Is discrimination against the elderly evident in the EU and is it associated with the representation of old people in the population?

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Population Aging: Challenges and Opportunities
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University of Economics, Prague

In **2008**, European Commission published the Communication ***"Non-discrimination and equal opportunities: a renewed commitment"*.**
http://eur-lex.europa.eu/legal-ontent/EN/TXT/PDF/?uri=CELEX:52008DC0420&from=en

In **2015, a new Eurobarometer survey on discrimination** was conducted and the corresponding report (***Discrimination in the EU in 2015, Special Eurobarometer 437***) was published.
http://ec.europa.eu/COMMFrontOffice/publicopinion/index.cfm/Survey/getSurveyDetail/instruments/SPECIAL/surveyKy/2077

The results showed that the risk of discrimination based on age (being over 55 years old) is still widespread.

Discrimination is defined as a less favorable treatment of a person or a group because of their personal characteristics.

Special EUROBAROMETER 437, p.13

Outline

The main goal is to examine EU28 country ranking based on the discrimination against the elderly, (being 55 years and more old), with specific attention paid to Czechia.

Descriptive view focuses on the distribution of discrimination based on the perception of being 55+ accross countries according to:

gender: male, female
age group: 15-24; 25-34; 35-44; 45-54; 55-64; 65-74; 75+
life satisfaction: very satisfied, fairly satisfied; not very satisfied; not at all satisfied
social class: working class, lower middle class, middle class, upper middle class, higher class, other

Education level or a community size were not statistically significant in subsequent modelling.

Multilevel modelling (binary logistic regression; two levels):

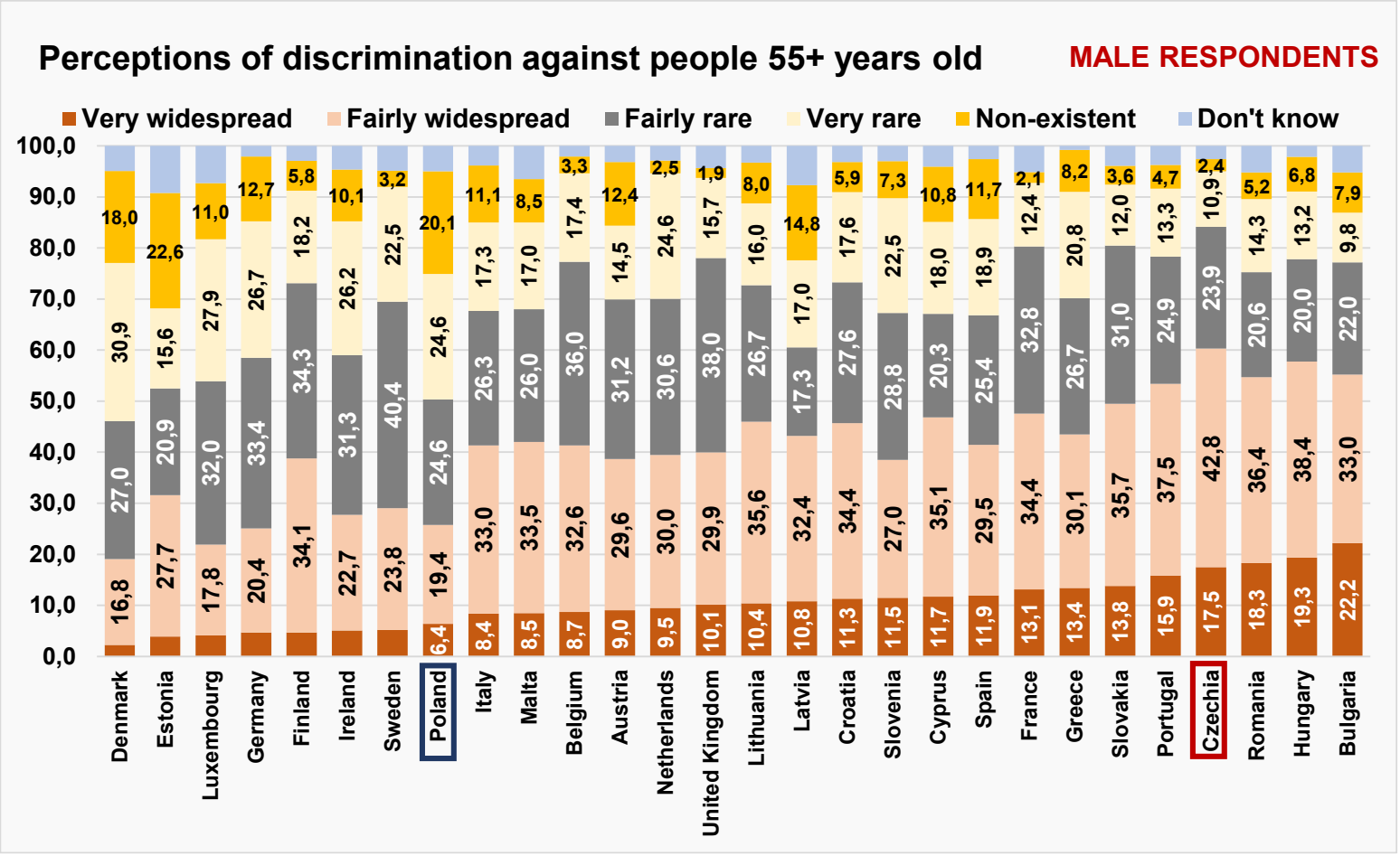
fixed effects (categorical predictors): gender, age group, life satisfaction, social class
random effect: country

