

POVERTY AND SOCIAL INCLUSION INDICATORS IN 2016

Poverty and social inclusion indicators are part of the general EU indicators for tracing the progress in the field of poverty and social inclusion. Main source of statistical data on which basis the indicators are calculated is the annually conducted Survey on Income and Living Conditions (EU-SILC).

Poverty estimation

In 2016, the average monthly poverty line for the country is 308.17 BGN per person. The number of persons who are below this line is 1 638.7 thousand representing 22.9% of the population.

1. Main poverty indicators

	2012	2013	2014	2015	2016
At-risk-of-poverty threshold (monthly average in BGN)	279.7	285.9	323.8	325.8	308.2
Persons below at-risk-of-poverty threshold - in thousands	1559	1528	1578	1586	1639
At-risk-of-poverty rate (% of the population)	21.2	21.0	21.8	22.0	22.9
At-risk-of-poverty rate before social transfers (% of the population)	41.8	41.8	46.2	42.9	45.5
At-risk-of-poverty rate before social transfers with pensions included (% of the population)	25.9	26.7	27.3	28.4	27.9
Inequality of income distribution (S80/20)	6.1	6.6	6.8	7.1	7.9
Gini coefficient ¹	33.6	35.4	35.4	37.0	38.3

The poverty line decreased by 5.4% compared to the previous year and the share of poor population increased by 0.9 percentage points.

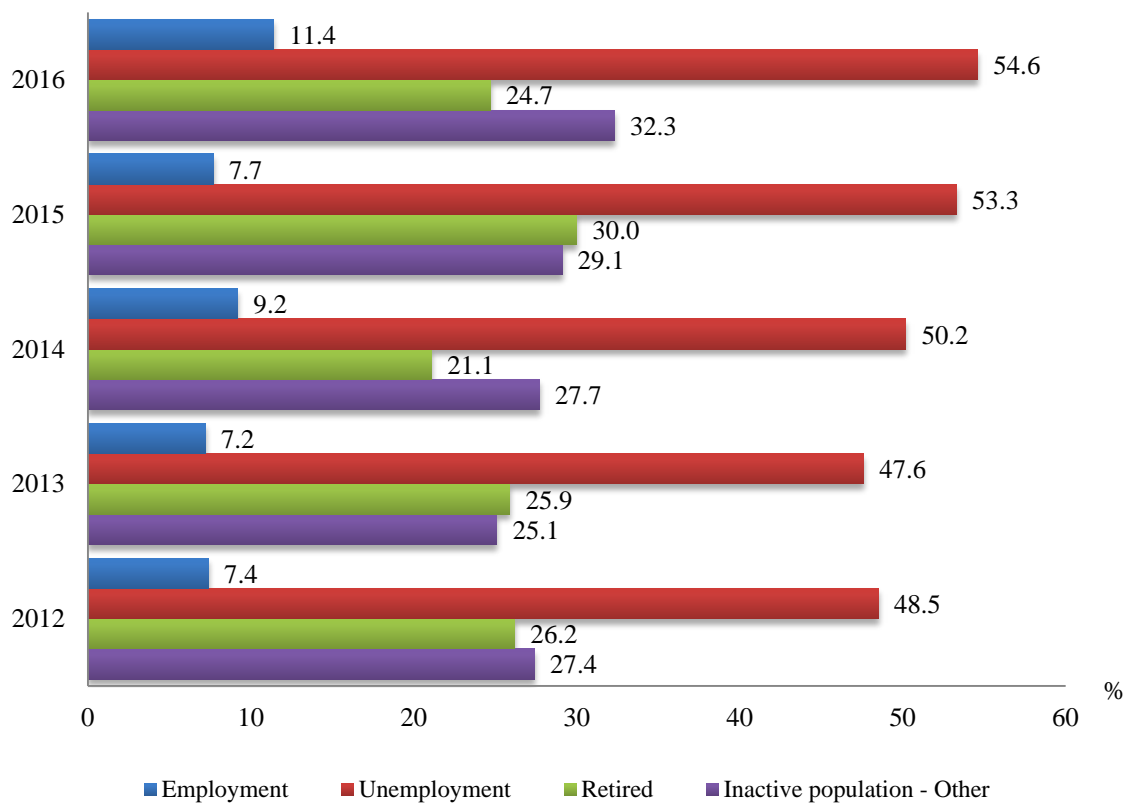
The social protection system contributes considerably to the poverty decrease. According to 2016 data, if the income from pensions is included into the household's income and the rest social transfers are excluded, the poverty level increases from 22.9% to 27.9%, or by 5.0 percentage points. And respectively, if the pensions and the rest of the social transfers are excluded, the poverty level increases up to 45.5%, or by 22.5 percentage points.

The main factor influencing the risk of poverty for the prevailing part of population is the economic activity and participation in the labour market. For the observed period, the share of poor is highest among the unemployed (54.6%) and the risk of poverty for unemployed male is 6.7 percentage points higher than for unemployed female.

¹ Calculated based on data of the distribution of persons and households by income and normalized in the range from 0 to 100.



Figure 1. At-risk-of-poverty rate by most frequent activity status



Share of poor among employed persons increased in 2016 compared to the previous year by 3.8 percentage points and is 11.6%. The risk of poverty is four times higher for persons working part time than for those working full-time. At the same time the risk of poverty among female is 3.5 percentage points lower than among male.

2. In-work at-risk-of-poverty rate (by gender, population 18 - 64 age)

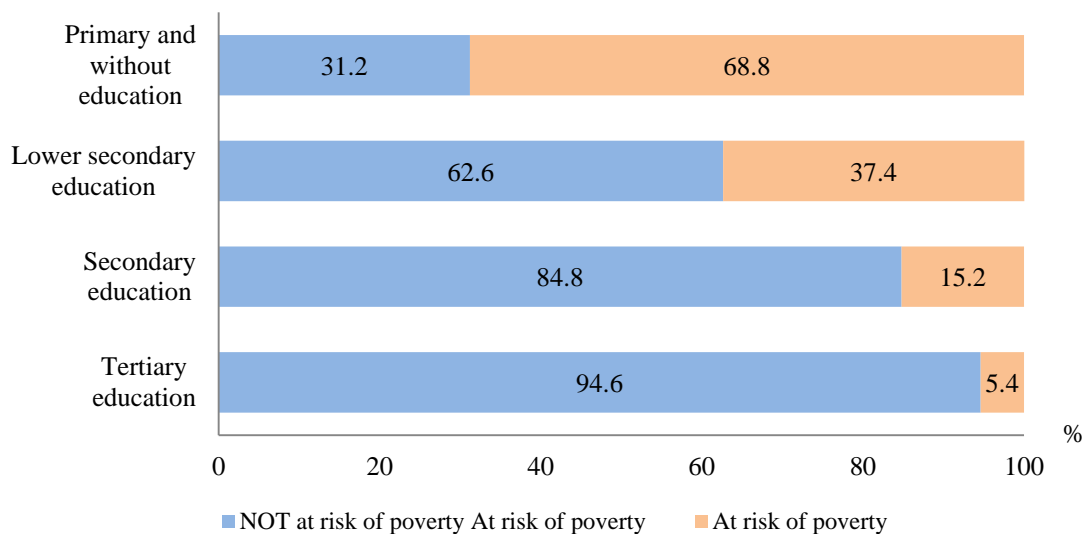
(Per cent)

	2012	2013	2014	2015	2016
Employed					
Total	7.4	7.2	9.3	7.8	11.6
Male	7.7	8.0	9.8	8.3	13.2
Female	7.1	6.4	8.7	7.2	9.7
Type of employment					
Full time	6.6	6.4	8.1	6.7	10.2
Part time	27.9	20.9	27.8	30.3	42.2



Educational level influences considerably the risk of poverty for employed. Highest is the share of working poor with primary and without education - 68.8%. The increase of educational level decreases the share of poor among employed with primary education about 2 times and more than 4 times for those with secondary education. The share of working poor with tertiary education is 5.4%.

