

# Material Deprivation in Selected EU Countries According to EU-SILC Income Statistics

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## Abstract

The article deals with issues of households at risk of poverty in relative conception. Income poverty means a situation when the threshold of 0.6 of median income is not achieved. The analysis of a broader definition of poverty is based on identification and assessment of material deprivation factors, including: financial stress, housing conditions, availability of consumer durables and basic needs. Data sources are based EU-SILC dataset. Presented analysis is focused on selected EU countries, namely Czech Republic, Finland, France, Spain and United Kingdom. The result identifies the problem areas that cause deprivation symptoms.

*Key words: EU-SILC, income, material deprivation, poverty*

## 1. INTRODUCTION

According to Delors and the EU (Marketing journal, 2011) competitiveness means a country's ability to provide their citizens with a high and growing standard of living and employment to all who want to work. In the global definition of competitiveness, the three important and irreplaceable pillars are health, quality of education and the labor market, thus pillars dependent on labor force. Marketing and production oriented perceptions of competitiveness are based on the premise that consumers focus on competitive advantages of products in their shopping decision-making. Significant limitation to consumers is presented by poverty. Poverty represents the inability to participate in society and it has a multidimensional character – economic, human, social, and political. The dominant approach to measuring poverty is based on income situation of households, while except for the income indicators it also includes non-income indicators, so called deprivation items which are particularly discussed in this paper.

The problem of poverty of the European Union population is more and more intensely debated issue that hampers sound socio-economic development of the society. The decision of the EU Council to proclaim the year 2010 as the European Year for Combating Poverty and Social Exclusion was an indicator of Europe-wide orientation to the phenomenon of poverty. The concern of the social effects caused by the economic crisis development in 2009 was one of the main stimuli.

In 2010, 16.4% of European households lived below the poverty line. The Czech Republic has maintained its position as the state with the least income-vulnerable households in the EU. In that year, only 9% of Czech households lived in poverty zone. Spain (20.7%) and UK (17.1%) were above the average. Approximately equal representation of economically weak households was in Finland (13.1%) and France (13.4%).

To be able to get more detailed assessment of the household income situation, it is necessary to take the households' subjective opinions into account. For this purpose, we can use indicators

of material deprivation, which can bring better understanding for the conditions people in the European Union live in. It is particularly interesting to monitor material deprivation of households in poverty zone, indicating the poverty level that affects this population group.

## 2. THEORETICAL FRAMEWORK

In economic studies, the income situation of households is examined relatively to the political, economic and social situation in the society. The methodology is applied to all member states of the Community (since 2005 in the Czech Republic) in compliance with EU Council Directive no. 1177/2003. The part of the survey of the income situation (and consequently the entire socio-economic environment) and its impact is mainly the issue of poverty.

Poverty is often referred to as “one of the hottest issues of the globalized world” (Exnerová, Volfová, 2008). The issue of poverty of inhabitants is not specific, as it might seem to be, to developing countries or regions. According to European Committee data, the EU is one of the richest areas of the world, yet 17% of Europeans have such low incomes that they cannot afford to pay for the basic needs (European Committee website, 2010). This statement is based on the findings of the Statistical Office of the European Communities, presented among others in the report, saying that “17 % of EU citizens were at-risk-of-poverty in 2008” (Wolff, 2010).

Dewilde (2003, p. 334) pointed out that “poverty is a social and relative concept, depending on the standards of living in society.” Halleröd and Larsson (2008, p. 16) explain that “the poor are those who, due to insufficient access to economic resources, have an unacceptably low level of consumption of goods and services”. Whelan and Maître (2010) add that poverty is intrinsically multidimensional and not only about money.

National poverty line or poverty threshold means the income level below which people are considered to be poor. It is also called subsistence minimum. This definition is closely linked to the income level people need to be able to buy life’s basic necessities, such as food, clothing, housing, but also those things necessary for satisfaction of their most important socio-cultural needs. We must take into account the fact that the poverty line changes over time and it also varies by region; the official national poverty line is determined by a country’s government (Beyond Economic Growth, 2004). Halleröd and Larsson (2008, p. 17) add that “income poverty is measured in accordance with the conventional EU measurement of relative poverty, i.e. those who live in a household with an equivalent disposable income that is below 60 per cent of the median household income are defined as poor.”

