Potential and Problems of Regional Cluster Policies: Evidence from Germany

Agenda

1) What are Cluster Policies?
2) Impacts of Regional Cluster Policies in Germany
3) Problems: Stylised Facts
4) Implications and Research Needs
What is a Cluster?

Clusters = geographic concentrations of

- interconnected companies,
- specialized suppliers,
- service providers,
- firms in related industries,
- and associated institutions (e.g. universities, standards agencies, chambers of commerce, trade associations…)

in particular fields that compete but also cooperate (cf. Porter 2008: p. 215 f.).

The Cluster as a Localized Value System

Customers

- Vertical Dimension
  - Manufacturer
  - Intermediate goods (Value Chain)
  - Suppliers

- Horizontal Dimension
  - institutional Dimension
    - Values, Norms and Rules
  - Lateral/diagonal Dimension
    - Business Services: KIBS, Financial Services (Banks, VC…)
    - Research & Education ⇒ specialized labor
    - Chambers, associations
    - Network organizations
    - Specialized infrastructure

- External Dimension
  - Territorial boundary

Kiese 2012, p. 39
ARL International Summer School 2015 “Winners and Losers: Why are the Effects of Regional Policy so Different?” Prague, August 25th, 2015
The Massachusetts Life Sciences Cluster

- Health and Beauty Products
- Surgical Instruments and Suppliers
- Medical Equipment
- Dental Instruments and Suppliers
- Ophthalmic Goods
- Diagnostic Substances
- Containers
- Analytical Instruments
- Teaching and Specialized Hospitals
- Biological Products
- Biopharmaceutical Products
- Research Organizations
- Cluster Organizations: MassMedic, MassBio, others
- Specialized Business Services: Banking, Accounting, Legal
- Specialized Risk Capital: VC Firms, Angel Networks
- Specialized Research Service Providers: Laboratory, Clinical Testing
- Educational Institutions: Harvard University, MIT, Tufts University, Boston University, UMass

Porter 2006, p. 6

The Massachusetts Life Sciences Cluster

What is (Regional) Cluster Policy?

- All efforts of government to develop and support clusters (in a particular region) (Hospers/Beugelsdijk 2002, p. 382)
- Industrial, structural, technology or innovation policy promoting regional specialisation
- Public efforts to develop concentrations of industry or network structures into clusters, or to promote existing clusters (cf. Bruch-Krumbein/Hochmuth 2000, p. 69 f.)
Elements of Cluster Policy

• Identification of clusters with their specific profiles, strengths and weaknesses
• Identification and mobilisation of cluster members
• Development of common visions, strategies and projects
• Improvement of the general business environment, e.g. taxation, regulations constraining innovation and firm growth
• Formation of networks between firms, including research, education and other supporting organisations
• Provision and sharing of information on market and technology trends
• Promotion of entrepreneurship to reach a critical mass of firms for localisation economies to kick in
• Attraction of mobile firms to fill gaps in regional value chains or to increase the agglomeration of firms
• Building and upgrading cluster-specific infrastructure, e.g. research and training centres
• Locational marketing to build cluster/place brand recognition

Maier et al. 2012, pp. 163 f. (translated and amended)

Cluster Policy as Multi-level Governance

• European Union
  • Identification and cross-border networking of clusters
  • Knowledge exchange and dissemination of best practice among policymakers and practitioners (cluster managers)
  • Funding for clusters through structural funds
• Federal States (Länder) (cf. Buhl/Maier zu Köcker 2008i), e.g. North Rhine-Westphalia:
  • 16 NRW-Clusters + open RegioCluster contest
  • Cluster contests for disbursement of structural funds
• Regions and municipalities
  • Out of 144 cities > 50,000 inhabitants, 63 % claimed to have a coherent strategy for the development of cluster, networks, fields of technology or competence (Hollbach-Grömig/Floeting 2008)
  • Case studies: see below
Case Studies of Regional Cluster Policies

- State-level policies
  - NRW ~ mature industries facing structural change
  - Bavaria ~ late industrialisation, high-tech industries
  - Niedersachsen ~ “normal” region

- Seven regional (sub-state) case studies
- 2006-2007: 110 semi-structured interviews with 134 practitioners, consultants and independent observers

Case Studies: Overview

<table>
<thead>
<tr>
<th>State/Region/City</th>
<th>Programme/Organisation (Start year in brackets)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Saxony</td>
<td>Regional growth concepts (since 2004)</td>
</tr>
<tr>
<td>Dortmund</td>
<td>Incubator and technology park since 1985, industry targeting in local economic development since 1997, dortmund-project (*7/2000)</td>
</tr>
<tr>
<td>Wuppertal-Solingen-Reimscheid</td>
<td>kompetenzhoch3 (*2001)</td>
</tr>
<tr>
<td>Braunschweig</td>
<td>Projekt REGION BRAUNSchWEIG GMBH (*02/2005)</td>
</tr>
</tbody>
</table>
Agenda

1) What are Cluster Policies?

