

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

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# 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 of 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

- OECD (2017). “**Trust** and Public Policy” report.
- Holm & Danielson (2005). Tropic **trust** versus Nordic **trust**: experimental evidence from Tanzania and Sweden. *The Economic Journal*, 115(503), 505-532.
- Kaplanoglou & Rapanos (2013). Tax and **Trust**: The Fiscal Crisis in Greece, *South European Society and Politics*, 18:3, 283-304.

# 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

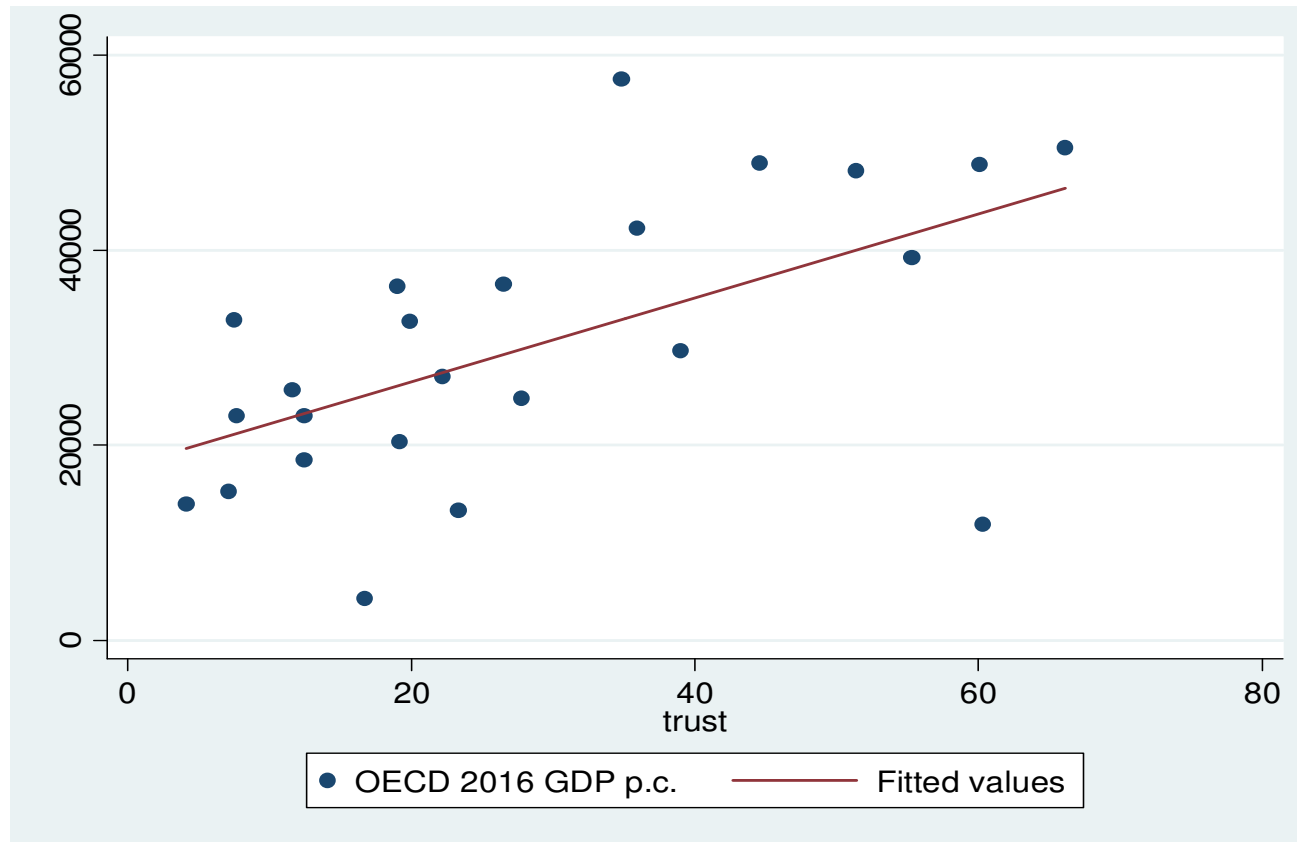


Figure 1: GDP p.c. (2016) versus trust.



