



UNIVERSITÀ DEGLI STUDI DI TRENTO

Dipartimento di Sociologia  
e Ricerca Sociale



**Universitat  
Pompeu Fabra**  
*Barcelona*

# A WAY OUT OF THE GENDER- CLASS INEQUALITY TRADE-OFF?

A LONGITUDINAL ANALYSIS OF GENDER AND CLASS INCOME  
INEQUALITY IN DIFFERENT INSTITUTIONAL CONTEXTS.

ANNA ZAMBERLAN

WITH PAOLO BARBIERI & GIORGIO CUTULI

# THEORETICAL BACKGROUND

- **Class inequality**
  - The “class form” of inequality and the occupational structure as a foundation of social stratification
  - The postmodernist phase and the “death-of-class” thesis
- **Gender inequality**
  - Critiques of mainstream analyses of inequality and the welfare state: gender as a relevant explanatory variable
- **Trade-off** between different inequalities
  - Relative inequality levels as a zero-sum exchange (Cooke, 2011)
  - Stratification of positive effects of gender egalitarian trends (Esping-Andersen, 2016)

# RESEARCH QUESTIONS

1. Is there empirical evidence about the fact that **class** is by now unable to explain economic outcomes of individuals? On the other hand, can we detect significant changes over time in the effect exerted by **gender** on these outcomes?
2. Is there evidence of a **trade-off**, in different European countries, between gender and class income inequality?
3. Does the **macro-institutional context** play a relevant role in shaping relative levels of gender and class inequality?
4. What are the consequences of **increases in macro-level gender equality** on gender and class income inequality, as well as on their relationship?
5. Are the effects of gender-egalitarian trends on gender and class income inequality **stratified**?

# DATA & SAMPLE

- EU-SILC individual-level panel data, cumulative sample 2005-2015 (Borst, 2018)
  - Employed respondents aged 25 to 64, excluding permanently disabled and people in compulsory military community
  - Unemployed people included only in the weights' construction
  - Exclusion of self-employed
  - Countries: Austria, France, Greece, Ireland, Italy, Spain, Sweden, and UK
- ESS micro-level data (rounds 3 (2006) to 7 (2014))
- Pooled EVS-WVVS micro-level data
- OECD and Eurostat macro-level data



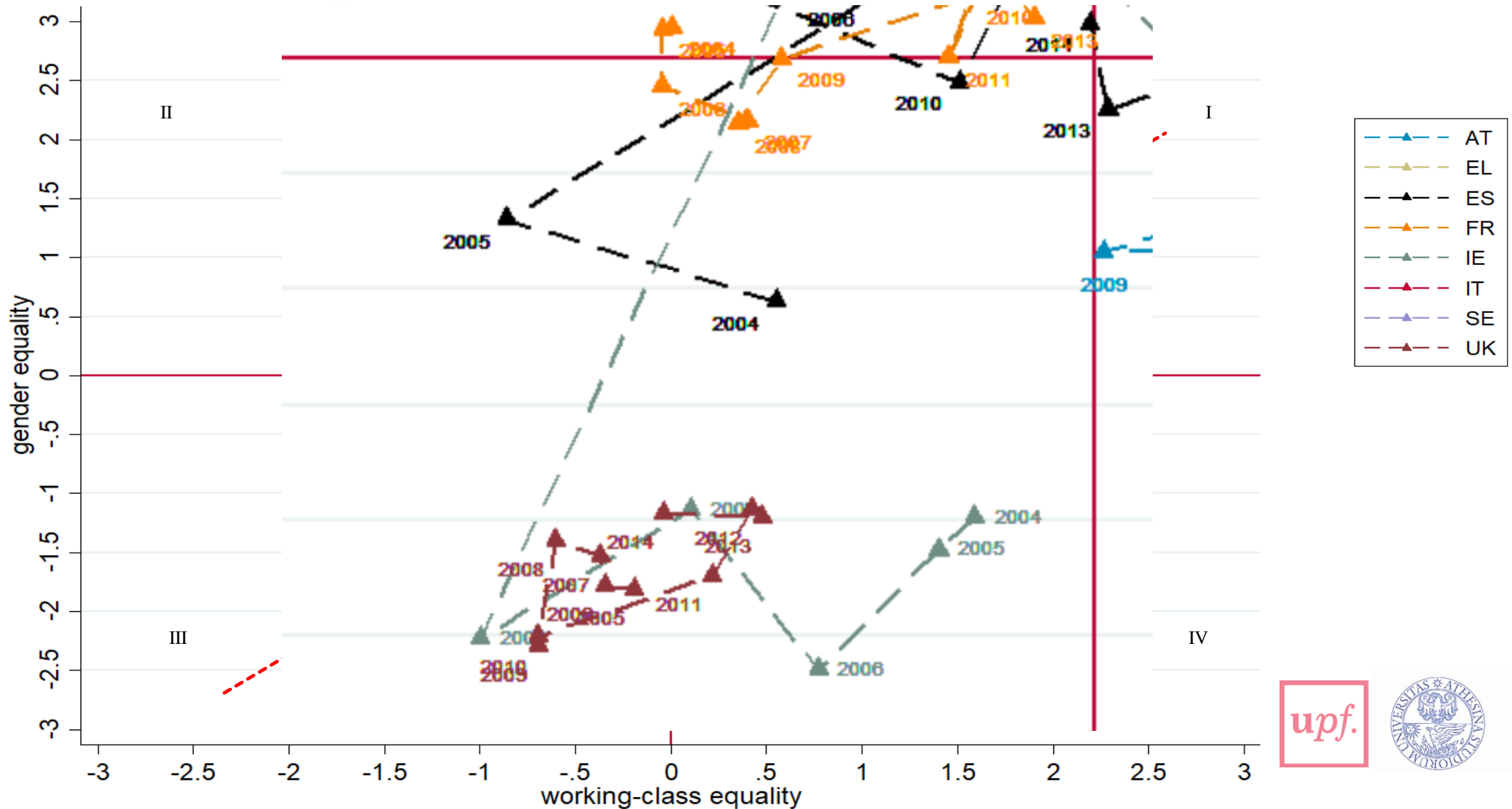
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# MODELLING STRATEGY & STATISTICAL METHODS

- **Exploratory analysis:** “mapping” of betas in different countries, over time
  - $Y1 = \frac{y_i | C_k}{\bar{y}_m | C_k}$  (“gender ratio”) → female betas
  - $Y2 = \frac{y_i | G_k}{\bar{y}_{upper} | G_k}$  (“class ratio”) → middle- and working-class betas
  - Inverse Probability Weighting
- **Confirmatory factor analysis:** macro-level gender equality indexes
- **Two-step multilevel analysis** (*macro & meso*)
  - Saving of female and class betas (log income; IPW)
  - Hybrid panel models estimating the effects of the gender equality indexes on inequality outcomes

Relative levels of **gender and working-class equality** in different countries, over time. Standardized values (N=274350).  
 2005-2015 EU-SILC panel<sup>1</sup>



# RESEARCH QUESTIONS

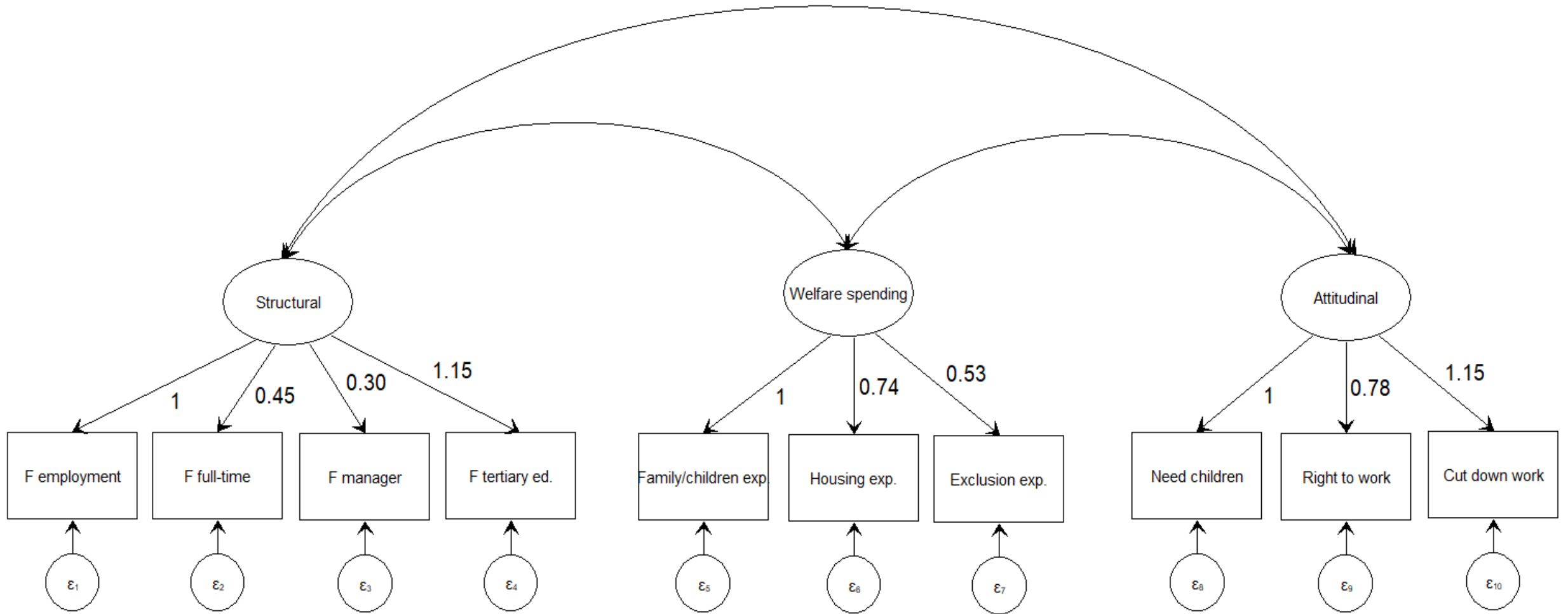
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Diagram of the structural equation model tested in the confirmatory factor analysis.