2) Impacts of Regional Cluster Policies in Germany

3) Problems: Stylised Facts

4) Implications and Research Needs

Case Study Wolfsburg: AutoVision Cluster Strategy

- Implement and build-up
  - CMO with units
    - ICT incubator
    - Leisure
    - Supplier attraction
    - Personnel service agency
    - Cluster initiation
    - Mobility and leisure

- Build-up and establish
  - AutoVison GmbH
    - Venture
    - Service
    - People
    - Strengthening of clusters
      - Mobility and leisure
      - IT and health business

- Build-up, establish and network
  - Mobile Life Campus
    - Cluster Hub
      - Mobility
      - IT
      - Leisure
      - Health business

Source: Wolfsburg AG 2005, p. 16 (own translation)
Wolfsburg AG: Balance Sheet

- **+ 43,255 jobs** with compulsory social security contributions (June 1997: 73,363 ⇒ June 2014: 116,618 = +59%)
- **+16,000 permanent jobs in clusters** ("key growth areas")
- **Unemployment** rate of 4.8% (2014: 19.3%)
- **586 companies founded** in or **attracted** to WOB in key growth areas (June 2015)
  - Including 183 **supplier** companies relocated to WOB
- **100-200 million €** drain on **consumer spending** in 1997 reversed to a **70 million €** surplus in 2008
- Benchmarked as a German region with "very high prospects" in the Prognos **city rankings** published in 2004, 2007, 2010 and as a German region with "the best prospects" in 2013

Wolfsburg AG 2015, p. 39

Regional Cluster Policy: What has been achieved?

**The Case of hannoverimpuls**

- Customer Relations Management since 2004: Annual survey of employment figures for all firms and start-ups using the organisation’s services
- Figures grossed up for **non-response**, multiplier effects and general growth of focus industries (based on McKinsey & Co. formula)
- 2013: 3,379 jobs created (+47% vis-a-vis target of 2,300)
- 2003-2013: 33,701 jobs created (+10.2% vis-a-vis target of 30,570)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Firms*</td>
<td>2,970</td>
<td>564</td>
<td>619</td>
<td>657</td>
<td>624</td>
<td>475</td>
<td>2,741</td>
</tr>
<tr>
<td>Employment</td>
<td>12,558</td>
<td>1,814</td>
<td>2,682</td>
<td>4,246</td>
<td>3,735</td>
<td>3,379</td>
<td>15,856</td>
</tr>
</tbody>
</table>

- "jobs originally created through hannoverimpuls" (hannoverimpuls 2007)
- "a performance record that is unique in its clarity and significance" (LHH 2007, p. 5)
- "Game of questions and answers with politicians"; "absolutely voodoo" (interviewed practitioners)

Kiese 2008b, p. 224-227; Data: hannoverimpuls 2008, p. 36; LHH 2014, pp. 108 & 112; *) from 2009 only start-ups

ARL International Summer School 2015 "Winners and Losers: Why are the Effects of Regional Policy so Different?" Prague, August 25th, 2015
What has really been achieved?

- **Professionalization**, focus and **strategic orientation** of local and regional economic development efforts
- E.g. Dortmund
  - Innovation centre \(\Rightarrow\) ten specialised incubators
  - Start-up contests
- **Process benefits:** Improving a region’s **organising capacity**
- **Indicator:** Capacity to attract public funding from higher levels (e.g. Dortmund, Central Franconia)

Source: Adapted from van den Berg et al. 1997, p. 260

---

**Capacity to Attract: ERDF-RCE in NRW, 2007-2013**

Dortmund is among the top recipients!

