

Effects of Institutional Changes on Requirements for Vacant Professorships in Germany

A Quantitative Content Analysis of Employment Advertisements

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Project context

“Performance evaluation in appointment procedures - the changing tradition of hiring professors in academia (LiBerTas)”

- Funded by German Federal Ministry of Education and Research (BMBF)
- Conducted at the German Centre for Research on Higher Education and Science Studies (DZHW)
- Central object of research: Appointment procedures for professorships at public German universities and universities of applied sciences
- Project homepage: http://www.dzhw.eu/projekte/pr_show?pr_id=400

New Demands Placed on German Universities

Changes in
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Structures in HE

Universities are
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Universities are
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Universities are required to act more autonomously

- New rights and responsibilities
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Universities are confronted with new tasks & demands

- Attract external funding of research activities
(Winterhager, 2015, p.34 ff.)
- Succeed within competitive fields
(Hasse & Krücken, 2013)
- Demonstrate socioeconomic relevance of research
(Krücken et al., 2012)
- International connectivity of teaching and research
(Fumasoli et al., 2014)

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Universities are
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- Universities have to comply with institutionalized expectations to assure their legitimacy (Meyer & Rowan, 1977)
 - The demands have to be fulfilled by the academic personnel (Mallich et al., 2010)
 - Universities can influence the professoriate mainly via appointment procedures (Hüther & Krücken, 2011)
- The expanded spectrum of tasks of universities as autonomous actors should be reflected in the requirements profile of vacant professorships

Requirements profiles for vacant professorships: Certain requirements beyond the core activities in teaching and research should have increased

- a) The attraction of external funding
- b) Cooperation
- c) Internationality
- d) A specific profile

Requirements profiles for vacant professorships:
Certain requirements beyond the core activities in teaching and research should have increased

a) The attraction of external funding

Universities are reliant on contract-research and research applications performed by their professoriate (Fumasoli et al., 2014)

- a) Cooperation
- b) Internationality
- c) A specific profile

Requirements profiles for vacant professorships: Certain requirements beyond the core activities in teaching and research should have increased

- a) The attraction of external funding
- b) Cooperation

The dependence on external funding (De Boer et al., 2007) and the growing importance of socio-economic relevance of research have fostered new tasks in the area of cooperation (Blümel et al., 2010)

- a) Internationality
- b) A specific profile

Requirements profiles for vacant professorships: Certain requirements beyond the core activities in teaching and research should have increased

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International experiences and foreign language skills are necessary for teaching in international study programs and working in multinational research teams

- a) A specific profile

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Strategic profiles of universities or departments require competencies in specific areas

Content Analysis of Job Advertisements

1. Systematic sample of three volumes of the German weekly newspaper „ZEIT“ (i. e. 1995, 2003, and 2012)
 - First edition of every second month
 - All professorships advertised from German public universities and universities of applied sciences

