Track mobility

Loophole or second chance

Maarten L. Buis

Introduction

- Germany has a tracked educational system,
- and track placement happens early at about age 10.
- This tends to increase educational inequality.
- However, not everybody stays in their assigned track.
- This track mobility is an intentional part of the system.
- One of the hopes is that this ‘second chance’ reduces the negative impact of tracking.
- However, what kind of children will use such a ‘loophole’?

Questions

- To what extend was parental background associated with track-mobility?
- To what extend did this influence of parental background on track-mobility matter for the influence of parental background on the highest achieved level of education?

Why would track-mobility have a positive impact on educational inequality?

- One of the problems with early tracking is that at age 10 it is hard to predict which track is right for each child.
- Therefore, parental background can play a stronger role
- When children can become mobile they are necessarily older, so merit may play a stronger role at mobility compared to the initial track placement
- One can be mobile by obtaining a higher level of general secondary education within vocational education.
- These classes could act as a ‘safe haven’ for working class children to get higher levels of eduction.
- This way educational inequality during track-mobility may be less strong or even benefit disadvantaged children.

Why would parental background influence upward track-mobility?

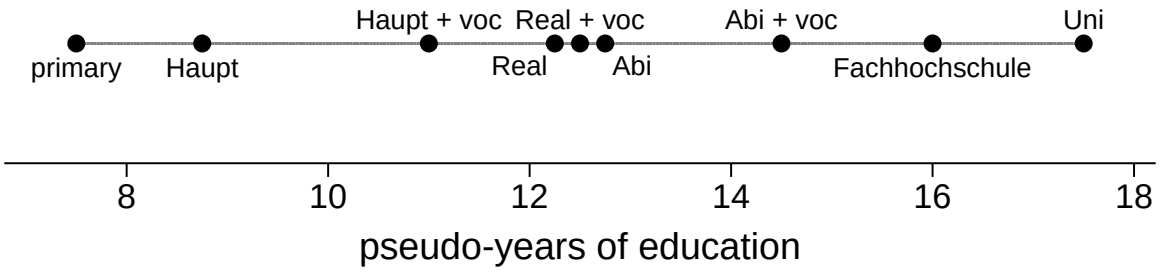
- Upward track-mobility is not free
  - it involves entering a new class and often a new school
  - it is uncertain whether one is successful
- If upward mobility is necessary for maintaining the same status compared the parents, then mobility is also associated with a big benefit.
- Moreover, higher school levels are less ‘foreign’ for children of higher educated parents, reducing the uncertainty.
- Together, this leads to the prediction that children from higher educated parents are more likely to be upwardly mobile.

Why would parental background influence downward track-mobility?

- Downward track-mobility often involves a decision between repeating a year versus moving down a track.
- Downward mobility can be assumed to be more costly if it involves ending up in a lower level of education compared to the parents.
- So children from higher educated parents are predicted to more often prefer repeating a year over downward mobility.

The German educational system

- Two forms of primary education: Grundschule and Volksschule
- After that one can enter three forms of General secondary education: Hauptschule, Realschule, Gymnasium,
- or sometimes postpone the choice by entering a Gesamtschule.
- After General Secondary education one can enter vocational education, a Fachhochschule, or a university.



Types of track-mobility

- You can enter a form of general secondary education, find that it is not for you, and move up or down.
- You can stay in your original level, but obtain a different diploma.
- You can finish your diploma, and than obtain an extra diploma

Data

- The data come from the adult cohort of the NEPS, which is part of a large German panel study.
- Though in this study I only use the retrospectively reported educational careers.
- I only use West-Germans older than 30 and born before 1977.
- This leaves 7,933 observations
- as explanatory variables I used
  - the respondent's sex,
  - birth year, and
  - the sum of parent's education in pseudo-years.

Model

- An adaptation of the Mare model: a set of (multinomial) logistic regressions conditional on being at risk.
- For example: Everybody who entered Hauptschule is at risk of finishing Hauptschule, entering Realschule, or finishing Realschule.

Relating effects on passing transitions to effects on the final outcome

- This describes the process of attaining education.
- This process leads to an end-result: the highest attained level of education.
- From the Mare model you can also derive an effect on the highest attained level of education.
- This effect on the highest attained level of education is a weighted sum of effects on each transition
- A transition receives more weight when
  - more people are at risk
  - passing or failing that transition is not almost universal
  - the expected gain in level of education from passing is higher

Track placement

origin	% at risk	destination	Frequency	%
enter Grundschule	100	finish Grundschule	6,582	83
		finish Hauptschule	1,351	17
finish Grundschule	83	enter Hauptschule	2,046	31
		enter Realschule	1,865	28
		enter Gymnasium	2,276	35
		enter Gesamtschule	304	5
		done Grundschule	91	1
enter Gesamtschule	6	finish Hauptschule	73	15
		finish Realschule	299	60
		finish Abitur	123	25

Track-mobility within general secondary education

origin	% at risk	destination	Frequency	%
enter Hauptschule	27	enter Realschule	240	11
		finish Hauptschule	1,697	80
		finish Realschule	182	9
enter Realschule	32	enter Hauptschule	73	3
		enter Gymnasium	81	3
		finish Hauptschule	65	3
		finish Realschule	2,303	90
		finish Abitur	21	1
enter Gymnasium	34	enter Realschule	241	9
		finish Realschule	358	13
		finish Gymnasium	2,207	79

