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Educational Differences in Cohort Fertility across Sub-National Regions in Europe

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Shift in the human development-fertility nexus

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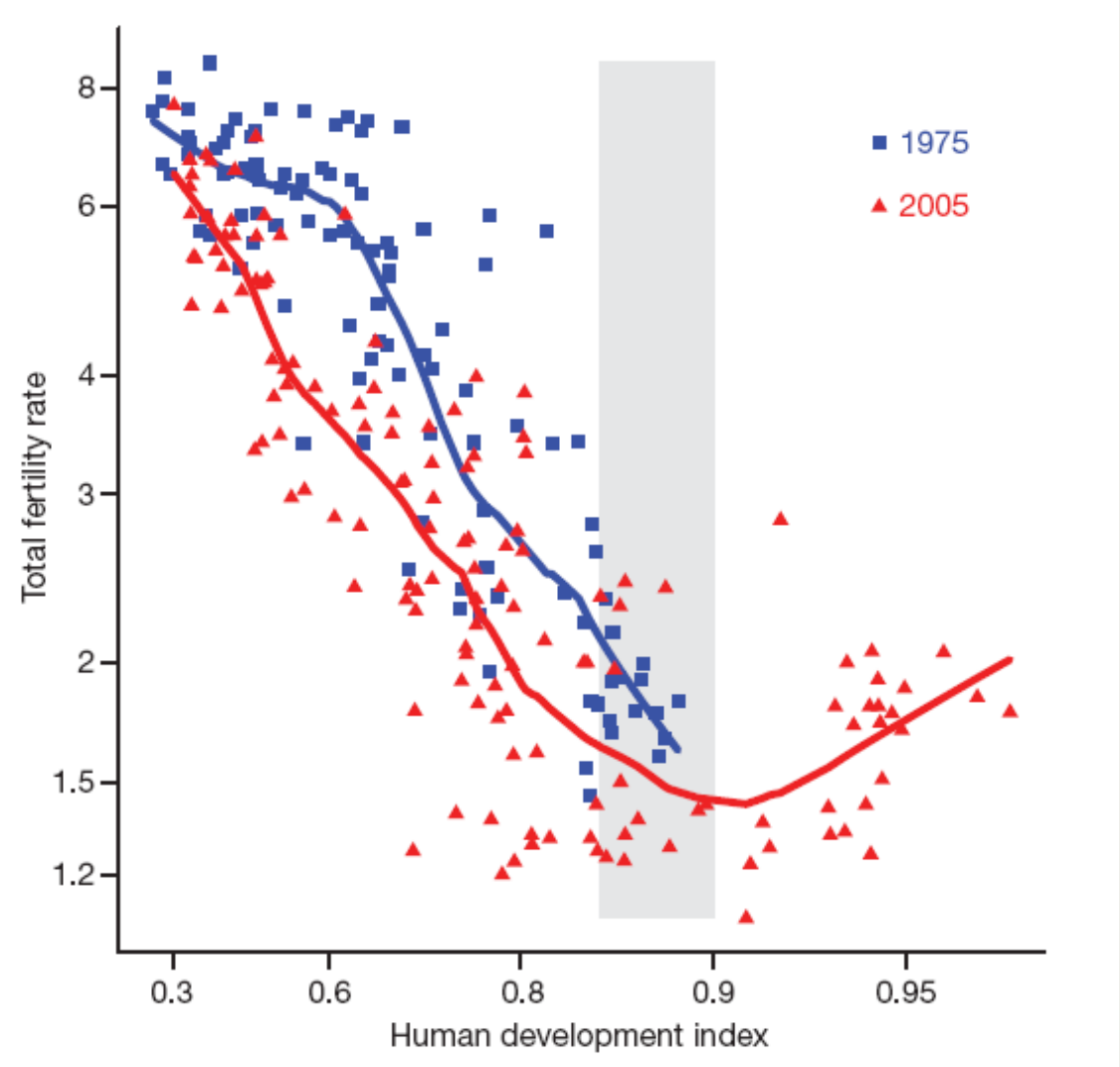
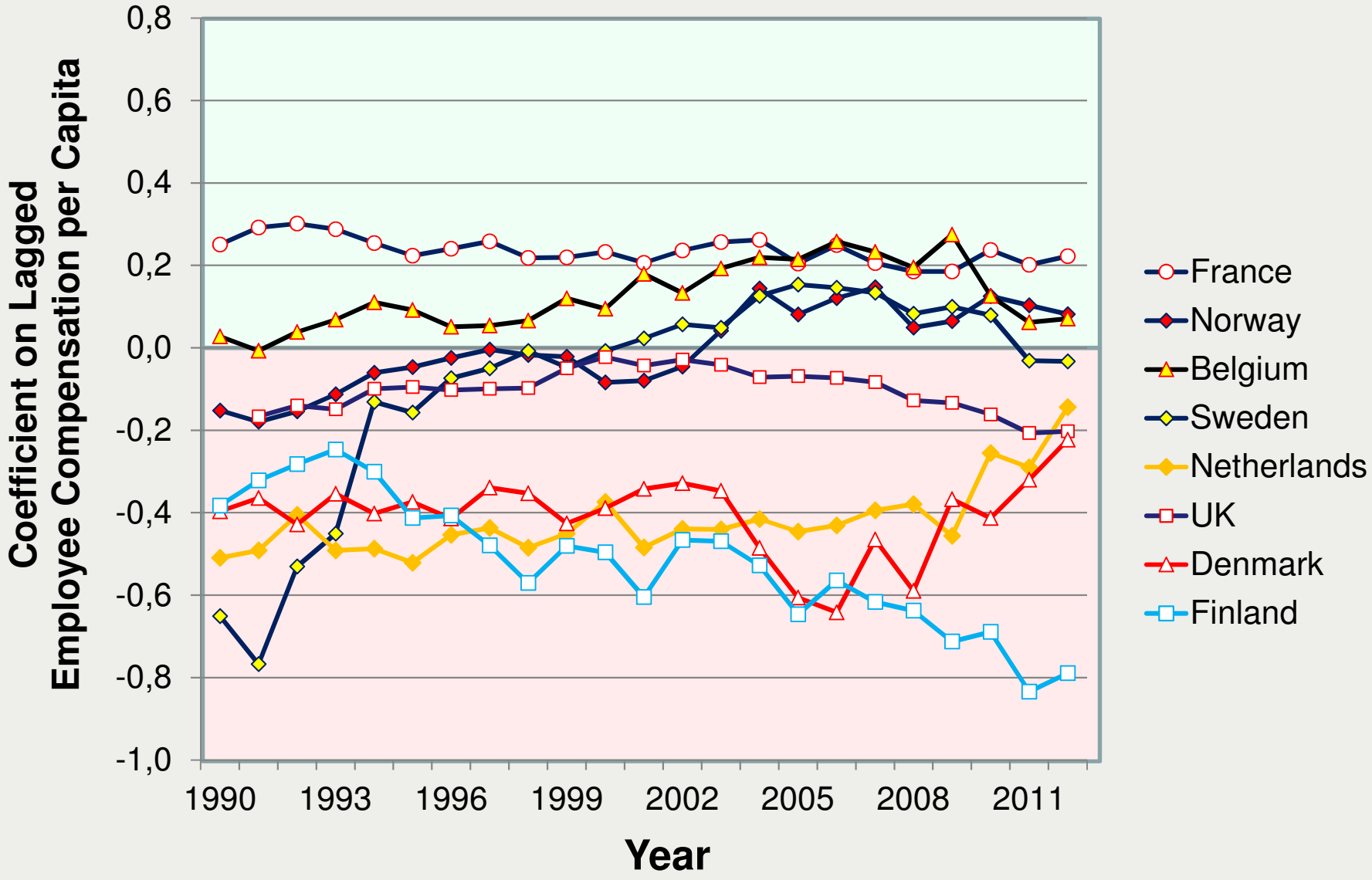


