

# Occupational Social Class and Earnings Inequality in Europe: A Comparative Assessment

## Supplementary material

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This file accompanies the full paper, published in Social Indicators Research.

In this file:

1. The first section presents some robustness checks regarding the ranking of countries in terms of overall and between-class inequality, when making use of other inequality indices.
2. The second section sheds more light on the differences between social classes in median earnings, by breaking results down by gender and household type.
3. The third section provides more background details on the association between social class and the other covariates used in the analysis, as well as the bivariate association between earnings and all covariates.
4. The fourth section presents more information on the regression analysis underlying the counterfactual estimates of between-class earnings inequality included in the article.
5. The fifth and final section repeats the analysis of between-class earnings inequality by gender.

### 1 Robustness inequality estimates

Although there are several advantages to using the mean log deviation for the purposes of our analysis, it is important to recognize that different inequality measures may yield different results. The table below shows the MLD, Theil and Gini coefficient of earnings and their breakdown by within and between-class earnings inequality. The correlation table included thereafter, shows that the cross-national correlation is particularly robust for the between-class component, yielding as good as equal country rankings for all three inequality measures. The correlation is less strong for the within-class component. Yet, also the share of the between-class component in total inequality yields a Pearson's correlation coefficient well above 0.90. Please note that the Gini coefficient cannot be neatly decomposed into a within and between component.

**Table 1. Total, within, and between-class inequality in earnings according to the MLD, Theil and Gini inequality measures, population at active age and in paid employment, EU-SILC 2018**

Country	Mean log deviation			Theil index			Gini coefficient			
	Total	Within	Between	Total	Within	Between	Total	Within	Between	Overlap
AT	0.32	0.26	0.06	0.26	0.21	0.05	0.38	0.07	0.18	0.14
BE	0.18	0.15	0.03	0.15	0.12	0.03	0.29	0.05	0.14	0.10
BG	0.36	0.29	0.07	0.39	0.31	0.08	0.43	0.06	0.21	0.17
CH	0.29	0.24	0.05	0.24	0.19	0.05	0.36	0.07	0.17	0.12
CY	0.27	0.20	0.07	0.25	0.18	0.07	0.38	0.05	0.21	0.12
CZ	0.16	0.13	0.03	0.15	0.12	0.03	0.29	0.04	0.14	0.11
DE	0.31	0.26	0.06	0.26	0.20	0.05	0.38	0.06	0.18	0.14
DK	0.19	0.16	0.04	0.19	0.15	0.04	0.29	0.05	0.14	0.09
EE	0.26	0.22	0.04	0.22	0.18	0.04	0.36	0.06	0.15	0.15
EL	0.26	0.22	0.04	0.24	0.20	0.04	0.35	0.04	0.15	0.15
ES	0.33	0.27	0.06	0.28	0.22	0.06	0.40	0.05	0.19	0.16
FI	0.21	0.17	0.04	0.18	0.14	0.04	0.31	0.05	0.16	0.11
FR	0.28	0.22	0.06	0.24	0.19	0.06	0.36	0.06	0.19	0.11
HR	0.19	0.15	0.04	0.19	0.15	0.04	0.32	0.04	0.15	0.12
HU	0.26	0.23	0.03	0.22	0.19	0.03	0.34	0.05	0.12	0.17
IE	0.37	0.28	0.09	0.42	0.33	0.09	0.44	0.06	0.24	0.14
IT	0.27	0.23	0.04	0.25	0.22	0.04	0.37	0.05	0.15	0.17
LT	0.30	0.25	0.05	0.28	0.23	0.05	0.39	0.06	0.18	0.15
LU	0.29	0.21	0.07	0.26	0.19	0.07	0.39	0.07	0.20	0.12
LV	0.27	0.21	0.06	0.26	0.19	0.06	0.38	0.06	0.19	0.13
MT	0.21	0.16	0.05	0.21	0.15	0.05	0.33	0.06	0.18	0.10
NL	0.27	0.22	0.05	0.23	0.18	0.04	0.36	0.07	0.17	0.13
NO	0.20	0.16	0.03	0.16	0.13	0.03	0.30	0.06	0.14	0.10
PL	0.21	0.17	0.04	0.19	0.15	0.04	0.33	0.04	0.16	0.13
PT	0.28	0.20	0.07	0.29	0.21	0.07	0.39	0.05	0.21	0.13
RO	0.32	0.18	0.13	0.21	0.11	0.10	0.34	0.03	0.23	0.08
RS	0.18	0.14	0.04	0.16	0.12	0.04	0.30	0.04	0.15	0.11
SE	0.20	0.16	0.03	0.16	0.13	0.03	0.29	0.05	0.14	0.10
SI	0.20	0.16	0.05	0.18	0.13	0.04	0.32	0.05	0.17	0.10
UK	0.34	0.26	0.08	0.32	0.24	0.08	0.42	0.07	0.22	0.13

Source: EU-SILC 2018 (release Spring 2020), computations by the authors.

**Table 2. Association between inequality measures at the country level. Pearson's r and Spearman's rank correlation coefficient for total, within and between-class earnings inequality**

