

How do structured doctoral programs change the landscape of doctoral education?

Wien, 25.11.2016
Jens Ambrasat

Background

Doctoral training in transition

- in Europe and worldwide (Nerad and Hegelund 2008)
- Politics (Bologna, EU Commission) as driving force within Europe

Several criticisms concerning:

- Inefficient,
- Non-transparent doctoral training
- Long-lasting completion times
- Not enough qualified for demands outside of academia

Structured Doctoral Programs (SDPs)

Improving doctoral education by structuring and formalizing training conditions

Various instruments (Korff and Roman 2013)

- Standardized selection procedures
- Supervision contracts (written agreements)
- Team supervision
- Compulsory curricula
- Increase in European countries (Sursock and Smidt 2010)
- 824 different programmes, mostly locally administered (Korff and Roman 2013)
- 23 % of all candidates are program members (destatis 2016)

Evaluation and Comparison

How to investigate the ongoing change and the structural effects of emerging SDPs?

- Micro or Macro perspective?
 - Case studies or large scale comparisons?
- What is the relevant benchmark?
- Do we have appropriate data?
- Structural effects should be examined in comparison to the pre-existing structure

Traditional pathways to Doctorate

Main status groups

(Ateş et al. 2011; Auriol 2007; Enders 1996, 2001, Waaijer et al. 2016)

- Research assistants (69 %, destatis 2016)
 - Research Aides
- Scholarship holders (16 %)
- External candidates
 - With job outside of academia (14 %)
 - Without job (17 %)

Traditional pathways to doctorate

	Research assistant	Research aide	Scholar	External with job outside	External without job
closeness to supervisor	very high	medium	medium	low	rather low
integration in scientific community	very high	medium	rather high	low	rather low
embeddedness in research producing organization	very high	medium	rather low	very low	very low
motive for scientific career	high	rather high	rather high	low	medium
time resources for work on thesis	medium	medium	very high	very low	rather high
degree of structuration and formalization of doctoral training	medium	medium	rather high	rather low	very low