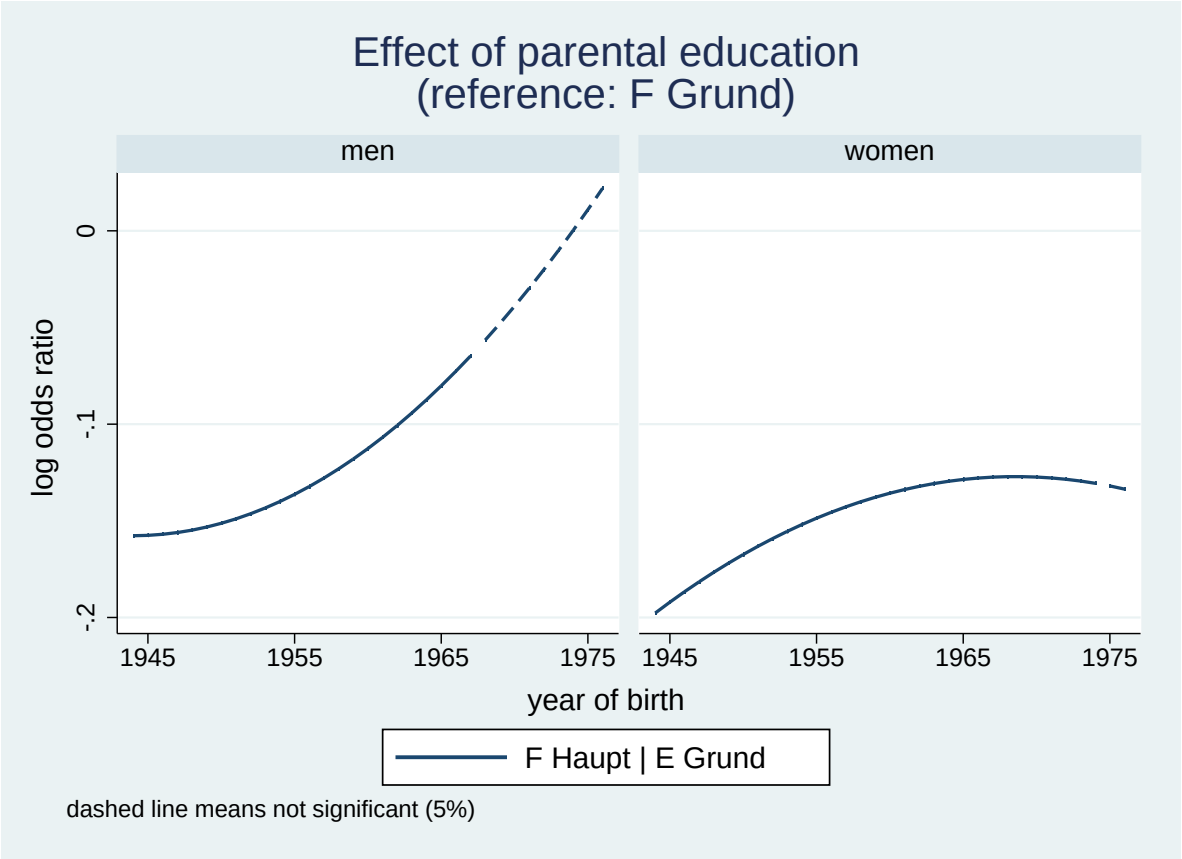
Track-mobility after general secondary education

origin	% at risk	destination	Frequency	%
finish Hauptschule	40	enter Realschule	197	6
		enter Gymnasium	62	2
		enter Gesamtschule	130	4
		enter Vocational, gen. sec.	439	14
		enter Vocational, Hauptschule	1,968	62
		done Hauptschule	390	12
finish Realschule	44	enter Gymnasium	387	11
		enter Gesamtschule	61	2
		enter Vocational, gen. sec.	535	15
		enter Vocational, Realschule	2,085	60
		enter Fachhochschule	64	2
		done Realschule	368	11
finish Abitur	37	enter Vocational, Abitur	1,224	41
		enter Fachhochschule	360	12
		enter University	1,058	36
		done Abitur	325	11

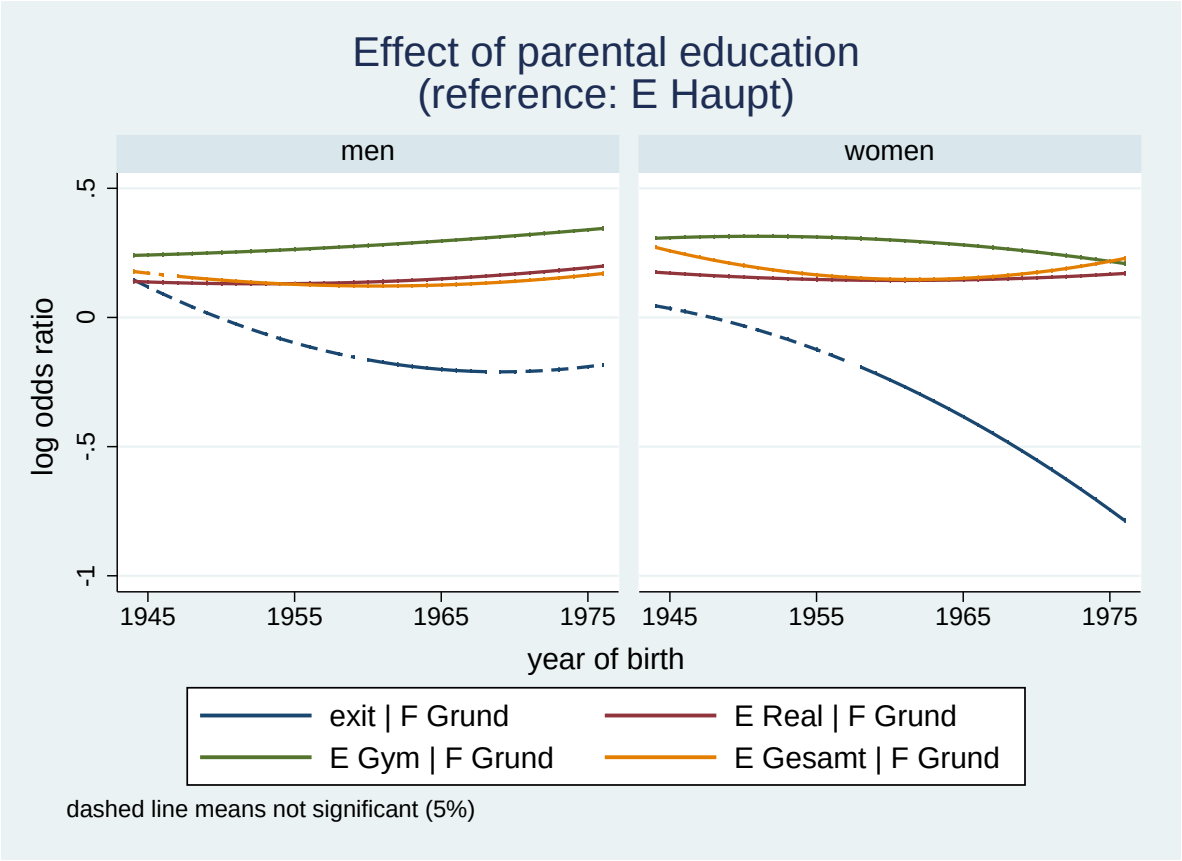
Vocational and Tertiary education

origin	% at risk	destination	Frequency	%
enter Vocational, gen. sec.	12	finish Realschule	358	37
		finish Abitur	616	63
finish Vocational, Haupt	24	enter Fachhochschule	28	1
		done Vocational, Haupt	1,940	99
finish Vocational, Real	26	enter Fachhochschule	112	5
		enter University	24	1
		done Vocational, Real	1,949	93
finish Vocational, Abi	15	enter Fachhochschule	276	23
		enter University	151	12
		done Vocational, Abi	797	65
finish Fachhochschule	11	enter University	52	6
		done Fachhochschule	788	94

