ROLE OF UNIVERSITIES IN REGIONAL AND LOCAL DEVELOPMENT

Grzegorz Gorzelak
Agnieszka Olechnicka

EUROREG | CENTRUM EUROPEJSKICH STUDIÓW REGIONALNYCH I LOKALNYCH UNIWERSYTET WARSZAWSKI
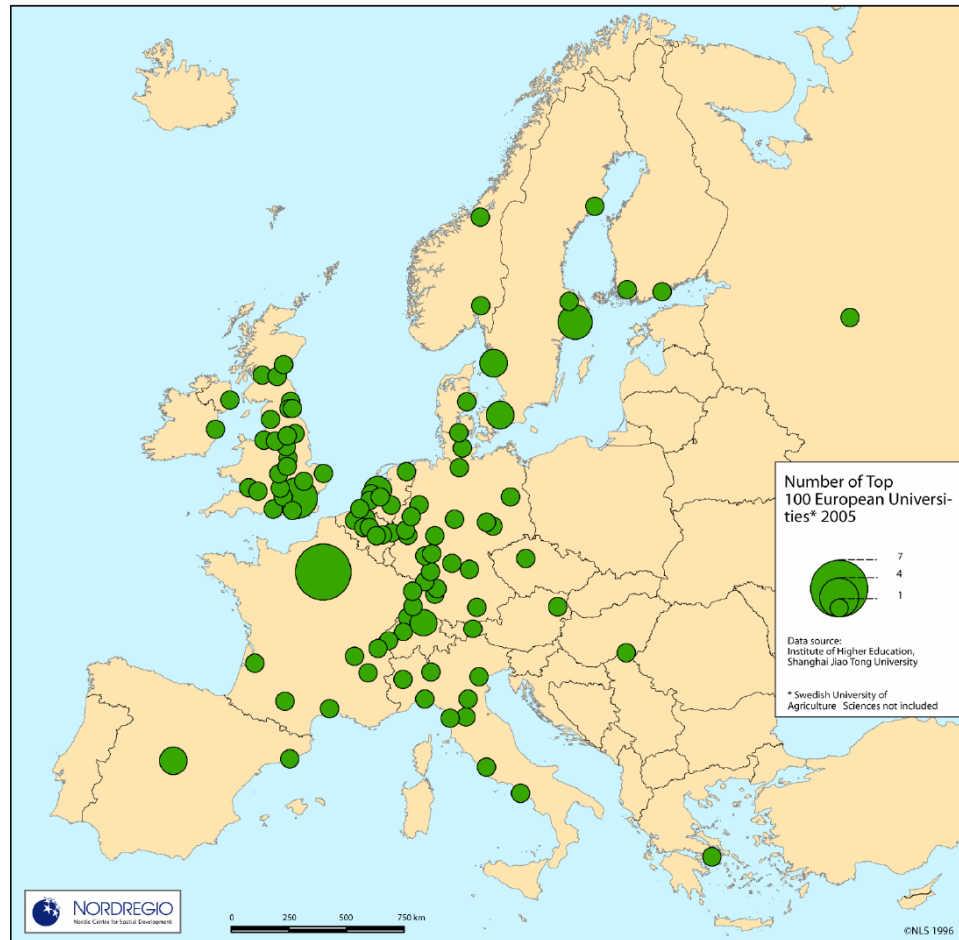
INTERNATIONAL SEMINAR
REGIONAL POLICY ON THE GLOBAL CONTEXT:
PRESENT SITUATION AND NEW PERSPECTIVES

