universität
wien
Quality Assurance

What's next? Tracking of universities' graduates on the labour market using administrative data

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SURVEY

- Graduates' **survey** is the most used method (paper-pencil or online questionnaire) to assess…
  - entry process into labour market
  - employment situation after graduation (mostly 2 to 5 years)
  - relevance of competences acquired during university studies
- Drawbacks:
  - Access (contact data) and response rate problems
  - Reliability of the data (e.g. memory bias)
  - Panel mortality in longitudinal surveys

WHAT WAS YOUR FIRST INCOME AFTER GRADUATION?

https://goo.gl/haaxfs

SURVEY: EXAMPLES

- **Austria**
  - Trendence Graduate Barometer https://www.oesterreichs100.at/top-arbeitgeber/absolventenbefragung.html
- **Germany**
  - Graduates panel by DZHW German Centre for HE research and Science Studies http://www.dzhw.eu/en/abteilungen/bildung/index_html
- **England**
  - The UK Graduate Careers Survey by High Fliers Research http://www.highfliers.co.uk/
- **Europe**
 - EUROGRADUATE http://www.eurograduate.eu/
- …

TRACKING

- Graduates' **tracking** is based on university's administrative data automatically and anonymously merged with data of the *Main Association of Austrian Social Security Institutions*
- Provides reliable information about:
    - Employment status after graduation
    - Income data
    - Economical field of employment
- Advantages:
    - Data about <u>all</u> graduates registered by the national social security system
    - Career tracking over the whole life span in Austrian labour market possible
- Drawbacks:
    - No data about suitability of competences and concrete job profile, satisfaction with the employment, motives for job choice, etc.

TRACKING

SURVEY

HARD FACTS

NO RESPONSE BIAS

INFORMATION ABOUT WHOLE POPULATION
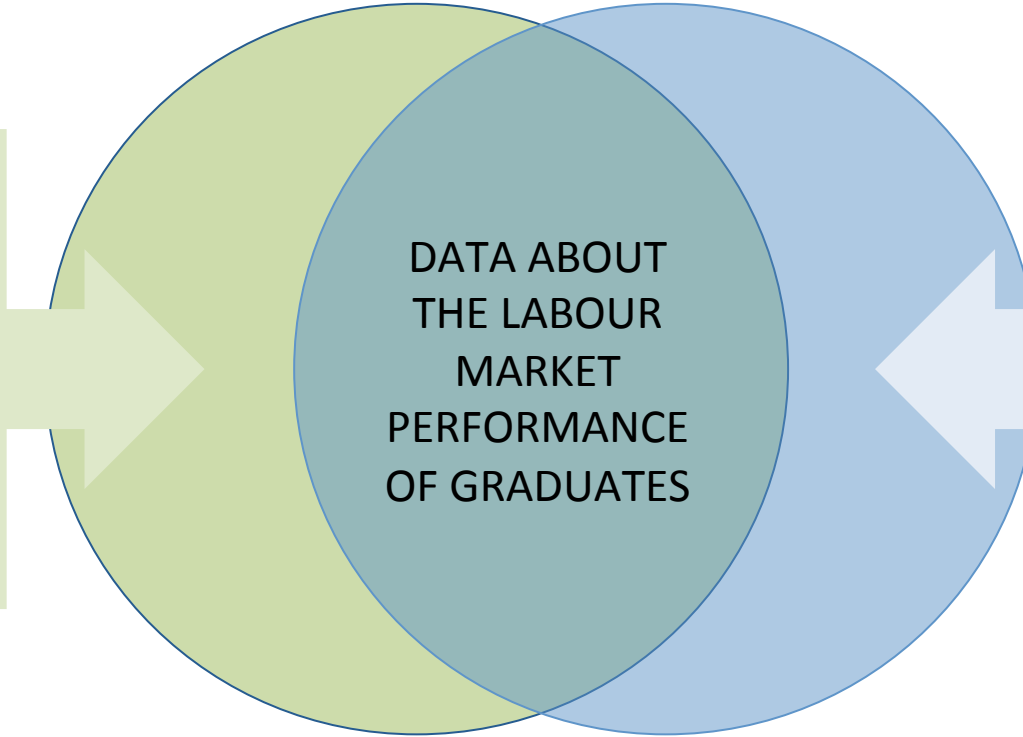
DATA ABOUT THE LABOUR MARKET PERFORMANCE OF GRADUATES
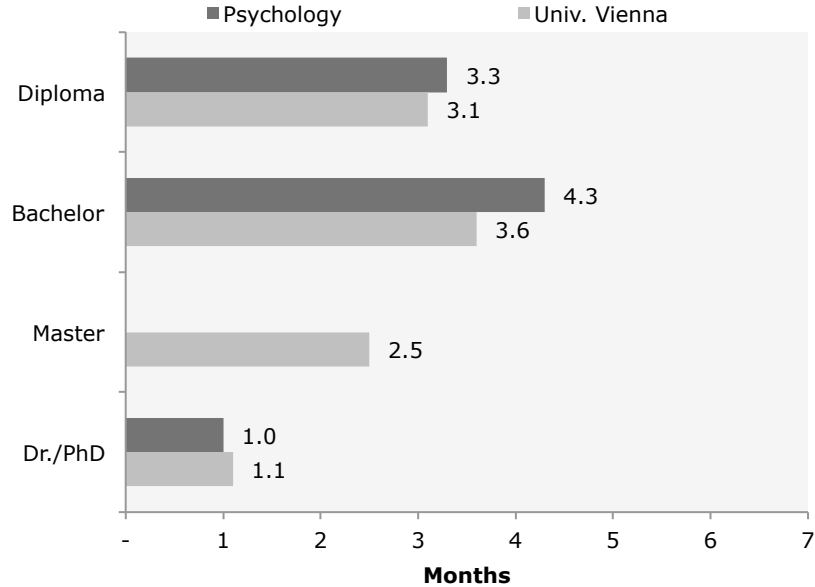
MOTIVES

