Monetary Poverty, Material and Social Deprivation in the European Union: promoting equitable treatment?

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I N D E X

1. Introduction and Literature Approaches to Poverty

- The ability to identify very close and common coincidences that improve the living conditions of people and their families is a concern in which we must strive and, at the same time, focus on collective behaviour aimed at poverty alleviation (Deaton & Case, 2020; Daher et al, 2023).

- Even during the pandemic, people of lower socioeconomic status will have been the least affected by the restrictions of daily life that the pandemic has imposed on us, according to the study carried out by Cheek (2023).

- Poverty is equally diverse because each situation is individual, that is, it is experienced in the unique context of a family, whatever its size (European Commission (EC), 2021).

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- Comparisons of poverty levels between EU countries (Eurostat, 2020) are expressed in Purchasing Power Parities (PPP).

- Poverty indicators in the European Union do not measure absolute poverty (Instituto + Liberdade, 2023).

- Rather, they measure relative poverty, a poverty measure that assesses people who are below a relative poverty line which, in the case of the EU, is 60% of the median equivalent disposable income after social transfers (Eurostat, 2021-b).

- Relative poverty designates a situation in which the lifestyle and income of some people is at a level well below the standard of living in the country or region in which they live, to the point that they have to struggle to achieve a normal life and to participate in economic, social and cultural activities (Beck et al, 2020).

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- While not as extreme as absolute poverty, relative poverty is still quite worrisome and harmful.

- Since the "at-risk-of-poverty rate" is an indicator that considers, by definition, only the distribution of net monetary income in each year, it is thus conditioned by changes in median income.

- According to INE (2020), the median net equivalent income in Portugal is €11,014 per year, so the poverty line is set at 60% of this figure, i.e., around €6,700 per year.

- In PPP (that is, excluding the effect of the difference in the cost of living in each country), someone with an income equivalent to the Portuguese median income would be considered poor in 6 EU countries (LU, NL, AT, DK, BE).

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- In this way, it is clear that being poor in these 6 countries is totally different from being poor in Portugal or Romania.

- Being poor in these countries is the equivalent of the lower middle class in Portugal.

- Net equivalent disposable income aggregates household income from work, capital, property, pensions and other social transfers, after deducting taxes and social contributions.

- These earnings are then divided by each member of the household, in terms of adult equivalent, that is, each member of the family has a different weight.

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- In other words, it is the unit of measurement of household size resulting from the application of the modified OECD equivalence scale, which assigns a weight of 1 to the first adult in a household, 0.5 to the remaining adults and 0.3 to each child, within each aggregate.

- The use of this scale allows taking into account differences in the size and composition of households (INE, 2017).

- The poverty rate can be expressed before or after social transfers, with the difference determining the hypothetical impact of national social transfers on reducing the risk of poverty (Eurostat, 2021-a).

Number of people at risk of poverty or social exclusion

Analysed by type of risk, EU, 2021, million
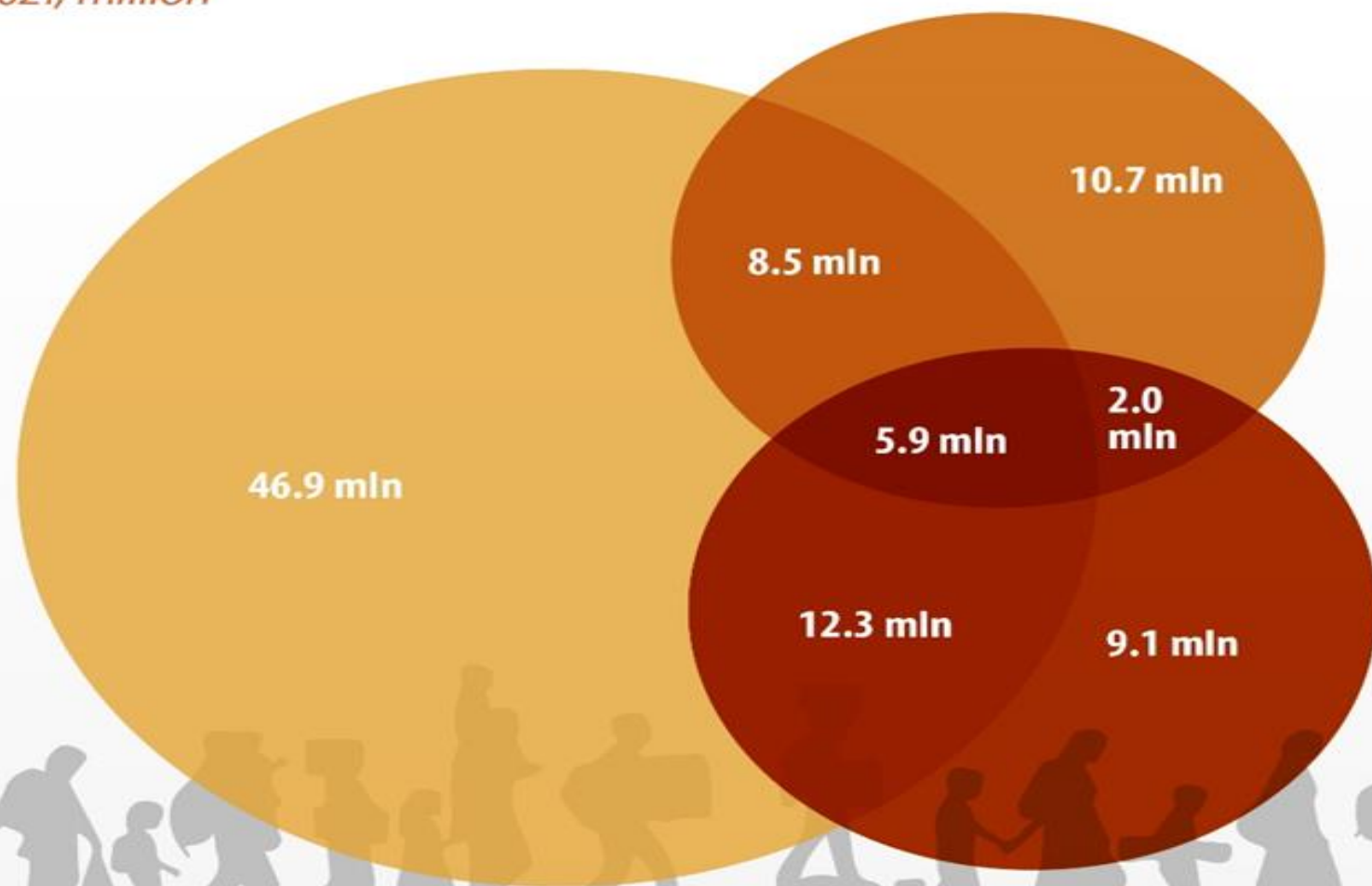
73.7 mln
at risk of poverty

