

# Socioeconomic Status and Health: An exploratory analysis

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# Motivation

- ▶ Individuals with higher Socioeconomic Status (SES) tend to display better health outcomes
- ▶ Correlational relationship well established in literature but (causal) mechanisms are hard to investigate due to endogeneity and long-term development (multiple generations)
- ▶ Deaton (2003) exposes a few hypotheses
  - ▶ Education: with access to better education -> better health decisions
  - ▶ Irrationality: Too high discount rate -> failure to build capital & protect health
  - ▶ Absolute vs relative “income hypothesis” -> Evidence that not only level of wealth but also *ranking*, i.e., inequality, affect health outcomes

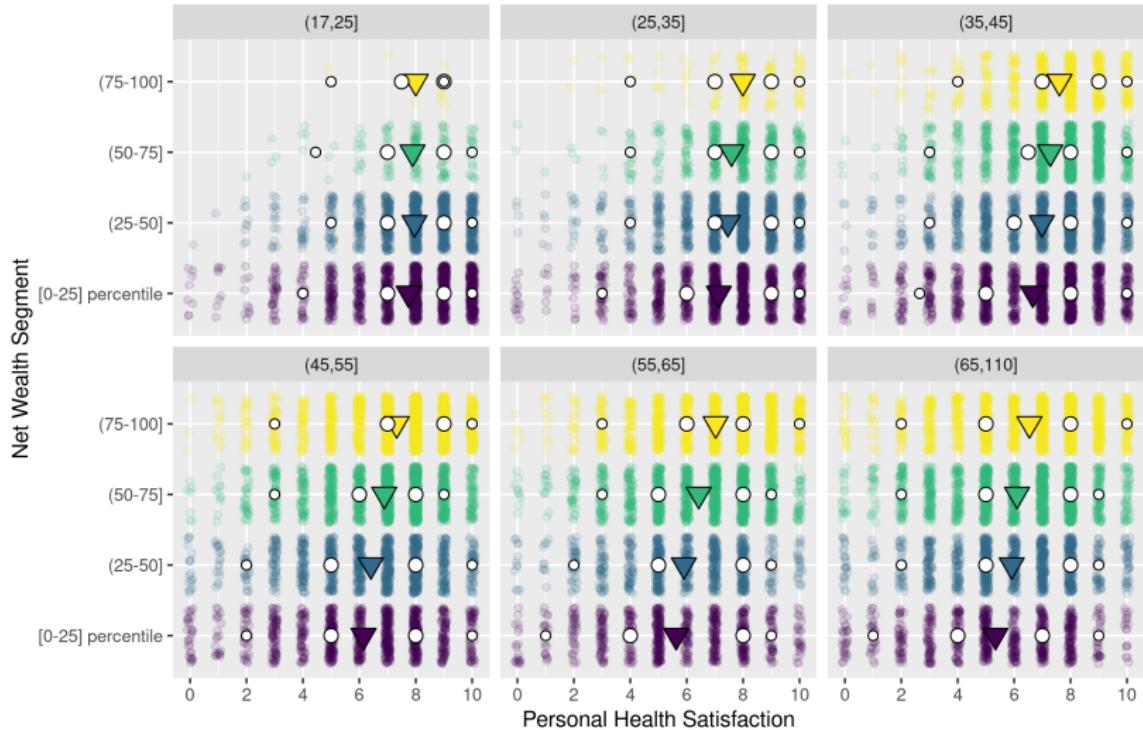
## Data

- ▶ Cross-sectional SOEPv36 data from 2019 with 24.429 observations, including new sample on top-stakeholders (TS)
- ▶ Wealth module from 2017 for other samples
- ▶ Item non-response imputed via Bayesian Networks implemented by Göbler (2019)
- ▶ Drawback: Health module (from 2018) with broader coverage of health variables not available for SOEP TS sample

# Exploratory Visualisations I

## Overall satisfaction with personal health

Decomposition by net wealth segments (y-axis) and age group (facets)