Source: Myrskylä, Kohler, Billari (2009)

Shift also at subnational regional level: association with Total Fertility Rate



Source: Fox, Klüsener, Myrskylä (2018)

Human development and fertility

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Macro

Fertility levels by human development level

Micro

Fertility outcomes by SES and gender

Education-fertility association across regions: theoretical considerations

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Why high-income regions and high educated may gain ground:

- New wave of family policies targeted at dual-earners
- Changes in the spatial organization of the economic sphere
- Selective migration processes

Education-fertility association across regions: theoretical considerations

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Why high-income regions and high educated may gain ground:

- New wave of family policies targeted at dual-earners
- Changes in the spatial organization of the economic sphere
- Selective migration processes

However:

- Still high living costs in high-income regions

Hypotheses

- There is sub-national regional variation in the educational gradient in cohort fertility (CFR).

- Differences between educational groups are expected to be smaller in high-income regions compared to low-income regions.

Data

- Registers, censuses and large-sample surveys
- 15 European countries
- 116 sub-national regions (usually NUTS 2)

- Only native-born women
- Cohorts born in the end of the 1960s

Our 15 countries and 116 regions

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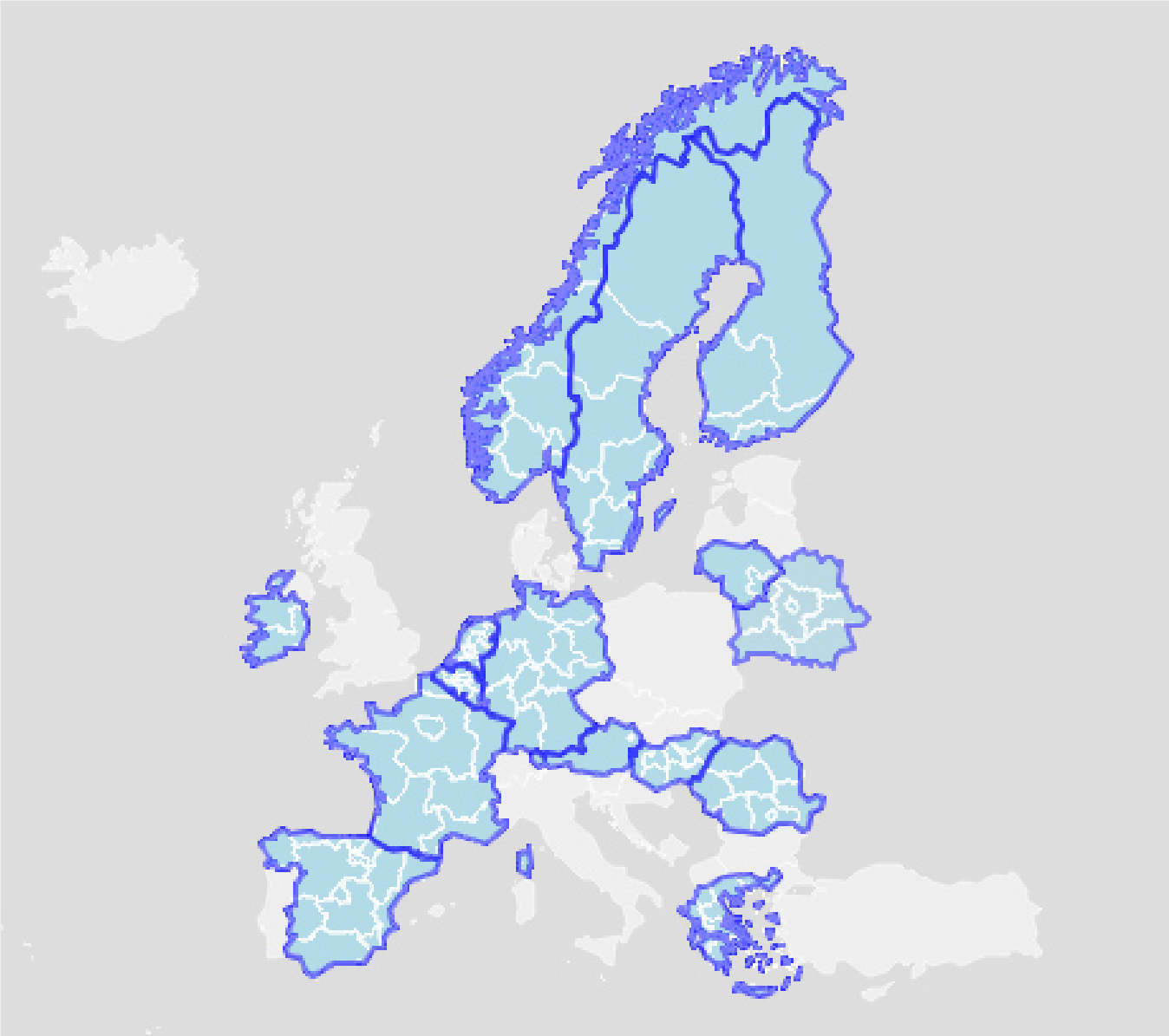

Method

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Empirical Bayesian method

- to reduce uncertainty of the regional estimates
- CFR ~ Poisson
- borrow strength within countries from
  - other regions within a country of similar GDP levels
  - other educational groups within a region
  - general regularities in fertility schedules

Average cohort fertility rate (CFR)