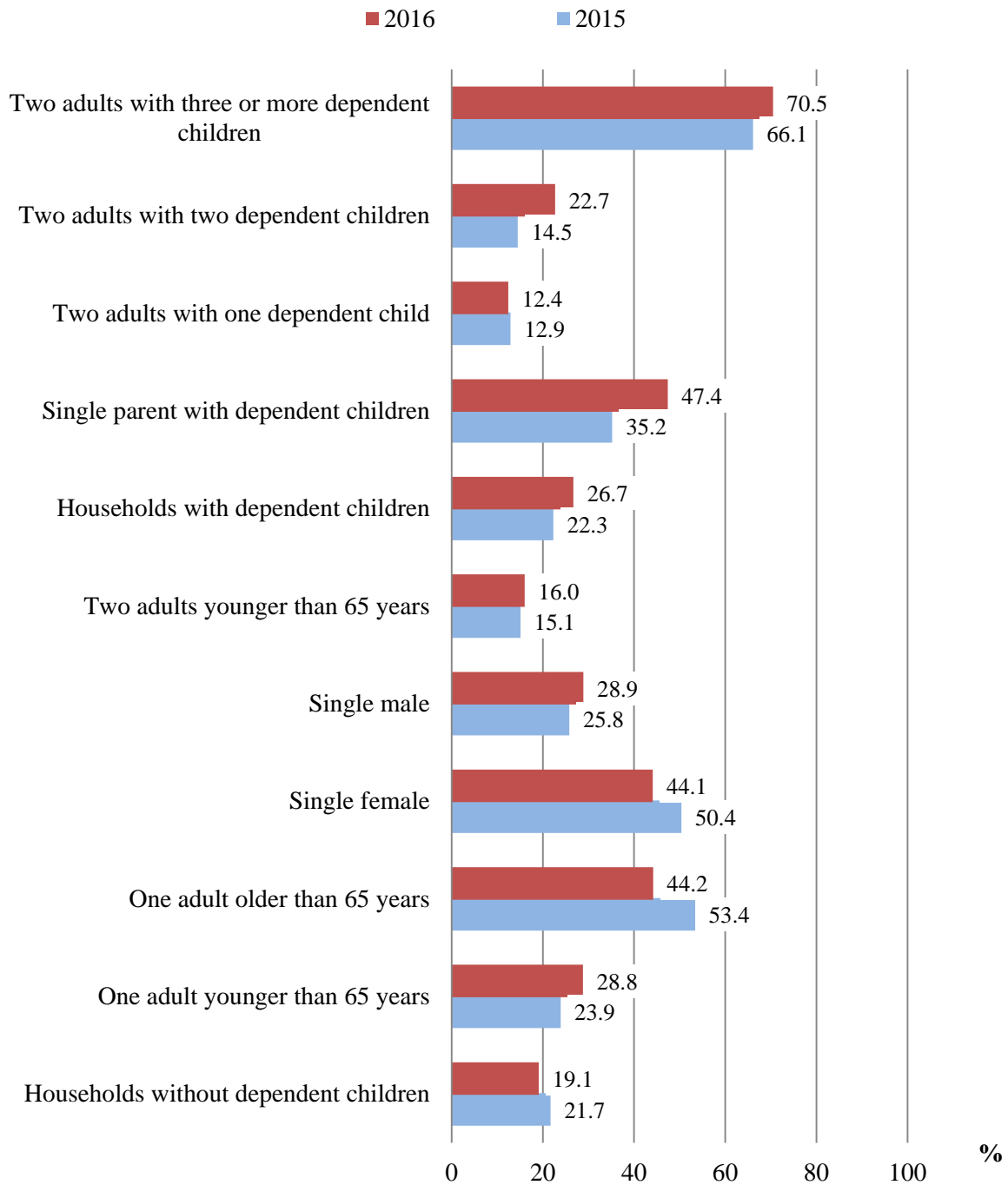
Figure 2. Employees at-risk-of-poverty by level of education in 2016



Poverty estimates by type of household, show that poverty is concentrated among elderly single-person households, single parents with children and households with three or more children. Compared to the previous year, in 2016 highest is the increase of the risk of poverty among single-person households with dependant children - an increase of 12.2 percentage points (Figure 3). Share of poor is lowest among households with two adults with one child (12.4%) and two adults aged below 65 years (16.0%). Among single-person households the risk of poverty is 15.3 percentage points higher for female than for male. Moreover, the risk of poverty among single-person households varies according to the household member age - it is 15.4 percentage points higher for persons aged 65 and over than for those aged below 65 years.



Figure 3. Risk of poverty by household types



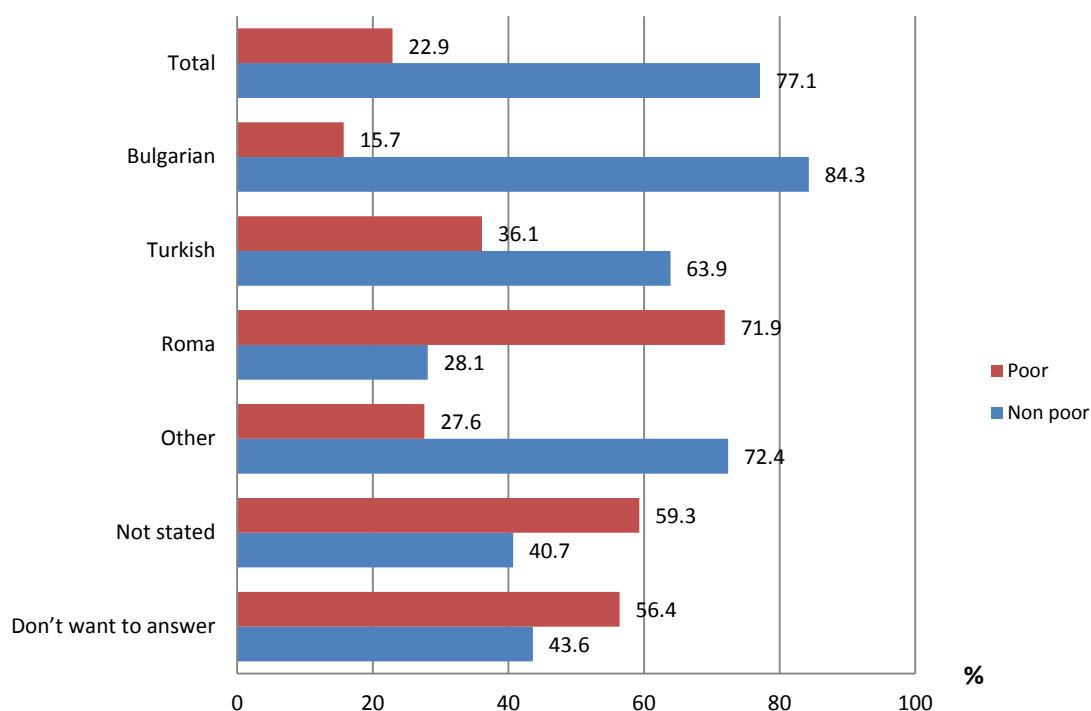


Poverty estimates by ethnicity¹

In order to meet the increasing users' needs of information, incl. poverty estimates by ethnicity, in 2015 a new question on respondents' ethnic group is added to the survey main questionnaire. Self-determination principle is applied i.e. respondents determine their ethnicity themselves and answering the question is voluntary. If the respondent does not want to answer the question a possibility is provided answer - 'Don't want to answer' to be chosen. Also a possibility is ensured answer 'Not stated' to be given in case the respondent cannot determine his/her ethnicity. Children ethnic group is determined by their parents and if the parents' ethnic group is different based on consensus.

Highest is the share of poor among Roma ethnic group - 77.1% and lowest among Bulgarian one - 15.7%.

Figure 4. Distribution of households' members by ethnic group and risk of poverty

