

*Higher Education in Regional and City Development:
For Fairer, Stronger and Cleaner regions*
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Project-economy approaches of Higher Education Institutions...

... for more prosperous and purposeful regional development



Dr. Ingo Rollwagen
Senior Analyst

Think Tank of Deutsche Bank Group

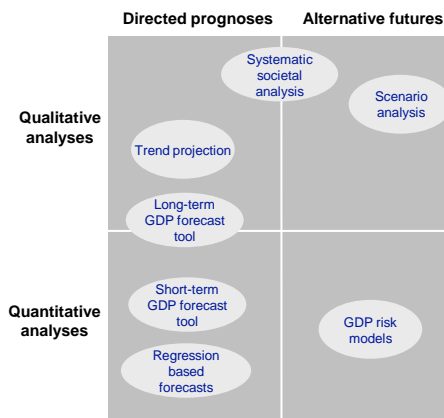
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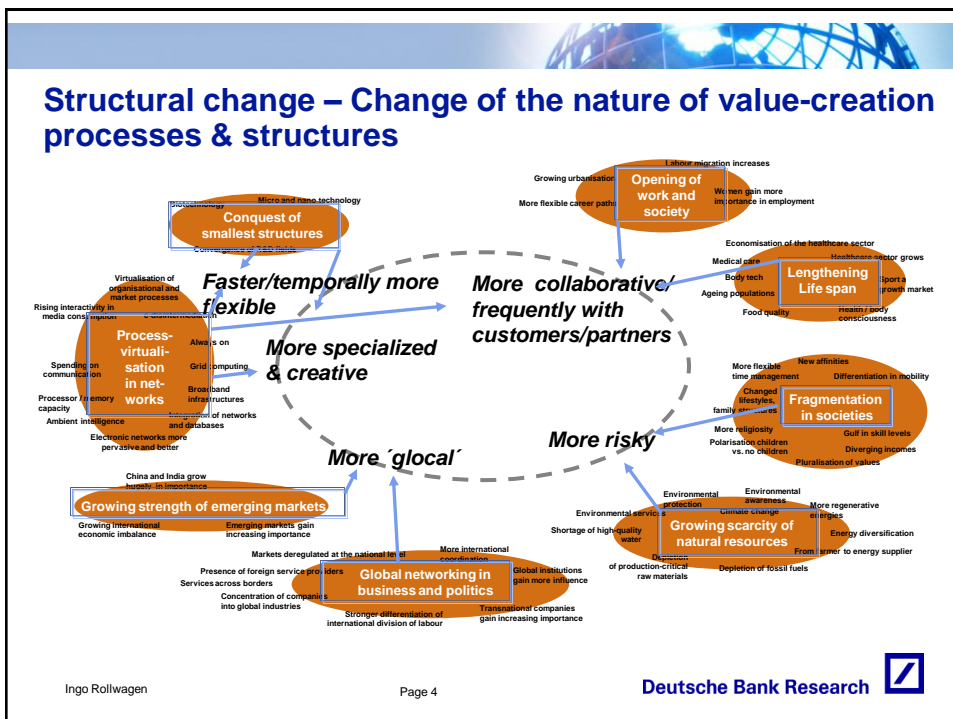
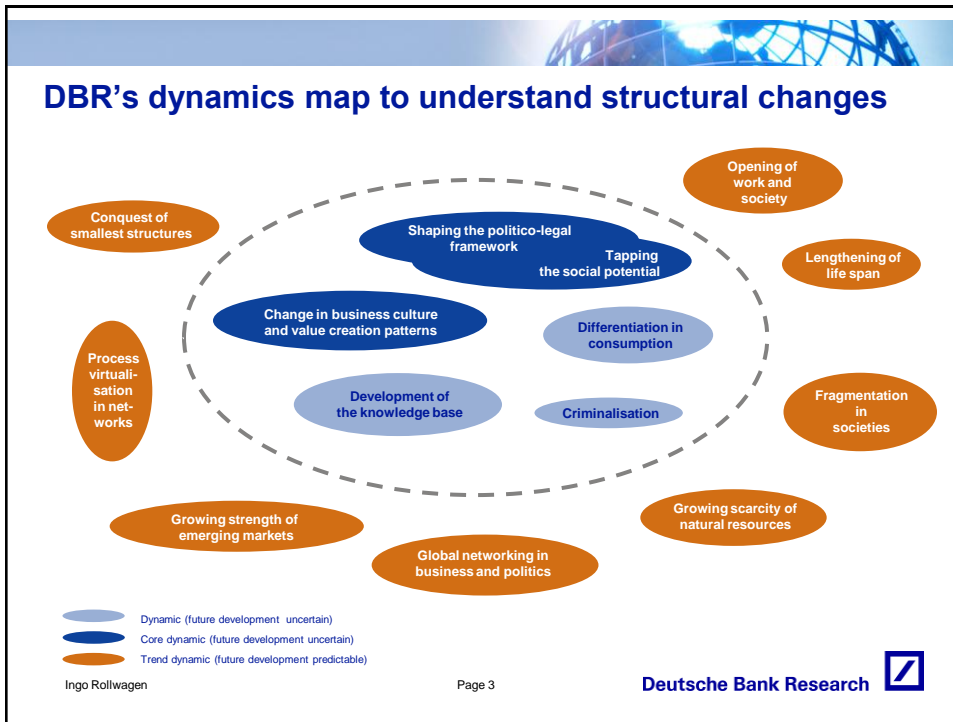


