

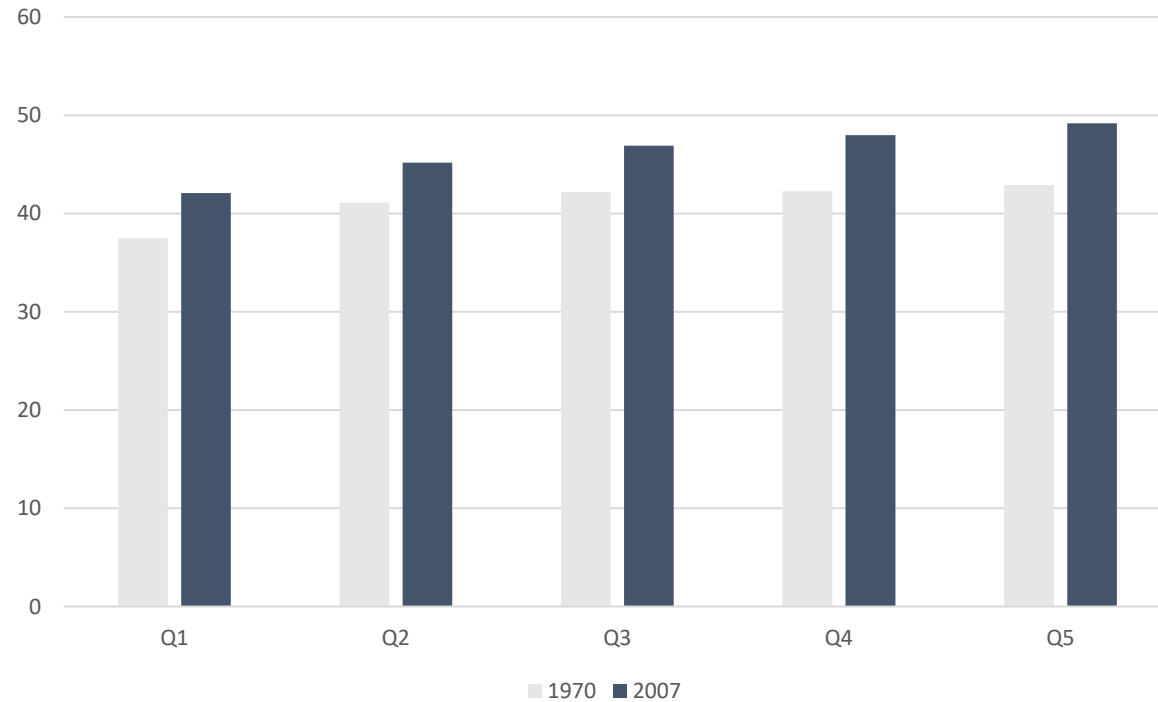
# Income inequality and health

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# The socio-economic gradient in health

- Well documented association between SES and health
- Debated when in history SES differences appeared (Bengtsson et al 2022)
- Recent increases in health differences by income (Mackenbach, 2019)
- For Sweden, Hederos et al (2018) show increasing disparities in life expectancy 1970-2007
  - Greater health gains among richer individuals
  - Cause of death - circulatory disease
  - See also Fors et al (2022), Rehnberg et al (2022)