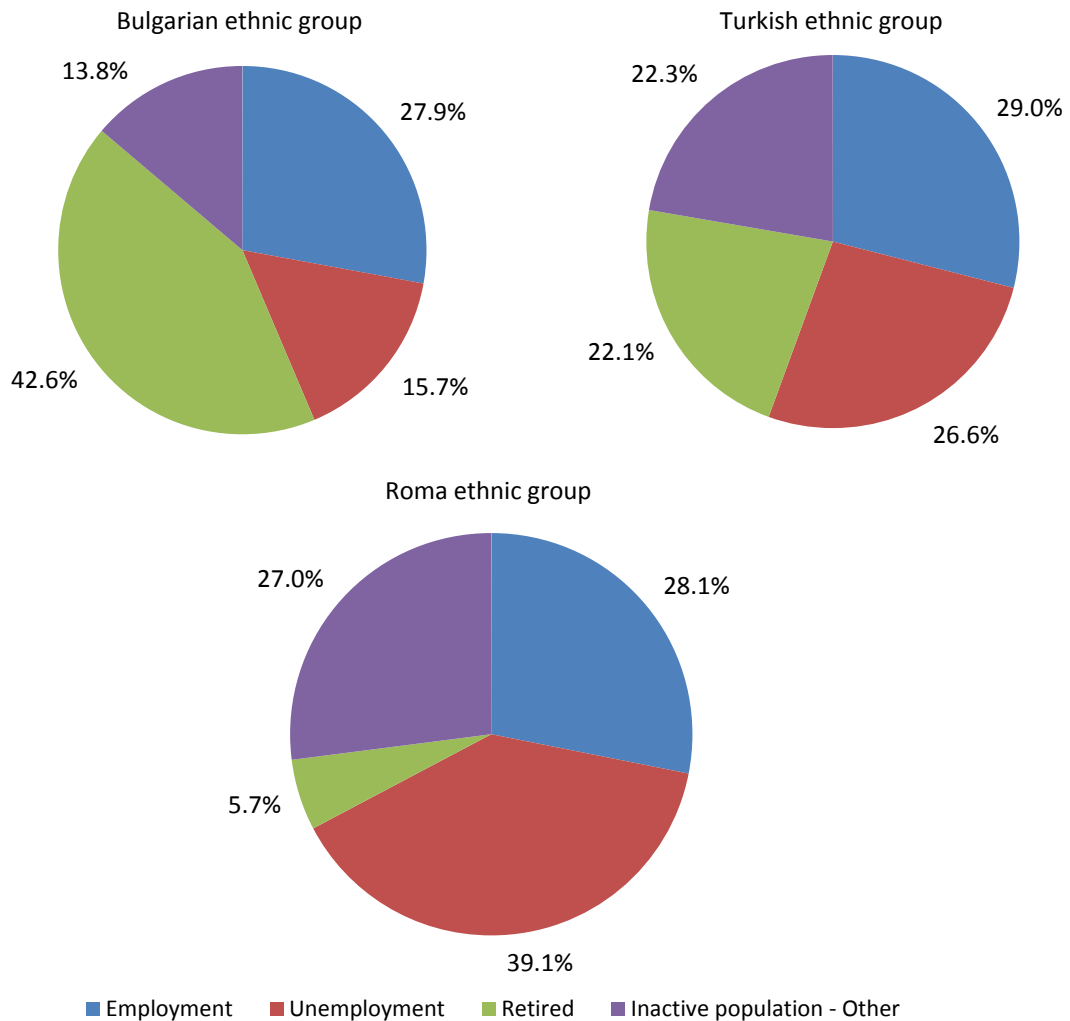


Considerable discrepancies are observed in the distribution of poor belonging to separate ethnic groups and their economic activity. Among poor belonging to the Bulgarian ethnic group prevail retired people (42.6%), while among Roma one highest is the share of unemployed (39.1%). Regarding employed, highest is the share of working poor among Turkish ethnic group - 29.0%, compared to 28.1% working poor among Roma and 27.9% among Bulgarian ethnic groups.

¹ Due to sample nature of survey, the poverty estimates by ethnicity contain stochastic inaccuracy. To define the stochastic accuracy of main poverty indicators by ethnicity, stochastic errors are calculated coefficients of variation and confidence intervals. The last are shown in methodological notes (Table 8).



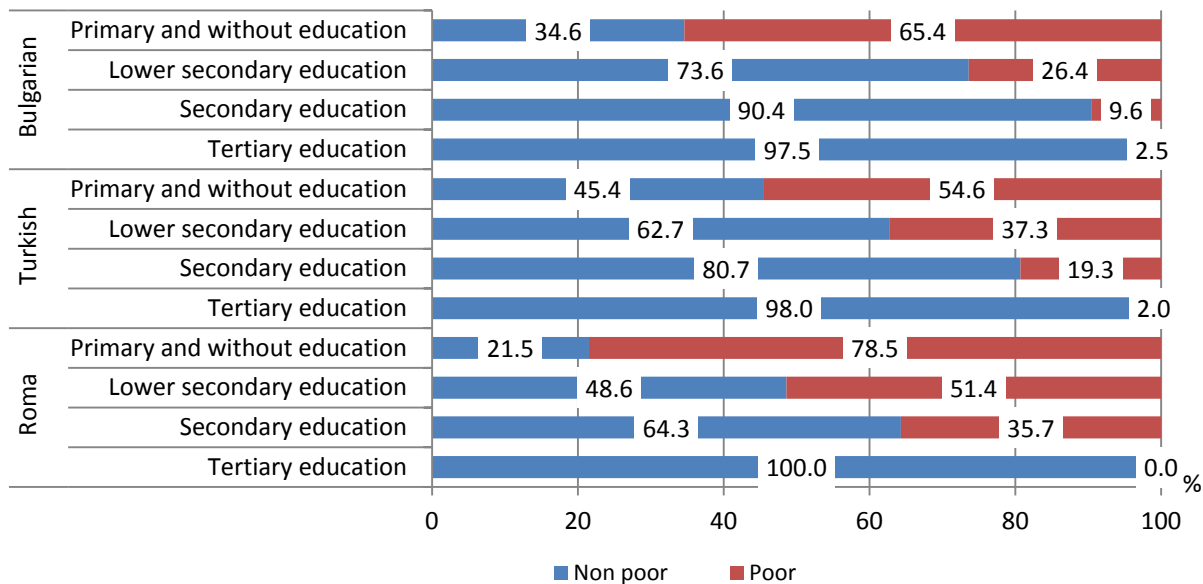
Figure 5. Share of poor by economic activity and ethnicity



Risk of poverty is strongly influenced by education, regardless the ethnic group - increase of education decreases the risk of poverty of employed of the three main ethnic groups. Among Bulgarian ethnic group the risk of poverty for persons with primary education and without education is 26 times higher compared to the risk of poverty for persons with tertiary education and among Turkish one - 27 times higher. Among Roma population, 78.5% of persons with primary and without education are poor, compared to absence of poor among Roma with tertiary education.



Figure 6. Share of employed by education, risk of poverty and ethnic group



Material deprivation of the households at national level

The general indicators of poverty assessment include subjective indicators related to material deprivation. They show the subjective assessment and personal attitude of the persons and households related to the possibility to meet individual needs. The subjective indicators are formed from the answers of nine questions related to the consumption of specific goods and services (Table 3).

3. Subjective material deprivation items in 2016

	Questions related to deprivations asked to the households	Deprived persons - in numbers	Share of population - %
1	Has the household been in arrears, i.e. has been unable to pay on time due to financial difficulties for any of the listed housing costs: <ul style="list-style-type: none"> • Mortgage repayment for the main dwelling • Rent • Utility bills for electricity, water, heating, etc. (without expenditures on telephone) • Hire purchase instalments or other loan payments 	2449934	34.2
2	Can your whole household afford (if you wish) going for a week's annual holiday away from home every year, including staying at a second dwelling or with friends and relatives	4032871	56.3
3	Can your whole household afford (if you wish) eating meat, chicken or fish (or their vegetarian equivalent) every second day	2473496	34.5
4	Can your household afford an unexpected required expense and pay through its own resources (urgent repair of the dwelling or car; replacement of washing machine or refrigerator; sudden illness, etc.)	3876507	54.1
5	Does your household have a telephone (incl. mobile)	202096	2.8
6	Does your household have a colour TV	97976	1.4
7	Does your household have a washing machine?	641983	9.0
8	Does your household have a car/van (incl. company car for private use)	1575394	22.0
9	Can your household afford to keep its home adequately warm	2807151	39.2



Data show that the highest number of households have restrictions on affording a holiday away from home (56.3%) and the ability to afford unexpected required expenses with own resources (urgent repair of the dwelling or car, replacement of washing machine or refrigerator, sudden illness, etc.) - 54.1%. In parallel, 2.8% of respondents cannot afford having a telephone (including mobile), 1.4% - a colour TV, 9.0% - a washing machine, and 34.5% of the households claim that they cannot afford having a meal with meat, chicken or fish every second day. One third of persons in households have arrears on the payment of housing-related costs in time, as 39.2% of the households cannot keep their home adequately warm.

In 2016, 31.9% of the population live in severe material deprivation (limitations in 4 of 9 indicators).

Limitations connected to satisfaction of certain needs and necessities differ among separate ethnic groups. For all ethnic groups highest is the share of persons who cannot afford a holiday away from home - 91.9% of Roma, 77.2% of Turkish and 50.2% of Bulgarian population. Over 80% of Roma cannot afford unexpected required expenses with own resources and 70.1% - to have a meal with meat, chicken or fish every second day. The respective shares for Turkish population are 67.0% and 35.0%.

4. Share of deprived persons in 2016 by ethnic groups

		(Per cent)			
	Questions	Bulgarian ethnic group	Turkish ethnic group	Roma ethnic group	Other ethnic group
1	Has the household been in arrears, i.e. has been unable to pay on time due to financial difficulties for any of the listed housing costs: <ul style="list-style-type: none"> • Mortgage repayment for the main dwelling • Rent • Utility bills for electricity, water, heating, etc. (without expenditures on telephone) • Hire purchase instalments or other loan payments 	37.6	70.4	14.3	40.5
2	Can your whole household afford (if you wish) going for a week's annual holiday away from home every year, including staying at a second dwelling or with friends and relatives	50.2	77.2	91.9	55.8
3	Can your whole household afford (if you wish) eating meat, chicken or fish (or their vegetarian equivalent) every second day	30.6	35.0	70.1	18.7
4	Can your household afford an unexpected required expense and pay through its own resources (urgent repair of the dwelling or car; replacement of washing machine or refrigerator; sudden illness, etc.)	49.1	67.0	86.6	43.2
5	Does your household have a telephone (incl. mobile)	1.3	3.8	15.0	4.0
6	Does your household have a colour TV	0.6	2.2	8.2	0.0
7	Does your household have a washing machine	5.2	9.7	41.9	8.8
8	Does your household have a car/van (incl. company car for private use)	16.4	27.6	66.1	13.5
9	Can your household afford to keep its home adequately warm	35.3	47.1	66.4	30.8

The population with severe material deprivation (limitations in 4 of 9 indicators) by ethnic groups are 25.8% of Bulgarian, 38.4% of Turkish and 80.6% of Roma population.