SATISFACTION

COMPETENCES

GRADUATES CAREER TRACKING IN AUSTRIA

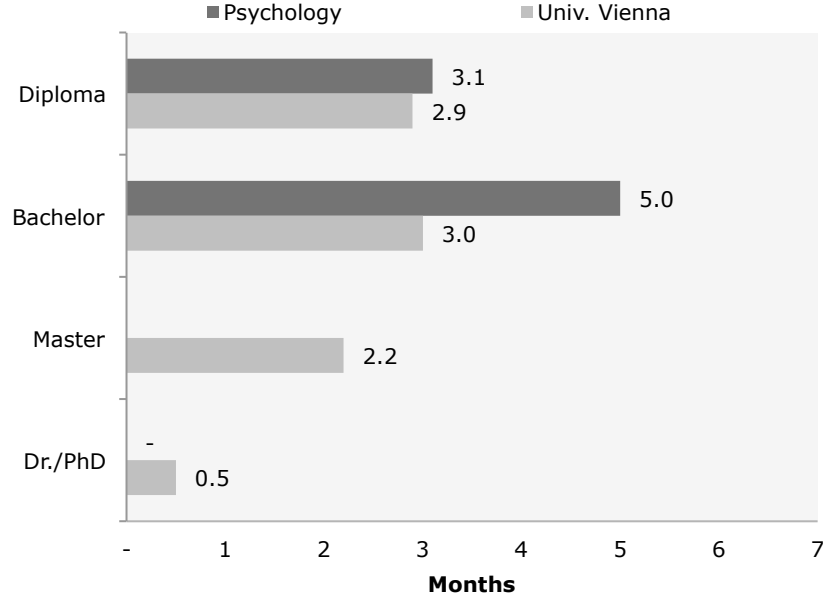|	UNIVERSITY OF VIENNA	UNIVERSITY OF GRAZ
Sample	Modelling a 'typical' graduate (<35 years old, leaving the university after graduation)	All graduates
Data analysing institution	Statistic Austria	Institute of Advanced Studies
Categories	Labour market status (employed, unemployed, etc.), labour market integration (time to first job, job changes), income (median/quartiles, monthly/annual), economic sectors	
Study information	Faculty, fields of studies, type of studies (BA, MA, Diploma, teacher training programs, PhD), duration of studies, ECTS	
Personal information	Gender, age, citizenship, study entrance qualification, previous HE degrees (e.g. BA at another university)	

