

DIW Berlin – German Institute for Economic Research

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# Addressing wealth inequality in Germany: A microsimulation analysis of the impact of wealth policy instruments

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1.

# Motivation

# 1.

## Long term research project focusing on wealth inequality in Germany

The three phases of the project commissioned by the Forum New Economy

### Phase 1:

Bartels, Charlotte, and Carsten Schroeder (2020a). "*Income, consumption and wealth inequality in Germany: Three concepts, three stories?*". Forum New Economy Basic Papers Nr. 2.

Bartels, Charlotte, and Carsten Schroeder (2020b). "The role of rental income, real estate and rents for inequality in Germany". Forum New Economy Working Papers Nr. 7.

### Phase 2:

Stefan Bach, Markus M. Grabka and Marc C. Adam (2021). "*Ungleichheit in Deutschland – Politikmaßnahmen zur Trendumkehr*". Forum New Economy Working Papers Nr. 05.

### Phase 3:

Estimation of the effects of various wealth policy instruments on wealth inequality in a comparable framework using a dynamic microsimulation model

**Evaluation** of wealth policy instruments in the **short** (1 year), **medium** (5 years) and **longer** (10 years) term

- **Baseline scenario:** status quo
- **Tax the rich** (=government revenue)
  - Wealth tax
  - Inheritance tax
  - Capital income tax
- **Support wealth accumulation of the poor** (=government expenditure)
  - Social inheritance
  - Social dividend

**Fiscal effects**

- Counter-financing (reallocation, debt, ...)
- Use of the additional revenue

**What are the relevant criteria?**

- Participation/inclusiveness
- Reduction of inequality (long term vs. short term)
- Costs of the instrument
- Sustainability

**In addition:**

- Single implementation or combination of measures
- Institutional aspects and implementation feasibility

# The simulation framework

## **Core database: 37th wave (1984-2020) of the German Socio-Economic Panel (SOEP)**

- Wealth data from 2017
- Inheritances retrospectively collected in 2019
- Additional socio-economic characteristics from the 2017 to 2020 panel data

### **Preparing wealth data:**

1. Uprating:
  - Combination and comparison of the microdata with the corrected balance sheets of private households from the national accounts (Piketty et al. 2018; Saez und Zucman, 2020, Albers et al. 2022)
2. Upper end correction:
  - Rich lists (Managemagazin)
  - Potential use of the “Top Wealth Sample” 2019 (SOEP)

**Sample selection:**

- Adults in age 20 to 60
- Excluded:
  - individuals who immigrated after their 18th birthday
  - individuals who were not born in Germany and have no declaration of their year of immigration
  - Individuals who died before the age of 60
  - individuals from East Germany born before 1970
  - individuals from the latest migration sample (2009-2013) and high income sample (2002)



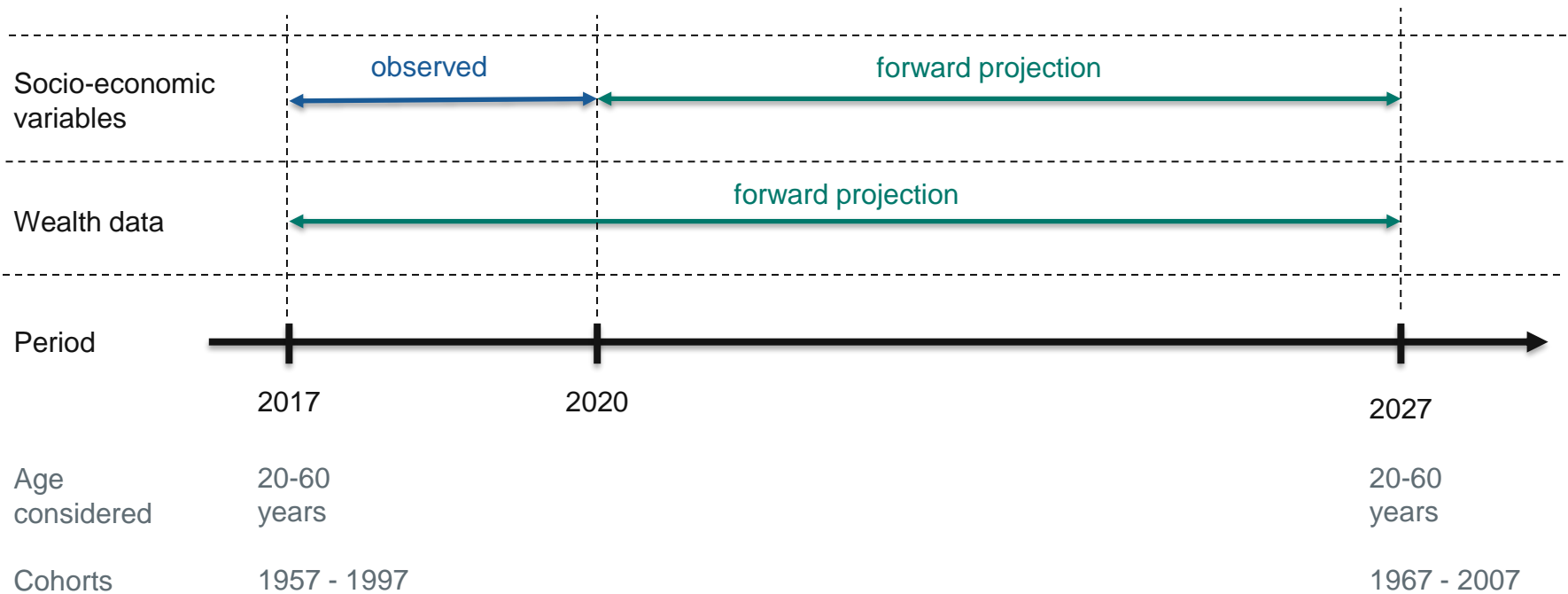
**Initial wealth: 2017**

Dynamic microsimulation up to 2027 depending on selected adjustable parameters:

- **Simulation of career trajectories** under behavioral assumptions and extrapolation of general trends (start a family, income evolution, etc.)
- **Individual decision parameters** (savings rate)
- **Simulation of the taxes**, social insurance and transfers
- **Wealth accumulation process** through savings behavior and inheritances

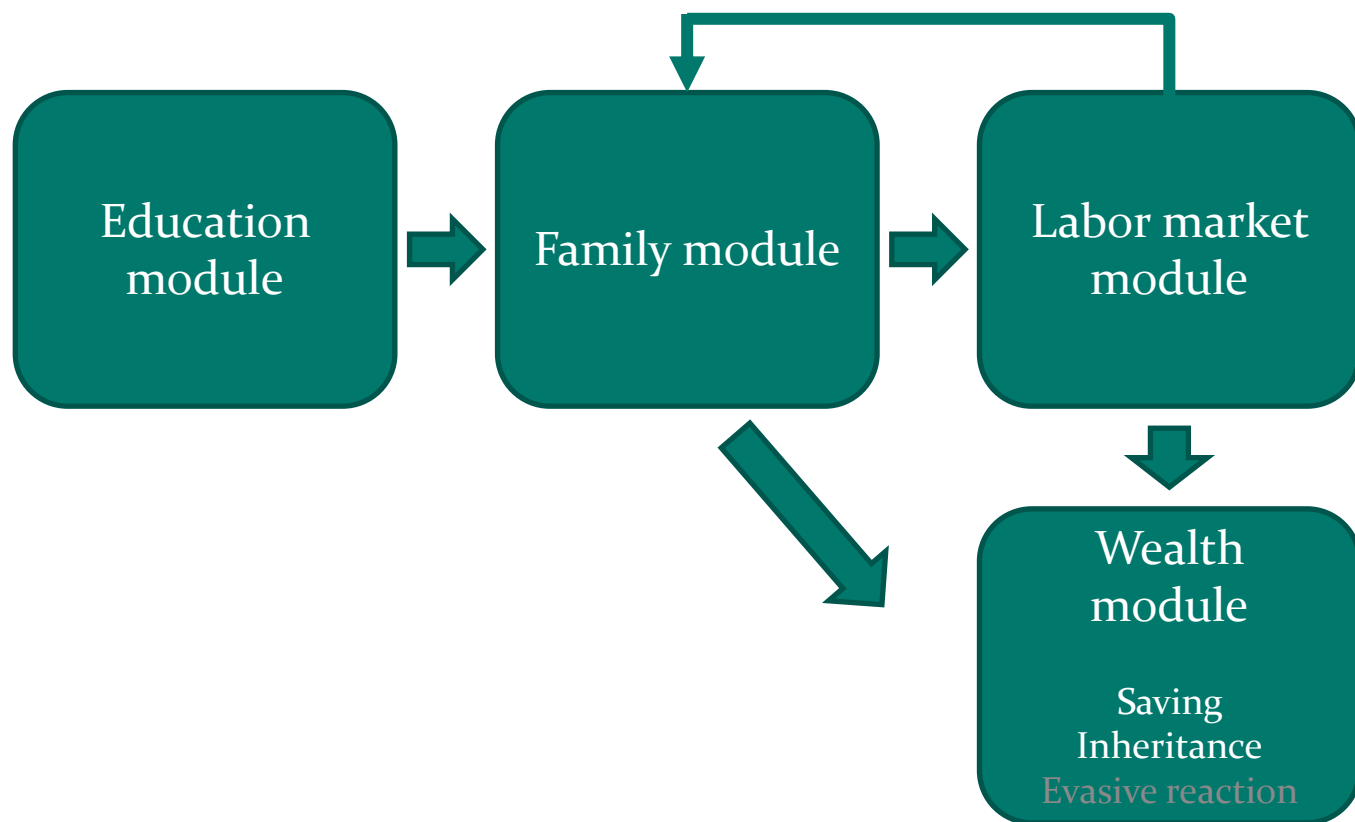
## 2.