27.0 mln
severely materially deprived

29.3 mln
living in a household
with low work intensity

46.9 mln

8.5 mln

10.7 mln

5.9 mln

2.0 mln

12.3 mln

9.1 mln

Note: estimates.
Due to rounding, the sum of the data for the seven intersecting groups may differ slightly from the totals published elsewhere.

ec.europa.eu/**eurostat**

2. Poverty in the EU: Facts and Analysis

- The poverty measurement described before has many specificities and, for example, greatly limits the comparison of poverty between countries.

- In accordance with European Council decisions, the "at-risk-of-poverty rate" is measured in relation to the situation in each EU Member State, and a common threshold does not apply.

- In 2021, 95.4 million people in the EU, 21.7% of the EU population were "at risk of poverty" or "social exclusion" (Eurostat, 2022).

- This is a slight increase compared with 2020 (94.8 million; 21.6% of the population).

2. Poverty in the EU: Facts and Analysis

- 95.4 million people in the EU (94.8 million in 2020) at risk of poverty, around 5.9 million (1.3% of the total EU population) lived in households exposed simultaneously to the three risks of poverty and social exclusion:
  - ✓ risk of poverty;
  - ✓ living in households with very low labour intensity "per capita"; or
  - ✓ in a situation of severe material and social deprivation.

- Romania (34%), Bulgaria (32%), Greece and Spain (28% each) were the Member States with the highest rates of people at risk of poverty or social exclusion.

- The lowest rates of people at risk of poverty were recorded in the Czech Republic (11%), Slovenia (13%) and Finland (14%).

People at risk of poverty or social exclusion in the EU Member States

(% of total population, 2021)

Bar chart values by country:

- ROMANIA: 34.4%
- BULGARIA
- GREECE
- SPAIN
- LATVIA
- ITALY **
- LITHUANIA
- PORTUGAL
- ESTONIA
- EU *: 21.7%
- LUXEMBOURG
- CROATIA
- GERMANY
- MALTA
- IRELAND
- HUNGARY
- BELGIUM
- FRANCE
- AUSTRIA
- CYPRUS
- DENMARK
- SWEDEN
- POLAND **
- NETHERLANDS
- SLOVAKIA
- FINLAND
- SLOVENIA
- CZECHIA: 10.7%

* Estimates. ** Provisional.
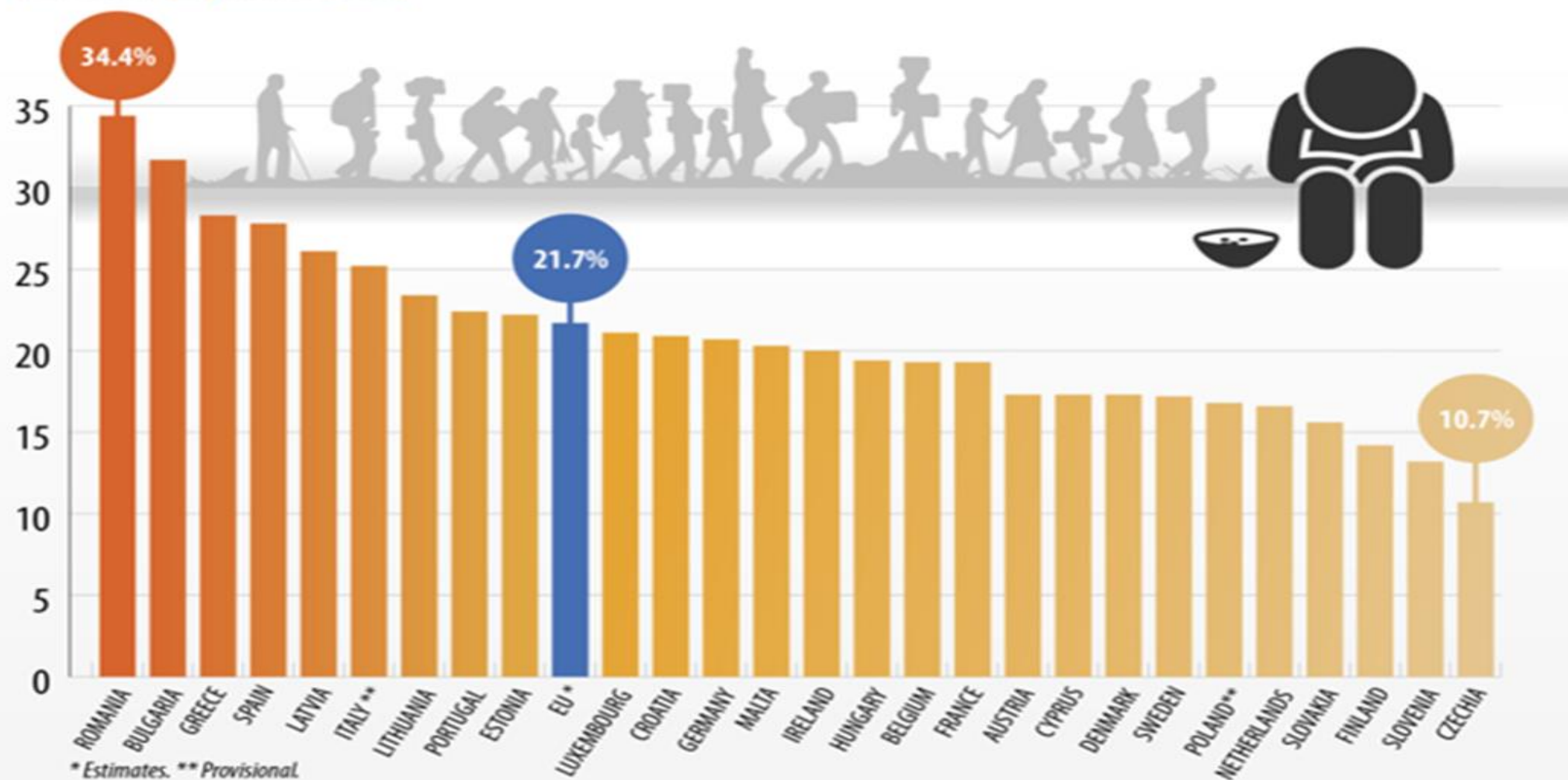
3. Methodology

- The analysis was performed using R language (R Development Core Team, 2008).