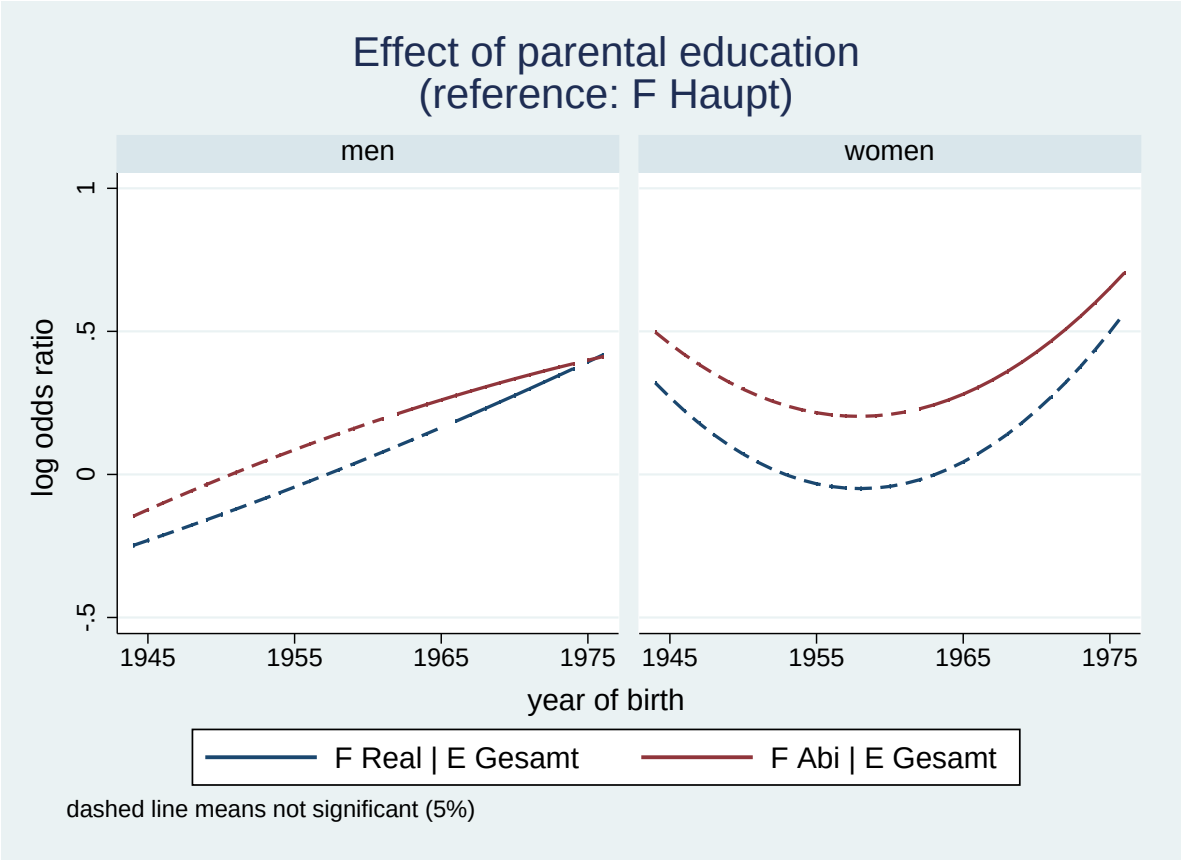
Grundschule versus Volksschule



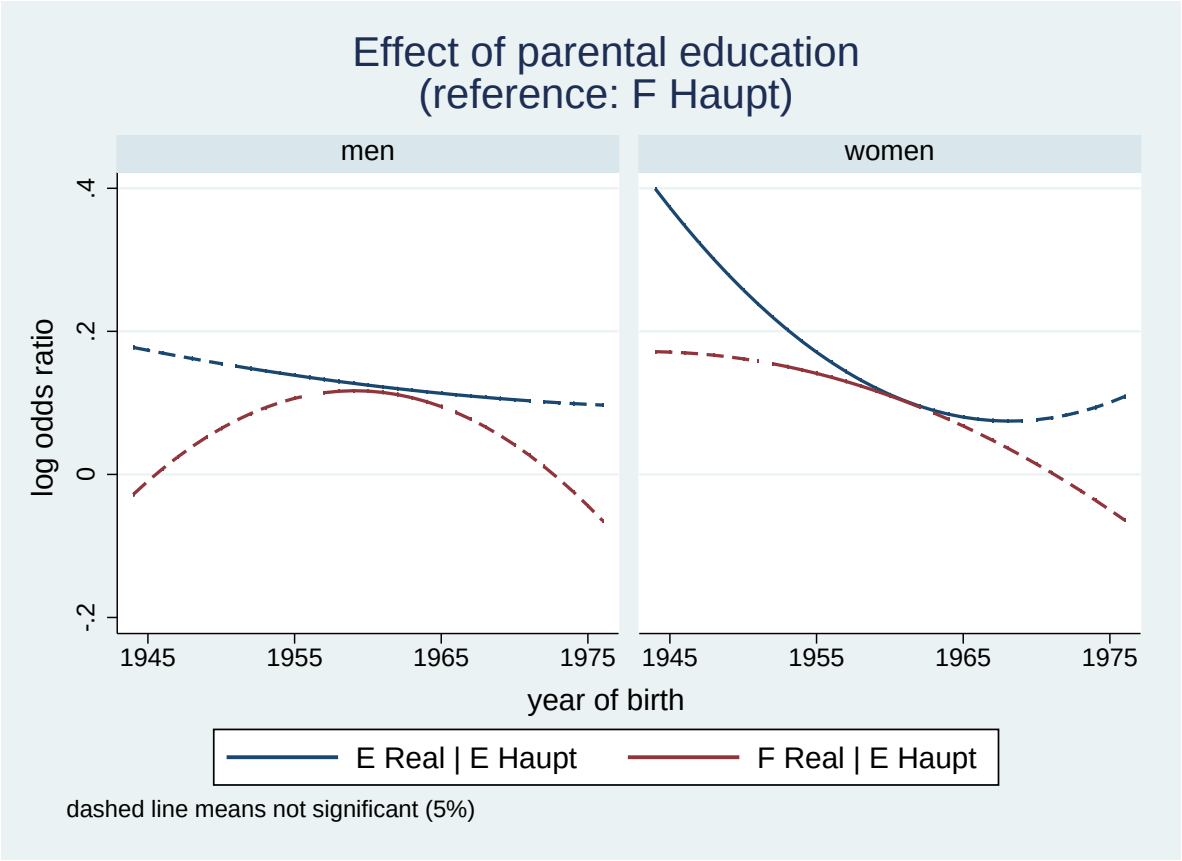
Initial track placement