Source: Own Calculations based on MWEIMH-NRW 2015

Legend:
- Amount of Structural Funds
  - In excess of 100 mil. €
  - 50 to 100 mil. €
  - 20 to 50 mil. €
  - 10 to 20 mil. €
  - Lower than 10 mil. €
Phoenix West: Urban Renewal through Cluster Policy

Phoenix West (dortmund project 2007, p. 26)

- New 115 hectare technology park for micro and nanotechnologies, manufacturing process technology and IT on former steel mill site
- MST.factory as specialised business incubator with cleanroom facilities, cost 50 million €

Sources: 1) StadtbezirksMarketing Dortmund-Hörde 2006; 2) BMWi 2008, p. 24; 3) MWME-NRW 2009

Agenda

1) What are Cluster Policies?
2) Impacts of Regional Cluster Policies in Germany
3) Problems: Stylised Facts
4) Implications and Research Needs
Stylized Facts on Regional Cluster Policies in Germany

1. **Technocratic** understanding of clusters in policy and practice
2. For simplicity’s sake, clusters are understood as **networks**
3. **Spatial mismatch** between cluster and policy ⇒ over-/underbounding
4. **Temporal mismatch** (short-termism vs. cluster development)
5. **Herd behaviour** (ICT, bio, nano…)
6. From horizontal demonstration effects to **top-down diffusion**
7. Inflationary use of cluster term ⇒ **meaning, credibility ↓**
8. Lack of explicit **theoretical foundation/reference**
9. **Sloppy identification** of cluster potential
10. **Declining cluster focus** over time

Cf. Kiese 2012, pp. 323-331

ARL International Summer School 2015 “Winners and Losers: Why are the Effects of Regional Policy so Different?”
Prague, August 25th, 2015

Understanding of Clusters and Matching Problems

1. **Technocratic understanding** of clusters
   - „Let's form a cluster!“
   - Dominance of bureaucratic rationality (cf. Kiese 2008a)
2. For simplicity’s sake, clusters are understood as **networks**
   - Focus on **co-operation**, neglect of **competition**
   - **Geography of clusters** ignored in state-level policies attempting at networking across administrative territory

Cf. Kiese 2012, pp. 323-326

ARL International Summer School 2015 “Winners and Losers: Why are the Effects of Regional Policy so Different?”
Prague, August 25th, 2015
Clusters and Networks: Conceptual Differences

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Networks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spatially bounded</td>
<td>No spatial dimension</td>
</tr>
<tr>
<td>Focuses co-operation and</td>
<td>More than co-operative than competitive</td>
</tr>
<tr>
<td>competition</td>
<td></td>
</tr>
<tr>
<td>Element of networks (external</td>
<td>Part of clusters, but usually extending</td>
</tr>
<tr>
<td>dimension)</td>
<td>beyond clusters’ spatial confines</td>
</tr>
<tr>
<td>Policy: Concept</td>
<td>Policy: Instrument/Tool</td>
</tr>
</tbody>
</table>

...but commonly equated in policy and practice!

e.g. Bavaria: Clusters as „organised state-wide networks of firms and research organisations“ (see Stoiber 2006, S. 10)


Understanding of Clusters and Matching Problems

1. **Technocratic understanding** of clusters
   - „Let's form a cluster!“
   - Dominance of bureaucratic rationality (cf. Kiese 2008a)

2. For simplicity’s sake, clusters are understood as **networks**
   - Focus on **co-operation**, neglect of **competition**
   - **Geography of clusters** ignored in state-level policies attempting at networking across administrative territory

3. **Spatial mismatch** between **cluster** and **policy**
   - Densities and scales of interaction vs. parochial thinking
   - Danger of over- or underbounding
   - Neglect of external cluster dimension

Cf. Kiese 2012, pp. 323-326

ARL International Summer School 2015 “Winners and Losers: Why are the Effects of Regional Policy so Different?”
Prague, August 25th, 2015
Overbounding

- Manufacturing firms
  - Knowledge-intensive business services
  - Universities, research organisations
  - Specialised infrastructure, supporting organisations

Own visualisation inspired by Bennett/McCoshan 1993, p. 222

Underbounding

- Manufacturing firms
  - Knowledge-intensive business services
  - Universities, research organisations
  - Specialised infrastructure, supporting organisations

Own inspiration inspired by Bennett/McCoshan 1993, p. 222
Institute of Geography
Matthias Kiese
Urban and Regional Economics

ARL International Summer School 2015 "Winners and Losers: Why are the Effects of Regional Policy so Different?"
Prague, August 25th, 2015

1. Technocratic understanding of clusters
   - „Let’s form a cluster!“
   - Dominance of bureaucratic rationality (cf. Kiese 2008a)

2. For simplicity’s sake, clusters are understood as networks
   - Focus on co-operation, neglect of competition
   - Geography of clusters ignored in state-level policies attempting at networking across administrative territory

3. Spatial mismatch between cluster and policy
   - Densities and scales of interaction vs. parochial thinking
   - Danger of over- or underbounding
   - Neglect of external cluster dimension

