Trends in intergenerational income mobility in Sweden

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Outline

Introduction

- the importance of family background for social and economic status is subject to considerable public and social-scientific interest
- that interest is in part driven by ethical interest: great importance of family background in the distribution of social and economic positions may signal lack of openness and much inequality of opportunity
- the relationship between family background's importance, inequality of opportunity, cross-sectional inequality and social justice raises complicated questions, which I will *not* address here
- I am also *not* here concerned with either theoretical issues or causal questions
- instead, I will attempt to highlight some problems with the recent interest in what is called *absolute* intergenerational income mobility
- the background is a report prepared by Jesper Roine and myself for the Swedish Economic Policy Council this spring

The "W" issues for mobility analysis

Any study of income mobility faces three "W" issues: mobility of What, among Whom, and When? Studies of trends over time or across countries add another issue, that of comparability.(Jäntti and Jenkins, 2015, p. 856)

- the 3 "W" questions:
  - "What": which income concept should be used to measure economic living standards?
  - "Whom": who are "children" and who are "parents"? What circumstances should be taken into account? E.g. personal incomes only or family/household incomes?
  - "When": what is the appropriate interval within which incomes should be measured? At what *age* should we measure parental income and offspring income? E.g. parental income when offspring are g
- we argue that the *ideal* answers to these questions depend on the question being asked and answered.

The question

- are children economically better off that their parents?
  - attempt to measure living standard as it is measured in income distribution research, what in Sweden is known as “economic standard”
  - focus on income
  - will emphasize disposable household income, adjusted for household needs
- other questions may require a different focus

Literature in economics

- relative mobility: Solon (2002); Jäntti and Jenkins (2015); Björklund and Jäntti (2020)
- absolute mobility: Chetty et al. (2017); Manduca et al. (2020)

There is a *huge*, deep, and very insightful literature in sociology, both within and across countries, on intergenerational mobility. The interested reader can start by consulting Erikson and Goldthorpe (1992).

Data

- incomes for the years 1968-2018 (and limited data for 1960-66; not used here)
- focus on incomes during a few years (baseline: 5 years) around age 40
- oldest parents born in 1930, youngest offspring born in 1976
- we have information on marital status, children (for both parents and offspring), place of birth (including outside of Sweden), educational attainment and so on
- look at "biological" kinship
- data based on population registers (and are population data, not a sample)

Disposable income: a double sum

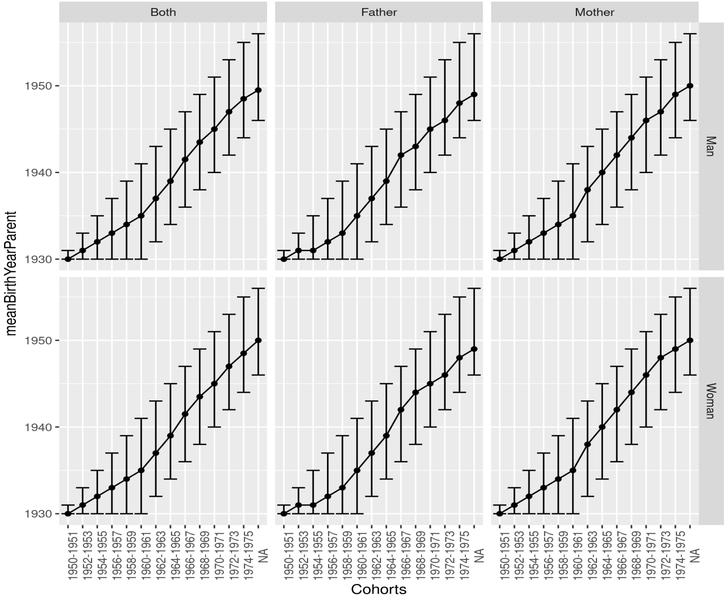
		HH members			
	Income component	A	B	...	Aggregate
	Earnings	✓	·	·	·
+	Capital income	·	·	·	·
=	**Factor income**	✓	·	·	·
+	Transfers	·	·	·	·
−	Direct taxes	·	·	·	·
=	**Disposable income**	✓	·	·	✓

Note that "A+B" for now entails summing across columns *and* taking into account the equivalent number of family members.

