



The European Commission's science and knowledge service

Joint Research Centre

Competence Centre on Microeconomic
Evaluation: Policy evaluation in practice

Massimiliano Ferraresi

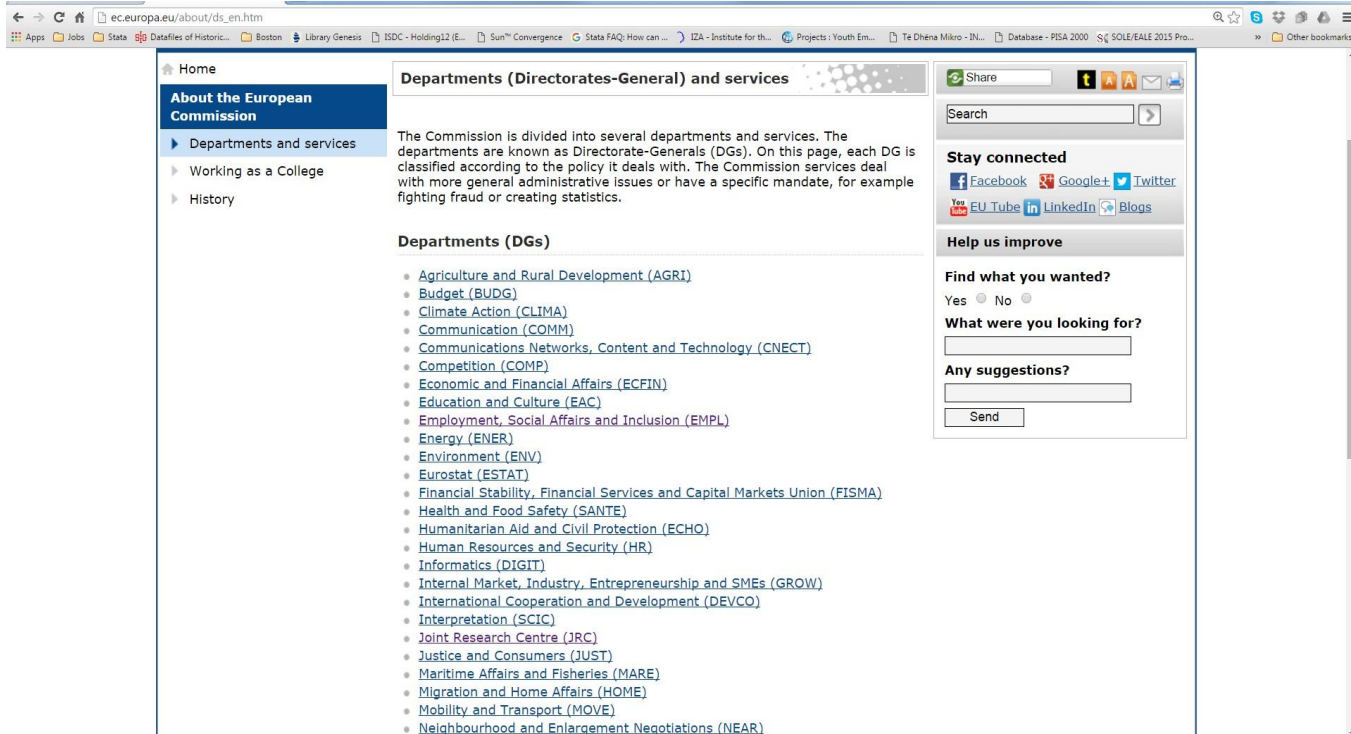
Directorate I - Competences

Competence Centre on Microeconomic Evaluation

Presentation Outline

1. DG Joint Research Centre (JRC)
2. Centre for Research on Impact Evaluation (CRIE)
3. Activities of the Competence Centre on Microeconomic Evaluation (CC-ME)
4. Use of administrative data for policy

European Commission: DG Joint Research Centre



The screenshot shows a web browser window with the URL ec.europa.eu/about/ds_en.htm. The page is titled "Departments (Directorates-General) and services". The left sidebar contains a navigation menu with "Home", "About the European Commission", "Departments and services", "Working as a College", and "History". The main content area explains that the Commission is divided into several departments and services, known as Directorates-General (DGs). It lists 25 DGs, including Agriculture and Rural Development (AGRI), Budget (BUDG), Climate Action (CLIMA), Communication (COMM), Communications Networks, Content and Technology (CNECT), Competition (COMP), Economic and Financial Affairs (ECFIN), Education and Culture (EAC), Employment, Social Affairs and Inclusion (EMPL), Energy (ENER), Environment (ENV), Eurostat (ESTAT), Financial Stability, Financial Services and Capital Markets Union (FISMA), Health and Food Safety (SANTE), Humanitarian Aid and Civil Protection (ECHO), Human Resources and Security (HR), Informatics (DIGIT), Internal Market, Industry, Entrepreneurship and SMEs (GROW), International Cooperation and Development (DEVCO), Interpretation (SCIC), Joint Research Centre (JRC), Justice and Consumers (JUST), Maritime Affairs and Fisheries (MARE), Migration and Home Affairs (HOME), Mobility and Transport (MOVE), and Neighbourhood and Enlargement Negotiations (NEAR). The right sidebar contains a "Share" section, a "Stay connected" section with links to Facebook, Google+, Twitter, YouTube, EU Tube, LinkedIn, and Blogs, a "Help us improve" section, and a "Find what you wanted?" section with a search bar and a "Send" button.

