

# POSSIBILITIES AND LIMITS IN THE ANALYSIS OF SOCIAL EXCLUSION SPATIALITY

Valentina VASILE<sup>1</sup>, Mihaela MIHAI<sup>2</sup>,  
Daniela-Ioana MANEA<sup>1,2</sup>, Țițan EMILIA<sup>1,2</sup>, Cristina BOBOC<sup>1,2</sup>

**Abstract.** *Social exclusion may manifest through spatial concentration of deprived population in communities located in certain areas. The globalization has reshaped the social and spatial geography of cities which led to major implications for research on social exclusion. Thus, in any practical formulation of social inclusion policies, it is necessary to consider the idea that social exclusion is inherently spatial. By addressing the territorial dimension of social exclusion, some important theoretical issues about the interaction of the two concepts ("social" and "space") are analyzed. Based on theoretical-conceptual contributions developed recently, this paper analyzes this dimension of social exclusion.*

**Keywords:** *social exclusion, spatiality, the rate of overcrowding*

**JEL Classification:** *H75, J61, I23, R23*

## 1. Introduction - The spatiality of social exclusion

Many contemporary approaches are based on empirical studies and are conducted at the "micro" level (research concerning the exclusion in the city, rural areas, etc.) or at regional level.

This new approach emphasizes the relevance of spatiality and its influence over building social relationships (Massey, 1985; Sayer, 1985).

But, in the meantime, we cannot say that the social exclusion "spatiality" is just another dimension which requires conceptualization, as there are numerous maps depicting

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<sup>1</sup> Institute of National Economy, Romanian Academy, Bucharest, e-mail: valentinavasile2009@gmail.com

<sup>2</sup> The Bucharest University of Economic Studies, Bucharest, e-mail:mihaela.mihai@csie.ase.ro

dimensions of social exclusion, including several specific indicators derived from these dimensions. While the maps can be easily understood, if we think of the NUTS classification, we must take into account that not necessarily the entire region can be considered excluded. There is a possibility to consider only people or groups of people excluded. However, a map of social exclusion at the NUTS 3 level can be considered significant. Information specific to each region and how to implement the EU regional policy shows realities "more inclusive" for people living in these areas.

Basically, we can consider and analyze the phenomenon of socio-spatial exclusion as a multi-scalar concept.

Although the literature on the social construction of scale denies that various social phenomena can be significantly related to pre-built "levels" and the spatial division, we can use a multi-scale of social exclusion, which shows us, that the different dimensions of social exclusion are reflected with different weights in certain geographical scales. This means that approaching mixed methods, which combine NUTS regionalization on 3 levels and the qualitative case studies at the micro level, would provide us with a more realistic picture of social exclusion in the EU. In fact, NUTS 3 may show some multi-scale aspects of social exclusion.

For example: excluding intra-household can be analyzed using the proportion of inactive population; ethnic/migrant composition of a region may indicate the exclusion of a neighborhood in urban areas. Meanwhile, NUTS 3 provides data at the level of access to cultural institutions (library) or density of cars within the population, which may indicate whether the residents of small villages within a rural area experience social exclusion.

## **2. National context**

Limited access to the labor market is one of the main factors leading to multiple deprivations. In Romania, the activity rate (Eurostat) was 65.7% in 2014. Exclusion from economic activity can be considered as a direct result of lack of employment opportunities and low incomes in the labor market - leading to increased labor force exodus.

According to the objectives set out in the Europe Strategy 2020, considered in the National Plan for Reform, Romania will be required to adopt effective policies of social inclusion, that the number of people risking poverty and social exclusion to be reduced by 580 thousand persons by 2020.

Regarding the percentage of people at risk of poverty and social exclusion, Romania is far behind UE28 average, by 40.4% of the population in 2013 (EU average of approx.

24.5%). The rate of poverty reduction in our country is approximately equal to the 2011 one (40.3%) and lower compared to 2012 (41.7%). Overall, this indicator is more pronounced in Romania than in EU27 (UE28), which makes us think that the phenomenon is quite widespread and chronic throughout the country (see Table 1). Furthermore, the dominant profile of poverty remains constant; poverty prevails in certain population group: children between 0-17 years, single parent, etc.