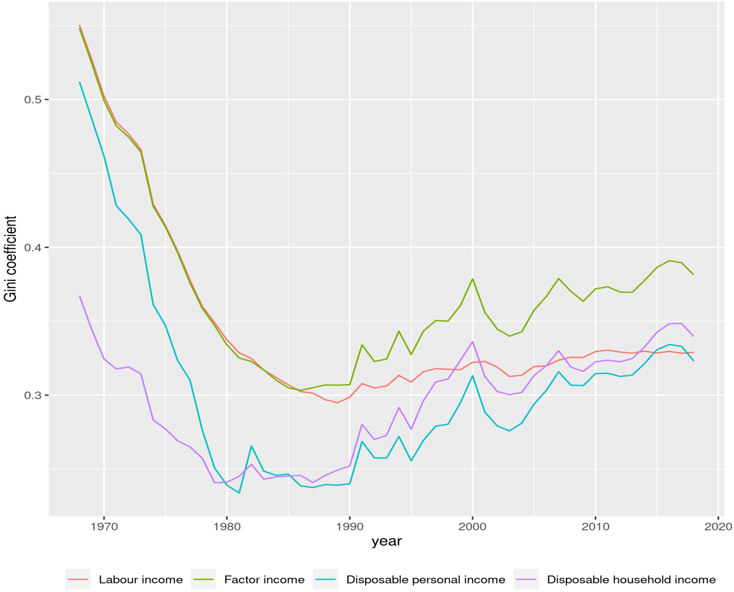
Do different choices matter?

- focus on four income concepts: earnings, factor income, personal disposable income and disposable household income (adjusted for family size)
- average across $T = 5$ years around age 40 for both parents and offspring
- limit parent-offspring age difference (i.e., parent's age when offspring was born) to 20–30 years
- results appear to be robust wrt averaging and parent-offsrping age difference

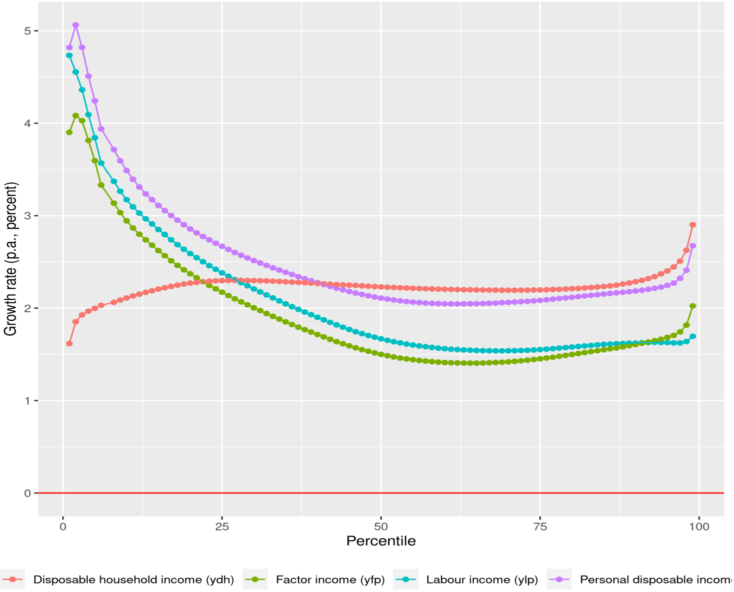
Offspring cohorts and parental birth years



