Effects of internal migration on the life satisfaction of apprentices

‚The Power of Where‘
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Research gap

Current literature

- Life satisfaction (LS) can be affected by life events such as internal migration (Luhmann et al. 2012)
- For DE: Kratz 2020, Erlinghagen et al. 2021
  - Positive and lasting effects
    - Mainly significant for housing-related moves, marginally significant for job & family
    - Insignificant for individuals with education below VET* (ISCED < 3)
    - Also: Melzer 2011, Melzer/Muffels 2017, Nowok et al. 2013 (UK)
- Perales 2017, Switek 2016: positive effects for young adults (AU, UK, SW)

*Vocational Education and Training

Research question

- **None of these studies consider mobility at the transition into VET as a particular life event**
  - “Coupled life event” (Buchmann / Kriesi 2011)

- **How does the coupled life event of *entering VET* and *migrating internally* change life satisfaction?**

Theory and hypotheses

Main hypothesis: positive effect of migration

- SPF theory: both, entering VET and migration result from deliberate decisions and should, therefore, aim at an overall increase in LS (Ormel et al. 1999)
  - Conflicting goals (attaining VET, closeness to family, …) have to be weighed against each other
  - Final decision may be a compromise
  - Migrating should generally be considered the best option by migrants, but specifics may depend on the circumstances
  - Empirical findings generally support this notion

H1: Generally positive effects of VET-related migration on the life satisfaction of apprentices

Theory and hypotheses

Moderators

- The effect of VET-related migration may be moderated by :
  - VET opportunities in the home region (VET-OS)
  - Occupational status attained through VET
  - Type of destination area (rural / urban)

Theory and hypotheses

Moderators

- VET opportunity structure in the home region:
  - Less VET positions per capita
    - Less chances of finding a VET position
    - Lower LS gain threshold for a positive decision to migrate
  - *H2a: LS gains from VET-related migration are smaller the worse the VET-OS of the home region is.*

However…

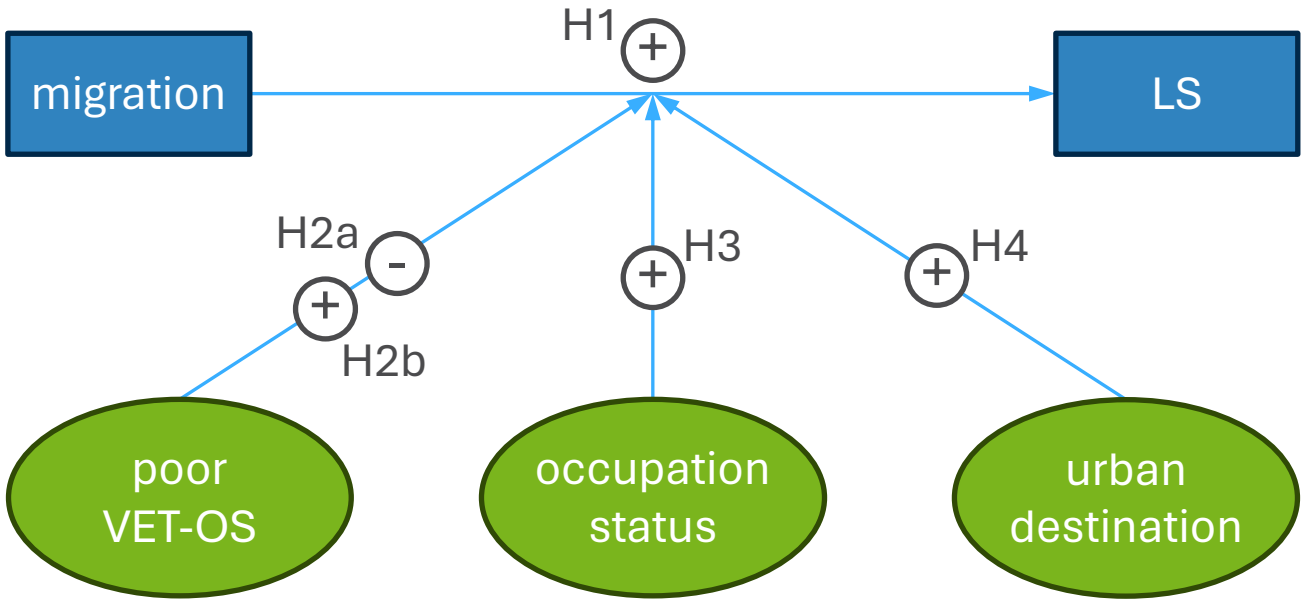
- Less VET positions per capita
  - More to gain from a move to another region (experience of overcoming a poor VET-OS)
  - *H2b: LS gains from VET-related migration are larger the worse the VET-OS of the home region is.*

Theory and hypotheses

Moderators

- Occupational status attained through VET:
  - Status an important factor in choosing an occupation
    - Widening the search radius may make higher status occupations available
  - *H3: Attaining a high-status occupation should increase the effect of VET-related migration.*
- Destination area:
  - Urban areas offer additional amenities, particularly for young adults
  - Migrating to an urban area grants access to these amenities
  - *H4: VET-related migration towards urban areas should have larger positive effects than migration towards rural areas.*