Material deprivation interacts with country in the manner that it leads to it having substantial consequences for more subjective economic stress in richer rather than poorer countries (Whelan, Maitre, 2008). In a broader sense, following aspects are considered to be partial indicators of poverty:

- The issue of health, which is compared with indicators of mean life expectancy in given country.
- Access to education and the education level, as assessed by current and future expected mean length of schooling. Earlier, rate of illiterate adult population was also used.
- Availability and adequate level of services. In addition to health and education, services such as electricity, sewerage and waste collection and transportation services.

- Quality of infrastructure. Insufficient infrastructure causes social exclusion of the poor.
- The issue of social exclusion (applies to a group of people, which is due to some lawful or illegal discriminatory mechanism not included in the society, while the extremely poor are often affected by social exclusion) and hence also of public safety and more.

Analyses of each of the poverty dimensions don't include only the actual indicators, but also the cause of revealed values. In reality, it is not easy to capture the nature of poverty using either a single uni- or multidimensional definition or measure, because poverty can be defined in several ways (Fusco, 2003). Bellani and D'Ambrosio (2010) state that deprivation and poverty can be defined as condition in which a person is deprived of the essentials, necessary for reaching minimum standard of well-being and life. Guio (2005, p. 2) defines material deprivation as *“the enforced lack of a combination of items depicting material living conditions, such as housing conditions, possession of durables, and capacity to afford basic requirements.”*

An identification of deprivation is performed by using socio-economic categorization of living standards (MPSV, 2010). People, who are considered to be threatened by material deprivation, are those, who cannot afford at least three of the nine items listed below (EU Social Protection Committee, 2009):

1. to pay rent, mortgage, other loans and utility bills,
2. to keep their home adequately warm,
3. to face unexpected expenses,
4. to eat meat (or another adequate source of proteins) regularly,
5. to go on holiday,
6. audio-video equipment (orig. ‘TV set’),
7. a refrigerator,
8. a car,
9. a phone (regular or GSM).

Each of the categories is examined in more details or with more specific purpose. For example, when exploring the ability to pay for arrears, the size of burden is ascertained: ‘large burden’, ‘some burden’ or ‘no burden’. But it does not mean that the expression of poverty within income indicators has lost its importance. On the contrary, it is widely used as comparative indicator, while the assessment is not based on absolute conception, but on a relative one – the European statistics work with so called at-risk-of-poverty-threshold which was defined as 60% of national median income by EUROSTAT (see Halleröd, Larsson, 2008). Guio (2005) highlights the close connection of income distribution and deprivation situation.

### **3. METHODOLOGY AND OBJECTIVES**

The EU-SILC (European Union Statistics on Income and Living Conditions) project is based on primary investigations of income levels. In the Czech Republic, the module “Living Conditions” is implemented by the Czech Statistical Office annually, based on the regulation of the European Parliament and EU Council. The objective of this paper is to present results of material deprivation analysis of selected countries, because the indicator of poverty, based on proportion of population, living at the risk of poverty, cannot sufficiently reflect the real living

conditions. On the other hand, the analysis of material deprivation provides much better base for such assessments.

For the purpose of this paper, four countries were selected as representatives of four zones of cultural kinship defined by Světlík (2003). These representatives are Finland (FI), France (FR), Spain (ES) and United Kingdom (UK). The Czech Republic (CZ) was added to these countries. The data provided by Eurostat were used as the main sources for comparisons. Table 1 presents information on the number of household in the selected countries, participating in EU-SILC data collections in 2005 and 2010. Available information on the number of households living below the poverty line (BPL) is included in the table, defined as 60% of median equivalized income, in these years.

Tab. 1 – Numbers of households participating in EU-SILC data collections. Source: Eurostat, 2011, calculations of authors.

Country	Number of households	2005	2010
<b>CZ</b>	total	4,351	9,098
	BPL	453	819
<b>FI</b>	total	11,229	10,989
	BPL	1,314	1,440
<b>FR</b>	total	9,775	7,250*
	BPL	1,271	972
<b>ES</b>	total	13,027	13,597
	BPL	2,580	2,815
<b>UK</b>	total	10,826	8,109
	BPL	2,036	1,387

\* The size of the sample replaced by Minimum effective sample size provided by Eurostat due to data unavailability at the date of paper elaboration

Years 2005 and 2010 were selected for the comparison, because the year 2005 represented a first period in which the EU-SILC investigation was carried out in the Czech Republic, and 2010 represents the latest available period at the time of this publication.