ec.europa.eu/about/ds_en.htm

Home

About the European Commission

Departments and services

Working as a College

History

Departments (Directorates-General) and services

The Commission is divided into several departments and services. The departments are known as Directorates-General (DGs). On this page, each DG is classified according to the policy it deals with. The Commission services deal with more general administrative issues or have a specific mandate, for example fighting fraud or creating statistics.

Departments (DGs)

- [Agriculture and Rural Development \(AGRI\)](#)
- [Budget \(BUDG\)](#)
- [Climate Action \(CLIMA\)](#)
- [Communication \(COMM\)](#)
- [Communications Networks, Content and Technology \(CNECT\)](#)
- [Competition \(COMP\)](#)
- [Economic and Financial Affairs \(ECFIN\)](#)
- [Education and Culture \(EAC\)](#)
- [Employment, Social Affairs and Inclusion \(EMPL\)](#)
- [Energy \(ENER\)](#)
- [Environment \(ENV\)](#)
- [Eurostat \(ESTAT\)](#)
- [Financial Stability, Financial Services and Capital Markets Union \(FISMA\)](#)
- [Health and Food Safety \(SANTE\)](#)
- [Humanitarian Aid and Civil Protection \(ECHO\)](#)
- [Human Resources and Security \(HR\)](#)
- [Informatics \(DIGIT\)](#)
- [Internal Market, Industry, Entrepreneurship and SMEs \(GROW\)](#)
- [International Cooperation and Development \(DEVCO\)](#)
- [Interpretation \(SCIC\)](#)
- [Joint Research Centre \(JRC\)](#)
- [Justice and Consumers \(JUST\)](#)
- [Maritime Affairs and Fisheries \(MARE\)](#)
- [Migration and Home Affairs \(HOME\)](#)
- [Mobility and Transport \(MOVE\)](#)
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Any suggestions?

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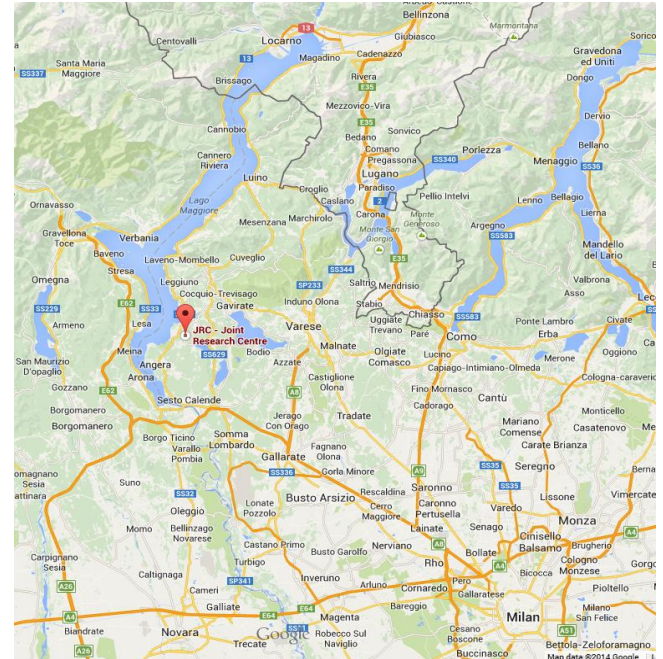
Joint Research Centre (JRC)

- The JRC is the Commission's in-house science service.
- **Mission:** provide EU policies with independent, evidence-based scientific and technical support throughout the whole policy cycle.
- The JRC **works with policy DGs**, develops methods, tools and standards, and shares its know-how with the Member States, the scientific community and international partners.
- The 7 scientific institutes of the JRC are located on 5 sites in **Belgium** (Brussels, Geel), **Germany** (Karlsruhe), **Italy** (Ispra), the **Netherlands** (Petten) and **Spain** (Seville).
- Website: <https://ec.europa.eu/jrc/>



JRC – Ispra (Italy)

- JRC
- Ispra site, Varese, Italy
- Competence Centre on Microeconomic Evaluation (CC-ME)



First steps towards counterfactual impact evaluation...



What is Counterfactual Impact Evaluation?