Theory and hypotheses



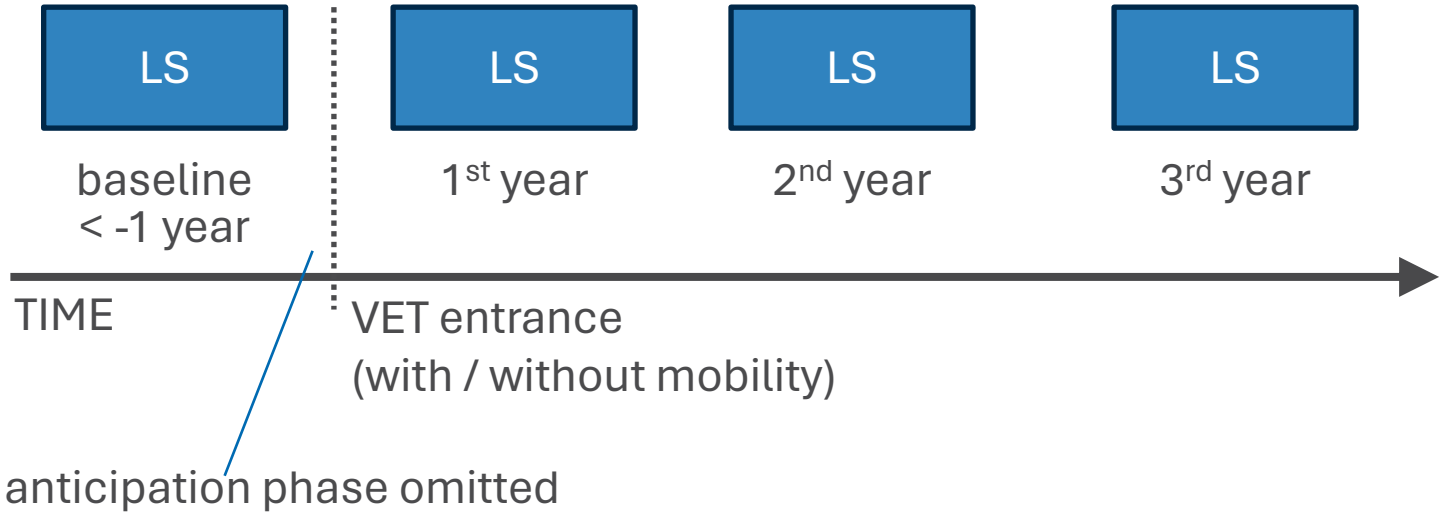
Data

NEPS SC4

- German National Educational Panel Study (NEPS) Starting Cohort 4
- Begins in grade 9
  (graduation year for lowest school degree)
- Data available for 13 waves
  - Survey administration roughly biannually to annually
- Respondents:
  - Total: N = 16,425 students
  - Of which enter VET at least once: N = 7,156
    - Only first VET spell used
  - Usable sample: N = 6,757
  - Unambiguously identifiable as migrants/stayers: N = 5,051

Methods

- FE regression with dummies for each year
  - controls for age, period, VET cancellation, panel dropout
- LS trajectory around a life event can be broken down into temporal stages (Kratz 2020, Erlinghagen et al. 2021):



Methods

Regression Models

basic model:

$$LS_{it} = \beta T + \gamma TM_i + \alpha_i + \epsilon_{it}$$

$$T: time\ dummies$$
$$M_i: Migration\ indicator$$
$$\alpha_i: unit\ fixed\ effect$$
$$\epsilon_{it}: residual$$

moderation models:

$$LS_{it} = \beta T + \gamma TM_i + \delta_1 TX_i + \delta_2 TM_i X_i + \alpha_i + \epsilon_{it}$$

$$X_i: Indicator\ of\ moderation\ variable$$

Variables

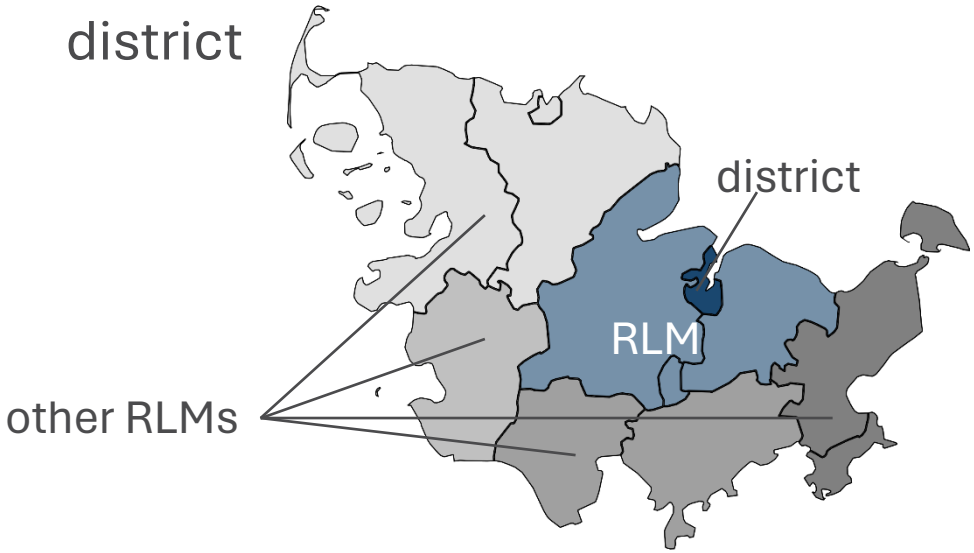
Life satisfaction

- “All in all, how satisfied are you with your life at the moment?”
  - 0 “completely unsatisfied” – 10 “completely satisfied”