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Structural Change – Regions and Cities challenged...

Value-creation activities getting...	Regions/Cities should...
...more glocal	...be more open; intensify local and global partnering
... more risky	... foster financial resilience, financial literacy & entrepreneurship
...more temporally flexible/faster	... develop a more broad temporal repertoire with mid & long-term view
...smarter; more specialized	...foster smarter infrastructures concerning information, mobility of goods and people, health, buildings & creativity
...collaboratively; more frequently with partners, peers & citizens	...develop more open governance structures for more open innovation with more partners and innoconsumers




...Higher Education Institutions (HEIs) also challenged by structural change

Field	Dynamics
1. Institutional and regulatory settings	<ul style="list-style-type: none"> ▪ Global reach and local requirements – Integration of research activities and education of HEIs required ▪ More autonomy for higher education institutions ▪ More private institutions & universities of applied sciences ▪ More structured governance parameters and institutions ▪ Races to excellence on a regional, national and international basis – other degree structures emerging ▪ More diversified sources of income – third-party funds more important
2. Faculty	<ul style="list-style-type: none"> ▪ More faculty and administrative personnel to cope with the expansion in higher education
3. Learners/Students	<ul style="list-style-type: none"> ▪ More and other (adult) students
4. “Educational products”	<ul style="list-style-type: none"> ▪ Curricular changes – convergence and integration of more specialized bodies of knowledge ▪ Other, new forms of learning being developed – education technology & software as an innovation field



If challenges are ahead, collaboration gains ground... Project-economy approaches of Higher Education Institutions & regions for more prosperous development

For regions/cities becoming...	HEIs and regions together start to...
...fairer/more equitable	<ul style="list-style-type: none"> ▪ ...build up more intellectual capital to counter the scarcity of skilled personnel in innovative fields (like e-mobility, health) ▪ ...provide more personalization – improving access, equity and quality for more and other (adult) prospective students
...more attractive	<ul style="list-style-type: none"> ▪ intensify networking to profile cities as “higher education cities” making them more attractive (e.g. German National Association for Student Affairs, German association of cities and German Rectors conference)
...smarter ...more sustainable/greener ..more innovative, explorative	<ul style="list-style-type: none"> ▪ ...form consortia, develop business models and engage in third-party research and application projects for field testing new mobility solutions integrating lead users (innosumers) and facilitating social acceptance by service learning activities ▪ enhance the potential of educational processes with integrated educational products based on the development of electric mobility-solutions and more campus-management (e.g. smart wheels project)

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Reflections on existing initiatives of project-economy approaches for more prosperous regions

- The complementarities of challenges and the definition of goals and time horizons have been important to form ‘expeditions’ of heterogeneous actors: Cities challenged to be more sustainable – economically and ecologically; HEIs challenged to develop new knowledge and curricula; companies anticipating skilled personnel shortages
- Project-economy approaches have been driven by pioneers and peers, companies as promoters and financiers have been important
- The local context, social capital and the embeddedness matters
- The set-up of consortia for projects, partnerships, platforms and alliances and the definition of legal and operational details as well as the task division within these have been facilitated by peer-effects
- HEIs are mainly in the role of the supplier of knowledge and research-based consulting for other players
- The nature of third-party and project funding for HEIs tends to behold relatively short-term orientations, continuity still lacks in many projects

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Project-economy approaches of Higher Education Institutions & regions for more prosperous development...still a frontier/room for improvement

For regions/cities becoming...	HEIs and regions together could think of...
...more prosperous (economically)	<ul style="list-style-type: none"> ▪ ...setting up more local interregional/international projects ▪ ...partnering for using synergies of research organizations & HEIs ▪ ...consistently profiling their regions with peers from industry ▪ ...providing more perspectives with new forms of science-industry collaboration, venturing activities and employment (e.g. MaRS discovery centre Toronto)
...stronger/more financially resilient	<ul style="list-style-type: none"> ▪ ...experimenting with new financial solutions for integrating more different actors leveraging investments & sharing financial burden ▪ experimenting with new forms of taxation, technology transfer and entrepreneurship schemes
...smarter	<ul style="list-style-type: none"> ▪ ...supporting and professionalizing the development of local governance structures and local decision-making by training (learning journeys)
...more innovative, explorative	<ul style="list-style-type: none"> ▪ co-developing of new technologies and new applications and solutions in sustained partnerships

