Capturing Spatial Patterns of Social Innovativeness
- A Blueprint of Social Innovation Metrics

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Summer School „Theoretical and Empirical Studies of Social Innovations as Factors in the Development of Civil Society, Third Sector and Volunteerism“
Structure of Presentation

① Project information
② Definition of social innovation
③ Measurement perspective
④ Method and blueprint of social innovation indicators
⑤ Social economy and its role in measurement
⑥ Ongoing research
PROJECT INFORMATION
• The theoretical, empirical and policy foundations for building social innovation in Europe
• EU’s 7th framework programme

• Pilot study on social innovation processes
• Case study on integration of population with migration background
SOCIAL INNOVATION DEFINITION
Technological, economic, public innovation ...  

INNOVATION  
- Creativity  
- Engine for growth  
- The right moment  
- …
… and social innovation

• Social innovations are **new solutions** (products, services, models, markets, processes etc.)
• that simultaneously **meet a social need** (more effectively than existing solutions)
• and lead to **new or improved capabilities and relationships** and/or better use of assets and resources.

(Young Foundation 2012: 18)
Give me some examples of social innovation that are promising and worth to mention in your view.

In your view, what qualifies these examples for being innovative?
Are you innovative?
Impressions from expert interviews

„Absolutely. Well, shall we say, because I really try to find new solutions in many areas [...]. And I also really try to face problems if existing and related to my area. When saying [...] ‘let’s build a climbing wall in a mosque’ I think this is quite innovative. Where else can we find this?“

„Actually these are no new ways we are taking because what we are doing with asylum seekers that’s normal behavior. We just support them in getting access to life what in our view is normal. And just because they come from another part of the world or another country it is not familiar to them.“

„[...] that what the management does in saying fully aware: We employ people with migration background to reflect society’s structure in our organization. Well, I think they don't do so for achieving something in conceptual manner rather it is their vision of human being. That is the innovative way.„
Dimensions of social innovation for measurement

- **Content/Product Dimension**, i.e. the satisfaction of not satisfied human needs

- **Process Dimension**, i.e. changes in social relations enabling the satisfaction and the level of participation

- **Empowerment Dimension**, i.e. improvements of socio-political capability and access to resources

(Moulaert et al. 2005)
Dimensions of social innovation for measurement

→ Relative newness (Gillwald 2000)

→ Social means & social ends (BEPA 2011)

→ Self-regulation and regulation & legitimacy generation
MEASUREMENT PERSPECTIVE
Measuring technological, economic, public innovation …

- Global Innovation Index (INSEAD)
- Innovation Union Scoreboard (European Union)
- Innovation in public sector organisations (NESTA)
- ...

Source: European Union 2014, p. 12
… and measuring social innovation

Research goal:
• Measurement approach at the societal macro level
• Holistic view on innovation research → combining research traditions with explorative ways

(1) Operationalization of social innovation
(2) Highlight enabling framework conditions for social innovation
(3) Provision of rationales for policy action
(4) Increase of legitimacy
METHOD AND BLUEPRINT
Step I: Review and Screening

Step II: Conceptualization of model and blueprint

Step III: Empirical Testing

Interrelated step: Modification
Step I – Review and Screening

Review and screening of
(1) **Innovation metrics**, i.e. innovation in the commercial private as well as the public sector
(2) **Welfare metrics**, i.e. metrics that focus on social or environmental dimensions

