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# EU Cohesion Policy: what works and where?

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## Team

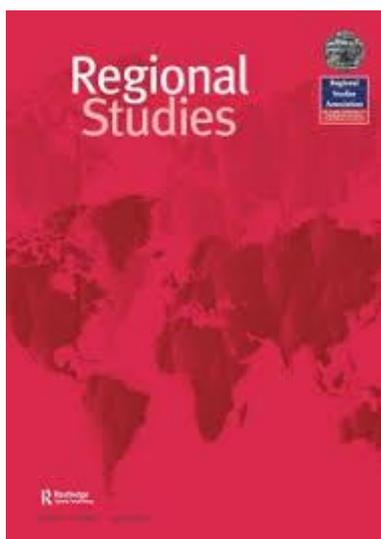
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## Towards 2020: Special Sessions and Roundtables

- **2016-08 - ERSA Wien:**  
Special Session: "The cohesion policy of the European Union and the factors influencing its impacts on growth, jobs and investment" (Organisers: R.Crescenzi, U.Fratesi, V. Monastiriotis)
- **2017-06 - RSA Dublin:**  
Special Session: "The Cohesion Policy of the European Union after the Economic Crisis & Brexit" (Organisers R.Crescenzi, U.Fratesi, V. Monastiriotis)
- **2017-08 - ERSA Groningen:**  
Special Session: "The EU Cohesion Policy after the Crisis and Brexit" (Organisers R.Crescenzi, U.Fratesi, V. Monastiriotis)
- **2017-09 - AISRe Cagliari:**  
Special Session «Il futuro delle politiche di coesione nell'Europa post Brexit» (Organisers R.Crescenzi, U.Fratesi, M. Giua)
- **2017-11 - RSA London:**  
Plenary Roundtable "The Cohesion Policy of the European Union after the Economic Crisis & Brexit: Back to National Regional Policies?" (Chair R.Crescenzi; Panelists: U.Fratesi, V. Monastiriotis, L. Polverari, P. Wostner)
- **Forthcoming 2018-08 ERSA Cork:**  
Special Session "The EU Cohesion Policy after the Crisis and Brexit" (Organisers: R.Crescenzi, U.Fratesi, V. Monastiriotis)
- **Proposal 2018-10 European Week of Regions Brussels:**  
Interactive University Session "Thirty years of EU Cohesion Policy: What works? Where? for Whom?" (Organisers R.Crescenzi, U.Fratesi, V. Monastiriotis)

## Special Issue: "EU Cohesion Policy: Back to National Regional Policies?"



Editors: R. Crescenzi, U.Fratesi, V. Monastiriotis

- Ten papers now at advanced stage
- Forthcoming in 2018
- Explores the features of EU Cohesion Policy, its impacts on regional outcomes, and the socio-economic, political and institutional factors conditioning these processes

## This talk

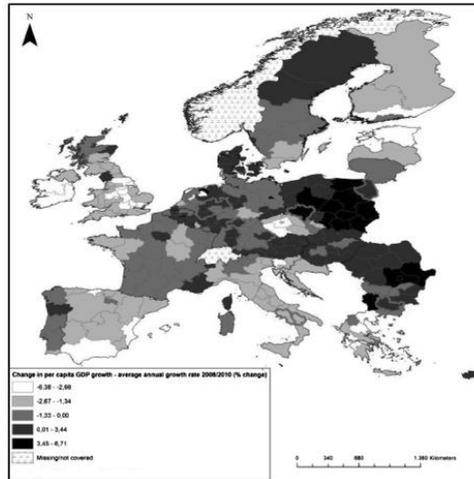
- Towards 2020: A decade of 'crises'
- European regions and the 'double-challenge' for EU Cohesion Policy
- EU Cohesion Policy after 2020
  - The 'political' rationale
  - 'EU value added' and 'impact'
- Pathway to impact
  - How regions work
  - How POLICIES work in practice
- What works? Where? Under what conditions?
  - Identification
  - Contextualisation
- General conclusions

