

Hochschule und Stadt – Formen und Bereiche der Kooperation

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Universities as Examples for NMPU (= non-municipal public units):

- NMPU are always located just in some cities (“central places”), have a “horizontal” relation to their cities, even if they are parts of “higher” tiers of government
- NMPU are (often neglected!) relevant drivers of local economic growth →→→



Relevance of NMPU for urban economic development:

- public sector activities are often not integrated in approaches to analyze the driving forces of agglomeration (see Roos 2004)

- but ...
 - competencies of public units have impact on urban development (Storper 2010)
 - political centralization plays an important role for the process of agglomeration (Krugman 1996)
 - empirical evidence confirms the impact of being a state capital on urban development (Dascher 2000; Kauffmann 2009)

- some cities have turned to the strategy of attracting and supporting NMPU instead of private businesses
- special focus of cities is often on universities



A lot of research has been done on the Impact of universities on urban economic development, in the light of New Growth Theorie; see for empirical studies in Germany e. g.

- Rosenfeld, Franz, Roth 2005
- Fritsch et al. 2007

-- Much less research has been done on the impact of cities on universities ...

-- ... and on the cooperation between universities and cities!



General Hypotheses (1):

- Support of NMPU (cities) by their municipalities (NMPU) may improve the performance of the NMPU (cities)

- Reciprocal relationship!

- Coordination / cooperation could benefit both partners!

- Incentives of municipalities (NMPU) to support NMPU (cities) are in general low, because most of the benefits of NMPU (cities) may not be measured in monetary terms

- Benefits (and incentives for supporting the partner) of the cities are higher than those of the NMPU

- Institutional Settings (no formal responsibilities of cities; lack of autonomy of NMPU) may prevent cooperation →→→



General Hypotheses (2):

Degree of Autonomy of a NMPU		
High	Medium	Low
Chance of Cooperation between NMPU and City		Need of Cooperation between City and Higher Tiers of Government (often located in other Cities)



Organization of the Paper / Agenda:

- Local external benefits (“supplementary benefits”) of NMPU ... and of cities
- Universities as Examples for NMPU with a High Potential for Cooperating with Municipalities
- Empirical Analysis
- Conclusions



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Demand effects of NMPU:

"A concentration of NMPU within a city will lead to positive employment effects, especially in the cultural, foodservice, retailing and hotel industry."

[for the differentiation between demand and supply effects see e. g. Rosenfeld, Franz, Roth 2005]

Supply effects of NMPU:

"NMPU will have a positive impact on the attraction of highly qualified jobs and employees in the private sector within a city ..."

"Private firms may recruit their employees from the NMPU"

"Especially universities may produce (1.) 'knowledge spillovers' for private firms and (2.) spin-offs"

"... but Cities with a high concentration of NMPU will have a tendency to economic stagnation within the private sector".

Determinants for Benefits from NMPU for cities (1):

- number and qualifications of employees of NMPU
- demand by NMPU for other production factors
- attraction of visitors from other regions by NMPU
- relevance of the outputs of NMPU for private businesses (e. g. universities are producing innovations and graduates [= academic workers], both categories of outputs are highly estimated today as input factors for private businesses and as relevant factors of urban growth)
- degree of centrality of the NMPU



Determinants for Benefits from NMPU for cities (2):

- capacity of a NMPU (its “publicity value”) to shape the image of a city
- autonomy of NMPU with regard to spending money, determining their own budgets and raising own taxes or fees from the private sector
- structure of the local economy and the matching between this structure and the structure of NMPU (Are the production factors which are used as inputs for NMPU produced within the city in question? Are local businesses in need of inputs from or relations to certain categories of NMPU? What about the absorptive capacity of the local economy?)



Benefits from local policy for NMPU:

- *Accessibility from outside / of the NMPU within the city*
- *Prominent site within the city for the NMPU*
- *Local level of amenities*
- *Overall image of the city*
- *Making the NMPU visible within the city, e. g. with information signs*
- *Taxing and / or subsidies by the municipality*
- *Structure of private businesses within the city (capacity for cooperating?)*



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Categories of NMPU ...

... with regard to their

-- **benefits for the cities**

→ low e. g. for Water Boards, high e. g. for Universities

-- **benefits from the cities (to what extent is it necessary for the NMPU to attract workers from outside?)**

→ low e. g. for Radio Stations, high e. g. for Universities

-- **degree of autonomy of the NMPU**

→ low e. g. for Water Boards, high e. g. for Universities



What should cities do (1)?

Real estate policy → prices for land, → suitable place for local universities within the city as a whole

Caring for a high capacity of hotel rooms and places for large international congresses

Social, education and cultural policy should create and finance a suitable level of urban amenities

Image policy is not especially directed towards universities and workers of the universities

Accessibility policy should take care for the accessibility of the city from outside and for the accessibility of the local universities from places within the city



What should cities do (2)?

Labour market policy may give special help in the sense of employment exchange for students if they want to earn their living by working parallel to studying

Industrial policy could be directed to support the cooperation between universities and private companies, e. g. with the help of business incubators or by helping to supply private firms with students for internships

Information policy (information signs, printed materials, information via internet) could (a.) highlight the own university, (b.) highlight the measures of a city in favour of its university and their workers (academic workers and students) and (c.) explain how workers may get access of the city's services in favour of them



What should cities do ... on their websites (= criteria for “scanning” the internet)?

- Links zu den örtlichen Hochschulen
- Informationen zur Qualität der örtlichen Hochschulen
- spezielle Internetseite mit Informationen für Studierende
- Informationen zu städtischen Sonderleistungen für Studierende (z.B. Semesterticket, Begrüßungsgeld, Preisermäßigungen)
- Möglichkeit eines Praktikums bei der Stadtverwaltung



What should universities do (1)?

Supporting their workers to settle within their city, e. g. by advisory services on the local housing market

Integrating university buildings / campuses into the built structure of a city

Real estate policy may influence the local price of land, university buildings are shaping a city and its image



What should universities do (2)?

Supporting the city by choosing a name for itself with a strong relation to the city and its overall image

Supporting start-ups, because the supply with new entrepreneurs is a relevant way to re-structure the local economy

Attracting national and international attention to a university and to its city by organizing congresses and events

Information policy may communicate a positive image of the city to people working at the university and to the outside world

What should universities do ... on their websites (= criteria for “scanning” the internet)?

