



**SFUVET**

SWISS FEDERAL UNIVERSITY  
FOR VOCATIONAL EDUCATION  
AND TRAINING

# Relevance, potentials and limitations of longitudinal analysis based on register data

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# Structure

- I. Introducing educational register data: before and after
- II. Examples of the use of register data:
  - Monitoring and tracking drop-outs from VET
  - Analyzing the vocational baccalaureate
  - Analyzing occupational mobility after apprenticeship
  - Combining register data with survey data
- III. Conclusions: Advantages, potentials, and limitations

# I. Before the introduction of register data: Counting entries and degrees



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Eidgenössisches Volkswirtschaftsdepartement EVD  
Bundesamt für Berufsbildung und Technologie BBT

## Eintritte in die Sekundarstufe II

1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04
20'308	20'683	20'432	20'041	19'803	19'883	20'851
69'586	72'778	73'776	76'026	77'772	76'129	75'401
81'742	82'687	82'085	83'587	83'312	84'619	84'831

■ Maturitätsschulen   ■ Berufliche Grundbildung\*   ■ Schülerinnen / Schüler

## Berufsbildung in der Schweiz 2007

### Fakten und Zahlen



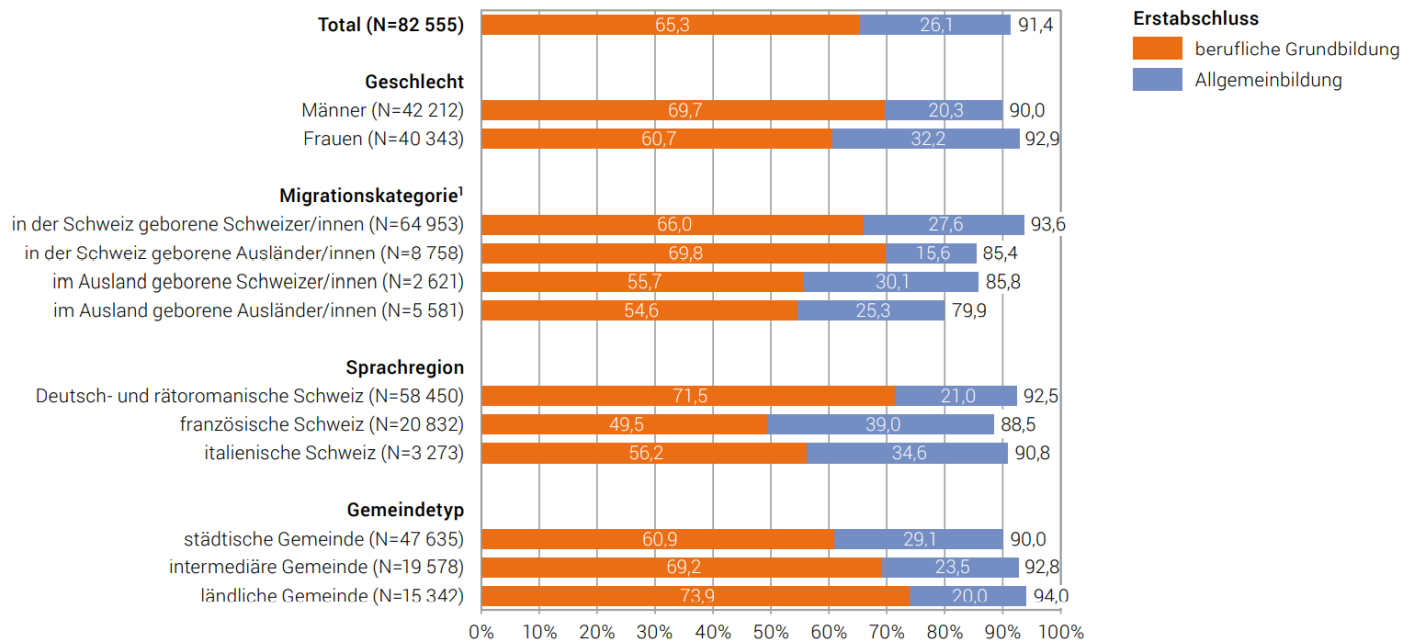
# The register data

- Introduction of new social security number in 2008: used as personal identifier (ID) for many purposes
- Decision to use cantonal registers to supply official statistics in all domains
- Cantons report data (incl. ID) on all students in official education programs to Federal Statistical Office (FSO) on yearly basis
- FSO cleans data, publishes indicators and reports, provides longitudinal data for research

# Providing basic indicators on the education system

## Erwerb eines Abschlusses der Sekundarstufe II bis zum 25. Altersjahr durch die Jugendlichen, die im Jahr 2010 15 Jahre alt wurden