Households with low work intensity status

Jobless households are households where no member has been in employment over the last four weeks, i.e. all members of the household aged 16 years old or more have been either unemployed or inactive. Low work intensity of the household refers to the ratio between, on the one hand, the number of months that all working age (18 - 59) household members have been working during the income reference year, and on the other hand, the total number of months that could theoretically have been worked by the same household members. For those who declare that they work part-time, number of months is converted to full-time based on hours worked.

People living in households with very low work intensity are defined as people of all ages (from 0 - 59 years) living in households where the adults (those aged 18 - 59, but excluding students aged 18 - 24) worked less than 20% of their total potential during the income reference period.

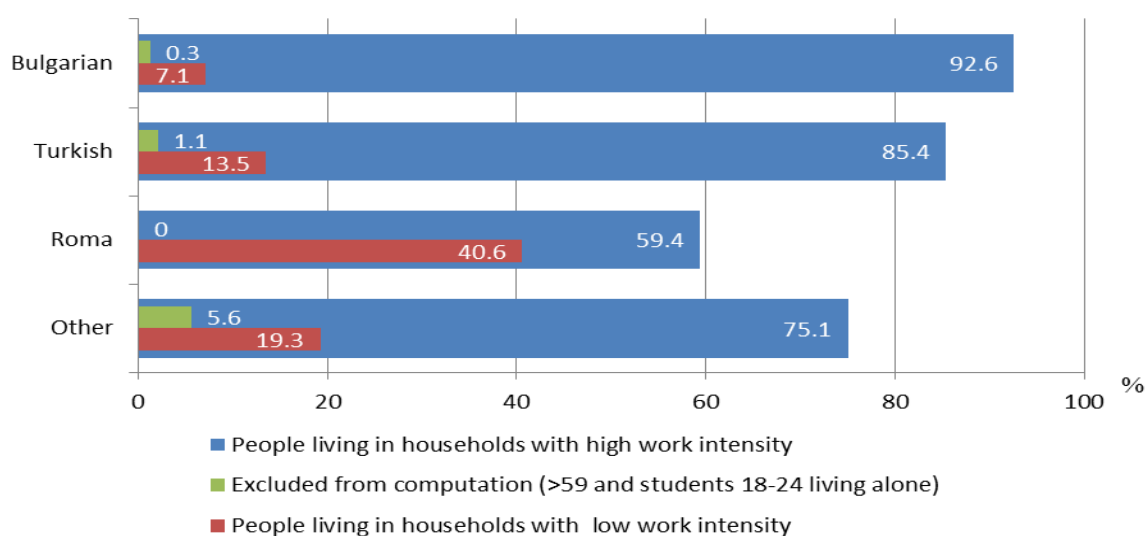
5. People aged 18 - 59 years living in households with very low work intensity by gender

	2012	2013	2014	2015	2016
Total - in thousands	473.8	482.1	461.4	440.3	437.4
Share of population - %	11.2	11.6	11.2	10.9	11.0
Male - in thousands	242.4	254.3	242.2	230.7	221.9
Share of population - %	11.3	12.0	11.6	11.2	10.9
Female - in thousands	231.4	227.8	219.2	209.6	215.5
Share of population - %	11.1	11.1	10.9	10.6	11.1

437.4 thousand persons aged 18 - 59 years live in a household with very low work intensity in 2016, or 11.0% of the population. Compared to 2015 their share increased by 0.1 percentage points. Share of male (10.9%) is 0.2 percentage points lower than of female (11.1%).

Highest is the share of persons with very low work intensity among Roma population - 46.6%, compared to 13.5% - among Turkish ethnic group and 7.1% among Bulgarian.

Figure 7. People aged 18 - 59 years living in households with very low work intensity by ethnic groups





Combined indicator

In relation to the goals set in strategy 'Europe 2020' a combined indicator for regular monitoring of countries' progress in implementing the national targets is calculated using data from the Survey of Income and Living Conditions (EU-SILC). The indicator includes at-risk-of-poverty rate, severe material deprivation rate and rate of people living in households with low work intensity.

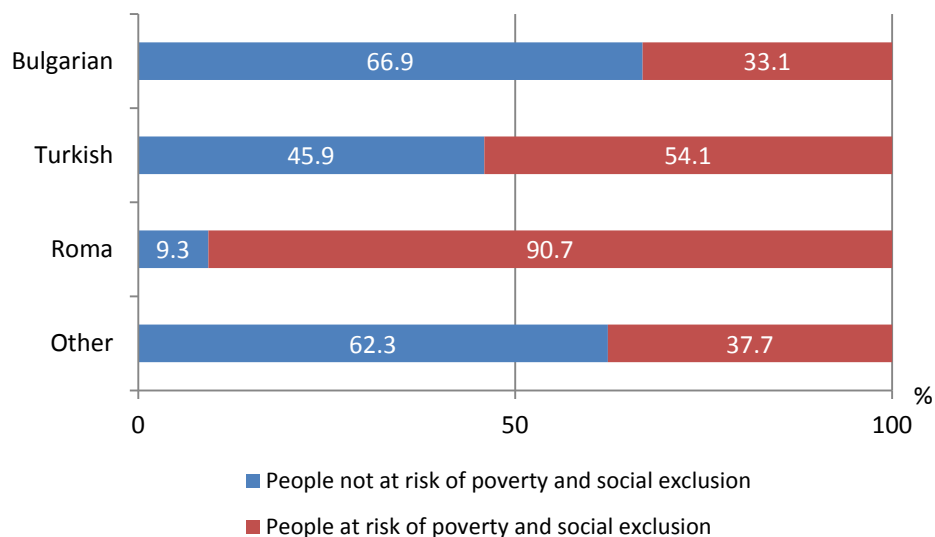
The combining of the three indicators show that in 2016 - 40.4% or 2 890.3 thousand persons are in at risk of poverty and social exclusion.

The indicator value decreases by 0.9 percentage points compared to 2015, more considerably among male - by 1.0 than among female - 0.9 percentage points.

6. Population at-risk-of-poverty or social inclusion by gender

	2012	2013	2014	2015	2016
Total - in thousands	3621.1	3493.4	2908.6	2981.7	2890.3
Share of population - %	49.3	48.0	40.1	41.3	40.4
Male - in thousands	1703.3	1648.5	1370.6	1386.4	1341.7
Share of population - %	47.6	46.5	38.8	39.5	38.5
Female - in thousands	1917.7	1844.9	1538.1	1595.3	1548.6
Share of population - %	50.9	49.4	41.3	43.0	42.1

Figure 8. Population at-risk-of-poverty or social inclusion by ethnic groups

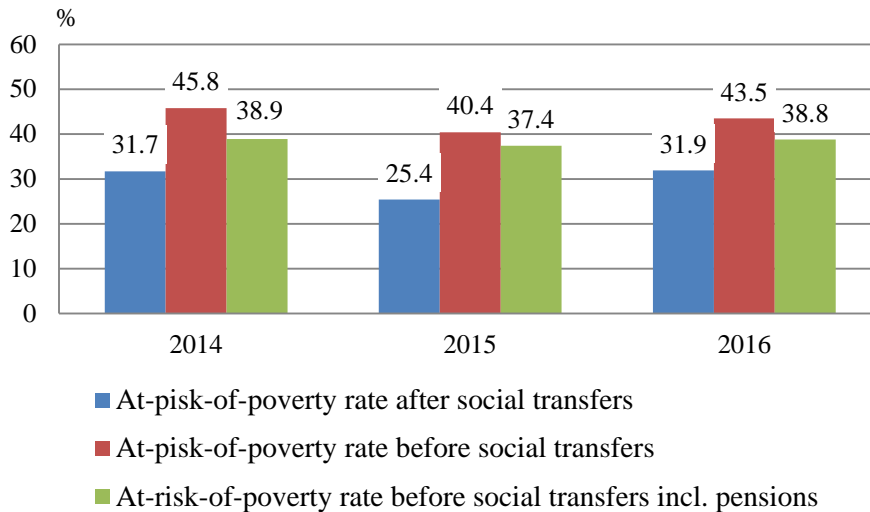




Children at-risk-of-poverty and material deprivation

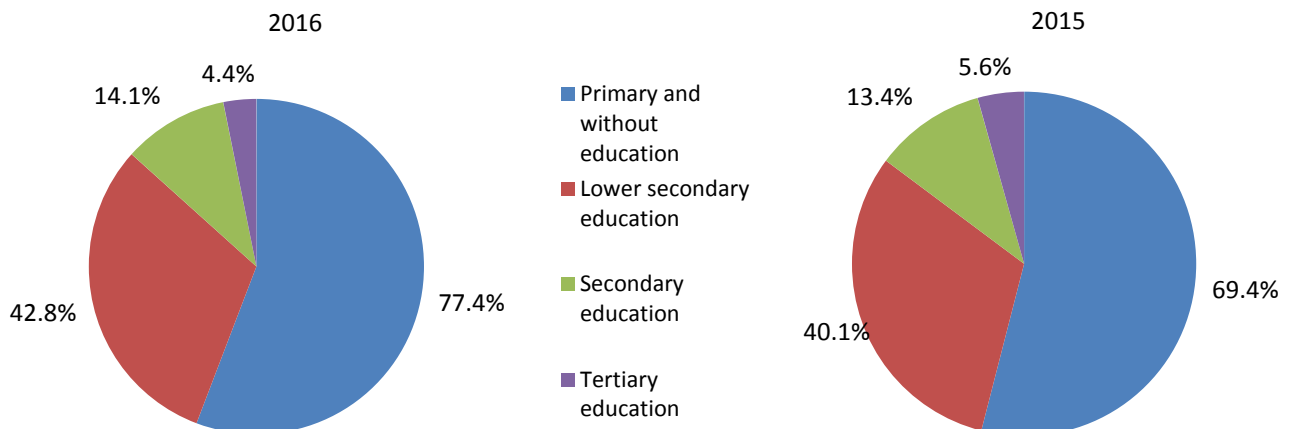
In 2016, 31.9% of children aged 0 - 17 years in Bulgaria were at-risk-of-poverty or 6.5 percentage points higher than in 2015. The social transfers decrease children's poverty rate by 11.6 percentage points.