- In a nutshell, **Counterfactual Impact Evaluation** (CIE) is a methodological approach that allows to compare the outcome of interest of units having benefitted from a programme (the “treated group”) with other units similar in many respects (the “comparison/control group”), except for participation in the programme.
- The comparison group helps addressing the question: “*what would have happened to the treated had they not participated to the programme?*”, known as the **counterfactual**.
- The main idea is to find the “*best counterfactual*” using a combination of:

Data on beneficiaries and non-beneficiaries

+

methodology

Why do we need Counterfactual Impact Evaluation?

- Public Authorities need to collect evidence and determine whether policy objectives have been met.
The ultimate goal of the evaluation is to assess whether the resources were used efficiently.
- CIE is a tool that allows to establish a causal link between policies and their effects, *relying on data availability both for beneficiaries and non beneficiaries of a policy programme.*
- The European Commission is committed to making impact evaluation part of the Policy Cycle.

The Centre for Research on Impact Evaluation (CRIE)

- CRIE is an initiative of the: Joint Research Centre (DG JRC) and Directorate General Employment, Social Affairs and Inclusion (DG EMPL)
- It was launched in **June 2013** to support Member States (MS) and DG EMPL for carrying out **Counterfactual Impact Evaluations (CIE)** of European Social Fund (ESF) interventions.
- The ESF is one of the **main financial instruments** for promoting employment and social inclusion in Europe.

Data Fitness Initiative for CIE

Launched in 2016

- **Promotion of the use of CIE for the assessment of ESF-funded interventions**
- **Selection of a suitable ESF intervention to conduct a CIE**
- **Collaboration between CRIE and Managing Authorities (MAs) on evaluations foreseen in their Evaluation Plan.**



Data Fitness Initiative for CIE

Two-type support to ESF Managing Authorities (MA):

1. 'data-ready' : carry out the evaluation if data are in the right format
2. 'data-future' : support the MAs in the process of collecting data to perform an evaluation at a later stage

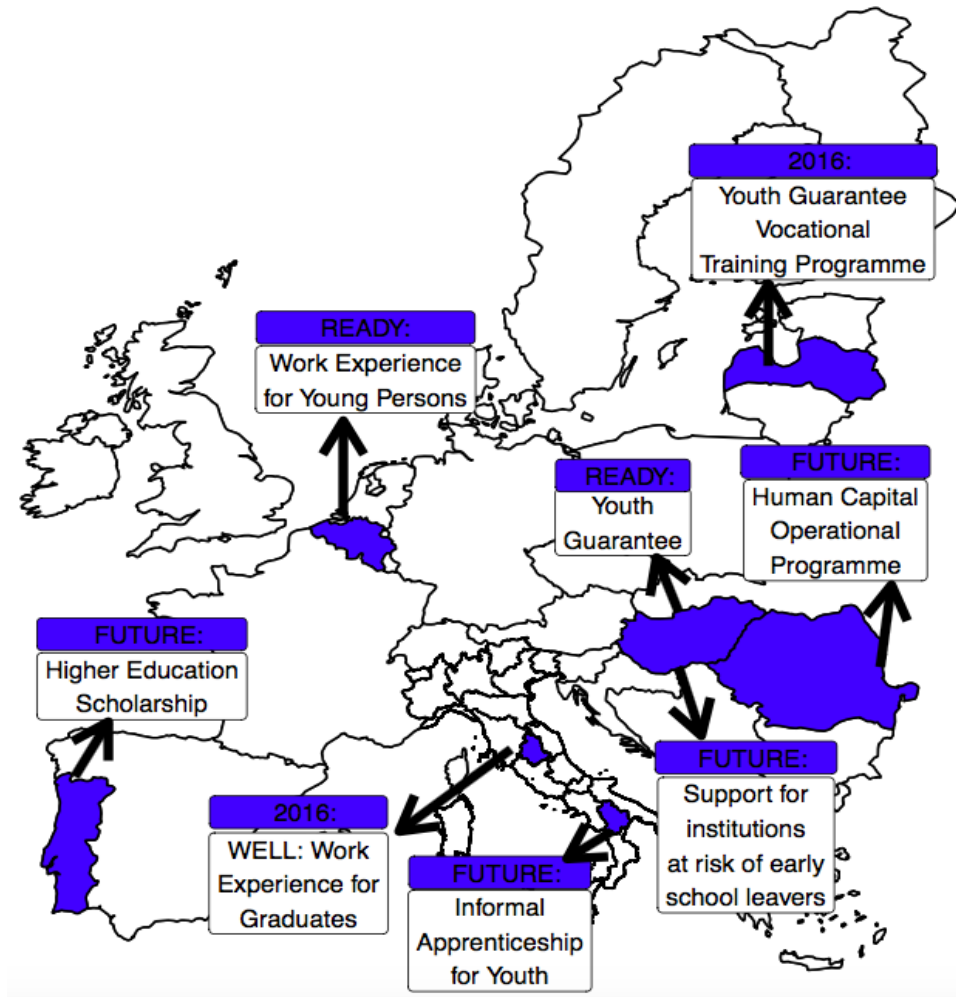
- ESF MAs are invited to provide CRIE with the data needed to carry out a well-designed CIE of a specific ESF funded intervention

- ESF MAs will be guided by CRIE through the year in the data collection and/or data linkage procedures to be ready for a CIE study

Suggestions for any CIE evaluation of ESF or Youth Guarantee funded programmes?