EXAMPLES: UNIVERSITY OF VIENNA
Time until First Employment Following Graduation

Median Women — bar chart comparing Psychology and Univ. Vienna, in Months:
- Diploma: Psychology 3.3, Univ. Vienna 3.1
- Bachelor: Psychology 4.3, Univ. Vienna 3.6
- Master: Univ. Vienna 2.5
- Dr./PhD: Psychology 1.0, Univ. Vienna 1.1

Median Men — bar chart comparing Psychology and Univ. Vienna, in Months:
- Diploma: Psychology 3.1, Univ. Vienna 2.9
- Bachelor: Psychology 5.0, Univ. Vienna 3.0
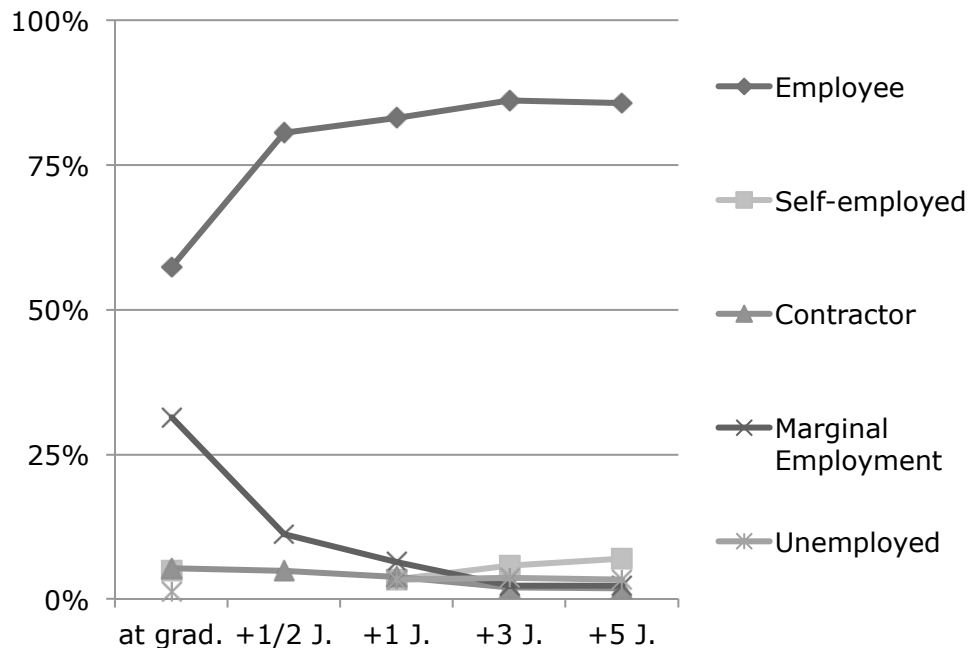- Master: Univ. Vienna 2.2
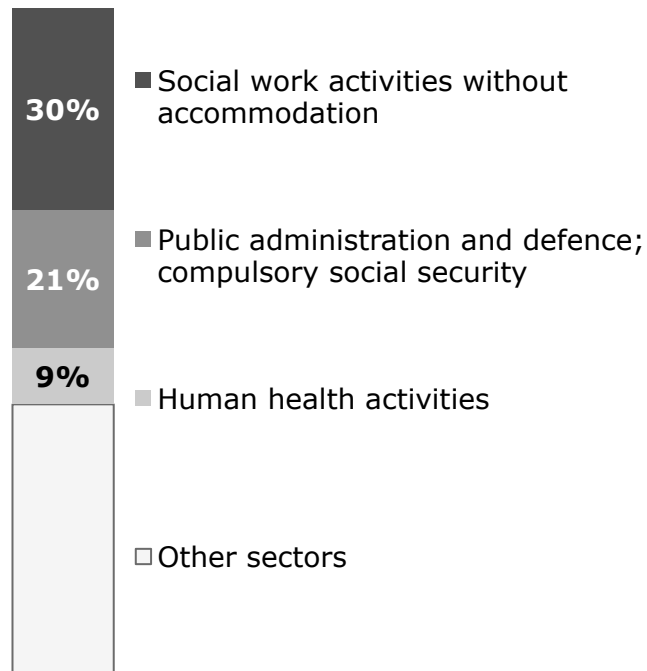- Dr./PhD: Psychology -, Univ. Vienna 0.5

EXAMPLES: UNIVERSITY OF VIENNA
Employment Status and Top Sectors: Diploma Psychology