dependent (binary) variable: perception of discrimination against 55+:
very widespread and widespread=1; fairly rare, very rare and non-existent =0

software: SAS 9.4 proc glimmix (dist. binary; link logit);

QC1-3: Could you please tell me whether, in your opinion, a discrimination on the basis of being over 55 years old, is very widespread, fairly widespread, fairly rare or very rare in your country.

Czechia belongs among countries with a high perception of discrimination against the elderly, especially when combining categories very and fairly widespread.



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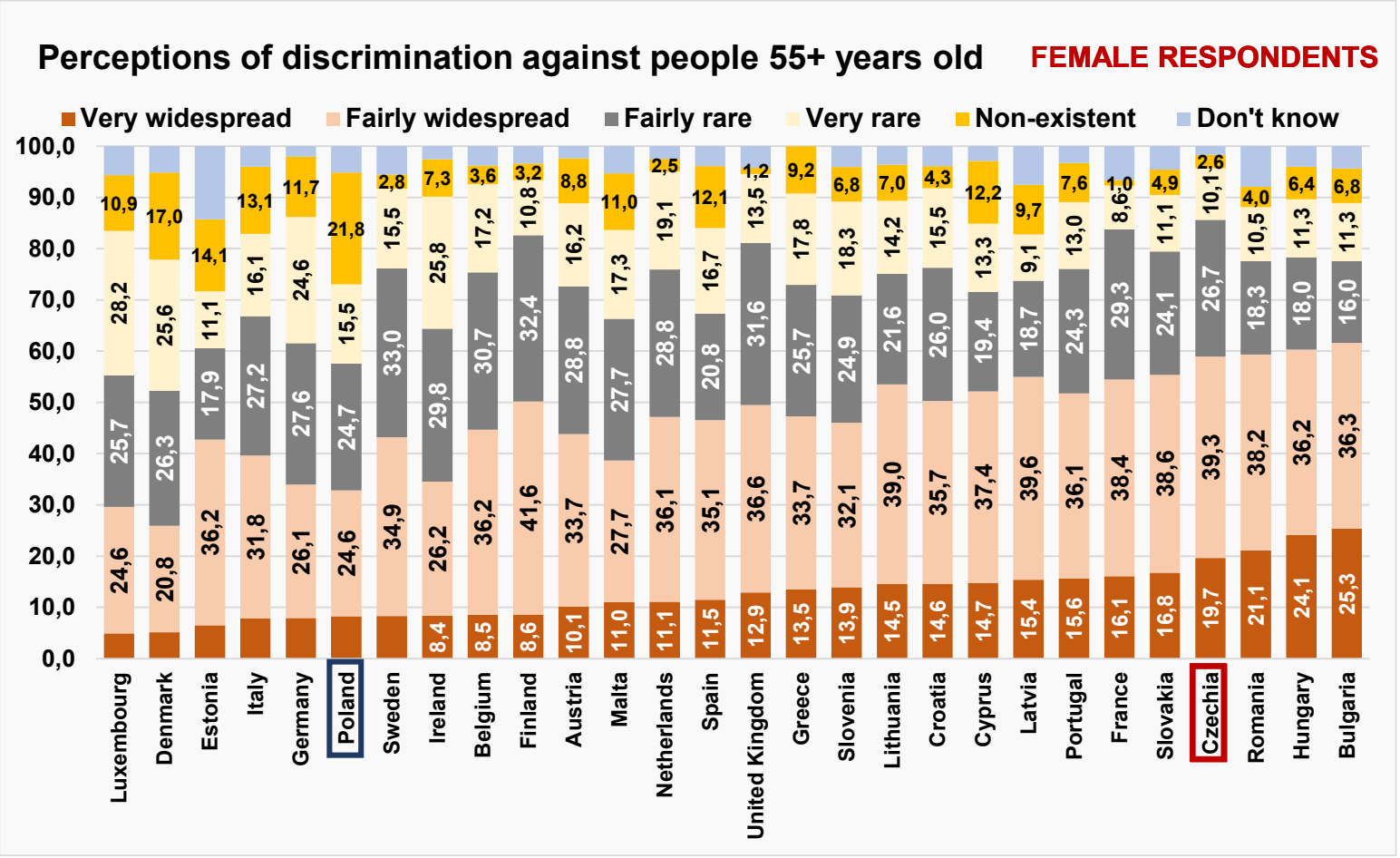
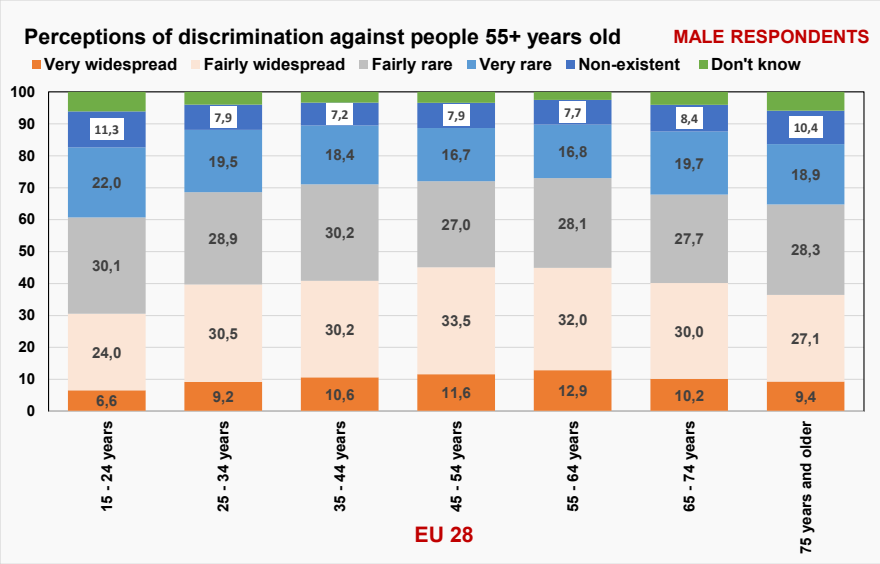
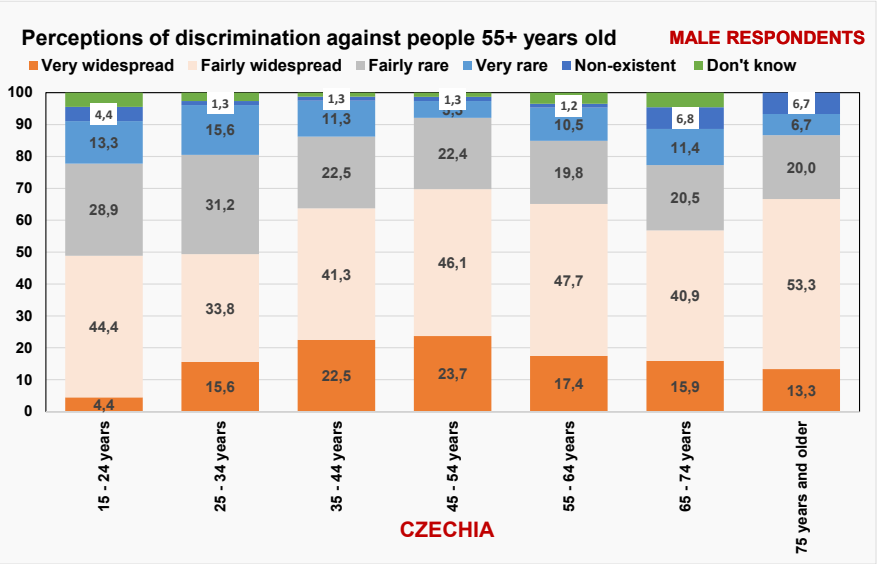
QC1-3: Could you please tell me whether, in your opinion, a discrimination on the basis of being over 55 years old, is very widespread, fairly widespread, fairly rare or very rare in your country.

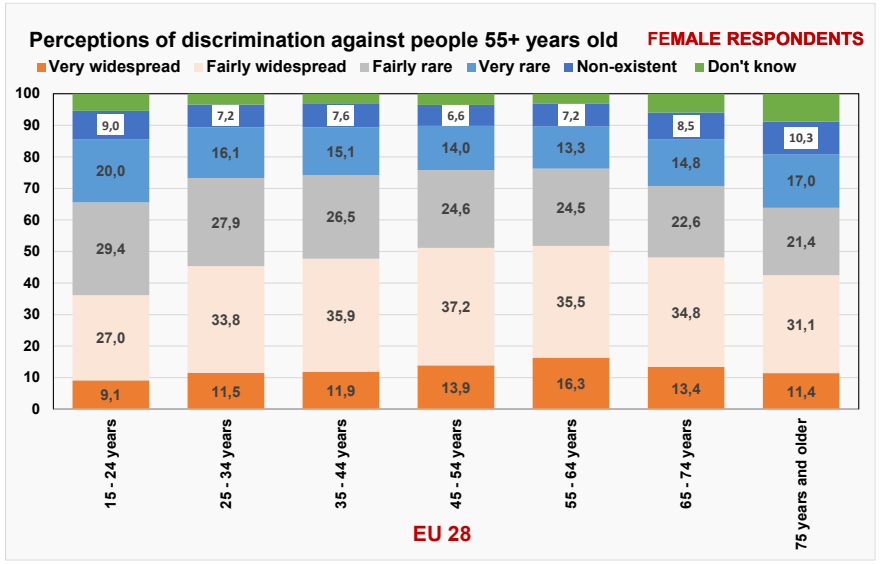
Czech respondents are more likely to say that age discrimination is widespread on the basis of being over 55 years old than in Poland