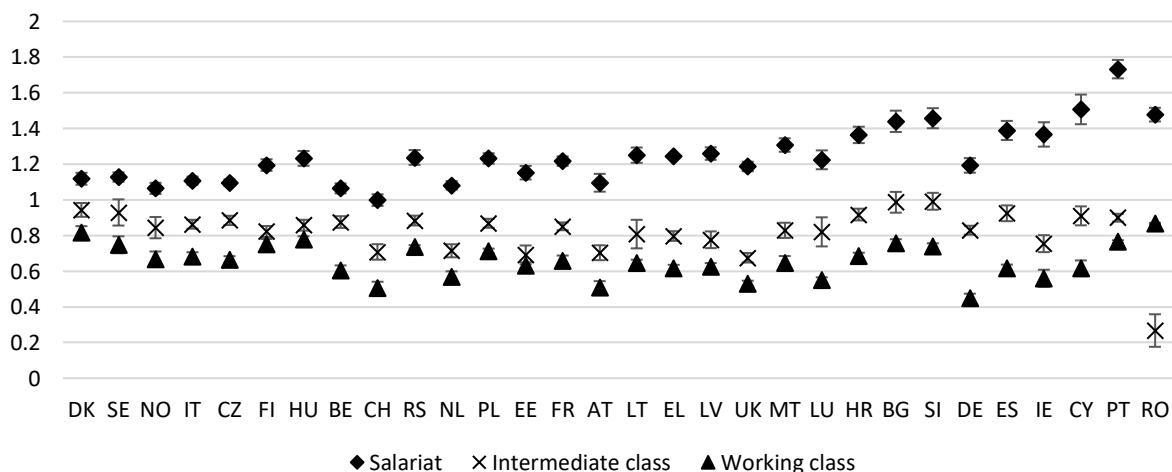
		Pearson			Spearman		
		MLD	Theil	Gini	MLD	Theil	Gini
Total	MLD	1.00	0.90	0.93	1.00	0.90	0.91
	Theil	0.90	1.00	0.95	0.90	1.00	0.97
	Gini	0.93	0.95	1.00	0.91	0.97	1.00
Within	MLD	1.00	0.89	0.62	1.00	0.88	0.62
	Theil	0.89	1.00	0.56	0.88	1.00	0.61
	Gini	0.62	0.56	1.00	0.62	0.61	1.00
Between	MLD	1.00	0.97	0.92	1.00	0.99	0.99
	Theil	0.97	1.00	0.98	0.99	1.00	0.99
	Gini	0.92	0.98	1.00	0.99	0.99	1.00
Share Between in Total	MLD	1.00	0.97	0.95	1.00	0.90	0.91
	Theil	0.97	1.00	0.93	0.90	1.00	0.91
	Gini	0.95	0.93	1.00	0.91	0.91	1.00

Source: Values in Table 1.

## 2 Earnings inequality by class, by gender and household type

The graphs below reproduce Figure 3 in the article, but separately for some subgroups in the population. In other words, each of these graphs shows for specific subgroups in the population median earnings by social class, expressed as a proportion of national median earnings, for people at active age and currently in paid employment with non-zero earnings in the income reference year. All graphs work with a three-class schema. The graphs by household type distinguish between individuals living in the following four household types: single-person households; a household consisting of two adults aged 18 or over, and no children; a household consisting of one person aged 18 or over and at least one child; a household consisting of two adults aged 18 or over and at least one child, with 'child' defined as being younger than 18.

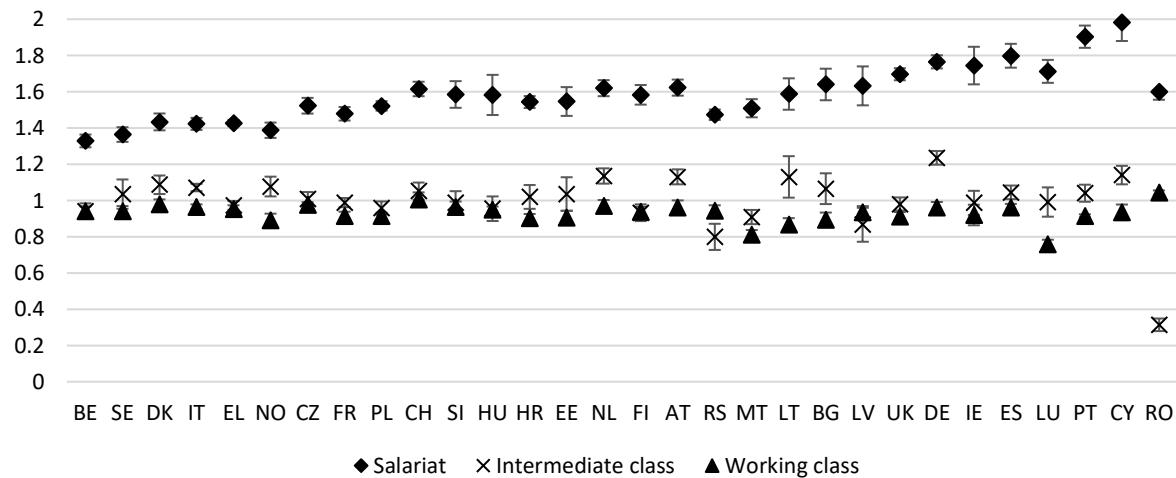
**Figure 1. Median earnings as a proportion of national median earnings by social class and gender: Females, EU-SILC 2008**



Note: Countries sorted by the difference between the highest and lowest median earnings in the country. 95% confidence intervals.

Source: EU-SILC 2018 (release Spring 2020), computations by the authors.

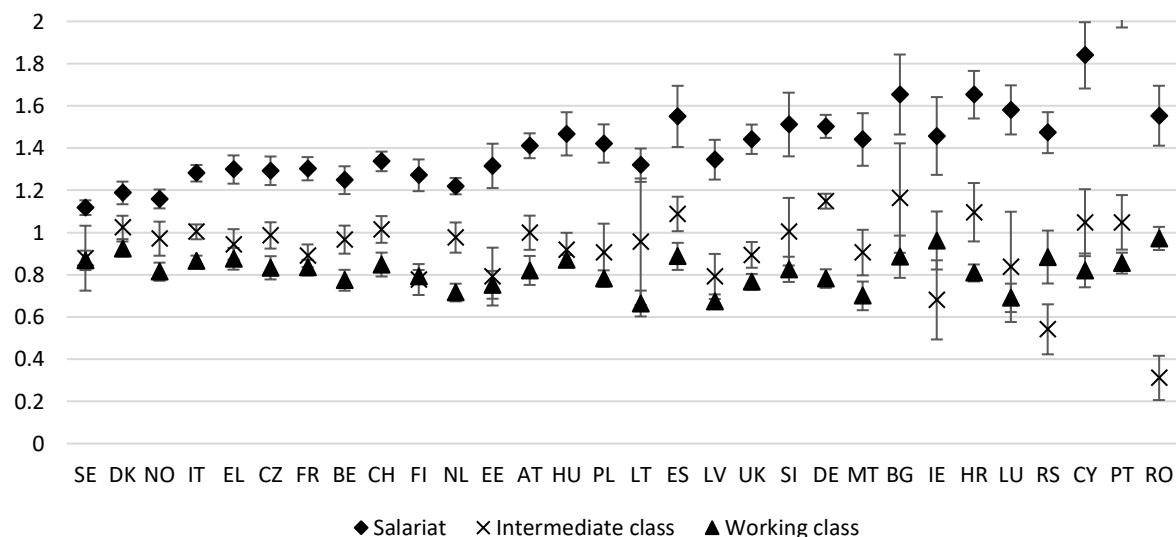
**Figure 2. Median earnings as a proportion of national median earnings by social class and gender: Males, EU-SILC 2008**



Note: Countries sorted by the difference between the highest and lowest median earnings in the country. 95% confidence intervals.

