Belgian wealth inequality, 1935-2022

Evidence from inheritance and gift tax data

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There are three approaches to estimate wealth inequality (Kopczuk, 2015)

1. Wealth survey (+ Pareto correction & rescaling)

2. Capitalisation of capital income tax data

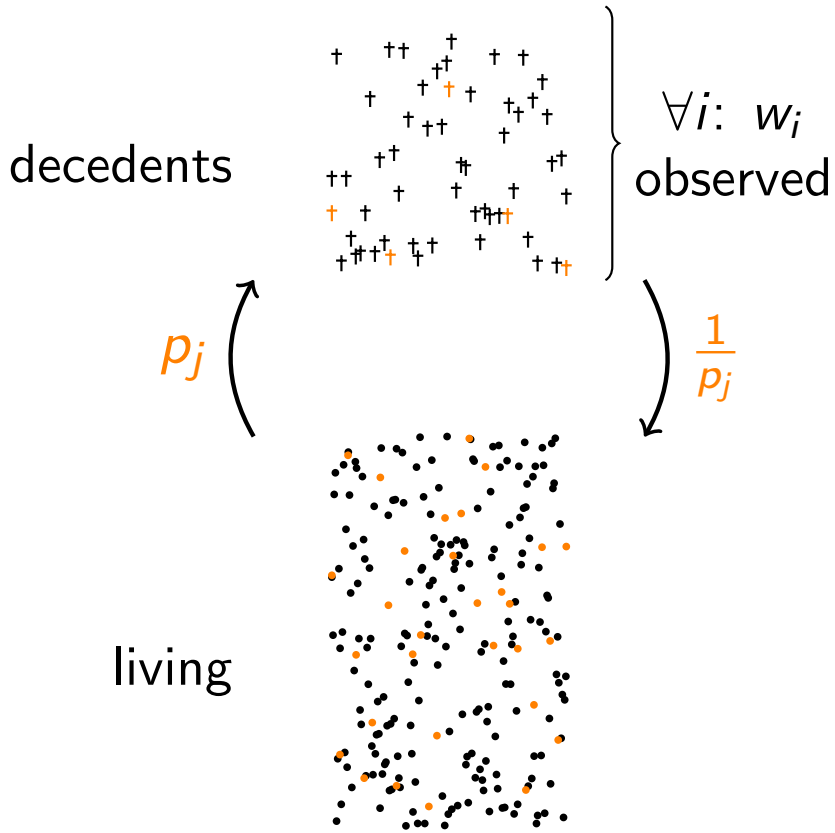
3. **Multiplying inheritance tax data** ('mortality multiplier' approach)

Inheritance tax data can be used to estimate wealth inequality

Issue: representativeness of decedents

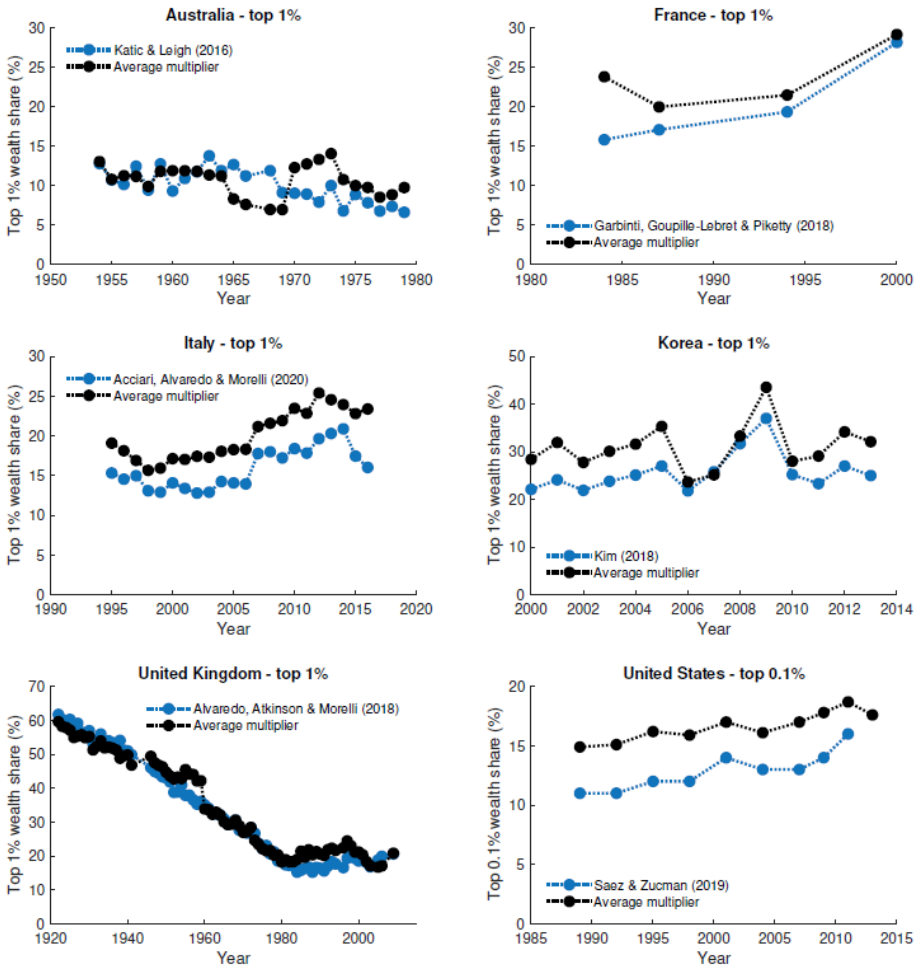
Solution: weighting!

