

# Entering the labour market: University of applied science vs. university – Does it matter?

## Research Question

- Employers put forward a claim for stronger practical relevance of study programmes (DIHK 2015; FAZ 2015; Forschung & Lehre 2011; Henkel 2004; Zeit 2015)
  - Formally equal degrees at Universities of applied science and universities (at least for most disciplines)
  - On a descriptive level: More successful career start for graduates from universities of applied science than from universities
- How can these differences be explained?  
→ Is there a signalling effect of the universities of applied science?

## State of Research

Advantages for graduates from universities of applied science in comparison to graduates from universities according:

- Unlimited and/or full-time employment
  - Wage
- (Alesi et al. 2010; Briedis et al. 2011; Fabian et al. 2016; Rehn et al. 2011; Wehner & Wienert 2012)

### Employment contract of first job by type of university and degree (percent)



DZHW-Studie, 05/2016, © BMBF (own translation)

→ But until now there has been no data and therefore no in-depth analysis for a complete cohort from the new Bachelor and Master system in Germany

## Theory and Hypotheses

- **Signalling Theory** (Arrow, 1973; Spence, 1973)  
→ Signal for emphasis of practical relevance
  - **Human capital theory** (Becker, 1993)  
→ For isolation of the sole signalling effect
- **H1:** Graduates of universities of applied science get higher wages than graduates from universities...  
→ **H2:** ... and are more likely to get an open-ended contract.

## Data and Method

**Data:** Graduate Panel, cohort 2013

Graduates are asked about their study and their career start one, five and ten years after they graduated from the university or the university of applied science

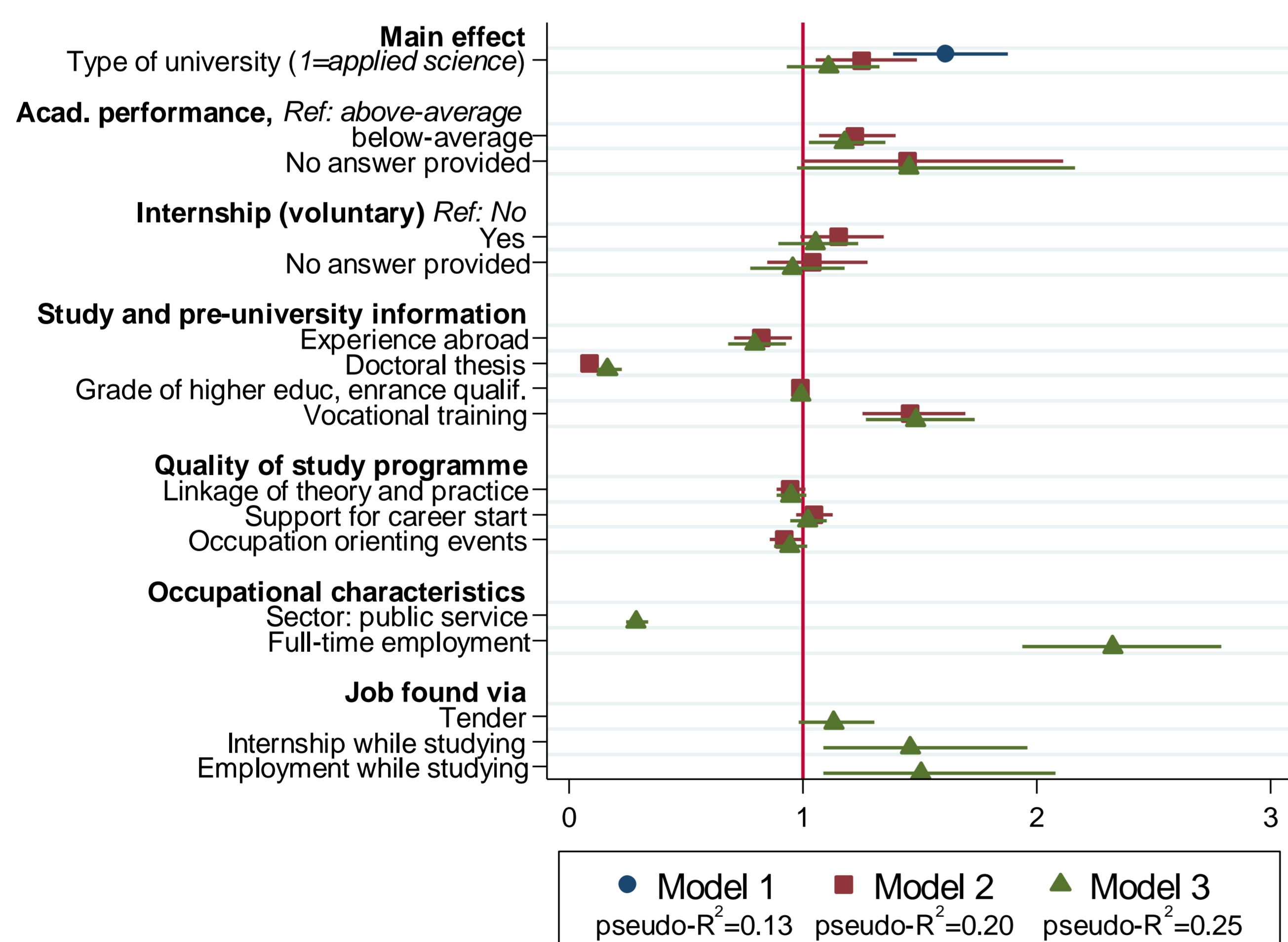
**Method:** Hierarchical OLS regressions