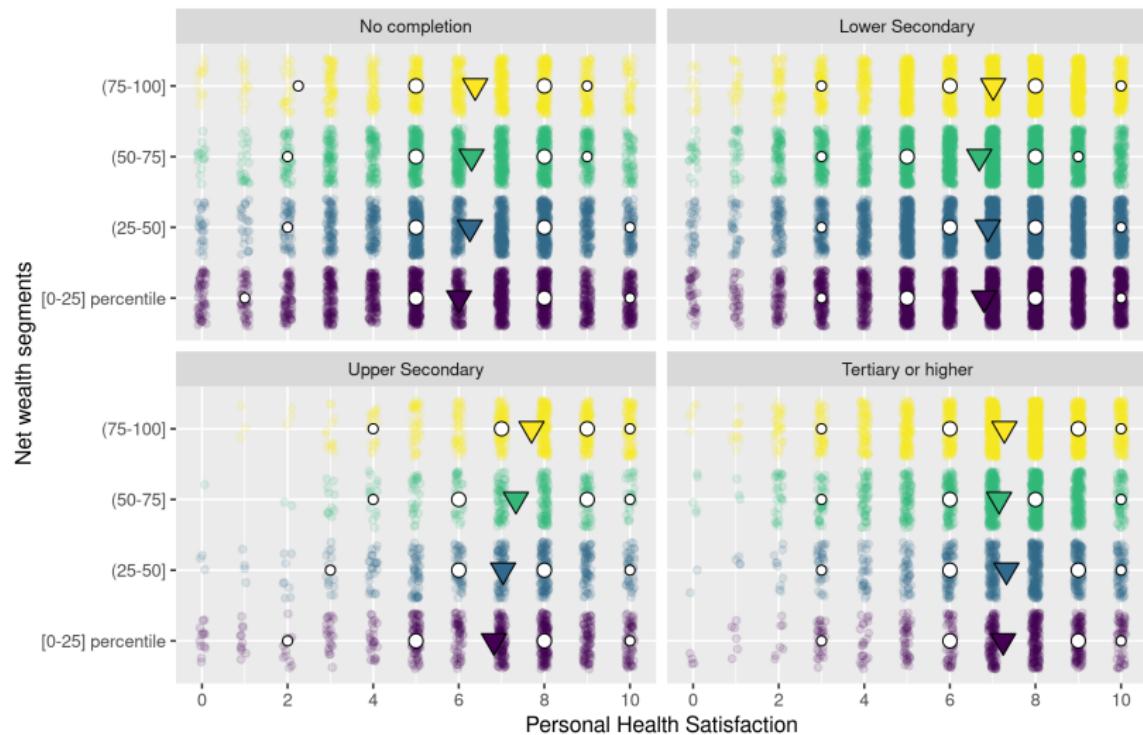


Self reported health satisfaction on scale from 0 to 10  
Mean value by segment depicted as a triangle and 5th, 25th, 75th and 95th percentiles as circles

# Exploratory Visualisations II

## Overall satisfaction with personal health

Decomposition by net wealth segments (y-axis) and education (facets)