## Representation of the simulation process



### Definition of the framework conditions (external data)

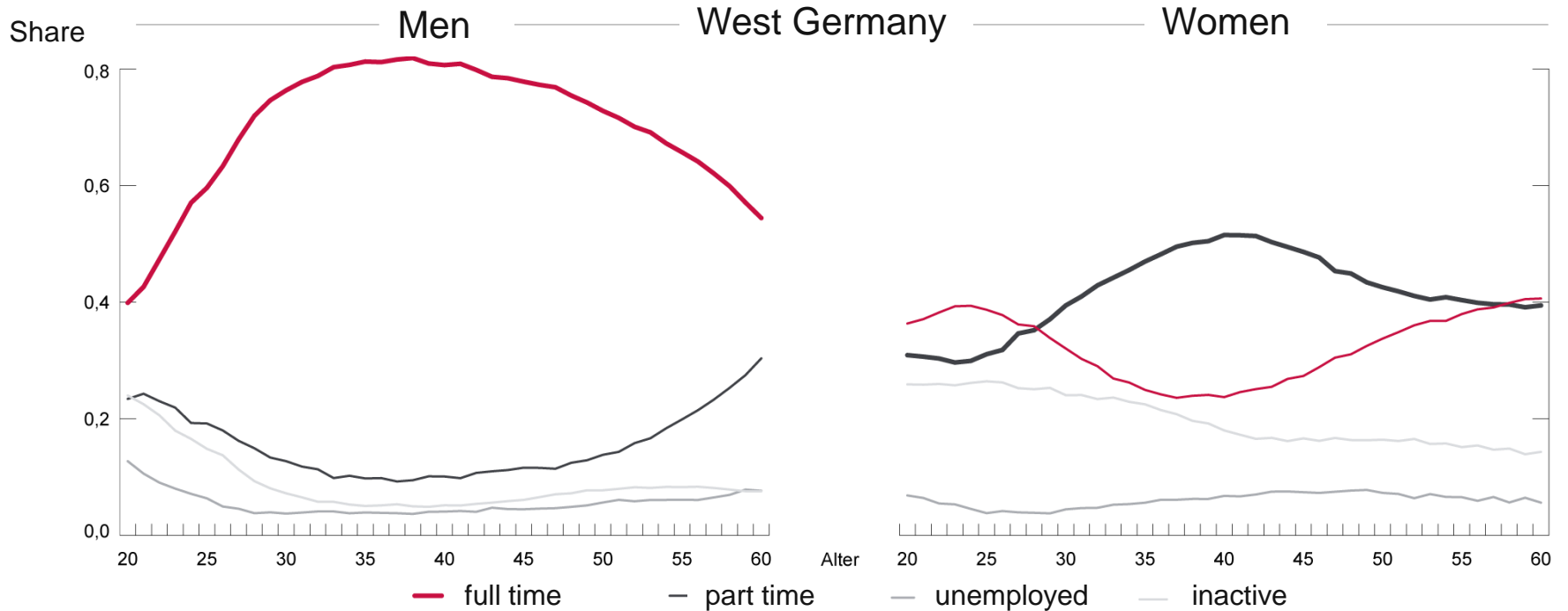
- Demographics (in particular mortality and immigration)
- Economic growth (scenarios)/real interest rates
- Unemployment (scenarios)

**Figure 4:** Interaction between the different modules

Notes: The backward and forward projection of biographies begins for each individual depending on their first participation in the SOEP survey. First, missing employment information is simulated before SOEP entry, then - after leaving the SOEP - employment and family information is projected.

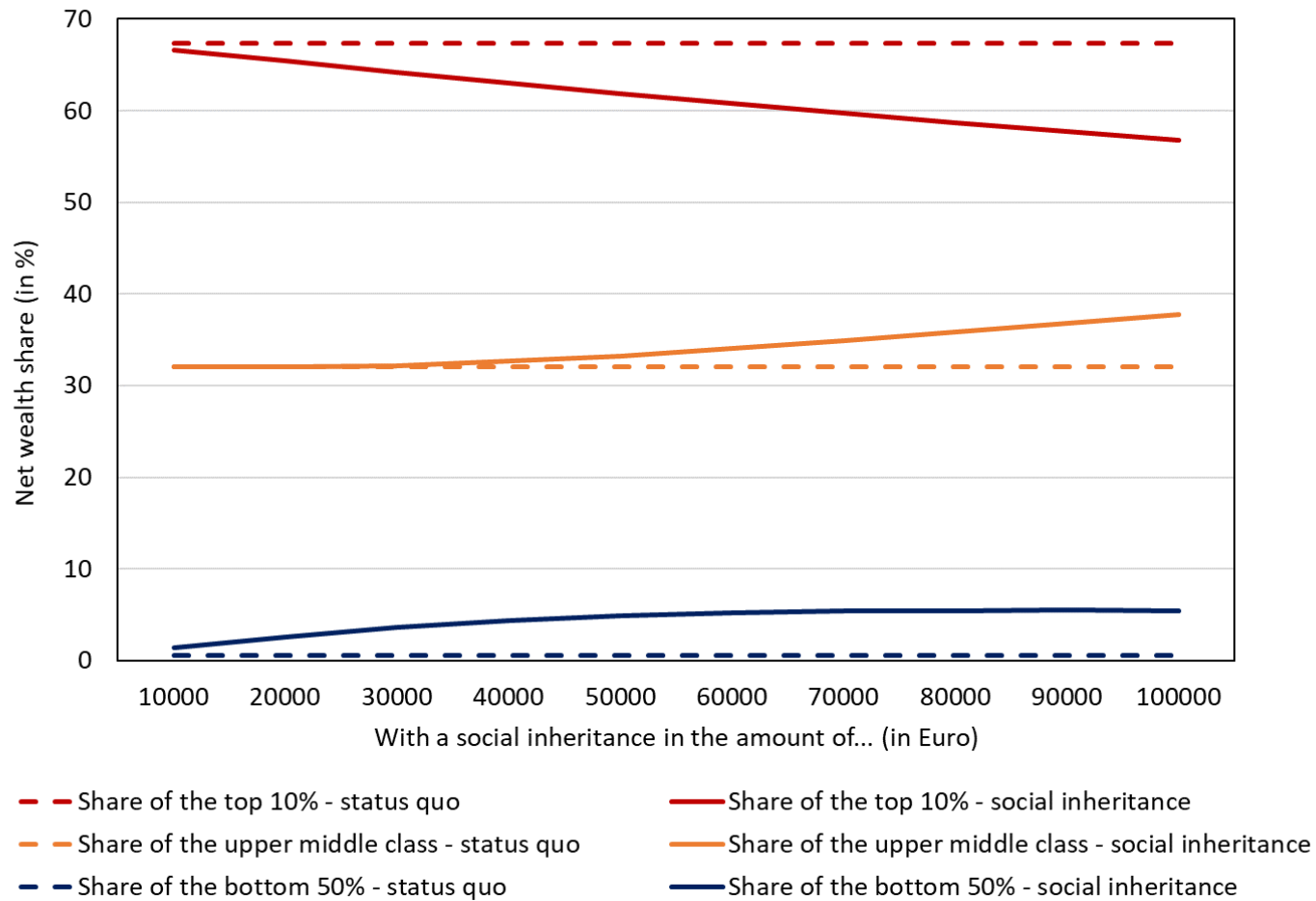
# 2.