- Deaths can be interpeted as random draws from a group with same age, gender, and socio-economic status
- Reweigh net wealth of death to obtain net wealth of living



e.g. wealthy women between 50 & 60 (group j)

Reweighting might not be necessary at the top (Berman & Morelli, 2021)



Source: Berman & Morelli (2021)

The simplified approach has lower data requirements

The **differential** mortality multiplier approach is **more precise** but requires at least tabulations subdivided by age & gender

The **simplified** mortality multiplier approach is less precise but only requires tabulations by inheritance size, and hence '**may unlock a wide array of aggregate estate tabulations**, previously thought to be unusable, for estimating historical trends of wealth concentration' (Berman and Morelli, 2021)

The inheritance tax approach has been applied to various countries

Notably,

- Italy (Acciari et al., 2024)
- UK (Alvaredo et al., 2018)
- France (Garbinti et al., 2016)
- US (Kopczuk and Saez, 2004)

Applying the inheritance approach to Belgium is interesting

- LT evolution wealth inequality
- 'Best' approach for Belgium? (cfr WID DINA Guidelines, Blanchet et al. 2024)
- Triangulation

An important caveat

Ideally, one should use a wealth register to study wealth inequality

As a wealth register is not available, estimation approaches are required in a data-constrained environment
$\Rightarrow$ this work is **an attempt to provide sensible estimates given major data constraints** (similarly to related work for other countries, see Blanchet et al. 2024)

This does not imply that anything goes!

Data

There are two main inheritance tax data sources for Belgium

1. 1935–1994: inheritance tax **tabulations**

2. 2009–2022: inheritance tax **microdata** (complete coverage)
   - Linked with gift tax microdata
   - Linked with fiscal (labour) income
   - Linked with sociodemographic microdata (national registry and census)

   These data sources have important limitations for which I correct (not discussed here)

1935–2022: simplified mortality multiplier approach

Key idea: assume that the top share of the inheritance distribution is a good approximation for the top share of the wealth distribution