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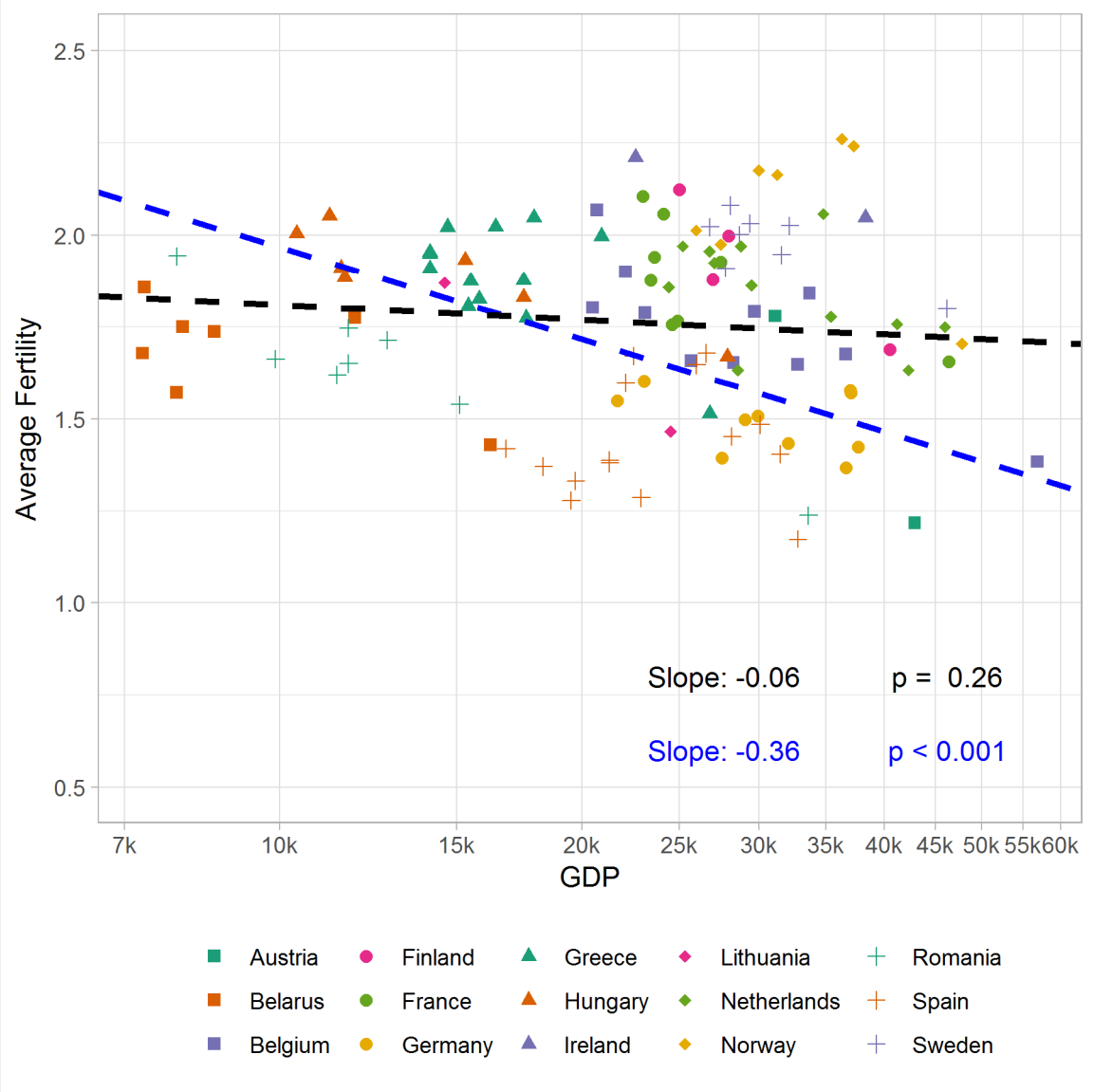

Average cohort fertility rate (CFR)