## A decade of 'crises' (1)

### **2008 – Great Recession**

- Severe contraction of economic activity and employment in virtually all regions
  - Shift of EU Cohesion expenditure in order to:
    - Address new and emerging local 'needs'
    - Compensate for cuts in 'national' public expenditure in key areas
- Asymmetric spatial patterns of recovery
  - New demands for Cohesion Policy in order to facilitate recovery

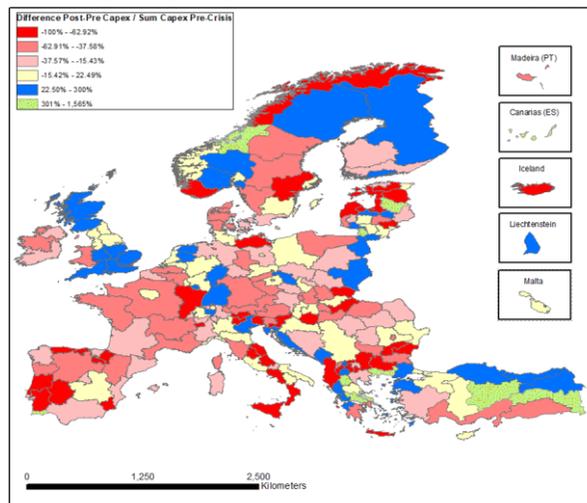
## Geography of the Crisis (1)



Average **Annual Growth Rates** of  
Regional GDP pc, 2008-2010 (Eurostat)

Source: Crescenzi, Luca, Milio 2016

## Geography of the Crisis (2)



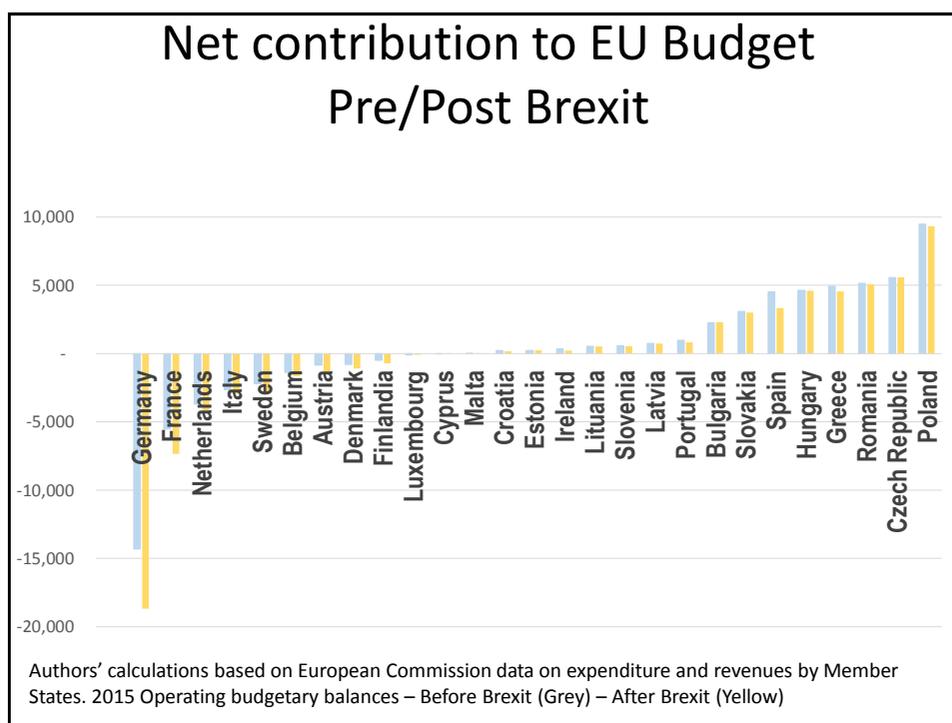
Changes in **FDI towards the regions of Europe** after the crisis  
(Differences in capital expenditure between 2003–08 and 2009–14).

