighbours environmental problem or from the street, therefore, varies from 37% in Cyprus and 32% in the Netherlands to around 13% in Ireland and Sweden - in each case, two pairs of different countries (Table 2). In addition, while in most countries (18 of the 24 countries), the proportion of people reporting noise problems is larger for those at risk of poverty than for those with higher income levels, in three of these, the difference in proportion is very small (less than 2 percentage points).

Table 2: Proportion of population reporting problems with neighbourhood

	Noise			Pollution			Crime		
	Poor	Non-poor	Total	Poor	Non-poor	Total	Poor	Non-poor	Total
EU*	25,5	22,1	22,7	17,6	16,9	17,0	18,6	15,2	15,8
LU	30,0	20,7	22,0	18,5	15,9	16,2	9,7	9,7	9,7
UK	22,0	19,3	19,8	12,2	13,2	13,0	28,2	26,5	26,8
CY	37,1	36,7	36,8	23,0	26,3	25,8	13,3	13,6	13,6
AT	25,4	19,1	19,8	10,4	7,6	8,0	11,6	11,4	11,4
IE	16,0	12,3	13,0	11,8	8,8	9,3	21,1	14,1	15,3
NL	34,0	31,9	32,2	15,2	13,6	13,8	18,2	17,6	17,6
DE	34,7	25,8	27,1	25,6	21,1	21,8	18,3	11,4	12,4
DK	27,0	18,9	19,9	14,2	7,2	8,0	17,6	13,5	14,0
BE	25,9	22,3	22,9	21,0	16,7	17,3	20,9	16,7	17,3
SE	15,6	12,4	12,7	5,3	7,2	7,0	16,5	12,6	13,0
FR	25,4	18,0	19,0	18,0	16,5	16,7	21,9	15,6	16,4
FI	18,9	15,6	16,0	12,5	14,2	13,9	16,4	12,3	12,9
IT	26,5	25,1	25,3	20,4	21,3	21,1	18,3	15,5	16,1
SI	21,6	18,3	18,7	20,8	19,7	19,8	10,0	10,2	10,2
ES	25,5	26,1	26,0	15,8	16,5	16,3	18,1	18,0	18,0
EL	18,4	22,6	21,7	14,6	19,8	18,7	8,7	10,8	10,4
PT	24,4	28,2	27,5	23,3	21,8	22,1	13,5	12,4	12,6
CZ	20,0	18,3	18,4	20,2	16,7	17,0	17,8	12,6	13,1
SK	22,1	18,5	18,9	20,4	17,9	18,2	7,5	8,3	8,2
EE	18,8	23,8	22,8	22,8	27,3	26,4	22,7	21,1	21,4
HU	17,9	14,3	14,8	12,9	13,5	13,4	18,4	12,1	12,9
LT	15,4	19,2	18,5	13,6	15,9	15,4	4,1	7,8	7,1
PL	19,7	19,3	19,4	11,3	13,2	12,9	8,5	7,8	8,0
LV	19,3	22,6	21,9	34,6	37,4	36,8	25,2	30,6	29,5

Source: Own calculations based on EU-SILC 2007.

Notes: See Table 1.



Much the same picture is evident for those reporting problems of pollution and grime in their neighbourhood (in places where people usually walk or shop), which, although highest in Latvia, the country with the lowest level of income per capita, again shows little systematic variation with income. (Poland with the next-lowest income levels has among the smallest proportions reporting problems, while Cyprus with the thirdhighest income level has among the largest proportions.) In this case, the relative number of those at risk of poverty reporting pollution problems is larger than for those with higher income in half of the countries but smaller in the other half. Having problems of pollution, therefore, does not invariably go together with having a low income.

There is also no evidence of people reporting problems of crime, violence or vandalism in the area varying with income either between or within countries. The proportion doing so is highest again in Latvia, though the proportion is only slightly less in the UK, the country with the second-highest level of household income. It is also relatively high in Estonia (the only other countries where the proportion is over 20%), but in Lithuania, the third of the Baltic States, it is lower than anywhere else in the EU. While in the majority of countries (17 of the 24), the proportion of people at risk of poverty reporting such problems is larger than for those with higher income, in 7 of these, the difference in the proportion is very small, so that overall, there is no clear tendency for problems of crime to be experienced more by those with low income.