Variables

Internal migration

- Regional Labor Markets
  - Optimized for minimal commuting *between* RLMs
  - Kosfeld / Werner 2012, Kropp / Schwengler 2011
- Internal migration
  - Yes: change of residence across RLMs to VET location
  - No: same residential district & VET location in same district



Variables

Moderators

- poor VET-OS:

$$-\frac{vacant\ VET\ positions\ (RLM, aspired\ occupation)}{cohort\ size}$$

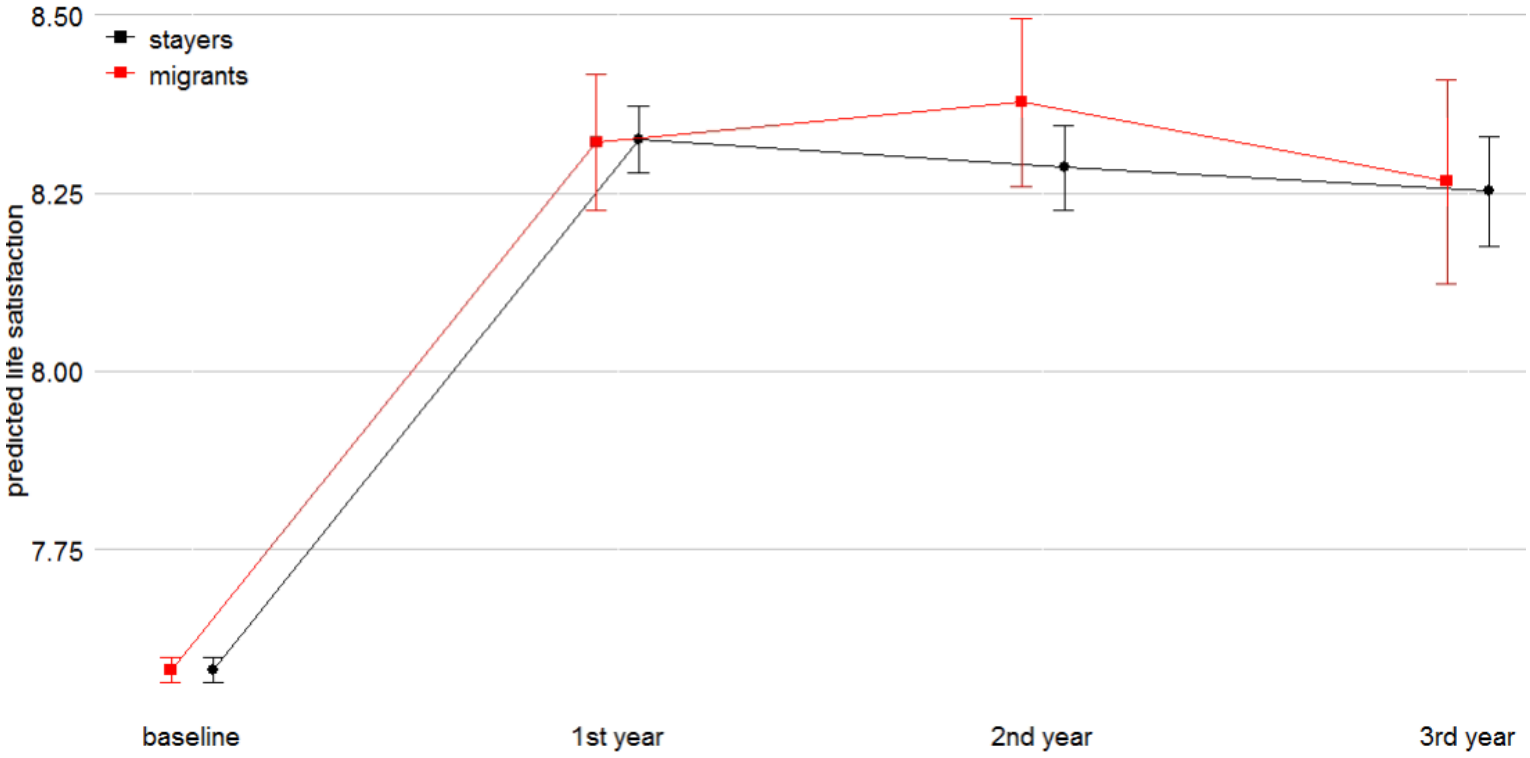
  - standardized in analyses
- Occupational status attained through VET: ISEI-08
  - standardized in analyses
- Destination area: Urban, ref. rural
  - Based on BBSR settlement structure classification