Material deprivation criteria are divided into 4 groups: financial stress, housing conditions, availability of consumer durables and basic needs. The group financial stress assesses the load of housing costs and difficulties of such households to make ends meet. Housing conditions are considered from two perspectives, the quality of environment (noise, pollution, crime and vandalism) and amenities (equipped with shower or bath and flush toilets, roof leakages, moisture, light conditions). Consumer durables mean a phone, a colour TV, a personal computer, a washing machine and a car. Keeping household adequately warm, ability to spend a week-long holiday away from home, consumption of meat every other day and ability to face unexpected expenses are considered to be basic needs.

These indicators reflect the total number of households, and the share of households below the poverty line, which receive special attention. The subjective opinion of head of a household

is taken into account. Comparative descriptive statistic procedures were applied for the evaluation.

Households missing 3 or more of the total number of 9 items defined by the EU Commission for Social Protection & Social Inclusion are considered to be materially deprived; in case that 4 or more of these items are missing the households are considered to be severely materially deprived. These nine items should reflect that the household has the ability to pay its rent, mortgage, other loans and utility bills of the household, and the ability to keep the home adequately warm, the ability to face unexpected expenses, to eat meat or proteins regularly, to go on holiday once a year, the ownership of a TV, a refrigerator, a car and a telephone (landline or GSM). The aim is to identify issues that can be symptoms of deprivation in individual of selected countries.

Considering the goal of the work, comparative procedures of descriptive statistics were used.

## 4. RESULTS

The head of household presents his (her) subjective opinion on criteria that can be divided into the following four groups: financial stress, housing conditions, availability of consumer durables and basic needs.

The first indicator of financial stress reflects perception of the burden imposed by housing costs and examines it from the point of view of the difficulties of households based on its income. The housing costs, shown in Table 2, are 'some burden' for most Czech households. Different situation can be observed in France, where most of the households do not consider these costs as any burden. The opinion distribution of Spanish households is interesting. In 2010, housing costs were perceived as high burden by 51.4% of them and some burden by 45.7%, and thus, in comparison with 2005, it is possible to observe an increase in number of households considering their housing costs as high burden.

Economically weak households in the Czech Republic reported inter-annual shift directed into the 'high burden' category. Housing costs were generally the most progressively growing category, which was reflected mainly in this household segment. The proportion of reported 'high burden' of housing costs has increased by 6.4% (from 50.1% in 2005). In contrast, the proportion of 'some burden' dropped from 44.2% in 2005 by 4.5% in 2010 and 'no burden' by as much as 2% to 3.7%.

Spanish households below the poverty line also perceive their housing costs as high burden: in 2010, it represented 66.7% of the households, which is more by 39.1% than in Finland. In France, the share of households below the poverty line between the 2005 and 2010 changed and number of household that perceived the housing cost as 'high burden' increased by 13.1%. In 2010, British households had roughly equal representation of perception 'high burden' and 'some burden'. When compared with other countries, it is possible to observe the highest proportion of households below the poverty line indicating the cost of housing as 'no burden', but we can see an increase by 3.3% in 2010 even here.

Tab. 2 – Housing costs. Source: Authors’ calculations based on Eurostat data

Material deprivation – housing costs (%)							
Country	Number of households (%)	High burden		Some burden		No burden	
		2005	2010	2005	2010	2005	2010
CZ	total	24.4	26.1	64.3	65.2	11.3	8.8
	BPL	50.1	56.5	44.2	39.7	5.7	3.7
FI	total	19.7	18.4	56.3	56.2	24.1	25.4
	BPL	26.8	27.6	52.0	48.7	21.2	23.7
FR	total	20.9	27.1	30.8	24.1	48.4	48.8
	BPL	35.2	48.3	32.1	23.6	32.7	28.1
ES	total	46.4	51.4	50.1	45.7	3.5	2.9
	BPL	57.0	66.7	40.2	31.7	2.8	1.6
UK	total	25.0	26.2	44.8	43.3	30.2	30.2
	BPL	36.0	41.1	42.0	40.3	21.9	18.6

Households could also express their opinions on their financial stress through the assessment of difficulties they face to meet both ends with their incomes, using a six-level scale: from ‘with great difficulties’ to ‘very easily’. In 2005, the largest share of households with the evaluation ‘very easily’ was in Finland (11.6%) and UK (8.1%). In 2010, this level even increased to 14.9% in Finland, while in Britain there was a slight decrease by 0.7%. Spaniards seem to face the greatest difficulties to meet both ends. In the Czech Republic, the number of households experiencing great difficulties when trying to meet both ends dropped from 10.6% to 8.4%; thus reached the second position behind Spain.