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  - Hybrid panel models estimating the effects of the gender equality indexes on inequality outcomes

Variables	M0 Gender inequality	M1 Gender inequality	M2 Gender inequality	M3 Gender inequality	M4 Gender inequality
Structural GEI (BE)		-0.13 (0.12)			-0.02 (0.10)
Structural GEI (WI)		0.40** (0.13)			0.41** (0.13)
Welfare spend. GEI (BE)			-0.21** (0.07)		-0.39*** (0.08)
Welfare spend. GEI (WI)			-0.13 (0.12)		-0.14 (0.12)
Attitudinal GEI (BE)				-0.09 (0.11)	0.28** (0.11)
Attitudinal GEI (WI)				0.16 (0.13)	-0.01 (0.13)
Constant	-0.41*** (0.03)	-0.33*** (0.08)	-0.31*** (0.04)	-0.37*** (0.06)	-0.33*** (0.04)
Variance (country)	0.09*** (0.02)	0.08*** (0.02)	0.06*** (0.02)	0.09*** (0.02)	0.04*** (0.01)
Variance (residual)	0.05*** (0.00)	0.05*** (0.00)	0.05*** (0.00)	0.05*** (0.00)	0.05*** (0.00)
Pseudo R <sup>2</sup> (country)		0.12	0.50	0.00	1.25
Observations	85	85	85	85	85

## Effects of trends in macro-level gender equality on gender income inequality.

Hybrid panel model estimates on female betas (gender inequality).

Between-countries (BE) and within-country variation (FE).

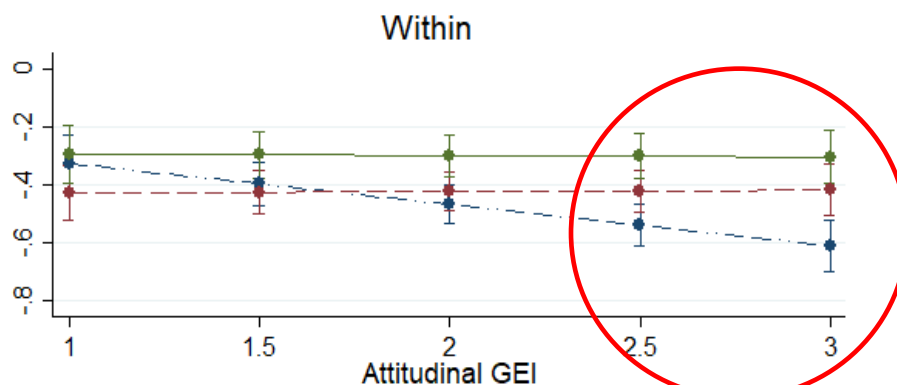
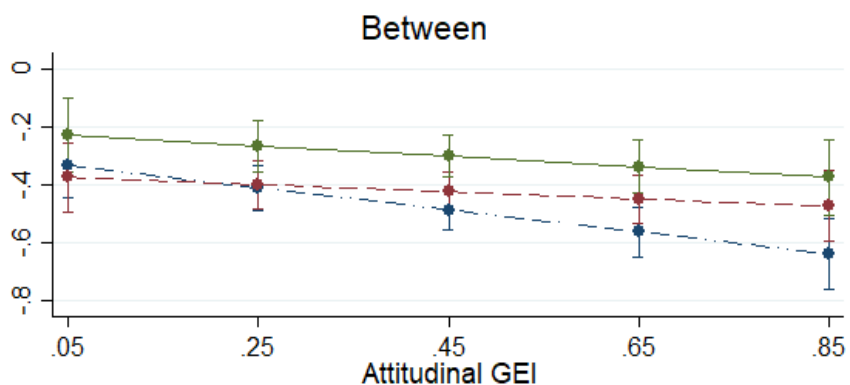
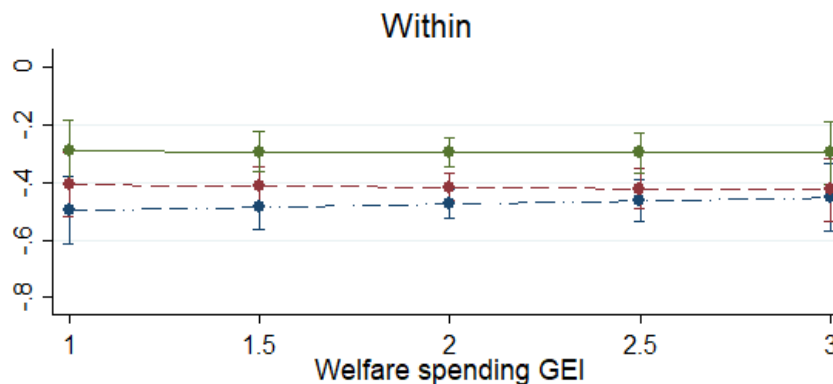
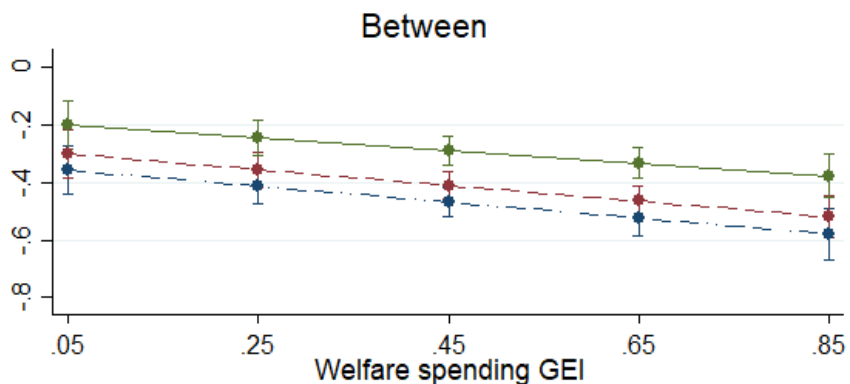
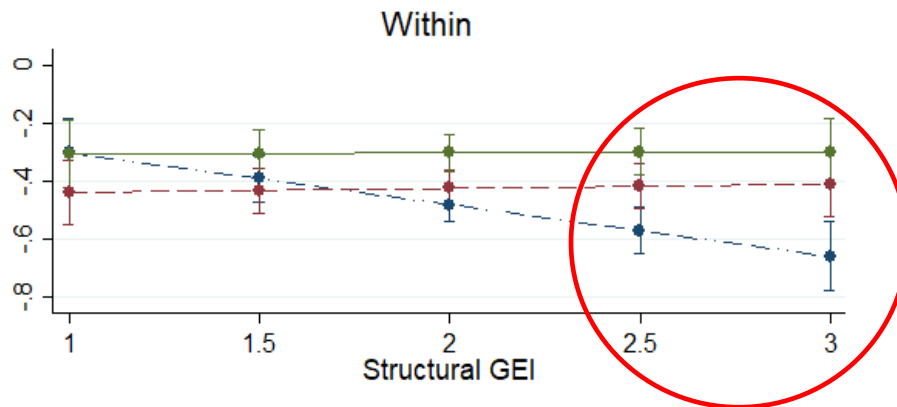
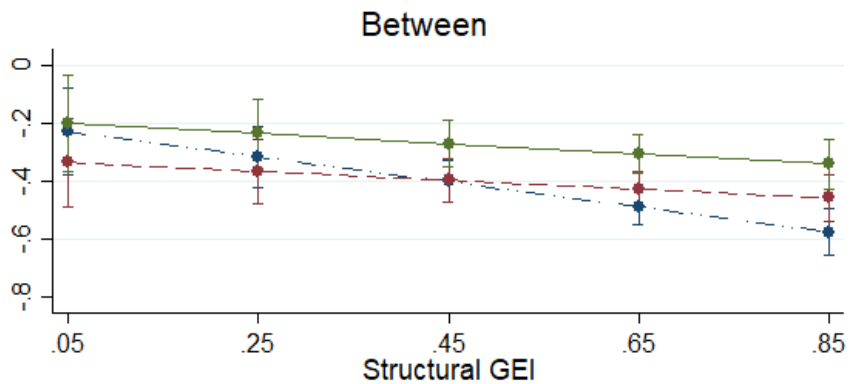
2005-2015 EU-SILC panel.

Standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .  
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—●— primary or lower    
 - - ● - - secondary + post-secondary non-tertiary    
 —●— tertiary and more

**Effects of the interaction between trends in macro-level gender equality and ISCED on gender income inequality.**

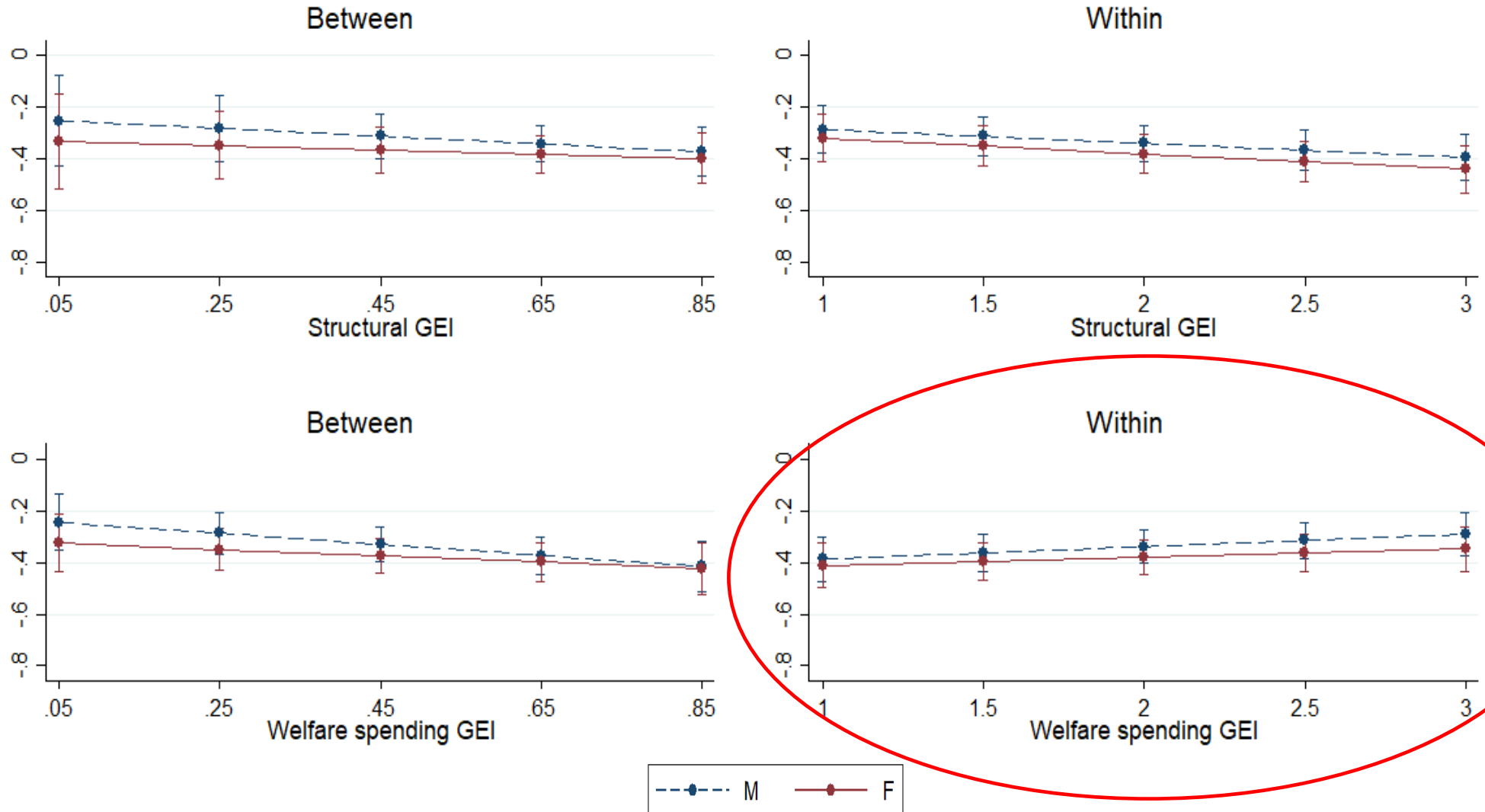
Estimates of gender income inequality for different levels of structural, welfare spending, and attitudinal macro-level gender equality (GEI), separately for different educational categories (N=244).

2005-2015 EU-SILC panel.



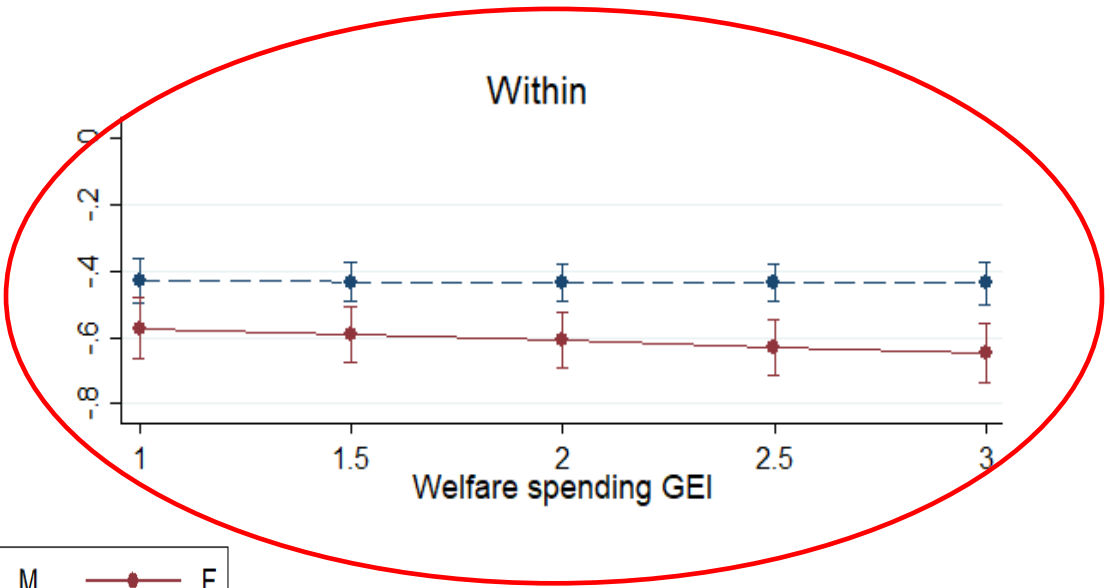
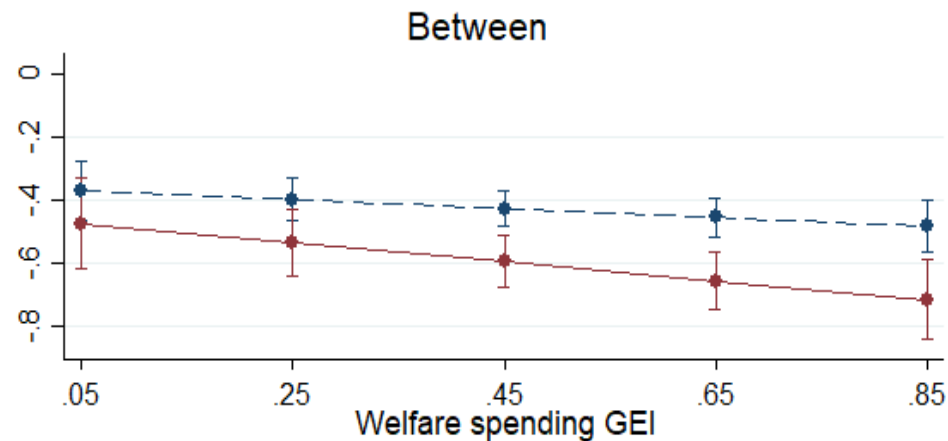
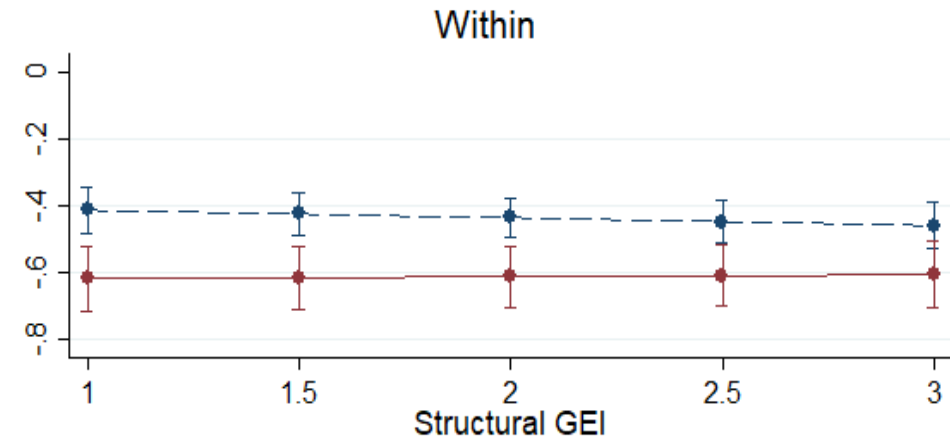
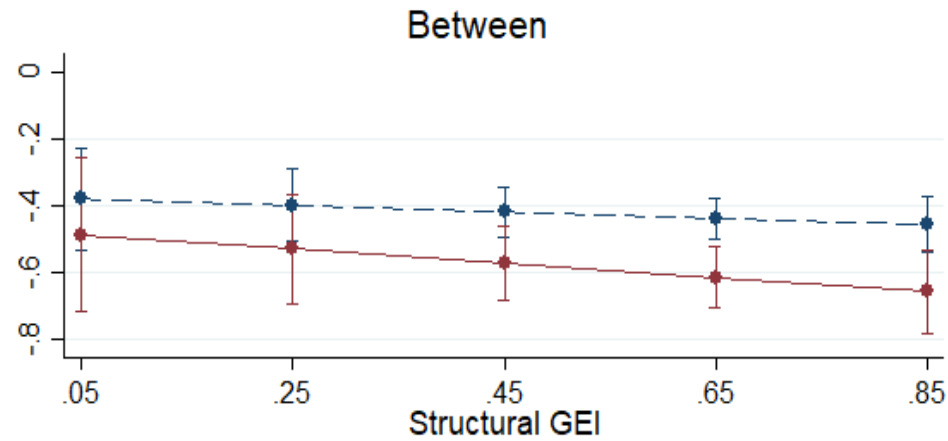
# Effects of the interaction between trends in macro-level gender equality and gender on middle-class income inequality.