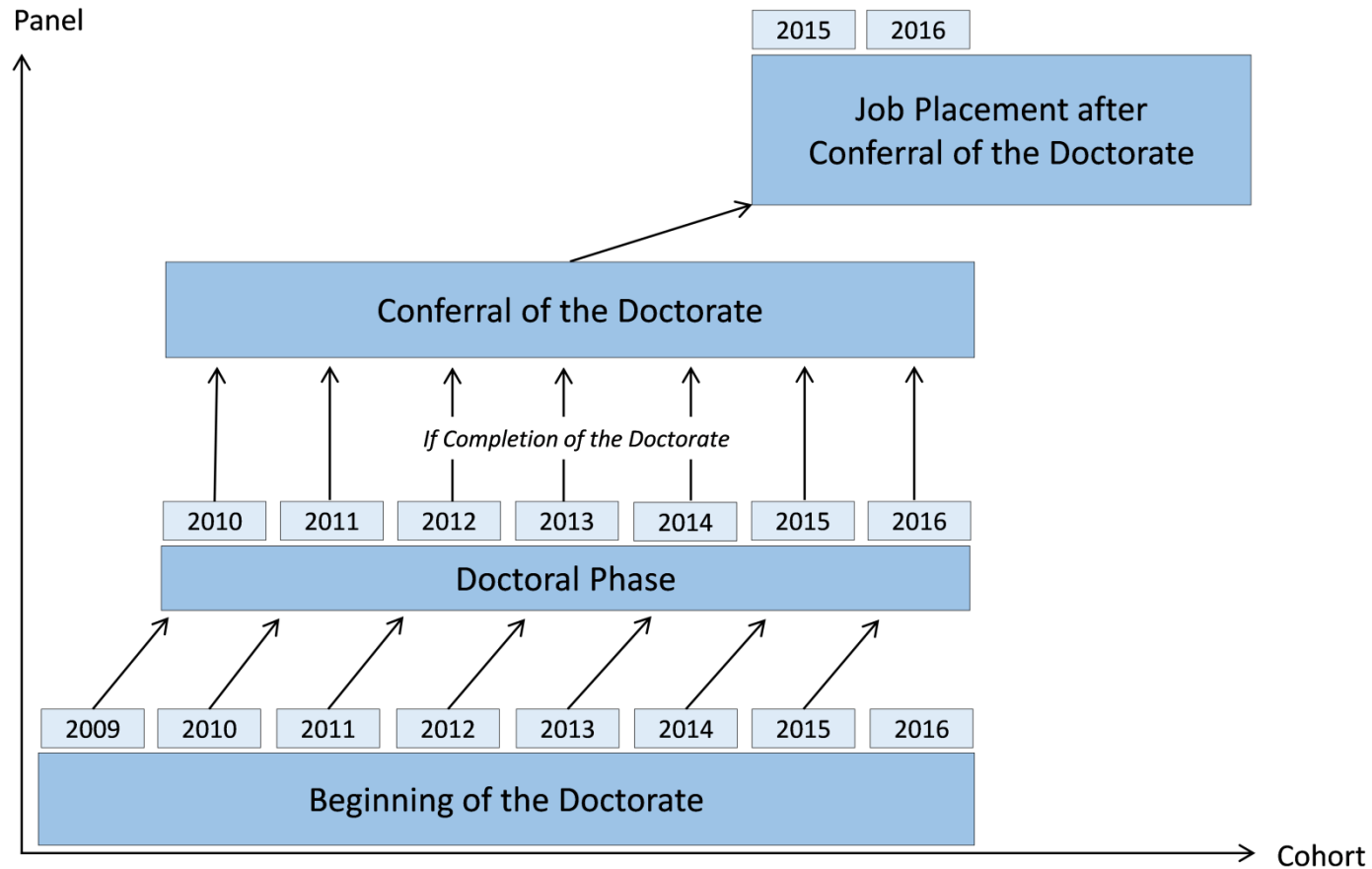
Ambrasat and Tesch, submitted

Argument

Traditional status groups function as backdrop for the ongoing change by emerging SDPs