- R is a programming language that can be used on different systems and integrated with other languages.

- Due to its versatility, it also benefits from data reorganization and reporting.

- It can be used to develop business strategies, statistical reports and other analytical resources for businesses (R Development Core Team, 2008; Lathiya, 2020).

4. Data Analysis

- Data were extracted from Eurostat and are referring to two types of data:
  - ✓ Monetary Poverty (26 variables); and
  - ✓ Material and Social Deprivation (11 variables).
  - ✓ Accounting for a total of 37 variables.

- All variables are designated in Table 1 and Table 2 depending on their description, each variable code and the links they are referred to.

4. Data Analysis

Table 1. Variables on Monetary Poverty Data

Description	Variable	Link
At-risk-of-poverty threshold	TESSI014	https://ec.europa.eu/eurostat/databrowser/view/tessi014/default/table?lang=en
Dispersion around the at-risk-of-poverty threshold	TESSI126	https://ec.europa.eu/eurostat/databrowser/view/tessi126/default/table?lang=en
At-risk-of-poverty by sex	TESSI010	https://ec.europa.eu/eurostat/databrowser/view/tessi010/default/table?lang=en
At-risk-of poverty rate by detailed age group	TESSI120	https://ec.europa.eu/eurostat/databrowser/view/tessi120/default/table?lang=en
At-risk-of poverty rate by household type	TESSI121	https://ec.europa.eu/eurostat/databrowser/view/tessi121/default/table?lang=en
At-risk-of poverty rate by most frequent activity status	TESSI124	https://ec.europa.eu/eurostat/databrowser/view/tessi124/default/table?lang=en
At-risk-of-poverty rate after social transfers by sex	TPS00184	https://ec.europa.eu/eurostat/databrowser/view/tps00184/default/table?lang=en
At-risk-of-poverty rate of households without dependent children by work intensity	TESSI122	https://ec.europa.eu/eurostat/databrowser/view/tessi122/default/table?lang=en
At-risk-of-poverty rate of households with at least one dependent child by work intensity	TESSI123	https://ec.europa.eu/eurostat/databrowser/view/tessi123/default/table?lang=en
At-risk-of-poverty-rate, by highest level of education attained	TPS00151	https://ec.europa.eu/eurostat/databrowser/view/tps00151/default/table?lang=en
At-risk-of poverty rate by tenure status	TESSI125	https://ec.europa.eu/eurostat/databrowser/view/tessi125/default/table?lang=en
At-risk-of-poverty rate before social transfers by sex	TESOV250	https://ec.europa.eu/eurostat/databrowser/view/tesov250/default/table?lang=en
At-risk-of-poverty rate before social transfers by age group	TESOV252	https://ec.europa.eu/eurostat/databrowser/view/tesov252/default/table?lang=en
Persistent at-risk-of poverty rate by sex	TESSI020	https://ec.europa.eu/eurostat/databrowser/view/tessi020/default/table?lang=en
Persistent at-risk-of poverty rate by age group	TESSI022	https://ec.europa.eu/eurostat/databrowser/view/tessi022/default/table?lang=en
Relative median at-risk-of-poverty gap	SDG_10_30	https://ec.europa.eu/eurostat/databrowser/view/sdg_10_30/default/table?lang=en
Relative median poverty risk gap by age group	TESSI030	https://ec.europa.eu/eurostat/databrowser/view/tessi030/default/table?lang=en
At-risk-of-poverty rate anchored at a fixed moment in time (2019) by sex	TESSI220	https://ec.europa.eu/eurostat/databrowser/view/tessi220/default/table?lang=en
At-risk-of-poverty rate anchored at a fixed moment in time (2019) by age group	TESOV092	https://ec.europa.eu/eurostat/databrowser/view/tesov092/default/table?lang=enx
At-risk-of-poverty rate of older people by detailed age group	TESPN050	https://ec.europa.eu/eurostat/databrowser/view/tespn050/default/table?lang=en
Dispersion around the at-risk-of-poverty threshold for elderly people	TESPN120	https://ec.europa.eu/eurostat/databrowser/view/tespn120/default/table?lang=en
At-risk-of-poverty rate of elderly people by tenure status	TESPN110	https://ec.europa.eu/eurostat/databrowser/view/tespn110/default/table?lang=en
At-risk-of-poverty rate for pensioners	TESPN100	https://ec.europa.eu/eurostat/databrowser/view/tespn100/default/table?lang=en
Relative median poverty risk gap of elderly people	TESPN090	https://ec.europa.eu/eurostat/databrowser/view/tespn090/default/table?lang=en
In-work at-risk-of-poverty rate by sex	TESOV110	https://ec.europa.eu/eurostat/databrowser/view/tesov110/default/table?lang=en