4. Temporal mismatch
   - Cluster development requires long gestation periods
   - Electoral cycles demand short-term and visible effects

Cf. Kiese 2012, pp. 323-326
ARL, International Summer School 2015 "Winners and Losers: Why are the Effects of Regional Policy so Different?"
Prague, August 25th, 2015

5. Herd behaviour
   - Megatrends and key technologies (biotech, nanotech, ICT, health-related technologies...)
   - Demonstration effects (“me too”)
   \[ \Rightarrow \text{Convergence} \text{ of cluster policy portfolios} \]

ARL, International Summer School 2015 "Winners and Losers: Why are the Effects of Regional Policy so Different?"
Prague, August 25th, 2015
Convergence of Cluster Portfolios: Herd Behaviour?

<table>
<thead>
<tr>
<th>Number of clusters</th>
<th>NW</th>
<th>L Saxony</th>
<th>Brandenburg</th>
<th>Berlin</th>
<th>Hamburg</th>
<th>Hessen</th>
<th>Rhineland Palatinate</th>
<th>Baden Wurttemberg</th>
<th>Bavaria</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICT</td>
<td>16</td>
<td>14</td>
<td>13</td>
<td>12</td>
<td>11</td>
<td>10</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>88</td>
</tr>
<tr>
<td>Automotive, transport technology, telematics</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health services, life sciences</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biotech, nanotech</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical engineering, process engineering (mechatronics, automation)</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Logistics</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental technology</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media, event &amp; communication</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nano &amp; micro technology</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New materials</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical industry</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food processing</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial Services</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tourism, leisure &amp; entertainment</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensors</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovative Services</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electronics &amp; electrical engineering</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forestry &amp; wood processing</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural economy</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastic products</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aircraft &amp; space aircraft, satellite navigation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metal processing</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optical technologies</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product design &amp; development</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1) in Regional Growth Concepts; but focus in technology policy and state initiatives.

Cf. Kiese 2012, pp. 225, 313

AFL International Summer School 2015 “Winners and Losers: Why are the Effects of Regional Policy so Different?”
Prague, August 20th, 2015

Inflation of Cluster Policy

5. Herd behaviour
- Megatrends and key technologies (biotech, nanotech, ICT, health-related technologies...)
- Demonstration effects (“me too”)
⇒ Convergence of cluster policy portfolios

6. Top-Down Diffusion
- Originally bottom-up and horizontal diffusion
- Increasingly vertical diffusion EU ⇒ (federal ⇒) states ⇒ regions/municipalities
- Professionalisation of economic development practice and specialisation of consultants as transfer agents (cf. Stone 2004, Kiese 2010)

7. Inflation
- „Clusters“ as meaningless labels?!
- Danger of arbitrariness

AFL International Summer School 2015 “Winners and Losers: Why are the Effects of Regional Policy so Different?”
Prague, August 20th, 2015
Danger of Conceptual Dilution

8. Lack of theory
   - Porter’s definition only reference to academic literature
   - Incremental, cumulative, path-dependent learning by doing $\Rightarrow$ coagulated experience and implicit theories (Hofmann 1993)

9. Insufficient identification of cluster potential
   - Methodological toolbox used only scantily
   - Political decisions shaped by interest groups, proportional representation and concerns for spatial equity
     $\Rightarrow$ Inflation, danger of promoting „wishful thinking“ clusters (Enright 2003, p. 104)

Cf. Kiese 2012, pp. 323-331
ARL International Summer School 2015 “Winners and Losers: Why are the Effects of Regional Policy so Different?”
Prague, August 25th, 2015

Methods for Cluster Identification

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Own experience</td>
<td>75%</td>
</tr>
<tr>
<td>External expertise</td>
<td>61%</td>
</tr>
<tr>
<td>Growth forecasts</td>
<td>51%</td>
</tr>
<tr>
<td>Workshops with stakeholders</td>
<td>46%</td>
</tr>
<tr>
<td>Network analysis</td>
<td>44%</td>
</tr>
<tr>
<td>Measures of concentration</td>
<td>40%</td>
</tr>
<tr>
<td>Value chain analysis</td>
<td>33%</td>
</tr>
<tr>
<td>Contests</td>
<td>19%</td>
</tr>
<tr>
<td>Others</td>
<td>9%</td>
</tr>
</tbody>
</table>