Source: EU-SILC 2018 (release Spring 2020), computations by the authors.

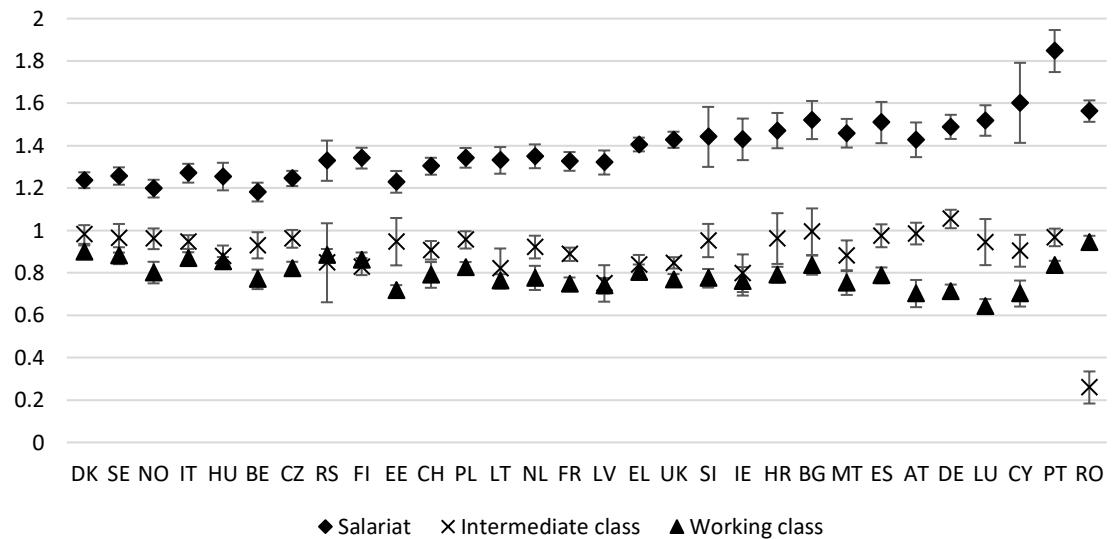
**Figure 3. Median earnings as a proportion of national median earnings by social class and household type: Single-person households, EU-SILC 2008**



Note: Countries sorted by the difference between the highest and lowest median earnings in the country. 95% confidence intervals.

Source: EU-SILC 2018 (release Spring 2020), computations by the authors.

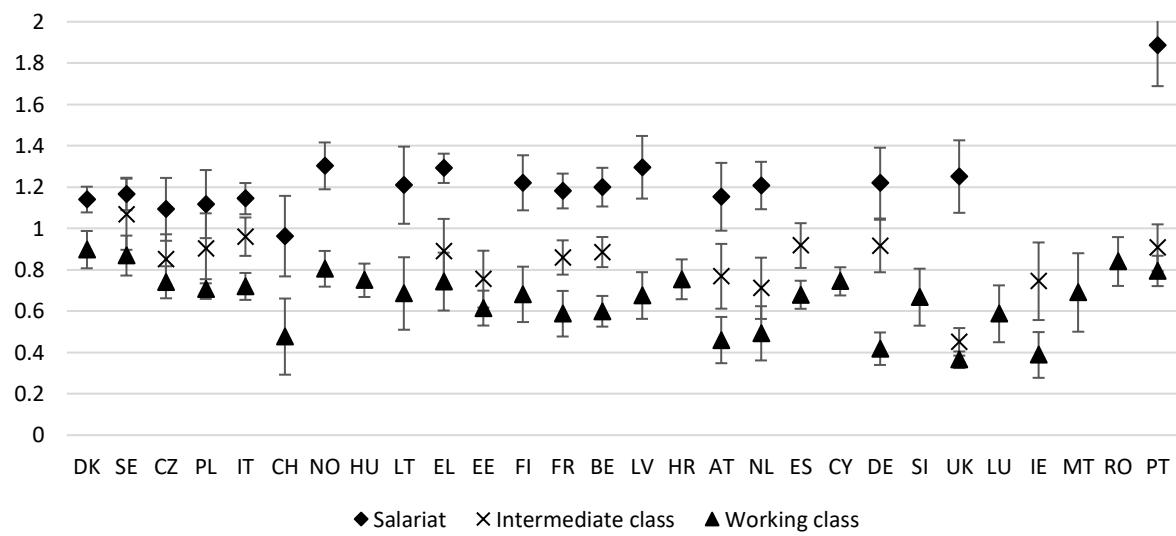
**Figure 4. Median earnings as a proportion of national median earnings by social class and household type: Two adults, no children, EU-SILC 2008**



Note: Countries sorted by the difference between the highest and lowest median earnings in the country. 95% confidence intervals.

Source: EU-SILC 2018 (release Spring 2020), computations by the authors.