- To classify the various perspectives
- To carry out screening of the conceptual foundations and indicators
- To assess transferability for the measurement of social innovation
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>• R&amp;D expenditure (e.g., public R&amp;D expenditure)</td>
<td>• Patents</td>
<td>• Innovation Surveys (e.g., Community Innovation Survey)</td>
<td>• Knowledge (e.g., PhD degrees)</td>
</tr>
<tr>
<td>• S&amp;T Personnel (e.g., technical skills of the workforce)</td>
<td>• Publications (e.g., scientific articles)</td>
<td>• Indexing</td>
<td>• Intangibles (e.g., investment in computerised information)</td>
</tr>
<tr>
<td>• Capital</td>
<td>• Products (e.g., sales of innovative products)</td>
<td>• Benchmarking Innovation capacity</td>
<td>• Networks (e.g., inspirations from conferences)</td>
</tr>
<tr>
<td>• Tech intensity</td>
<td>• Quality Change (e.g., changes in services, technology performance quality)</td>
<td>• ...</td>
<td>• Demand (e.g., cooperation with clients)</td>
</tr>
<tr>
<td>• ...</td>
<td>• ...</td>
<td>• ...</td>
<td>• Clusters (e.g., technology-science linkages)</td>
</tr>
</tbody>
</table>

Source: Milbergs/Vonortas 2004, p. 4
“The economies have succeeded in creating well-linked innovation ecosystems where investments in human capital thrive in fertile and stable innovation infrastructures to create impressive levels of innovation outputs.” Dutta (INSEAD) 2012, p. 26
Dimensions of Innovation Metrics

- Financial Resources
- Knowledge
- Information and Communication Technology
- Innovation Culture
- Entrepreneurial Activities
- Collaboration and Networks
- Intellectual Property Rights and Patents
Main gaps in existing approaches

- Normative aspects
- Innovation in the third sector
- Individual entrepreneurial activities that have a particular social aim, beyond case studies
- Societal outcomes
Step II: Integrated Model
For Measuring Social Innovation

Source: Bund/Hubrich/Schmitz/Mildenberger/Krlev 2013, p. 31
Analytical level

Framework Conditions

- **Pull-factors** for the innovation process

- **Importance** of institutions, actors and interactions for innovation processes in addition to physical, knowledge or financial infrastructure (Wieczorek & Hekkert 2012)

- Configuration of regulative framework conditions (hard/soft) → Spatial patterns of **social innovativeness**
<table>
<thead>
<tr>
<th>Resources Framework</th>
<th>Financial Resources</th>
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<tbody>
<tr>
<td></td>
<td>Human Resources</td>
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<td></td>
<td>Infrastructural Resources</td>
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<tr>
<td>Institutional Framework</td>
<td>Normative Institutions</td>
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<td>Regulative Institutions</td>
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<td></td>
<td>Cultural-cognitive Institutions</td>
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<tr>
<td>Political Framework</td>
<td>Policy Awareness about Social Innovation</td>
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<td></td>
<td>Political Environment</td>
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<tr>
<td>Societal Climate Framework</td>
<td>Social Needs/ Demands as reference points for Social Innovation</td>
</tr>
<tr>
<td></td>
<td>Social Engagement / Attitudes</td>
</tr>
</tbody>
</table>

Source: Krlev, Bund, Mildenberger 2014
Analytical level

*Entrepreneurial Activities*

- **Push-factors** for the innovation process

- Stimulation of innovation as a **managerial task** (Drucker 1985)

- Entrepreneurship and innovation are intrinsically related as both involve processes of discovery, evaluation, and exploitation of opportunities (entrepreneurship) and novelties (innovation) (Crossan & Apaydin 2010)

- Social innovation as a **cross-sector** phenomenon

- Social entrepreneurship as “set of behaviours and attitudes of individuals involved in creating new social ventures, such as a willingness to take risks and finding creative ways of using underused assets” (Young Foundation 2013, p. 6)
<table>
<thead>
<tr>
<th>Investment Activities</th>
<th>Expenditure in Innovation by Social Economy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Expenditure in Innovation by Public Sector</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Start-ups Activities</th>
<th>Start-ups and Death Rates of firms dedicated to a social purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Business Environment for starting a Business</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Collaboration and Networks</th>
<th>Citizens' Involvement in social entrepreneurial activities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cluster Development</td>
</tr>
</tbody>
</table>

Source: Krlev, Bund, Mildenberger 2014
Analytical level
Organizational Output & Societal Outcome

• **Outputs**: measurable items connected to the production or service process

• **Societal outcomes**: changes in the structure of needs within a given society in broader terms

