
NEW FORMS OF REGIONAL UNIVERSITY ENGAGEMENT - EVIDENCE FROM GERMANY

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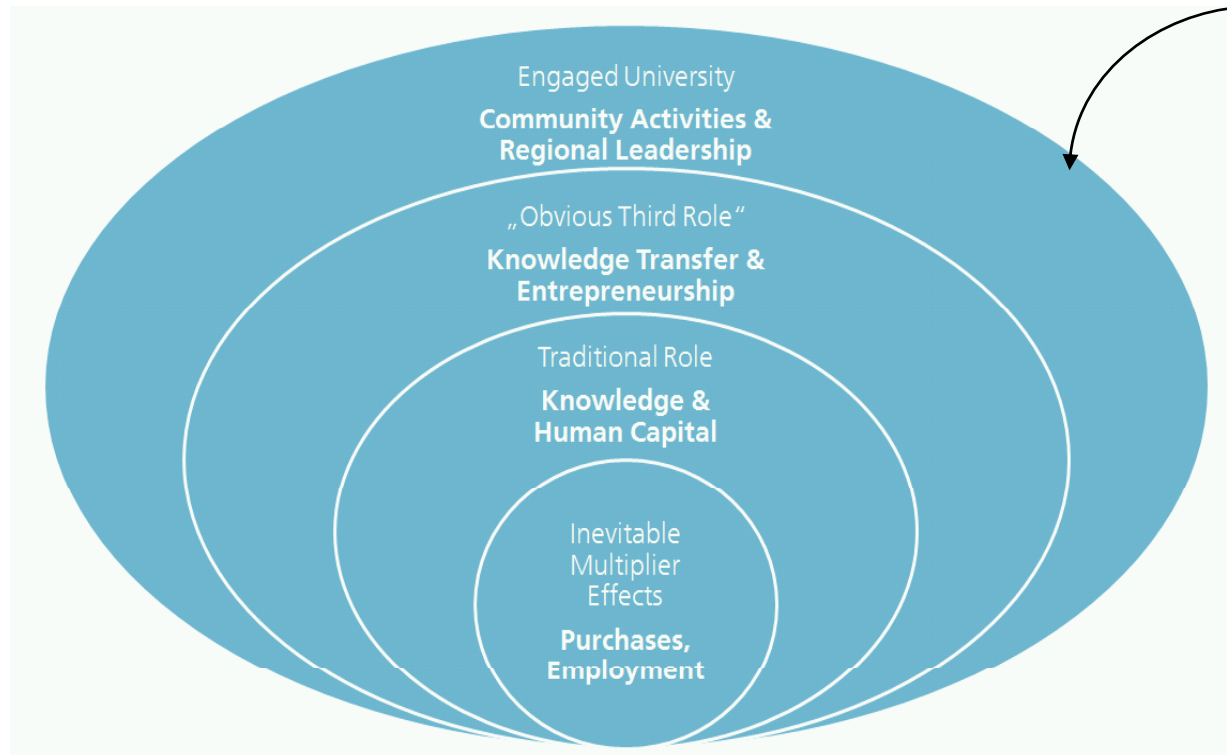
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Different forms of regional university engagement

- So far the **orientation of HEI concerning their regional environment** has already been subject to many economic or social scientific research projects (Bleaney et al. 1992; Cooke 2002; Gunasekara 2006a; Keane und Allison 1999; Kitagawa 2004; Thanki 1999).
- Many HEIs **actively engage in their environment in a strategic manner** (Krücken et al. 2009; Krücken and Meier 2006; Nickel 2004).
- In this context the emergence of "**entrepreneurial universities**" (Clark 1998, Gibbs 2001) and the "**boundary-spanning roles**" of new HEI units (Youtie and Shapira 2008) are discussed, as well the special role of HEI in transferring (tacit) knowledge in a regional context.
- In the wake of the **regionalization of RTD policies** the **expectations of policy makers** towards HEIs to engage in regional/local networks, clusters and other initiatives have significantly **increased** (Fritsch et al. 2007).

Different forms of regional university engagement



- Regional governments try to **engage universities in joint strategic undertakings** of the industry, the science and the public sectors in a region
- Such initiatives can relate to the initiation of large scale cluster projects, to the formation of public-private-partnerships, as to urban development activities

Source: Kroll et al. (2012) based on Goldstein/Mayer/Luger (1995), Uyerra (2010) and others