When comparing the assessments of economically weak households, we can see that the Czech Republic has the highest proportion of households below the poverty line which perceive that they meet both ends due to their the income ‘with great difficulties’. Despite the decrease from 40.4% in 2005 to 37% in 2010, the level is still 6.9% higher than in case of Spain, and 28.6% higher than in Finland. Equally interesting is the fact that none of the households below the poverty line in the Czech Republic expressed that it can handle its financial situation ‘very easily’. Most of the Finnish economically weak households assessed that they can meet both ends ‘fairly easily’ (31%) or ‘with certain difficulties’ (28%), while we can see that between the analyzed years there was a slight decrease in levels of ‘with great difficulties’ and ‘quite easily’ in favour of increases in assessments ‘easily’ and ‘very easily’. In France, the development was very different. The first two categories experienced an increase of representation of economically weak households, and decreased share of assessments of categories from ‘with certain difficulties’ to ‘very easily’.

Housing conditions are another significant indicator of material deprivation. Housing conditions are evaluated d from two perspectives: the quality of environment (which takes into account noise, pollution, crime and vandalism) and amenities (equipped with shower or bath and toilets, roof leakages, moisture, light conditions – dark dwelling). The Tables 3 and 4 provide more information on the evaluation of these parameters.

British households experienced the biggest noise problems (20.1%). In Spain and France, about the same number of households (18.7% and 18.5%) identified noise as a serious problem, too. Pollution is the biggest problem for Czech households (18.5%) and lowest for Finland (8.5%). 23.1% of households in the UK identified crime and vandalism as the most serious problems connected with respondents' dwellings. It is interesting that for all the elements of the dwelling environment quality, the share of households considering these issues as their serious problem decreased between 2005 and 2010 in all countries.

From the point of view of households below the poverty threshold, the situation is somewhat different though. Noise is the biggest problem for economically weak French (25.4%) and British (21.9%) households. Pollution in the surroundings of the dwelling is the most serious for Czech economically weak households, more than noise, crime, and vandalism. In the UK, 27.5% of economically weak households live in areas with high crime rate and vandalism, which is more than 50% more than in Finland. Among the evaluated elements, noisy environment is considered as the biggest problem of economically weak households in France, Spain and Finland. In France, however, the severeness of the noise problem reaches about the same level as crime and vandalism, which are identified as the biggest problem of economically weak households in the UK.

It is interesting to see that both in case of all households and in case of households living below the poverty line in all countries the problems with dwelling environment dropped compared with year 2005. Particularly there was a decrease in number of households perceiving the above mentioned 3 elements as a serious problem, with the exception of crime and vandalism in France, where the level increased in 2010 compared to 2005.

Tab. 3 – Problems with the quality of dwelling environment. Source: Authors' calculations based on Eurostat data

Material deprivation – problems with dwelling conditions (%)							
Country	Number of households (%)	Noise		Pollution		Criminality and vandalism	
		2005	2010	2005	2010	2005	2010
CZ	total	21.3	16.5	19.8	18.5	16.5	15.4
	BPL	26.7	17.8	20.0	18.9	22.4	17.4
FI	total	16.3	13.0	12.8	8.5	17.3	8.7
	BPL	19.4	18.2	11.6	9.5	16.7	13.3
FR	total	20.1	18.5	17.1	12.9	17.5	15.6
	BPL	25.8	25.4	19.6	17.1	21.4	25.2
ES	total	28.5	18.7	16.7	10.8	19.2	13.1
	BPL	26.4	19.1	15.8	10.1	18.4	15.4
UK	total	23.8	20.1	14.1	11.8	30.0	23.1
	BPL	27.3	21.9	13.7	12.5	32.3	27.5

As we can see in Table 4, almost all households in selected countries have a bath or shower and indoor toilet, though no data are available for 2010 for Spain. Anyway, the shares of households that do not own these amenities are very low; in case of the UK it is 0% of all economically weak households. The biggest shift between 2005 and 2010 was recorded in the Czech Republic, where the number of households fell from 1.2% to 0.3%. Despite this fact, the Czech Republic had the highest number of economically weak households without a bath, shower, indoor toilet (1.6%) which, however, also represents a significant decrease (by 4.8%) when compared to 2005.