Contact us 😊

Data Fitness Initiative for CIE 2016–2017



DATA READY projects

2016

- **WELL Work Experience for Graduates** (On-the-job training for graduates; incentive to firms and host organizations), **Italy**
- **Youth Guarantee Vocational Training Programme**, **Latvia**

2017

- Youth Guarantee Scheme** (Training programmes and wage subsidies), **Hungary**
- Work for Youth** (Labour market services), **Belgium**

2018

- JobsPlus Incentive Scheme** (Training programmes and wage subsidies), **Ireland**

Evaluation projects with Member States

The way forward

Enabling provision to use administrative registers

Proposal for the draft Regulation on ESF+

- released by the European Commission on 30 May 2018
- modifiable by European Parliament and Council

Article 15: Indicators and reporting

5. Member States shall, when data are available in registers or equivalent sources, enable the Managing Authorities and other bodies entrusted with data collection necessary for the monitoring and the evaluation of the general support of the ESF+ strand under shared management to obtain those data from data registers or equivalent sources, in accordance with points (c) and (e) of Article 6(1) of Regulation (EU) 2016/679

**The European Commission is investing more in
causal evidenced based policy...**



Competence Centre on Microeconomic Evaluation

The centre was launched in May 2016 to support the evaluation programmes of the European Commission.

It builds on the experience of the Centre for Research on Impact Evaluation (CRIE), but covering other economic areas such as: education, migration, regulatory policies, innovation, growth, etc.

CRIE is still an integral part of the CC-ME and focuses on evaluation in the area of employment.

Visit us online at: <https://ec.europa.eu/jrc/en/microeconomic-evaluation>
or contact us at: ec-cc-me@ec.europa.eu



Mission

To enhance EU policies through data-driven microeconomic analysis and to provide causal evidence on what policies work.

Services

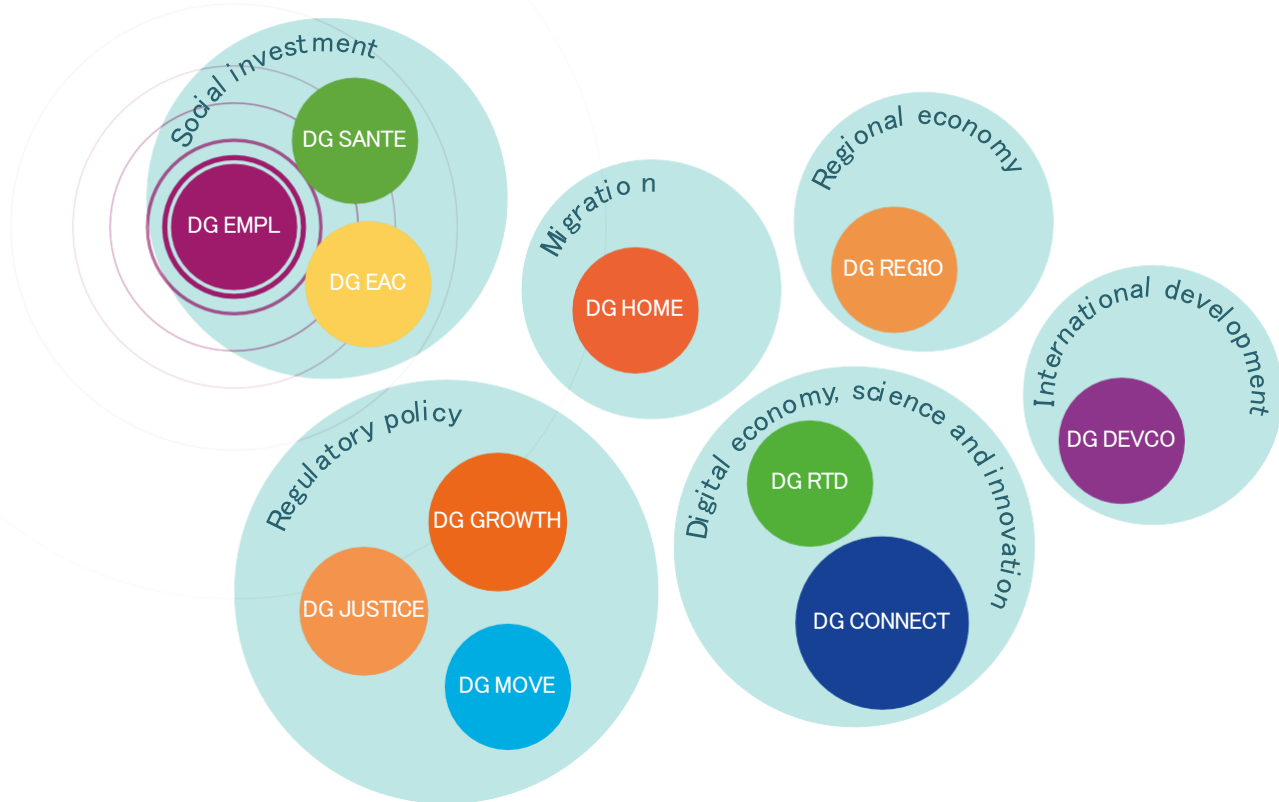
Counterfactual Impact Evaluations as well as advice and capacity building on data collection, evaluation design and methodology.