Sample

		cases	mean / %	min	max
Life satisfaction		6,635	7.83	0	10
Mobility	Migrants	648	16.73%		
	Stayers	3,225	83.27%		
Poor ROS	$-\frac{VET\ positions}{cohort\ size}$	4,787	-0.01	-0.14	0
VET status	ISEI	6,527	38.67	11.56	84.61
Destination area	Urban	3,660	54.42%		
	Rural	3,065	45.58%		
Age	Years	6,725	17.36	14.25	26.58

Multivariate results

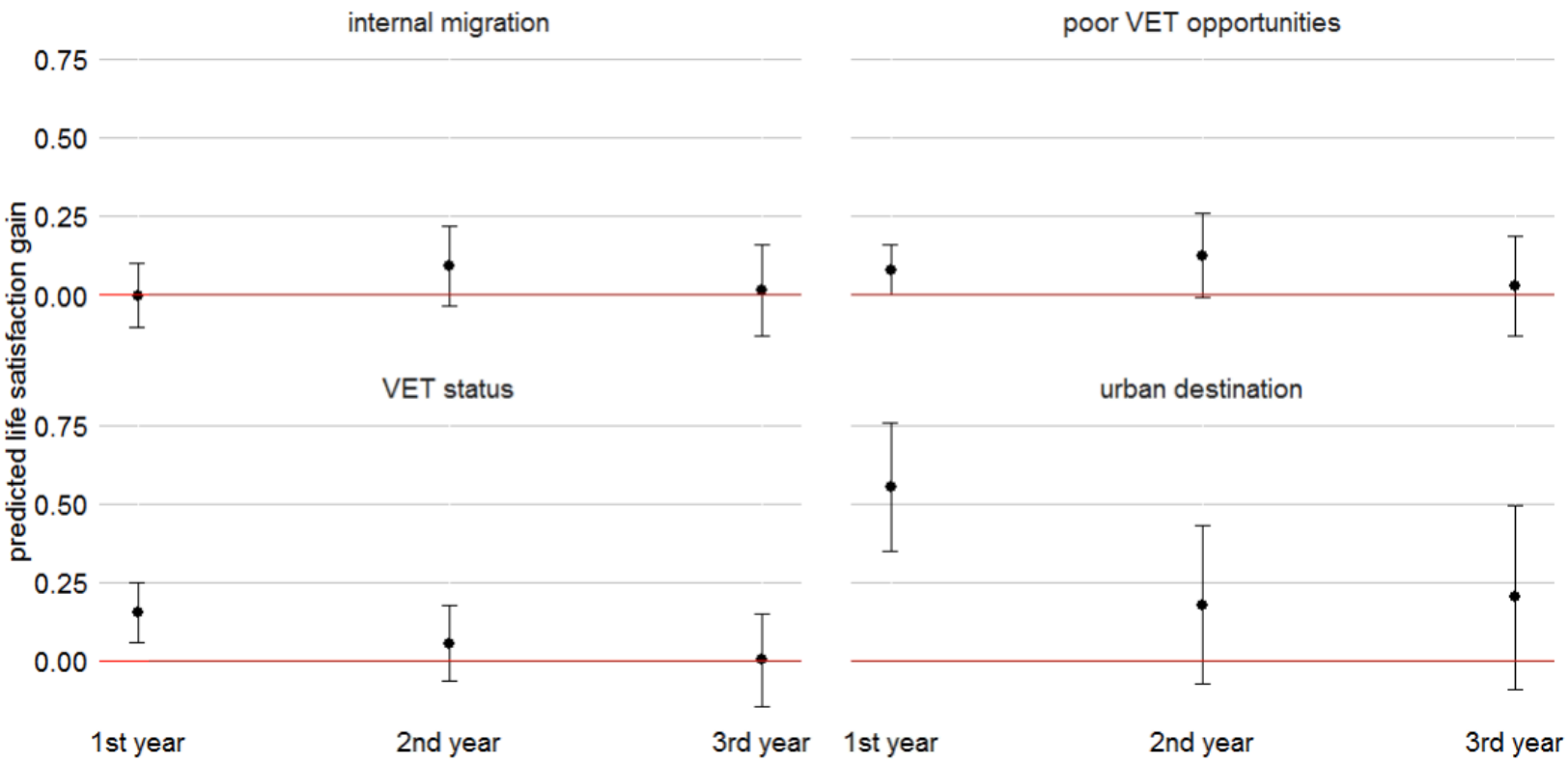
No effect of VET-related migration



NEPS SC4 13.0.0, own calculations, FE regression, complete cases, N = 3204, 95% CIs

Multivariate results

Average marginal effects



NEPS SC4 13.0.0, own calculations, FE regression, complete cases, N = 2820, 95% CIs,