Estimates of middle-class income inequality for different levels of structural and welfare spending macro-level gender equality (GEI), separately for men and women (N=170).



# Effects of the interaction between trends in macro-level gender equality and gender on working-class income inequality.

Estimates of working-class income inequality for different levels of structural and welfare spending macro-level gender equality (GEI), separately for men and women (N=170).





# DISCUSSION & CONCLUSIONS

1. **Class** and **gender** are both relevant sources of economic inequality
2. Macro-level: **no evidence of a trade-off** between gender and class inequality
3. **Country-specific** levels and trends of inequality, even though in line with macro-typologies
4. Systems of stratification
  - The seemingly egalitarian impact of the **structural dimension**
  - The weak explanatory power of the **attitudinal dimension**
5. Meso-level: **stratified consequences** of gender-egalitarian trends
  - The relevance of educational level
  - Welfare spending and class divisions among women: the Matthew effect



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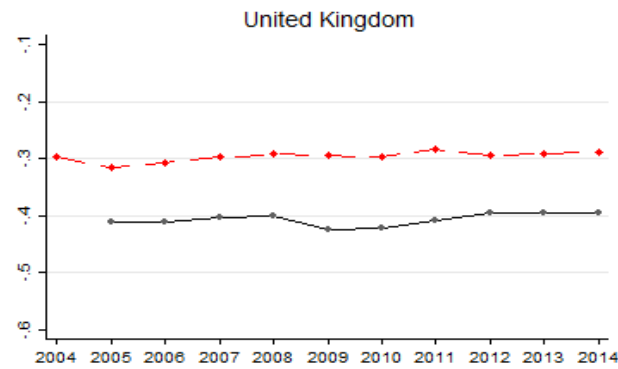
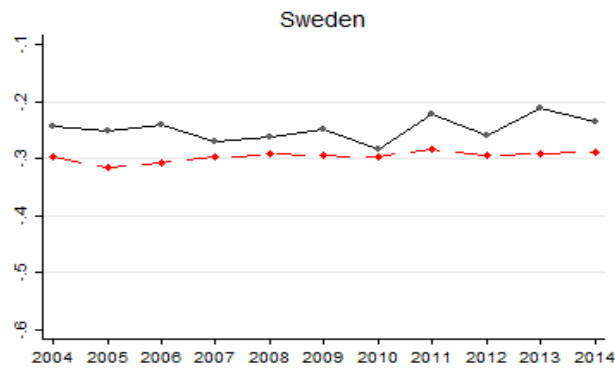
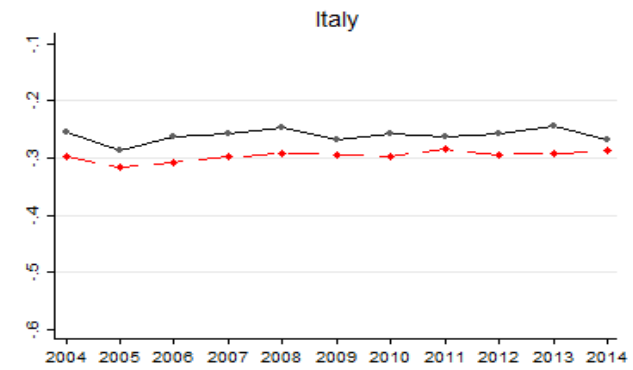
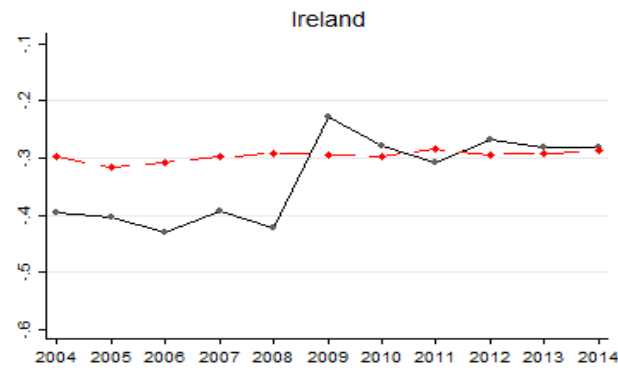
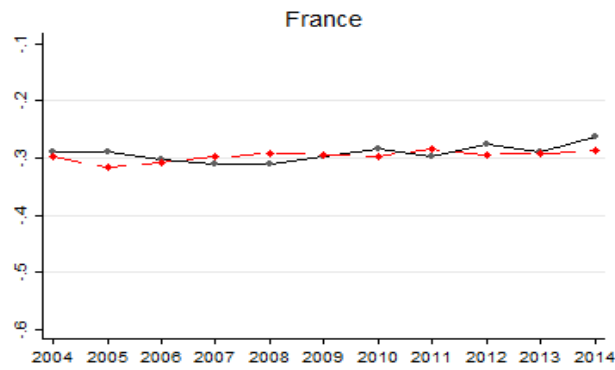
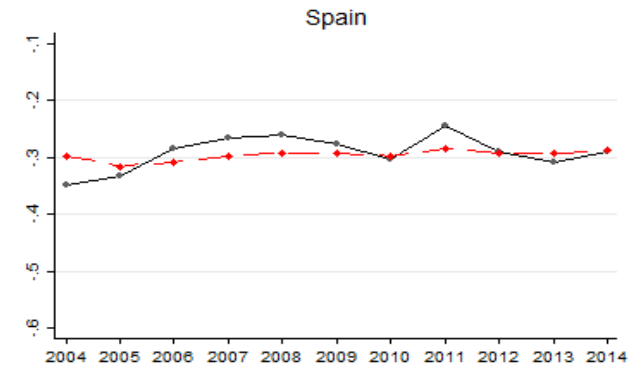
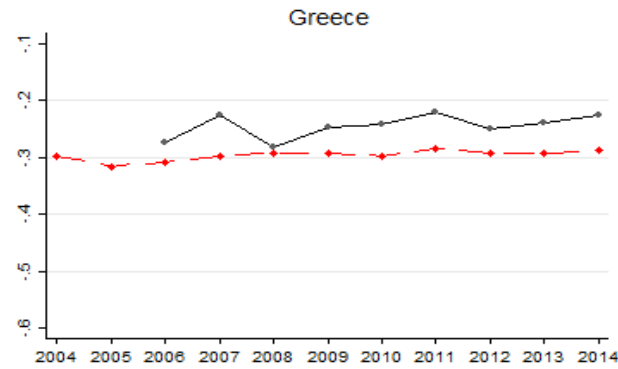
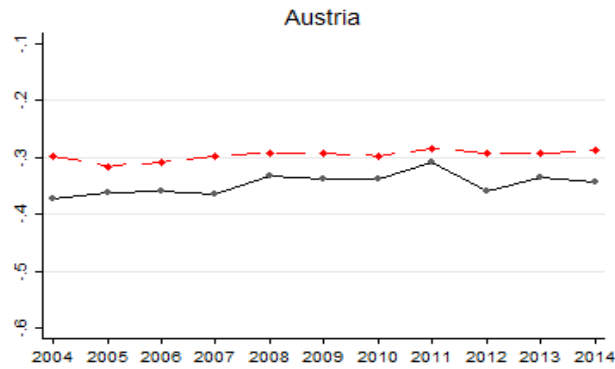


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THANK YOU!