Source: Crescenzi & Iammarino 2017 - fDi Markets data

## A decade of 'crises'(2)

### 2016 – Brexit

- Political crisis with financial and economic implications
  - The debate on Brexit called into question the 'value' of the Union
  - The UK played a relevant role in shaping EU policies including the progressive shift of resources from CAP towards Cohesion
  - Pressures on EU Budget following the departure of a net contributor with complex re-distributive effects

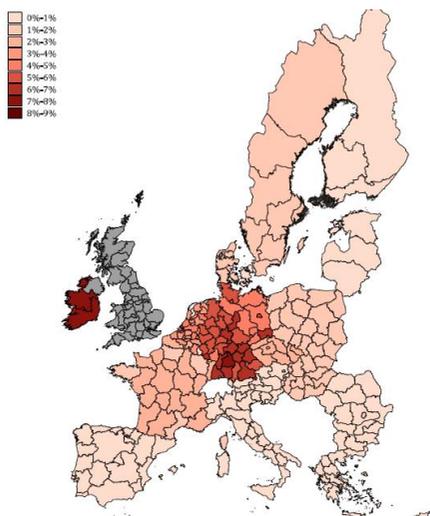


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  - Pressures on EU Budget following the departure of a net contributor with complex re-distributive effects
- Asymmetric spatial impacts
  - New demands for Cohesion Policy in order to deal with new asymmetric shocks via trade and FDI

## Geography of the impacts of Brexit



Regional shares of **local labour income exposed to Brexit** (excluding the UK)

Source: Chen, W., Los, B., McCann, P., Ortega-Argiles, R., Thissen, M., van Oort, F (2018)

## EU Crises and the regions

**Doing more** - Asymmetric economic impacts with complex geographies

**With (even) less (?)** – Increasing pressures on available resources for less developed regions:

- Uncertainty over resources available in the post-2020 EU Budget
- Communication of the Commission regarding the priorities of the post-2020 EU budget (14<sup>th</sup> February 2018) contains some critical elements for less developed regions

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### Juncker edges away from principle of ever closer union

Drop some pan-European policies and 'do less more efficiently', says commission chief



© Reuters

MARCH 1, 2017 Arthur Beesley in Brussels

EU states could regain control over matters ranging from regional development to consumer protection, [Jean-Claude Juncker](#), has suggested, setting out ideas to shore up the bloc after Brexit.

A lot of policymaking could be renationalised as part of a plan in which the EU's 27 remaining countries could "do less more efficiently" and act more decisively on a smaller range of common priorities, the [European Commission president](#) said.

***"Sometimes less is more. The EU27 could focus on areas where we make a real difference"***

***"EU states could regain control over matters ranging from regional development to consumer protection"***

## Cohesion Policy in post-2020 Europe (1)

Existential challenge for Cohesion Policy

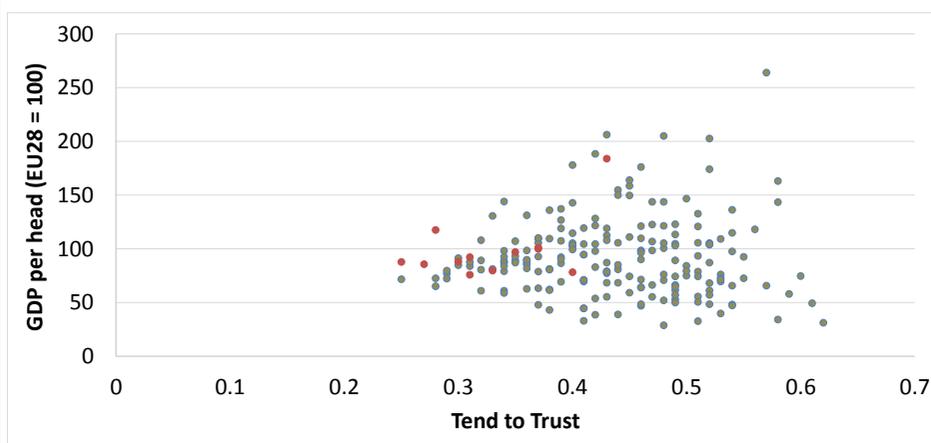
Potential discontinuity in public policies for less developed regions throughout Europe

- Cohesion Policy is often the only development tool available ('natural experiment' in the UK shows the difficulty faced by 'less developed' regions to attract national resources)

In order to (re)assert its role, EU Cohesion Policy **cannot** rely on purely **political arguments** such as:

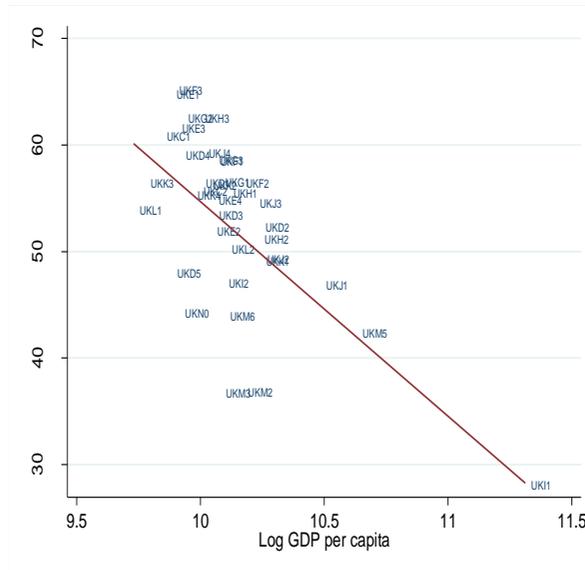
- Cohesion Policy needed for redistributive purposes
- Less developed regions 'voting against European integration'

## Regional GDP and Trust in the EU



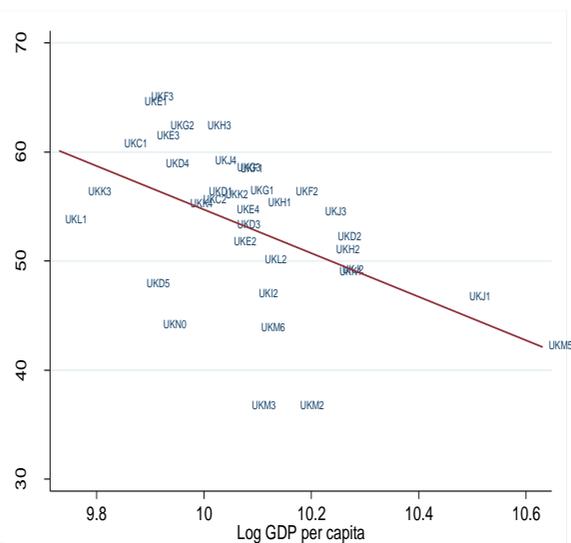
Own elaboration: Flash Eurobarometer (Public opinion in the EU NUTS 1/2 regions);  
GDP per head (PPS), 2015 EUROSTAT