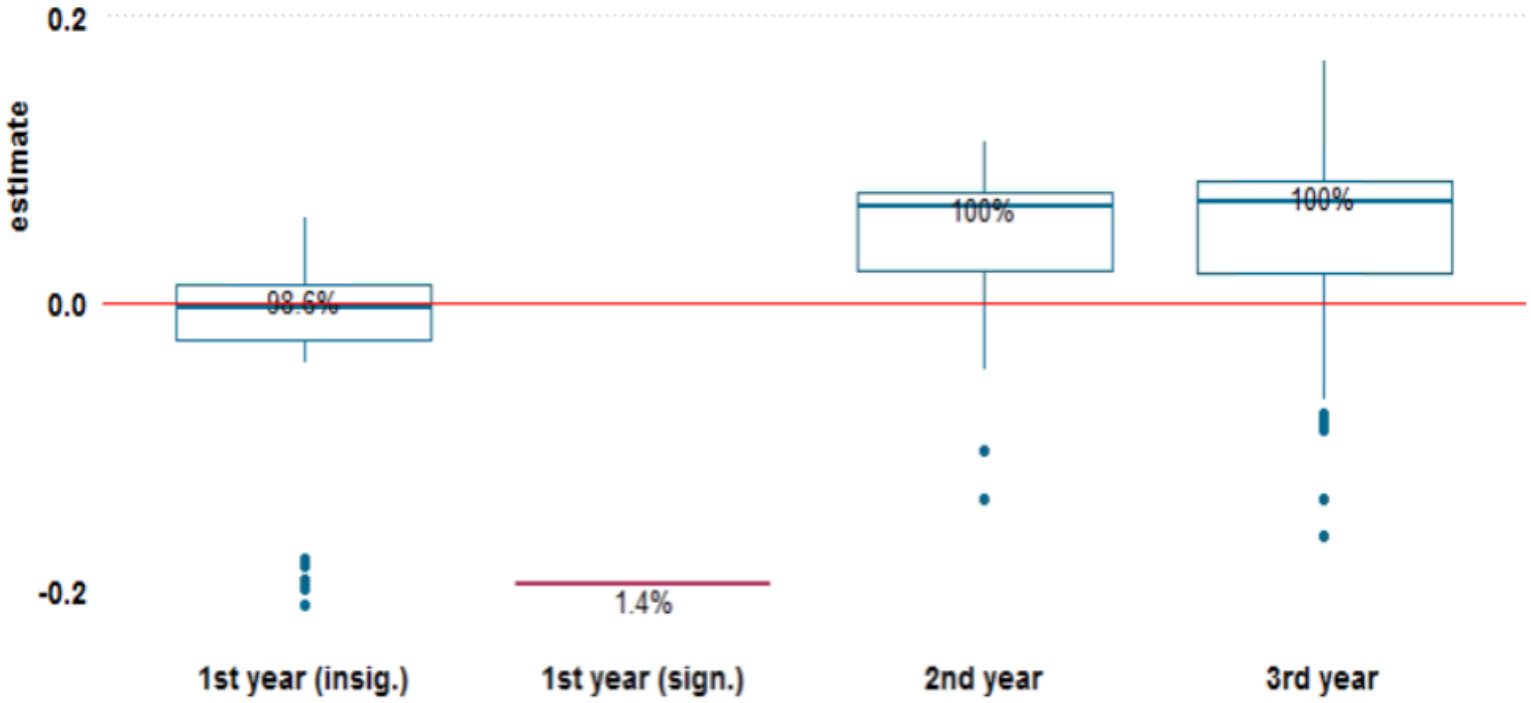
Robustness checks

Analytical decisions

Decision	Preferred model	Alternatives
Sample	Regular schools	Gymnasium only
		All schools incl. special
RLMs	141 RLMs	105 / 50 RLMs
Occup. groups	Segments	Sectors
MV handling	Complete Cases	Multiple Imputation (with/without LS)
VET status	ISEI	SIOPS
Area type	BBSR classification	BBSR (excl. urbanized regions) Thünen institute classification