Roof leakages, moisture and rottenness are problems for Spaniards (21.3%), while only 5% Finns encounter this problem. Similarly, most households living below the poverty threshold are in Spain (28.9%), which is actually even an increase by 5.7%, compared to 2005. In the UK, there was an increase by 1% to 22.5% between the analyzed periods and in France an increase by 0.4% to a level of 21.1% of economically weak households. Positive change was proved in the Czech Republic. When results for 2005 are compared, 33% of households living below the poverty line had problems with roof leakages, moisture and rot; the level was reduced by as much as 8%.

Perception of their dwelling as too dark is most often expressed by British households (10.3%) and the least frequently by Czechs (3.7%). The situation of economically weak households is different though. The highest share of those who are unhappy with the light conditions of their dwellings are French economically weak households (13.1%); the number in 2010 was higher than in 2005, just like in Finland. In contrast, the shares declined in other countries, most significantly in case of Spain.

Tab. 4 – Problems with the housing conditions. Source: Authors' calculations based on Eurostat data

Material deprivation – problems with dwelling amenities (%)							
Country	Number of households (%)	No bath / shower, indoor toilet		Leaking roof		Dwelling too dark	
		2005	2010	2005	2010	2005	2010
CZ	total	1.2	0.3	20.5	11.8	6.2	3.7
	BPL	6.4	1.6	33.0	20.0	12.7	7.0
FI	total	0.7	0.5	4.9	5.0	3.8	4.2
	BPL	2.4	1.5	7.9	8.5	4.7	5.5
FR	total	0.5	0.3	12.3	12.5	7.8	8.3
	BPL	1.5	0.7	20.7	21.1	11.7	13.1
ES	total	0.3	-	17.3	21.3	10.4	5.3
	BPL	0.6	-	23.2	28.9	13.4	6.5
UK	total	0.0	0.0	14.5	15.0	11.6	10.3
	BPL	0.1	0.0	21.5	22.5	13.9	10.7



The third indicator is focused on household durables, which include a telephone, a colour TV, a computer, a washing machine and a car. The shares of households with a constrained lack of the mentioned items are shown in Table 5.

All the items in all analyzed countries indicate generally discussed trend – increasing level of households' physical facilities and equipment. Among all, the most significant increase in ratio of ownership was recorded for a computer, reflecting the boom in information technology together with wide penetration of the Internet connection.

In the Czech Republic, the second most growing category was the car ownership (by 5.3% between analyzed years). Nevertheless, the Czech Republic is the country with the highest proportion of households without a car. In contrast to this fact, only 3.6% of French households did not have a car in 2010. 1% of Finnish households did not have a colour television, which is the highest among the concerned countries. The ration was the same as far as ownership of washing machine is concerned. There are 6.3% of Spanish households which do not own a computer just as well as Czech households. In both countries, there has been a growth in ownership of this consumer durable item.

Czech households below the poverty line increased the amount of their durables faster than the examined sample set (their mean was 6.1% compared with 3.18% for all households). For the economically weak households, ownership of car grew the most slowly (4.2%), which is due to relatively high acquisition costs. In contrast, the growth in ownership of colour TV among economically weak households was nearly 4 times higher (1.5% compared with 0.4%), five times higher for the phones (7.1% among the poor compared to 1.4% of total).

Number of households living below the poverty line not owning a car increased only in France, Finland and the United Kingdom. In France, this proportion increased from 13.5% to 14.4%, in the UK from 13.9% to 15.1%, and in Finland from 29.7% to 30.4%.

Tab. 5 – Household ownership of consumer durables. Source: Authors' calculations based on Eurostat data

Material deprivation – lack of household durables (%)											
Country	Number of households (%)	Telephone		Colour TV		Computer		Washing machine		Car	
		2005	2010	2005	2010	2005	2010	2005	2010	2005	2010
CZ	total	1.8	0.4	0.6	0.2	14.9	6.3	0,5	0.3	15.5	10.2
	BPL	9.6	2.5	3.3	1.8	43.1	26.0	2,7	2.1	43.6	39.4
FI	total	0.3	0.0	0.9	1.0	7.2	2.9	1,3	0.8	9.1	8.5
	BPL	0.9	0.2	4.3	4.6	22.0	10.5	6,2	4.0	29.7	30.4
FR	total	0.8	0.1	0.3	0.1	9.3	4.0	1,0	0.7	3.9	3.6
	BPL	2.5	0.6	1.4	0.7	24.4	12.2	4,3	2.8	13.5	14.4
ES	total	0.7	0.4	0.2	0.1	11.3	6.3	0,3	0.1	5.5	4.7
	BPL	2.2	1.1	0.7	0.3	20.2	13.1	1,1	0.4	12.1	10.8
UK	total	0.2	0.2	0.2	0.1	6.5	3.4	0,6	0.4	5.3	6.1
	BPL	0.7	0.6	0.7	0.1	13.4	8.8	1.5	1.7	13.9	15.1

The last indicator of material deprivation deals with basic needs. These needs are: adequate heating of dwelling, a week long holiday at least once a year, eating meat or proteins at least every other day (including fish and chicken), and the ability to pay unexpected expenses. Figures for households which cannot afford to meet these needs are listed in Table 6.