## Brexit: leave votes and regional GDP pc (1)



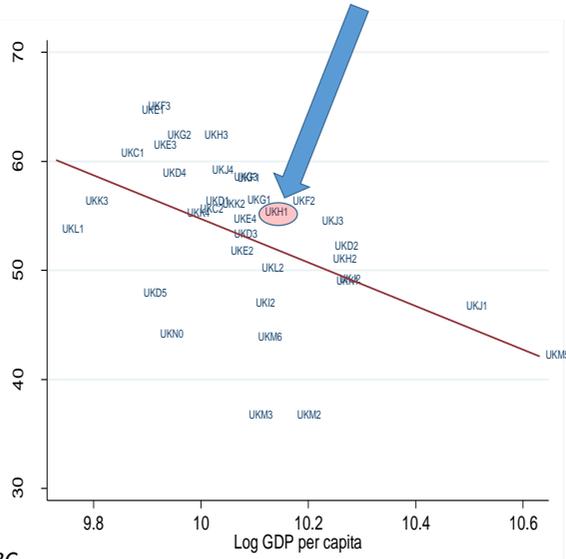
Source: Eurostat, BBC

## Brexit: leave votes and regional GDP pc (2) (Excluding London)



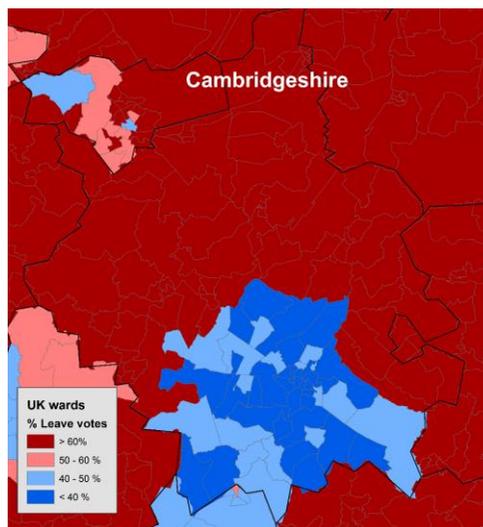
Source: Eurostat, BBC

## Brexit: leave votes and regional GDP pc (2) (Excluding London)



Source: Eurostat, BBC

## Cambridgeshire (UKH12) Leave votes by ward



Source: Crescenzi, Di Cataldo and Giua (2018) - elaboration based on BBC data

## Cohesion Policy in post-2020 Europe (2)

Cohesion Policy is **economically** justified if it **can show that**:

- It is an **EU economic priority** (EU rationale)
  - Equity Argument (asymmetric impacts of EU integration and EU policies)
  - Efficiency Argument (removal of developmental bottlenecks and global challenges)
- It **works** (Impact → not only ‘economic impacts’ matter but all impacts should be testable against a credible benchmark)
- **Best use of public resources** vs. other alternative options (Effectiveness)

## The diagnosis

Existent scholarly and policy debates have focused on **‘how regions work’**

- Very dynamic field of research in Economic Geography, Regional Economics, Urban Planning etc.
- Remarkable attention by policy makers taking on board state-of-the-art academic work (e.g. Barca Report or Smart Specialisation)
- Data quality constantly improving
- Very accurate diagnoses (e.g. Cohesion Report)

## The cure: What works? Where? (1)

More limited attention to '**how Regional Policies work and where**' in terms of economic outcomes

- More recent (but rapidly developing) field of research
- Still difficult to draw general conclusions to inform policies
- Significant data barriers (with some best practices, e.g. OpenCoesione in Italy)

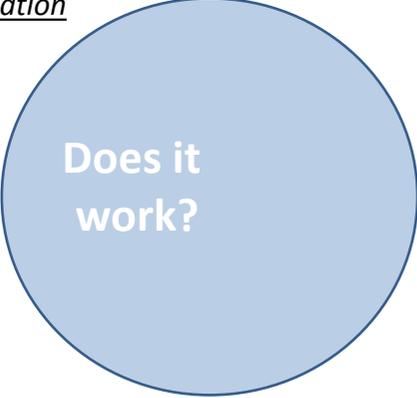
## The cure: What works? Where? (2)

Sophisticated **diagnoses** not matched by 'well-tested medications':

- Regions have been told (and very rightly so) to 'invest more in **innovation**', 'increase and improve **human capital**', 'reinforce **institutions**' etc.
- If all regions were good at this kind of thing, these problems wouldn't exist today!
- Generic recipes are good cover-ups for rent-seeking by local elites
- How to achieve these goals *in practice* given local conditions? What works? Where?



Identification



Does it work?

E.g. Mohl & Hagen, 2010; Becker et al., 2010; Accetturo & De Blasio, 2011; Bondonio & Greenbaum, 2012; Pellegrini et al., 2013.

## Does it work?

### The impact of Cohesion Policy (1)

Emerging literature on counterfactual assessment of Cohesion Policy impacts

Separation between **EU-wide studies** (Becker et al., 2010 and 2013; Pellegrini et al., 2013; Percoco, 2017) vs. **one-country studies** (e.g. Di Cataldo, 2017 for the UK or Giua, 2017 for Italy)

## Does it work? The impact of Cohesion Policy (2)

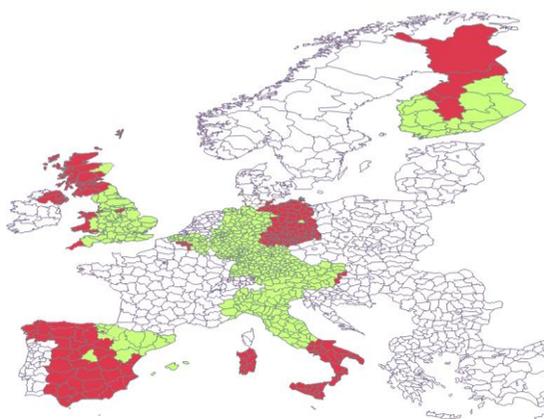
### Key questions

- Does Cohesion Policy boost regional **growth and employment**?
- Do regions in **ALL Member States benefit** from Cohesion Policy?