Research issues

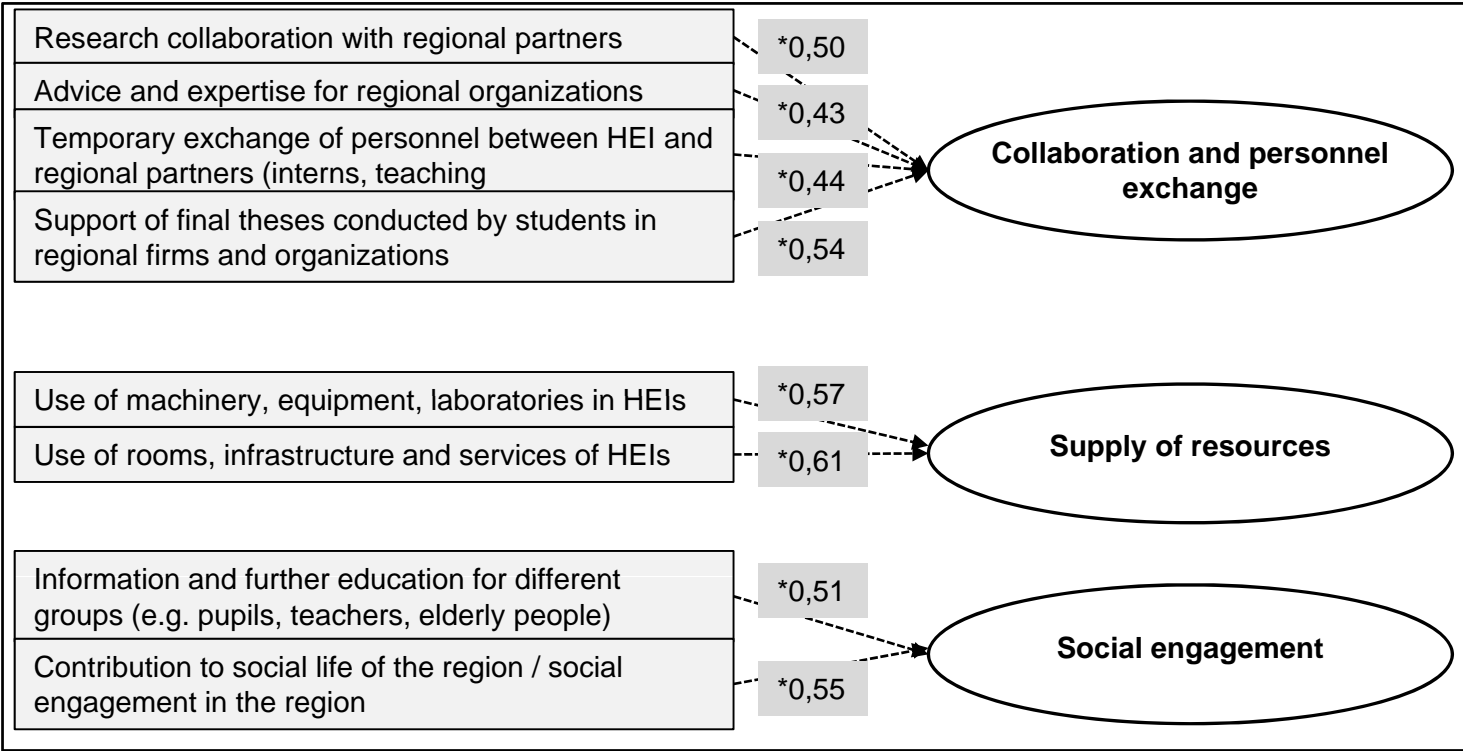
- Most prominent forms of regional engagement of German universities
- Evolution of new organisational models in university-industry interaction in the German research and innovation system
- Implications for coordination and governance of regional university engagement

Possible types of (regional) university engagement

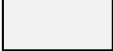
- **Research:** Collaborative research projects, contract research
- **Knowledge sharing:** Consultancy, competence building at regional actors, participation at public dialogue and media discourses
- **Services:** Making university assets and services accessible, intellectual expert contributions, contribution to civic life of the region
- **Teaching:** Practical education for citizenship, public lectures and seminars, further education, lifelong learning

Source: adapted according to Benneworth et al. (2009)

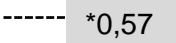
Different forms of regional engagement of universities in Germany



N = 1441



= Indicator



= estimated factor loading



= latent variable

* The highest of the respective factor loadings are shown;
 Fitting of the sample according to Kaiser-Meyer-Olkin criterion = 0,78

Source: Koschatzky et al. (2013)

Results from Germany

- **Research collaborations, consulting activities** and **exchange of human capital** via students, graduates and business people are important forms of regional engagement in which spatial and cultural proximity are of high relevance.
- Also important is the **supply of resources** (infrastructure and services).
- **Social engagement** (contribution to social life, further education) plays also a role.