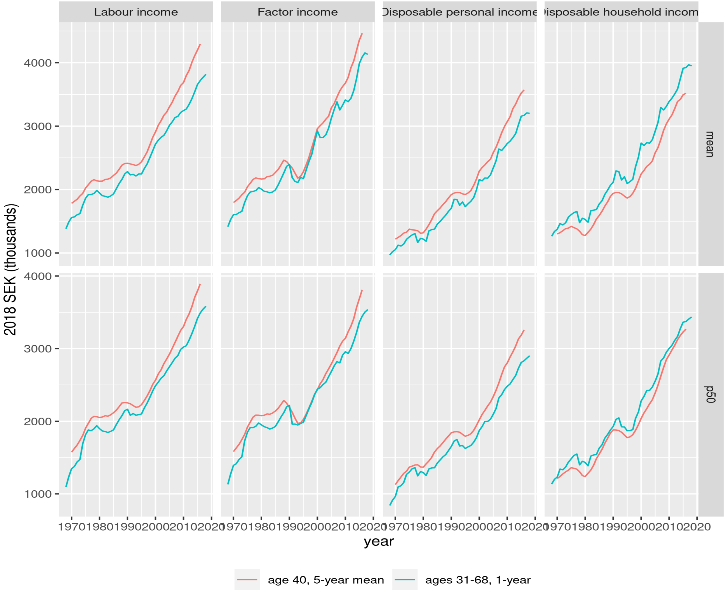
Inequality in cross-section



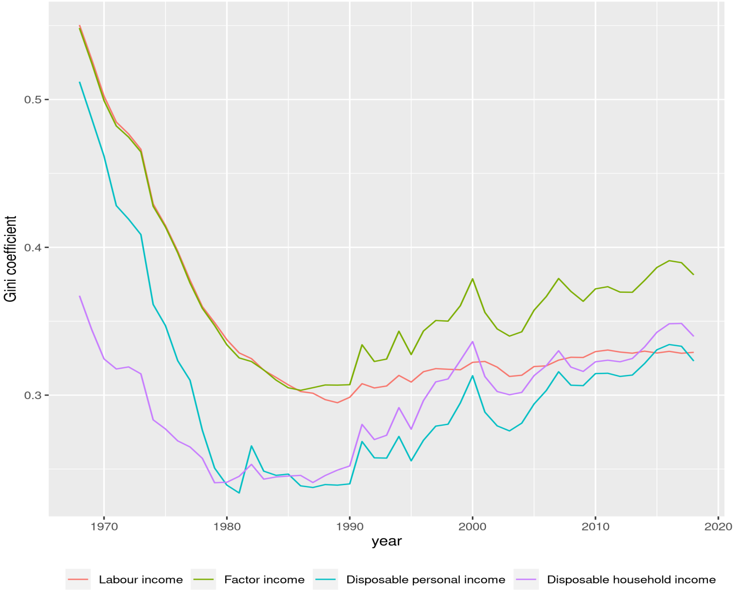
Growth-incidence across full period



Cross-sectional and longitudinal income



Inequality in cross-section

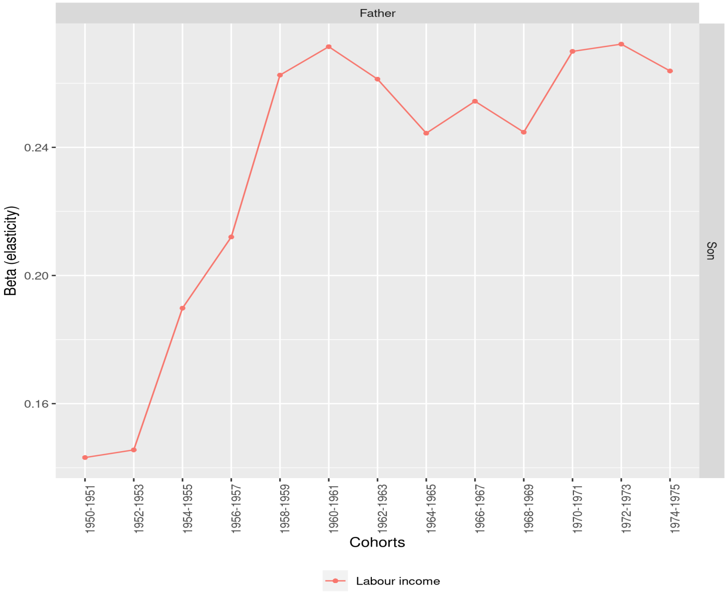


Inequality in cross-sectional and longitudinal income

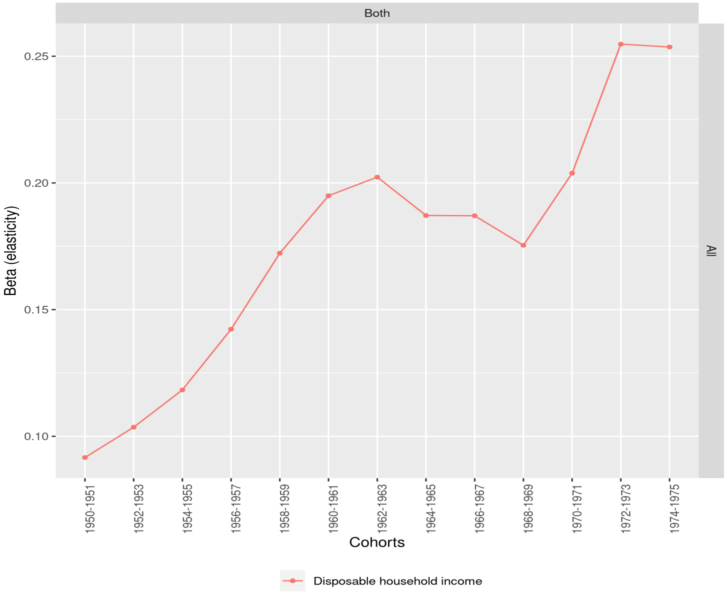
Results (lots of...)