Table 2. Variables on Material and Social Deprivation

Description	Variable	Link
Material and social deprivation rate by age, sex and most frequent activity status	MDSD01	https://ec.europa.eu/eurostat/databrowser/view/ilc_mdsd01/default/table?lang=en
Material and social deprivation rate by income quintile and household type	MDSD02	https://ec.europa.eu/eurostat/databrowser/view/ilc_mdsd02/default/table?lang=en
Material and social deprivation rate by age, sex and educational attainment level	MDSD03	https://ec.europa.eu/eurostat/databrowser/view/ilc_mdsd03/default/table?lang=en
Material and social deprivation rate by age, sex and group of citizenship	MDSD04	https://ec.europa.eu/eurostat/databrowser/view/ilc_mdsd04/default/table?lang=en
Material and social deprivation rate by age, sex and group of country of birth	MDSD05	https://ec.europa.eu/eurostat/databrowser/view/ilc_mdsd05/default/table?lang=en
Material and social deprivation rate by tenure status	MDSD06	https://ec.europa.eu/eurostat/databrowser/view/ilc_mdsd06/default/table?lang=en
Material and social deprivation rate by age and sex	MDSD07	https://ec.europa.eu/eurostat/databrowser/view/ilc_mdsd07/default/table?lang=en
Material and social deprivation rate by degree of urbanisation	MDSD09	https://ec.europa.eu/eurostat/databrowser/view/ilc_mdsd09/default/table?lang=en
Material and social deprivation rate for children by age and educational attainment level of their parents	MDSD10	https://ec.europa.eu/eurostat/databrowser/view/ilc_mdsd10/default/table?lang=en
Severe material and social deprivation rate by age and sex	MDSD11	https://ec.europa.eu/eurostat/databrowser/view/ilc_mdsd11/default/table?lang=en
Severe material and social deprivation by income quantile and household composition	MDSD13	https://ec.europa.eu/eurostat/databrowser/view/ilc_mdsd13/default/table?lang=en

4.1. Monetary Poverty Data

Graph 1 - At Risk of Poverty by Type of Household

4.1. Monetary Poverty Data

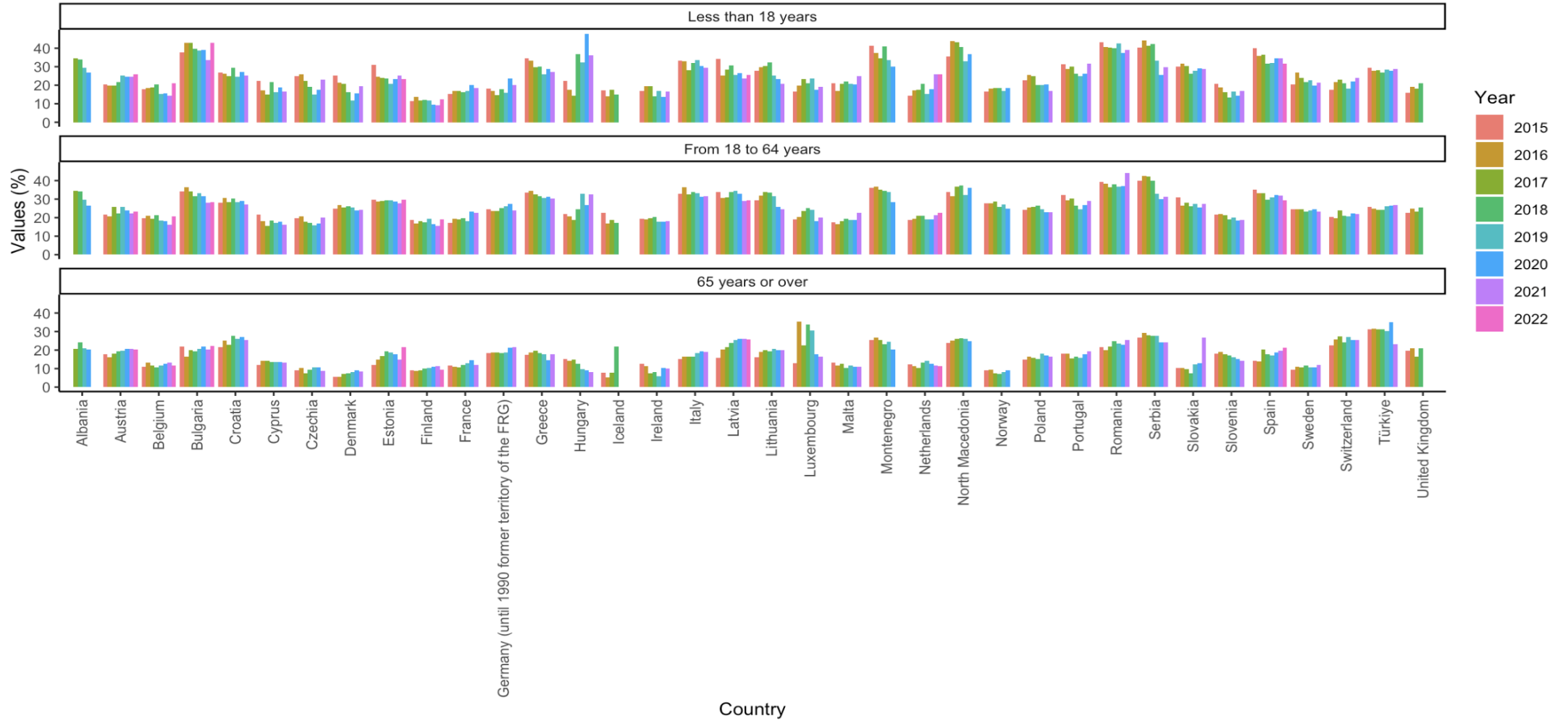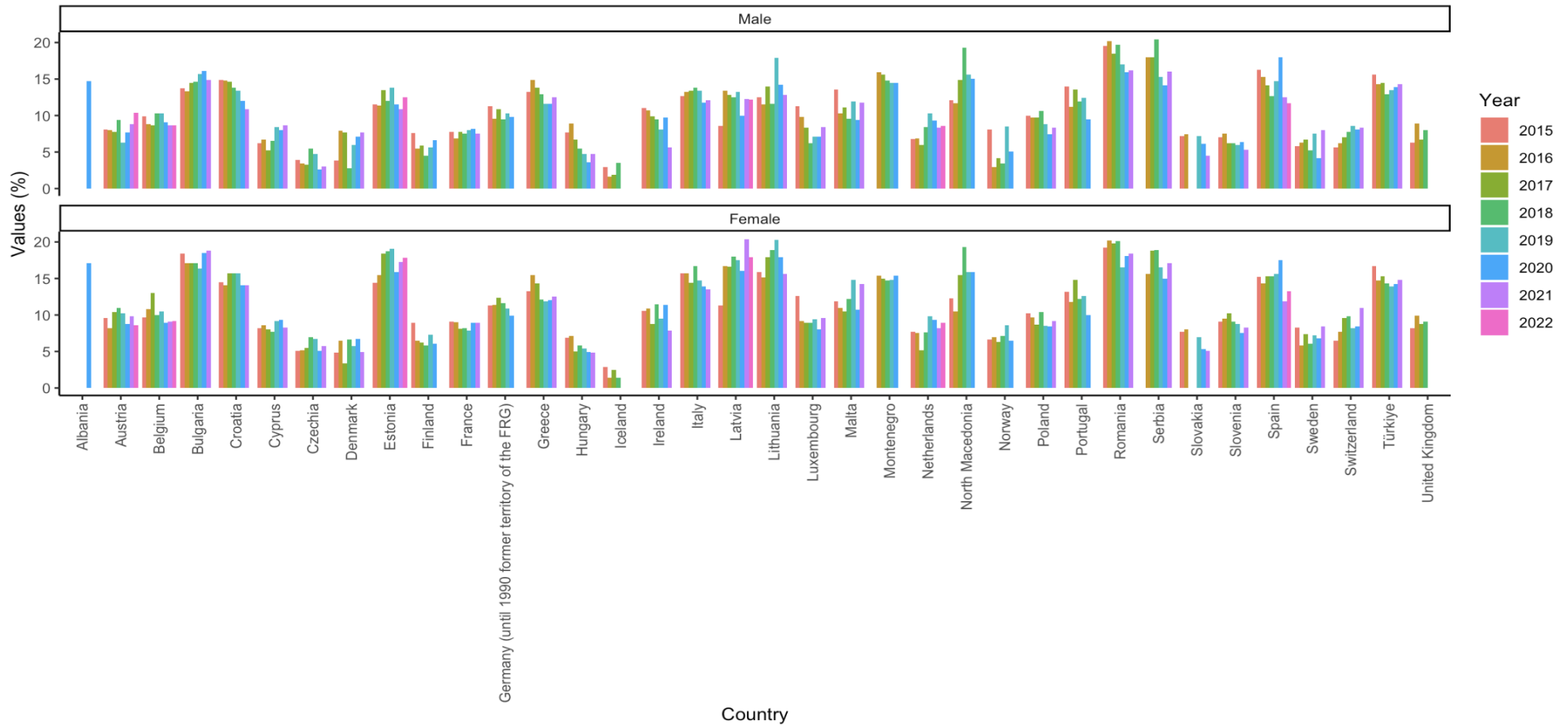Graph 2 - At Risk of Poverty Rate of Elderly People by Teneure Status