# Analysis: GERD (% of GDP) vs Trust

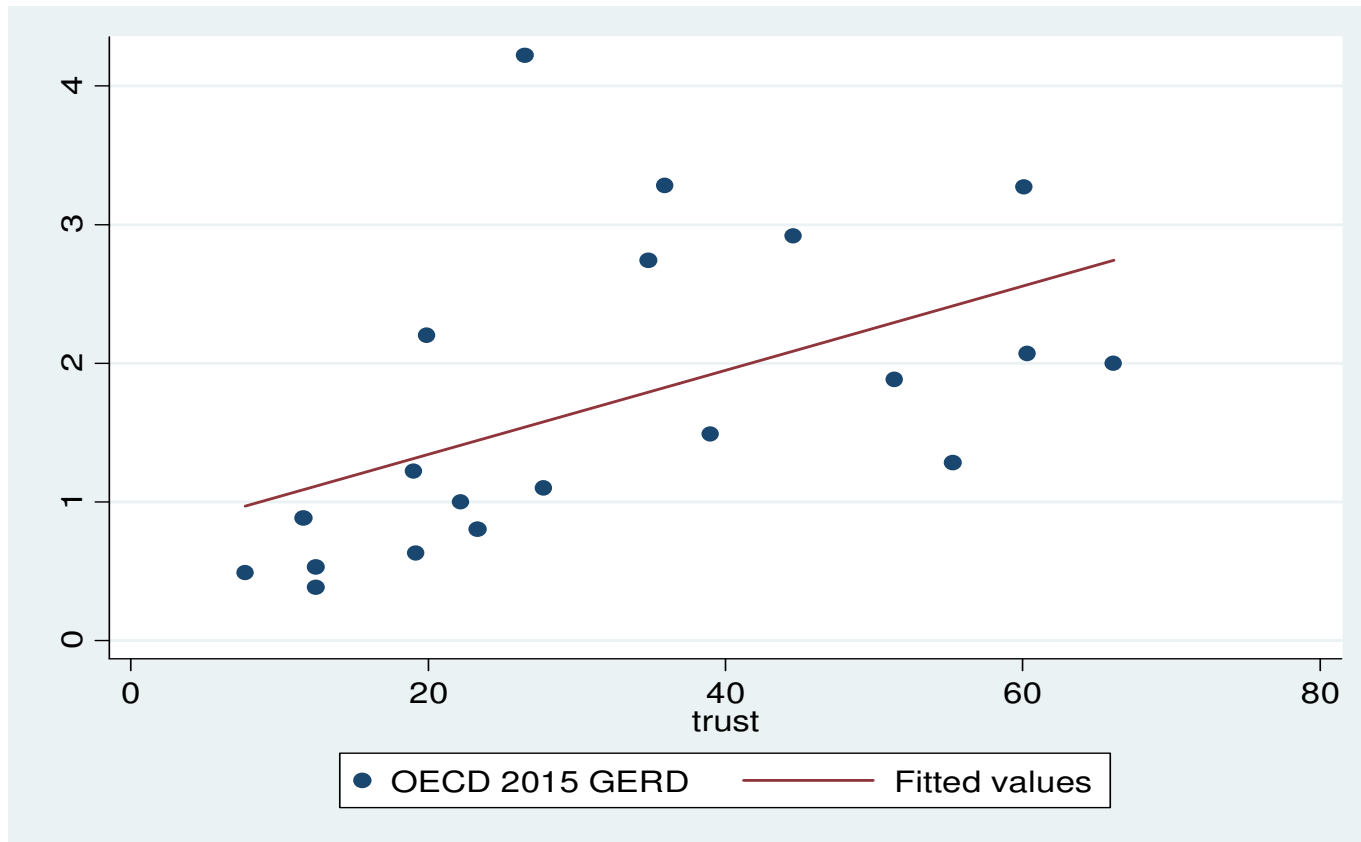


Figure 2: GERD (as a % of GDP 2015) versus trust.