- relative mobility (elasticity, rank correlation)
- absolute mobility (conditioning on various characteristics)
- growth incidence (anonyous, non-anonnymous)

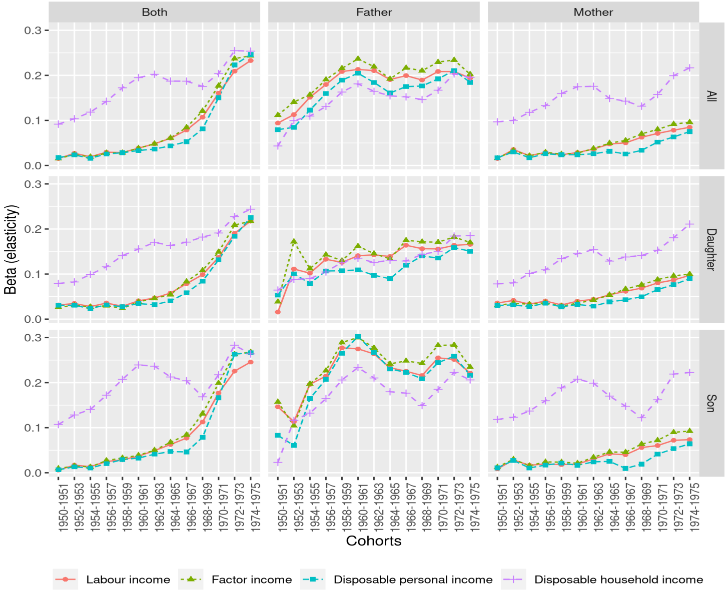
Relative intergenerational mobility – elasticity father-son earnings



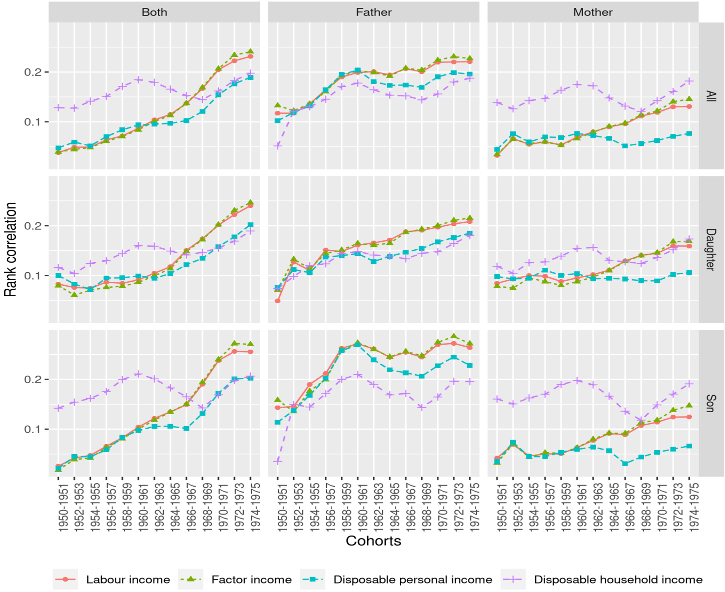
Relative intergenerational mobility – elasticity parent-child disposable household income



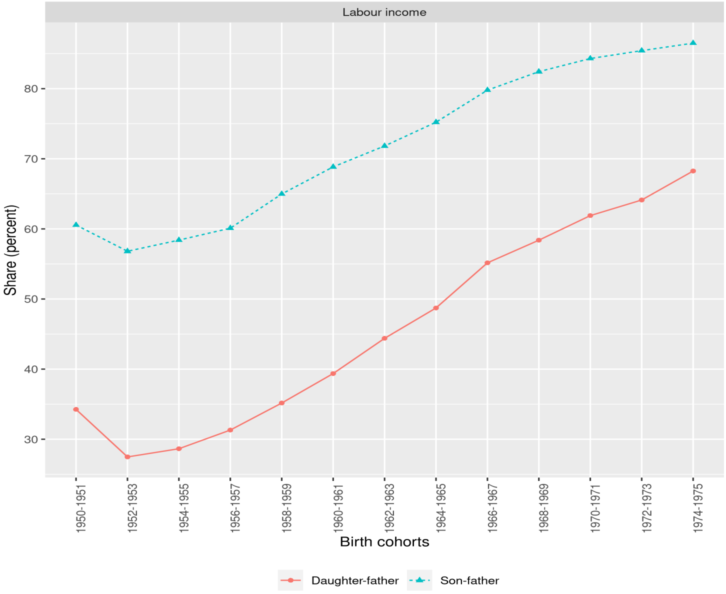
Relative intergenerational mobility – elasticity