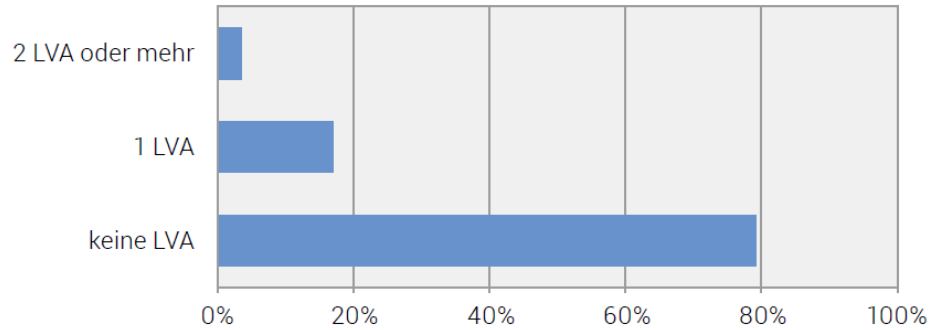
Anteil zertifizierte Jugendliche nach Kernaspekten, in %



Source: FSO 2022

# II. Example 1: VET drop-outs (2012-2016)

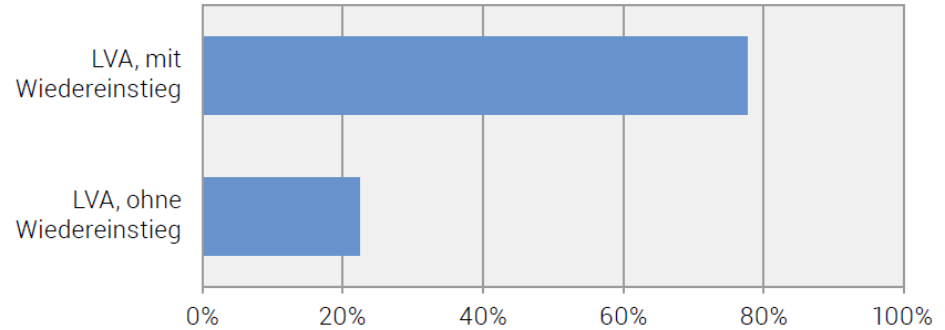
## Lehrvertragsauflösungen pro Person



Quelle: BFS – SBG

© BFS 2017

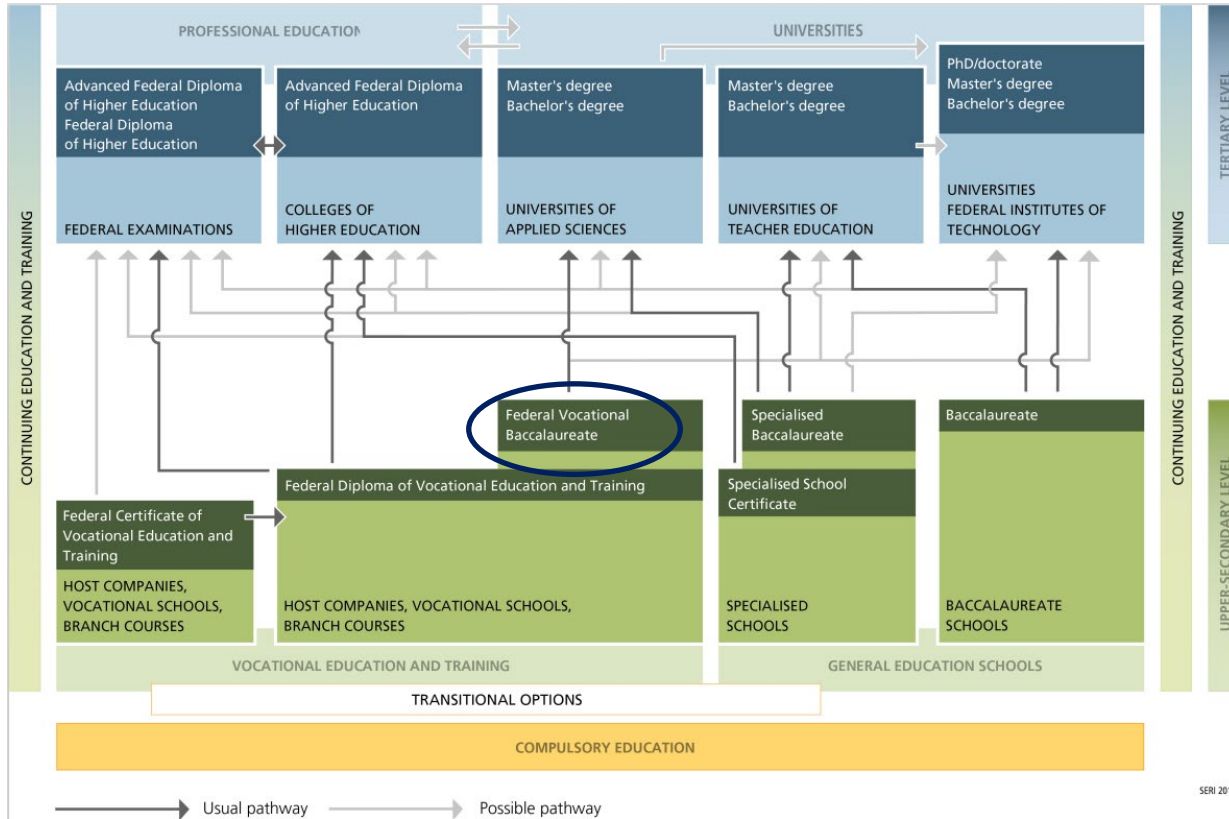
## Wiedereinstiegsquote nach der 1. Lehrvertragsauflösung