## Simulated age profile: Labor market status

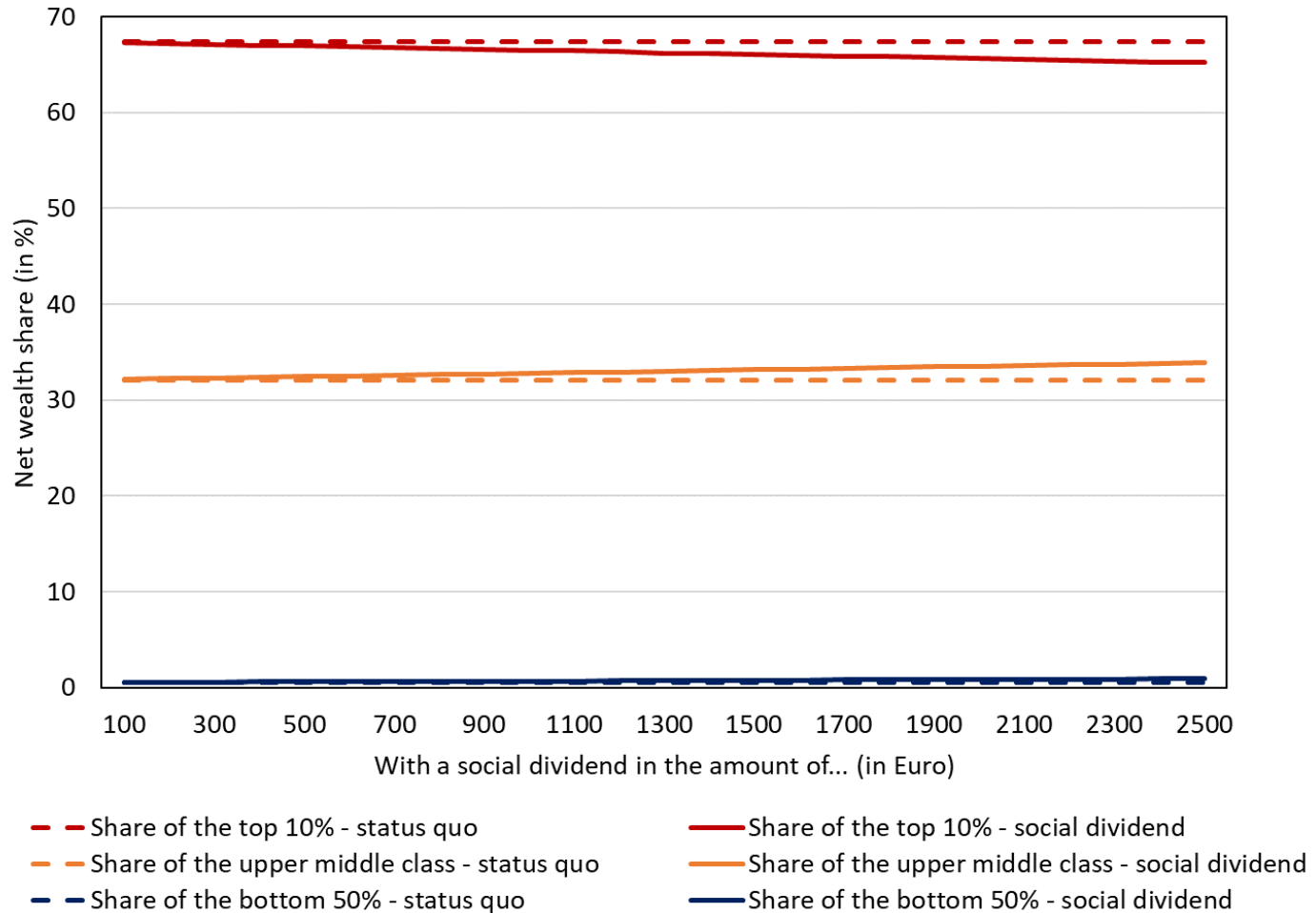


Source: SOEP v35; own calculations.