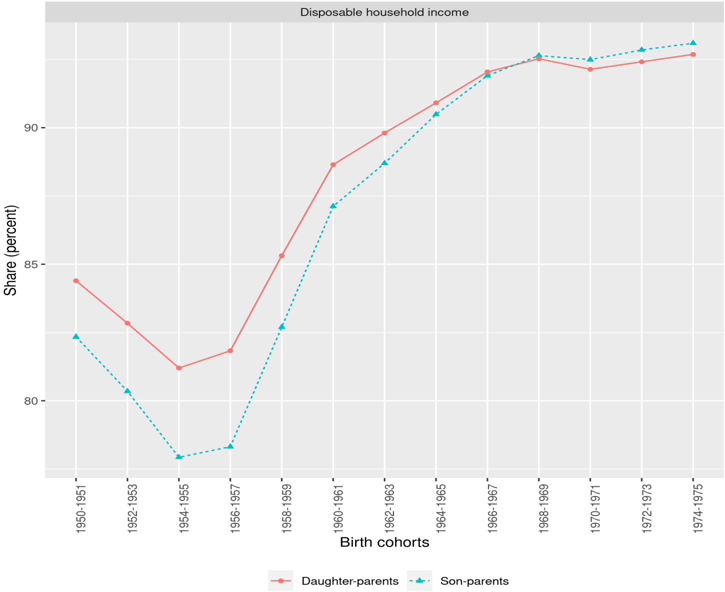
Relative intergenerational mobility – rank correlations



Fraction of children with income higher than parents – earnings



Fraction of children with income higher than parents – disposable household income



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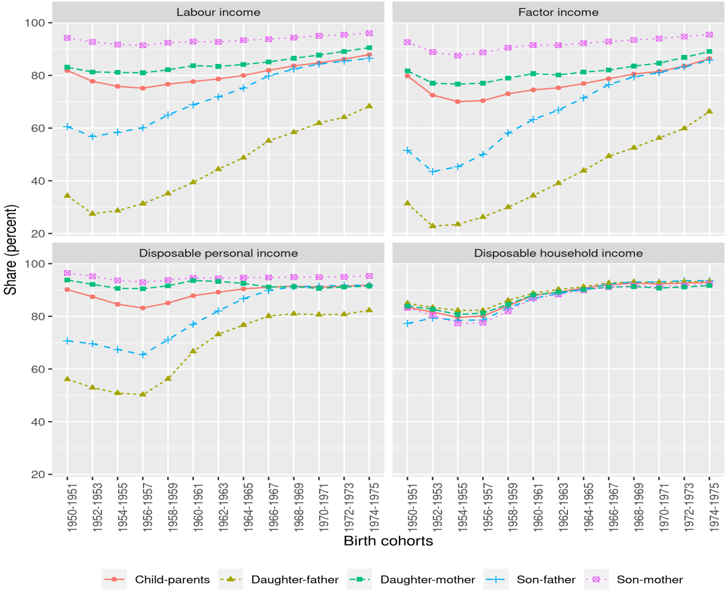
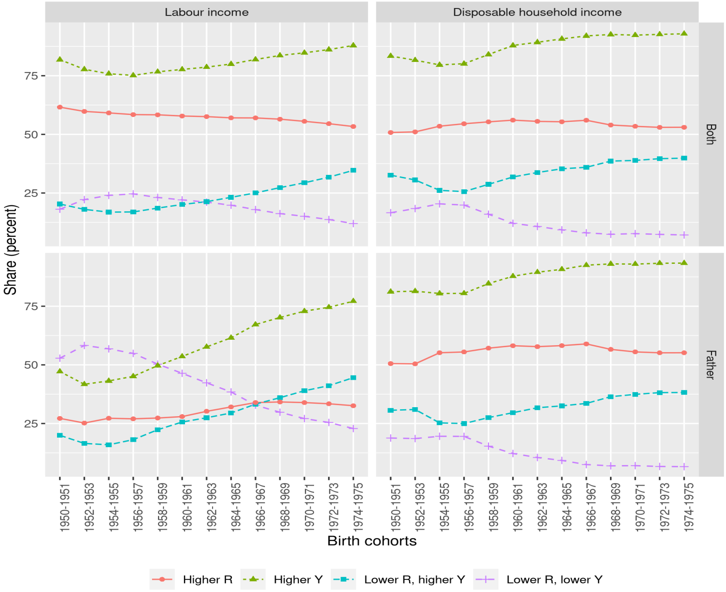
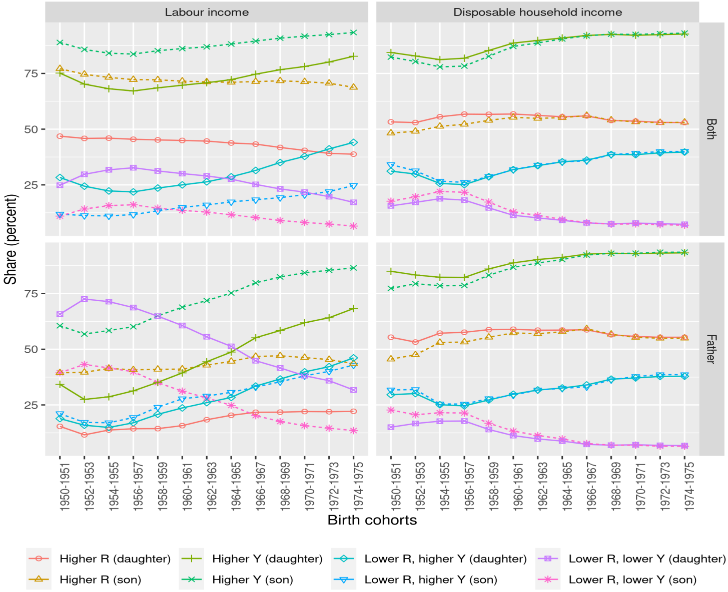