**Table 1 – Summary statistics of social inclusion and poverty gap**

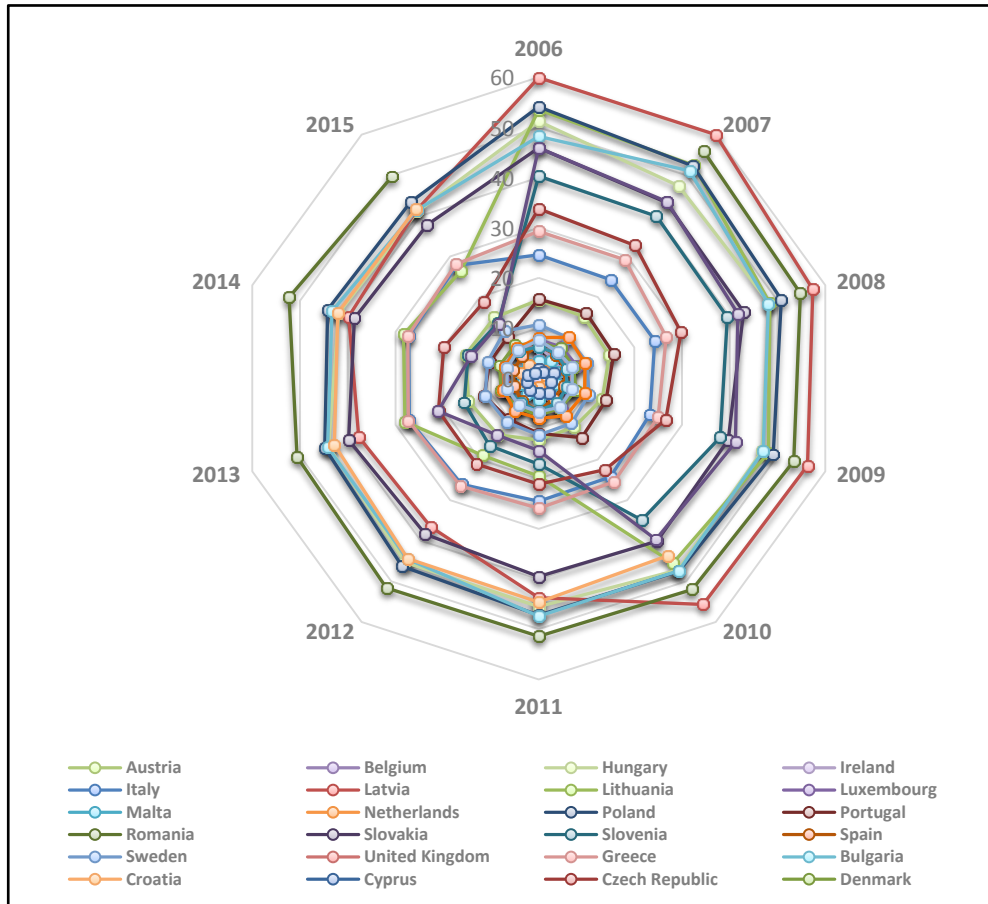
Indicator	2013		
	RO	UE27	RO gap in % of EU27 [[RO-UE27]/UE27]*100
Population at risk of poverty or social exclusion	40.4	24.5	64.90
Population at risk of poverty or social exclusion – single parent family	31.3	31.9	-1.88
Population at risk of poverty or social exclusion – households without children	15.4	14.5	6.21
People at risk of poverty or social exclusion - households made up of dependent children	27.2	18.7	45.45
People living in households with low work intensity (population aged between 0 and 59)	6.4	10.8	-40.74
People at risk of poverty to extreme poverty	18.2	10.8	68.52
People at risk of poverty and education level 0-2	34.7	23.6	47.03
People at risk of poverty and education level 3-4	15.3	14.4	6.25
People at risk of poverty and education level 5-6	1.6	7.5	-78.67
Overcrowding rate	52.9	17.1	209.36
Inequality in income distribution (ratio of extreme income quintiles)	6.2	5	24.00

Source: Eurostat.

### 3. Overcrowding Rate

Overpopulation and overcrowding, regardless of urban or rural areas, are a significant cause of stress. One of the fundamental aspects taken into account for assessing the quality of housing is the availability of living. It is a crucial matter that the lack of living space is acute for larger families with very low income, being associated with poor access to subsidized public housing.