Figure 9. Children at-risk-of-poverty before and after social transfers



The parents' level of educational attainment and professions are important for children's future progress. The higher educational level creates opportunities for better access to labour market and higher remuneration. In 2016, parents of eight of ten children at-risk-of-poverty (77.4%) are with primary and no education (Figure 10). Nearly 18 times less or 4.4% of children living in households which members have high level of education were at-risk-of-poverty. The risk of poverty among children whose parents are with secondary education is five times higher than for those whose parents are with tertiary education.

Figure 10. Share of children at-risk-of-poverty by educational level of their parents

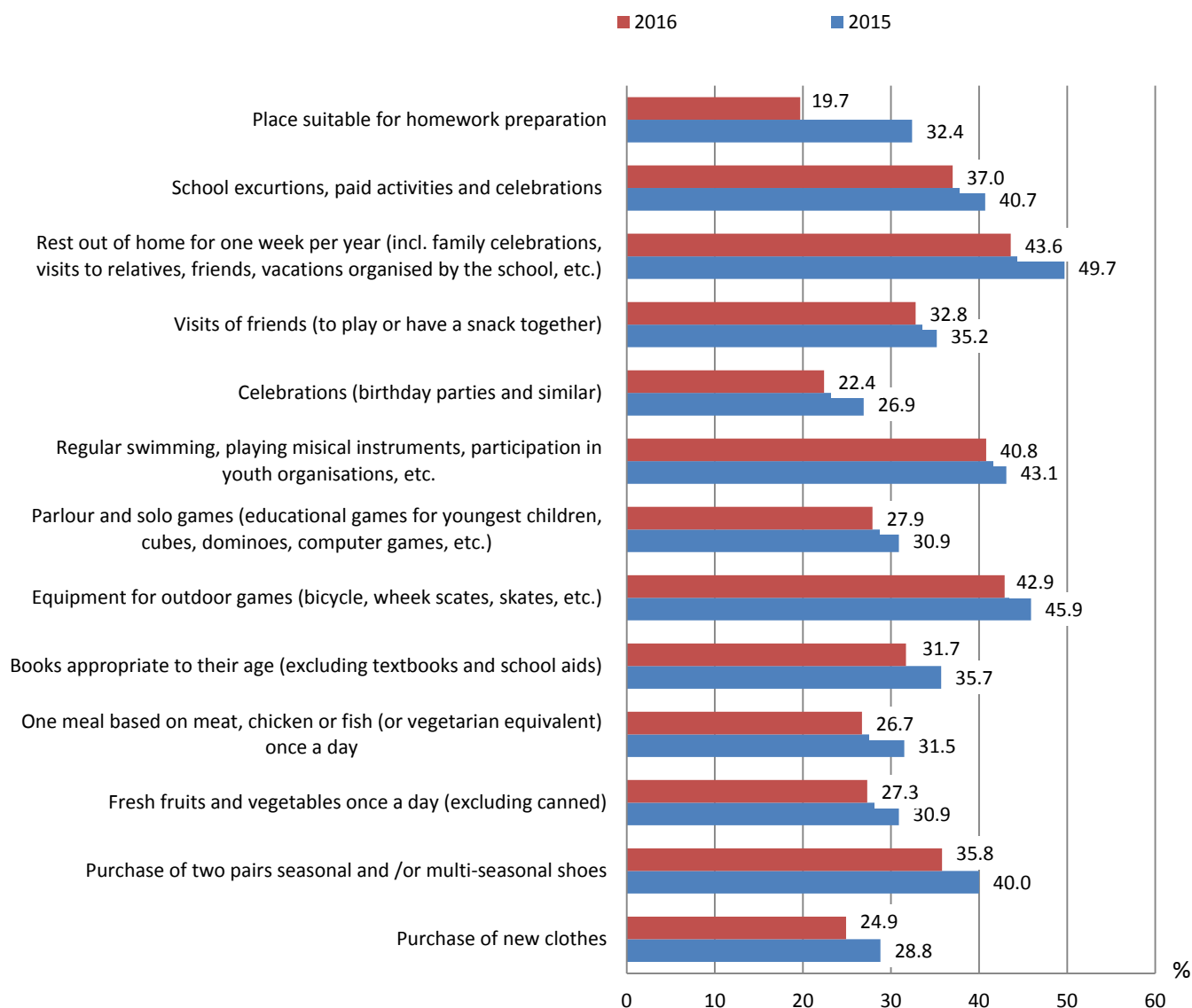




Material deprivation among children

EU-SILC collects data on material deprivation among children aged 1 to 15 years since 2013. In 2016 the share of children with material deprivation (lacking 1 or more from 13 items) is 51.4% and for 6.0% of children no need can be satisfied due to financial reasons. Almost half of the children (43.4%) cannot afford one-week holiday per year (including family holidays, visiting relatives, friends, organised by the school vacation, etc.); 40.8% - regular swimming, playing musical instruments, participation in youth organisations, etc.; 42.9% - equipment for outdoor games (bicycle, skates, etc.). Two of five children could not be ensured place suitable for homework preparation, meat, chicken or fish meal at least once a day and books suitable for their age. In 2016, 41.4% of children with material deprivation were at-risk-of-poverty.

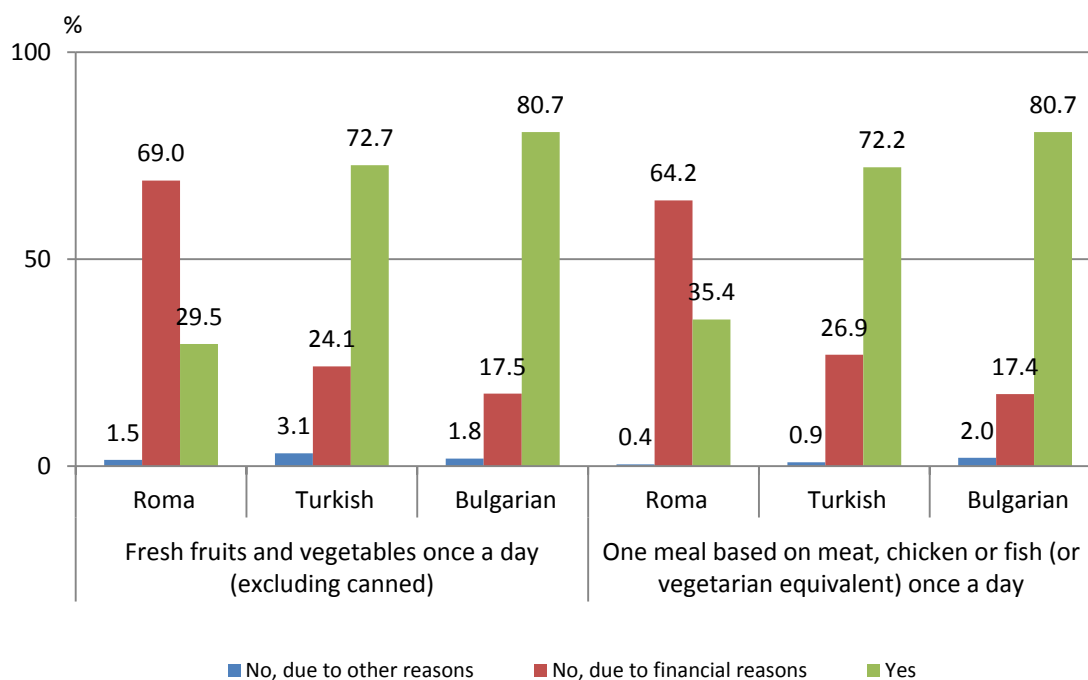
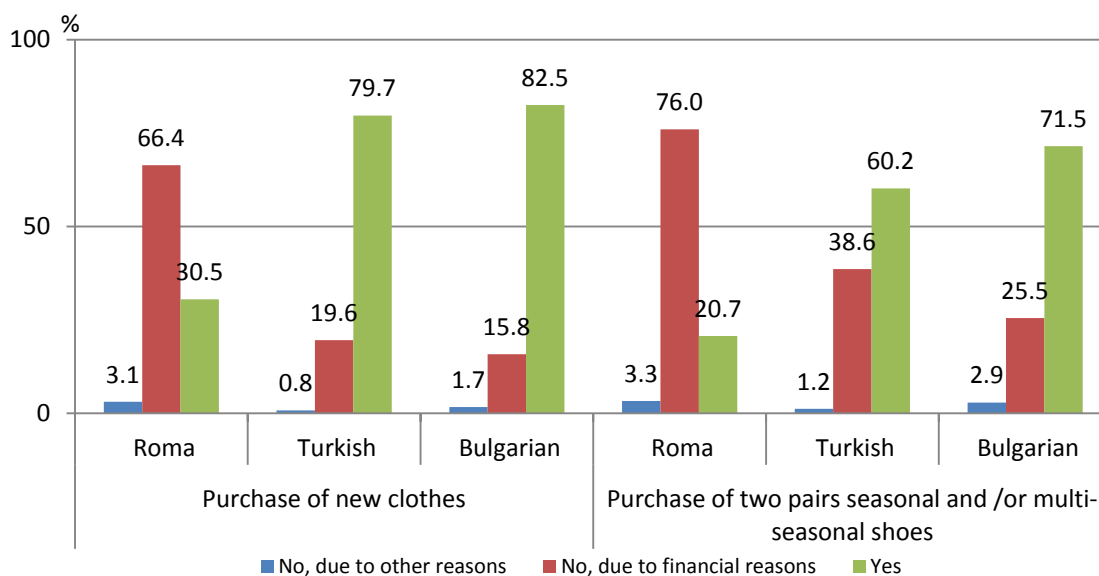
Figure 11. Material deprivation among children in 2015 and 2016