# Life expectancy at age 35 (men) by income group



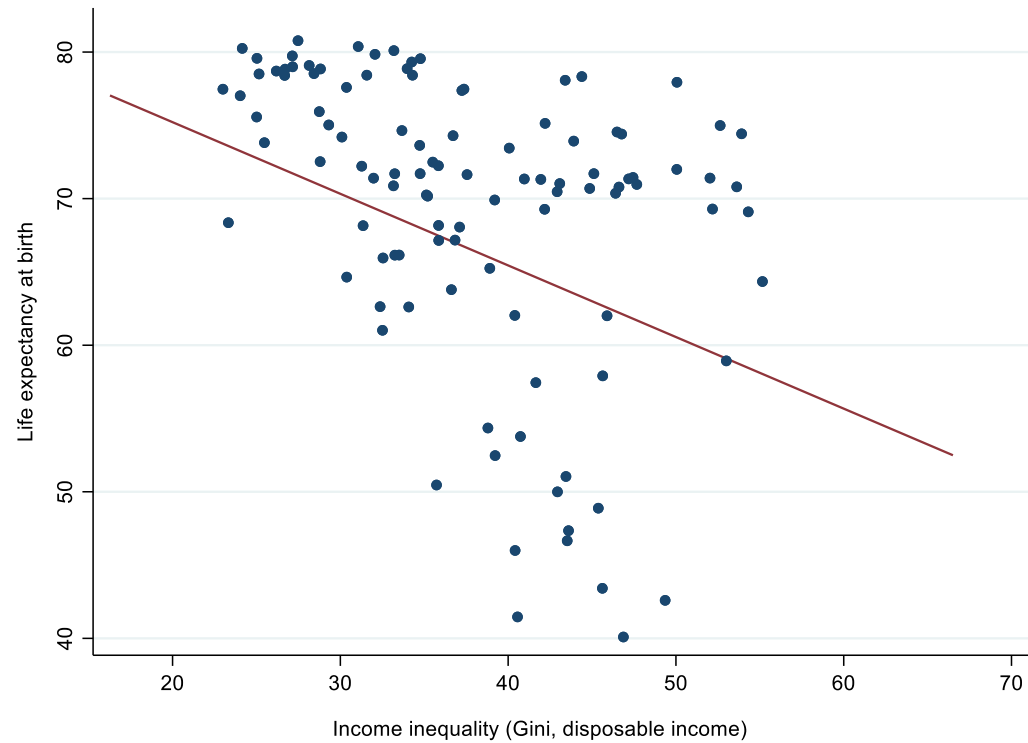
Source: Hederos et al (2018)

# Theories

- How do health inequalities arise and why so persistent?
  - Social selection
  - Neo-Materialism
  - Diffusion of innovations
  - Income inequality hypothesis

c.f. Mackenbach (2019) for a complete overview of theories

# Income inequality and life expectancy



Source: WDI 2021

# The income inequality hypothesis

- Income inequality is harmful for everyone's health
- Brought to the attention of a wide readership - both professionals and lay - by epidemiologist Richard Wilkinson
- The notion is suggestive, exciting and politically controversial
- Aligns with recent trends in economic inequality and SES differences in health

# How can economic inequality influence health?

- Social comparisons
  - psychological stress
  - health effects



# How can economic inequality influence health?

- Lower trust
  - Political mechanisms
    - Elite capture
    - Different preferences of the rich and poor – e.g. provision of public goods
  - Violence and crime
    - Alienation breaking down societal values
    - Large income differences increase the expected return of crime relative to legal activities
- Direct and indirect influence on wellbeing and health



# Income inequality and population health

+ 200 published articles

(Dunn et al 2022, Schenkman & Bousquat 2021, Liao & de Maio 2021.....Rodgers 1979)

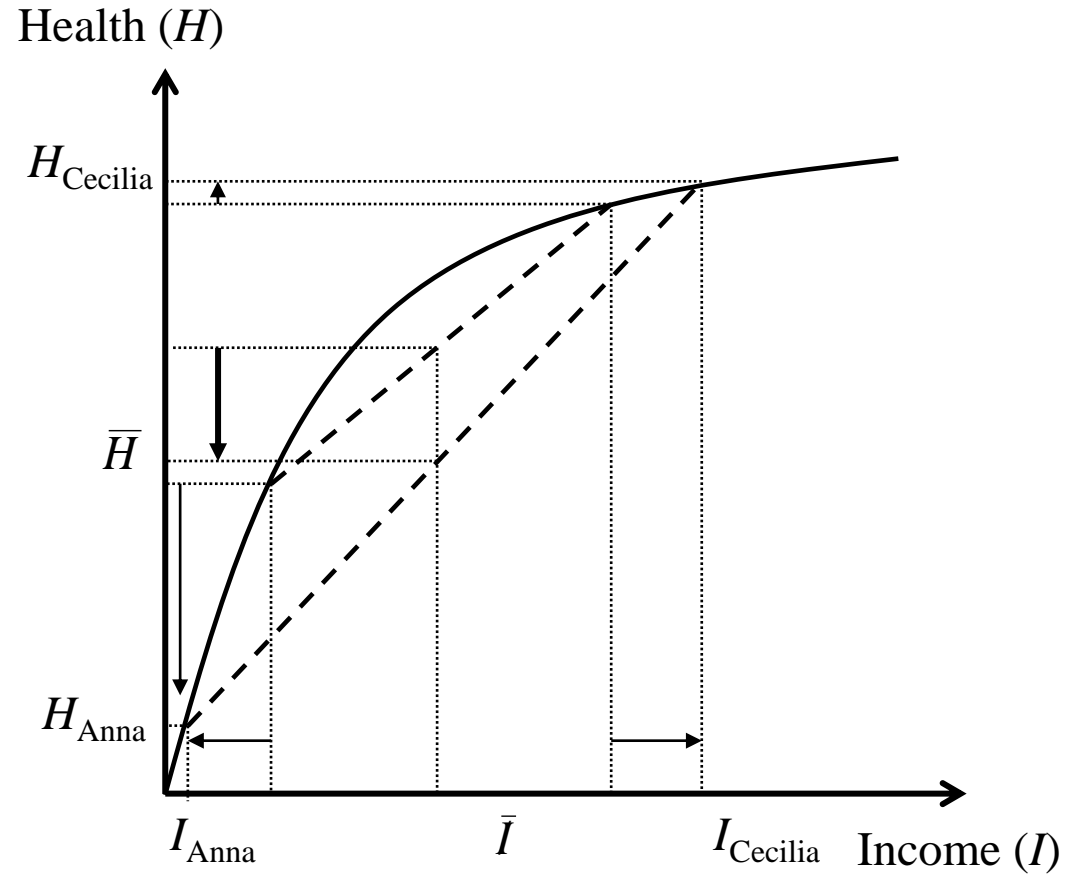
- Multiple health outcomes (subjective and objective)
- Aggregated data (averages across countries, regions etc.)
- More equal societies have better health and well-being
- Limited discussion about methodological challenges