Environmental problems Unlike many aspects of deprivation, environmental problems are not are less closely closely linked to poverty levels of household income. It is also evident, related to poverty however, that there is equally little relationship between the three types of environmental problems, in the sense that countries in which a relatively large number of people report problems of noise are not typically the same as those in which large numbers report problems of pollution or crime. Exceptions are Latvia and Estonia, where the proportions reporting problems are high for all three types and Sweden and, to a lesser extent, Hungary, where the proportions are relatively low for all three.

# Shortage of space: divergence between objective criteria and subjective assessment

The "shortage of space" indicator has been adopted in 2009 (see Annex 2) by the Indicators Subgroup of the Social Protection Committee, and defines needs based on household size and composition (European Commission 2009).3 The definition renders that, e.g. a couple needs 2 rooms (kitchen, bathroom, etc. are not counted as rooms), a two-parent-two-



children household needs 3-4 rooms, a two parent-four-children household needs 4-6 rooms, depending on the age and sex of the children. The definition is thus slightly less generous than allocating one room per person. This is thus an objective definition, based on expert judgement, using a common standard for space needs across the whole EU.

Objective indicator varies Although the extent of space shortage by objective and subjective standby country wealth, ands is on the same level in the EU on average (15-15%), these figures subjective one less so mask rather different patterns across Europe. While over-crowdedness, using an objective indicator based on "need" defined by the household size and composition (see Annex 2), varies vastly across Europe, there is less variation in self-assessed shortage of space. The former indicator takes a value between 2% and 60%, with Cyprus, the Netherlands, Spain and Belgium at the lower end, and Poland, Latvia and Lithuania at the higher end, with over half of the population classified to live in overcrowded housing. This warrants for the potential inadequacy of the indicator for national policies.

East-West divide: Self-assessed shortage of space varies between 8% and 32%, thus in none adaptation in the East? of the countries surpasses 50%, signalling the impact of potential adaptation and social comparison effects. In most East-European countries we find strong evidence for adaptation or for lower aspirations: despite the large prevalence of space problems, a relatively low share of the population thinks that they have space shortages. On the other hand, in a number of Western and Southern countries, where "objective" space deprivation is very small, several times as many people feel that their families live in crowded conditions.

Stronger link between In Eastern Europe, the people who report space shortage are more likely circumstances and their to be those who have problems of over-crowdedness (as defined by the assessment in the East EU indicator). The correlation between the indicator of overcrowded housing and self-assessed shortage of space is positive, albeit moderate (R=0.32). We find that this correlation is stronger than average in all of the Eastern European countries, and is particularly high in Estonia (R=0.50) and Latvia (R=0.48). There is a weak relationship between objective and subjective indicators on an individual level in Denmark, Finland and the Netherlands, with a correlation coefficient between 0.11 and 0.16. All this suggests that the recently adopted objective indicator reflects people's own assessment of their shortage of space only to a limited extent, with a stronger relationship in Eastern European countries.

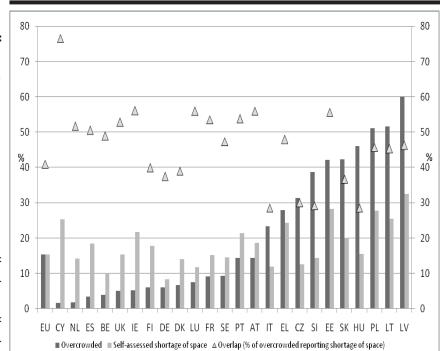
> The discrepancy between the objective and self-assessed shortage of space may be partly due to cultural reasons. The EU indicator, which



calculates households' needs based on their composition, e.g. assumes that each person aged 18 or more should have a separate room, or that no more than two young children should share a room. In some cultures or among certain social groups these may not be perceived as necessities. On the other hand, self-proclaimed "needs" are also affected by people's aspirations and their adaptation to the circumstances they have.

Is over-crowdedness a typical problem of low-income countries? To some extent yes, although more accurately the problem typically affects the Eastern European countries, which tend to have low average incomes (see Figure 2). Portugal, Greece, and Spain, also relatively low-income countries, suffer from this problem much less. Note also that the relationship between average incomes and shortage of space is far from linear: there is little explanation for the large differences in the level of overcrowded housing between Spain, Greece and Portugal, countries with rather similar level of incomes. There is little variation in over-crowdedness among the wealthier nations, especially among the non-poor population. Thus, average incomes seem to be little related to the self-assessed shortage of space. On the other hand, there is a major difference among the poor and non-poor groups within countries, suggesting that these subjective norms are culture-specific.