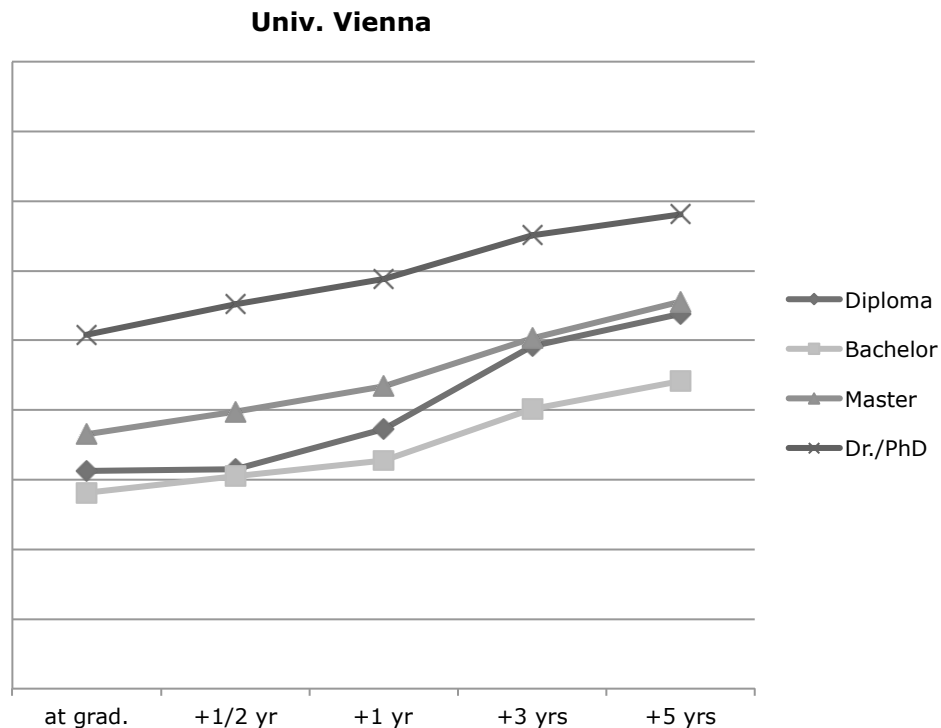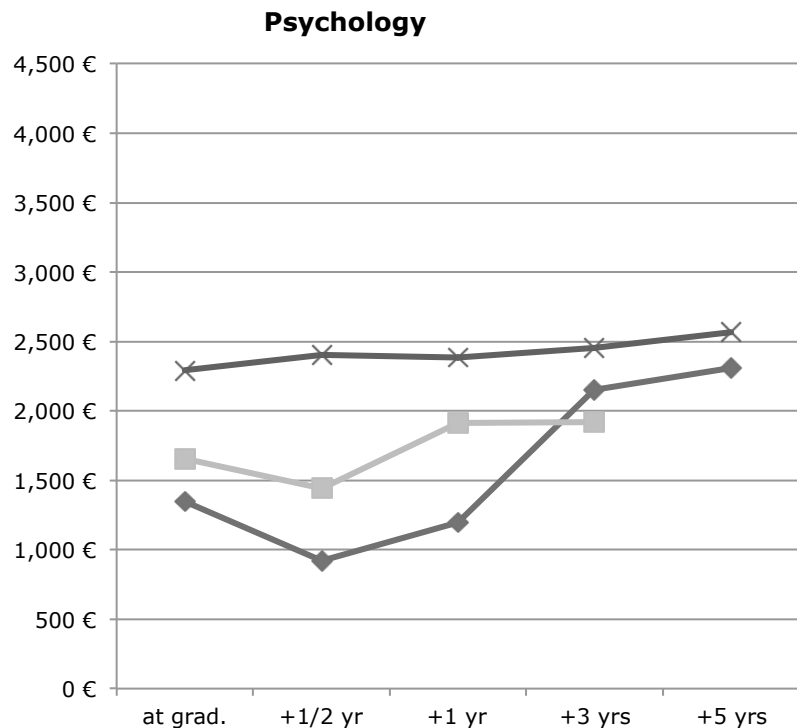Employment status (incl. student and temporary jobs)