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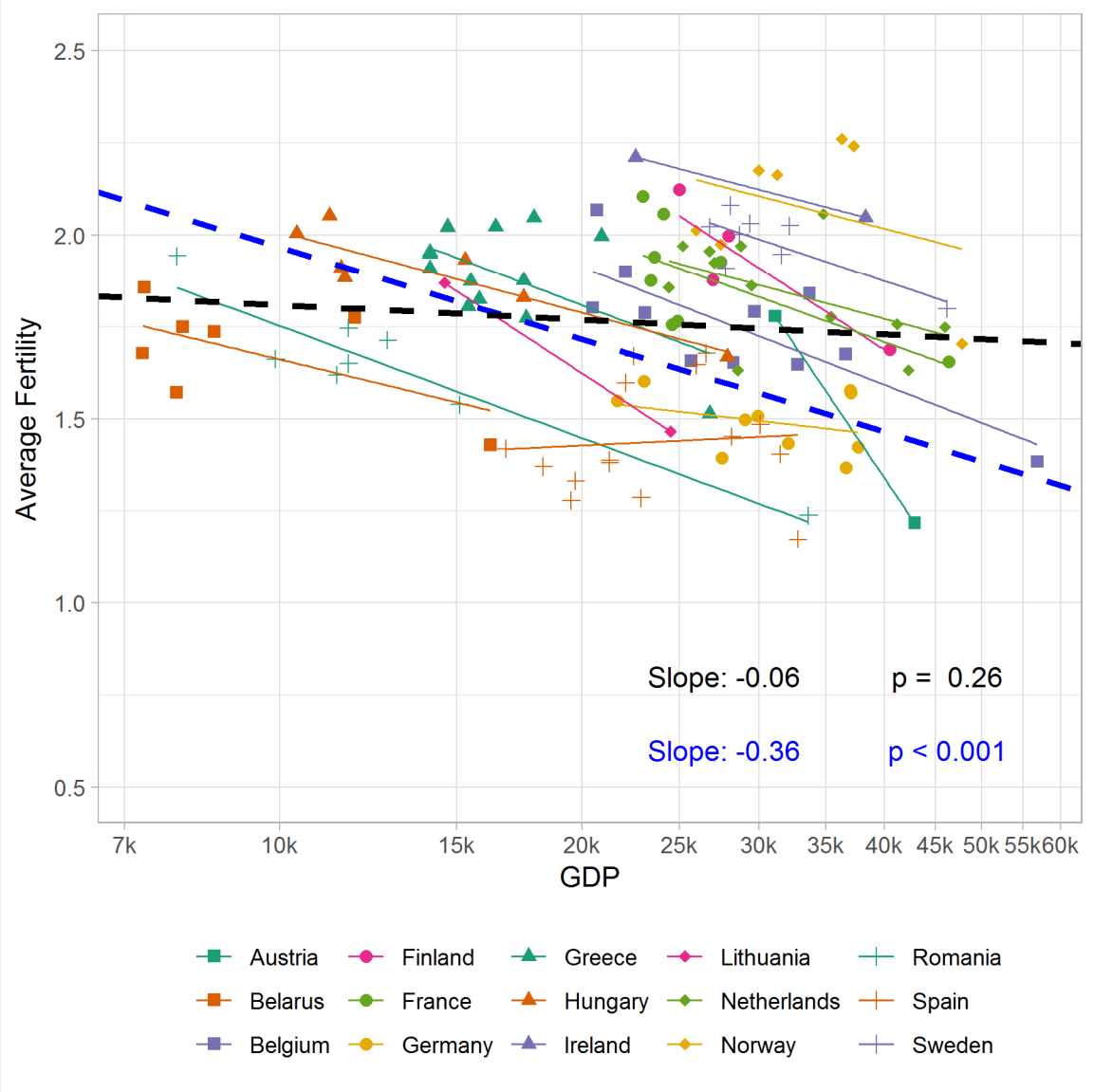
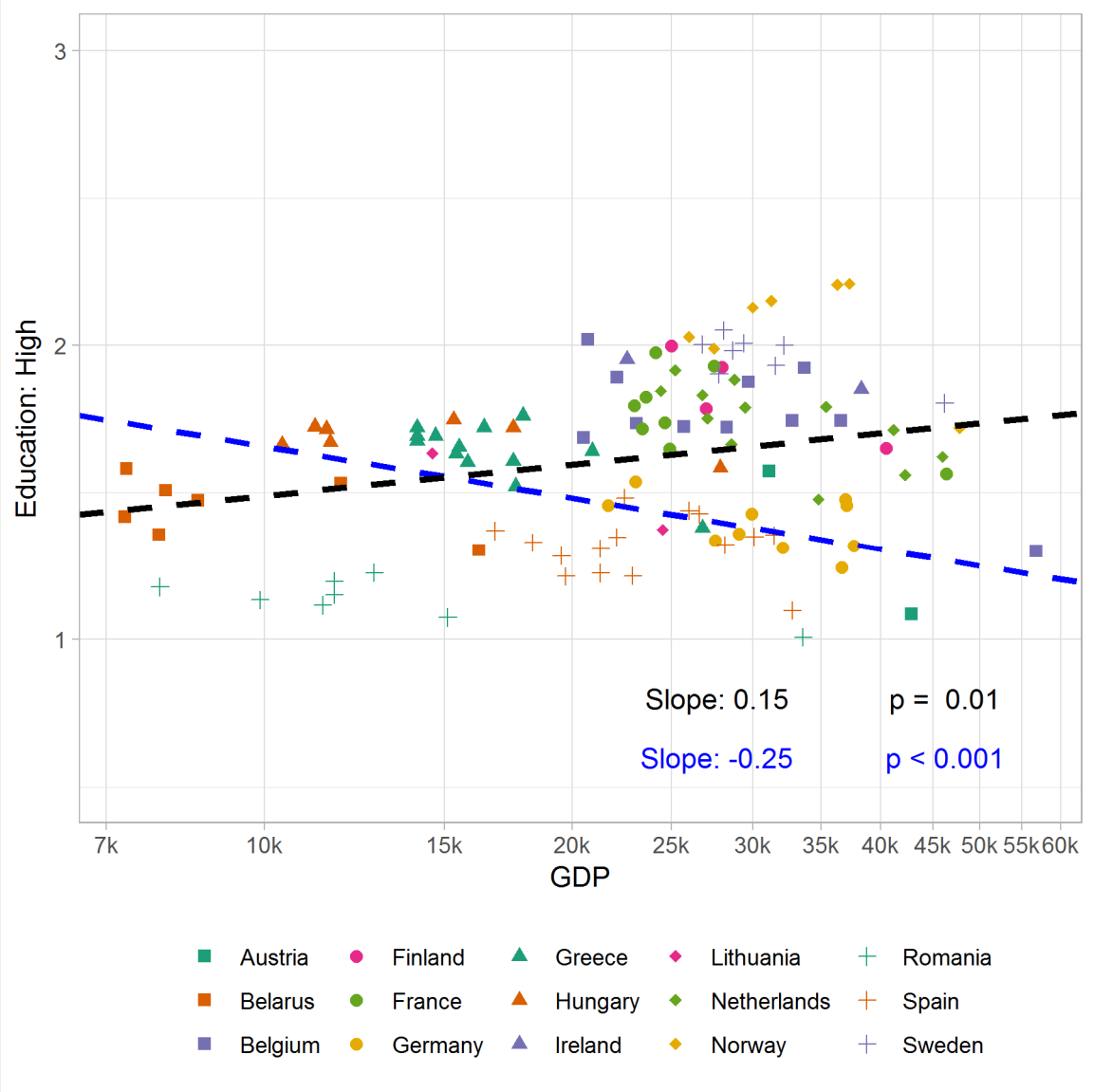