# Results



Sources: SOEP v37, EVS 2018; own calculations.

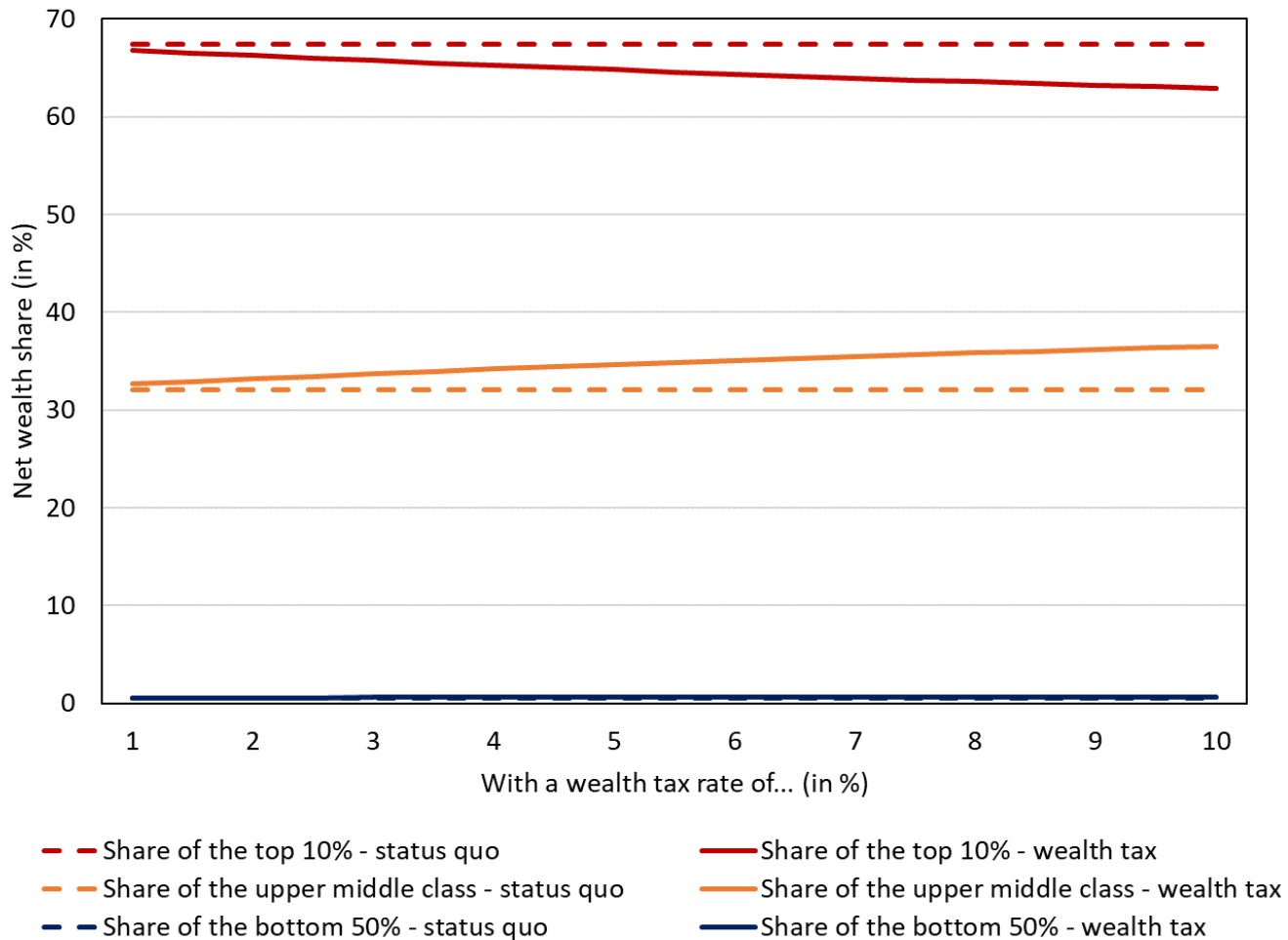


Sources: SOEP v37, EVS 2018; own calculations.