- Link zur Internetseite der Stadt
- Informationen zur Stadt
- Informationen zu örtlichen Unternehmen
- Information / Link zu einem Career Center o.ä. (Schnittstelle zwischen Hochschule und Arbeitsmarkt, Beratung, Vermittlung und Qualifizierung, Vermittlung von Nachwuchskräften an die örtlichen Unternehmen)



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- **Empirical Analysis**

#Thanks for the assistance by Anja Förtsch, Masterstudent in Economics at the Martin-Luther-University Halle-Wittenberg!#

- Conclusions

Empirische Analyse der Internetseiten der 190 Hochschulstädte sowie der 424 Hochschulen in Deutschland (1)

→ Einbeziehung (semi-) privater Hochschulen

→ "scanning" the internet presentations, according to the criteria, as explained before, between Dec. 2013 and March 2014

→ Gewichtungsfaktoren:

Weitgehende Erfüllung eines Kriteriums → 1 Punkt

Nur ungenügende Erfüllung eines Kriteriums oder Schwierigkeiten beim Auffinden der Informationen → 0,5 Punkt

Fehlen eines Kriteriums → 0 Punkt

→→→→

Empirische Analyse der Internetseiten der 190 Hochschulstädte sowie der 424 Hochschulen in Deutschland (2)

→ Städte können maximal 5 Punkte, Hochschulen maximal 4 Punkte erreichen!

→ Ermittlung der jeweils erreichten Gesamtpunktzahl

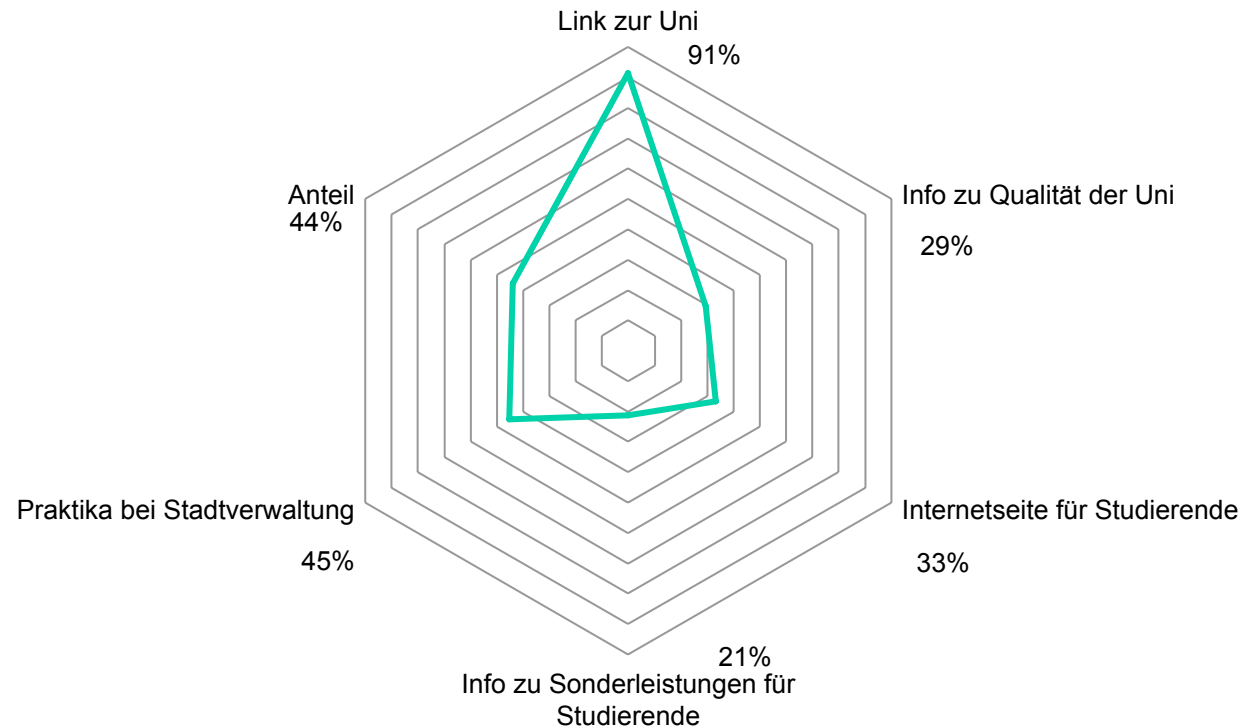
→ im Folgenden betrachtet:

Anteil der jeweils erreichten Gesamtpunktzahl an den maximal möglichen Punkten in %

Bei mehreren Hochschulen je Stadt: arithmetisches Mittel!



Informationsumfang auf Interneseiten der Städte (1)