Crescenzi & Giua (2018):

- Spatial Regression Discontinuity Design (RDD) estimates **distinct but fully comparable regional impacts for each individual Member State** before the Crisis and during Recovery
- Eligible and non-eligible areas are compared by means of a spatial forcing variable

## Does it work? The impact of Cohesion Policy (3)



Treated NUTS-3 regions (belonging to Objective 1 regions according to the 2000-2006 EU Cohesion Policy eligibility criteria) in red. Counterfactual NUTS-3 regions in green

Source: Crescenzi and Giua (2018)

**Table 4. Effects of EU Cohesion Policy on economic growth and employment (2000-2010)**

|                                     | Europe               | Germany              | Italy                  | Spain                  | UK                     |
|-------------------------------------|----------------------|----------------------|------------------------|------------------------|------------------------|
| <b>Panel A - Y: economic growth</b> |                      |                      |                        |                        |                        |
| Objective 1                         | 0.0036**<br>(0.0011) | 0.0354**<br>(0.0118) | 0.0295<br>(0.0411)     | 0.5078<br>(0.5907)     | 0.0074<br>(0.0451)     |
| R squared                           | 0.183                | 0.094                | 0.195                  | 0.360                  | 0.138                  |
| Polynomial degree                   | 3-2                  | 3-1                  | 2-1                    | 2-1                    | 1-1                    |
| Observations                        | 779                  | 428                  | 87                     | 44                     | 125                    |
| <b>Panel B- Y: employment</b>       |                      |                      |                        |                        |                        |
| Objective 1                         | 0.0045*<br>(0.0017)  | 9.7737<br>(4.9094)   | 40.8626**<br>(12.8633) | -78.82296<br>(43.9912) | 50.3325**<br>(16.6211) |
| R squared                           | 0.300                | 0.154                | 0.218                  | 0.510                  | 0.177                  |
| Polynomial degree                   | 3-1                  | 3-3                  | 2-3                    | 3-3                    | 3-2                    |
| Observations                        | 770                  | 421                  | 87                     | 42                     | 125                    |

## Does it work?

### The impact of Cohesion Policy (4)

- **Positive** EU-wide impact on both regional **economic growth and employment**
- The **positive impact on regional employment has survived the Crisis** and supported less developed regions in the recovery period
- Positive effects are unevenly distributed across member states:
  - ‘Regional growth bonus’ concentrated in Germany
  - Impacts on regional employment are largely confined to UK regions
  - Italian beneficiary regions experienced better employment performance but this effect ended with the Crisis
  - Spanish beneficiary regions have benefited in terms of better growth during Recovery with no impacts on employment

## Does it work?

### The impact of Cohesion Policy (4)

In post-Brexit Europe, EU Cohesion Policy remains an EU-wide public good

Better **adaptation of the policy to the needs and overarching objectives of each individual Member State** might be the best complement to the current place-based approach

Contextualisation

Where?  
Under what  
conditions?