CFR – High educated



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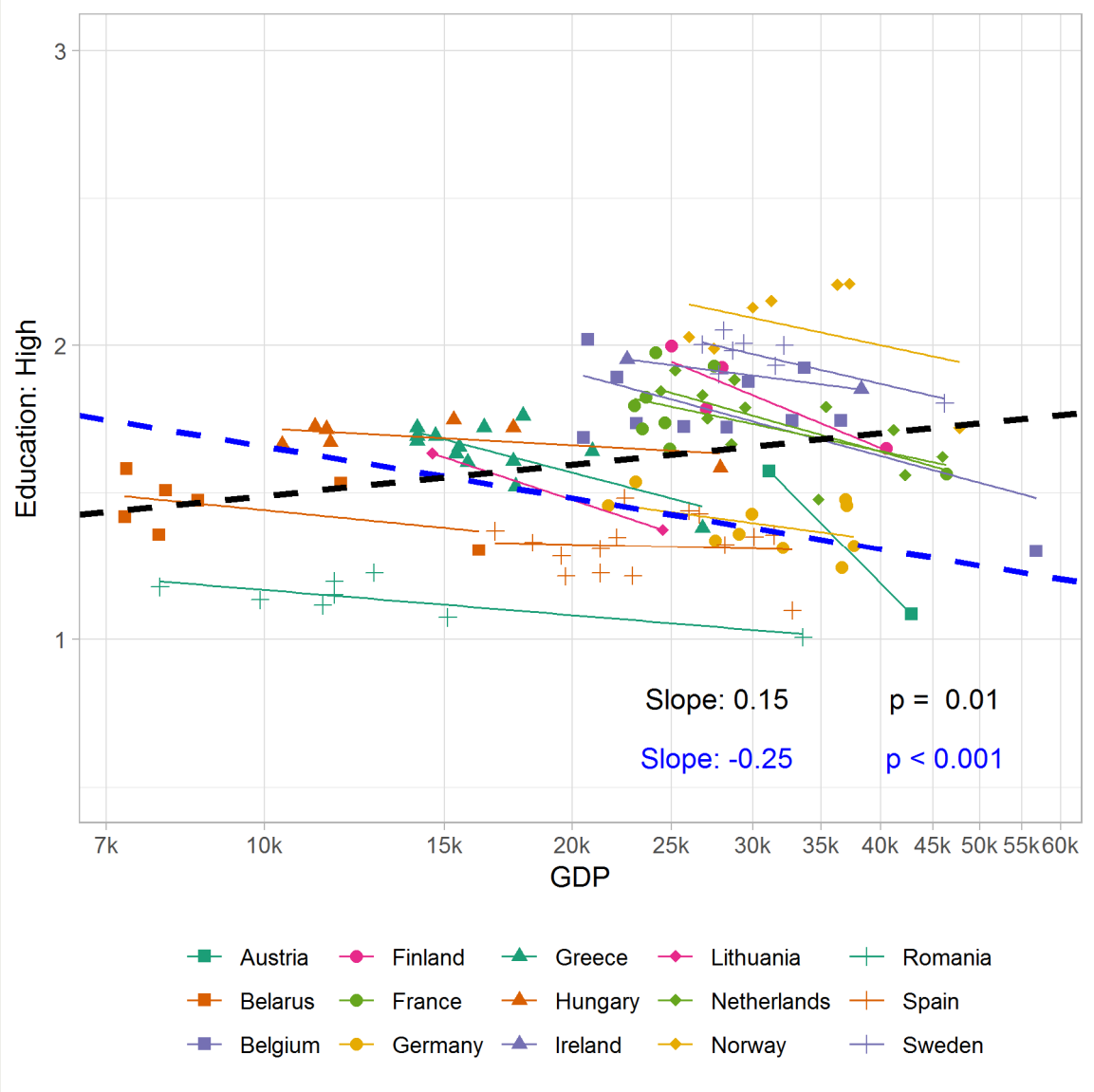
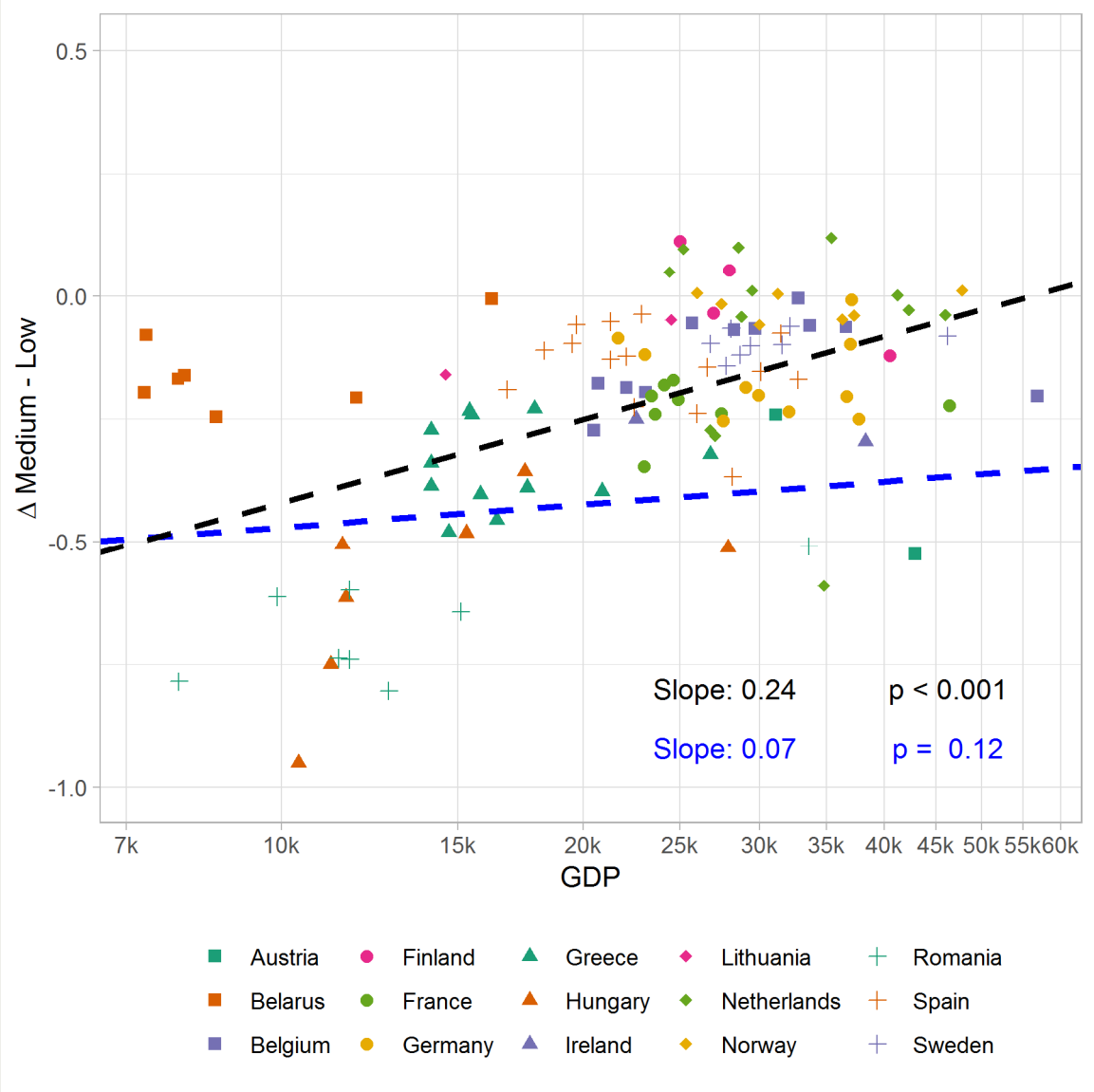