It would be expected that the need of adequate heating of the dwelling would not be met only in marginal cases; despite of that, the inability to meet this need reached 11.2% of Czech economically weak households in 2010, which, however, means a significant decrease, compared with 19.5% in 2005. The best situation among the selected countries is in Finland, where only 1.4% of all households and 3.5% of households below the poverty line had inadequate heating of their dwelling in 2010. On the other hand, in Spain, 7% of all households suffered from lack of adequate heating in 2010; Spain got in front of the Czech Republic as a country with the highest number of households indicating that their dwelling as inadequately heated. Most households below the poverty line without adequate heating live in France (15.3%), where an increase of 2.4% can be seen, compared to 2005. In case of Spanish economically weak households, the situation in both analyzed years was relatively stable (15.2% in 2005 and 15.1% in 2010).

Tab. 6 – Basic needs. Source: Authors' calculations based on Eurostat data

Material deprivation – other basic needs consumption categories (%)									
Country	Number of households (%)	Inadequate heating of home		A one week holiday		Meet every other day		Unexpected expenses	
		2005	2010	2005	2010	2005	2010	2005	2010
CZ	total	9.3	5.2	40.6	39.5	17.8	9.7	42.9	37.9
	BPL	19.5	11.2	79.8	76.7	43.7	27.8	81.4	77.7
FI	total	2.6	1.4	19.9	14.7	2.9	2.9	33.0	28.1
	BPL	4.0	3.5	49.2	35.8	9.6	7.9	65.2	59.1
FR	total	5.3	5.7	31.3	28.7	6.3	6.9	35.6	33.1
	BPL	12.9	15.3	63.2	62.5	16.3	20.3	67.3	70.5
ES	total	8.5	7.0	40.9	40.8	2.3	2.4	33.3	63.3
	BPL	15.2	15.1	63.7	65.3	6.4	4.8	53.2	60.2
UK	total	5.7	6.1	23.3	27.3	6.2	5.1	30.8	34.7
	BPL	11.0	11.9	46.2	51.4	13.3	10.9	54.0	56.0

The inability to spend one week holiday away from home once a year dropped by 1.1% and by 3.1% for economically weak households for all Czech households. In 2010, there were 40.8% of Spanish households that could not afford one week holiday, compared to only 14.7% of Finnish households. As far as economically weak households are concerned, there were 76.7% of Czech households that could not afford holiday, while in Finland; the number was on less than half of this level.

The inability to afford meat every other day has decreased by 8.1% within the analyzed period for all Czech households and by 15.9% for the households living below the poverty line. In-

terestingly, Spain is a country in which only 2.4% of all households and 4.8% of households at-risk-of poverty could not afford meat every other day.

It is worth mentioning that only 77.7% of Czech economically weak households are unable to pay unexpected expenses. Similar situation is in France, where there are 70.5% of such households, in Spain 60.2%, in Finland 59.1% and 56% in the UK and its households living below poverty line.

#### 4.1 The level and the depth of material deprivation

After analysing individual indicators of material deprivation, it is essential to take into account the total number of households and households living below the poverty line that are materially deprived. The percentages of materially deprived and seriously materially deprived households in each country are presented in Table 7.

Tab. 7 – Materially deprived households. Source: Authors' calculations based on Eurostat data

Material deprivation					
Country	Number of households (%)	Materially deprived households		Severely materially deprived household	
		2005	2010	2005	2010
CZ	total	25.7	16.2	15.5	7.9
	BPL	68.2	53.2	50.3	37.0
FI	total	12.4	9.1	5.6	3.6
	BPL	38.8	30.4	21.7	14.2
FR	total	15.7	13.6	7.5	6.7
	BPL	42.5	41.9	25.4	25.2
ES	total	14.5	15.2	5.8	5.6
	BPL	29.6	32.4	14.5	15.0
UK	total	14.2	20.9	6.5	6.0
	BPL	32.0	31.8	17.1	14.9

To make it clear, the intersections in the following sets of graphs show the number of materially deprived households in 2010 and the number of households at-risk-of poverty.