4.1. Monetary Poverty Data

Graph 3 - Relative Median Poverty Risk Gap by Age Group

4.1. Monetary Poverty Data

Graph 4 - Persistent At Risk of Poverty Rate
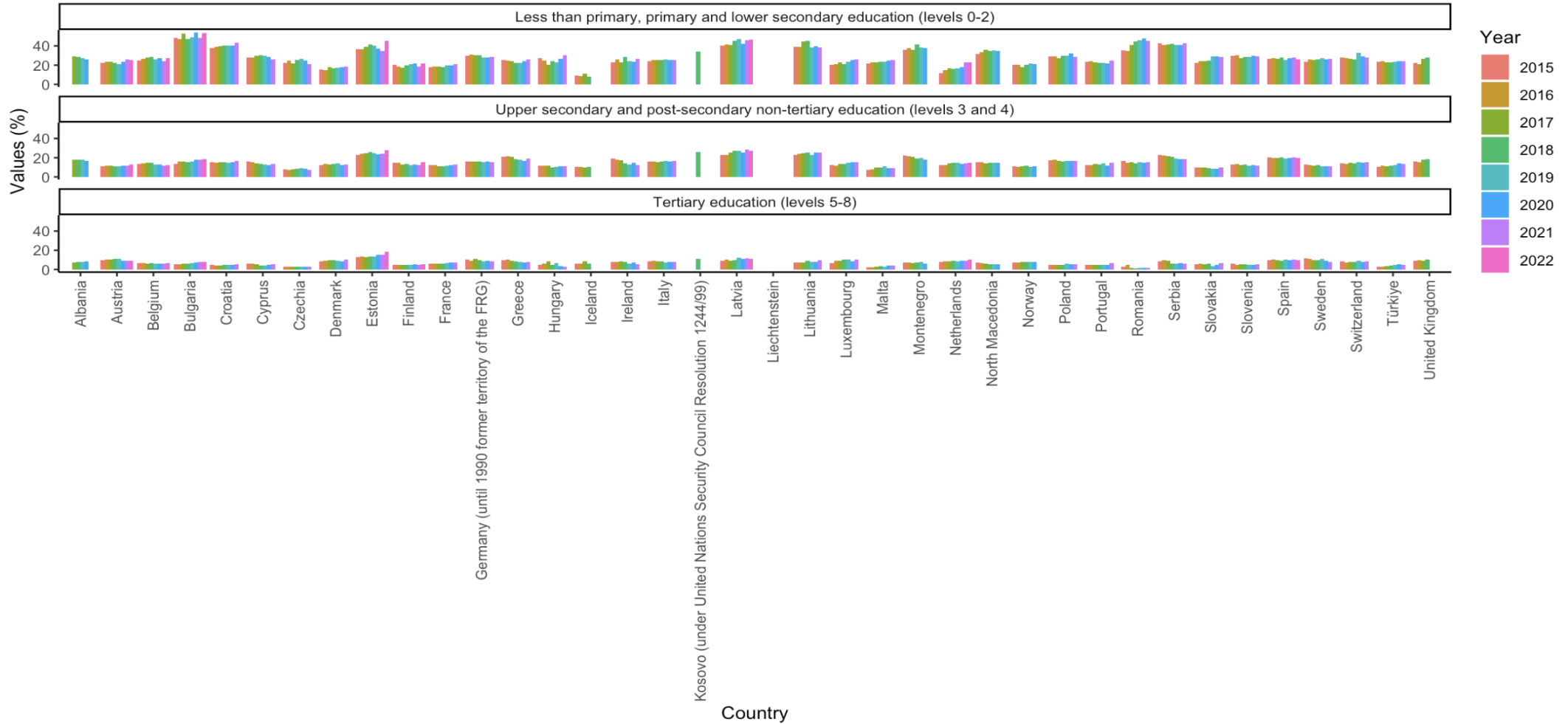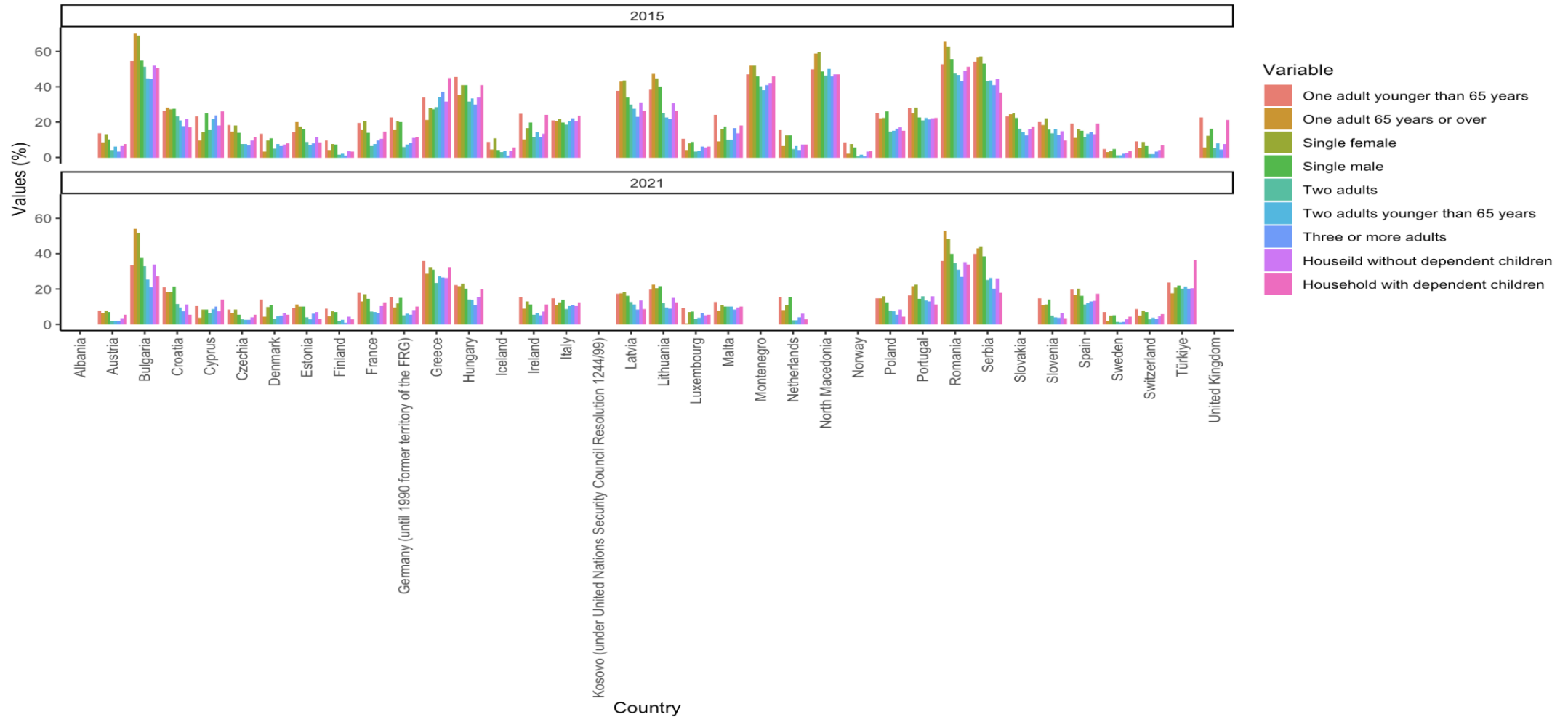
4.1. Monetary Poverty Data