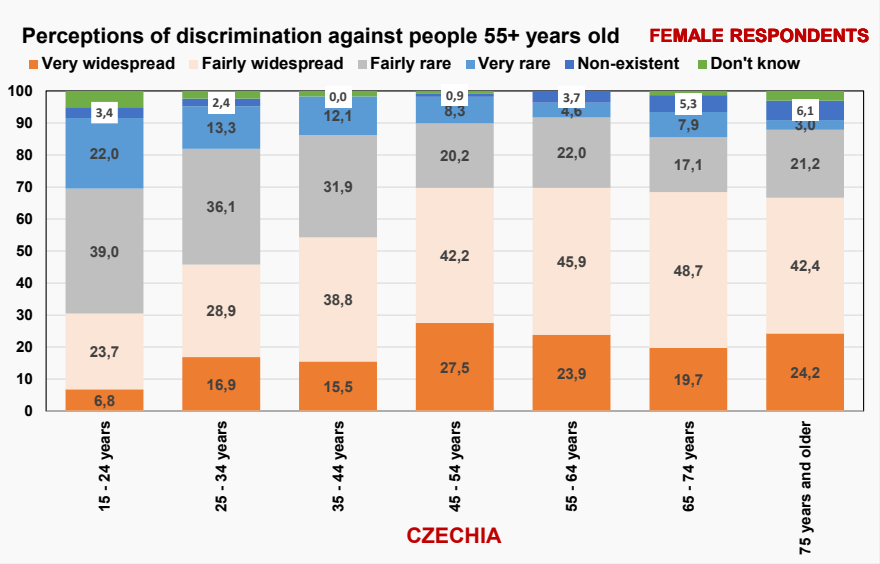


Age discrimination is more widespread in Czechia primarily for soon-to-be retirees and for elderly women.









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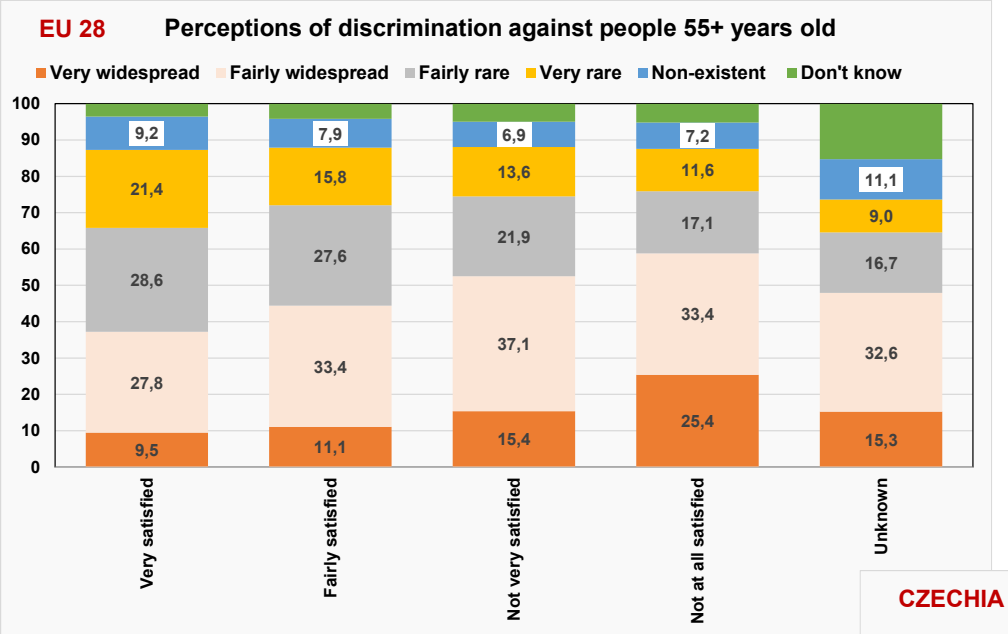
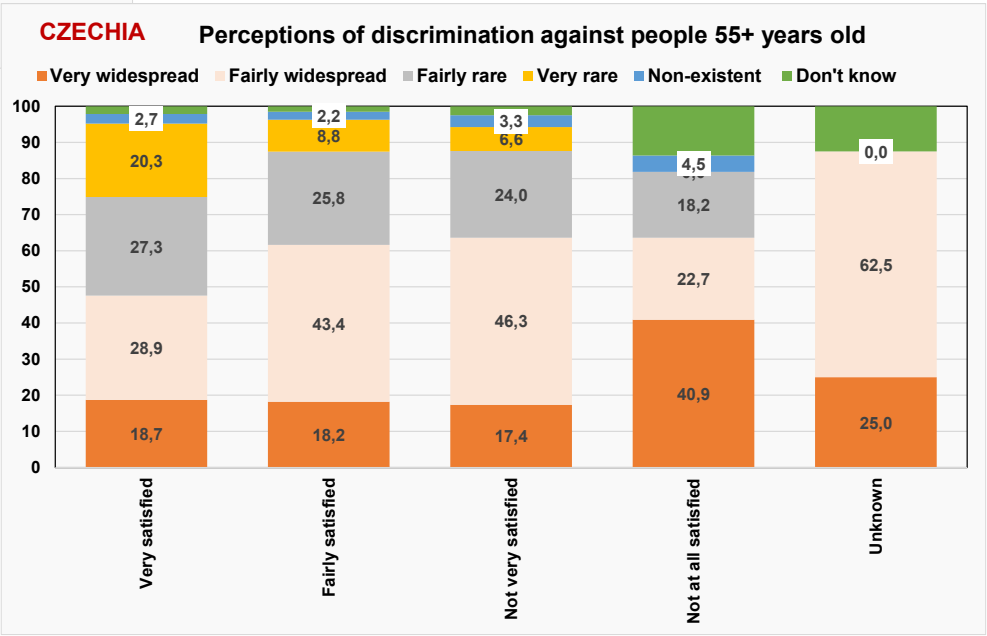