Focus

Quantitative evaluations of EU policies contributing to the Better Regulation Agenda, the European Semester and the EU Spending Programmes.



How does CC-ME contribute to policy making?



Counterfactual impact evaluation studies using administrative data

- **Spending programmes**
 - Evaluation of **labour market** policies (European Social Fund, Youth Guarantee) – in collaboration with DG EMPL
 - Assessing the impact of the **FP7 programmes** on firms' outcomes – in collaboration with DG RTD
 - **Migration policies** and the current refugees crisis
- **Regulatory policies**
 - The impact of the Late Payment Directive (LPD) implementation on business performance
 - Effectiveness of Country Specific Recommendations (CSRs)
 - The impact of the Airport Charges Directive (ACD) on the level of airport charges
- **Administrative data (labs)**
 - New Zealand
 - CBS Netherlands



Spending programmes: Labour market policies



DG EMPL (Data fitness initiative 2016)

What worked with the Work Experience for Graduates initiative in Umbria (Italy)

WHY

The goal of the project is to evaluate the impact of an European Social Fund intervention, the 'Work Experience for Graduates' implemented in Umbria (Italy).

WHEN

The project ended in December 2016

WITH WHOM

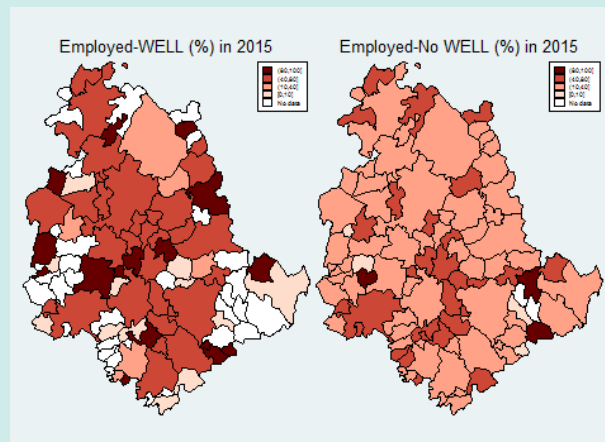
The Umbria regional authorities

FINDINGS

The programme:

- targeted unemployed graduates;
- consisted in, first, on-the-job training, and, second, wage subsidies to firm and organizations that finally hired the trainees.
- was implemented between April 2013 and September 2014.

The analysis carried out with Propensity Score Matching indicates that the participants are more likely to be employed. However, the positive effect is measured only for participants who found a job within the region boundaries.



Employment rate of WELL participants and non-participants, at the municipality level

DG EMPL (Data fitness initiative 2016)

What worked in the implementation of Youth Guarantee in Latvia

WHY

The goal of the project is to evaluate the impact of a Youth Guarantee intervention implemented in Latvia. This is one of the first counterfactual impact evaluation on Youth Guarantee in Europe.

WHEN

Ongoing project until September 2017

WITH WHOM

The Latvian European Social Fund managing authority

FINDINGS

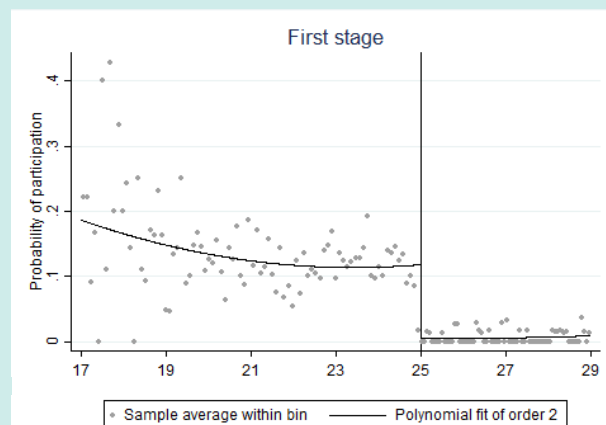
The intervention :

- targeted young NEETs (Not in Education, Employment or Training) aged 15-29 years;
- consisted in vocational training courses offered to participants
- the evaluation refers to the period January 2014 - December 2015.