Brasilia, 19-21 March 2013

Leading university cities of Europe 2005

Number of Top 100 European Universities* 2005

7
4
1

Data source:
Institute of Higher Education,
Shanghai Jiao Tong University

* Swedish University of
Agriculture Sciences not included

NORDREGIO
Nordic Centre for Spatial Development

0   250   500   750 km

©NLS 1996

Medieval Universities: peregrinations of Scientists

- **Core-periphery dichotomy**

- **Stable patterns**

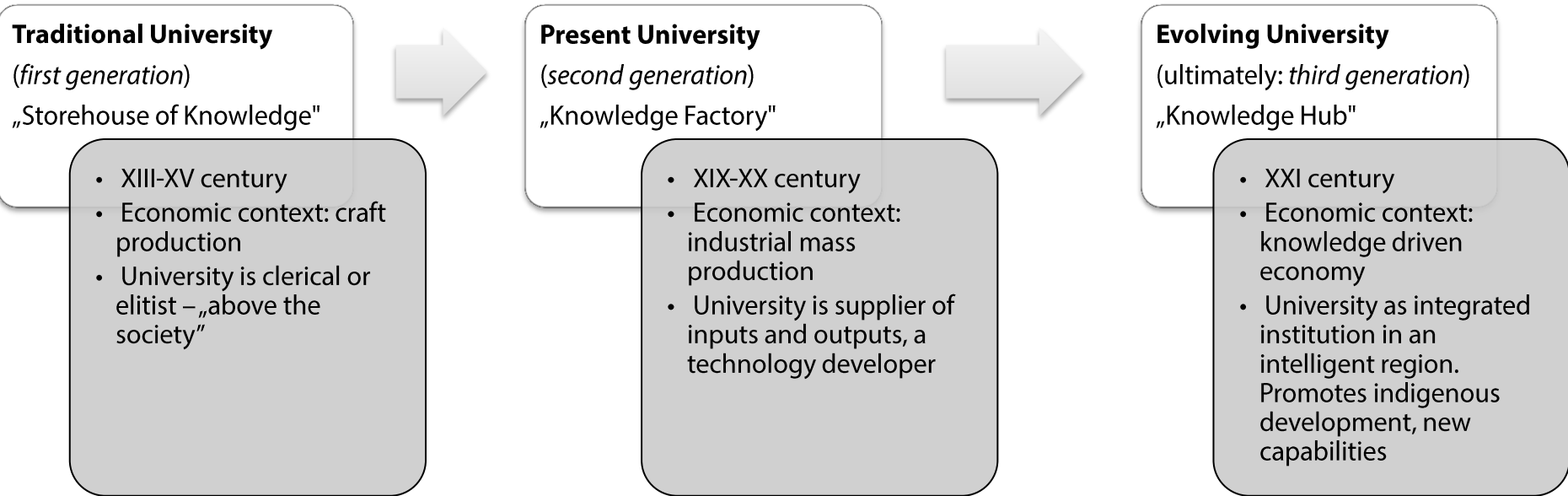- **Transportaions routes matter – if in the core**

université au Moyen-Age
- de 1150 à 1200
- de 1200 à 1299
- de 1300 à 1400
- de 1400 à 1500

deux pérégrins médiévaux
— les voyages de Pétrarque (1304-1374)
— les voyages d'Erasme (1469-1536)
— frontières actuelles

Evolution of mission and aims of universities

Traditional University

(*first generation*)

„Storehouse of Knowledge"

- XIII-XV century
- Economic context: craft production
- University is clerical or elitist – „above the society"

Present University

(*second generation*)

„Knowledge Factory"

- XIX-XX century
- Economic context: industrial mass production
- University is supplier of inputs and outputs, a technology developer

Evolving University

(ultimately: *third generation*)

„Knowledge Hub"

- XXI century
- Economic context: knowledge driven economy
- University as integrated institution in an intelligent region. Promotes indigenous development, new capabilities

(Wissema 2009, p. 34; Youtie, Shapira 2008)