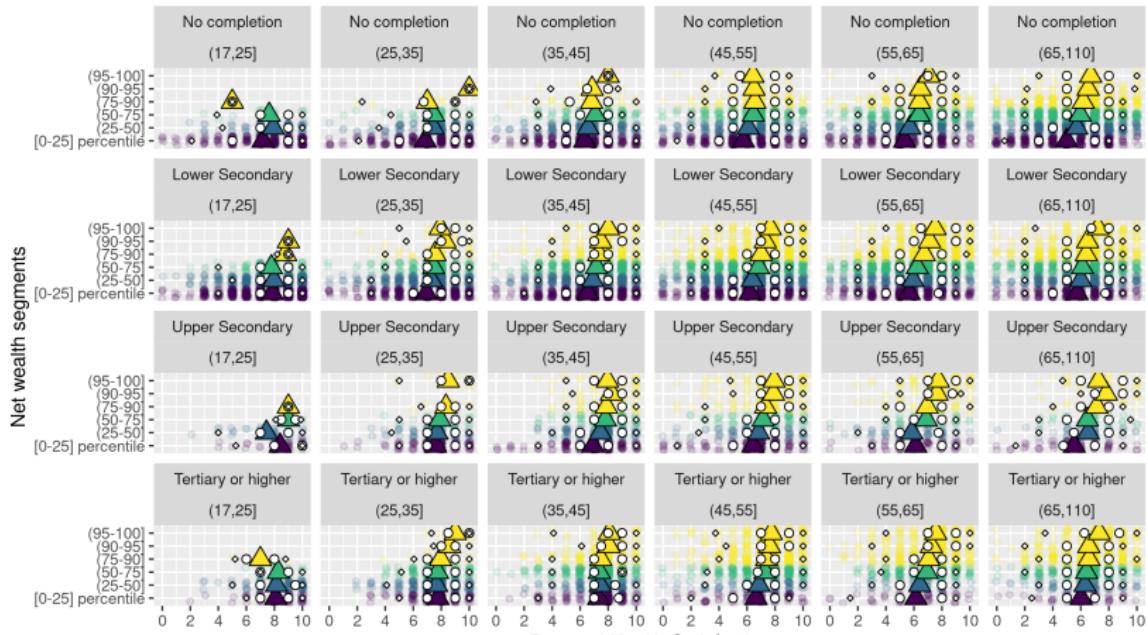


Self reported health satisfaction on scale from 0 to 10  
Mean value by segment depicted as a triangle and 5th, 25th, 75th and 95th percentiles as circles

# Exploratory Visualisations III

## Overall satisfaction with personal health

Decomposition by net wealth segments (y-axis) across education and age group (facets)