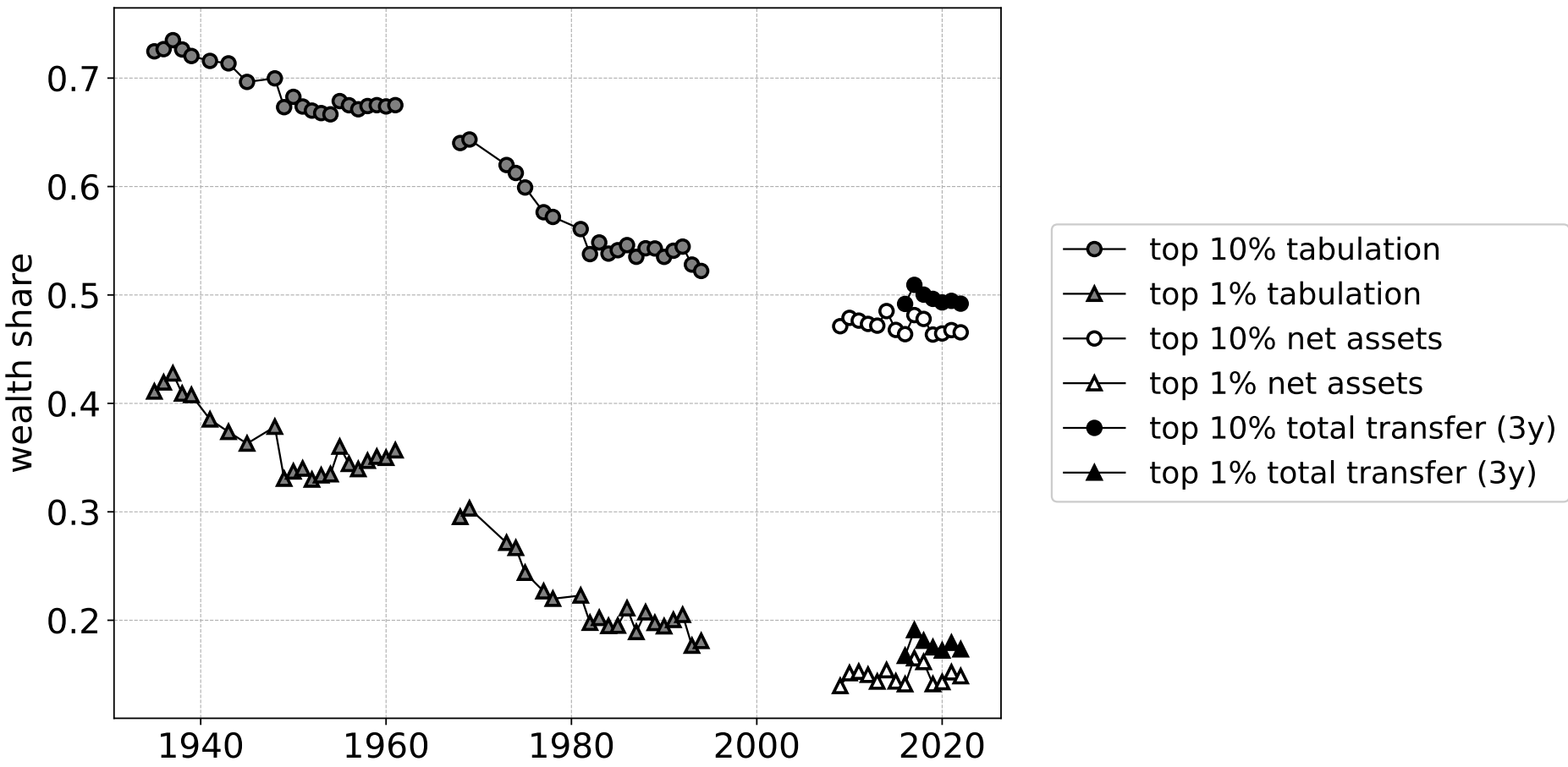
The simplified mortality multiplier approach has already been applied to Belgium

Alvaredo et al. (2024) apply the simplified mortality multiplier approach to Belgian inheritance tax tabulations for 1935-1994

My contribution

- Creating a consistent series including 2009-2022
- Thorough investigation of context knowledge (e.g. non-identified population) (not discussed here)
- Checking the appropriateness & robustness of key assumptions using recent microdata (not discussed here)