**Figure 1 - Overcrowding rate by poverty status - EU-SILC survey - % 2006-2015**



Source: Eurostat.

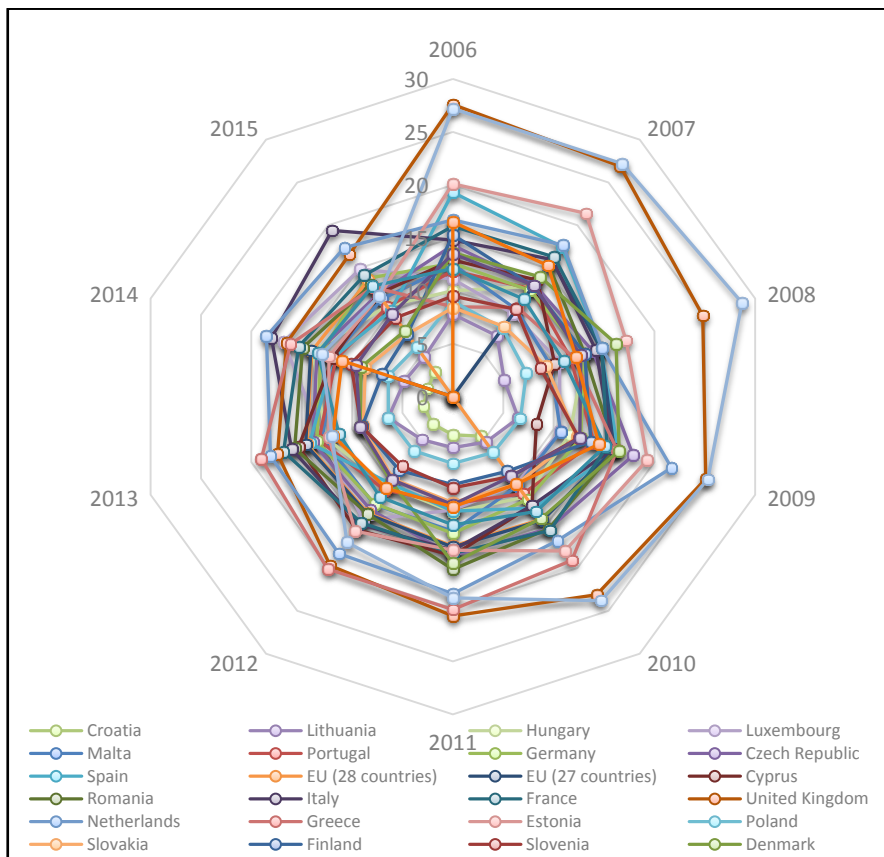
#### 4. Crime, violence or vandalism in the area

Considering the expected benefits and costs, economists have regarded a criminal behavior as a logical decision; this approach leads to an increased attention in the analysis of factors that directly influence the costs and benefits of participation in the criminal activity.

A wider perspective of this concept, highlighting various influences on crime and violence, is based on the ecological model - a model that aggregates theories from various fields (economics, sociology, public health). For example, the ecological model multiplies the levels of influence on criminal behavior and violent:

- Individual factors include personal characteristics (education level, marital status and biological profiles);
- Relational factors refer to relationships with close people (relationships with colleagues, partners and family);
- Community factors basically extrapolate relational factors to a regional level (expanding social relations to different social environments: schools, districts);
- Social factors include higher level of social relations at the macro level; it is obvious that violence is influenced also by cultural norms and economic conditions at the macro level.