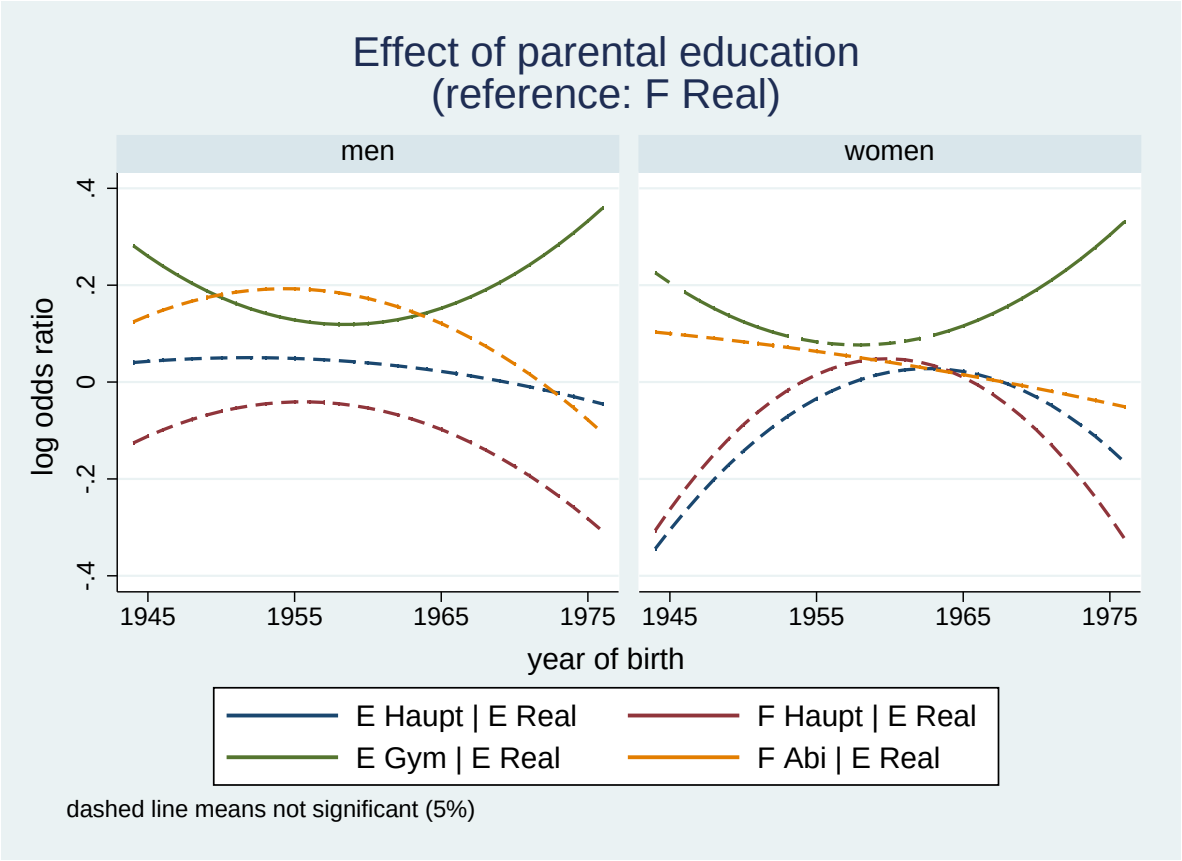
Track after entering Gesamtschule



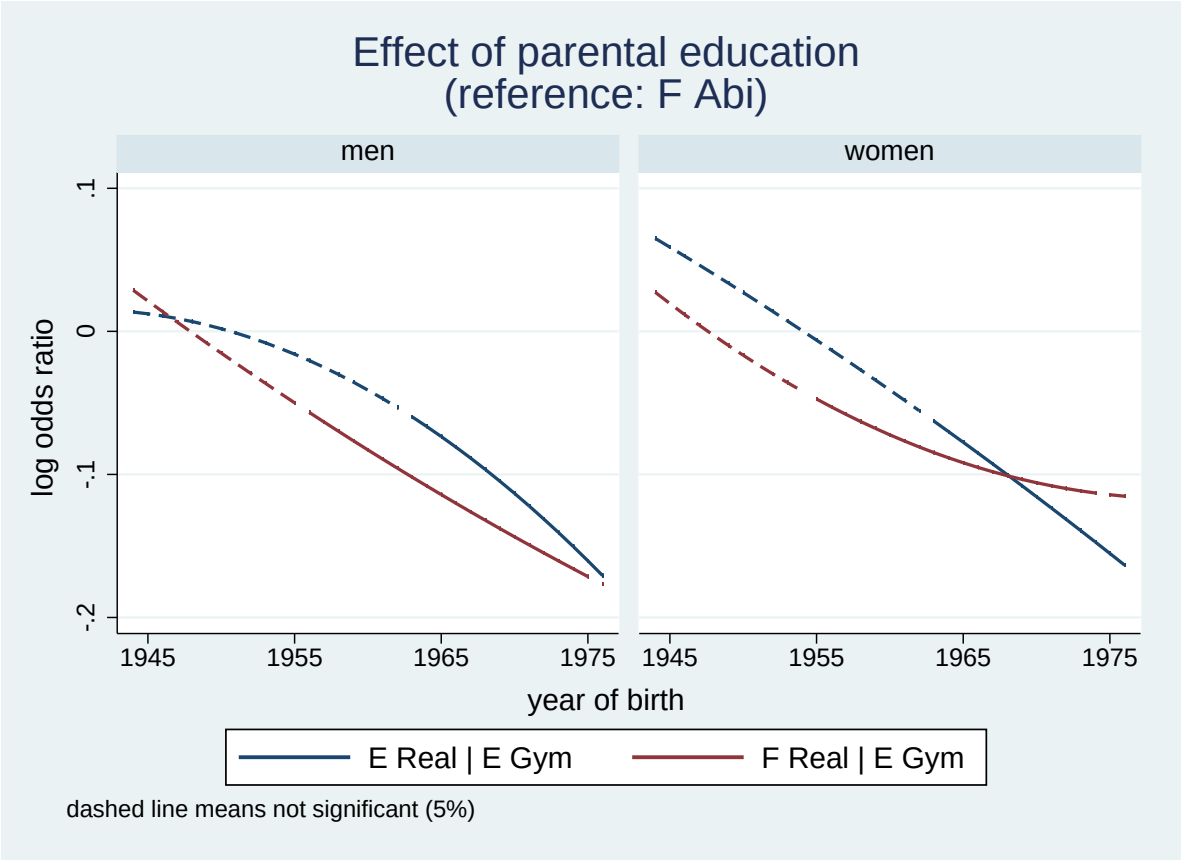
Mobility after entering Hauptschule