Wealth inequality has declined over time



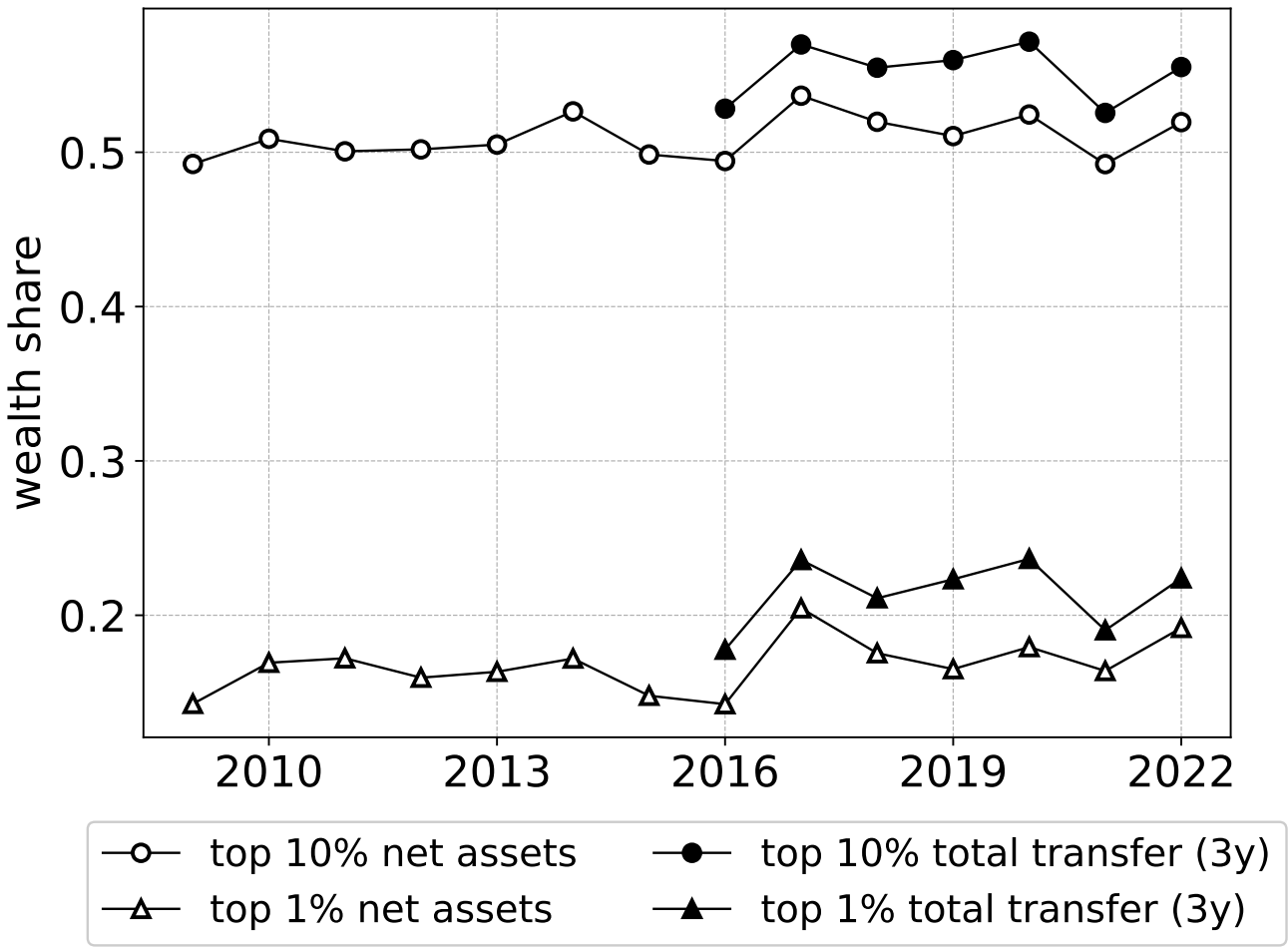
2009–2022: differential mortality multiplier approach

Key idea: interpret deaths as random draws from corresponding sociodemographic group, and reweigh to obtain wealth distribution among the living

How to determine weights?

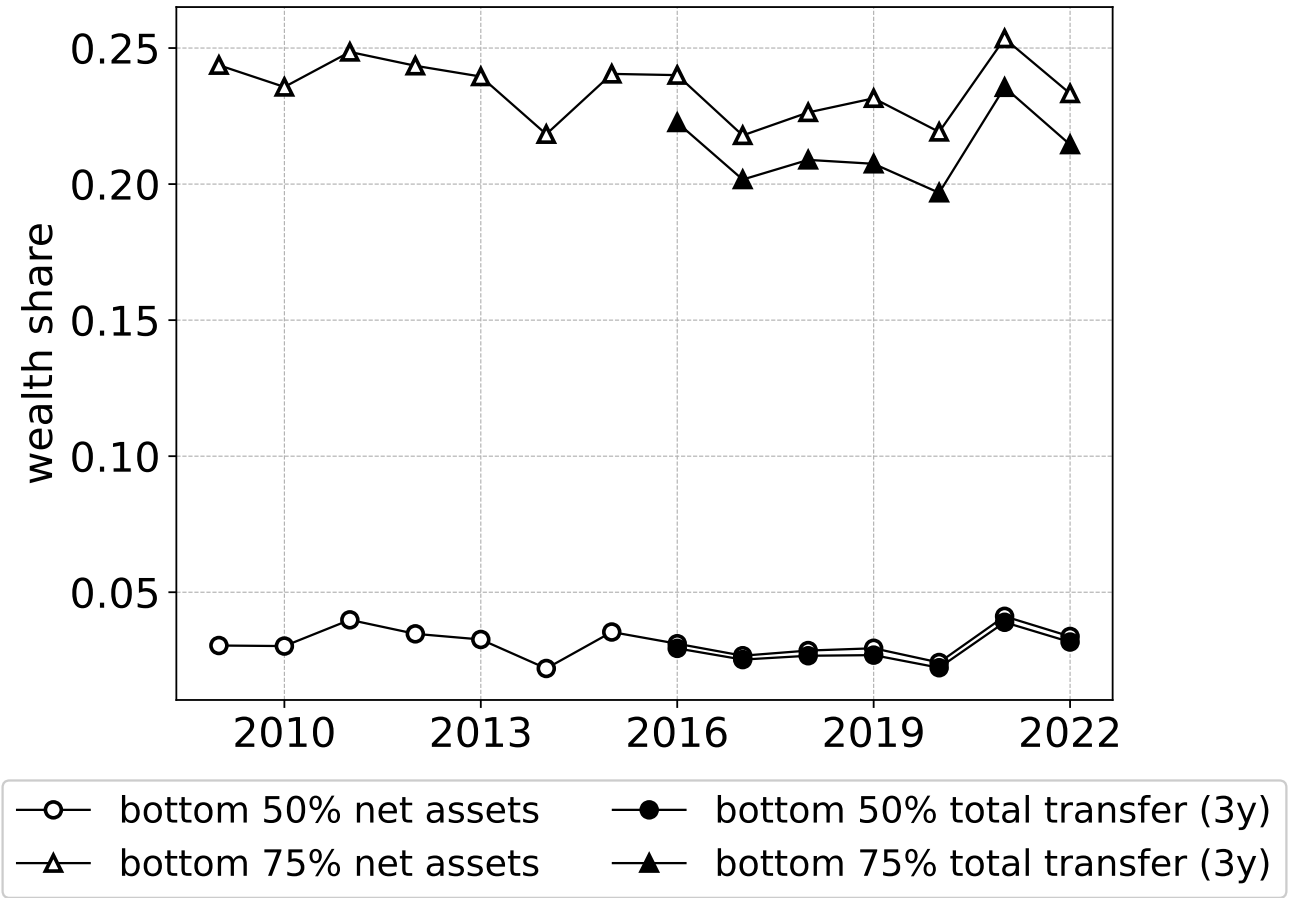
- Literature rather rough approximation
- My approach
  - 'Naive' weighting
    1. Weights by age, gender & region
  - **'Theory-driven' weighting** (shown here)
    1. Calculate literature-derived SES scores for each individual
    2. Weights by age, gender, region, and linked SES score groups
  - 'Data-driven' weighting
    1. ML prediction of net wealth (ranks) among the living
    2. Weights by age, gender, region, and predicted net wealth rank group