# The importance of individual level data

The incomes of Anna, Benjamin and Cecilia in a hypothetical society

-----A-----B-----C-----  
Anna: 18 000 SEK Benjamin: 20 000 SEK Cecilia: 22 000 SEK

-----A-----B-----C-----  
Anna: 10 000 SEK Benjamin: 20 000 SEK Cecilia: 30 000 SEK



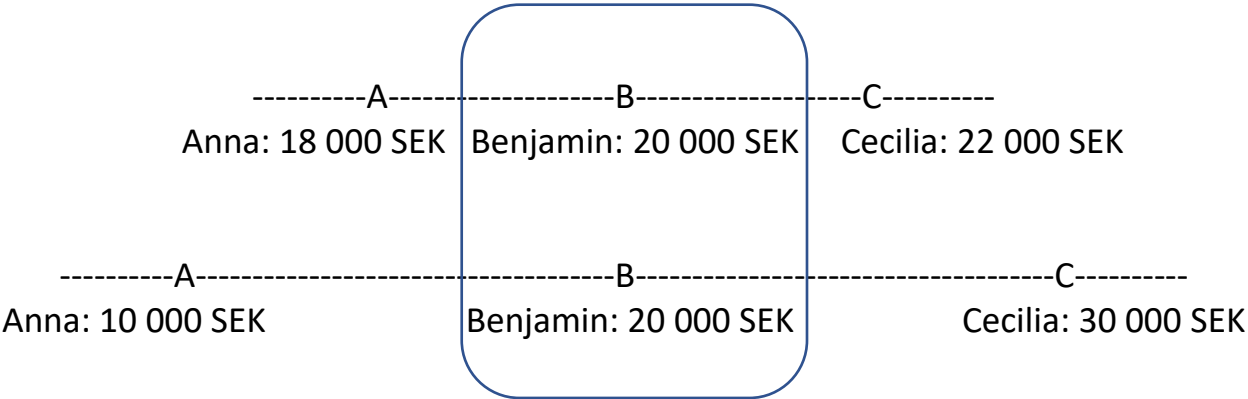
The ecological fallacy

The noted aggregated relationship also aligns with a non-linear relationship between income and health

