(Almost) Two decades of research based on the TREE data: attempt of a synopsis

Sandra Hupka-Brunner
Thomas Meyer
Data & Methods (TREE1 & TREE2)

- **completed panel waves**
- **planned panel waves**
- **baseline surveys**

- PISA 2000
- first cohort (TREE1, N=6,343)
- ÜGK 2016
- second cohort (TREE2, N=9,762)
# Survey design & response rates 1st cohort (TREE1)

<table>
<thead>
<tr>
<th>Year</th>
<th>Ø age of sample</th>
<th>Transition progress of sample</th>
<th>Surveys</th>
<th>Sample size and response rates</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>2000 16</td>
<td>End of compulsory school</td>
<td>PISA 2000</td>
<td>valid sample: 6'343</td>
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<tr>
<td></td>
<td>2001 17</td>
<td>Transitions from lower sec. to upper sec.</td>
<td>TREE panel 1</td>
<td>5'532 response absolute: 87%</td>
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<td></td>
<td>2002 18</td>
<td>Transitions from upper sec. to tertiary level or labour market</td>
<td>TREE panel 2</td>
<td>5'210 response %: 86%</td>
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<td></td>
<td>2003 19</td>
<td>Transitions from tertiary level to labour market or consolidation of labour market entry</td>
<td>TREE panel 3</td>
<td>4'880 response %: 87%</td>
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<td>2004 20</td>
<td>Transitions from lower sec. to upper sec.</td>
<td>TREE panel 4</td>
<td>4'680 response %: 88%</td>
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<td>2005 21</td>
<td>Transitions from upper sec. to tertiary level or labour market</td>
<td>TREE panel 5</td>
<td>4'507 response %: 89%</td>
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<td>2006 22</td>
<td>Transitions from tertiary level to labour market or consolidation of labour market entry</td>
<td>TREE panel 6</td>
<td>4'138 response %: 85%</td>
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<td>2007 23</td>
<td>Transitions from lower sec. to upper sec.</td>
<td>TREE panel 7</td>
<td>3'953 response %: 86%</td>
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<td>2008 24</td>
<td>Transitions from upper sec. to tertiary level or labour market</td>
<td>TREE panel 8</td>
<td>4'571 response %: 85%</td>
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<td>2009 25</td>
<td>Transitions from tertiary level to labour market or consolidation of labour market entry</td>
<td>TREE panel 9</td>
<td>4'404 response %: 86%</td>
</tr>
</tbody>
</table>
Particularities of the dataset (TREE1)

- Detailed longitudinal data on education and labour market pathways over 19 years (age 16-35);
- Abundant context data
- Representative at national and linguistic region levels (longitudinal weights in order to account for panel attrition);
Survey instruments

- Detailed (month by month) collection of education, labour market & other activities
- Context data:
  - socio-demographic data (e.g. SES, migrations background),
  - personality & non-cognitive skills scales (e.g. coping, persistence, etc.)
  - resources & strains
  - values
  - health & well-being
  - critical life events
  - aspirations & plans
  - financial & home/residential situation
  - children, partner, child care situation (as of T8/2010)
- Cognitive skills measures at baseline (PISA or ÜGK scores, marks)
Survey methods

Mixed mode

- CATI interview approx. 20min (secondary mode: self-administered P&P)
- self-administered questionnaire 20-30 minutes (online/P&P)
Data availability (TREE1)

- 9 waves, observation span of 14 years (2000 to 2014; age 16 to 30)
- Episodic data on all job episodes 2003 to 2014
- Documentation in German, French & English
- SPSS and STATA data formats
- Available to the scientific community at large, online & free of charge (at FORS center/FORSbase, Lausanne)
  https://forsbase.unil.ch/project/study-public-overview/13923/0/
2nd cohort (TREE2)

- Replication of the TREE1 (with some extensions, adjustments and improvements)
- Baseline survey: “ÜGK”
  (national standardised math test 9th grade)
- Larger and more balanced sample than TREE1
  (N ≈ 10'000)
- Sample retention as of wave 3/2019: approx. 6.000 respondents
- First data available by mid 2020 (baseline, 1st and 2nd follow-up survey)
TREE data use: cumulative development 2010-2019
TREE data use 2016-2019 by institution/country

- 61%: Swiss universities
- 11%: other Swiss institutions (mostly Universities of applied sciences)
- 7%: UK
- 6%: Germany
- 14%: other countries (12)
TREE data use 2016-2019 by type of use

- Research: 54%
- Teaching purposes/student use: 20%
- Master thesis: 12%
- Doctoral thesis: 9%
- Other/n.a.: 5%
TREE data use 2016-2019 by discipline/field of research

- Sociology: 40%
- Economics (etr): 27%
- Psychology: 11%
- Educational Sciences: 8%
- Political Sciences: 7%
- Interdisciplinary: 4%
- Other: 3%
Publications based on TREE data: cumulative development 2000-2019
Several cooperations and additional research projects have been initiated in cooperation with the TREE-team:

**TREE1:**
- Maihofer (NFP60-project «Continuity and Change of Gender Inequalities in Educational and Vocational Pathways. A Mixed Methods Study» and SNF-project «Anticipated parenthood and employment trajectories. The interrelation of family and career plans of young adults and their implications for occupational gender segregation»)
- Zimmermann & Seiler (Gendered pathways and choices)
- Bertschy (NFP 60-project «BELODIS», Gender wage gap)
- Imdorf («Educational Systems and Gendered Transitions from School into Vocational Training and Work (ESGT)”
- Imdorf, Murdoch et al («Pathways, Aspirations, Tracking and access to Higher education (PATH)” – cooperation with France, Kanada)
- Hupka, Gaupp et al (educational pathways of disadvantaged youth in Germany and Switzerland)
- Szydlik/Bertogg (Parent-Children Relation during middle adulthood)
- Samuel (SNF-project «wellbeing & success»)
- Elfering (SNF “Individual Trajectories of Working Life in Switzerland” AEUAS-TREE-data)
- Keller (ERC Grant Coping Stress Health Module)
Several cooperations and additional research projects have been initiated in cooperation with the TREE-team:

**TREE2:**
- Hupka-Brunner, Gomensoro et al (SNF: «PICE - Parental Investment in Children’s Education (PICE) in Migrant Families in Switzerland»)
- Kriesi et al (SNF grant «The role of vocational specificity and skill demand in explaining long-term labour market outcomes of people with VET», cooperation with the Swiss Federal Institute for Educational and Training)
- Pfeiffer (SNF grant “Influence of transition from school to work on health promotion of young people in Switzerland”)
- Combet (SNF grant proposal on Gendered Choices at the end of Gymnasium; submitted)
SNF grants funded (partially) on grounds of TREE data analysis, 2010-2019, in CHF
Status quo ante in 2000

“…the opportunity should not be missed to equip Switzerland with a longitudinal survey of transitions at national level, especially as national research programmes are rightly focusing on transition. Transition pathways to employment are becoming increasingly complex. To understand young people’s decisions and options, and to take them into account in policy decisions, appropriate analytical instruments are needed.”

(OECD 1999:53)
The Swiss education system: some macro-context characteristics

- Marked socio-spatial, institutional heterogeneity (26 cantonal school systems, 4 official languages)
- Early and strong segregation/"tracking" (lower sec., but also horizontal segregation at upper secondary and tertiary levels)
- Marked and unequalled predominance of dual VET at upper sec. level, strong separation between VET and general education
- Relatively high completion rate (90%) at upper secondary level, but low to medium rates at tertiary level
- High employment and low unemployment rates (both for youth and for entire population at working age)
Comprehensive, multi-dimensional view on pathways

TREE allows us to analyse, in-depth and multi-dimensionally, how young people «make use» of this system and how they go through its various stages.

- Cognitive skills
- Educational credentials
- Institutional characteristics/Institutional/regional opportunity structures
- Ascriptive characteristics such as social origin, gender, migration background
- Self-evaluation, values, aspirations/motivation…
• “bottleneck” situation at the transition from lower to upper secondary education (mostly due to lack of VET training places (“Lehrstellenkrise”))

• Selection into upper secondary marked by “(in)equity issues” (SES, Migration, gender)

• Marked predominance of VET at upper sec. level (two thirds), as opposed to only 25% in general education
Marked heterogeneity within upper sec. VET: more than 200 training occupations with enormous disparities in terms of (academic) skills requirements; large number of training professions without de facto access/transition to tertiary education

Comprehensive, multi-dimensional view on pathways
Comprehensive, multi-dimensional view on pathways

- Relatively low enrolment at tertiary level education, largely failing to satisfy the demands of the Swiss labour market. To a substantial degree, the LM compensates this lack of “domestic production” by hiring immigrant labour with a tertiary level degree.
Comprehensive, multi-dimensional view on pathways

- Excellent labour market absorption at age 30
- But strong gender differences (starting before family foundation)
- Indications as to a general shift of «level of distinction» from upper sec. to tertiary level education.
Summary

Some key contributions of TREE to a deepened understanding of the (functioning of the) Swiss education system:

- Extent and importance of institutional and socio-spatial heterogeneity (both domestic and cross-country)
- Equity/meritocracy/permeability issues
  - Persistent and strong inequalities by “ascriptive” characteristics (gender, social origin, migration background etc.)
  - Selection processes at upper sec. VET entry (and / or Bridging solutions)
- Effects of earlier stages of educational pathways on later phases of educational/labour market career
  - “The long shadow of lower sec. tracking”
  - Transition from lower to upper sec. as pivotal point (of risk)
  - Discontinuity as risk factor per se
  - “Orientation by failure” in French-speaking Switzerland
  - Marked discrepancy between formal and factual system permeability (both horizontally and vertically)
- Lack of general education and strong restrictions of access to tertiary level education for a substantial part of Swiss Educational System
  - Persistent “under-education” throughout lower and upper sec. education for students deemed to meet only “basic requirements” and/or low-skilled VET
  - “Tertiarisation lag” of VET and generally low completion rates at tertiary level

Inevitably, our findings sometimes starkly contrast with the system’s «official» self-perception and self-portrayal
Outlook

- Cohort 1: long-term career development
- Pathways of cohort 2
  - Gendered Pathways
  - Selection into upper sec. and bridging solutions
  - Dropout and reorientation from/within upper sec. VET
  - Educational success and entry into the labour market
- Analyses of different experiments (cohort 2)
- Interplay between life domains (cohorts 1 and 2)
  - Health (well-being, work-life balance)
  - Political interest
  - Family and work
- Cohort comparison
- …..
Limitations & potential

- TREE surveys young people and their opinions. We only have spare information about other actors in the system, both individual and institutional (teachers, training firms, schools, parents, peers, etc.)

- Time lag of results due to cohort character of survey: by the time we present results (particularly the long-term ones), they are “outdated”

- How long can we follow up which cohort (sample power)?

- School leavers’ survey: starts too late, cannot (directly) observe what happens throughout the early parts of educational pathways

- Combination/complementarity of longitudinal register data (LABB/SFO) with (TREE) survey data
Thank you for your attention!