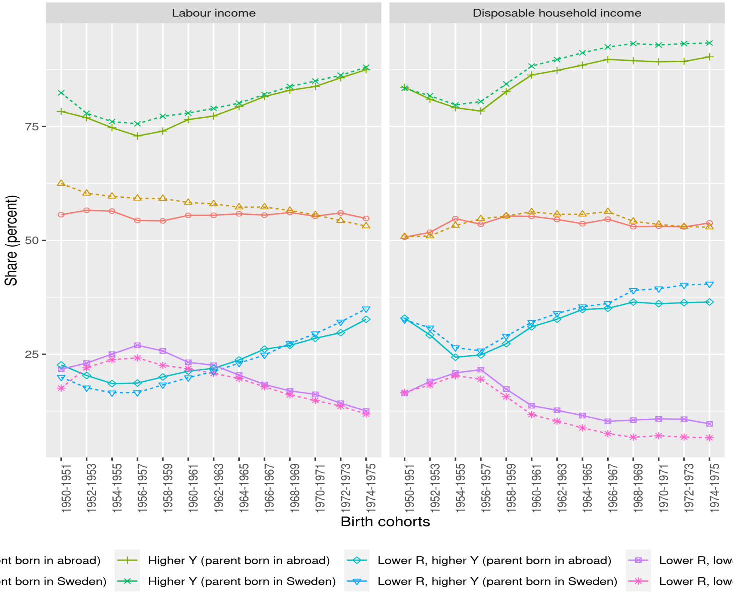
Dimensions of absolute mobility



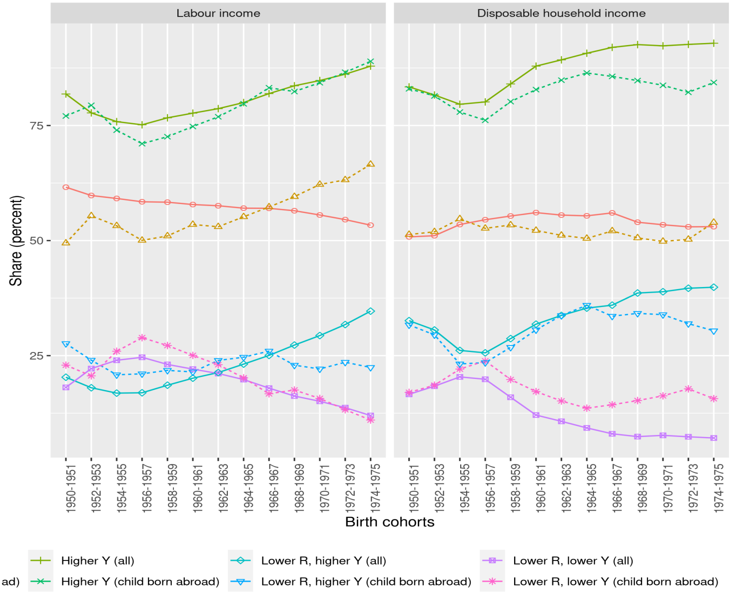
Dimensions of absolute mobility – by gender