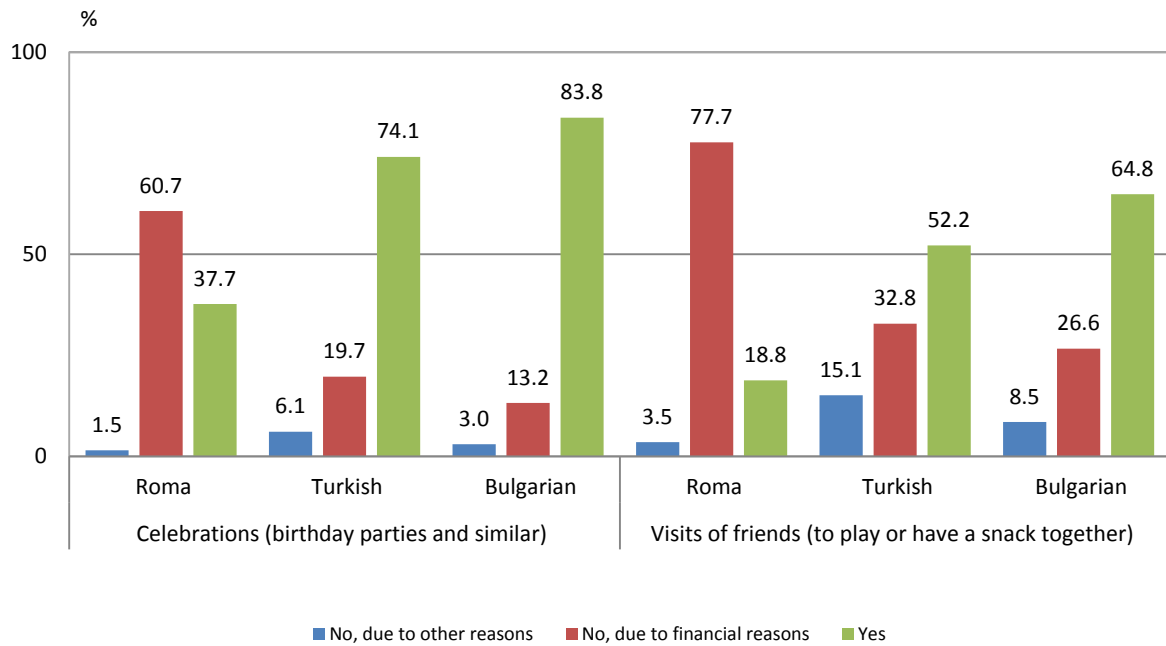
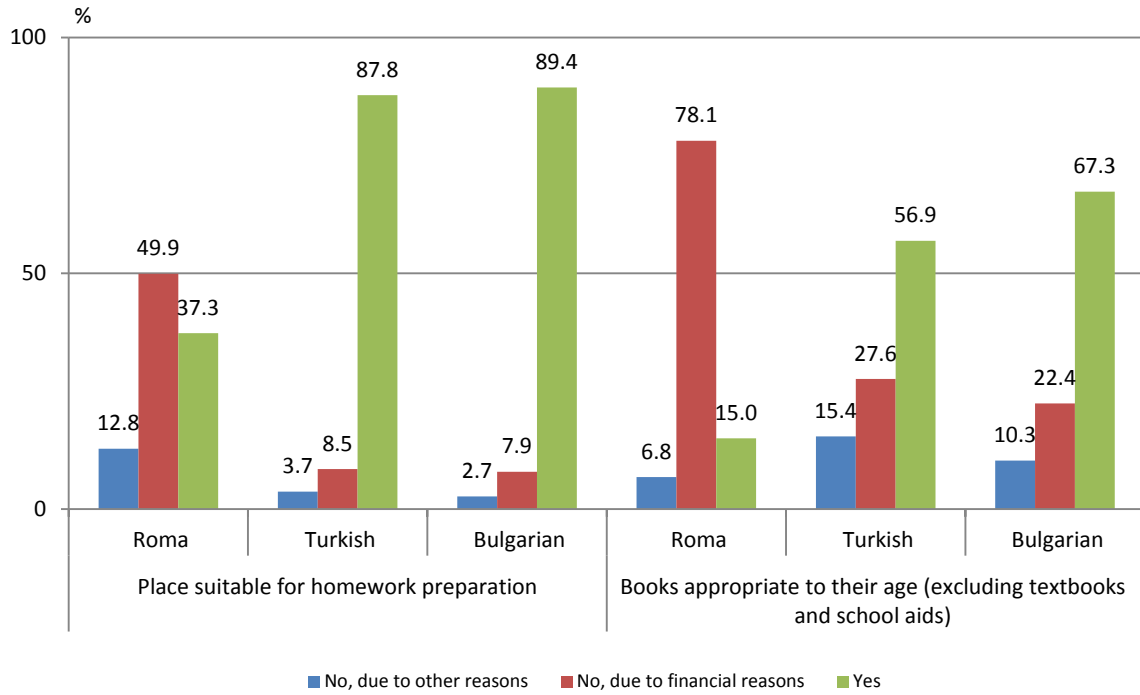




The ability to ensure certain children's necessities defers among ethnicities. In 2016, the shares of materially deprived (lacking 1 or more from 13 items) children by ethnicity are as follows: 18.7% - among Bulgarian ethnic group, 40.0% - among Turkish one, 75.1% - among Roma and 32.3% - among other ethnicities. No necessity (limitation on all the 13 items) could be satisfied for 0.9% of the Bulgarians, 2.1% of Turkish and 22.3% of Roma. About 23% of materially deprived children of Bulgarian ethnic group live at-risk-of-poverty at the same time. The shares for the rest ethnic groups are: 48.4% of children of Turkish ethnic group, 78.9% of Roma and 31.8% of other.