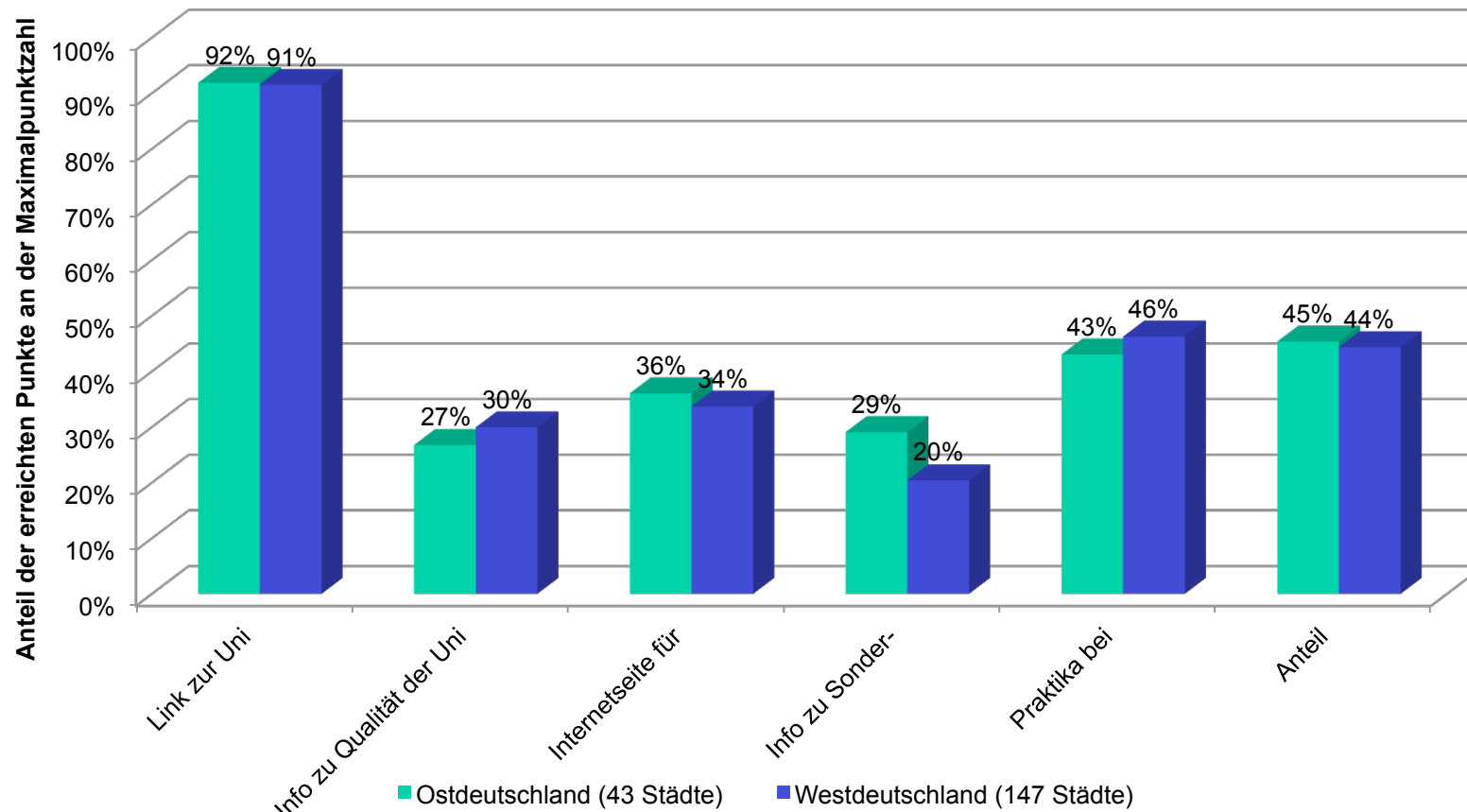


Informationsumfang auf Internetseiten der Städte (2)

-Städte ohne Link zur Hochschule: eher kleinere Städte plus München

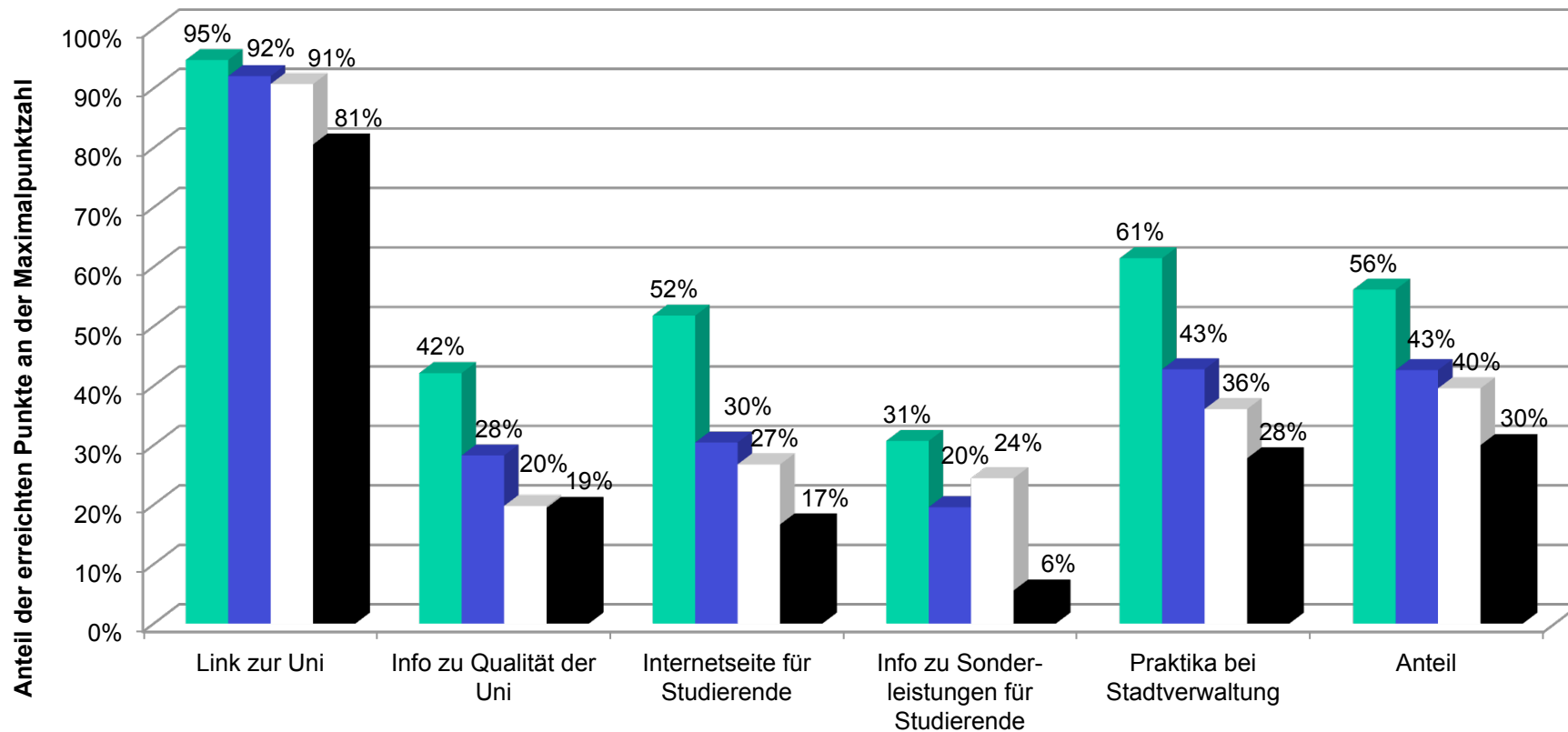
-Insgesamt aber kein eindeutiger Zusammenhang Größe-Umfang der Informationen

Informationsumfang auf Internetseiten der Städte (3) – Ost vs. West?



Informationsumfang auf Internetseiten der Städte (4) – Alt vs. Neu?

Informationsumfang auf den Internetseiten der Hochschulstädte nach Alter der Hochschulen



■ Gründung vor 1945 (57 Städte) ■ Gründung ab 1945 (69 Städte) ■ Gründung ab 1990 (43 Städte) ■ Gründung ab 2000 (18 Städte)

“City of Science” in Germany:

- Title, annually (up to 2012) awarded by the

“Stifterverband für die deutsche Wissenschaft”

= Organization for supporting science and education in Germany,
funded by private firms, entrepreneurs, other foundations