Top 3 Sectors of Employment (ÖNACE), 5 years after graduation
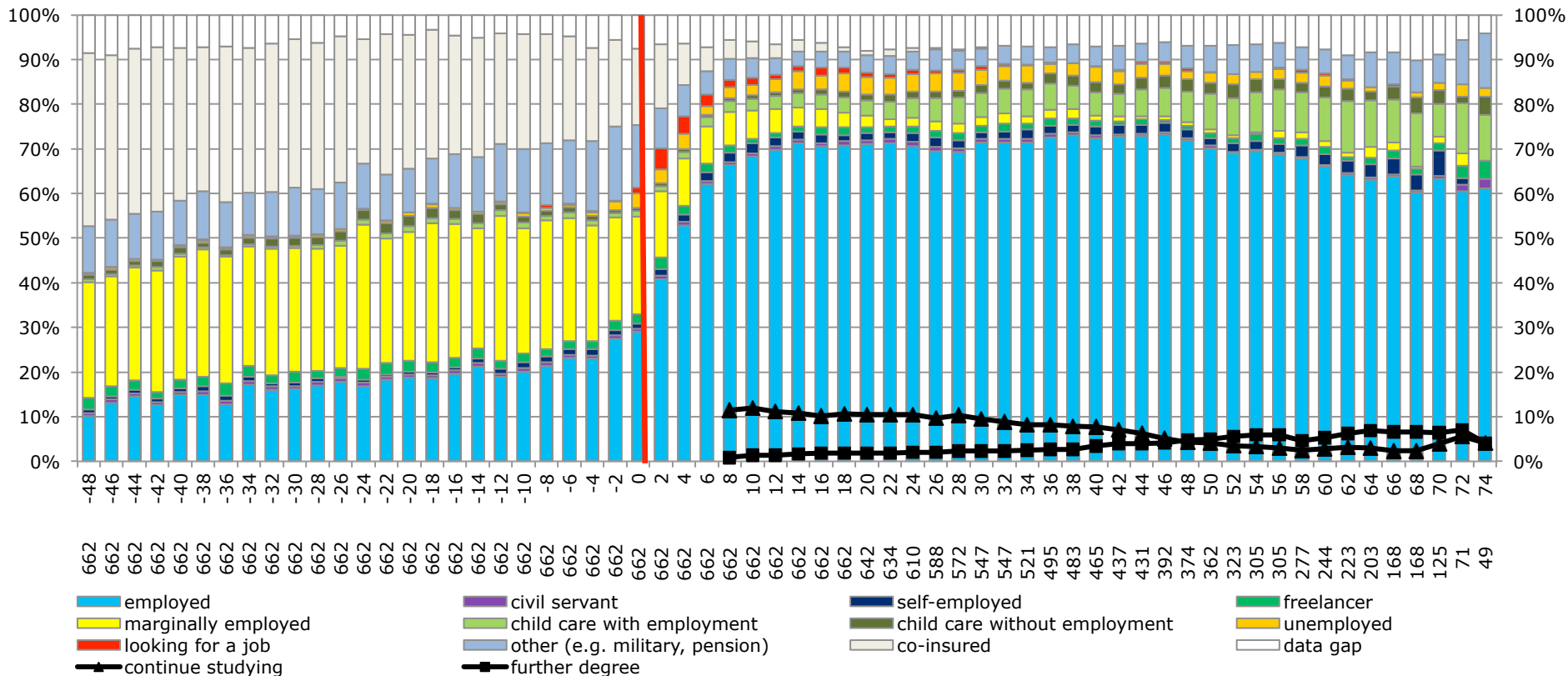
EXAMPLES: UNIVERSITY OF VIENNA
Monthly Income (gross pay, inflation-adjusted): Women

Psychology | Univ. Vienna

Legend: Diploma, Bachelor, Master, Dr./PhD

EXAMPLES: UNIVERSITY OF GRAZ
Labour Market Status

Psychology graduates (diploma) academic years 2008/09 to 2012/13

Legend:
- employed
- civil servant
- self-employed
- freelancer
- marginally employed
- child care with employment
- child care without employment
- unemployed
- looking for a job
- other (e.g. military, pension)
- co-insured
- data gap
- continue studying
- further degree