# 3.

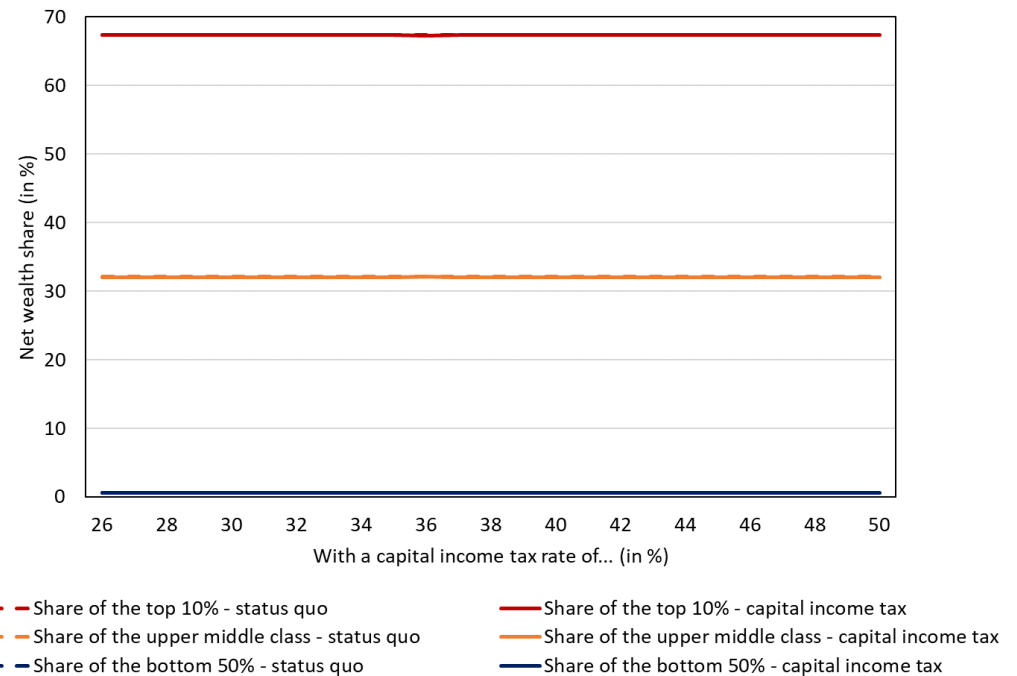
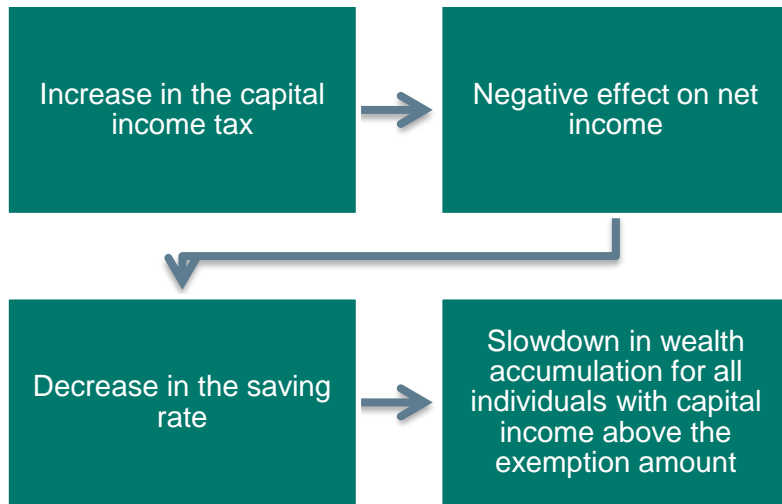
## Wealth tax: Wealth concentration after 10 years



Sources: SOEP v37, EVS 2018; own calculations.

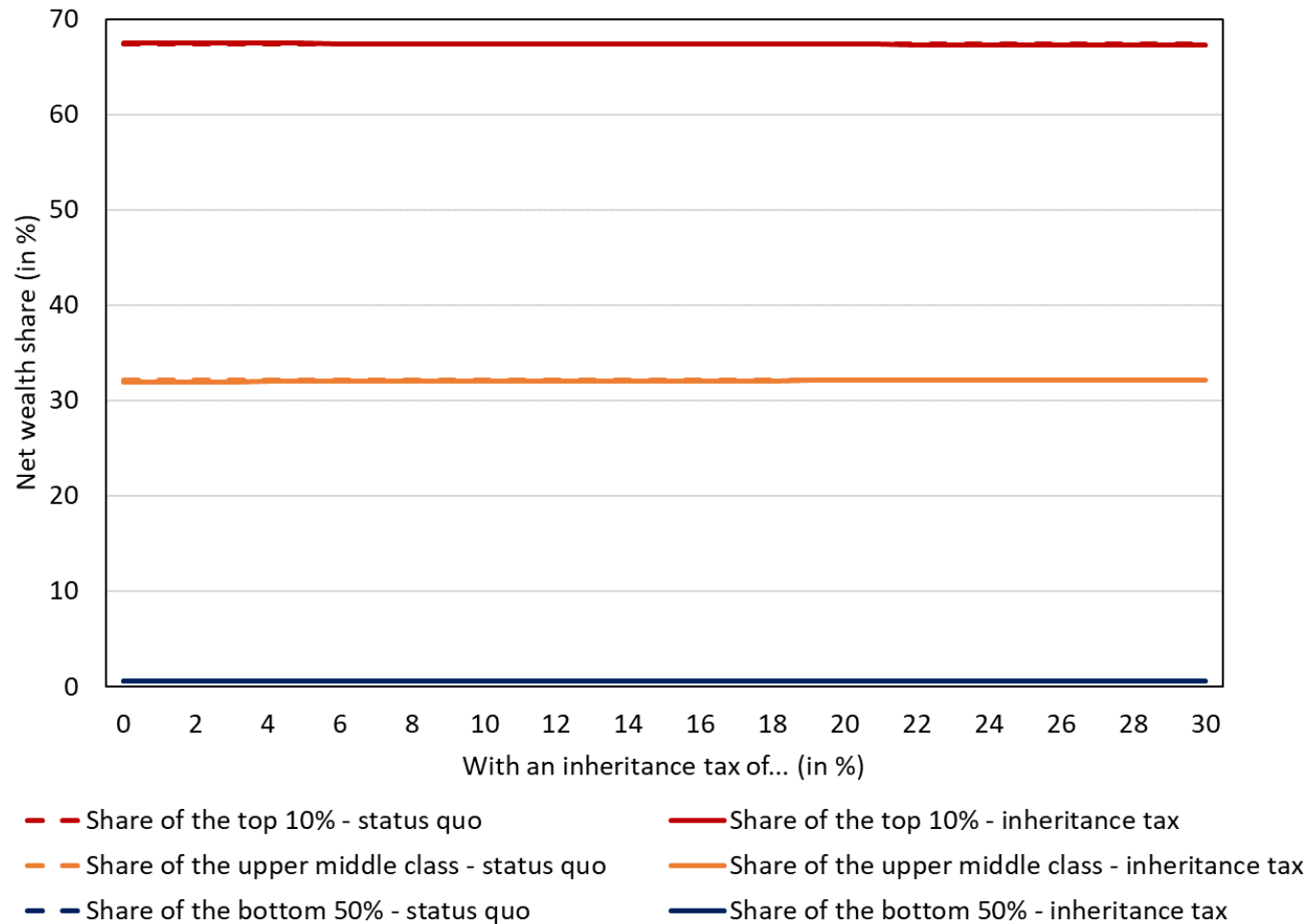
# 3.