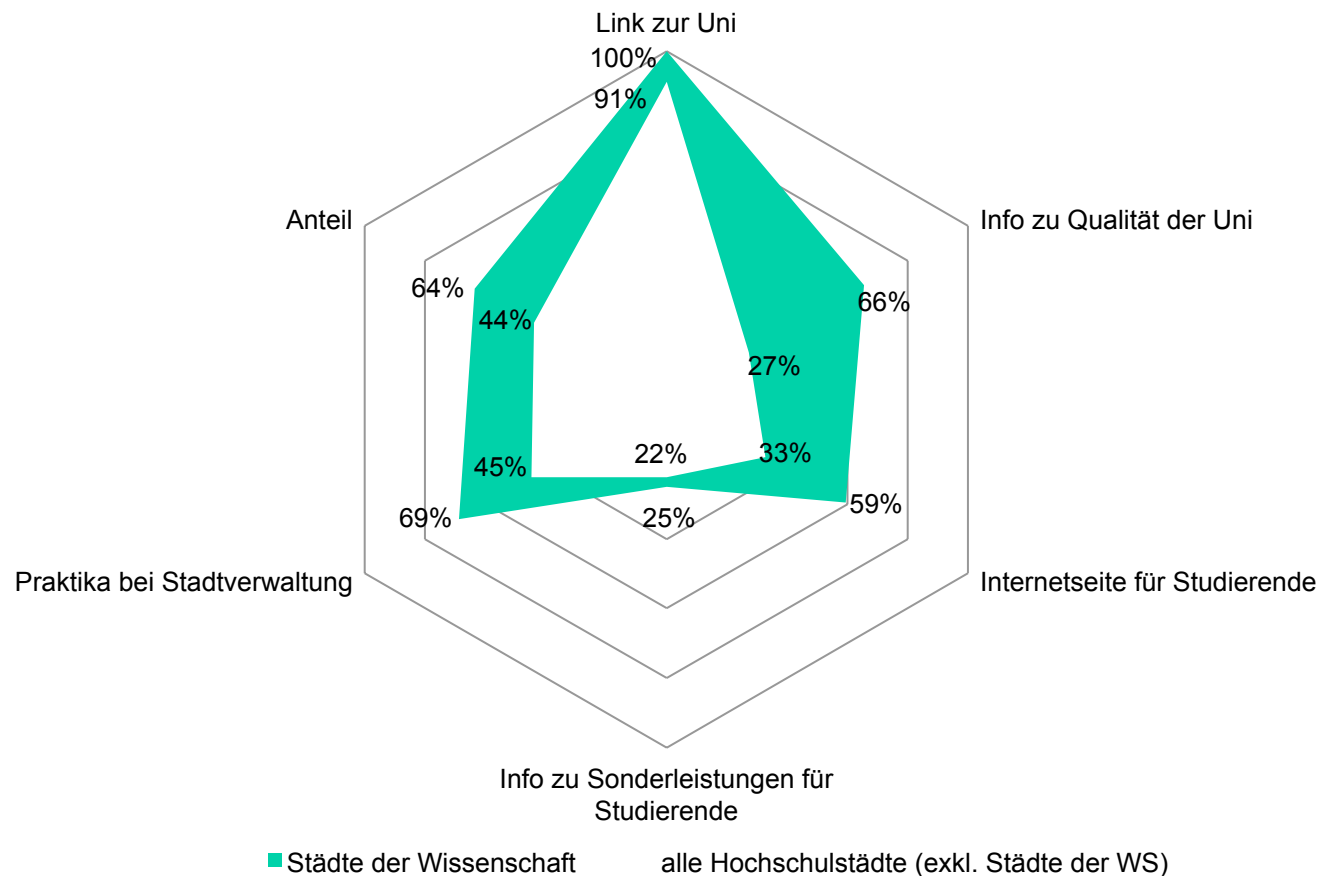
-Cities had to apply for the title, like for grants from the state or
federal or EU level of government!

Winners:

Bremen/Bremerhaven; Dresden; Braunschweig; Jena; Oldenburg;
Mainz; Lübeck; Münster



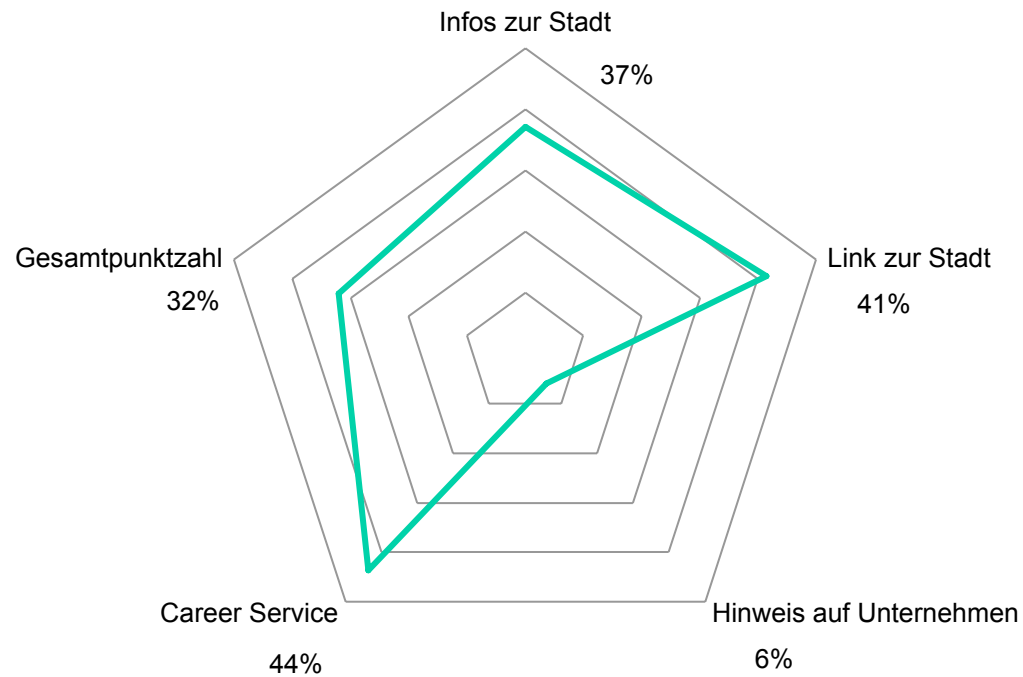
Informationsumfang auf Internetseiten der Städte (5) – Stadt der Wissenschaft?