Fuzzy Regression Discontinuity Design method using a priority rule for those aged 15-24.

The rule was effective in increasing participation.

Though, participation did not increase the employability and the income of the participants.



Age measured on registration date at PES

Spending programmes: The impact of FP7 on firms performance



DG RTD

What worked in the disbursement of Research grants

- This project evaluates the impact of the programmes FP7 on firms outcomes.
- **Performance measures:** number of patents, number of trademarks, labor productivity growth, sales growth, employment growth
- **Three databases:** FP7 Corda (grants), Orbis (firm data), PATSTAT (patent data)
- **Two methods:** Regression Discontinuity Design (RDD) and Dose Response Function (DRF)



DG RTD

What worked in the disbursement of Research grants

- First rigorous evaluation of the impact of EU research grants on firms' performance
- Information of *non-successful applicants* and the score obtained for the project allows more precise estimation than most similar studies
- Broad target group: 46 countries (including Old- and New Member States, Candidate, Associate and Tiers countries), small/big firms,...
- We can assess EC's "systematic choices"
... and (later) *heterogeneous responses to the grant*
- **(Preliminary) results** show that FP grants have a positive impact on firms' post-treatment productivity

Regulatory measures: European Directives, Country Specific Recommendations



DG GROW

What worked in the implementation of the Late Payment Directive

WHY

The evaluation focuses on the impact of the Late Payment Directive (LPD) implementation on business performance, notably on firms exit rate

WHEN

Completed December 2017

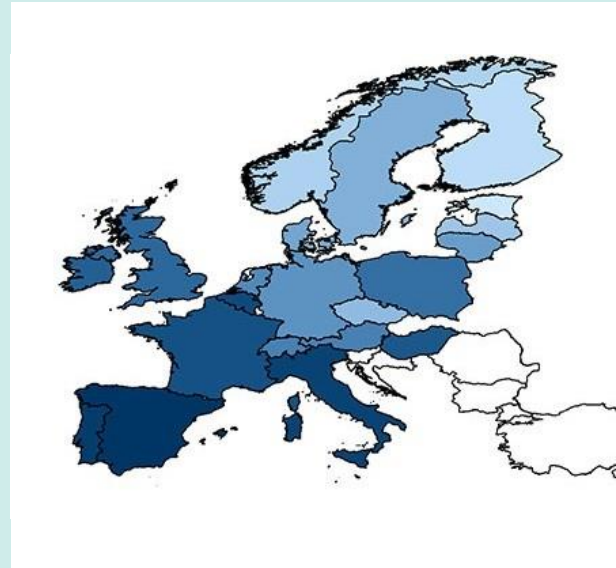
WITH WHOM

Directorate-General Internal Market, Industry, Entrepreneurship and SMEs (DG GROW), and the European Commission Secretariat-General (SEC GEN)

FINDINGS

The counterfactual impact evaluation has focused on the case of payments from the Public Administrations to economic operators (PA2B), for the period 2008-2014.

The analysis showed that the implementation of the LPD significantly reduced firms' exit rate, and that the effect is stronger for the member states that showed longer average payment period before the adoption of the LPD.



*European countries by average payment length
The darker the blue, the greater the average payment duration.*

DG MOVE

What worked in the implementation of the Airport Charges Directive

WHY

The evaluation focuses on the impact of the Airport Charges Directive on the level of Airport Charges

WHEN

Completed June 2018

WITH WHOM

Directorate-General Mobility and Transport (DG MOVE) and the European Commission Secretariat-General (SEC GEN)

FINDINGS

The analysis showed that the implementation of the ACD reduced the level of charges and that the effect is more pronounced one year after its adoption.



DG GROW

Effectiveness of Country Specific Recommendations (CSRs)

WHY

The study aims at evaluating the yearly and multi-annual progresses in the implementation of Country-specific Recommendations (CSR) issued since 2011. Moreover, the determinants of the degree of implementation are analyzed.