## Analysis Strategy

- Step 1:** Type of university, discipline, Bachelor/Master, gender  
**Step 2:** + study characteristics (e.g. grades, time abroad), pre-university information (e.g. entrance qualification grade, vocational training), quality of study programme (e.g. support for career start, career events)  
**Step 3:** + occupational characteristics (e.g. public service, working hours), job finding method (e.g. via internship or job during the study)

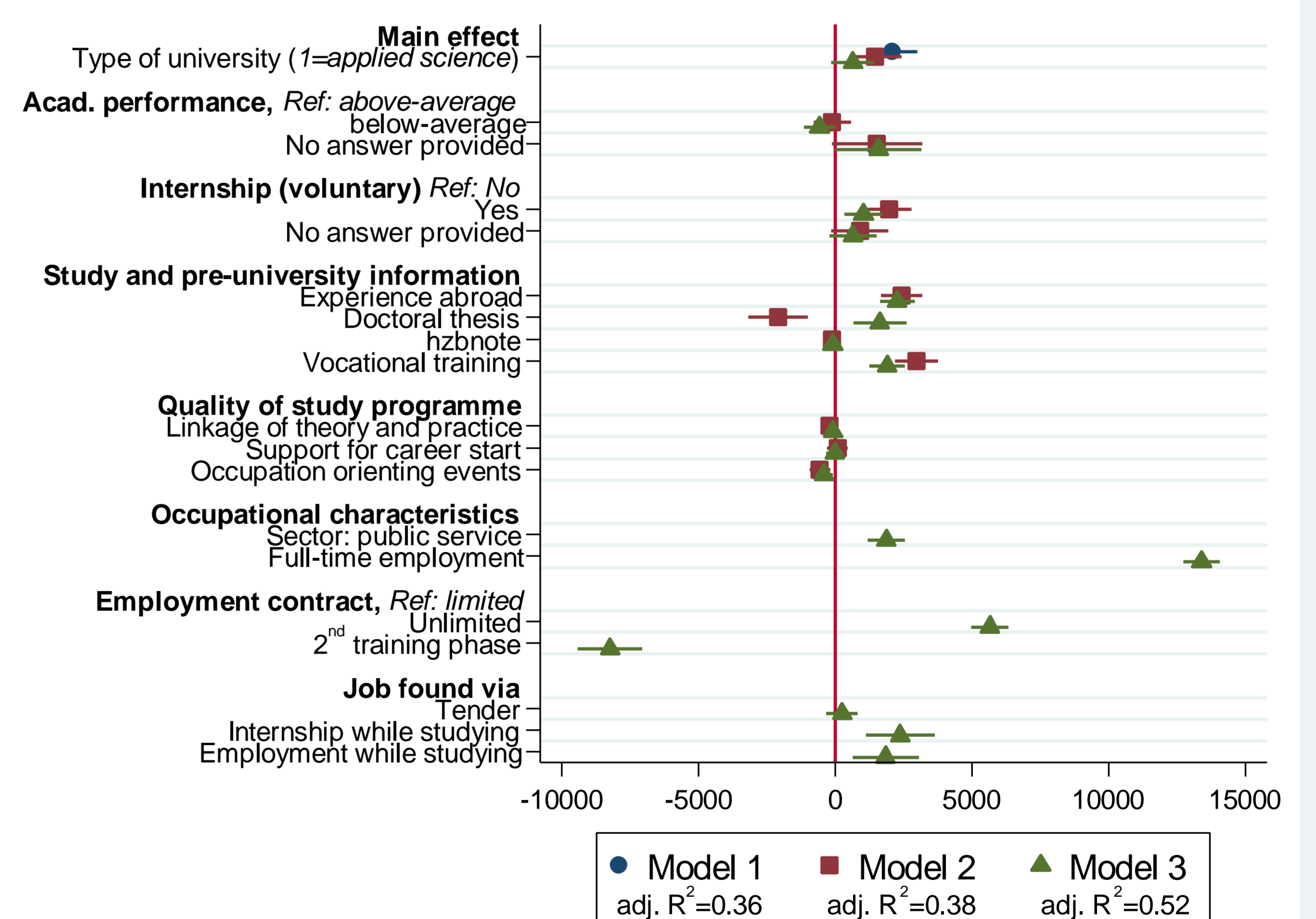
## Results

### Logistic regression limitation of first employment after graduation (1=open-ended employment contract; e<sup>b</sup>; N=5434)



(All models are controlled for disciplines, type of degree and gender)

### Linear regression on gross annual income, first employment after graduation (OLS; N=5352)



(All models are controlled for disciplines, type of degree and gender)

## Conclusions

- Disciplines contribute significantly to the explanation of open-ended employment contracts and income
- First considerable differences between types of university disappear after controlling for other available information and relevant factors
- Descriptive analyses fall short of the mark and may lead to not completely correct conclusions, even if they could be explained by theoretical mechanisms