Looking for the key to unlock smart specialization’s full potential: How bright are the Northern Lights and the Mediterranean Sun?

Fragiskos Archontakis
International Hellenic University

Aspasia Maria Dragona
Democritus University of Thrace

2018 SMARTER Conference on Smart Specialisation and Territorial Development
Seville, September 2018
Outline of the talk

- Motivation
- Literature
- Data
- Analysis
- Case studies
- Future steps
- Conclusion
Motivation (1/2)

- Discussions with JRC-Seville members.
- “To increase the understanding for the need to select a limited number of priorities, and to build trust among stakeholders, including with public authorities” (Boden et al., 2015).

Mark Boden, Patrice dos Santos, Karel Haegeman, Elisabetta Marinelli and Susana Valero; European Parliament Preparatory Action: "Actual and desired state of the economic potential in regions outside the Greek capital Athens"; EUR 27570 EN.
Motivation (2/2)

• Although trust is a subjective term its influence on public policy could be significant to make building trust an objective worth pursuing for public institutions (OECD, 2017).

• Trust has been often viewed as an important economic element: ‘Virtually every commercial transaction has within itself an element of trust ....’ (Arrow, 1972: p. 357).

• The link between trust and economic development and growth has been examined (Alesina & La Ferrara, 2002; Zak & Knack, 2001).
Literature

Definition of “Trust”

Definitions of trust – Source: https://www.merriam-webster.com/dictionary/trust

1. a : assured reliance on the character, ability, strength, or truth of someone or something
   b : one in which confidence is placed
2. a : dependence on something future or contingent : hope
   b : reliance on future payment for property (such as merchandise) delivered
3. a : a property interest held by one person for the benefit of another
   b : a combination of firms or corporations formed by a legal agreement; especially : one that reduces or threatens to reduce competition

...
Data Sources

• Trust variable: World Value Surveys (WVS), Eurostat
• GDP p.c. and GERD (% of GDP) variables: OECD data (ref. year 2016)
• Variable “Doing Business in ...” : World Bank data (ref. year 2018)
Analysis: GDP p.c. vs Trust

Figure 1: GDP p.c. (2016) versus trust.
Analysis: GERD (% of GDP) vs Trust

Figure 2: GERD (as a % of GDP 2015) versus trust.
Analysis: Doing Business vs Trust

Figure 3: World Bank’s Doing Business (2018) versus trust.
Overview of Regression Results

<table>
<thead>
<tr>
<th></th>
<th>Dependent Variable</th>
<th>Direction of Linearity</th>
<th>Significance</th>
<th>Strength (R(^2))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>GDP p.c.</td>
<td>(+)</td>
<td>✓</td>
<td>33%</td>
</tr>
<tr>
<td>Model 2</td>
<td>GERD (% GDP)</td>
<td>(+)</td>
<td>✓</td>
<td>26%</td>
</tr>
<tr>
<td>Model 3</td>
<td>WB’s “Doing Business”</td>
<td>(+)</td>
<td>✓</td>
<td>14%</td>
</tr>
</tbody>
</table>

Recall: In all models independent variable is Trust.
## Trust in others in Europe

Country: Respondents answered the survey question “would you say that most people can be trusted?” on a scale ranging from 0 (low trust) to 10 (high trust).

<table>
<thead>
<tr>
<th>Country</th>
<th>The average answer for each country.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>&gt;8</td>
</tr>
<tr>
<td>Norway, Finland</td>
<td>7.1-8.0</td>
</tr>
<tr>
<td>Ireland, Latvia, Lithuania, Malta, Netherlands, Romania, Spain, <strong>Sweden</strong>, Switzerland, UK</td>
<td>6.1-7.0</td>
</tr>
<tr>
<td>Austria, Belgium, Czech Rep., Estonia, Luxembourg, Germany, <strong>Greece</strong>, Italy, Poland, Portugal, Slovakia</td>
<td>5.1-6.0</td>
</tr>
<tr>
<td>Bulgaria, Cyprus, France, Serbia</td>
<td>4.1-5.0</td>
</tr>
</tbody>
</table>

Trust in Sweden...

- In Norway, **Sweden** and Finland, more than 60% of respondents in the World Value Survey think that people can be trusted.

  Source: [https://ourworldindata.org/trust](https://ourworldindata.org/trust)

- Experimental game behavior: in Sweden, the higher amount subjects received, the higher the share they send back; the relationship was statistically significant (Holm & Danielson, 2005).

Facts & Figures: Sweden

• Sweden is among top EU Member States, recording the highest R&D intensities (e.g. in 2016 it was 3.25%, according to Eurostat).

• The mission of the Swedish Governmental Agency for Innovation Systems (VINNOVA) is to promote sustainable growth by improving the conditions for innovation, as well as funding needs-driven research.

• The VINNVÄXT programme, for the development of regional innovation systems: in the 2013 call, the relation to “smart specialisation” and regional innovation strategies is referred to explicitly.
Smart specialisation priorities in Sweden
(“smart specialisation” in Swedish: “smart specialisering”)

Selected fields:

• Cultural & creative industries
  (e.g. Generator Swedish Creative Industries)

• Information & Communication Technology
  (e.g. data centres, fiber optics, smart housing)

• Manufacturing & industry (e.g. aerospace in Region Västra Götaland)

• Renewable energy: production & distribution

• Sustainable innovation & production (e.g. food/green industries)
... and trust in Greece?

• Civil War, just after WWII (from 1946 to 1949)

• Conspiracy theories

• “Beware of Greeks bearing gifts”
Facts & Figures: Greece

• Greece is among bottom EU Member States, recording R&D intensities below 1% (e.g. in 2016 it was 0.99%, according to Eurostat).

• Brain Drain: hundreds of thousands educated citizens moved abroad with no plans to return; the new Hellenic Foundation for Research and Innovation (HFRI) – ΕΛΙΔΕΚ, with initial funds amount to € 240 mln (provided by the Public Investment Program (€60 mln) & the European Investment Bank (€ 180 mln)).

• There are noneconomic factors that drive taxpayer compliance behaviour. Two categories of such factors that play an important role are:
  1. Personal and social norms.
  2. Trust, both in the government/state institutions & in other taxpayers.
  Source: Kaplanoglou & Rapanos (2013).
Smart specialisation priorities in Greece
(“smart specialisation” in Greek: “Έξυπνη Εξειδίκευση”)

Selected fields:

• Health (e.g. medical tourism, manufacturing of generic drugs., long-term elderly care)
• High-quality/innovative food (aquaculture, organic agriculture)
• Energy & Materials (e.g. Wind or Solar energy)
• ICT services
• Logistics & Value Chains (specific areas: food)
To Be Done...

• Interviews with key stakeholders:
  - in Greece
  - in Sweden
  - in Brussels

• Expanding data/understanding for S3:
  - in Greece
  - in Sweden
  - elsewhere?
Thank you for your attention!

¡Gracias por vuestra atención!