## Capital income tax: Wealth concentration after 10 years



## 3.

## Inheritance tax: Wealth concentration after 10 years



Sources: SOEP v37, EVS 2018; own calculations.

# Conclusion

- While wealth taxation policies (wealth tax, capital income tax, inheritance tax) generate additional revenue, it demonstrates limited effectiveness in reducing wealth inequality.
- Measures aimed at fostering wealth accumulation, such as providing a social inheritance to young individuals or a social dividend, seems to be more effective in reshaping wealth distribution.
- Further research:
  - Use of the “Top Wealth Sample” 2019 (SOEP)
  - Adapting trends to economic projections (scenarios)
  - Consideration of the evasive reaction
  - ...

Vielen Dank für Ihre Aufmerksamkeit.

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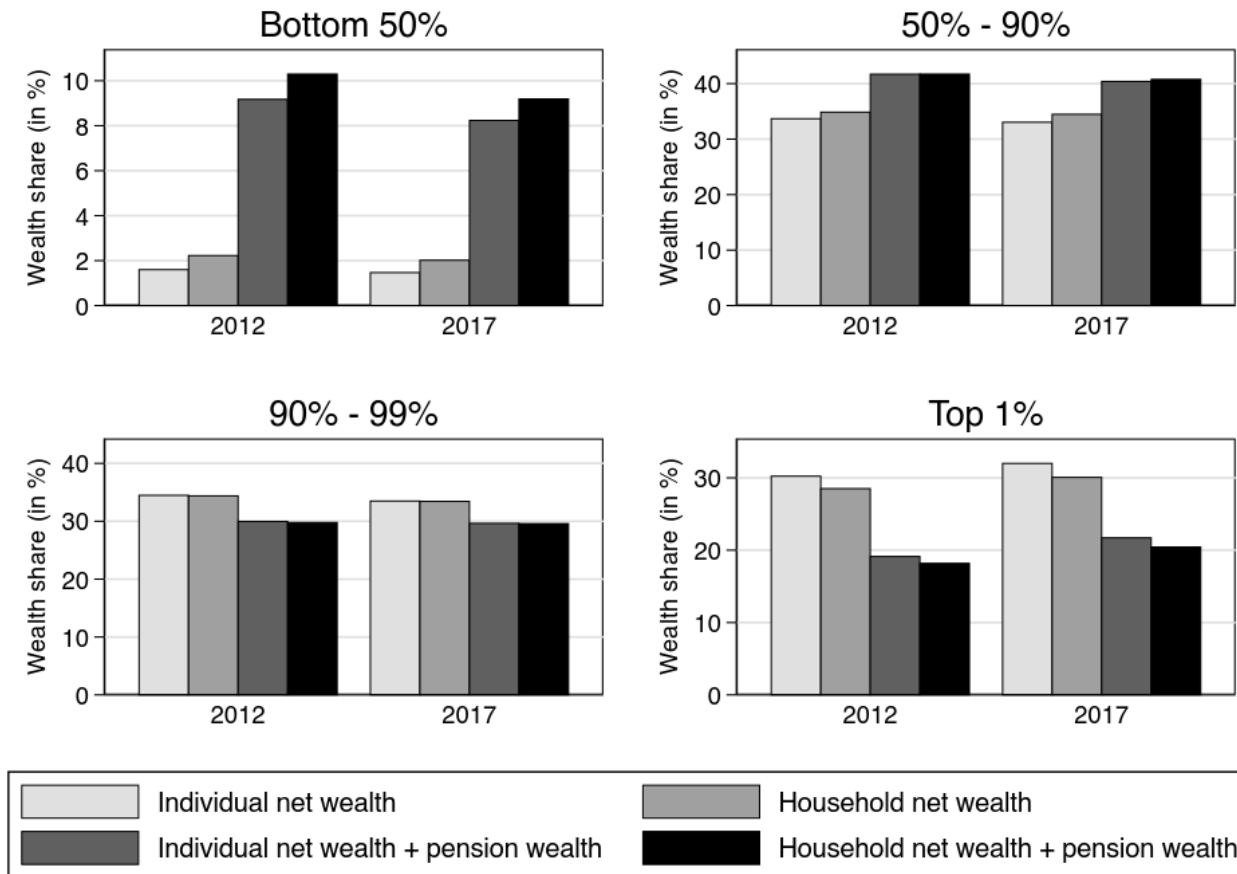
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# Appendix