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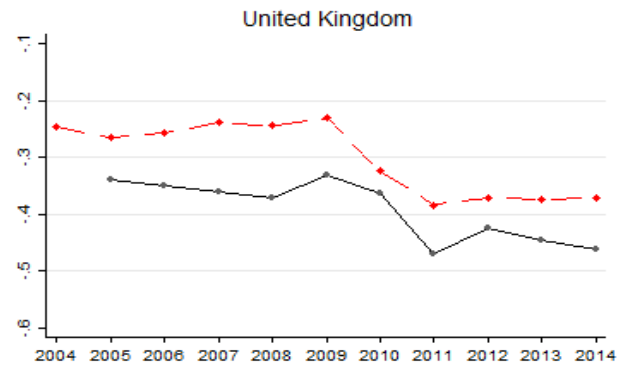
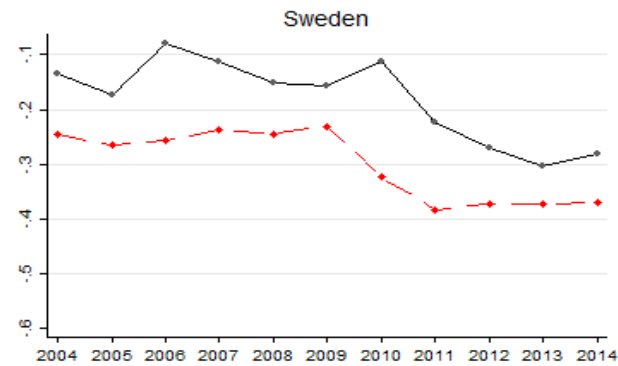
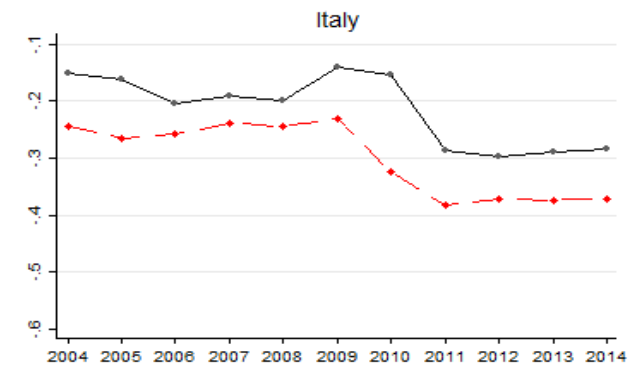
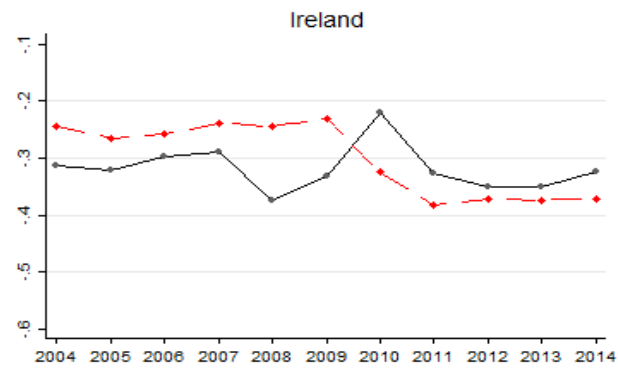
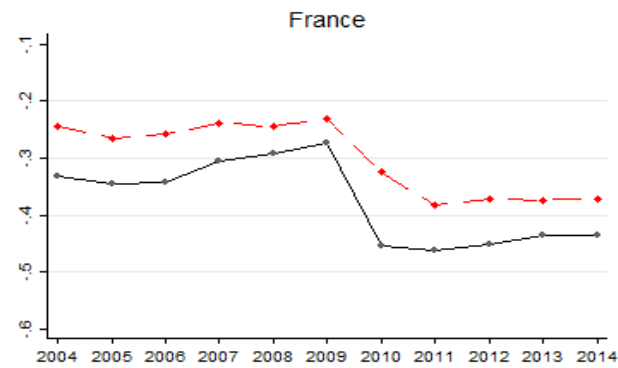
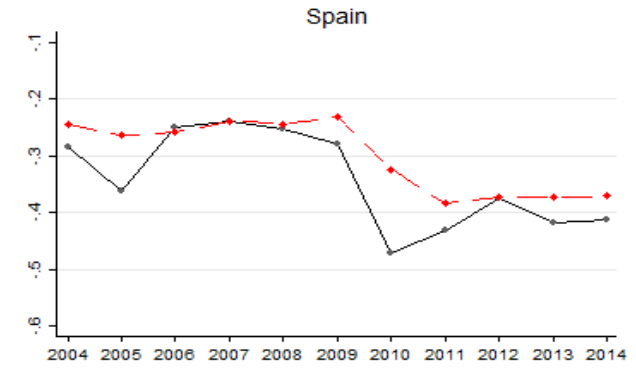
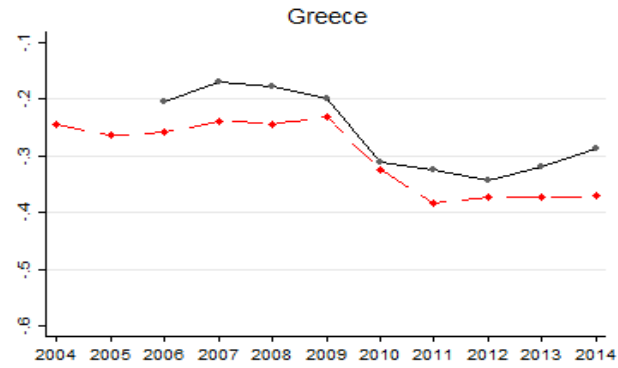
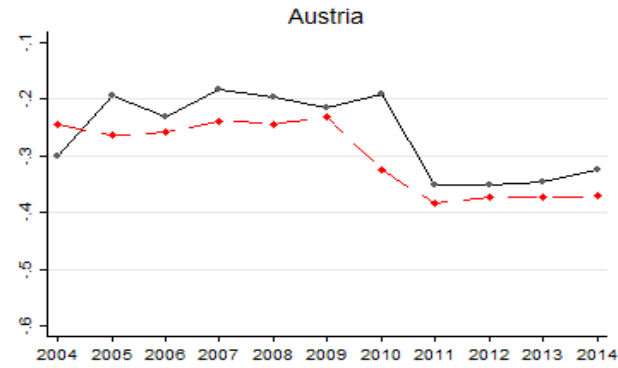
Time trends in gender income inequality (**female betas**), by country (N=274350).  
2005-2015 EU-SILC panel.