Data and methods

ProFile - The German Doctoral Candidates and Doctorate Holders Study



Data and methods

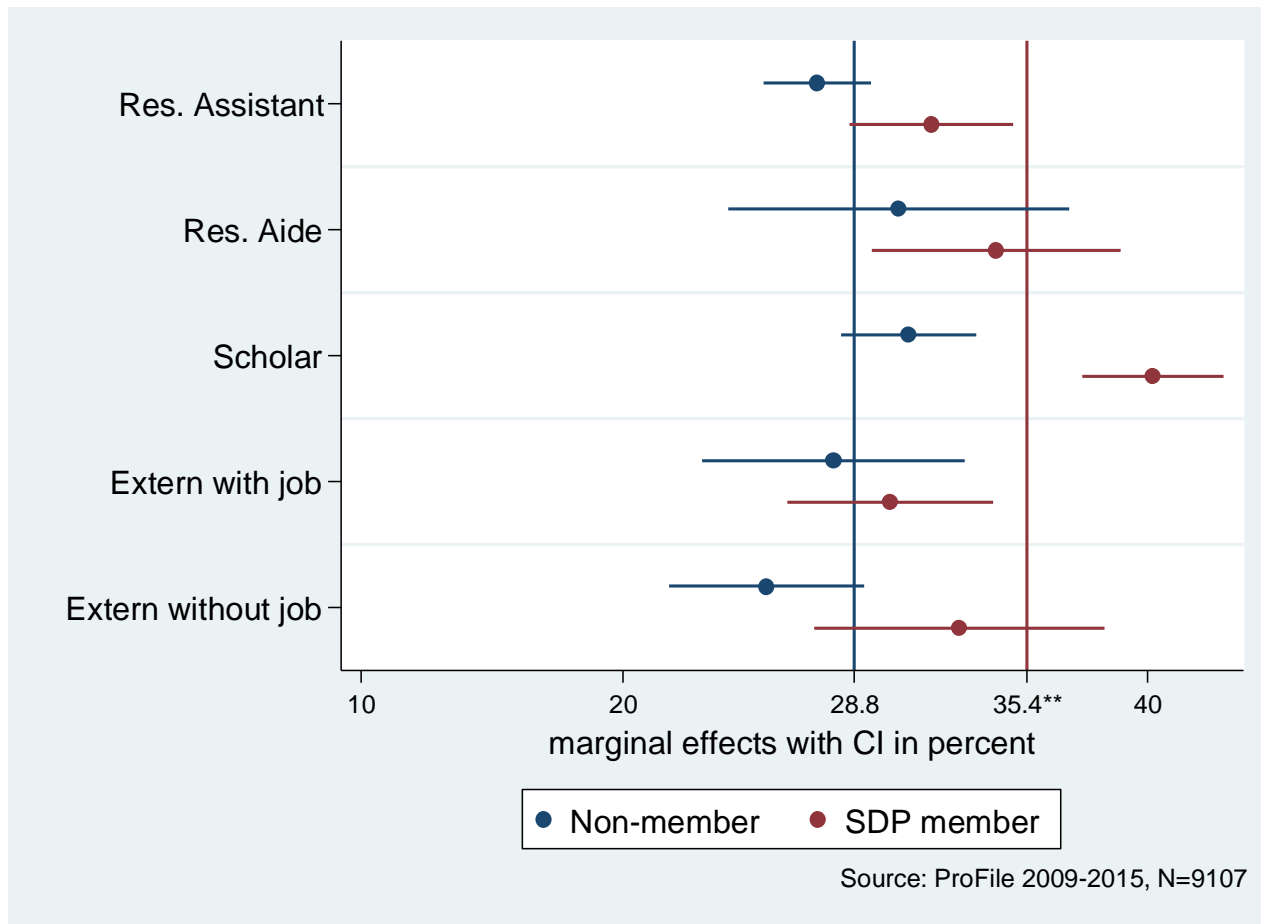
Sample Statistics		
Status Groups	No.	%
Research Assistants	3,352	36.8
Research Aides	403	4.4
Scholars	3,684	40.5
External Candidates with job	1,012	11.1
External Candidates without job	656	7.2
SDP Membership		
Non-Member	4,403	48.3
SDP Member	4,704	51.7
Total	9,107	100.0

- Cohorts from 2009 – 2015
- Oversampled: Stipends and SDP Members
- Better comparisons possible