Modes of Knowledge Production

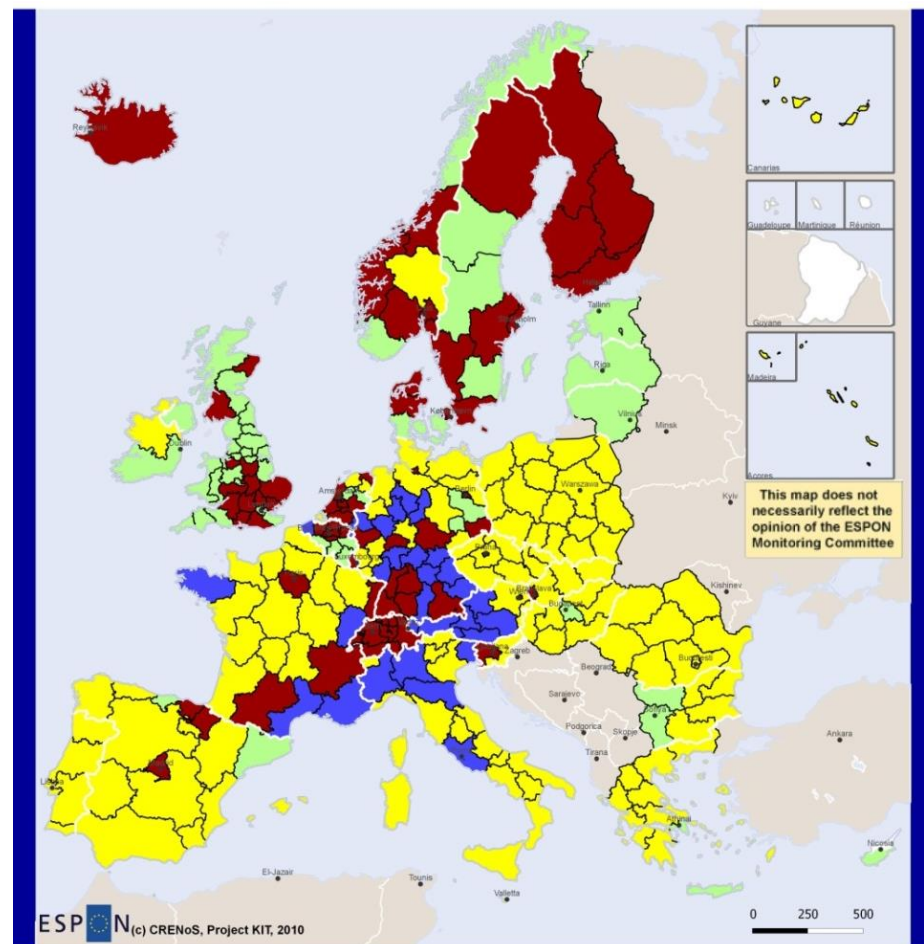| Attributes	Mode 1 knowledge production	Mode 2 knowledge production
Place of knowledge production	Academic context	Context of application
Scientific disciplines	Disciplinary	Transdisciplinary
Institutions	Homogeneity	Heterogeneity
Relations with environment	**Autonomy**	**Reflexivity/social accountability**

(Hessels, van Lente 2008)

Factors influencing contemporary universities

1. Increasing demand for an educated labour force, particularly in fast growing and profitable knowledge-intensive sectors.