• Diversity of social needs: *field specific* outputs and outcomes

• **Benchmark** for the validation of the indicators
<table>
<thead>
<tr>
<th></th>
<th>Equality Opportunities / Inequalities</th>
<th>Skill Acquisition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Health and Care</strong></td>
<td>Access / Quality of Health Facilities</td>
<td>Health Status and Research</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td>Jobs and Earnings</td>
<td>Work and Life</td>
</tr>
<tr>
<td><strong>Housing</strong></td>
<td>Housing Situation</td>
<td>Access and Quality</td>
</tr>
<tr>
<td><strong>Social Capital and</strong></td>
<td>Frequency and Quality</td>
<td>Social Cohesion</td>
</tr>
<tr>
<td><strong>Networks</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Political Participation</strong></td>
<td>Voting and Being Informed</td>
<td>Citizens' active Involvement</td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td>Patents and Certificates</td>
<td>Preservation of Natural Capital</td>
</tr>
</tbody>
</table>

Source: Krlev, Bund, Mildenberger 2014
SOCIAL ECONOMY AND ITS ROLE IN MEASUREMENT
Social innovation players

Social Economy

- Emerged as a concept in contrast to the analytical view of the Nonprofit Sector (JHP)
- Includes organizations with limited profit distribution
- New forms of legal and organizational forms

→ Mission-Driven Organizations
Mission-Driven Organisations

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Example</th>
<th>Data access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax-exempted status</td>
<td>Organisation is proven to be mission driven due to the tax-exempted status which is given for organisations fulfilling or aiming at a social and/or ecological purpose</td>
<td>Non-Profit Organisation, Charity</td>
<td>Easy or less difficult</td>
</tr>
<tr>
<td>Mission driven legal forms</td>
<td>Organisation is proven to be mission driven due a legal form that is only accessible for organisations fulfilling or aiming at a social and/or ecological purpose</td>
<td>CIC, L3C</td>
<td>Easy</td>
</tr>
<tr>
<td>Inherent legal characteristics</td>
<td>Organisation is proven to be mission driven due a legal form that shows characteristics that either give hints to mission driven operations or democratic governance</td>
<td>Co-operatives</td>
<td>Easy to less difficult depending on national data</td>
</tr>
<tr>
<td>For-Profit Social Goal Organisations</td>
<td>Organisation has a for-profit legal status, but is strongly committed to a social mission. Often a tax-exempted status is not possible due to legal constraints</td>
<td>GEPA</td>
<td>Only accessible on a case to case analysis</td>
</tr>
</tbody>
</table>