Female betas  
Average female betas (pooled countries)



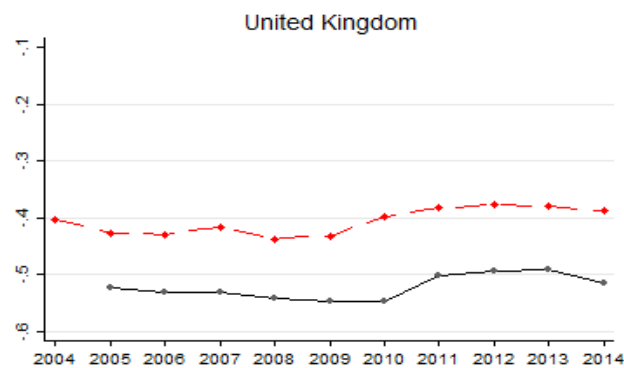
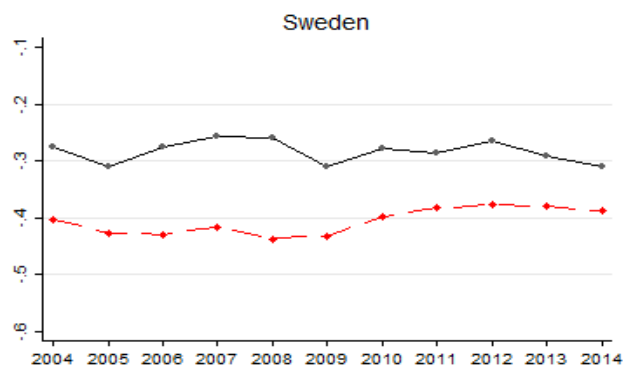
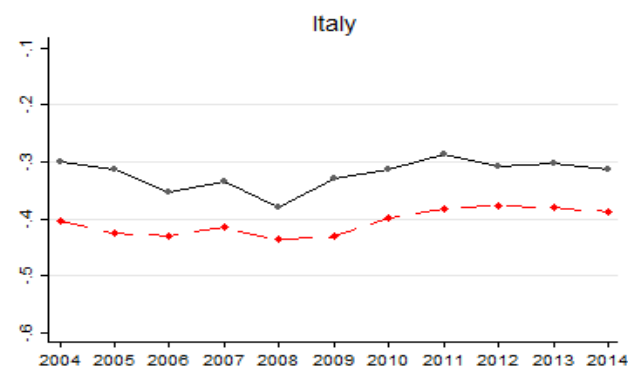
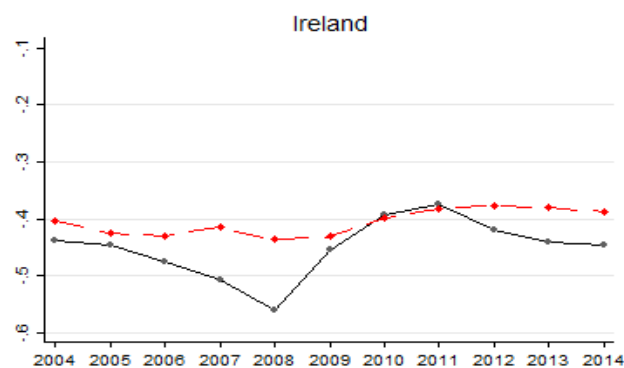
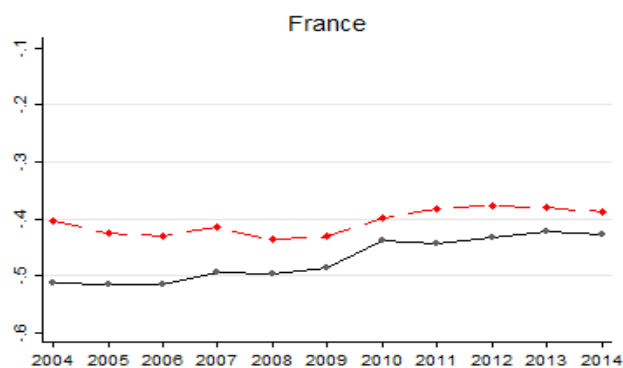
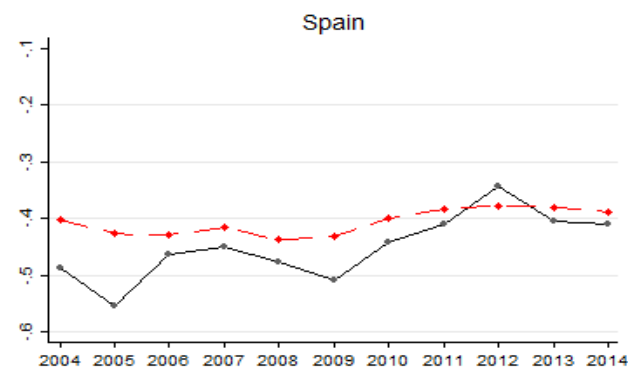
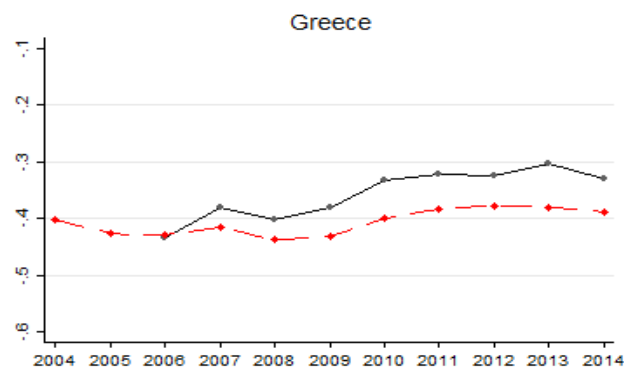
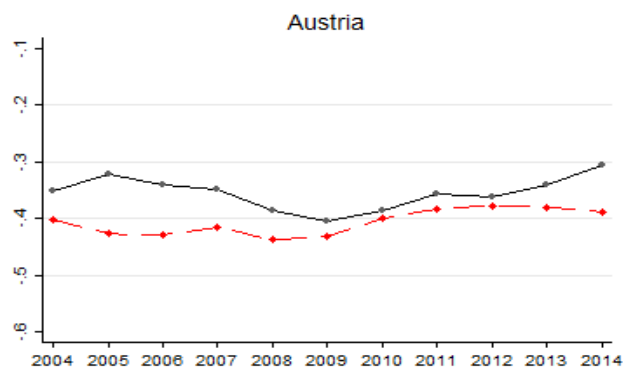
Time trends in middle-class income inequality (**middle-class betas**), by country (N=274350).  
2005-2015 EU-SILC panel.



—●— Middle-class betas  
- - -◆- - Average middle-class betas (pooled countries)



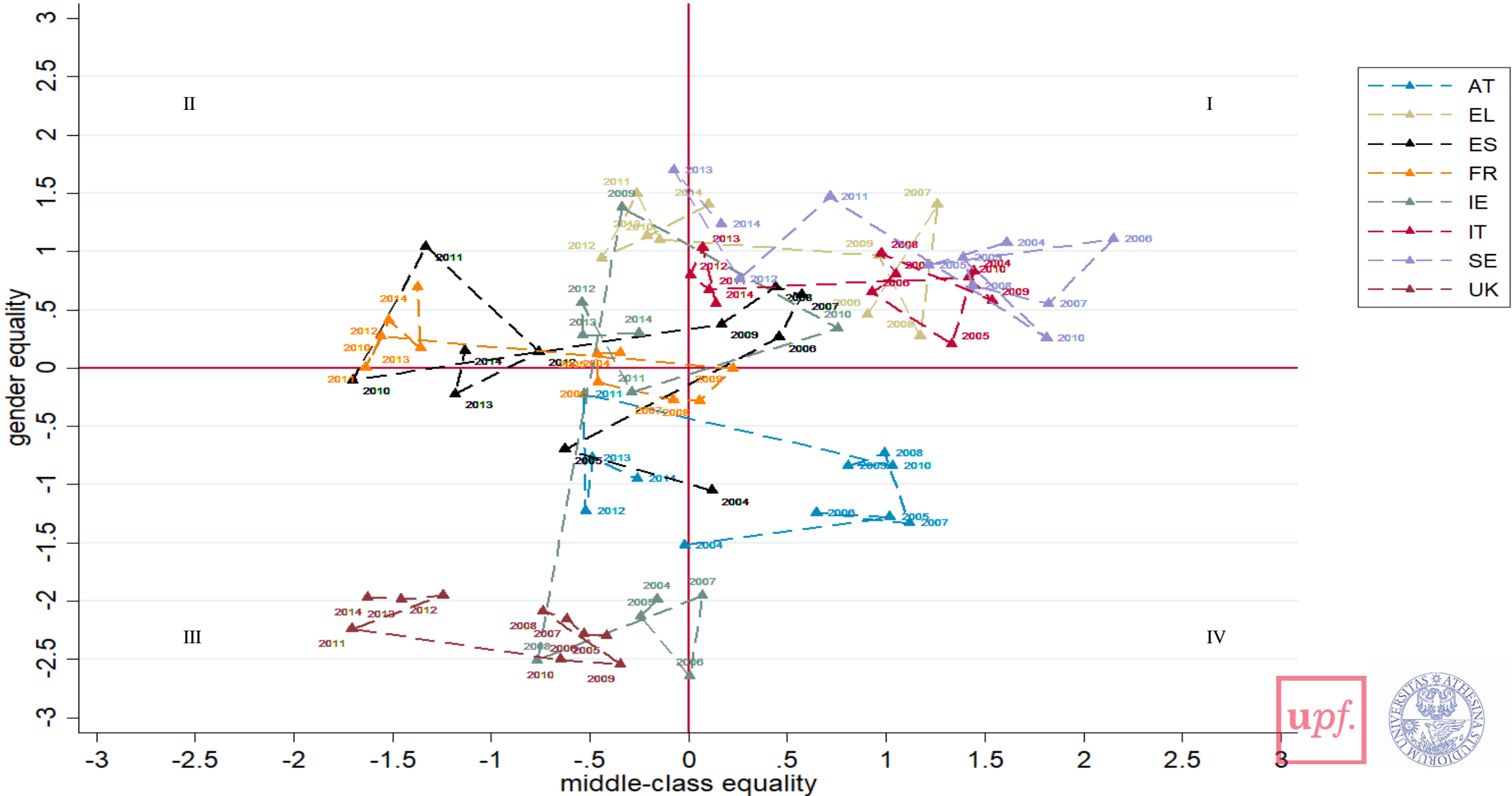
Time trends in working-class income inequality (**working-class betas**), by country (N=274350).  
2005-2015 EU-SILC panel.