**Figure 2 - Crime, violence or vandalism in the area – EU-SILC survey 2006-2015**



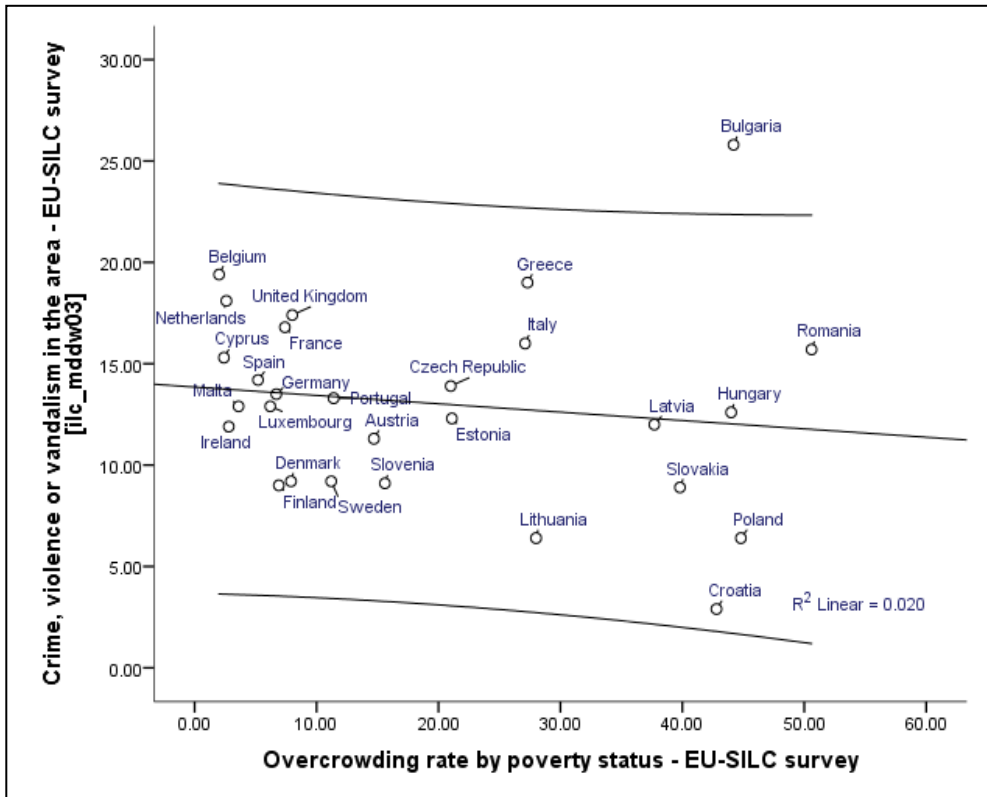
Source: Eurostat.

According to Eurostat, unlike the rate of overcrowding by which Romania ranks the first, we can say that things are a little better in the case of the Crime, violence or vandalism indicator in the area, Romania recording a value of 15.7%, with 1.2% over EU average (14.5%).

### 5. Overcrowding rate vs Crime, violence or vandalism in the area

Certainly, both the literature and the latest analysis and interpretations have highlighted the two-way relationships between social exclusion and crime, violence or vandalism in the area. In this paper, we analyze the influence of overcrowding rate on crime, violence or vandalism in the area according to the degree of urbanization.

**Figure 3 - Overcrowding rate by poverty status vs Crime, violence or vandalism in the area**



**Table 2. Correlation analysis**

			Overcrowding rate by poverty status	Crime, violence or vandalism in the area
Kendall's tau_b	Overcrowding rate by poverty status	Correlation Coefficient	1.000	-.205
		Sig. (2-tailed)	.	.128
		N	28	28
	Crime, violence or vandalism in the area	Correlation Coefficient	-.205	1.000
		Sig. (2-tailed)	.128	.
		N	28	28

The value of -0.205 indicates an inverse low intensity link with a calculated significance level of 0.128.

Limitations of the study: The analysis for the year 2013 did not reveal a significant relationship.

The analysis can be extended by taking into consideration other variables which quantify the level of poverty, (see Table 2):

- Population at risk of poverty or social exclusion;
- Population at risk of poverty or social exclusion – single parent family;
- Population at risk of poverty or social exclusion – households without children;
- People at risk of poverty or social exclusion - households with dependent children;
- People living in households with low work intensity (population aged between 0 and 59);
- People at risk of poverty and education level 0-2 / education level 3-4 / education level 5-6;
- Inequality in income distribution (ratio of extreme income quintiles).

## 6. Conclusions

In recent years, there has been a proliferation of indexes which provide citizens, academics and political forums with techniques and ways to measure decision-making factors to create increasingly social policies as complex and effective as possible. Thereby concepts, that seemed difficult to measure and quantify, could be assessed: happiness, human rights, corruption, gender discrimination, peace etc. using statistical methods.

The violence roots reach deep into society, reaching complex conditions such as poverty, racism, unemployment and hopelessness. It is preferable to have a quick fix for each outbreak of violence. But many times, it is necessary to apply a long term "treatment" in order to change the conditions, which cause the violent behavior,.