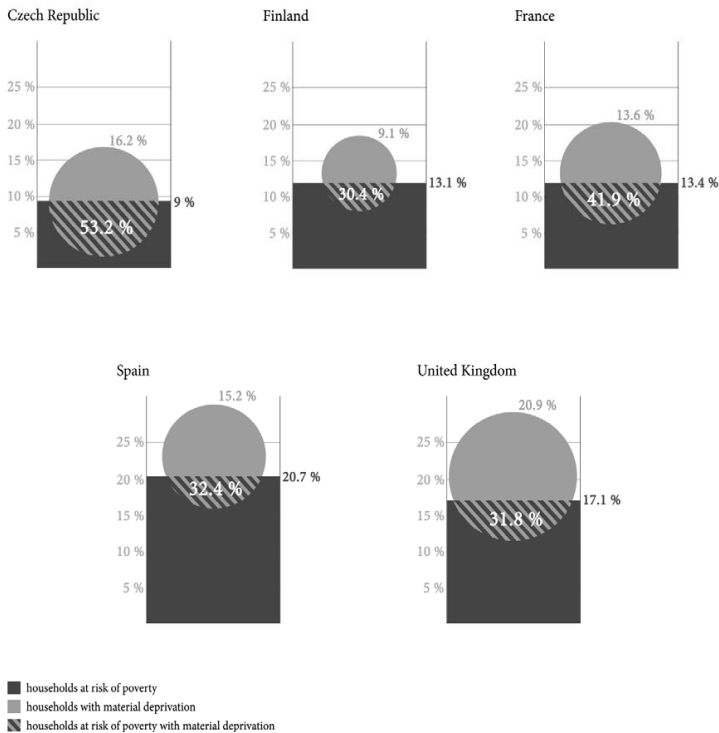


Fig. 1 – Materially deprived households at-risk-of-poverty, 2010. Source: Authors' calculations based on Eurostat data

The highest share of materially deprived households is in the UK; it is over one fifth of all households, which makes the UK the only country out of the selected ones for our analysis with greater number of deprived households than what the European Union mean is (18.5% in 2010). On the other hand, in Finland only about one tenth of their households suffer from material deprivation. In 2005, when the European mean was 22.4%, the value for the Czech Republic reached 25.7% of all households that missed 3 or more items in the above mentioned list. In 2010, this value decreased to 16.2%.

The situation of Czech households living below the poverty line was as follows. In 2010, 53.2% of the households were materially deprived and 37% of them even seriously materially deprived. Even though there was a decrease compared with 2005 (15% in material deprivation, and 13.3% in severe material deprivation), it does not change the fact that the Czech households are in the worst situation among the selected countries, even in 2010, their share is above the European mean, which is 44.8%. For both analyzed years, out of the European Union countries, only Latvia, Lithuania, Hungary and Poland had more materially deprived households than Czech Republic, and in 2010, Bulgaria, Estonia, Greece, Romania, Slovakia and Croatia were added to the list. In 2005, the data were not collected only for Romania and Croatia.

Out of the selected countries, the lowest share of materially deprived economically weak households live in Finland (14.2%) which is only about 0.7% less than in the UK. In Finland, however, there was a dramatic decrease from the value of 21.7% in 2005. The number of households in France stayed on about the same level (25%) for the two analyzed years.

It is also essential to mention various levels of material deprivation. In 2005, the highest number of households living without any material deprivation lived in the UK (61%); in 2010 it was in Finland (63.5%). The highest share of households with material deprivation of level 0, meaning the households were not materially deprived, was for both years in the UK (35.7% in 2005 and 34.9% in 2010).

At this point, it is appropriate to explain the indicator depth of material deprivation, which is the ratio defined as the unweighted mean number of items missed by materially deprived households. Figure 2 presents the results of this indicator for selected countries for years 2005 and 2010.