Absolute mobility by offspring born in Sweden/not in Sweden



Absolute mobility by offspring born in Sweden/not in Sweden



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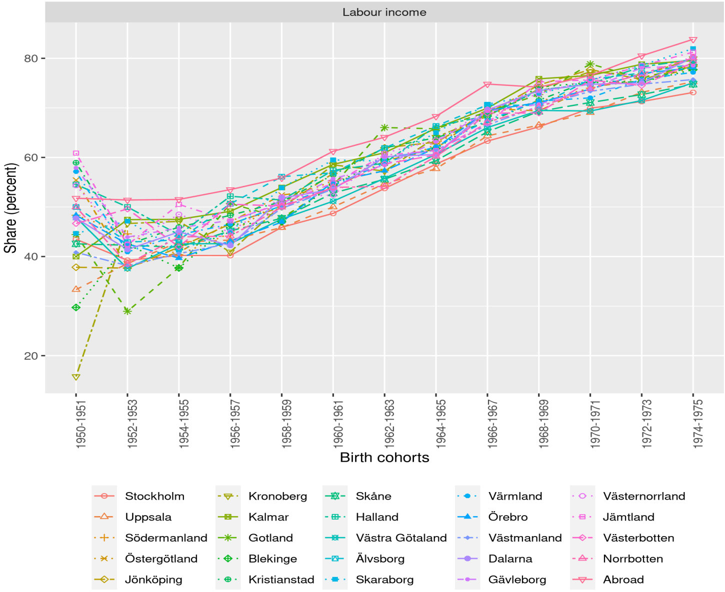
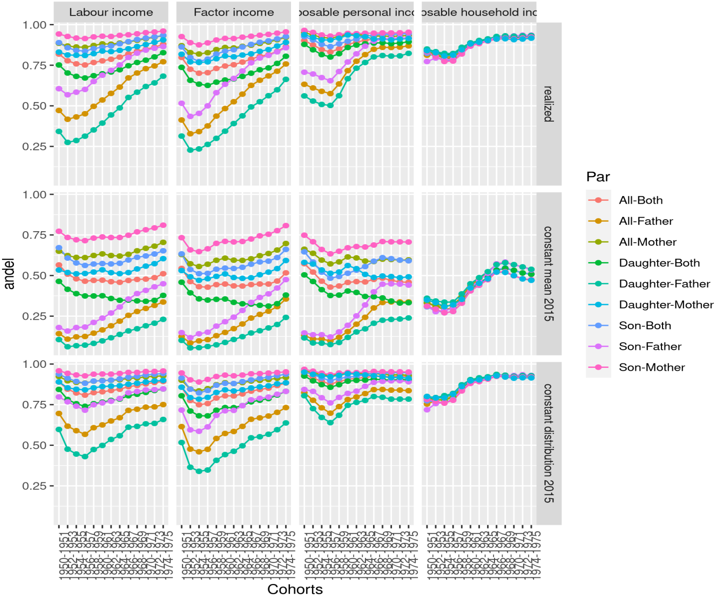
Absolute mobility by birth region – earnings



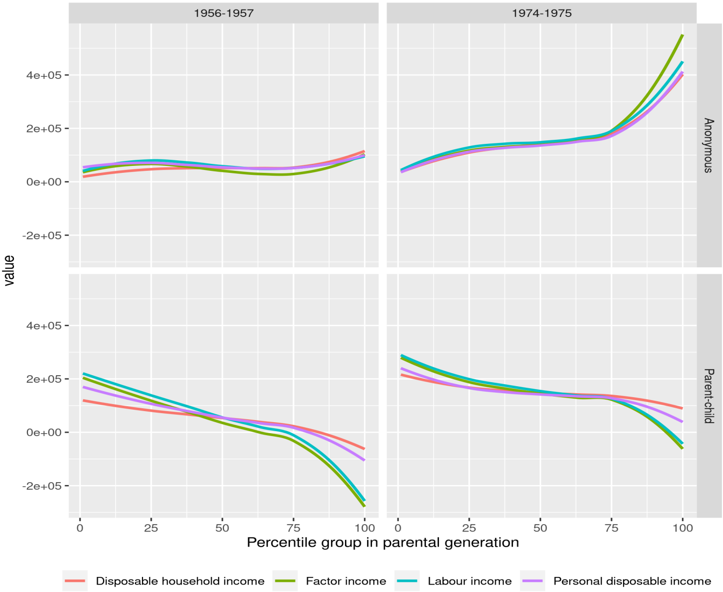
Counterfactual mobility – no growth or constant inequality