LIFE SATISFACTION and age discrimination

The perception of discrimination of being over 55 years old is very widespread among people who are not at all satisfied in life.

People in Czechia who are not at all satisfied in life more frequently say they are discriminated against because of being aged 55+ compared to their counterparts in EU28



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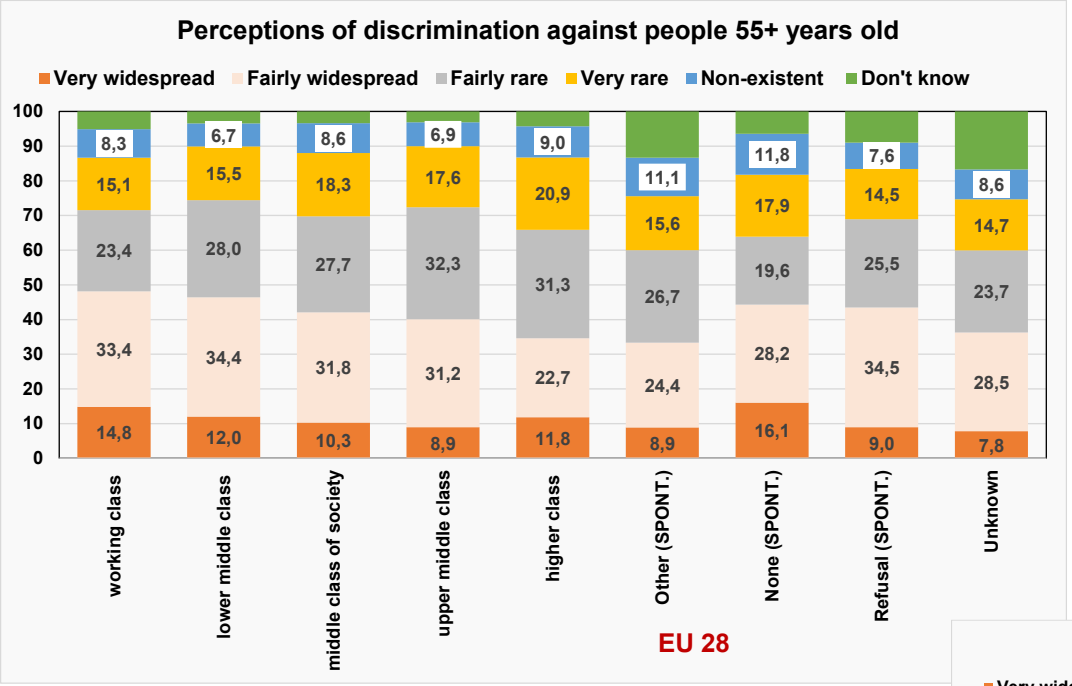
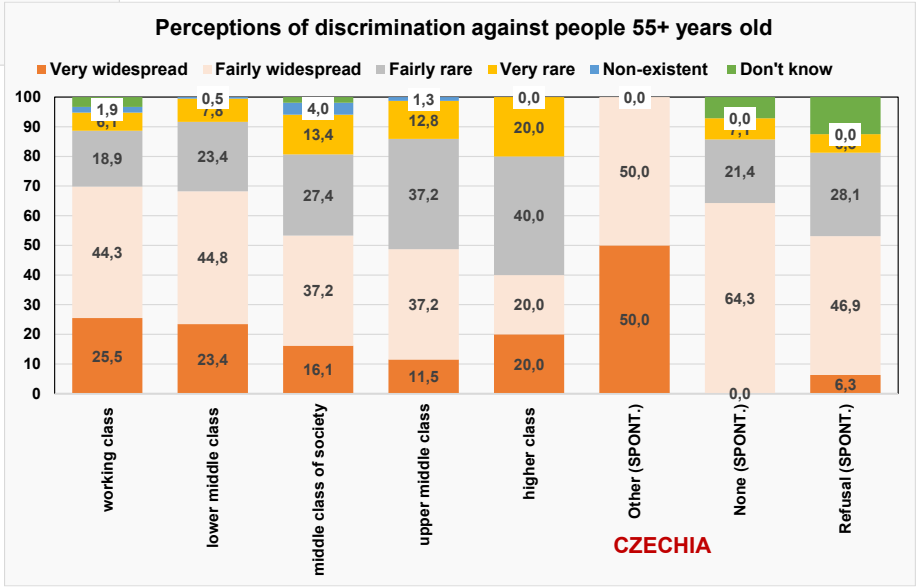