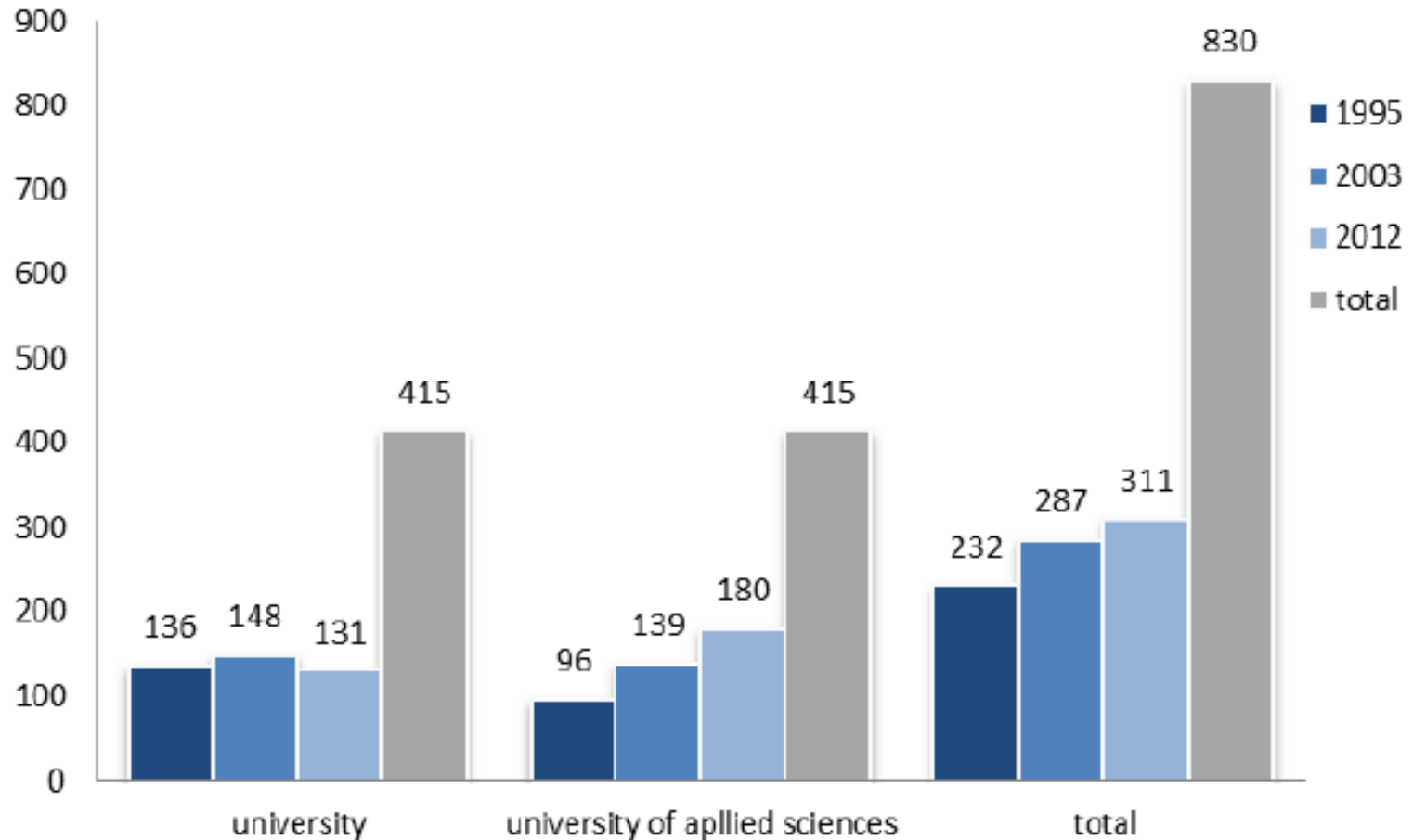
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2. Development of a code system
 - Inductively and deductively developed
 - test of reliability
3. Encoding the texts
 - Focus: requirements for professorships beyond the core areas of teaching and research

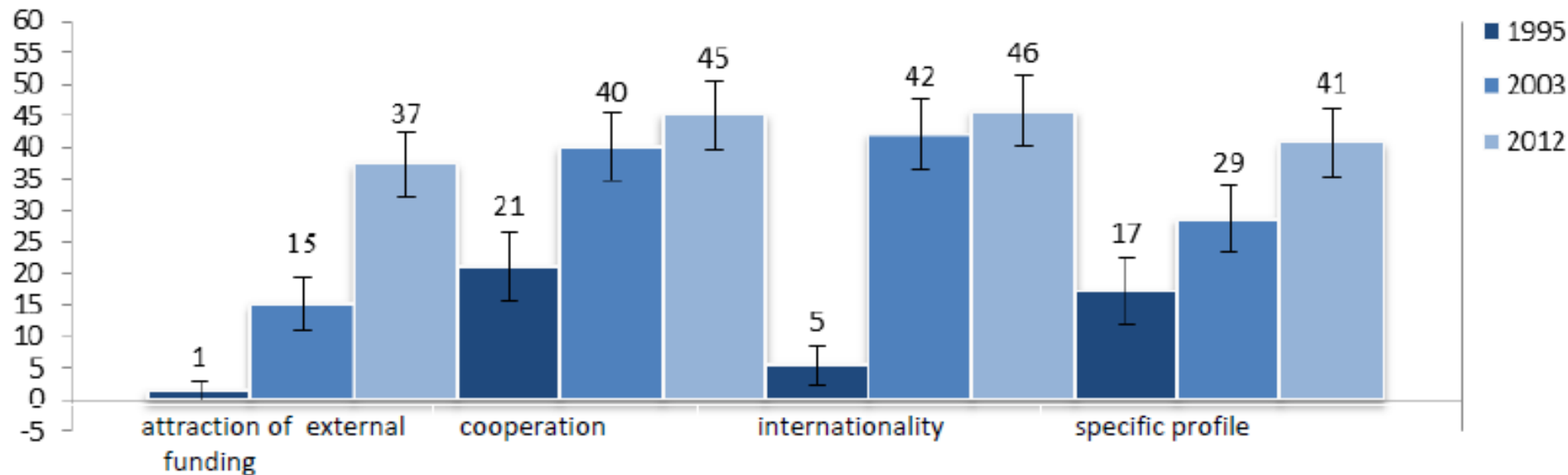
(1): Employment advertisements for professorships, by type of university and year (in absolute terms)