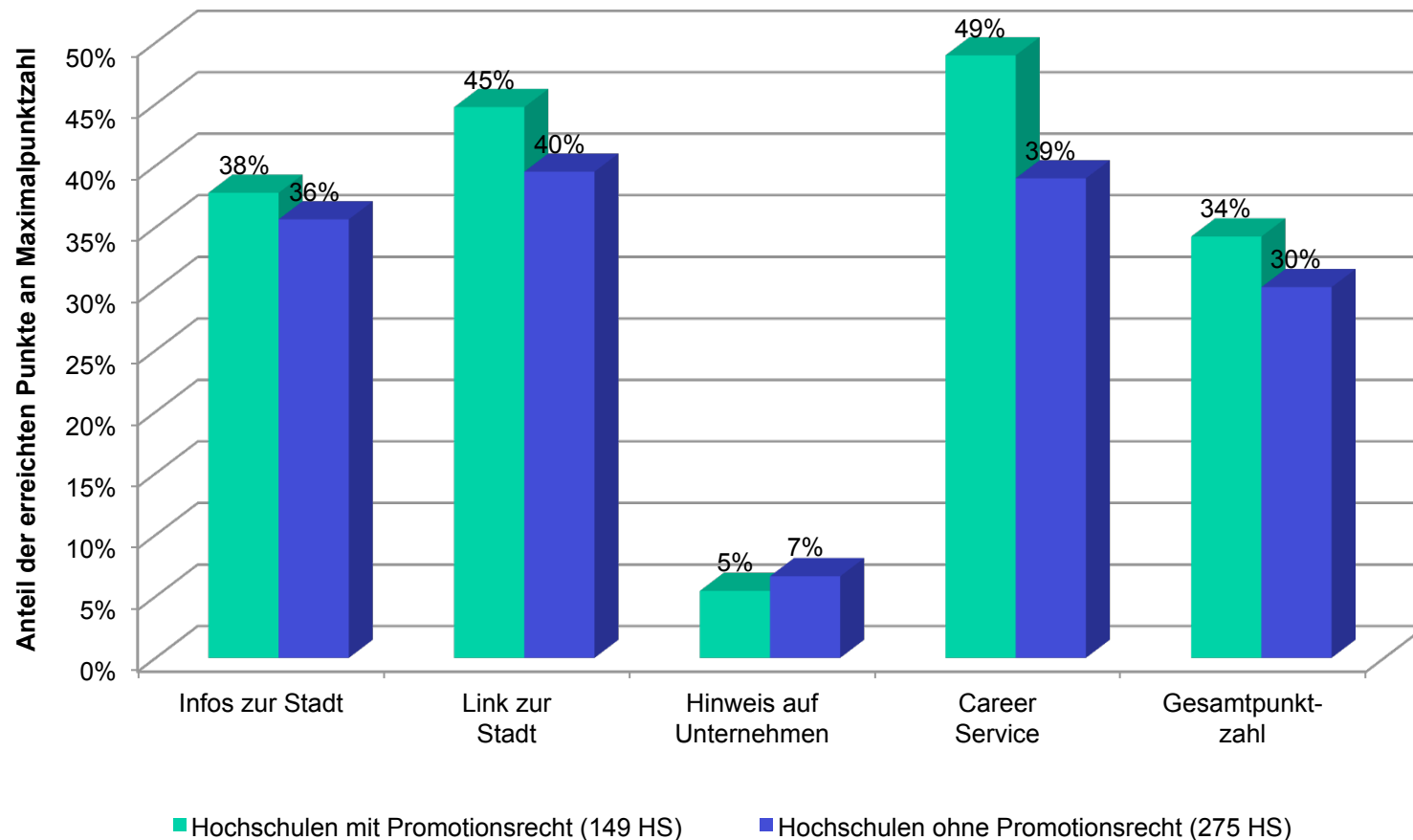
Informationsumfang auf Internetseiten der Städte (6) – Konkret für Halle:

- Link zu Hochschulen: 1
- Qualität: "1724 erster afrikanischer Student ... Wer sich entschlossen hat, in der bunten Saalestadt mit dem unverwechselbaren Flair zu studieren, braucht neben einigen Informationen zum Studium nur noch ein Dach über dem Kopf und kann sich mit diesem Anliegen zum Beispiel an das Studentenwerk Halle wenden." → 0,5
- Seite für Studierende: 0
- Sonderleistungen: 0
- Praktikum: 0

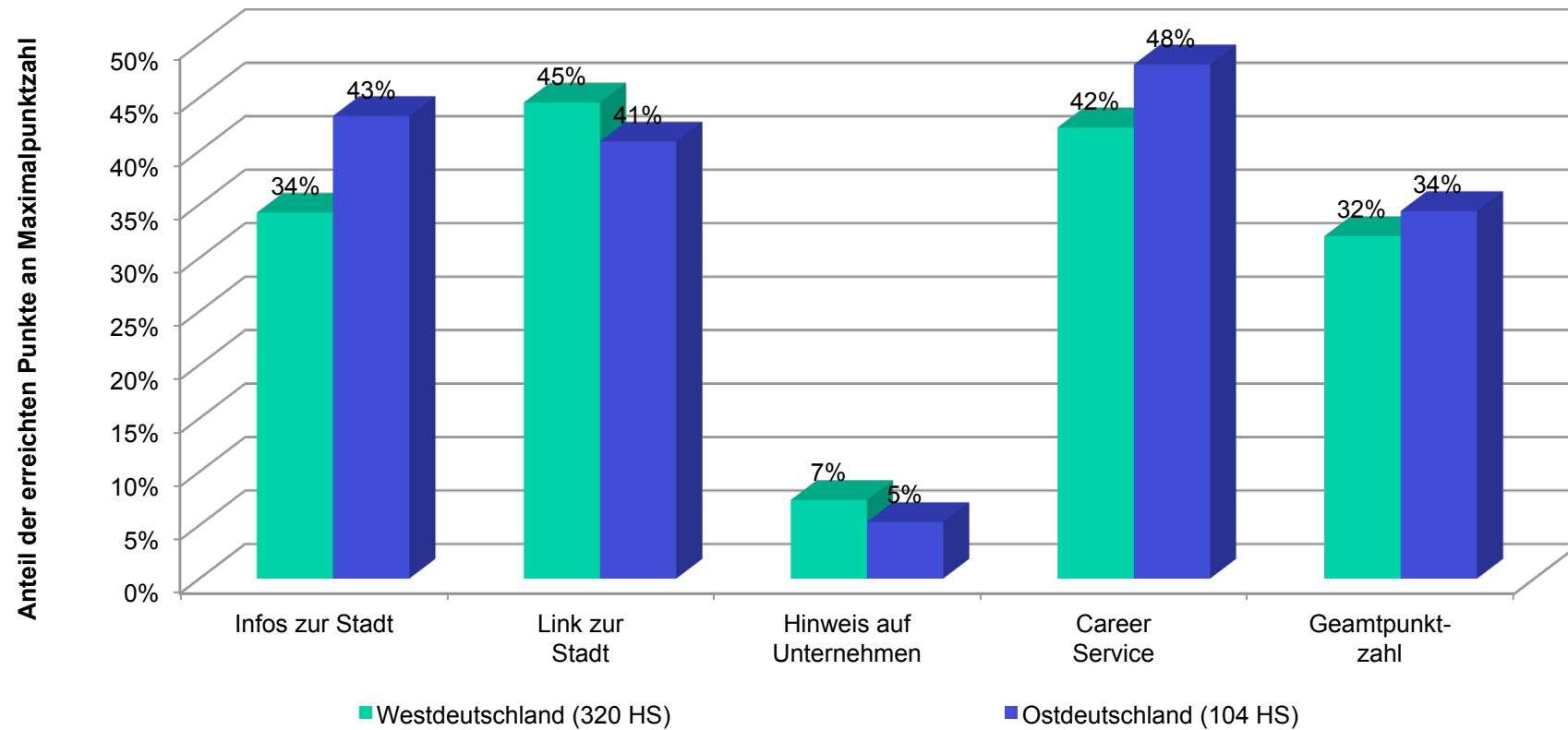
Informationsumfang auf Internetseiten der Hochschulen (1)



Informationsumfang auf Internetseiten der Hochschulen (2): mit/ohne Promotionsrecht?