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Outlook – Challenges to make regions and HEIs more prosperous (1)

- **Products**
 - More differentiated “products” – more combinations of tangible goods and intangible products, so-called hybrid products and integrated service solutions of regions and HEIs needed especially when it is about smarter infrastructures
- **Paradigms**
 - More work on paradigms and the standardization of technologies and practices, platforms & applications needed
- **Pricing**
 - More differentiated pricing and gain-sharing arrangements and forms of employment needed
- **Persons**
 - More subtle educational products and courses needed to re- and up-skill more people in coming to grips with innovative solutions; more projects for integrating consumers needed transforming them into “innosumers” who co-create & use services also for conspicuous consumption
- **Pioneers and promoters**
 - More support and new forms of employment and institutional schemes needed for pioneers and promoters/entrepreneurs in HEIs and regional settings

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Outlook – Challenges to make regions and HEIs more prosperous (1)

■ Projects/Partnerships/ Peers/Partners and Platforms

- Many more explorative development & implementation projects needed
- More structured partnerships with more heterogeneous partners and peers from industry needed
- Management of multi-project setting, programs, partnerships and platforms, also in modified forms of sustained collaboration (alliances, joint ventures...) needed
- Platforms and other forms of institutionalization needed — not always centers instituted **IN** the HEI, but structures with an own business model and sound structures for managing projects providing a platform, finance, contacts, centers (e.g. MaRS)

■ Processes

- More continuous processes with follow-up projects and sustained impetus needed
- More open processes, more integration of other communities needed
- More accountability measures and efficiency considerations needed in processes

■ Purposes/Parameters/Performance (Indication/measurement)

- Non-profit, not-for-profit, for-profit activities need to be increasingly mixed to diversify revenue streams in regional project settings
- More structured service learning activities needed



Thank you for your attention!

Looking forward to your remarks and questions!

**Further questions:
ingo.rollwagen@db.com**






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References

Arbo, Peter / Benneworth, Paul (2007): Understanding the regional contribution of Higher Education Institutions : A literature review. (Education Working Paper No. 9). Paris.

Hofer, A. and J. Potter (2010), "Universities, Innovation and Entrepreneurship: Criteria and Examples of Good Practice", OECD Local Economic and Employment Development (LEED) Working Papers, 2010/10, OECD.Paris.

OECD (2009): Higher Education to 2030 (Volume 2): Globalisation. Paris.

OECD (2008): Higher Education to 2030 (Vol. 1): Demography. Paris.

OECD (2008): Trends Shaping Education - 2008 Edition. Paris.

OECD (2008): Open innovation in global networks. Paris.


OECD 2007: Higher education and regions: Globally competitive, locally engaged. Paris.

Hofmann, Jan / Rollwagen, Ingo / Schneider, Stefan (2007): Germany 2020 – New challenges for a land on expedition. Deutsche Bank Research, Frankfurt. Current Issues No. 382.

Reichert, Sybille (2006): The Rise of knowledge regions: Emerging opportunities and challenges for universities. European University Association. Brussels.

Rollwagen, Ingo (2010): Project economy approaches for higher education: diversifying the revenue base of German universities. Forthcoming in: Higher Education Management and Policy, Paris.

Rollwagen, Ingo (2007): Policies for Profit and Progress? Education Policy Trends in the United States. American Institute for contemporary German Studies (AICGS). Washington. Issue Brief 19.

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Cases

- Smart wheels project for developing intelligent electro-mobility solutions for the model region Aachen: consortium of FEV Motorentechnik GmbH, RWTH Aachen (Forschungsinstitut für Rationalisierung (FIR), Forschungsgemeinschaft für Elektrische Anlagen und Stromwirtschaft e.V. (FGH), Institut für Hochspannungstechnik (IFHT), Institut für Kraftfahrzeuge (ika), Institut für Stromrichtertechnik und Elektrische Antriebe (ISEA), Lehrstuhl für Verbrennungskraftmaschinen (VKA)), MENNEKES Elektrotechnik GmbH & Co KG, regio iT aachen Gesellschaft für Informationstechnologie mbH, Stadtwerke Aachen Aktiengesellschaft, InnoZ (www.smartwheels.de)
- TU (Technical University of Berlin) for field tests of electromobility solutions
- Higher Education Cities of the German National Association for Student Affairs, German association of cities and German Rectors conference
- MaRS Discovery District Toronto, Canada