WHEN

Completed April 2018

WITH WHOM

Directorate-General Internal Market, Industry, Entrepreneurship and SMEs (DG GROW), and the European Commission Secretariat- General (SEC GEN)



Administrative Data for policy evaluation: the way forward

Use of administrative data (CC-ME book)

Data-Driven Policy Impact Evaluation

Crato, Paruolo (2019) Springer

How Access to Microdata is Transforming Policy Design

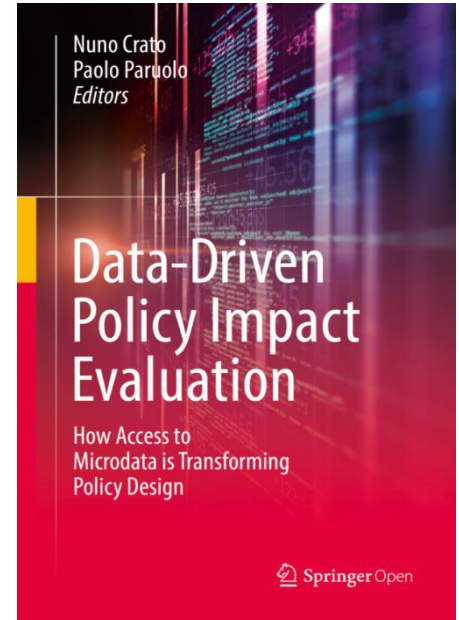
In the light of better and more detailed administrative databases, the book provides statistical tools for evaluating the effects of public policies advocated by governments and public institutions.

Topics include data confidentiality, data linkage, and national practices in policy areas such as public health, education and employment.

Open access under a CC BY 4.0 license

Available at

<https://www.springer.com/it/book/9783319784601>



CC-ME studies and projects using admin data

Collaboration with New Zealand: demonstrating the power of admin data

WHY

The project aims at carrying out demonstration projects to show how administrative data can be used to demonstrate the impact of social investment.

WHEN

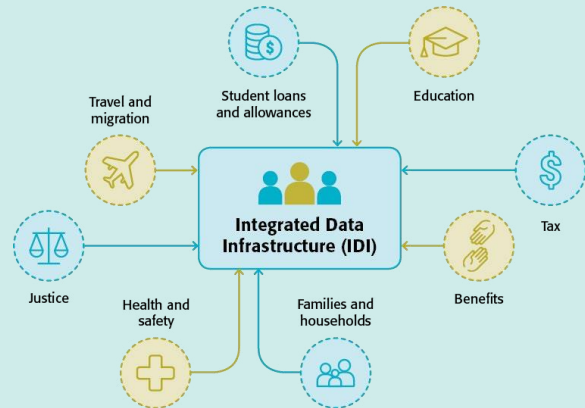
The project started in March 2017.

WITH WHOM

The New Zealand Office of the Prime Minister Chief Scientific Advisor and Statistics New Zealand.

Three projects will be carried out, namely:

- The effect of education on crime behavior
- The effects of involuntary job loss on adult and child outcomes
- The effect of the 2011 Christchurch earthquake on school and health outcomes.



Source: Statistics New Zealand website

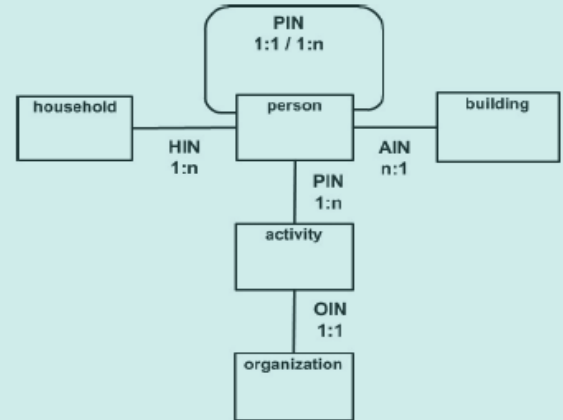
Collaboration with **Statistics Netherlands (CBS)**

System of interlinked and standardised registers and surveys

The Dutch Population Register (PR) contains **personal identifiers** and demographic information for **every registered inhabitant in the Netherlands**

This allows matching persons to households, buildings and organisations (firms, schools, etc.)

Studies of regional phenomena and small sub-groups as well as longitudinal studies and small domain statistics are possible



Research project: **Segregation in the Netherlands**

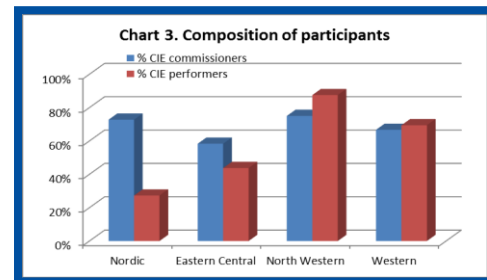
- We study how inequality of opportunity and socio-economic outcomes is affected by the extent to which members of different groups tend to interact with peers who have similar characteristics, i.e. segregation.
- We investigate this issue within the three environments in which individuals mostly interact with peers in their everyday life: the neighborhood, the school and the workplace.
- We plan to provide answers to questions such as:
 - How are economic opportunities for children shaped by the neighborhoods in which they grow up?
 - Does this pattern depend on the level of segregation in the area where their family live?
 - How does this relate to the level of segregation in the school they attend?
 - Is the exposure to segregated environments correlated across generations?