Δ CFR Medium – Low



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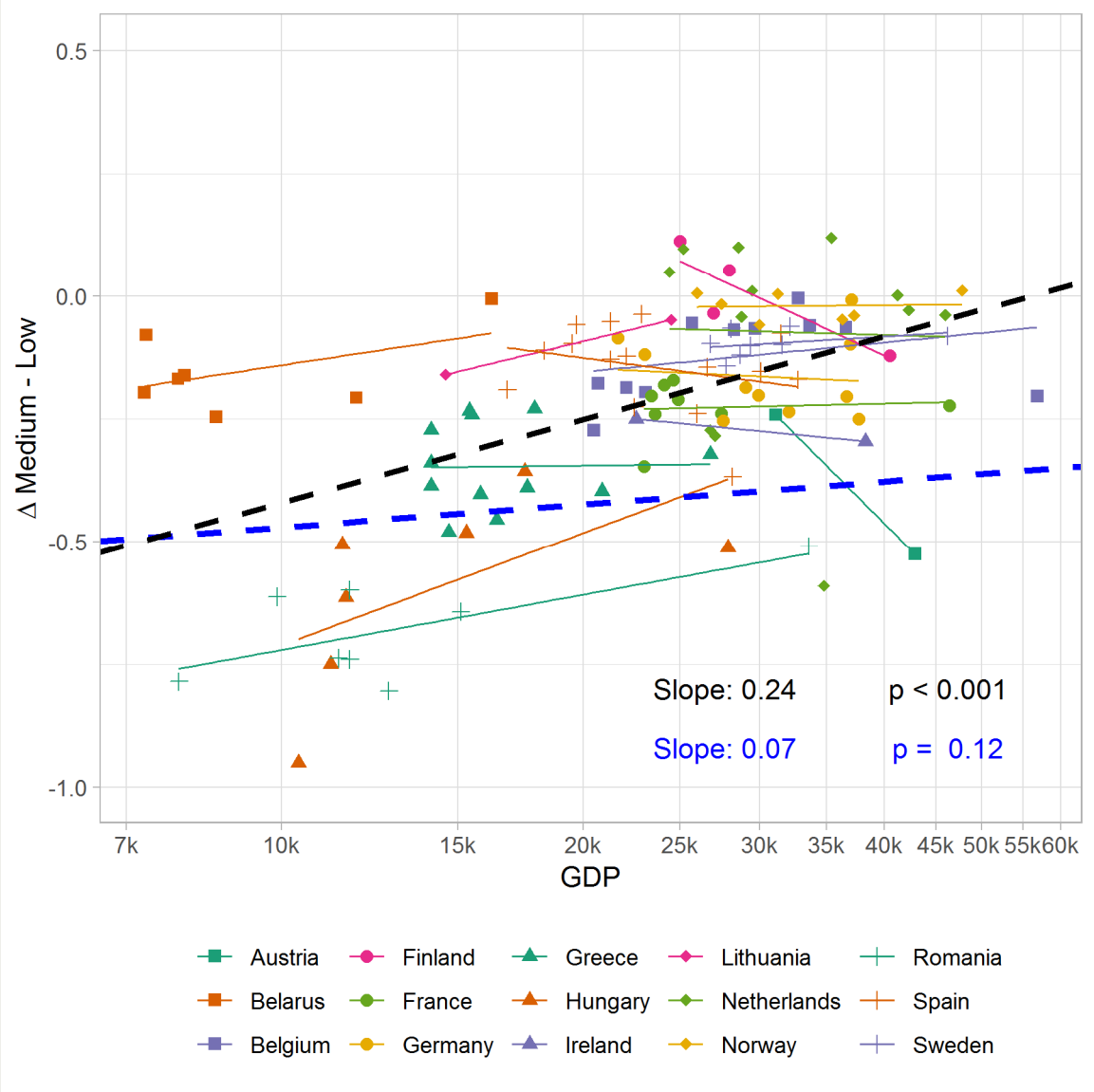

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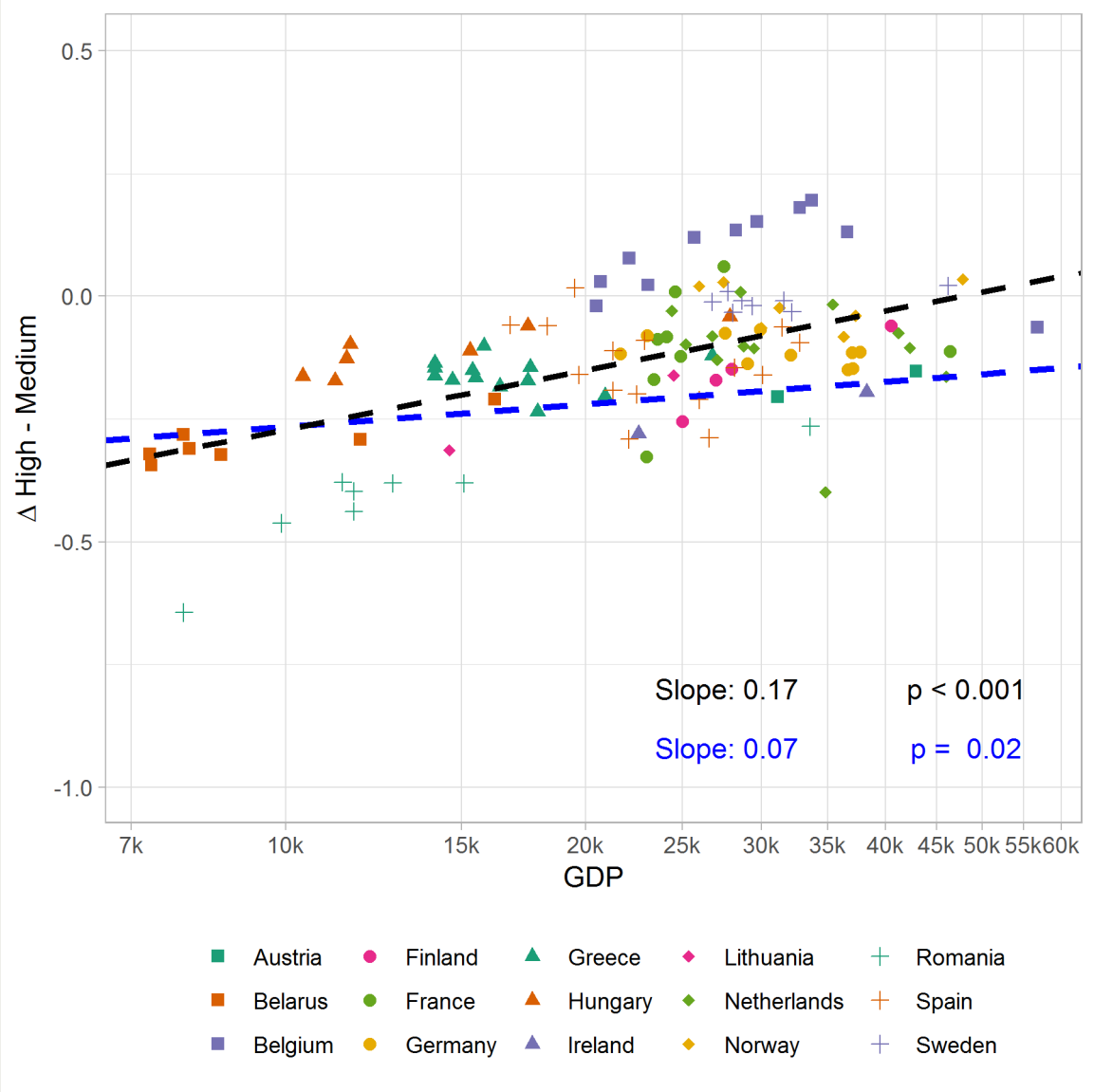