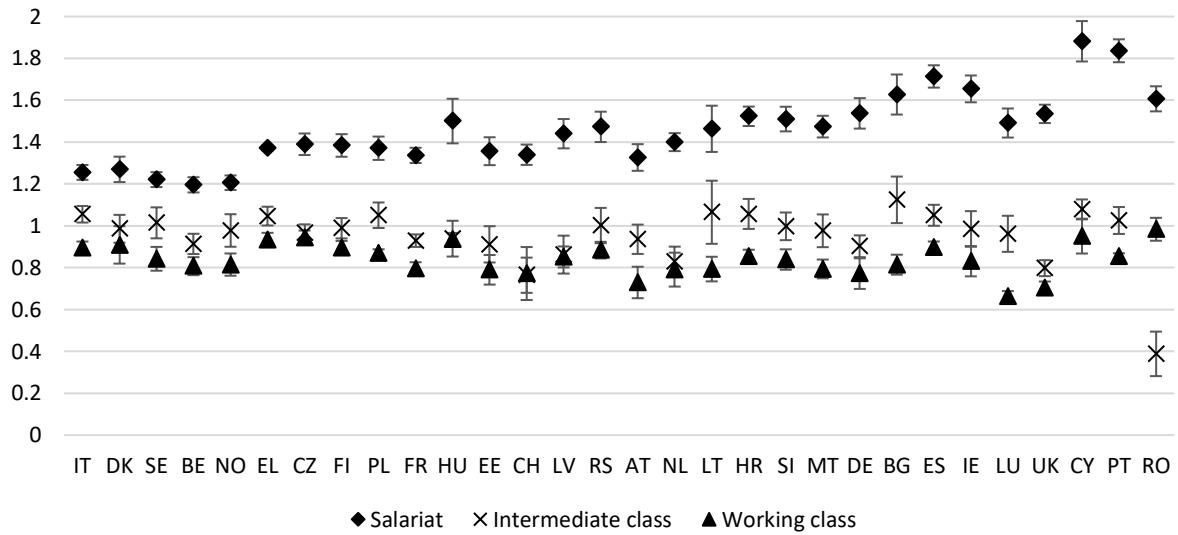
**Figure 5. Median earnings as a proportion of national median earnings by social class and household type: One adult, at least one child, EU-SILC 2008**



Note: Countries sorted by the difference between the highest and lowest median earnings in the country. 95% confidence intervals. Countries and social classes for which confidence intervals spanned at least 40 per cent of national median earnings have been dropped.

Source: EU-SILC 2018 (release Spring 2020), computations by the authors.

**Figure 6. Median earnings as a proportion of national median earnings by social class and household type: Two adults, at least one child, EU-SILC 2008**



Note: Countries sorted by the difference between the highest and lowest median earnings in the country. 95% confidence intervals.

Source: EU-SILC 2018 (release Spring 2020), computations by the authors.

### 3 Determinants of social class

In this section we provide some evidence to support the statement that the covariates employed in the study are both correlated to social class and to earnings. More precisely, the tables below present p-values to test the statistical significance of the association between social class/earnings on the one hand and the covariates used in the study on the other, under the null hypothesis that there is no such relation. We use the following strategy for testing the statistical significance of the association between social class / earnings and the covariates:

- Social class and other categorical variables: we use the Rao and Scott adjusted Pearson chi-square test to test the association between social class and other categorical covariates (e.g. Heeringa, West, & Berglund, 2010, pp. 165-167) (using the svy: tab command in Stata).
- Social class and continuous variables as well as earnings and categorical variables: the Kruskal-Wallis H test (kwallis in Stata)
- Earnings and other continuous variables: Spearman's rank correlation.

The number of adults, dependent adults and children are considered continuous variables in this exercise. For all these tests, the sample is restricted to cases with full information on all variables included in the analysis. The tests are carried out separately for each country. The tables show that, indeed, in the majority of countries each of the variables is significantly associated with social class / earnings, although there is quite some variation across countries.

**Table 3. The bivariate association between social class and the other covariates. P-values of various tests of association**

	hours worked	education	career	gender	health	immigration	number of children	number of adults	number of dependent adults
AT	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.027</b>	0.001	0.000
BE	0.000	0.000	0.000	0.000	0.004	0.000	<b>0.257</b>	<b>0.035</b>	0.000
BG	0.000	0.000	0.000	0.000	0.000	0.001	<b>0.018</b>	0.002	0.000
CH	0.000	0.000	0.000	0.000	0.001	0.000	<b>0.322</b>	<b>0.037</b>	<b>0.666</b>
CY	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000
CZ	<b>0.061</b>	0.000	0.000	0.000	0.000	0.002	0.000	<b>0.205</b>	0.005
DE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
DK	<b>0.079</b>	0.000	0.000	0.000	<b>0.178</b>	0.000	<b>0.163</b>	<b>0.080</b>	<b>0.997</b>
EE	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.006	0.000
EL	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000
ES	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.217</b>	0.000
FI	0.000	0.000	0.000	0.000	<b>0.097</b>	0.001	0.000	0.000	<b>0.208</b>
FR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.467</b>	0.004
HR	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.041</b>	0.001	0.000
HU	0.000	0.000	0.000	0.000	0.000	<b>0.364</b>	<b>0.170</b>	<b>0.057</b>	0.000
IE	0.000	0.000	0.000	<b>0.948</b>	<b>0.031</b>	0.000	0.000	0.000	0.002
IT	0.000	0.000	0.000	<b>0.025</b>	0.000	0.000	0.004	<b>0.016</b>	0.000
LT	0.009	0.000	0.000	0.000	0.000	<b>0.310</b>	0.000	0.002	0.000
LU	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.527</b>	0.000	0.000
LV	0.001	0.000	0.000	0.000	0.000	<b>0.202</b>	0.000	<b>0.378</b>	0.000
MT	0.000	0.000	0.000	<b>0.062</b>	<b>0.941</b>	<b>0.010</b>	0.000	0.000	0.000
NL	0.000	0.000	0.000	0.000	0.000	<b>0.374</b>	0.000	0.000	<b>0.585</b>
NO	0.000	0.000	0.000	0.000	0.000	0.000	0.003	<b>0.068</b>	<b>0.947</b>
PL	0.000	0.000	0.000	0.000	0.000	<b>0.375</b>	0.001	0.000	0.000
PT	0.000	0.000	0.000	0.000	0.000	<b>0.058</b>	0.000	0.000	0.000
RO	0.000	0.000	0.000	0.000	<b>0.146</b>	<b>0.755</b>	0.002	<b>0.036</b>	0.000
RS	<b>0.317</b>	0.000	0.000	0.000	<b>0.155</b>	<b>0.114</b>	<b>0.376</b>	0.000	0.000
SE	0.000	0.000	0.001	0.000	0.007	0.000	0.001	<b>0.046</b>	<b>0.175</b>
SI	<b>0.019</b>	0.000	0.000	0.000	<b>0.027</b>	0.000	0.000	<b>0.100</b>	0.000
UK	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.050</b>	0.000

Note: 9 Class schema. P-values of tests described in text above. Shaded cells indicate p-values greater than 0.01.