**Figure 2:** Wealth distribution with and without pension wealth in Germany, at individual and household level



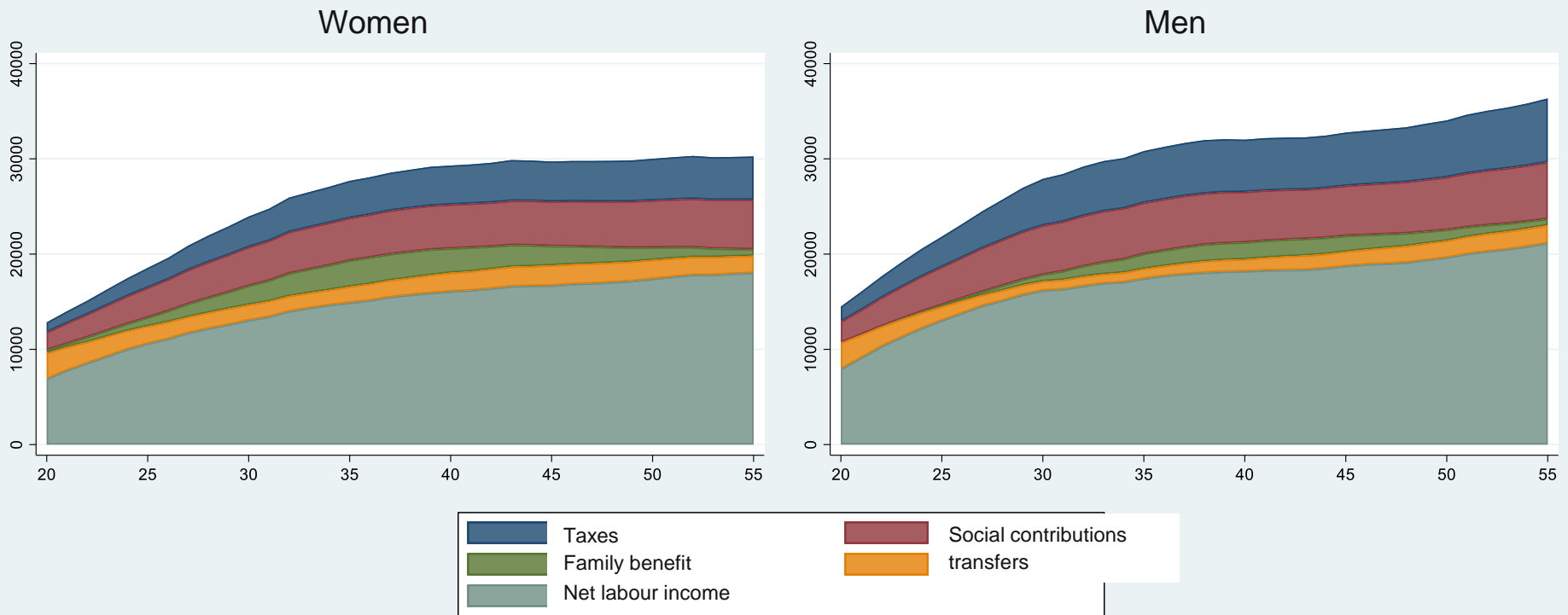
Sources: SOEP, German Federal Statistical Office, Rich lists; own calculations.



Microsimulation model of the tax, social security and transfer system for the years 2017 to 2027:

- **Unchangeable instruments:**
  - Income tax
  - Dual taxation or tax assessment option for capital returns
  - Social security contributions from employees and employers
  - Unemployment insurance transfers (ALG I and ALG II), social assistance, sickness benefit, reduced earning capacity and old-age pensions, child allowances,...
  - Interdependencies between social security & taxes
- **Changing wealth policy instruments** of the tax-transfer system

**Figure 7:** Taxes, social security contributions, family benefits, transfers and net earned income per capita of women and men over the life cycle



Notes: Cash flows per capita attributed to the individual in the household context in 2015 prices. Cash flows in average annual values for pooled birth cohorts from 1964 to 1985. The per capita disposable income in the household context corresponds to the sum of per capita net earned income, transfers and family benefits.

Source: SOEP v35; own calculations.