Figure 2: Shortage of space: "objective" versus self-assessed measure

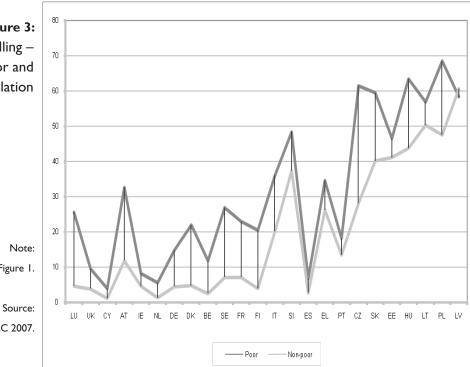


Note: EU: BG, RO and MT are not included.



The poor are more likely to experience shortage of space, thus being exposed to multiple disadvantages (Figure 3). There is a tendency for more of those at risk of poverty to live in overcrowded housing or to feel short of space (Figure 4).

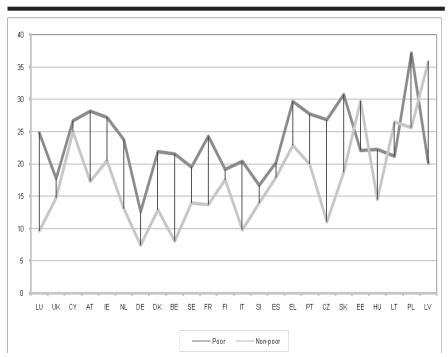
Figure 3: Overcrowded dwelling among the poor and non-poor population



Note: See Figure 1.

Own calculations based on EU-SILC 2007.

Figure 4: Self-assessed shortage of space in dwelling - among the poor and non-poor population



Note: See Figure 1.

Source:



The three Baltic States are exceptions with respect to the subjective assessment, where the proportion is larger among those with incomes above the poverty line. This might be due to greater aspirations of these groups, perhaps comparing their own situation with those in other countries. We have no explanation, however, why this occurs in the Baltic States in particular.<sup>4</sup> In 9 of the 24 countries, the proportion reporting a shortage of space was 20% or more even among those with income above the poverty threshold - in Estonia, 30% and in Latvia, 36%. At the same time, there were only 5 countries in which the proportion of those with income below the threshold was less than 20% - Germany, Slovenia, the UK, Finland and Sweden.

# Dissatisfaction with dwelling

Majority of the population are Generally, the majority of the population say that they are satisfied with satisfied with their dwelling their dwelling in all the EU countries. Only in the three Baltic States and Hungary does the share of those who are dissatisfied (very dissatisfied or somewhat dissatisfied) reach 30% or more. We find an East-West divide here, also, albeit less pronounced than in the case of space shortage: in addition to the four countries mentioned above, Poland and Slovakia have the highest share of dissatisfied population (over 20%) in the EU. On the other hand, however, Slovenia fares below the EU average, while the Czech Republic is only slightly above it. With respect to Western Europe, 7 countries have particularly low shares of dissatisfied population (below 10%): Austria, Denmark, Finland, Luxembourg, the Netherlands, Sweden and the UK.

Space shortages and inadequate

amenities may be the main People who are affected by housing shortfalls are more likely to be discause of dissatisfaction satisfied (Table 3). In particular, space shortages and deficiencies in basic

Table 3: Share of dissatisfied with dwelling among people affected by specific housing quality failures, in %

Overcrowded	29,7
Self-reported shortage of space	34,3
Housing deficiencies:	
Lack of adequate electrical installations	30,2
Lack of adequate plumbing	29,0
Too dark	30,3
Neighbourhood problems:	
Noise	20,7
Pollution	21,1
Crime	20,3
Difficulty in access to public transport	18,4
Difficulty in access to primary health care	20,0
Total population	13,7

Source:



amenities (inadequate plumbing or electrical installations, plus darkness) play a role. People affected by neighbourhood shortfalls are relatively less likely to become dissatisfied. Note, however, that the overlap between dissatisfaction and housing failures is only partial: only 18-34% of those suffering from a basic deficiency report that they are dissatisfied, implying that the majority of these groups are actually satisfied with their dwelling despite the problems they have.