2. Rapid changes in innovation processes requiring cooperation of different agents, openness and networking.

3. Stress on Technology&Innovation, some neglect of Arts&Humanities, need to ammend these trends.

4. Increasing awareness of importance of territorial contexts for the individual and collective learning.

5. Growing internationalisation of scientific research and education on the higher level.

6. Negative demographic trends influencing competition among universities (rankings!).

Knowledge economy - functional approach

presence in the region of functions like R&D and high education

Legend
- ☐ no data
- ■ Scientific regions
- ■ Human capital intensive regions
- ■ Research intensive regions
- ■ Regions witn no specialization in knowledge activities
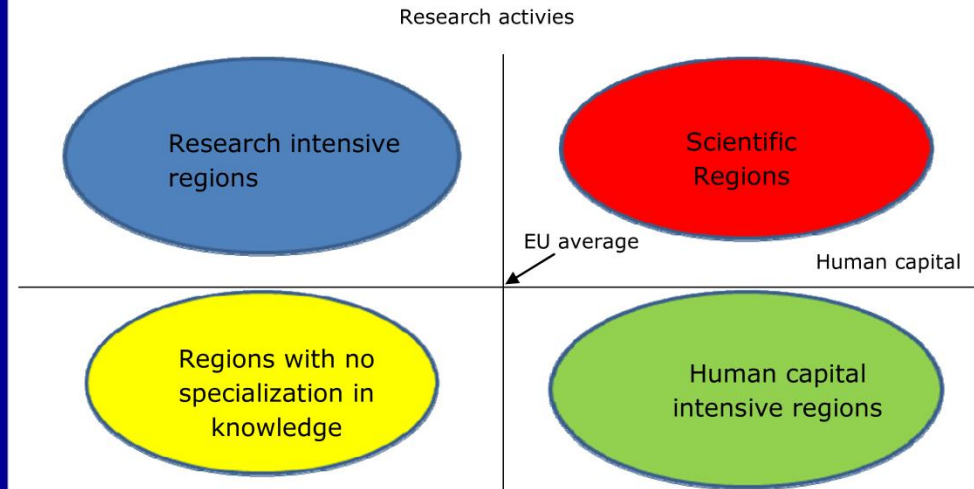
The number of scientific regions (with both high levels of human capital and research potential) pretty limited.

At the same time large number of regions with low levels in these two dimensions. Have to follow "dependant modernisation"
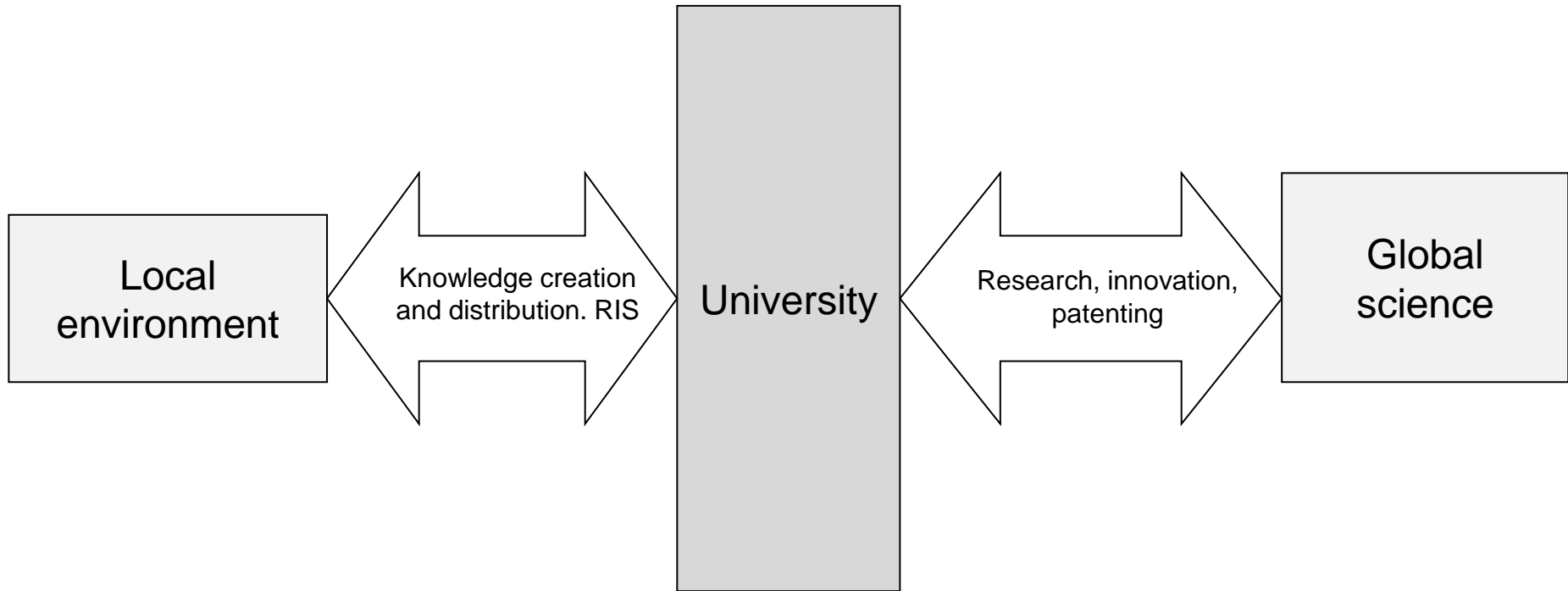
R.Capello, KIT project, ESPON