Source: EU-SILC 2018 (release Spring 2020), computations by the authors.

**Table 4. The bivariate association between earnings and covariates. P-values of various tests of association**

	social class	hours worked	education	career	gender	health	immigrant	number of children	number of adults	number of dependent adults
AT	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000	<b>0.237</b>
BE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.102</b>	0.001
BG	0.000	0.000	0.000	0.001	0.000	<b>0.035</b>	<b>0.458</b>	<b>0.015</b>	<b>0.064</b>	0.000
CH	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.481</b>	<b>0.112</b>	0.000	<b>0.092</b>
CY	0.000	0.000	0.000	0.000	0.000	<b>0.933</b>	0.000	0.000	0.000	0.000
CZ	0.000	0.000	0.000	0.001	0.000	0.000	<b>0.076</b>	0.000	0.000	<b>0.436</b>
DE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.001
DK	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.119</b>	0.002	0.000	<b>0.178</b>
EE	0.000	0.000	0.000	<b>0.297</b>	0.000	0.000	0.000	0.001	<b>0.237</b>	0.001
EL	0.000	0.000	0.000	0.000	0.000	<b>0.030</b>	0.000	0.000	<b>0.014</b>	0.000
ES	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
FI	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.016</b>
FR	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.115</b>	<b>0.059</b>
HR	0.000	0.000	0.000	0.000	0.000	<b>0.107</b>	0.002	0.000	0.000	0.000
HU	0.000	0.000	0.000	<b>0.039</b>	0.000	0.000	0.005	<b>0.046</b>	<b>0.088</b>	0.000
IE	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	<b>0.075</b>	0.000
IT	0.000	0.000	0.000	0.000	<b>0.799</b>	0.000	0.000	0.000	0.000	0.000
LT	0.000	0.000	0.000	<b>0.030</b>	0.000	0.000	<b>0.436</b>	0.001	<b>0.211</b>	0.000
LU	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.575</b>	0.000	0.000	<b>0.014</b>
LV	0.000	0.000	0.000	0.000	0.000	<b>0.030</b>	0.000	0.000	0.000	0.000
MT	0.000	0.000	0.000	0.004	0.000	0.002	<b>0.012</b>	0.000	<b>0.141</b>	0.000
NL	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	<b>0.290</b>	0.000
NO	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.004	<b>0.015</b>
PL	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.636</b>	0.000	0.005	0.000
PT	0.000	0.000	0.000	0.000	0.000	0.000	0.005	0.000	0.000	0.000
RO	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.448</b>	<b>0.543</b>	<b>0.592</b>	0.000
RS	0.000	0.000	0.003	0.000	<b>0.119</b>	0.001	<b>0.286</b>	0.002	0.000	0.000
SE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.010	0.000	<b>0.194</b>
SI	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	<b>0.995</b>	<b>0.118</b>
UK	0.000	0.000	0.000	<b>0.431</b>	0.000	0.000	<b>0.028</b>	<b>0.475</b>	<b>0.031</b>	0.000

Note: 9 Class schema. P-values of tests described in text above. Shaded cells indicate p-values greater than 0.01.

Source: EU-SILC 2018 (release Spring 2020), computations by the authors.

#### 4 Design degrees of freedom and $R^2$ of regressions

The table below includes the number of observations, design degrees of freedom and goodness-of-fit of the regression models that underly the estimation of the counterfactual measure of between-class inequality, as well as the number of observations. Please note that Eurostat only defines a minimum threshold for the sample size in each country and countries can freely decide to have bigger sample sizes. As a result, both gross and net sample sizes vary tremendously between countries in EU-SILC, in accordance with national priorities. Hence the variation in sample size of the subsample that we use

(with complete information) is primarily determined by the overall size of the EU-SILC sample in each country. We also show the design degrees of freedom, given that EU-SILC in most countries follows a ‘complex sample’ design, imply clustering and multiple stages of selection. Sample designs are key to the sampling variance. The design degrees of freedom indicate the number of clusters at the first stage of the sample design, minus the number of strata, which is a key determinant of the sampling variance (rather than the number of observations) (for more details see, for instance, Heeringa et al., 2010). It is natural that the design degrees of freedom vary even more strongly across countries than the number of observations do, due to strong differences in sample designs across countries.

**Table 5. Number of observations, design degrees of freedom and R squared of regressions underlying the computation of the counterfactual between-class Mean Log deviation of earnings, EU-SILC 2018**

	n	DF	R <sup>2</sup>	
			no interactions	interactions
AT	5,410	6,075	0.40	0.36
BE	4,804	268	0.42	0.38
BG	6,441	7,232	0.19	0.16
CH	5,737	6,665	0.46	0.40
CY	4,299	4,191	0.54	0.46
CZ	7,780	1,836	0.37	0.34
DE	10,567	12,878	0.42	0.38
DK	1,176	5,583	0.33	0.25
EE	5,996	6,065	0.33	0.30
EL	16,740	3,521	0.24	0.22
ES	12,045	2,198	0.35	0.31
FI	4,844	9,831	0.38	0.35
FR	7,688	502	0.37	0.32
HR	6,449	2,622	0.32	0.29
HU	5,764	3,156	0.25	0.22
IE	3,826	1,119	0.18	0.14
IT	17,161	7,496	0.27	0.24
LT	4,369	4,902	0.29	0.23
LU	4,243	3,831	0.42	0.37
LV	4,764	1,122	0.33	0.30
MT	3,791	3,820	0.36	0.30
NL	5,428	12,385	0.44	0.40
NO	3,061	5,932	0.37	0.34
PL	11,674	15,193	0.29	0.27
PT	12,678	4,750	0.34	0.29
RO	6,798	787	0.51	0.49
RS	4,464	367	0.34	0.31
SE	2,429	5,814	0.36	0.31
SI	3,847	2,868	0.39	0.35
UK	9,396	1,828	0.28	0.25

Source: EU-SILC 2018 (release Spring 2020), computations by the authors.