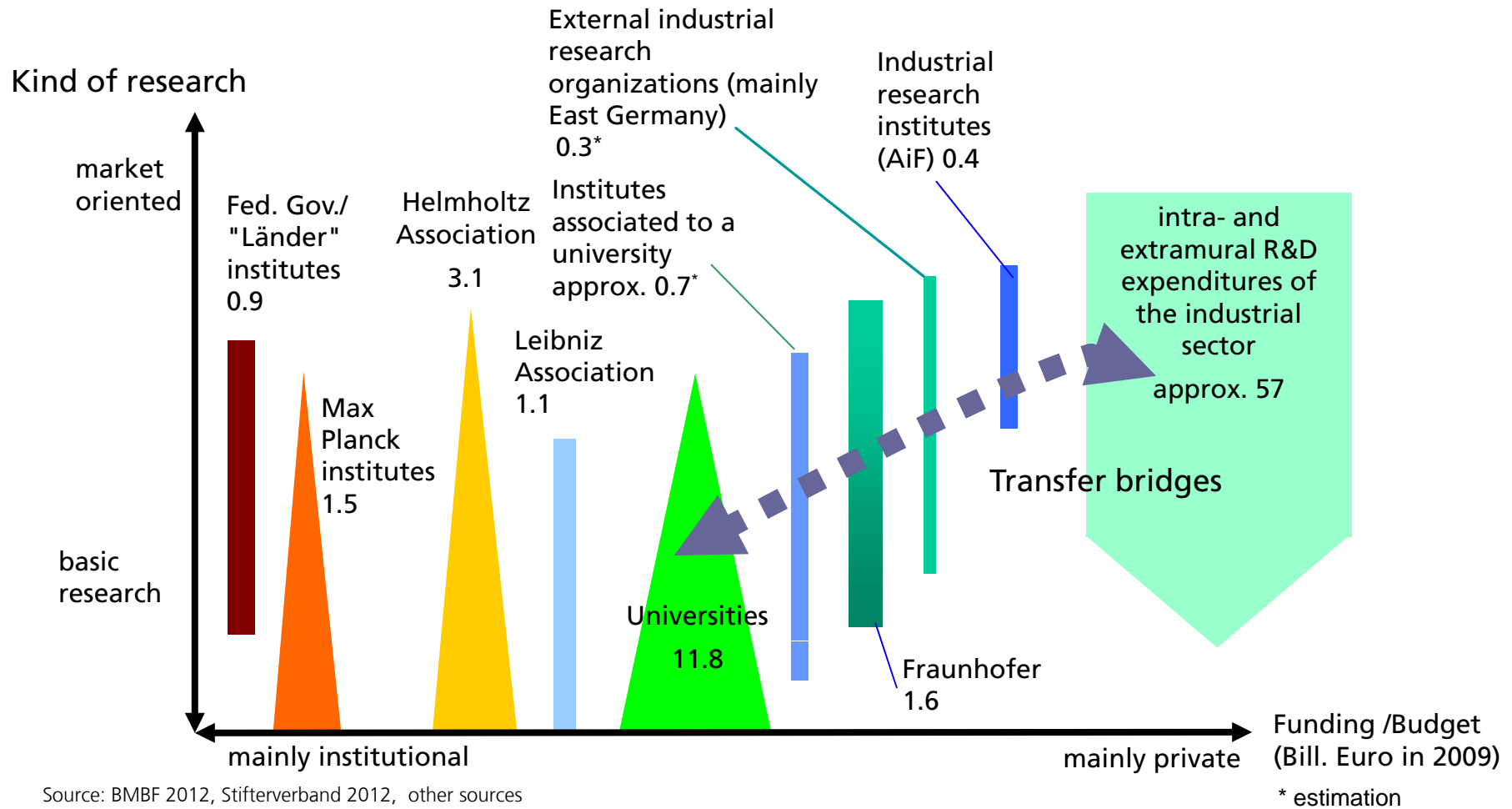
- **Conclusion:** The "third role" of German universities is a strong starting point for policy measures.

Public support of heterogeneous cooperations in Germany

- In its report 2009, the Expert Commission for Research and Innovation (EFI) suggested that strategic cooperations between industry and research organizations should be encouraged and "active political support should be provided for further partnerships" (EFI Report 2009, p. 41).
- Based on this recommendation, BMBF formulated and implemented the funding initiative **"Research Campus" (Forschungscampus)** which is part of the Hightech Strategy 2020.
- Its objective is to promote collaboration between partners from industry and research organizations by **combining resources** in order to **develop new research fields** in a **middle to long-term perspective** in the way of **public-private partnerships** located **at the campus of a university or research institute**.
- **Strategic pre-competitive research** should be strengthened and **leverage effects** by public funding for an increased private investment be created.

The logo for 'Forschungscampus' features the word 'FORSCHUNGS' in a blue, sans-serif font above the word 'CAMPUS' in a larger, bold, blue, sans-serif font. A stylized orange arrow points upwards from the 'A' in 'CAMPUS'.