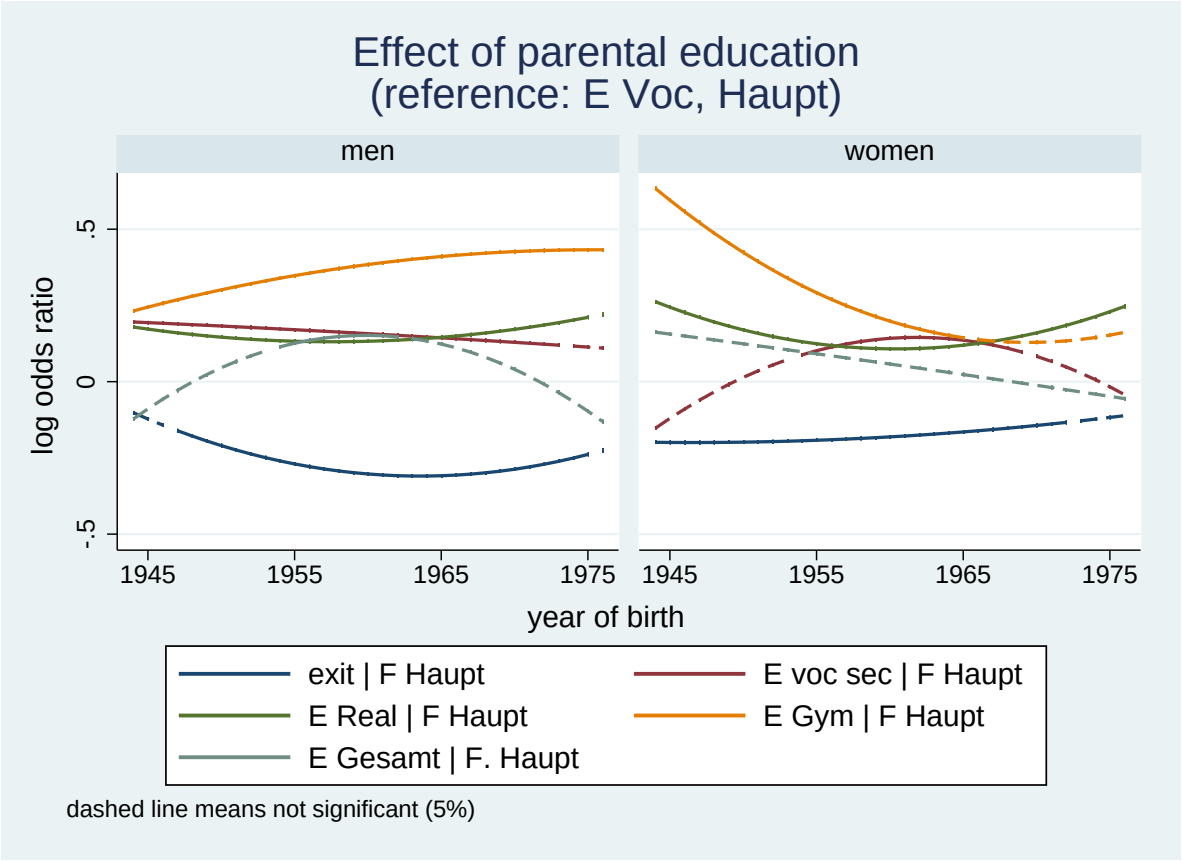
Mobility after entering Realschule



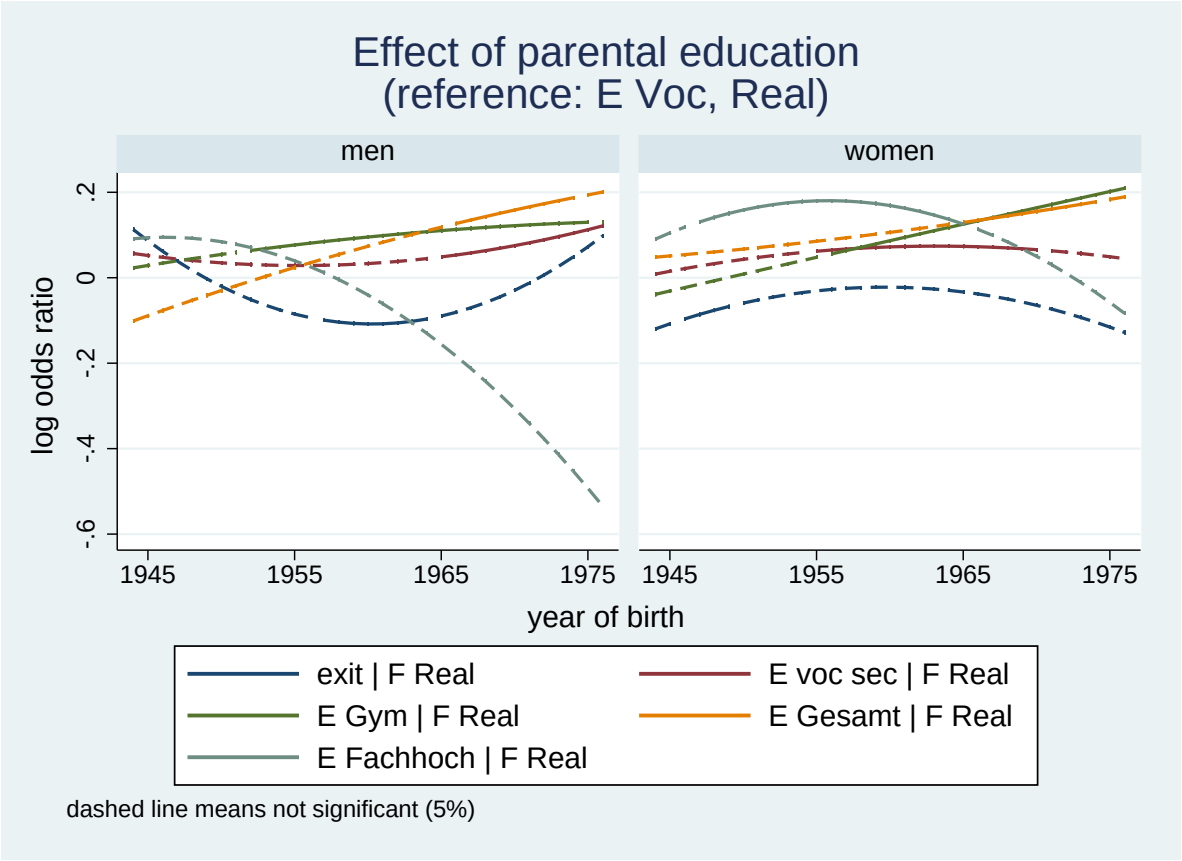
Mobility after entering Gymnasium