EXAMPLES UNIVERSITY OF GRAZ
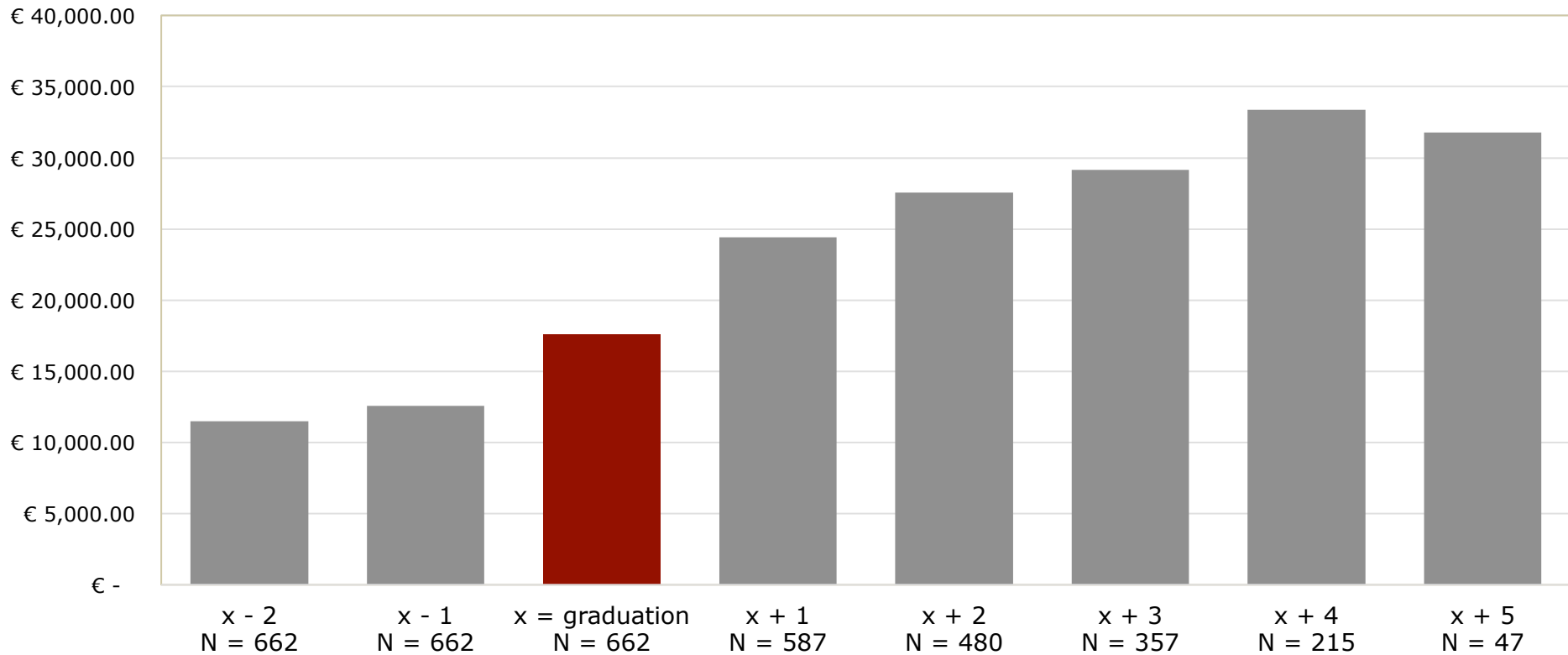## Labour Market Integration of Different Cohorts