# Exploratory Visualisations IV



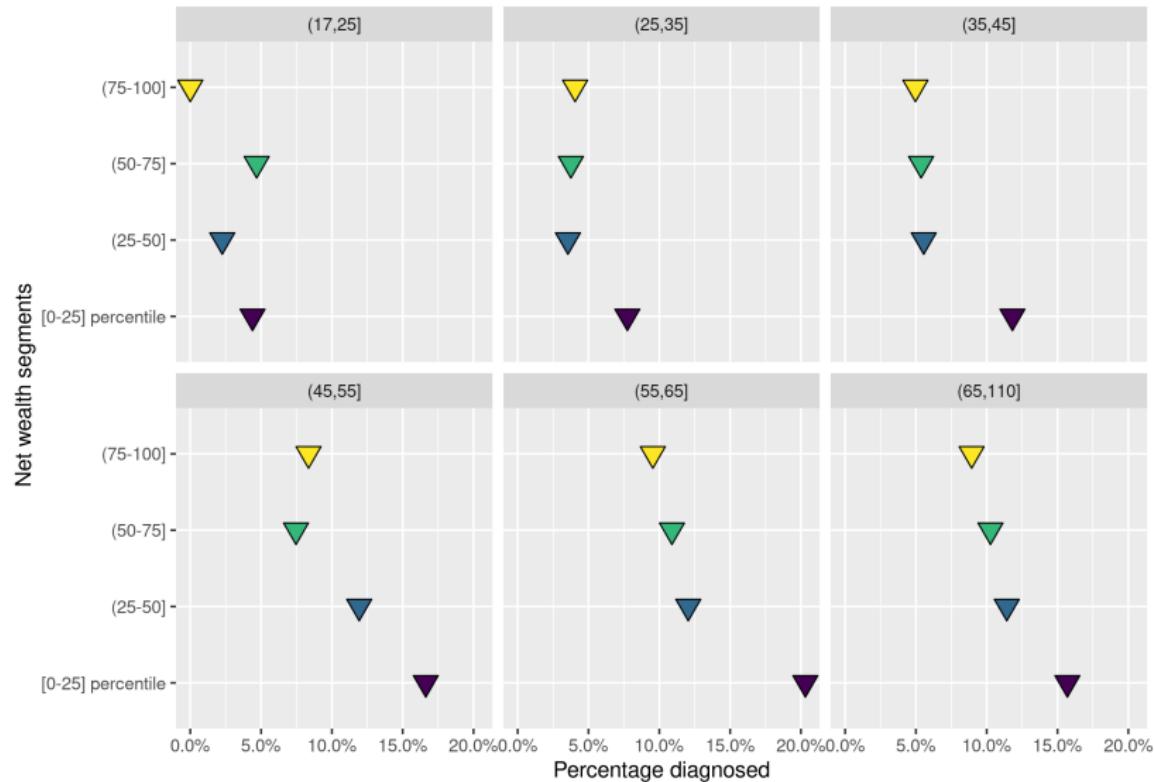
# Exploratory Visualisations V



# Exploratory Visualisations VI

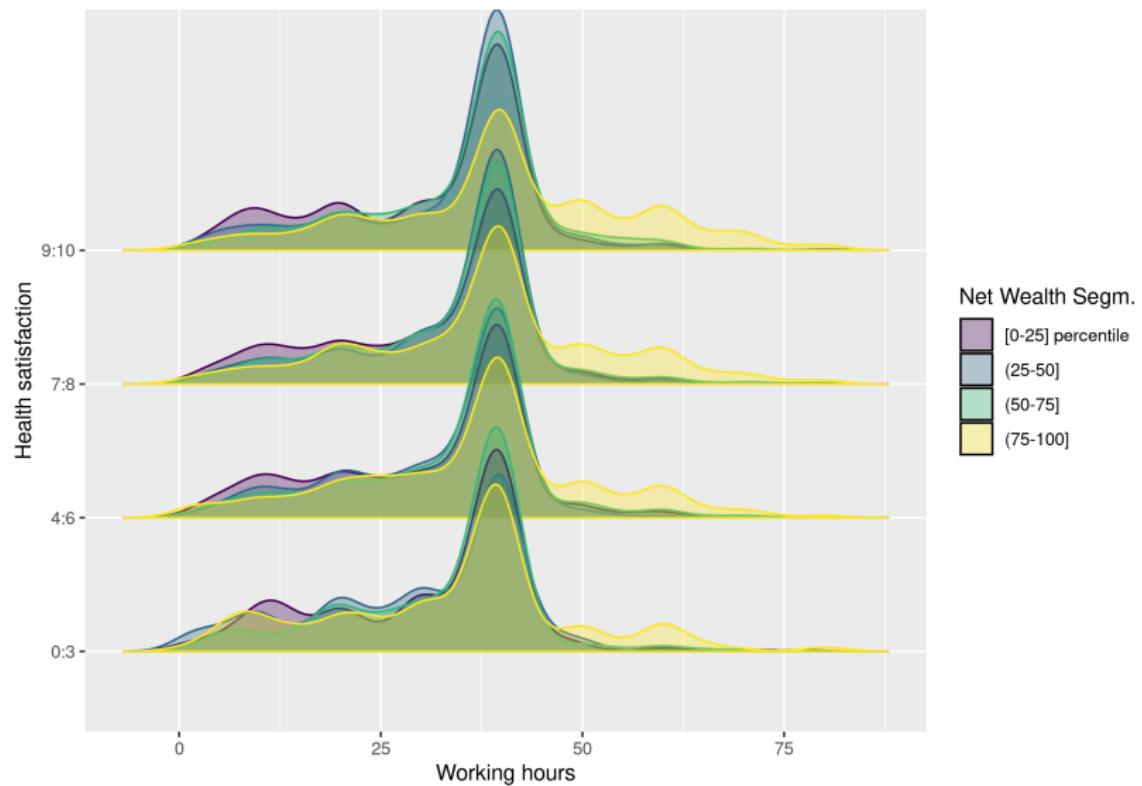
Ever diagnosed with Sleeping Disorder?

Decomposed by wealth segment (y-axis) and age groups (facets)



# Exploratory Visualisations VII

Distribution of working hours by health satisfaction across wealth segments  
(Only active in labour market individuals)



# Outlook

## Objectives

- ▶ Generate via Principal Components a physical, a mental and (possibly) a *social health* variables to consolidate available health information in fewer dimensions
- ▶ Investigate which variables more strongly predict health outcomes in these dimensions
- ▶ investigate how predictive are the physical and mental health variables on income and wealth outcomes.

## Challenges

- ▶ Properly deal with endogeneity, confounder and collider biases!
- ▶ Still need to consolidate a overall research question.

## References

- Deaton, Angus. 2003. "Health, Inequality, and Economic Development ." Journal of Economic Literature, 41 (1): 113-158.
- Göbler, K. (2019). A Novel Imputation Algorithm with Bayesian Networks". In: Mimeo.