Departing from simplified ideas that:

i) R&D equates knowledge,

ii) a knowledge economy is a synonymous of the scientific (R&D-based) economy,

iii) R&D investments are the right and unique innovation policy measures to support a knowledge economy in ALL regions.

Proves how important the academic institutions are in all these dimensions.

University as a bridge beetwen the local and the global

Local environment ⟷ Knowledge creation and distribution. RIS ⟷ University ⟷ Research, innovation, patenting ⟷ Global science

Fields of regional influence of the university

▶ **University as an economic entity:**
  ◦ employer – sometimes the one of the biggest in a city, usually paying high wages;
  ◦ demand generator: buyer, contractor, housing market, retails shops etc.;
  ◦ if in old premises (or if in very modern) – a tourist attraction.

▶ **University as knowledge producer:**
  ◦ intellectual property rights;
  ◦ new technologies, organisational patterns.

▶ **University as a business agent**:
  ◦ technology parks, spin-offs, patent selling.

▶ **University as human capital creator:**
  ◦ students, researchers;
  ◦ distance learning, long-life learning, open university for local community.
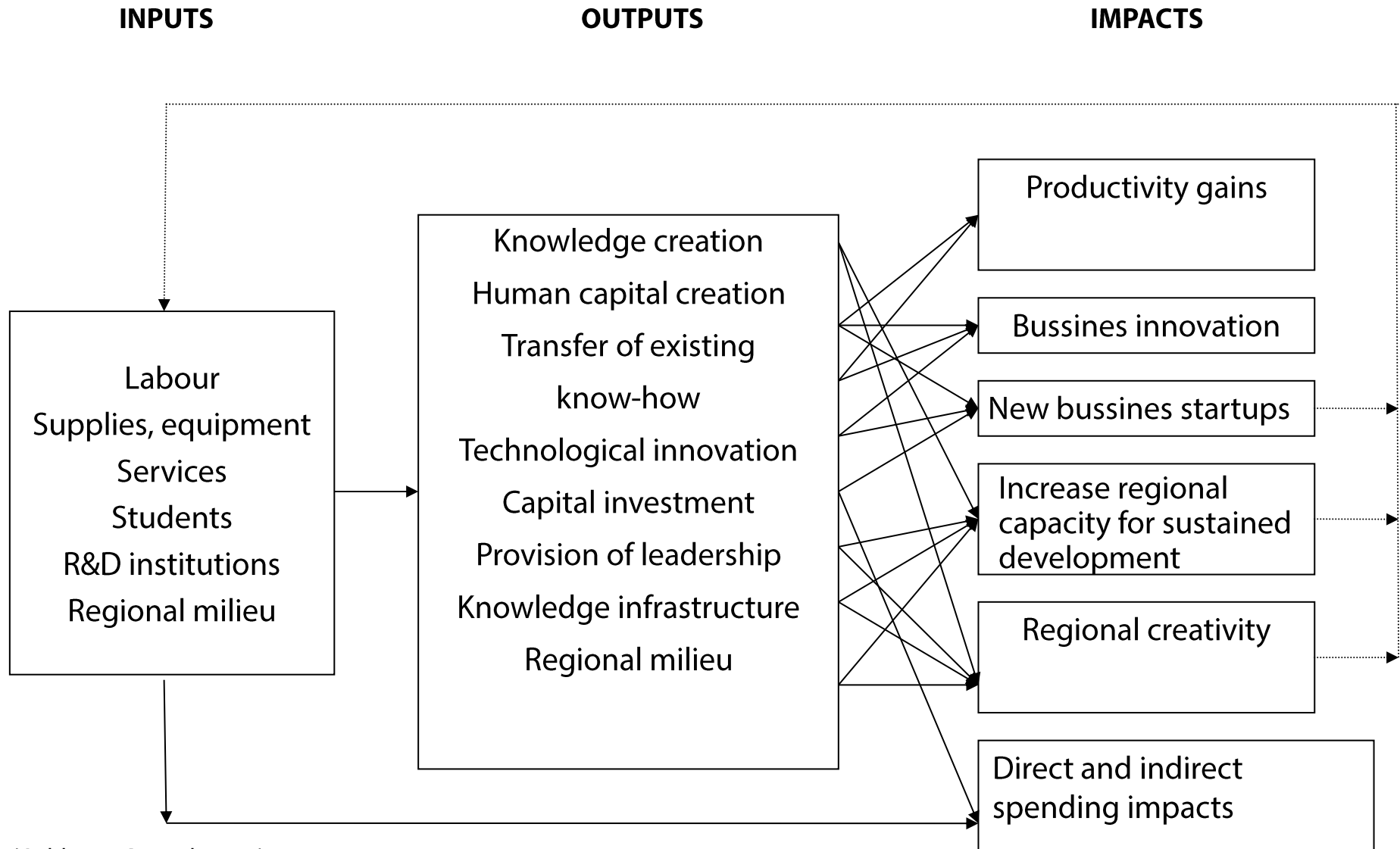
▶ **University as a regional actor:**
  ◦ advising local authorities, organiser of cultural events etc.