Wealth inequality has been stable in recent years



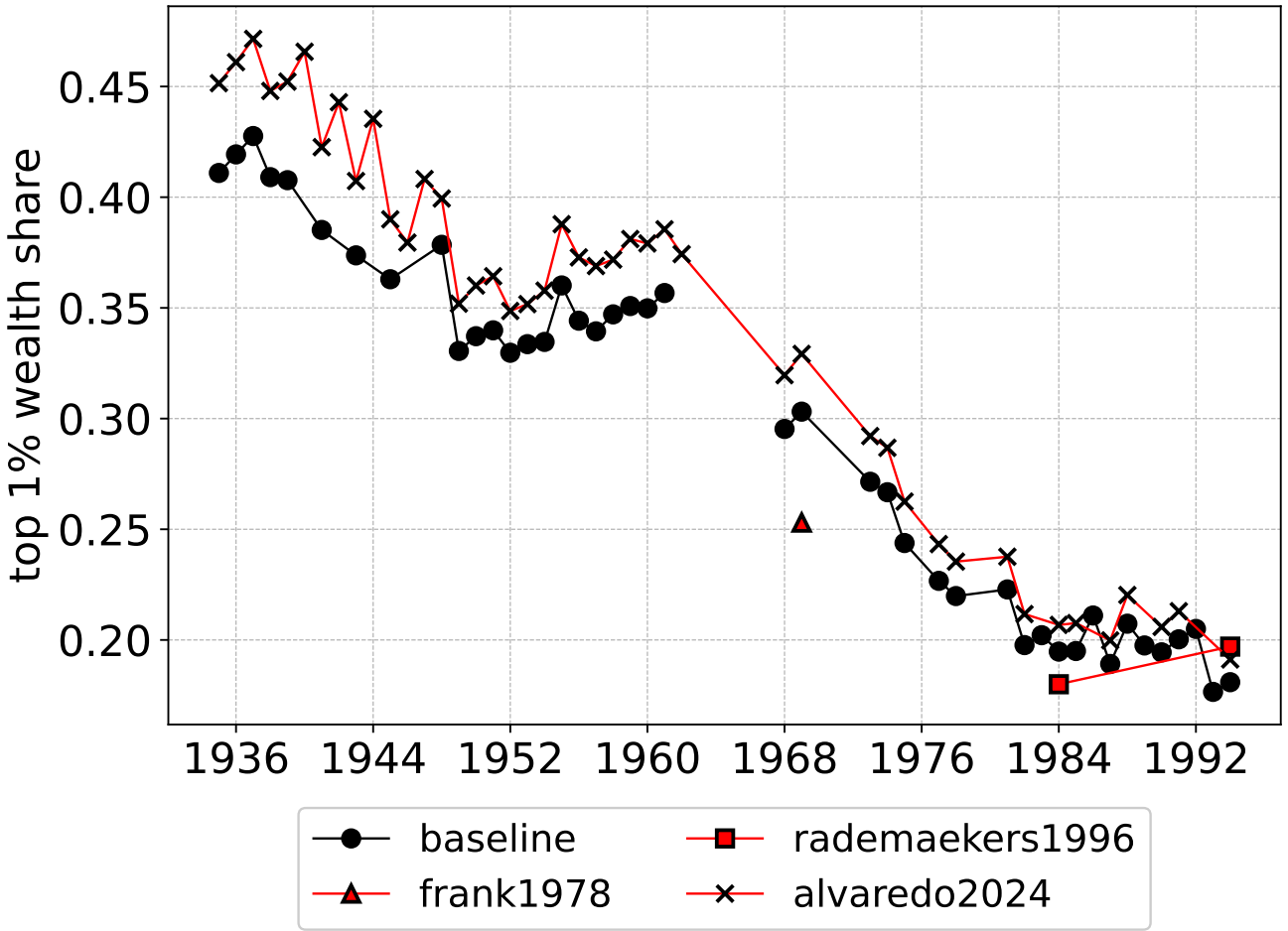
Note: more unequal than simplified approach!