The German research system

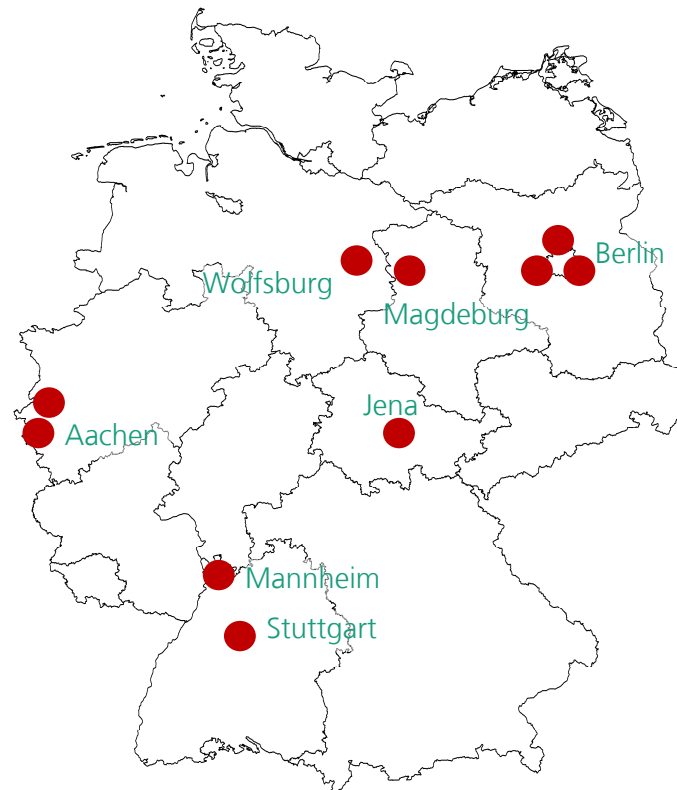


Three distinct characteristics:

- **Proximity** – the bundling of research activities and competencies at one location, as possible on a university or public research campus,
- The medium- to long-term **adaptation of a specific research topic**, ideally in the frame of a research programme,
- A mandatory **public-private partnership**.

Preparation and main phases will be supported **up to altogether 15 years** with a **maximal amount of 2 mill. Euro per year**.

In September 2012, **ten ResearchCampus projects** were selected.



Campus	Subject	Location
ARENA 2036 – Active Research Environment for the Next Generation of Automobiles	Support of sustainable future mobility and production; multifunctional composite materials	Stuttgart
Connected Technologies	Overall subject: Smart homes and networked living of tomorrow; development of a basis for technologies, modes of interaction and business models for new application scenarios in the home environment.	Berlin
Digital Photonic Production	Laser application in production and construction of composites related to future areas like mobility, energy, health and ICT.	Aachen
Electrical Nets of the Future	Environment friendly sustainable energy technologies; research on direct current voltage for power transmission.	Aachen
Sustainable Energy- and Mobility development through coupling of intelligent nets and e-mobility	Integrated research on e-mobility by coupling energy technology approaches with mobility- and urban concepts.	Berlin

Campus	Subject	Location
INFECTOGNOSTICS	Development of a technology portfolio which enables a highly-efficient and rapid on site proof of infection agents and microbiological contaminations.	Jena
Mannheim Molecular Intervention Environment – M2OLIE	Long-lasting research strategy with the aim to develop a molecular medical intervention environment regarding cancer therapy.	Mannheim
Mathematical Optimization and Data Analysis Laboratory – MODAL AG	Research on data based modelling, simulation and optimization of complex processes in logistics and medical technology. Main objective: optimization of nets, systems and related processes for instance regarding rail traffic, petroleum gasoline maintenance or medical diagnostic technologies.	Berlin
Open Hybrid LabFactory	Research focus on hybrid light construction; development of new process technologies aiming at the construction of innovative large-scale and functional light construction components.	Wolfsburg
STIMULATE – Solution Centre for Image Guided Local Therapies	RC develops and optimizes technologies for the screening of minimal-invasive methods in medicine; the focus is on important widespread diseases in the fields of oncology, neurology and cardiovascular diseases.	Magdeburg

Conclusions

- There is a clear indication for **reorganizing the division of labour in strategic R&D** between industry and the research sector.
- During the last years the expectations of policy makers towards universities to engage in industry collaborations have significantly increased.
- The ResearchCampus programme by BMBF is an **attempt to establish this form of collaboration in Germany**.
- Universities respond to these expectations by changing governance modes (i.e. the former faculty based decision mode changes to a stronger involvement of the university administration in strategic matters).
- The public responds by questioning the independence of research and professors due to closer linkages to and dependencies on industry .
- Based on ongoing experiences it has to be evaluated whether these strategic PPPs become a **new and sustainable element in Germany** and how they **affect the whole research system** (i.e. new role and self-conception of universities).

Thank you for your attention!

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