▶ **University as a space creator:**
  ◦ revitalisation, new campuses, creative architecture;
  ◦ provider of regional and city brands.

Contributions of universities to regional economic development

INPUTS

OUTPUTS

IMPACTS

Labour
Supplies, equipment
Services
Students
R&D institutions
Regional milieu

Knowledge creation
Human capital creation
Transfer of existing
know-how
Technological innovation
Capital investment
Provision of leadership
Knowledge infrastructure
Regional milieu

Productivity gains

Bussines innovation

New bussines startups

Increase regional capacity for sustained development

Regional creativity

Direct and indirect spending impacts

(Goldstein, Renault 2004)

Regionalisation of academic centres - Poland

Catchment areas (2 million records): strongly regionalised
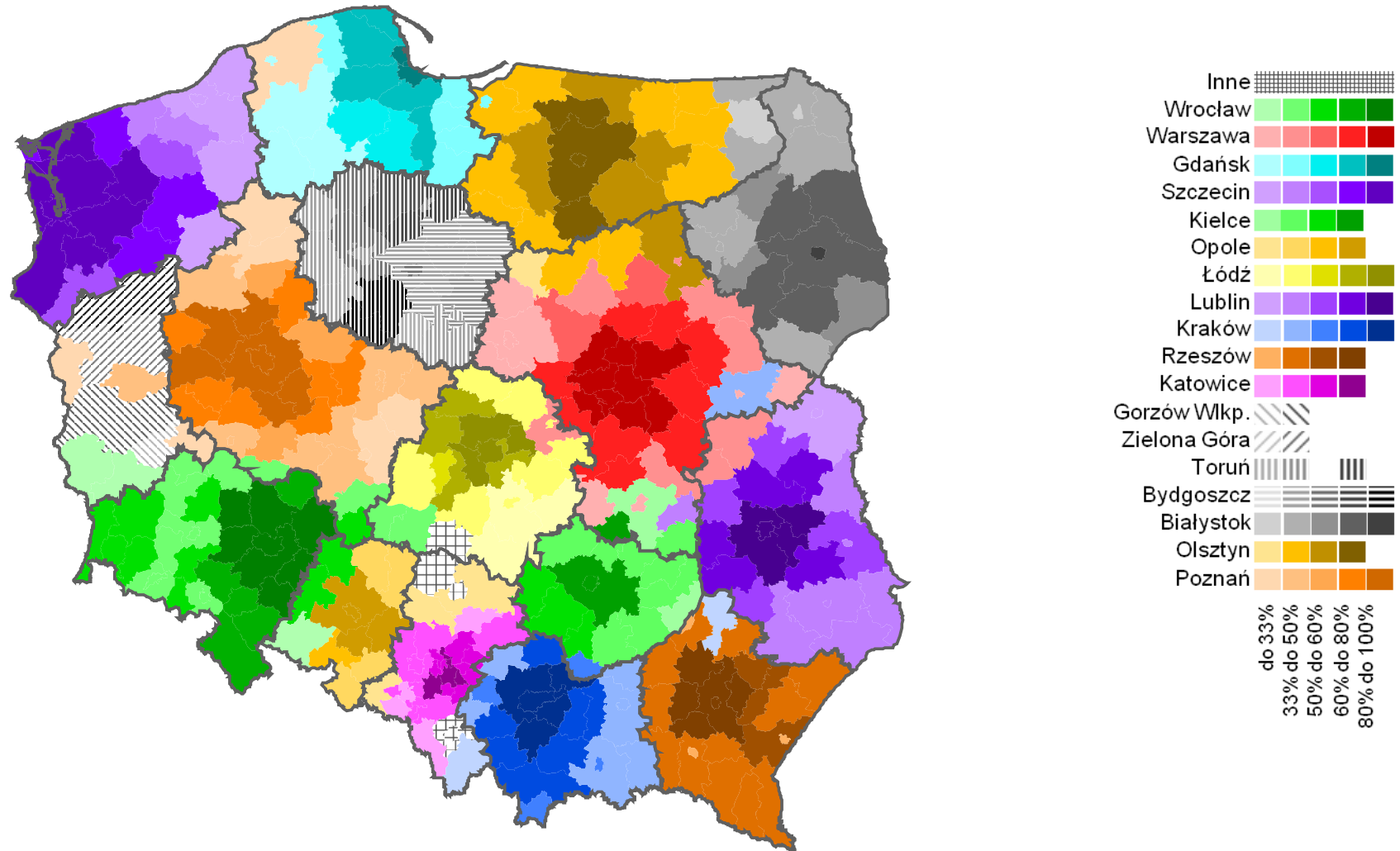
Example 1: Charlotte: a University City

- NC's first mixed use development
- Region's first restaurant with a true wine cellar
- First satellite hospital
- Charlotte's first true business park
- First super-wired business park
- First high-tech manufacturer
- Charlotte's first and only nature preserve
- First international Public Radio hit program
- Pioneering high-tech multi-school village
- Speedway firsts
- First suburban municipal service district
- First Chamber branch
- First desktop-published community magazine

http://universitycityclt.org/ideas/great-ideas/

Example 2: Bristol

- All industry except aerospace has gone from the city region.

- University of Bristol is the **largest independent employer** in the city: 5500 jobs and a further 4500 from indirect employment.

- The **economic impact** of a university is 1.74 times its turnover – and accumulated impact of graduates over their lifetime – 6 times turnover.

- University officials are active in the **Bristol City Council** and attend all city social events and network with the other key players in the city.

- University is open for the use of many **partners and organisations** in the city.

- Large Research and Enterprise Directorate works closely with **local businesses**, providing easiest access possible for businesses to the skills and technical expertise.

- The Bristol Enterprise Network assists knowledge transfer among the high tech, high growth **SMEs** in the Bristol sub-region. Has 1500 members, provides networking opportunities and also news and **information and training** in business skills.

- The university provides (nearly 200) **medical staff** for health care in the city and works very closely with local health trusts.