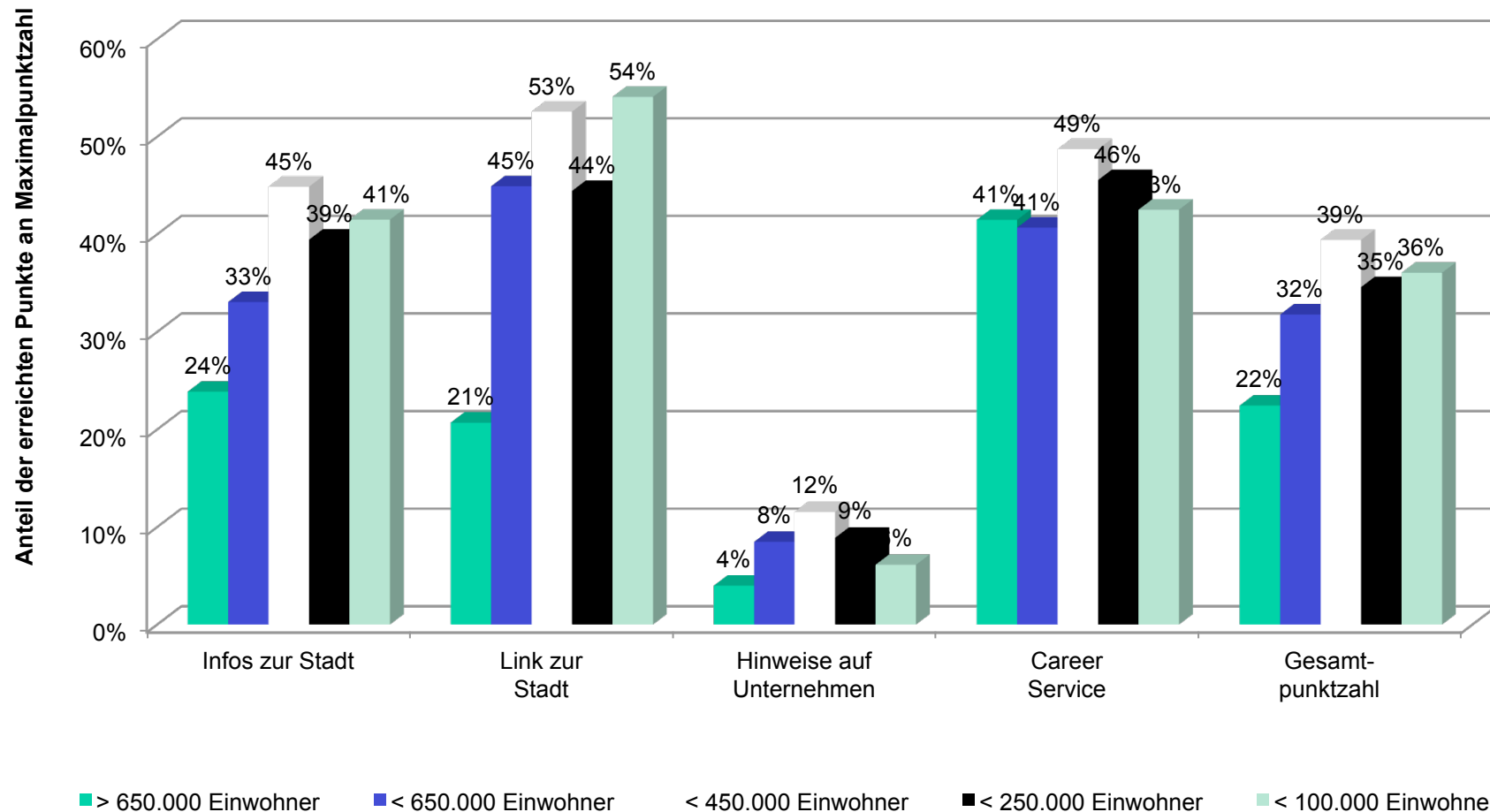


Informationsumfang auf Internetseiten der Hochschulen (3): Ost vor West!