SOCIAL CLASS and age discrimination

Discrimination against people aged 55 years and more is less widespread among people belonging to a higher social class.

However, respondents who do not identify with any social class say that discrimination on the grounds of being aged 55+ years is very widespread in Czechia.



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ESTIMATING TWO-LEVEL MODELS WITH DICHOTOMOUS OUTCOME

Hierarchical generalized linear models (HGLMs); SAS 9.4 proc glimmix

Hierarchical model with people/repondents nested in countries

The analysis is based on the dataset of individual records of the Eurobarometer Survey for EU 28 countries: *Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, United Kingdom.*

MODEL BUILDING PROCESS:

Model 1: no predictors, just random effect *(country)*

Model 2: level 1: fixed effects *(gender, age, social class, life satisfaction),*
random effect *(country)*

Model 3: level 1: fixed effects *(gender, age, social class, life satisfaction)* **+**
level 2: fixed effects (life expectancy at age 65, purchasing power parity, percentage of population aged 65 and more), **random effect** (country).

Model 1: Unconditional model with no predictors, just random effect: *country*

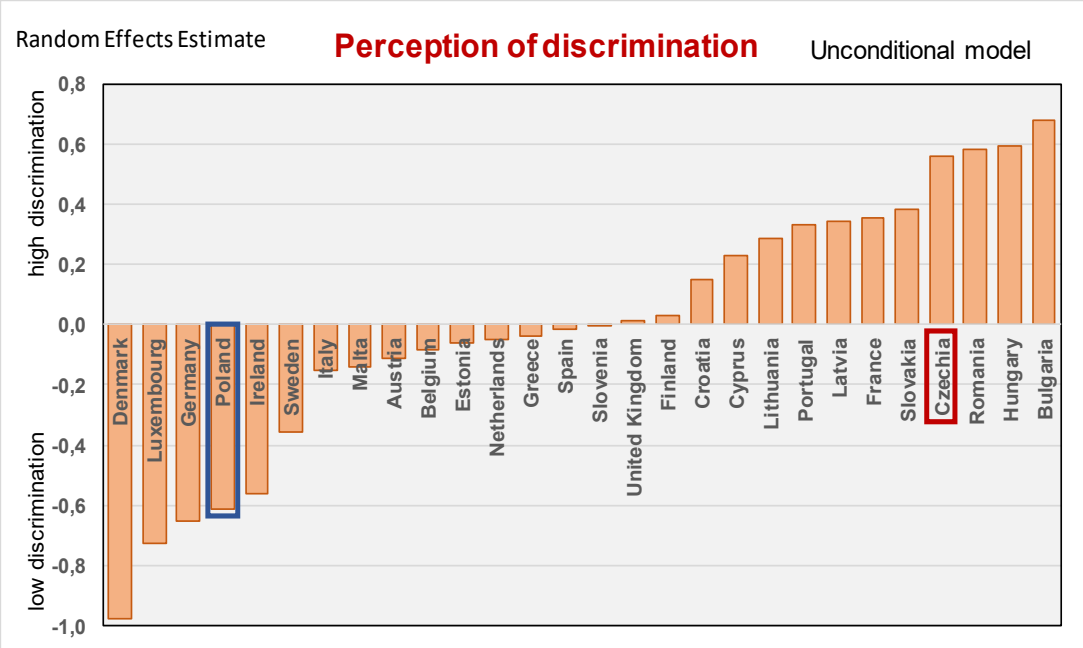
This model demonstrates an overall perception estimate of discrimination of being aged 55+ for people in a typical country. It also provides information about the variability in discrimination between countries.