Working-class betas  
 Average working-class betas (pooled countries)



Relative levels of **gender and middle-class equality** in different countries, over time. Standardized values (N= 274350). 2005-2015 EU-SILC panel.



Variables	M0 Class inequality	M1 Class inequality	M2 Class inequality	M3 Class inequality	M4 Class inequality
Structural GEI (BE)		-0.09 (0.09)			-0.11 (0.10)
Structural GEI (WI)		0.00 (0.10)			-0.01 (0.10)
Welfare spend. GEI (BE)			-0.12 (0.07)		-0.25** (0.08)
Welfare spend. GEI (WI)			-0.24** (0.09)		-0.23* (0.09)
Attitudinal GEI (BE)				-0.03 (0.09)	0.28* (0.11)
Attitudinal GEI (WI)				0.11 (0.10)	0.07 (0.10)
Constant	-0.26*** (0.02)	-0.21*** (0.06)	-0.20*** (0.04)	-0.25*** (0.05)	-0.19*** (0.04)
Variance (country)	0.07*** (0.02)	0.07*** (0.02)	0.06*** (0.01)	0.07** (0.02)	0.04*** (0.01)
Variance (residual)	0.04*** (0.00)	0.04*** (0.00)	0.04*** (0.00)	0.04*** (0.00)	0.04*** (0.00)
Pseudo R <sup>2</sup> (country)		0.00	0.14	0.00	0.43
Observations	85	85	85	85	85

## Effects of trends in macro-level gender equality on class income inequality.

Hybrid panel model estimates on class (middle or low) betas (class inequality).

Between-countries (BE) and within-country variation (WI).

2005-2015 EU-SILC panel.

Standard errors in parentheses. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1.  
2005-2015 EU-SILC panel.



Variables	M0 Ratio	M1 Ratio	M2 Ratio	M3 Ratio	M4 Ratio
Structural GEI (BE)		0.00 (0.14)			0.24 (0.21)
Structural GEI (WI)		0.51 (0.30)			0.56 (0.32)
Welfare spend. GEI (BE)			-0.04 (0.11)		0.03 (0.16)
Welfare spend. GEI (WI)			0.48 (0.28)		0.43 (0.28)
Attitudinal GEI (BE)				-0.10 (0.12)	-0.30 (0.22)
Attitudinal GEI (WI)				-0.09 (0.30)	-0.19 (0.32)
Constant	0.64*** (0.03)	0.64*** (0.09)	0.66*** (0.06)	0.69*** (0.06)	0.61*** (0.08)
Variance (country)	0.09*** (0.03)	0.09*** (0.03)	0.09*** (0.03)	0.09*** (0.03)	0.08*** (0.02)
Variance (residual)	0.12*** (0.01)	0.11*** (0.01)	0.11*** (0.01)	0.12*** (0.01)	0.11*** (0.01)
Pseudo R <sup>2</sup> (country)		0.00	0.00	0.00	0.11
Observations	85	85	85	85	85

## Effects of trends in macro-level gender equality on the relationship between class and gender income inequality.

Hybrid panel model estimates on the ratio between class and female betas.

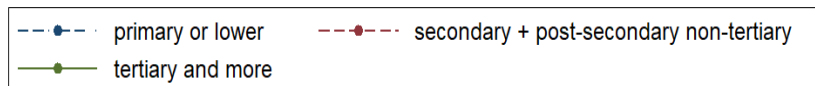
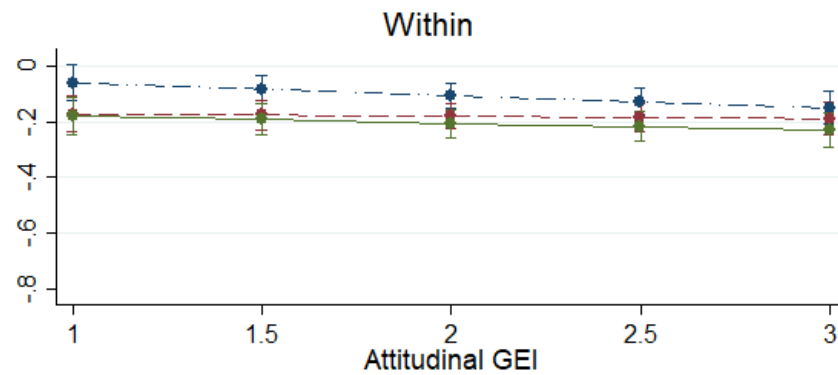
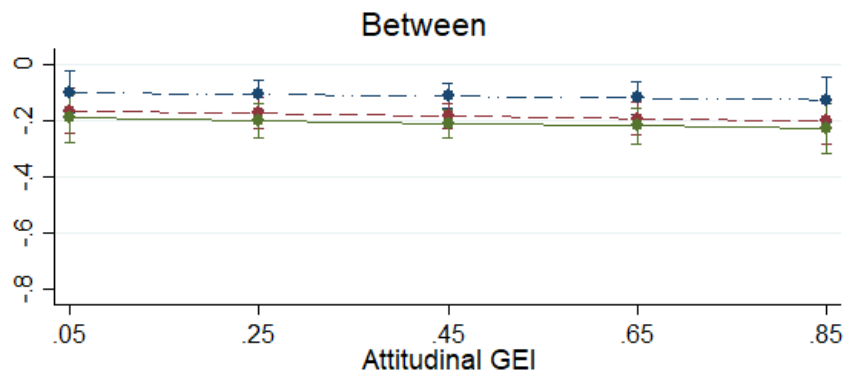
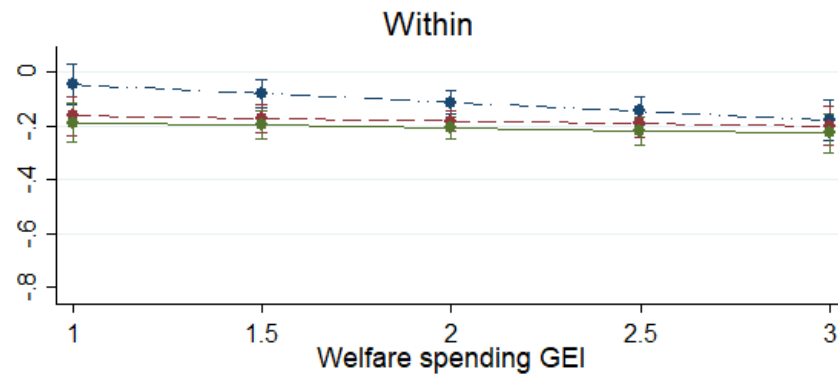
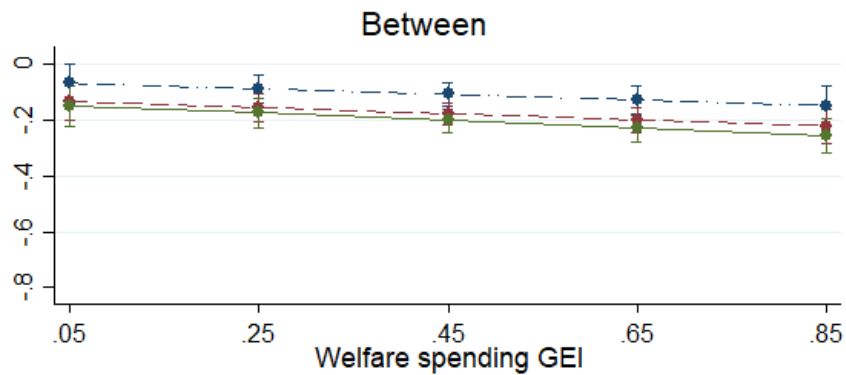
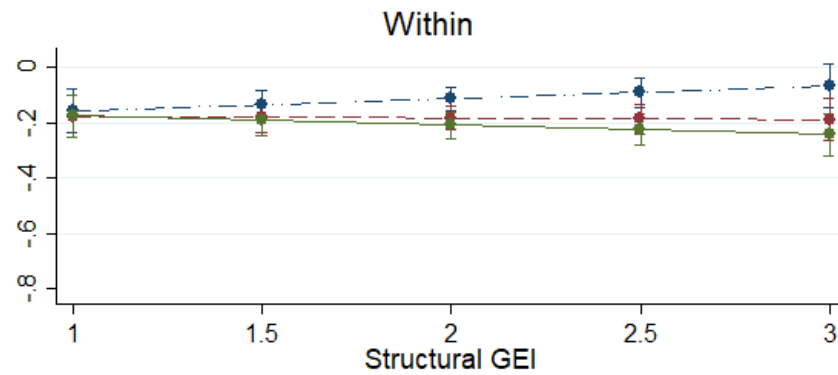
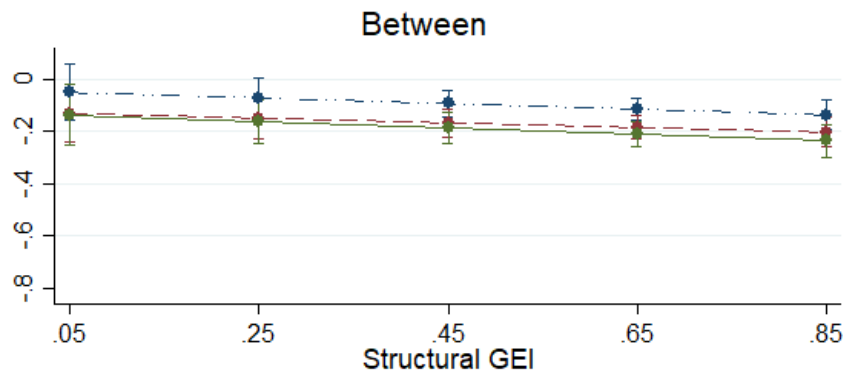
Between-countries (BE) and within-country variation (WI).