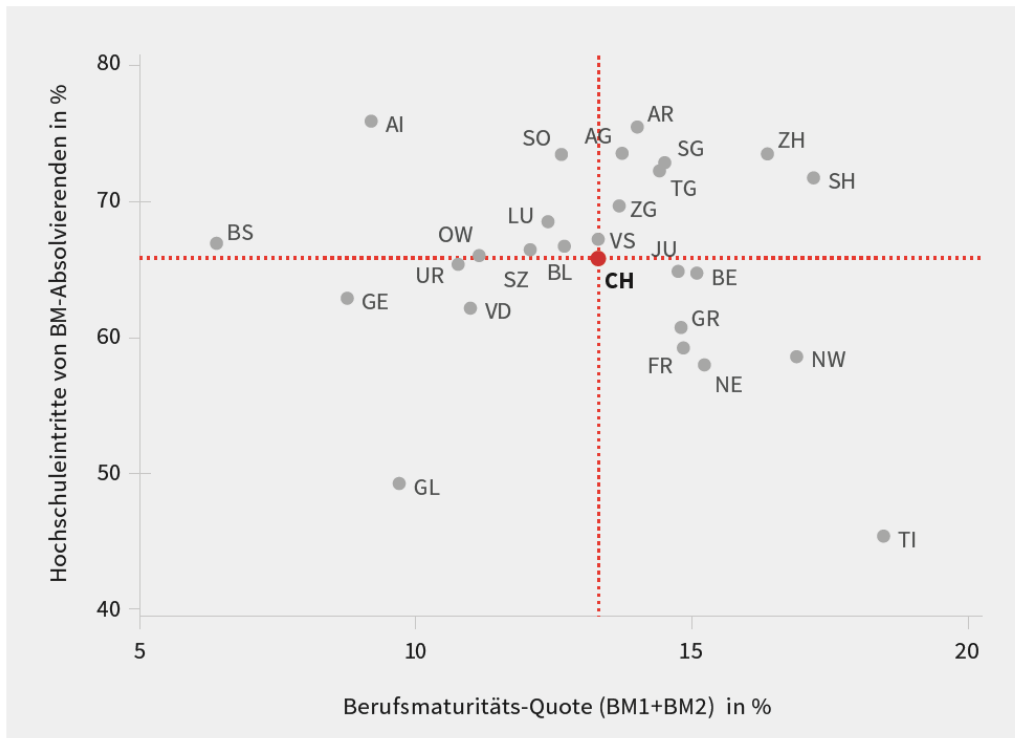
Quelle: BFS – SBG

© BFS 2017

# Example 2: Careers of VET graduates that earned a vocational baccalaureate



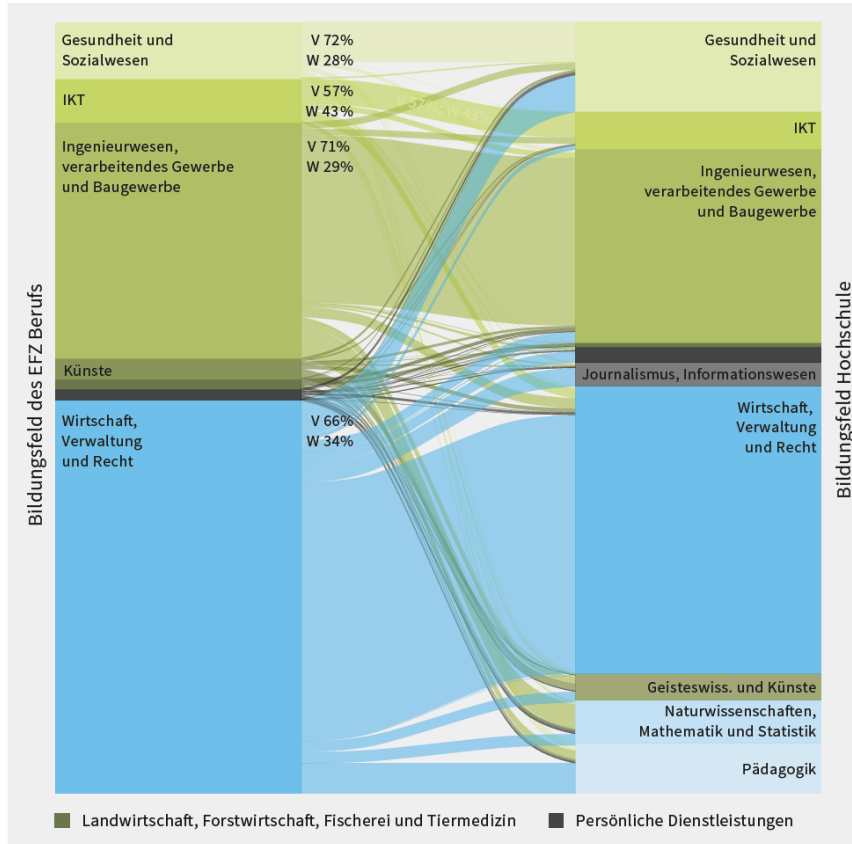
# By canton: Share of voc. bacc. against entries into universities