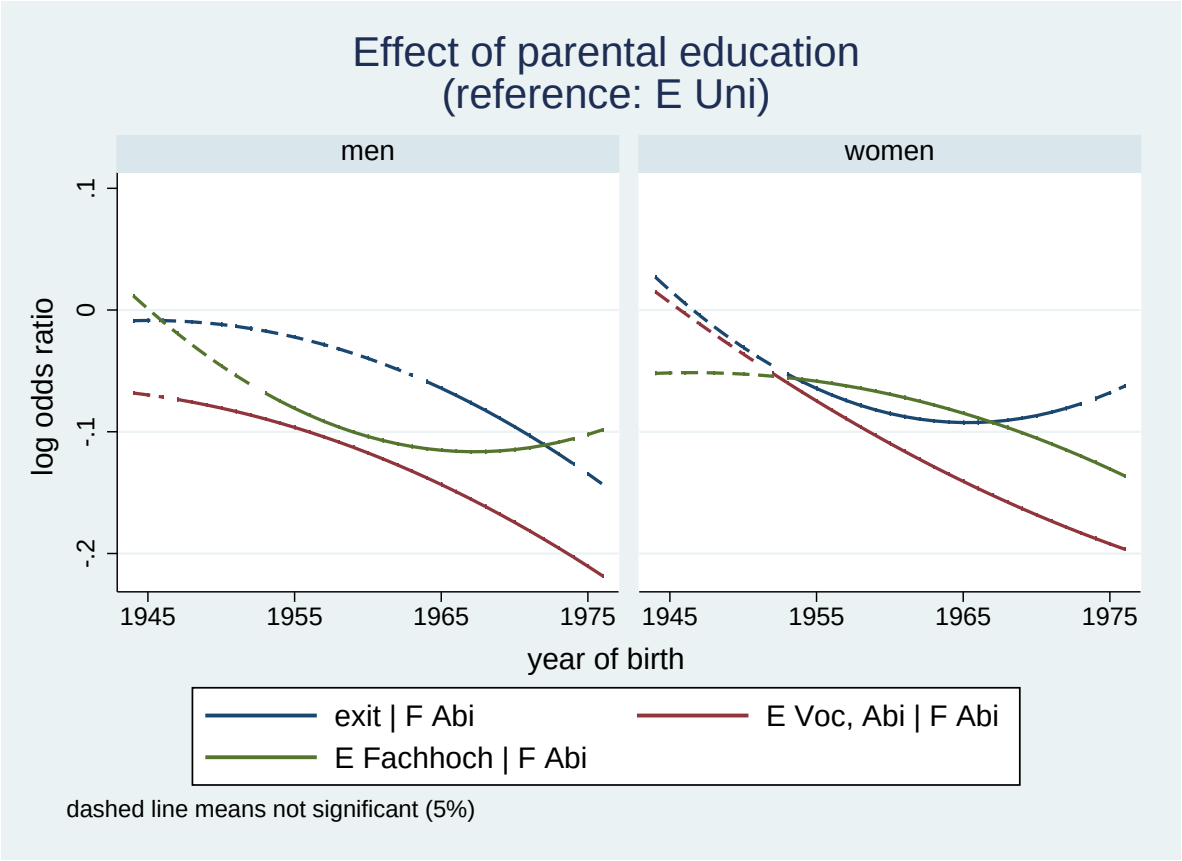
Mobility after finishing Hauptschule



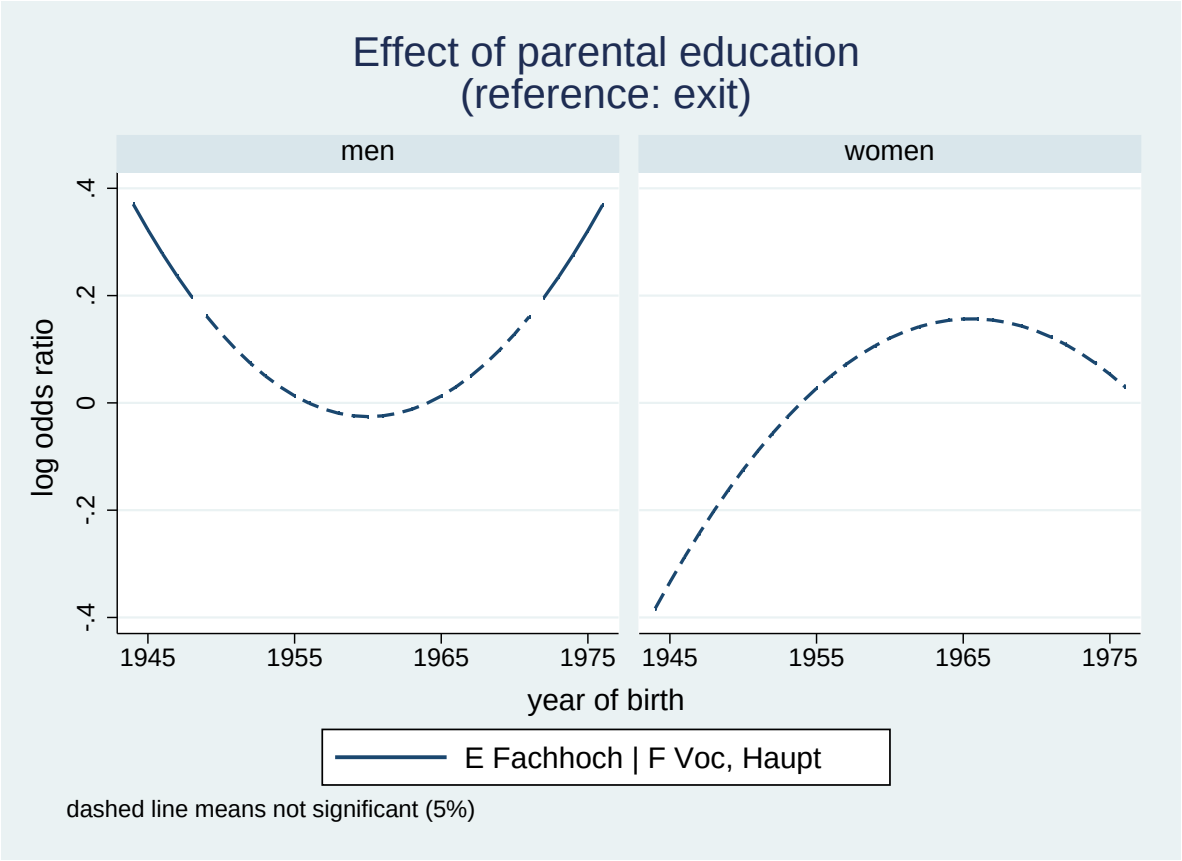
Mobility after finishing Realschule