Graph 5 - At Risk of Poverty Rate After Social Transfers by Sex

4.1. Monetary Poverty Data

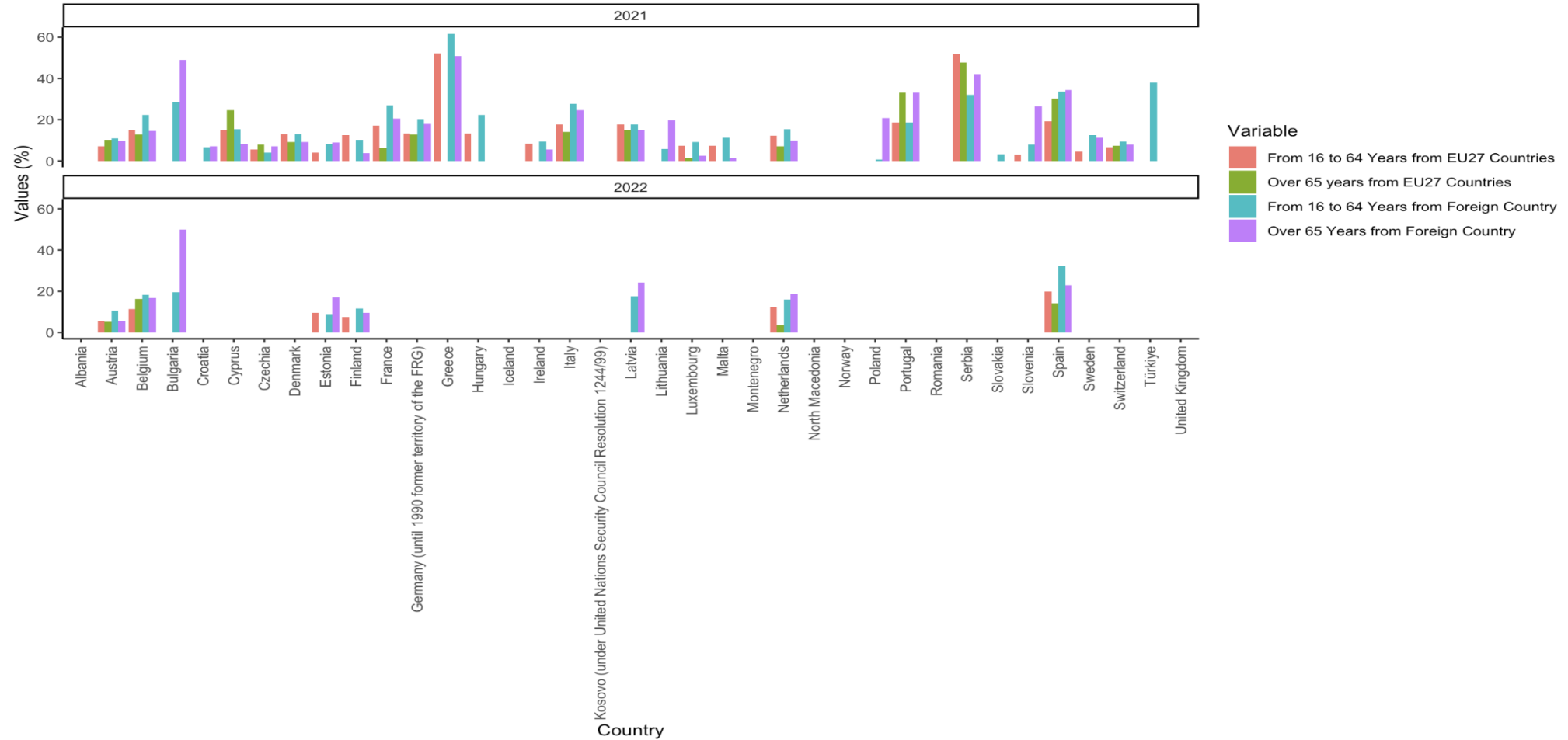Graph 6 - At Risk of Poverty Rate by Highest Level of Education Obtained

4.2. Material and Social Depravation Data

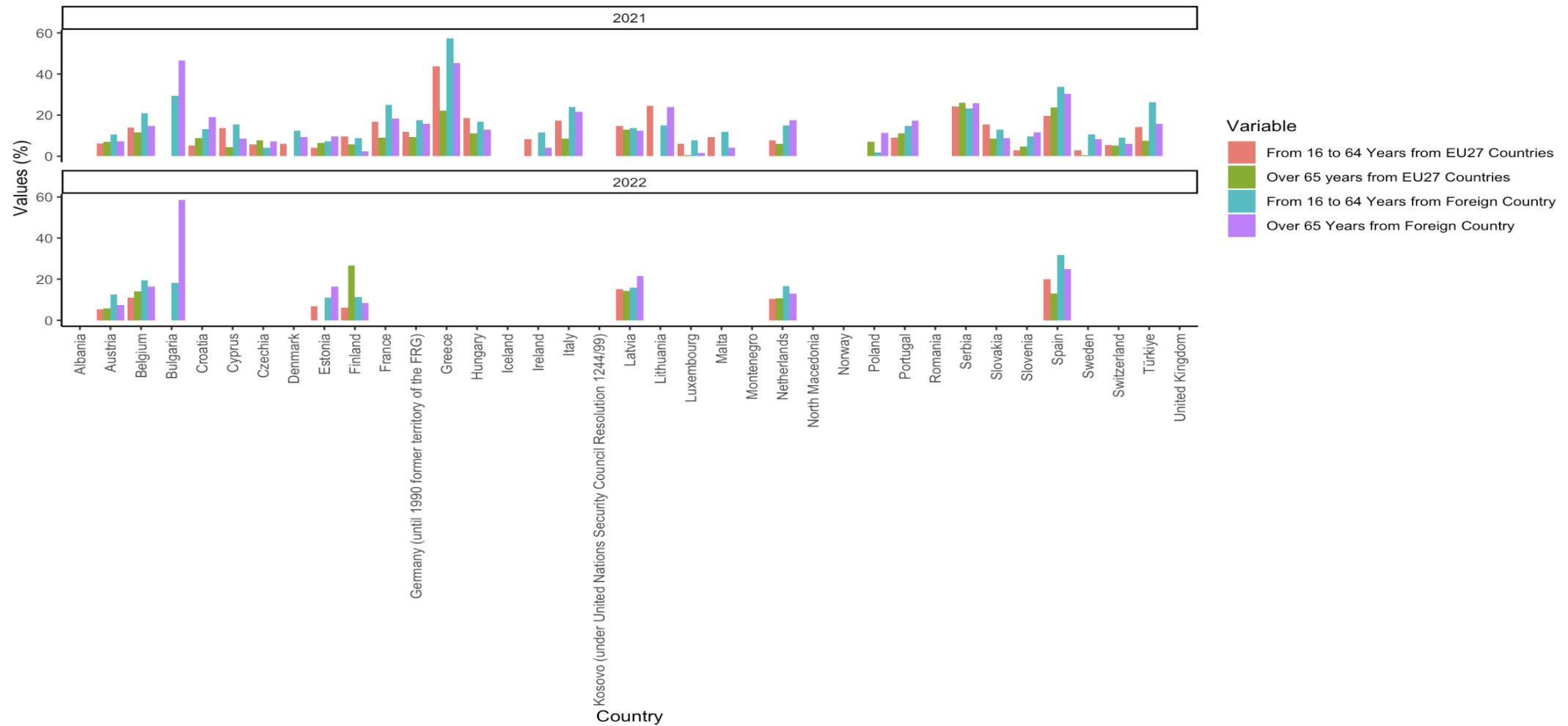Graph 7 - Material and Social Deprivation Rate by Household Type