Robustness checks

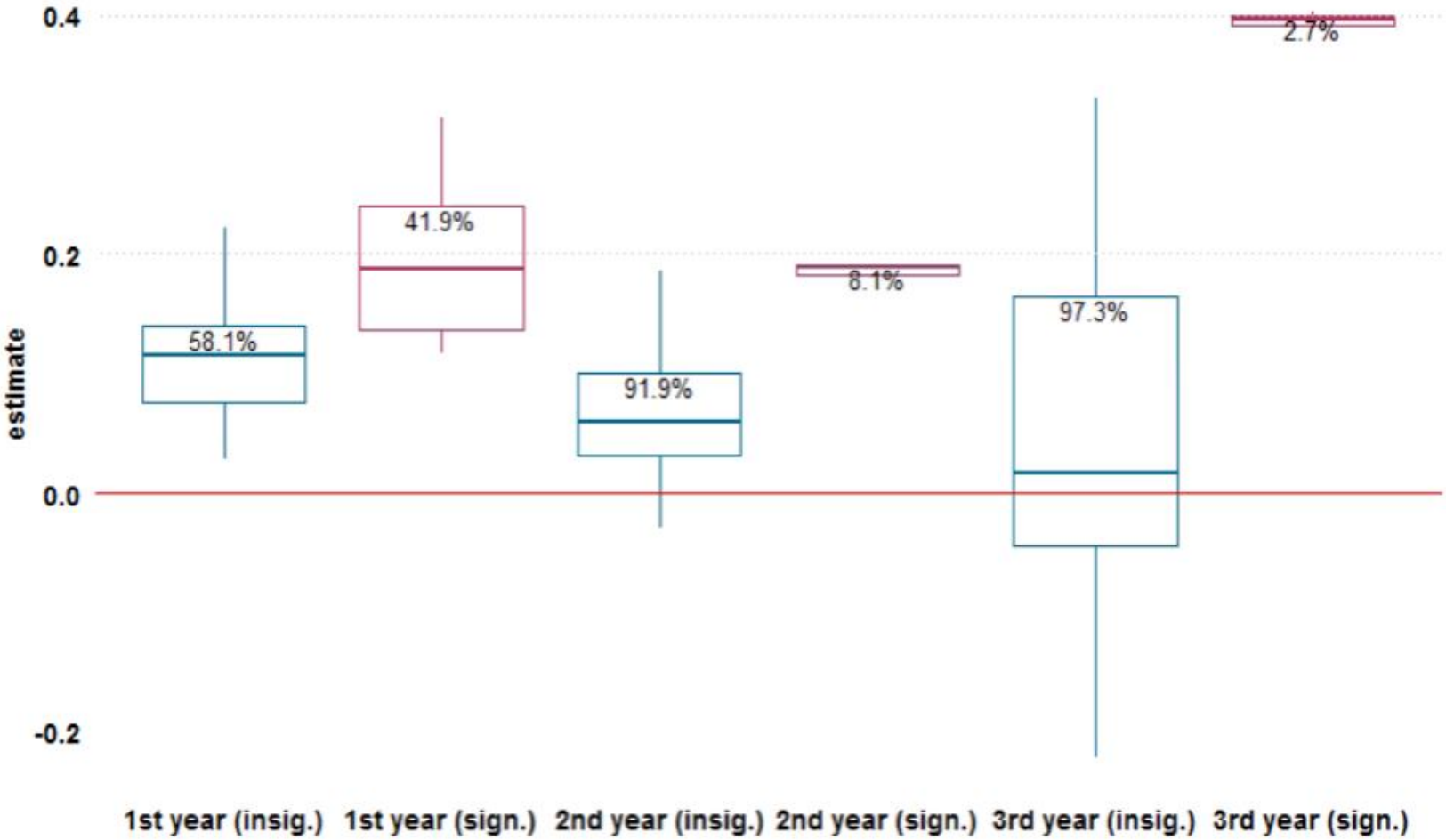
H1: No general effect of VET-related migration



NEPS SC4 13.0.0, own calculations, N(models) = 74, significance level = 95%, numbers in boxes give percentage of stat. (in)significant models per time point

Robustness checks

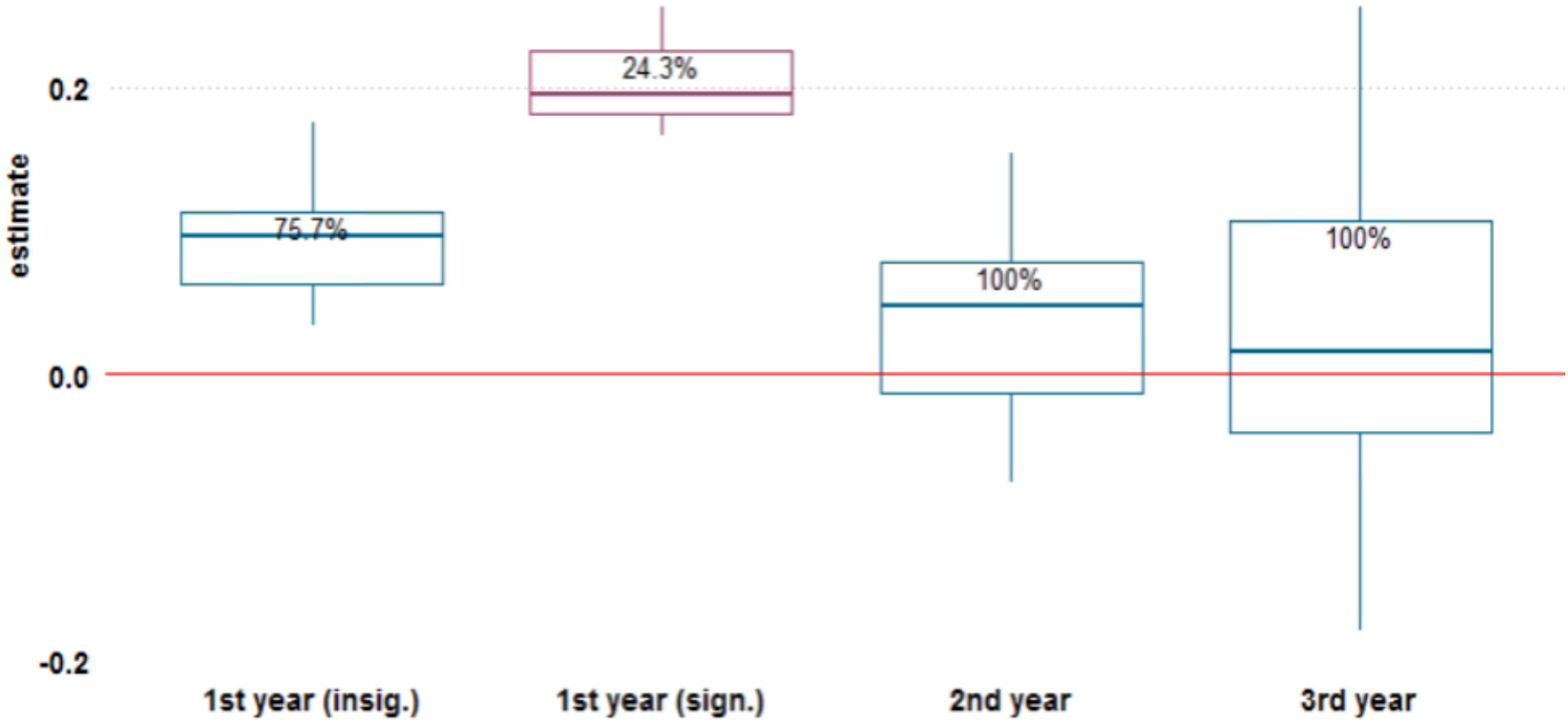
H2: Positive effect of poor VET-OS in 1st year