The intercept (-0.1604) represents the log odds of the perception of being discriminated at age 55+ in a typical country.
Probability of the perception of being discriminated at age 55+: exp(-0,1604)/(1+exp(-0,1604)) =**0,460**
Probability of perception of not being discriminated at 55+: 1-0,460=0,540

The intraclass correlation coefficient (ICC) indicates how much of the total variation in the probability of the perception of being discriminated at age 55+ is accounted for by the countries: 0,1817/(0,1817+3,29)=0,052.

This indicates that approximately 5,2 % of the variability in the perception of being discriminated at age 55+ is accounted for by the countries, leaving 94,8% of the variability to be accounted for by the people or other unknown factors.

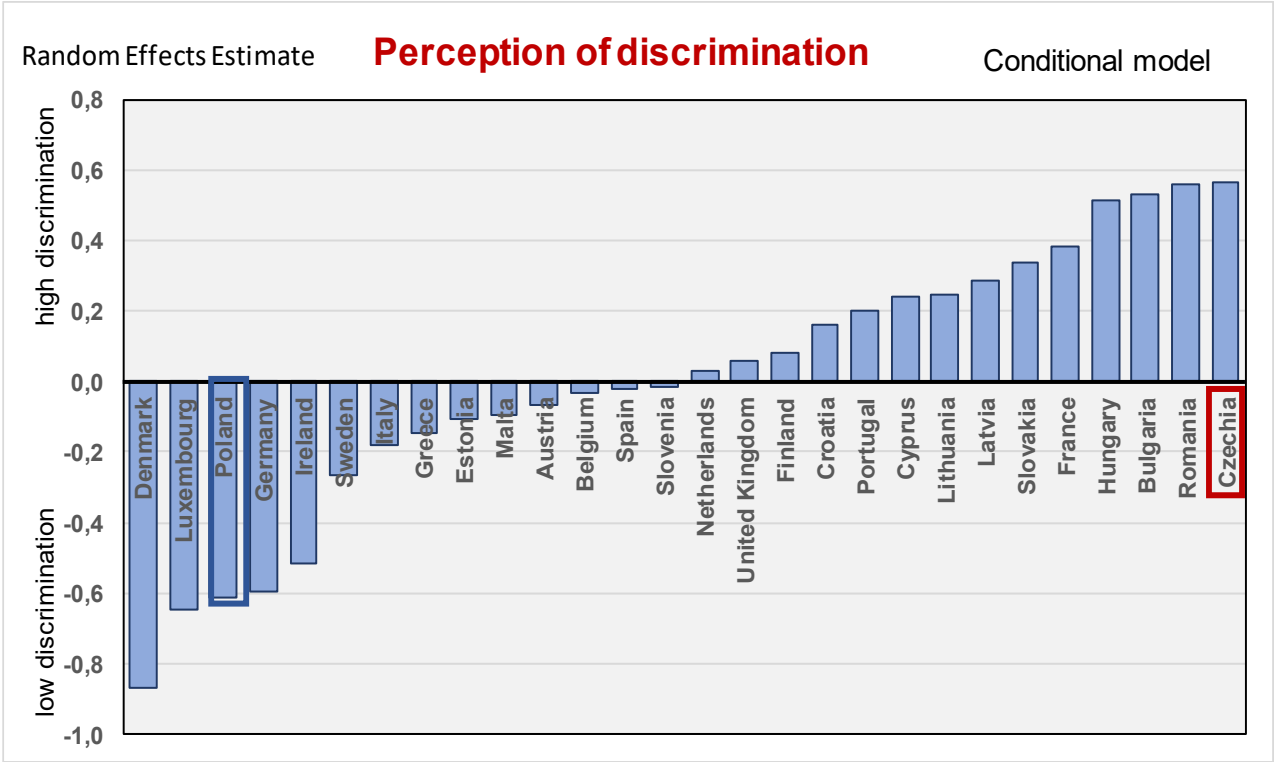
-2LL=34287



Model 2: Conditional model with predictors (level 1: fixed effects *gender, age group, life satisfaction, social class*) and random effect: *country*

gender	OR	
male	**1**	
female	**1,319**	<,0001
age		
15-24	**1**	
25-34	1,450	<,0001
35-44	1,542	<,0001
45-54	1,803	<,0001
55-64	1,777	<,0001
65-74	1,631	<,0001
75+	1,470	<,0001
life satisfaction		
very satisfied	**1**	
fairly satisfied	1,158	<,0001
not very satisfied	1,413	<,0001
not at all satisfied	1,851	<,0001
social class		
working class	**1**	
lower middle class	0,903	0,0113
middle class	0,874	<,0001
upper middle class	*0,915*	0,1302
higher class	0,672	0,0099
other	*0,639*	0,2128

dependent (binary) variable: perception of discrimination against 55+:
very widespread and widespread=1;
fairly rare, very rare and non-existent =0