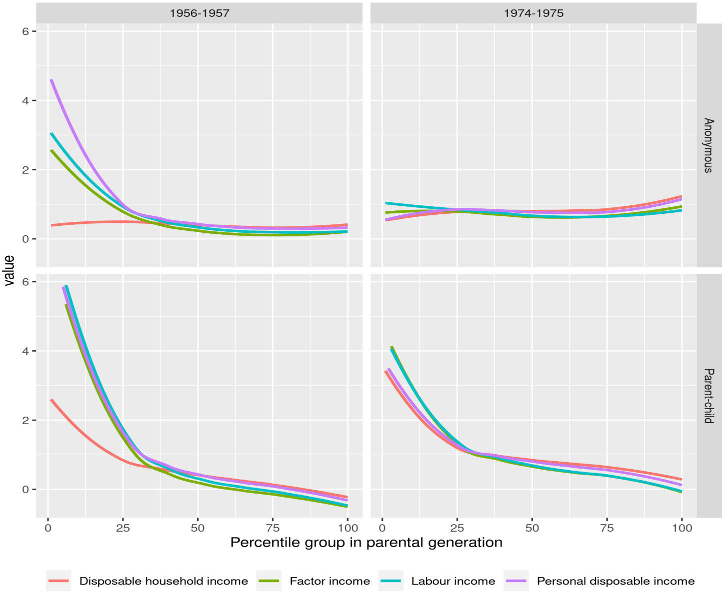
Welfare-economic reflections

- what exactly it is we learn from “absolute” comparisons is the subject of a long literature in economics
- some quick reflections:
  - the proper unit of well-being is usually thought to be the individual. . .
  - . . . but the formal welfare economics treatment often slips into looking at the (male) dynastic line (esp. father-son) as its unit
  - a more intelligible approach is to treat the individual as the relevant well-bing unit but possibly evaluate their well-being *with reference* to parental living standards
  - the “distance” to be travelled from fix-price earnings/factor incomes to living standards is very long (and disposable household income is but one stop along that journey)

Change Incidence Curves – anonymous and parent-child income change (in SEK)



Growth Incidence Curves – anonymous and parent-child income growth (in %)



Concluding comments

- to what extent are children economically better off than their parents and how has this changed across time?
- the answer depends very much on what is meant by “parents”, “children”, “economically” as well as “better off”
- as a descriptive excercize in social statistics, the question can be answered
- for a deeper, welfare-economically grounded answer, more needs to be known

Björklund, Anders and Markus Jäntti (Feb. 2020). "Intergenerational mobility, intergenerational effects, sibling correlations, and equality of opportunity: a comparison of four approaches". In: *Research on Social Stratification and Mobility* 70. DOI: 10.1016/j.rssm.2019.100455. URL: https://doi.org/10.1016/j.rssm.2019.100455.

Chetty, Raj et al. (2017). "The fading American dream: Trends in absolute income mobility since 1940". In: *Science* 356.6336, pp. 398–406. ISSN: 0036-8075. DOI: 10.1126/science.aal4617. eprint: https://science.sciencemag.org/content/356/6336/398.full.pdf. URL: https://science.sciencemag.org/content/356/6336/398.

Erikson, Robert and John Goldthorpe (1992). *The Constant Flux: A Study of Class Mobility in Industrial Societies*. Oxford: Clarendon Press.

Jäntti, Markus and Stephen Jenkins (2015). "Income mobility". In: *Handbook of Income Distribution*. Ed. by Anthony B Atkinson and François Bourguignon. Vol. 2. Elsevier. Chap. 10, pp. 807–935.

Manduca, Robert et al. (July 2020). *Trends in Absolute Income Mobility in North America and Europe*. IZA Discussion Paper 13456. IZA. URL: http://ftp.iza.org/dp13456.pdf.

Solon, Gary M (2002). "Cross-country Differences in Intergenerational Earnings Mobility". In: *Journal of Economic Perspectives* 16.3, pp. 59–66.