Tenants are worse off We find that tenants tend to be more dissatisfied than owners (Table 4). While the share of dissatisfied owners is 12%, the share of dissatisfied tenants varies between 21-23% in three alternative tenant groups, including those who rent at market price, those who rent below this, and those who live in a free accommodation. Interestingly, we found that the real cut-off point is between owners and tenants of all sorts, rather than between tenants at market price and those who live in their flat for free or at a subsidized price. It is surprising, given that in a well-functioning labour market we may well assume that tenants at a market price are able to choose the property they need and can afford. This finding highlights that renting a property may not be a voluntary choice for most Europeans, but rather due to external constraints. Tenants renting property at market price are more likely to be poor and have much higher housing costs. According to our calculations, this group of tenants has on average 70% higher total housing costs than owners (including the mortgage interest payments and taxes of the latter group), and their poverty rate is around twofold. Poverty thus is strongly intertwined with the issue of housing ownership.

# Table 4:

Share of dissatisfied by social groups: poverty, tenure status, and degree of urbanisation of the dwelling, in %

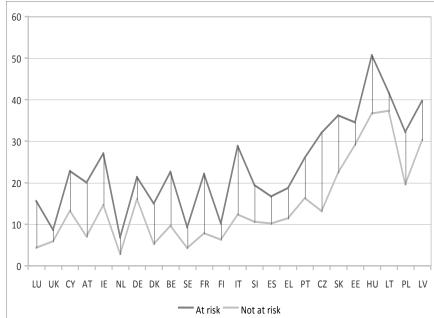
	% dissatisfied
Poverty status:	
Non-poor	12,2
Poor	21,6
Tenure status:	
Owner	10,2
Tenant at market rate	21,2
Tenant at a reduced rate	24,1
Free accommodation	22,9
Degree of urbanization:	
Densely populated area	14,4
Intermediate area	12,6
Thinly populated area	15,3
Total population	13,7

Source:



Figure 5: Proportion of population dissatisfied with dwelling, with

income above and below the at-risk-of-poverty threshold



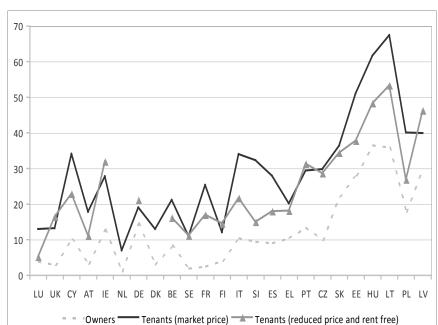
Note: Dissatisfied: refers to "very dissatisfied"

and "somewhat dissatisfied".

Source:

Own calculations based on EU-SILC 2007.

Figure 6: Proportion of population dissatisfied with dwelling by ownership





Small cities are the There is a peculiar relationship between the degree of urbanization and best place to live in satisfaction with housing: thinly populated areas and cities seem to have a higher number of dissatisfied people than those living in intermediate areas (defined as a density between 100 and 500 inhabitants per square kilometre) (Table 4). On average, 25% of the population lives in such areas. Thus, smaller cities appear to fare better than large ones.

The poor are more dissatisfied The poor are also more likely to be dissatisfied with their housing not in most of Europe only at the EU-level on average but in each country as well. The difference between the poor and non-poor is relatively large in most countries - around 9-10 percentage points or more in 14 of the 24.

> Satisfaction with dwelling, similar to other measures of self-assessment, depends on custom, expectations and social environment as well, not just on objective housing conditions. Therefore, it seems to be more appropriate to compare specific groups within a country than country averages as such.

# **Selected capital regions:** Brussels, Prague, Paris, Athens and Madrid

Most quality problems in Paris Overall, the Paris and Brussels regions have the most quality problems in Brussels, cities with large (with respect to adequate installations) among the five capitals, with private rental markets 9-14% of the inhabitants affected. These are the two capitals with the highest share of tenants (55% and 47%, respectively), thus it can be attributed to the lower quality of dwellings on the rental market. On the other hand, problems with water installations are relatively rare in Prague (6%), despite the fact that an outstanding share, one third of the inhabitants live in rental housing below market price or rent free.