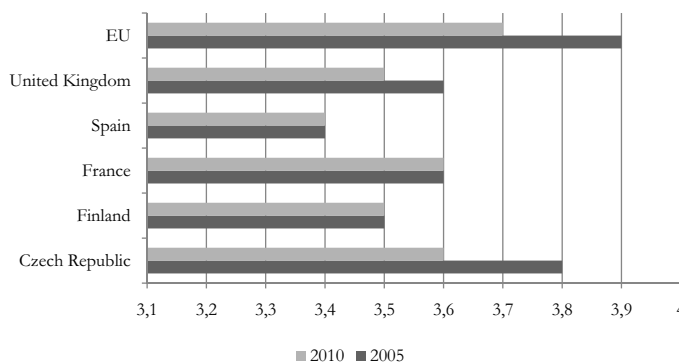


Fig. 2 – The depth of material deprivation. Source: Authors' calculations based on Eurostat data

In 2005, the Czech Republic experienced the most profound material deprivation (3.8 items) as well as in 2010, when there was a decline to the level of France in both analyzed years (3.6 items). It is positive that all the selected countries reached better results than the European mean in both analyzed years.

In 2010, households in Romania (4.2 items), Bulgaria and Latvia (4.1 items) were in the worst condition in the EU. The depth of material deprivation in these countries suggests that the conditions are serious. The countries with the lowest depth of material deprivation in the EU are the Netherlands, Spain, Iceland (3.4 items) and Finland (3.5 items).

## 5. DISCUSSION AND CONCLUSION

The conducted analyses of material deprivation revealed some interesting facts. One fact is that UK is the country with the highest share of materially deprived households, however the highest rate of economically weak households that are materially deprived are in the Czech Republic (53.2%). We can consider it positive that the number decreased by 15% in 2010 when compared to values of 2005. A decrease also occurred in case of materially seriously deprived

households in the Czech Republic, because 7.9% of all households and 37% of all economically weak households cannot afford 4 of 9 items defining material deprivation. The least materially deprived households from selected countries live in Finland (9.1%); there is the lowest number of poverty households that are marked as materially deprived.

The burden of housing costs appears to be greatest for Spanish households living below the poverty line, namely to 66.7% of them. The level 'no burden' at all has the highest representation in French economically weak households, nevertheless, in France, a growth of share of household that cannot afford adequately heated household dropped between the analyzed years 2005 and 2010 (from 12.9% to 15.3%).

When considering individual items assessing the dwelling environment, the most problematic to economically weak households are noise in France (25.4%), pollution in the Czech Republic (18.9%) and crime and vandalism in the United Kingdom (27.5%). Problems with dwelling conditions are essential especially in the Czech Republic, where 28.9% of economically weak households experience roof leakages and moisture and rot in their homes. Dwellings equipped with shower, bath and indoor toilets are almost commonplace, and however, the highest share of households that lack these commodities are in the Czech Republic (1.6%) and in Finland (1.5%). Too dark dwellings are reported by 10.7% economically weak British households.

An indicator that does not display any serious insufficiency in economically weak households is the availability of household durables (except for cars and computers). A telephone is nowadays almost standard equipment in all households and even in households living below the poverty line. The results show that the share of households which cannot afford a phone is in the range from 0.2% (in Finland) to 2.5% (Czech Republic). In Finland, however, there are 4.6% of economically weak households which cannot afford to have a TV (it is the highest level among the countries concerned). Interestingly, there are more households in the Czech Republic that own a colour TV than those having a washing machine.

Noteworthy is also the fact that in all analyzed selected countries, more than a half of households at-risk-of-poverty cannot afford one-week holiday away from home. A meal with meat is a normal element of most economically weak households in Spain, where only 4.8% of households cannot afford eating meat at least every other day, however, in the Czech Republic, it is typical for 27.8% of economically weak households. Alarming is the finding that in all analyzed countries a majority of households at-risk-of-poverty cannot face unexpected expenses, most often in the Czech Republic (77.7%).

We can conclude that out of the analyzed countries, the best situation is in Finland, where only 30.4% of the economically weak households are identified as materially deprived and 14.2% as severely materially deprived the lowest share among the selected countries. Finnish economically weak households also showed the best scores in the majority of items in the assessment of individual indicators. Finland also showed the lowest depth of material deprivation.

Although the Czech Republic has long maintained the position of a country with the lowest share of households at risk of poverty in the EU (9% in 2010), it must be noted that more than half of these households are described as materially deprived and 37% of them even as seriously materially deprived, that is, although there was a large drop since 2005, the highest percentage among the selected countries. The fact that households are unable to face unexpected

expenses and that they have big problems with the housing conditions and provision of basic needs creates a potential threat of social exclusion with all negative consequences. Therefore, it is necessary to point out that despite the generally perceived fact that the Czech Republic belongs to economically advanced countries, it is not correct to ignore the issue of poverty in our country.

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