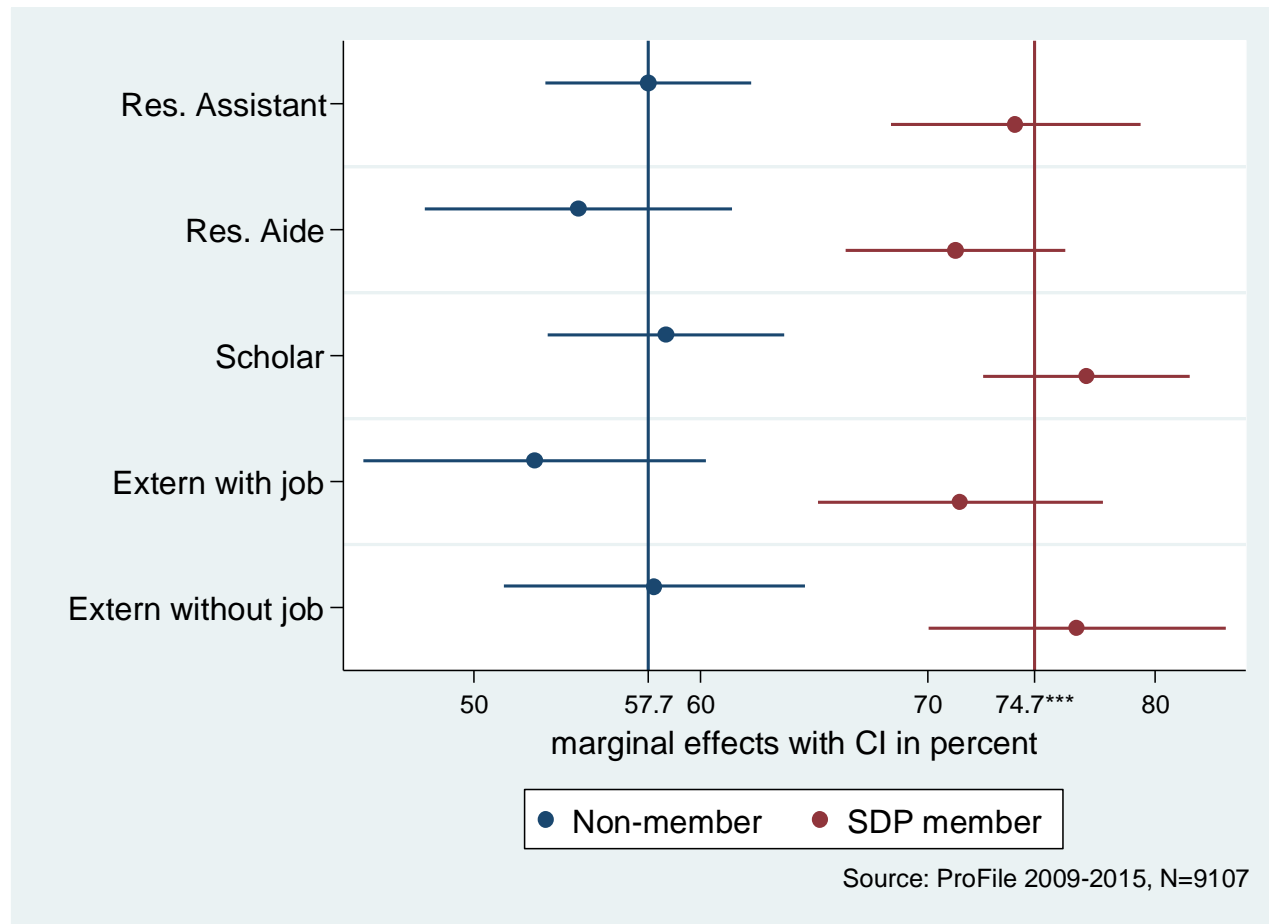
Empirical findings

1. Structure and Quality of Supervision
2. Course attendance
3. Time used for work on dissertation (thesis)

Written agreements

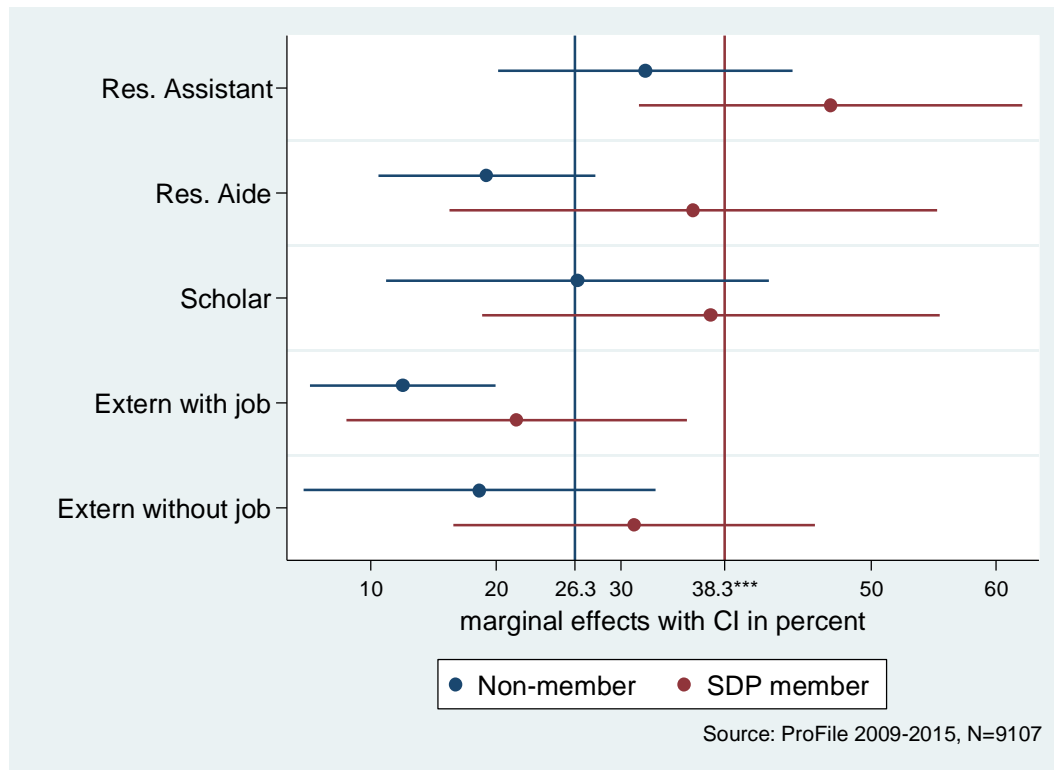


Multiple supervisors



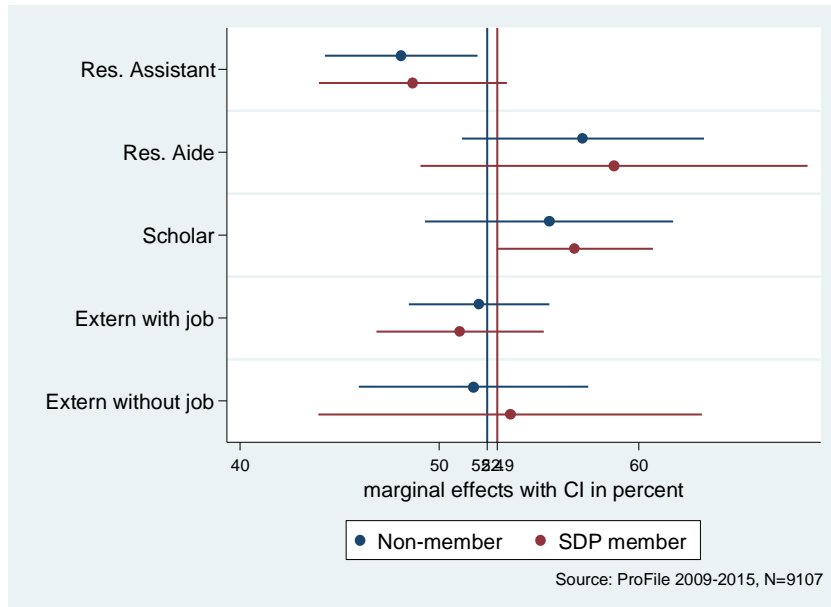
Exchange intensity

At least weekly exchange with supervisor

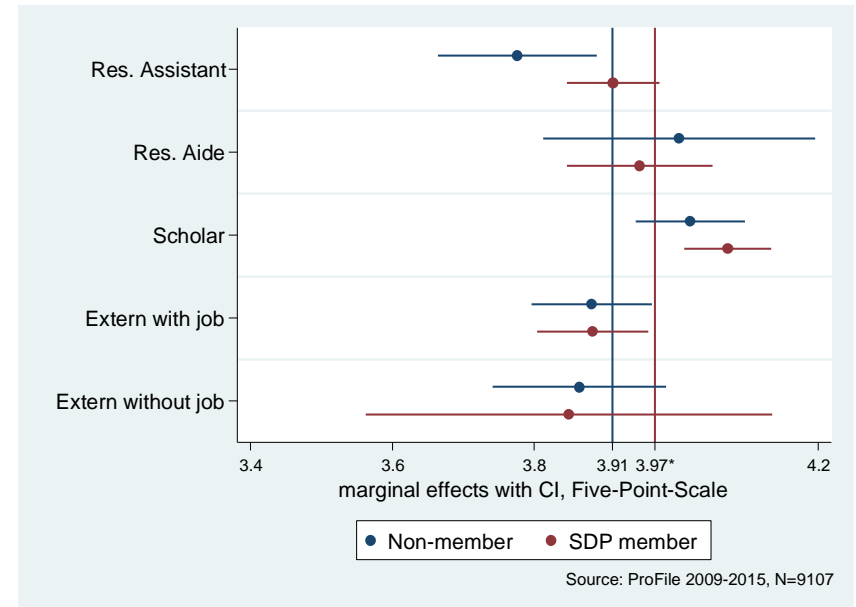


Evaluation of Supervision

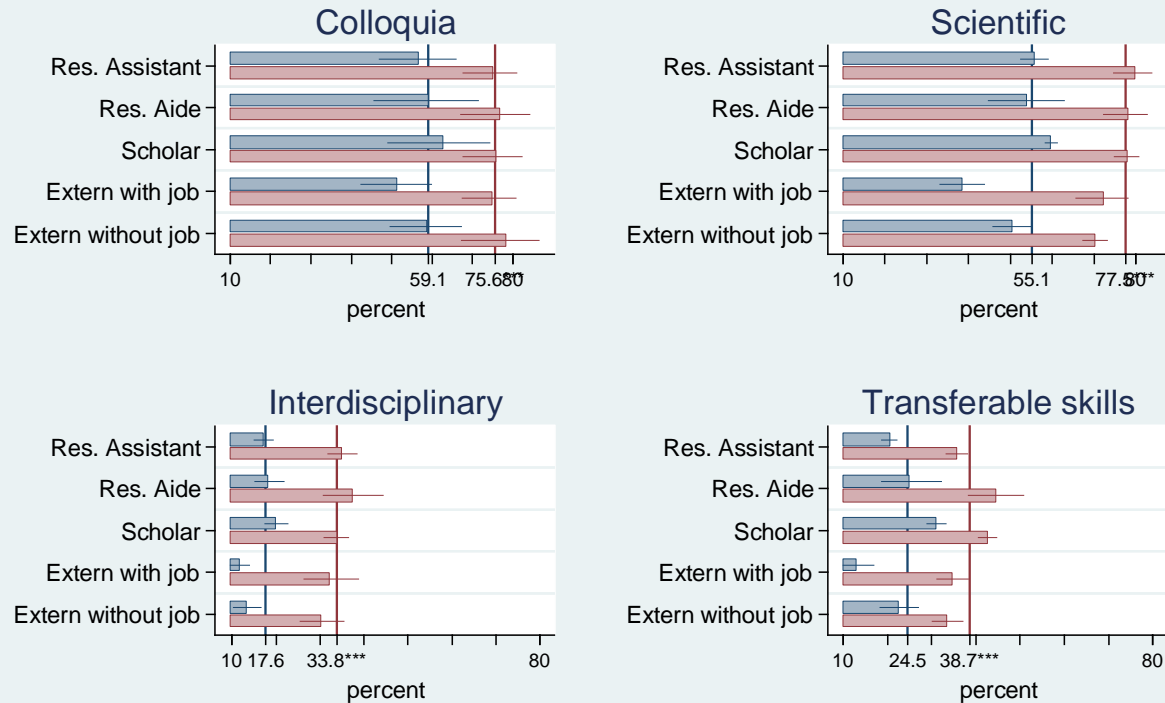
Quality



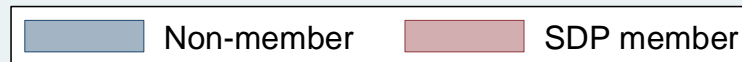
Satisfaction



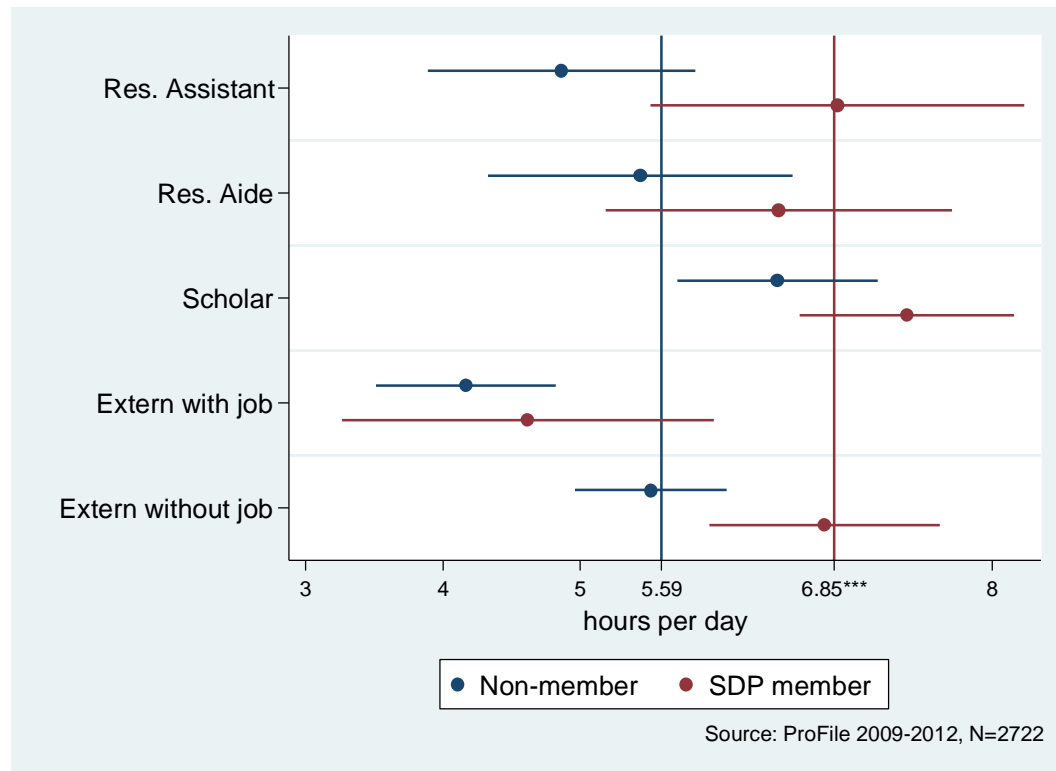
Course Attendances



Source: ProFile 2009-2015, N=9107