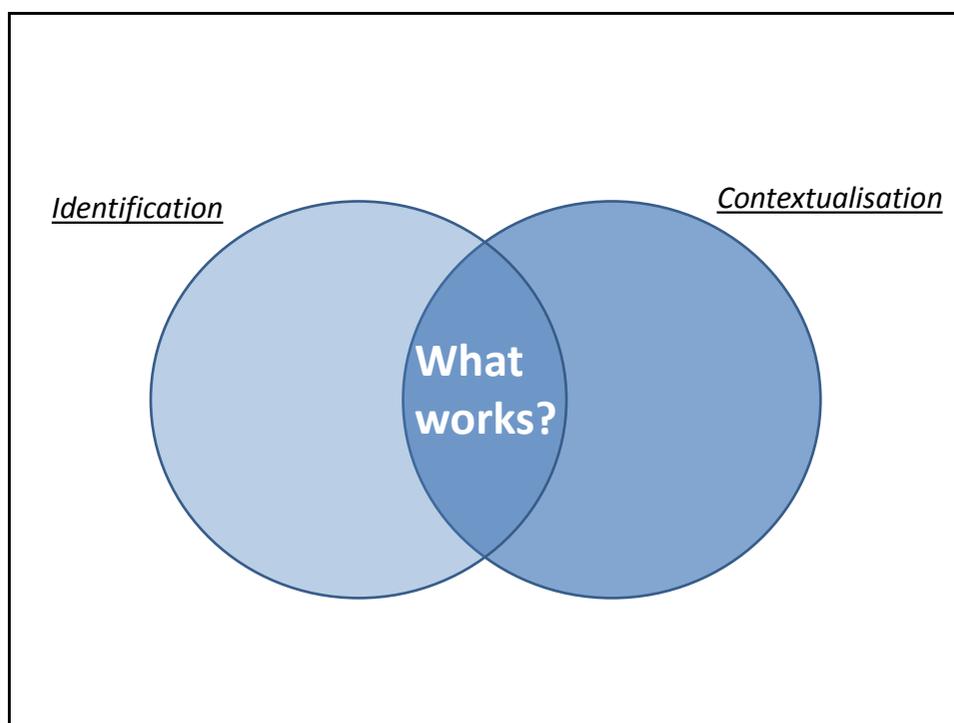
E.g. Cappellen et al., 2003;  
Rodríguez-Pose & Fratesi,  
2004; Ederveen et al., 2006;  
Dall'Erba et al., 2007; Esposti  
& Bussoletti, 2008;  
Bondonio & Greenbaum,  
2012.

## A bottom-up approach in all regions?

- Crescenzi & Giua (2016) compare the territorial implications of a **fully 'top-down' policy** (CAP) with an **increasingly 'bottom-up' policy** (Cohesion Policy)
- Link 'models of intervention' to heterogeneous territorial conditions
- Test the association between growth and regional-level expenditure for EU Cohesion Policy, Rural Development Policy and CAP over the 1994-2013 period
- The results suggest that:
  - The positive influence **of EU Cohesion Policy** on regional growth is **stronger in regions with the most favourable socio-economic** initial conditions;
  - CAP has a **positive link** with regional economic performance only in the **most deprived regions** of the EU;
  - **Coordination** between EU policies maximises impacts

## Concentration and alignment with needs

- Crescenzi, Fratesi and Monastiriotis (2017) **bridge a case-study approach with econometric analysis**
- Quantitative assessment of 15 selected regions with both **quantitative and qualitative information on expenditure and local achievements**
- Explore the link between the structure of expenditure, its alignment with local needs and a variety of objective and subjective local achievements
- The results suggest that:
  - **Structure of expenditure** is a key factor conditioning impacts;
  - Consistency, in terms of planned interventions and alignment between objectives and on-the-ground needs, is a key conditioning factor for all types of achievements (not only economic returns)



## What Works? (1)

### A Smart Specialisation Forerunner Programme

**Too early for rigorous evaluation** of actual 2014-2020 Smart Specialisation Programmes

**But** we can analyse 'S-3 forerunner programmes' from the past and learn from them

Crescenzi, De Blasio & Giua (2018) **evaluate the impact of a scheme** (Collaborative Industrial Research - CIR) supporting **innovative activities of firms located in less developed regions** in Italy (1 billion euros)

Co-financed by the EU Cohesion Policy in 2007-2013 and it **anticipates some key features of Smart Specialisation Strategy** Programmes

## What Works? (2)

### A Smart Specialisation Forerunner Programme

Makes it possible to draw insights on the potential impacts of S-3:

- **What features of S-3 Programmes work best** in the most disadvantaged areas of the EU?
- **What is the impact and 'value added'** of some of the **new features** introduced into regional innovation strategies by S-3?