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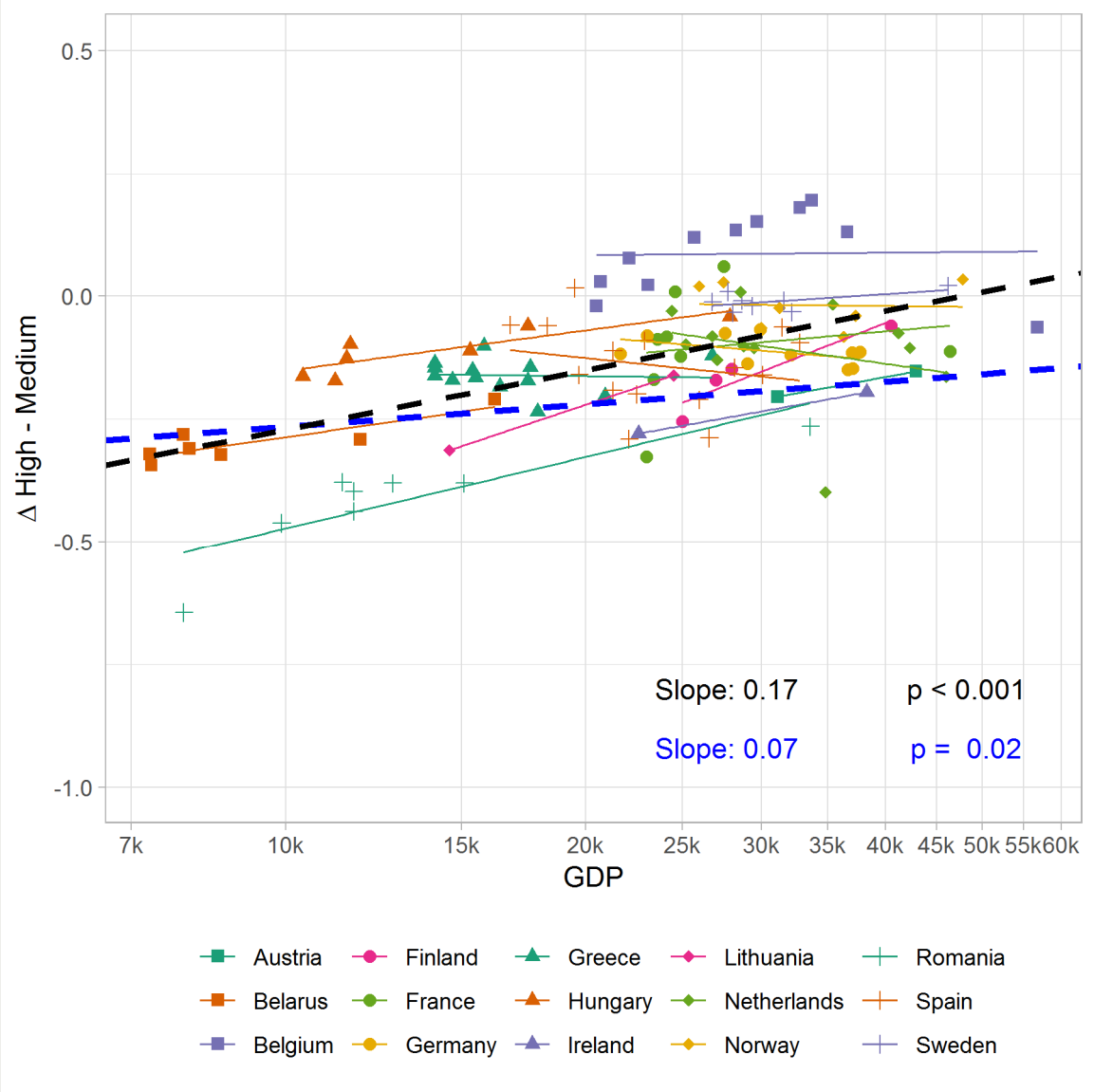

