

# Counterfactual impact evaluation

The experience of DG Regional Policy

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#### **Enterprise and innovation support**

- €80 billion in EU Regional policy 2007-13
- Main instrument grants (but also loans, guarantees, venture capital, business advice, networking, incubators etc)
- Would like to see impacts in terms of jobs, productivity and regional growth
- Pre-2008, roughly 80% process evals
  (& most impact evals beneficiary survey)





## From 2008: counterfactuals in EU Regional Policy

- We have led evals of 8 schemes, partnered on 4 more
- Mouqué (Regional Focus, 2012) summarises for €40 billion in 7 MSs to >235,000 firms
- 3 summer schools => more studies coming from MS partners





#### Where do we get our control groups?

- 1. Accidental randomness (Piedmonte & PL)
- 2. Discontinuity designs (eg rejected applicants under Law 488 in Italy)
- 3. Matching techniques (eg innovation in DE)
- 4. Simple matching, difference-in-difference... and a health warning! (CZ, URBAN)
- Future: deliberate, random variation in treatment?
- Finding good control group with large n remains a limiting factor





#### What other practical issues? Data!

- On the intervention (nature, scale, dates)
- On target indicators (before and after, including for non-beneficiaries)
- Confidentiality/access is an issue, we have:
  - signed agreements with various providers
  - mandated public access of intervention data for 2014-20 period, in user friendly format (Excel/CSV)
- Linking is an issue, we have:
  - tightened reporting requirements for new 2014-20 period
- Still a limiting factor





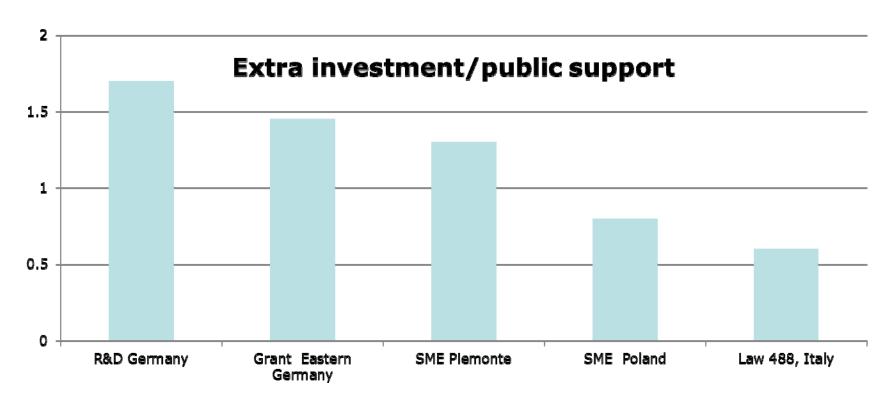
### What policy implications?





#### **Support boosts SME investment**

(First resolution to old debate)

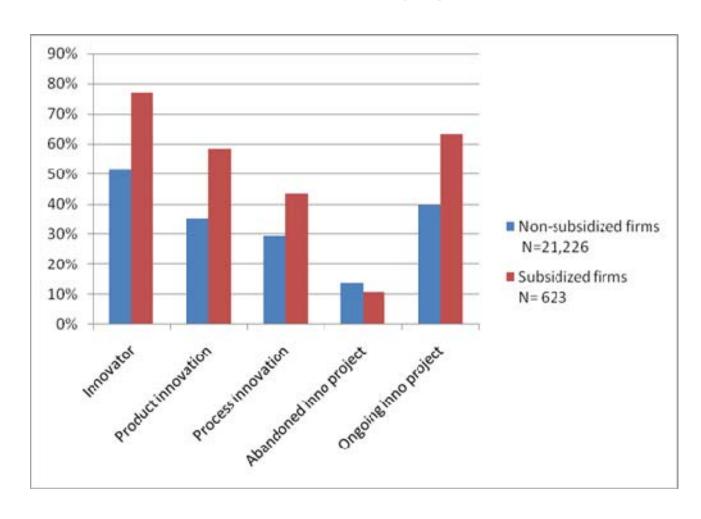






#### Support can also boost innovation

CIS indics, Germany (Czarnitzki, 2011)