Source: Hubrich/Bund/Schmitz/Mildenberger 2012, p. 9
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Structural variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entities total</td>
<td>100,200¹</td>
<td>620,944¹</td>
<td>57,937¹</td>
<td>82,600¹</td>
<td>50,288¹</td>
<td>300,000¹</td>
</tr>
<tr>
<td>Organisation density (one organisation covers ... inhabitants, population 2009)</td>
<td>55</td>
<td>132</td>
<td>195</td>
<td>462</td>
<td>211</td>
<td>203</td>
</tr>
<tr>
<td>Employees total (headcount)</td>
<td>200,342¹</td>
<td>2,203,428²</td>
<td></td>
<td></td>
<td>194,207²</td>
<td>2,041,000¹</td>
</tr>
<tr>
<td>Employees (headcount) per entity (average)</td>
<td>2</td>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Employees total (FTE)</td>
<td>140,520¹</td>
<td></td>
<td>95,500³</td>
<td>159,350³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employees (FTE) per entity (average)</td>
<td>1</td>
<td></td>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Members total</td>
<td>15,088,000²</td>
<td>41,200,000³</td>
<td></td>
<td></td>
<td>91,163,355¹³</td>
<td></td>
</tr>
<tr>
<td>Members per entity (average)</td>
<td>151</td>
<td>66</td>
<td>120</td>
<td></td>
<td></td>
<td>304</td>
</tr>
<tr>
<td>Volunteers total (headcount)</td>
<td>1,477,000¹</td>
<td>25,761,000⁶</td>
<td></td>
<td></td>
<td></td>
<td>20,000,000⁴⁷</td>
</tr>
<tr>
<td>Volunteers per entity (average)</td>
<td>15</td>
<td>41</td>
<td></td>
<td></td>
<td></td>
<td>67</td>
</tr>
<tr>
<td><strong>Monetary variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income total in €</td>
<td>12,950,000,000¹</td>
<td></td>
<td></td>
<td>3,130,000,000³</td>
<td></td>
<td>46,200,000,000²</td>
</tr>
<tr>
<td>Income per entity in € (average)</td>
<td>129,341</td>
<td></td>
<td></td>
<td>42,877³</td>
<td></td>
<td>282,115⁷</td>
</tr>
<tr>
<td>Expenditure total in €</td>
<td>12,490,000,000¹</td>
<td>89,170,000,000⁵</td>
<td></td>
<td>2,900,000,000³⁴</td>
<td>7,300,000,000²</td>
<td>45,700,000,000²</td>
</tr>
<tr>
<td>Expenditure per entity in € (average)</td>
<td>124,651</td>
<td>143,604⁶¹</td>
<td></td>
<td>40,960³</td>
<td>160,298²</td>
<td>279,062³</td>
</tr>
<tr>
<td>Share of expenditure in GDP (GDP in 2010 at current prices and current PPPS, inflation-adjusted)</td>
<td>7.9%</td>
<td>3.7%</td>
<td></td>
<td>0.5%</td>
<td>3.5%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

¹ data refers to associations, independent (self-governing) institutions and public utility funds/charitable foundations; data based on the Johns Hopkins Study 2006 (not all organisations of the social economy are included; e.g. cooperatives)
² 2004
³ data refers to associations, foundations, gGmbH, cooperatives, mutuals without associations, gAG, VwAG; estimated number of foundations data from 1997
⁴ estimation
⁵ contribution to gross value added by Third Sector (not all social economy organisations are included)
⁶ calculated by social economy entities (underestimated value)
⁷ estimation; data refers to associations, foundations, other social organisations and religious institutions, cooperatives (number of employees does not consider cooperatives)
⁸ some studies show a higher number of members
⁹ data refers to associations and similar community organisations and foundations
¹⁰ in terms of costs
¹¹ data refers to foundations, associations, cooperatives, baldis, organisations under Catholic Canon Law, religious organisations with legal personality, ZIVs
¹² calculation excludes cooperatives and mutuals (except social solidarity and housing cooperatives since they can't distribute earnings)
¹³ data from 2002; refers to associations, mutuals foundations, cooperatives, LDDs, Holy Houses of Mercy, museums, development NGO, religious worship
¹⁴ data based on the civil society concept (some organisations within this concept do not fit our understanding of *mission-driven*); 600,000 informal, unregistered organisations are not included in the data
¹⁵ data based on the voluntary sector (not all social economy organisations are included)
¹⁶ estimation
¹⁷ estimation 2010

Source: Hubrich/Bund/Schmitz/Mildenberger 2012, p. 40
Source: Then/Kehl 2012, p. 60
ONGOING RESEARCH
Step III – Empirical Testing

EXPERT INTERVIEWS
- Integration activities
- Innovative practice
- Framework conditions

DOCUMENTARY ANALYSIS

TESTING STATISTICAL SIGNIFICANCE

Source: Bundesamt für Migration und Flüchtlinge 2013
Conclusion

• No “one best way” for measuring social innovation
• Need of data improvement
• Complexity of innovation processes
• Social embeddedness of social innovation

Future research

• Case study research
• Complementary measurement at the meso and micro level
Thank you for your attention!

Contact:

eva.bund@geog.uni-heidelberg.de
Literature

- Krlev, G., Bund, E., Mildenberger, G. (2014): Measuring what matters? Indicators of social innovativeness on the national level. Accepted for publication in Information Systems Management (ISM), Special Issue on Social Innovation in the Public Sector, 31 (3).