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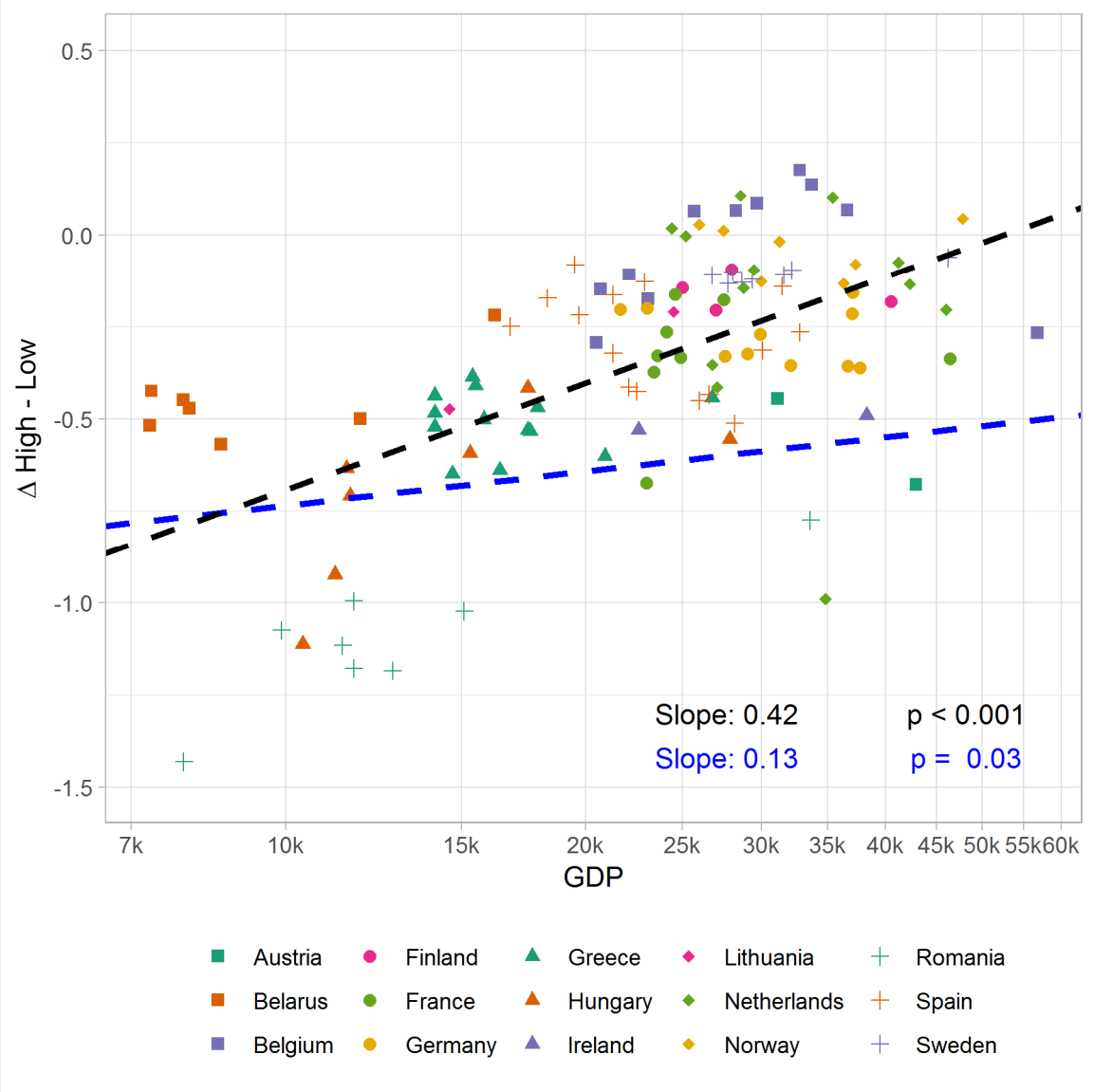

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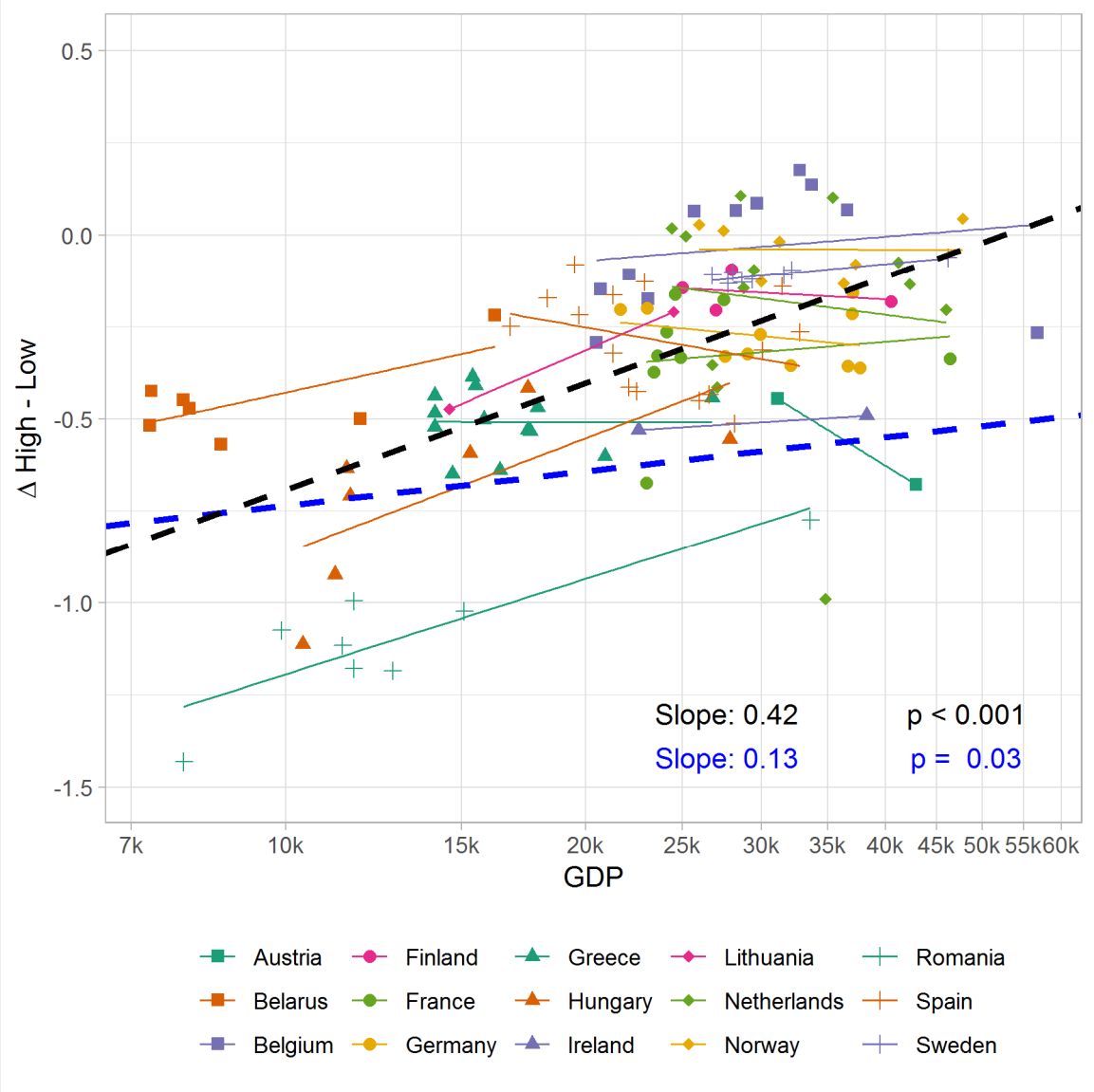

Discussion

- Among high educated, positive fertility-economic development nexus driven by between-country differences (non-significant or negative among medium/low educated)

Differences between SES groups:

- Fertility disadvantage of persons with higher educational attainment tends to decrease/ reverse with increasing development level (reduced, if focus on within-country variation)
- Large within-variation across countries

Conclusion and outlook

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- Working hypotheses are supported
  → Additional evidence that we indeed observe a shift in the human development-fertility nexus at high levels of development

- Future work with register data will allow us to look into the potential determinants of the observed patterns
- Will also allow to study tendencies over time

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Comments or Questions?

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