# Analysis: Doing Business vs Trust

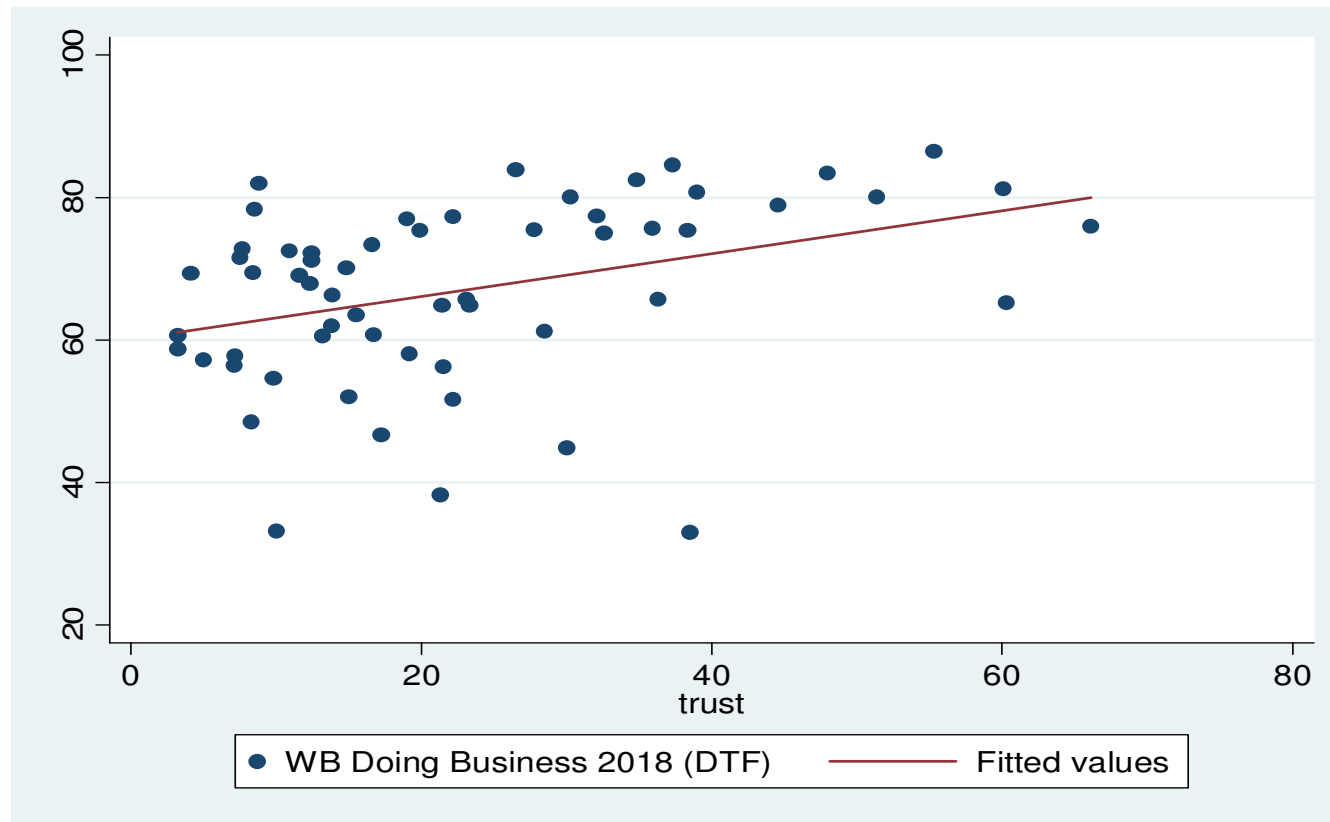


Figure 3: World Bank's Doing Business (2018) versus trust.

# Overview of Regression Results

|                | <b>Dependent Variable</b> | <b>Direction of Linearity</b> | <b>Significance</b> | <b>Strength (R<sup>2</sup>)</b> |
|----------------|---------------------------|-------------------------------|---------------------|---------------------------------|
| <b>Model 1</b> | GDP p.c.                  | (+)                           | ✓                   | 33%                             |
| <b>Model 2</b> | GERD (% GDP)              | (+)                           | ✓                   | 26%                             |
| <b>Model 3</b> | WB's "Doing Business"     | (+)                           | ✓                   | 14%                             |

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). | The average answer for each country. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| Denmark                                                                                                                                                      | >8                                   |
| Norway, Finland                                                                                                                                              | 7.1-8.0                              |
| Ireland, Latvia, Lithuania, Malta, Netherlands, Romania, Spain, Sweden, Switzerland, UK                                                                      | 6.1-7.0                              |
| Austria, Belgium, Czech Rep., Estonia, Luxembourg, Germany, Greece, Italy, Poland, Portugal, Slovakia                                                        | 5.1-6.0                              |
| Bulgaria, Cyprus, France, Serbia                                                                                                                             | 4.1-5.0                              |

Source: Trust – Eurostat (2015) from [OurWorldInData.org/trust](https://www.ourworldindata.org/trust)

# 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>

- 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).
- Inequality and Trust in Sweden: Some Inequalities are More Harmful than Others, by Magnus Gustavsson and Henrik Jordahl, IFN Working Paper No. 673, 2006.

# 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).

Source: [https://ec.europa.eu/eurostat/statistics-explained/index.php/R\\_%26\\_D\\_expenditure](https://ec.europa.eu/eurostat/statistics-explained/index.php/R_%26_D_expenditure)

- 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).

Source: [https://ec.europa.eu/eurostat/statistics-explained/index.php/R\\_%26\\_D\\_expenditure](https://ec.europa.eu/eurostat/statistics-explained/index.php/R_%26_D_expenditure)

- 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)).

Source: <http://www.eib.org/en/infocentre/press/releases/all/2016/2016-178-european-backing-to-create-new-hellenic-foundation-for-research-and-innovation-to-strengthen-research-across-greece.htm>

- 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!