Logistic regression model

- Dependent variable: each specific requirement
- Independent variable: year of job advertisement
- Control variables:
 - University type
 - Subject area
 - University funded in the excellence initiative
 - Number of students in winter term 2011/2012
- Presentation of results: Predictive Margins

(2) Estimated likelihood of occurrence of requirements, by year (predictive margins with 95% confidence intervals, in percent)



What do we know now?

- ✓ Requirements for vacant professorships have changed over time

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But we don't know whether these requirements are...

- ... additional or substitutional
- ... merely a demonstration of conformity with institutional contexts (Meyer & Rowan, 1977)

Further Research

- Increase or decrease of requirements regarding the core activities in teaching and research?
- Role of job advertisements for the further selection process:
 - To what extent do they reflect the actual selection criteria for new professors?
 - „Window dressing“ or „close coupling“?

Implications

Changing requirements might affect...

...academic careers:

- Additional/other competencies might be needed to become appointed as professor (Gross & Jungbauer-Gans, 2007)

...the academic profession:

- Changing duties might affect professional roles (Kehm & Teichler, 2013)

...universities:

- strategic behaviour in the realms of personnel selection

Thank you for your attention!

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BACKUP

(3) Description of the dependent variables

code	code description
attraction of external funding	applicants are required to have experience in attracting external funding, the prospective job holder is expected to attract external funding, a documentation of already attracted external funding is demanded
cooperation	cooperation refers to activities both in teaching and research and includes cooperation within the university, with other research institutes or universities or with other external actors applicants are required to have experience in cooperation, the prospective job holder is expected to cooperate, a documentation of former cooperation is demanded
internationality	applicants are required to have international experience, the prospective job holder is expected to cooperate internationally or teach in English, a documentation of foreign language skills is demanded, the employment advertisement is available in English
specific profile	applicants are required to have experience in specific areas of teaching or research, the prospective job holder is expected to teach specific courses/ in certain programmes

(4) Determinants of occurrence of requirements
(logistic regressions, odds ratios)

	Attraction of ext. funding	Cooperation	Internationality	Specific profile
<i>Year (ref.: 1995)</i>				
2003	2.685***	1.005***	2.626***	0.797***
2012	4.066***	1.233***	2.786***	0.647**
<i>University type (ref.: university)</i>				
University of applied sciences	-1.377***	-1.200***	-0.234	-0.697**
<i>Subject area (ref.: linguistics & cultural studies)</i>				
Legal, economic & social sciences	-0.487	0.044	1.405***	0.137
Mathematics & natural sciences	0.125	0.653*	0.977**	0.620**
Human & veterinary medicine; health sciences	0.409	1.161**	0.859*	0.326
Engineering sciences	-0.126	0.378	0.739*	0.377
Art sciences	<i>empty</i>	0.095	0.074	0.906*
Other subjects	1.067	1.058*	0.677	0.929
University funded in the excellence initiative	0.244	0.376	0.505	0.033
Number of students	0.000	-0.0001*	-0.001**	-0.001
Prob>chi2 (Pearson's chi-squared test)	0.000	0.000	0.000	0.000
Pseudo-R2	0.238	0.0953	0.167	0.043
Number of observations	830	830	830	830