2015 Regional Workshops on CIE

1 - North-Western RWC: 13-14 April 2015, Brussels

Participating countries: BE, IE, NL, 13 participants

CRIE Trainers: Andrea Morescalchi, Sylke V. Schnepf



2 - Eastern Central RWC: 22-24 Sept. 2015, Budapest

Participating countries: BG, HR, CZ, HU, SK, SE, RO, 78 participants

CRIE Trainers: Enkelejda Havari, Paolo Paruolo

Experts: Gabor Kezdi and Martin Kahanec

(Central European University),

Joost de Laat, Celine Ferré (WB)



2015 Regional Workshops on CIE

3 - Nordic RWC: 13-15 October 2105, Tallinn

Participating countries: EE, SE, LV, LT, PL, 14 participants

CRIE Trainers: Paolo Paruolo, Leandro Elia

Experts: Mihails Hazans (IZA, University of Latvia)

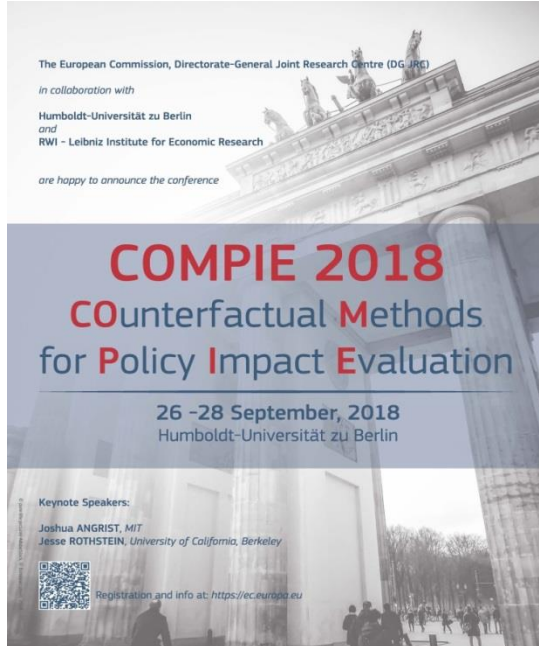
Céline Ferré (WB)



4 - Western RWC: 28-30 October 2015, Dublin

- *Participating countries:* IE, DE, FR, ES, PT, 58 participants
- *CRIE Trainers:* Béatrice d'Hombres, Giulia Santangelo
- *Experts:* Pedro Martins (Queen Mary, University of London), Enrico Rettore
- (Research Institute for the Evaluation of Public Policies and Trento University)

COMPIE conference



The aim of the conference is to **bring together policy makers and researchers** to discuss developments in counterfactual methods and applications of impact evaluation.

The latter can cover a broad range of interventions, from labor and social policy to regulation and funding programmes, ideally with a focus on EU policies.



COMPIE conference

26-28 September 2018, Humboldt-Universität zu Berlin, Berlin

- Keynote speakers: **Joshua Angrist (MIT)** and **Jesse Rothstein (UC Berkeley)**
- Round table “Social dividends of counterfactual impact evaluation in the EU: present, past and future”

Past COMPIE conferences


20-21 October 2016, Catholic University, Milan





- Keynote speakers: **Michael Lechner (University of St. Gallen)** and **Jeffrey Andrew Smith (University of Michigan)**
- Round table “Policy Making with Administrative data: is there a EU dimension?”

27-28 November 2014, Rome


- Keynote speakers: **Jochen Kluve (Humboldt-Universität Berlin)** and **Steve Pischke (London School of Economics)**

Our platform on Yammer: Counterfactual Impact Evaluation Network CIE-NET

 COUNTERFACTUAL IMPACT EVALUATION NETWORK (CIE-NET)







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Learning
Community of Practice - ESF MAs
Conferences
Data Fitness - ESF MAs
All Network





All Network

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What are you working on?






**Corinna Ghirelli** – March 1 at 3:46pm
Here is a very interesting article from The Economist that argues very clearly why counterfactual impact evaluation methods should be used by policymakers.

Enjoy your reading!







In praise of human guinea pigs _ The Economist



Doctors use evidence when prescribing treatments. Policymakers should, too.







 LIKE  REPLY  SHARE ...

Enkelejda Havari and Giulia Santangelo like this

**Giulia Santangelo** – March 1 at 3:50pm
Very interesting reading indeed!


 LIKE  REPLY  SHARE ...



MEMBERS (38)


SEARCH

INFO
[Click here to edit this section.](#)

NETWORK RESOURCES [Add](#)
 Corinna Ghirelli, as a network admin, you can add files and links here to make them easily accessible to your entire network.



Any questions?

You can find me massimiliano.ferraresi@ec.europa.eu