But in many schemes, firms tended to broaden, not deepen (ie to increase production, not productivity)



#### Jobs created, but < monitoring data

Scheme	Study	Jobs supported (monitoring)	Jobs created (from CF)
Investment support, E. Germany	GEFRA/IAB (2010)	107,000 "created", plus 439,000 "safeguarded"	27,000
Law 488 invest support, IT	Bondonio & Martini (2012)	36,000 "net jobs created" (beneficiary survey)	12,000
SME invest grants, PL	Trzciński (2011)	25,000 "created"	10,500





#### **But job quality good**

- Bondonio & Martini (2012) average firm salary and productivity same or slightly greater
- Trzciński (2011) jobs created in SMEs received similar pay rises to those in the control group – and that jobs were maintained five years after support.





#### **Small is beautiful 1 - the firms**

Scheme	Study	Finding on large enterprises	Comparison between SME size classes
Investment grants, IT	ASVAPP (2012)	No or negative impact firms >250 employees	Thorough exam: no difference
RSA invest grants, UK	Crisculo et al (2012)	No impact for firms > 150 employees	Impacts slightly higher for firms < 50 employees?
DK Innovation Consortia	CEBR, Denmark (2010)	No impacts for firms > 150 employees	Not examined
Innovation support, DE	Czarnitzki et al (2011)	Small much better, but firm or grant size?	Smaller may do better
Invest support, E. Germany	GEFRA/IAB (2010)	(Did not study large enterprises)	No difference by SME size class
Germany		Policy	



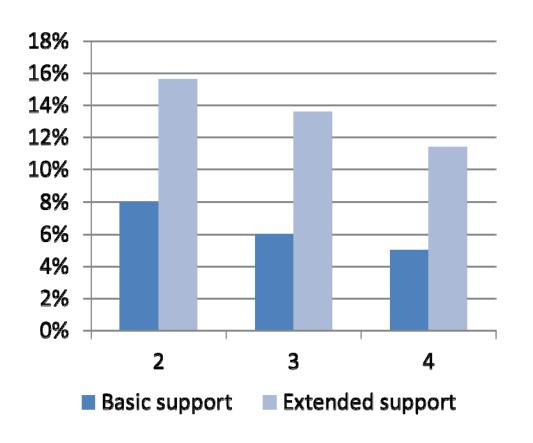
#### Small is beautiful 2 – the support

- ASVAPP (2012) even controlling for firm size, smaller grants more effective (cpj €79,000 for smallest grants, rising to €489,000 for largest).
- ASVAPP (2012) outright grant to SMEs similar effect to soft loan of same size
- Czarnitzki et al (2011) presence or absence of a grant was the crucial factor smallest grants had almost the same innovation impact as the largest
- Comparing across studies: schemes of smaller support tended to have better results (eg RSA, UK)





## Hints that business advice can be cost effective?



Better survival rates than non-supported 2-4 years later in North Jutland? €7500/net firm? €1500/net job? (Rotger and Gørtz, 2009)





#### Real world policy impact?

- Block grants to large enterprises excluded from Cohesion Policy in 2014-20 (previously €10 bn)
- Encouraging financial instruments, soft support in the drafting of 2014-20 programmes
- The new round of State Aids guidelines? ©





#### **Next steps**

We have already learned a lot from this method, not learned (or not proven) any other way

**But the picture far from complete:** 

- Extend to more schemes in more countries
- Extend to more forms of support (financial instruments, soft support)
- •Complement with other methods, eg case studies to understand SME size and capital constraints, what boosts innovation/learning etc





Beware the man whose only tool is a hammer...

... for every problem comes to resemble a nail

- Abraham Maslow









#### For further information

InfoRegio: ec.europa.eu/inforegio

#### Mouqué (Regional Focus, 2012)

"What are counterfactual impact evaluations teaching us about enterprise and innovation support?"

http://ec.europa.eu/regional\_policy/sources/docg ener/focus/2012\_02\_counterfactual.pdf