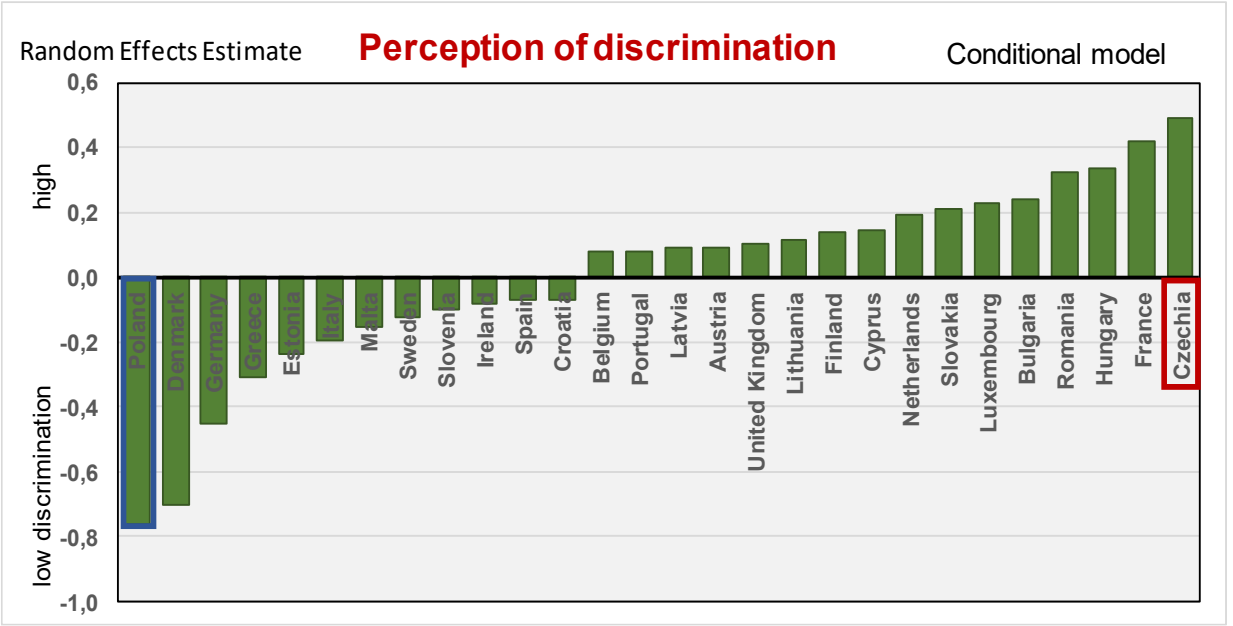


-2LL=33851
ICC=4,4 %

Model 3: Conditional model with predictors (level 1: fixed effects *gender, age group, life satisfaction, social class*), (level 2: fixed effect purchasing power parity) and random effect: *country*

gender	**OR**	**Pr > |t|**
male	**1**	
female	1,319	<,0001
age		
15-24	**1**	
25-34	1,449	<,0001
35-44	1,542	<,0001
45-54	1,805	<,0001
55-64	1,777	<,0001
65-74	1,632	<,0001
75+	1,471	<,0001
life satisfaction		
very satisfied	**1**	
fairly satisfied	1,155	<,0001
not very satisfied	1,405	<,0001
not at all satisfied	1,839	<,0001
social class		
working class	**1**	
lower middle class	0,904	0,0120
middle class	0,875	<,0001
upper middle class	*0,918*	0,1447
higher class	0,673	0,0103
other	*0,643*	0,2194
purchasing power parity	0,994	<,0001

dependent (binary) variable: perception of discrimination against 55+:
very widespread and widespread=1;
fairly rare, very rare and non-existent =0



-2LL=33837
ICC=2,7 %

Life expectancy at age 65 and the percentage of population aged 65 and more were not statistically significant.

Conclusions

- Opinions on discrimination and attitudes towards the different groups at risk of discrimination largely differ among the EU Member States as result of national specificities such as the prevalence of different groups at risk of discrimination, cultural and historical considerations and/or recent political and legal developments relevant for each group.

- Unlike Poland, respondents in Czechia say rather more frequently that the perception of discrimination of being over 55 years old is widespread.

- When using two-level modelling, the perception of age discrimination is the highest at pre-retirement ages 45-64 and for women. It increases with decreasing life satisfaction and lower social class. The contextual variables (PPS, e65, P65+) seem to have a weak or no effect.

- When adjusting for gender, age, life satisfaction, social class and purchasing power parity, among the 28 EU countries, Czechia shows the highest perception of age 55+ discrimination while Poland shows the lowest.