Labour market integration of psychlogy graduates
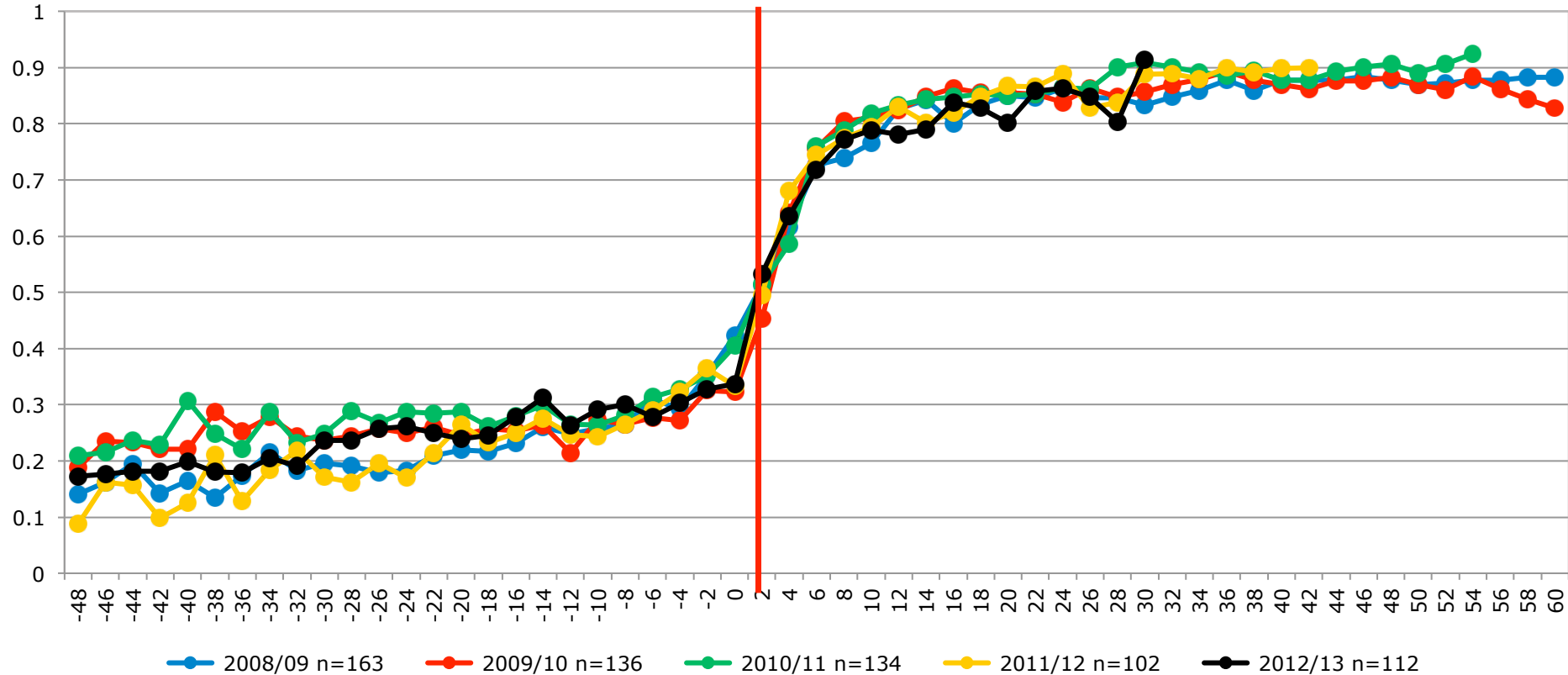
EXAMPLES UNIVERSITY OF GRAZ
Gross Median Income

Income of psychology graduates (diploma) employed during the entire year

x - 2 N = 662	x - 1 N = 662	x = graduation N = 662	x + 1 N = 587	x + 2 N = 480	x + 3 N = 357	x + 4 N = 215	x + 5 N = 47

Economic sectors of psychology graduates	18 months after graduation	
	N	*%*
Other social work activities without accommodation n.e.c.	115	22%
Social work activities without accommodation for the elderly and disabled	65	12%
Other human health activities	48	9%
Tertiary education	**38**	**7%**
Hospital activities	30	6%
General public administration activities	22	4%
Child day-care activities	21	4%
Activities of other membership organisations n.e.c.	20	4%
Other residential care activities	16	3%
Business and other management consultancy activities	15	3%
Compulsory social security activities	13	2%
self-employed	9	2%
other	116	22%
total	**528**	**100%**

DATA MODEL

UNIVERSITY

MERGING KEY

AGGREGATED ANALYSIS

DATA PROVIDER (LABOUR MARKET DATA)