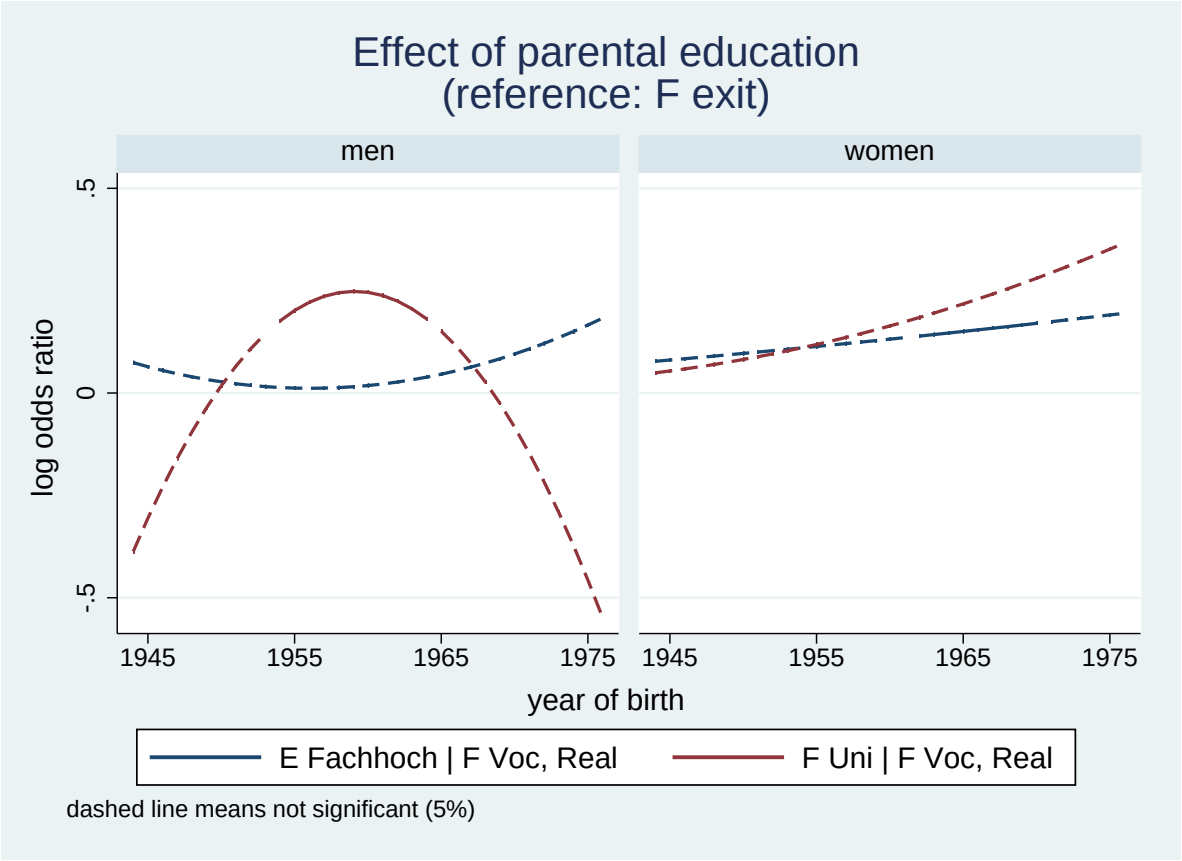
Mobility after finishing Abitur



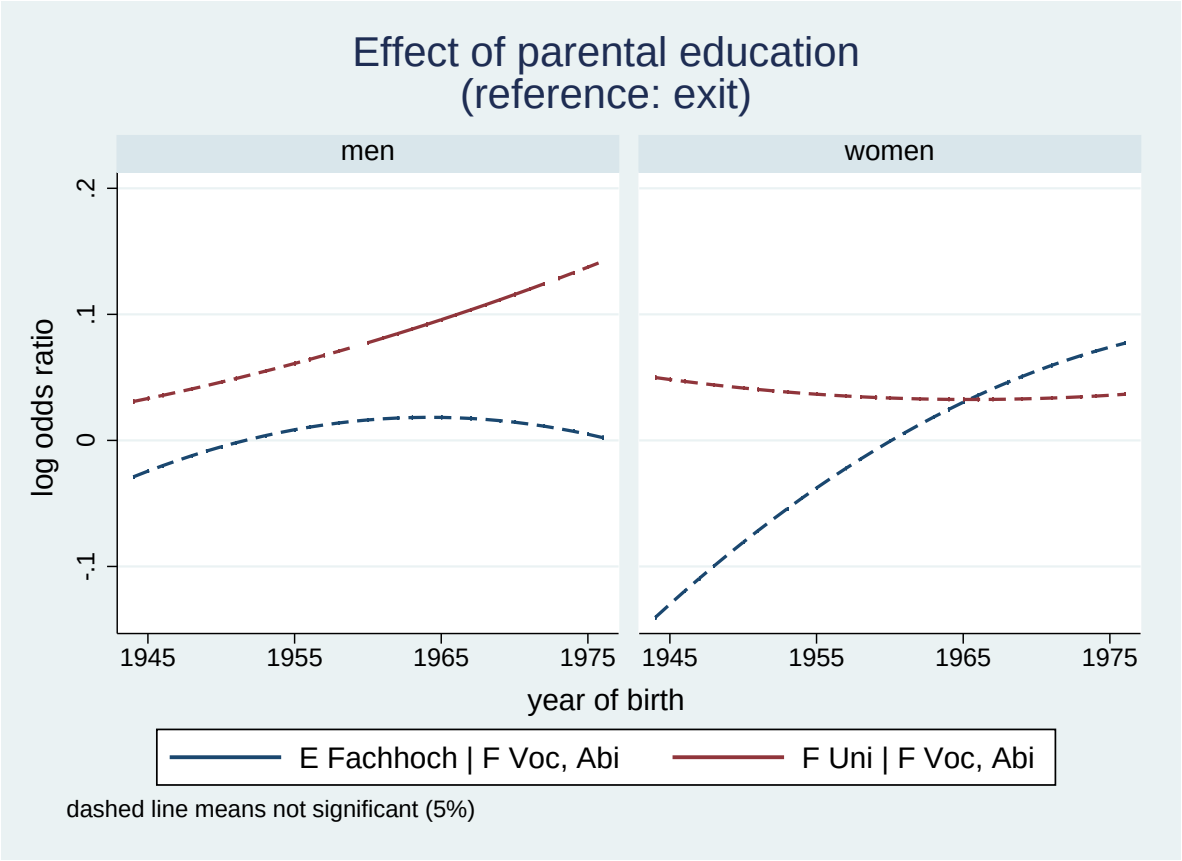
Mobility after finishing Vocational, Hauptschule