- The university provides most of the local **teacher training**.

- The University will have invested over £500 million in **infrastructure** which has knock-on effects in the local planning, architectural, building and legal services.

A university in a peripheral region: Finnish example

Oulu University of Applied Sciences aids regional development by:

- **Educating** the workforce for regional needs.

- Supporting **entrepreneurship**

- Developing project and **innovation** activities

- Taking part in the **regional strategy** development,

- Taking part in the regional centre and centres of **expertise** programmes,

- Promoting **international** co-operation.

The role of Cohesion Policy

Connecting Universities to Regional Growth:
A Practical Guide

September 2011

- Universities are a critical '**asset**' of the region, especially in **less favoured** regions where the private sector may be weak.

- Mobilising universities needs to be addressed in a '**holistic**' way of functions performed

- **Partnerships** should be established in the region to specifically address the issues of engagement between universities and regions.

- A broader definition of innovation is needed to acknowledge the role that **arts, humanities and social sciences** can play in development.

- Cohesion Policy should support **regional authorities** in their efforts to strengthen their universities.
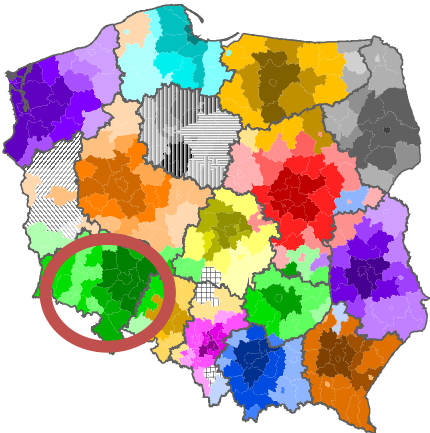
The role of regional/city authorities

Higher Education in Regional and City Development

Wroclaw, Poland

Jaana Puukka, Patrick Dubarle, John Goddard
Ellen Hazelkorn, Małgorzata Kuczera

OECD
BETTER POLICIES FOR BETTER LIVES

- A regional/city **strategy** needed that would allow for a systematic approach to human capital and skills development as part of a broad-based, but clearly focused, regional innovation system.

- Universities should acknowledge **changes in the world** and adjust their activities.

- Multifaceted **strategic partnerships** should be established.

- Better i**nformation** base required.

- Improvement in quality of **pre-university education** and developing an integrated and coherent tertiary education needed.

- Financial, social and academic **assistance** to students requires strengthening.

- Education programmes should be aligned with the **labour market**

- needs.

- Re-skilling and up-skilling and other forms of **lifelong learning** should be scaled up – society is getting older!.

- A need to align the supply of skills with the demand from **industries** and clusters.

- Stronger involvement of universities in **community life** could improved creativity, space management and design.

National policies: concentration or deconcentration?

Discussion in Norway

The Stjernø Commission indicated that the balance between availability and the need for concentration of research environments is a central issue for further development. The radical proposal suggested to merge the existing universities and university colleges into 8–10 regional universities.

The Ministry of Education and Research chose not to follow up on the Commission's recommendations for structural changes. The Ministry regulations resulted in a number of initiatives for cooperation between higher education institutions in the form of scientific research cooperation or mergers. Importantly, such cooperation initiatives take place on a voluntary basis.

But in **Denmark** 12 universities and 13 governmental research institutions were merged into eight universities and four research institutes.

Policy for higher education: efficiency-equity dilemma

Pros for concentration

- Increasing specialisation
- Creation of critical mass in research and education
- Improvement of the quality of functions performed
- Growing international visibility (e.g. in rankings).

Cons against concentration

- Region-forming role of universities
- Creation of regional elites
- Diversity of institutions adjusted to regional needs
- Accessibility for local communities

Conclusion:

No one answer fitting all – depends on national settings: **spatial patterns**, culture, tradition, surces of financing, model of **regional policy** etc.

Thank you for attention!