Time used for work on thesis



Summary

- Traditional status groups already structure the context of doctoral training
- SDPs change the landscape remarkably
!and in the expected way
- But effects of SDP membership vary between traditional status groups

Outlook

Analyses on the macro level provide a conceptual framework

- Could and should be complemented by best practice examples from the institutional level

Further research

- Trend analyses
- Impact of doctoral training on (scientific) careers

Thank you very much for your attention

References

- Ambrasat, J. and Jakob Tesch. Structured Diversity - The changing landscape of doctoral training in Germany after the introduction of structured doctoral programs. (submitted)
- Auriol, L. (2010) 'Careers of Doctorate Holders: Employment and Mobility Patterns', *OECD Science, Technology and Industry Working Papers*, 4.
- Enders, J. (ed.) (2001) *Academic Staff in Europe: Changing Contexts and Conditions*. Westport /London: Greenwood Press.
- Korff, S. and Roman, N. (eds) (2013) *Promovieren nach Plan?: Chancengleichheit in der strukturierten Promotionsförderung*. New York: Springer VS.
- Lange, J./ A. Lietz / J. Ambrasat / J. Tesch and A. Wegner (2016) The German Doctoral Candidates and Doctorate Holders Study ProFile. *Journal of Economics and Statistics*. (in press)
- Nerad, M. and Heggelund, M. (2008) *Toward a global PhD?: Forces and Forms in Doctoral Education Worldwide*. Seattle: University of Washington Press.
- Sursock, A. and Smidt, H. (2010) *Trends 2010: A decade of change in European higher education*. Brussels: European University Association.
- Waaiker, C. J. F., Heyer, A. and Kuli, S. (2016) 'Effects of appointment types on the availability of research infrastructure, work pressure, stress, and career attitudes of PhD candidates of a Dutch university', *Research Evaluation*: 1–9.