## 5 Between-class inequality by gender

The tables in figures below largely repeat the analysis presented in the article, separately for males and females (as a proxy of gender, EU-SILC only reports sex with these two categories). Due to its small sample size with full information, Denmark is excluded from the counterfactual analysis (i.e. Table 5 and the graphs below). Furthermore, for the counterfactual analysis, ESeC categories that either account for less than 1.5 per cent of the population in paid employment at active age, or are represented by fewer than 30 observations in the data, were dropped from the analysis. For Females, this implies that small farmers were excluded from the analysis in Switzerland, the Czech Republic, Germany, Estonia, France, Hungary, Ireland and Slovenia, and both small farmers and the skilled manual in Belgium, Cyprus, Luxembourg, Malta, the Netherlands and Sweden. In Norway this included in addition the 'Petit bourgeois'. For the same reason, the higher grade blue collar class was left out of the analysis in Romania. Fewer cases were dropped from the analysis in the case of males. In that instance, due to a small number of observations, small farmers were left out of the analysis in Belgium, Germany, Luxembourg, Malta, the Netherlands, Norway and Sweden.

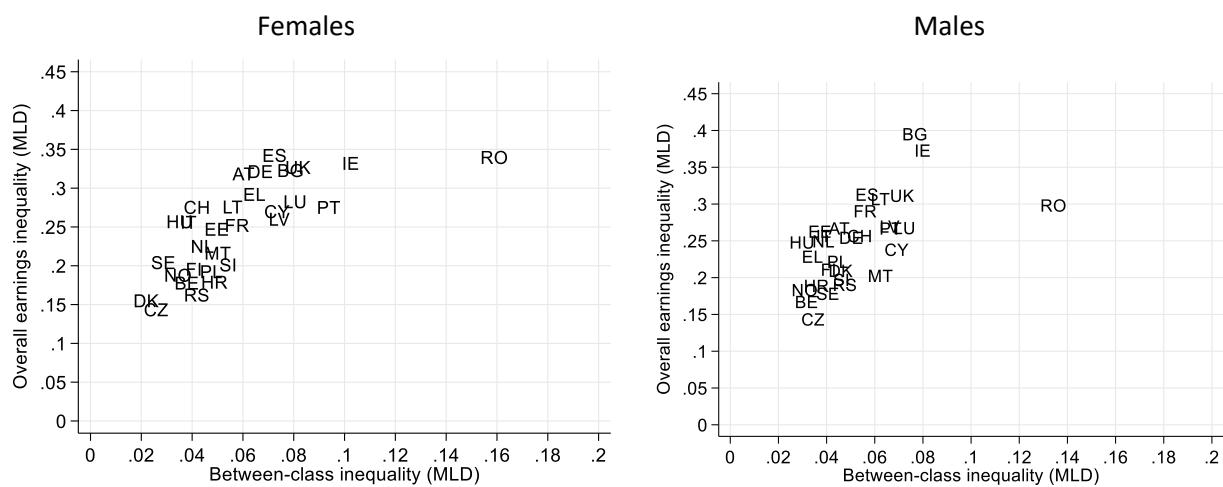
**Table 6. Overall earnings inequality and earnings inequality between social classes by gender, mean log deviation, EU-SILC 2018**

	Overall inequality		Absolute between-class inequality		Between-class inequality as a % of overall inequality	
	Females	Males	Females	Males	Females	Males
AT	0.319 (0.015)	0.267 (0.014)	0.060 (0.005)	0.045 (0.004)	18.9 (1.4)	17.0 (1.4)
BE	0.178 (0.010)	0.167 (0.010)	0.038 (0.004)	0.032 (0.003)	21.3 (1.9)	19.0 (1.7)
BG	0.323 (0.018)	0.395 (0.027)	0.079 (0.009)	0.077 (0.016)	24.4 (2.1)	19.4 (2.9)
CH	0.276 (0.014)	0.257 (0.017)	0.042 (0.004)	0.054 (0.005)	15.2 (1.6)	21.0 (1.5)
CY	0.270 (0.010)	0.238 (0.011)	0.073 (0.006)	0.069 (0.006)	27.2 (1.8)	29.0 (1.9)
CZ	0.144 (0.006)	0.143 (0.005)	0.026 (0.002)	0.034 (0.003)	18.0 (1.4)	24.0 (1.4)
DE	0.322 (0.009)	0.254 (0.008)	0.067 (0.004)	0.050 (0.004)	20.8 (1.1)	19.8 (1.1)
DK	0.155 (0.014)	0.210 (0.036)	0.022 (0.004)	0.046 (0.015)	14.2 (2.1)	21.9 (4.4)
EE	0.247 (0.011)	0.263 (0.011)	0.050 (0.004)	0.037 (0.004)	20.1 (1.5)	14.2 (1.5)
EL	0.292 (0.010)	0.229 (0.007)	0.065 (0.005)	0.034 (0.003)	22.1 (1.3)	14.9 (0.9)
ES	0.342 (0.011)	0.313 (0.010)	0.073 (0.005)	0.057 (0.005)	21.2 (1.2)	18.2 (1.3)
FI	0.196 (0.011)	0.211 (0.011)	0.041 (0.004)	0.041 (0.004)	20.8 (1.7)	19.3 (1.6)
FR	0.252 (0.010)	0.291 (0.016)	0.058 (0.005)	0.056 (0.005)	22.9 (1.7)	19.3 (1.5)
HR	0.179 (0.008)	0.189 (0.009)	0.049 (0.004)	0.036 (0.004)	27.3 (1.7)	18.9 (1.6)
HU	0.257 (0.017)	0.248 (0.015)	0.035 (0.005)	0.030 (0.005)	13.7 (1.9)	12.0 (2.0)
IE	0.332 (0.045)	0.373 (0.030)	0.102 (0.025)	0.080 (0.015)	30.8 (3.8)	21.4 (2.8)
IT	0.256 (0.009)	0.257 (0.007)	0.039 (0.004)	0.039 (0.003)	15.1 (1.2)	15.1 (1.0)
LT	0.276 (0.016)	0.307 (0.016)	0.056 (0.006)	0.062 (0.008)	20.3 (2.0)	20.3 (2.2)
LU	0.283 (0.019)	0.268 (0.016)	0.081 (0.008)	0.072 (0.007)	28.5 (2.6)	27.0 (2.2)
LV	0.260 (0.011)	0.270 (0.013)	0.074 (0.006)	0.066 (0.007)	28.6 (1.8)	24.6 (2.1)
MT	0.217 (0.017)	0.203 (0.012)	0.050 (0.005)	0.062 (0.007)	23.2 (2.5)	30.8 (2.4)
NL	0.225 (0.010)	0.250 (0.013)	0.044 (0.004)	0.039 (0.004)	19.6 (1.5)	15.5 (1.5)
NO	0.188 (0.012)	0.183 (0.010)	0.034 (0.004)	0.031 (0.003)	18.3 (1.6)	16.9 (1.5)
PL	0.193 (0.006)	0.222 (0.006)	0.048 (0.003)	0.045 (0.003)	24.7 (1.2)	20.1 (1.2)
PT	0.275 (0.010)	0.267 (0.009)	0.094 (0.005)	0.067 (0.005)	34.1 (1.5)	25.0 (1.5)
RO	0.340 (0.025)	0.298 (0.018)	0.159 (0.016)	0.134 (0.012)	46.8 (2.9)	45.0 (2.2)
RS	0.163 (0.010)	0.190 (0.011)	0.042 (0.004)	0.048 (0.006)	25.8 (2.3)	25.0 (2.3)
SE	0.204 (0.014)	0.178 (0.013)	0.029 (0.003)	0.041 (0.005)	14.1 (1.6)	22.7 (1.9)
SI	0.201 (0.009)	0.197 (0.009)	0.054 (0.004)	0.046 (0.005)	26.9 (2.0)	23.4 (2.2)
UK	0.327 (0.009)	0.312 (0.009)	0.082 (0.005)	0.071 (0.004)	25.0 (1.2)	22.9 (1.1)