Obviously, any indicator, which can be used in the analysis of social exclusion, can also be found to some extent in the interpretations of violence problems. Given that certain indicators characterize each region, we can then affirm that a community problem requires solutions at the community level.

In addition to specialized institutions, universities and non-governmental organizations have developed local assessments based on data for these concepts, thus trying to identify possible links between indicators for obtaining policies aimed to reduce social exclusion and violence. Obtained indices reflect the extent of attainment of the objectives and what is appropriate for them to be achieved and where more work must be done.

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**Appendix 1 - Overcrowding rate by poverty status - EU-SILC survey - % 2006-2015**

	geotime	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	Austria	15.6	15.2	14.8	13.3	12	12.3	13.9	14.7	15.3	15
2	Belgium	3.6	3.8	4.1	3.9	4.2	2.2	1.6	2	2	1.6
3	Bulgaria	48.2	51.1	48.1	47	47.4	47.4	44.5	44.2	43.3	41.4
4	Croatia					43.7	44.6	44.4	42.8	42.1	41.7
5	Cyprus	1.9	1.6	3.3	2.6	3.5	2.9	2.8	2.4	2.2	1.4
6	Czech Republic	33.8	32.7	29.8	26.6	22.5	21.1	21.1	21	19.9	18.7
7	Denmark	7.1	7.4	7.3	7.8	7.3	7.4	7.2	7.9	8.2	8.1
8	Estonia	45.9	43.5	41.7	41.2	39.7	14.4	14	21.1	14.2	13.4
9	Finland	6.3	6.1	5.8	5.9	6.1	6.5	6	6.9	7	6.7
10	France	8.1	10.1	9.7	9.6	9.2	8	8.1	7.4	7.1	7.4
11	Germany	7.6	6.5	7	7	7.1	6.7	6.6	6.7	6.6	7
12	Greece	29.3	29.2	26.7	25	25.5	25.9	26.5	27.3	27.4	28.1
13	Hungary	51.2	47.4	48.3	46.8	47.2	45.5	45.3	44	41.9	41.1
14	Ireland	6.2	4.9	4.7	3.7	3.4	2.6	3.2	2.8	3.9	:
15	Italy	24.6	24.3	24.3	23.3	24.3	24.5	26.1	27.1	27.2	27.8
16	Latvia	59.9	60	57.4	56.3	55.7	43.7	36.6	37.7	39.8	41.4
17	Lithuania	53.5	52.5	48.4	48.1	45.5	19.5	19	28	28.3	26.4
18	Luxembourg	7.7	7.7	8	6.4	7.8	6.8	7	6.2	6.7	6.8
19	Malta	3.5	4.2	3.9	3.8	4	4.4	4	3.6	4	3.5
20	Netherlands	1.8	1.9	1.7	1.7	2	1.7	2.5	2.6	3.5	3.3
21	Poland	54.1	52.3	50.8	49.1	47.5	47.2	46.3	44.8	44.2	43.4
22	Portugal	15.8	16.1	15.7	14.1	14.6	11	10.1	11.4	10.3	10.3
<b>23</b>	<b>Romania</b>		<b>55.9</b>	<b>54.8</b>	<b>53.4</b>	<b>52</b>	<b>51.4</b>	<b>51.6</b>	<b>50.6</b>	<b>52.3</b>	<b>49.7</b>
24	Slovakia	45.9	43.3	42.9	39.7	40.1	39.5	38.4	39.8	38.6	37.8
25	Slovenia	40.3	39.9	39.5	38	34.9	17.1	16.6	15.6	14.8	13.7
26	Spain	6.5	5.8	5.6	5.2	5	6.6	5.6	5.2	5.3	5.5
27	Sweden	10.7	10	10.1	10.5	11.1	11.3	10.8	11.2	10.7	11.6
28	United Kingdom	6.3	6.2	6.5	7.2	7.3	7.1	7	8	7.3	7.3
<b>29</b>	<b>EU (27 countries)</b>	<b>19.1</b>	<b>18.7</b>	<b>18.3</b>	<b>17.7</b>	<b>17.5</b>	<b>16.7</b>	<b>16.7</b>	<b>16.8</b>	<b>16.7</b>	<b>16.6</b>
<b>30</b>	<b>EU (28 countries)</b>					<b>17.7</b>	<b>17</b>	<b>16.9</b>	<b>17</b>	<b>16.9</b>	<b>16.8</b>

Source: Eurostat.