Data: Hollbach-Gröming/Floeting 2008, p. 11 (n=94)
ARL International Summer School 2015 “Winners and Losers: Why are the Effects of Regional Policy so Different?”
Prague, August 25th, 2015

Research probably skewed through methodology (postal survey)!
Methods for Cluster Identification: Case Studies

- Expert opinion, professional reports
- Moderation of regional actors
- Measures of concentration (absolute/relative)
- Dynamic analysis, e.g. shift-share
- Input output analysis
- Functional value chain analysis
- Network analysis
- Cluster contests

Growth forecasts ("Megatrends")
Decision by shareholders (politics)
or ("pre-dating the analysis"

<table>
<thead>
<tr>
<th>Method</th>
<th>NRW</th>
<th>Bav</th>
<th>Dort</th>
<th>Berg</th>
<th>WOB</th>
<th>Han</th>
<th>Brun</th>
<th>CF</th>
<th>Reg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expert opinion, professional reports</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Moderation of regional actors</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Measures of concentration (absolute/relative)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Dynamic analysis, e.g. shift-share</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Input output analysis</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Functional value chain analysis</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Network analysis</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Cluster contests</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Growth forecasts (&quot;Megatrends&quot;)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Decision by shareholders (politics)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>(&quot;pre-dating the analysis&quot;)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

Translated from Kiese 2008a, p. 138
AFL International Summer School 2015 "Winners and Losers: Why are the Effects of Regional Policy so Different?"
Prague, August 25th, 2015

8. Lack of theory

- Porter’s definition only reference to academic literature
- Incremental, cumulative, path-dependent learning by doing ⇒ coagulated experience and implicit theories (Hofmann 1993)

9. Insufficient identification of cluster potential

- Methodological toolbox used only scantily
- Political decisions shaped by interest groups, proportional representation and concerns for spatial equity
  ⇒ Inflation, danger of promoting „wishful thinking“ clusters (Enright 2003, p. 104)

10. Declining cluster orientation during implementation

- Promotion of too many “clusters” without sufficient potential to reach critical mass
- Generic project easier to realise (“early wins”)
- Bureaucratic rationality: CMO fighting for budgets and survival

Cf. Kiese 2012, pp. 323-331
AFL International Summer School 2015 "Winners and Losers: Why are the Effects of Regional Policy so Different?"
Prague, August 25th, 2015
Agenda

1) What are Cluster Policies?
2) Impacts of Regional Cluster Policies in Germany
3) Problems: Stylised Facts
4) Implications and Research Needs

Challenges for Regional Cluster Policies

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding of clusters</td>
<td>• moderating and facilitating role of policy&lt;br&gt;• appreciate organic forces of cluster evolution</td>
</tr>
<tr>
<td>Matching problems (space &amp; time)</td>
<td>• overcome parochial thinking to form regional alliances that match the spatial extent of clusters&lt;br&gt;• leadership and long-term strategy</td>
</tr>
<tr>
<td>Inflation</td>
<td>• identify and promote original regional assets rather than just follow fads; marry trends and tradition (cf. Hospers 2004)&lt;br&gt;• use participatory methods (e.g., foresight, cf. Koschatzky 2005) to discover regional trajectories</td>
</tr>
<tr>
<td>Conceptual dilution, declining cluster orientation</td>
<td>• careful and objective analysis of cluster potential&lt;br&gt;• exploit toolbox for cluster identification more fully, including open cluster contests as discovery device&lt;br&gt;• continuous monitoring, independent evaluation&lt;br&gt;• continuous review and adaptation of concept/strategy</td>
</tr>
</tbody>
</table>
Research Needs

- **Comparative** cluster policy research
  - Structural & institutional **variety ⇒ design, implementation and outcomes** of cluster policy
  - Interregional (e.g., Kiese 2012 for Germany) and international (e.g., Sternberg et al. 2010 for the U.S. vs. Germany)

- Different **perspectives** proved usefulness
  - Institutional (varieties of capitalism [cf. Sternberg et al. 2010], regional & multilevel governance)
  - Policy diffusion/transfer and learning (cf. Kiese 2010)

- **Evolutionary** perspective: Cluster **policy learning** across time and space (cf. Kiese 2010)

- Independent **evaluation** of cluster policies
  - Conceptual and methodological challenges
  - Practice of commissioned evaluation governed by political-administrative system (cf. Kiese 2009, 2014)

---

Cluster Policies: Beware of Context!

Silicon Valley

Silicon X

Y Valley

© Max Peter Merrit

Thank you very much for your attention!
References (1/4)


References (2/4)


References (3/4)


References (4/4)