> Shortage of space problems (as reported by citizens) are the most frequent in Athens, although it affects over 1 in 5 persons in the Brussels, Paris and Madrid regions as well.

Heating and cooling depend on Heating and cooling needs and facilities are strongly determined by the climate and expectations climate, so cross-country comparisons may be less adequate. A relatively small population tends to be deprived from fixed heating (the ratio is somewhat higher in Madrid and Athens: 7-8%). While a cool flat is an issue to nearly half of the population in Prague, only about one fourth of Athen's population suffers from this problem, suggesting the importance of adaptation and expectations.



Capital regions: worse quality Our calculations also highlight the differences between capital regions than in other urban areas and other urban regions within the same country. Shortage of space affects capitals the most and seems to be less of a problem in other urban regions in all five cases. Regarding adequate electrical and water and plumbing installations, Paris is the only capital which fares better compared to other urban areas. Those living in capital regions tend to be relatively dissatisfied with their housing conditions with the exception of Prague.

Table 5: Housing quality problems in selected capital and other urban regions (% population affected)

	No adequate electrical installations	No adequate water/plumbing	No fixed heating	Dwelling not warm in winter	Dwelling not cool in summer	Shortage of space	Dissatisfied with dwelling
Brussels region	9,5	9,0	4,0	12,6	25,6	21,8	18,2
Other Belgian urban							
regions	5,5	3,1	9,1	6,2	16,2	11,3	12,1
Prague	7,2	5,5	1,0	10,3	48,0	16,9	15,4
Other Czech urban regions	9,9	5,4	0,4	11,6	42,2	14,5	17,6
Paris region	11,5	13,7	1,2	15,4	33,8	22,9	12,8
Other French urban regions	12,2	16,5	1,1	12,3	32,5	17,9	11,8
Athens region Other Greek urban	6,0	7,0	8,0	14,1	26,8	26,5	11,7
regions	3,9	4,8	8,0	13,8	34,1	22,4	10,8
Madrid region Other Spanish urban	5,0	5,9	7,4	6,3	31,6	23,7	13,3
regions	5,2	4.3	30.3	10.9	26.0	20.0	11,9

Source:

Own calculations based on EU-SILC 2007.

Notes:

Number of observations: Brussels region: 1928, Prague: 1872, Paris region: 4360, Athens region: 4142,

Madrid region: 2264

Definition of capital regions: Région de Bruxelles-Capitale / Brussels Hoofdstedelijk Gewest, Praha, Île

de France, Attiki, Comunidad de Madrid

**Bold**: Estimations based on less than 25 observations

Other urban regions: densely populated areas within the country other than the capital region

Dissatisfied: refers to "very dissatisfied and "somewhat dissatisfied"



#### **Conclusions**

Our results suggest that housing quality is correlated with a nation's affluence, and in particular there is a marked East-West divide for some indicators. The Baltic States appear to be particularly disadvantaged on most grounds.

Self-assessed needs vary less across Europe than objective indicators, suggesting the role of adaptation in low-income nations or that of aspirations in more affluent ones. This suggests that for policy evaluation objective indicators need to be used along subjective ones. Subjective indicators may provide useful information on social consensus, and as such, also a basis for defining objective indicators. For national purposes, subjective indicators provide useful evidence on people's assessment of their circumstances, which is an essential policy outcome indicator as well.

The poor live worse in terms of housing quality, although their relative disadvantage is more prevalent with respect to basic amenities or shortage of space, rather than neighbourhood problems. This signals their cumulative disadvantage and the necessity of coherent policies for social inclusion, including not only raising people's income above a minimum level, but also the improvement of the housing quality of the low-income groups.

There are various challenges related to the recently adopted indicator of space shortage by the European Commission.

- · First, there is a great disparity between the objective and subjective (self-assessed) measure of space shortage, as shown by our results.
- · Second, over half of the population is classified as living in overcrowded housing in the Baltic States, which questions the policy relevance of this measure.
- · Third, given the emerging environmental concerns affecting the dwelling sizes (housing-related carbon footprint is about one fourth of the average ecological footprint in the UK, itself at a non-sustainable level), this measure appears to be overly generous.

All in all, this indicator measures a kind of disadvantage, which however cannot be called a deprivation in basic needs as such.

Based on our analysis, we argue that the use of objective criteria for assessing the need for space may be flawed, and the indicators of the EU pursuing social inclusion need to be harmonized with strategies of environmental sustainability.