NEPS SC4 13.0.0, own calculations, N(models) = 74, significance level = 95%,
numbers in boxes give percentage of stat. (in)significant models per time point

Robustness checks

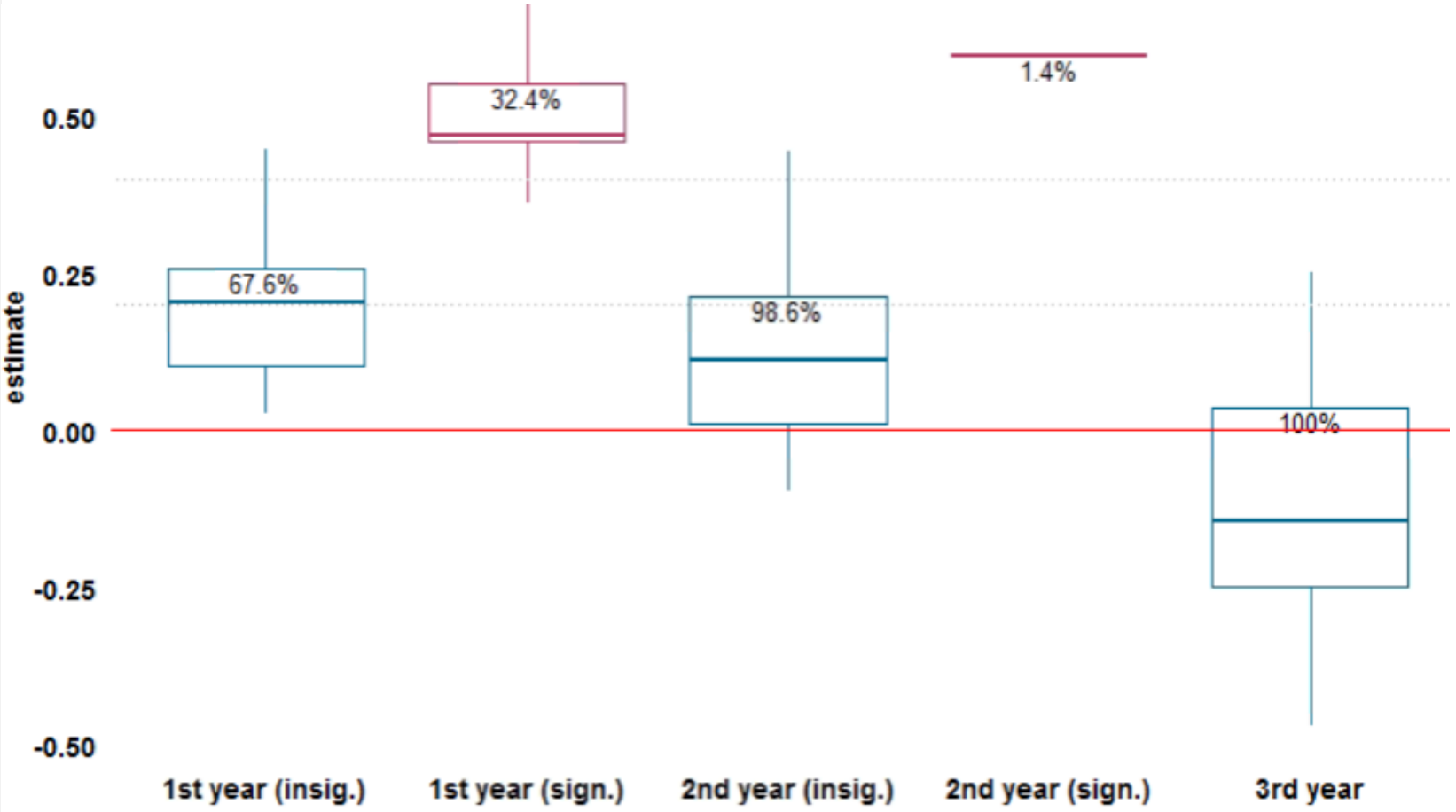
H3: Positive effect of VET status in 1st year