Note: 9-class ESeC. All computations (including overall earnings inequality) computed separately by gender.  
Standard errors between brackets.

Source: EU-SILC 2018 (release Spring 2020), computations by the authors.

**Figure 7. Overall vs. Between-class earnings inequality by gender**



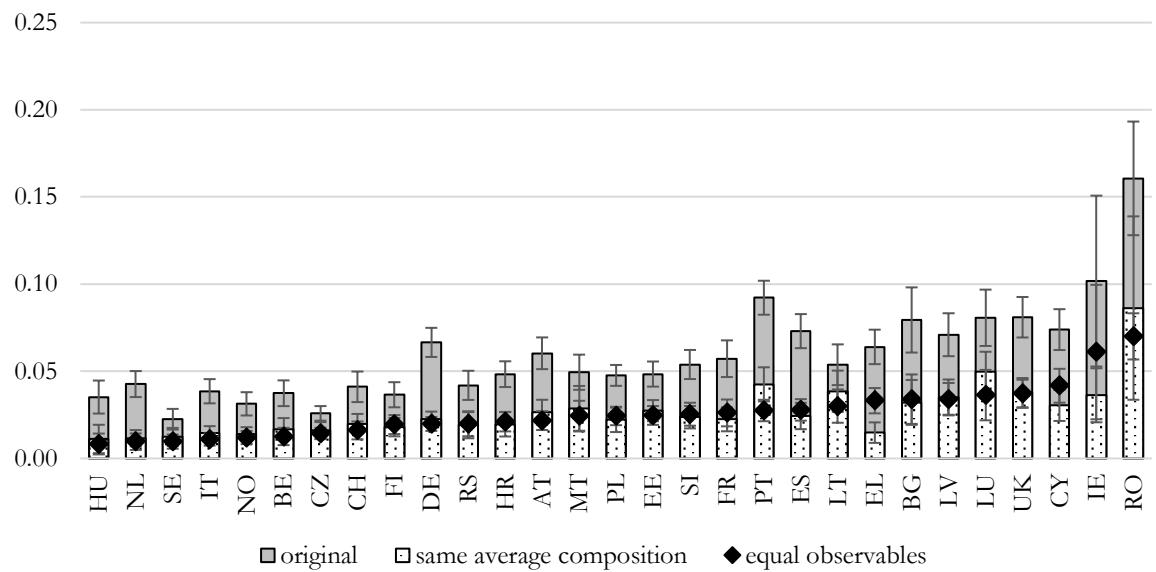
Source: Table 6.

**Table 7. Number of observations, design degrees of freedom and R squared of regressions underlying the computation of the counterfactual between-class Mean Log deviation of earnings, by gender, EU-SILC 2018**

	Number of observations		Design degrees of freedom		R squared			
	Females	Males	Females	Males	Females		Males	
					no interactions	interactions	no interactions	interactions
AT	2,602	2,808	6,077	6,078	0.49	0.43	0.32	0.28
BE	2,278	2,515	268	268	0.47	0.42	0.37	0.32
BG	3,078	3,363	7,232	7,232	0.20	0.18	0.21	0.16
CH	2,878	2,904	6,669	6,675	0.51	0.46	0.39	0.34
CY	2,139	2,184	4,191	4,191	0.62	0.50	0.47	0.40
CZ	3,620	4,204	1,836	1,836	0.38	0.34	0.32	0.30
DE	5,378	5,189	12,882	12,888	0.48	0.45	0.34	0.31
EE	3,004	3,034	6,070	6,068	0.38	0.35	0.32	0.27
EL	6,991	9,749	3,521	3,521	0.34	0.30	0.20	0.18
ES	5,565	6,480	2,198	2,198	0.38	0.33	0.34	0.30
FI	2,266	2,578	9,831	9,831	0.39	0.35	0.34	0.31
FR	3,897	3,896	502	502	0.43	0.38	0.33	0.28
HR	2,910	3,539	2,623	2,623	0.41	0.35	0.28	0.24
HU	2,683	3,059	3,171	3,172	0.32	0.25	0.24	0.21
IE	1,838	1,982	1,120	1,119	0.18	0.14	0.18	0.14
IT	7,703	9,702	7,496	7,496	0.28	0.24	0.25	0.22
LT	2,330	2,039	4,903	4,903	0.28	0.24	0.29	0.22
LU	2,014	2,214	3,831	3,832	0.49	0.40	0.35	0.32
LV	2,499	2,265	1,122	1,122	0.37	0.34	0.33	0.29
MT	1,512	2,258	3,820	3,822	0.41	0.36	0.35	0.29
NL	2,732	2,675	12,439	12,438	0.47	0.42	0.34	0.30
NO	1,417	1,633	5,957	5,955	0.39	0.35	0.29	0.25
PL	5,382	6,292	15,205	15,207	0.31	0.29	0.27	0.25
PT	6,520	6,304	4,750	4,750	0.38	0.31	0.32	0.27
RO	2,168	3,997	787	787	0.55	0.52	0.50	0.48
RS	1,927	2,537	367	367	0.40	0.35	0.32	0.29
SE	1,198	1,216	5,822	5,822	0.43	0.38	0.32	0.27
SI	1,933	1,964	2,868	2,868	0.45	0.39	0.36	0.33
UK	9,528	9,472	1,828	1,828	0.32	0.29	0.24	0.21

Source: EU-SILC 2018 (release Spring 2020), computations by the authors.