4.2. Material and Social Depravation Data

Graph 8 - Material and Social Deprivation Rate by Group of Citizenship
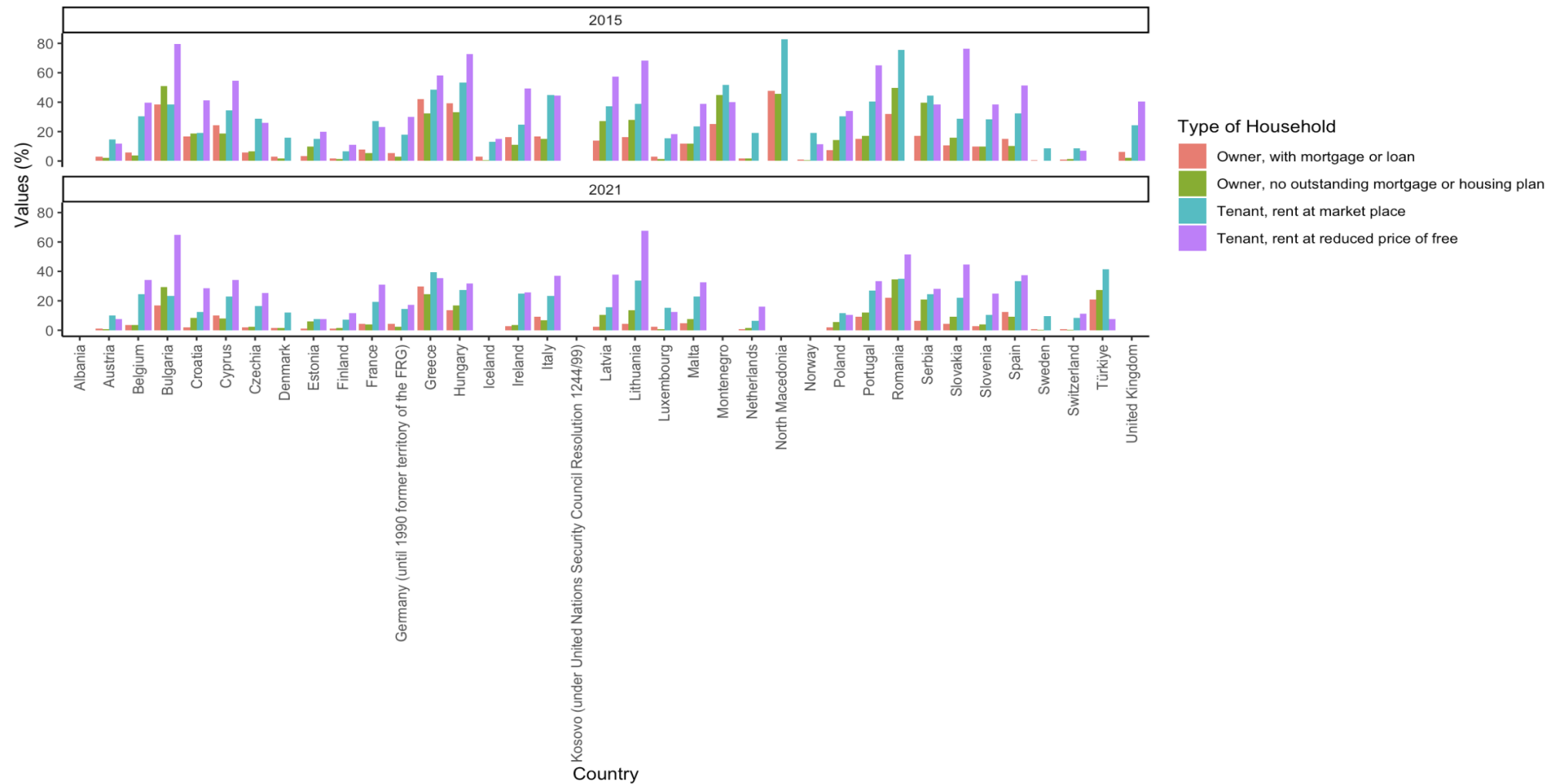
4.2. Material and Social Depravation Data

Graph 9 - Material and Social Deprivation Rate by Country of Birth

4.2. Material and Social Depravation Data

Graph 10 - Material and Social Deprivation Rate by Tenure Status

4.2. Material and Social Depravation Data

Graph 11 - Severe Material Social Deprivation Rate by Sex

5. Conclusions – Table 3 (Main Statitical Values)

Variable	Mean	Median	Standard Deviation
TESSI014	14310.59	12239.5	8424.601
TESPN110	21.31744	17.8	12.89152
TPS00184	17.2334	16.6	4.486744
TPS00151	16.99023	14.5	10.6119
MDSD02	17.502	13.5	14.13497
MDSD06	20.3648	15.45	17.7957
MDSD11	9.127178	5.9	9.314154

5. Conclusions

- In Table 3, it is described some statistical measurements in order to have a better understanding about how the data is distributed in some of the variables.

- Based on the variable TPS00184 ("At-risk-of-poverty rate after social transfers by sex"), it is observed that the mean value is approximately 17%.

- This indicates that around 17% of people are at risk of poverty even after receiving social transfers.

- On the other hand, the MDSD11 variable ("Severe material and social deprivation rate by age and sex") has a median value of 5,9.

- This information can be confirmed through Graph 11, which reveals that although some countries have very high "Severe material and social deprivation rate by sex" values, most have low values.

- This distribution results in a mean value are also low for this variable.

- The EU, as a gallery of countries, doesn't promote so much as it should equitable treatment in all countries, besides the programmes used to mitigate poverty. Why they don't work in a much better way on the ground?

5. Conclusions

➢ The aim was to unite the concerns of citizens and public authorities for a real issue that should not exist in such an uneven way: monetary poverty and social and material deprivation.

➢ To fight insufficiency and shortages, it is essential to monitor the objectives set by national governments and the EU.

➢ Any public policy requires that it be redistributive and equitable, based on scientific studies and statistically reliable and credible indicators.

➢ Adapting efforts against human poverty on the ground will never be easy, but they are always virtuous efforts to achieve a European equality of poverty.

➢ Despite starting to become less evident over the years, it is still noticeable, with women being the most likely to be in a situation of greater material deprivation.

➢ Households with more than one member receiving a salary or some type of economic compensation are less likely to find themselves in precarious situations, even if they have more than one child.

THANK YOU

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