Bottom wealth shares are also stable



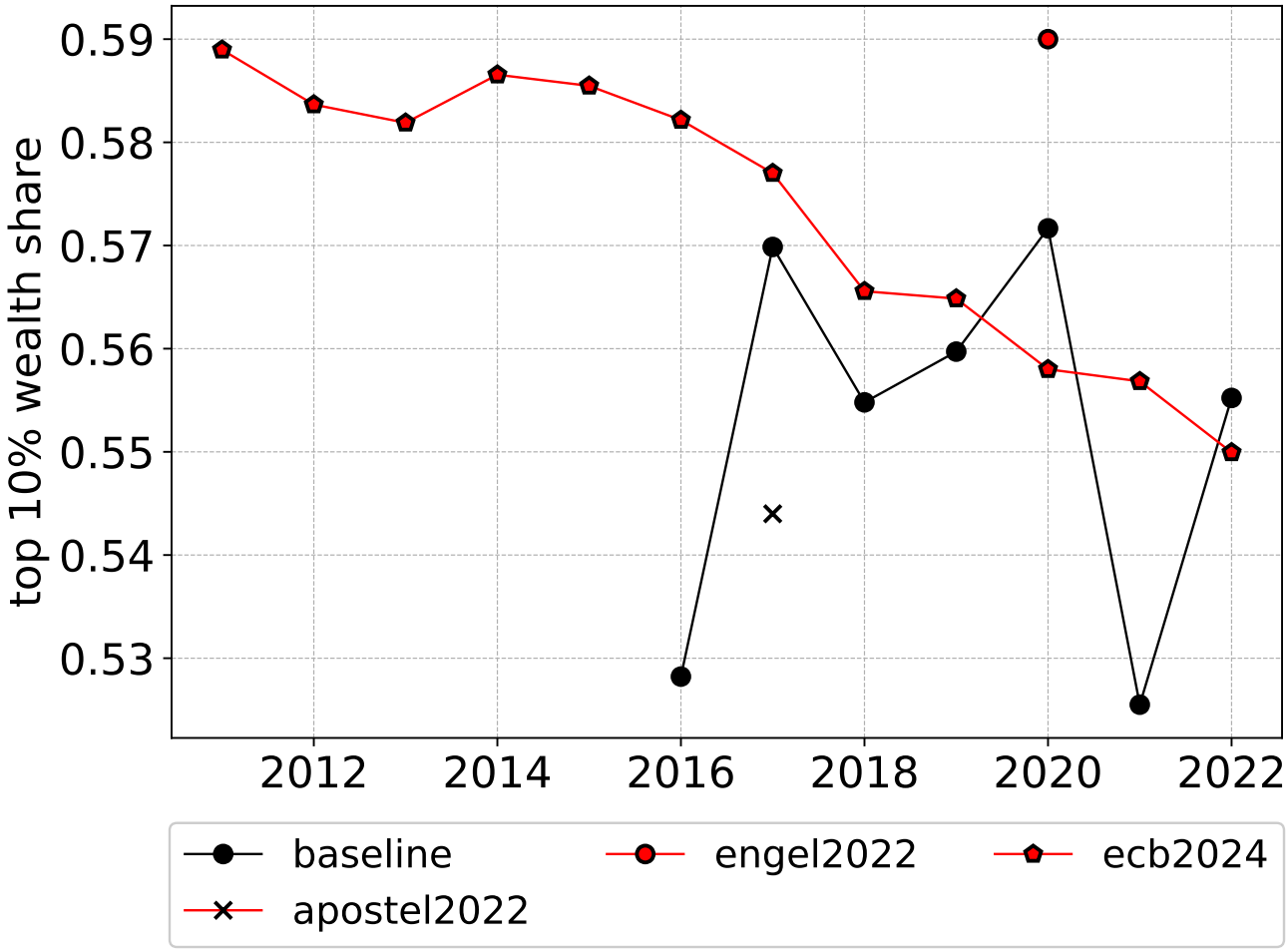
Comparison with previous work

Baseline is in line with previous work for the 20th century



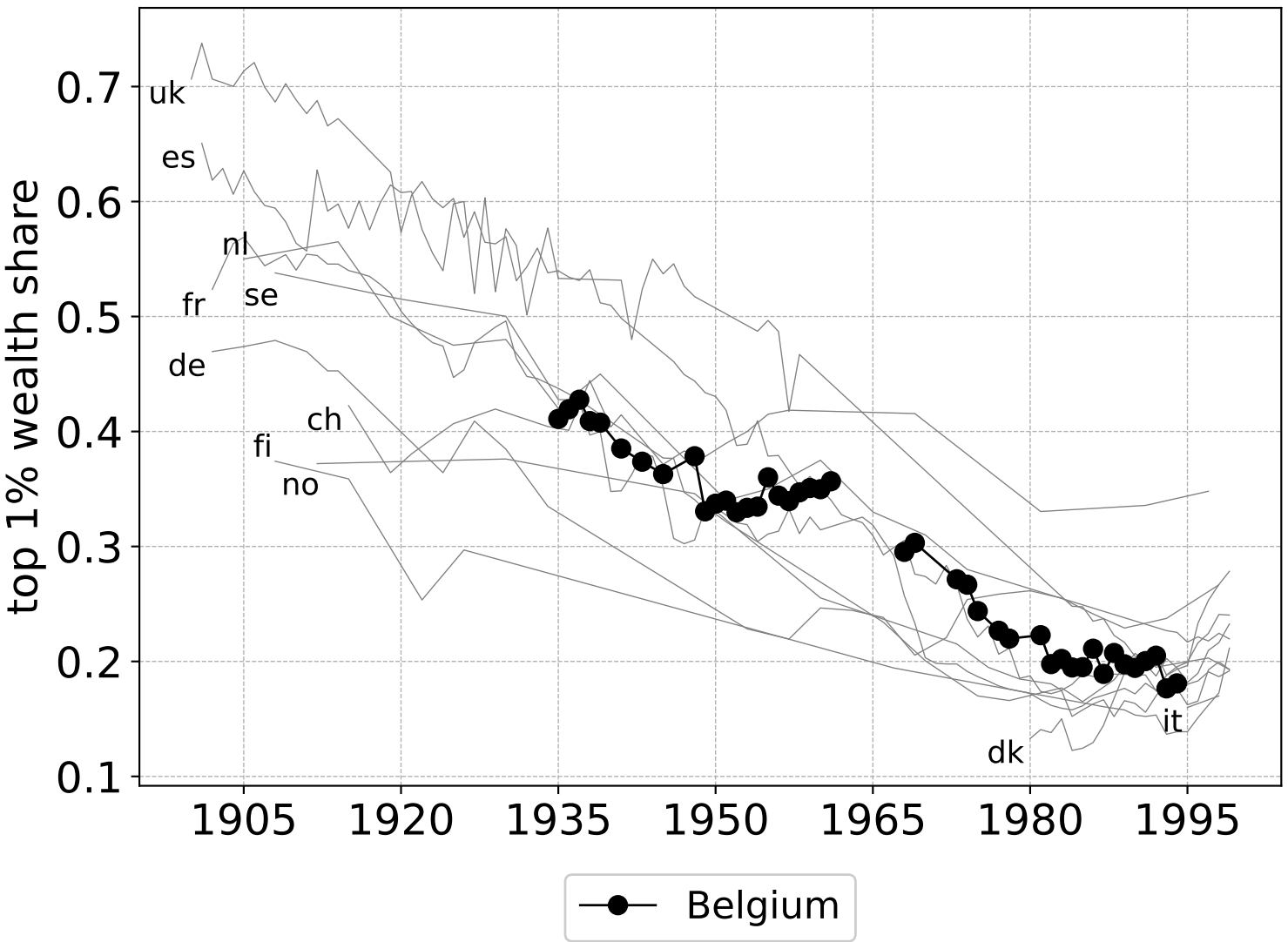
- Frank & Rademaekers at household level!