2005-2015 EU-SILC panel.

Standard errors in parentheses. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .  
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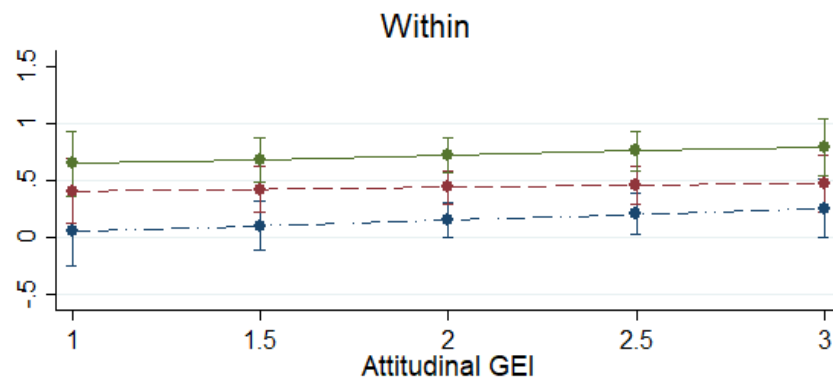
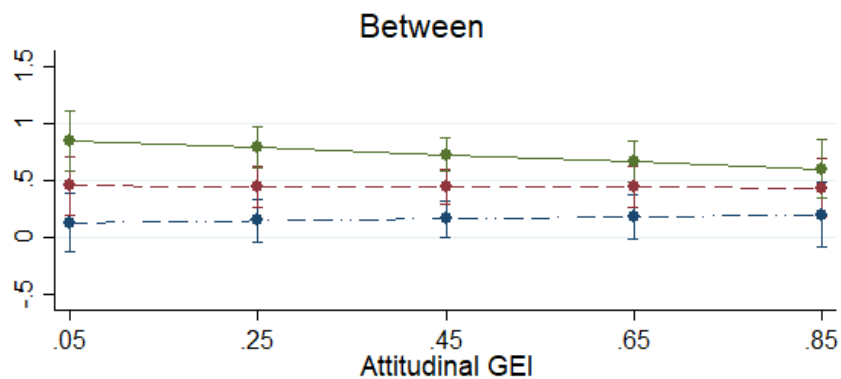
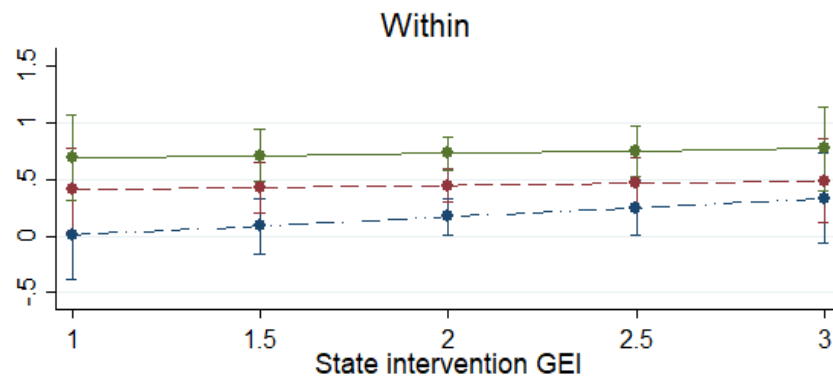
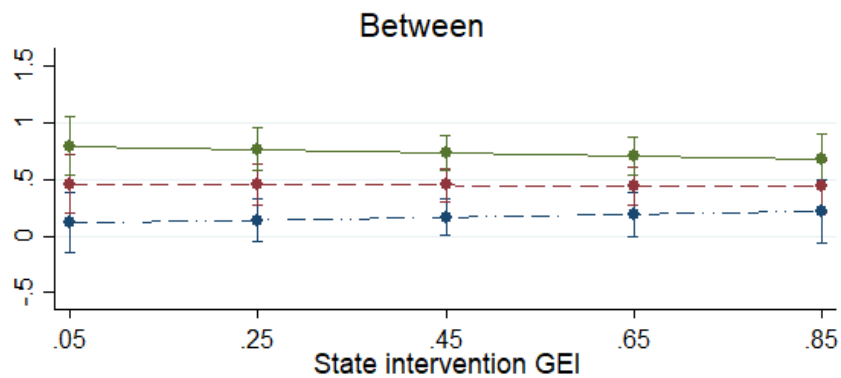
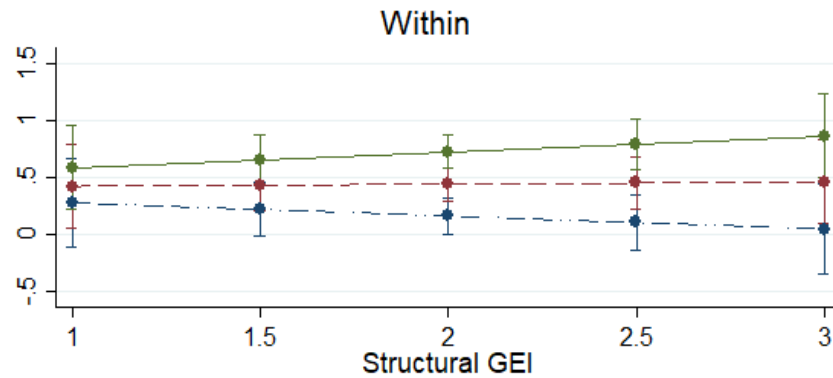
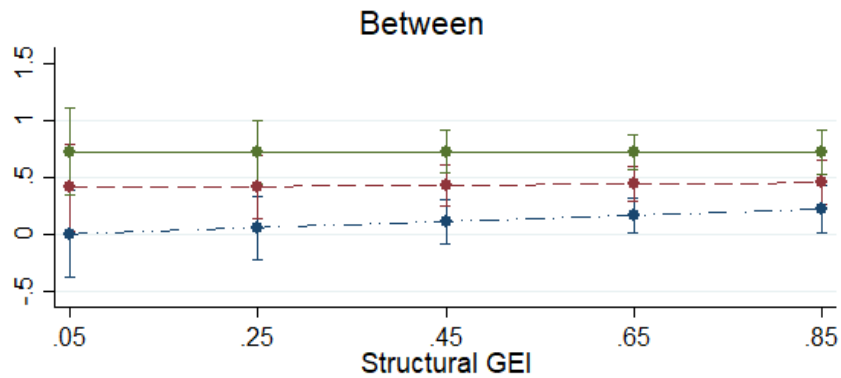


**Effects of the interaction between trends in macro-level gender equality and ISCED on class income inequality.**

Estimates of class income inequality for different levels of structural, welfare spending, and attitudinal macro-level gender equality (GEI), separately for different educational categories (N=244).

2005-2015 EU-SILC panel.





- · - ● primary or lower     - · - ● secondary + post-secondary non-tertiary  
— ● tertiary and more

**Effects of the interaction between trends in macro-level gender equality and ISCED on the relationship between class and gender income inequality.**

Estimates of the ratio between class and gender income inequality for different levels of structural, welfare spending, and attitudinal macro-level gender equality (GEI), separately for different educational categories (N=244).

2005-2015 EU-SILC panel.