Source: SFUVET 2020



# Occupation field in VET vs. study field



Source: SFUVET 2020

Abbildung 9: Wechsel und Verbleib im Bildungsfeld von BM-Absolvierenden beim Hochschuleintritt.

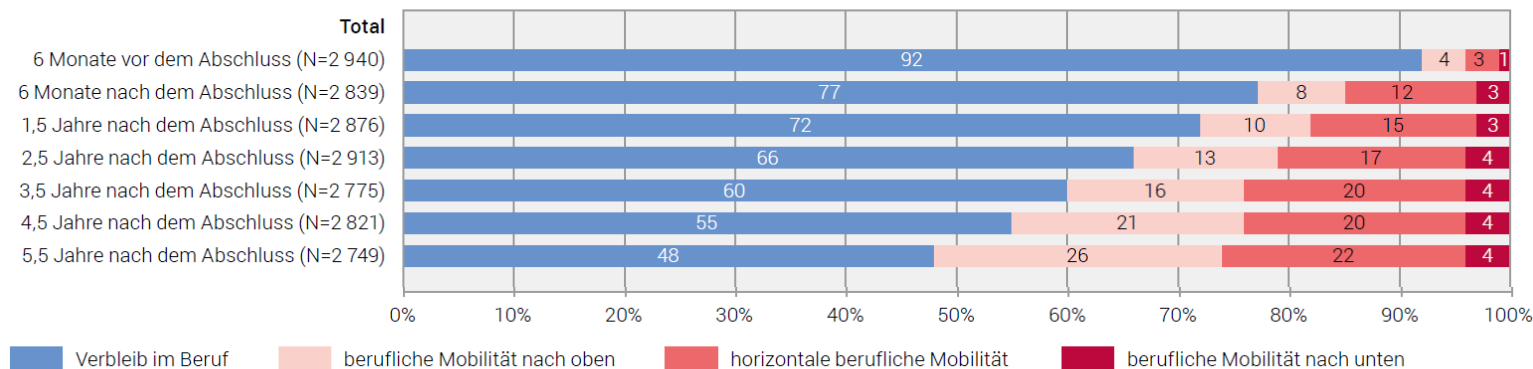
# Policy process

- First figures on graduates published by FSO
- 2020: Specific report on vocational baccalaureate published by SFUVET
- 2021: Preparatory group by EDK (Swiss Conference of Cantonal Ministers of Education) to prepare next steps to strengthen vocational baccalaureate  
National workshops with stakeholders
- 2022: EDK mandate for three working groups on the topics «selection», «support», and «cooperation»

# Example 3: Occupational mobility after completing an apprenticeship

Absolvent/innen einer EFZ-Ausbildung: Verbleib im Beruf und Mobilität nach Teilnahme an der Ausbildung, in %

G4.1



Source: FSO 2020

# Example 4: combine register data with survey data

- Regular firm surveys on the costs and benefits of apprenticeship training for host companies, run by SFUVET
  - Contain a lot of information on training conditions in firms during apprenticeships
  - New project: Do training conditions in companies affect apprentices' further education and career pathways?
- ⇒ Use longitudinal register data to track apprentices' career, no need for additional survey

# III. Conclusion: Advantages, potentials, and limits of educational register data

- Reliable: official data, less errors and wrong answers
  - Reduces need for (some) surveys
  - Full population: large N, no attrition
  - Longitudinal: observe individual transitions
  - Can be combined with data from other registers or from surveys
- ⇒ Provides much needed information on transitions in education and into the labor market
- Considerable investment in infrastructure and data quality
  - Limited information per observation
  - Longitudinal data takes time to build up
  - Needs unified IDs  
Data protection and privacy issues
- ⇒ Needs time and resources