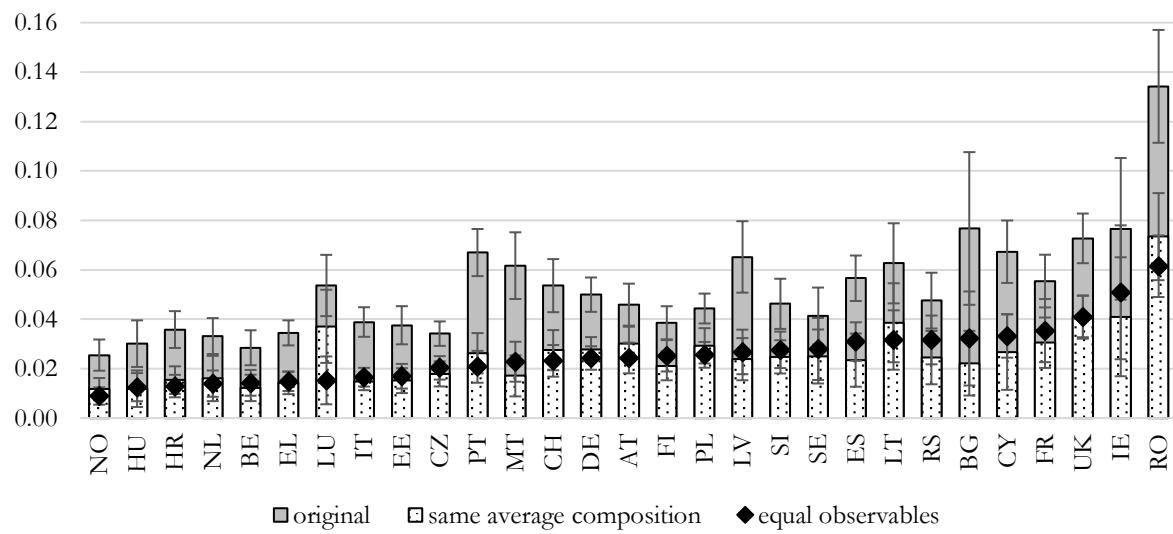
**Figure 8. Earnings inequality between social classes before and after controlling for observable characteristics, Females, EU-SILC 2018**



Note: Denmark excluded due to small sample size and probably biased estimates. Countries ordered from low to high between class inequality, after controlling for background characteristics. Sample restricted to all cases without missing observations on any of the regression variables. Some classes excluded in some countries (see data and methods section). 95% confidence intervals.

Source: EU-SILC 2018 (release Spring 2020), computations by the authors.

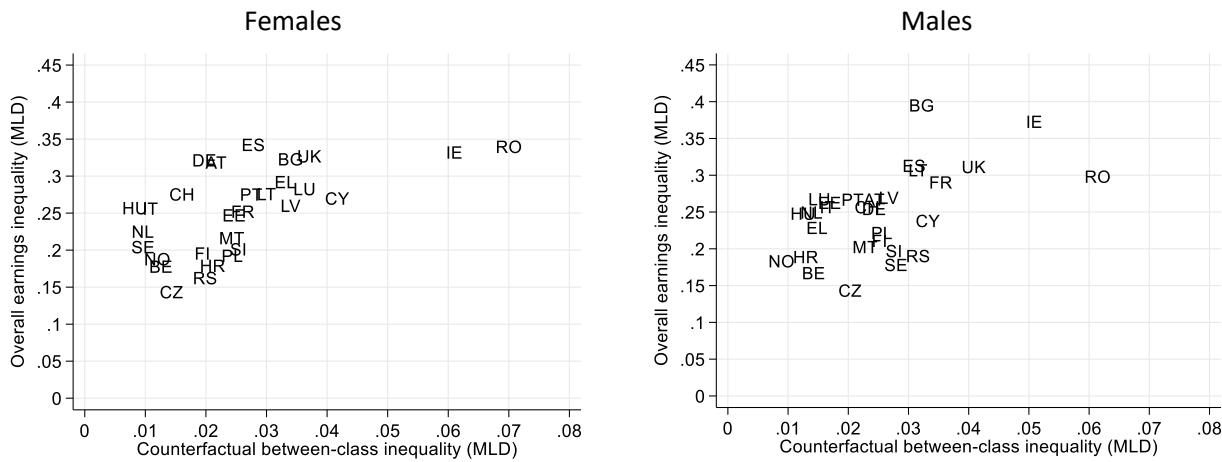
**Figure 9. Earnings inequality between social classes before and after controlling for observable characteristics, Males, EU-SILC 2018**



Note: Denmark excluded due to small sample size and probably biased estimates. Countries ordered from low to high between class inequality, after controlling for background characteristics. Sample restricted to all cases without missing observations on any of the regression variables. Some classes excluded in some countries (see data and methods section). 95% confidence intervals.

Source: EU-SILC 2018 (release Spring 2020), computations by the authors.

**Figure 10. Counterfactual earnings inequality between social classes controlling for observed characteristics and differences in returns versus total earnings inequality, Mean Log Deviation, EU-SILC 2018**



Source: EU-SILC 2018 (release Spring 2020), computations by the authors.

## References

Heeringa, S. G., West, B. T., & Berglund, P. A. (2010). *Applied Survey Data Analysis*. Boca Raton: Chapman & Hall/CRC.