## What Works? (3)

### A Smart Specialisation Forerunner Programme

Unique collection of **detailed programme-level and firm-level data**

Information on **applicants, selection scores and beneficiaries** with actual payments and firm characteristics and performance (5 different datasets)

RDD approach using the evaluation score of the applications as the forcing variable (some projects are eligible but not funded due to limited resources)

Focus **on project-level heterogeneity** (i.e. anticipation of some S-3 features)

### Heterogeneous Impact (H-ATE ) Results

|  |              | Investments            | Value Added            | Employment             |
|--|--------------|------------------------|------------------------|------------------------|
| Z1: Public research<br>(presence of a University in the project partnership) | Treatment*Z1 | -1.1480<br>(0.8926)    | 0.4142<br>(0.7503)     | 1.0767*<br>(0.4205)    |
| Z2: Collaboration<br>(project partnership involving large number of firms)   | Treatment*Z2 | -0.5514<br>(0.5438)    | -1.9874***<br>(0.5263) | -1.9942***<br>(0.4992) |
| Z3: Advanced Activities<br>(activity of the project classified as advanced)  | Treatment*Z3 | -0.4083<br>(0.4439)    | -0.2672<br>(0.4907)    | -1.4622*<br>(0.5910)   |
| Z4: Low tech<br>(firms operating in low tech sectors)                        | Treatment*Z4 | 1.2951**<br>(0.4333)   | 0.1203<br>(0.4162)     | 1.3514**<br>(0.4749)   |
| Z5: Patenting<br>(firms with a high capacity of patenting)                   | Treatment*Z5 | -0.1697***<br>(0.0477) | 0.2223***<br>(0.0596)  | 0.1248<br>(0.0876)     |
| Z6: Internationalisation<br>(multinational corporations)                     | Treatment*Z6 | -0.7148<br>(0.6535)    | -0.9529*<br>(0.3698)   | -1.7699*<br>(0.7928)   |

Source: Crescenzi, De Blasio & Giua (2018)

## What Works? (4)

### A Smart Specialisation Forerunner Programme

Z1- **Collaboration** with public research centres or Universities does not increase impact

Z2 - **Large partnerships** have a negative impact on value added and employment

Z3 - **Most innovative activities** (e.g. ICT or Health and biotechnologies) do not show any additional benefits vs. **more 'traditional' activities** (e.g. Agro-industrial system, Cultural heritage)

Z4 - Firms operating in **low tech economic sectors** benefit the most

Z5 - Firms with more **consolidated innovative capabilities** reduce investments (crowding-out) and focus on value added

Z6 - No benefit for large **internationalised firms**

## Conclusions (1)

EU Regions are facing a **'double-challenge'**

- Multiple shocks (Recovery from Great Recession & Brexit) with asymmetric territorial impacts
- Changing budget constraints for development policies

EU Cohesion Policy **can and should remain central** after 2020

**'EU value added'** and **'Impact'** are key to success in a changing Europe

Good understanding of **how regions work** (Diagnosis)

More work is needed on **how regional policies work in practice** (Well-tested medications)

- **What works?**
- **Under what conditions? Where?**

## Conclusions (2)

Exciting field of research combining identification **and** contextualisation

Gradual transparent **evidence-based policy learning** based on:

- Ex-ante, *in-itinere* and ex-post evaluation of policies, programmes and projects beyond formal requirements
- (Open) Data availability at the firm/individual beneficiary level in ALL Member States
- Combination of qualitative, quantitative and mixed methods (including Machine Learning)
- Stringent requirements in terms of valid methods, external validity and transferability of results
- Eclectic evidence-based selection of policy tools
- Top-down and bottom-up integrated approach
- Coordination between policies
- Small-scale experimentation with continuous feedback mechanisms

<http://blogs.lse.ac.uk/gild/>

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Foreign Direct Investment and the world regions. Where? Why? And for Whom?

Number of patents by region (2012)

Economies have long seen innovation and technological progress as some of the most powerful drivers of economic development and wealth. Therefore, in order to assess the impact of multinational on their host economies we looked at innovation in cities across the globe. One crucial step to measure the innovative capacity of cities and regions is to count the number of patents granted to their respective residents.

Based on this statistic, local economies are extremely critical in their innovation potential. The bubbles on the global map represent regional patent counts in 2012. While some regions are innovation hubs, most of the emerged land has no patent at all.

Click on the image above to visualise global economic flows and their impacts on regions (opens a new tab).

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All errors and omissions are our own

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