MERGED ANONYMISED DATA

ANALYSING INSTITUTION
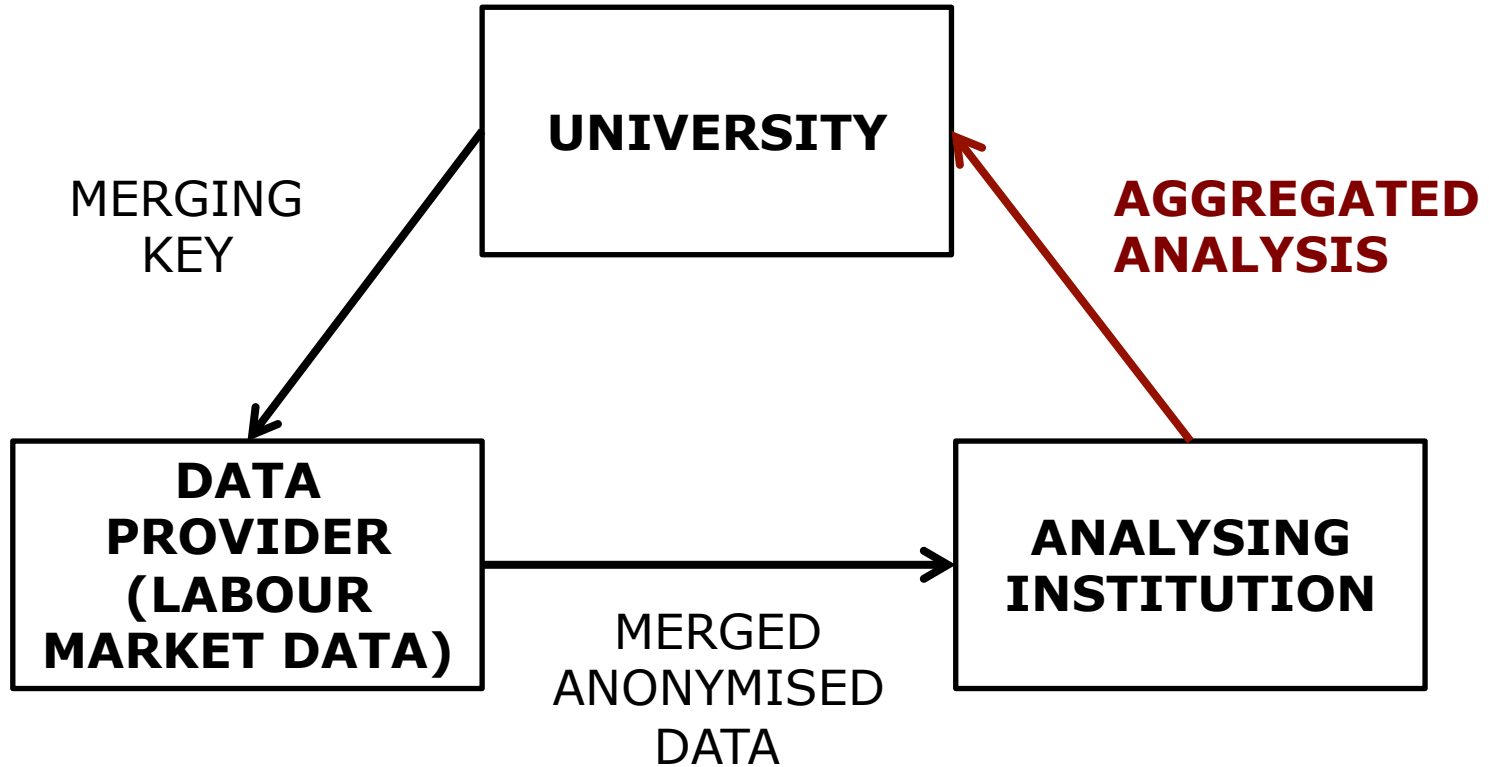
DATA USAGE

- Curricula development
- Strategic decisions by the University
- Evaluation of study programmes
- Information for career services units
- Information for high school graduates in regard to perspectives on the labour market

OUTLOOK

- New perspectives:
  - Labour market integration of drop-outs in comparison to graduates
  - Social dimension (e.g. non-traditional students)
- National project (12 partner universities) with the main goal to track graduates on the Austrian labour market
- Monitoring of students at the labour market (interaction between studies and employment)
- Challenge: Develop European/International graduate tracking in labour market

https://goo.gl/RX2Fgo

DISCUSSION IN GROUPS

- What is a graduate?
- Pros and cons of survey and tracking
- Institutional, national and European level
- Usage and usability of results
- EU General data protection regulation (GDPR)

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Reports (in German):
http://qs.univie.ac.at/en/analyses/graduate-tracking/
https://static.uni-graz.at/fileadmin/portal/Intranet/Files/150909Bericht_Absomonitoring.pdf

For further questions, do not hestitate to contact us!