**Appendix 2 - Crime, violence or vandalism in the area – EU-SILC survey 2006-2015**

	geotime	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
1	Austria	12.1	11.4	11.0	15.1	13.4	12.1	11.7	11.3	13.4	12.9
2	Belgium	18.0	17.3	15.8	16.9	17.5	15.6	14.5	19.4	16.2	16.1
3	Bulgaria	24.5	27.6	24.7	28.6	27.7	27.2	26.9	25.8	26.8	26.3
4	Croatia					4.6	3.6	3.2	2.9	2.5	2.9
5	Cyprus	12.9	13.6	10.1	8.3	12.7	15.0	15.5	15.3	11.9	12.0
6	Czech Republic	14.3	13.1	13.9	17.9	15.4	15.0	13.2	13.9	13.5	12.0
7	Denmark	13.6	14.0	16.2	16.5	14.2	15.7	9.9	9.2	9.1	7.7
8	Estonia	20.1	21.4	17.2	19.3	18.0	14.5	15.7	12.3	12.3	11.8
9	Finland	15.3	12.9	13.1	13.7	8.7	8.3	8.6	9.0	7.0	7.3
10	France	16.1	16.3	14.8	15.3	15.6	14.8	14.7	16.8	15.3	14.2
11	Germany	12.6	12.4	13.0	12.7	12.0	12.9	12.5	13.5	13.1	13.8
12	Greece	8.5	10.4	12.0	16.3	19.1	20.1	20.1	19.0	16.1	12.8
13	Hungary	10.0	12.9	13.1	11.6	11.7	10.9	10.4	12.6	13.9	10.6
14	Ireland	16.5	15.3	12.2	14.5	10.2	10.4	10.7	11.9	11.0	
15	Italy	14.8	16.0	14.2	15.9	12.7	14.5	14.9	16.0	18.0	19.4
16	Latvia	27.2	27.2	28.7	25.3	23.8	19.0	17.0	12.0	13.0	11.8
17	Lithuania	7.8	7.1	5.1	6.5	5.3	4.8	5.0	6.4	4.8	4.6
18	Luxembourg	11.1	9.7	10.6	10.6	10.2	10.7	14.4	12.9	16.8	14.9
19	Malta	12.5	10.2	9.7	10.7	10.4	12.7	12.6	12.9	12.0	11.4
20	Netherlands	16.7	17.7	14.8	21.7	16.8	18.6	18.3	18.1	18.5	17.4
21	Poland	9.0	8.0	7.3	6.7	6.5	6.3	6.3	6.4	6.4	5.8
22	Portugal	11.9	12.6	11.7	14.0	11.3	10.1	10.9	13.3	11.6	10.5
<b>23</b>	<b>Romania</b>		<b>15.4</b>	<b>13.1</b>	<b>16.1</b>	<b>15.4</b>	<b>16.3</b>	<b>13.7</b>	<b>15.7</b>	<b>14.9</b>	<b>13.1</b>
24	Slovakia	8.4	8.2	9.3	12.3	10.2	10.0	9.6	8.9	8.7	7.3
25	Slovenia	9.5	10.2	8.7	12.5	9.3	8.6	8.1	9.1	10.1	9.2
26	Spain	19.3	17.5	14.7	16.4	13.0	10.8	10.1	14.2	11.9	10.0
27	Sweden	13.5	13.0	12.7	12.6	9.3	10.2	9.7	9.2	9.6	9.7
28	United Kingdom	27.6	26.9	24.8	25.1	23.1	20.7	19.7	17.4	16.5	16.6
<b>29</b>	<b>EU (28 countries)</b>					<b>14.3</b>	<b>14.1</b>	<b>13.6</b>	<b>14.5</b>	<b>14.0</b>	<b>13.6</b>
<b>30</b>	<b>EU (27 countries)</b>		<b>15.9</b>	<b>14.7</b>	<b>16.0</b>	<b>14.4</b>	<b>14.2</b>	<b>13.7</b>	<b>14.6</b>	<b>14.1</b>	

Source: Eurostat.