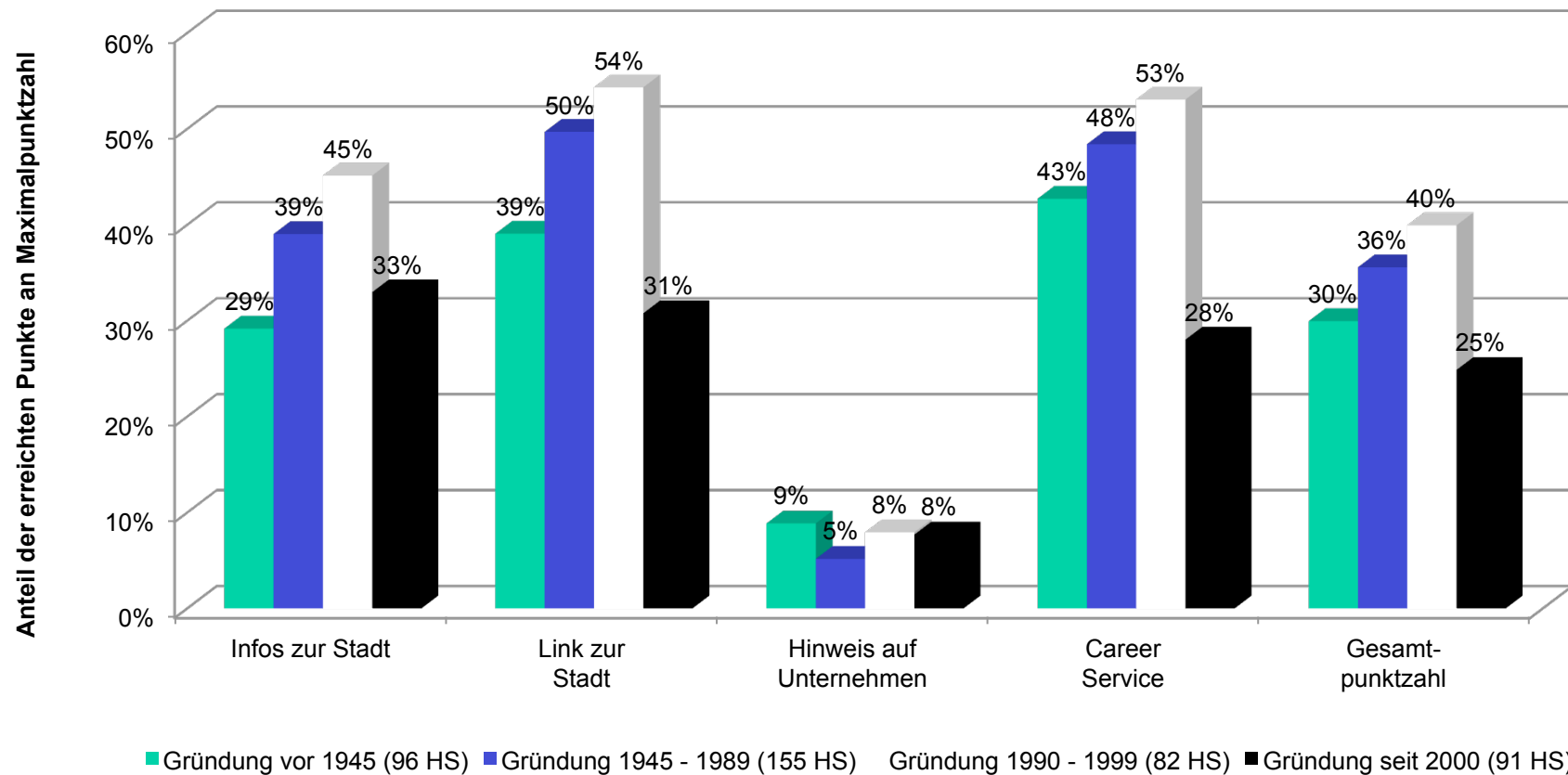




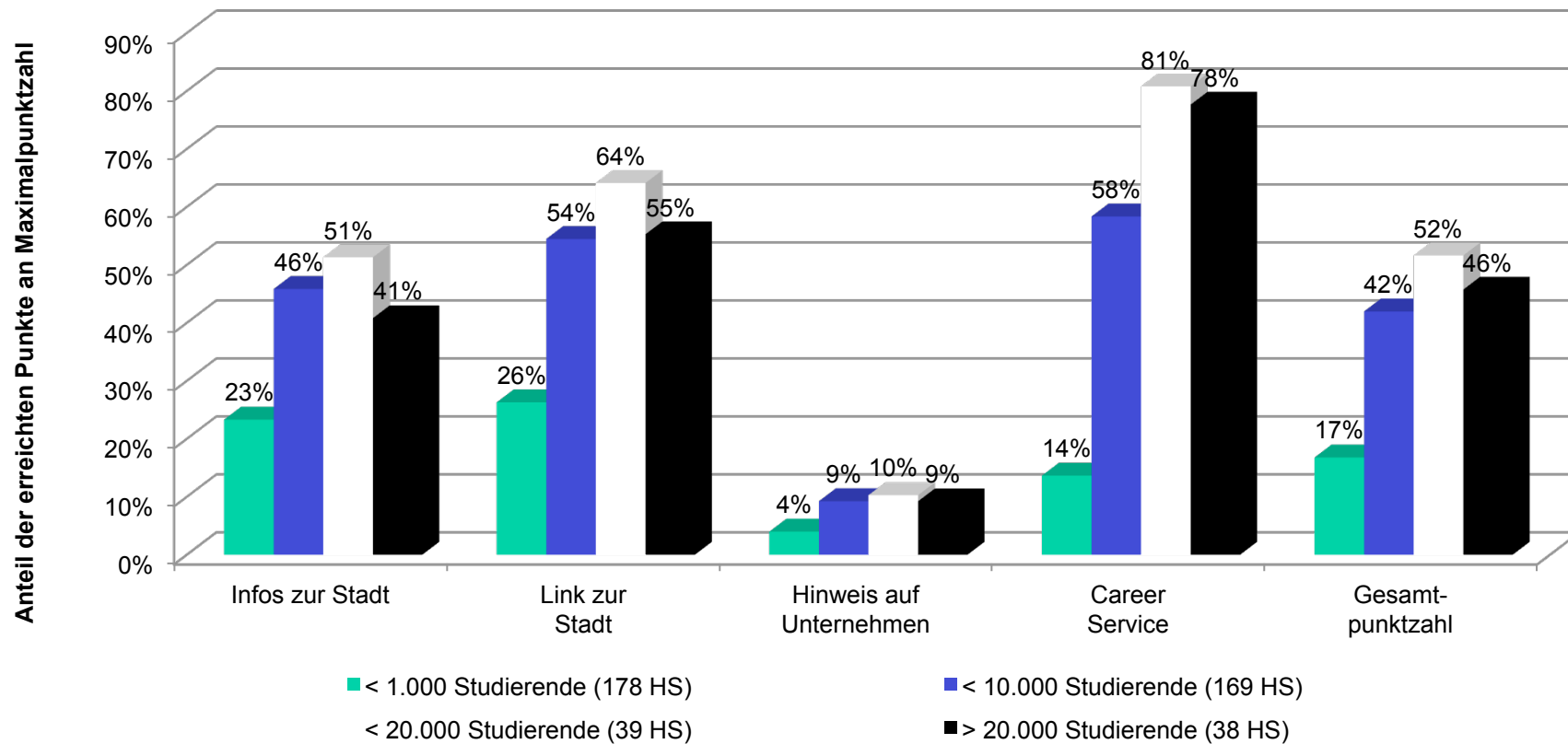
Informationsumfang auf Internetseiten der Hochschulen (4): Groß in kleineren Städten!