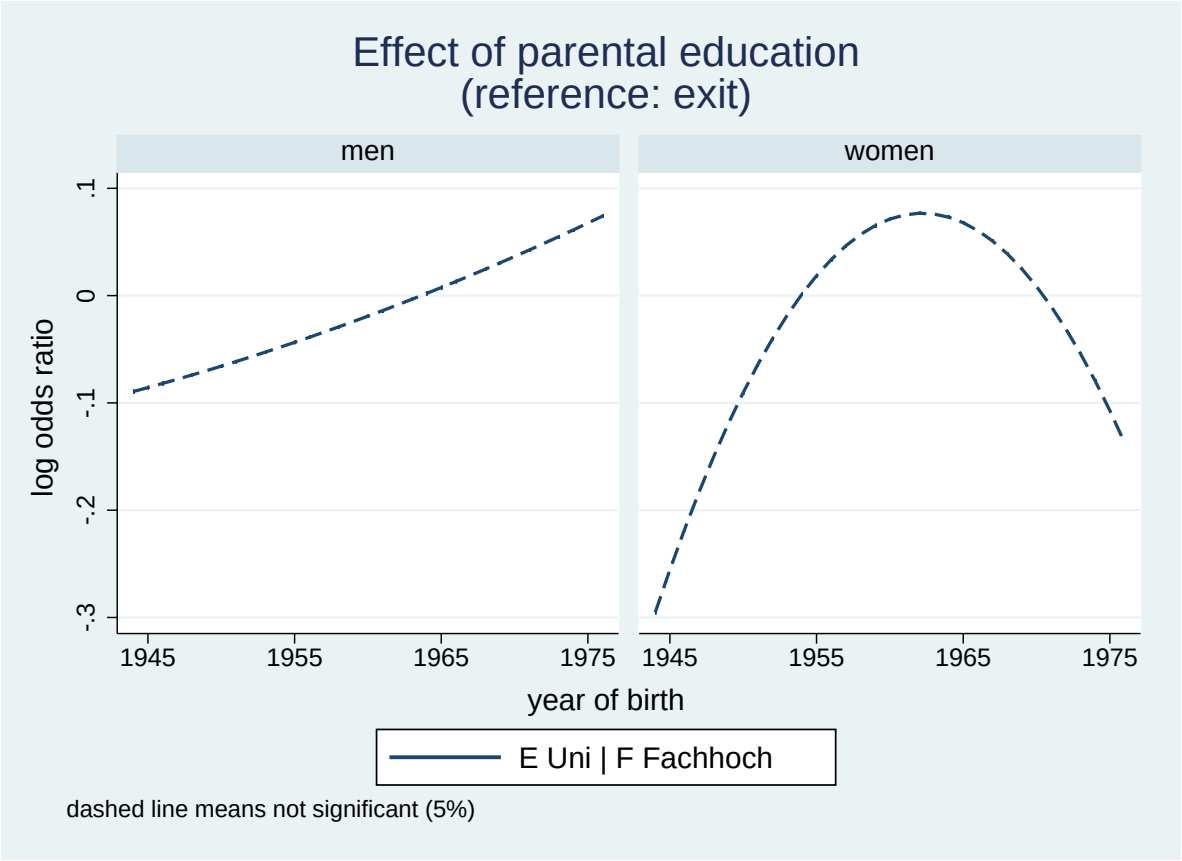
Mobility after finishing Vocational, Realschule



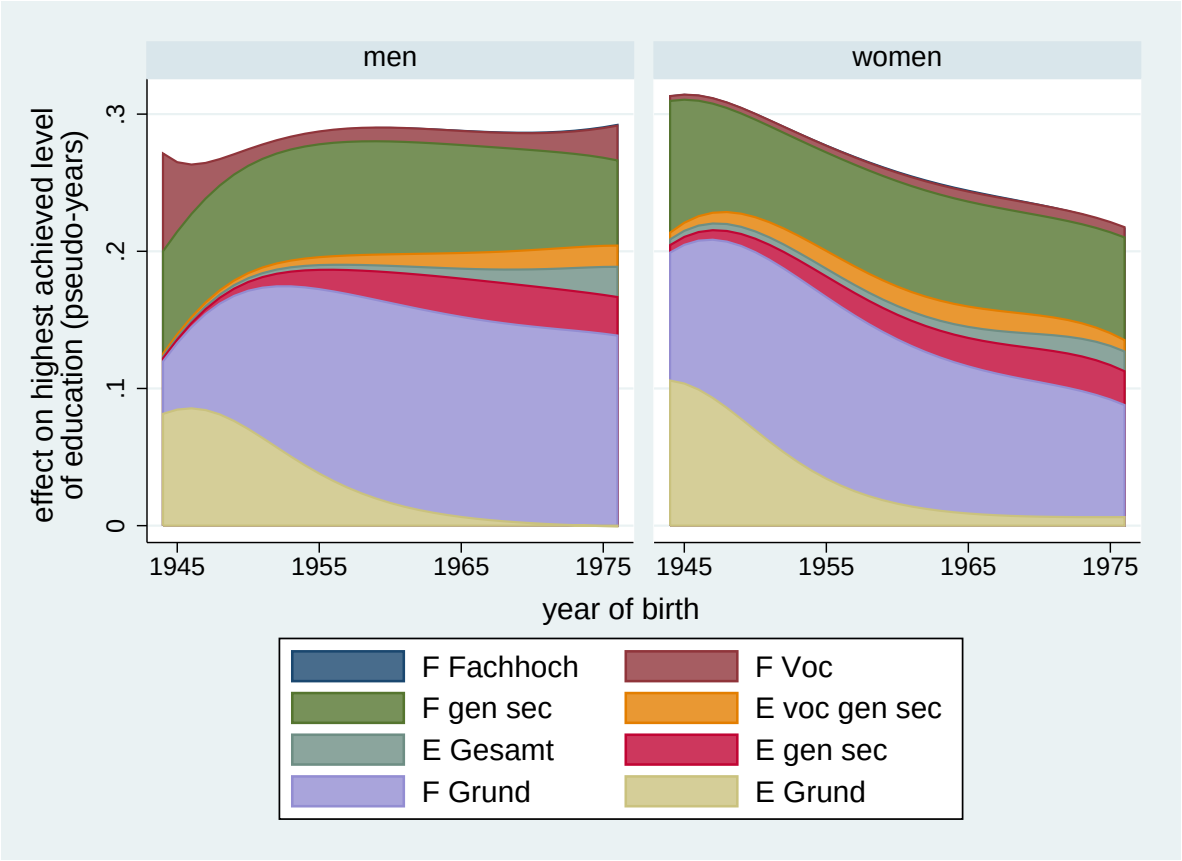
Mobility after finishing Vocational, Abitur



Mobility after finishing Fachhochschule



Decomposing the effect



Conclusions

- parental education tend to have a positive influence on upward track-mobility and a negative influence on downward track-mobility.
- All forms of track-mobility increased the inequality of educational outcome, but especially track-mobility in the form of obtaining an extra general secondary diploma after finishing a general secondary diploma.