NEPS SC4 13.0.0, own calculations, N(models) = 74, significance level = 95%, numbers in boxes give percentage of stat. (in)significant models per time point

Robustness checks

H4: Positive effect in 1st year



NEPS SC4 13.0.0, own calculations, N(models) = 74, significance level = 95%, numbers in boxes give percentage of stat. (in)significant models per time point

Conclusions

Main Findings

- H1: Internal migration does not seem to influence LS of all VET trainees
- H2: possibly weak positive moderation by poor VET-OS at the beginning of VET
  - additional benefit of overcoming seems more relevant than lower LS gain threshold
- H3: possibly weak moderation by occupational status at the beginning of VET
- H4: possibly positive moderation by type of urban areas at the beginning of VET
- **all in all: short-term LS gains for moves from disadvantageous to advantageous circumstances**

Conclusions

Wider implications

- Coupled life events have to be considered in research on life courses and migration
  - Additional LS increase and sustained gain for migrating apprentices under certain ciscumstances
  - Theoretical arguments for effect heterogeneity
- Policy implication: internal migration seems to have no negative consequences for apprentices
  - may be a remedy for regional training supply disparities
  - but we need to understand the mechanisms better before we can recommend it

Contact

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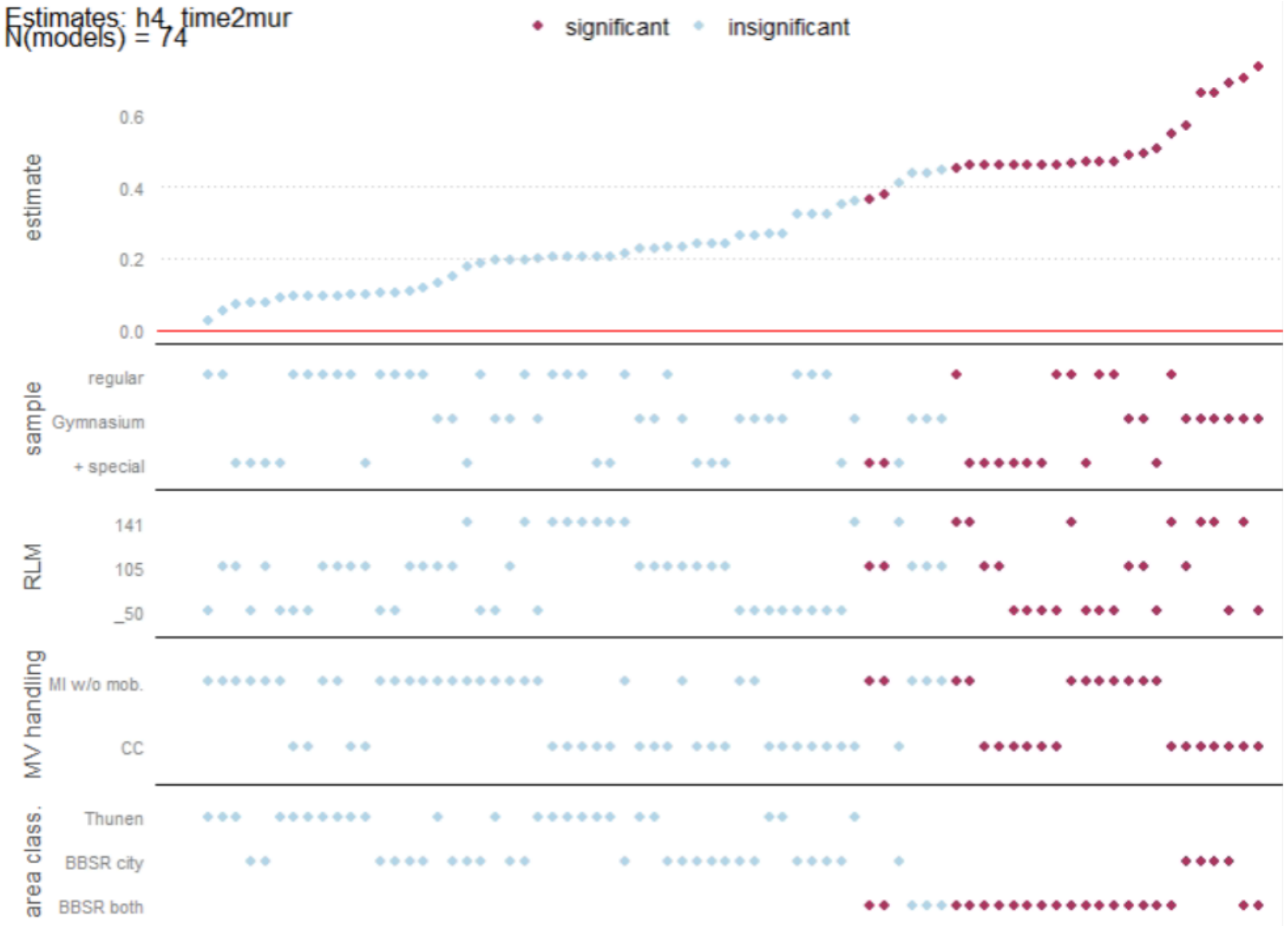
Appendix

SCA Curve Plot – H4, 1st year



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