Baseline conflicts with previous work for the 21st century



- Previous studies at household level!
- Not the WID.world series, as they do not correct for the top (Blanchet and Martinez-Toledano, 2022)

Belgium does not seem to be an outlier in the 20th century



Source: Waldenström (2022)

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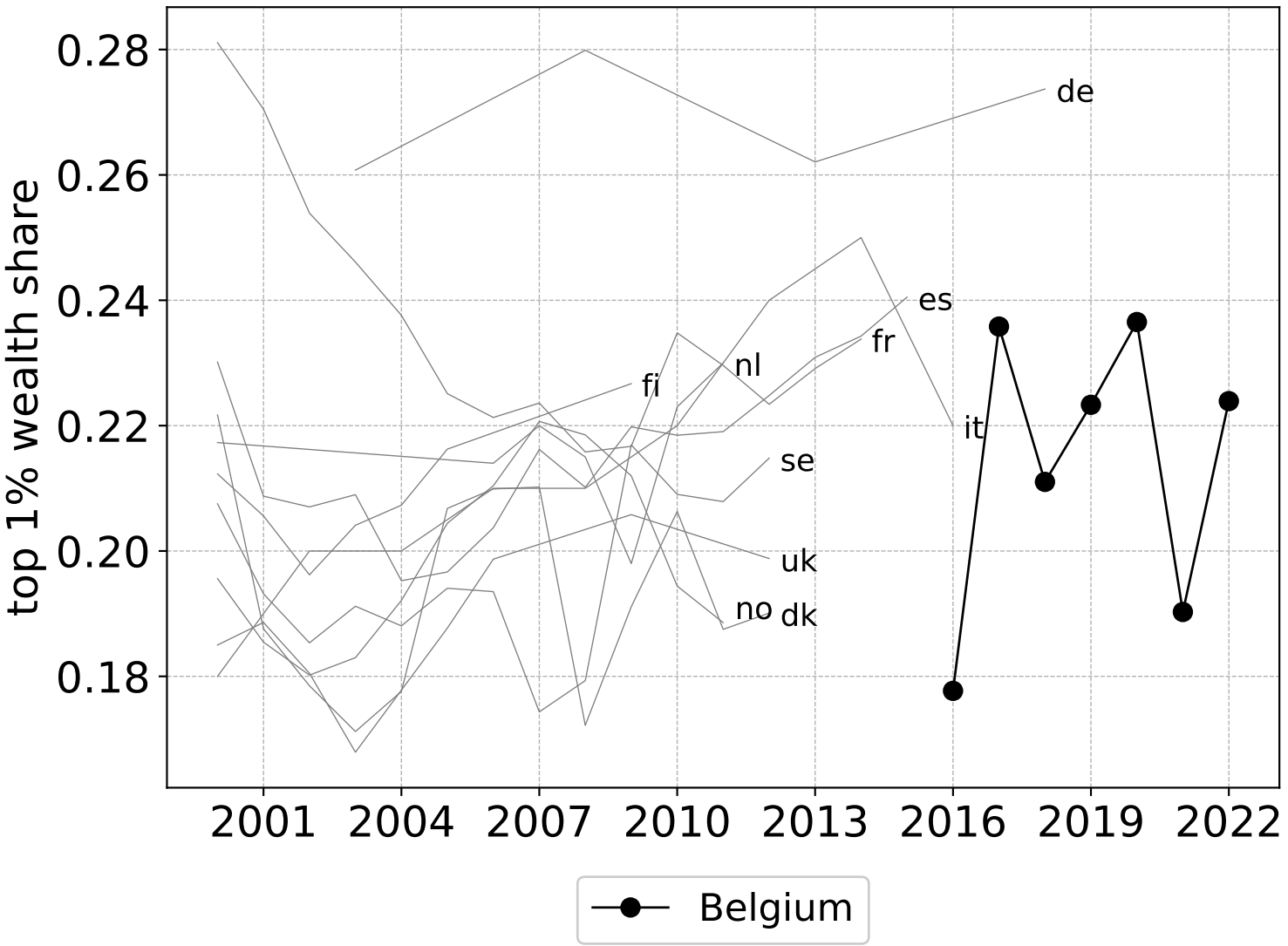

Source: Waldenström (2022)

Conclusions

- Belgian wealth inequality
  - has declined throughout the 20th century
  - is no longer declining, but also not increasing
  - and seems in line with the evolution in other European countries
- Limitations
  - Most notably, tax evasion & avoidance

Thank you!