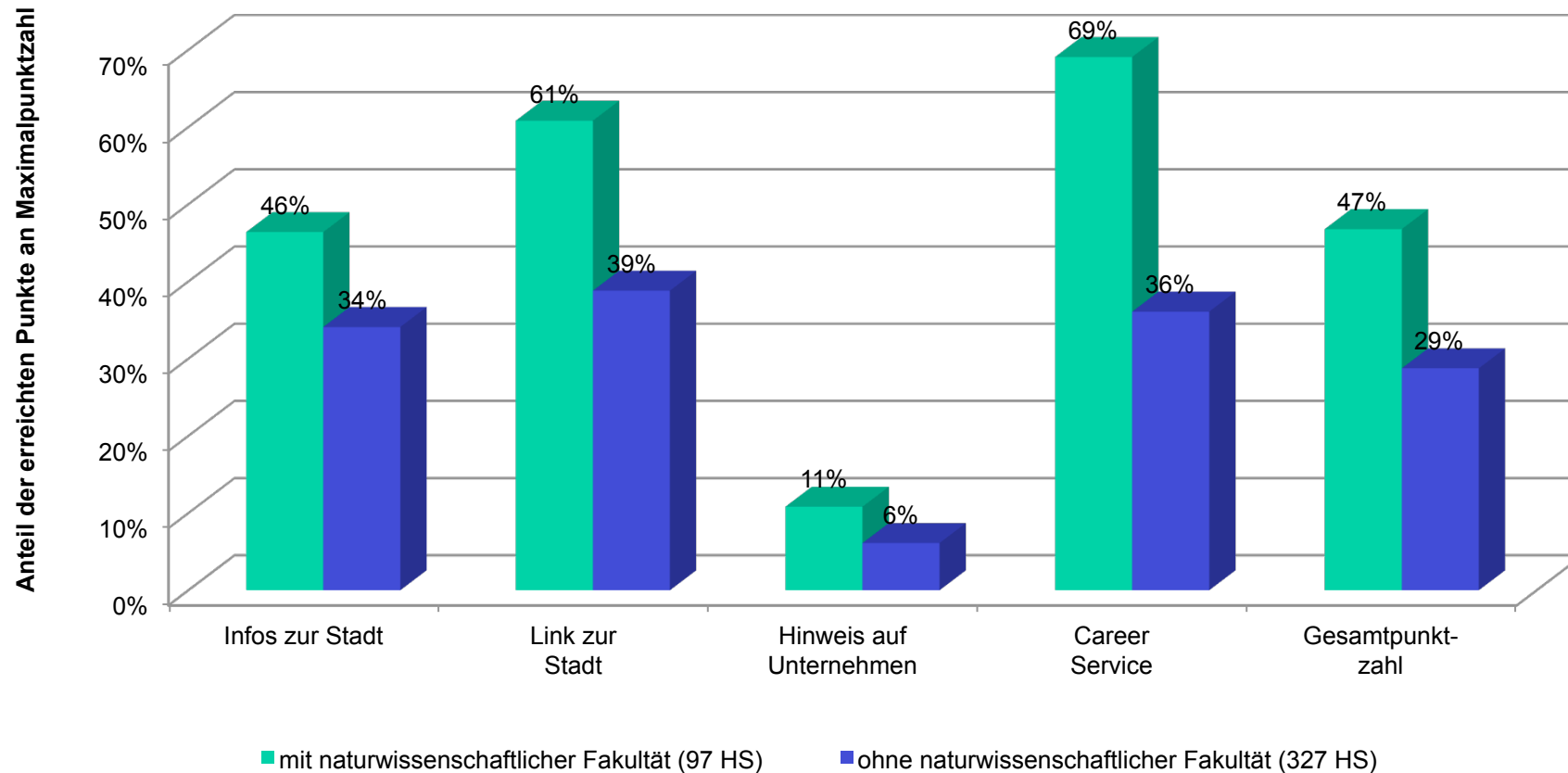
Informationsumfang auf Internetseiten der Hochschulen (5): Jüngere liegen vorn!



Informationsumfang auf Internetseiten der Hochschulen (6): Mittelgroße liegen vorn!



Informationsumfang auf Internetseiten der Hochschulen (7): Naturwiss. liegen vorn!



Informationsumfang auf Internetseiten der Hochschulen (8): Gesamtranking

4 Punkte: Universität Bremen

3,5 Punkte: u.a. TU Dresden, FH Jena, HS Merseburg

0 Punkte: u.a. RWTH Aachen, FU Berlin, HS
Niederrhein



Informationsumfang auf Internetseiten der Hochschulen (9): MLU

-Link: 0

-Informationen zur Stadt: "... größte Stadt Sachsen-Anhalts und liegt direkt an der Saale ... Zur attraktiven Umgebung gehören ... zum Beispiel der Goethe-Park im benachbarten Bad Lauchstädt oder das Dessau-Wörlitzer-Gartenreich mit seinen vielen Zeugnissen des 18. Jahrhunderts. Zu entdecken gibt es viel, auch für die, die glauben, nach Jahren schon alles gesehen zu haben"

→0,5

-Unternehmen: 0

-Career Center: 1



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- Defizite bei der Internetpräsentation auf beiden Seiten sind offenkundig und ungleichmäßig zwischen verschiedenen Kategorien von Städten / Hochschulen verteilt
- Asymmetrie zugunsten der Städte
- Weitere empirische Analyse ist erforderlich (neben Internetrecherche)
- Zudem Frage, ob die bessere Kooperation etwas bringt?
- Allgemeine Vermutungen hinsichtlich der Ursachen für mangelhafte Kooperation:

→→→



- Universities are probably too much accustomed to have a regional monopoly and to be financed from outside and without own efforts to collect revenues
→ installing more competition between universities?

- Cities have no formal responsibilities for universities and are not full aware that their activities could lead to higher local benefits from universities

- local taxes on universities?
- local quote of interest for financing universities?
- grants from the state government to the cities in order to stimulate their support for universities?



Main References:

Kristof Dascher (2000), Warum sind Hauptstädte so groß? Eine ökonomische Interpretation und ein Beitrag zur Geographie der Politik, Berlin.

Michael Fritsch et al. (2007), Hochschulen, Innovation, Region - Wissenstransfer im räumlichen Kontext, Berlin.

Kauffmann, A. (2009): Von der Bezirks- zur Landeshauptstadt: Zum Einfluss der Zuordnung staatlicher Funktionen auf das ostdeutsche Städtesystem. In: Wirtschaft im Wandel, Jg. 2009, pp. 523-532.

Krugman, P. (1996): Urban concentration: The role of increasing returns and transport costs. International Regional Science Review 19, 5-30.

Roos, M.W.M. (2004): Agglomeration and the public sector, in: Regional Science and Urban Economics, Vol. 34, 411-427.

Rosenfeld, M.T.W.; Franz, P.; Roth, D. (2005): Was bringt die Wissenschaft für die Wirtschaft in einer Region? – Regionale Innovations-, Wachstums- und Beschäftigungseffekte von öffentlichen Hochschulen und Forschungseinrichtungen am Beispiel der Region Halle, Baden-Baden (Schriften des Instituts für Wirtschaftsforschung Halle).

Storper, M. (2012): Why Does a City Grow? Specialisation, Human Capital or Institutions?, In: Urban Studies 47: 2027-2050.

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