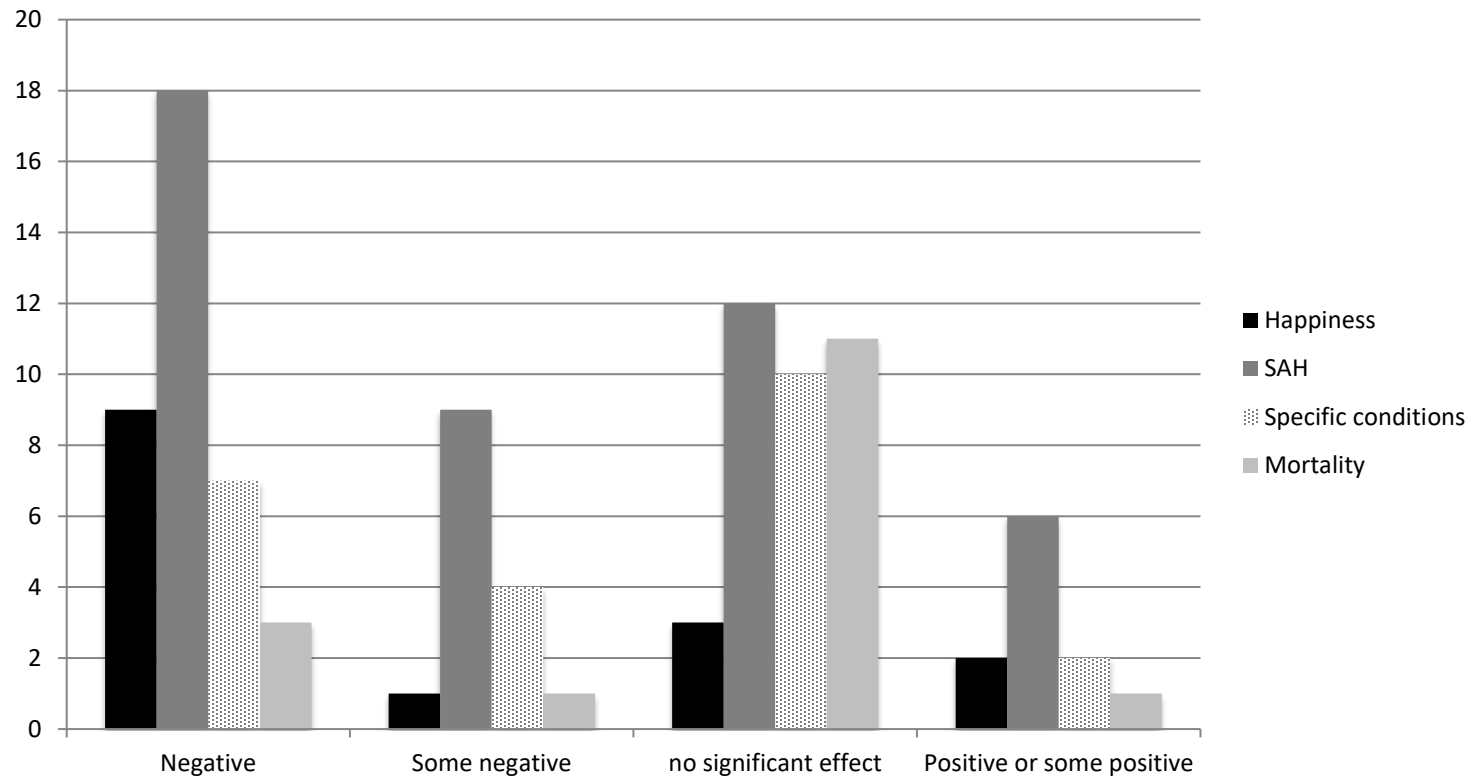
Estimates based on average health will be biased

# The importance of individual level data

The incomes of Anna, Benjamin and Cecilia in a hypothetical society



# Income inequality and individual health



Bergh, Nilsson & Waldenström (2016) + update 2022

- Mixed evidence

C.f. meta-studies on e.g. mental health: Ngamaba et al (2018), Silva Ribeiro (2018)

- Subjective vs. objective health
- Level of inequality exposure (country, region, city)
- Strong support for the notion that the level of income matters for health

- Multi-country studies

- More meaningful generalizations
- Low variation in inequality within countries
- -/0/+

- Studies trying to handle endogeneity problems

- Longitudinal data
- Quasi-natural experiments
- Lab-experiments

# Concluding remarks

- Need individual level data
- Mixed evidence
- Inequality doesn't seem to make us sick, but perhaps affect how we feel
  
- Magnitudes are rarely discussed
  - policy makers need to put costs in relation to potential gains
  
- Absolute incomes associate with health (dual relationship)



- Redistribution matters!
- What type: Early investments
  - The importance of the early life environment
  - Bhalotra m.fl. (2017, 2021) on effects of infant care on health and labour market outcomes across the life course
  - Fischer m.fl. (2020, 2021) on the effect of education on health and later life outcomes

Thank you!