Figure 12. Material deprivation among children by ethnic groups



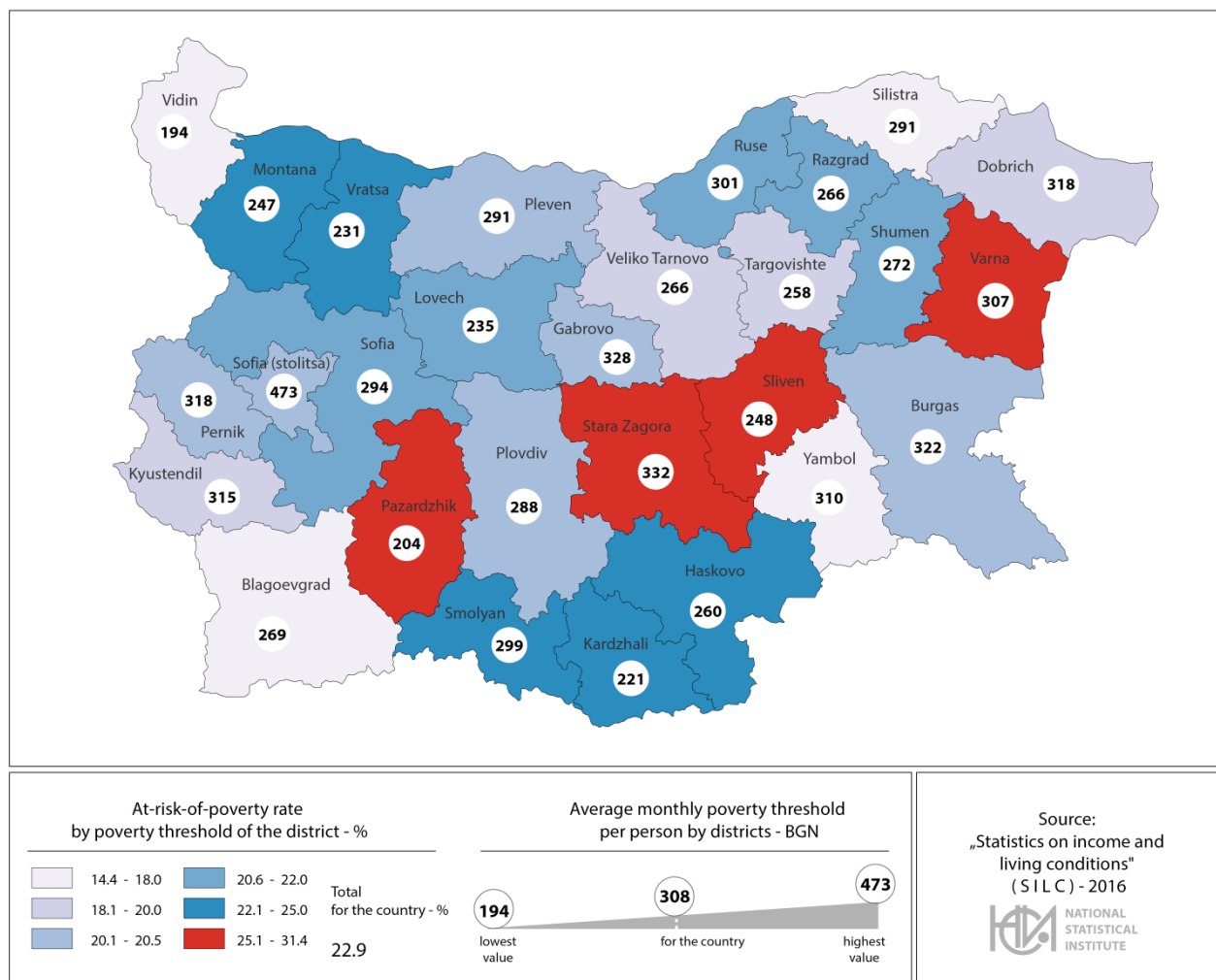




Assessment of poverty at regional level

An important aspect in the study of poverty is its assessment by districts. The same method as for the poverty line at national level is applied in the calculating the poverty line for each district - 60% of the average disposable net income of the households in the district.

Figure 13. Poverty threshold by districts in 2016

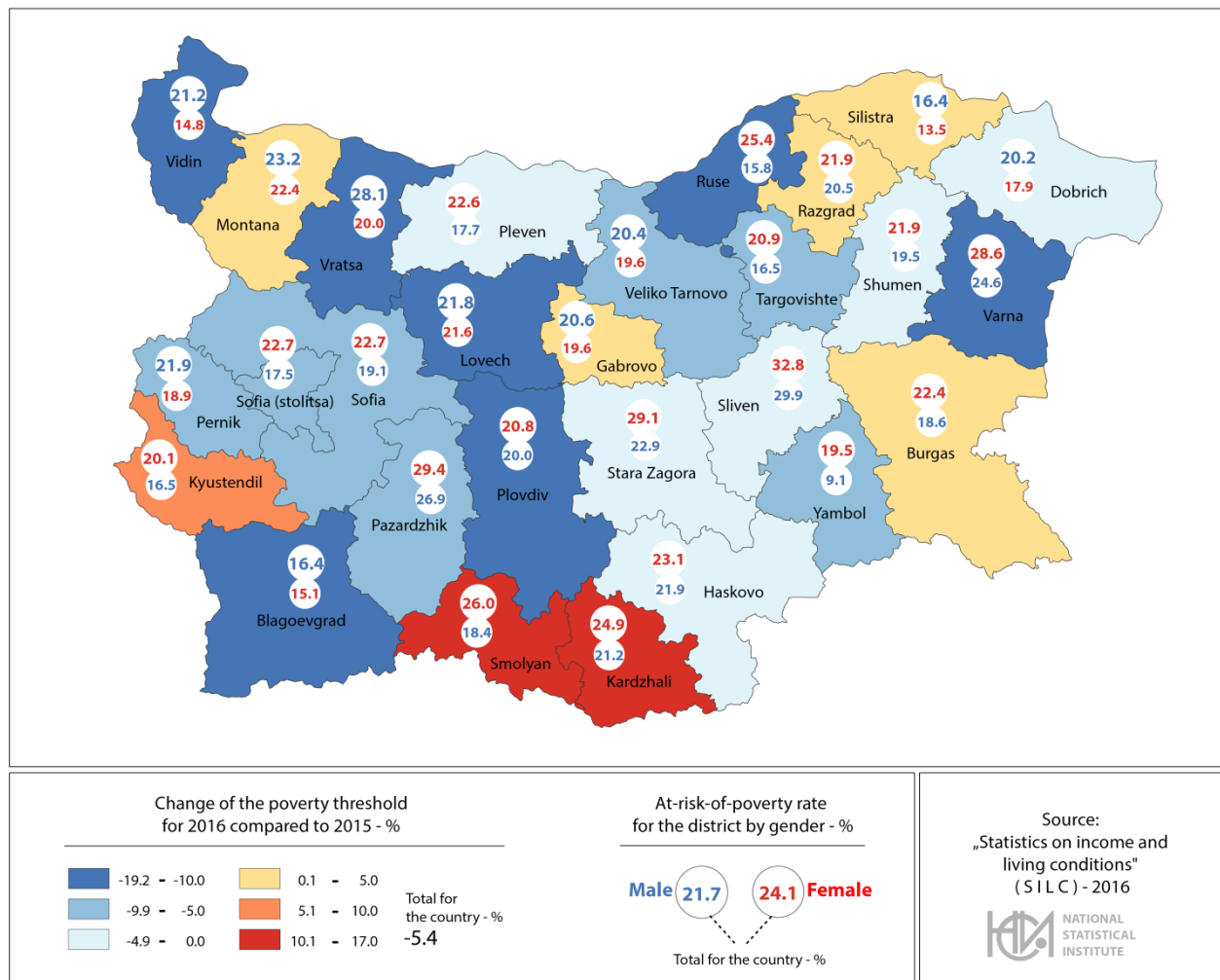


Lowest poverty threshold in 2016 is observed in districts Vidin and Pazardzhik - 194 BGN and 204 BGN respectively, and the highest - in district Sofia (stolitsa) - 473 BGN, followed by districts Stara Zagora (332 BGN) and Gabrovo (328 BGN).

Highest share of people at-risk-of-poverty is observed in districts Sliven - 31.4%, Pazardzhik - 28.2% and Varna - 26.6%. Lowest is the share of people at-risk-of-poverty in districts Yambol - 14.4%, Silistra - 14.9%, and Blagoevgrad - 15.7%.



Figure 14. Change of the poverty threshold and risk of poverty rate by regions and gender



The poverty threshold in 2016 decreased compared to 2015 in 21 districts. Highest is the decrease in districts Blagoevgrad (by 19.2%), Vratsa (16.9%), Vidin (16.3%), Plovdiv (14.2%), Varna (13.1%), Ruse (12.7%) and Lovech (10.5%). The main reason for the lower level of poverty threshold is due to decrease of income from wages for all districts, especially in Vidin and Vratsa - respective decrease by 29.2% and 28.2%.

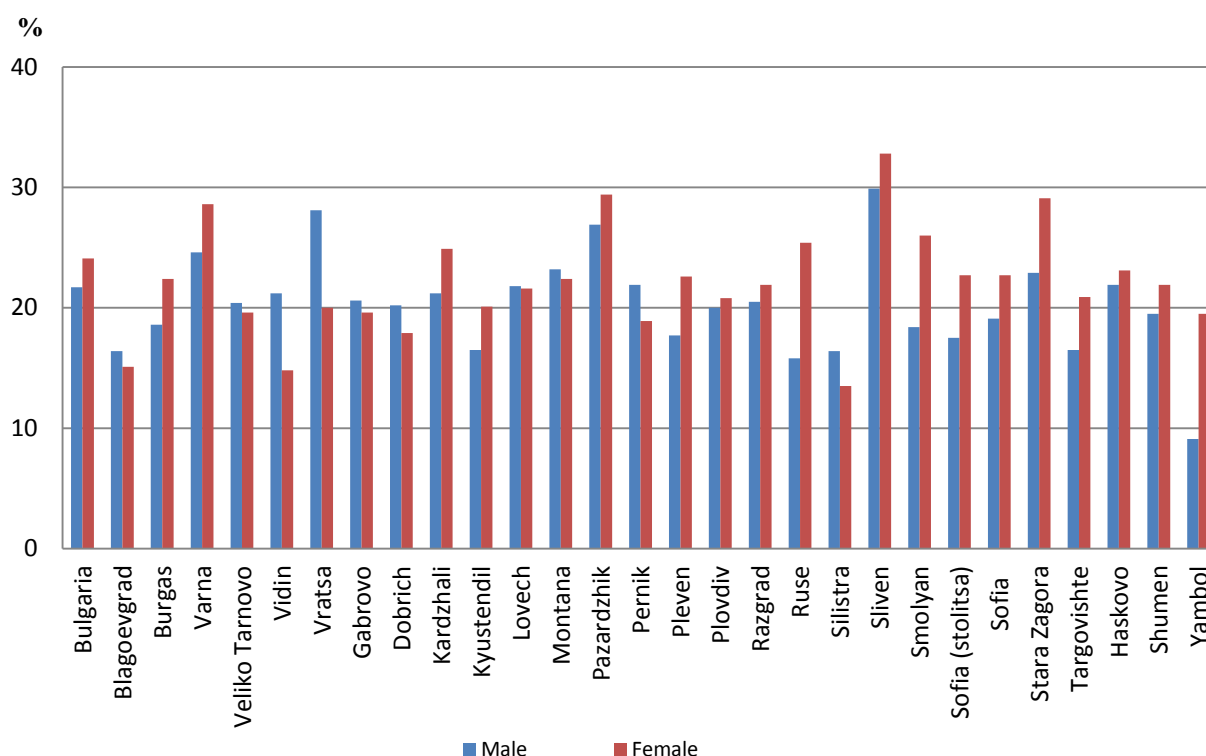
The poverty threshold in 2016 increased compared to 2015 in districts Kardzhali (by 17.0%), Smolyan (by 13.4%), Kyustendil (by 8.6%) and Montana (by 3.6%). The leading reasons for the increase are:

- Increased share of employed persons in the observed population (by 4.7% in district Silistra and by 3.6% in district Smolyan).
- Increased average income from pensions - by 49.9% in district Smolyan, by 41.1% in district Montana and by 33.9% in district Kardzhali.
- Reduced number of unemployment and other economically inactive persons.



The lowest share of poor for male - 9.1% is observed in district Yambol, while the highest one - in district Sliven - 29.9%. Lowest is the at-risk-of-poverty rate for female in district Silistra - 13.5%, compared to highest in district Sliven - 32.8%. In districts Yambol, Ruse, Smolyan, Stara Zagora and Sofia (stolitsa) the share of female at-risk-of-poverty is more than 5 p.p. higher than of male. In 10 districts - Lovech, Veliko Tarnovo, Montana, Gabrovo, Blagoevgrad, Dobrich, Silistra, Pernik, Vidin and Vratsa, the share of poor male is higher than the share of poor female.

Figure 15. Share of the persons at-risk-of-poverty by gender and districts in 2016





Methodological notes

The Survey of Income and Living Conditions (EU-SILC) is a part of the European Statistical System (ESS) and is realized based on unified methodology, defined by the Regulation No. 1177/2003 of the European Parliament and of the Council. It provides cross-sectional and longitudinal data on changes in income, level and structure of poverty and social isolation.

The target population in EU-SILC consists of all **private** households and their members, living at the country territory at the reference period. Persons in institutional households are excluded.

Up to 2015, the survey is conducted over a 4 year rotational panel from private households. The size of the sample within the panel is around 7 300 addresses/private households every year, distributed over all regions of the country. Except from the sampled household all its members aged 16 years or more are also surveyed. Households are participating in the survey for 4 consecutive years. Every year 1 rotational group is dropped and replaced by another. This rotational design provides two kinds of data:

- Cross-sectional (data from the current year of observation)
- Longitudinal (data for households participated in the survey for at least two consecutive years).

Since 2015, with the financial support of the European Commission, households from the 9th and 10th rotational groups are followed for the fifth (5) and sixth (6) consecutive year respectively.

In 2016, the sample size of the panel is 8 600 private households from 6 rotational groups, distributed over all regions of the country.

Two types of questionnaires are used:

- Household questionnaire
- Individual questionnaire for persons aged 16 years and more.

Basis concepts:

Poverty line

The total disposable net income is used in the Eurostat methodology for calculation of poverty line. Poverty line represents 60% of the average total disposable net income per equivalent unit.

Equivalent scales

Poverty and social inclusion indicators are calculated based on the total disposable net income per equivalent unit. Different equivalent scales are applied due to the different household's composition and number of members. The modified OECD scale issued according to which the first adult household member, aged 14 years and more is given weight 1, the second - 0.5 and each child under 14 years of age - 0.3. The weights are given to each household member and are summarized in order to obtain the equivalent household size. The total disposable net income of each household is divided to its equivalent size thus creating a total disposable net income per equivalent unit.

Education level

To define the educational level of the parents used the International Standard Classification of Education (ISCED 2011):

- ISCED 0 - Pre-primary education
- ISCED 1 - Primary education
- ISCED 2 - Lower secondary education



- ISCED 3 - Upper secondary education
- ISCED 4 - Post-secondary non-tertiary education
- ISCED 6 - Tertiary education (bachelor and professional bachelor)
- ISCED 7 - Tertiary education (master)
- ISCED 8 - Tertiary education (doctor).

Weighting

Data base for each country consists of different types of weights:

- Household weight (target variable DB090) for obtaining the real number of households at the country territory;
- Individual weight (target variable RB050) for obtaining the real number of persons at the country territory;
- Individual weight for each household member aged 16 years and more (target variable PB040) for obtaining the number of persons aged 16 years and more at the country territory.

The individual weight (RB050) is used for calculation of the poverty indicators, since the poverty status is calculated at individual level and the target group is referred to the whole population living in private households. For some of the indicators and namely those concerning persons aged 16 years and more (for instance 'share of employed poor'), the individual weight for persons aged 16 years and more issued (PB040).

In calculation of the indicators, the weights are corrected with a weighting factor thus eliminating the missing survey cases (RB050a).

Due to the sampling approach used in the Survey on Income and Living Conditions (EU-SILC), the estimates listed in tables 7 and 8 are calculated:

7. Estimation for main indicators in 2016

Indicators	Percent	Standard error	Variance	Confidence interval	
				95% lower limit, in %	95% upper limit, in %
Population at-risk-of-poverty and social exclusion					
Total	40.4	0.9	0.9	38.5	42.2
Male	38.5	1.0	1.0	36.6	40.5
Female	42.1	1.0	1.0	40.2	44.0
0 - 17 years	45.6	1.8	3.3	42.0	49.1
18 - 64 years	37.2	1.0	1.1	35.1	39.2
65+	45.9	1.0	1.0	43.9	47.9
At-risk-of-poverty					
Total	22.9	0.8	0.7	21.3	24.5
Male	21.7	0.9	0.8	19.9	23.4
Female	24.1	0.9	0.8	22.3	25.8
0 - 17 years	31.9	1.8	3.2	28.4	35.4
18-64 years	20.0	0.9	0.7	18.3	21.7
65+	24.3	0.8	0.7	22.7	26.0



Severe material deprivation					
Total	31.9	0.9	0.9	30.1	33.7
Male	30.4	1.0	1.0	28.4	32.4
Female	33.4	1.0	0.9	31.5	35.2
0 - 17 years	36.1	1.8	3.3	32.5	39.7
18 - 64 years	29.0	1.0	1.0	27.0	30.9
65+	37.5	1.0	1.0	35.6	39.5
Low work intensity					
Total 18-59 years	11.0	0.7	0.4	9.7	12.3
Male	10.9	0.7	0.5	9.6	12.3
Female	11.1	0.7	0.5	9.6	12.5
Total 0 - 17 years	15.1	1.4	1.9	12.4	17.8
Total 0 - 59 years	11.9	0.8	0.6	10.4	13.4
Male	11.7	0.8	0.6	10.2	13.2
Female	12.2	0.9	0.8	10.5	13.9

8. Estimation for main indicators by ethnic groups in 2016

Indicators	Percent	Standard error	Confidence interval	
			95% lower limit, in %	95% lower limit, in %
Population at-risk-of-poverty and social exclusion by ethnic group				
Bulgarian ethnic group	33.1	0.9	31.4	34.8
Turkish ethnic group	54.1	3.2	47.9	60.3
Roma ethnic group	90.7	2.4	86.0	95.5
Other ethnic group	37.7	7.3	23.5	52.0
At-risk-of-poverty and ethnic group				
Bulgarian ethnic group	15.7	0.6	14.4	16.9
Turkish ethnic group	36.1	3.0	30.3	42.0
Roma ethnic group	71.9	3.4	65.1	78.4
Other ethnic group	27.6	7.1	13.7	41.5
Severe material deprivation and ethnic group				
Bulgarian ethnic group	25.8	0.8	24.2	27.5
Turkish ethnic group	38.4	3.2	32.1	44.6
Roma ethnic group	80.6	3.2	74.4	86.8
Other ethnic group	20.7	3.9	13.0	28.4
Low work intensity and ethnic group				
Bulgarian ethnic group	7.1	0.5	6.1	8.2
Turkish ethnic group	13.5	2.1	9.5	17.6
Roma ethnic group	40.6	3.8	33.2	48.0
Other ethnic group	19.3	7.0	5.5	33.1

More information on the poverty and social inclusion indicators can be found at the NSI web site - www.nsi.bg, section 'Social inclusion and living conditions' and Infostat.