### **Notes**

- I There are no data for Malta, while Bulgaria and Romania did not implement the survey until 2007.
- 2 Country wealth is measured by median (equalized) disposable income per head, adjusted for purchasing power parity
- 3 European Commission "Portfolio of Indicators for the Monitoring of the European Strategy for Social Protection and Social Inclusion -2009 Update", Brussels, September 2009. Downloadable from: http://ec.europa.eu/social/BlobServlet?docId=3882&langId=en
- 4 There was a fundamental housing reform in the Baltic States in the 1990s, including housing privatization, restitution (the return of illegally expropriated property back to their pre-WW II owners) and liberalization of the housing market (property transactions, rents etc.). As a result, currently the dominant form of home ownership in Estonia, Latvia, and Lithuania is owner-occupied housing (Kõre, 2009).

### References

- European Commission (2009) "Portfolio of Indicators for the Monitoring of the European Strategy for Social Protection and Social Inclusion -2009 Update", Brussels, September 2009. Downloadable from: http://ec.europa.eu/social/BlobServlet?docId=3882&langId=en
- Kõre, Jüri (2009) "Housing Reform and Residential Segregation. Pre- and Post-Reform Situation. Case of Estonia", Manuscript, University of Tartu, Estonia. Downloadable from:
  - http://www.soc.cas.cz/download/908/paper\_kore\_juri\_w\_16.pdf
- Lelkes, Orsolya / Zólyomi, Eszter (2009) Quality of Housing and the Link to Income. Research Note Nr. 2. Prepared for the European Commission, Directorate-General "Employment, Social Affairs and Equal Opportunities". Downloadable from:
  - http://www.socialsituation.eu/WebApp/ResearchNotes.aspx
- Ranci, Costanzo (ed.) (2010) Social Vulnerability in Europe. The New Configuration of Social Risks. Palgrave Macmillan.



# **Annex I:Variable definitions** in the EU-SILC 2006 survey

# I) Main questionnaire

Areas	List of variables			
	- Bath or shower in dwelling (yes, no)			
	- Indoor flushing toilet for sole use			
Housing facilities	of household (yes, no)			
and quality	- Problems with the dwelling:			
	too dark, not enough light (yes, no)			
	- Leaking roof, damp walls/floors/foundation,			
	or rot in window frames or floor (yes, no)			
	- Noise from neighbours or from the street (yes, no)			
Neighbourhood	– Pollution, grime or other environmental			
characteristics	problems (yes, no)			
	- Crime violence or vandalism in the area (yes, no)			

# 2) Special module on housing

Areas	List of variables
Shortage of	– Shortage of space in dwelling:
space in dwelling	respondent's opinion (yes, no)
Dwelling	-Adequate electrical installations (yes, no)
installations	-Adequate plumbing/water installations (yes, no)
and facilities	- Dwelling equipped with heating facilities (yes, no)
	- Dwelling comfortably warm during winter time
	(yes, no)
Overall	- Overall satisfaction with dwelling (very dissatisfied,
satisfaction	somewhat dis-satisfied, satisfied, very satisfied)
with dwelling	



# **Annex 2: Definition of space shortages**

The indicator of space shortages agreed at EU-level specifies that shortages exist if a house or apartment does not comprise a minimum of rooms equal to:

- one room for the household (in addition to the other rooms below);
- one room for each couple;
- one room for each single person aged 18 and over;
- I room for two single persons of the same sex between 12 and 17 years of age;
- I room for each single person of different sex between 12 and 17 years of age;
- I room for each two children under the age of 12.

To be counted, rooms have to be at least 4 square meters in size, have a height of over two metres and be accessible from inside the unit. Kitchens used solely for cooking, bathrooms, toilets and corridors are not counted.

The main potential defect of this measure is that it denotes all single-room accommodation, such as studios, as being short of space, irrespective of the size of the room concerned. This poses a particular problem in respect of people living alone. However, for most countries, the result does not change much if those living alone are excluded from the measure. The main change is for the former communist countries, where the proportion of people living in housing with space shortages is increased - largely for those in the bottom quintile (i.e. the bottom 20% of the income distribution). On the other hand, in Finland, the proportion is reduced if such households are excluded, again the reduction being concentrated in the bottom quintile.



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